



City of Tempe, Arizona

2023 Water and Wastewater Financial Model Update

September 12, 2023



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The City of Tempe, Arizona (City) contracted with Stantec Consulting Services Inc (Stantec) to conduct the 2022 Water and Wastewater Rate Study¹ (2022 Rate Study). The 2022 Rate Study established a plan of annual water and wastewater rate adjustments for the period March 1, 2023 through December 31, 2027. The plan was developed through multiple work sessions with City staff whereby the then-current revenue, expense budgets and capital improvement investments for both the Water and Wastewater Utilities (Utilities) were projected for 10 years defining the Utilities' revenue requirements. The plan of rate adjustments was then crafted to ensure that the Utilities' minimum operating requirements are met throughout the time period such as policy reserve levels, debt coverage and sustainable annual cash flows. The plan of water and wastewater rate increases developed in the 2022 Rate Study are shown in Table 1 below. Notably, the first year of water and wastewater rate adjustments identified in the 2022 Rate Study were implemented March 1, 2023.

Table 1: 2022 Rate Study Recommended Water and Wastewater Rate Adjustments

Effective Date	March 2023 (Adopted)	January 2024	January 2025	January 2026	January 2027
Water Rate Increase	5.50%	5.50%	5.50%	5.50%	5.50%
Wastewater Rate Increase	2.50%	4.00%	6.00%	6.00%	4.00%

In 2023, The City requested that Stantec assist in updating the Utilities' financial model projections with actual revenue and expense results from Fiscal Year (FY) 2023, preliminary FY 2023 end of year reserves, FY 2024 adopted capital investment plan and current bond repayment schedules. Stantec assisted the City in updating the 2022 Rate Study financial models with the most up-to-date data projecting the Utilities' necessary rate adjustments for the next four fiscal years. The following sections of this memorandum describe the material differences between the 2022 Rate Study rate adjustment recommendations and the updated rate adjustment plans for the Utilities.

REVENUE SUFFICIENCY ANALYSIS UPDATE

Stantec assisted City staff in updating the Water and Wastewater Utility financial models prepared in the 2022 Rate Study to reflect actual, unaudited, FY 2023 cash flows and the FY 2024 budget. The following tables show the variance between the 2022 Rate Study and the 2023 Financial Model Update for revenues, operating expenses, debt service, and capital for FY 2023 through FY 2027, based on the rate increases projected in the 2022 Rate Study. The dollar amounts in each table are rounded to one tenth of a million. In summary, water revenues are notably lower (largely attributable to recent weather conditions), operating expenses are higher (driven largely by elevated inflation levels), and capital expenditures have increased substantially (again in large part due to cost increases) as compared to the forecasts from the 2022 Rate Study.

¹ Final report dated October 13, 2022.

Table 2: Comparison of Operating Revenues (\$M)

	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027
Water					
2022 Rate Study	60.1	63.0	66.1	69.3	72.7
2023 Financial Model Update	55.2	57.4	62.0	64.8	67.8
Variance	(4.9)	(5.6)	(4.1)	(4.5)	(4.9)
Wastewater					
2022 Rate Study	33.6	34.8	36.5	38.7	40.6
2023 Financial Model Update	34.0	35.6	38.1	40.4	42.2
Variance	0.4	0.8	1.6	1.7	1.6

Table 3: Comparison of Operating Expenses (\$M)

	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027
Water					
2022 Rate Study	34.4	35.5	36.7	37.6	39.0
2023 Financial Model Update	32.9	40.4	41.7	42.9	44.3
Variance	(1.5)	4.9	5.0	5.3	5.3
Wastewater					
2022 Rate Study	15.3	16.0	17.0	21.1	21.5
2023 Financial Model Update	17.0	19.6	20.8	24.3	25.8
Variance	1.7	3.6	3.8	3.2	4.3

Table 4: Comparison of Capital Spending – Executed (\$M)

	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027
Water					
2022 Rate Study	45.2	37.1	37.3	43.7	43.1
2023 Financial Model Update	8.4	60.0	40.3	31.9	54.5
Variance	(36.8)	22.9	3.0	(11.8)	11.4
Wastewater					
2022 Rate Study	25.1	36.6	61.0	25.6	22.7
2023 Financial Model Update	3.6	30.0	28.7	28.9	16.6
Variance	(21.5)	(6.6)	(32.3)	3.3	(6.1)

Table 5: Comparison of Annual Debt Service (\$M)

	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027
Water					
2022 Rate Study	28.6	30.8	32.8	34.2	35.3
2023 Financial Model Update	26.5	26.5	32.4	39.0	43.1
Variance	(2.1)	(4.3)	(0.4)	4.8	7.8
Wastewater					
2022 Rate Study	18.8	20.6	23.0	23.2	23.2
2023 Financial Model Update	17.7	20.7	22.5	22.9	22.9
Variance	(1.1)	0.1	(0.5)	(0.3)	(0.3)

RESULTS

Decreased water demand in FY 2023 resulted in the Utility collecting lower than projected revenues. The projected revenues for FY 2024 have also been revised lower than the 2022 Rate Study projections in consideration of recent demand trends to be more conservative. Combined with increased FY 2024 operating expense projections and increased capital costs in the near term, the 2023 Financial Model Update is now recommending a water rate increase of 14.75% for all customers in FY 2024, instead of the original 5.50% from the 2022 Rate Study. Moreover, future rate increases are anticipated to be higher than the 2022 Rate Study as well, in large part due to the magnitude of the increased capital expenditure requirements.

The wastewater utility’s revenues have been negatively impacted by the reduced water demands, and operating expenses are forecast to be above the near-term projections of the 2022 Rate Study. As such 2023 Financial Model Update is recommending slightly higher rate increases of 6.25% for FY 2024 through FY 2027. The updated plan of water and wastewater rate adjustments is shown in Table 6.

Table 6: 2023 Financial Model Update Recommended Water and Wastewater Rate Increases

	March 2023 (Adopted)	January 2024	January 2025	January 2026	January 2027
Water Rate Increase	5.50%	14.75%	14.75%	12.00%	10.00%
Wastewater Rate Increase	2.50%	6.25%	6.25%	6.25%	6.25%

The resulting annual end-of-year reserves are contrasted in Table 7 for the 2022 Rate Study and the 2023 Financial Model Update, based on the updated assumptions discussed herein and the projected water and wastewater rate increases shown in Table 6.

Table 7: Comparison of Annual End of Year Reserves (\$M)

	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027
Water					
2022 Rate Study	59.1	54.4	49.2	43.7	39.4
2023 Financial Model Update	64.5	52.4	46.0	39.3	32.4
Variance	5.4	(2.0)	(3.2)	(4.4)	(7.0)
Wastewater					
2022 Rate Study	38.1	37.0	34.2	29.1	25.5
2023 Financial Model Update	40.8	40.8	36.7	31.1	26.4
Variance	2.7	3.8	2.5	2.0	0.9

The combined water and wastewater operating end of fiscal year fund balance from the 2022 Rate Study and 2023 Financial Model Update are shown in Figure 1. This figure demonstrates that, with the updated recommended plan of increases, the fund balance reaches approximately the same levels each year as the 2022 Rate Study. Tables 8 and 9 show the proposed water and wastewater rates for January 2024, utilizing the updated rate adjustment plan from the 2023 Financial Model Update, as presented in Table 6.

Figure 1: Comparison of Annual End of Year Reserves Versus Policy Target

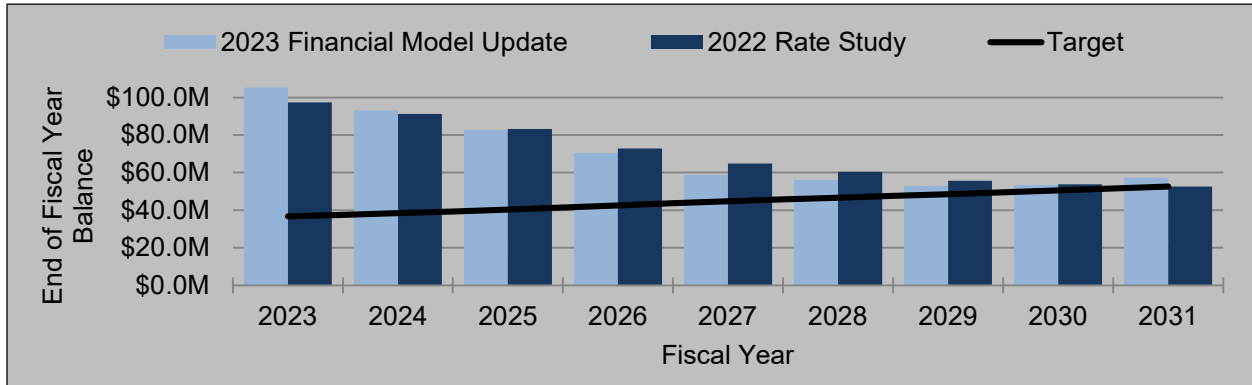


Table 8: Current and Recommended Inside City Water Rates

Monthly Service Charges	Current Rate as of March 2023	Recommended Rate January 2024
5/8"	\$10.25	\$11.75
3/4"	\$11.50	\$13.20
1"	\$16.80	\$19.30
1.5"	\$34.65	\$39.75
2"	\$65.45	\$75.10
3"	\$97.90	\$112.35
4"	\$228.10	\$261.75
6"	\$656.95	\$753.85
8"	\$1,018.85	\$1,169.15
10"	\$1,525.25	\$1,750.20
1.0" installed to accommodate sprinklers	\$10.25	\$11.75
Volume Charges Per 1,000 Gallons	Current Rate as of March 2023	Recommended Rate January 2024
Single-family		
0-8,000 gallons	\$2.53	\$2.90
8,001-16,000 gallons	\$3.93	\$4.51
16,001-36,000 gallons	\$5.00	\$5.74
36,001+ gallons	\$5.79	\$6.64
Multi-family	\$2.81	\$3.22
Commercial	\$3.16	\$3.63
Construction	\$4.66	\$5.35
Industrial	\$3.12	\$3.58
Landscape	\$4.26	\$4.89

Table 9: Current and Recommended Inside City Wastewater Rates

Monthly Service Charges	Current Rate as of March 2023	Recommended Rate January 2024
5/8"	\$9.30	\$9.90
3/4"	\$10.70	\$11.40
1"	\$16.65	\$17.70
1.5"	\$36.70	\$39.00
2"	\$71.30	\$75.75
3"	\$107.80	\$114.55
4"	\$254.05	\$269.95
6"	\$736.00	\$782.00
8"	\$1,142.65	\$1,214.10
10"	\$1,711.75	\$1,818.75
Volume Charges per 1,000 Gallons	Current Rate as of March 2023	Recommended Rate January 2024
Single-family	\$2.12	\$2.25
Multi-family	\$2.39	\$2.54
Commercial - Dry Cleaners	\$4.44	\$4.72
Commercial - Food Sales	\$4.44	\$4.72
Commercial - Hospitals	\$3.03	\$3.22
Commercial - Other	\$3.03	\$3.22
Commercial - Restaurants/Bakeries	\$4.44	\$4.72
Commercial - Self-Service Laundry	\$3.03	\$3.22
Industrial - Volume	\$2.61	\$2.77
Industrial - TSS (per pound)	\$0.25	\$0.27
Industrial - COD (per pound)	\$0.10	\$0.11

The stormwater/environmental fee recommended in the 2022 Rate study was adopted in March of 2023, and will remain at \$3.00 for the time being. Stantec and The Utility will evaluate the costs associated with the stormwater/environmental fee during the 2024 Rate Study, and update the fee as needed.

Finally, Appendix A (water system) and B (wastewater system) of this memorandum include cash flow projections that indicate all anticipated revenues from residential and nonresidential customers and the overall expenses for providing water and wastewater service, respectively.

Disclaimer

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Additionally, the purpose of this document is to summarize Stantec’s analysis and findings related to this project, and it is not intended to address all aspects that may surround the subject area. Therefore, this document may have limitations, assumptions, or reliance on data that are not readily apparent on the face of it. Moreover, the reader should understand that Stantec was called on to provide judgments on a variety of critical factors which are incapable of precise measurement. As such, the use of this document and its findings by the City should only occur after consultation with Stantec, and any use of this document and findings by any other person is done so entirely at their own risk.

Appendix A - Water

	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031
Operating Revenue									
1 Residential and Non-Residential Rate Revenue	\$ 54,215,634	\$ 56,000,000	\$ 63,854,473	\$ 72,811,202	\$ 81,035,255	\$ 88,578,454	\$ 95,064,176	\$ 99,191,592	\$ 103,499,085
2 Change in Revenue From Growth	\$ -	\$ (353,400)	\$ (402,446)	\$ (458,296)	\$ (509,388)	\$ (556,068)	\$ (595,994)	\$ (621,034)	\$ (647,132)
3 Subtotal	\$ 54,215,634	\$ 55,646,600	\$ 63,452,028	\$ 72,352,906	\$ 80,525,867	\$ 88,022,386	\$ 94,468,183	\$ 98,570,557	\$ 102,851,953
4 Weighted Average Rate Increase	0.00%	7.34%	7.31%	5.95%	4.96%	3.98%	2.48%	2.48%	2.47%
5 Additional Rate Revenue From Rate Increase	\$ -	\$ 4,081,775	\$ 4,841,214	\$ 4,305,577	\$ 3,993,278	\$ 3,501,883	\$ 2,342,339	\$ 2,444,057	\$ 2,543,015
6 Total Rate Revenue	\$ 54,215,634	\$ 59,728,375	\$ 68,993,242	\$ 76,658,483	\$ 84,519,145	\$ 91,524,268	\$ 96,810,521	\$ 101,014,614	\$ 105,394,968
7 Plus: Other Operating Revenue	\$ 1,024,961	\$ 760,034	\$ 763,064	\$ 766,246	\$ 769,587	\$ 773,095	\$ 776,778	\$ 780,645	\$ 784,706
8 Equals: Total Operating Revenue	\$ 55,240,595	\$ 60,488,409	\$ 68,856,306	\$ 77,424,729	\$ 85,288,732	\$ 92,297,363	\$ 97,587,299	\$ 101,795,259	\$ 106,179,674
Less: Operating Expenses									
9 Operating Expenses	\$ (32,509,689)	\$ (38,857,486)	\$ (40,051,860)	\$ (41,297,641)	\$ (42,598,273)	\$ (43,957,503)	\$ (45,379,462)	\$ (46,868,647)	\$ (48,430,075)
10 Equals: Net Operating Income	\$ 22,730,906	\$ 21,630,923	\$ 28,804,446	\$ 36,127,088	\$ 42,690,459	\$ 48,339,860	\$ 52,207,837	\$ 54,926,612	\$ 57,749,599
Plus: Non-Operating Income/(Expense)									
11 Non-Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12 Interest Income	\$ 661,165	\$ 584,337	\$ 491,776	\$ 426,549	\$ 358,677	\$ 323,253	\$ 317,790	\$ 316,567	\$ 333,245
13 System Development Fees	\$ 468,500	\$ 469,999	\$ 471,503	\$ 473,012	\$ 474,526	\$ 476,044	\$ 477,567	\$ 479,095	\$ 480,628
14 Transfers In	\$ 182,406	\$ 182,406	\$ 182,406	\$ 182,406	\$ 182,406	\$ 182,406	\$ 182,406	\$ 182,406	\$ 182,406
15 Equals: Net Income	\$ 24,042,977	\$ 22,867,665	\$ 29,950,132	\$ 37,209,055	\$ 43,706,068	\$ 49,321,563	\$ 53,185,601	\$ 55,904,680	\$ 58,745,878
Less: Revenues Excluded From Coverage Test									
16 Excluded Debt Service Revenue	\$ (468,500)	\$ (469,999)	\$ (471,503)	\$ (473,012)	\$ (474,526)	\$ (476,044)	\$ (477,567)	\$ (479,095)	\$ (480,628)
17 Transfers In	\$ (182,406)	\$ (182,406)	\$ (182,406)	\$ (182,406)	\$ (182,406)	\$ (182,406)	\$ (182,406)	\$ (182,406)	\$ (182,406)
18 Equals: Net Income Available For Debt Service	\$ 23,392,071	\$ 22,215,260	\$ 29,296,223	\$ 36,553,637	\$ 43,049,136	\$ 48,663,113	\$ 52,525,628	\$ 55,243,179	\$ 58,082,844
Total Senior Debt Service Coverage Test									
19 Net Income Available for Debt Service	\$ 23,392,071	\$ 22,215,260	\$ 29,296,223	\$ 36,553,637	\$ 43,049,136	\$ 48,663,113	\$ 52,525,628	\$ 55,243,179	\$ 58,082,844
20 Existing Bond Debt Service	\$ 8,378,747	\$ 8,348,271	\$ 8,216,150	\$ 8,212,818	\$ 8,212,182	\$ 8,268,209	\$ 8,279,332	\$ 8,282,331	\$ 7,679,204
21 New Bond Debt Service (Model Calculated)	\$ 1,981,439	\$ 2,611,887	\$ 9,160,269	\$ 17,284,947	\$ 23,367,622	\$ 27,996,376	\$ 31,471,714	\$ 34,525,807	\$ 37,670,347
22 Existing Other Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23 New Other Debt Service (Model Calculated)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24 Total Annual Debt Service	\$ 10,360,186	\$ 10,960,158	\$ 17,376,419	\$ 25,497,765	\$ 31,579,804	\$ 36,264,585	\$ 39,751,046	\$ 42,808,138	\$ 45,349,551
25 Calculated Senior Debt Service Coverage	Targ. 1.50	2.26	2.03	1.69	1.43	1.36	1.34	1.32	1.29
26 Additional Fee Revenue	\$ 468,500	\$ 469,999	\$ 471,503	\$ 473,012	\$ 474,526	\$ 476,044	\$ 477,567	\$ 479,095	\$ 480,628
27 Total Income for Debt Service Including Fees	\$ 23,860,571	\$ 22,685,259	\$ 29,767,726	\$ 37,026,649	\$ 43,523,662	\$ 49,139,157	\$ 53,003,195	\$ 55,722,274	\$ 58,563,472
28 Calculated Senior Debt Service Coverage including Fees	Targ. 1.50	2.30	2.07	1.71	1.45	1.38	1.33	1.30	1.29
Total Subordinate Debt Service Coverage Test									
29 Net Income Available for Debt Service	\$ 23,392,071	\$ 22,215,260	\$ 29,296,223	\$ 36,553,637	\$ 43,049,136	\$ 48,663,113	\$ 52,525,628	\$ 55,243,179	\$ 58,082,844
30 Existing Loan Debt Service	\$ 16,121,615	\$ 15,546,490	\$ 15,062,812	\$ 13,518,815	\$ 11,506,568	\$ 8,843,868	\$ 8,819,075	\$ 8,801,350	\$ 5,107,269
31 New Loan Debt Service (Model Calculated)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
32 Total Annual Debt Service	\$ 16,121,615	\$ 15,546,490	\$ 15,062,812	\$ 13,518,815	\$ 11,506,568	\$ 8,843,868	\$ 8,819,075	\$ 8,801,350	\$ 5,107,269
33 Calculated Subordinate Debt Service Coverage	Targ. 1.50	1.45	1.43	1.94	2.70	3.74	5.50	5.96	8.12
Total All-In Debt Service Coverage Test									
34 Net Income Available for Debt Service	\$ 23,392,071	\$ 22,215,260	\$ 29,296,223	\$ 36,553,637	\$ 43,049,136	\$ 48,663,113	\$ 52,525,628	\$ 55,243,179	\$ 58,082,844
35 Total Bond Debt Service	\$ 10,360,186	\$ 10,960,158	\$ 17,376,419	\$ 25,497,765	\$ 31,579,804	\$ 36,264,585	\$ 39,751,046	\$ 42,808,138	\$ 45,349,551
36 Total Loan Debt Service	\$ 16,121,615	\$ 15,546,490	\$ 15,062,812	\$ 13,518,815	\$ 11,506,568	\$ 8,843,868	\$ 8,819,075	\$ 8,801,350	\$ 5,107,269
37 Total Other Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
38 Total Annual Debt Service	\$ 26,481,802	\$ 26,506,648	\$ 32,439,231	\$ 39,016,580	\$ 43,086,372	\$ 45,108,453	\$ 48,570,121	\$ 49,609,489	\$ 50,456,820
39 Calculated All-In Debt Service Coverage	Targ. 1.50	0.88	0.84	0.90	0.94	1.00	1.08	1.11	1.15
40 Additional Fee Revenue	\$ 468,500	\$ 469,999	\$ 471,503	\$ 473,012	\$ 474,526	\$ 476,044	\$ 477,567	\$ 479,095	\$ 480,628
41 Total Income for Debt Service Including Fees	\$ 23,860,571	\$ 22,685,259	\$ 29,767,726	\$ 37,026,649	\$ 43,523,662	\$ 49,139,157	\$ 53,003,195	\$ 55,722,274	\$ 58,563,472
42 Calculated All-In Debt Service Coverage with Fees	Targ. 1.50	0.90	0.86	0.92	0.95	1.01	1.09	1.12	1.16
Cash Flow Test									
43 Net Income Available For Debt Service	\$ 23,392,071	\$ 22,215,260	\$ 29,296,223	\$ 36,553,637	\$ 43,049,136	\$ 48,663,113	\$ 52,525,628	\$ 55,243,179	\$ 58,082,844
44 Less: Non-Operating Expenditures	\$ 182,406	\$ 182,406	\$ 182,406	\$ 182,406	\$ 182,406	\$ 182,406	\$ 182,406	\$ 182,406	\$ 182,406
45 Net Interfund Transfers (In - Out)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
46 Debt Service Payment (Net of Development Fee Contributions)	\$ (26,481,802)	\$ (26,506,648)	\$ (32,439,231)	\$ (39,016,580)	\$ (43,086,372)	\$ (45,108,453)	\$ (48,570,121)	\$ (49,609,489)	\$ (50,456,820)
47 Non-Revenue Fund System Development Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
48 Projects Designated To Be Paid With Cash	\$ -	\$ (1,800,000)	\$ (1,831,750)	\$ (2,712,180)	\$ (5,385,136)	\$ (2,156,479)	\$ (3,300,000)	\$ (3,300,000)	\$ (3,300,000)
49 Projects Paid With Reserve Funds	\$ -	\$ (4,630,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
50 Capital Outlay	\$ (348,600)	\$ (1,570,750)	\$ (1,610,026)	\$ (1,650,276)	\$ (1,691,533)	\$ (1,733,821)	\$ (1,777,166)	\$ (1,821,597)	\$ (1,867,137)
51 Plus: Revenues Excluded From Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
52 Net Cash Flow	\$ (3,255,924)	\$ (12,109,741)	\$ (6,402,379)	\$ (6,642,993)	\$ (6,931,499)	\$ (153,234)	\$ (939,253)	\$ 694,499	\$ 2,641,293
Unrestricted Reserve Fund Test									
53 Balance At Beginning Of Fiscal Year	\$ 67,744,516	\$ 64,488,575	\$ 62,378,820	\$ 45,976,429	\$ 39,333,426	\$ 32,401,918	\$ 32,248,675	\$ 31,309,414	\$ 32,003,906
54 Net Cash Flow	\$ (3,255,924)	\$ (12,109,741)	\$ (6,402,379)	\$ (6,642,993)	\$ (6,931,499)	\$ (153,234)	\$ (939,253)	\$ 694,499	\$ 2,641,293
55 Balance At End Of Fiscal Year	\$ 64,488,592	\$ 52,378,833	\$ 45,976,442	\$ 39,333,436	\$ 32,401,926	\$ 32,248,683	\$ 31,309,422	\$ 32,003,914	\$ 34,645,199
56 Minimum Working Capital Reserve Target	\$ 21,623,000	\$ 22,862,000	\$ 24,035,000	\$ 25,250,000	\$ 26,576,000	\$ 27,940,000	\$ 29,280,000	\$ 30,670,000	\$ 32,172,848
57 Excess/(Deficiency) Of Working Capital To Target	\$ 42,865,592	\$ 29,516,833	\$ 21,941,442	\$ 14,083,436	\$ 5,825,926	\$ 4,308,683	\$ 2,029,422	\$ 1,333,914	\$ 2,472,351

Appendix B - Wastewater

	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031
Operating Revenue									
1 Residential and Non-Residential Rate Revenue	\$ 32,722,884	\$ 34,350,000	\$ 36,496,875	\$ 38,777,930	\$ 41,201,550	\$ 43,776,647	\$ 46,512,688	\$ 49,419,731	\$ 52,508,464
2 Change in Revenue From Growth	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3 Subtotal	\$ 32,722,884	\$ 34,350,000	\$ 36,496,875	\$ 38,777,930	\$ 41,201,550	\$ 43,776,647	\$ 46,512,688	\$ 49,419,731	\$ 52,508,464
4 Weighted Average Rate Increase	0.00%	3.11%	3.10%	3.10%	3.10%	3.11%	3.10%	3.10%	3.09%
5 Additional Rate Revenue From Rate Increase	\$ -	\$ 1,067,641	\$ 1,131,175	\$ 1,201,873	\$ 1,276,991	\$ 1,360,633	\$ 1,441,603	\$ 1,531,703	\$ 1,622,840
6 Total Rate Revenue	\$ 32,722,884	\$ 35,417,641	\$ 37,628,050	\$ 39,979,803	\$ 42,478,541	\$ 45,137,280	\$ 47,954,290	\$ 50,951,433	\$ 54,131,303
7 Plus: Other Operating Revenue	\$ 1,240,167	\$ 807,026	\$ 909,016	\$ 811,491	\$ 813,697	\$ 815,595	\$ 817,571	\$ 819,829	\$ 821,771
8 Equals: Total Operating Revenue	\$ 33,963,051	\$ 36,224,667	\$ 38,437,066	\$ 40,791,294	\$ 43,292,238	\$ 45,952,875	\$ 48,771,861	\$ 51,771,062	\$ 54,953,074
Less: Operating Expenses									
9 Operating Expenses ¹	\$ (16,846,887)	\$ (18,839,235)	\$ (19,384,765)	\$ (19,952,451)	\$ (20,543,817)	\$ (21,160,428)	\$ (21,804,041)	\$ (22,476,630)	\$ (23,180,321)
10 Equals: Net Operating Income	\$ 17,116,164	\$ 17,385,432	\$ 19,052,301	\$ 20,838,843	\$ 22,748,421	\$ 24,792,447	\$ 26,967,820	\$ 29,294,432	\$ 31,772,753
Plus: Non-Operating Income/(Expense)									
11 Non-Operating Revenue	\$ 5,298	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12 Interest Income	\$ 697,502	\$ 699,514	\$ 675,148	\$ 622,712	\$ 566,716	\$ 526,148	\$ 501,830	\$ 493,020	\$ 502,099
13 System Development Fees	\$ 369,417	\$ 370,895	\$ 372,379	\$ 373,869	\$ 375,364	\$ 376,865	\$ 378,372	\$ 379,885	\$ 381,405
14 Transfers In	\$ 482,568	\$ 3,607,568	\$ 482,568	\$ 482,568	\$ 482,568	\$ 482,568	\$ 482,568	\$ 482,568	\$ 482,568
15 Equals: Net Income	\$ 18,670,949	\$ 22,063,409	\$ 20,882,396	\$ 22,317,992	\$ 24,173,069	\$ 26,178,028	\$ 28,330,890	\$ 30,649,905	\$ 33,138,826
Less: Revenues Excluded From Coverage Test									
16 Excluded Debt Service Revenue	\$ (369,417)	\$ (370,895)	\$ (372,379)	\$ (373,869)	\$ (375,364)	\$ (376,865)	\$ (378,372)	\$ (379,885)	\$ (381,405)
17 Transfers In	\$ (482,568)	\$ (3,607,568)	\$ (482,568)	\$ (482,568)	\$ (482,568)	\$ (482,568)	\$ (482,568)	\$ (482,568)	\$ (482,568)
18 Equals: Net Income Available For Debt Service	\$ 17,818,964	\$ 18,084,946	\$ 19,727,449	\$ 21,461,555	\$ 23,315,137	\$ 25,318,595	\$ 27,469,650	\$ 29,787,452	\$ 32,274,853
Total Senior Debt Service Coverage Test									
19 Net Income Available for Debt Service	\$ 17,818,964	\$ 18,084,946	\$ 19,727,449	\$ 21,461,555	\$ 23,315,137	\$ 25,318,595	\$ 27,469,650	\$ 29,787,452	\$ 32,274,853
20 Existing Bond Debt Service	\$ 3,453,711	\$ 3,450,815	\$ 3,505,152	\$ 3,504,060	\$ 3,505,049	\$ 3,537,453	\$ 3,538,251	\$ 3,540,882	\$ 3,037,869
21 New Bond Debt Service (Model Calculated)	\$ 1,363,424	\$ 4,604,524	\$ 7,767,618	\$ 11,025,639	\$ 12,896,289	\$ 14,982,864	\$ 16,937,277	\$ 18,950,322	\$ 21,023,759
22 Existing Other Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23 New Other Debt Service (Model Calculated)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24 Total Annual Debt Service	\$ 4,817,135	\$ 8,055,339	\$ 11,272,770	\$ 14,529,699	\$ 16,401,338	\$ 18,520,317	\$ 20,475,528	\$ 22,491,204	\$ 24,061,628
25 <i>Calculated Senior Debt Service Coverage</i>	<i>Targ. 1.50</i>	<i>3.70</i>	<i>2.25</i>	<i>1.75</i>	<i>1.48</i>	<i>1.37</i>	<i>1.34</i>	<i>1.32</i>	<i>1.34</i>
26 Additional Fee Revenue	\$ 369,417	\$ 370,895	\$ 372,379	\$ 373,869	\$ 375,364	\$ 376,865	\$ 378,372	\$ 379,885	\$ 381,405
27 Total Income for Debt Service Including Fees	\$ 18,188,381	\$ 18,455,841	\$ 20,099,828	\$ 21,835,424	\$ 23,690,501	\$ 25,695,460	\$ 27,848,022	\$ 30,167,337	\$ 32,656,258
28 <i>Calculated Senior Debt Service Coverage including Fees</i>	<i>Targ. 1.50</i>	<i>3.78</i>	<i>2.29</i>	<i>1.78</i>	<i>1.50</i>	<i>1.44</i>	<i>1.39</i>	<i>1.36</i>	<i>1.38</i>
Total Subordinate Debt Service Coverage Test									
29 Net Income Available for Debt Service	\$ 17,818,964	\$ 18,084,946	\$ 19,727,449	\$ 21,461,555	\$ 23,315,137	\$ 25,318,595	\$ 27,469,650	\$ 29,787,452	\$ 32,274,853
30 Existing Loan Debt Service	\$ 12,894,084	\$ 12,596,864	\$ 11,245,881	\$ 8,323,473	\$ 6,504,811	\$ 4,142,337	\$ 4,117,853	\$ 2,335,276	\$ 1,702,173
31 New Loan Debt Service (Model Calculated)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
32 Total Annual Debt Service	\$ 12,894,084	\$ 12,596,864	\$ 11,245,881	\$ 8,323,473	\$ 6,504,811	\$ 4,142,337	\$ 4,117,853	\$ 2,335,276	\$ 1,702,173
33 <i>Calculated Subordinate Debt Service Coverage</i>	<i>Targ. 1.50</i>	<i>1.38</i>	<i>1.44</i>	<i>1.75</i>	<i>2.58</i>	<i>3.58</i>	<i>6.11</i>	<i>12.76</i>	<i>18.96</i>
Total All-In Debt Service Coverage Test									
34 Net Income Available for Debt Service	\$ 17,818,964	\$ 18,084,946	\$ 19,727,449	\$ 21,461,555	\$ 23,315,137	\$ 25,318,595	\$ 27,469,650	\$ 29,787,452	\$ 32,274,853
35 Total Bond Debt Service	\$ 4,817,135	\$ 8,055,339	\$ 11,272,770	\$ 14,529,699	\$ 16,401,338	\$ 18,520,317	\$ 20,475,528	\$ 22,491,204	\$ 24,061,628
36 Total Loan Debt Service	\$ 12,894,084	\$ 12,596,864	\$ 11,245,881	\$ 8,323,473	\$ 6,504,811	\$ 4,142,337	\$ 4,117,853	\$ 2,335,276	\$ 1,702,173
37 Total Annual Debt Service	\$ 17,711,220	\$ 20,652,203	\$ 22,518,652	\$ 22,853,173	\$ 22,906,149	\$ 22,662,654	\$ 24,593,381	\$ 24,826,479	\$ 25,763,801
38 <i>Calculated All-In Debt Service Coverage</i>	<i>Targ. 1.50</i>	<i>1.01</i>	<i>0.88</i>	<i>0.88</i>	<i>0.94</i>	<i>1.02</i>	<i>1.12</i>	<i>1.20</i>	<i>1.25</i>
39 Additional Fee Revenue	\$ 369,417	\$ 370,895	\$ 372,379	\$ 373,869	\$ 375,364	\$ 376,865	\$ 378,372	\$ 379,885	\$ 381,405
40 Total Income for Debt Service Including Fees	\$ 18,188,381	\$ 18,455,841	\$ 20,099,828	\$ 21,835,424	\$ 23,690,501	\$ 25,695,460	\$ 27,848,022	\$ 30,167,337	\$ 32,656,258
41 <i>Calculated All-In Debt Service Coverage with Fees</i>	<i>Targ. 1.50</i>	<i>1.03</i>	<i>0.89</i>	<i>0.89</i>	<i>0.96</i>	<i>1.03</i>	<i>1.13</i>	<i>1.22</i>	<i>1.27</i>
Cash Flow Test									
42 Net Income Available For Debt Service	\$ 17,818,964	\$ 18,084,946	\$ 19,727,449	\$ 21,461,555	\$ 23,315,137	\$ 25,318,595	\$ 27,469,650	\$ 29,787,452	\$ 32,274,853
43 Less: Non-Operating Expenditures	\$ 482,568	\$ 3,566,318	\$ (183,969)	\$ (3,127,851)	\$ (3,997,644)	\$ (3,988,703)	\$ (3,980,503)	\$ (3,980,503)	\$ (3,980,503)
44 Net Interfund Transfers (In - Out)	\$ (17,711,220)	\$ (20,652,203)	\$ (22,518,652)	\$ (22,853,173)	\$ (22,906,149)	\$ (22,662,654)	\$ (24,593,381)	\$ (24,826,479)	\$ (25,763,801)
45 Debt Service Payment (Net of Development Fee Contributions)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
46 Non-Revenue Fund System Development Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
47 Projects Designated To Be Paid With Cash	\$ -	\$ (300,000)	\$ (309,000)	\$ (318,270)	\$ (327,818)	\$ (337,653)	\$ (347,782)	\$ (358,216)	\$ (368,962)
48 Projects Paid With Reserve Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
49 Capital Outlay	\$ (131,400)	\$ (745,782)	\$ (762,934)	\$ (780,482)	\$ (798,434)	\$ (816,798)	\$ (835,585)	\$ (854,805)	\$ (874,465)
50 Plus: Revenues Excluded From Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
51 Net Cash Flow	\$ 458,912	\$ (46,721)	\$ (4,047,105)	\$ (5,618,220)	\$ (4,714,908)	\$ (2,487,212)	\$ (2,287,601)	\$ (232,551)	\$ 1,287,122
Unrestricted Reserve Fund Test									
52 Balance At Beginning Of Fiscal Year	\$ 40,365,540	\$ 40,824,434	\$ 40,777,695	\$ 36,730,574	\$ 31,112,338	\$ 26,397,415	\$ 23,910,190	\$ 21,622,576	\$ 21,390,013
53 Net Cash Flow	\$ 458,912	\$ (46,721)	\$ (4,047,105)	\$ (5,618,220)	\$ (4,714,908)	\$ (2,487,212)	\$ (2,287,601)	\$ (232,551)	\$ 1,287,122
54 Balance At End Of Fiscal Year	\$ 40,824,452	\$ 40,777,713	\$ 36,730,590	\$ 31,112,353	\$ 26,397,429	\$ 23,910,203	\$ 21,622,588	\$ 21,390,025	\$ 22,677,135
55 Minimum Working Capital Reserve Target	\$ 15,172,448	\$ 15,620,942	\$ 16,312,325	\$ 17,422,700	\$ 18,206,900	\$ 18,811,041	\$ 19,371,774	\$ 19,952,700	\$ 20,554,700
56 Excess/(Deficiency) Of Working Capital To Target	\$ 25,652,004	\$ 25,156,771	\$ 20,418,265	\$ 13,689,653	\$ 8,190,529	\$ 5,099,162	\$ 2,250,814	\$ 1,437,325	\$ 2,122,435

¹ Table 3 of this report includes Operating Expenses, Capital Outlay, and Transfers Out to reflect annual expenses to the operating budget