

MEMORANDUM

TO: Mayor and Council
THROUGH: Ken Jones, Deputy City Manager, Chief Financial Officer
FROM: Terry Piekarz, Municipal Utilities Director *TP*
DATE: August 27, 2021
SUBJECT: 2021 Water and Wastewater Financial Model Update Recommendations



BACKGROUND

The 2020 Water and Wastewater Rate Study (2020 Rate Study) resulted in a 5.5 percent water revenue adjustment, which was effective January 3, 2021, and no revenue adjustment for wastewater.

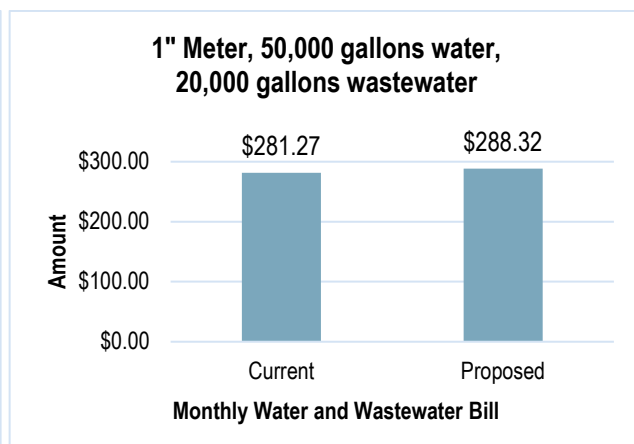
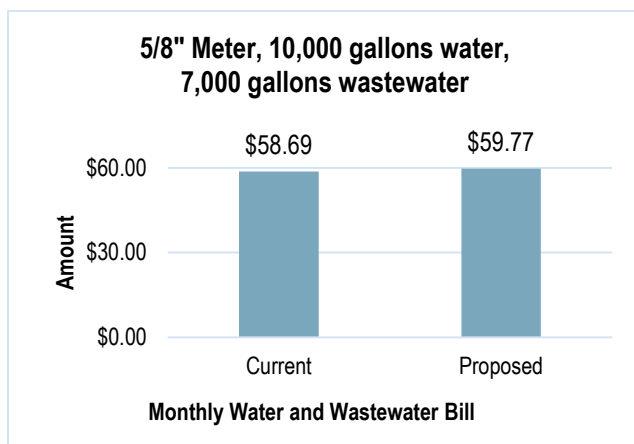
During non-rate study years, the Water and Wastewater Utility (Utility) completes a financial model update of the Water and Wastewater Fund to determine if revenue adjustments are necessary. This financial model update is not a comprehensive cost of service rate study. The process includes reviewing industry inflationary trends from the United States (U.S.) Consumer Price Index – Water and Sewerage Maintenance series, provided by the U.S. Bureau of Labor Statistics (www.bls.gov), and updating the financial model with revenues and expenses from the most recent fiscal year to determine revenue requirements for the next fiscal year. Any resulting revenue adjustment (rate increase) recommendation, if adopted, would apply to each water or wastewater service provided by the Utility and, if approved, would take effect in January of the following year. As with cost of service rate studies, the financial model update is completed with the assistance of a contracted third-party financial consultant.

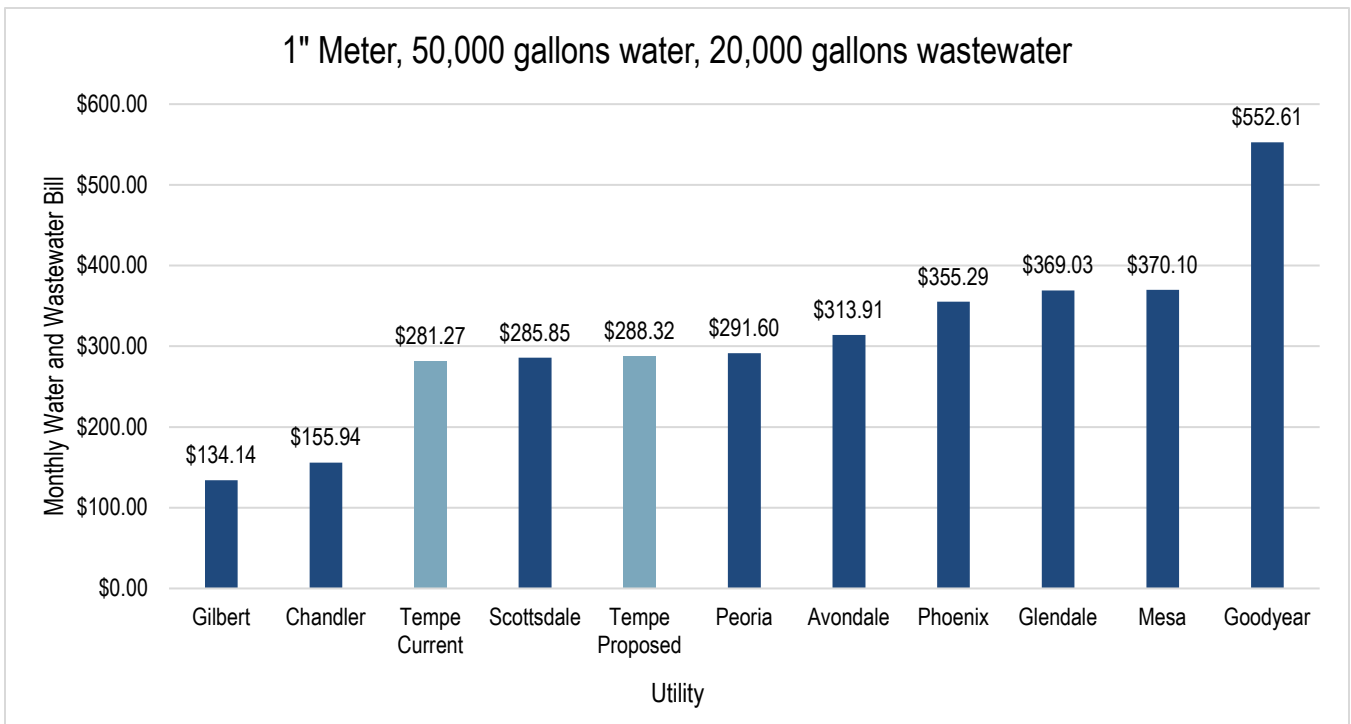
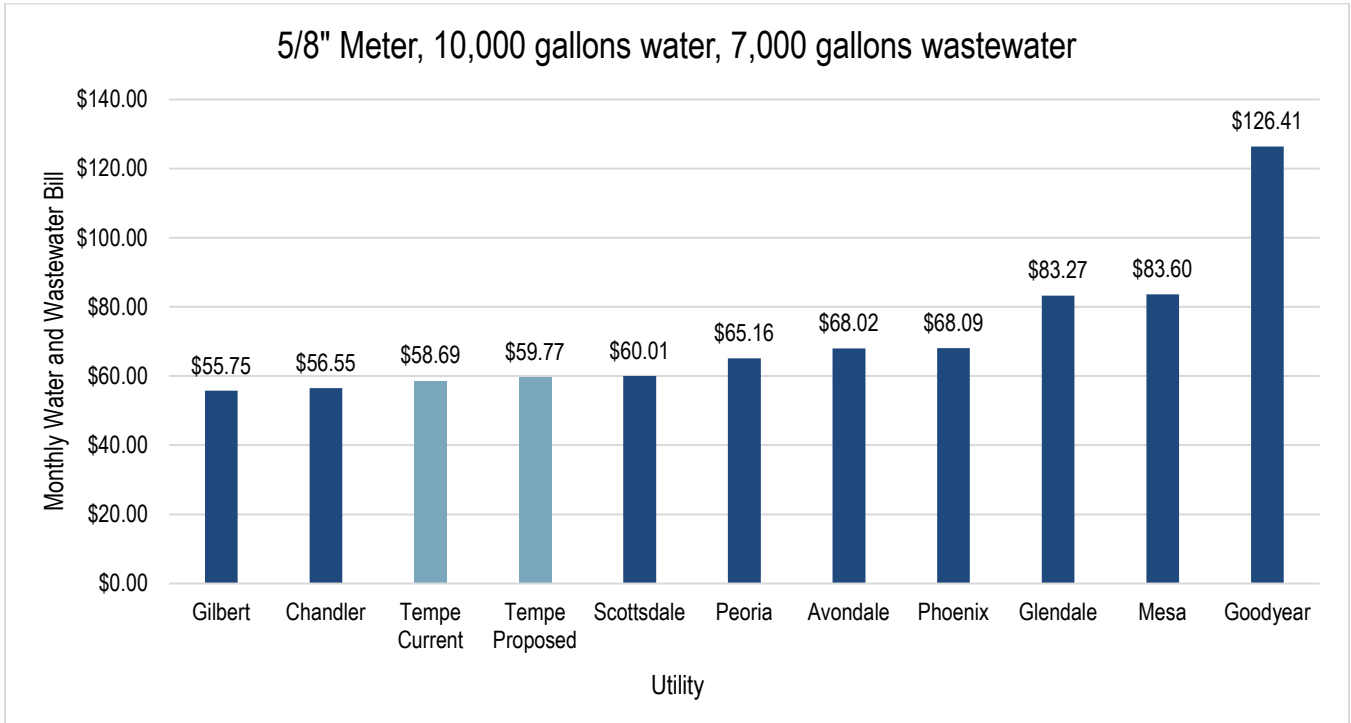
WATER AND WASTEWATER FINANCIAL MODEL UPDATE RECOMMENDATIONS

The 2020 Rate Study forecasted an additional 5.5 percent water revenue adjustment each year, beginning in January 2021. However, the 2021 Financial Model Update resulted in a recommendation of only a three percent increase for next year, effective January 2022. This revenue adjustment will help ensure the financial stability of the Utility through the collection of revenue sufficient to recover operating costs, finance capital improvement projects and maintain the fund balance at policy level, now and into the future. The 2021 Financial Model Update determined that wastewater revenue is sufficient at this time and confirmed the recommendations from the 2020 Rate Study that a revenue adjustment is not necessary. A technical memorandum from the City's financial consultant, Stantec Consulting Services, Inc., detailing the analysis performed and recommended revenue adjustment, is attached.

CUSTOMER IMPACTS AND BILL COMPARISON

The average single family residential customer using 10,000 gallons of water per month will see an increase of \$1.08 on their monthly water and wastewater bill. Higher volume single family residential customers, using 50,000 gallons of water per month, will see an increase of \$7.05.





PUBLIC INVOLVEMENT SUMMARY

Unlike during a full cost of service rate study, the Utility does not conduct an extensive public outreach campaign during the non-rate study year financial model update. The public is encouraged to provide input on recommended revenue adjustments beginning September 3, 2021, up to the Public Hearing at the Regular Council Meeting on November 9, 2021. This outreach and communication strategy for non-rate study years complies with regulatory requirements and is comparable to when other rates, charges, fees or tax changes are proposed throughout the City.

Pursuant to A.R.S. Section 9-511.01(A)(1), the technical memorandum supporting rate recommendations will be published with the City Clerk's Office and posted on www.tempe.gov, September 3, 2021. Pursuant to A.R.S. Section 9-511.01(B), the public hearing and Tempe City Council's consideration to adopt the rates will occur during the Regular Tempe City Council Meeting on November 9, 2021, providing a minimum of 60 days for public comment and feedback on recommended rates. A copy of the Notice of Intention, showing the date, time and place of the hearing, shall be published one time in a newspaper of general circulation within the boundaries of the municipality, not less than 20 days before the public hearing date.

Associated documents, including this memorandum and the technical memorandum supporting the financial model update recommendations, will be posted to the Utility's rate study webpage at www.tempe.gov/UtilityRateStudy.

TIMELINE

September 9, 2021, Regular Council Meeting – Adopt Notice of Intention to hold a public hearing for the consideration of a water rate adjustment on November 9, 2021.

November 9, 2021, Regular Council Meeting – Public hearing and adoption of water rate adjustments.

January 1, 2022 – If adopted, new water rates become effective.

ATTACHMENT

2021 Water and Wastewater Financial Model Update Technical Memorandum



City of Tempe, Arizona

2021 Water and Wastewater Financial Model Update

August 26, 2021



Prepared for: Mr. Terry Piekarz
 City of Tempe
 Municipal Utilities Director

Prepared by: Kyle Stevens *ks*
 Stantec Consulting Services Inc.
 Managing Consultant

Date: August 26, 2021

Subject: 2021 Water and Wastewater Financial Model Update

BACKGROUND

The City of Tempe, Arizona (City or Utility) contracted with Stantec Consulting Services, Inc. (Stantec), to conduct the 2020 Water and Wastewater Rate Study¹ (2020 Rate Study). The 2020 Rate Study established a plan of annual water and wastewater rate adjustments for the projection period of January 1, 2021, through December 31, 2025. The plan was developed through multiple work sessions with City staff. The then-current revenue, expense budgets and capital improvement investments for both the Water and Wastewater Utilities (Utilities) were projected for ten years to define the Utilities' short- and long-term revenue requirements. The plan of rate adjustments was calculated to ensure that the Utilities' minimum operating requirements are met throughout the projection period to maintain fund balance policy levels, debt coverage and sustainable annual cash flows. The plan of water and wastewater rate increases developed in the 2020 Rate Study are shown in Table 1 below. The first year of water rate adjustments² were implemented January 3, 2021.

Table 1: 2020 Rate Study Recommended Water and Wastewater Rate Adjustments

Effective Date	January 2021 (Adopted)	January 2022	January 2023	January 2024	January 2025
Water Rate Adjustment	5.50%	5.50%	5.50%	5.50%	5.50%
Wastewater Rate Adjustment	0.00%	0.00%	0.00%	0.00%	0.00%

In 2021, the City requested that Stantec update the Utilities' financial model projections with actual revenue and expense results from Fiscal Year 2020-2021, preliminary Fiscal Year 2020-2021 end-of-year fund balance, Fiscal Year 2022-2026 adopted capital improvement program and bond repayment schedules, inclusive of the Series 2021 Revenue Bond. Stantec updated the 2020 Rate Study financial models with the most up-to-date data to project the Utilities' necessary revenue adjustments for the next four fiscal years. The following sections of this memorandum describe the material differences between the 2020 Rate Study rate adjustment recommendations and the updated rate adjustment plan.

REVENUE SUFFICIENCY ANALYSIS UPDATE

Stantec updated the Utilities' financial models prepared during the 2020 Rate Study to reflect actual, unaudited, Fiscal Year 2020-2021 cash flows, and Fiscal Year 2021-2022 budgets. Tables 2-5 on the following pages show the variance between the 2020 Rate Study and the 2021 Financial Model Update for revenues, operating expenses, debt service and capital for Fiscal Year 2020-2021 through Fiscal Year 2024-2025, based on the rate increases projected in the 2020 Rate Study. The dollar amounts in each table are rounded to one one-hundredth of a million.

¹ Final report dated October 26, 2020.

² No wastewater rate increases were planned.

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

	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025
Water					
2020 Rate Study	53.09	56.63	59.33	62.19	65.18
2021 Financial Model Update	56.57	57.42	60.32	63.23	66.29
Variance	3.48	0.79	0.99	1.04	1.11
Wastewater					
2020 Rate Study	31.97	32.97	33.07	33.20	33.33
2021 Financial Model Update	31.95	32.14	32.31	32.44	32.57
Variance	(0.02)	(0.83)	(0.76)	(0.76)	(0.77)

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

	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025
Water					
2020 Rate Study	34.19	34.62	35.56	36.85	38.11
2021 Financial Model Update	33.68	32.85	33.74	34.97	36.16
Variance	(0.50)	(1.76)	(1.82)	(1.88)	(1.95)
Wastewater					
2020 Rate Study	14.35	14.85	15.11	15.78	16.12
2021 Financial Model Update	14.21	14.68	14.93	15.68	16.40
Variance	(0.14)	(0.18)	(0.19)	(0.10)	0.28

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

	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025
Water					
2020 Rate Study	29.44	27.24	28.05	32.75	29.07
2021 Financial Model Update	47.15	38.81	37.80	33.96	26.06
Variance	17.71	11.57	9.75	1.21	(3.01)
Wastewater					
2020 Rate Study	17.29	17.45	23.29	42.65	44.74
2021 Financial Model Update	12.48	24.55	22.01	37.69	40.27
Variance	(4.81)	7.09	(1.28)	(4.96)	(4.47)

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

	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025
Water					
2020 Rate Study	22.50	22.27	21.65	21.04	19.49
2021 Financial Model Update	22.78	24.48	23.86	23.25	21.71
Variance	0.28	2.21	2.21	2.21	2.21
Wastewater					
2020 Rate Study	16.13	15.73	15.43	14.13	11.21
2021 Financial Model Update	16.36	16.35	16.05	14.75	11.83
Variance	0.23	0.62	0.62	0.62	0.62

RESULTS AND RECOMMENDATION

Increased water demand during Fiscal Year 2020-2021 resulted in the Utility collecting higher than projected water revenues. This increase in revenue, coupled with rate model calibrations for debt service payments, completion of the Comprehensive Annual Financial Review (published after the completion of the 2020 Rate Study) and lower operations and maintenance expenses during Fiscal Year 2020-2021, resulted in the fund balance being higher at the end of Fiscal Year 2020-2021 than projected in the 2020 Rate Study. The financial model update determined that a January 2022 water rate increase of three (3.00) percent, instead of the original forecasted 5.50 percent, is sufficient without materially impacting the long-term financial stability of the Utility. This change brings rate revenues for Fiscal Year 2022-2023 through Fiscal Year 2024-2025 into closer alignment with the level projected in the 2020 Rate Study.

The Wastewater Utility’s operating and capital expense assumptions depend heavily on the projected timeline of the Kyrene Water Reclamation Facility’s rehabilitation and return to service. Operating expenses have been adjusted upward since the 2020 Rate Study to reflect current estimates, resulting in the need for a rate increase in Fiscal Year 2024-2025. At this time, no other increases are anticipated until 2025.

The updated plan of water and wastewater rate adjustments is shown in Table 6.

Table 6: 2021 Financial Model Update Recommended Water and Wastewater Rate Increases

	January 2021 (Adopted)	January 2022	January 2023	January 2024	January 2025
Water Rate Increase	5.50%	3.00%	5.50%	5.50%	5.50%
Wastewater Rate Increase	0.00%	0.00%	0.00%	0.00%	3.00%

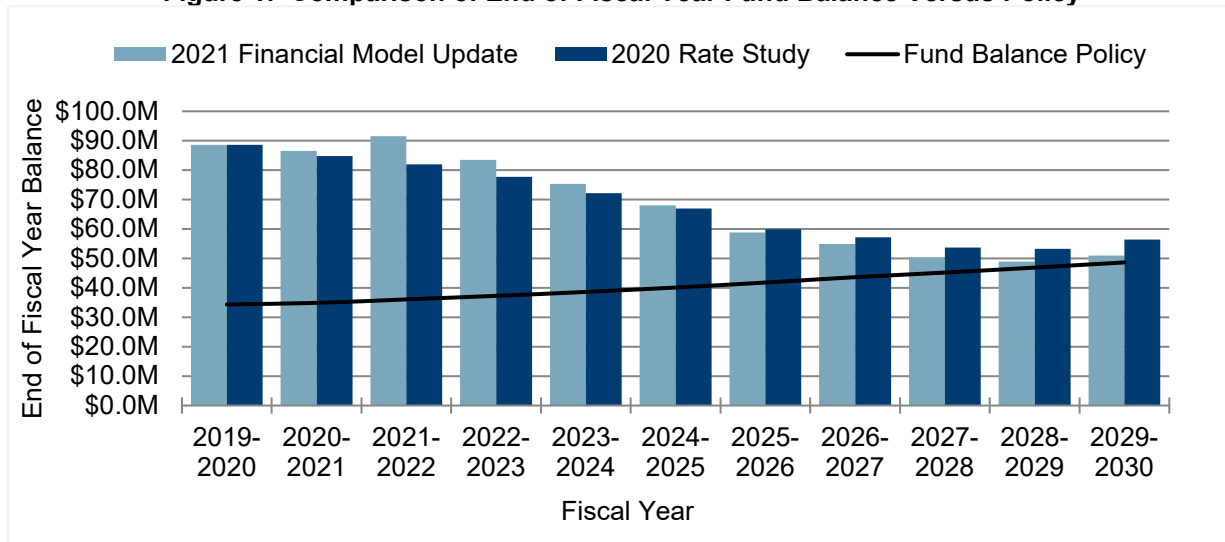
The resulting annual end-of-year fund balances for the 2020 Rate Study and the 2021 Financial Model Update are contrasted in Table 7, based on the updated assumptions discussed herein and the projected water and wastewater rate increases shown in Table 6.

Table 7: Comparison of Annual End of Fiscal Year Fund Balance (\$M)

	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025
Water					
2020 Rate Study	46.28	41.64	37.19	33.12	30.06
2021 Financial Model Update	48.16	50.71	43.22	37.26	32.34
Variance	1.88	9.07	6.03	4.13	2.28
Wastewater					
2020 Rate Study	38.48	40.31	40.56	39.06	36.90
2021 Financial Model Update	38.35	40.85	40.31	38.12	35.68
Variance	(0.13)	0.54	(0.25)	(0.94)	(1.22)

The combined water and wastewater end of fiscal year fund balance, from the 2020 Rate Study and 2021 Financial Model Update, are shown in Figure 1. This figure demonstrates that, with the 2021 Financial Model Update recommended plan of rate adjustments, the fund balance will reach approximately the same level each year as the 2020 Rate Study plan.

Figure 1: Comparison of End of Fiscal Year Fund Balance Versus Policy



Tables 8 and 9 show the proposed water rates for January 2022, utilizing the updated rate adjustment plan from the 2021 Financial Model Update, as seen in Table 6.

Table 8: Current and Recommended Inside City Water Rates

Monthly Service Charges by Meter Size	Current Rate as of January 2021	Recommended Rate January 2022
5/8"	\$13.15	\$13.55
3/4"	\$14.85	\$15.30
1"	\$22.15	\$22.80
1.5"	\$47.00	\$48.40
2"	\$91.60	\$94.35
3"	\$207.25	\$213.45
4"	\$298.70	\$307.65
6"	\$1,148.55	\$1,183.00
8"	\$2,004.35	\$2,064.50
10"	\$3,002.80	\$3,092.90
Volume Charges by Customer Classification	Current Rate	Recommended Rate January 2022
Single Family		
Tier 1: 0-6,000 gallons	\$1.84	\$1.90
Tier 2: 6,001-12,000 gallons	\$2.83	\$2.91
Tier 3: 12,001-20,000 gallons	\$3.89	\$4.01
Tier 4: 20,001-40,000 gallons	\$4.93	\$5.08
Tier 5: 40,001+ gallons	\$5.42	\$5.58
Multi-Family	\$2.05	\$2.11
Commercial	\$2.65	\$2.73
Construction	\$4.29	\$4.42
Industrial	\$2.77	\$2.85
Landscaping	\$3.96	\$4.08

Table 9: Current and Recommended Flood Irrigation Rates

Parcel Area (square feet)	Current Rate as of January 2021	Recommended Rate January 2022
Up to 13,068	\$182.50	\$187.98
13,069 to 17,424	\$243.00	\$250.29
17,425 to 21,780	\$303.53	\$312.64
21,781 to 26,136	\$364.04	\$374.96
26,137 to 30,492	\$423.83	\$436.54
30,493 to 34,848	\$485.08	\$499.63
34,849+	\$485.08 plus \$60.63 per each 4,355 square foot increment or portion thereof in excess of 34,848 square feet	\$499.63 plus \$62.45 per each 4,355 square foot increment or portion thereof in excess of 34,848 square feet

Disclaimer

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