



July 7, 2020

---

## WATER AND WASTEWATER UPDATE CITY OF KILLEEN, TEXAS

NewGen  
Strategies & Solutions

## KEY ISSUES – WATER AND WASTEWATER

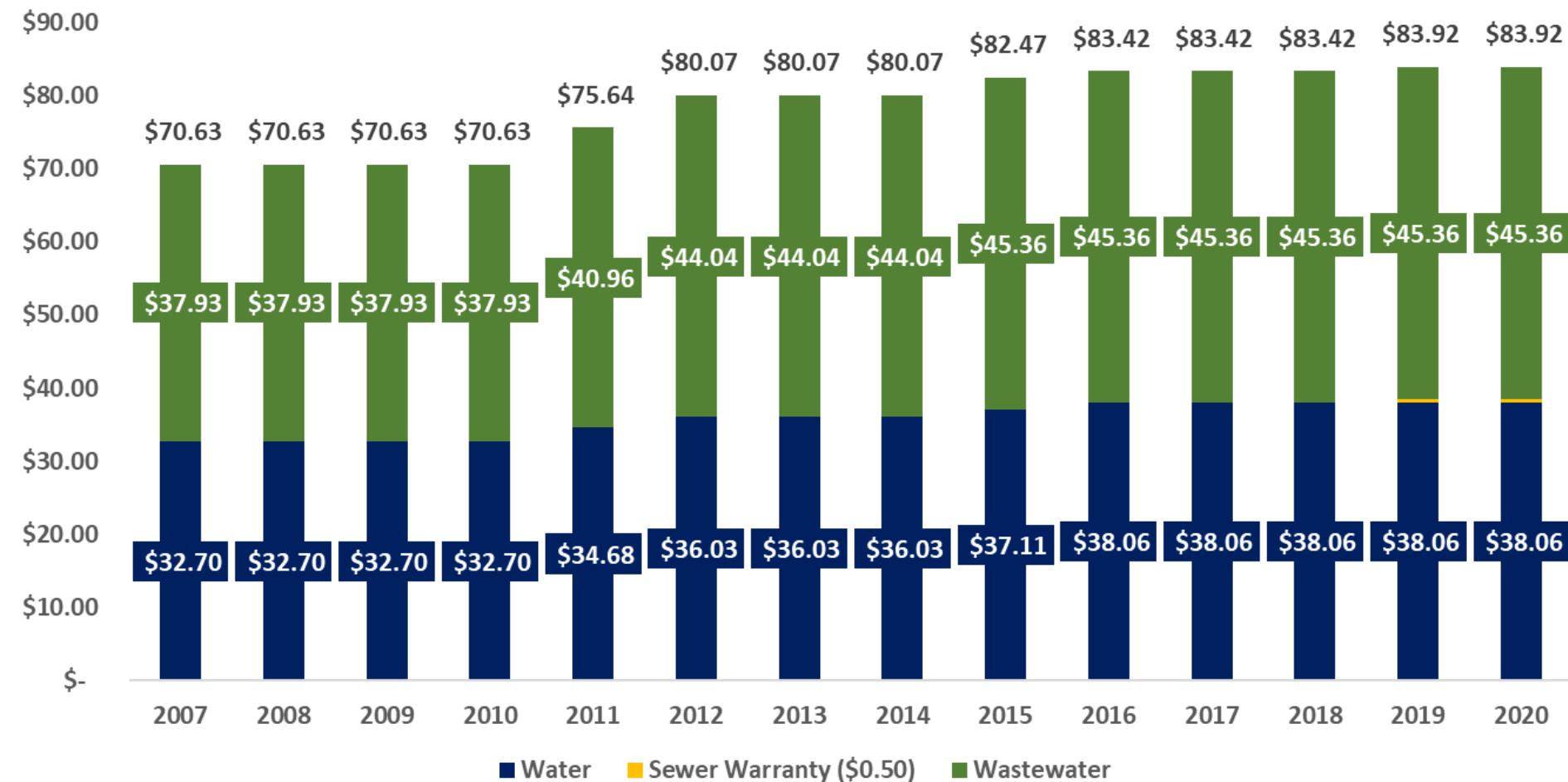


- Findings from 2020 Water/Sewer Rate Study
  - Assuming ‘normalized’ consumption, the Utility’s revenues are insufficient, particularly revenues from water customers.
  - Recommend City continue to carefully evaluate overall utility revenue performance and ensure rates remain sufficient, particularly in light of future capital improvements.
- Several rate structure changes recommended in 2016; no action taken



## HISTORICAL MONTHLY BILL

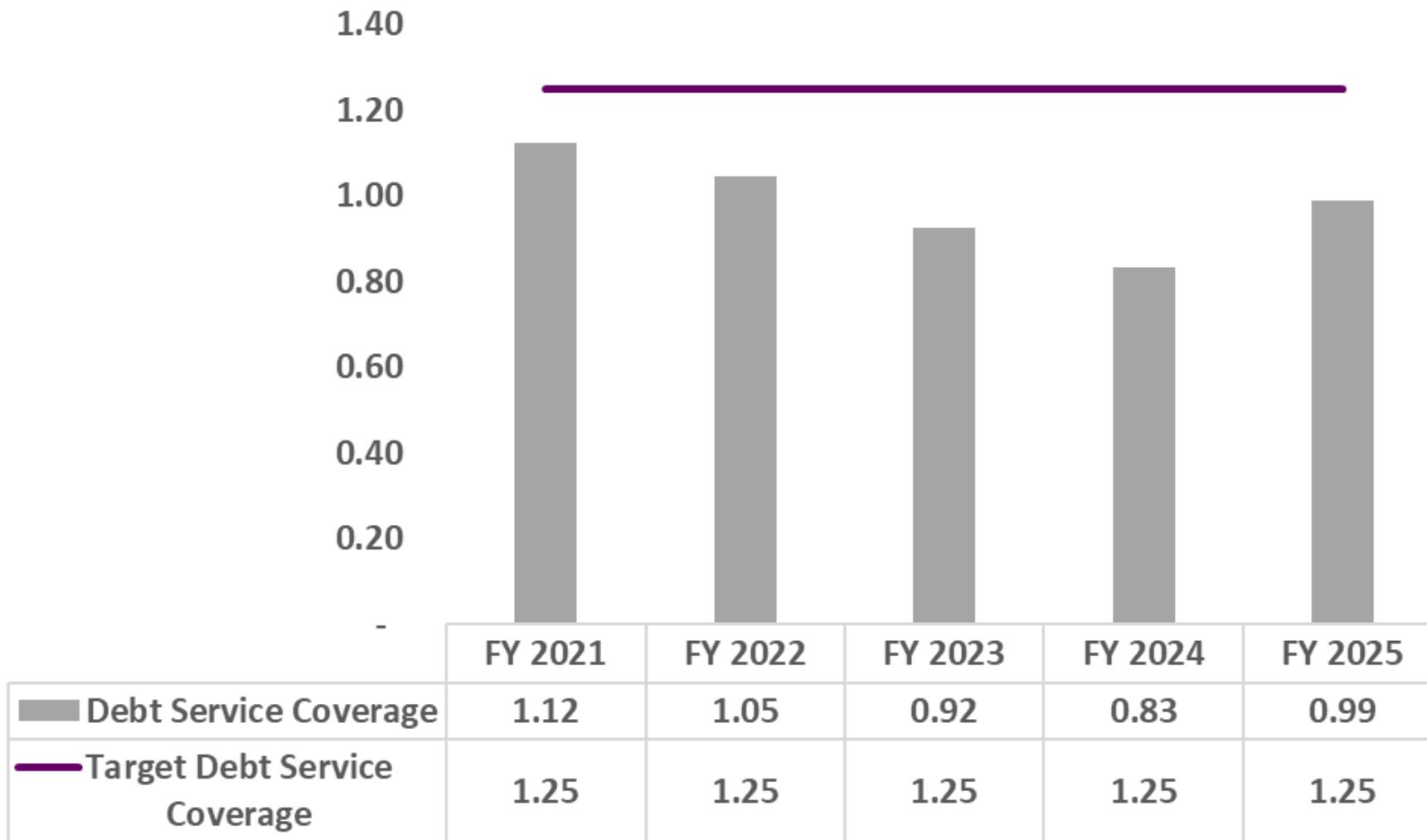
- 1.51% Effective Annual Increase
- 5,000 Gallon Water and Wastewater Customer



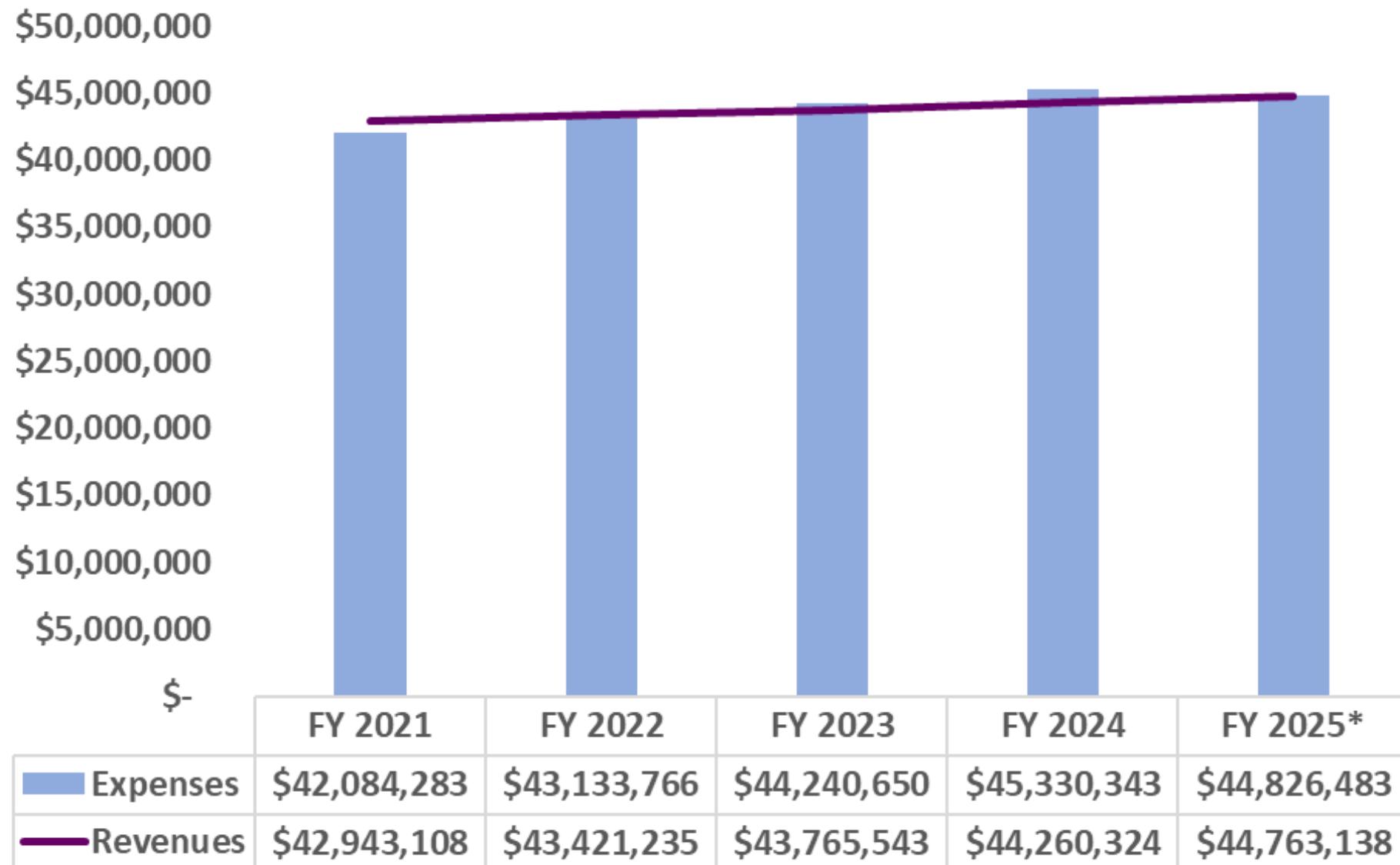
## HISTORICAL MONTHLY BILL

- 1.34% Effective Annual Increase
- 10,000 Gallon Water and Wastewater Customer

## DEBT SERVICE COVERAGE

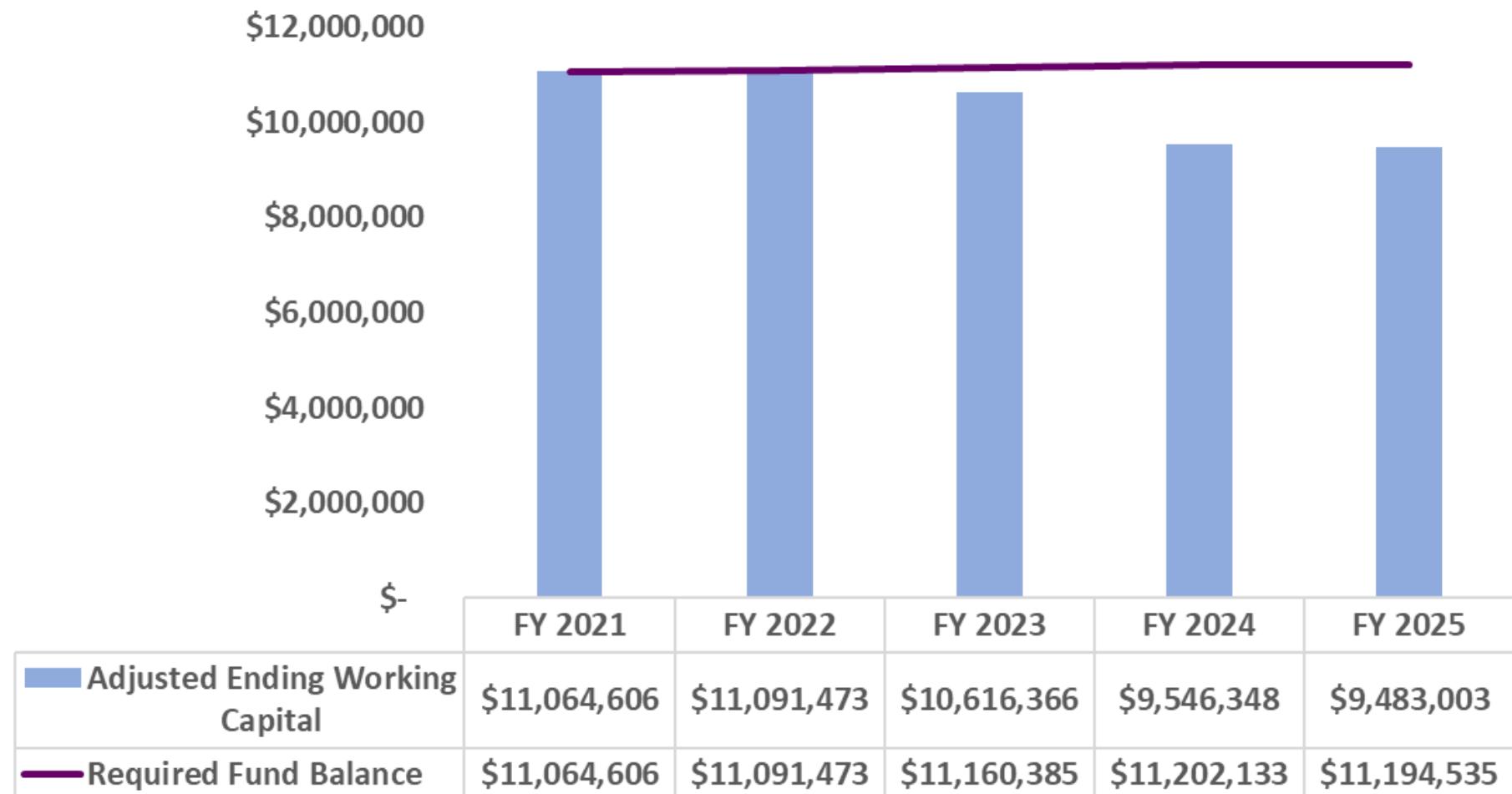


## WATER AND WASTEWATER PERFORMANCE UNDER CURRENT RATES

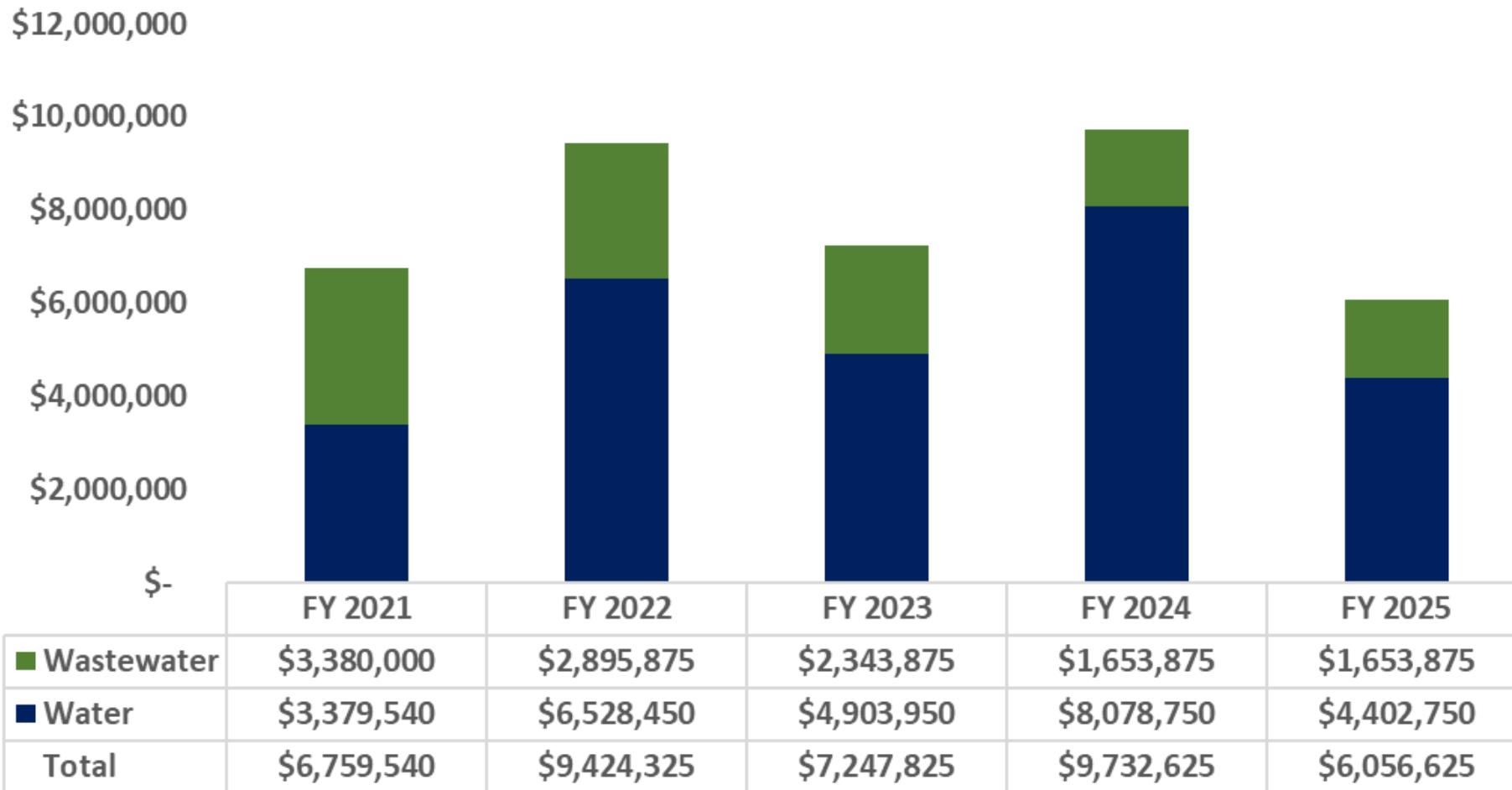


\*\$1.4 million in debt payments drops off in FY 2025.

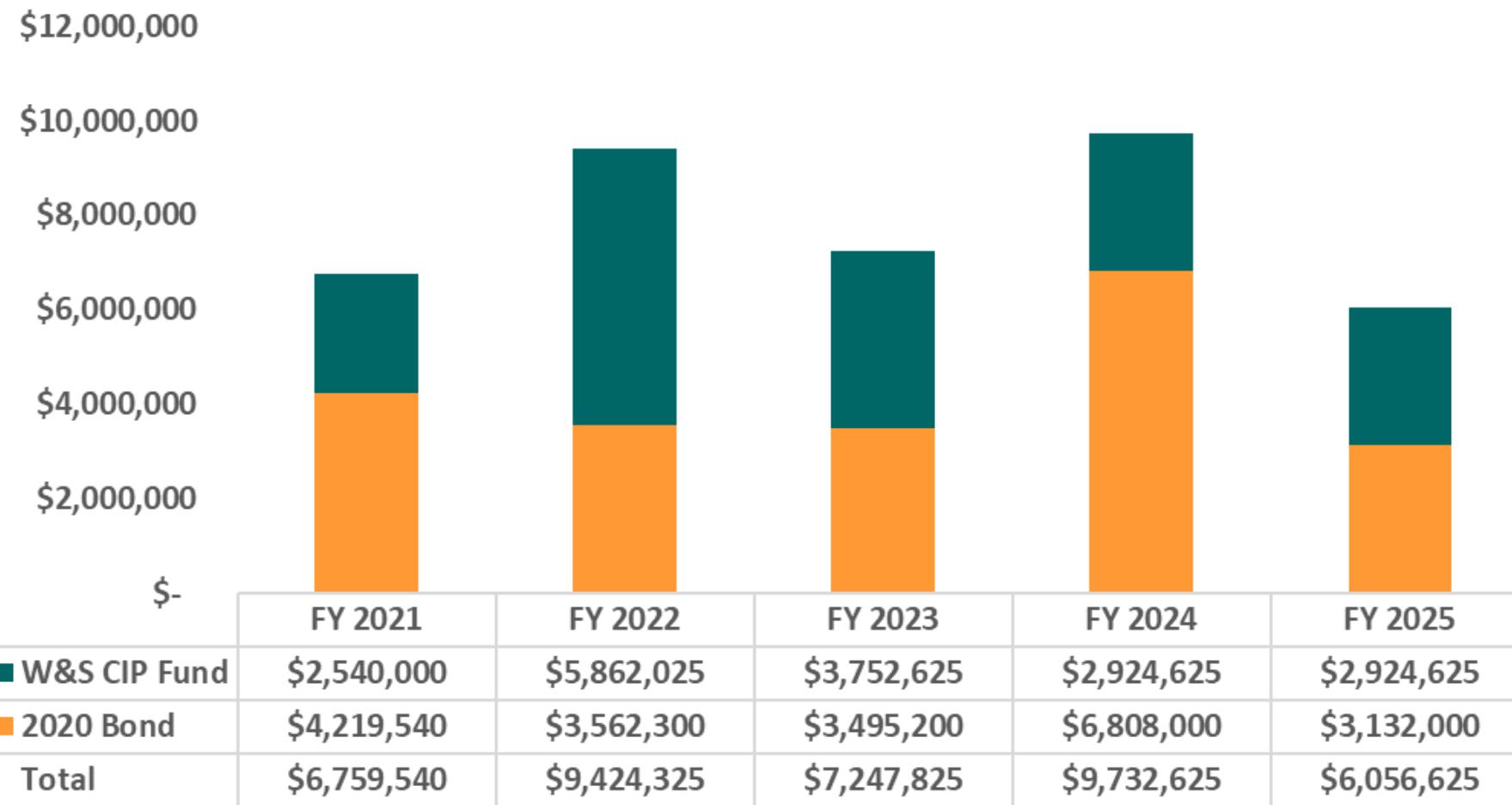
# WATER AND WASTEWATER PERFORMANCE UNDER CURRENT RATES



## CIP: WATER AND WASTEWATER ALLOCATION



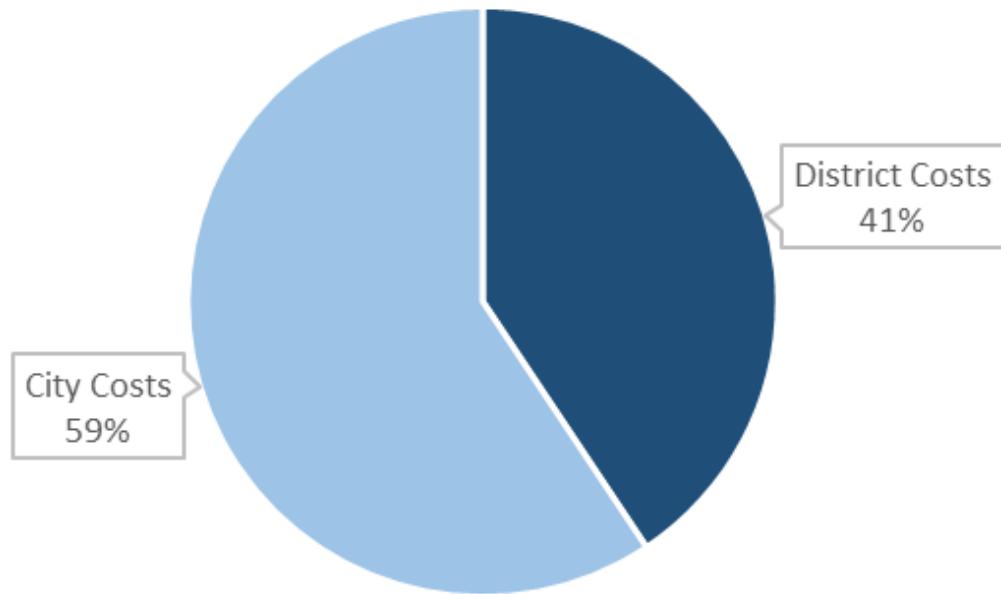
## CIP: FUNDING METHODS



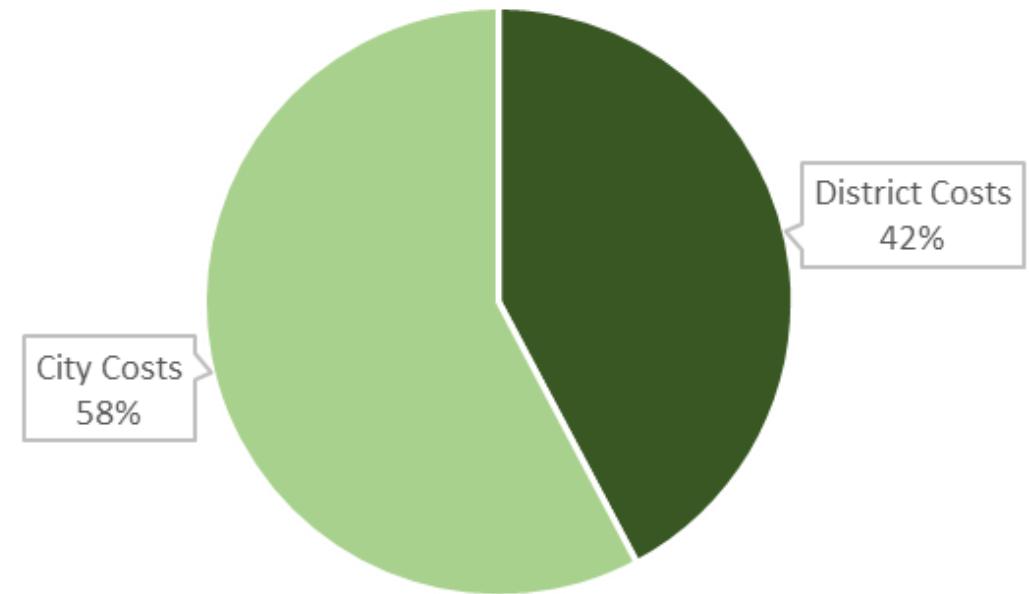
# DISTRICT COSTS IN FY 2021 DRAFT BUDGET

---

Water



Wastewater



## CURRENT RATE STRUCTURE EVALUATION

- Two Part Water Rate:
  - Fixed Meter Charge based on Size
  - 2,000 gallons in Fixed Bill
  - Volumetric Charge which increases with use

Meter Charge (Includes 2,000 gal)	
3/4 inch	\$ 12.70
1 inch	14.06
1 1/2 inch	17.47
2 inch	21.55
3 inch	31.09
4 inch	44.74
6 inch	79.83
8 inch	119.68
Volumetric Charge (per 1,000 gal)	
2,000 – 25,000	\$ 3.17
25,000 +	3.78

## CURRENT RATE STRUCTURE EVALUATION

---

- Two Part Sewer Rate:
  - Fixed Base Charge
  - 3,000 gallons in Fixed Bill
  - Single Volumetric Charge; capped at 10K gallons for Residential; no cap for Commercial
  - Residential Minimum Charge  
Includes \$0.50 for Sewer Warranty

Base Charge (Includes 3,000 gal)	
Residential	\$ 19.26
Volumetric Charge (per 1,000 gal)	
3,000 – 10,000 gallons	\$ 3.80

## RATE AMENDMENTS PREVIOUSLY IDENTIFIED

---

### Amend Rate Blocks

- Restructure Tier Rates to the following
  - 2,001 – 15,000 gallons
  - 15,001 – 30,000 gallons
  - 30,001+ gallons
- Stronger Conservation Signal
- Additional Water Revenue, \$225,000
- Revenue is Weather Dependent

### Adjust Meter Charge to Recognize Demand

- AWWA Standard
- Impact on Schools, Commercial Business
- Plan to Implement 5-Year Phase-In Starting in FY 2023 with Full Phase-In by FY 2027
- Additional Water Revenue at Full Phase-In, \$790,000

Note: Increases only proposed for FY 2021, except for meter equivalency changes.

# MONTHLY RESIDENTIAL CUSTOMER BILL IMPACT

	Current	FY 2021
2,000 Gallons		
Water	\$ 12.70	\$ 14.16
Wastewater	19.26	19.26
Total	\$ 31.96	\$ 33.42
<i>Monthly Increase over Current</i>		\$ 1.46
<i>Percent Increase over Current</i>		4.57%
5,000 Gallons		
Water	\$ 22.21	\$ 24.78
Wastewater	26.86	26.86
Total	\$ 49.07	\$ 51.64
<i>Monthly Increase over Current</i>		\$ 2.57
<i>Percent Increase over Current</i>		5.24%

# MONTHLY RESIDENTIAL CUSTOMER BILL IMPACT

	Current	FY 2021
10,000 Gallons		
Water	\$ 38.06	\$ 42.48
Wastewater (Capped at 10k)	45.86	45.86
Total	\$ 83.92	\$ 88.34
<i>Monthly Increase over Current</i>		\$ 4.42
<i>Percent Increase over Current</i>		5.27%
20,000 Gallons		
Water	\$ 69.76	\$ 81.28
Wastewater (Capped at 10k)	45.86	45.86
Total	\$ 115.62	\$ 127.14
<i>Monthly Increase over Current</i>		\$ 11.52
<i>Percent Increase over Current</i>		9.96%

# MONTHLY RESIDENTIAL CUSTOMER BILL IMPACT

	Current	FY 2021
25,000 Gallons		
Water	\$ 85.61	\$ 102.38
Wastewater (Capped at 10k)	45.86	45.86
Total	\$ 131.47	\$ 148.24
<i>Monthly Increase over Current</i>		\$ 16.77
<i>Percent Increase over Current</i>		12.76%
30,000 Gallons		
Water	\$ 104.51	\$ 123.48
Wastewater (Capped at 10k)	45.86	45.86
Total	\$ 150.37	\$ 169.34
<i>Monthly Increase over Current</i>		\$ 18.97
<i>Percent Increase over Current</i>		12.62%

## RECOMMENDED WATER RATE ACTION

Water Rate Revenue  
Increase = 12.89%

	Residential		Commercial	
	Current	FY 2021	Current	FY 2021
Meter Charge (includes 2,000 gal)				
3/4 inch	\$ 12.70	<b>\$ 14.16</b>	\$ 13.15	<b>\$ 14.66</b>
1 inch	14.06	<b>15.68</b>	14.60	<b>16.28</b>
1 1/2 inch	17.47	<b>19.48</b>	18.13	<b>20.21</b>
2 inch	21.55	<b>24.03</b>	22.38	<b>24.95</b>
3 inch	31.09	<b>34.66</b>	32.30	<b>36.01</b>
4 inch	44.74	<b>49.88</b>	46.49	<b>51.83</b>
6 inch	79.83	<b>89.01</b>	82.98	<b>92.51</b>
8 inch	119.68	<b>133.44</b>	124.56	<b>138.86</b>
Volumetric Charge (per 1,000 gal)				
2,000 – 15,000	\$ 3.17	<b>\$ 3.54</b>		
15,000 – 25,000	3.17	<b>4.22</b>		
25,000 – 30,000	3.78	<b>4.22</b>		
30,000 +	3.78	<b>5.03</b>		
2,000 +			\$ 3.28	<b>\$ 3.66</b>

## 5-YEAR METER EQUIVALENCY PHASE-IN (RESIDENTIAL)

	<u><b>FY 2022</b></u>	<u><b>FY 2023</b></u>	<u><b>FY 2024</b></u>	<u><b>FY 2025</b></u>	<u><b>FY 2026</b></u>	<u><b>FY 2027</b></u>
Meter Charge (includes 2,000 gal)						
3/4 inch	\$ 14.16	\$ 14.16	\$ 14.16	\$ 14.16	\$ 14.16	\$ 14.16
1 inch	15.68	16.05	17.94	19.82	21.71	23.60
1 1/2 inch	19.48	20.77	27.38	33.98	40.59	47.20
2 inch	24.03	26.43	38.70	50.98	63.25	75.52
3 inch	34.66	39.65	65.14	90.62	116.11	141.60
4 inch	49.88	58.53	102.90	147.26	191.63	236.00
6 inch	89.01	105.73	197.30	288.86	380.43	472.00
8 inch	133.44	162.37	310.58	458.78	606.99	755.20

Note: This assumes no other overall rate increases.

# 5-YEAR METER EQUIVALENCY PHASE-IN (COMMERCIAL)

	<u><b>FY 2022</b></u>	<u><b>FY 2023</b></u>	<u><b>FY 2024</b></u>	<u><b>FY 2025</b></u>	<u><b>FY 2026</b></u>	<u><b>FY 2027</b></u>
Meter Charge (includes 2,000 gal)						
3/4 inch	\$ 14.66	\$ 14.66	\$ 14.66	\$ 14.66	\$ 14.66	\$ 14.66
1 inch	16.28	16.61	18.57	20.52	22.48	24.43
1 1/2 inch	20.21	21.50	28.34	35.18	42.03	48.87
2 inch	24.95	27.37	40.07	52.78	65.48	78.19
3 inch	36.01	41.05	67.44	93.82	120.21	146.60
4 inch	51.83	60.59	106.53	152.46	198.40	244.33
6 inch	92.51	109.46	204.26	299.06	393.87	488.67
8 inch	138.86	168.10	321.54	474.98	628.43	781.87

Note: This assumes no other overall rate increases.

# CUSTOMERS PER METER SIZE (AS OF DECEMBER 2019)

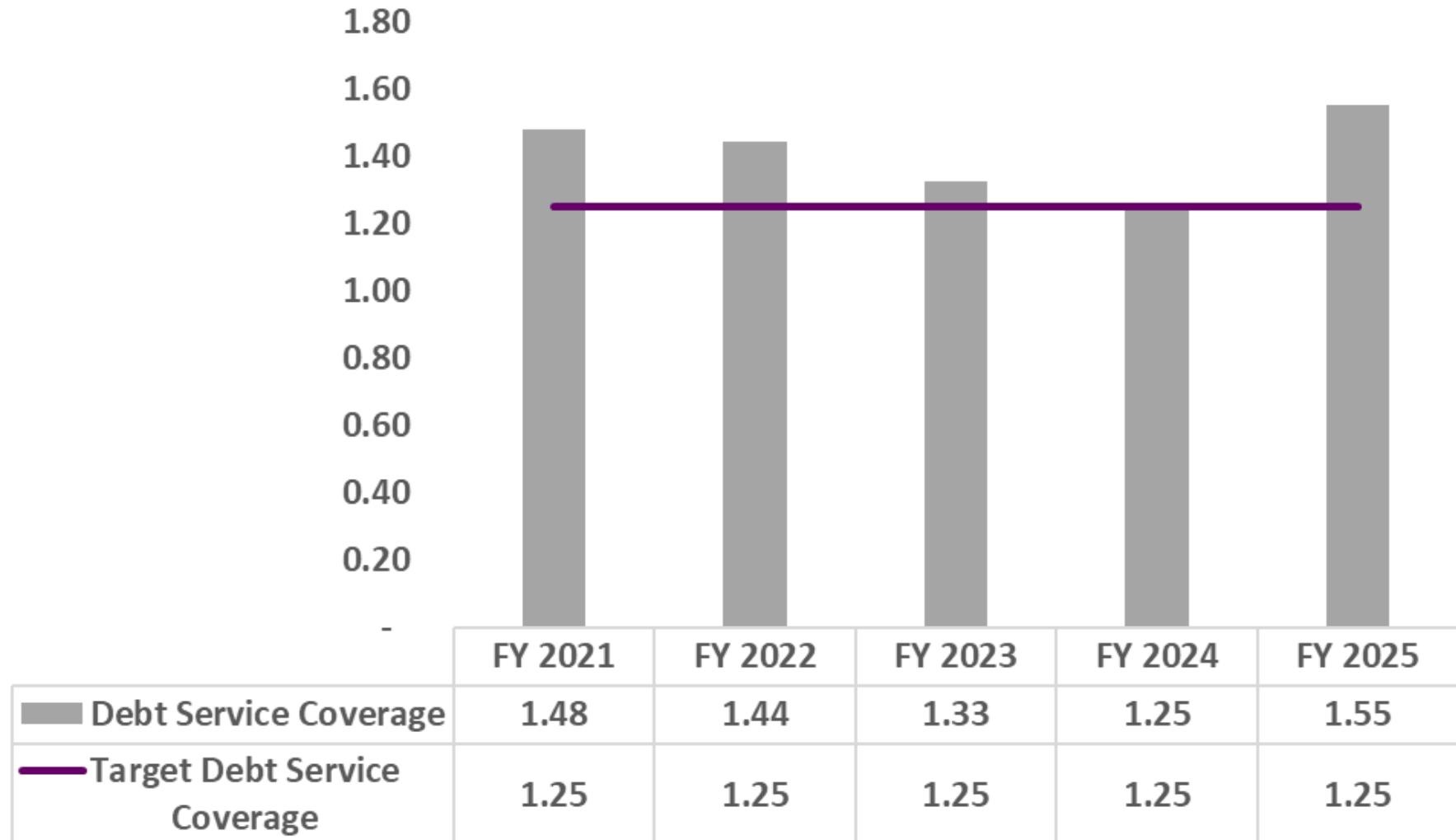
Meter Size	Residential	Commercial
3/4 inch	47,933	1,579
1 inch	154	535
1 1/2 inch	21	280
2 inch	49	410
3 inch	0	41
4 inch	0	19
6 inch	0	6
8 inch	0	0
Total	48,157	2,870

## RECOMMENDED SEWER RATE ACTION

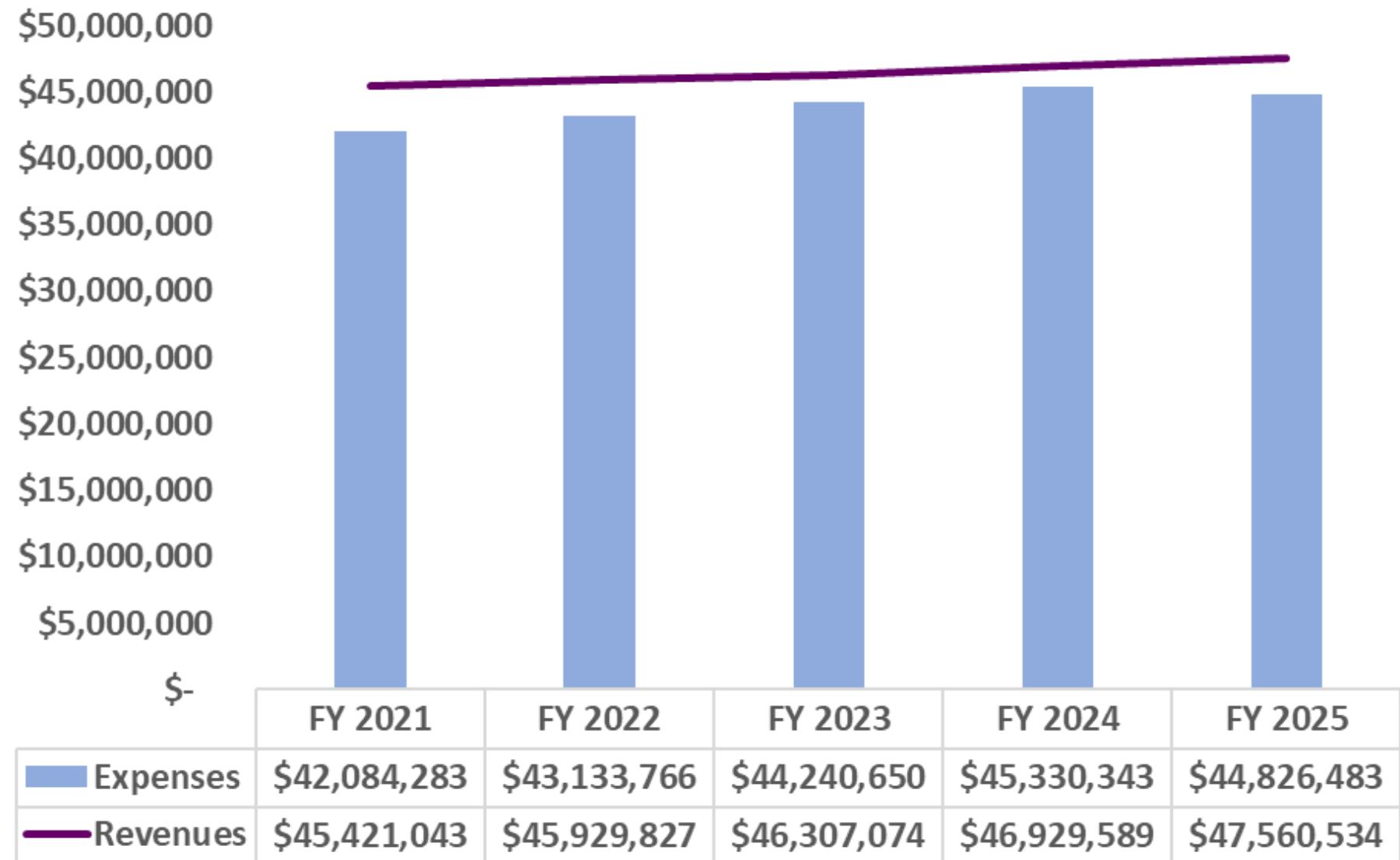
	<u>Current</u>	<u>FY 2021</u>
Base Charge (includes 3,000 gal)		
Residential*	\$ 19.26	<b>\$ 19.26</b>
Commercial	19.15	<b>19.15</b>
Volumetric Charge (per 1,000 gal)		
3,000 – 10,000	\$ 3.80	<b>\$ 3.80</b>
10,000 + (Com Only)	3.80	<b>3.80</b>
Overall Rate Increase		<b>0.00%</b>

\*Residential minimum charge includes \$0.50 for Sewer Warranty.

# DEBT SERVICE COVERAGE

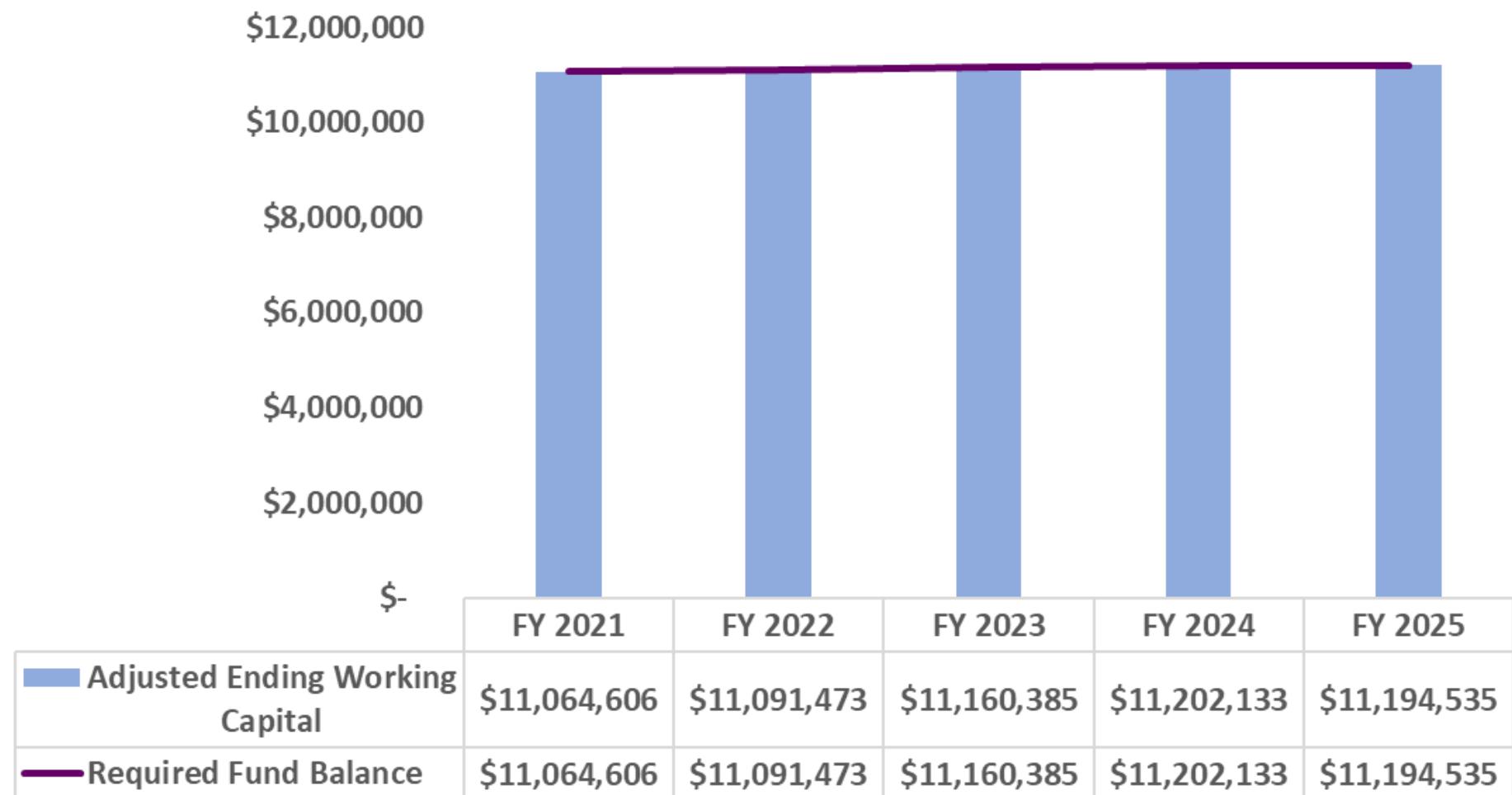


## WATER AND WASTEWATER PERFORMANCE UNDER PROPOSED RATES



Note: Excess working capital is used to fund PayGo projects.

# WATER AND WASTEWATER PERFORMANCE UNDER PROPOSED RATES

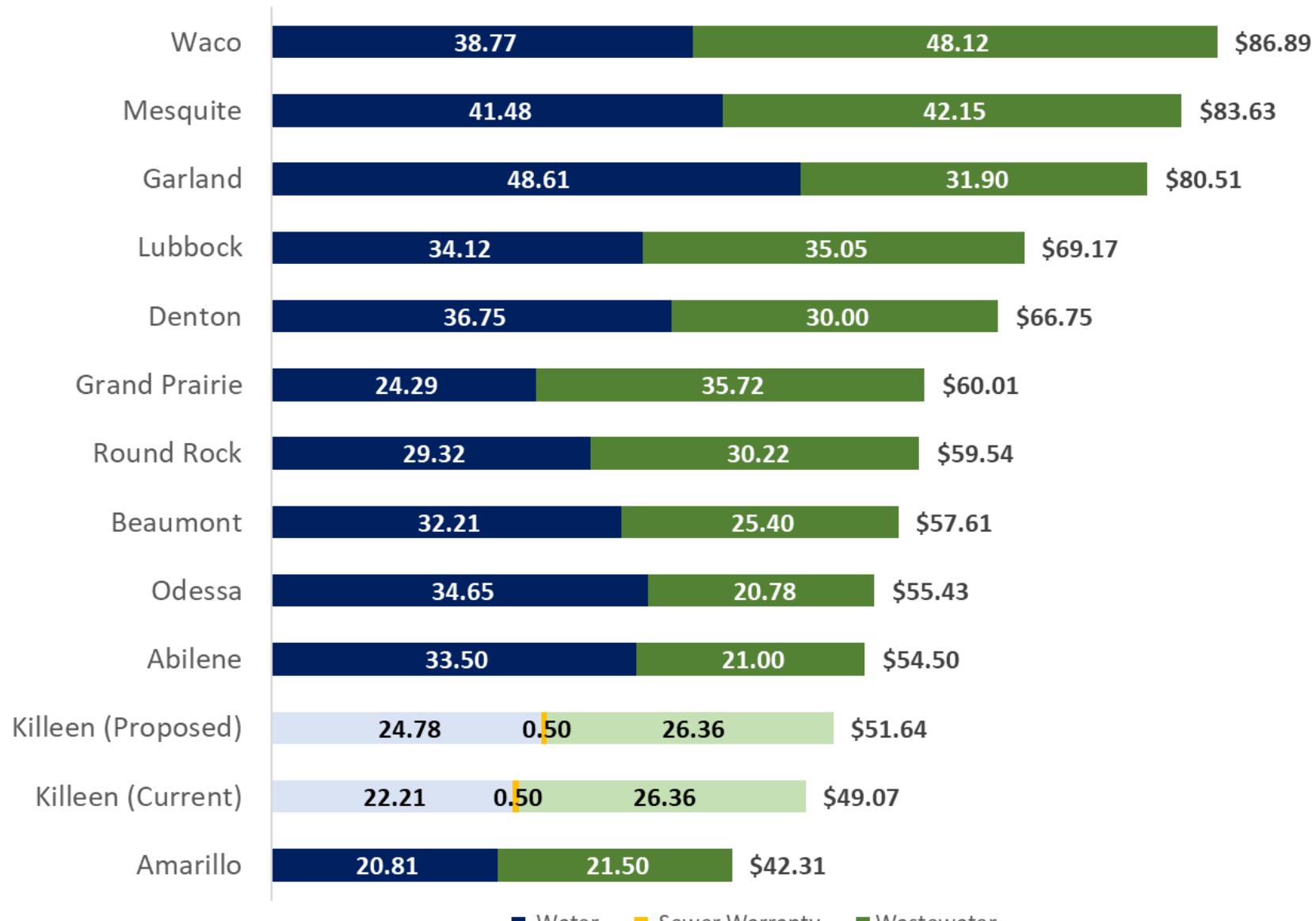


## RECOMMENDATIONS

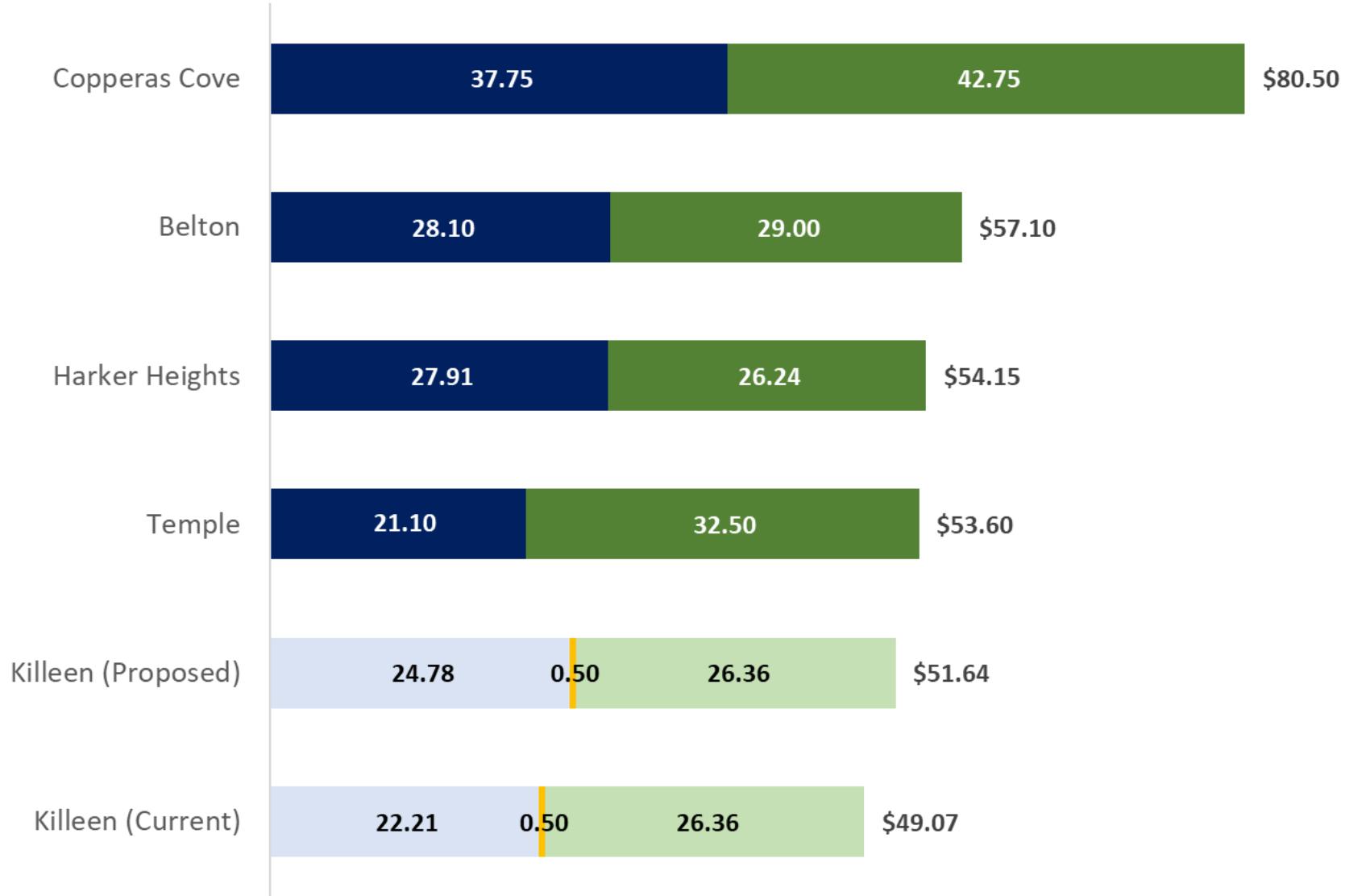
---

- Rate increase only in FY 2021
- Rates and sufficiency need to be reviewed each year
- Smaller increases could be needed in later years to prevent one large increase in the future

# 5,000 GALLON MONTHLY BILL COMPARISON (BENCHMARK)

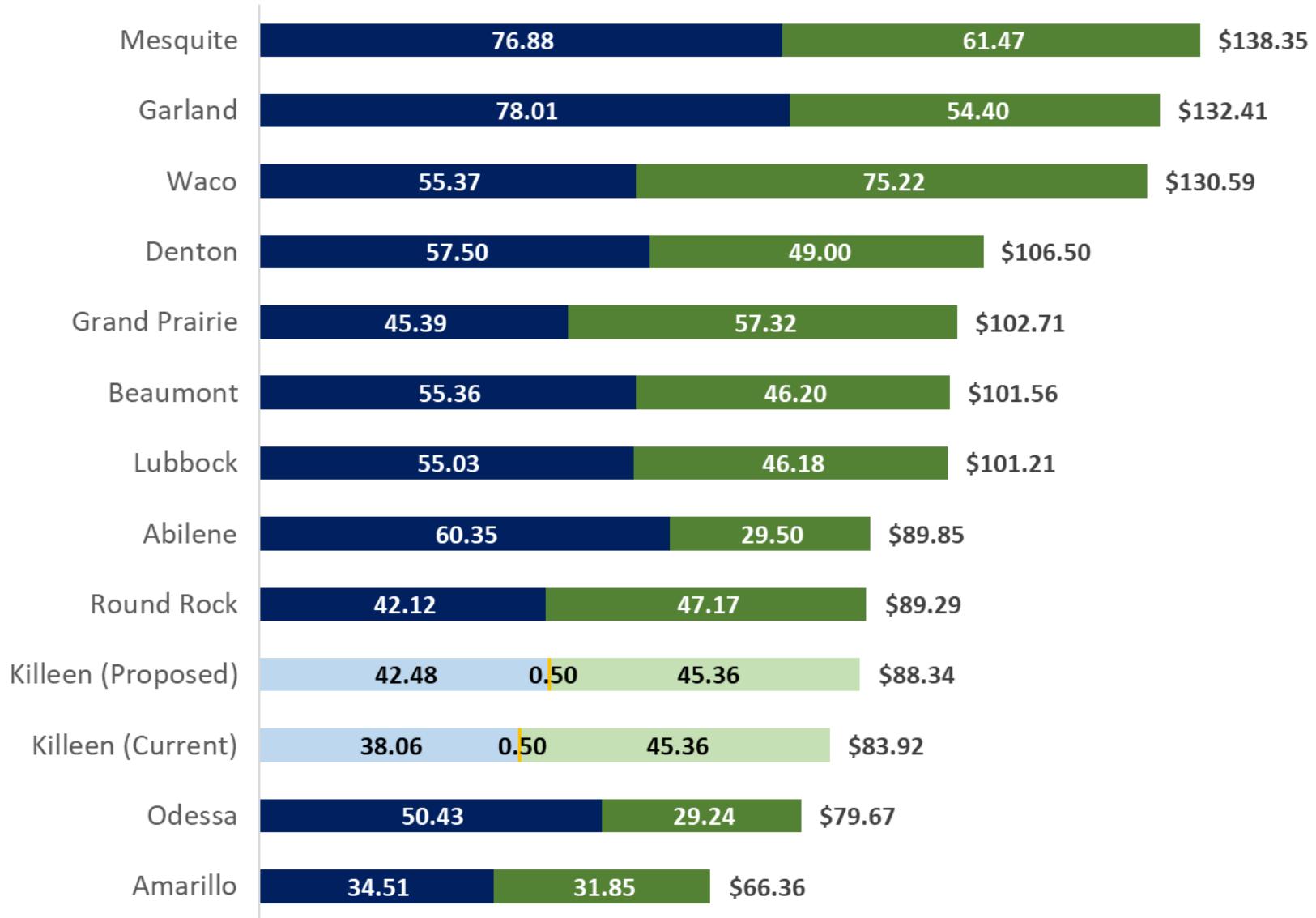


# 5,000 GALLON MONTHLY BILL COMPARISON (LOCAL)



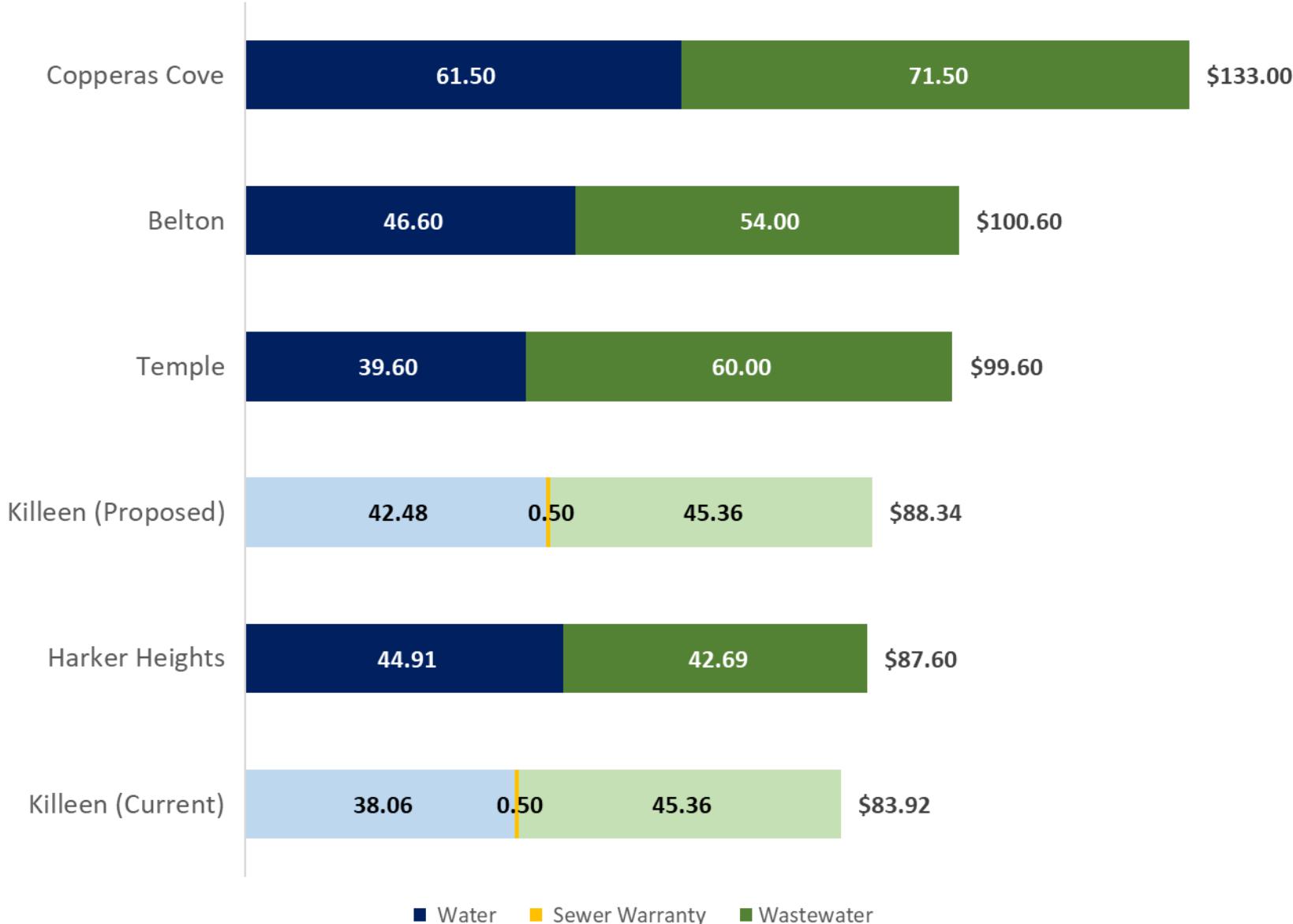
■ Water    ■ Sewer Warranty    ■ Wastewater

# 10,000 GALLON MONTHLY BILL COMPARISON (BENCHMARK)



■ Water   ■ Sewer Warranty   ■ Wastewater

# 10,000 GALLON MONTHLY BILL COMPARISON (LOCAL)





## QUESTIONS / DISCUSSION

**NEWGEN STRATEGIES AND SOLUTIONS**  
275 W. CAMPBELL ROAD, SUITE 440  
RICHARDSON, TEXAS 75080

**CHRIS EKRUT, DIRECTOR**  
972-232-2234  
**CEKRUT@NEWGENSTRATEGIES.NET**

# CAPITAL PROJECTS

Project	Funding	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Water Line Rehabilitation; Phase 1-4	W&S CIP Fund		\$ 1,270,750	\$ 1,270,750	\$ 1,270,750	\$ 1,270,750
Pump Station #2 Rehabilitation	W&S CIP Fund		1,695,400			
Airport Pump Station Rehabilitation	W&S CIP Fund			138,000		
Water Meter Replacement Program	W&S CIP Fund	500,000				
Sewer Line Rehabilitation; Phase 5 (2012 MP)	W&S CIP Fund	800,000				
Sewer Line Rehabilitation; Phase 1-4 (2020 MP)	W&S CIP Fund		1,653,875	1,653,875	1,653,875	1,653,875
Flow Monitoring and I/I Study	W&S CIP Fund	240,000				
Lift Station #6 Rehabilitation	W&S CIP Fund		1,242,000			
Lift Station #1 Rehabilitation	W&S CIP Fund			690,000		
Downtown Rehab	W&S CIP Fund	1,000,000				
Chaparral Rd WW Improvements	2020 Bond	1,840,000				
Park Street Booster Pump Station	2020 Bond	931,040				
South Water Supply - 24 Inch Hwy 195 Waterline	2020 Bond		908,500	1,000,000	3,808,000	2,000,000
Hwy 195 Ground Storage Tank	2020 Bond		289,800	300,000	1,000,000	632,000
South Water Supply - Chaparral Elevated Storage Tank	2020 Bond	1,000,000	1,864,000	1,000,000		
South Water Supply - Chaparral Pump Station	2020 Bond	448,500	500,000	1,195,200	2,000,000	500,000