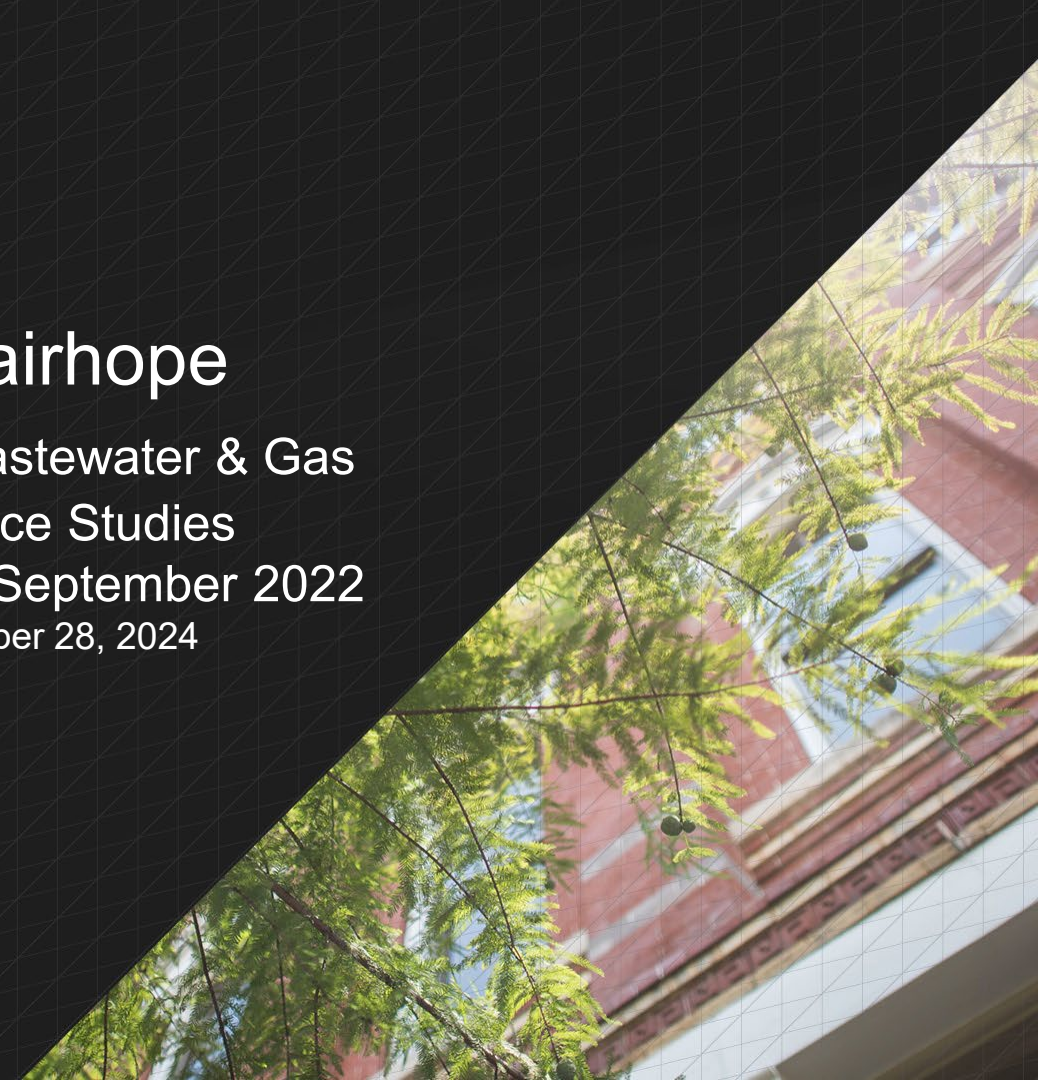
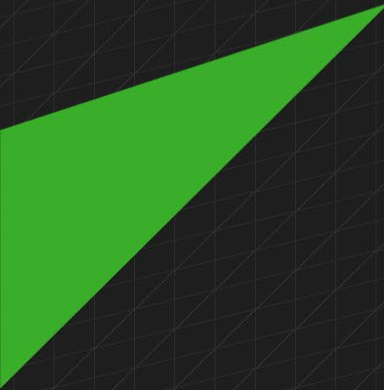


# JACKSON THORNTON

Certified Public Accountants  
& Consultants

## City of Fairhope

Electric, Water, Wastewater & Gas  
Cost of Service Studies  
12 Months Ending September 2022  
Presented October 28, 2024



# Typical Objectives of Rate Study

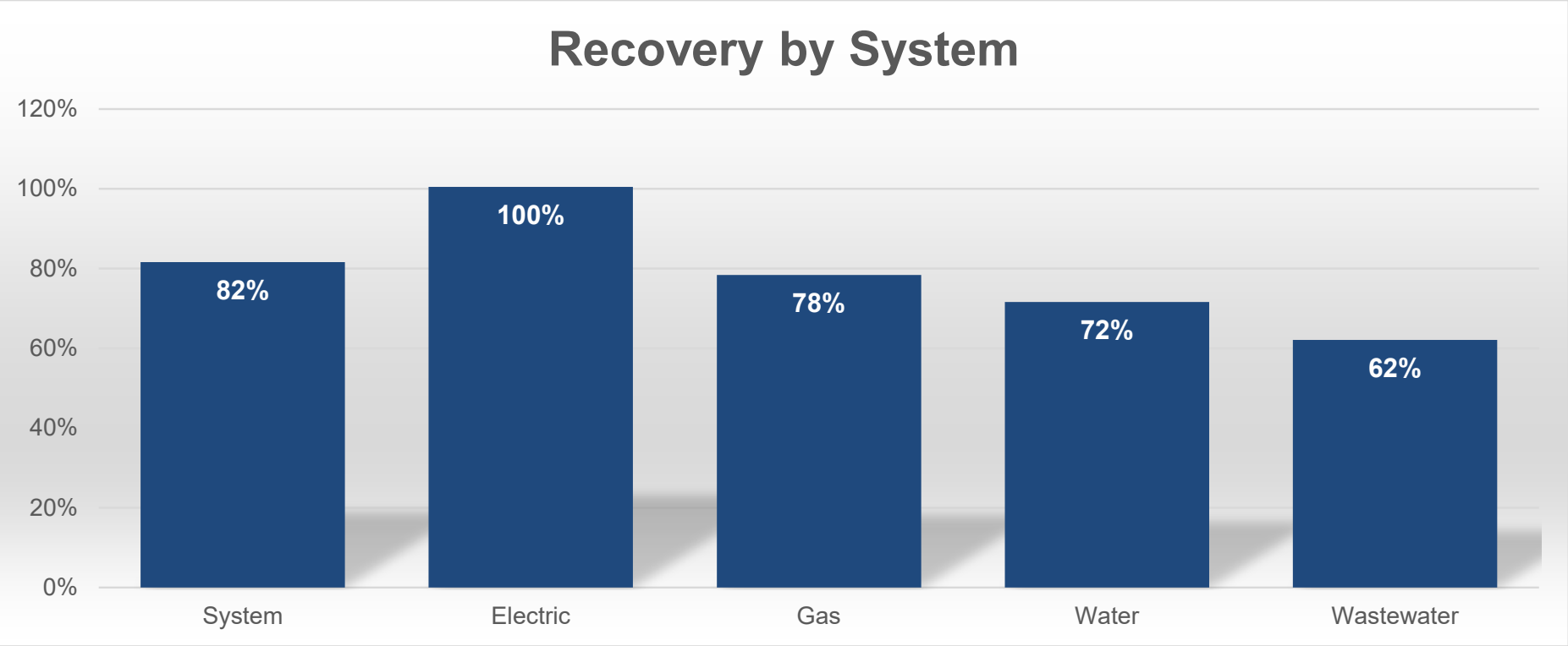
1. Revenue Stability and Sufficiency
2. Fairness and Equity
  - Fair is related to cross subsidies
  - Equity is related to  $\text{Price}=\text{Cost}$
3. Ability to Pay
4. Simplicity (Admin & Cust Understanding)
5. Defensible

# Overview of Process

1. Determine Revenue Requirements
  - How much does the system need to operate?
2. Develop Revenue Requirements by Rate Class
  - How much does the system need to recover by rate class?
3. Develop COS Rates and Design Acceptable Rates
  - How does the system best recover the needed revenues?
4. Implement Rate Changes



# Cash Method – All Systems Revenue Requirement



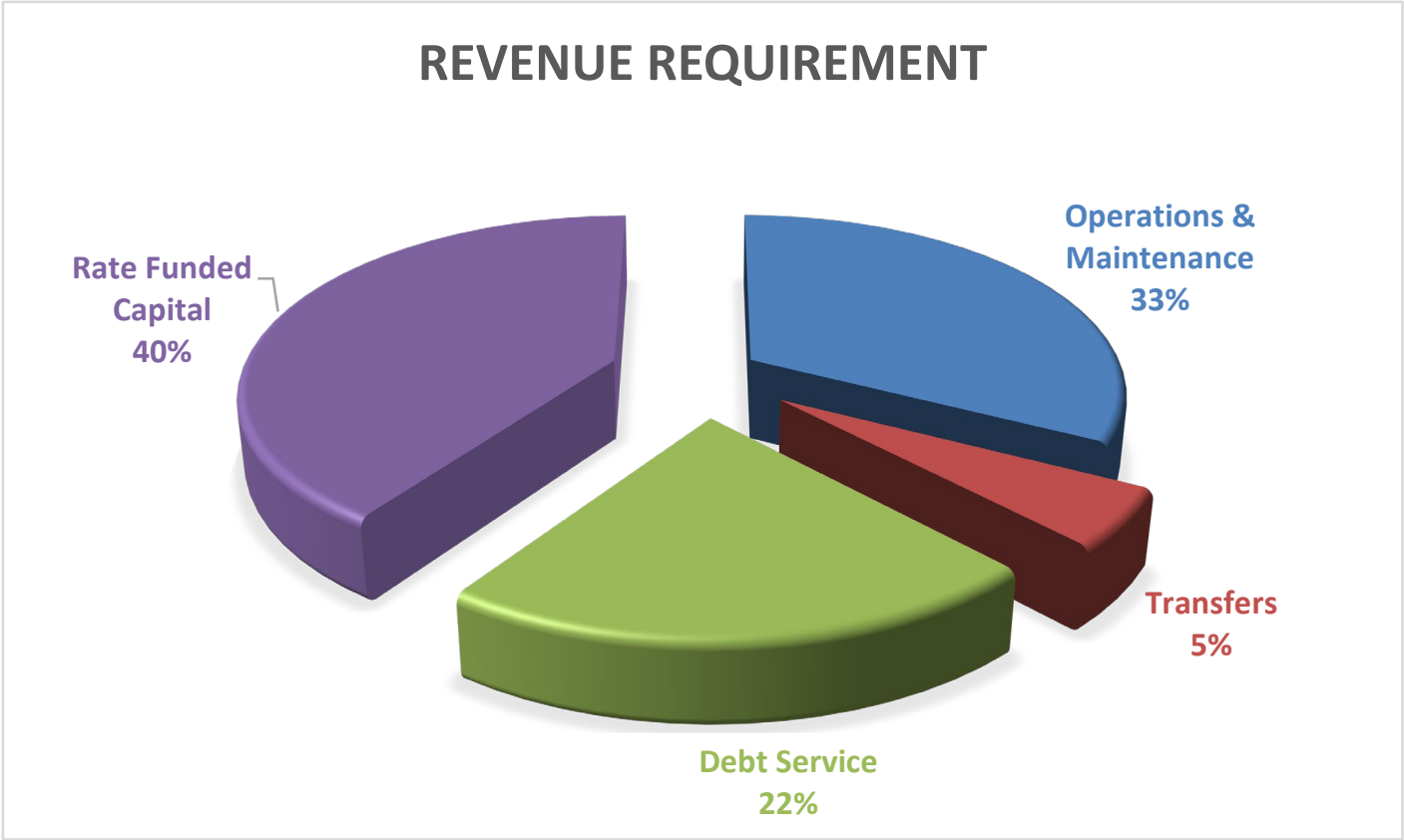
## Water – Cash Method Revenue Requirement

### TOTAL REV. REQ.

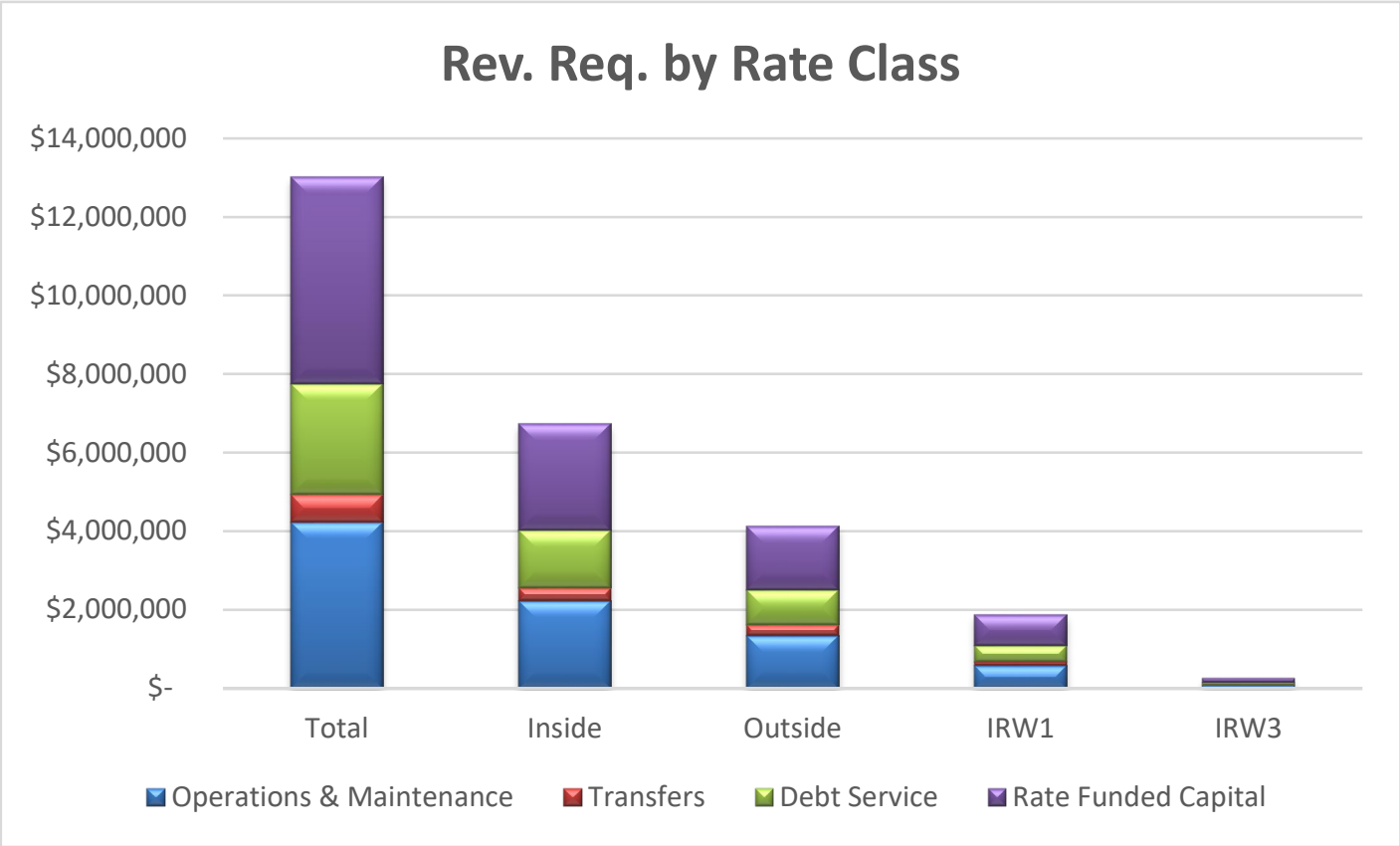
Operations & Maintenance	\$ 4,237,685
Plus: Transfers	\$ 688,310
Plus: Debt Service	\$ 2,839,846
Plus: Rate Funded Capital	\$ 5,250,000
Total Revenue Requirement	<u>\$ 13,015,842</u>
Less: Other Revenue	<u>\$ 510,120</u>
Rate Requirement	<u>\$ 12,505,722</u>

\*Debt Service Includes \$2,491,000 of annual payments that do not yet exist

# Water – Components of Revenue Requirement

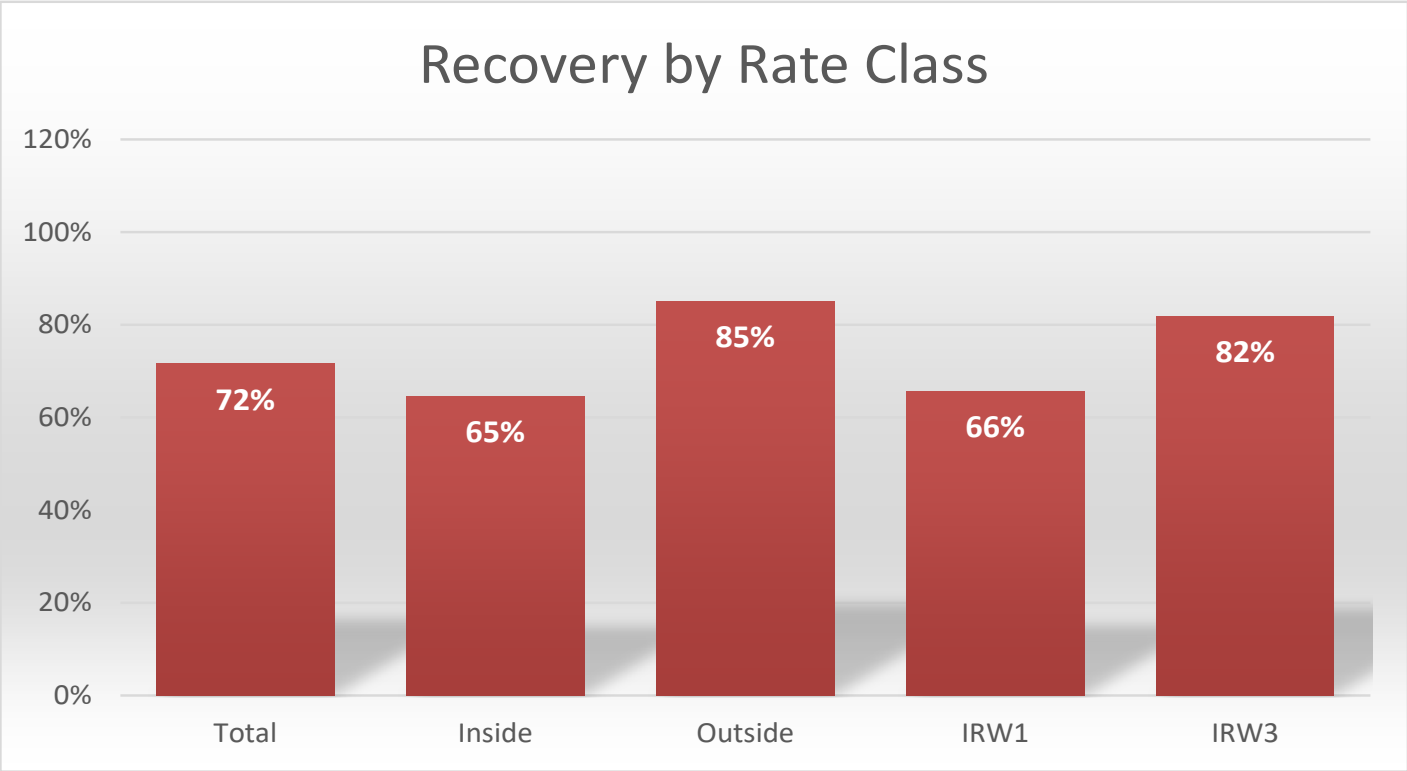


# Water – Revenue Requirement by Rate Class





# Water – Recovery by Class



	Total	Inside	Outside	IRW1	IRW3
Total Revenue	\$ 9,322,407	\$ 4,354,931	\$ 3,523,866	\$ 1,236,561	\$ 207,049
Over/(Under) Recovery	\$ (3,693,435)	\$ (2,384,227)	\$ (619,094)	\$ (644,180)	\$ (45,935)

## Water – Results & Recommendations, 1 of 3

- The water system is anticipated to under-recover by approximately \$3,700,000 on a total need of \$13,000,000.
- During our most recent work session held with staff on September 16, 2024, it was decided to try and target a 90% recovery in two steps.
  - This equals approximately \$1,221,00 in additional revenue each of the next two steps.

## Water – Results & Recommendations, 2 of 3

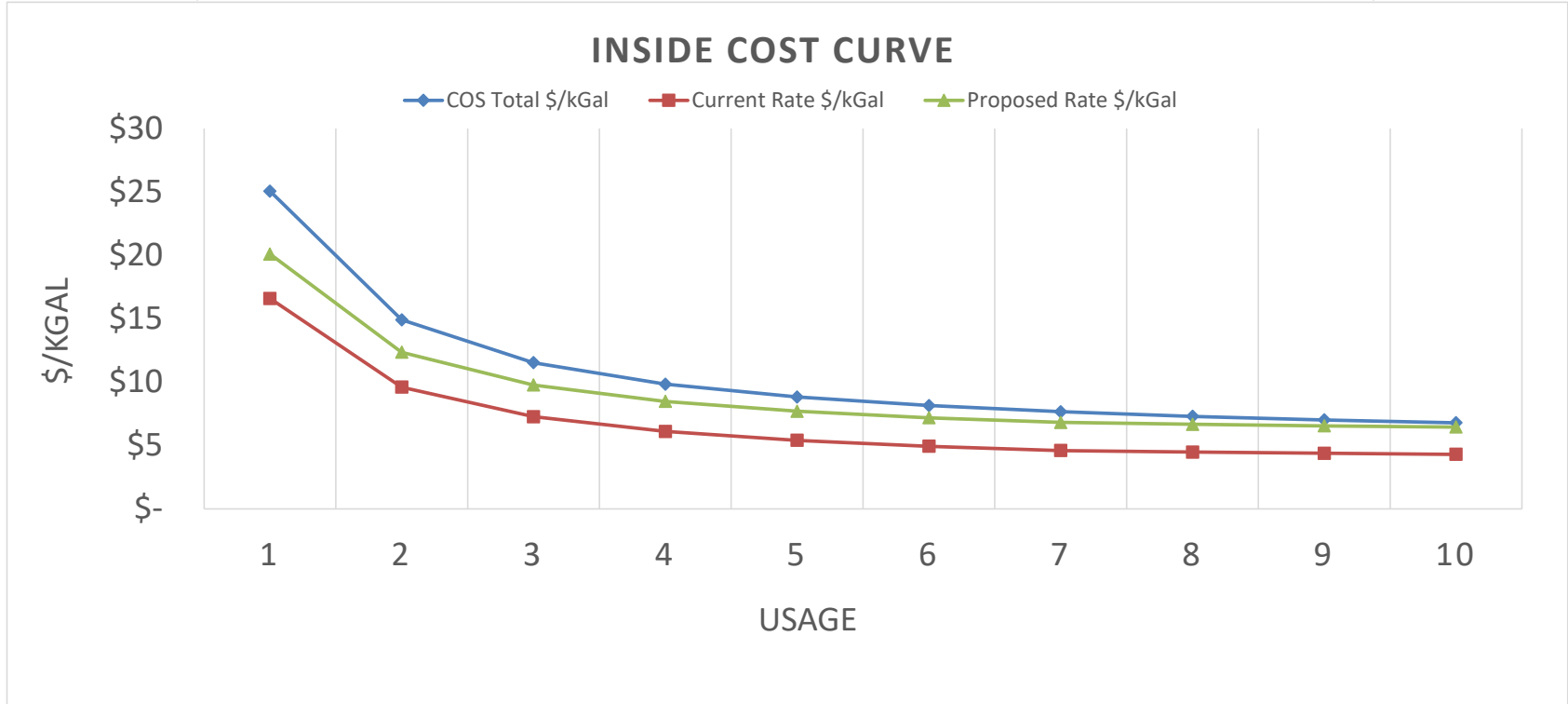
	<b>Inside</b>	<b>Outside</b>	<b>IRW1</b>	<b>IRW3</b>	<b>Total</b>
Additional Revenue Needed for 90% Recovery	\$ 1,737,895	\$ 221,768	\$ 461,843	\$ 21,357	\$ 2,442,863
Additional Revenue Needed Each Year	\$ 868,948	\$ 110,884	\$ 230,921	\$ 10,678	\$ 1,221,432
Bills sent in FY 2022	136,237	83,817	28,336	3,557	251,947
Average Impact per Bill per Step	\$ 6.38	\$ 1.32	\$ 8.15	\$ 3.00	\$ 4.85

## Water – Results & Recommendations, 3 of 3

- For all Inside City Limit customers, including irrigation, consider the following rate action:
  - Increase the monthly customer charge \$0.75 each of the next two steps. Total increase of \$1.50.
  - Increase volumetric rate on all volumes by \$1.00 each of the next two steps. Total increase of \$2.00 per kGal.
- For all Outside City Limit customers, including irrigation, consider the following rate action:
  - Increase volumetric rate on all volumes by \$0.50 each of the next two steps. Total increase of \$1.00 per kGal.

# Water – Inside City Rate Curve – Full Implementation

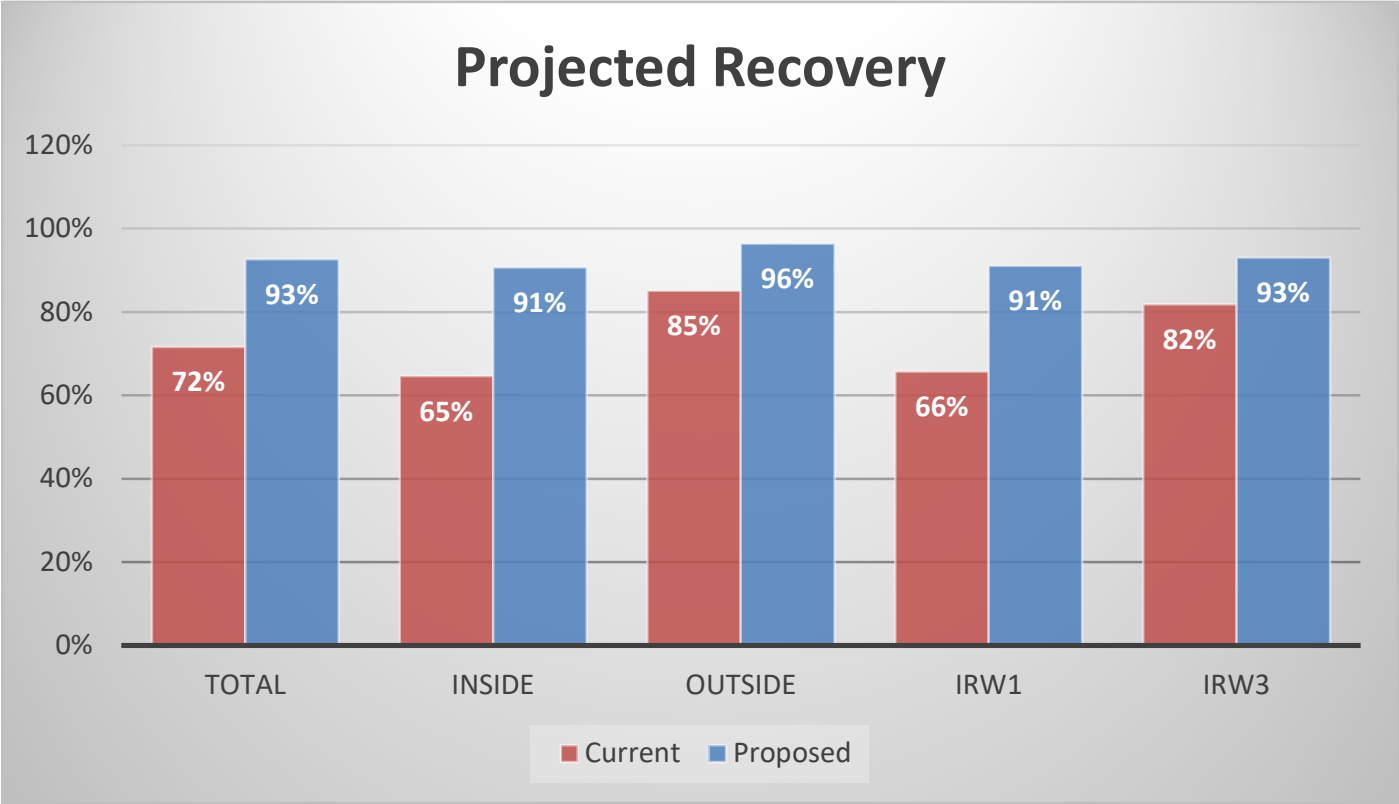
	Cost of Service	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 20.30	\$ 14.00	\$ 15.50	\$ 1.50
1,000-7,000 gal	\$ 4.76	\$ 2.60	\$ 4.60	\$ 2.00
All Additional Usage		\$ 3.60	\$ 5.60	\$ 2.00



## Water – Inside City Rate Impact – Full Implementation

Usage		COS Rates	Current Rates	Proposed Rates	Monthly Change	Daily Change	Current \$/kGal	Proposed \$/kGal	
1	\$	25.06	\$ 16.60	\$ 20.10	\$ 3.50	\$ 0.12	\$ 16.60	\$ 20.10	
2	\$	29.82	\$ 19.20	\$ 24.70	\$ 5.50	\$ 0.18	\$ 9.60	\$ 12.35	
3	\$	34.58	\$ 21.80	\$ 29.30	\$ 7.50	\$ 0.25	\$ 7.27	\$ 9.77	
4	\$	39.34	\$ 24.40	\$ 33.90	\$ 9.50	\$ 0.32	\$ 6.10	\$ 8.48	
<b>5</b>	<b>\$</b>	<b>44.10</b>	<b>\$ 27.00</b>	<b>\$ 38.50</b>	<b>\$ 11.50</b>	<b>\$ 0.38</b>	<b>\$ 5.40</b>	<b>\$ 7.70</b>	
<b>6</b>	<b>\$</b>	<b>48.86</b>	<b>\$ 29.60</b>	<b>\$ 43.10</b>	<b>\$ 13.50</b>	<b>\$ 0.45</b>	<b>\$ 4.93</b>	<b>\$ 7.18</b>	
7	\$	53.62	\$ 32.20	\$ 47.70	\$ 15.50	\$ 0.52	\$ 4.60	\$ 6.81	
8	\$	58.38	\$ 35.80	\$ 53.30	\$ 17.50	\$ 0.58	\$ 4.48	\$ 6.66	
9	\$	63.14	\$ 39.40	\$ 58.90	\$ 19.50	\$ 0.65	\$ 4.38	\$ 6.54	
10	\$	67.90	\$ 43.00	\$ 64.50	\$ 21.50	\$ 0.72	\$ 4.30	\$ 6.45	
<b>Average Usage</b>			<b>5,700</b>						

# Water – Projected Recovery – Full Implementation



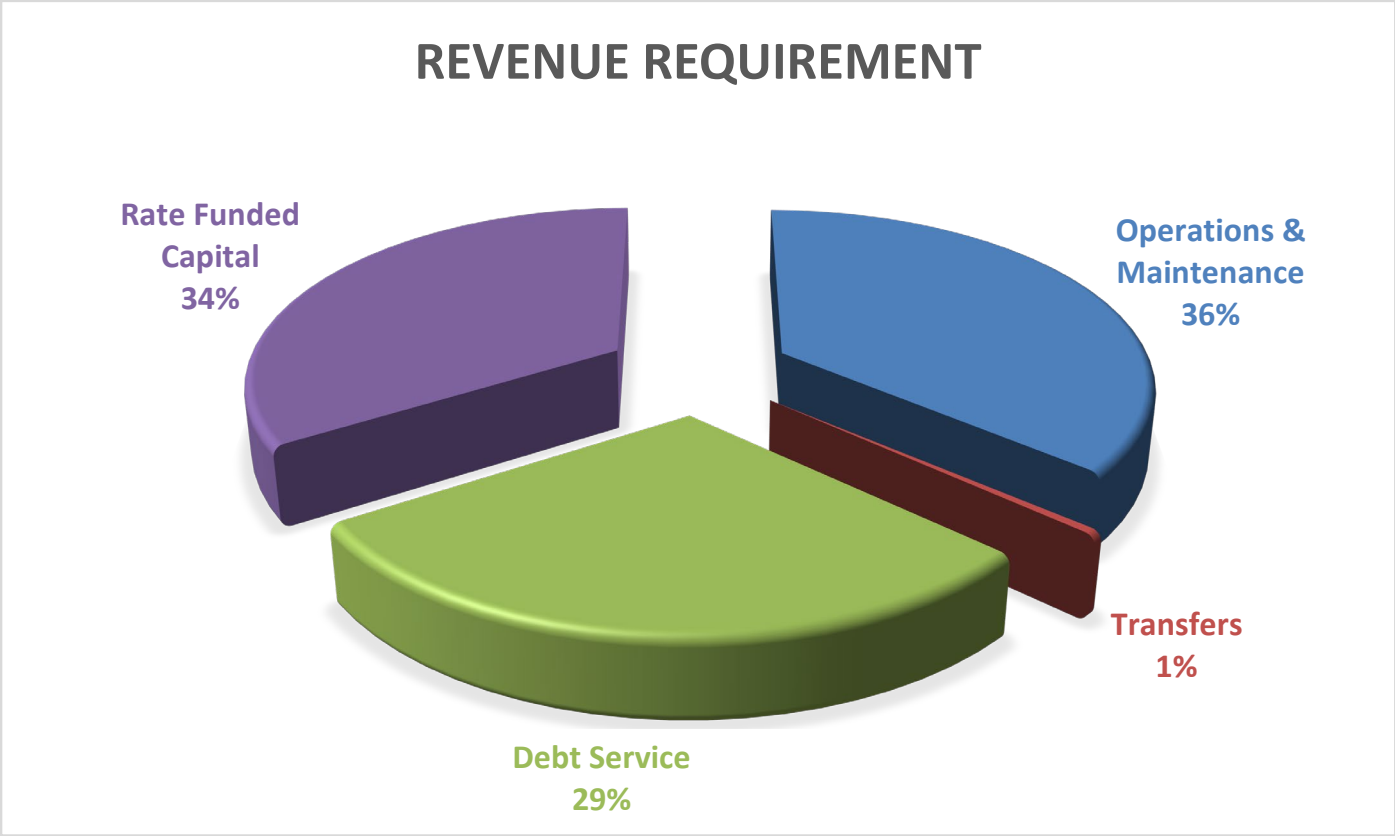
## Sewer – Cash Method Revenue Requirement

TOTAL REV. REQ.	
Operations & Maintenance	\$ 4,274,887
Plus: Transfers	\$ 51,583
Plus: Debt Service	\$ 3,451,921
Plus: Rate Funded Capital	\$ 4,000,000
Total Revenue Requirement	<u>\$ 11,778,391</u>
Less: Other Revenue	<u>\$ 88,850</u>
Rate Requirement	<u>\$ 11,689,542</u>

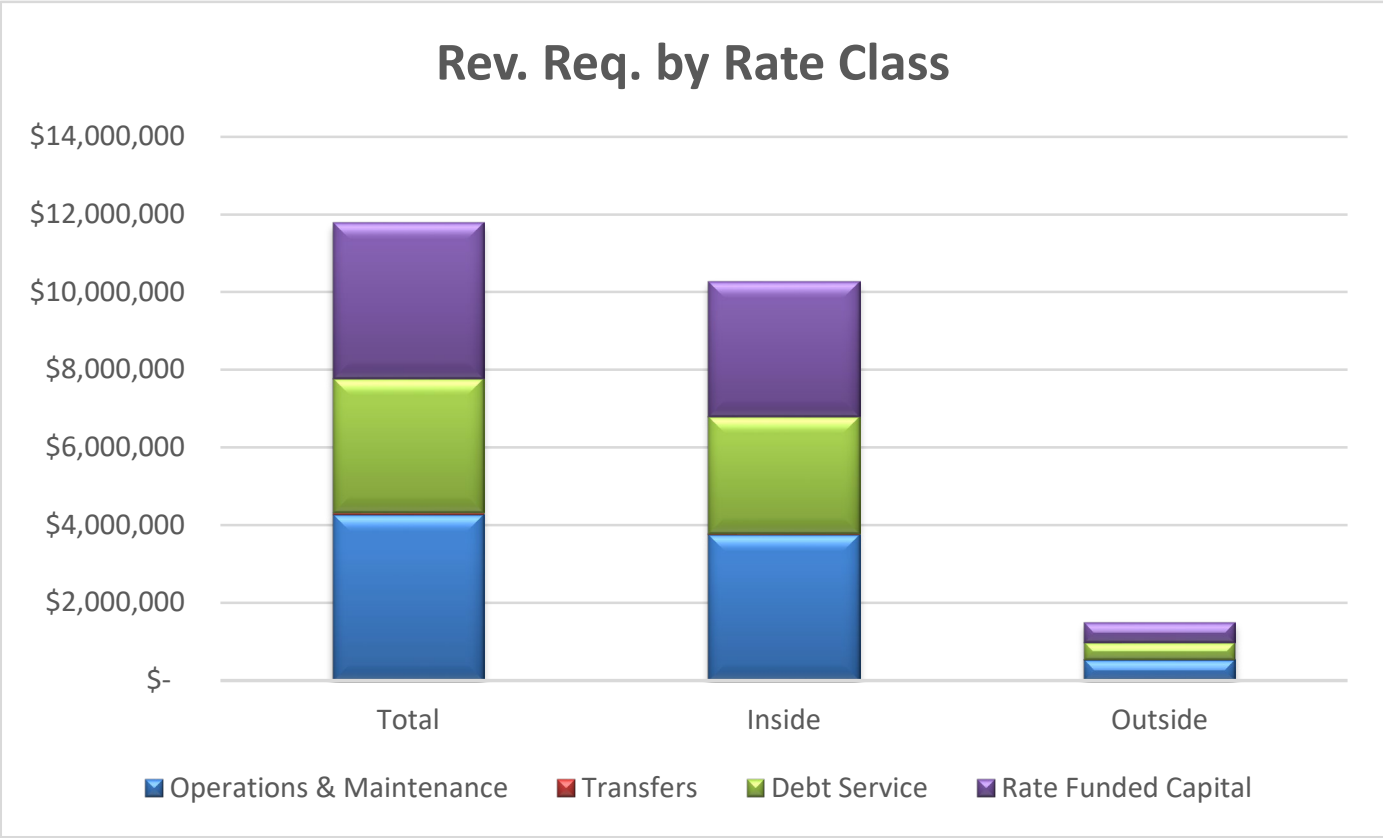
\*Debt Service Includes \$2,058,000 of annual payments that do not yet exist



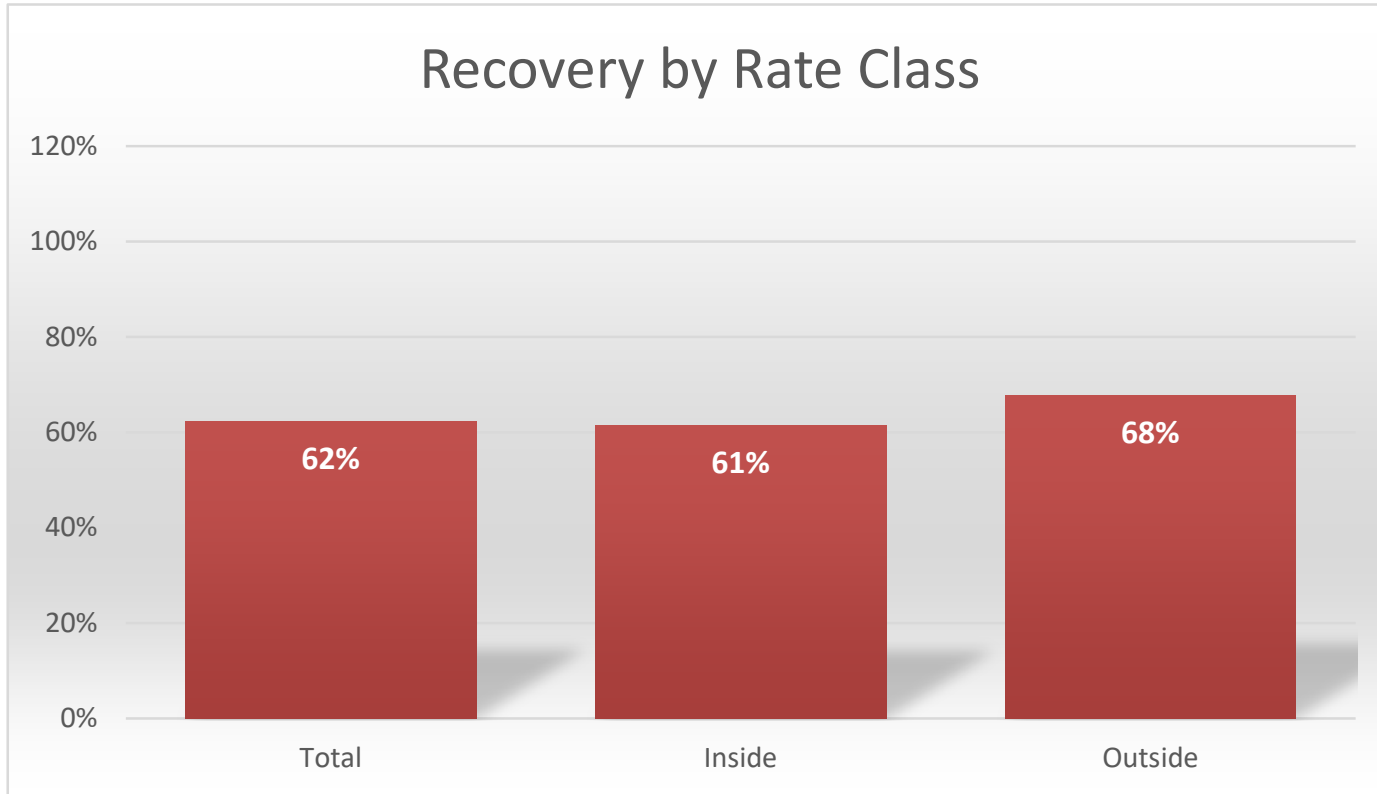
# Sewer – Components of Revenue Requirement



# Sewer – Revenue Requirement by Rate Class



## Sewer – Recovery by Class



	Total	Inside	Outside
Total Revenue	\$ 7,336,537	\$ 6,322,181	\$ 1,014,356
Over/(Under) Recovery	\$ (4,441,854)	\$ (3,958,677)	\$ (483,177)

## Sewer – Results & Recommendations, 1 of 3

- The sewer system is anticipated to under-recover by approximately \$4,442,000 on a total need of \$11,778,000.
- During our most recent work session held with staff on September 16, 2024, it was decided to try and target a 90% recovery in two steps.
  - This equals approximately \$1,636,00 in additional revenue each of the next two steps.

## Sewer – Results & Recommendations, 2 of 3

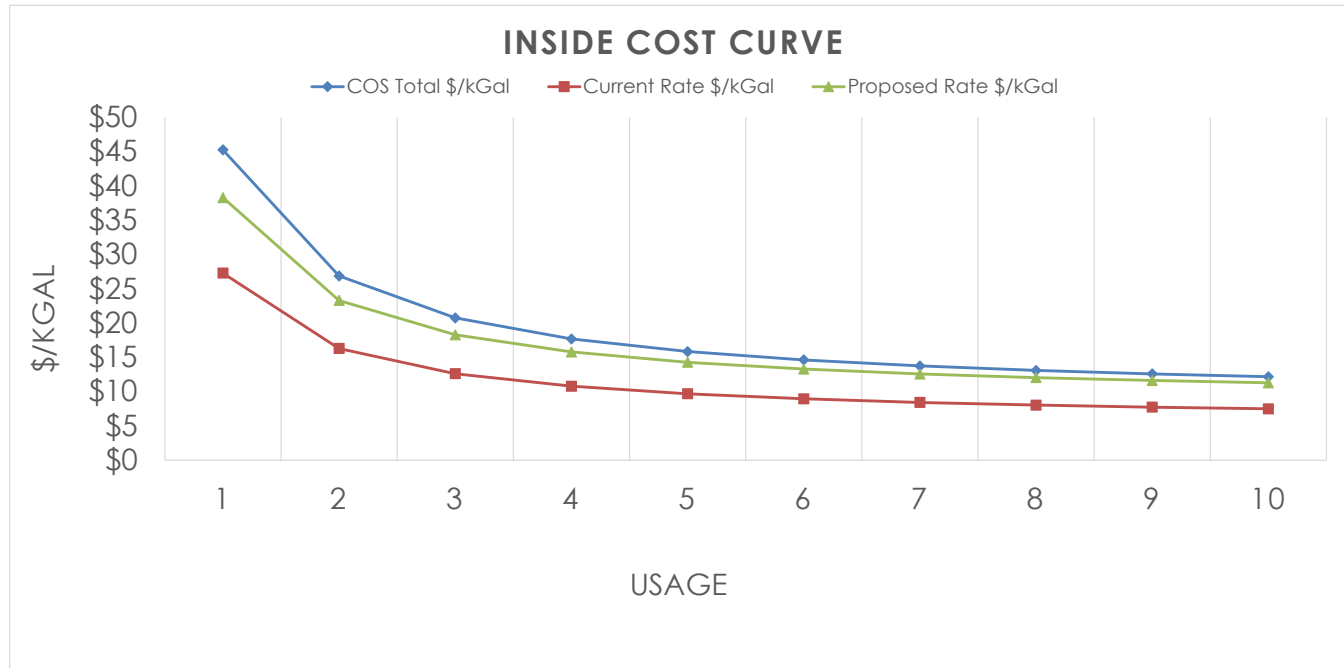
	<b>Inside</b>	<b>Outside</b>	<b>Total</b>
Additional Revenue Needed for 90% Recovery	\$ 2,938,527	\$ 334,373	\$ 3,272,900
Additional Revenue Needed Each Year	\$ 1,469,264	\$ 167,186	\$ 1,636,450
Bills sent in FY 2022	123,301	14,750	138,051
Average Impact per Bill per Step	\$ 11.92	\$ 11.33	\$ 11.85

## Sewer – Results & Recommendations, 3 of 3

- For all customers consider the following rate action:
  - Increase the monthly customer charge \$4.00 each of the next two steps. Total increase of \$8.00.
  - Increase volumetric rate on all volumes by \$1.50 each of the next two steps. Total increase of \$3.00 per kGal.

# Sewer – Inside City Rate Curve – Full Implementation

	Cost of Service	Current Rate	Proposed Rate	Difference
Customer Charge	\$ 36.74	\$ 22.00	\$ 30.00	\$ 8.00
All Usage	\$ 8.51	\$ 5.30	\$ 8.30	\$ 3.00



## Sewer – Inside City Rate Impact – Full Implementation

Usage	COS Rates	Current Rates	Proposed Rates	Monthly Change	Daily Change	Current \$/kGal	Proposed \$/kGal
1	\$ 45.25	\$ 27.30	\$ 38.30	\$ 11.00	\$ 0.37	\$ 27.30	\$ 38.30
2	\$ 53.77	\$ 32.60	\$ 46.60	\$ 14.00	\$ 0.47	\$ 16.30	\$ 23.30
3	\$ 62.28	\$ 37.90	\$ 54.90	\$ 17.00	\$ 0.57	\$ 12.63	\$ 18.30
4	\$ 70.80	\$ 43.20	\$ 63.20	\$ 20.00	\$ 0.67	\$ 10.80	\$ 15.80
<b>5</b>	<b>\$ 79.31</b>	<b>\$ 48.50</b>	<b>\$ 71.50</b>	<b>\$ 23.00</b>	<b>\$ 0.77</b>	<b>\$ 9.70</b>	<b>\$ 14.30</b>
<b>6</b>	<b>\$ 87.83</b>	<b>\$ 53.80</b>	<b>\$ 79.80</b>	<b>\$ 26.00</b>	<b>\$ 0.87</b>	<b>\$ 8.97</b>	<b>\$ 13.30</b>
7	\$ 96.34	\$ 59.10	\$ 88.10	\$ 29.00	\$ 0.97	\$ 8.44	\$ 12.59
8	\$ 104.86	\$ 64.40	\$ 96.40	\$ 32.00	\$ 1.07	\$ 8.05	\$ 12.05
9	\$ 113.37	\$ 69.70	\$ 104.70	\$ 35.00	\$ 1.17	\$ 7.74	\$ 11.63
10	\$ 121.89	\$ 75.00	\$ 113.00	\$ 38.00	\$ 1.27	\$ 7.50	\$ 11.30
<b>Average Usage</b>		<b>5,402</b>					



## Sewer – Projected Recovery – Full Implementation

