



# **CITY OF BRISBANE WATER RATE STUDY 2022**

**Draft Tables**

**June 7, 2022**



**Table 1: Utility Reserves**  
**City of Brisbane**  
**Water and Sewer Utility Rate Study 2022**

<b>Current Assets</b>	<b>As of June 30, 2020</b>	<b>As of June 30, 2021</b>	<b>50% of Current Assets</b>
Cash and investments (1)	\$7,378,892	\$7,656,890	\$3,689,446
Restricted cash and investments	1,884,484	0	\$942,242
Accounts receivable, net	1,097,729	1,076,741	\$548,865
Taxes receivable	1,246	536	\$623
<u>Interest receivable</u>	<u>13,890</u>	<u>3,660</u>	<u>\$6,945</u>
<b>Total Current Assets</b>	<b>10,376,241</b>	<b>8,737,827</b>	<b>\$5,188,121</b>

Source: Proprietary Funds, Statement of Net Position, June 30, 2020 and June 30, 2022

(1) Estimated total utility reserves

<b>Reserves by Utility</b>	<b>As of June 30, 2021</b>	<b>% of Total</b>
Water Utility Beginning Reserve Fund Balance	\$2,828,445	36.9%
<u>Sewer Utility Beginning Reserve Fund Balance</u>	<u>4,828,445</u>	<u>63.1%</u>
<b>Total Reserves</b>	<b>7,656,890</b>	<b>100.0%</b>

**Table 2: Combined Water and Sewer Cash Flow Projection (Water Rate Annual Increases = 8%, Sewer Rate Annual Increases = 24%)**  
 City of Brisbane  
 Water & Sewer Utility Rate Study 2022

DRAFT - 6/7/22

	Budget 2021/22	Years 1-5: Proposition 218					Years 6-10: Extended Projection				
		2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
1 <b>BEGINNING FUND BALANCE</b>	\$7,656,890	\$6,575,087	\$4,449,056	\$2,622,712	\$3,692,556	\$2,803,087	\$2,608,406	\$3,371,999	\$4,085,412	\$4,736,734	\$5,305,377
2											
3 <b>REVENUES</b>											
4 Water Sales (1)	3,000,000	3,120,000	3,370,000	3,640,000	3,931,000	4,245,000	4,670,000	5,044,000	5,448,000	5,884,000	6,355,000
5 Sewer Service Charges (1)	2,000,000	2,240,000	2,778,000	3,445,000	4,272,000	5,297,000	5,615,000	5,952,000	6,309,000	6,688,000	7,089,000
6 Drought Reserve Charge	100,000	100,000	100,000	100,000	100,000	100,000	0	0	0	0	0
7 <u>Capital Charge (2)</u>	<u>365,000</u>	<u>515,000</u>	<u>515,000</u>	<u>515,000</u>	<u>515,000</u>	<u>515,000</u>	<u>815,000</u>	<u>815,000</u>	<u>815,000</u>	<u>815,000</u>	<u>815,000</u>
8 Investment Earnings	50,000	51,000	52,000	53,000	54,000	55,000	56,000	57,000	58,000	59,000	60,000
9 Account Open/Reconnection Fees	3,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
10 Late Payment Charges	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
11 Sewer & Meter Connection Fees	23,000	25,000	27,000	29,000	31,000	33,000	36,000	39,000	42,000	45,000	48,000
12 Fire Service Charges	115,000	124,000	134,000	145,000	157,000	170,000	187,000	202,000	218,000	235,000	254,000
13 Altamar Meter Reading Fee	7,500	8,000	9,000	10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000
14 Transfers from Other Funds	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000
15 Less: Low Income Rate Assistance	(75,000)	(75,000)	(75,000)	(75,000)	(75,000)	(75,000)	(75,000)	(75,000)	(75,000)	(75,000)	(75,000)
16 <u>Projected Grant Revenue</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2,500,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
17 <b>Total Revenues</b>	5,673,500	6,197,000	6,999,000	10,451,000	9,085,000	10,441,000	11,406,000	12,137,000	12,919,000	13,756,000	14,652,000
18											
19 <b>EXPENSES</b>											
20 <u>Operating &amp; Maintenance</u>											
21 Salaries	949,583	987,000	1,027,000	1,068,000	1,110,000	1,154,000	1,200,000	1,248,000	1,298,000	1,350,000	1,404,000
22 Payroll Taxes	13,300	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000
23 Benefits	523,326	544,000	566,000	589,000	613,000	637,000	663,000	689,000	717,000	745,000	775,000
24 Insurance	110,225	121,000	127,000	133,000	140,000	147,000	154,000	162,000	170,000	179,000	188,000
25 Supplies and Services	3,585,356	4,057,000	4,463,000	4,910,000	5,401,000	5,942,000	6,536,000	7,190,000	7,909,000	8,700,000	9,570,000
26 <u>Admin Charges and Credit</u>	<u>936,825</u>	<u>969,000</u>	<u>1,003,000</u>	<u>1,038,000</u>	<u>1,075,000</u>	<u>1,113,000</u>	<u>1,152,000</u>	<u>1,192,000</u>	<u>1,233,000</u>	<u>1,276,000</u>	<u>1,321,000</u>
27 Subtotal O&M	6,118,616	6,691,000	7,199,000	7,751,000	8,352,000	9,006,000	9,718,000	10,494,000	11,340,000	12,263,000	13,271,000
28											
29 Net Operating Revenue	(445,116)	(494,000)	(200,000)	2,700,000	733,000	1,435,000	1,688,000	1,643,000	1,579,000	1,493,000	1,381,000
30											
31 <b>Debt Service</b>											
32 2015 Utility Bonds	636,688	632,031	626,344	630,156	622,469	629,681	624,406	629,588	627,678	624,356	635,813
33 <u>New Bonds (3)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>300,000</u>	<u>300,000</u>	<u>300,000</u>	<u>300,000</u>	<u>300,000</u>
34 Subtotal Debt Service	636,688	632,031	626,344	630,156	622,469	629,681	924,406	929,588	927,678	924,356	935,813
35											
36 <b>Capital Projects</b>	0	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	0	0	0	0	0
37											
38 <b>Total Expenses</b>	6,755,303	8,323,031	8,825,344	9,381,156	9,974,469	10,635,681	10,642,406	11,423,588	12,267,678	13,187,356	14,206,813
39											
40 <b>Total Net Revenues</b>	(1,081,803)	(2,126,031)	(1,826,344)	1,069,844	(889,469)	(194,681)	763,594	713,413	651,322	568,644	445,188
41											
42 <b>ENDING FUND BALANCE</b>	6,575,087	4,449,056	2,622,712	3,692,556	2,803,087	2,608,406	3,371,999	4,085,412	4,736,734	5,305,377	5,750,565
43											
44											
45 <u>Reserve Funds</u>											
46 Operating Reserve Target (25% of O&M)	1,529,700	1,672,800	1,799,800	1,937,800	2,088,000	2,251,500	2,429,500	2,623,500	2,835,000	3,065,800	3,317,800
47 <u>Drought Reserve (\$700,000?)</u>	<u>447,499</u>	<u>547,499</u>	<u>647,499</u>	<u>747,499</u>	<u>847,499</u>	<u>947,499</u>	<u>947,499</u>	<u>947,499</u>	<u>947,499</u>	<u>947,499</u>	<u>947,499</u>
48 Total Combined Reserves	1,977,199	2,220,299	2,447,299	2,685,299	2,935,499	3,198,999	3,376,999	3,570,999	3,782,499	4,013,299	4,265,299
49 Target Met?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
50											
51 Debt Service Coverage - 1.25x (4)	-0.70	-0.78	-0.32	0.32	1.18	2.28	1.83	1.77	1.70	1.62	1.48
52 Target Met?	no	no	no	no	no	yes	yes	yes	yes	yes	yes
53											

1 - Water Sales & Sewer Service Charges for 2022/23 have been adjusted for September 1, 2022 implementation date

2 - Assumes Capital Charge will increase in 2022/23 by half

3 - Total debt service for New Bonds is estimated at \$300,000

**Table 3: Scenario 1: No Rate Increases - Water Cash Flow Projection**  
 City of Brisbane  
 Water Utility Rate Study 2022

DRAFT - 6/7/22

	Budget 2021/22	Years 1 - 5: Proposition 218					Years 6 - 10: Extended Projection				
		2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
1 Overall Revenue Adjustment		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2 Rate Increase Effective		Jan 1, 2023	Jul 1, 2023	Jul 1, 2024	Jul 1, 2025	Jul 1, 2026	Jul 1, 2027	Jul 1, 2028	Jul 1, 2029	Jul 1, 2030	Jul 1, 2031
4											
5 <b>BEGINNING FUND BALANCE</b>	\$2,828,445	\$2,983,640	\$2,391,140	\$1,556,640	\$1,704,140	\$315,640	(\$1,391,860)	(\$2,888,360)	(\$4,760,860)	(\$7,038,360)	(\$9,757,860)
7 Water Sales Based on 12 Mos. of Rev	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
9 <b>REVENUES</b>											
10 Water Sales (1)	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
11 Meter Connection Fees	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
12 Fire Service Charges	115,000	115,000	115,000	115,000	115,000	115,000	115,000	115,000	115,000	115,000	115,000
13 Altamar Meter Reading Fee	7,500	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000
14 Drought Reserve Charge	100,000	100,000	100,000	100,000	100,000	100,000	0	0	0	0	0
15 Capital Charge (2)	182,500	257,500	257,500	257,500	257,500	257,500	407,500	407,500	407,500	407,500	407,500
16 Investment Earnings	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
17 Account Open/Reconnection Fees	1,500	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
18 Late Payment Charges	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
19 Transfers from Other Funds	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500
20 Less: Low Income Rate Assistance	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)
21 Projected Grant Revenue	0	0	0	1,250,000	0	0	0	0	0	0	0
22 <b>Total Revenues</b>	3,456,500	3,532,500	3,532,500	4,782,500	3,532,500	3,532,500	3,582,500	3,582,500	3,582,500	3,582,500	3,582,500
23											
24 <b>EXPENSES</b>											
25 <u>Operating &amp; Maintenance</u>											
26 Salaries	499,125	519,000	540,000	562,000	584,000	607,000	631,000	656,000	682,000	709,000	737,000
27 Payroll Taxes	7,112	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000
28 Benefits	277,746	289,000	301,000	313,000	326,000	339,000	353,000	367,000	382,000	397,000	413,000
29 Insurance	58,938	65,000	68,000	71,000	75,000	79,000	83,000	87,000	91,000	96,000	101,000
30 Supplies and Services	1,666,998	1,942,000	2,136,000	2,350,000	2,585,000	2,844,000	3,128,000	3,441,000	3,785,000	4,164,000	4,580,000
31 Admin Charges and Credit	473,044	487,000	502,000	517,000	533,000	549,000	565,000	582,000	599,000	617,000	636,000
32 Subtotal O&M	2,982,962	3,309,000	3,554,000	3,820,000	4,110,000	4,425,000	4,767,000	5,140,000	5,546,000	5,990,000	6,474,000
33											
34 Net Operating Revenue	473,538	223,500	(21,500)	962,500	(577,500)	(892,500)	(1,184,500)	(1,557,500)	(1,963,500)	(2,407,500)	(2,891,500)
35											
36 <b>Debt Service</b>											
37 2015 Utility Bonds (3)	318,344	316,000	313,000	315,000	311,000	315,000	312,000	315,000	314,000	312,000	318,000
38 New Bonds	0	0	0	0	0	0	0	0	0	0	0
39 Subtotal Debt Service	318,344	316,000	313,000	315,000	311,000	315,000	312,000	315,000	314,000	312,000	318,000
40											
41 <b>Capital Projects</b>	0	500,000	500,000	500,000	500,000	500,000	0	0	0	0	0
42											
43 <b>Total Expenses</b>	3,301,305	4,125,000	4,367,000	4,635,000	4,921,000	5,240,000	5,079,000	5,455,000	5,860,000	6,302,000	6,792,000
44											
45 <b>Total Net Revenues</b>	155,195	(592,500)	(834,500)	147,500	(1,388,500)	(1,707,500)	(1,496,500)	(1,872,500)	(2,277,500)	(2,719,500)	(3,209,500)
46											
47 <b>ENDING FUND BALANCE</b>	2,983,640	2,391,140	1,556,640	1,704,140	315,640	(1,391,860)	(2,888,360)	(4,760,860)	(7,038,360)	(9,757,860)	(12,967,360)
48											
49											
50 <u>Reserve Funds</u>											
51 Operating Reserve Target (25% of O&M)	745,700	827,300	888,500	955,000	1,027,500	1,106,300	1,191,800	1,285,000	1,386,500	1,497,500	1,618,500
52 Drought Reserve (\$700,000?)	447,499	547,499	647,499	747,499	847,499	947,499	947,499	947,499	947,499	947,499	947,499
53 Total Water Reserves	1,193,199	1,374,799	1,535,999	1,702,499	1,874,999	2,053,799	2,139,299	2,232,499	2,333,999	2,444,999	2,565,999
54 Target Met?	yes	yes	yes	yes	no	no	no	no	no	no	no
55											
56 Debt Service Coverage - 1.25x (4)	1.49	0.71	-0.07	-0.91	-1.86	-2.83	-3.80	-4.94	-6.25	-7.72	-9.09
57 Target Met?	yes	no	no	no	no	no	no	no	no	no	no
58											

1 - Water Sales projection adjusted for September 1, 2022 implementation date

2 - Assumes Capital Charge will increase every 5 years. First increase is planned for 2022/23 in which the Capital Charge will increase by half. Second increase is anticipated in 2027/28 and assumes that the City will issue \$5 million in new debt (combined water & sewer).

3 - Total debt service for New Bonds is estimated at \$300,000 and is split evenly with the Sewer Utility.

**Table 4: Scenario 2: 5% Annual Rate Increases - Water Cash Flow Projection**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

DRAFT - 6/7/22

	Budget 2021/22	Years 1 -5: Proposition 218					Years 6 - 10: Extended Projection				
		2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
1 Overall Revenue Adjustment		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
2 Rate Increase Effective		Jan 1, 2023	Jul 1, 2023	Jul 1, 2024	Jul 1, 2025	Jul 1, 2026	Jul 1, 2027	Jul 1, 2028	Jul 1, 2029	Jul 1, 2030	Jul 1, 2031
4 <b>BEGINNING FUND BALANCE</b>	\$2,828,445	\$2,983,640	\$2,473,140	\$1,881,640	\$2,440,140	\$1,640,640	\$708,140	\$31,640	-\$815,860	-\$1,853,360	-\$3,106,860
7 Water Sales Based on 12 Mos. of Rev	3,000,000	3,150,000	3,229,000	3,390,000	3,560,000	3,738,000	3,925,000	4,121,000	4,327,000	4,543,000	4,770,000
9 <b>REVENUES</b>											
10 Water Sales (1)	3,000,000	3,075,000	3,229,000	3,390,000	3,560,000	3,738,000	3,925,000	4,121,000	4,327,000	4,543,000	4,770,000
11 Meter Connection Fees	20,000	21,000	22,000	23,000	24,000	25,000	26,000	27,000	28,000	29,000	30,000
12 Fire Service Charges	115,000	121,000	127,000	133,000	140,000	147,000	154,000	162,000	170,000	179,000	188,000
13 Altamar Meter Reading Fee	7,500	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000
14 Drought Reserve Charge	100,000	100,000	100,000	100,000	100,000	100,000	0	0	0	0	0
15 Capital Charge (2)	182,500	257,500	257,500	257,500	257,500	257,500	407,500	407,500	407,500	407,500	407,500
16 Investment Earnings	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
17 Account Open/Reconnection Fees	1,500	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
18 Late Payment Charges	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
19 Transfers from Other Funds	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500
20 Less: Low Income Rate Assistance	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)
21 Projected Grant Revenue	0	0	0	1,250,000	0	0	0	0	0	0	0
22 <b>Total Revenues</b>	3,456,500	3,614,500	3,775,500	5,193,500	4,121,500	4,307,500	4,552,500	4,757,500	4,972,500	5,198,500	5,435,500
24 <b>EXPENSES</b>											
25 <u>Operating &amp; Maintenance</u>											
26 Salaries	499,125	519,000	540,000	562,000	584,000	607,000	631,000	656,000	682,000	709,000	737,000
27 Payroll Taxes	7,112	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000
28 Benefits	277,746	289,000	301,000	313,000	326,000	339,000	353,000	367,000	382,000	397,000	413,000
29 Insurance	58,938	65,000	68,000	71,000	75,000	79,000	83,000	87,000	91,000	96,000	101,000
30 Supplies and Services	1,666,998	1,942,000	2,136,000	2,350,000	2,585,000	2,844,000	3,128,000	3,441,000	3,785,000	4,164,000	4,580,000
31 Admin Charges and Credit	473,044	487,000	502,000	517,000	533,000	549,000	565,000	582,000	599,000	617,000	636,000
32 Subtotal O&M	2,982,962	3,309,000	3,554,000	3,820,000	4,110,000	4,425,000	4,767,000	5,140,000	5,546,000	5,990,000	6,474,000
34 Net Operating Revenue	473,538	305,500	221,500	1,373,500	11,500	(117,500)	(214,500)	(382,500)	(573,500)	(791,500)	(1,038,500)
36 <b>Debt Service</b>											
37 2015 Utility Bonds (3)	318,344	316,000	313,000	315,000	311,000	315,000	312,000	315,000	314,000	312,000	318,000
38 New Bonds	0	0	0	0	0	0	150,000	150,000	150,000	150,000	150,000
39 Subtotal Debt Service	318,344	316,000	313,000	315,000	311,000	315,000	462,000	465,000	464,000	462,000	468,000
41 <b>Capital Projects</b>	0	500,000	500,000	500,000	500,000	500,000	0	0	0	0	0
43 <b>Total Expenses</b>	3,301,305	4,125,000	4,367,000	4,635,000	4,921,000	5,240,000	5,229,000	5,605,000	6,010,000	6,452,000	6,942,000
45 <b>Total Net Revenues</b>	155,195	(510,500)	(591,500)	558,500	(799,500)	(932,500)	(676,500)	(847,500)	(1,037,500)	(1,253,500)	(1,506,500)
47 <b>ENDING FUND BALANCE</b>	2,983,640	2,473,140	1,881,640	2,440,140	1,640,640	708,140	31,640	(815,860)	(1,853,360)	(3,106,860)	(4,613,360)
50 <u>Reserve Funds</u>											
51 Operating Reserve Target (25% of O&M)	745,700	827,300	888,500	955,000	1,027,500	1,106,300	1,191,800	1,285,000	1,386,500	1,497,500	1,618,500
52 Drought Reserve (\$700,000?)	447,499	547,499	647,499	747,499	847,499	947,499	947,499	947,499	947,499	947,499	947,499
53 Total Water Reserves	1,193,199	1,374,799	1,535,999	1,702,499	1,874,999	2,053,799	2,139,299	2,232,499	2,333,999	2,444,999	2,565,999
54 Target Met?	yes	yes	yes	yes	yes	no	no	no	no	no	no
56 Debt Service Coverage - 1.25x (4)	1.49	0.97	0.71	0.39	0.04	-0.37	-0.46	-0.82	-1.24	-1.71	-2.22
57 Target Met?	yes	no	no	no	no	no	no	no	no	no	no

1 - Water Sales projection adjusted for September 1, 2022 implementation date

2 - Assumes Capital Charge will increase every 5 years. First increase is planned for 2022/23 in which the Capital Charge will increase by half. Second increase is anticipated in 2027/28 and assumes that the City will issue \$5 million in new debt (combined water & sewer).

3 - Total debt service for New Bonds is estimated at \$300,000 and is split evenly with the Sewer Utility.

**Table 5: Scenario 3: 8% Annual Rate Increases - Water Cash Flow Projection**  
 City of Brisbane  
 Water Utility Rate Study 2022

DRAFT - 6/7/22

	Budget 2021/22	Years 1 -5: Proposition 218					Years 6 - 10: Extended Projection				
		2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
1 Overall Revenue Adjustment		8.0%	8.0%	8.0%	8.0%	8.0%	10.0%	8.0%	8.0%	8.0%	8.0%
2 Rate Increase Effective		Jan 1, 2023	Jul 1, 2023	Jul 1, 2024	Jul 1, 2025	Jul 1, 2026	Jul 1, 2027	Jul 1, 2028	Jul 1, 2029	Jul 1, 2030	Jul 1, 2031
4 <b>BEGINNING FUND BALANCE</b>	\$2,828,445	\$2,983,640	\$2,522,140	\$2,081,640	\$2,907,140	\$2,502,640	\$2,109,140	\$2,222,640	\$2,353,140	\$2,502,640	\$2,667,140
7 Water Sales Based on 12 Mos. of Rev	3,000,000	3,240,000	3,370,000	3,640,000	3,931,000	4,245,000	4,670,000	5,044,000	5,448,000	5,884,000	6,355,000
9 <b>REVENUES</b>											
10 Water Sales (1)	3,000,000	3,120,000	3,370,000	3,640,000	3,931,000	4,245,000	4,670,000	5,044,000	5,448,000	5,884,000	6,355,000
11 Meter Connection Fees	20,000	22,000	24,000	26,000	28,000	30,000	33,000	36,000	39,000	42,000	45,000
12 Fire Service Charges	115,000	124,000	134,000	145,000	157,000	170,000	187,000	202,000	218,000	235,000	254,000
13 Altamar Meter Reading Fee	7,500	8,000	9,000	10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000
14 Drought Reserve Charge	100,000	100,000	100,000	100,000	100,000	100,000	0	0	0	0	0
15 Capital Charge (2)	182,500	257,500	257,500	257,500	257,500	257,500	407,500	407,500	407,500	407,500	407,500
16 Investment Earnings	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
17 Account Open/Reconnection Fees	1,500	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
18 Late Payment Charges	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
19 Transfers from Other Funds	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500
20 Less: Low Income Rate Assistance	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)
21 Projected Grant Revenue	0	0	0	1,250,000	0	0	0	0	0	0	0
22 <b>Total Revenues</b>	3,456,500	3,663,500	3,926,500	5,460,500	4,516,500	4,846,500	5,342,500	5,735,500	6,159,500	6,616,500	7,110,500
24 <b>EXPENSES</b>											
25 <u>Operating &amp; Maintenance</u>											
26 Salaries	499,125	519,000	540,000	562,000	584,000	607,000	631,000	656,000	682,000	709,000	737,000
27 Payroll Taxes	7,112	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000
28 Benefits	277,746	289,000	301,000	313,000	326,000	339,000	353,000	367,000	382,000	397,000	413,000
29 Insurance	58,938	65,000	68,000	71,000	75,000	79,000	83,000	87,000	91,000	96,000	101,000
30 Supplies and Services	1,666,998	1,942,000	2,136,000	2,350,000	2,585,000	2,844,000	3,128,000	3,441,000	3,785,000	4,164,000	4,580,000
31 Admin Charges and Credit	473,044	487,000	502,000	517,000	533,000	549,000	565,000	582,000	599,000	617,000	636,000
32 Subtotal O&M	2,982,962	3,309,000	3,554,000	3,820,000	4,110,000	4,425,000	4,767,000	5,140,000	5,546,000	5,990,000	6,474,000
34 Net Operating Revenue	473,538	354,500	372,500	1,640,500	406,500	421,500	575,500	595,500	613,500	626,500	636,500
36 <b>Debt Service</b>											
37 2015 Utility Bonds (3)	318,344	316,000	313,000	315,000	311,000	315,000	312,000	315,000	314,000	312,000	318,000
38 New Bonds	0	0	0	0	0	0	150,000	150,000	150,000	150,000	150,000
39 Subtotal Debt Service	318,344	316,000	313,000	315,000	311,000	315,000	462,000	465,000	464,000	462,000	468,000
41 <b>Capital Projects</b>	0	500,000	500,000	500,000	500,000	500,000	0	0	0	0	0
43 <b>Total Expenses</b>	3,301,305	4,125,000	4,367,000	4,635,000	4,921,000	5,240,000	5,229,000	5,605,000	6,010,000	6,452,000	6,942,000
45 <b>Total Net Revenues</b>	155,195	(461,500)	(440,500)	825,500	(404,500)	(393,500)	113,500	130,500	149,500	164,500	168,500
47 <b>ENDING FUND BALANCE</b>	2,983,640	2,522,140	2,081,640	2,907,140	2,502,640	2,109,140	2,222,640	2,353,140	2,502,640	2,667,140	2,835,640
50 <b>Reserve Funds</b>											
51 Operating Reserve Target (25% of O&M)	745,700	827,300	888,500	955,000	1,027,500	1,106,300	1,191,800	1,285,000	1,386,500	1,497,500	1,618,500
52 Drought Reserve (\$700,000?)	447,499	547,499	647,499	747,499	847,499	947,499	947,499	947,499	947,499	947,499	947,499
53 Total Water Reserves	1,193,199	1,374,799	1,535,999	1,702,499	1,874,999	2,053,799	2,139,299	2,232,499	2,333,999	2,444,999	2,565,999
54 Target Met?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
56 Debt Service Coverage - 1.25x (4)	1.49	1.12	1.19	1.24	1.31	1.34	1.25	1.28	1.32	1.36	1.36
57 Target Met?	yes	no	no	no	yes	yes	yes	yes	yes	yes	yes

1 - Water Sales projection adjusted for September 1, 2022 implementation date

2 - Assumes Capital Charge will increase every 5 years. First increase is planned for 2022/23 in which the Capital Charge will increase by half. Second increase is anticipated in 2027/28 and assumes that the City will issue \$5 million in new debt (combined water & sewer).

3 - Total debt service for New Bonds is estimated at \$300,000 and is split evenly with the Sewer Utility.

Table 6: Water Scenario Comparison  
City of Brisbane  
Water Utility Rate Study 2022

**GOAL 1 : MEET DEBT SERVICE COVERAGE**

	Current 2021/22	Proposed				
		2022/23	2023/24	2024/25	2025/26	2026/27
Debt Service Coverage Ratio Required	1.25	1.25	1.25	1.25	1.25	1.25
Scenario 1: No Rate Increases <i>Target Met?</i>	1.49 yes	0.71 no	(0.07) no	(0.91) no	(1.86) no	(2.83) no
Scenario 2: 5% Annual Rate Increases <i>Target Met?</i>	1.49 yes	0.97 no	0.71 no	0.39 no	0.04 no	(0.37) no
Scenario 3: 8% Annual Rate Increases <i>Target Met?</i>	1.49 yes	1.12 no	1.19 no	1.24 no	1.31 yes	1.34 yes

**GOAL 2: MEET RESERVE FUND TARGETS**

	Current 2021/22	Proposed				
		2022/23	2023/24	2024/25	2025/26	2026/27
Water Fund Reserve Target	\$1,061,399	\$1,193,199	\$1,374,799	\$1,535,999	\$1,702,499	\$1,874,999
Scenario 1: No Rate Increases <i>Target Met?</i>	\$2,983,640 yes	\$2,391,140 yes	\$1,556,640 yes	\$1,704,140 yes	\$315,640 no	(\$1,391,860) no
Scenario 2: 5% Annual Rate Increases <i>Target Met?</i>	\$2,983,640 yes	\$2,473,140 yes	\$1,881,640 yes	\$2,440,140 yes	\$1,640,640 no	\$708,140 no
Scenario 3: 8% Annual Rate Increases <i>Target Met?</i>	\$2,983,640 yes	\$2,522,140 yes	\$2,081,640 yes	\$2,907,140 yes	\$2,502,640 yes	\$2,109,140 yes

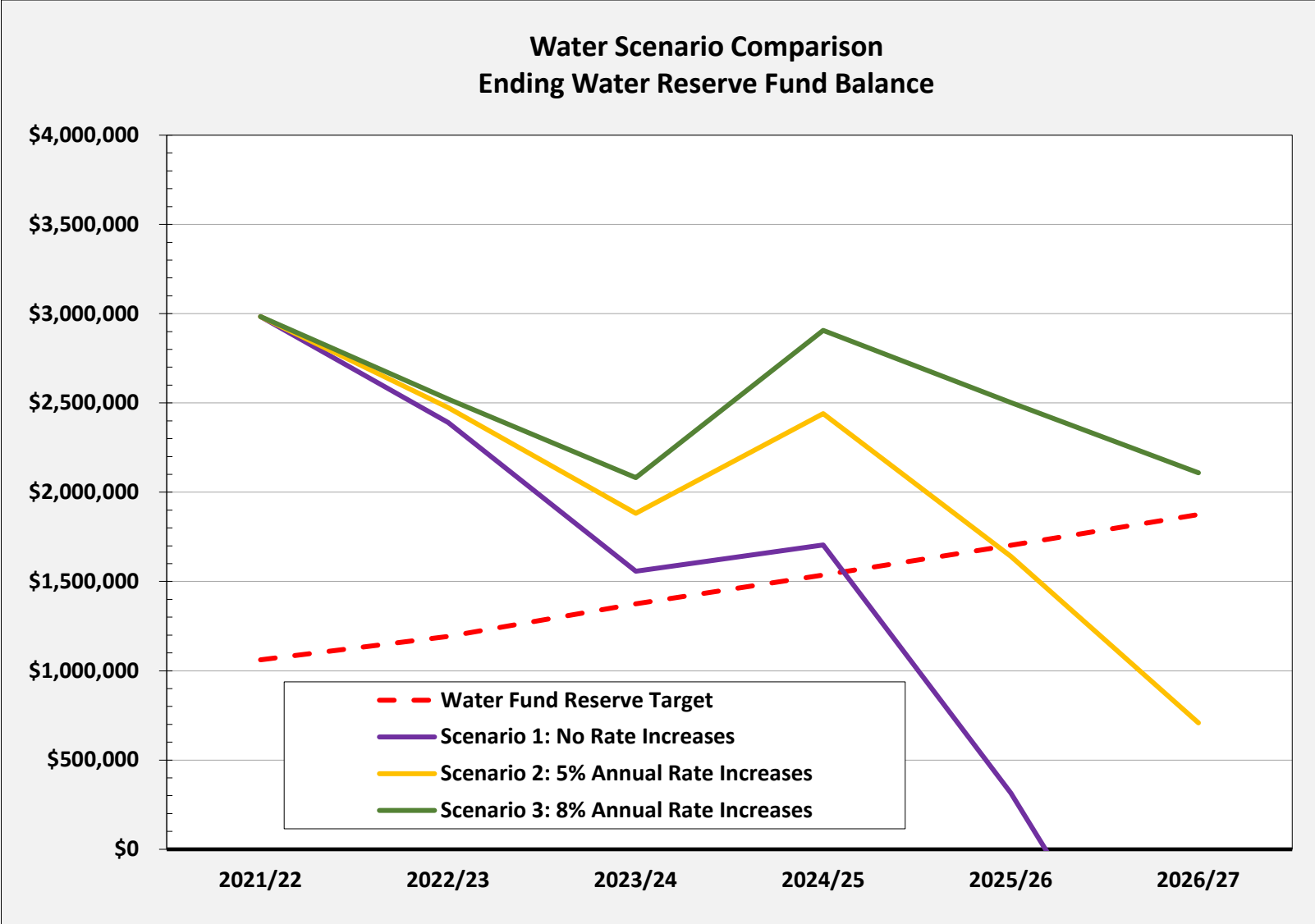
**GOAL 3: POSITIVE TOTAL NET REVENUES**

	Current 2021/22	Proposed				
		2022/23	2023/24	2024/25	2025/26	2026/27
Scenario 1: No Rate Increases <i>Target Met?</i>	\$155,195 yes	(\$592,500) no	(\$834,500) no	\$147,500 yes	(\$1,388,500) no	(\$1,707,500) no
Scenario 2: 5% Annual Rate Increases <i>Target Met?</i>	\$155,195 yes	(\$510,500) no	(\$591,500) no	\$558,500 yes	(\$799,500) no	(\$932,500) no
Scenario 3: 8% Annual Rate Increases <i>Target Met?</i>	\$155,195 yes	(\$461,500) no	(\$440,500) no	\$825,500 yes	(\$404,500) no	(\$393,500) no

Table 7: Water Scenario Comparison Graph - Ending Water Fund Reserve Fund Balance

City of Brisbane

Water Utility Rate Study 2022





**Table 8: Projected Water Consumption with 1 Unit Allotment**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

	CURRENT 2019/20	PROJECTED		PROJECTED - RATE STUDY PERIOD				
		2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
<b>Residential</b>								
<i>Annual Increase %</i>		0.0%	0.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Annual Consumption (ccf)	109,065	109,065	109,065	110,156	111,257	112,370	113,493	114,628
<u>Less 1 ccf Allotment</u>	<u>9,655</u>	<u>9,655</u>	<u>9,655</u>	<u>9,752</u>	<u>9,849</u>	<u>9,948</u>	<u>10,047</u>	<u>10,148</u>
Total Consumption for Consumption Charges	99,410	99,410	99,410	100,404	101,408	102,422	103,446	104,481
<b>Commercial</b>								
<i>Annual Increase %</i>		0.0%	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Annual Consumption (ccf)	95,700	95,700	95,700	98,571	101,528	104,574	107,711	110,943
<u>Less 1 ccf Allotment</u>	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>	<u>1,442</u>	<u>1,485</u>	<u>1,530</u>	<u>1,576</u>	<u>1,623</u>
Total Consumption for Consumption Charges	94,300	94,300	94,300	97,129	100,043	103,044	106,135	109,320
<b>Irrigation</b>								
<i>Annual Increase %</i>		0.0%	0.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Annual Consumption (ccf)	79,400	79,400	79,400	80,988	82,608	84,260	85,945	87,664
<u>Less 1 ccf Allotment</u>	<u>400</u>	<u>400</u>	<u>400</u>	<u>408</u>	<u>416</u>	<u>424</u>	<u>433</u>	<u>442</u>
Total Consumption for Consumption Charges	79,000	79,000	79,000	80,580	82,192	83,835	85,512	87,222
<b>Total Consumption</b>								
Total Consumption	284,165	284,165	284,165	289,715	295,393	301,204	307,150	313,235
<u>Less 1 ccf Allotment</u>	<u>11,455</u>	<u>11,455</u>	<u>11,455</u>	<u>11,602</u>	<u>11,750</u>	<u>11,902</u>	<u>12,056</u>	<u>12,212</u>
<b>TOTAL CONSUMPTION (CCF) FOR CONSUMPTION CHARGES</b>	<b>272,710</b>	<b>272,710</b>	<b>272,710</b>	<b>278,113</b>	<b>283,643</b>	<b>289,302</b>	<b>295,094</b>	<b>301,023</b>

**Table 9: Projected Customer Growth & Water Consumption**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

	CURRENT 2019/20	PROJECTED		PROJECTED - RATE STUDY PERIOD				
		2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
<b>NUMBER OF METERS</b>								
Growth Increase %		0.00%	0.00%	0.50%	0.50%	0.50%	0.50%	0.50%
Total Water Meters	2,038	2,038	2,038	2,048	2,058	2,069	2,079	2,089
Total Meter Equivalents	3,259	3,259	3,259	3,275	3,292	3,308	3,325	3,341
<b>WATER CONSUMPTION</b>								
<b>Residential</b>								
<i>Annual Increase %</i>		<i>0.0%</i>	<i>0.0%</i>	<i>1.0%</i>	<i>1.0%</i>	<i>1.0%</i>	<i>1.0%</i>	<i>1.0%</i>
<u>Consumption</u>								
Tier 1: 1 - 20 ccf	86,634	86,634	86,634	87,501	88,376	89,259	90,152	91,054
Tier 2: Over 20 ccf	<u>12,776</u>	<u>12,776</u>	<u>12,776</u>	<u>12,903</u>	<u>13,032</u>	<u>13,163</u>	<u>13,294</u>	<u>13,427</u>
Subtotal Residential	99,410	99,410	99,410	100,404	101,408	102,422	103,446	104,481
<b>Commercial</b>								
<i>Annual Increase %</i>		<i>0.0%</i>	<i>0.0%</i>	<i>3.0%</i>	<i>3.0%</i>	<i>3.0%</i>	<i>3.0%</i>	<i>3.0%</i>
<u>Consumption (1)</u>								
Tier 1: 1 - 20 ccf	26,948	26,948	26,948	27,757	28,590	29,447	30,331	31,241
Tier 2: Over 20 ccf	<u>67,352</u>	<u>67,352</u>	<u>67,352</u>	<u>69,372</u>	<u>71,453</u>	<u>73,597</u>	<u>75,805</u>	<u>78,079</u>
Subtotal Commercial	94,300	94,300	94,300	97,129	100,043	103,044	106,135	109,320
<b>Irrigation</b>								
<i>Annual Increase %</i>		<i>0.0%</i>	<i>0.0%</i>	<i>2.0%</i>	<i>2.0%</i>	<i>2.0%</i>	<i>2.0%</i>	<i>2.0%</i>
<u>Consumption</u>								
Tier 1: 1 - 20 ccf	12,344	12,344	12,344	12,591	12,843	13,100	13,362	13,629
Tier 2: Over 20 ccf	<u>66,656</u>	<u>66,656</u>	<u>66,656</u>	<u>67,989</u>	<u>69,349</u>	<u>70,736</u>	<u>72,150</u>	<u>73,593</u>
Subtotal Irrigation	79,000	79,000	79,000	80,580	82,192	83,835	85,512	87,222
<b>Total Consumption</b>								
<i>Annual Increase %</i>		<i>0.0%</i>	<i>0.0%</i>	<i>2.0%</i>	<i>2.0%</i>	<i>2.0%</i>	<i>2.0%</i>	<i>2.0%</i>
<u>Consumption</u>								
Tier 1: 1 - 20 ccf	125,927	125,927	125,927	127,849	129,808	131,807	133,845	135,923
Tier 2: Over 20 ccf	<u>146,783</u>	<u>146,783</u>	<u>146,783</u>	<u>150,264</u>	<u>153,834</u>	<u>157,495</u>	<u>161,249</u>	<u>165,099</u>
Total Consumption	272,710	272,710	272,710	278,113	283,643	289,302	295,094	301,023

**Table 10: Water Cost Allocation**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

Operating Expense	2022/23 Budget	FIXED CHARGES		CONSUMPTION CHARGES		Total
		Meters & Services	Customer Service	Base	Extra	
Salaries	\$519,000	10%	10%	25%	55%	100%
Payroll Taxes	\$7,000	10%	10%	25%	55%	100%
Benefits	\$289,000	10%	10%	25%	55%	100%
Insurance (2)	\$65,000	10%	10%	25%	55%	100%
Supplies and Services	\$1,942,000	2%	2%	25%	71%	100%
Admin Charges and Credits	\$487,000	25%	25%	25%	25%	100%
<u>Debt Service</u>	<u>\$316,000</u>	<u>10%</u>	<u>10%</u>	<u>25%</u>	55%	100%
Total Water Operating Expenses	\$3,625,000	\$280,200	\$280,200	\$906,300	\$2,158,400	\$3,625,100
<b>Total Allocation %</b>		<b>7.7%</b>	<b>7.7%</b>	<b>25.0%</b>	<b>59.5%</b>	<b>100.0%</b>

**Table 11: Scenario 3: 8% Annual Rate Increases - Annual Revenue Requirement Allocation**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

	Cost Allocation %	PROJECTED - RATE STUDY PERIOD				
		2022/23	2023/24	2024/25	2025/26	2026/27
<b>Total Revenue Requirement (1)</b>		\$3,240,000	\$3,370,000	\$3,640,000	\$3,931,000	\$4,245,000
<b>FIXED CHARGES</b>						
Meters & Services	7.7%	\$250,452	\$260,501	\$281,372	\$303,866	\$328,139
Customer Service Charge	7.7%	<u>\$250,452</u>	<u>\$260,501</u>	<u>\$281,372</u>	<u>\$303,866</u>	<u>\$328,139</u>
Total Fixed Charges	15.5%	\$500,904	\$521,002	\$562,744	\$607,733	\$656,277
<b>CONSUMPTION CHARGES</b>						
Base	25.0%	\$810,000	\$842,500	\$910,000	\$982,750	\$1,061,250
Extra	59.5%	<u>\$1,929,096</u>	<u>\$2,006,498</u>	<u>\$2,167,256</u>	<u>\$2,340,517</u>	<u>\$2,527,473</u>
Total Consumption Charges	84.5%	\$2,739,096	\$2,848,998	\$3,077,256	\$3,323,267	\$3,588,723
<b>TOTAL</b>	100.0%	\$3,240,000	\$3,370,000	\$3,640,000	\$3,931,000	\$4,245,000

1 - From Cash Flow (Table 9, line 5)

**Table 12: Scenario 3: 8% Annual Rate Increases - Water Fixed Charge Derivation**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

		PROJECTED - RATE STUDY PERIOD				
		2022/23	2023/24	2024/25	2025/26	2026/27
<b>REVENUE REQUIREMENT</b>						
Meters & Services		\$250,452	\$260,501	\$281,372	\$303,866	\$328,139
Customer Service Charge		<u>\$250,452</u>	<u>\$260,501</u>	<u>\$281,372</u>	<u>\$303,866</u>	<u>\$328,139</u>
Total Fixed Charge Revenue Requirement		\$500,904	\$521,002	\$562,744	\$607,733	\$656,277
<b>METER EQUIVALENT CHARGE</b>						
Total Meter Equivalent Charge Revenue Requirement		\$250,452	\$260,501	\$281,372	\$303,866	\$328,139
Total Number of Meter Equivalents		<u>3,275</u>	<u>3,292</u>	<u>3,308</u>	<u>3,325</u>	<u>3,341</u>
Total Meter Equivalent Charge		\$12.74	\$13.19	\$14.18	\$15.23	\$16.37
Meter Equivalent Charge by Meter Size						
	<u>Meter Size</u>	<u>Meter Ratio</u>				
	5/8"	1.00	\$12.74	\$13.19	\$14.18	\$15.23
	3/4"	1.00	\$12.74	\$13.19	\$14.18	\$15.23
	1"	1.67	\$21.23	\$21.98	\$23.63	\$25.38
	1-1/2"	3.33	\$42.47	\$43.97	\$47.27	\$50.77
	2"	5.33	\$67.95	\$70.35	\$75.63	\$81.23
	3"	10.67	\$135.89	\$140.69	\$151.25	\$162.45
	4"	16.67	\$212.33	\$219.83	\$236.33	\$253.83
	6"	33.33	\$424.67	\$439.67	\$472.67	\$507.67
<b>CUSTOMER SERVICE CHARGE</b>						
Total Customer Service Charge Revenue Requirement		\$250,452	\$260,501	\$281,372	\$303,866	\$328,139
Total Number of Meters		<u>2,048</u>	<u>2,058</u>	<u>2,069</u>	<u>2,079</u>	<u>2,089</u>
Total Customer Service Charge per Account		\$20.38	\$21.09	\$22.67	\$24.36	\$26.17
<b>TOTAL BIMONTHLY FIXED CHARGE (1)</b>						
	<u>Meter Size</u>					
	5/8"		\$33.12	\$34.28	\$36.85	\$39.59
	3/4"		\$33.12	\$34.28	\$36.85	\$39.59
	1"		\$41.61	\$43.07	\$46.30	\$49.74
	1-1/2"		\$62.85	\$65.06	\$69.94	\$75.13
	2"		\$88.33	\$91.44	\$98.30	\$105.59
	3"		\$156.27	\$161.78	\$173.92	\$186.81
	4"		\$232.71	\$240.92	\$259.00	\$278.19
	6"		\$445.05	\$460.76	\$495.34	\$532.03

1 - Total Bimonthly Fixed Charge is the sum of the "Meter Equivalent Charge" by meter size plus the "Total Customer Service Charge per Account"

**Table 13: Scenario 3: 8% Annual Rate Increases - Consumption Charge Rate Derivation**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

	PROJECTED - RATE STUDY PERIOD				
	2022/23	2023/24	2024/25	2025/26	2026/27
<b>REVENUE REQUIREMENT</b>					
Base Charge Revenue Requirement	\$810,000	\$842,500	\$910,000	\$982,750	\$1,061,250
<u>Extra Charge Revenue Requirement</u>	<u>\$1,929,096</u>	<u>\$2,006,498</u>	<u>\$2,167,256</u>	<u>\$2,340,517</u>	<u>\$2,527,473</u>
Total Consumption Charge Revenue Requirement	\$2,739,096	\$2,848,998	\$3,077,256	\$3,323,267	\$3,588,723
<b>CONSUMPTION CHARGE DERIVATION</b>					
<b>All Customers</b>					
Tier 1 Revenue Requirement	\$810,000	\$842,500	\$910,000	\$982,750	\$1,061,250
<u>Tier 1: 1-20 ccf Consumption (ccf)</u>	<u>127,849</u>	<u>129,808</u>	<u>131,807</u>	<u>133,845</u>	<u>135,923</u>
Tier 1 Rate per ccf	<b>\$6.34</b>	<b>\$6.49</b>	<b>\$6.90</b>	<b>\$7.34</b>	<b>\$7.81</b>
Tier 2 Revenue Requirement	\$1,929,096	\$2,006,498	\$2,167,256	\$2,340,517	\$2,527,473
<u>Tier 2: Over 20 ccf Consumption (ccf)</u>	<u>146,783</u>	<u>146,783</u>	<u>150,264</u>	<u>153,834</u>	<u>157,495</u>
Tier 2 Rate per ccf	<b>\$13.14</b>	<b>\$13.67</b>	<b>\$14.42</b>	<b>\$15.21</b>	<b>\$16.05</b>
SFPUC Rate + Bond Surcharge	\$5.15	\$5.63	\$6.15	\$6.72	\$7.36
Difference b/w Tier 1 Rate & SFPUC Rate	\$1.18	\$0.86	\$0.75	\$0.62	\$0.45

**Table 14: Scenario 3: 8% Annual Rate Increases - Proposed Bimonthly Water Rates**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

	PROJECTED - RATE STUDY PERIOD				
	2022/23	2023/24	2024/25	2025/26	2026/27
<b>FIXED CHARGES</b>					
<u>Meter Size</u>					
5/8"	\$33.12	\$34.28	\$36.85	\$39.59	\$42.54
3/4"	\$33.12	\$34.28	\$36.85	\$39.59	\$42.54
1"	\$41.61	\$43.07	\$46.30	\$49.74	\$53.45
1-1/2"	\$62.85	\$65.06	\$69.94	\$75.13	\$80.74
2"	\$88.33	\$91.44	\$98.30	\$105.59	\$113.48
3"	\$156.27	\$161.78	\$173.92	\$186.81	\$200.78
4"	\$232.71	\$240.92	\$259.00	\$278.19	\$299.00
6"	\$445.05	\$460.76	\$495.34	\$532.03	\$571.84
<b>CONSUMPTION CHARGES (per ccf)</b>					
<u>All Customers (Usage over 1 ccf)</u>					
Tier 1: 1- 20 ccf	\$6.34	\$6.49	\$6.90	\$7.34	\$7.81
Tier 2: Over 20 ccf	\$13.14	\$13.67	\$14.42	\$15.21	\$16.05

**Table 15: Scenario 3: 8% Annual Rate Increases - Sample Bimonthly Water Bill Impacts**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

**RESIDENTIAL BILL IMPACTS - 5/8" METER**

	Bimonthly Use (ccf)	Current Bill	Proposed				
			2022/23	2023/24	2024/25	2025/26	2026/27
<b>Residential: 5/8" meter, 1 ccf</b>							
Fixed Meter Charge - 5/8"		\$22.67	\$33.12	\$34.28	\$36.85	\$39.59	\$42.54
Consumption Charge							
Tier 1: 0 - 1 ccf	1	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tier 2: 2 - 3 ccf	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tier 3: 3 ccf	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tier 4: 4 - 8 ccf	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tier 5: 9 - 16 ccf	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<u>Tier 6: Over 16 ccf</u>	<u>0</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>
Subtotal Consumption Charge	1	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Bimonthly Water Bill		\$22.67	\$33.12	\$34.28	\$36.85	\$39.59	\$42.54
\$ Change			\$10.45	\$1.16	\$2.57	\$2.74	\$2.95
% Change			46.1%	3.5%	7.5%	7.4%	7.5%
<b>Residential: 5/8" meter, 4 ccf</b>							
Fixed Meter Charge - 5/8"		\$22.67	\$33.12	\$34.28	\$36.85	\$39.59	\$42.54
Consumption Charge							
Tier 1: 0 - 1 ccf	1	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tier 2: 2 - 3 ccf	1	\$2.17	\$6.34	\$6.49	\$6.90	\$7.34	\$7.81
Tier 3: 3 ccf	1	\$5.63	\$6.34	\$6.49	\$6.90	\$7.34	\$7.81
Tier 4: 4 - 8 ccf	1	\$7.00	\$6.34	\$6.49	\$6.90	\$7.34	\$7.81
Tier 5: 9 - 16 ccf	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<u>Tier 6: Over 16 ccf</u>	<u>0</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>
Subtotal Consumption Charge	4	\$14.80	\$19.01	\$19.47	\$20.71	\$22.03	\$23.42
Total Bimonthly Water Bill		\$37.47	\$52.13	\$53.75	\$57.56	\$61.62	\$65.96
\$ Change			\$14.66	\$1.62	\$3.81	\$4.06	\$4.35
% Change			39.1%	3.1%	7.1%	7.0%	7.1%
<b>Residential: 5/8" meter, 10 ccf</b>							
Fixed Meter Charge - 5/8"		\$22.67	\$33.12	\$34.28	\$36.85	\$39.59	\$42.54
Consumption Charge							
Tier 1: 0 - 1 ccf	1	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tier 2: 2 - 3 ccf	1	\$2.17	\$6.34	\$6.49	\$6.90	\$7.34	\$7.81
Tier 3: 3 ccf	1	\$5.63	\$6.34	\$6.49	\$6.90	\$7.34	\$7.81
Tier 4: 4 - 8 ccf	5	\$35.00	\$31.68	\$32.45	\$34.52	\$36.71	\$39.04
Tier 5: 9 - 16 ccf	2	\$17.38	\$12.67	\$12.98	\$13.81	\$14.68	\$15.62
<u>Tier 6: Over 16 ccf</u>	<u>0</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>
Subtotal Consumption Charge	10	\$60.18	\$57.02	\$58.41	\$62.14	\$66.08	\$70.27
Total Bimonthly Water Bill		\$82.85	\$90.14	\$92.69	\$98.99	\$105.67	\$112.81
\$ Change			\$7.29	\$2.55	\$6.29	\$6.69	\$7.14
% Change			8.8%	2.8%	6.8%	6.8%	6.8%



<b>Residential: 5/8" meter, 20 ccf</b>							
Fixed Meter Charge - 5/8"		\$22.67	\$33.12	\$34.28	\$36.85	\$39.59	\$42.54
Consumption Charge							
Tier 1: 0 - 1 ccf	1	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tier 2: 2 - 3 ccf	1	\$2.17	\$6.34	\$6.49	\$6.90	\$7.34	\$7.81
Tier 3: 3 ccf	1	\$5.63	\$6.34	\$6.49	\$6.90	\$7.34	\$7.81
Tier 4: 4 - 8 ccf	5	\$35.00	\$31.68	\$32.45	\$34.52	\$36.71	\$39.04
Tier 5: 9 - 16 ccf	8	\$69.52	\$50.68	\$51.92	\$55.23	\$58.74	\$62.46
<u>Tier 6: Over 16 ccf</u>	<u>4</u>	<u>\$44.20</u>	<u>\$25.34</u>	<u>\$25.96</u>	<u>\$27.62</u>	<u>\$29.37</u>	<u>\$31.23</u>
Subtotal Consumption Charge	20	\$156.52	\$120.38	\$123.32	\$131.18	\$139.51	\$148.35
Total Bimonthly Water Bill		\$179.19	\$153.50	\$157.60	\$168.03	\$179.10	\$190.89
\$ Change			(\$25.69)	\$4.10	\$10.43	\$11.07	\$11.79
% Change			-14.3%	2.7%	6.6%	6.6%	6.6%
<b>Residential: 5/8" meter, 40 ccf</b>							
Fixed Meter Charge - 5/8"		\$22.67	\$33.12	\$34.28	\$36.85	\$39.59	\$42.54
Consumption Charge							
Tier 1: 0 - 1 ccf	1	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tier 2: 2 - 3 ccf	1	\$2.17	\$6.34	\$6.49	\$6.90	\$7.34	\$7.81
Tier 3: 3 ccf	1	\$5.63	\$6.34	\$6.49	\$6.90	\$7.34	\$7.81
Tier 4: 4 - 8 ccf	5	\$35.00	\$31.68	\$32.45	\$34.52	\$36.71	\$39.04
Tier 5: 9 - 16 ccf	8	\$69.52	\$50.68	\$51.92	\$55.23	\$58.74	\$62.46
<u>Tier 6: Over 16 ccf</u>	<u>24</u>	<u>\$265.20</u>	<u>\$288.19</u>	<u>\$299.36</u>	<u>\$316.08</u>	<u>\$333.66</u>	<u>\$352.19</u>
Subtotal Consumption Charge	40	\$377.52	\$383.23	\$396.71	\$419.64	\$443.80	\$469.31
Total Bimonthly Water Bill		\$400.19	\$416.35	\$430.99	\$456.49	\$483.39	\$511.85
\$ Change			\$16.16	\$14.65	\$25.49	\$26.90	\$28.46
% Change			4.0%	3.5%	5.9%	5.9%	5.9%

#### RESIDENTIAL BILL IMPACTS - 3/4" METER

	Monthly Use (ccf)	Current Bill	Proposed				
			2022/23	2023/24	2024/25	2025/26	2026/27
<b>Residential: 3/4" meter, 1 ccf</b>							
Fixed Meter Charge - 3/4"		\$22.67	\$33.12	\$34.28	\$36.85	\$39.59	\$42.54
Consumption Charge							
Tier 1: 0 - 3 ccf	1	\$5.19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tier 2: 4 - 8 ccf	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tier 3: 9 - 16 ccf	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<u>Tier 4: Over 16 ccf</u>	<u>0</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>
Subtotal Consumption Charge	1	\$5.19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Bimonthly Water Bill		\$27.86	\$33.12	\$34.28	\$36.85	\$39.59	\$42.54
\$ Change			\$5.26	\$1.16	\$2.57	\$2.74	\$2.95
% Change			18.9%	3.5%	7.5%	7.4%	7.5%

<b>Residential: 3/4" meter, 4 ccf</b>							
Fixed Meter Charge - 3/4"		\$22.67	\$33.12	\$34.28	\$36.85	\$39.59	\$42.54
Consumption Charge							
Tier 1: 0 - 3 ccf	3	\$15.57	\$12.67	\$12.98	\$13.81	\$14.68	\$15.62
Tier 2: 4 - 8 ccf	1	\$7.00	\$6.34	\$6.49	\$6.90	\$7.34	\$7.81
Tier 3: 9 - 16 ccf	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<u>Tier 4: Over 16 ccf</u>	<u>0</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>
Subtotal Consumption Charge	4	\$22.57	\$19.01	\$19.47	\$20.71	\$22.03	\$23.42
Total Bimonthly Water Bill		\$45.24	\$52.13	\$53.75	\$57.56	\$61.62	\$65.96
\$ Change			\$6.89	\$1.62	\$3.81	\$4.06	\$4.35
% Change			15.2%	3.1%	7.1%	7.0%	7.1%
<b>Residential: 3/4" meter, 10 ccf</b>							
Fixed Meter Charge - 3/4"		\$22.67	\$33.12	\$34.28	\$36.85	\$39.59	\$42.54
Consumption Charge							
Tier 1: 0 - 3 ccf	3	\$15.57	\$12.67	\$12.98	\$13.81	\$14.68	\$15.62
Tier 2: 4 - 8 ccf	5	\$35.00	\$31.68	\$32.45	\$34.52	\$36.71	\$39.04
Tier 3: 9 - 16 ccf	2	\$17.38	\$12.67	\$12.98	\$13.81	\$14.68	\$15.62
<u>Tier 4: Over 16 ccf</u>	<u>0</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>
Subtotal Consumption Charge	10	\$67.95	\$57.02	\$58.41	\$62.14	\$66.08	\$70.27
Total Bimonthly Water Bill		\$90.62	\$90.14	\$92.69	\$98.99	\$105.67	\$112.81
\$ Change			(\$0.48)	\$2.55	\$6.29	\$6.69	\$7.14
% Change			-0.5%	2.8%	6.8%	6.8%	6.8%
<b>Residential: 3/4" meter, 20 ccf</b>							
Fixed Meter Charge - 3/4"		\$22.67	\$33.12	\$34.28	\$36.85	\$39.59	\$42.54
Consumption Charge							
Tier 1: 0 - 3 ccf	3	\$15.57	\$12.67	\$12.98	\$13.81	\$14.68	\$15.62
Tier 2: 4 - 8 ccf	5	\$35.00	\$31.68	\$32.45	\$34.52	\$36.71	\$39.04
Tier 3: 9 - 16 ccf	8	\$69.52	\$50.68	\$51.92	\$55.23	\$58.74	\$62.46
<u>Tier 4: Over 16 ccf</u>	<u>4</u>	<u>\$44.20</u>	<u>\$25.34</u>	<u>\$25.96</u>	<u>\$27.62</u>	<u>\$29.37</u>	<u>\$31.23</u>
Subtotal Consumption Charge	20	\$164.29	\$120.38	\$123.32	\$131.18	\$139.51	\$148.35
Total Bimonthly Water Bill		\$186.96	\$153.50	\$157.60	\$168.03	\$179.10	\$190.89
\$ Change			(\$33.46)	\$4.10	\$10.43	\$11.07	\$11.79
% Change			-17.9%	2.7%	6.6%	6.6%	6.6%
<b>Residential: 3/4" meter, 40 ccf</b>							
Fixed Meter Charge - 3/4"		\$22.67	\$33.12	\$34.28	\$36.85	\$39.59	\$42.54
Consumption Charge							
Tier 1: 0 - 3 ccf	3	\$15.57	\$12.67	\$12.98	\$13.81	\$14.68	\$15.62
Tier 2: 4 - 8 ccf	5	\$35.00	\$31.68	\$32.45	\$34.52	\$36.71	\$39.04
Tier 3: 9 - 16 ccf	8	\$69.52	\$50.68	\$51.92	\$55.23	\$58.74	\$62.46
<u>Tier 4: Over 16 ccf</u>	<u>24</u>	<u>\$265.20</u>	<u>\$288.19</u>	<u>\$299.36</u>	<u>\$316.08</u>	<u>\$333.66</u>	<u>\$352.19</u>
Subtotal Consumption Charge	40	\$385.29	\$383.23	\$396.71	\$419.64	\$443.80	\$469.31
Total Bimonthly Water Bill		\$407.96	\$416.35	\$430.99	\$456.49	\$483.39	\$511.85
\$ Change			\$8.39	\$14.65	\$25.49	\$26.90	\$28.46
% Change			2.1%	3.5%	5.9%	5.9%	5.9%

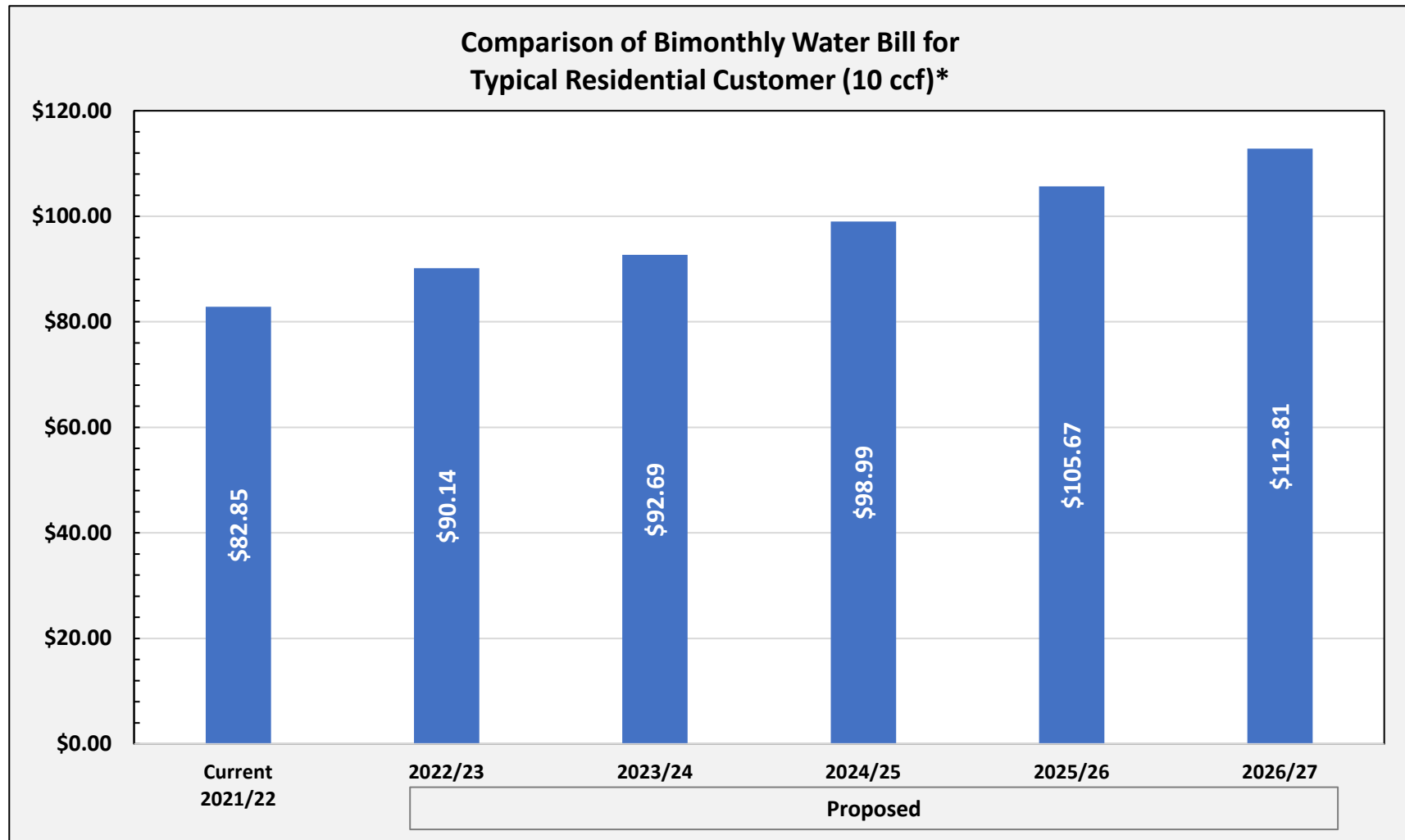
**COMMERCIAL BILL IMPACTS**

	Monthly Use (ccf)	Current Bill	Proposed				
			2022/23	2023/24	2024/25	2025/26	2026/27
<b>Commercial: 5/8" meter, 10 ccf</b>							
Fixed Meter Charge - 5/8"		\$35.07	\$33.12	\$34.28	\$36.85	\$39.59	\$42.54
Consumption Charge							
Tier 1: 0 - 8 ccf	8	\$41.58	\$44.35	\$45.43	\$48.33	\$51.40	\$54.65
Tier 2: 9 - 16 ccf	2	\$17.38	\$12.67	\$12.98	\$13.81	\$14.68	\$15.62
Tier 3: Over 16 ccf	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Subtotal Consumption Charge	10	\$58.96	\$57.02	\$58.41	\$62.14	\$66.08	\$70.27
Total Bimonthly Water Bill		\$94.03	\$90.14	\$92.69	\$98.99	\$105.67	\$112.81
\$ Change			(\$3.89)	\$2.55	\$6.29	\$6.69	\$7.14
% Change			-4.1%	2.8%	6.8%	6.8%	6.8%
<b>Commercial: 1-1/2" meter, 40 ccf</b>							
Fixed Meter Charge - 1-1/2"		\$0.00	\$33.12	\$34.28	\$36.85	\$39.59	\$42.54
Consumption Charge							
Tier 1: 0 - 8 ccf	8	\$56.00	\$44.35	\$45.43	\$48.33	\$51.40	\$54.65
Tier 2: 9 - 16 ccf	8	\$69.52	\$50.68	\$51.92	\$55.23	\$58.74	\$62.46
Tier 3: Over 16 ccf	24	\$265.20	\$288.19	\$299.36	\$316.08	\$333.66	\$352.19
Subtotal Consumption Charge	40	\$390.72	\$383.23	\$396.71	\$419.64	\$443.80	\$352.19
Total Bimonthly Water Bill		\$390.72	\$416.35	\$430.99	\$456.49	\$483.39	\$394.73
\$ Change			\$25.63	\$14.65	\$25.49	\$26.90	(\$88.66)
% Change			6.6%	3.5%	5.9%	5.9%	-18.3%

**IRRIGATION BILL IMPACTS**

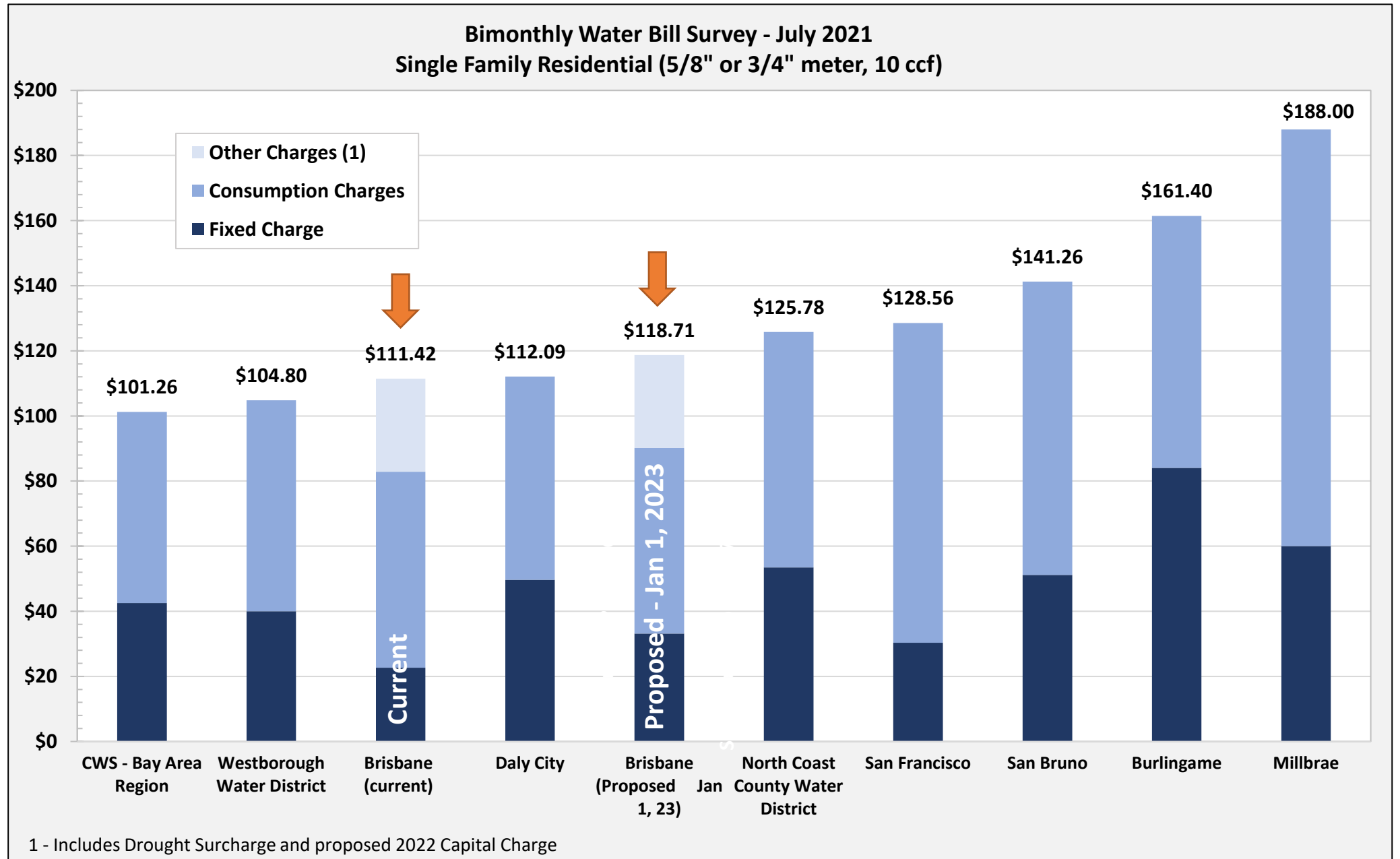
	Monthly Use (ccf)	Current Bill	Proposed				
			2022/23	2023/24	2024/25	2025/26	2026/27
<b>Irrigation: 1-1/2" meter, 50 ccf</b>							
Fixed Meter Charge - 5/8"		\$92.47	\$88.33	\$91.44	\$98.30	\$105.59	\$113.48
Consumption Charge							
Tier 1: 0 - 8 ccf	8	\$41.42	\$44.35	\$45.43	\$48.33	\$51.40	\$54.65
Tier 2: 9 - 16 ccf	8	\$90.80	\$50.68	\$51.92	\$55.23	\$58.74	\$62.46
Tier 3: Over 16 ccf	34	\$448.46	\$472.19	\$490.74	\$518.00	\$546.66	\$576.86
Subtotal Consumption Charge	50	\$580.68	\$567.22	\$588.09	\$621.56	\$656.80	\$693.98
Total Bimonthly Water Bill		\$673.15	\$655.55	\$679.53	\$719.85	\$762.39	\$807.45
\$ Change			(\$17.61)	\$23.98	\$40.33	\$42.53	\$45.07
% Change			-2.6%	3.7%	5.9%	5.9%	5.9%
<b>Irrigation: 2" meter, 100 ccf</b>							
Fixed Meter Charge - 2"		\$92.47	\$88.33	\$91.44	\$98.30	\$105.59	\$113.48
Consumption Charge							
Tier 1: 0 - 8 ccf	8	\$41.42	\$44.35	\$45.43	\$48.33	\$51.40	\$54.65
Tier 2: 9 - 16 ccf	8	\$90.80	\$50.68	\$51.92	\$55.23	\$58.74	\$62.46
Tier 3: Over 16 ccf	84	\$1,107.96	\$1,129.31	\$1,174.23	\$1,239.15	\$1,307.39	\$1,379.26
Subtotal Consumption Charge	100	\$1,240.18	\$1,224.35	\$1,271.58	\$1,342.71	\$1,417.53	\$1,496.37
Total Bimonthly Water Bill		\$1,332.65	\$1,312.67	\$1,363.02	\$1,441.00	\$1,523.12	\$1,609.85
\$ Change			(\$19.98)	\$50.35	\$77.98	\$82.11	\$86.74
% Change			-1.5%	3.8%	5.7%	5.7%	5.7%

**Table 16: Comparison of Bimonthly Water Bill for Typical Residential Customer**  
**City of Brisbane**  
**Water Utility Rate Study 2022**



\* Does not include Drought Surcharge or Capital Charge

**Table 17: Bimonthly Water Bill Survey**  
**City of Brisbane**  
**Water Utility Rate Study 2022**



**Table 18: Water Low Income Discount  
City of Brisbane  
Water and Sewer Utility Rate Study 2022**

	<b>Proposed Rates Jan 1, 2023</b>
Total Number of Residential Water Customers	1,650
Estimated Number of Customers Eligible for Discount	400
Total 2020/21 Water Low Income Discount Revenue	\$37,500
Annual Discount per Customer	\$93.80
Bimonthly Discount per Customer	\$15.60
5/8" Meter Bimonthly Fixed Charge	\$33.12
<u>Less Proposed Bimonthly Discount per Customer</u>	<u>\$15.60</u>
5/8" Meter Bimonthly Fixed Charge less Discount	\$17.52
% of Discount	47.1%