

Memorandum



Date: August 29, 2022
To: Andrew Nelson
From: David Naumann
Subject: 2022 Water and Sewer Rate Findings

Introduction

In 2021, the City of Republic engaged Burns & McDonnell to conduct the Water and Sewer Rate Study (2021 Study) to prepare for the upcoming capital improvements to the water and sewer system. Based on the development of engineering estimates and project timelines the City reengaged Burns & McDonnell to perform a financial plan update to analyze the impact on user charges and assist in the development of a capital funding strategy. This memorandum summarizes the findings of the Financial Planning Update (2022 Study).

Financial Planning Process

The City's water and wastewater utilities are anticipated to require large scale capital investment from 2023 through 2027. One of the goals of the 2022 Study is to determine whether the existing revenue streams are sufficient to implement these capital projects and fund the ongoing cost of operation and maintenance of the systems.

To determine if revenues under existing and approved rates can be expected to generate sufficient funding to meet the City's operating and capital costs, Burns & McDonnell prepared a multi-year financial projection of revenues and expenditures for the water and wastewater utilities. A comparison of projected revenues and expenditures provides insight into the adequacy of overall revenue levels.

Similar to the 2021 Study, our approach to utility financial planning involves the following basic steps:

1. Project revenues under existing and approved rates.
2. Project water and wastewater utility expenditures.
3. Determine a funding plan to meet the proposed capital improvement program, including the use of cash and debt
4. Develop a multi-year financial plan

The planning period begins with fiscal year (FY) 2022 as a budget year and a five-year forecast period, FY 2023 through FY 2027. The City utilizes a twelve-month fiscal year beginning January 1 and ending December 31. The financial planning recognizes and references the same fiscal year.

Water and Wastewater Revenues under Existing and Approved Rates

Following the 2021 Study, The City adopted an 18 percent sewer increase effective in July of 2021 and left water rates unchanged. Table 1 shows the existing FY 2022 water and sewer rates.

August 29, 2022
 Page 2

Table 1 – Existing Water and Sewer Rates

Line No.	Customer Class	Water	Sewer
		Existing	Existing
		2022	2022
		Rates	Rates
		\$	\$
Inside city			
1	Base Charge	\$ 7.56	\$ 18.80
2	Surcharge	\$ 3.56	\$ 11.17
Outside City			
3	Base Charge	\$11.34	\$ 28.20
4	Surcharge	\$ 5.34	\$ 16.77

[1] Base charge includes 1,500 gallons

Historical and Projected Customers, Volumes, and Revenues

Tables 2 and 3 present the historical water and wastewater customers, volume, and revenue from 2019 to 2021 and a projection of customers, volume, and revenue for the 2022 to 2027 planning period. Like the 2021 Study, the forecast allows for growth in the underlying customer base. The City has seen growth in accounts in recent years and is expecting to grow more over the forecast period. The Study assumes 3 percent growth in customer accounts based on City staff guidance to account for some growth in the underlying revenue.

August 29, 2022

Page 3

Table 2 – Historical and Projected Water Accounts, Volume, & Revenue

Line No.	Historical			Projected						
	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Accounts										
1	Actual User	222	174	160	165	170	175	180	185	190
2	Bad Debt	1	-	-	-	-	-	-	-	-
3	CC Commercial	6	3	5	5	5	5	5	5	5
4	CC Residential	49	54	56	58	60	62	64	66	68
5	City	26	31	31	32	33	34	35	36	37
6	Commercial	450	473	472	486	500	515	530	545	561
7	Industrial	2	2	2	2	2	2	2	2	2
8	Institutional	99	100	101	104	107	110	113	116	119
9	Landlord	55	70	89	92	95	98	101	104	107
10	Residential	6,223	6,477	6,633	6,832	7,037	7,248	7,466	7,690	7,921
11	Total Accounts	7,133	7,386	7,549	7,776	8,009	8,249	8,496	8,749	9,010
Billed Volume (kgal)										
12	Actual User	7,271	5,728	5,441	5,610	5,795	5,979	6,164	6,348	6,533
13	Bad Debt	15	-	-	-	-	-	-	-	-
14	CC Commercial	707	444	396	425	425	425	425	425	425
15	CC Residential	3,332	4,681	4,724	4,844	5,023	5,203	5,382	5,561	5,741
16	City	936,382	11,695	114,094	117,459	121,129	124,800	128,471	132,141	135,812
17	Commercial	81,567	179,452	104,655	107,910	111,024	114,378	117,732	121,086	124,679
18	Industrial	49	71	47	47	47	47	47	47	47
19	Institutional	14,438	13,604	13,932	14,343	14,791	15,239	15,687	16,135	16,584
20	Landlord	789	1,116	3,101	3,199	3,313	3,428	3,542	3,656	3,770
21	Residential	280,892	314,785	307,807	317,048	326,540	336,333	346,427	356,823	367,520
22	Total Billed Volume	1,325,442	531,576	554,196	570,884	588,087	605,831	623,876	642,223	661,110
User Revenues Under Existing and Approved Rates										
23	Actual User	\$ 35,052	\$ 27,383	\$ 25,396	\$ 26,713	\$ 27,577	\$ 28,441	\$ 29,305	\$ 30,170	\$ 31,034
24	Bad Debt	\$ 89	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	CC Commercial	\$ 3,022	\$ 1,852	\$ 1,800	\$ 1,950	\$ 1,950	\$ 1,950	\$ 1,950	\$ 1,950	\$ 1,950
26	CC Residential	\$ 13,255	\$ 18,171	\$ 18,454	\$ 19,310	\$ 20,020	\$ 20,730	\$ 21,440	\$ 22,150	\$ 22,861
27	City	\$ 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
28	Commercial	\$ 333,236	\$ 367,758	\$ 424,882	\$ 446,872	\$ 459,770	\$ 473,656	\$ 487,542	\$ 501,428	\$ 516,301
29	Industrial	\$ 275	\$ 345	\$ 289	\$ 245	\$ 245	\$ 245	\$ 245	\$ 245	\$ 245
30	Institutional	\$ 55,561	\$ 52,959	\$ 54,477	\$ 57,220	\$ 58,984	\$ 60,748	\$ 62,512	\$ 64,275	\$ 66,039
31	Landlord	\$ 5,730	\$ 7,818	\$ 10,098	\$ 10,643	\$ 11,013	\$ 11,384	\$ 11,754	\$ 12,125	\$ 12,495
32	Residential	\$ 1,208,435	\$ 1,321,335	\$ 1,300,695	\$ 1,366,645	\$ 1,407,575	\$ 1,449,788	\$ 1,493,317	\$ 1,538,127	\$ 1,584,254
33	Total Revenue	\$ 1,654,658	\$ 1,797,621	\$ 1,836,092	\$ 1,929,597	\$ 1,987,135	\$ 2,046,942	\$ 2,108,065	\$ 2,170,471	\$ 2,235,180

August 29, 2022

Page 4

Table 3 – Historical and Projected Sewer Accounts, Volume, & Revenue

Line No.		Historical			Projected					
		2019	2020	2021	2022	2023	2024	2025	2026	2027
Accounts [1] [2]										
1	Actual User	259	171	156	161	166	171	176	181	187
2	Bad Debt	1	-	-	-	-	-	-	-	-
3	CC Commercial	6	2	3	4	4	4	4	4	4
4	CC Residential	45	42	45	46	47	49	50	52	53
5	Commercial	443	397	382	393	405	417	430	442	456
6	Industrial	2	1	1	1	1	1	1	1	1
7	Institutional	100	86	86	88	91	94	97	100	103
8	Landlord	58	70	87	90	93	95	98	101	104
9	Residential	<u>7,072</u>	<u>6,379</u>	<u>6,540</u>	<u>6,736</u>	<u>6,938</u>	<u>7,146</u>	<u>7,360</u>	<u>7,581</u>	<u>7,809</u>
10	Total Accounts	7,985	7,147	7,300	7,519	7,745	7,977	8,216	8,463	8,717
Billed Volume (Kgal)										
11	Actual User	6,335	1,772	4,444	4,577	4,715	4,856	5,002	5,152	5,306
12	Bad Debt	3	-	-	-	-	-	-	-	-
13	CC Commercial	442	274	187	193	199	205	211	217	224
14	CC Residential	628	771	576	593	611	630	648	668	688
15	Commercial	70,116	161,162	83,974	86,494	89,088	91,761	94,514	97,349	100,270
16	Industrial	33	21	27	27	28	29	30	31	32
17	Institutional	8,290	6,062	8,060	8,302	8,551	8,808	9,072	9,344	9,624
18	Landlord	715	967	2,836	2,921	3,009	3,099	3,192	3,288	3,386
19	Residential	<u>96,085</u>	<u>113,953</u>	<u>105,359</u>	<u>108,520</u>	<u>111,776</u>	<u>115,129</u>	<u>118,583</u>	<u>122,140</u>	<u>125,805</u>
20	Total Billed Volume	182,646	284,982	205,464	211,628	217,977	224,516	231,252	238,189	245,335
User Revenues Under Existing Rates [1] [2]										
21	Actual User	\$ 75,737	\$ 58,714	\$ 55,142	\$ 60,639	\$ 62,458	\$ 64,332	\$ 66,262	\$ 68,250	\$ 70,298
22	Bad Debt	\$ 194	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	CC Commercial	\$ 4,636	\$ 2,747	\$ 2,202	\$ 2,421	\$ 2,494	\$ 2,569	\$ 2,646	\$ 2,725	\$ 2,807
24	CC Residential	\$ 14,229	\$ 17,771	\$ 17,672	\$ 19,434	\$ 20,017	\$ 20,617	\$ 21,236	\$ 21,873	\$ 22,529
25	Commercial	\$ 727,418	\$ 758,490	\$ 867,945	\$ 954,471	\$ 983,106	\$ 1,012,599	\$ 1,042,977	\$ 1,074,266	\$ 1,106,494
26	Industrial	\$ 352	\$ 255	\$ 307	\$ 338	\$ 348	\$ 359	\$ 369	\$ 380	\$ 392
27	Institutional	\$ 80,327	\$ 62,241	\$ 81,112	\$ 89,198	\$ 91,874	\$ 94,630	\$ 97,469	\$ 100,393	\$ 103,405
28	Landlord	\$ 12,192	\$ 15,340	\$ 20,771	\$ 22,841	\$ 23,527	\$ 24,232	\$ 24,959	\$ 25,708	\$ 26,479
29	Residential	<u>\$ 2,189,892</u>	<u>\$ 2,486,242</u>	<u>\$ 2,450,283</u>	<u>\$ 2,694,555</u>	<u>\$ 2,775,392</u>	<u>\$ 2,858,654</u>	<u>\$ 2,944,413</u>	<u>\$ 3,032,746</u>	<u>\$ 3,123,728</u>
30	Total Revenue	\$ 3,104,976	\$ 3,401,801	\$ 3,495,434	\$ 3,843,898	\$ 3,959,215	\$ 4,077,991	\$ 4,200,331	\$ 4,326,341	\$ 4,456,131

Historical water volumes are based on utility records of annual water system demand. Similarly, historical wastewater flow is based on utility records of collected wastewater flow. Forecasted water volumes and wastewater flow were estimated based on growth in accounts, assuming use per account remains consistent with recent system consumption patterns.

Projected user charges are forecasted to increase from the 2021 budget, resulting from growth in accounts of 3 percent and stable usage patterns. The impact of the adopted FY 2021 sewer rates is reflected in Table 3, but only reflects a partial year rate increase since rates were adopted in July. Projected water user charges are anticipated to be \$1.93 million in 2022, increasing to \$2.24 million by 2027 under existing rates. Projected sewer user charges are anticipated to be \$3.84 million in 2022, increasing to \$4.46 million by 2027 under existing rates.

August 29, 2022

Page 5

Operation and Maintenance Expenses

The primary cash expenditures of the water and wastewater utilities include the following direct operating and capital costs:

- Operation and Maintenance (O&M) Expenses
- Capital Improvement Program Expenditures
- Debt Service Principal and Interest Payments

Tables 4 and 5 presents recent water and wastewater O&M expense history and a projection of water and wastewater system O&M expenses through the 2027 planning period.

Due to recent increases and future uncertainty in inflation, O&M expenses were forecasted to increase 5 percent annually over the 2022 budget. In keeping with the 2021 Study, budgeted capital expenses were moved to the capital improvement plan table. Historic capital expenses are shown along with historic O&M.

August 29, 2022
Page 6

Table 4 – Historical and Projected Water Operation and Maintenance Expenses

Line No.	Historical			Budget	Projected				
	2019	2020	2021	2022	2023	2024	2025	2026	2027
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Administration									
1	121,720	144,025	163,867	244,111	256,300	269,100	282,600	296,700	311,500
2	220	177	361	1,667	1,800	1,900	2,000	2,100	2,200
3	12,241	10,904	16,633	24,869	26,100	27,400	28,800	30,200	31,700
4	8,994	8,432	12,932	18,660	19,600	20,600	21,600	22,700	23,800
5	24,282	20,212	14,586	32,682	34,300	36,000	37,800	39,700	41,700
6	-	-	-	17,220	18,100	19,000	20,000	21,000	22,100
7	2,739	68	66	1,000	1,100	1,200	1,300	1,400	1,500
8	633	637	10,533	1,000	1,100	1,200	1,300	1,400	1,500
9	391	895	2,118	5,000	5,300	5,600	5,900	6,200	6,500
10	774	162	3,164	1,200	1,300	1,400	1,500	1,600	1,700
11	-	2,168	1,579	250	300	300	300	300	300
12	62,575	7,504	1,911	15,298	16,100	16,900	17,700	18,600	19,500
13	438	1,040	896	1,250	1,300	1,400	1,500	1,600	1,700
14	473	94	1,793	500	500	500	500	500	500
15	851	1,430	1,242	3,217	3,400	3,600	3,800	4,000	4,200
16	1,337	2,938	3,212	1,200	1,300	1,400	1,500	1,600	1,700
17	807	854	1,805	750	800	800	800	800	800
18	-	-	-	500	500	500	500	500	500
19	489	2,096	8,733	10,000	10,500	11,000	11,600	12,200	12,800
20	4,408	5,542	3,626	-	-	-	-	-	-
21	23	-	-	500	500	500	500	500	500
22	2,300	603	7,332	10,000	10,500	11,000	11,600	12,200	12,800
23	82	10	8	250	300	300	300	300	300
24	6,429	2,324	7,965	2,200	2,300	2,400	2,500	2,600	2,700
25	106	165	436	100	100	100	100	100	100
26	237,266	-	-	-	-	-	-	-	-
27	1,830	1,283	1,771	2,000	2,100	2,200	2,300	2,400	2,500
28	76,613	102,426	101,775	118,112	124,000	130,200	136,700	143,500	150,700
29	1,684	5,179	3,578	5,179	5,400	5,700	6,000	6,300	6,600
30	173,791	141,725	193,975	174,343	183,100	192,300	201,900	212,000	222,600
31	743,758	463,364	565,895	693,100	728,000	764,500	802,900	843,000	885,000
Water Plant									
32	335,547	346,948	338,105	331,532	348,100	365,500	383,800	403,000	423,200
33	8,256	-	8,424	-	-	-	-	-	-
34	37,404	25,435	27,273	36,667	38,500	40,400	42,400	44,500	46,700
35	48,075	44,568	57,528	47,563	49,900	52,400	55,000	57,800	60,700
36	28,881	21,588	24,886	28,167	29,600	31,100	32,700	34,300	36,000
37	47,327	53,721	34,208	49,339	51,800	54,400	57,100	60,000	63,000
38	-	-	-	24,853	26,100	27,400	28,800	30,200	31,700
39	-	-	-	-	-	-	-	-	-
40	15,279	17,703	17,062	14,388	15,100	15,900	16,700	17,500	18,400
41	-	-	-	-	-	-	-	-	-
42	4,859	3,274	913	2,700	2,800	2,900	3,000	3,200	3,400
43	2,870	3,219	1,585	5,000	5,300	5,600	5,900	6,200	6,500
44	6,591	4,705	7,338	7,000	7,400	7,800	8,200	8,600	9,000
45	26,685	20,534	15,455	30,000	31,500	33,100	34,800	36,500	38,300
46	15,000	23,158	19,929	20,000	21,000	22,100	23,200	24,400	25,600
47	4,305	3,848	3,190	5,000	5,300	5,600	5,900	6,200	6,500
48	1,940	145	413	250	300	300	300	300	300
49	-	-	-	250	300	300	300	300	300
50	11,343	11,799	10,824	12,000	12,600	13,200	13,900	14,600	15,300
51	6,160	3,019	5,628	7,000	7,400	7,800	8,200	8,600	9,000
52	-	-	-	500	500	500	500	500	500
53	2,805	691	57	1,000	1,100	1,200	1,300	1,400	1,500
54	2,660	30,622	47,576	44,000	46,200	48,500	50,900	53,400	56,100
55	-	-	195	500	500	500	500	500	500
56	-	-	49	100	100	100	100	100	100
57	250	250	-	250	300	300	300	300	300
58	2,767	2,216	56	5,500	5,800	6,100	6,400	6,700	7,000
59	495	287	780	750	800	800	800	800	800
60	14,054	12,672	25,873	22,000	23,100	24,300	25,500	26,800	28,100
61	279	1,106	310	500	500	500	500	500	500
62	-	-	-	100	100	100	100	100	100
63	7,151	10,684	8,709	8,500	8,900	9,300	9,800	10,300	10,800
64	1,704	446	623	1,500	1,600	1,700	1,800	1,900	2,000
65	185,339	193,774	208,704	185,000	194,300	204,000	214,200	224,900	236,100
66	11,403	72,054	58,812	-	-	-	-	-	-
67	224,820	166,125	450,161	-	-	-	-	-	-
68	38,915	196,970	1,879	-	-	-	-	-	-
69	14,046	1,457	4,194	-	-	-	-	-	-
70	19,638	63,293	59,925	-	-	-	-	-	-
71	-	26,449	-	-	-	-	-	-	-
72	1,519,521	1,584,516	1,719,013	891,900	936,800	983,700	1,032,900	1,084,400	1,138,300
73	743,758	463,364	565,895	693,100	728,000	764,500	802,900	843,000	885,000
74	1,519,521	1,584,516	1,719,013	891,900	936,800	983,700	1,032,900	1,084,400	1,138,300
75	2,263,279	2,047,880	2,284,909	1,585,000	1,664,800	1,748,200	1,835,800	1,927,400	2,023,300

August 29, 2022
Page 7

Table 5 – Historical and Projected Sewer Operation and Maintenance Expenses

Line No.	Historical			Budget	Projected					
	2019	2020	2021	2022	2023	2024	2025	2026	2027	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Administration										
1	108,682	140,917	153,815	244,111	256,300	269,100	282,600	296,700	311,500	
2	-	-	-	-	-	-	-	-	-	
3	176	177	164	1,667	1,800	1,900	2,000	2,100	2,200	
4	10,591	11,974	9,419	24,869	26,100	27,400	28,800	30,200	31,700	
5	7,978	8,801	13,014	18,660	19,600	20,600	21,600	22,700	23,800	
6	21,215	21,379	14,586	32,682	34,300	36,000	37,800	39,700	41,700	
7	-	-	-	17,220	18,100	19,000	20,000	21,000	22,100	
8	2,739	-	56	1,000	1,100	1,200	1,300	1,400	1,500	
9	908	637	658	1,000	1,100	1,200	1,300	1,400	1,500	
10	1,539	895	1,505	5,000	5,300	5,600	5,900	6,200	6,500	
11	1,189	162	2,858	1,200	1,300	1,400	1,500	1,600	1,700	
12	-	-	-	-	-	-	-	-	-	
13	250	5,600	16,579	400	400	400	400	400	400	
14	127,924	7,430	17,524	142,783	149,900	157,400	165,300	173,600	182,300	
15	723	1,131	3,339	1,250	1,300	1,400	1,500	1,600	1,700	
16	318	-	-	-	-	-	-	-	-	
17	1,000	1,932	1,604	3,717	3,900	4,100	4,300	4,500	4,700	
18	1,337	2,200	5,064	2,500	2,600	2,700	2,800	2,900	3,000	
19	930	854	1,740	750	800	800	800	800	800	
20	-	-	-	500	500	500	500	500	500	
21	1,952	2,096	3,016	10,000	10,500	11,000	11,600	12,200	12,800	
22	4,408	5,542	7,304	10,000	10,500	11,000	11,600	12,200	12,800	
23	853	-	-	-	-	-	-	-	-	
24	258	-	-	500	500	500	500	500	500	
25	5,655	625	7,282	10,000	10,500	11,000	11,600	12,200	12,800	
26	83	10	8	350	400	400	400	400	400	
27	1,310	323	641	2,000	2,100	2,200	2,300	2,400	2,500	
28	115	157	432	200	200	200	200	200	200	
29	1,849	1,303	1,771	2,000	2,100	2,200	2,300	2,400	2,500	
30	640,868	-	-	-	-	-	-	-	-	
31	129,053	135,254	195,443	201,265	211,300	221,900	233,000	244,700	256,900	
32	1,684	5,179	3,578	5,200	5,500	5,800	6,100	6,400	6,700	
33	179,791	141,725	193,975	174,343	183,100	192,300	201,900	212,000	222,600	
34	1,249,378	496,302	655,372	915,167	961,100	1,009,200	1,059,900	1,112,900	1,168,300	
Wastewater Plant										
35	359,338	331,302	444,906	617,710	648,600	681,000	715,100	750,900	788,400	
36	-	-	-	3,172	-	-	-	-	-	
37	20,089	16,678	27,050	46,667	49,000	51,500	54,100	56,800	59,600	
38	54,417	45,741	38,579	62,123	65,200	68,500	71,900	75,500	79,300	
39	26,020	18,855	24,562	50,835	53,400	56,100	58,900	61,800	64,900	
40	72,130	52,832	44,145	89,026	93,500	98,200	103,100	108,300	113,700	
41	-	-	-	44,845	47,100	49,500	52,000	54,600	57,300	
42	-	-	-	-	-	-	-	-	-	
43	5,934	8,176	12,491	10,000	10,500	11,000	11,600	12,200	12,800	
44	-	-	-	-	-	-	-	-	-	
45	1,199	1,556	2,436	2,618	2,700	2,800	2,900	3,000	3,200	
46	2,254	561	1,705	5,000	5,300	5,600	5,900	6,200	6,500	
47	1,927	4,444	3,567	5,000	5,300	5,600	5,900	6,200	6,500	
48	4,714	41,304	249,838	-	-	-	-	-	-	
49	116,448	86,320	107,751	95,000	99,800	104,800	110,000	115,500	121,300	
50	12,330	31,582	63,380	150,000	157,500	165,400	173,700	182,400	191,500	
51	18,469	18,318	9,984	30,000	31,500	33,100	34,800	36,500	38,300	
52	48,040	19,745	44,121	50,000	52,500	55,100	57,900	60,800	63,800	
53	11,707	9,984	5,034	10,000	10,500	11,000	11,600	12,200	12,800	
54	1,956	306	658	500	500	500	500	500	500	
55	32	-	-	12	100	100	100	100	100	
56	2,545	4,529	531	5,000	5,300	5,600	5,900	6,200	6,500	
57	16,710	10,898	12,959	20,000	21,000	22,100	23,200	24,400	25,600	
58	32,253	25,208	22,326	50,000	52,500	55,100	57,900	60,800	63,800	
59	6,415	6,944	2,307	10,000	10,500	11,000	11,600	12,200	12,800	
60	-	-	-	1,000	1,100	1,200	1,300	1,400	1,500	
61	-	-	42	1,000	1,100	1,200	1,300	1,400	1,500	
62	-	-	-	3,000	3,200	3,400	3,600	3,800	4,000	
63	2,656	30,155	47,570	44,000	46,200	48,500	50,900	53,400	56,100	
64	-	-	-	1,000	1,100	1,200	1,300	1,400	1,500	
65	-	-	87	500	500	500	500	500	500	
66	69	259	540	500	500	500	500	500	500	
67	3,641	-	-	3,000	3,200	3,400	3,600	3,800	4,000	
68	13,047	11,871	18,421	15,000	15,800	16,600	17,400	18,300	19,200	
69	15,411	11,718	7,595	15,000	15,800	16,600	17,400	18,300	19,200	
70	53	183	169	750	800	800	800	800	800	
71	15,758	13,074	12,892	16,500	17,300	18,200	19,100	20,100	21,100	
72	5,495	635	-	100	100	100	100	100	100	
73	-	-	21	250	300	300	300	300	300	
74	4,963	3,397	1,865	2,000	2,100	2,200	2,300	2,400	2,500	
75	3,162	2,783	5,263	5,000	5,300	5,600	5,900	6,200	6,500	
76	-	2,162	-	-	-	-	-	-	-	
77	324,007	332,033	319,307	320,000	336,000	352,800	370,400	388,900	408,300	
78	-	42,596	1,650	-	-	-	-	-	-	
79	-	40,232	9,863	-	-	-	-	-	-	
80	-	-	-	-	-	-	-	-	-	
81	-	-	-	-	-	-	-	-	-	
82	-	16,334	10,095	-	-	-	-	-	-	
83	-	-	40,879	-	-	-	-	-	-	
84	-	-	-	-	-	-	-	-	-	
85	-	7,780	57,239	-	-	-	-	-	-	
86	-	-	-	-	-	-	-	-	-	
87	-	-	-	-	-	-	-	-	-	
88	-	112,433	599	-	-	-	-	-	-	
89	1,403,788	76,455	-	-	-	-	-	-	-	
90	-	-	-	-	-	-	-	-	-	
91	-	-	-	-	-	-	-	-	-	
92	2,606,986	1,440,539	1,665,609	1,783,014	1,872,700	1,966,700	2,065,300	2,168,700	2,276,800	
93	1,249,378	496,302	655,372	915,167	961,100	1,009,200	1,059,900	1,112,900	1,168,300	
94	2,606,986	1,440,539	1,665,609	1,783,014	1,872,700	1,966,700	2,065,300	2,168,700	2,276,800	
95	-	-	-	-	-	-	-	-	-	
96	3,856,364	1,936,841	2,320,981	2,698,181	2,833,800	2,975,900	3,125,200	3,281,600	3,445,100	

August 29, 2022

Page 8

Projected Capital Improvements

Tables 6 and 7 show the projected capital improvement program (CIP) for 2022 to 2027 for the water and sewer utilities, respectively.

The water CIP is forecasted with 3 percent inflation starting in 2023. The total water CIP for the forecast period is approximately \$3.78 million.

The sewer CIP is forecasted with 3 percent inflation starting in 2027. Planned sewer capital projects through 2027 are expected to have sufficient contingency to cover any unexpected increase in costs. Total sewer CIP is projected to be approximately \$69.83 million and includes major collection system and treatment plant improvements. The sewer CIP does not include the membrane bioreactor (MBR) construction project. Value engineering and grant money are being pursued to determine the cost of the MBR plant project.

August 29, 2022
Page 9

Table 6 – Water Capital Improvement Plan

Line No.		Projected						Total
		2022	2023	2024	2025	2026	2027	
		\$	\$	\$	\$	\$	\$	
Listed CIP Projects								
1	Hankins Dev	140,000	-	-	-	-	-	140,000
2	West Ave. Main Ext.	42,625	-	-	-	-	-	42,625
3	N Alexander Main Connection	43,400	-	-	-	-	-	43,400
4	Various Main Improvements throughout Republic	200,000	200,000	200,000	200,000	100,000	-	900,000
5	Backhoe Lease	12,500	12,500	12,500	12,500	12,500	-	62,500
6	Replace Skid Steer	23,000	-	-	-	-	-	23,000
7	Equipment Truck & Trailer Replacement	-	120,000	-	-	-	-	120,000
8	Replace Heavy Duty work Truck (New)	-	-	50,000	50,000	-	-	100,000
9	Replace 2006 Freight Linear Tanker Truck	-	-	175,000	-	-	-	175,000
10	Paint Hines St. Water Tower	-	-	300,000	-	-	-	300,000
11	Replace F150	-	-	-	40,000	-	-	40,000
12	Collections System Repair Truck	-	-	-	100,000	-	-	100,000
13	Battlefield Utilities	-	-	-	-	615,000	-	615,000
		461,525	382,500	737,500	402,500	727,500	-	2,711,525
14	Capital Spending Allowance	-	-	-	-	-	500,000	500,000
15	Total	-	-	-	-	-	500,000	500,000
Other Capital								
16	Inspector Truck (f150)	30,000	-	-	-	-	-	30,000
17	FFE New Building	-	166,667	-	-	-	-	166,667
18	Replace Admin Escape	-	-	-	11,667	-	-	11,667
19	Aerial Photography	1,625	-	2,167	-	-	-	3,792
20	Meters	80,000	-	-	-	-	-	80,000
21	Total	111,625	166,667	2,167	11,667	-	-	292,126
22	Total CIP	573,150	549,167	739,667	414,167	727,500	500,000	3,503,651
23	Total Inflated CIP	573,150	565,642	784,713	452,571	818,808	579,637	3,774,521

Table 7 – Sewer Capital Improvement Plan

Line No.		Projected						Total
		2022	2023	2024	2025	2026	2027	
		\$	\$	\$	\$	\$	\$	
Listed CIP Projects								
1	Hankins Dev	80,000	-	-	-	-	-	80,000
2	FM 112 I&I Reduction (B&M CIP 4	280,000	-	-	-	-	-	280,000
3	B&M CIP 6 Linear improvements	2,850,000	-	-	-	-	-	2,850,000
4	Relocate Brookline South Lift Station (B&M CIP 8)	1,100,000	-	-	-	-	-	1,100,000
5	McElhaney Replacement (B&M CIP 7)	850,000	-	-	-	-	-	850,000
6	New Vac Truck	-	380,000	-	-	-	-	380,000
7	Replace Evergreen VFDs	50,000	-	-	-	-	-	50,000
8	WWTP upgrade part 1	13,000,000	-	-	-	-	-	13,000,000
9	Replace 2006 Trail Blazer	30,000	-	-	-	-	-	30,000
10	LS 4 Improvement (B&M CIP 3)	-	1,000,000	-	-	-	-	1,000,000
11	FM 109 I&I Reduction (B&M CIP 2)	-	1,323,000	-	-	-	-	1,323,000
12	4000 Gallon Tanker Truck	-	150,000	-	-	-	-	150,000
13	WWTP upgrade part 2	-	13,000,000	-	-	-	-	13,000,000
14	Collections System Repair Truck	-	-	100,000	-	-	-	100,000
15	FM 115 I&I Reduction (B&M CIP 5	-	-	1,440,500	-	-	-	1,440,500
16	Replace 2006 Freight Linear Tanker Truck	-	-	175,000	-	-	-	175,000
17	WWTP upgrade part 3	-	-	13,000,000	-	-	-	13,000,000
18	(B&M CIP 15) FM 108 Linear Improvements	-	-	-	1,523,500	-	-	1,523,500
19	Brookline Direct (B&M CIP 9) part 1	-	-	-	6,000,000	-	-	6,000,000
20	Woodland Park Linear Improvements (B&M CIP 12)	-	-	-	1,500,000	-	-	1,500,000
21	Various I&I Reduction projects	-	-	-	400,000	-	-	400,000
22	Brookline Direct (B&M CIP 9) part 2	-	-	-	-	7,000,000	-	7,000,000
23	Wilson's Creek Battlefield Utilities	-	-	-	-	3,730,000	-	3,730,000
24	Total Listed CIP	18,240,000	15,853,000	14,715,500	9,423,500	10,730,000	-	68,962,000
Capitalized Expenses								
25	Capital Spending Allowance [1]	-	-	-	-	-	750,000	750,000
26	Total CIP	-	-	-	-	-	750,000	750,000
27	MBR Plant Construction	-	-	-	-	-	-	-
28	Total Uninflated CIP	18,240,000	15,853,000	14,715,500	9,423,500	10,730,000	750,000	69,712,000
29	Total Inflated CIP	18,240,000	15,853,000	14,715,500	9,423,500	10,730,000	869,456	69,831,456

August 29, 2022
Page 10

Existing and Proposed Debt Service Requirements

Tables 8 and 9 summarizes the existing and proposed debt service requirements for the water and wastewater utilities. The water utility currently has three outstanding debt obligations as shown on Table 8. The water utility shares in 48 percent of the cost responsibility of the 2006 Brookline debt while the other 52 percent is attributed to sewer. Additionally, the water and sewer utilities share in 1/3 of the public works cost responsibility, each. The streets department is responsible for the other 1/3 share of the cost.

The sewer utility shares in the 2006 Brookline and Public Works Building costs as well as the nearly \$43 million in new special obligation bonds associated with the sewer treatment improvements.

Table 8 – Existing & Proposed Water Debt Service

Line No.	Projected						
	2022	2023	2024	2025	2026	2027	
<u>Existing Debt Issues</u>							
1	Series 2006 A (Brookline) [1]	262,127	263,123	262,266	262,947	262,245	262,078
2	Special Obligation Bonds 2017	11,815	3,294	3,318	4,710	-	-
3	Public Works Building Payment (Series 2022) [2]	45,086	108,657	108,672	108,797	108,838	108,797
4	Total Existing Debt Service	319,000	375,100	374,300	376,500	371,100	370,900
<u>Proposed Debt</u>							
5	Proposed SRF Debt	-	-	-	-	-	-
6	Proposed Debt Issue	-	-	-	-	-	-
7	Total Proposed Debt Service	-	-	-	-	-	-
8	Total Debt	319,000	375,100	374,300	376,500	371,100	370,900

[1] Series 2006 A Brookline Debt allocates 48% of total amortization to water

[2] Public works building split evenly 3 ways

August 29, 2022
Page 11

Table 9 – Existing & Proposed Sewer Debt Service

Line No.	Projected						
	2022	2023	2024	2025	2026	2027	
Existing Debt Issues							
1	Series 2006 A (Brookline) [1]	284,585	284,000	285,000	284,100	284,900	284,100
	Series 2022 Special Obligation Bonds						
2	Treatment Plant	1,057,575	2,548,730	2,549,084	2,552,010	2,552,986	2,552,010
3	Public Works Building [2]	45,086	108,657	108,672	108,797	108,838	108,797
4	Total Existing Debt Service	1,387,246	2,941,387	2,942,756	2,944,907	2,946,724	2,944,907
Proposed Debt							
5	Proposed COP Debt	-	-	-	-	-	-
6	Proposed SRF Debt	-	-	-	-	-	-
7	Total Proposed Debt	-	-	-	-	-	-
8	Grand Total Debt	1,387,246	2,941,387	2,942,756	2,944,907	2,946,724	2,944,907

[1] Series 2006 A Brookline Debt allocates 52% of total amortization to sewer
[2] Public works building split evenly 3 ways

Financial Planning Guiding Principles

Comparing forecasted utility revenues and expenses described in this technical memorandum provides a basis for evaluating the sufficiency of revenues under existing rates. The following guiding principles were used to assess the adequacy of proposed scenarios.

- Maintain an operating reserve balance of at least 90 days of O&M expenses.
- Target \$500,000 in minimum capital balance.
- Achieve debt service coverage (DSC) of 1.20 over the forecast period.

These principles are used to evaluate the sufficiency of revenues under existing and approved rates to meet future operating and capital requirements.

Water Operating Flow of Funds

A detailed water cash flow is presented in Table 10. Line 1 shows user revenues under existing FY 2022 rates, forecasted previously in Table 2. Lines 2 through 6 present proposed revenue increases.

Total user charge revenues are summarized on Line 8. Line 10 presents the total revenue which combines the annual user charge revenue and the other revenue from Line 9. Over the study period, total utility revenues increase from \$2.27 million in 2022 to \$3.19 million in 2027.

August 29, 2022

Page 12

Total operating expenses are summarized on Line 17 and consist of O&M and debt service. These annual costs are deducted from Line 10, total revenue, to determine the annual operating balance, which is shown on Line 18. With the proposed revenue adjustments, the operating balance is positive throughout the forecast. All available cash above the required minimum of 90 days of operations is transferred to the capital fund, as shown on Line 21 and again on Line 30.

In alignment with the 2021 Study, the impact fee balance and annual revenue is also made available for cash funding capital projects.

Lines 32 and 35 show the total sources and uses of capital funds, respectively, and the annual capital balance is shown on Line 36. With the proposed revenue adjustments the ending capital balance achieves the minimum \$500,000 by 2025.

Lastly, DSC is shown as a measure of financial resiliency, measuring the ability to pay for debt after paying operating expenses. The water utility has an internal targeted DSC of 1.20 which is achieved in each year of the forecast.

August 29, 2022
Page 13

Table 10 – Water Financial Plan

Line No.	Projected						
	2022	2023	2024	2025	2026	2027	
Water Utility Operating Flow of Funds							
1	Revenues Under Existing and Approved Rates [1]						
	1,929,600	1,987,100	2,046,900	2,108,100	2,170,500	2,235,200	
	<u>Year</u>	<u>Increases</u>	<u>Month Effective</u>				
2	2023	7.00%	2				
3	2024	7.00%	2	127,500	143,300	147,600	
4	2025	7.00%	2		140,500	157,900	
5	2026	2.00%	2		154,900	174,000	
6	2027	2.00%	2			48,700	
7	Total Proposed Additional Revenue	-	127,500	283,800	460,400	537,200	609,000
8	Total Water User Charge Revenue	1,929,600	2,114,600	2,330,700	2,568,500	2,707,700	2,844,200
9	Total Other Revenue	340,000	347,900	348,700	349,700	350,100	350,600
10	Total Revenues	2,269,600	2,462,500	2,679,400	2,918,200	3,057,800	3,194,800
Revenue Requirements							
11	Operation & Maintenance Expense	1,585,000	1,664,800	1,748,200	1,835,800	1,927,400	2,023,300
Debt Service							
12	Existing Bond Debt Service	273,900	266,400	265,600	267,700	262,200	262,100
13	Proposed Debt Issues (SRF)	-	-	-	-	-	-
14	Proposed Debt Issue	-	-	-	-	-	-
15	Public Works Building	45,100	108,700	108,700	108,800	108,800	108,800
16	Total Debt Service	319,000	375,100	374,300	376,500	371,000	370,900
17	Total Expenses	1,904,000	2,039,900	2,122,500	2,212,300	2,298,400	2,394,200
18	Annual Operating Balance	365,600	422,600	556,900	705,900	759,400	800,600
19	Beginning Balance - Operating Funds [2]	634,000	390,800	410,500	431,100	452,700	475,200
20	Annual Operating Balance	365,600	422,600	556,900	705,900	759,400	800,600
21	Transfers to Capital	(608,800)	(402,900)	(536,300)	(684,300)	(736,900)	(776,900)
22	Ending Balance [3]	390,800	410,500	431,100	452,700	475,200	498,900
Impact Fee Flow of Funds							
23	Beginning Balance	280,100	-	-	-	-	-
24	Annual Impact Fees	75,800	75,800	75,800	75,800	75,800	75,800
25	Transfer to Capital	(355,900)	(75,800)	(75,800)	(75,800)	(75,800)	(75,800)
26	Ending Balance	-	-	-	-	-	-
Water Utility Capital Flow of Funds							
<u>Sources</u>							
27	Beginning Balance [2]	76,300	467,800	380,900	208,300	515,800	509,700
28	Developer Reimbursements	-	-	-	-	-	-
29	Proposed Debt Issue	-	-	-	-	-	-
30	Transfers from Operations	608,800	402,900	536,300	684,300	736,900	776,900
31	Transfers from Impact Fees	355,900	75,800	75,800	75,800	75,800	75,800
32	Total Sources	1,041,000	946,500	993,000	968,400	1,328,500	1,362,400
<u>Uses</u>							
33	Capital Projects	573,200	565,600	784,700	452,600	818,800	579,600
34	Debt Issuance Expense	-	-	-	-	-	-
35	Total Uses	573,200	565,600	784,700	452,600	818,800	579,600
36	Ending Balance Capital Fund [4]	467,800	380,900	208,300	515,800	509,700	782,800
Debt Service Coverage							
37	Revenues Available for Debt Service	684,600	797,700	931,200	1,082,400	1,130,400	1,171,500
38	Net Debt Service Coverage [5]	2.15	2.13	2.49	2.87	3.05	3.16
39	Total Cash	858,600	791,400	639,400	968,500	984,900	1,281,700

[1] Based on 2022 Budget with 3% growth per year

[2] Cash balance as of June 30, 2022

[3] Targeting 90 days operating cash

[4] Targeted ending capital balance of \$500k

[5] Target DSC of 1.20X

August 29, 2022

Page 14

Sewer Operating Flow of Funds

A detailed sewer cash flow is presented in Table 11. Line 1 shows user revenues under existing FY 2022 rates, forecasted previously in Table 3. Lines 2 through 6 present proposed revenue increases.

Total user charge revenues are summarized on Line 8. Line 10 presents the total revenue which combines the annual user charge revenue and the other revenue from Line 9. Over the study period, total utility revenues increase from \$3.95 million in 2022 to \$7.47 million in 2027.

Total operating expenses are summarized on Line 17 and consist of O&M and debt service. These annual costs are deducted from Line 10, total revenue, to determine the annual operating balance, which is shown on Line 18. With the proposed revenue adjustments, the operating balance is positive starting in 2024. Also starting in 2024, all available cash above the required minimum of 90 days of operations is transferred to the capital fund, as shown on Line 21 and again on Line 31.

In alignment with the 2021 Study, the impact fee balance and annual revenue is also made available for cash funding capital projects.

Lines 33 and 36 show the total sources and uses of capital funds, respectively, and the annual capital balance is shown on Line 37. With the proposed revenue adjustments, the ending capital balance achieves the minimum \$500,000 in each year of the forecast.

Lastly, DSC is shown as a measure of financial resiliency, measuring the ability to pay for debt after paying operating expenses. The sewer utility has an internal targeted DSC of 1.20. Line 39 shows the coverage specific to the outstanding 2006 Brookline debt series for which the utility has strong coverage. Line 40 shows the all-in coverage which includes the new special obligation bond debt service and the public works building. With the proposed revenue adjustments the “all-in” coverage meets the targeted minimum starting in 2026.

August 29, 2022
Page 15

Table 11 – Sewer Financial Plan

Line No.	Projected					
	2022	2023	2024	2025	2026	2027
Sewer Utility Operating Flow of Funds						
1	Revenues Under Existing and Approved Rates [1]					
	3,843,900	3,959,200	4,078,000	4,200,300	4,326,300	4,456,100
2	<u>Year</u>	<u>Increases</u>	<u>Month</u>			
3	2023	36%	2	1,306,500	1,468,100	1,512,100
4	2024	5%	2	254,200	285,600	294,200
5	2025	5%	2		274,900	308,900
6	2026	5%	2			297,300
7	2027	5%	2			321,500
7	Total Proposed Additional Revenue	-	1,306,500	1,722,300	2,072,600	2,457,900
8	Total Sewer User Charge Revenue	3,843,900	5,265,700	5,800,300	6,272,900	6,784,200
9	Total Other Revenue	109,000	131,700	129,900	131,600	133,800
10	Total Revenues	3,952,900	5,397,400	5,930,200	6,404,500	6,918,000
Revenue Requirements						
11	Operation & Maintenance Expense	2,698,200	2,833,800	2,975,900	3,125,200	3,281,600
Debt Service						
12	Existing Bond Debt Service	1,342,200	2,832,700	2,834,100	2,836,100	2,837,800
13	Proposed Debt Issues (SRF)	-	-	-	-	-
14	Proposed Debt Issues (COP)	-	-	-	-	-
15	Public Works Building	45,100	108,700	108,700	108,800	108,800
16	Total Debt Service	1,387,300	2,941,400	2,942,800	2,944,900	2,946,600
17	Total Expenses	4,085,500	5,775,200	5,918,700	6,070,100	6,228,200
18	Annual Operating Balance	(132,600)	(377,800)	11,500	334,400	689,800
19	Beginning Balance [2]	1,237,200	1,104,600	726,800	733,800	770,600
20	Annual Operating Balance	(132,600)	(377,800)	11,500	334,400	689,800
21	Transfers to Capital	-	-	(4,500)	(297,600)	(651,200)
22	Ending Balance [3]	1,104,600	726,800	733,800	770,600	849,500
Impact Fee Flow of Funds						
<u>Impact Fees Flow of Funds</u>						
23	Beginning Balance	806,700	-	-	-	-
24	Annual Impact Fees	140,000	140,000	140,000	140,000	140,000
25	Transfer to Capital	(946,700)	(140,000)	(140,000)	(140,000)	(140,000)
26	Ending Balance	-	-	-	-	-
Sewer Utility Capital Flow of Funds						
<u>Sources of Funds</u>						
27	Beginning Balance [2]	816,300	51,523,000	35,810,000	21,239,000	12,253,100
28	ARPA Funds	25,000,000	-	-	-	-
29	Special Obligation Bonds, Series 2022	43,000,000	-	-	-	-
30	COP Debt Issue	-	-	-	-	-
31	Transfers from Operations	-	-	4,500	297,600	651,200
32	Transfers from Impact Fees	946,700	140,000	140,000	140,000	140,000
33	Total Sources of Funds	69,763,000	51,663,000	35,954,500	21,676,600	13,044,300
<u>Uses of Funds</u>						
34	Capital Projects	18,240,000	15,853,000	14,715,500	9,423,500	10,730,000
35	Debt Issuance Expense	-	-	-	-	-
36	Total Uses of Funds	18,240,000	15,853,000	14,715,500	9,423,500	10,730,000
37	Ending Capital Balance [4]	51,523,000	35,810,000	21,239,000	12,253,100	2,314,300
Debt Service Coverage						
38	Revenues Available for Debt Service	1,254,700	2,563,600	2,954,300	3,279,300	3,636,400
39	Debt Service Coverage (2006 Brookline)	4.41	9.03	10.36	11.54	12.77
40	Debt Service Coverage (All-In) [5]	0.90	0.87	1.00	1.11	1.23

[1] Based on 2022 Budget with 3% growth per year

[2] Cash balance as of June 30, 2022

[3] Targeting 90 days operating cash

[4] Targeted ending capital balance of \$500k

[5] Target DSC of 1.20X

August 29, 2022
Page 16

Water Proposed Rates & Typical Bills

Table 12 shows the existing and proposed water rates. The system revenue increases, shown on Table 10, have been applied across the board to all rates, increasing each component of the rate structure by the same percentage.

Table 12 – Existing and Proposed Water Rates

Line No.	Customer Class	Existing		Proposed			
		2022 Rates	2023 Rates	2024 Rates	2025 Rates	2026 Rates	2027 Rates
		\$	\$	\$	\$	\$	\$
Inside City							
1	Base Charge	\$ 7.56	\$ 8.09	\$ 8.66	\$ 9.26	\$ 9.45	\$ 9.64
2	Surcharge	\$ 3.56	\$ 3.81	\$ 4.08	\$ 4.36	\$ 4.45	\$ 4.54
Outside City							
3	Base Charge	\$ 11.34	\$ 12.13	\$ 12.98	\$ 13.89	\$ 14.17	\$ 14.45
4	Surcharge	\$ 5.34	\$ 5.71	\$ 6.11	\$ 6.54	\$ 6.67	\$ 6.81

[1] Base charge includes 1,500 gallons

Table 13 shows the typical bill impact to customers under the proposed rates at three different usage profiles. Analysis done around use per account shows that the average water demand of a residential customer is four thousand gallons per month. Under the proposed rates, an inside city residential customer using four thousand gallons per month can expect their bill to increase from \$16.46 in 2022 to \$17.61 in 2023.

August 29, 2022
Page 17

Table 13 – Typical Water Bill Impact

Line No.	Customer Class	Billable Flow kgal	Monthly Bill Under					
			Existing 2022 Rates \$	2023 Rates \$	2024 Rates \$	2025 Rates \$	2026 Rates \$	2027 Rates \$
Inside City								
1	Small User	2.0	\$ 9.34	\$ 9.99	\$ 10.69	\$ 11.44	\$ 11.67	\$ 11.90
2	Medium User	4.0	\$ 16.46	\$ 17.61	\$ 18.85	\$ 20.16	\$ 20.57	\$ 20.98
3	Large User	8.0	\$ 30.70	\$ 32.85	\$ 35.15	\$ 37.61	\$ 38.36	\$ 39.13
Outside City								
4	Small User	2.0	\$ 14.01	\$ 14.99	\$ 16.04	\$ 17.16	\$ 17.51	\$ 17.86
5	Medium User	4.0	\$ 24.69	\$ 26.42	\$ 28.27	\$ 30.25	\$ 30.85	\$ 31.47
6	Large User	8.0	\$ 46.05	\$ 49.27	\$ 52.72	\$ 56.41	\$ 57.54	\$ 58.69

Sewer Proposed Rates & Typical Bills

Table 14 shows the existing and proposed water rates. The system revenue increases, shown on Table 11, have been applied across the board to all rates, increasing each component of the rate structure by the same percentage.

Table 14 – Existing and Proposed Sewer Rates

Line No.	Customer Class	Existing		Proposed			
		2022 Rates \$	2023 Rates \$	2024 Rates \$	2025 Rates \$	2026 Rates \$	2027 Rates \$
Inside City							
1	Base Charge	\$ 18.80	\$ 25.57	\$ 26.85	\$ 28.19	\$ 29.60	\$ 31.08
2	Surcharge	\$ 11.17	\$ 15.19	\$ 15.95	\$ 16.75	\$ 17.59	\$ 18.46
Outside City							
3	Base Charge	\$ 28.20	\$ 38.35	\$ 40.27	\$ 42.28	\$ 44.40	\$ 46.62
4	Surcharge	\$ 16.77	\$ 22.81	\$ 23.95	\$ 25.14	\$ 26.40	\$ 27.72

[1] Base charge includes 1,500 gallons

August 29, 2022
Page 18

Table 15 shows the typical bill impact to customers under the proposed rates at three different usage profiles. Under the proposed rates, an inside city residential customer using four thousand gallons per month can expect their bill to increase from \$46.73 in 2022 to \$63.55 in 2023.

Table 15 – Typical Sewer Bill Impact

Line No.	Customer Class	Billable Flow kgal	Monthly Bill Under					
			Existing 2022 Rates	2023 Rates	2024 Rates	Proposed 2025 Rates	2026 Rates	2027 Rates
Inside City								
1	Small User	2.0	\$ 24.39	\$ 33.16	\$ 34.82	\$ 36.56	\$ 38.39	\$ 40.31
2	Medium User	4.0	\$ 46.73	\$ 63.55	\$ 66.72	\$ 70.06	\$ 73.56	\$ 77.24
3	Large User	8.0	\$ 91.41	\$ 124.31	\$ 130.53	\$ 137.05	\$ 143.91	\$ 151.10
Outside City								
4	Small User	2.0	\$ 36.59	\$ 49.76	\$ 52.24	\$ 54.86	\$ 57.60	\$ 60.48
5	Medium User	4.0	\$ 70.13	\$ 95.37	\$ 100.14	\$ 105.15	\$ 110.40	\$ 115.92
6	Large User	8.0	\$ 137.21	\$ 186.60	\$ 195.93	\$ 205.73	\$ 216.01	\$ 226.81

Regional Bill Comparisons

Table 16 and 17 show the comparison of residential bills across regional water and sewer providers for customers using 4 thousand gallons. Table 18 shows the consolidated comparison.

As seen in Table 16, regional water bills average \$23.83 while Republic is currently at \$16.46 and remains below the regional average under proposed 2023 rates.

Table 17 shows the regional sewer bills average \$36.35 while Republic is currently at \$39.61 and is anticipated to increase to \$53.86 under the proposed 2023 rates.

It should be noted that rates for regional peers reflect existing rates at the time this analysis was prepared in 2022. Based on national trends it is likely that rates for other communities will be increasing over time as well.

August 29, 2022

Page 19

Table 16 – Regional Water Bill Comparison (4 Thousand Gallons)

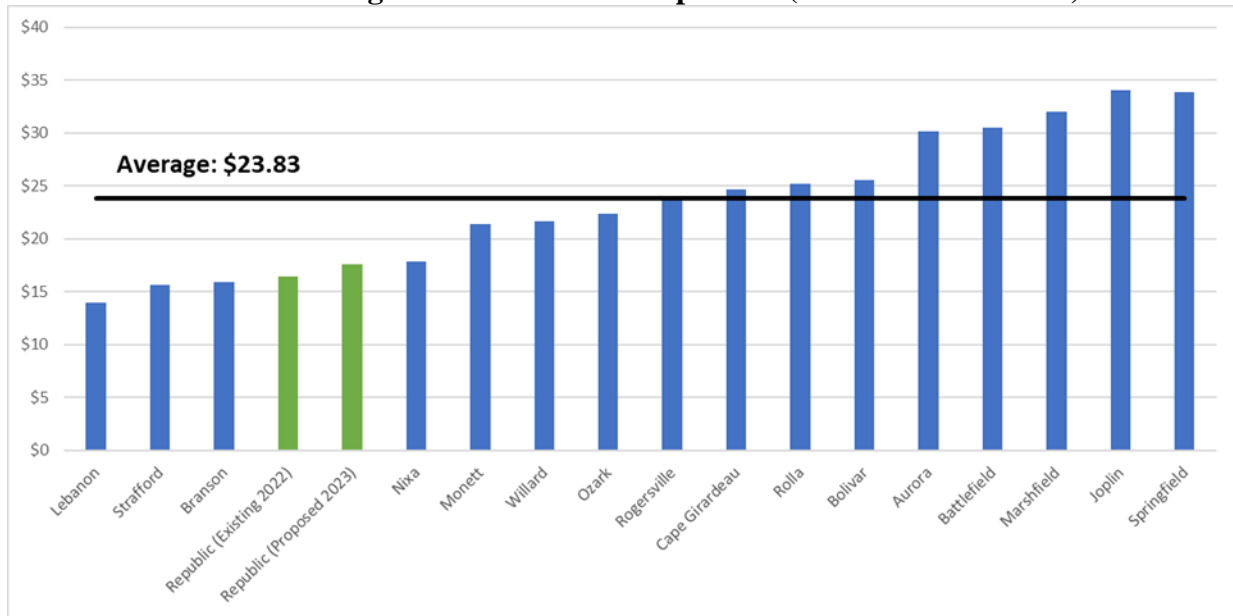
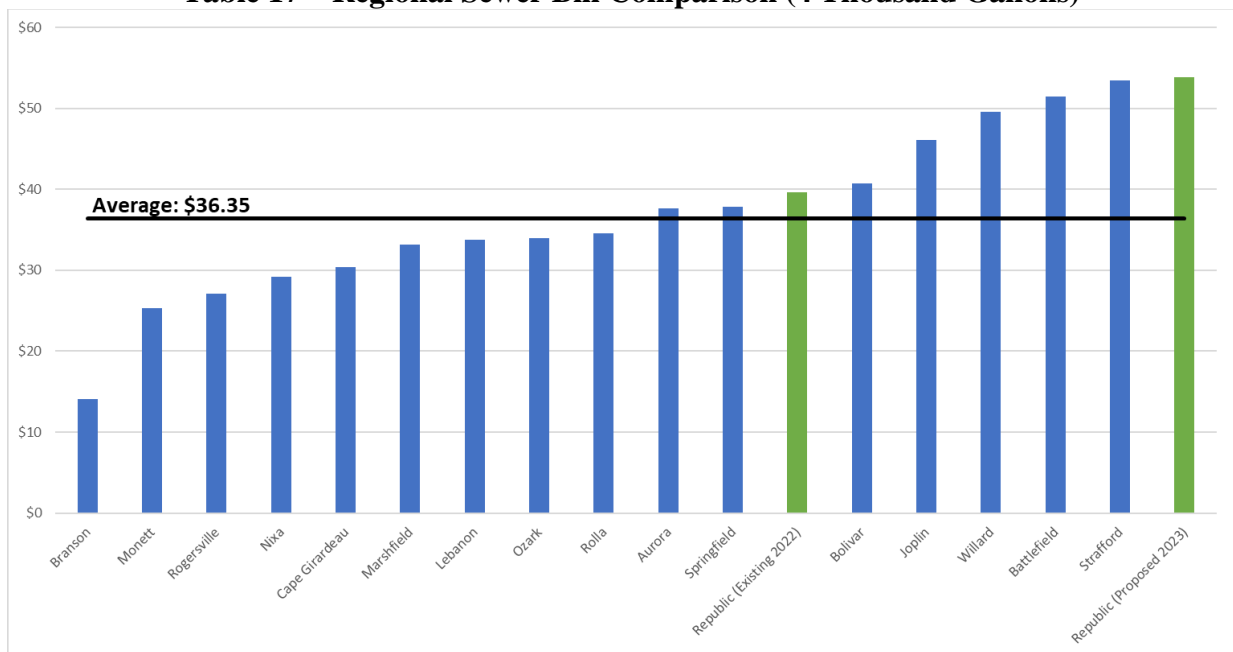


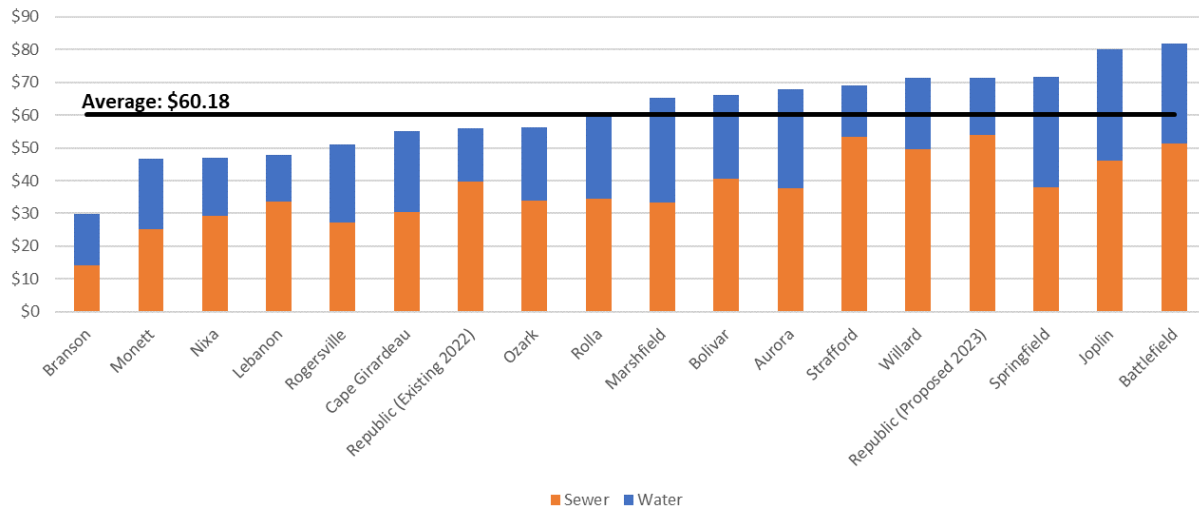
Table 17 – Regional Sewer Bill Comparison (4 Thousand Gallons)



August 29, 2022

Page 20

Table 18 – Regional Combined Bill Comparison (4 Thousand Gallons)



August 29, 2022

Page 21

Statement of Limitations

In preparation of the Financial Planning Update (2022 Study), Burns & McDonnell relied upon information provided by the City. The information included various analyses, computer-generated information and reports, audited financial reports, and other financial and statistical information, as well as other documents such as operating budgets and current rate and fee schedules. In addition, input to key assumptions regarding expected future levels of revenue, sales, and expenditures was provided by City staff to Burns & McDonnell. While Burns & McDonnell has no reason to believe that the information provided, and upon which Burns & McDonnell has relied, is inaccurate or incomplete in any material respect, Burns & McDonnell has not independently verified such information and cannot guarantee its accuracy or completeness.

Estimates and projections prepared by Burns & McDonnell relating to financial forecasting and costs are based on Burns & McDonnell's experience, qualifications, and judgment as a professional consultant. Since Burns & McDonnell has no control over weather, cost and availability of labor, material and equipment, labor productivity, contractors' procedures and methods, unavoidable delays, economic conditions, government regulations and laws (including interpretation thereof), competitive bidding, and market conditions or other factors affecting such estimates or projections, Burns & McDonnell does not guarantee the accuracy of its estimates or predictions.