

FINAL

WATER RATE STUDY

BLACK & VEATCH PROJECT NO. 423442

PREPARED FOR

City of Menlo Park, CA

5 MARCH 2026



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Legal Notice

Black & Veatch has prepared this report for MPMW, and it is based on information not within the control of Black & Veatch. MPMW has not requested Black & Veatch to make an independent analysis, to verify the information provided to us, or to render an independent judgment of the validity of the information provided by others. Because of this, Black & Veatch cannot, and does not, guarantee the accuracy thereof to the extent that such information, data, or opinions were based on information provided by others.

In conducting these analyses and in forming an opinion of the projection of future financial operations summarized in this report, Black & Veatch made certain assumptions on the conditions, events, and circumstances that may occur in the future. The methodology utilized in performing the analyses follows generally accepted practices for such projections. Such assumptions and methodologies are reasonable and appropriate for the purpose for which they are used. While we believe the assumptions are reasonable and the projection methodology valid, actual results may differ materially from those projected, as influenced by the conditions, events, and circumstances that occur. Such factors may include MPMW's ability to execute the capital improvement program as scheduled and within budget, regional climate and weather conditions affecting the demand for water, and adverse legislative, regulatory, or legal decisions (including environmental laws and regulations) affecting MPMW's ability to manage the system and meet water quality requirements.

1.0 Acronyms

ADD	Average Daily Demand
AWWA	American Water Works Association
BAWSCA	Bay Area Water Supply & Conservation Agency
Black & Veatch	Black & Veatch Management Consulting
Cal Water	California Water Service
CCF	Centum Cubic Feet or Hundred Cubic Feet
CIP	Capital Improvement Program
City	City of Menlo Park
CIS	Customer Information System
ENR CCI	Engineering News Record Construction Cost Index
FY	Fiscal Year (July 1 to June 30)
gpcd	gallons per day per capita
gpm	gallons per minute
M1	Principles of Water Rates, Fees, and Charges
Max Day	Maximum Day
Max Hour	Maximum Hour
MPMW	Menlo Park Municipal Water
O&M	Operation and Maintenance
OC	Original Cost
OCLD	Original Cost Less Depreciation
RC	Replacement Cost
RCLD	Replacement Cost Less Depreciation
SDC	System Development Charge
SFPUC	San Francisco Public Utilities Commission
SRF	State Revolving Fund
SWRCB	State Water Resources Control Board
Study	Water Rate Study
UWMP	Urban Water Management Plan

2.0 Executive Summary

The City of Menlo Park (City) commissioned Black & Veatch Corporation (Black & Veatch) to conduct a Water Rate Study (Study) for Menlo Park Municipal Water (MPMW). MPMW is a water utility wholly owned by the City. The Study incorporated the development of a financial plan, a cost-of-service analysis, the design of rates, and capacity fees. The specific objectives of the Study were to:

- Evaluate the adequacy of projected revenues under existing rates to meet projected revenue requirements.
- Develop sound financial plans for MPMW covering a ten-year period for both ongoing operations and planned capital improvements.
- Allocate MPMW's projected revenue requirements to the customer classes in accordance with the respective service requirements.
- Design a suitable five-year rate schedule that produces revenues adequate to meet financial needs while recognizing customer costs of service and regulatory considerations such as Proposition 218 and applicable judicial decisions.
- Develop capacity fees that allow new users to pay their fair share of the costs associated with existing capacity within the system while meeting regulatory requirements stated in the California Mitigation Fee Act.

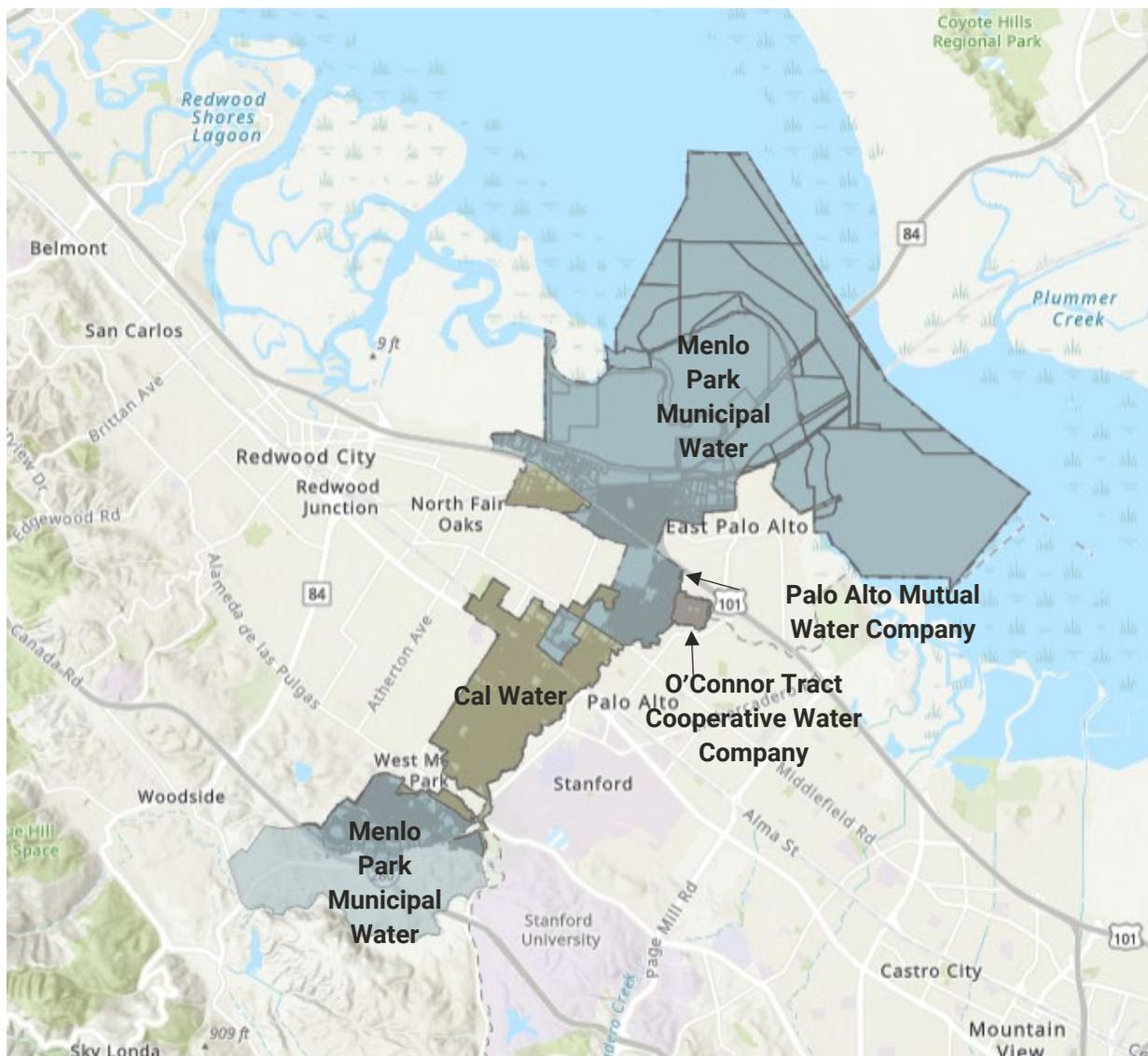
2.1 Menlo Park Municipal Water

The City owns and operates Menlo Park Municipal Water to provide water service to about 22,000 residents. The City serves approximately 4,400 residential, commercial, industrial, institutional, irrigation, hydrant construction, and fire connections. California Water Service (Cal Water), an investor-owned water purveyor, serves most of the remainder of the City's population. Cal Water serves the City's center, while MPMW serves the northeast and southwest ends of the City, as shown in Figure ES-2-1. There are small portions of the City served by the O'Connor Tract Cooperative Water Company, the City of East Palo Alto, and Palo Alto Park Mutual Water Company.

MPMW has two service areas: 1) the northeast area, which is located east of El Camino Real and serves the High-Pressure Zone and Lower Zone, and 2) the southeast area in Sharon Heights, serving the Upper Zone. Both areas are physically isolated from each other and have emergency interconnections with neighboring water agencies.

MPMW's sole source of water supply is surface water purchased from the San Francisco Public Utilities Commission (SFPUC). There are five turnouts throughout the service areas that feed into MPMW's water system. The water system comprises 56 miles of distribution mains, three pressure reducing stations, two water storage facilities, one pump station, and one emergency well is pending final testing. MPMW is also developing other emergency storage/supplies as backup source to SFPUC.

Figure ES-2-1 Water System Map



Source: <https://menlopark.maps.arcgis.com>

2.2 Financial Plan

MPMW operates as a self-supporting enterprise fund. As such, it must develop a financial plan, also known as revenue requirements, which provides enough revenue to meet all needs.

- Revenue consists of water service fees, SFPUC surcharge, capital facility surcharge, interest income, and other miscellaneous revenues.
- Revenue Requirements consist of operation and maintenance expenses, debt service requirements, capital improvements, and reserves.

The Study develops a financial plan that projects operating revenue, expenses, and capital financing costs for MPMW over a five-year planning period beginning July 1, 2026, and ending June 30, 2031 (study period). A fiscal year (FY) is between July 1 of the prior year and June 30 of the subsequent year.

The report shows the results of a five-year period, but a decision needs to be made by the City to adopt a three-year or five-year rate schedule. To assist in decision making, the following benefits are identified for each time frame. Black & Veatch recommends a three-year rate schedule based on the uncertainty associated with recycled water demand and construction costs. Construction costs have increased significantly in recent years and by examining costs in two years, it will provide better directions on future rates and debt financing.

Table ES-2-1 Matrix of Benefits

	THREE-YEAR RATES	FIVE-YEAR RATES
Benefits	<ul style="list-style-type: none"> Provides an opportunity to update Bayfront area customer projections (potable to recycle water) Provides opportunity to update operating costs associated with SFPUUC Provides opportunity to update capital costs based on updated construction cost 	<ul style="list-style-type: none"> Provides longer term financial certainty for MPMW Viewed favorably by financial markets especially when seeking debt financing Reduced costs associated with rate study and Proposition 218 noticing requirements

2.2.1 Financial Plan Scenarios

In conducting the Study, Black & Veatch examined different financial planning options. Each option generates sufficient revenues to meet obligations while satisfying reserve targets and minimizing rate impacts to customers. Table ES-2-2 shows a summary of the different options analyzed. It is Black & Veatch’s recommendation that MPMW select Option 1 as it provides MPMW with the funds to operate the utility, finance its CIP and minimize rate impacts. Option 1 is derived in the body of this report while the financial plans and proposed rates for the other options are shown in Appendix B.

Table ES-2-2 Matrix of Options

OPTION	CONSUMPTION RATE STRUCTURE	REVENUE ADJUSTMENTS ¹	CAPITAL SURCHARGE ²	LONG-TERM DEBT ³	CIP ⁴
1	Uniform rates for all customers	<ul style="list-style-type: none"> 4.25% for FY 2027, FY 2028 4.25% for FY 2029 5.0% for FY 2030, FY 2031 	Yes, ~\$2.4M per year	\$16.0M in FY 2029	\$46.1M
2	Uniform rates for all customers	<ul style="list-style-type: none"> 8.0% for FY 2027, FY 2028 8.25% for FY 2029, FY 2030, FY 2031 	Yes, ~\$2.6M per year	\$24.0M in FY 2029	\$62.6M
3	Uniform rates for all customers	<ul style="list-style-type: none"> 20.0% for FY 2027 6.5% for FY 2028, FY 2029 0% for FY 2030, FY 2031 	Yes, ~\$2.7M per year	No Debt	\$46.1M

4	Uniform rates for all customers	<ul style="list-style-type: none"> • 35.0% for FY 2027 • 10.0% for FY 2028, FY 2029 • 0% for FY 2030, FY 2031 	Yes, ~\$3.2M per year	No Debt	\$62.6M
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Legend:

1. Revenue Adjustments: Identifies the percent of revenue adjustment needed in FY 2027 to FY 2031 to meet all obligations. The existing rate structure consists of a fixed meter charge; unmetered fire fixed charge, consumption charge, and capital facility consumption based surcharge.
2. Capital Surcharge: Identifies if the capital facility surcharge will be an independent component within the rate structure. If independent, the revenues per year are directed for capital expenditures.
3. Long-Term Debt: Identifies if MPMW will obtain long-term debt funding to assist in executing the CIP.
4. CIP: Identifies the capital improvement program amount used in the evaluation.

2.2.2 Financial Plan – Option 1

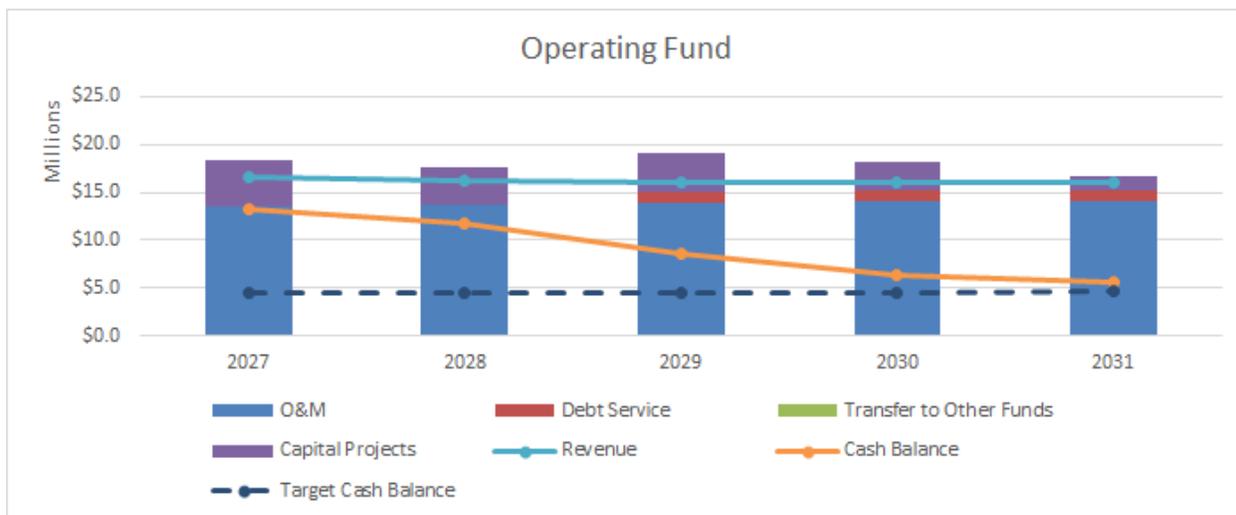
The derivation of Option 1 is described in detail in the body of this Report. It is important to note that for all options, the operations and maintenance (O&M) expenses remain constant. The rate revenues, principal and interest expense on debt, capital improvement program (CIP), transfers, and reserve requirements change based on option.

Summarized below are MPMW’s revenue requirements for Option 1:

- **Operation and Maintenance Expenses:** MPMW anticipates O&M expenses to increase from \$13,547,800 in FY 2027 to \$14,143,800 in FY 2031.
- **Capital Improvements:** MPMW plans significant water projects in the amount of \$46,097,000 from FY 2027 to FY 2031. The capital projects include:
 - Emergency Water Storage/Supply - The development of wells and storage to provide a secondary water supply and emergency water supply in the event of an outage or reduced supply.
 - Water Main Replacement Project – The ongoing design and replacement of the aging water pipelines in the water system.
 - Storage Reservoir and Pump Stations – The planning, design, and construction of a new storage tank and two pump stations to meet the operational, emergency, and fire flow storage needs.
 - Water System Improvements – Various improvements associated with blow-offs, valves, interconnections with Cal Water and Palo Alto and pump station improvements.
- **Debt Service:** MPMW does not have any existing debt. To invest in water infrastructure, Option 1 requires a Revenue Bond in the amount of \$16,000,000 in FY 2029.
- **Reserves:** MPMW will continue with operating and capital fund reserves.
 - The operating fund reserve covers fluctuations in day-to-day expenses. The scheduled target is 120 days of O&M expenses.
 - The capital fund reserve maintains enough funds on hand to help mitigate unexpected capital costs. The current target is \$1,000,000, but it is recommended to increase to \$3,000,000 by FY 2031.

To meet the projected revenue requirements, MPMW is proposing revenue adjustments that would allow MPMW to operate in a sufficient manner with a balanced budget, as shown in Figure ES-2-2.

Figure ES-2-2 Operating Cash Flow (Option 1)



2.3 Adequacy of Existing Rates to Meet Costs of Service

Based on the financial plan, Black & Veatch recommends the revenue adjustments shown in Table ES-2-3 for Option 1, to meet the projected revenue requirements for FY 2027 to FY 2031. These revenue adjustments inform us of the rates needed to generate the revenues. The rate adjustments will vary by customers based on their connection size to the water system and water consumption level.

Table ES-2-3 Proposed Revenue Adjustment (Option 1)

Fiscal Year	Effective Month	Revenue Adjustment
FY 2027	July	4.25%
FY 2028	July	4.25%
FY 2029	July	4.50%
FY 2030	July	5.00%
FY 2031	July	5.00%

2.4 Cost-of-Service Analysis

The water cost-of-service analysis performed in this Study uses the Base-Extra Capacity Method endorsed by the American Water Works Association (AWWA) Principles of Water Rates, Fees, and Charges, M1 (M1) manual. Under cost-of-service principles, costs are allocated to the different customers in proportion to their water system use. As recommended by AWWA, Black & Veatch distributed operational and capital costs to the base (average load conditions), extra capacity (peaking conditions), customer-related parameters (meters services and customer billing), and direct cost (fire protection). This allocation methodology produces unit costs for allocation to individual customer classes based on the projected customer service requirements.

2.5 Rate Design

Through the cost-of-service analysis, the allocation of costs to customer classes must meet Proposition 218 requirements. The Right to Vote on Taxes Act, also known as Proposition 218, was passed by California voters in 1996 and added Article XIII C and Article XIII D to the California Constitution. These articles provide the regulatory framework that guides and informs the rate-setting process. The regulatory

framework helps ensure cost recovery is proportionate to the cost of providing the service. In summary, Proposition 218 requires:

- Revenue derived from rates must not exceed the costs of providing the service.
- Revenue derived from rates must not be used for any purpose other than for which it is imposed.
- The rates imposed must not exceed the proportional cost of the service provided.

Based on recent court rulings, MPMW proposes to amend their consumption rates in the analysis. The body of the report fully develops Option 1. Through discussions with City staff, the selected rate structure minimizes rate impacts, retains simplicity, and ensures revenue's reasonable stability.

- **Fixed Meter Charge:** MPMW's monthly fixed meter charge is based on meter sizes for all customer classes. The monthly fixed meter service charge recovers portions of fixed cost elements such as meter maintenance and services, meter reading, customer billing, and maintenance and capacity costs associated with public fire protection.
- **Unmetered Fire Fixed Charge:** MPMW's fixed fire service charge is based on the size of the private fire service connections. The fire service charge will recover the maintenance and capacity costs associated with private fire service connections.
- **Consumption Charge:** MPMW's consumption charge for all customers is on a centum cubic foot (CCF) or hundred cubic foot basis. The consumption charges recover costs associated with average day and peak day capacity demands. In this analysis, MPMW proposes to transition from an inclining tiered rate structure to a uniform rate structure. An inclining block rate structure consists of consumption charges that increase with increasing consumption. A uniform rate structure consists of a constant unit rate for all consumption.
- **Capital Facility Surcharge:** MPMW's consumption-based surcharge currently recovers capital costs associated with the repair and rehabilitation of the water system. The capital facility surcharge was implemented in 1990 to help MPMW direct funds for CIP projects.

Table ES-2-4 shows the recommended rate schedules for Option 1.

Table ES-2-4 Proposed Rate Schedule (Option 1)

Customer Class	Existing	Fiscal Year Ending June 30,				
	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Monthly Fixed Meter Charge (\$/Month)						
3/4" or less	33.53	36.76	38.32	40.04	42.04	44.14
1"	55.87	61.26	63.86	66.73	70.07	73.57
1-1/2"	111.77	122.52	127.73	133.48	140.15	147.16
2"	178.83	196.03	204.36	213.56	224.24	235.45
3"	357.65	392.07	408.73	427.12	448.48	470.90
4"	558.83	612.60	638.64	667.38	700.75	735.79
6"	1,117.66	1,225.21	1,277.28	1,334.76	1,401.50	1,471.58
8"	1,788.26	1,960.33	2,043.64	2,135.60	2,242.38	2,354.50
10"	2,570.60	2,817.98	2,937.74	3,069.94	3,223.44	3,384.61
12"	4,805.85	5,268.39	5,492.30	5,739.45	6,026.42	6,327.74
Monthly Unmetered Fire Fixed Charges (\$/Month)						
1-1/2"	36.75	47.44	49.46	51.69	54.27	56.98
2"	58.80	75.90	79.13	82.69	86.82	91.16
3"	117.58	151.80	158.25	165.37	173.64	182.32
4"	183.72	237.19	247.27	258.40	271.32	284.89
6"	367.43	474.38	494.54	516.79	542.63	569.76
8"	587.88	759.00	791.26	826.87	868.21	911.62
10"	845.09	1,091.07	1,137.44	1,188.62	1,248.05	1,310.45
12"	1,579.95	2,039.82	2,126.51	2,222.20	2,333.31	2,449.98
Consumption Charge (\$/CCF)						
Tier 1 (0-6 CCF)	6.18					
Tier 2 (7-12 CCF)	8.30					
Tier 3 (Over 12 CCF)	10.56					
All CCF		9.39	9.79	10.23	10.74	11.28
Capital Facility Surcharge (\$/CCF)						
All Usage	1.92	2.00	2.09	2.18	2.29	2.40

2.6 Drought Surcharges

MPMW has a six-stage Water Shortage Contingency Plan that identifies water curtailments required to meet the State Water Resources Control Board’s regulations. In state mandated curtailments, MPMW will impose a drought surcharge to help offset the revenue loss due to consumption decreases.

Table ES-2-5 shows the recommended drought surcharges.

Table ES-2-5 Proposed Drought Surcharges

Description	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Required Water Reduction %	Up to 10%	Up to 20%	Up to 30%	Up to 40%	Up to 50%	Greater 50%
Drought Surcharge (\$/CCF)						
FY 2027	\$0.31	\$0.69	\$1.18	\$1.84	\$2.75	\$4.13
FY 2028	\$0.31	\$0.71	\$1.21	\$1.88	\$2.81	\$4.21
FY 2029	\$0.35	\$0.78	\$1.33	\$2.07	\$3.10	\$4.63
FY 2030	\$0.37	\$0.82	\$1.41	\$2.19	\$3.27	\$4.87
FY 2031	\$0.41	\$0.91	\$1.56	\$2.42	\$3.61	\$5.37

1. The drought rates represent the max rate per stage. The actual drought surcharge will be calculated based on the actual water conservation target that must be met.
2. Stage 6 represents water conservation greater than 50%. The drought surcharge shown is for 60% reduction.

2.7 Capacity Fees

Capacity fees are designed to pay for increased system capacity from “new” customers. Generally levied at the time building permits are required, capacity fees recover the cost associated with existing facilities and/or pay for increasing flow capacities, which result from either (1) changes in the use of a structure served by an existing connection to the system, or (2) a new connection to the system. For the purposes of this report, both sources of additional flow are used in the term “new” customer.

Collection of capacity fees to partially or wholly finance new customer capacity requirements can, over time, help reduce the amount of financing, and the magnitude of rate increases that otherwise might be needed. Ideally, capacity fees should generate enough revenues to meet future expansion requirements to not burden existing users with the proportionate costs of expansion caused by growth in system use by new users.

Table ES-2-6 shows the recommended capacity fees.

Table ES-2-6 Existing and Proposed Capacity Fees

Line No.	Meter Size	Existing Capacity Fees (\$/Conn)	Proposed Capacity Fees (\$/Conn)
Capacity Fees			
1	3/4" or less	\$7,959	\$9,326
2	1"	\$13,265	\$15,543
3	1-1/2"	\$26,530	\$31,086
4	2"	\$42,448	\$49,738
5	3"	\$84,897	\$99,476
6	4"	\$132,651	\$155,432
7	6"	\$265,303	\$310,864
8	8"	\$424,484	\$497,382
9	10"	\$612,196	\$714,987
10	12"	\$1,140,800	\$1,336,714

3.0 Revenue and Revenue Requirements

To meet the costs associated with providing water services to its customers, MPMW derives revenue from various sources, including water user rates, capacity fees, capital facility surcharges, interest earned from the investment of available funds, and other operating charges. Black & Veatch has projected the level of future revenue generated in the Study based on historical data and future system growth in terms of the number of connections and consumption. In addition, this section projects the expenses or revenue requirements necessary to operate and maintain the system, invest in capital improvements, and cover other water system expenses.

3.1 Customer and Water Consumption Projections

3.1.1 Customer Connections

MPMW provides water services to approximately 4,400 customers shown in Table 3-1. All customers, except for unmetered private fire, are connected to the water system via metered connections. The projected total number of connections is expected to grow over the study period, with an average decline of 1.9 percent per year based on MPMW’s demand projections. The demand projections were developed using demographic data, regional water demand, historical accounts and consumption, regulatory targets. The primary cause of the decline is associated with commercial, industrial and irrigation customers in the Bayfront area converting from potable water to recycled water.

Recycled water will be provided to the customer directly by West Bay Sanitary District (District). The District is designing and building the Bayfront Recycled Water Facilities Project which consists of a 0.6 million gallons per day recycled water treatment plant, an influent pump station, 2,500 lineal feet of raw wastewater force main, 2,500 lineal feet of pipeline to return waste flows to the collection system, and 14,500-foot recycled water distribution pipeline to convey flow to recycled water customers in the Bayfront area. The target completion of the project is March 2027.

Table 3-1 shows the projected number of connections for MPMW.

Table 3-1 Projected Number of Connections

Line No.	Description	Fiscal Year Ending June 30,				
		FY 2027 (Conn)	FY 2028 (Conn)	FY 2029 (Conn)	FY 2030 (Conn)	FY 2031 (Conn)
Connections						
1	Single Family Residential	3,392	3,393	3,394	3,395	3,396
2	Multi Family Residential	206	206	206	206	206
3	Commercial	194	178	159	145	130
4	Industrial	219	170	119	71	23
5	Irrigation	156	145	130	118	105
6	Public Institution	45	43	38	37	35
7	Hydrant	14	14	14	14	14
8	Private Fire	155	155	155	155	155
9	Total	4,381	4,304	4,215	4,141	4,064

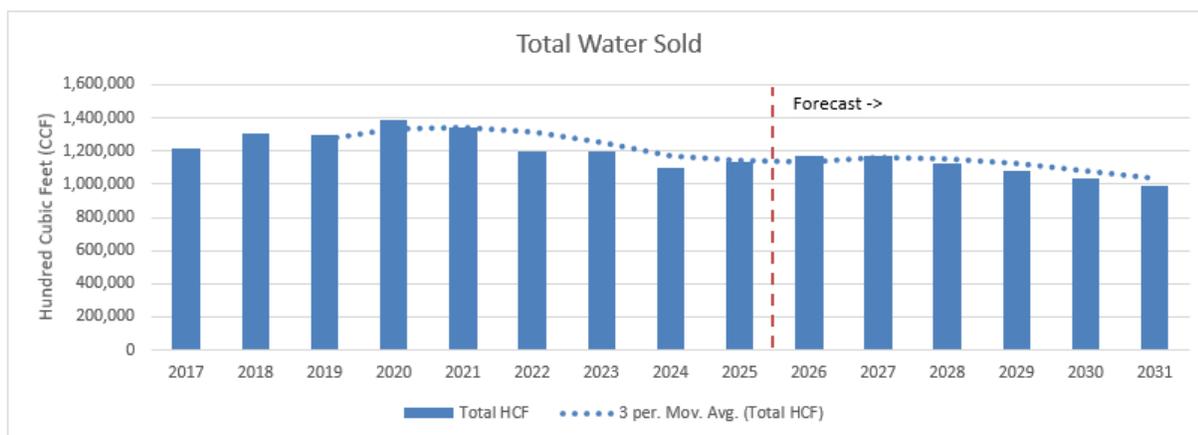
3.1.2 Water Consumption

MPMW and Black & Veatch examined historical water consumption patterns by customer class based on available data in conjunction with projected water consumption, potential future development in the City, and water conservation requirements set forth by the State of California.

In analyzing the historical water consumption patterns, Black & Veatch examined total water consumption and plotted a 3-year moving average of total usage between 2010 and 2024, as shown in Figure 3-1. Based on consumption, the maximum consumption was in 2013 at 1,457,000 CCF and the minimum consumption was in 2016 at 1,076,000 CCF. The decrease in 2015 and 2016 was due to drought conditions which prompted the State of California to issue Executive Order B29-15 by Governor Brown on April 1, 2015. Executive Order B29-15 directed the State Water Resources Control Board (SWRCB) to impose restrictions on water providers to achieve a statewide 25 percent reduction in potable urban water usage through February 16, 2016. Each water provider was tasked to reduce water usage by a specific percentage based on different factors such as historical conservation efforts, climate, existing gallons per day per capita usage, etc. MPMW’s goal was 20 percent, which its customers met.

On April 7, 2017, the Governor lifted the drought declaration and mandatory statewide conservation. As shown in Figure 3-1, consumption bounced back from 2017 through 2020. Again, starting in 2021 there was a decrease in water consumption due to drought conditions which prompted the State of California to issue Executive Order N-10-21 by Governor Newsom on July 8, 2021. Executive Order N-10-21 called on all Californias to reduce their water use by 15 percent from their 2020 consumption levels. The order focused on using water more efficiently which has carried forward through the years.

Figure 3-1 MPMW Historical and Projected Water Consumption



In the analysis, Black & Veatch projected total consumption under current conditions would grow over the study period, but due to commercial, industrial and irrigation potable water customers transitioning to recycled water in the Bayfront area, the net total consumption will instead experience an average decline of 4.0 percent per year. Bayfront area commercial, industrial and irrigation customers are dual plumbed which gives them the ability to transition non drinking water functions such as toilet flushing from potable water to recycled water.

Table 3-2 shows projected water consumption for the study period.

Table 3-2 Projected Water Consumption

Line No.	Description	Fiscal Year Ending June 30,				
		FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
		(CCF)	(CCF)	(CCF)	(CCF)	(CCF)
Consumption						
1	Single Family Residential	371,300	371,400	371,500	371,600	371,700
2	Multi Family Residential	130,400	130,400	130,400	130,400	130,400
3	Commercial	221,100	209,215	197,039	184,569	171,808
4	Industrial	173,800	148,266	122,734	97,199	71,665
5	Irrigation	134,900	129,087	122,955	116,505	109,737
6	Public Institution	137,000	136,499	135,999	135,499	134,998
7	Hydrant	1,200	1,200	1,200	1,200	1,200
8	Total (CCF)	1,169,700	1,126,067	1,081,827	1,036,972	991,508

3.2 Revenue Under Existing Rates

Water user rates serve as the primary source of revenue for MPMW. Therefore, the level of future rate revenue is important in the development of a long-range financial plan. Rate revenue is determined by multiplying the projected system growth in terms of the number of connections and billed water consumption by the applicable rates.

Table 3-3 shows MPMW’s current schedule of charges as of FY 2026. There are several charges applied to different customers based on the services received. Typical customers are charged a monthly fixed meter charge, a consumption charge, and a capital surcharge. Private fire connections are charged a monthly fire fixed charge.

Table 3-3 Existing Water Rates

Description	Water Charges FY 2026	Description	Water Charges FY 2026
Monthly Fixed Meter Charge (\$/Month)		Monthly Unmetered Fire Fixed Charges (\$/Month)	
3/4" or less	33.53	1-1/2"	36.75
1"	55.87	2"	58.80
1-1/2"	111.77	3"	117.58
2"	178.83	4"	183.72
3"	357.65	6"	367.43
4"	558.83	8"	587.88
6"	1,117.66	10"	845.09
8"	1,788.26	12"	1,579.95
10"	2,570.60		
Consumption Charge (\$/HCF)			
Tier 1 (0-6 HCF)	6.18		
Tier 2 (7-12 HCF)	8.30		
Tier 3 (Over 12 HCF)	10.56		
Capital Facility Surcharge			
All Usage	1.92		

Table 3-4 shows a summary of projected water rate revenue under existing rates with no revenue adjustments. As shown, the revenue generated is anticipated to decrease over the study period in

conjunction with the number of connections and water consumption. Projected operating revenue decreases from \$14,989,000 in FY 2027 to \$12,577,800 in FY 2031. Projected capital revenue decreases from \$2,248,300 in FY 2027 to \$1,906,300 in FY 2031. A decrease in revenue impacts MPMW's ability to cover its operating and capital expenses which leads to revenue increases.

Table 3-4 Projected Revenue under Existing Rates (No Adjustments)

Line No.	Description	Fiscal Year Ending June 30,				
		FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
		(\$)	(\$)	(\$)	(\$)	(\$)
Monthly Fixed Meter						
1	Single Family Residential	1,542,700	1,543,100	1,543,500	1,543,900	1,544,300
2	Multi Family Residential	245,800	245,800	245,800	245,800	245,800
3	Commercial	545,500	500,300	404,900	382,700	337,900
4	Industrial	458,400	369,300	286,600	198,200	122,200
5	Irrigation	256,800	240,100	216,400	197,600	176,600
6	Public Institution	131,600	128,800	117,800	115,700	112,900
7	Hydrant	54,700	54,700	54,700	54,700	54,700
8	Total Monthly Fixed Meter	3,235,500	3,082,100	2,869,700	2,738,600	2,594,400
Monthly Unmetered Fire Fixed						
9	Private Fire	822,400	822,400	822,400	822,400	822,400
10	Total Monthly Unmetered Fire Fixed	822,400	822,400	822,400	822,400	822,400
Consumption						
11	Single Family Residential	2,885,800	2,886,600	2,887,400	2,888,200	2,889,000
12	Multi Family Residential	1,281,900	1,281,900	1,281,900	1,281,900	1,281,900
13	Commercial	2,234,700	2,115,600	1,993,400	1,868,400	1,740,300
14	Industrial	1,748,200	1,495,200	1,242,200	989,200	736,100
15	Irrigation	1,356,300	1,298,800	1,238,000	1,174,100	1,107,000
16	Public Institution	1,400,400	1,396,000	1,391,600	1,387,300	1,382,900
17	Hydrant	23,800	23,800	23,800	23,800	23,800
18	Total Water Consumption	10,931,100	10,497,900	10,058,300	9,612,900	9,161,000
19	Total Water System (Operating)	\$ 14,989,000	\$ 14,402,400	\$ 13,750,400	\$ 13,173,900	\$ 12,577,800
Capital Facility Surcharge						
20	Single Family Residential	712,900	713,100	713,300	713,500	713,700
21	Multi Family Residential	250,400	250,400	250,400	250,400	250,400
22	Commercial	424,500	401,700	378,300	354,400	329,900
23	Industrial	333,700	284,700	235,700	186,600	137,600
24	Irrigation	259,000	247,800	236,100	223,700	210,700
25	Public Institution	263,000	262,000	261,100	260,100	259,200
26	Hydrant	4,800	4,800	4,800	4,800	4,800
27	Total Water Capital Surcharge	\$ 2,248,300	\$ 2,164,500	\$ 2,079,700	\$ 1,993,500	\$ 1,906,300

3.3 Other Revenue

MPMW generates other operating revenue sources from miscellaneous fees and charges such as new customer installations, plan checks, interest on investments, and other minor miscellaneous charges. In total, other operating revenues represent about 2.4 percent of MPMW's total revenue. MPMW anticipates that these revenues will remain relatively flat for the study period.

3.4 Operating and Maintenance Expenses

Table 3-5 shows MPMW’s projected O&M expense for the study period. These expenses include costs related to water purchase, contract and professional services, salaries and benefits, materials and supplies (operating expenses), fringe benefits, routine capital outlay, utilities, repair and maintenance, and travel. In the study period, MPMW will add the following new expenses: (1) salaries and benefits for two new OIT employees, and (2) payment for indirect costs to the general fund. Indirect costs consist of general fund services such as legal, finance, and human resources and are based on a cost allocation plan. MPMW benefits from utilizing general fund resources due to economies of scale and thus experience lower operating costs.

MPMW, in conjunction with the City, anticipates that all O&M expenditures excluding water purchases will increase on average about 3.9 percent per year starting FY 2027. The percent is a bit higher than the Consumer Price Index Uninflated (CPI-U) All Items in the San Francisco-Oakland-Hayward, CA metro, where the three-year average ending December 2024 was 3.3 percent. This is due to MPMW’s mix of expenses which include items such as services and utilities that averaged higher than CPI-U.

Table 3-5 O&M Expenses

Line No.	Description	Fiscal Year Ending June 30,				
		FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
		(\$)	(\$)	(\$)	(\$)	(\$)
Operating Expenses						
1	Salaries & Wages	1,437,500	1,494,900	1,554,700	1,616,900	1,681,600
2	Fringe Benefits	733,200	762,500	793,000	824,800	857,800
3	Operating Expenses	626,400	647,000	668,300	690,300	713,100
4	Services	1,592,500	1,654,900	1,716,800	1,781,200	1,847,900
5	Travel	4,400	4,500	4,600	4,700	4,800
6	Utilities	437,900	459,800	482,800	506,900	532,200
7	Water Purchase	7,881,200	8,116,100	8,190,100	8,072,500	7,941,500
8	Fixed Assets & Capital Outlay	117,500	122,200	127,100	132,200	137,500
9	Repairs & Maintenance	404,300	420,500	437,400	454,800	473,000
10	Total	\$ 13,234,900	\$ 13,682,400	\$ 13,974,800	\$ 14,084,300	\$ 14,189,400

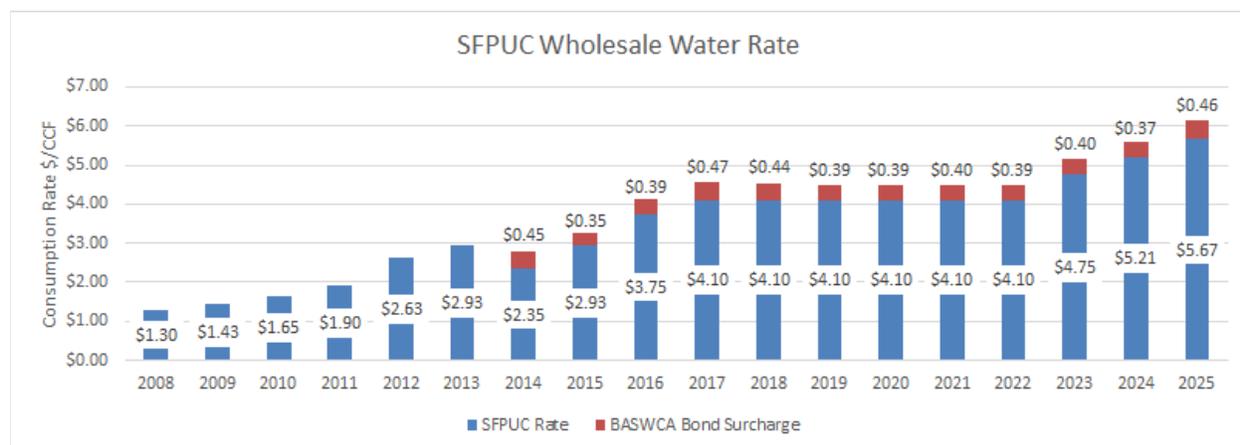
As shown in Table 3-5, MPMW’s O&M expenses are projected to increase from \$13,234,900 in FY 2027 to \$14,189,400 in FY 2031.

3.4.1 Wholesale Water

The highest O&M cost is for wholesale water purchases. Wholesale water purchase costs, including the Bay Area Water Supply & Conservation Agency (BAWSCA) surcharge, account for about 63.0 percent of the total annual O&M expenses over the study period.

MPMW purchases 100 percent of its wholesale water supply from SFPUC. In 2012, SFPUC began an extensive multi-year capital improvement program to repair and rehabilitate the Hetch Hetchy regional water system. The program involved all aspects of the regional water system, including the mountain tunnel, conveyance system, dams and reservoirs, buildings, powerhouses, and power transmission lines. Due to program costs, SFPUC has increased its wholesale water rates from \$1.30 per CCF in FY 2008 to \$5.67 per CCF in FY 2025 as shown in Figure 3-2. SFPUC provided preliminary increases of 14.8 percent in rates over the study period, and the analysis incorporates it into the water purchase cost in Table 3-5. SFPUC projected rates may change as conditions change. If any water purchase cost exceeds the amount projected in Table 3-5, then MPMW will impose pass-through charges to recover the costs.

Figure 3-2 Historical Wholesale Water Rates



In addition to the SFPUC wholesale water rate, BAWSCA adds a bond surcharge to the wholesale water rate as shown in Figure 3-2. In February 2013, BAWSCA issued bonds to prepay its member agencies’ share of outstanding capital costs owed to the SFPUC to achieve savings. Annual debt service costs for the BAWSCA bonds are allocated to the member agencies based on their share of total SFPUC wholesale water deliveries from the prior fiscal year. The BAWSCA surcharge replaces the prior capital recovery component of the SFPUC’s wholesale water rates and results in a lower overall charge per CCF of wholesale water. The BAWSCA bond surcharge fluctuates based on bond payments. In FY 2025, the bond surcharge is \$0.46 per CCF. The bond surcharge is calculated annually by BAWSCA. For the analysis, it is expected that the bond surcharge will remain the same over the study period and the analysis incorporates it into the water purchase cost in Table 3-5. The bond surcharge rates may change as conditions change.

3.5 Capital Improvement Program

MPMW prepared a Water System Master Plan report dated April 2018 in which it performed an extensive evaluation of the distribution system. The report identified infrastructure needs and provided recommendations on capital expenditure. Using the report’s findings, MPMW reviewed and developed the multi-year CIP that is incorporated in the analysis through three years. Based on the CIP, MPMW anticipates that it will need a total of \$46,097,000 over the study period.

Table 3-6 shows the planned CIP for the study period.

Table 3-6 Capital Improvement Projects

Line No.	Description	Fiscal Year Ending June 30,				
		FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
		(\$)	(\$)	(\$)	(\$)	(\$)
Water Capital Improvements						
1	Water Storage/Supply	1,000,000	3,827,000	4,170,000	0	0
2	Water Main Replacement	500,000	2,000,000	1,900,000	2,400,000	800,000
Water Storage Reservoir and Pump						
3	Stations	2,000,000	2,400,000	21,900,000	2,200,000	0
4	Water System Improvements	0	500,000	0	500,000	0
5	Total	\$ 3,500,000	\$ 8,727,000	\$ 27,970,000	\$ 5,100,000	\$ 800,000

The following provides a brief overview of key CIP projects:

- Emergency Water Storage/Supply - The development of wells and storage to provide a secondary water supply in the lower zone service area. An emergency water supply would be needed in the event of an outage or reduced supply of the Hetch Hetchy system.
- Water Main Replacement Project – The ongoing design and replacement of the aging water supply system ensures continued public health protection and system reliability. Using a condition assessment based on pipe age, material, size, and hazards, sections of the water system most vulnerable to failure are selected for replacement.
- Storage Reservoir and Pump Stations – The storage reservoir is part of Emergency Water Storage/Supply but listed separately to show anticipated costs. The planning, design, and construction of a 2-3 MG underground storage tank to meet the operational, emergency, and fire flow storage needs of the Lower Pressure Zone.
- Water System Improvements – The pipeline improvements associated with interconnections with Cal Water and Palo Alto that provide the City supply reliability in the event of an emergency.

3.6 Long-Term Debt

It is common practice for utilities to utilize debt to finance multi-year capital improvement projects, but financing options will depend on the utility’s financial conditions. By financing capital improvements, MPMW can fund major projects when needed and spread the payment over a specified time frame. Without debt financing, utilities will need to build up reserves over years until there is sufficient cash to execute the project. This delays investment in the system and could lead to higher construction costs.

If MPMW decides to utilize debt financing, there are three primary sources: 1) Revenue Bonds, 2) General Obligation Bonds, and 3) State Revolving Fund Loans. The long-term debt options are summarized below.

TYPE OF DEBT	DESCRIPTION
Revenue Bond	<ul style="list-style-type: none"> ■ Funds are provided by investors ■ Guaranteed by specific revenues generated by the utility – usually issues by the utility and backed by rates and charges ■ Higher risk to potential investors ■ Interest rate is about 4-6% (depends on credit rating) ■ 20 to 30 years repayment after bond proceeds disbursed ■ Principal and interest incur immediately after disbursement ■ Bond proceeds are obtained upfront upon issuance of debt ■ Debt service reserve fund required ■ Must maintain a debt service coverage ratio (revenue over expenses)
General Obligation Bonds	<ul style="list-style-type: none"> ■ Funds are provided by investors ■ Guaranteed by any means of revenues generated by the agency – usually issued by the agency with taxing authority and backed by taxes ■ Medium risk to potential investors ■ Interest rate is about 4-6% (depends on credit rating) ■ Require 2/3 voter approval before issuance ■ 20 to 30 years repayment after bond proceeds disbursed ■ Principal and interest incur immediately after disbursement ■ Bond proceeds are obtained upfront upon issuance of debt ■ No debt service reserve fund required ■ No debt service coverage ratio, but lender might assess the ratio as part of evaluation

State Revolving Fund Loan	<ul style="list-style-type: none"> ▪ Managed by the State Water Resources Control Board (California) ▪ Drinking Water State Revolving Fund Program ▪ Drinking water infrastructure projects needed to achieve or maintain compliance with Safe Drinking Water Act requirements ▪ Must submit application and be selected to receive SRF loan ▪ Interest rate is about ½ General Obligation Bonds (1.9% in 2025) ▪ 20 to 30 years repayment after substantial completion ▪ Interest incurs immediately after disbursement (can capitalize interest) ▪ Loan proceeds are distributed after costs already incurred (reimbursement) ▪ Commercial paper may be used until reimbursements come in
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In Option 1, the analysis assumes MPMW obtains a Revenue Bond for \$16,000,000 in FY 2029. A Revenue Bond was incorporated as it immediately provides the funds and is backed by the revenue stream of MPMW. The debt service payment is expected to start immediately. MPMW will examine a General Obligation Bond which is the debt instrument the City has used before for other departments. The Revenue Bond terms are based on a 5.0 percent interest rate, 30-year repayment term, one percent issuance costs, a debt service reserve and debt coverage ratio of 1.25x.

3.6.1 Capital Improvement Financing Plan

MPMW funds annual expenditures for the CIP from a combination of revenues derived from operating, debt proceeds, capacity fees, capital facility surcharge interest earnings, and available funds on hand.

Table 3-7 shows the capital financial plan for MPMW under Option 1. In this scenario, the capital facility surcharge consolidates with the consumption charge. It is expected that the operating fund will contribute \$17,500,000 over the study period for capital expenditure. In terms of debt proceeds, MPMW would obtain a Revenue Bond for \$16,000,000 in FY 2029. Capital facility surcharges are dedicated funds from rates that are used solely for capital expenditures and will contribute \$11,822,400 over the study period. To a lesser extent, capacity fees are one-time fees imposed when connecting to the water system and can also only be used for capital improvements. These fees will contribute a total of \$703,000 over the study period.

The source of funds identified in Option 1 covers the identified total CIP expenditures and associated costs of \$49,155,600.

Table 3-7 Capital Fund (Option 1)

Line No.	Description	Fiscal Year Ending June 30,						
		FY 2027	FY 2028	FY 2029	FY 2030	FY 2031		
		(\$)	(\$)	(\$)	(\$)	(\$)		
Source of Funds								
1	Transfer from Operating Fund	4,900,000	4,000,000	4,000,000	3,100,000	1,500,000		
2	Debt Proceeds	0	0	16,000,000	0	0		
3	Water Connection Fees	140,600	140,600	140,600	140,600	140,600		
4	Capital Facility Surcharge	2,248,300	2,164,500	2,079,700	1,993,500	1,906,300		
	Year	Months Effective	Rate Adj					
5	2027	12	4.25%	95,600	92,000	88,400	84,700	81,000
6	2028	12	4.25%		95,900	92,100	88,300	84,500
7	2029	12	4.50%			101,700	97,500	93,200
8	2030	12	5.00%				113,200	108,300
9	2031	12	5.00%					113,700
10	Increased Revenue Due to Adjustments	95,600	187,900	282,200	383,700	480,700		
11	Interest Income	423,000	327,100	45,100	42,200	146,600		
12	Total Sources	\$ 7,807,500	\$ 6,820,100	\$ 22,547,600	\$ 5,660,000	\$ 4,174,200		
Use of Funds								
13	Capital Projects [1]	4,064,700	9,314,300	28,580,800	5,735,200	1,460,600		
14	Debt Issuance Costs	0	0	173,000	0	0		
15	Bond Reserve Fund Requirement	0	0	1,125,300	0	0		
16	Total Uses	\$ 4,064,700	\$ 9,314,300	\$ 29,879,100	\$ 5,735,200	\$ 1,460,600		
17	Net Annual Cash Balance	3,742,800	(2,494,200)	(7,331,500)	(75,200)	2,713,600		
18	Beginning Unrestricted Fund Balance	7,255,988	10,998,788	8,504,588	1,173,088	1,097,888		
19	Net Cumulative Fund Balance	\$ 10,998,788	\$ 8,504,588	\$ 1,173,088	\$ 1,097,888	\$ 3,811,488		
20	Reserve Target [2]	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 3,000,000		

[1] Differs from Table 3-6 as it includes ~\$560k to \$610k in operating costs.

[2] Recommended reserve target is \$3.0M (by 2031). Existing reserve target is \$1.0M.

3.7 Reserves

MPMW has reserve goals in place for operating and capital. A utility typically establishes reserves for several reasons, such as covering shortfalls in operating revenues, maintaining strong bond ratings, covering day-to-day operating costs, and easing the burden on ratepayers associated with large rate increases. Therefore, MPMW will continue with its two reserves:

- Operating Reserve represents working capital maintained by the Operating Fund to cover day-to-day expenses and maintain enough funds to cover accounts receivable if there are supplier issues, periods of lower-than-expected water sales, or unforeseen cost increases. The reserve has a target of 120 days of operating expenses.
- Capital Reserve represents funds used for unforeseen and unbudgeted capital costs. The current reserves target to maintain a balance equal to \$1,000,000. It is recommended that the reserve target be increased to \$3,000,000 by FY 2031 to keep up with increase costs in materials and construction.

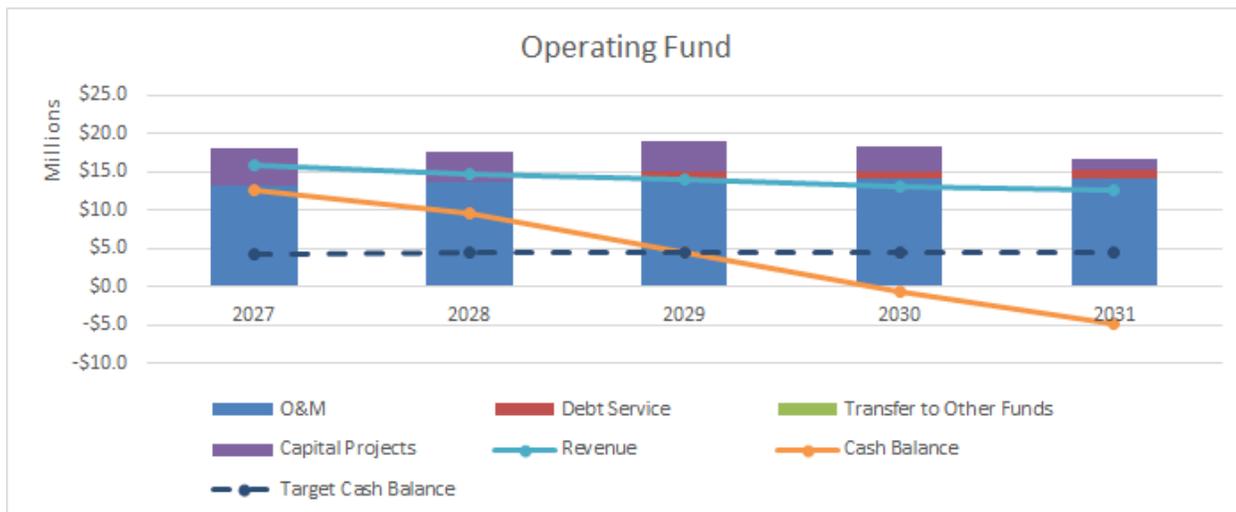
In the analysis, the target reserve levels as incorporated into the cash flow and thus the revenue projected must be at sufficient levels that fully fund the reserves.

3.8 Projected Operating Results

The revenue requirements of MPMW consist of O&M expenses, debt service, and transfers to other funds, and the capital fund for capital expenditures.

To fully understand the current condition of MPMW, it was important to examine the cash flow projections under status quo conditions. In this scenario, MPMW would not impose any revenue increases over the study period and continue to incur O&M expenses, debt service payments, and transfers. As shown in Figure 3-3, the status quo conditions would project that MPMW would operate in an annual deficit position tapping into its reserves. By FY 2030, the operating fund would be below the reserve target which needs significant rate increases or support from the City’s General Fund.

Figure 3-3 Operating Cash Flow Status Quo



To avoid a deficit position, MPMW would need to implement the revenue increases, as shown in Table 3-8 for Option 1. The revenue increases represent the overall total revenue adjustment needed to meet revenue requirements. The revenue adjustment does not represent adjustments to the individual rates but reflects the overall revenue level needed to meet MPMW’s obligations.

The suggested revenue increases help MPMW meet the following goals:

- Meet budgeted operating obligations.
- Meet planned capital investments.
- Maintain an operating reserve of 120 days of operating expenses.
- Maintain capital reserve equaled at least \$1,000,000 and increased to \$3,000,000 by FY 2031.

Table 3-8 shows the proposed Operating Fund for the study period for Option 1. The Operating Fund consists of two parts: 1) Revenue and 2) Revenue Requirements.

Revenue

- Line 1 is the revenue under existing rates.
- Lines 2 through 6 are the additional annual revenue generated from the required annual revenue increases. The additional revenue generated is a direct reflection of the number of months the

increase is effective for, and therefore the amount might be calculated at less than that stated amount.

- Line 8 is the total revenue generated from rates.
- Line 12 represents the total of other operating revenues.
- Line 13 represents total revenues for the Operating Fund.

Revenue Requirements

- Line 16 represents the total O&M expenses and routine capital outlay. This includes water purchases from SFPUC.
- Line 19 represents the total existing and proposed debt service payments. MPMW has no existing debt on the books but plans to get a Revenue Bond in FY 2029.
- Line 20 represents transfers to other funds within the City.
- Line 21 represents transfers to the capital fund to help execute capital projects in the multi-year CIP.
- Line 23 represents total revenue requirements for the Operating Fund.

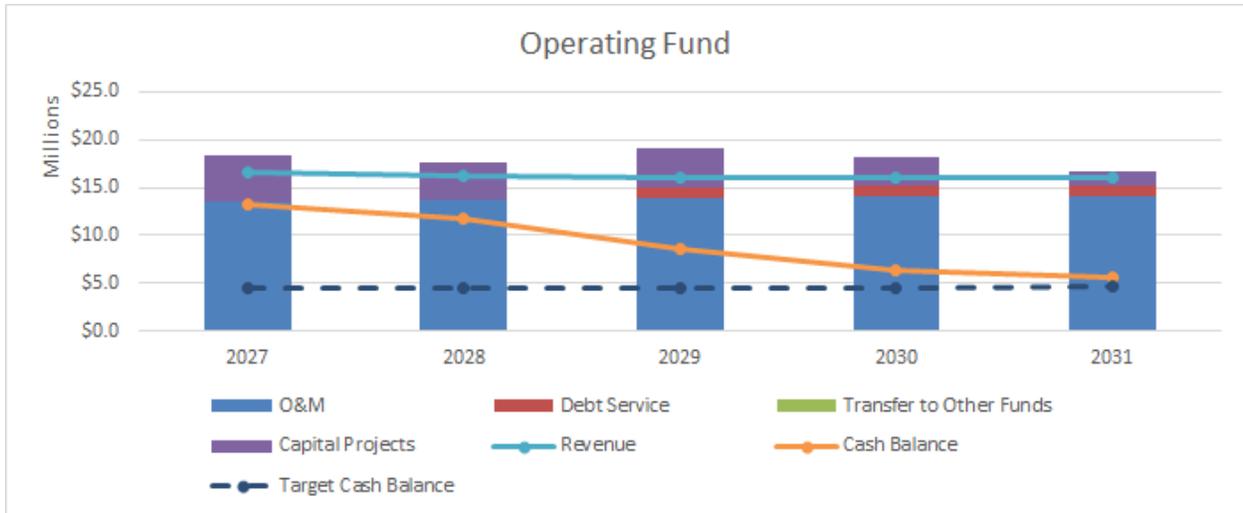
Line 26 represents the net cumulative cash balance within the Operating Fund. The net cumulative cash balance intends to match the reserve target of 120 days of O&M expenses, to the extent possible, shown in Line 27. Line 28 represents the debt service coverage ratio which intends to be greater than the target of 1.25x. The target is based on historical requirements set by the financial institutions. The actual target will be finalized upon issuance of the Revenue Bond.

Table 3-8 Operating Fund (Option 1)

Line No.	Description	Fiscal Year Ending June 30,				
		FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
		\$	\$	\$	\$	\$
Revenue						
Rate Revenue						
1	Revenue from Existing Rates	14,989,000	14,402,400	13,750,400	13,173,900	12,577,800
Months						
	Year	Effective	Rate Adj			
2	2027	12	4.25%	637,000	612,100	584,400
3	2028	12	4.25%		638,100	609,200
4	2029	12	4.50%			672,500
5	2030	12	5.00%			748,100
6	2031	12	5.00%			750,000
7	Increased Revenue Due to Adjustments	637,000	1,250,200	1,866,100	2,536,000	3,171,200
8	Subtotal Rate Revenue	\$ 15,626,000	\$ 15,652,600	\$ 15,616,500	\$ 15,709,900	\$ 15,749,000
Other Operating Revenue						
9	Inter Governmental Revenue	500,000	0	0	0	0
10	Use of Money & Property	507,900	450,200	332,100	244,800	215,400
11	Charges for Services	38,900	39,300	39,700	40,100	40,500
12	Subtotal Other Operating Revenue	\$ 1,046,800	\$ 489,500	\$ 371,800	\$ 284,900	\$ 255,900
13	Total Revenue	\$ 16,672,800	\$ 16,142,100	\$ 15,988,300	\$ 15,994,800	\$ 16,004,900
Revenue Requirements						
Operating & Maintenance						
14	O&M Expenses	13,430,300	13,519,700	13,805,600	13,908,300	14,006,300
15	Routine Capital Outlay	117,500	122,200	127,100	132,200	137,500
16	Subtotal O&M	\$ 13,547,800	\$ 13,641,900	\$ 13,932,700	\$ 14,040,500	\$ 14,143,800
Debt Service						
17	Existing Revenue Bonds	0	0	0	0	0
18	Proposed Revenue Bonds	0	0	1,125,300	1,125,300	1,125,300
19	Total Debt Service	\$ 0	\$ 0	\$ 1,125,300	\$ 1,125,300	\$ 1,125,300
Transfers						
20	Transfer to Other Funds	0	0	0	0	0
21	Transfer to Capital Fund	4,900,000	4,000,000	4,000,000	3,100,000	1,500,000
22	Total Transfers	\$ 4,900,000	\$ 4,000,000	\$ 4,000,000	\$ 3,100,000	\$ 1,500,000
23	Total Revenue Requirements	\$ 18,447,800	\$ 17,641,900	\$ 19,058,000	\$ 18,265,800	\$ 16,769,100
24	Net Annual Cash Balance	(1,775,000)	(1,499,800)	(3,069,700)	(2,271,000)	(764,200)
25	Beginning Fund Balance	14,979,600	13,204,600	11,704,800	8,635,100	6,364,100
26	Net Cumulative Fund Balance	\$ 13,204,600	\$ 11,704,800	\$ 8,635,100	\$ 6,364,100	\$ 5,599,900
27	Target Operating Reserves (120 Days)	\$ 4,415,400	\$ 4,444,800	\$ 4,538,800	\$ 4,572,600	\$ 4,604,800
28	Debt Service Coverage	0.00	0.00	1.83	1.74	1.65

Figure 3-4 presents the proposed Operating Fund for Scenario 1.

Figure 3-4 Proposed Operating Cash Flow (Scenario 1)



4.0 Cost of Service Analysis

Cost of service analysis requires recovery of MPMW’s needed revenues from rates for water service, allocated to customer classes according to the service rendered. An equitable rate structure allocates the capture of revenue requirements to customer classes based on the quantity of water consumed and peak flows, the number of customer connections, and other relevant factors.

In analyzing MPMW’s cost of service for allocation to its customer classes, Black & Veatch selected the annual revenue requirements for FY 2027 as the Test Year requirements to demonstrate the development of cost-of-service water rates. Table 4-1 shows the total service costs that need to be recovered from water user rates for Option 1. The table represents Test Year 2027.

Table 4-1 Cost of Service Revenue from Rates (Option 1)

Line No.	Description	Operating Expense	Capital Cost	Total Cost
		(\$)	(\$)	(\$)
Revenue Requirements				
1	O&M Expense	13,430,300	0	13,430,300
2	Routine Capital Outlay	117,500	0	117,500
3	Debt Service Requirements	0	0	0
4	Transfers to Other Funds	0	0	0
5	Transfers to Water Capital	0	4,900,000	4,900,000
6	Subtotal	\$ 13,547,800	\$ 4,900,000	\$ 18,447,800
Less Revenue Requirements Met from Other Sources				
7	Inter Governmental Revenue	500,000	0	500,000
8	Use of Money & Property	507,900	0	507,900
9	Charges for Services	38,900	0	38,900
10	Subtotal	\$ 1,046,800	\$ 0	\$ 1,046,800
Adjustments				
11	Adjustment for Annual Cash Balance	1,275,200	499,800	1,775,000
12	Adjustment to Annualize Rate Increase	0	0	0
13	Subtotal	\$ 1,275,200	\$ 499,800	\$ 1,775,000
14	Cost of Service to be Recovered from Rates	\$ 11,225,800	\$ 4,400,200	\$ 15,626,000

Line 6 is the total revenue requirement that corresponds with Table 3-8, Line 23. Line 10 is revenue from other sources that will be used to offset the total revenue requirements.

Line 11 represents the net annual cash balance during the Test Year. If the utility is drawing down funds already in the Operating Fund, then this number is positive. The number will be negative if the utility is replacing funds. In the case of MPMW, the \$1,775,000 figure indicates that the forecast projects a negative cash balance for the year.

Since MPMW expects to implement the revenue adjustment starting on July 1, 2026, the final service recovery cost from rates does not require an adjustment as shown in Line 12.

4.1 Functional Cost Components

The first step in conducting a cost-of-service analysis involves analyzing the cost of providing water service by system function to properly allocate the costs to the various customer classes and subsequently design rates. As a basis for allocating costs of service among customer classes, costs were separated into the following four basic functional cost components: (1) "Base"; (2) "Extra Capacity"; (3) "Customer"; and (4) "Direct Assignment," described as follows:

1. Base costs represent the system's operating and capital costs associated with service to customers to the extent required under constant or average annual load conditions without the elements necessary to meet water consumption variations or peak demands.
2. Extra Capacity costs represent those operating and capital costs incurred in meeting peaking demands. Peaking demands represent water consumption in excess of the average rate of use.
3. Customer costs are those expenditures that tend to vary in proportion to the number of customers connected to the system. These include maintenance and capital costs associated with meters and services, meter reading, billing, collecting, and accounting.
4. Directly assigned costs are costs specifically identified as those incurred to serve specific customers. These costs include fire protection.

4.2 Allocation to Cost Components

The next step of the cost-of-service process involves allocating each element of cost to functional cost components based on the parameter or parameters having the most significant influence on the magnitude of that element of cost. O&M expense items were allocated directly to appropriate cost components. A detailed allocation of related capital investment was used as a proxy for allocating capital and replacement costs. The separation of costs into functional components provides a means for distributing such costs to the various classes of customers based on their respective responsibilities for each type of service.

4.2.1 System Base, Max Day, and Max Hour Allocations

The water system consists of various facilities, each designed and operated to fulfill a given function. For the system to provide adequate service to its customers, it must meet the annual volume requirements and the maximum demand rates placed on the system. Because not all customers and types of customers exert maximum demand at the same time, the capacities of the various facilities must meet the maximum coincidental demand of all classes of customers. Each water service facility within the system has an underlying average demand exerted by the customers for whom the base cost component applies. For those facilities designed solely to meet average day demand, 100% of the costs go to the base cost component. Extra capacity requirements associated with coincidental demands in excess of average use consist of maximum daily and maximum hourly demand subcomponents.

For volume-related cost allocations, the first step in determining the allocation percentages is to assign system peaking factors. The base element is equal to the average daily demand (ADD) and is assigned a value of 1.0. Based on the Water System Master Plan dated 2018, the existing water system has a maximum day (max day) demand of 1.5 times the ADD based on experience with similar systems. Thus, the max day factor value of 1.5. The maximum hourly (max hour) demand is 2.1 times the ADD. Thus, the max hour factor value of 2.1.

The costs associated with facilities required to meet maximum day demand are allocable to base and maximum day extra capacity as follows:

- Base = $(1.0/1.5) \times 100 = 66.7\%$
- Max Day = $(1.5 - 1.0)/1.5 \times 100 = 33.3\%$

These calculations indicate that the average or base use requires 66.7% of the capacity of facilities designed and generated to meet maximum day demand, and the remaining 33.3% meets maximum day extra capacity requirements.

The costs associated with facilities required to meet maximum hour demand are allocable to base, maximum day extra capacity, and maximum hour extra capacity as follows:

- Base = $(1.0/2.1) \times 100 = 47.6\%$
- Max Day = $(1.5 - 1.0)/2.1 \times 100 = 23.8\%$
- Max Hour = $(2.1 - 1.5)/2.1 \times 100 = 28.6\%$

4.2.2 Allocation of Functional Costs

To allocate O&M and capital costs to costs components shown in Section 4.1, the O&M and capital costs were allocated to a function or activity such as water supply, pumping, treatment, water storage, transmission and distribution, meters, hydrants, or general plant to the extent possible. In cases where O&M or capital costs cannot be identified into a specific function, then the average of the existing and proposed fixed assets is used as a basis. All fixed assets are categorized into functions and then allocated to the cost component. The result sets a distribution of fixed assets that can be used to allocate other O&M and capital costs. Table 4-2 shows the functional costs allocated to the cost components.

Table 4-2 Allocation of Function Costs (Option 1)

Line No.	Description	Common to All Customers					Fire Protection
		Base	Max. Day	Max. Hour	Meters	Cust/Bill.	
O&M & Capital Allocations [3]							
1	Water Supply	99.0%	0.0%	0.0%	0.0%	0.0%	1.0%
2	Pumping	66.0%	33.0%	0.0%	0.0%	0.0%	1.0%
3	Treatment	66.0%	33.0%	0.0%	0.0%	0.0%	1.0%
4	Water Storage	9.0%	0.0%	90.0%	0.0%	0.0%	1.0%
5	Transmission & Distribut	47.1%	23.6%	28.3%	0.0%	0.0%	1.0%
6	Meters	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
7	Customer	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
8	Hydrants	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
9	Transfers	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
10	Sal&Ben	37.6%	18.8%	22.6%	10.0%	10.0%	1.0%
11	FA - Avg Net Plant [1]	33.7%	4.4%	60.9%	0.0%	0.0%	1.0%
12	Avg O&M (less S&FB) [2]	79.2%	0.8%	13.3%	0.5%	5.2%	1.2%

Notes:

[1] FA - Net Plant represents the average of costs for all plant system elements.

[2] Avg O&M represents the average of costs for all O&M elements (excluding Salaries & Fringe Benefits).

[3] The values in Base/Max Day/Max Hour are based on Section 4.2.1, but may be reduced due to allocation to fire.

4.2.3 Allocation of Operating and Maintenance Expenses

In allocating O&M expenses for Test Year 2027, the allocation factors in Table 4-2 were used to allocate the O&M costs to the cost components. Table 4-3, Lines 1-12 represent the allocations of O&M. Next, the revenues from other sources, as shown in Table 4-1, Line 10, and the adjustments shown in Table 4-1, Line 13, were subtracted to determine the net O&M costs. The net operating costs are shown in Line 16.

Table 4-3 Allocation of O&M Expenditures (Option 1)

Line No.	Description	Total Cost	Common to All Customers					Fire Protection	Allocation Basis
			Base	Max. Day	Max. Hour	Meters	Cust/Bill.		
		(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	
Operation & Maintenance									
1	Salaries & Benefits	2,170,700	816,500	408,300	490,000	217,100	217,100	21,700	Sal&Ben
2	Operating Expenses	630,800	212,500	27,700	384,300	0	0	6,300	FA - Avg Net Plant
3	Utilities	437,900	147,400	19,300	266,800	0	0	4,400	FA - Avg Net Plant
4	Purchased Water	8,230,300	8,148,000	0	0	0	0	82,300	Water Supply
5	Services	970,100	326,700	42,700	591,000	0	0	9,700	FA - Avg Net Plant
6	Customer Billing	377,000	0	0	0	0	377,000	0	Customer
7	Conservation	209,200	0	0	0	0	209,200	0	Customer
8	Capital Outlay	36,400	12,200	1,600	22,200	0	0	400	FA - Avg Net Plant
9	Meter Services	52,000	0	0	0	52,000	0	0	Meters
10	Hydrants	29,100	0	0	0	0	0	29,100	Hydrants
11	Repairs & Maintenance	404,300	136,200	17,800	246,300	0	0	4,000	FA - Avg Net Plant
12	Transfers	0	0	0	0	0	0	0	Transfers
13	Total O&M Expenses	\$ 13,547,800	\$ 9,799,500	\$ 517,400	\$ 2,000,600	\$ 269,100	\$ 803,300	\$ 157,900	
Less Other Revenue									
14	Miscellaneous Revenues	(1,046,800)	(757,100)	(40,000)	(154,600)	(20,800)	(62,100)	(12,200)	Avg O&M
15	Other Adjustments	(1,275,200)	(922,400)	(48,700)	(188,300)	(25,300)	(75,600)	(14,900)	Avg O&M
16	Net Operating Expenses	\$ 11,225,800	\$ 8,120,000	\$ 428,700	\$ 1,657,700	\$ 223,000	\$ 665,600	\$ 130,800	

4.2.4 Allocation of Capital Investments

In allocating capital investment for Test Year 2027, the proposed five-year CIP are allocated directly to cost components to the extent possible using Table 4-2. The allocation of costs in this manner provides a basis for annual investment in water system facilities. Using the CIP, the capital costs can be allocated using the total net system investment distribution across the functional cost components.

Table 4-4 shows the allocation of Test Year water investment. The total proposed system investment of \$46,097,000 shown on Line 10 represents the five-year proposed CIP. Line 11 represents the test year's CIP costs and Line 14 represents the net capital investment for the test year once other revenue sources are deducted.

Table 4-4 Allocation of Capital Costs (Option 1)

Line No.	Description	Total Cost	Common to All Customers					Fire Protection	Allocation Basis
			Base	Max. Day	Max. Hour	Meters	Cust/Bill.		
		(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	
Planned 5-Year CIP									
1	Water Supply	8,997,000	8,907,000	0	0	0	0	90,000	Water Supply
2	Pumping	0	0	0	0	0	0	0	Pumping
3	Treatment	0	0	0	0	0	0	0	Treatment
4	Water Storage	28,500,000	2,565,000	0	25,650,000	0	0	285,000	Water Storage
5	Transmission	1,635,200	770,900	385,400	462,500	0	0	16,400	Transmission & Distribution
6	Distribution	6,964,800	3,283,500	1,641,700	1,970,000	0	0	69,600	Transmission & Distribution
7	Meters	0	0	0	0	0	0	0	Meters
8	Hydrants	0	0	0	0	0	0	0	Hydrants
9	General Plant	0	0	0	0	0	0	0	FA - Avg Net Plant
10	Total Planned 5-Year CIP	\$ 46,097,000	\$ 15,526,400	\$ 2,027,100	\$ 28,082,500	\$ 0	\$ 0	\$ 461,000	
11	Current Capital Projects	4,900,000	1,650,400	215,500	2,985,100	0	0	49,000	FA - Avg Net Plant
Less Other Revenue									
12	Miscellaneous Revenues	0	0	0	0	0	0	0	FA - Avg Net Plant
13	Other Adjustments	(499,800)	(168,300)	(22,000)	(304,500)	0	0	(5,000)	FA - Avg Net Plant
14	Net Operating Expenses	\$ 5,399,800	\$ 1,818,700	\$ 237,500	\$ 3,289,600	\$ 0	\$ 0	\$ 54,000	

4.3 Units of Service

Following the allocation of costs, each customer class's total cost responsibility is developed using unit costs of service for each cost function and subsequently assigning those costs to the customer classes based on the respective service requirements of each. To properly recognize the cost of service, each customer class receives its share of base, maximum day, peak hour, and customer costs. The number of units of service required by each customer class provides a means for the proportionate distribution of costs previously allocated to respective cost categories.

Table 4-5 shows the estimated Test Year 2027 units of service for the various customer classes.

- Base costs vary with the volume of water consumed and distributed to customer classes on that basis.
- Extra Capacity costs are associated with meeting peak demand rates of water use and distributed to customer classes based on the respective class capacity requirements in excess of average rates of use. Black & Veatch followed the capacity factor methodology outlined in Appendix A of the AWWA M1 Manual to derive peak consumption information from the monthly consumption records in MPMW's Customer Information System (CIS), which helps provide the basis for estimating maximum day and peak hour ratios by customer class.
- Customer billing costs are distributed by the number of bills for each customer class.
- Customer meter requirements are allocated based on the number of equivalent meters serving each customer class. The estimated number of equivalent meters for each customer class relies on the total number of various sizes of meters serving respective classes and the ratio of the cost of meters for the various sizes to the cost of the ¾-inch meter. The equivalent meter ratios adopted in this analysis are consistent with those established in AWWA M1 Manual.
- Private fire-protection cost allocations use equivalent meters.

4.3.1 Max Day/Max Hour Peaking Factors

Like other utilities, MPMW does not have access to system capacity factor data for individual customer classes. It is typical for utilities to lack this data since acquiring it requires installing special meters for prolonged periods to measure the usage patterns of different customer classes. In the absence of measured capacity factors, estimates were developed of these factors using procedures outlined in Appendix A of AWWA's M1 Rate Manual. The process involved using MPMW's monthly peaking data and high-level assumptions regarding customer class usage patterns. Each customer class's capacity factors are multiplied by the average consumption for each class to determine the base, max day, and max hour allocation percentages. The allocation to base, max day, and max hour considers the total water consumption per customer class and the demand each customer class places on the system.

4.3.2 Fire Service

Fire protection costs are allocated between those costs to be recovered from all users and those recovered from customers with private fire meters. MPMW provided Black & Veatch with the number of public fire hydrants and the number of private fire meters by meter size. The public fire hydrants and private meters were converted to equivalent meters to derive 12,600-meter equivalents for public fire and 6,344-meter equivalents for private fire. As shown in Table 4-7, Column 1, \$2,105,300 of the fire protection costs are associated with public hydrants and are recovered by all water users. The remaining \$1,083,400 of the fire protection costs will be recovered directly from those customers with private fire meters.

The derivation of fire protection units of service depends on the system’s fire requirements. For MPMW, according to the Water System Master Plan dated April 2018, the water system should be able to handle a 4-hour fire delivering 4,000 gallons per minute (GPM) of flow. The process for converting these fire protection requirements into base/max day/max hour elements is as follows:

Public Fire Protection

- Max Day requirements = Fire duration x Water flow x conversion factors x number of public meters/total number of meters
 - Max Day Extra = $4 \times 4,000 \times 60/7.48/100 \times 12,600/18,944 = 854 \text{ CCF/day}$
- Max Hour requirements = Water flow x conversion factors x number of public meters/total number of meters
 - Max Hour Total = $4,000 \times 60/7.48/100 \times 12,600/18,944 = 5,122 \text{ CCF/day}$
 - Max Hour Extra = $5,122 \text{ CCF/day} - 854 \text{ CCF/day} = 4,268 \text{ CCF/day}$

The same process for the private fire protection units was repeated but replaced “number of public fire meters” with “number of private meters.”

4.4 Cost of Service Allocations

To determine the cost of service for each customer class, apply the unit costs of service to each customer classes’ respective service requirements. The total unit costs of service applied to each customer class’s respective requirements result in the total cost of service for each customer class.

4.4.1 Units Costs of Service

The Test Year 2027 unit cost of service for each functional cost component is simply the total cost divided by the applicable units of service, as shown in Table 4-6. On Line 3, the total cost represents the costs that rates need to recover, as shown in Table 4-1, Line 14. The net O&M cost includes O&M less revenue from other sources and adjustments. The total capital cost includes transfers to the Capital Fund. Line 5 represents the unit costs for the entire water system regardless of customer classes. After that, use these unit costs in allocating the costs to the specific customer classes.

4.4.2 Distribution of Costs of Service to Customer Classes

Applying the unit costs to the units for each customer class produces the customer class costs. This process is illustrated in Table 4-7, in which the unit costs are applied to the customer class units of service for Test Year 2027. The costs attributable to each customer class reflect the functional cost components described in Section 4.1. Each customer class places a burden on the system in different ways, and thus, the allocation of the units is representative of this burden.

An example of the application of unit costs is shown below for illustrative purposes.

	Base Component
Unit Cost (Table 4-6, Col 2, Line 5)	\$ 8.20 per CCF
Multi Family Consumption (Table 4-7, Col 2, Line 4)	130,400 CCF
Total Allocated Cost	\$ 1,069,300

Please note that the numbers within the tables are rounded, yet the calculations are done based on non-rounded values; therefore, results might vary.

Table 4-5 Units of Service (Option 1)

Line No.	Description	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		Consumption		Factor	Maximum Day		Maximum Hour			Meters	Bills	Fire Protection
Units of Measure	Annual	Avg. Day	Total		Extra	Factor	Total	Extra	(EMs)			
Customers												
1	Single Family Residential	371,300	1,017	241%	2,452	1,434	321%	3,265	814	3,913	40,704	
2	Multi Family Residential	130,400	357	204%	729	372	271%	968	239	623	2,472	
3	Commercial	221,100	606	242%	1,466	860	322%	1,951	485	1,230	2,328	
4	Industrial	173,800	476	229%	1,090	614	304%	1,448	357	1,163	2,628	
5	Irrigation	137,400	376	320%	1,205	828	425%	1,600	395	790	2,040	
6	Public Institutional	137,000	375	243%	912	537	323%	1,212	300	334	540	
7	Hydrant	-	-	545%	-	-	725%	741	741	-	-	
8	Subtotal	1,171,000	3,208		7,853	4,645		11,185	3,331	8,052	50,712	
9	Public Fire Service				854	854		5,122	4,268			12,600
10	Private Fire Service				430	430		2,579	2,149		1,860	6,344
11	Subtotal				1,283	1,283		7,701	6,417		1,860	18,944
12	Total Water System	1,171,000	3,208		9,137	5,929		18,885	9,749	8,052	52,572	18,944

Table 4-6 Units Cost of Service (Option 1)

Line No.	Description	(1)	(2)	(3)	(4)	(5)	(6)	(7)
		Total Cost	Common to All Customers					Fire Protection
			Base	Max. Day	Max. Hour	Meters	Cust./Bill.	
		(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
1	Net Operating Expense	11,225,800	8,120,000	428,700	1,657,700	223,000	665,600	130,800
2	Capital Costs	4,400,200	1,482,100	193,500	2,680,600	0	0	44,000
3	Total Cost of Service	\$ 15,626,000	\$ 9,602,100	\$ 622,200	\$ 4,338,300	\$ 223,000	\$ 665,600	\$ 174,800
4	Units of Service		1,171,000	5,929	9,749	8,052	52,572	18,944
			CCF	CCF/Day	CCF/Day	Eq. Meters	Bills	Eq. Meters
5	Cost per Unit		\$ 8.20	\$ 104.95	\$ 445.02	\$ 27.69	\$ 12.66	\$ 9.23
			per CCF	per CCF/Day	per CCF/Day	per Eq. Meters	per Bill	per Eq. Meters

Table 4-7 Distribution of Costs to Customer Classes (Option 1)

Line No.	Description	(1)	(2)	(3)	(4)	(5)	(6)	(7)
		Total Cost	Common to All Customers					Fire Protection
			Base	Max. Day	Max. Hour	Meters	Cust./Bill.	
		(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
1	Cost per Unit		\$ 8.20	\$ 104.95	\$ 445.02	\$ 27.69	\$ 12.66	\$ 9.23
			per CCF	per CCF/Day	per CCF/Day	per Eq. Meters	per Bill	per Eq. Meters
	Single Family Residential							
2	Units		371,300	1,434	814	3,913	40,704	0
3	Allocation of costs of ser	4,181,000	3,044,600	150,500	362,200	108,300	515,400	0
	Multi Family Residential							
4	Units		130,400	372	239	623	2,472	0
5	Allocation of costs of ser	1,263,400	1,069,300	39,000	106,500	17,300	31,300	0
	Commercial							
6	Units		221,100	860	485	1,230	2,328	0
7	Allocation of costs of ser	2,182,600	1,813,000	90,300	215,700	34,100	29,500	0
	Industrial							
8	Units		173,800	614	357	1,163	2,628	0
9	Allocation of costs of ser	1,714,000	1,425,100	64,500	158,900	32,200	33,300	0
	Irrigation							
10	Units		137,400	828	395	790	2,040	0
11	Allocation of costs of ser	1,437,200	1,126,700	86,900	175,900	21,900	25,800	0
	Public Institution							
12	Units		137,000	537	300	334	540	0
13	Allocation of costs of ser	1,329,300	1,123,400	56,300	133,600	9,200	6,800	0
	Hydrant							
14	Units		0	0	741	0	0	0
15	Allocation of costs of ser	329,800	0	0	329,800	0	0	0
	Public Fire Service							
16	Units		0	854	4,268	0	0	12,600
17	Allocation of costs of ser	2,105,300	0	89,600	1,899,400	0	0	116,300
	Private Fire Service							
18	Units		0	430	2,149	0	1,860	6,344
19	Allocation of costs of ser	1,083,400	0	45,100	956,300	0	23,500	58,500
20	TOTAL COSTS OF SERVICE	\$ 15,626,000	\$ 9,602,100	\$ 622,200	\$ 4,338,300	\$ 223,000	\$ 665,600	\$ 174,800

5.0 Rate Design

The initial consideration in the derivation of rate schedules for water service is to establish equitable charges for the customers commensurate with the cost of providing that service. While the cost-of-service allocations to customer classes should not be construed as literal or exact determinations, they offer a guide to the necessity for and the extent of rate adjustments. Practical considerations sometimes modify rate adjustments by considering additional factors such as bill impacts, existing contracts, and historical local policies and practices.

5.1 Proposed Rates

The costs of service analysis described in the preceding sections of this report provide a basis for the design of water rates.

5.1.1 Monthly Meter Charge

The monthly meter charge recovers costs associated with meter maintenance and services, meter reading, customer billing, and maintenance and capacity costs associated with public fire protection regardless of the level of water consumed. Black & Veatch used meter ratios based on maximum operating capacities by meter size, which recognizes that as meter size increases, so does the capacity, as shown in Table 5-1. For example, customers with a 4" meter expect to be able to use more water (at a higher flow capacity) than customers are with a ¾" meter. Consequently, MPMW's water system must maintain assets sized accordingly and capable of providing customers with the level of service expected from their meter connection when the tap turns on.

Table 5-1 shows the cost elements incorporated into the monthly meter charge for FY 2027 for Scenario 1. The following are calculations used to derive the unit costs shown in Table 5-1. The unit costs are added and multiplied by the meter ratio to derive the total service charge.

- Meter Unit Cost = \$223,000 (Table 4-6, Col 5, Line 3) / 8,052 Equivalent Meters (Table 4-6, Col 5, Line 4) / 12 bills = \$2.31/Eq. Meter
- Customer Unit Cost = \$665,600 (Table 4-6, Col 6, Line 3) / 52,572 bills (Table 4-6, Col 6, Line 4) = \$12.66/bill
- Public Fire Unit Cost = \$2,105,300 (Table 4-7, Col 1, Line 17) / 8,052 Equivalent Meters (Table 4-6, Col 5, Line 4) / 12 bills = \$21.79/Eq. Meter

Table 5-2 shows the total revenue generated from the monthly meter charge for FY 2027 for Option 1. Table 5-3 shows the monthly meter charge rate schedule for Scenario 1. The fixed charge rate schedule follows the cost-of-service allocations described in Section 4 of this report.

Table 5-1 Cost Components for Monthly Meter Charge (Option 1)

Meter Size	Meter Ratio	Meter Service Costs			Total Service Charge
		Meter Unit Cost	Customer Unit Cost	Public Fire Unit Cost	
		per Eq. Meter	per Bill	per Eq. Meter	\$/Month
3/4" or less	1.00	2.31	12.66	21.79	36.76
1"	1.67	2.31	12.66	21.79	61.26
1-1/2"	3.33	2.31	12.66	21.79	122.52
2"	5.33	2.31	12.66	21.79	196.03
3"	10.67	2.31	12.66	21.79	392.07
4"	16.67	2.31	12.66	21.79	612.60
6"	33.33	2.31	12.66	21.79	1,225.21
8"	53.33	2.31	12.66	21.79	1,960.33
10"	76.67	2.31	12.66	21.79	2,817.98
12"	143.33	2.31	12.66	21.79	5,268.39

Table 5-2 Monthly Meter Charge Revenue (Option 1)

Meter Size	Total Bills in Year	Total Service Charge	Total Meter Revenue
	Bills	\$/Month	\$
3/4" or less	34,716	36.76	1,276,000
1"	10,344	61.26	633,700
1-1/2"	1,524	122.52	186,700
2"	2,904	196.03	569,300
3"	636	392.07	249,400
4"	312	612.60	191,100
6"	120	1,225.21	147,000
8"	120	1,960.33	235,200
10"	0	2,817.98	0
12"	12	5,268.39	63,200
			\$ 3,551,600

Table 5-3 Proposed Monthly Meter Charge (Option 1)

Customer Class	Existing	Fiscal Year Ending June 30,				
	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Monthly Fixed Meter Charge (\$/Month)						
3/4" or less	33.53	36.76	38.32	40.04	42.04	44.14
1"	55.87	61.26	63.86	66.73	70.07	73.57
1-1/2"	111.77	122.52	127.73	133.48	140.15	147.16
2"	178.83	196.03	204.36	213.56	224.24	235.45
3"	357.65	392.07	408.73	427.12	448.48	470.90
4"	558.83	612.60	638.64	667.38	700.75	735.79
6"	1,117.66	1,225.21	1,277.28	1,334.76	1,401.50	1,471.58
8"	1,788.26	1,960.33	2,043.64	2,135.60	2,242.38	2,354.50
10"	2,570.60	2,817.98	2,937.74	3,069.94	3,223.44	3,384.61
12"	4,805.85	5,268.39	5,492.30	5,739.45	6,026.42	6,327.74

5.1.2 Monthly Fixed Fire Charge

The fire fixed charge includes customer billing, maintenance and capacity costs, and direct fire costs associated with private fire protection. The fire service charge increases as pipeline diameter size increases. MPMW provides fire service to 143 private fire service accounts. These customers have a separate water line connection to the water system that is specifically for fire protection.

Table 5-4 shows the cost elements incorporated into the monthly fixed fire charge for FY 2027. The following are calculations used to derive the unit costs derived in Table 5-4. The unit cost is multiplied by the meter ratio to derive the total service charge.

- Private Fire Unit Cost = \$1,083,400 (Table 4-7, Col 1, Line 19) / 6,344 Equivalent Meters (Table 4-5, Col 11, Line 10) / 12 bills = \$14.23/Eq. Meter

Table 5-5 shows the monthly fixed fire charge rate schedule.

Table 5-4 Cost Components for Monthly Fixed Fire Charge (Option 1)

Meter Size	Meter Ratio	Mtr Costs	Total Service Charge
		Private Fire Unit Cost	
		per Eq. Meter	\$/Month
1-1/2"	3.33	14.23	47.44
2"	5.33	14.23	75.90
3"	10.67	14.23	151.80
4"	16.67	14.23	237.19
6"	33.33	14.23	474.38
8"	53.33	14.23	759.00
10"	76.67	14.23	1,091.07
12"	143.33	14.23	2,039.82

Table 5-5 Proposed Monthly Fixed Fire Charge (Option 1)

Customer Class	Existing	Fiscal Year Ending June 30,				
	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Monthly Unmetered Fire Fixed Charges (\$/Month)						
1-1/2"	36.75	47.44	49.46	51.69	54.27	56.98
2"	58.80	75.90	79.13	82.69	86.82	91.16
3"	117.58	151.80	158.25	165.37	173.64	182.32
4"	183.72	237.19	247.27	258.40	271.32	284.89
6"	367.43	474.38	494.54	516.79	542.63	569.76
8"	587.88	759.00	791.26	826.87	868.21	911.62
10"	845.09	1,091.07	1,137.44	1,188.62	1,248.05	1,310.45
12"	1,579.95	2,039.82	2,126.51	2,222.20	2,333.31	2,449.98

5.1.3 Development of Consumption Charge

The existing MPMW rate structure is commonly known as an inclining tiered rate structure. Under this type of rate design, the tiered consumption charge recovers costs by charging an increasing unit rate (dollar per unit - \$/CCF) as the amount of water consumed increases. The proposed MPMW rate structure recommends a transition from tiered rate structure to a uniform rate structure where the consumption charge recovers costs by charging a unit rate for all water consumed.

5.1.3.1 Tier Structure Rate Cases

In two recent Court rulings, *Coziahr v. Otay Water District* and *Patz v. City of San Diego*, the Courts made a significant ruling that tiered rates were not supported by the actual cost of service calculations with identifiable costs correlating to each tier. Since its inception in 1996, Proposition 218 has placed the burden of proving the constitutionality of a challenged rate structure on the water service provider. In these cases, the Courts required granular time-of-use data not available to the water providers. Therefore, the water service providers failed to carry its burden, and the Court held that their tiered rate structures at issue failed to comply with Proposition 218. Based on the ruling, the uniform rates developed in the Study were developed to meet Proposition 218 requirements.

5.1.3.2 Uniform Consumption Charge

The uniform consumption charge is designed to recover operating expenses and capital costs associated with base and peak costs divided by all the consumption. Base costs represent costs associated with average daily demand conditions. This includes most water supply costs and delivery costs. Water supply costs are the costs associated with purchasing water through BAWSCA. Delivery costs are the costs associated with delivering water through the rest of the water system. Peak costs present costs associated with maximum day and maximum hour demand.

The following is the derivation of the uniform consumption charge. Table 5-6 shows the consumption charge rate schedule.

Uniform Consumption Charge	
Total Cost of Service (Table 4-6, Col 1, Line 3)	\$ 15,626,000
less Costs recovered from Private Fire (Table 4-7, Line 19)	\$ (1,083,400)
less Costs recovered from Meter Charges (Table 5-2)	\$ (3,551,600)
Total Consumption (Table 4-6, Line 4)	1,171,000 CCF
Uniform Unit Costs	\$ 9.39 /CCF

Table 5-6 Proposed Uniform Consumption Charge (Option 1)

Customer Class	Existing	Fiscal Year Ending June 30,				
	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Consumption Charge (\$/CCF)						
Tier 1 (0-6 CCF)	6.18					
Tier 2 (7-12 CCF)	8.30					
Tier 3 (Over 12 CCF)	10.56					
All CCF		9.39	9.79	10.23	10.74	11.28

5.1.3.3 Capital Facility Surcharge

The capital facility surcharge is a separate charge that is extracted from the consumption charge and directed to the capital fund. The funds generated from the charge are designed to contribute a minimum dollar amount towards capital costs. MPMW executes numerous capital projects throughout the year as shown in Table 3-6. In situations where the capital projects exceed the minimum dollar amount, the operating fund provides additional funds. The capital facility surcharge is expected to generate about \$2.4M per year during the study period.

Table 5-7 shows the capital facility surcharge rate schedule.

Table 5-7 Proposed Capital Facility Surcharge (Option 1)

Customer Class	Existing	Fiscal Year Ending June 30,				
	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Capital Facility Surcharge (\$/CCF)						
All Usage	1.92	2.00	2.09	2.18	2.29	2.40

5.1.4 AB 3030 Pass-Through

On September 30, 2008, the State of California Governor signed Assembly Bill 3030 (AB 3030) to add Section 53756 to the California Government Code. Section 53756 provides water, sewer, or refuse collection agencies with the ability to adopt charges authorizing automatic adjustments that pass-through increases in wholesale charges for water or adjustments for inflation without going through Proposition 218 protest proceedings. Section 53756 states that the agency must comply with the following:

- Adopt the schedule of fees or charges for a not to exceed five years.
- The schedule of fees or charges may include a schedule of adjustments, including a clearly defined formula for adjusting for inflation.
- The schedule of fees or charges for an agency that purchases wholesale water from a public agency may provide for automatic adjustments that pass through the adopted increases or decreases in the wholesale charges for water established by the other agency.
- Notice of any adjustment shall be given no less than 30 days before the effective date of the adjustment.

5.1.5 AB 2257 Remedies

On September 25, 2024, the State of California Governor signed Assembly Bill 2257 (AB 2257) to add Section 53759.1 and 53759.2 to the California Government Code¹. Section 53759 prohibits a person or entity from bringing a judicial action or proceeding alleging noncompliance with the constitutional provisions for any new, increased, or extended fee or assessment, as defined, unless that person or entity has timely submitted to the local agency a written objection to that fee or assessment that specifies the grounds for alleging noncompliance. Section 53759 states that the agency must comply with the following:

- Make available to the public a proposed fee no less than 45 days prior to the deadline for a ratepayer to submit an objection.
- Posts on its website a written basis for the fee and include a link to the written notice.
- Mail the written notice.
- Provides at least 45 days for a property owner to review the proposed fee or assessment and to timely submit to the local agency a written objection to that fee.

¹ Legiscan. Legislative Consult's Digest. <[Bill Text: CA AB2257 | 2023-2024 | Regular Session | Chaptered | LegiScan](#)>. Accessed February 3, 2026.

- Considers and responds in writing, including the grounds for which a challenge is not resulting in amendments to the proposed fee, to any timely submitted written objections prior to the close of the protest hearing or ballot tabulation hearing.
- Include in the written notice that all written objections must be submitted within the written objection period set by the local agency and that a failure to timely object in writing bars any right to challenge that fee through legal proceeding.

5.2 Typical Monthly Costs Under Proposed Charges

The following represent comparisons of typical monthly bills under existing rates and the proposed schedule of water user rates derived in this Study for both residential and non-residential customers.

Table 5-8 shows a typical single-family residential household with a ¾” meter using a range of consumption from 0-14 CCF. The average single-family residential household uses 10 CCF. Table 5-9 shows non-residential customers with a 2” meter using a range of consumption from 0-1,000 CCF. Non-residential encompasses various customer classes and uses; therefore, the table is designed to give a perspective of charges.

Table 5-8 Typical Residential Monthly Bill with a 3/4” meter (Option 1)

Typical Monthly Usage (CCF)	FY 2026 Existing Rates (\$)	FY 2027 Proposed Rates (\$)	FY 2028 Proposed Rates (\$)	FY 2029 Proposed Rates (\$)	FY 2030 Proposed Rates (\$)	FY 2031 Proposed Rates (\$)
Residential						
0	\$33.53	\$36.76	\$38.32	\$40.04	\$42.04	\$44.14
2	\$49.73	\$59.53	\$62.06	\$64.85	\$68.09	\$71.49
4	\$65.93	\$82.31	\$85.81	\$89.67	\$94.15	\$98.86
6	\$82.13	\$105.08	\$109.55	\$114.48	\$120.20	\$126.21
8	\$102.57	\$127.86	\$133.29	\$139.29	\$146.25	\$153.56
9	\$112.79	\$139.25	\$145.17	\$151.70	\$159.29	\$167.25
10	\$123.01	\$150.64	\$157.04	\$164.11	\$172.32	\$180.94
12	\$143.45	\$173.41	\$180.78	\$188.92	\$198.37	\$208.29
14	\$168.41	\$196.19	\$204.52	\$213.72	\$224.41	\$235.63

Table 5-9 Typical Non-Residential Monthly Bill with a 2” meter (Option 1)

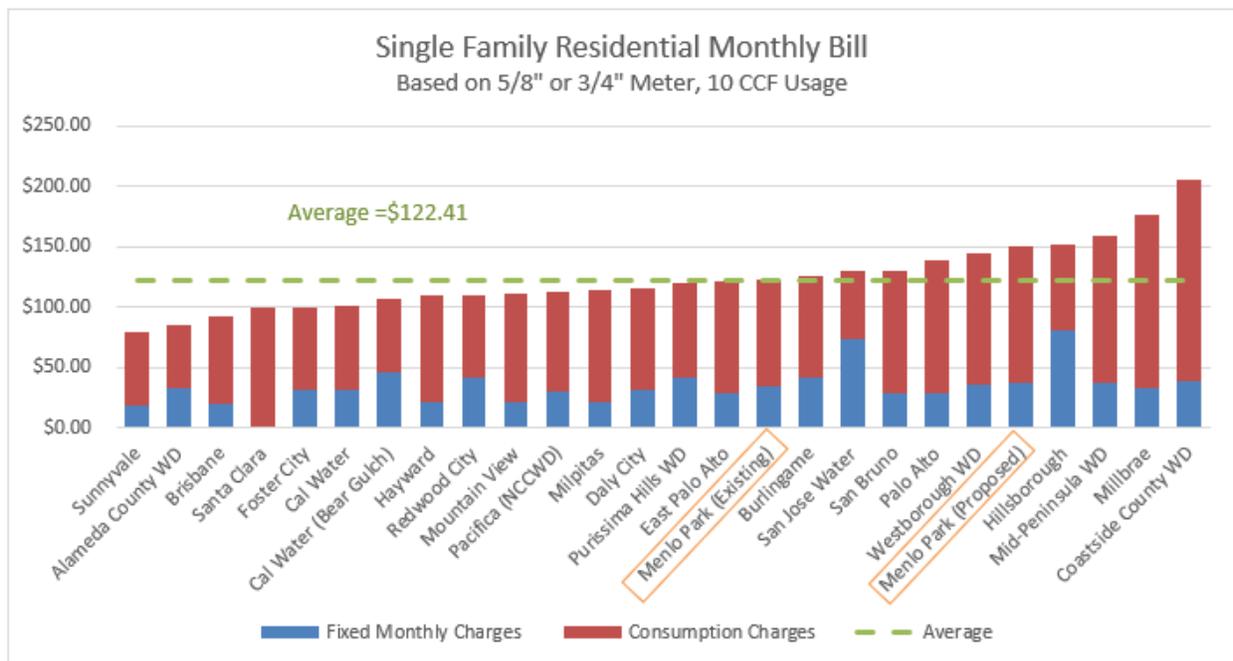
Typical Monthly Usage (CCF)	FY 2026 Existing Rates (\$)	FY 2027 Proposed Rates (\$)	FY 2028 Proposed Rates (\$)	FY 2029 Proposed Rates (\$)	FY 2030 Proposed Rates (\$)	FY 2031 Proposed Rates (\$)
Non-Residential						
0	\$33.53	\$36.76	\$38.32	\$40.04	\$42.04	\$44.14
20	\$243.29	\$264.51	\$275.76	\$288.17	\$302.58	\$317.71
50	\$617.69	\$606.15	\$631.91	\$660.35	\$693.37	\$728.04
100	\$1,241.69	\$1,175.55	\$1,225.51	\$1,280.66	\$1,344.69	\$1,411.92
250	\$3,113.69	\$2,883.73	\$3,006.29	\$3,141.57	\$3,298.65	\$3,463.58
500	\$6,233.69	\$5,730.71	\$5,974.27	\$6,243.11	\$6,555.27	\$6,883.03
750	\$9,353.69	\$8,577.69	\$8,942.24	\$9,344.64	\$9,811.87	\$10,302.46
1,000	\$12,473.69	\$11,424.67	\$11,910.21	\$12,446.17	\$13,068.48	\$13,721.90

5.3 Neighboring Water Utilities

Figure 5-1 is the proposed rates compared to other BAWSCA agencies' rates for a single-family residential customer with a 5/8" or 3/4" meter size (or equivalent) consuming 10 CCF. All surveyed community rates are current as of December 2025. It is important to note that Cal Water (Bear Gulch) serving the other portion of the City includes surcharges such as balancing accounts, low-income ratepayers, CPUC reimbursement fees, and the rate support fund in the survey.

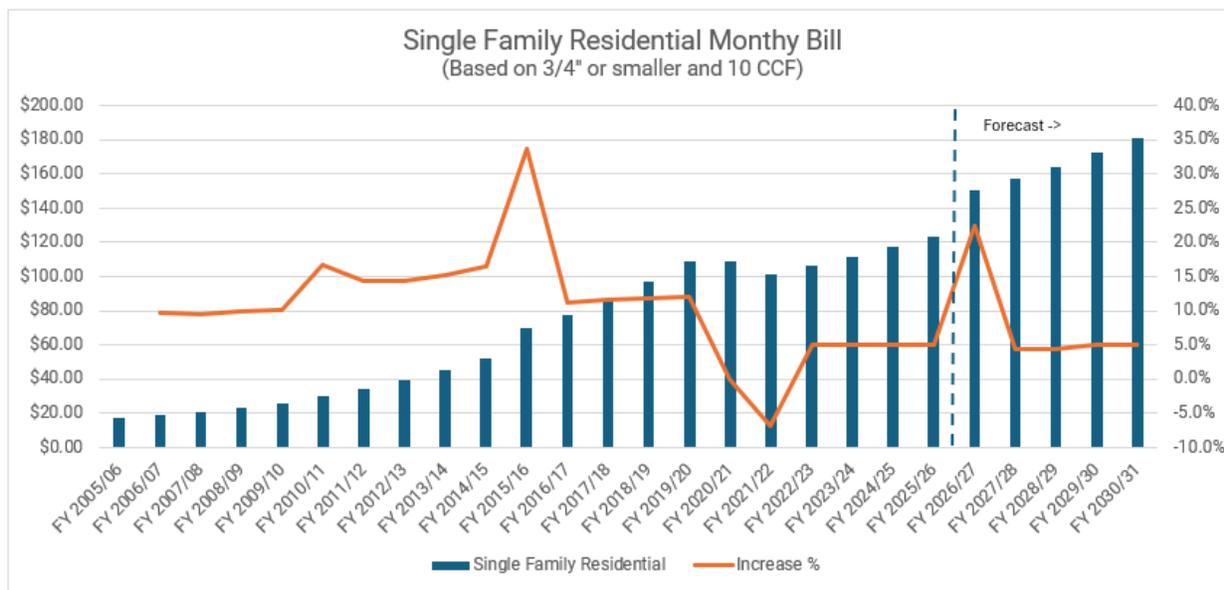
Cal Water (Bear Gulch) provides water to the City of Menlo Park. Cal Water is a private investor-owned utility that provides water to City of Menlo Park residents. Their rates are adopted by the California Public Utilities Commission. In examining their rate structure, they have an inclining tier rate structure with tier 1 set at about 25 percent of tier 2 which provide relief to low water consumption customers. Cal Water has the ability to adjust their rate structure without the constraints of Proposition 218.

Figure 5-1 Comparison to other BAWSCA Agencies



In examining historical and projected rates and calculating the typical monthly bills for a single family residential with a 3/4" meter or smaller and 10 CCF, Figure 5-2 shows that there have been periods of spikes in rate increases due to rate studies being performed. The rates studies represent a specific period where estimates of operating and capital costs are determined. As MPMW operates between rate studies, new operating and capital costs arise and inflation impacts the planned costs. Regardless the need to invest in the water system exists and the rate increases are reflection of this.

Figure 5-2 Historical and Projected Typical Monthly Bill



5.4 Drought Conditions

5.4.1 Water Shortage Contingency Plan

MPMW developed a six-stage Water Shortage Contingency Plan in the draft 2020 Urban Water Management Plan that complies with the SWRCB’s regulations. Table 5-10 shows that the plan includes the percent supply reduction and water supply condition for the different stages within the plan.

Table 5-10 Stages of Water Shortages Contingency Plan

STAGES	PERCENT SUPPLY REDUCTION	WATER SUPPLY CONDITION
1	≤10%	Declaration by the City Council upon the determination that the SFPUC or another governing authority (e.g., the SWRCB) has required a voluntary or mandatory reduction in water use of up to 10% due to water supply shortages or an emergency.
2	11-20%	Declaration by the City Council upon the determination that the SFPUC or another governing authority (e.g., the SWRCB) has required a voluntary or mandatory reduction in water use from 11% to 20% due to water supply shortages or emergency.
3	21-30%	Declaration by the City Council upon the determination that the SFPUC or another governing authority (e.g., the SWRCB) has required a voluntary or mandatory reduction in water use from 21% to 30% due to water supply shortages or emergency.

STAGES	PERCENT SUPPLY REDUCTION	WATER SUPPLY CONDITION
4	31-40%	Declaration by the City Council upon the determination that the SFPUC or another governing authority (e.g., the SWRCB) has required a voluntary or mandatory reduction in water use from 31% to 40% due to water supply shortages or emergency.
5	41-50%	Declaration by the City Council upon the determination that the SFPUC or another governing authority (e.g., the SWRCB) has required a voluntary or mandatory reduction in water use from 41% to 50% due to water supply shortages or emergency.
6	>50%	Declaration by the City Council upon the determination that the SFPUC or another governing authority (e.g., the SWRCB) has required a voluntary or mandatory reduction in water use greater than 50% due to water supply shortages or emergency.

Source: Draft 2020 Urban Water Management Plan

5.4.2 Drought Surcharges

Table 5-11 shows the drought surcharges that have been developed for Stages 1 through 6 to be consistent with new Water Shortage Contingency Plan requirements. For the purposes of this Study, normal conditions represent the projected baseline consumption for each fiscal year. The projected baseline provides an expected revenue for the fiscal year. Under drought conditions, consumption is decreased, and thus additional revenue is required for recovery from a drought surcharge. The drought surcharge is calculated by dividing the revenue loss by the reduced usage after accounting for reduction in water supply costs associated with BAWSCA water purchases.

Table 5-11 Proposed First Year Drought Charges, FY 2027 (Option 1)

Description	Normal	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Required Water Reduction %		Up to 10%	Up to 20%	Up to 30%	Up to 40%	Up to 50%	Greater 50%
Reduction by Tier							
All Customers							
All CCF		10%	20%	30%	40%	50%	60%
Projected Consumption (CCI)	1,167,300	1,050,570	933,840	817,110	700,380	583,650	466,920
Total Reduction in Consumption (CCF)		116,730	233,460	350,190	466,920	583,650	700,380
Projected Consumption by Tier (CCF)							
All CCF	1,167,299	1,050,569	933,839	817,109	700,379	583,650	466,920
Total Consumption	1,167,299	1,050,569	933,839	817,109	700,379	583,650	466,920
Projected Consumption Rates (\$/CCF)							
All CCF	\$9.39	\$9.39	\$9.39	\$9.39	\$9.39	\$9.39	\$9.39
Projected Consumption Revenue							
All CCF	\$10,960,938	\$9,864,843	\$8,768,748	\$7,672,654	\$6,576,559	\$5,480,474	\$4,384,379
Total Revenue	\$10,960,938	\$9,864,843	\$8,768,748	\$7,672,654	\$6,576,559	\$5,480,474	\$4,384,379
Revenue Lost		\$1,096,095	\$2,192,189	\$3,288,284	\$4,384,379	\$5,480,464	\$6,576,559
Reduced Water Sold + Water Loss		123,734	247,468	371,201	494,935	618,669	742,403
SFPUC + BAWSCA Wholesale Rate		\$6.26	\$6.26	\$6.26	\$6.26	\$6.26	\$6.26
Reduced Cost of SFPUC & BAWSCA		(\$774,600)	(\$1,549,100)	(\$2,323,700)	(\$3,098,300)	(\$3,872,900)	(\$4,647,400)
Revenue Lost due to Reduction		\$1,096,095	\$2,192,189	\$3,288,284	\$4,384,379	\$5,480,464	\$6,576,559
Less Reduction of Water Purchase Costs		(\$774,600)	(\$1,549,100)	(\$2,323,700)	(\$3,098,300)	(\$3,872,900)	(\$4,647,400)
Revenue to be recovered by drought surcha		\$321,495	\$643,089	\$964,584	\$1,286,079	\$1,607,564	\$1,929,159
Drought Surcharge on Consumption (\$/CCF)		\$0.31	\$0.69	\$1.18	\$1.84	\$2.75	\$4.13

Using the same methodology per fiscal year, Table 5-12 shows the proposed drought surcharges for each stage.

Table 5-12 Proposed Drought Charges (Option 1)

Description	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Required Water Reduction %	Up to 10%	Up to 20%	Up to 30%	Up to 40%	Up to 50%	Greater 50%
Drought Surcharge (\$/CCF)						
FY 2027	\$0.31	\$0.69	\$1.18	\$1.84	\$2.75	\$4.13
FY 2028	\$0.31	\$0.71	\$1.21	\$1.88	\$2.81	\$4.21
FY 2029	\$0.35	\$0.78	\$1.33	\$2.07	\$3.10	\$4.63
FY 2030	\$0.37	\$0.82	\$1.41	\$2.19	\$3.27	\$4.87
FY 2031	\$0.41	\$0.91	\$1.56	\$2.42	\$3.61	\$5.37

1. The drought rates represent the max rate per stage. The actual drought surcharge will be calculated based on the actual water conservation target that must be met.
2. Stage 6 represents water conservation greater than 50%. The drought surcharge shown is for 60% reduction.

6.0 Capacity Fee Analysis

6.1 Development Fee Background

Many utilities assess system development charges, also known as capacity fees, as in the case of MPMW, to help offset costs for increased system capacity. Generally levied at the time building permits are required, capacity fees recover the cost associated with existing facilities and/or increasing flow capacities, which result from either (1) changes in the use of a structure served by an existing connection to the system, or (2) a new connection to the system. For the purposes of this report, both sources of additional flow in the term “new” customer.

The premise behind capacity fees is that new customers or developers should pay for required system capacity, to the extent that service user charges do not support the investment for the required capacity. Capacity represents the current demand requirement of each property and is not transferable to any other property located within the service area.

The cost of providing such capacity in system facilities for new customers can contribute significantly to the need for capital financing and service user rates and/or taxes to support the financing. Collection of capacity fees to partially or wholly finance new customer capacity requirements can, over time, help reduce the amount of financing, and the magnitude of rate increases that otherwise might be needed. Ideally, capacity fees should generate enough revenues to meet future expansion requirements to not burden existing users with the proportionate costs of expansion caused by growth in system use by new users.

6.1.1 General Approaches

Capacity fees are traditionally assessed to new development to recover the value of system capacity constructed for new customer service. There is no single established method for the determination of SDCs that is both appropriate for all situations and perfectly equitable to all new customers. There are, however, various approaches that are currently recognized and utilized, some more than others, by utilities. These methods can be categorized as follows:

- **System Buy-In Approach.** Capacity fees are designed to derive from the new customer an amount per connection equal to the “equity” in the system attributable to similar existing customers. New development would pay for its share of the useful life and remaining capacity of existing facilities from which new development would benefit. (Note: The word “equity” refers to that portion of system value for which there is no offsetting debt. It does not imply ownership of, or title to, utility facilities.)
- **Incremental Cost-Pricing Approach.** Capacity fees are designed to derive from the new customer the marginal or incremental cost of system expansion associated with new customer growth. Under this method, new connections to the system should be responsible for those costs which they cause the utility to incur for the most recent or next increment of required system capacity. Costs recovered user fees or other utility charges or excluded from this calculation.
- **Combination Cost Approach.** With this method, capacity fees combine selected elements of each of the preceding approaches to establish a composite value of both existing and required expansion facilities as a basis for pricing system capacity required to serve new customers.

Regardless of the methodology employed, revenues derived from capacity fees are commonly used to offset part or all capital costs to accomplish any of the following objectives:

- To pay the capital costs of future capacity provided for growth.
- To provide rate relief to existing system users by recovering that portion of the annual existing and future capacity capital costs associated with growth, including debt service requirements and direct asset purchases from current revenues.
- To accumulate reserves to finance system improvements and expansions required to meet growth needs.

The water system assets contain excess capacity that new connections can utilize. Therefore, the methodology used for this study is the system buy-in approach. Since the system buy-in approach requires the selection of a basis for determining system value, a discussion of asset valuation methods follows.

6.2 Asset Valuation Methods

There are different approaches to how utilities value their existing assets and, thus, the excess capacity available to new connections. The first step is to identify a proper basis for determining existing asset value. To do this, MPMW provided its fixed asset records. These records present detailed listings of each water system asset in use by MPMW, including asset name, system function, date in service, useful life, original cost, and annual and the accumulated depreciation.

From this point, the current valuation for the fixed assets must be determined. Various methods are employed to estimate the value of utility facilities required to furnish service to new users. To establish capacity fees, the two principal methods commonly used to value a utility's properties are original cost and replacement cost, with or without considerations for depreciation of existing assets. The following sections give an overview of each valuation method.

6.2.1 Original Cost

Original cost (OC) represents the cost of the existing utility facilities at the prices when the assets were put into service. The principal advantages of the original cost method lie in its relative simplicity and stability since the recorded costs of tangible property are constant. The major criticism levied against original cost valuation pertains to the disregard of changes in the value of money over, which are attributable to inflation and other factors. As evidenced by history, prices have tended to increase rather than to remain constant. Because the value of money varies inversely with changes in price, monetary values in most recent years have exhibited a definite decline; a fact not recognized by the original cost approach. This situation becomes further exacerbated when you consider that most utility systems are developed over time on a piecemeal basis as demanded by service area growth. In other words, the utility paid for each property addition using dollars of different purchasing power. When these outlays are added together to obtain a system value, the result can be misleading. Thus, the original cost approach often fails to fully satisfy a principal objective of many system development charge studies, which is to determine a meaningful measure of the current value of the tangible asset.

6.2.2 Replacement Cost

Replacement cost (RC) represents the cost of duplicating the existing utility facilities at current prices. Changes in the value of the dollar over time, at least as considered by the impact of inflation, can be recognized by replacement cost property valuation. Unlike the original cost approach, the replacement cost method recognizes price level changes that may have occurred since system construction.

The most accurate replacement cost valuation would involve a physical inventory and appraisal of system components in terms of their replacement costs at the time of valuation. However, with original cost records available, a reasonable approximation of replacement cost system value can most easily be ascertained by trending historical original costs. This approach employs the use of applicable cost indices to express actual capital costs experienced by the utility in current dollars. An obvious advantage of the replacement cost approach is that it considers changes in the value of money over time. In this analysis, the annual Engineering News Record Construction Cost Index (ENR-CCI) factors are used to inflate original cost figures to estimate current asset values for each asset.

6.2.3 Depreciation

Considerations of the current value of utility facilities may also be materially affected by the effects of age and depreciation. Depreciation considers the anticipated losses in system value caused by wear and tear, decay, inadequacy, and obsolescence. Expressing both the original cost and replacement cost valuation measures on an original cost less depreciation (OCLD), and a replacement cost less depreciation (RCLD) basis provides appropriate recognition of the effects of depreciation on existing facilities. Under the OCLD and RCLD approach, accumulated depreciation is computed for each asset account based upon its age or condition and deducted from the respective total original cost or replacement cost to determine the OCLD or RCLD measures of system value.

6.3 Existing System Investment

For this analysis, the replacement cost (RC) method is used to value existing system assets. There are several reasons to choose this approach. First, while over 80 percent of the fixed assets still have a useful life, most of those assets have less than 50 percent of their useful life remaining. This signifies that MPMW will need to perform normal routine repair and rehabilitation of assets. Subsequently, MPMW recently had a third-party consultant determine the replacement costs associated with many of its infrastructure assets. Many assets are still in use despite that some have fully depreciated. Furthermore, it is reasonable to assume that the RC approach provides the utility with a return on its money used to build the past facilities for future customers. This return is often accounted for by the increase in the replacement cost value of the facilities.

MPMW maintains fixed assets data by components such as Land, Buildings, Equipment, Infrastructure, and Construction in Progress. The data obtained were for assets as of the end of FY 2024 (June 30, 2024). To help establish the charge's engineering nexus, the components are reclassified into major functional components such as water supply, pumping, treatment, water storage, transmission & distribution, meters, hydrants, and general plant. The reclassification relies upon Black & Veatch's engineering judgment for other similar asset types.

Table 6-1 shows the fixed asset original cost and replacement cost values for water assets utilized in the capacity fee analysis. Original costs are shown to demonstrate how the costs were incurred by MPMW over the years and are the basis for determining the replacement costs. Column 1 represents the original cost, Column 2 represents the Construction Work in Progress, and Column 3 represents the sum of Columns 1 and 2. The replacement costs shown in Column 4 were determined using the original cost and construction cost data indices. Column 5 represents the Construction Work in Progress, which is identical to Column 2 as these assets are still not placed on the fixed asset register. Column 6 represents the total of Columns 4 and 5.

Appendix C of this report provides details for each fixed asset and how the summary figures were derived.

Table 6-1 Water System Fixed Asset Value – RC Valuation

Line No.	System Component	(1)	(2)	(3)	(4)	(5)	(6)
		Original Cost			2025 Replacement Cost*		
		Assets	CWIP	Total	Assets	CWIP	Total
		\$	\$	\$	\$	\$	\$
Water Facilities							
1	Water Supply	0	2,698,953	2,698,953	0	3,410,518	3,410,518
2	Pump Stations	4,824,203	0	4,824,203	15,885,103	0	15,885,103
3	Water Treatment	0	0	0	0	0	0
4	Water Storage	4,091,973	558,233	4,650,206	12,817,151	705,408	13,522,559
5	Transmission	1,800,587	0	1,800,587	26,057,303	0	26,057,303
6	Distribution	8,311,294	2,394,565	10,705,859	106,844,551	3,025,880	109,870,431
7	Meters	132,166	0	132,166	769,457	0	769,457
8	Hydrants	132,166	0	132,166	769,457	0	769,457
9	General Plant	130,871	0	130,871	316,851	0	316,851
10	Total Existing System Investment	\$19,423,259	\$5,651,751	\$25,075,010	163,459,875	7,141,806	170,601,681

CWIP = Construction Work in Progress

* 2025 RC values are derived based on ENR Construction Cost Index. 2025 ENR CCI = 2024 avg annual value of 13,571.3 x 1.03.

6.3.1 Cash Reserves

In addition to fixed assets, capacity fee methodologies allow the incorporation of cash reserves if the utility has specifically dedicated these funds for capital activities. Cash reserves represent cash that has been saved over multiple years from existing customers to help finance future capital projects. Since new customers have not contributed to the cash reserves, the cash reserves are considered an asset that new customers will be buying into by paying their fair share through the capacity fee. Based on the beginning of year balance for FY 2025, the capital fund's cash balance is \$20,868,030.

6.4 System Capacity

Water facilities are designed to accommodate average day and maximum day and, in some cases, maximum hour demand requirements. The utility system conditions are critical to understanding the existing systems' actual service demand requirements and serve as a critical component in the development of SDCs. In determining the existing system's capacity, Black & Veatch used the water supply capacity available (individual supply guarantee) from SFPUC of 4.465 mgd. These system characteristics commonly serve as a measure of total system capacity. In the case of water, these are the assets that constrain the systems from providing more capacity.

Table 6-2 shows the max water supply capacity of the water system. The max water supply capacity is the amount of water MPMW can purchase from SFPUC based on its Individual Supply Guarantee identified in the 2020 Urban Water Management Plan. MPMW has intertie connections as an emergency water supply, but these are not used for day-to-day operations. Therefore, the max water supply capacity is 4.456 mgd associated with SFPUC. In FY 2024, MPMW experienced a water consumption of 2.26 mgd, which is below the maximum water supply capacity.

Table 6-2 Max Water Supply Capacity

Description	Total Capacity (mgd)	Used Capacity (mgd)	Available Capacity (mgd)
SFPUC	4.465		
Total Water Supply Capacity	4.465		
2024 System Average Day Flow		2.258	
2024 Available Water Capacity			2.207

mgd - million gallons per day

6.5 Applicable System Equity

The total system equity is equal to the total system value with less applicable credits. Therefore, to determine the appropriate capacity fee value, applicable credits need to be identified. As previously mentioned, there are two types of credits with specific characteristics:

- Revenue credit due to possible double payment situations could occur when other sources of revenues may contribute to the capital costs of infrastructure covered by the system development charge, such as long-term debt, grants, and ad valorem taxes.
- Site-specific credit or developer reimbursement for the dedication of land or construction of system improvements; these contributed assets and related credits are a matter of agency policy and typically not included in a schedule of capacity fees.

6.5.1 Revenue Credit

New connections to the systems should not be required to pay, via the capacity fee, for the facilities financed by debt and are being paid via user rates and facilities paid by grants or ad valorem taxes that do not need to be repaid. Therefore, the capacity fee analysis must consider debt, grants, and ad valorem credits to avoid the potential for double-payment.

- Debt: Customer user rates are designed to reduce the outstanding debt in the enterprises, and since new connections will eventually turn into rate-paying customers, the principal outstanding is credited against the fixed asset. MPMW has no long-term debt. Therefore, there is no water system credit for debt.
- Grants/Ad Valorem: Grants and ad valorem taxes are funds provided to MPMW to help construct water facilities. These funds are given to MPMW with no expectation of being repaid; therefore, new customers will be exempt from buying into those assets, just as existing customers did not pay for these assets. MPMW has no records of grants and/or ad valorem taxes used to pay for any water facilities. Therefore, there is no water credit for grants and/or ad valorem taxes.

6.5.2 Site-Specific Credit

MPMW has extracted contributed capital assets from the fixed asset listing. These fixed assets were contributed to MPMW's water system by a third-party. Typically, a third-party company will install water facilities in the vicinity of a large development to provide services to the new development and connect to the existing MPMW's water facilities. There were no records of contributed assets identified, and thus no adjustments were made.

6.6 System Unit Cost

Incorporating the different capacity fee components, a unit cost for the system is determined, as shown in Table 6-3. The unit cost represents the system's cost divided by the total water supply capacity. The costs of the system include:

- Fixed assets as shown in Lines 1 to 9.
- Cash reserves as shown in Line 11.
- Debt credits are shown in Line 12 and 13.
- The final equity value of the system is shown in Line 15.

Using the water supply capacity as shown in Line 16, the system's unit cost is determined to be \$42.88/gpd.

Table 6-3 Water Unit Equity Costs

Line No.	System Component	2025
		\$
	Water System Value	
	Existing Investment (RCLD)	(per Table 6-1)
1	Water Supply	3,410,518
2	Pump Stations	15,885,103
3	Water Treatment	-
4	Water Storage	13,522,559
5	Transmission	26,057,303
6	Distribution	109,870,431
7	Meters	769,457
8	Hydrants	769,457
9	General Plant	316,851
10	Total Value	\$170,601,681
11	Cash Reserves	20,868,030
	Non Equity Credits	
12	Outstanding Long-Term Debt	-
13	Debt Service Reserve Funds	-
14	Total Credits	-
15	Total Equity Value	\$191,469,711
16	Total Water Supply Capacity - mgd	4.47 (per Table 6-2)
17	Unit Equity Value - \$/gpd	\$42.88

mgd - million gallons per day
gpd - gallons per day

6.7 Proposed Capacity Fees

Historically, MPMW has recovered capacity fees based on a meter size basis for all customers. Table 6-4 shows the existing capacity fee schedule of charges.

Table 6-4 Existing Capacity Fees

Line No.	Meter Size	Existing Capacity Fees (\$/Conn)
Capacity Fees		
1	3/4" or less	\$7,959
2	1"	\$13,265
3	1-1/2"	\$26,530
4	2"	\$42,448
5	3"	\$84,897
6	4"	\$132,651
7	6"	\$265,303
8	8"	\$424,484
9	10"	\$612,196
10	12"	\$1,140,800

The charge increases as the meter size increases based on each meter's anticipated water capacity compared to the baseline meter size, a ¾ inch meter. The relationship between larger meters and the ¾" baseline meter follows the directions found in the American Water Works Association M26 and M1 manuals, which rely on flow capacity on a gallon per minute basis. The ¾ inch meter represents a single-family residential household. Using consumption data reported by MPMW for FY 2024, the typical ¾" meter consumption in the City served by MPMW is 217 gpd. Using the 217 gpd as the base for the calculation of the capacity fee, the following calculation illustrates the development of the fee for a ¾ inch meter:

Baseline Meter Charge	
3/4" meter usage per Household - gpd	217
Unit Equity Value - \$/gpd	\$42.88 (per Table 6-4)
Total SDC for 3/4" meter	\$9,326

Table 6-5 shows the capacity fees by meter size applicable to any new connection or changes to the existing connections based on the calculation and the meter ratios.

Table 6-5 Proposed Maximum Water Capacity Fee

Line No.	Meter Size	Meter Equivalents	Proposed Capacity Fees (\$/Conn)
Capacity Fees			
1	3/4" or less	1.00	\$9,326
2	1"	1.67	\$15,543
3	1-1/2"	3.33	\$31,086
4	2"	5.33	\$49,738
5	3"	10.67	\$99,476
6	4"	16.67	\$155,432
7	6"	33.33	\$310,864
8	8"	53.33	\$497,382
9	10"	76.67	\$714,987
10	12"	143.33	\$1,336,714

It is recommended that MPMW continue to incorporate an annual Consumer Price Index or Engineering News-Record inflation adjustment to account for increased costs.

7.0 Appendix A – 10-year Financial Plan

Table 7-1 Operating Fund (Option 1)

Line No.	Description	Fiscal Year Ending June 30,									
		FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Revenue											
Rate Revenue											
1	Revenue from Existing Rates	14,989,000	14,402,400	13,750,400	13,173,900	12,577,800	12,619,900	12,663,700	12,706,400	12,749,100	12,792,000
2	Increased Revenue Due to Adjustments	637,000	1,250,200	1,866,100	2,536,000	3,171,200	3,971,800	4,818,100	5,711,300	6,654,700	7,650,600
3	Subtotal Rate Revenue	\$ 15,626,000	\$ 15,652,600	\$ 15,616,500	\$ 15,709,900	\$ 15,749,000	\$ 16,591,700	\$ 17,481,800	\$ 18,417,700	\$ 19,403,800	\$ 20,442,600
Other Operating Revenue											
4	Inter Governmental Revenue	500,000	0	0	0	0	0	0	0	0	0
5	Use of Money & Property	507,900	450,200	332,100	244,800	215,400	198,700	200,200	218,000	253,800	309,500
6	Charges for Services	38,900	39,300	39,700	40,100	40,500	40,900	41,300	41,700	42,100	42,500
7	Subtotal Other Operating Revenue	\$ 1,046,800	\$ 489,500	\$ 371,800	\$ 284,900	\$ 255,900	\$ 239,600	\$ 241,500	\$ 259,700	\$ 295,900	\$ 352,000
8	Total Revenue	\$ 16,672,800	\$ 16,142,100	\$ 15,988,300	\$ 15,994,800	\$ 16,004,900	\$ 16,831,300	\$ 17,723,300	\$ 18,677,400	\$ 19,699,700	\$ 20,794,600
Revenue Requirements											
Operating & Maintenance											
9	O&M Expenses	13,430,300	13,519,700	13,805,600	13,908,300	14,006,300	14,496,900	15,010,600	15,535,200	16,082,700	16,653,800
10	Routine Capital Outlay	117,500	122,200	127,100	132,200	137,500	143,000	148,700	154,600	160,700	167,100
11	Subtotal O&M	\$ 13,547,800	\$ 13,641,900	\$ 13,932,700	\$ 14,040,500	\$ 14,143,800	\$ 14,639,900	\$ 15,159,300	\$ 15,689,800	\$ 16,243,400	\$ 16,820,900
Debt Service											
12	Existing Revenue Bonds	0	0	0	0	0	0	0	0	0	0
13	Proposed Revenue Bonds	0	0	1,125,300	1,125,300	1,125,300	1,125,300	1,125,300	1,125,300	1,125,300	1,125,300
14	Total Debt Service	\$ 0	\$ 0	\$ 1,125,300							
Transfers											
15	Transfer to Other Funds	0	0	0	0	0	0	0	0	0	0
16	Transfer to Capital Fund	4,900,000	4,000,000	4,000,000	3,100,000	1,500,000	1,500,000	1,400,000	1,400,000	1,400,000	1,400,000
17	Total Transfers	\$ 4,900,000	\$ 4,000,000	\$ 4,000,000	\$ 3,100,000	\$ 1,500,000	\$ 1,500,000	\$ 1,400,000	\$ 1,400,000	\$ 1,400,000	\$ 1,400,000
18	Total Revenue Requirements	\$ 18,447,800	\$ 17,641,900	\$ 19,058,000	\$ 18,265,800	\$ 16,769,100	\$ 17,265,200	\$ 17,684,600	\$ 18,215,100	\$ 18,768,700	\$ 19,346,200
19	Net Annual Cash Balance	(1,775,000)	(1,499,800)	(3,069,700)	(2,271,000)	(764,200)	(433,900)	38,700	462,300	931,000	1,448,400
20	Beginning Fund Balance	14,979,600	13,204,600	11,704,800	8,635,100	6,364,100	5,599,900	5,166,000	5,204,700	5,667,000	6,598,000
21	Net Cumulative Fund Balance	\$ 13,204,600	\$ 11,704,800	\$ 8,635,100	\$ 6,364,100	\$ 5,599,900	\$ 5,166,000	\$ 5,204,700	\$ 5,667,000	\$ 6,598,000	\$ 8,046,400
22	Target Operating Reserves (120 Days)	\$ 4,415,400	\$ 4,444,800	\$ 4,538,800	\$ 4,572,600	\$ 4,604,800	\$ 4,766,100	\$ 4,935,000	\$ 5,107,500	\$ 5,287,500	\$ 5,475,200
23	Debt Service Coverage	0.00	0.00	1.83	1.74	1.65	1.95	2.28	2.65	3.07	3.53

Table 7-2 Capital Fund (Option 1)

Line No.	Description	Fiscal Year Ending June 30,									
		FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036
		(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Source of Funds											
1	Transfer from Operating Fund	4,900,000	4,000,000	4,000,000	3,100,000	1,500,000	1,500,000	1,400,000	1,400,000	1,400,000	1,400,000
2	Debt Proceeds	0	0	16,000,000	0	0	0	0	0	0	0
3	Water Connection Fees	140,600	140,600	140,600	140,600	140,600	140,600	140,600	140,600	140,600	140,600
4	Capital Facility Surcharge	2,343,900	2,352,400	2,361,900	2,377,200	2,387,000	2,515,700	2,651,600	2,794,700	2,945,300	3,104,300
5	Interest Income	423,000	327,100	45,100	42,200	146,600	135,200	159,700	149,800	184,300	225,400
6	Total Sources	\$ 7,807,500	\$ 6,820,100	\$ 22,547,600	\$ 5,660,000	\$ 4,174,200	\$ 4,291,500	\$ 4,351,900	\$ 4,485,100	\$ 4,670,200	\$ 4,870,300
Use of Funds											
7	Capital Projects	4,064,700	9,314,300	28,580,800	5,735,200	1,460,600	4,587,000	3,714,500	4,743,000	3,772,700	3,803,600
8	Debt Issuance Costs	0	0	173,000	0	0	0	0	0	0	0
9	Bond Reserve Fund Requirement	0	0	1,125,300	0	0	0	0	0	0	0
10	Total Uses	\$ 4,064,700	\$ 9,314,300	\$ 29,879,100	\$ 5,735,200	\$ 1,460,600	\$ 4,587,000	\$ 3,714,500	\$ 4,743,000	\$ 3,772,700	\$ 3,803,600
11	Net Annual Cash Balance	3,742,800	(2,494,200)	(7,331,500)	(75,200)	2,713,600	(295,500)	637,400	(257,900)	897,500	1,066,700
12	Beginning Unrestricted Fund Balance	7,255,988	10,998,788	8,504,588	1,173,088	1,097,888	3,811,488	3,515,988	4,153,388	3,895,488	4,792,988
13	Net Cumulative Fund Balance	\$ 10,998,788	\$ 8,504,588	\$ 1,173,088	\$ 1,097,888	\$ 3,811,488	\$ 3,515,988	\$ 4,153,388	\$ 3,895,488	\$ 4,792,988	\$ 5,859,688
14	Reserve Target [1]	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000

[1] Recommended reserve target is \$3.0M (by 2031). Existing reserve target is \$1.0M.

8.0 Appendix B – Other Options

Table 8-1 Capital Fund (Option 2)

Line No.	Description	Fiscal Year Ending June 30,				
		FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
		(\$)	(\$)	(\$)	(\$)	(\$)
Source of Funds						
1	Transfer from Operating Fund	6,500,000	6,500,000	3,700,000	4,100,000	4,100,000
2	Debt Proceeds	0	0	24,000,000	0	0
3	Water Connection Fees	140,600	140,600	140,600	140,600	140,600
4	Capital Facility Surcharge	2,248,300	2,164,500	2,079,700	1,993,500	1,906,300
Months						
	Year	Effective	Rate Adj			
5	2027	12	8.00%	179,900	173,200	166,400
6	2028	12	8.00%		187,000	179,700
7	2029	12	8.25%			200,100
8	2030	12	8.25%			207,700
9	2031	12	8.25%			
10	Increased Revenue Due to Adjustments			179,900	360,200	546,200
11	Interest Income			282,400	203,700	121,400
12	Total Sources			\$ 9,351,200	\$ 9,369,000	\$ 30,587,900
						\$ 7,040,800
						\$ 7,183,600
Use of Funds						
13	Capital Projects [1]	9,264,700	11,414,300	30,780,800	8,235,200	5,960,600
14	Debt Issuance Costs	0	0	259,500	0	0
15	Bond Reserve Fund Requirement	0	0	1,687,900	0	0
16	Total Uses	\$ 9,264,700	\$ 11,414,300	\$ 32,728,200	\$ 8,235,200	\$ 5,960,600
17	Net Annual Cash Balance	86,500	(2,045,300)	(2,140,300)	(1,194,400)	1,223,000
18	Beginning Unrestricted Fund Balance	7,255,988	7,342,488	5,297,188	3,156,888	1,962,488
19	Net Cumulative Fund Balance	\$ 7,342,488	\$ 5,297,188	\$ 3,156,888	\$ 1,962,488	\$ 3,185,488
20	Reserve Target [2]	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 3,000,000

[1] Differs from Table 3-6 as it includes ~\$560k to \$610k in operating costs.

[2] Recommended reserve target is \$3.0M (by 2031). Existing reserve target is \$1.0M.

Table 8-2 Operating Fund (Option 2)

Line No.	Description	Fiscal Year Ending June 30,				
		FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
		\$	\$	\$	\$	\$
Revenue						
Rate Revenue						
1	Revenue from Existing Rates	14,989,000	14,402,400	13,750,400	13,173,900	12,577,800
Months						
	Year	Effective	Rate Adj			
2	2027	12	8.00%	1,199,100	1,152,200	1,100,000
3	2028	12	8.00%		1,244,400	1,188,000
4	2029	12	8.25%			1,323,200
5	2030	12	8.25%			1,267,700
6	2031	12	8.25%			1,372,300
7	Increased Revenue Due to Adjustments	1,199,100	2,396,600	3,611,200	4,832,100	6,031,700
8	Subtotal Rate Revenue	\$ 16,188,100	\$ 16,799,000	\$ 17,361,600	\$ 18,006,000	\$ 18,609,500
Other Operating Revenue						
9	Inter Governmental Revenue	500,000	0	0	0	0
10	Use of Money & Property	466,400	352,900	290,200	230,500	188,500
11	Charges for Services	38,900	39,300	39,700	40,100	40,500
12	Subtotal Other Operating Revenue	\$ 1,005,300	\$ 392,200	\$ 329,900	\$ 270,600	\$ 229,000
13	Total Revenue	\$ 17,193,400	\$ 17,191,200	\$ 17,691,500	\$ 18,276,600	\$ 18,838,500
Revenue Requirements						
Operating & Maintenance						
14	O&M Expenses	13,430,300	13,519,700	13,805,600	13,908,300	14,006,300
15	Routine Capital Outlay	117,500	122,200	127,100	132,200	137,500
16	Subtotal O&M	\$ 13,547,800	\$ 13,641,900	\$ 13,932,700	\$ 14,040,500	\$ 14,143,800
Debt Service						
17	Existing Revenue Bonds	0	0	0	0	0
18	Proposed Revenue Bonds	0	0	1,687,900	1,687,900	1,687,900
19	Total Debt Service	\$ 0	\$ 0	\$ 1,687,900	\$ 1,687,900	\$ 1,687,900
Transfers						
20	Transfer to Other Funds	0	0	0	0	0
21	Transfer to Capital Fund	6,500,000	6,500,000	3,700,000	4,100,000	4,100,000
22	Total Transfers	\$ 6,500,000	\$ 6,500,000	\$ 3,700,000	\$ 4,100,000	\$ 4,100,000
23	Total Revenue Requirements	\$ 20,047,800	\$ 20,141,900	\$ 19,320,600	\$ 19,828,400	\$ 19,931,700
24	Net Annual Cash Balance	(2,854,400)	(2,950,700)	(1,629,100)	(1,551,800)	(1,093,200)
25	Beginning Fund Balance	14,979,600	12,125,200	9,174,500	7,545,400	5,993,600
26	Net Cumulative Fund Balance	\$ 12,125,200	\$ 9,174,500	\$ 7,545,400	\$ 5,993,600	\$ 4,900,400
27	Target Operating Reserves (120 Days)	\$ 4,415,400	\$ 4,444,800	\$ 4,538,800	\$ 4,572,600	\$ 4,604,800
28	Debt Service Coverage	0.00	0.00	2.23	2.51	2.78

Table 8-3 Proposed Rate Schedule (Option 2)

Customer Class	Existing	Fiscal Year Ending June 30,				
	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Monthly Fixed Meter Charge (\$/Month)						
3/4" or less	33.53	36.46	39.38	42.63	46.15	49.96
1"	55.87	60.76	65.62	71.03	76.89	83.23
1-1/2"	111.77	121.52	131.24	142.07	153.79	166.48
2"	178.83	194.44	210.00	227.33	246.08	266.38
3"	357.65	388.88	419.99	454.64	492.15	532.75
4"	558.83	607.62	656.23	710.37	768.98	832.42
6"	1,117.66	1,215.24	1,312.46	1,420.74	1,537.95	1,664.83
8"	1,788.26	1,944.39	2,099.94	2,273.19	2,460.73	2,663.74
10"	2,570.60	2,795.06	3,018.66	3,267.70	3,537.29	3,829.12
12"	4,805.85	5,225.54	5,643.58	6,109.18	6,613.19	7,158.78
Monthly Unmetered Fire Fixed Charges (\$/Month)						
1-1/2"	36.75	48.35	52.22	56.53	61.19	66.24
2"	58.80	77.36	83.55	90.44	97.90	105.98
3"	117.58	154.73	167.11	180.90	195.82	211.98
4"	183.72	241.76	261.10	282.64	305.96	331.20
6"	367.43	483.53	522.21	565.29	611.93	662.41
8"	587.88	773.64	835.53	904.46	979.08	1,059.85
10"	845.09	1,112.11	1,201.08	1,300.17	1,407.43	1,523.54
12"	1,579.95	2,079.17	2,245.50	2,430.75	2,631.29	2,848.37
Consumption Charge (\$/CCF)						
Tier 1 (0-6 CCF)	6.18					
Tier 2 (7-12 CCF)	8.30					
Tier 3 (Over 12 CCF)	10.56					
All CCF		9.87	10.66	11.54	12.49	13.52
Capital Facility Surcharge (\$/CCF)						
All Usage	1.92	2.07	2.24	2.42	2.62	2.84

Table 8-4 Capital Fund (Option 3)

Line No.	Description	Fiscal Year Ending June 30,				
		FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
		(\$)	(\$)	(\$)	(\$)	(\$)
Source of Funds						
1	Transfer from Operating Fund	8,600,000	8,600,000	8,600,000	3,000,000	1,400,000
2	Debt Proceeds	0	0	0	0	0
3	Water Connection Fees	140,600	140,600	140,600	140,600	140,600
4	Capital Facility Surcharge	2,248,300	2,164,500	2,079,700	1,993,500	1,906,300
Months						
	Year	Effective	Rate Adj			
5	2027	12	20.00%	449,700	432,900	415,900
6	2028	12	6.50%		168,800	162,200
7	2029	12	6.50%			172,800
8	2030	12	0.00%			0
9	2031	12	0.00%			0
10	Increased Revenue Due to Adjustments			449,700	601,700	750,900
11	Interest Income			585,200	696,300	43,800
12	Total Sources			\$ 12,023,800	\$ 12,203,100	\$ 11,615,000
						\$ 5,904,200
						\$ 4,294,600
Use of Funds						
13	Capital Projects [1]	4,064,700	9,314,300	28,580,800	5,735,200	1,460,600
14	Debt Issuance Costs	0	0	0	0	0
15	Bond Reserve Fund Requirement	0	0	0	0	0
16	Total Uses	\$ 4,064,700	\$ 9,314,300	\$ 28,580,800	\$ 5,735,200	\$ 1,460,600
17	Net Annual Cash Balance	7,959,100	2,888,800	(16,965,800)	169,000	2,834,000
18	Beginning Unrestricted Fund Balance	7,255,988	15,215,088	18,103,888	1,138,088	1,307,088
19	Net Cumulative Fund Balance	\$ 15,215,088	\$ 18,103,888	\$ 1,138,088	\$ 1,307,088	\$ 4,141,088
20	Reserve Target [2]	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 3,000,000

[1] Differs from Table 3-6 as it includes ~\$560k to \$610k in operating costs.

[2] Recommended reserve target is \$3.0M (by 2031). Existing reserve target is \$1.0M.

Table 8-5 Operating Fund (Option 3)

Line No.	Description	Fiscal Year Ending June 30,				
		FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
		\$	\$	\$	\$	\$
Revenue						
Rate Revenue						
1	Revenue from Existing Rates	14,989,000	14,402,400	13,750,400	13,173,900	12,577,800
Months						
	Year	Effective	Rate Adj			
2	2027	12	20.00%	2,997,800	2,880,500	2,750,100
3	2028	12	6.50%		1,123,400	1,072,500
4	2029	12	6.50%			1,142,200
5	2030	12	0.00%			0
6	2031	12	0.00%			0
7	Increased Revenue Due to Adjustments	2,997,800	4,003,900	4,964,800	4,756,800	4,541,500
8	Subtotal Rate Revenue	\$ 17,986,800	\$ 18,406,300	\$ 18,715,200	\$ 17,930,700	\$ 17,119,300
Other Operating Revenue						
9	Inter Governmental Revenue	500,000	0	0	0	0
10	Use of Money & Property	454,300	320,600	182,300	226,800	300,500
11	Charges for Services	38,900	39,300	39,700	40,100	40,500
12	Subtotal Other Operating Revenue	\$ 993,200	\$ 359,900	\$ 222,000	\$ 266,900	\$ 341,000
13	Total Revenue	\$ 18,980,000	\$ 18,766,200	\$ 18,937,200	\$ 18,197,600	\$ 17,460,300
Revenue Requirements						
Operating & Maintenance						
14	O&M Expenses	13,430,300	13,519,700	13,805,600	13,908,300	14,006,300
15	Routine Capital Outlay	117,500	122,200	127,100	132,200	137,500
16	Subtotal O&M	\$ 13,547,800	\$ 13,641,900	\$ 13,932,700	\$ 14,040,500	\$ 14,143,800
Debt Service						
17	Existing Revenue Bonds	0	0	0	0	0
18	Proposed Revenue Bonds	0	0	0	0	0
19	Total Debt Service	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Transfers						
20	Transfer to Other Funds	0	0	0	0	0
21	Transfer to Capital Fund	8,600,000	8,600,000	8,600,000	3,000,000	1,400,000
22	Total Transfers	\$ 8,600,000	\$ 8,600,000	\$ 8,600,000	\$ 3,000,000	\$ 1,400,000
23	Total Revenue Requirements	\$ 22,147,800	\$ 22,241,900	\$ 22,532,700	\$ 17,040,500	\$ 15,543,800
24	Net Annual Cash Balance	(3,167,800)	(3,475,700)	(3,595,500)	1,157,100	1,916,500
25	Beginning Fund Balance	14,979,600	11,811,800	8,336,100	4,740,600	5,897,700
26	Net Cumulative Fund Balance	\$ 11,811,800	\$ 8,336,100	\$ 4,740,600	\$ 5,897,700	\$ 7,814,200
27	Target Operating Reserves (120 Days)	\$ 4,415,400	\$ 4,444,800	\$ 4,538,800	\$ 4,572,600	\$ 4,604,800
28	Debt Service Coverage	0.00	0.00	0.00	0.00	0.00

Table 8-6 Proposed Rate Schedule (Option 3)

Customer Class	Existing	Fiscal Year Ending June 30,				
	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Monthly Fixed Meter Charge (\$/Month)						
3/4" or less	33.53	44.01	46.87	49.92	49.92	49.92
1"	55.87	73.34	78.11	83.19	83.19	83.19
1-1/2"	111.77	146.69	156.22	166.37	166.37	166.37
2"	178.83	234.70	249.96	266.21	266.21	266.21
3"	357.65	469.40	499.91	532.40	532.40	532.40
4"	558.83	733.44	781.11	831.88	831.88	831.88
6"	1,117.66	1,466.89	1,562.24	1,663.79	1,663.79	1,663.79
8"	1,788.26	2,347.02	2,499.58	2,662.05	2,662.05	2,662.05
10"	2,570.60	3,373.85	3,593.15	3,826.70	3,826.70	3,826.70
12"	4,805.85	6,307.63	6,717.63	7,154.28	7,154.28	7,154.28
Monthly Unmetered Fire Fixed Charges (\$/Month)						
1-1/2"	36.75	64.40	68.59	73.05	73.05	73.05
2"	58.80	103.05	109.75	116.88	116.88	116.88
3"	117.58	206.09	219.49	233.76	233.76	233.76
4"	183.72	322.02	342.95	365.24	365.24	365.24
6"	367.43	644.05	685.91	730.49	730.49	730.49
8"	587.88	1,030.47	1,097.45	1,168.78	1,168.78	1,168.78
10"	845.09	1,481.31	1,577.60	1,680.14	1,680.14	1,680.14
12"	1,579.95	2,769.40	2,949.41	3,141.12	3,141.12	3,141.12
Consumption Charge (\$/CCF)						
Tier 1 (0-6 CCF)	6.18					
Tier 2 (7-12 CCF)	8.30					
Tier 3 (Over 12 CCF)	10.56					
All CCF		10.47	11.15	11.87	11.87	11.87
Capital Facility Surcharge (\$/CCF)						
All Usage	1.92	2.30	2.45	2.61	2.61	2.61

Table 8-7 Capital Fund (Option 4)

Line No.	Description	Fiscal Year Ending June 30,				
		FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
		(\$)	(\$)	(\$)	(\$)	(\$)
Source of Funds						
1	Transfer from Operating Fund	11,000,000	11,900,000	11,900,000	5,000,000	4,500,000
2	Debt Proceeds	0	0	0	0	0
3	Water Connection Fees	140,600	140,600	140,600	140,600	140,600
4	Capital Facility Surcharge	2,248,300	2,164,500	2,079,700	1,993,500	1,906,300
Months						
	Year	Effective	Rate Adj			
5	2027	12	35.00%	786,900	757,600	727,900
6	2028	12	10.00%		292,200	280,800
7	2029	12	10.00%			308,800
8	2030	12	0.00%			0
9	2031	12	0.00%			0
10	Increased Revenue Due to Adjustments			786,900	1,049,800	1,317,500
11	Interest Income			486,700	659,800	72,400
12	Total Sources			\$ 14,662,500	\$ 15,914,700	\$ 15,510,200
						\$ 8,478,700
						\$ 7,911,400
Use of Funds						
13	Capital Projects [1]			9,264,700	11,414,300	30,780,800
14	Debt Issuance Costs			0	0	0
15	Bond Reserve Fund Requirement			0	0	0
16	Total Uses			\$ 9,264,700	\$ 11,414,300	\$ 30,780,800
						\$ 8,235,200
						\$ 5,960,600
17	Net Annual Cash Balance			5,397,800	4,500,400	(15,270,600)
18	Beginning Unrestricted Fund Balance			7,255,988	12,653,788	17,154,188
19	Net Cumulative Fund Balance			\$ 12,653,788	\$ 17,154,188	\$ 1,883,588
						\$ 2,127,088
						\$ 4,077,888
20	Reserve Target [2]			\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
						\$ 1,000,000
						\$ 3,000,000

[1] Differs from Table 3-6 as it includes ~\$560k to \$610k in operating costs.

[2] Recommended reserve target is \$3.0M (by 2031). Existing reserve target is \$1.0M.

Table 8-8 Operating Fund (Option 4)

Line No.	Description	Fiscal Year Ending June 30,				
		FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
		\$	\$	\$	\$	\$
Revenue						
Rate Revenue						
1	Revenue from Existing Rates	14,989,000	14,402,400	13,750,400	13,173,900	12,577,800
Months						
	Year	Effective	Rate Adj			
2	2027	12	35.00%	5,246,200	5,040,800	4,812,600
3	2028	12	10.00%		1,944,300	1,856,300
4	2029	12	10.00%			2,041,900
5	2030	12	0.00%			0
6	2031	12	0.00%			0
7	Increased Revenue Due to Adjustments	5,246,200	6,985,100	8,710,800	8,345,700	7,968,000
8	Subtotal Rate Revenue	\$ 20,235,200	\$ 21,387,500	\$ 22,461,200	\$ 21,519,600	\$ 20,545,800
Other Operating Revenue						
9	Inter Governmental Revenue	500,000	0	0	0	0
10	Use of Money & Property	448,200	301,600	180,400	288,300	377,600
11	Charges for Services	38,900	39,300	39,700	40,100	40,500
12	Subtotal Other Operating Revenue	\$ 987,100	\$ 340,900	\$ 220,100	\$ 328,400	\$ 418,100
13	Total Revenue	\$ 21,222,300	\$ 21,728,400	\$ 22,681,300	\$ 21,848,000	\$ 20,963,900
Revenue Requirements						
Operating & Maintenance						
14	O&M Expenses	13,430,300	13,519,700	13,805,600	13,908,300	14,006,300
15	Routine Capital Outlay	117,500	122,200	127,100	132,200	137,500
16	Subtotal O&M	\$ 13,547,800	\$ 13,641,900	\$ 13,932,700	\$ 14,040,500	\$ 14,143,800
Debt Service						
17	Existing Revenue Bonds	0	0	0	0	0
18	Proposed Revenue Bonds	0	0	0	0	0
19	Total Debt Service	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Transfers						
20	Transfer to Other Funds	0	0	0	0	0
21	Transfer to Capital Fund	11,000,000	11,900,000	11,900,000	5,000,000	4,500,000
22	Total Transfers	\$ 11,000,000	\$ 11,900,000	\$ 11,900,000	\$ 5,000,000	\$ 4,500,000
23	Total Revenue Requirements	\$ 24,547,800	\$ 25,541,900	\$ 25,832,700	\$ 19,040,500	\$ 18,643,800
24	Net Annual Cash Balance	(3,325,500)	(3,813,500)	(3,151,400)	2,807,500	2,320,100
25	Beginning Fund Balance	14,979,600	11,654,100	7,840,600	4,689,200	7,496,700
26	Net Cumulative Fund Balance	\$ 11,654,100	\$ 7,840,600	\$ 4,689,200	\$ 7,496,700	\$ 9,816,800
27	Target Operating Reserves (120 Days)	\$ 4,415,400	\$ 4,444,800	\$ 4,538,800	\$ 4,572,600	\$ 4,604,800
28	Debt Service Coverage	0.00	0.00	0.00	0.00	0.00

Table 8-9 Proposed Rate Schedule (Option 4)

Customer Class	Existing	Fiscal Year Ending June 30,				
	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Monthly Fixed Meter Charge (\$/Month)						
3/4" or less	33.53	46.84	51.52	56.67	56.67	56.67
1"	55.87	78.07	85.88	94.47	94.47	94.47
1-1/2"	111.77	156.13	171.74	188.91	188.91	188.91
2"	178.83	249.81	274.79	302.27	302.27	302.27
3"	357.65	499.62	549.58	604.54	604.54	604.54
4"	558.83	780.65	858.72	944.59	944.59	944.59
6"	1,117.66	1,561.31	1,717.44	1,889.18	1,889.18	1,889.18
8"	1,788.26	2,498.09	2,747.90	3,022.69	3,022.69	3,022.69
10"	2,570.60	3,591.00	3,950.10	4,345.11	4,345.11	4,345.11
12"	4,805.85	6,713.62	7,384.98	8,123.48	8,123.48	8,123.48
Monthly Unmetered Fire Fixed Charges (\$/Month)						
1-1/2"	36.75	70.12	77.13	84.84	84.84	84.84
2"	58.80	112.19	123.41	135.75	135.75	135.75
3"	117.58	224.38	246.82	271.50	271.50	271.50
4"	183.72	350.59	385.65	424.22	424.22	424.22
6"	367.43	701.19	771.31	848.44	848.44	848.44
8"	587.88	1,121.90	1,234.09	1,357.50	1,357.50	1,357.50
10"	845.09	1,612.73	1,774.00	1,951.40	1,951.40	1,951.40
12"	1,579.95	3,015.11	3,316.62	3,648.28	3,648.28	3,648.28
Consumption Charge (\$/CCF)						
Tier 1 (0-6 CCF)	6.18					
Tier 2 (7-12 CCF)	8.30					
Tier 3 (Over 12 CCF)	10.56					
All CCF		12.05	13.26	14.59	14.59	14.59
Capital Facility Surcharge (\$/CCF)						
All Usage	1.92	2.59	2.85	3.14	3.14	3.14

9.0 Appendix C – Fixed Assets

Asset ID.	Description	Function	Acq Date	Acq Year	Useful Life	Original Cost	Accumulated Depreciation	Annual Depreciation	Original Cost less Depreciation (OCLD)	Replacement Cost less Depreciation (RCLD)
As of June 30, 2024										
Water Utility										
Land										
	Reservior #1 (2M gal)	Water Storage	1/1/1973	1973		0	0		0	0
	Reservior #2 (3.5M gal)	Water Storage	1/1/1997	1997		0	0		0	0
	Pumping Station	Pumping	1/1/1973	1973		215,622	0		215,622	1,590,532
	Pumping Station	Pumping	1/1/1970	1970		850,832	0		850,832	8,612,095
	Subtotal Land					\$1,066,454	\$0		\$1,066,454	\$10,202,627
Buildings										
	Pumping Station	Pumping	1/1/1973	1973	50	9,800	9,800	196	0	0
	Reservior #1 (2M gal)	Water Storage	1/1/1973	1973	50	628,209	628,209	12,564	0	0
	Reservior #1 - roof	Water Storage	1/1/2006	2006	50	213,971	77,022	4,279	136,949	246,979
	Reservior #2 (3.5M gal)	Water Storage	1/1/1997	1997	50	3,249,793	1,754,892	64,996	1,494,901	3,586,746
	Pumping Station	Pumping	1/1/1970	1970	50	57,687	57,687	1,154	0	0
	Sharon Park - Station	Pumping	1/1/2016	2016	60	2,860,525	381,400	47,675	2,479,125	3,352,128
	Sharon Park - Pumps	Pumping	1/1/2016	2016	20	811,650	324,664	40,583	486,986	658,474
	Subtotal Buildings					\$7,831,635	\$3,233,674	\$171,447	\$4,597,961	\$7,844,327
Equipment*										
	Additions	General Plant	01/01/1978	1978	10	34,915	34,915	0	0	0
	Pump Purchase	Pumping	01/30/1984	1984	10	18,087	18,087	0	0	0
	Balance	Meters	06/30/1976	1976	10	132,166	132,166	0	0	0
	Balance	Hydrants	06/30/1976	1976	10	132,166	132,166	0	0	0
	Portable Generator	General Plant	03/03/2008	2008	7	13,546	13,546	0	0	0
	Air Compressor	General Plant	06/30/2008	2008	15	12,281	12,281	0	0	0
	Portable Light Tower	General Plant	05/29/2012	2012	7	9,959	9,959	0	0	0
	Mini Message Board	General Plant	10/16/2014	2014	7	13,418	13,418	0	0	0
	Emergency Response Trailer	General Plant	06/30/2015	2015	7	1,807	1,807	0	0	0
	Electric Crane	General Plant	09/23/2015	2015	10	22,682	19,911	2,212	2,772	3,861
	DMP Big TEX Trailer	General Plant	10/29/2015	2015	7	8,160	8,160	0	0	0
	Double Wall Fuel Tank	General Plant	06/30/2017	2017	5	5,450	5,450	0	0	0
	Hoist System	General Plant	06/30/2018	2018	15	8,653	3,466	578	5,187	6,555
	Subtotal Equipment*					\$413,289	\$405,330	\$2,790	\$7,959	\$10,415
* The Balance line item details were not provided, therefore the amount was split 50% meters and 50% hydrants.										

Asset ID.	Description	Function	Acq Date	Acq Year	Useful Life	Original Cost	Accumulated Depreciation	Annual Depreciation	Original Cost less Depreciation (OCLD)	Replacement Cost less Depreciation (RCLD)
As of June 30, 2024										
Water Utility Infrastructure										
0" AC Total		Distribution	1/1/1910	1910	50	1	1	0	0	0
0" DI Total		Distribution	1/1/1910	1910	50	1	1	0	0	0
Total Laterals		Distribution	1/1/1910	1910	50	7	7	0	0	0
0" UNC Total		Distribution	1/1/1910	1910	50	224	224	4	0	0
2" CI Total		Distribution	1/1/1910	1910	50	0	0	0	0	0
4" AC Total		Distribution	1/1/1910	1910	50	10	10	0	0	0
4" CI Total		Distribution	1/1/1910	1910	50	2	2	0	0	0
4" DI Total		Distribution	1/1/1910	1910	50	1	1	0	0	0
6" AC Total		Distribution	1/1/1910	1910	50	103	103	2	0	0
6" CI Total		Distribution	1/1/1910	1910	50	29	29	1	0	0
6" DI Total		Distribution	1/1/1910	1910	50	0	0	0	0	0
6" PVC Total		Distribution	1/1/1910	1910	50	0	0	0	0	0
6" UNC Total		Distribution	1/1/1910	1910	50	2	2	0	0	0
8" AC Total		Distribution	1/1/1910	1910	50	163	163	3	0	0
8" CI Total		Distribution	1/1/1910	1910	50	22	22	0	0	0
8" DI Total		Distribution	1/1/1910	1910	50	0	0	0	0	0
8" ENC Total		Distribution	1/1/1910	1910	50	2	2	0	0	0
8" PVC Total		Distribution	1/1/1910	1910	50	11	11	0	0	0
8" STEEL Total		Distribution	1/1/1910	1910	50	1	1	0	0	0
8" UNC Total		Distribution	1/1/1910	1910	50	1	1	0	0	0
10 AC Total		Distribution	1/1/1910	1910	50	74	74	1	0	0
10 CI Total		Distribution	1/1/1910	1910	50	2	2	0	0	0
DW Total		Distribution	1/1/1910	1910	50	1	1	0	0	0
10 PVC Total		Distribution	1/1/1910	1910	50	1	1	0	0	0
10 UNC Total		Distribution	1/1/1910	1910	50	3	3	0	0	0
12" AC Total		Transmission	1/1/1910	1910	50	121	121	2	0	0
12" DI Total		Transmission	1/1/1910	1910	50	28	28	1	0	0
12" ENC Total		Transmission	1/1/1910	1910	50	1	1	0	0	0
12" PVC Total		Transmission	1/1/1910	1910	50	1	1	0	0	0
14" AC Total		Transmission	1/1/1910	1910	50	2	2	0	0	0
14" DI Total		Transmission	1/1/1910	1910	50	1	1	0	0	0
16" AC Total		Transmission	1/1/1910	1910	50	0	0	0	0	0
0" AC Total		Distribution	1/1/1920	1920	50	2	2	0	0	0
0" DI Total		Distribution	1/1/1920	1920	50	1	1	0	0	0
Total Laterals		Distribution	1/1/1920	1920	50	9	9	0	0	0
0" UNC Total		Distribution	1/1/1920	1920	50	303	303	6	0	0
2" CI Total		Distribution	1/1/1920	1920	50	0	0	0	0	0
4" AC Total		Distribution	1/1/1920	1920	50	14	14	0	0	0
4" CI Total		Distribution	1/1/1920	1920	50	2	2	0	0	0
4" DI Total		Distribution	1/1/1920	1920	50	2	2	0	0	0
6" AC Total		Distribution	1/1/1920	1920	50	139	139	3	0	0
6" CI Total		Distribution	1/1/1920	1920	50	39	39	1	0	0

Asset ID.	Description	Function	Acq Date	Acq Year	Useful Life	Original Cost	Accumulated Depreciation	Annual Depreciation	Original Cost less Depreciation (OCLD)	Replacement Cost less Depreciation (RCLD)
As of June 30, 2024										
Water Utility										
6" DI Total		Distribution	1/1/1920	1920	50	0	0	0	0	0
6" PVC Total		Distribution	1/1/1920	1920	50	1	1	0	0	0
6" UNC Total		Distribution	1/1/1920	1920	50	3	3	0	0	0
8" AC Total		Distribution	1/1/1920	1920	50	220	220	4	0	0
8" CI Total		Distribution	1/1/1920	1920	50	30	30	1	0	0
8" DI Total		Distribution	1/1/1920	1920	50	0	0	0	0	0
8" ENC Total		Distribution	1/1/1920	1920	50	3	3	0	0	0
8" PVC Total		Distribution	1/1/1920	1920	50	15	15	0	0	0
8" STEEL Total		Distribution	1/1/1920	1920	50	2	2	0	0	0
8" UNC Total		Distribution	1/1/1920	1920	50	1	1	0	0	0
10 AC Total		Distribution	1/1/1920	1920	50	100	100	2	0	0
10 CI Total		Distribution	1/1/1920	1920	50	3	3	0	0	0
DW Total		Distribution	1/1/1920	1920	50	1	1	0	0	0
10 PVC Total		Distribution	1/1/1920	1920	50	1	1	0	0	0
10 UNC Total		Distribution	1/1/1920	1920	50	4	4	0	0	0
12" AC Total		Transmission	1/1/1920	1920	50	163	163	3	0	0
12" DI Total		Transmission	1/1/1920	1920	50	38	38	1	0	0
12" ENC Total		Transmission	1/1/1920	1920	50	2	2	0	0	0
12" PVC Total		Transmission	1/1/1920	1920	50	1	1	0	0	0
14" AC Total		Transmission	1/1/1920	1920	50	2	2	0	0	0
14" DI Total		Transmission	1/1/1920	1920	50	2	2	0	0	0
16" AC Total		Transmission	1/1/1920	1920	50	0	0	0	0	0
0" AC Total		Distribution	1/1/1930	1930	50	7	7	0	0	0
0" DI Total		Distribution	1/1/1930	1930	50	3	3	0	0	0
Total Laterals		Distribution	1/1/1930	1930	50	34	34	1	0	0
0" UNC Total		Distribution	1/1/1930	1930	50	1,162	1,162	24	0	0
2" CI Total		Distribution	1/1/1930	1930	50	1	1	0	0	0
4" AC Total		Distribution	1/1/1930	1930	50	52	52	1	0	0
4" CI Total		Distribution	1/1/1930	1930	50	8	8	0	0	0
4" DI Total		Distribution	1/1/1930	1930	50	7	7	0	0	0
6" AC Total		Distribution	1/1/1930	1930	50	532	532	11	0	0
6" CI Total		Distribution	1/1/1930	1930	50	148	148	3	0	0
6" DI Total		Distribution	1/1/1930	1930	50	0	0	0	0	0
6" PVC Total		Distribution	1/1/1930	1930	50	2	2	0	0	0
6" UNC Total		Distribution	1/1/1930	1930	50	13	13	0	0	0
8" AC Total		Distribution	1/1/1930	1930	50	844	844	17	0	0
8" CI Total		Distribution	1/1/1930	1930	50	116	116	2	0	0
8" DI Total		Distribution	1/1/1930	1930	50	0	0	0	0	0
8" ENC Total		Distribution	1/1/1930	1930	50	12	12	0	0	0
8" PVC Total		Distribution	1/1/1930	1930	50	58	58	1	0	0
8" STEEL Total		Distribution	1/1/1930	1930	50	6	6	0	0	0
8" UNC Total		Distribution	1/1/1930	1930	50	5	5	0	0	0

Asset ID.	Description	Function	Acq Date	Acq Year	Useful Life	Original Cost	Accumulated Depreciation	Annual Depreciation	Original Cost less Depreciation (OCLD)	Replacement Cost less Depreciation (RCLD)
As of June 30, 2024										
Water Utility										
10 AC Total		Distribution	1/1/1930	1930	50	383	383	8	0	0
10 CI Total		Distribution	1/1/1930	1930	50	13	13	0	0	0
DW Total		Distribution	1/1/1930	1930	50	4	4	0	0	0
10 PVC Total		Distribution	1/1/1930	1930	50	3	3	0	0	0
10 UNC Total		Distribution	1/1/1930	1930	50	14	14	0	0	0
12" AC Total		Transmission	1/1/1930	1930	50	627	627	13	0	0
12" DI Total		Transmission	1/1/1930	1930	50	144	144	3	0	0
12" ENC Total		Transmission	1/1/1930	1930	50	6	6	0	0	0
12" PVC Total		Transmission	1/1/1930	1930	50	3	3	0	0	0
14" AC Total		Transmission	1/1/1930	1930	50	8	8	0	0	0
14" DI Total		Transmission	1/1/1930	1930	50	7	7	0	0	0
16" AC Total		Transmission	1/1/1930	1930	50	0	0	0	0	0
0" AC Total		Distribution	1/1/1940	1940	50	1,765	1,765	35	0	0
0" DI Total		Distribution	1/1/1940	1940	50	755	755	15	0	0
Total Laterals		Distribution	1/1/1940	1940	50	8,272	8,272	165	0	0
0" UNC Total		Distribution	1/1/1940	1940	50	282,674	282,674	5,653	0	0
2" CI Total		Distribution	1/1/1940	1940	50	227	227	5	0	0
4" AC Total		Distribution	1/1/1940	1940	50	12,727	12,727	255	0	0
4" CI Total		Distribution	1/1/1940	1940	50	1,945	1,945	39	0	0
4" DI Total		Distribution	1/1/1940	1940	50	1,789	1,789	36	0	0
6" AC Total		Distribution	1/1/1940	1940	50	129,551	129,551	2,591	0	0
6" CI Total		Distribution	1/1/1940	1940	50	36,022	36,022	720	0	0
6" DI Total		Distribution	1/1/1940	1940	50	48,577	48,577	972	0	0
6" PVC Total		Distribution	1/1/1940	1940	50	540	540	11	0	0
6" UNC Total		Distribution	1/1/1940	1940	50	3,057	3,057	61	0	0
8" AC Total		Distribution	1/1/1940	1940	50	205,402	205,402	4,108	0	0
8" CI Total		Distribution	1/1/1940	1940	50	28,230	28,230	565	0	0
8" DI Total		Distribution	1/1/1940	1940	50	47,397	47,397	948	0	0
8" ENC Total		Distribution	1/1/1940	1940	50	2,948	2,948	59	0	0
8" PVC Total		Distribution	1/1/1940	1940	50	14,227	14,227	285	0	0
8" STEEL Total		Distribution	1/1/1940	1940	50	1,465	1,465	29	0	0
8" UNC Total		Distribution	1/1/1940	1940	50	1,217	1,217	24	0	0
10 AC Total		Distribution	1/1/1940	1940	50	93,216	93,216	1,864	0	0
10 CI Total		Distribution	1/1/1940	1940	50	3,121	3,121	62	0	0
DW Total		Distribution	1/1/1940	1940	50	989	989	20	0	0
10 PVC Total		Distribution	1/1/1940	1940	50	824	824	16	0	0
10 UNC Total		Distribution	1/1/1940	1940	50	3,445	3,445	69	0	0
12" AC Total		Transmission	1/1/1940	1940	50	152,605	152,605	3,052	0	0
12" DI Total		Transmission	1/1/1940	1940	50	35,094	35,094	702	0	0
12" ENC Total		Transmission	1/1/1940	1940	50	1,507	1,507	30	0	0
12" PVC Total		Transmission	1/1/1940	1940	50	731	731	15	0	0
14" AC Total		Transmission	1/1/1940	1940	50	1,970	1,970	39	0	0

Asset ID.	Description	Function	Acq Date	Acq Year	Useful Life	Original Cost	Accumulated Depreciation	Annual Depreciation	Original Cost less Depreciation (OCLD)	Replacement Cost less Depreciation (RCLD)
As of June 30, 2024										
Water Utility										
14" DI Total		Transmission	1/1/1940	1940	50	1,705	1,705	34	0	0
16" AC Total		Transmission	1/1/1940	1940	50	44,067	44,067	881	0	0
0" AC Total		Distribution	1/1/1950	1950	50	2,139	2,139	43	0	0
0" DI Total		Distribution	1/1/1950	1950	50	915	915	18	0	0
Total Laterals		Distribution	1/1/1950	1950	50	10,027	10,027	201	0	0
0" UNC Total		Distribution	1/1/1950	1950	50	342,615	342,615	6,852	0	0
2" CI Total		Distribution	1/1/1950	1950	50	275	275	5	0	0
4" AC Total		Distribution	1/1/1950	1950	50	15,425	15,425	309	0	0
4" CI Total		Distribution	1/1/1950	1950	50	2,358	2,358	47	0	0
4" DI Total		Distribution	1/1/1950	1950	50	2,168	2,168	43	0	0
6" AC Total		Distribution	1/1/1950	1950	50	157,023	157,023	3,140	0	0
6" CI Total		Distribution	1/1/1950	1950	50	43,661	43,661	873	0	0
6" DI Total		Distribution	1/1/1950	1950	50	77,694	77,694	1,554	0	0
6" PVC Total		Distribution	1/1/1950	1950	50	654	654	13	0	0
6" UNC Total		Distribution	1/1/1950	1950	50	3,705	3,705	74	0	0
8" AC Total		Distribution	1/1/1950	1950	50	248,957	248,957	4,979	0	0
8" CI Total		Distribution	1/1/1950	1950	50	34,217	34,217	684	0	0
8" DI Total		Distribution	1/1/1950	1950	50	112,010	112,010	2,240	0	0
8" ENC Total		Distribution	1/1/1950	1950	50	3,573	3,573	71	0	0
8" PVC Total		Distribution	1/1/1950	1950	50	17,244	17,244	345	0	0
8" STEEL Total		Distribution	1/1/1950	1950	50	1,776	1,776	36	0	0
8" UNC Total		Distribution	1/1/1950	1950	50	1,475	1,475	30	0	0
10 AC Total		Distribution	1/1/1950	1950	50	112,982	112,982	2,260	0	0
10 CI Total		Distribution	1/1/1950	1950	50	3,783	3,783	76	0	0
DW Total		Distribution	1/1/1950	1950	50	1,199	1,199	24	0	0
10 PVC Total		Distribution	1/1/1950	1950	50	999	999	20	0	0
10 UNC Total		Distribution	1/1/1950	1950	50	4,175	4,175	83	0	0
12" AC Total		Transmission	1/1/1950	1950	50	184,964	184,964	3,699	0	0
12" DI Total		Transmission	1/1/1950	1950	50	42,536	42,536	851	0	0
12" ENC Total		Transmission	1/1/1950	1950	50	1,826	1,826	37	0	0
12" PVC Total		Transmission	1/1/1950	1950	50	886	886	18	0	0
14" AC Total		Transmission	1/1/1950	1950	50	2,388	2,388	48	0	0
14" DI Total		Transmission	1/1/1950	1950	50	2,067	2,067	41	0	0
16" AC Total		Transmission	1/1/1950	1950	50	53,432	53,432	1,069	0	0
0" AC Total		Distribution	1/1/1960	1960	50	694	694	14	0	0
0" DI Total		Distribution	1/1/1960	1960	50	297	297	6	0	0
Total Laterals		Distribution	1/1/1960	1960	50	3,255	3,255	65	0	0
0" UNC Total		Distribution	1/1/1960	1960	50	111,214	111,214	2,224	0	0
2" CI Total		Distribution	1/1/1960	1960	50	89	89	2	0	0
4" AC Total		Distribution	1/1/1960	1960	50	5,007	5,007	100	0	0
4" CI Total		Distribution	1/1/1960	1960	50	765	765	15	0	0
4" DI Total		Distribution	1/1/1960	1960	50	704	704	14	0	0

Asset ID.	Description	Function	Acq Date	Acq Year	Useful Life	Original Cost	Accumulated Depreciation	Annual Depreciation	Original Cost less Depreciation (OCLD)	Replacement Cost less Depreciation (RCLD)
As of June 30, 2024										
Water Utility										
6" AC Total		Distribution	1/1/1960	1960	50	50,970	50,970	1,019	0	0
6" CI Total		Distribution	1/1/1960	1960	50	14,172	14,172	283	0	0
6" DI Total		Distribution	1/1/1960	1960	50	25,220	25,220	504	0	0
6" PVC Total		Distribution	1/1/1960	1960	50	212	212	4	0	0
6" UNC Total		Distribution	1/1/1960	1960	50	1,203	1,203	24	0	0
8" AC Total		Distribution	1/1/1960	1960	50	80,812	80,812	1,616	0	0
8" CI Total		Distribution	1/1/1960	1960	50	11,107	11,107	222	0	0
8" DI Total		Distribution	1/1/1960	1960	50	36,359	36,359	727	0	0
8" ENC Total		Distribution	1/1/1960	1960	50	1,160	1,160	23	0	0
8" PVC Total		Distribution	1/1/1960	1960	50	5,597	5,597	112	0	0
8" STEEL Total		Distribution	1/1/1960	1960	50	577	577	12	0	0
8" UNC Total		Distribution	1/1/1960	1960	50	479	479	10	0	0
10 AC Total		Distribution	1/1/1960	1960	50	36,674	36,674	733	0	0
10 CI Total		Distribution	1/1/1960	1960	50	1,228	1,228	25	0	0
DW Total		Distribution	1/1/1960	1960	50	389	389	8	0	0
10 PVC Total		Distribution	1/1/1960	1960	50	324	324	6	0	0
10 UNC Total		Distribution	1/1/1960	1960	50	1,355	1,355	27	0	0
12" AC Total		Transmission	1/1/1960	1960	50	60,040	60,040	1,201	0	0
12" DI Total		Transmission	1/1/1960	1960	50	13,807	13,807	276	0	0
12" ENC Total		Transmission	1/1/1960	1960	50	593	593	12	0	0
12" PVC Total		Transmission	1/1/1960	1960	50	288	288	6	0	0
14" AC Total		Transmission	1/1/1960	1960	50	775	775	16	0	0
14" DI Total		Transmission	1/1/1960	1960	50	671	671	13	0	0
16" AC Total		Transmission	1/1/1960	1960	50	17,344	17,344	347	0	0
0" AC Total		Distribution	1/1/1970	1970	50	647	647	13	0	0
0" DI Total		Distribution	1/1/1970	1970	50	277	277	6	0	0
Total Laterals		Distribution	1/1/1970	1970	50	3,032	3,032	61	0	0
0" UNC Total		Distribution	1/1/1970	1970	50	103,609	103,609	2,072	0	0
2" CI Total		Distribution	1/1/1970	1970	50	83	83	2	0	0
4" AC Total		Distribution	1/1/1970	1970	50	4,665	4,665	93	0	0
4" CI Total		Distribution	1/1/1970	1970	50	713	713	14	0	0
4" DI Total		Distribution	1/1/1970	1970	50	656	656	13	0	0
6" AC Total		Distribution	1/1/1970	1970	50	47,485	47,485	950	0	0
6" CI Total		Distribution	1/1/1970	1970	50	13,203	13,203	264	0	0
6" DI Total		Distribution	1/1/1970	1970	50	23,495	23,495	470	0	0
6" PVC Total		Distribution	1/1/1970	1970	50	198	198	4	0	0
6" UNC Total		Distribution	1/1/1970	1970	50	1,120	1,120	22	0	0
8" AC Total		Distribution	1/1/1970	1970	50	75,286	75,286	1,506	0	0
8" CI Total		Distribution	1/1/1970	1970	50	10,347	10,347	207	0	0
8" DI Total		Distribution	1/1/1970	1970	50	33,872	33,872	677	0	0
8" ENC Total		Distribution	1/1/1970	1970	50	1,081	1,081	22	0	0
8" PVC Total		Distribution	1/1/1970	1970	50	5,215	5,215	104	0	0

Asset ID.	Description	Function	Acq Date	Acq Year	Useful Life	Original Cost	Accumulated Depreciation	Annual Depreciation	Original Cost less Depreciation (OCLD)	Replacement Cost less Depreciation (RCLD)
As of June 30, 2024										
Water Utility										
8" STEEL Total		Distribution	1/1/1970	1970	50	537	537	11	0	0
8" UNC Total		Distribution	1/1/1970	1970	50	446	446	9	0	0
10 AC Total		Distribution	1/1/1970	1970	50	34,166	34,166	683	0	0
10 CI Total		Distribution	1/1/1970	1970	50	1,144	1,144	23	0	0
DW Total		Distribution	1/1/1970	1970	50	363	363	7	0	0
10 PVC Total		Distribution	1/1/1970	1970	50	302	302	6	0	0
10 UNC Total		Distribution	1/1/1970	1970	50	1,263	1,263	25	0	0
12" AC Total		Transmission	1/1/1970	1970	50	55,934	55,934	1,119	0	0
12" DI Total		Transmission	1/1/1970	1970	50	12,863	12,863	257	0	0
12" ENC Total		Transmission	1/1/1970	1970	50	552	552	11	0	0
12" PVC Total		Transmission	1/1/1970	1970	50	268	268	5	0	0
14" AC Total		Transmission	1/1/1970	1970	50	722	722	14	0	0
14" DI Total		Transmission	1/1/1970	1970	50	625	625	13	0	0
16" AC Total		Transmission	1/1/1970	1970	50	16,158	16,158	323	0	0
0" AC Total		Distribution	1/1/1980	1980	50	19	17	0	2	10
0" DI Total		Distribution	1/1/1980	1980	50	8	7	0	1	4
Total Laterals		Distribution	1/1/1980	1980	50	89	78	2	11	46
0" UNC Total		Distribution	1/1/1980	1980	50	3,042	2,677	61	365	1,576
2" CI Total		Distribution	1/1/1980	1980	50	2	2	0	0	1
4" AC Total		Distribution	1/1/1980	1980	50	137	121	3	16	71
4" CI Total		Distribution	1/1/1980	1980	50	21	18	0	3	11
4" DI Total		Distribution	1/1/1980	1980	50	19	17	0	2	10
6" AC Total		Distribution	1/1/1980	1980	50	1,394	1,227	28	167	722
6" CI Total		Distribution	1/1/1980	1980	50	388	341	8	47	201
6" DI Total		Distribution	1/1/1980	1980	50	690	607	14	83	357
6" PVC Total		Distribution	1/1/1980	1980	50	6	5	0	1	3
6" UNC Total		Distribution	1/1/1980	1980	50	33	29	1	4	17
8" AC Total		Distribution	1/1/1980	1980	50	2,210	1,945	44	265	1,145
8" CI Total		Distribution	1/1/1980	1980	50	304	267	6	36	157
8" DI Total		Distribution	1/1/1980	1980	50	994	875	20	119	515
8" ENC Total		Distribution	1/1/1980	1980	50	32	28	1	4	16
8" PVC Total		Distribution	1/1/1980	1980	50	153	135	3	18	79
8" STEEL Total		Distribution	1/1/1980	1980	50	16	14	0	2	8
8" UNC Total		Distribution	1/1/1980	1980	50	13	12	0	2	7
10 AC Total		Distribution	1/1/1980	1980	50	1,003	883	20	120	520
10 CI Total		Distribution	1/1/1980	1980	50	34	30	1	4	17
DW Total		Distribution	1/1/1980	1980	50	11	9	0	1	6
10 PVC Total		Distribution	1/1/1980	1980	50	9	8	0	1	5
10 UNC Total		Distribution	1/1/1980	1980	50	37	33	1	4	19
12" AC Total		Transmission	1/1/1980	1980	50	1,642	1,445	33	197	851
12" DI Total		Transmission	1/1/1980	1980	50	378	332	8	45	196
12" ENC Total		Transmission	1/1/1980	1980	50	16	14	0	2	8

Asset ID.	Description	Function	Acq Date	Acq Year	Useful Life	Original Cost	Accumulated Depreciation	Annual Depreciation	Original Cost less Depreciation (OCLD)	Replacement Cost less Depreciation (RCLD)
As of June 30, 2024										
Water Utility										
12" PVC Total		Transmission	1/1/1980	1980	50	8	7	0	1	4
14" AC Total		Transmission	1/1/1980	1980	50	21	19	0	3	11
14" DI Total		Transmission	1/1/1980	1980	50	18	16	0	2	10
16" AC Total		Transmission	1/1/1980	1980	50	474	417	9	57	246
0" AC Total		Distribution	1/1/1990	1990	50	1,055	718	21	338	998
0" DI Total		Distribution	1/1/1990	1990	50	452	307	9	144	427
Total Laterals		Distribution	1/1/1990	1990	50	4,947	3,364	99	1,583	4,676
0" UNC Total		Distribution	1/1/1990	1990	50	169,032	114,942	3,381	54,090	159,784
2" CI Total		Distribution	1/1/1990	1990	50	135	92	3	43	128
4" AC Total		Distribution	1/1/1990	1990	50	7,610	5,175	152	2,435	7,194
4" CI Total		Distribution	1/1/1990	1990	50	1,163	791	23	372	1,100
4" DI Total		Distribution	1/1/1990	1990	50	1,070	727	21	342	1,011
6" AC Total		Distribution	1/1/1990	1990	50	77,469	52,679	1,549	24,790	73,230
6" CI Total		Distribution	1/1/1990	1990	50	21,540	14,647	431	6,893	20,362
6" DI Total		Distribution	1/1/1990	1990	50	38,331	26,065	767	12,266	36,234
6" PVC Total		Distribution	1/1/1990	1990	50	323	219	6	103	305
6" UNC Total		Distribution	1/1/1990	1990	50	1,828	1,243	37	585	1,728
8" AC Total		Distribution	1/1/1990	1990	50	122,825	83,521	2,457	39,304	116,105
8" CI Total		Distribution	1/1/1990	1990	50	16,881	11,479	338	5,402	15,957
8" DI Total		Distribution	1/1/1990	1990	50	55,261	37,578	1,105	17,684	52,238
8" ENC Total		Distribution	1/1/1990	1990	50	1,763	1,199	35	564	1,666
8" PVC Total		Distribution	1/1/1990	1990	50	8,507	5,785	170	2,722	8,042
8" STEEL Total		Distribution	1/1/1990	1990	50	876	596	18	280	828
8" UNC Total		Distribution	1/1/1990	1990	50	728	495	15	233	688
10 AC Total		Distribution	1/1/1990	1990	50	55,741	37,904	1,115	17,837	52,691
10 CI Total		Distribution	1/1/1990	1990	50	1,866	1,269	37	597	1,764
DW Total		Distribution	1/1/1990	1990	50	591	402	12	189	559
10 PVC Total		Distribution	1/1/1990	1990	50	493	335	10	158	466
10 UNC Total		Distribution	1/1/1990	1990	50	2,060	1,401	41	659	1,947
12" AC Total		Transmission	1/1/1990	1990	50	91,254	62,053	1,825	29,201	86,261
12" DI Total		Transmission	1/1/1990	1990	50	20,986	14,270	420	6,715	19,837
12" ENC Total		Transmission	1/1/1990	1990	50	901	613	18	288	852
12" PVC Total		Transmission	1/1/1990	1990	50	437	297	9	140	413
14" AC Total		Transmission	1/1/1990	1990	50	1,178	801	24	377	1,114
14" DI Total		Transmission	1/1/1990	1990	50	1,020	693	20	326	964
16" AC Total		Transmission	1/1/1990	1990	50	26,361	17,926	527	8,436	24,919
2005 Hamilton Ave Contributed Capital		Distribution	1/1/2005	2005	50	416,809	158,387	8,336	258,422	485,137
6" DIP		Distribution	1/1/2006	2006	50	700,815	252,293	14,016	448,522	808,880
8" DIP		Distribution	1/1/2006	2006	50	1,232,865	443,831	24,657	789,034	1,422,972
16" DIP		Transmission	1/1/2006	2006	50	65,976	23,751	1,320	42,225	76,149
12" PVC		Transmission	1/1/2012	2012	50	647,264	155,343	12,945	491,921	738,750
12" Steel		Transmission	1/1/2012	2012	50	235,076	56,418	4,702	178,658	268,302

Asset ID.	Description	Function	Acq Date	Acq Year	Useful Life	Original Cost	Accumulated Depreciation	Annual Depreciation	Original Cost less Depreciation (OCLD)	Replacement Cost less Depreciation (RCLD)
As of June 30, 2024										
Water Utility										
	8" PVC	Distribution	1/1/2012	2012	50	526,506	126,361	10,530	400,145	600,924
	6" DIP	Distribution	1/1/2012	2012	50	201,264	48,303	4,025	152,961	229,711
	8" DIP	Distribution	1/1/2016	2016	50	1,585,617	253,699	31,712	1,331,918	1,800,942
	6" DIP	Distribution	1/1/2016	2016	50	154,730	24,757	3,095	129,973	175,742
Subtotal Infrastructure						\$10,111,881	\$5,651,419	\$202,238	\$4,460,462	\$7,308,849
	Water Supply					0	0	0	0	0
	Pumping					4,824,203	791,638	89,608	4,032,565	14,213,229
	Treatment					0	0	0	0	0
	Water Storage					4,091,973	2,460,123	81,839	1,631,850	3,833,725
	Transmission					1,800,587	1,041,993	36,012	758,594	1,218,887
	Distribution					8,311,294	4,609,425	166,227	3,701,868	6,089,962
	Meters					132,166	132,166	0	0	0
	Hydrants					132,166	132,166	0	0	0
	General Plant					130,871	122,913	2,790	7,959	10,415
Total Water Utility						\$19,423,259	\$9,290,423	\$376,476	\$10,132,836	\$25,366,218

Notes

- (1) Source: Water Enterprise2024.xlsx (Fixed Assets as of June 30, 2024)
- (2) Assumes Straight-Line Depreciation method.
- (3) ENR index are national annual averages.
- (4) Replacement costs for some assets were provided by City (Berryman & Henigar).

City of Menlo Park, CA | Water Rate Study

Asset ID.	Description	Function	Acq Date	Acq Year	Useful Life	Original Cost	Accumulated Depreciation	Annual Depreciation	Original Cost less Depreciation (OCLD)	Replacement Cost less Depreciation (RCLD)
As of June 30, 2024										
Water CWIP										
77-003	Water Main Replace.	Distribution	1/1/2018	2018	50	2,394,565	0	47,891	2,394,565	3,025,880
77-007	Reservoir 1&2 - Mixer	Water Storage	1/1/2018	2018	50	352,127	0	7,043	352,127	444,963
77-012	Emergency W/Storage	Water Supply	1/1/2018	2018	50	2,698,953	0	53,979	2,698,953	3,410,518
77-015	Reservoir 2 - Roof Rep.	Water Storage	1/1/2018	2018	25	206,106	0	8,244	206,106	260,445
Subtotal Water CWIP						\$5,651,751	\$0		\$5,651,751	\$7,141,806
Water Supply						2,698,953	0	53,979	2,698,953	3,410,518
Pumping						0	0	0	0	0
Treatment						0	0	0	0	0
Water Storage						558,233	0	15,287	558,233	705,408
Transmission						0	0	0	0	0
Distribution						2,394,565	0	47,891	2,394,565	3,025,880
Meters						0	0	0	0	0
Hydrants						0	0	0	0	0
General Plant						0	0	0	0	0
Total						\$5,651,751	\$0	\$117,157	\$5,651,751	\$7,141,806

Notes

(1) Source: Summary of Water Projects.xlsx