

DATE: November 29, 2022
TO: Maywood Mutual Water Company #1
FROM: Lechowicz & Tseng Municipal Consultants
SUBJECT: Comparison of Water Rate Options

TECHNICAL MEMORANDUM

Introduction

On October 31, Lechowicz & Tseng Municipal Consultants (L&T) presented a draft water rate study report to the Maywood Mutual Water Company #1 (Company) Board of Directors (Board). The proposed rates presented in the report will be referred to as Option A. The Board requested that L&T develop a second option (Option B) as a phased-in rate plan. Option B provides lower increases to meter fees and the volume rate for the January 1, 2023 rate change. Options A and B have the same proposed rates for 2024 to 2027. At the November 28th Board meeting, the Board modified Option B into a new option (Option C) such that rates for January 1, 2025, 2026, and 2027 will be increased by 4% or the annual adjustment to the Consumer Price Index (CPI), whichever is greater. The rates for January 1, 2023 and 2024 are the same for Options B and C. Option C is the Board's preferred rate option.

Comparison of Rate Options

Tables 1, 2, and 3 provide proposed rates and Tables 4, 5, and 6 provide cash flows for the three options. It should be noted that cost data shown in the cash flows is slightly updated from the October 31 presentation and reflects a 7% increase in supply costs from the Water Replenishment District (WRD). The prior draft assumed a 4.2% increase in supply costs. This change increases the Company's operating cost by about \$7,000 annually compared to the prior draft.

It is proposed that new rates become effective January 1 of each for the next five years. The Company's fiscal year (which is reflected in the cash flow) runs from April 1 to March 31. Thus, only the last billing period running from January 1 to February 28 (billed in March) will reflect the January 1 rate change. The full effect of increased rates will be seen in fiscal year 2024 which spans from April 2023 through March 2024.

As shown in the cash flows, the Option B rates generate about \$87,200 less revenues than Option A. The Option B rates are projected to result in an operating deficit in FY2024 whereas Option A rates are projected to generate positive net revenues in FY2024. It should also be noted that Option B and Option C do not achieve the desired debt coverage ratio of at least 1.2x times the annual debt payment in

FY2024 while Option A does achieve (and exceed) the coverage ratio. It is recommended that the Company meet or exceed a coverage ratio of 1.2x to maintain a strong credit rating.

The cash flows for Options B and C are the same for FY2023 and FY2024. The cash flows for Option C in FY2025 and beyond depend upon the annual CPI increase. The Option C cash flow shown in Table 6 provides illustrative revenues assuming a 4% increase in FY2025 to FY2027. Based on the illustrative revenues and expenses for Option C, the Company may not be able to fully fund \$50,000 per year in capital improvements. Instead, the illustrative cash flow includes \$48,200 in capital funding in FY2026 and \$41,300 in FY2027. However, actual revenues and capital spending will depend on the CPI during those years.

Table 7 provides a comparison of typical bills under current and proposed January 1, 2023 rates. Under Option A, typical single family residential bills will increase about 27%. Under Options B and C, typical residential bills will increase about 20%. The average bi-monthly bill under Option A rates is \$9.79 more than under Option B rates.

A summary of the advantages and disadvantages of the rate options is provided below.

Metric	Option A - Original	Option B – Phased-in	Option C – Phased-in plus CPI (PREFERRED OPTION)
Rate Adjustment	One year of large increases plus 4.5% estimated inflationary increases thereafter	Two years of increases plus 4.5% estimated inflationary increases thereafter	Two years of increases plus 4% or CPI increases thereafter
Typical Bi-monthly Bill Impact Jan 1, 2023	Increase of \$37.00	Increase of \$27.21	Increase of \$27.21
Comparison to other utilities	Only Liberty Utilities has a higher typical bill	City of South Gate, Cal Water Service and Liberty Utilities have higher bills	City of South Gate, Cal Water Service and Liberty Utilities have higher bills
Cash flows	Generates \$87,200 more than Option B; positive net revenues in FY2024	Generates \$87,200 less than Option A; negative net revenues in FY2024	Generates \$87,200 less than Option A; negative net revenues in FY2024; cash flows from FY2025 to FY2027 TBD based on the CPI
Debt coverage	Exceeds debt coverage target of 1.2x in FY2024 to FY2027	Does not meet debt coverage target of 1.2x in FY2024; exceeds debt coverage target in FY2025 to FY2027	Does not meet debt coverage target of 1.2x in FY2024; exceeds debt coverage target in FY2025 to FY2027 based on 4% rate increases

Table 1: Proposed 5-year Rate Plan (Bi-monthly Rates) – OPTION A
Maywood Mutual Water Company #1
Water Rate Study

Meter Size	Current Fees	Jan 1, 2023		Jan 1, 2024		Jan 1, 2025		Jan 1, 2026		Jan 1, 2027	
		Fees	% Increase	Fees	% Increase	Fees	% Increase	Fees	% Increase	Fees	% Increase
Up to 1"	\$46.35	\$61.65	33.0%	\$64.42	4.5%	\$67.32	4.5%	\$70.35	4.5%	\$73.52	4.5%
1.5"	\$74.78	\$98.64	31.9%	\$103.07	4.5%	\$107.71	4.5%	\$112.56	4.5%	\$117.63	4.5%
2"	\$140.08	\$184.95	32.0%	\$193.26	4.5%	\$201.96	4.5%	\$211.05	4.5%	\$220.56	4.5%
3"	\$560.84	\$739.80	31.9%	\$773.04	4.5%	\$807.84	4.5%	\$844.20	4.5%	\$882.24	4.5%
4"	\$869.32	\$1,171.35	34.7%	\$1,223.98	4.5%	\$1,279.08	4.5%	\$1,336.65	4.5%	\$1,396.88	4.5%
6"	\$1,622.25	\$2,157.75	33.0%	\$2,254.70	4.5%	\$2,356.20	4.5%	\$2,462.25	4.5%	\$2,573.20	4.5%
Unmetered	\$109.00	\$138.20	26.8%	\$144.42	4.5%	\$150.92	4.5%	\$157.71	4.5%	\$164.81	4.5%
Volume Rate (\$/ccf)	\$3.30	\$4.08	23.6%	\$4.26	4.4%	\$4.45	4.5%	\$4.65	4.5%	\$4.86	4.5%

Table 2: Proposed 5-year Rate Plan (Bi-monthly Rates) – OPTION B
Maywood Mutual Water Company #1
Water Rate Study

Meter Size	Current Fees	Jan 1, 2023		Jan 1, 2024		Jan 1, 2025		Jan 1, 2026		Jan 1, 2027	
		Fees	% Increase	Fees	% Increase	Fees	% Increase	Fees	% Increase	Fees	% Increase
Up to 1"	\$46.35	\$55.62	20.0%	\$64.42	15.8%	\$67.32	4.5%	\$70.35	4.5%	\$73.52	4.5%
1.5"	\$74.78	\$88.99	19.0%	\$103.07	15.8%	\$107.71	4.5%	\$112.56	4.5%	\$117.63	4.5%
2"	\$140.08	\$166.86	19.1%	\$193.26	15.8%	\$201.96	4.5%	\$211.05	4.5%	\$220.56	4.5%
3"	\$560.84	\$667.44	19.0%	\$773.04	15.8%	\$807.84	4.5%	\$844.20	4.5%	\$882.24	4.5%
4"	\$869.32	\$1,056.78	21.6%	\$1,223.98	15.8%	\$1,279.08	4.5%	\$1,336.65	4.5%	\$1,396.88	4.5%
6"	\$1,622.25	\$1,946.70	20.0%	\$2,254.70	15.8%	\$2,356.20	4.5%	\$2,462.25	4.5%	\$2,573.20	4.5%
Unmetered	\$109.00	\$130.58	19.8%	\$136.45	4.5%	\$150.92	4.5%	\$157.71	4.5%	\$164.81	4.5%
Volume Rate (\$/ccf)	\$3.30	\$3.95	19.7%	\$4.26	7.8%	\$4.45	4.5%	\$4.65	4.5%	\$4.86	4.5%

Ccf – hundred cubic feet; one ccf = 748 gallons

Table 3: Proposed 5-year Rate Plan (Bi-monthly Rates) – OPTION C: PREFERRED OPTION
Maywood Mutual Water Company #1
Water Rate Study

Meter Size	Current Fees	Jan 1, 2023		Jan 1, 2024		Jan 1, 2025		Jan 1, 2026		Jan 1, 2027	
		Fees	% Increase	Fees	% Increase	Fees*	Increase*	Fees*	Increase*	Fees*	Increase*
Up to 1"	\$46.35	\$55.62	20.0%	\$64.42	15.8%	\$67.00	4.0%	\$69.68	4.0%	\$72.47	4.0%
1.5"	\$74.78	\$88.99	19.0%	\$103.07	15.8%	\$107.20	4.0%	\$111.49	4.0%	\$115.95	4.0%
2"	\$140.08	\$166.86	19.1%	\$193.26	15.8%	\$201.00	4.0%	\$209.04	4.0%	\$217.41	4.0%
3"	\$560.84	\$667.44	19.0%	\$773.04	15.8%	\$804.00	4.0%	\$836.16	4.0%	\$869.64	4.0%
4"	\$869.32	\$1,056.78	21.6%	\$1,223.98	15.8%	\$1,273.00	4.0%	\$1,323.92	4.0%	\$1,376.93	4.0%
6"	\$1,622.25	\$1,946.70	20.0%	\$2,254.70	15.8%	\$2,345.00	4.0%	\$2,438.80	4.0%	\$2,536.45	4.0%
Unmetered	\$109.00	\$130.58	19.8%	\$136.45	4.5%	\$141.23	4.0%	\$146.88	4.0%	\$152.76	4.0%
Volume Rate (\$/ccf)	\$3.30	\$3.95	19.7%	\$4.26	7.8%	\$4.43	4.0%	\$4.61	4.0%	\$4.79	4.0%

Ccf – hundred cubic feet; one ccf = 748 gallons

** Illustrative 4% rate increases are shown here. Rates will be increased by 4% or the annual increase in the Consumer Price Index, whichever is greater.*

**Table 4: Cash Flow Projection – OPTION A
Maywood Mutual Water Company #1
Water Rate Study**

	Actual FY2022	5 Year Rate Plan				
		FY2023	FY2024	FY2025	FY2026	FY2027
Rate Increase Effective		Jan 1, 2023	Jan 1, 2024	Jan 1, 2025	Jan 1, 2026	Jan 1, 2027
BEGINNING FUND BALANCE	\$1,044,900	\$997,300	\$865,700	\$870,100	\$875,900	\$883,500
REVENUES						
Water Sales (Rate Revenue)	1,317,500	1,367,200	1,620,900	1,693,000	1,768,800	1,848,400
Huntington Park	3,200	3,200	3,200	3,200	3,200	3,200
Rental Income	20,500	21,100	21,700	22,400	23,100	23,800
<u>Other & Misc</u>	<u>63,200</u>	<u>25,000</u>	<u>25,000</u>	<u>25,000</u>	<u>25,000</u>	<u>25,000</u>
TOTAL REVENUES	1,404,400	1,416,500	1,670,800	1,743,600	1,820,100	1,900,400
EXPENSES						
Operating Expenses						
Central Basin MWD	4,200	4,400	4,600	4,800	5,000	5,300
Source of Supply (WRD)	252,800	270,500	281,900	293,700	306,000	318,900
Electricity	108,300	119,100	125,100	131,400	138,000	144,900
Chemicals and Filters	15,000	16,500	17,300	18,200	19,100	20,100
Maintenance & Operations	257,400	283,100	297,300	312,200	327,800	344,200
Wages, Benefits, Worker's Comp	557,400	613,100	643,800	676,000	709,800	745,300
General, Admin, Office Expense	145,700	150,100	154,600	159,200	164,000	168,900
<u>Rental Expenses</u>	<u>8,800</u>	<u>9,200</u>	<u>9,700</u>	<u>10,200</u>	<u>10,700</u>	<u>11,200</u>
Total Operating Expenses	1,349,600	1,466,000	1,534,300	1,605,700	1,680,400	1,758,800
Net Operating Revenues	54,800	(49,500)	136,500	137,900	139,700	141,600
Debt Service						
Security Escrow Fund	20,300	0	0	0	0	0
SRF Loan Payment	67,600	67,600	67,600	67,600	67,600	67,600
<u>Rental Property Payment</u>	<u>14,500</u>	<u>14,500</u>	<u>14,500</u>	<u>14,500</u>	<u>14,500</u>	<u>14,500</u>
Subtotal Debt Service	102,400	82,100	82,100	82,100	82,100	82,100
Capital Improvement Set-aside			50,000	50,000	50,000	50,000
TOTAL EXPENSES	1,452,000	1,548,100	1,666,400	1,737,800	1,812,500	1,890,900
TOTAL NET REVENUES	(47,600)	(131,600)	4,400	5,800	7,600	9,500
ENDING FUND BALANCE	997,300	865,700	870,100	875,900	883,500	893,000
RESERVE FUND TARGETS						
Operating Reserve Target (33% of O&M + debt payment)	527,500	565,900	588,400	612,000	636,600	662,500
<i>Target Met?</i>	yes	yes	yes	yes	yes	yes
DEBT SERVICE COVERAGE	0.67	-0.60	1.66	1.68	1.70	1.72

**Table 5: Cash Flow Projection – OPTION B
Maywood Mutual Water Company #1
Water Rate Study**

	Actual FY2022	5 Year Rate Plan				
		FY2023	FY2024	FY2025	FY2026	FY2027
Rate Increase Effective		Jan 1, 2023	Jan 1, 2024	Jan 1, 2025	Jan 1, 2026	Jan 1, 2027
BEGINNING FUND BALANCE	\$1,044,900	\$997,300	\$851,100	\$782,900	\$788,700	\$796,300
REVENUES						
Water Sales (Rate Revenue)	1,317,500	1,352,600	1,548,300	1,693,000	1,768,800	1,848,400
Huntington Park	3,200	3,200	3,200	3,200	3,200	3,200
Rental Income	20,500	21,100	21,700	22,400	23,100	23,800
<u>Other & Misc</u>	<u>63,200</u>	<u>25,000</u>	<u>25,000</u>	<u>25,000</u>	<u>25,000</u>	<u>25,000</u>
TOTAL REVENUES	1,404,400	1,401,900	1,598,200	1,743,600	1,820,100	1,900,400
EXPENSES						
Operating Expenses						
Central Basin MWD	4,200	4,400	4,600	4,800	5,000	5,300
Source of Supply (WRD)	252,800	270,500	281,900	293,700	306,000	318,900
Electricity	108,300	119,100	125,100	131,400	138,000	144,900
Chemicals and Filters	15,000	16,500	17,300	18,200	19,100	20,100
Maintenance & Operations	257,400	283,100	297,300	312,200	327,800	344,200
Wages, Benefits, Worker's Comp	557,400	613,100	643,800	676,000	709,800	745,300
General, Admin, Office Expense	145,700	150,100	154,600	159,200	164,000	168,900
<u>Rental Expenses</u>	<u>8,800</u>	<u>9,200</u>	<u>9,700</u>	<u>10,200</u>	<u>10,700</u>	<u>11,200</u>
Total Operating Expenses	1,349,600	1,466,000	1,534,300	1,605,700	1,680,400	1,758,800
Net Operating Revenues	54,800	(64,100)	63,900	137,900	139,700	141,600
Debt Service						
Security Escrow Fund	20,300	0	0	0	0	0
SRF Loan Payment	67,600	67,600	67,600	67,600	67,600	67,600
<u>Rental Property Payment</u>	<u>14,500</u>	<u>14,500</u>	<u>14,500</u>	<u>14,500</u>	<u>14,500</u>	<u>14,500</u>
Subtotal Debt Service	102,400	82,100	82,100	82,100	82,100	82,100
Capital Improvement Set-aside			50,000	50,000	50,000	50,000
TOTAL EXPENSES	1,452,000	1,548,100	1,666,400	1,737,800	1,812,500	1,890,900
TOTAL NET REVENUES	(47,600)	(146,200)	(68,200)	5,800	7,600	9,500
ENDING FUND BALANCE	997,300	851,100	782,900	788,700	796,300	805,800
RESERVE FUND TARGETS						
Operating Reserve Target (33% of O&M + debt payment)	527,500	565,900	588,400	612,000	636,600	662,500
<i>Target Met?</i>	yes	yes	yes	yes	yes	yes
DEBT SERVICE COVERAGE	0.67	-0.78	0.78	1.68	1.70	1.72

Table 6: Cash Flow Projection – OPTION C: PREFERRED OPTION
Maywood Mutual Water Company #1
Water Rate Study

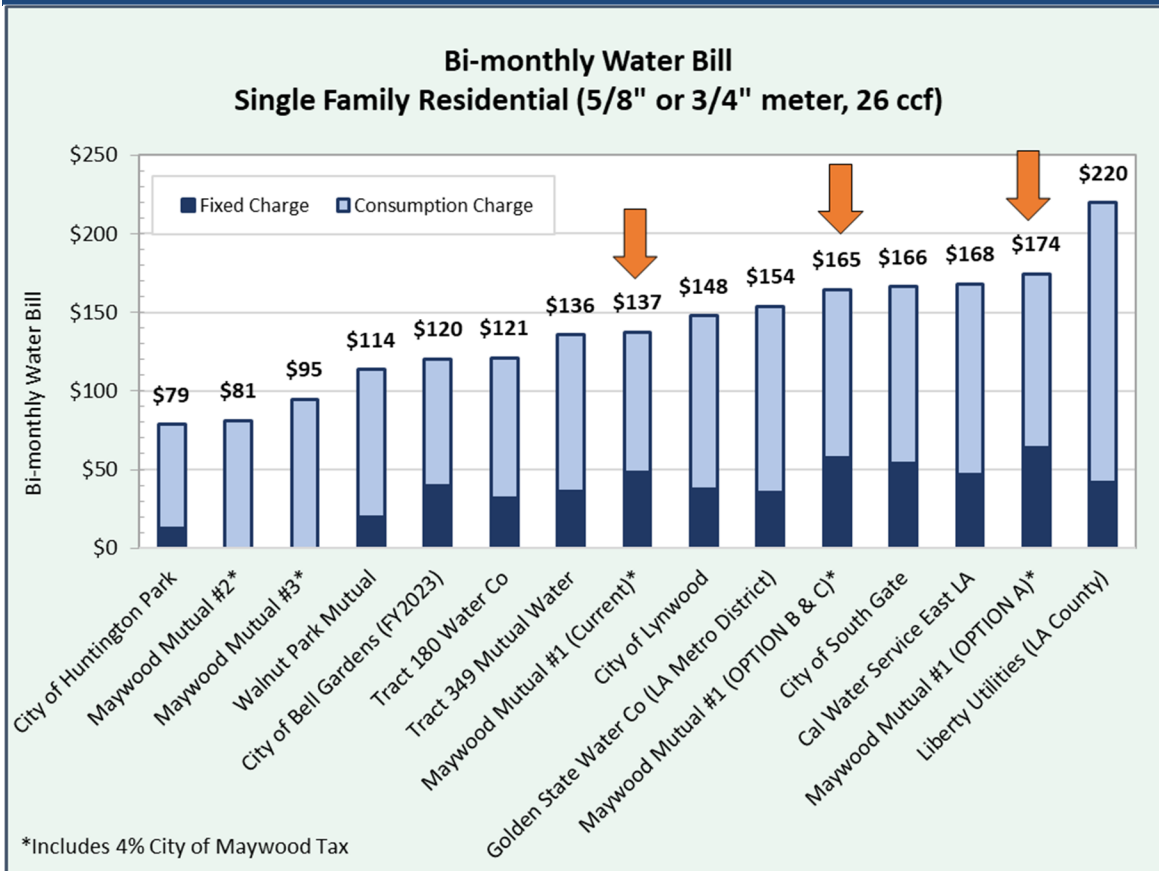
	Actual FY2022	5 Year Rate Plan				
		FY2023	FY2024	FY2025	FY2026	FY2027
Rate Increase Effective		Jan 1, 2023	Jan 1, 2024	Jan 1, 2025*	Jan 1, 2026*	Jan 1, 2027*
BEGINNING FUND BALANCE	\$1,044,900	\$997,300	\$851,100	\$782,900	\$787,300	\$787,300
REVENUES						
Water Sales (Rate Revenue)	1,317,500	1,352,600	1,548,300	1,691,600	1,759,400	1,830,200
Huntington Park	3,200	3,200	3,200	3,200	3,200	3,200
Rental Income	20,500	21,100	21,700	22,400	23,100	23,800
<u>Other & Misc</u>	<u>63,200</u>	<u>25,000</u>	<u>25,000</u>	<u>25,000</u>	<u>25,000</u>	<u>25,000</u>
TOTAL REVENUES	1,404,400	1,401,900	1,598,200	1,742,200	1,810,700	1,882,200
EXPENSES						
Operating Expenses						
Central Basin MWD	4,200	4,400	4,600	4,800	5,000	5,300
Source of Supply (WRD)	252,800	270,500	281,900	293,700	306,000	318,900
Electricity	108,300	119,100	125,100	131,400	138,000	144,900
Chemicals and Filters	15,000	16,500	17,300	18,200	19,100	20,100
Maintenance & Operations	257,400	283,100	297,300	312,200	327,800	344,200
Wages, Benefits, Worker's Comp	557,400	613,100	643,800	676,000	709,800	745,300
General, Admin, Office Expense	145,700	150,100	154,600	159,200	164,000	168,900
<u>Rental Expenses</u>	<u>8,800</u>	<u>9,200</u>	<u>9,700</u>	<u>10,200</u>	<u>10,700</u>	<u>11,200</u>
Total Operating Expenses	1,349,600	1,466,000	1,534,300	1,605,700	1,680,400	1,758,800
Net Operating Revenues	54,800	(64,100)	63,900	136,500	130,300	123,400
Debt Service						
Security Escrow Fund	20,300	0	0	0	0	0
SRF Loan Payment	67,600	67,600	67,600	67,600	67,600	67,600
<u>Rental Property Payment</u>	<u>14,500</u>	<u>14,500</u>	<u>14,500</u>	<u>14,500</u>	<u>14,500</u>	<u>14,500</u>
Subtotal Debt Service	102,400	82,100	82,100	82,100	82,100	82,100
Capital Improvement Set-aside			50,000	50,000	48,200	41,300
TOTAL EXPENSES	1,452,000	1,548,100	1,666,400	1,737,800	1,810,700	1,882,200
TOTAL NET REVENUES	(47,600)	(146,200)	(68,200)	4,400	0	0
ENDING FUND BALANCE	997,300	851,100	782,900	787,300	787,300	787,300
RESERVE FUND TARGETS						
Operating Reserve Target (33% of O&M + debt payment)	527,500	565,900	588,400	612,000	636,600	662,500
<i>Target Met?</i>	yes	yes	yes	yes	yes	yes
DEBT SERVICE COVERAGE	0.67	-0.78	0.78	1.66	1.59	1.50

**Revenues for illustrative 4% rate increases are shown here. Rates will be increased by 4% or the annual increase in the Consumer Price Index, whichever is greater.*

**Table 7: Typical Single Family Residential Bi-monthly Bills
Maywood Mutual Water Company #1
Water Rate Study**

Current						
Season	Water Use (ccf)	Usage Charges (\$3.30/ccf)	Meter Fee (3/4")	Total MMWC1 Fees	Total Bi-monthly Bill w/+4% City of Maywood Tax	
Winter Bill	24	\$79.20	+ \$46.35	= \$125.55	\$130.57	
Annual Average	26	\$85.80	+ \$46.35	= \$132.15	\$137.44	
Summer Bill	31	\$102.30	+ \$46.35	= \$148.65	\$154.60	
Proposed – Jan 1, 2023 OPTION A						
Season	Water Use (ccf)	Usage Charges (\$4.08/ccf)	Meter Fee (3/4")	Total MMWC1 Fees	Total Bi-monthly Bill w/+4% City of Maywood Tax	% Increase from Current
Winter Bill	24	\$97.92	+ \$61.65	= \$159.57	\$165.95	27.1%
Annual Average	26	\$106.08	+ \$61.65	= \$167.73	\$174.44	26.9%
Summer Bill	31	\$126.48	+ \$61.65	= \$188.13	\$195.66	26.6%
Proposed – Jan 1, 2023 OPTION B						
Season	Water Use (ccf)	Usage Charges (\$3.95/ccf)	Meter Fee (3/4")	Total MMWC1 Fees	Total Bi-monthly Bill w/+4% City of Maywood Tax	% Increase from Current
Winter Bill	24	\$94.80	+ \$55.62	= \$150.42	\$156.44	19.8%
Annual Average	26	\$102.70	+ \$55.62	= \$158.32	\$164.65	19.8%
Summer Bill	31	\$122.45	+ \$55.62	= \$178.07	\$185.19	19.8%
Proposed – Jan 1, 2023 OPTION C: PREFERRED OPTION						
Season	Water Use (ccf)	Usage Charges (\$3.95/ccf)	Meter Fee (3/4")	Total MMWC1 Fees	Total Bi-monthly Bill w/+4% City of Maywood Tax	% Increase from Current
Winter Bill	24	\$94.80	+ \$55.62	= \$150.42	\$156.44	19.8%
Annual Average	26	\$102.70	+ \$55.62	= \$158.32	\$164.65	19.8%
Summer Bill	31	\$122.45	+ \$55.62	= \$178.07	\$185.19	19.8%

Figure 1: Typical Bill Survey



The estimated number of accounts/connections and populations served by each of the surveyed utilities are listed below. The estimates are taken from utility websites, Urban Water Management Plans, and/or utility reports made to the California Water Board. It should be noted that for some of the cities listed below, water service areas are not contiguous with city boundaries (i.e. portions of the cities are served by municipal systems and portions are served by private water companies). The populations shown below are estimates of the population served (not necessarily the population of the city).

- Tract 349 Mutual: 920 connections, estimated population of 7,500
- Tract 180 Mutual: 1,100 connections, estimated population of 14,000
- Maywood Mutual #1: 1,200 connections, estimated population of 5,500
- Maywood Mutual #2: 2,000 connections, estimated population of 7,100
- Maywood Mutual #3: 2,100 connections, estimated population of 9,500
- City of Bell Gardens: 2,100 accounts, estimated population of 13,000
- Walnut Park Mutual: 2,800 accounts, estimated population of 16,100
- City of Huntington Park: 6,700 accounts, estimated population of 56,000
- City of Lynwood: 9,100 accounts, estimated population of 64,000
- City of South Gate: 14,200 connections, estimated population of 80,000

- Cal Water Service East LA District: 26,200 connections, estimated population of 152,000
- Liberty Utilities LA County District: 28,000 connections; estimated population of 133,000
- Golden State Water Co LA Metropolitan District: Portions of the Cities of Artesia, Bell, Bell Gardens, Carson, Cerritos, Compton, Cudahy, Culver City, Downey, El Segundo, Gardena, Hawaiian Gardens, Hawthorne, Huntington Park, Inglewood, Lakewood, La Mirada, Lawndale, Long Beach, Norwalk, Paramount, Santa Fe Springs, South Gate, and the communities of Athens, Lennox, and Moneta and vicinity, Los Angeles County, and portions of the City of Los Alamitos, Orange County; 262,000 total connections companywide