

MEMORANDUM

Date: November 13, 2018
 To: City of Dayton
 From: Steve McDonald
 Subject: Water Utility Rates and Revenue Projection

The City of Dayton has requested assistance in restructuring water utility rates. Below are the proposed rates.

Residential Rates

As requested by the City, to encourage conservation, the proposed Residential rate structure has been modified to a 4-tier rate structure. The volume for Tier 1 was set to correspond to average winter use of 6,000 gallons and additional tiers were set to encourage more efficient water use.

The proposed base and usage rates in the first two tiers are increased by 5% from the current 2018 rates.

Commercial Rates

The Commercial rate structure was left as is and the proposed base and usage rates increased by 5% from the current 2018 rates.

The table below compares the current rates to the proposed rates.

Rate Comparison							
Residential Rates							
Current				Proposed			
Base fee (5/8" meter)			\$ 13.40	Base fee (5/8" meter)			\$ 14.07
Usage fee (per 1,000 gallons)				Usage fee (per 1,000 gallons)			
	0	4,999	\$ 2.91		0	6,000	\$ 3.06
	Over	5,000	\$ 3.22		6,001	10,000	\$ 3.38
					10,001	33,000	\$ 3.70
					Over	33,001	\$ 4.07
Commercial Rates							
Current				Proposed			
Base fee (5/8" meter)			\$ 13.40	Base fee (5/8" meter)			\$ 14.07
Usage fee (per 1,000 gallons)				Usage fee (per 1,000 gallons)			
	0	4,999	\$ 2.91		0	4,999	\$ 3.06
	Over	5,000	\$ 3.22		Over	5,000	\$ 3.38

The proposed meter fees are also increased by 5% from the current 2018 rates

Meter Size	Current Meter Fee	Proposed Meter Fee
5/8-Inch	\$ 13.40	\$ 14.07
3/4-Inch	31.24	32.80
1-Inch	39.76	41.75
1 1/2-Inch	51.12	53.68
2-Inch	82.36	86.48
3-Inch	312.40	328.02
4-Inch	397.00	416.85
6-Inch	596.40	626.22
10-Inch	1,420.00	1,491.00

The table below compares Residential and Commercial bills at various water usage levels under the current and proposed rates.

Residential Bill Comparison					
Billing Detail		Current Rates	Proposed Rates	Bill Increase (Decrease)	Bill Increase (Decrease)%
Base fee	5/8" Meter	\$ 13.40	\$ 14.07		
Usage (gallons)	6,000	18.08	18.33		
		\$ 31.48	\$ 32.40	\$ 0.92	3%
Base fee	5/8" Meter	\$ 13.40	\$ 14.07		
Usage (gallons)	12,000	37.40	39.25		
		\$ 50.80	\$ 53.32	\$ 2.52	5%
Base fee	5/8" Meter	\$ 13.40	\$ 14.07		
Usage (gallons)	18,000	56.72	61.43		
		\$ 70.12	\$ 75.50	\$ 5.38	8%
Base fee	5/8" Meter	\$ 13.40	\$ 14.07		
Usage (gallons)	40,000	127.56	145.38		
		\$ 140.96	\$ 159.45	\$ 18.49	13%

Commercial Bill Comparison					
Billing Detail		Current Rates	Proposed Rates	Bill Increase (Decrease)	Bill Increase (Decrease)%
Base fee	1" Meter	\$ 39.76	\$ 41.75		
Usage (gallons)	7,000	21.60	22.04		
		\$ 61.36	\$ 63.79	\$ 2.43	4%
Base fee	1.5" Meter	\$ 51.12	\$ 53.68		
Usage (gallons)	92,000	295.00	309.42		
		\$ 346.12	\$ 363.10	\$ 16.98	5%
Base fee	2" Meter	\$ 82.36	\$ 86.48		
Usage (gallons)	162,000	520.40	546.09		
		\$ 602.76	\$ 632.57	\$ 29.81	5%
Base fee	1.5" Meter	\$ 51.12	\$ 53.68		
Usage (gallons)	352,000	1,132.20	1,188.48		
		\$ 1,183.32	\$ 1,242.16	\$ 58.84	5%

The table below is the revenue projection based on 2017 water usage. The 2017 usage does not include final-billed accounts and therefore revenues from those accounts is not included in the projections.

The base fee revenue projection excluded Sewer-only customers and assumes a 5/8-inch meter for all 843 Residential customers and the actual varied meter sizes for the 24 Commercial customers.

The 2018 projection is based on the current 2018 rates. The 2019 projection is based on the proposed rates. The projections for 2020 through 2028 are based on annual inflationary increase of 3% of the prior year.

Projected Water Utility Revenue											
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Base fee revenue	\$ 76,700	\$ 80,600	\$ 83,000	\$ 85,500	\$ 88,100	\$ 90,700	\$ 93,400	\$ 96,200	\$ 99,100	\$102,100	\$105,200
Usage fee revenue	304,400	332,400	342,400	352,700	363,300	374,200	385,400	397,000	408,900	421,200	433,800
Total revenue	\$381,100	\$413,000	\$425,400	\$438,200	\$451,400	\$464,900	\$478,800	\$493,200	\$508,000	\$523,300	\$539,000
Projected revenue for 2018-2019 is calculated from 2017 actual usage and does not include final billed account usage.											
Projected revenue for 2020-2028 is increased at an annual inflation rate of 3%											

