

City of Palm Coast, Florida Agenda Item

Agenda Date: November 14, 2023

Department WATER AND WASTEWATER Division UTILITY	Amount N/A Account # N/A
Subject: PRESENTATION - UTILITY RATE STUDY	
Presenter: Steve Flanagan, Utility Director	
Attachments: 1. Presentations (2)	
Background: Council Priority: D. Sustainable Environment & Infrastructure To ensure revenues are sufficient to support the operation, maintenance, and expansion of the water and sewer utility, the City periodically conducts a review of the established rates and fees. The City enlisted the services of Stantec Management Consulting in Florida to conduct a <i>Water and Wastewater Revenue Sufficiency and Capital Facilities Fees Study</i> . Calculations are needed to assess the rates necessary to maintain the infrastructure of the water and sewer system. The consultant will recommend adjustments to various rates including monthly base charges and per gallon charges as well as adjustments to water and sewer capacity fees that are assessed for new construction. Rate studies are performed to assure that the studied entity will be sustainable over time to cover operating costs, capital improvements costs, stay within financial policies, and cover debt payments with a reserve for emergencies. Much information must go into this evaluation and ultimately the result that is derived from all the information that goes into the study. These studies are usually performed every 3 to 5 years to keep up with the changes that occur in the operation, growth changes, material cost changes, labor rates, and equipment costs as well as maintenance and other factors. Based on the current economic factors changing much of how our economy functions, such as Covid impact, supply chain issues, inflation, labor shortages, and the fact that our past few studies have not been of the most comprehensive nature, this study is a more thorough dive into our system needs. During the regularly scheduled City Council meeting of November 14, 2023, beginning at 9:00 a.m., utility staff and the utility rate consultant will present its findings, options for consideration, and recommendations for cost adjustments.	
Recommended Action: THIS IS A PRESENTATION ONLY FOR INFORMATION, AND TO REQUEST COUNCIL DIRECTION WITH A FUTURE RATE CONSIDERATION TO COME BACK TO COUNCIL IN DECEMBER	

Rate Study Presentation

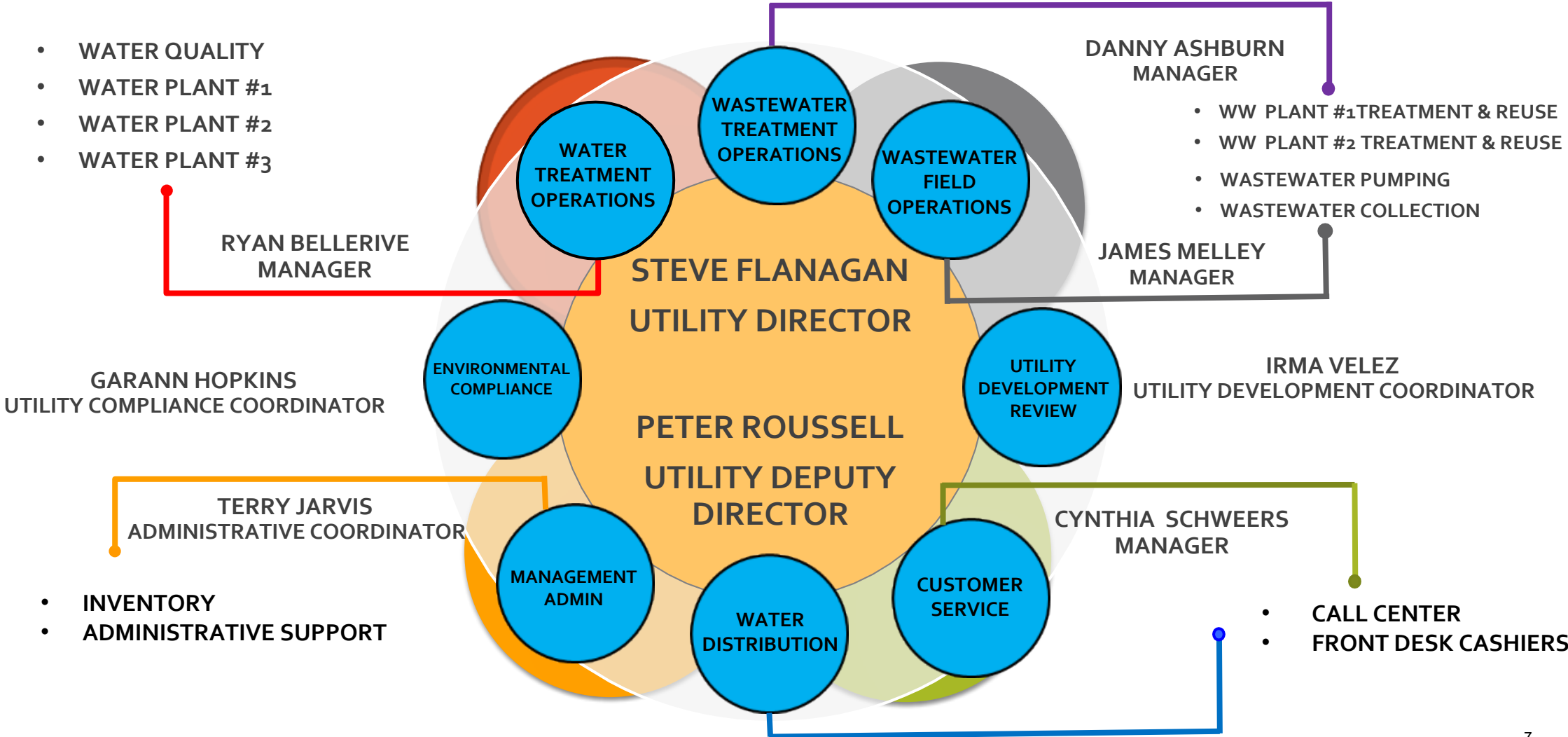


**THE UTILITY
DEPARTMENT**

Rate Study Presentation Agenda

- 1) Review Utility Infrastructure and Needs**
- 2) Present Rate Study Analysis**
- 3) Discuss Options**
- 4) Next Steps**

UTILITY DIVISIONS



Utility Administration Offices/Inventory



Water Treatment Plant Number One (Lime Softening Facility)



Conventional Lime Softening Facility



Originally Constructed in 1979
as a 2.5 MGD Facility



Expanded to 6.0 MGD in 1982

Water Treatment Plant Number Two (Membrane Softening Facility)

Expanded to 6.384 MGD in 2004



**2015 Added 1.2
MGD of additional
capacity
(7.58 MGD Total)**

Water Treatment Plant Number Three (Reverse Osmosis Facility)



Completed July 2008 at 3.0 MGD



Membrane Softening Designed for Brackish Reverse Osmosis



Water Quality

One of the primary goals of the Water Operations Division is to protect the public health of customers. The water quality monitoring program is based on the requirements of the U.S. Environmental Protection Agency's National Primary and Secondary Drinking Water Regulations.

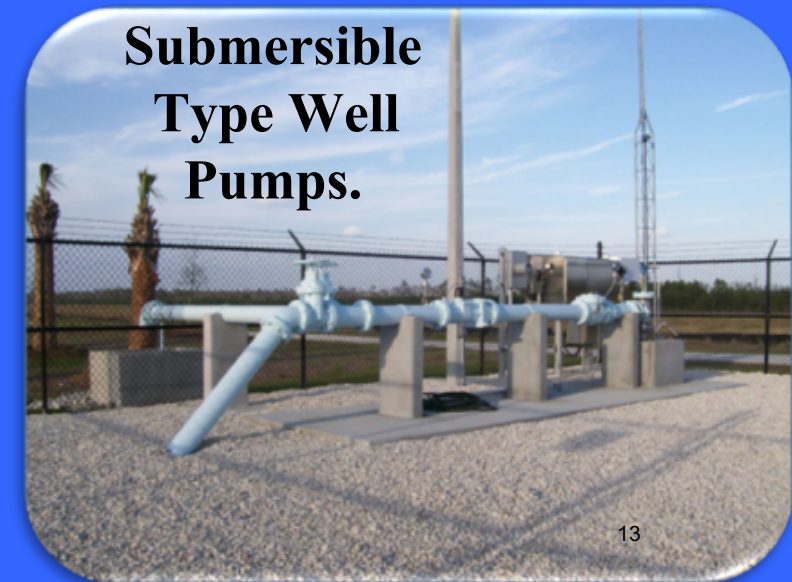
The Water Quality Division's staff performs a wide range of duties such as:

- Collects bacteriological samples at representative points in the distribution system
- Performs routine chlorine residual inspections
- Administers the Lead and Copper program
- Maintains fire hydrants
- Responds to customer concerns
- Evaluates the overall quality of the drinking water within the system



67 Water Supply Wells

- 51 Intermediate aquifer wells serving water treatment plant number one (lime softening facility) and water treatment plant number three - 60 to 80 feet deep
- 16 Floridan aquifer wells supplying water treatment plant number two (membrane softening facility) 220 to 300 feet deep



Utility Meter Division

- Meter Division currently reads 56,090 meters every 28-32 days.
- Meter Techs perform an average of 302 reread work orders a month, repair/replace an average of 400 meters monthly, we plan to start accelerating the meter retirement program to the point of replacing roughly 800 meters a month.
- Techs install all new meter transmitters as well as replace and repair units that malfunction. For a total of roughly 300 units/month.



The Utility Department has always prided itself on having well-run and maintained facilities and a highly trained staff who deliver great service and high-quality water.

That level of excellence has been rewarded again and again with about 90 regional, state and national awards over the past 40 years.

Most visible nationally, our “Water Buoys” team has won the American Water Works Association’s Top Ops National Championship 7 times since 2006 – including in June 2017. The team is also the State Champions, having won 13 times.



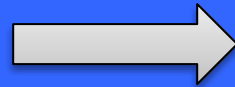
Water Reclamation Facility Number One



Several Capacity Upgrades
over the years
leading to the
current 6.83 MGD
Capacity



Latest Capacity
Expansion
Completed in 2006



Water Reclamation Facility Number 2



2 MGD Advanced
Waste Treatment
Facility Completed
in 2018



Currently Under
Construction of a
2 MGD Capacity
Expansion



Wastewater Treatment Plant No. 2
ITBCDCME1602

Image # 34
Date : 09.05.2018
Tel: 888.542.0231



Disposal of Treated Wastewater

After being treated, Palm Coast's treated wastewater – called reuse water – is disposed of in 3 ways:

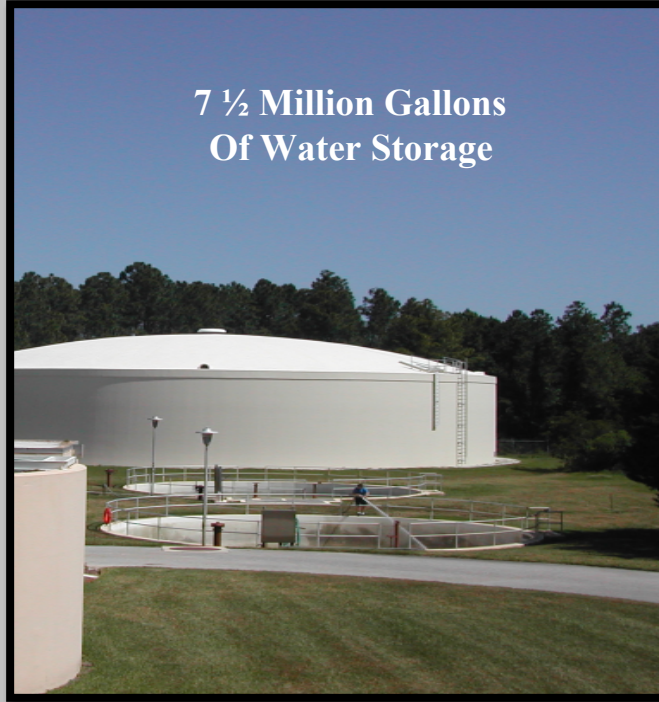
- Irrigation – reuse water is used for irrigation on medians to keep our City looking beautiful. It is also used by local golf courses, athletic fields, in Town Center and at some private homes.
- RIB (Rapid Infiltration Basin System) – The RIB is a system that replenishes the shallow aquifer. Water is pumped from the treatment facility into the RIB water basins to filter back into the water table.
- Outfall – At times of heavy rain, the City has a permit for limited “wet-weather” discharge into the Intracoastal Waterway.



800+ Miles of Wastewater Pipelines



6 Water Storage Tanks



**7 ½ Million Gallons
Of Water Storage**

4,007 Fire Hydrants



55,000+ Meters



800+ Miles of Water Mains



3 Wastewater Effluent Disposal Sites



1 Effluent Pumping Facility



16,000+ PEP Units



165 Wastewater Pump Stations



UTILITY CREWS SERVING OUR CITY

Pump Station Upgrades



Evaluating Pump Station Pipes



Unidirectional Flushing of Potable Water



Installing New Fire Hydrant

Installation of Filters



Gravity Sewer Main Repair



Water Capital Project Highlights

<u>Projects:</u>	FY23	FY24	FY25	FY26	FY27	FY28
Water Treatment Plant # 3						
Membrane Replacement	-	-		1,500,000	-	-
Plant Expansion Design	-	1,500,000	-	-	-	-
Electrical Switchgear Upgrades	-	1,000,000	-	-	1,000,000	-
Plant Expansion Design/Construction - LOAN PER RATE STUDY		-	5,000,000	9,000,000	3,000,000	3,000,000
2MG Ground Storage Tank		-	-	1,500,000	1,000,000	-
Wellfield and Wells			-			
Wellfield Expansion WTP #3 Phase 3 - Brackish/Fresh	100,000	1,000,000	-	-	-	-
Test Wells	100,000	50,000				
Wellfield Expansion SW-24 SW-25	-	-	-	1,000,000	4,000,000	3,000,000
Water Treatment Plant #1				-	-	
Lime Sludge Handling - Design and Facility	25,000	500,000	2,000,000	-	-	-
Water Treatment Plant #2				-	-	-
Sludge Thickener	100,000	1,900,000	250,000	-	-	-
2 MG Ground Water Storage Tank	-	1,500,000	1,000,000	-	-	21
Aeration Equipment		898,354				

Wastewater Capital Project Highlights

	FY23	FY24	FY25	FY26	FY27	FY28
Wastewater Treatment Plant #1						-
Headworks Bypass System & Coating Rehab	500,000	2,500,000	-	-	-	-
Centrifuge Replacement (Replace with Screw Press) (ARPA)	-	5,200,000	-	-	-	-
Aeration Upgrades	200,000	2,800,000	-	-	-	-
Expansion and Rehabilitation		-	5,000,000	30,000,000	35,000,000	-
Reclaimed Water Ground Storage Tank (6MG) (Seek Grant Funding)		-	300,000	3,000,000	-	-
Spray field to RIB conversion (SEEK SRF FUNDING)		250,000	2,500,000	1,500,000	-	-
Generator Replacement (Seek Grant)	-	-	4,700,000	-	-	-
Electrical Upgrades		-	2,000,000	-	-	-
Force Mains					-	-
OKR - SR100 to future WWTP #3	150,000	1,500,000	2,000,000	-	-	-
OKR Force Main to WWTP #1	150,000	3,800,000	-	-	-	-
A1A Force Main Extension (Jungle Hut to Malacompra) - ARPA	400,000	2,818,192	-	-	-	-
A1A Force Main Extension (Malacompra to Marineland) - County Grant not awarded	-	500,000	3,000,000	4,500,000	-	-
Reclaimed Water Mains	-		-	-	-	-
Seminole Woods Reclaim Extension	-	1,000,000	-	-	-	-
Land Acquisition		-	1,000,000	1,000,000	-	-
Seminole Blvd to Citation & Dry Lake Pond Conversion		-	2,500,000	2,500,000	-	-
Wastewater Treatment Plant #2	-	-		-	-	-
Replace Membranes	-	-	1,500,000	-	-	-
Reclaimed Water Ground Storage Tank (2MG)		-	250,000	2,500,000	-	22
Aquifer Recharge Design and Construction		250,000	1,000,000	-	-	-

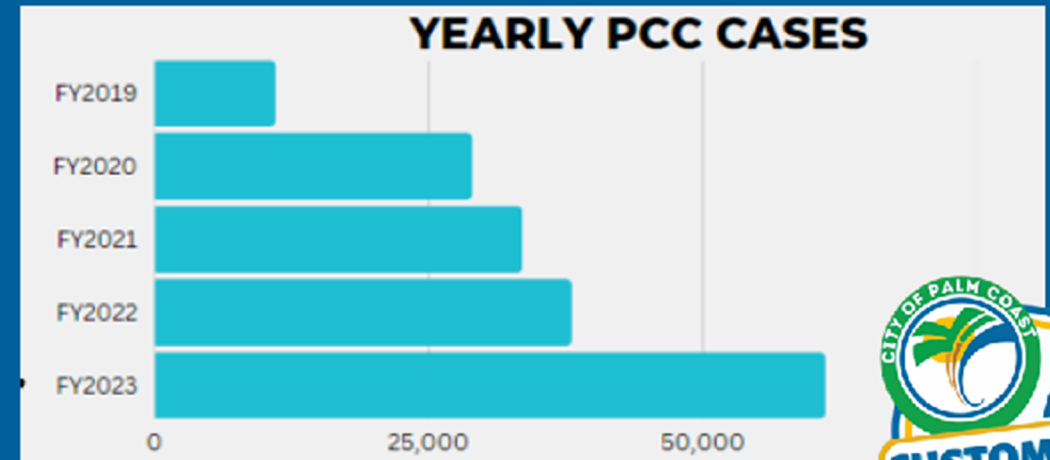
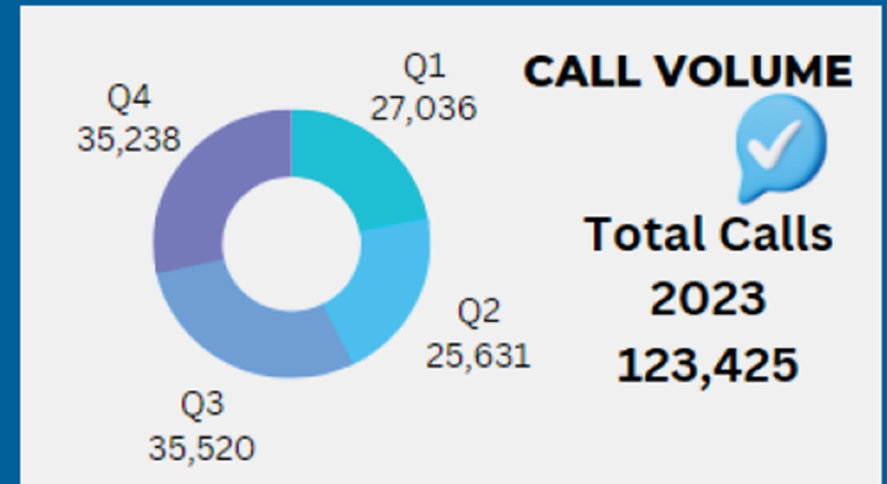
Customer Service Division

Customer Service Division is responsible for over 60,000 Utility Accounts and servicing over 100,000 residents. Customer Service sets up new utility services, takes payments, and answer questions related to water, wastewater, trash, stormwater, public works, and much more.

The call center handles 12,000-13,000 calls monthly

Customer Service Staff handles about 11,000-12,000 cases monthly through Palm Coast Connect &

We have two front desk locations - located at City Hall & Utility Drive



Environmental Compliance Division

- Federal and State Compliance Standards
- Water & Wastewater Permits
- Regulated & Hazardous Materials
- Growth Management
- Public Outreach
- Grants



Rate Study Presentation

**Stantec
Management &
Technology
Consulting**



**THE UTILITY
DEPARTMENT**

**Mr. Eric Grau,
Principal²⁵**



Utility Rate Study Presentation

City Council Workshop - November 14, 2023



A Rate Study is a Series of Connected Investigations

**How
Much?**

Revenue Sufficiency

- Maintain policies & targets
- Fund system investment needs
- Achieve sustainable funding of operations

**From
Whom?**

Defensible Allocation Methods

- Utilize industry accepted approaches
- Determine revenue requirements for services provided

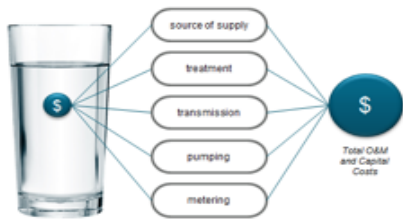
**How to
Collect?**

Simple & Sustainable Rates

- Collect revenue proportional to services provided
- Balance affordability and financial objectives
- Achieve revenue stability



Best Practices to Ensure Sustainable & Equitable Rates



Revenue Sufficiency

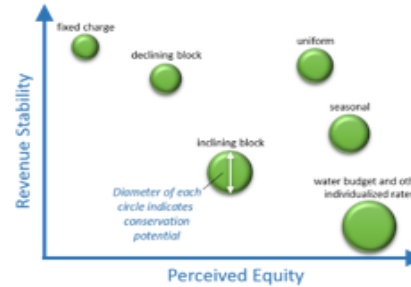
- Operating Costs
- Capital Costs
- Financial Policies
 - Debt Coverage
 - Reserves

Annually (Budget)



Cost Allocation

- Evaluate Available Data
- Identify Methodology
- Compare to Revenue



Rate Design

- Evaluate Objectives
- Identify Structures
- Set Parameters
- Customer Impacts



Capacity Fees

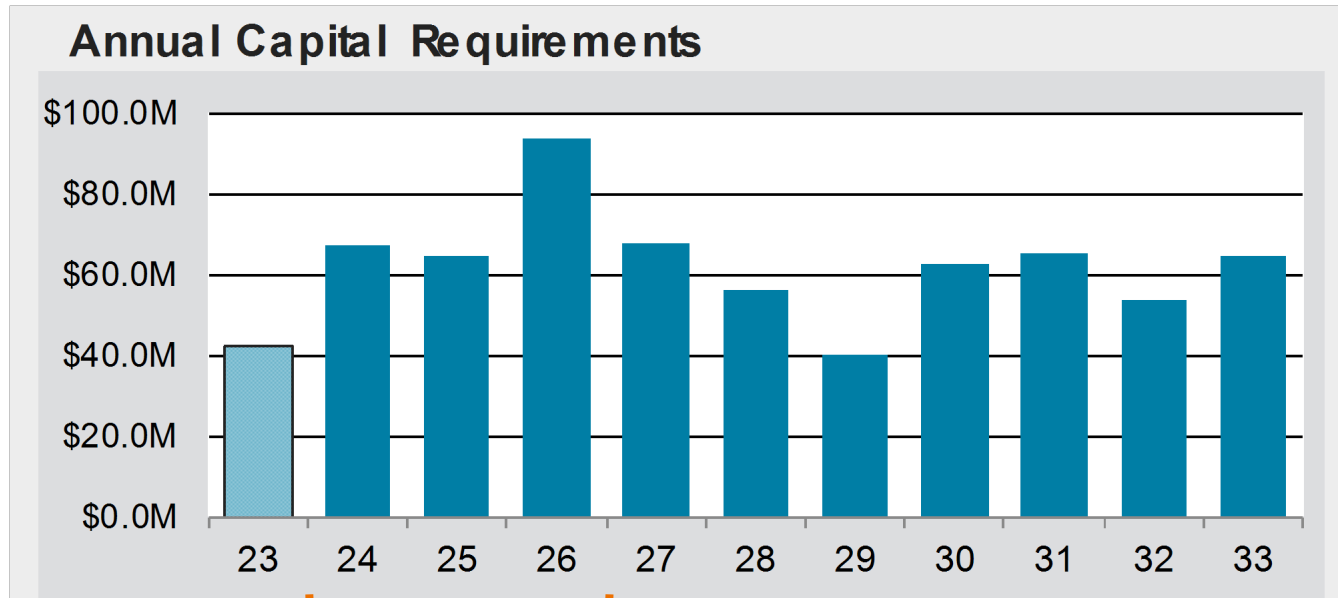
- Recover specific costs
- Growth pays for share of capital investments

Update Every 3 to 5 Years Based on Changes in Costs, Usage Profiles, Development Patterns, Industry Practices, Legal Precedent, Technology, etc.



Revenue Sufficiency Analysis – Key Issues

- Region continues experiencing strong growth
- Significant capital investment required to serve growth



FY 2024-2026 = \$225.1M

FY 2024-2033 = \$635.7M (future \$)

Planned spending needs of note:

- Water Treatment Plants = \$111.5M
- Wastewater Treat. Plants = \$136.5M
- Future WW Treat. Plant #3 = \$77.4M
- Wells and Wellfields = \$96.9M
- Pep System = \$29.2M
- General Plant R&R = \$40.6M

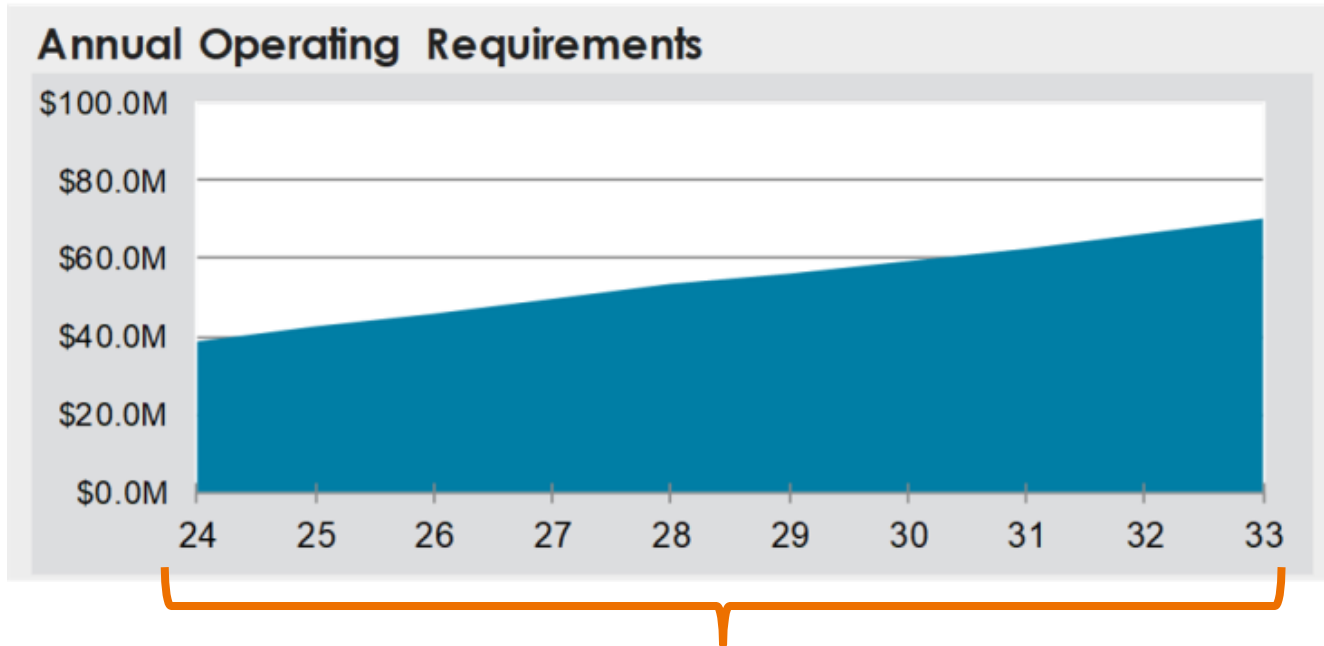
Available Resources:

- ARPA/County Grants = \$16.8M
- SRF Loan Proceeds = \$27.0M



Revenue Sufficiency Analysis – Key Issues

- Additional personnel and equipment needed to operate and maintain growing system
- Higher inflation to key operating inputs persist in utility industry



Spending by FY 2033 = \$70.1M / Yr.

Key Assumptions:

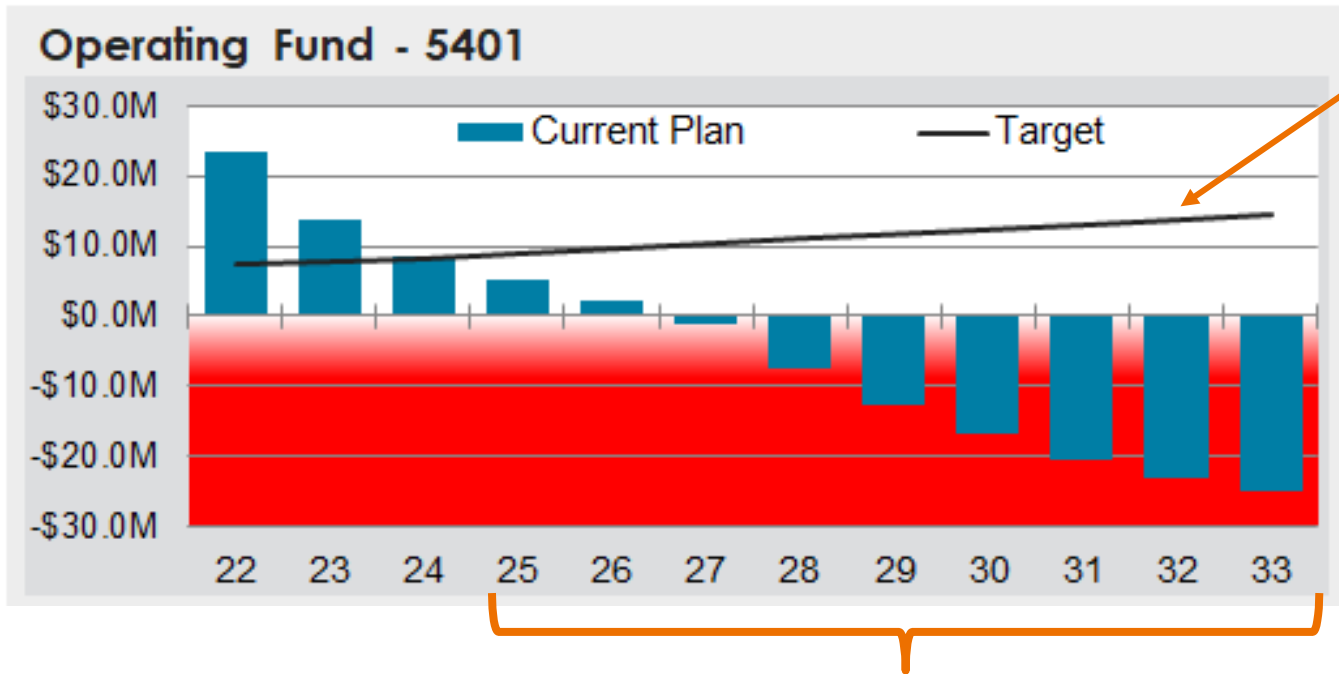
- Based upon FY 2024 Budget
- 5.5% avg annual inc. thereafter
- 97% budget spending execution
- Incremental OpEx by FY 2028:
 - Personnel = \$4.2M / Yr.
 - Equipment/Fleet = \$1.8M / Yr.

FY 2024-2033 = 80.7% cumulative increase in operations spending



Revenue Sufficiency Analysis – Conclusions & Results

➤ Indexing rates by US-CPI is not sufficient to fund capital needs



Required Minimum Balance = 2.5 Months of Operating Expenditures

Key Assumptions:

- 3.0% Annual Rate Indexing
 - US-CPI = 2.7% 10-yr Avg
 - W&S Series = 3.9% 10-yr Avg

Operating Reserves less than required minimum by FY 2025, exhausted by FY 2027



Revenue Sufficiency Analysis – Conclusions & Results

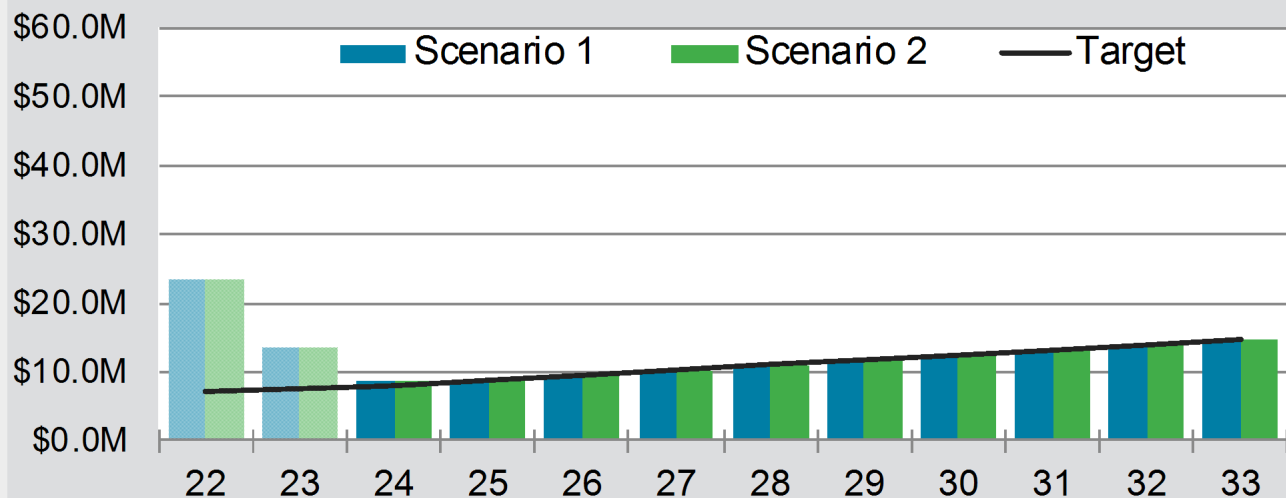
➤ Near-term rate increases needed to fund capital program

	FY 2024	FY 2025	FY 2026	FY 2027- FY 2033
Effective Date	Apr 1, 2024	Oct 1, 2024	Oct 1, 2025	Oct 1, 20xx
Scenario 1	N/A	12.50%	6.00%	3.75% per
Scenario 2	6.00%	6.00%	6.00%	3.75% per

Similar Results for Each Scenario

- Fund all identified requirements
 - Operations
 - Capital
 - Debt Service
 - Operating Reserve Target
- Debt Coverage $\geq 2.0x$ Net Rev
- Future borrowings; FY 2025-2033:
 - Revenue Bonds = ~\$217M
 - SRF Loans = ~\$59M

Operating Fund - 5401





10-Year Financial Forecast

CITY OF PALM COAST, FLORIDA

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
Effective Date	Apr 1, 2024	Oct 1, 2024	Oct 1, 2025	Oct 1, 2026	Oct 1, 2027	Oct 1, 2028	Oct 1, 2029	Oct 1, 2030	Oct 1, 2031	Oct 1, 2032
SCENARIO 1	N/A	12.50%	6.00%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%
Typical Bill	\$ 71.09	\$ 79.97	\$ 84.76	\$ 87.94	\$ 91.24	\$ 94.66	\$ 98.21	\$ 101.90	\$ 105.72	\$ 109.68
Debt Coverage	2.17x	2.01x	2.07x	2.01x	2.03x	2.02x	2.11x	2.01x	2.11x	2.16x
Bond Proceeds	\$ -	\$ 22.6M	\$ 43.9M	\$ 20.1M	\$ 19.1M	\$ 12.6M	\$ 29.5M	\$ 29.9M	\$ 16.5M	\$ 22.5M
SRF Proceeds	\$ -	\$ 2.5M	\$ 21.7M	\$ 22.8M	\$ 12.0M	\$ -	\$ -	\$ -	\$ -	\$ -
SCENARIO 2	6.00%	6.00%	6.00%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%
Typical Bill	\$ 75.35	\$ 79.87	\$ 84.66	\$ 87.84	\$ 91.13	\$ 94.55	\$ 98.10	\$ 101.77	\$ 105.59	\$ 109.55
Debt Coverage	2.33x	2.01x	2.07x	2.00x	2.02x	2.01x	2.10x	2.00x	2.09x	2.14x
Bond Proceeds	\$ -	\$ 21.0M	\$ 44.1M	\$ 20.3M	\$ 19.3M	\$ 12.9M	\$ 29.7M	\$ 30.2M	\$ 16.7M	\$ 22.9M
SRF Proceeds	\$ -	\$ 2.5M	\$ 21.7M	\$ 22.8M	\$ 12.0M	\$ -	\$ -	\$ -	\$ -	\$ -

“Typical” single-family residential monthly bill based upon water use of 2,500 gallons per month



Revenue Sufficiency Analysis – Key Takeaways

- Significant capital investment required to serve growth
- Indexing rates by US-CPI is not sufficient to fund capital needs
- Greater near-term increases are recommended:

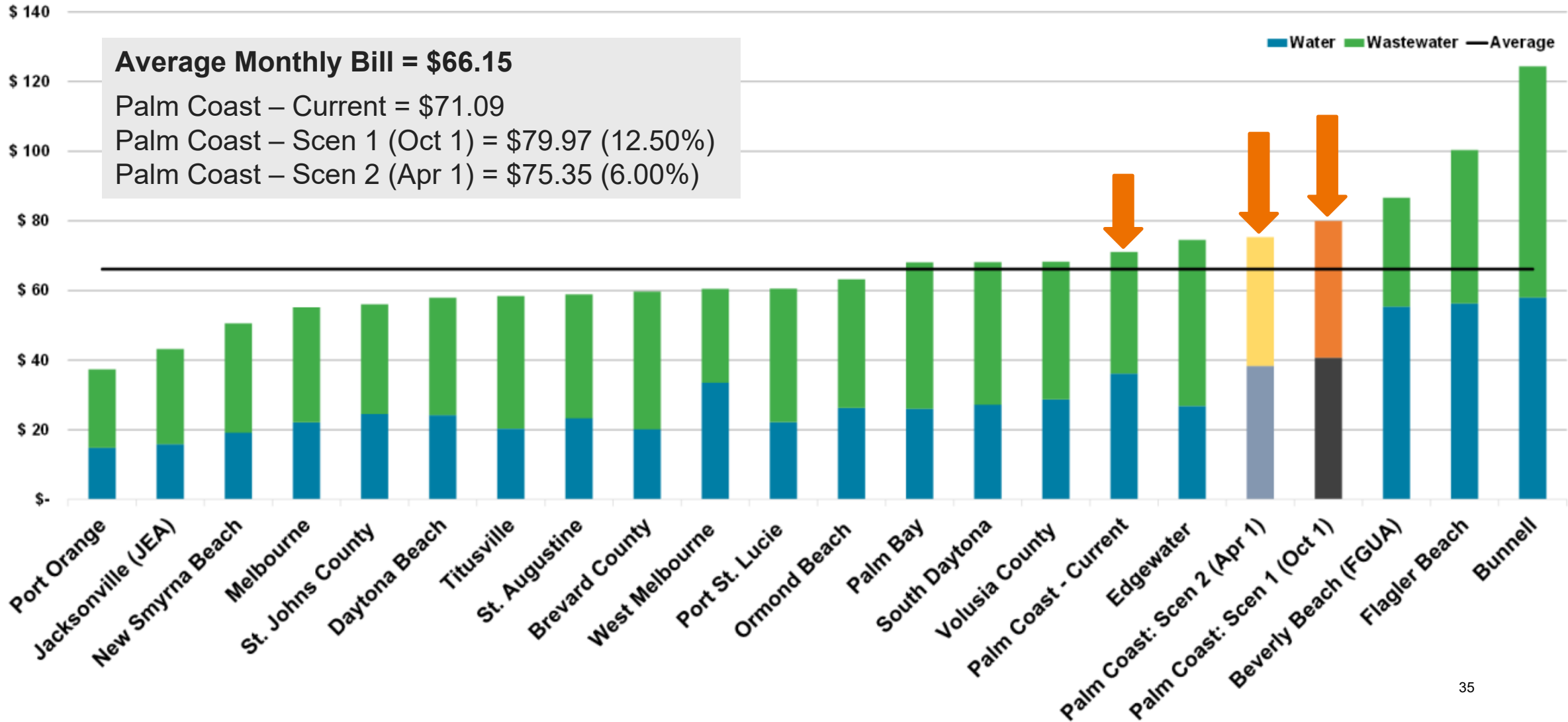
	FY 2024	FY 2025	FY 2026
Effective Date	Apr 1, 2024	Oct 1, 2024	Oct 1, 2025
SCENARIO 1	N/A	12.50%	6.00%
SCENARIO 2	6.00%	6.00%	6.00%



Local Water & Wastewater Monthly Bill Survey:

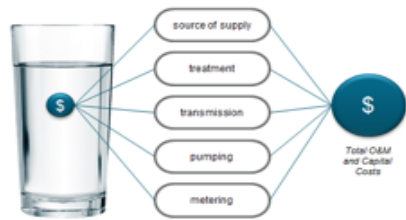
Current Single-Family Residential Bills at 2,500 gallons per month

CITY OF PALM COAST, FLORIDA





Best Practices to Ensure Sustainable & Equitable Rates



Revenue Sufficiency

- Operating Costs
- Capital Costs
- Financial Policies
 - Debt Coverage
 - Reserves

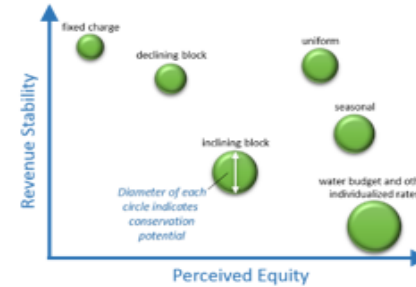
Annually (Budget)



Cost Allocation

- Evaluate Available Data
- Identify Methodology
- Compare to Revenue

Update Every 3 to 5 Years Based on Changes in Costs, Usage Profiles, Development Patterns, Industry Practices, Legal Precedent, Technology, etc.



Rate Design

- Evaluate Objectives
- Identify Structures
- Set Parameters
- Customer Impacts



Capacity Fees

- Recover specific costs
- Growth pays for share of capital investments



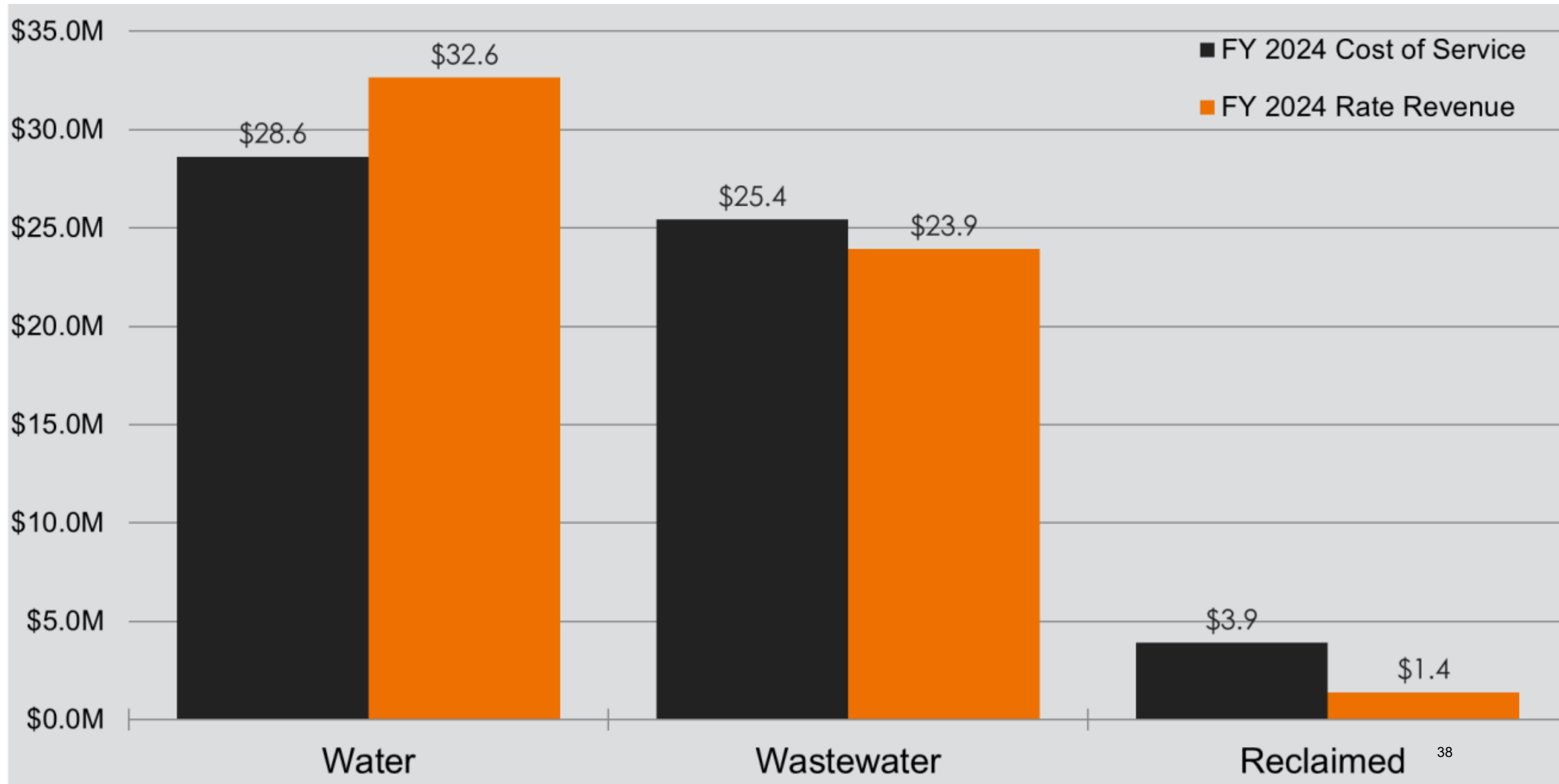
Cost of Service Analysis – Overview

- Primary objectives of analysis:
 - Determine cost of providing services: water / wastewater / reclaimed
 - Determine extent to which current rates reflect proportional cost of services
 - Evaluate and address any significant cross-service subsidizations

- Key takeaways:
 - Wastewater revenue under-recovers allocated costs by ~6%
 - Water/Reclaimed revenues over-recover allocated costs by ~5%
 - **Given small variances, no corrective action is needed at this time**

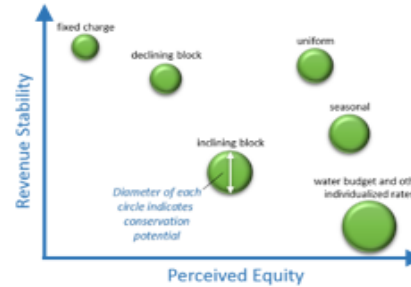
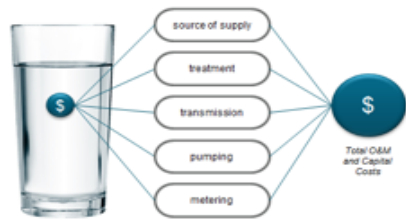


Cost of Service Analysis – Test Year Results





Best Practices to Ensure Sustainable & Equitable Rates



Revenue Sufficiency

- Operating Costs
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Annually (Budget)

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Update Every 3 to 5 Years Based on Changes in Costs, Usage Profiles, Development Patterns, Industry Practices, Legal Precedent, Technology, etc.



Rate Design Analysis – Overview

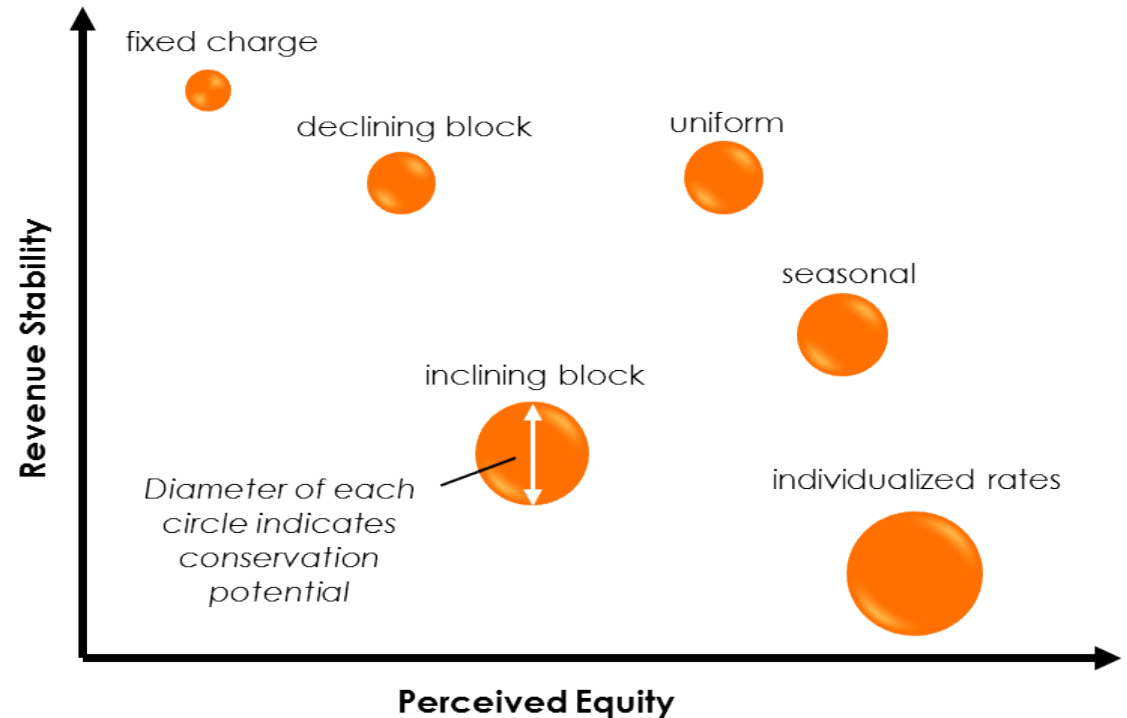
➤ Primary objective to design rates that fairly recover revenue across service type in a way that best balances City’s objectives

✓ **Rate structure considerations:**

- “ Conforms to industry practice
- “ Meets all legal requirements
- “ Easy to administer/understand
- “ Elasticity of demand & weather
- “ **Conservation and affordability**
- “ Stakeholder input/concerns

✓ **Other critical considerations:**

- “ Understanding distribution of costs
- “ Integrating financial considerations





Current Rate Structure

Water Rates			
		Inside City	Outside City
Fixed Charge	All Customer Classes		
	5/8" x 3/4", 3/4"	\$ 21.57	\$ 26.96
	1"	\$ 53.92	\$ 67.40
	1.5"	\$ 107.84	\$ 134.80
	2"	\$ 172.56	\$ 215.70
	3"	\$ 345.07	\$ 431.34
	4"	\$ 539.16	\$ 673.95
	6"	\$ 1,078.36	\$ 1,347.95
	8"	\$ 1,725.40	\$ 2,156.75
	10"	\$ 2,480.24	\$ 3,100.30
Volume Charges		Inside City	Outside City
	Single-Family & Duplex		
	0 - 5,000 gallons	\$ 5.84	\$ 7.30
	5,001 - 10,000 gallons	\$ 6.43	\$ 8.04
	10,001 - 20,000 gallons	\$ 8.19	\$ 10.24
	Above 20,000 gallons	\$ 10.51	\$ 13.14
General & Multi-Family			
All Usage	\$ 6.70	\$ 8.38	

Wastewater Rates			
		Inside City	Outside City
Fixed Charge	All Customer Classes		
	5/8" x 3/4", 3/4"	\$ 21.19	\$ 26.49
	1"	\$ 52.92	\$ 66.15
	1.5"	\$ 105.82	\$ 132.28
	2"	\$ 169.31	\$ 211.64
	3"	\$ 338.67	\$ 423.34
	4"	\$ 529.12	\$ 661.40
	6"	\$ 1,058.28	\$ 1,322.85
	8"	\$ 1,693.28	\$ 2,116.60
	10"	\$ 2,434.07	\$ 3,042.59
Volume Charges		Inside City	Outside City
	Single-Family & Duplex		
Up to 8,000 gallons	\$ 5.49	\$ 6.86	
General & Multi-Family			
Up to 8,000 gallons	\$ 6.59	\$ 8.24	

Current Fixed Charge Revenue Recovery:

- Water Fixed Charge = 45.6%
- Wastewater Fixed Charge = 48.4%



Recommended Rate Structure Updates

Monthly Bill Components	Current Rate Structure	Recommended Updates
Water / Wastewater Fixed Charges	Flat fee scaled by meter size	No Change
Water Volume Charges	Inclining Block: 4 Tiers	Add Lifeline Tier: 0-2 Kgal
Wastewater Volume Charges	1 Tier Capped at 8 Kgal	No Change

Goals:

- Mitigate bill impacts to fixed income / low water user
- Promote water conservation
- Ensure revenue stability is preserved

Solutions:

- Add Lifeline Tier to Water Rates
- Apply next increase to only Water / Wastewater Volume Charges



Recommended Rate Structure Updates

Scenario 1: 12.50% on Oct 1, 2024

Water Rates			
		Inside City	Outside City
All Customer Classes			
Fixed Charge	5/8" x 3/4", 3/4"	\$ 21.57	\$ 26.96
	1"	\$ 53.92	\$ 67.40
	1.5"	\$ 107.84	\$ 134.80
	2"	\$ 172.56	\$ 215.70
	3"	\$ 345.07	\$ 431.34
	4"	\$ 539.16	\$ 673.95
	6"	\$ 1,078.36	\$ 1,347.95
	8"	\$ 1,725.40	\$ 2,156.75
	10"	\$ 2,480.24	\$ 3,100.30
Volume Charges			
		Inside City	Outside City
Single-Family & Duplex			
	0 - 2,000 gallons	\$ 6.43	\$ 8.04
	2,001 - 5,000 gallons	\$ 8.04	\$ 10.05
	5,001 - 10,000 gallons	\$ 8.84	\$ 11.05
	10,001 - 20,000 gallons	\$ 11.26	\$ 14.07
	Above 20,000 gallons	\$ 14.47	\$ 18.09
General & Multi-Family			
	All Usage	\$ 9.25	\$ 11.56

- No change to Fixed Charges
- Fixed Charge Rev Recovery = 39.4%

- Recover all 12.50% increase (once)
- New Lifeline Tier: 0-2,000 gallons
- Redistribution of Volume Charges to generate same level of revenues



Recommended Rate Structure Updates

Scenario 1: 12.50% on Oct 1, 2024

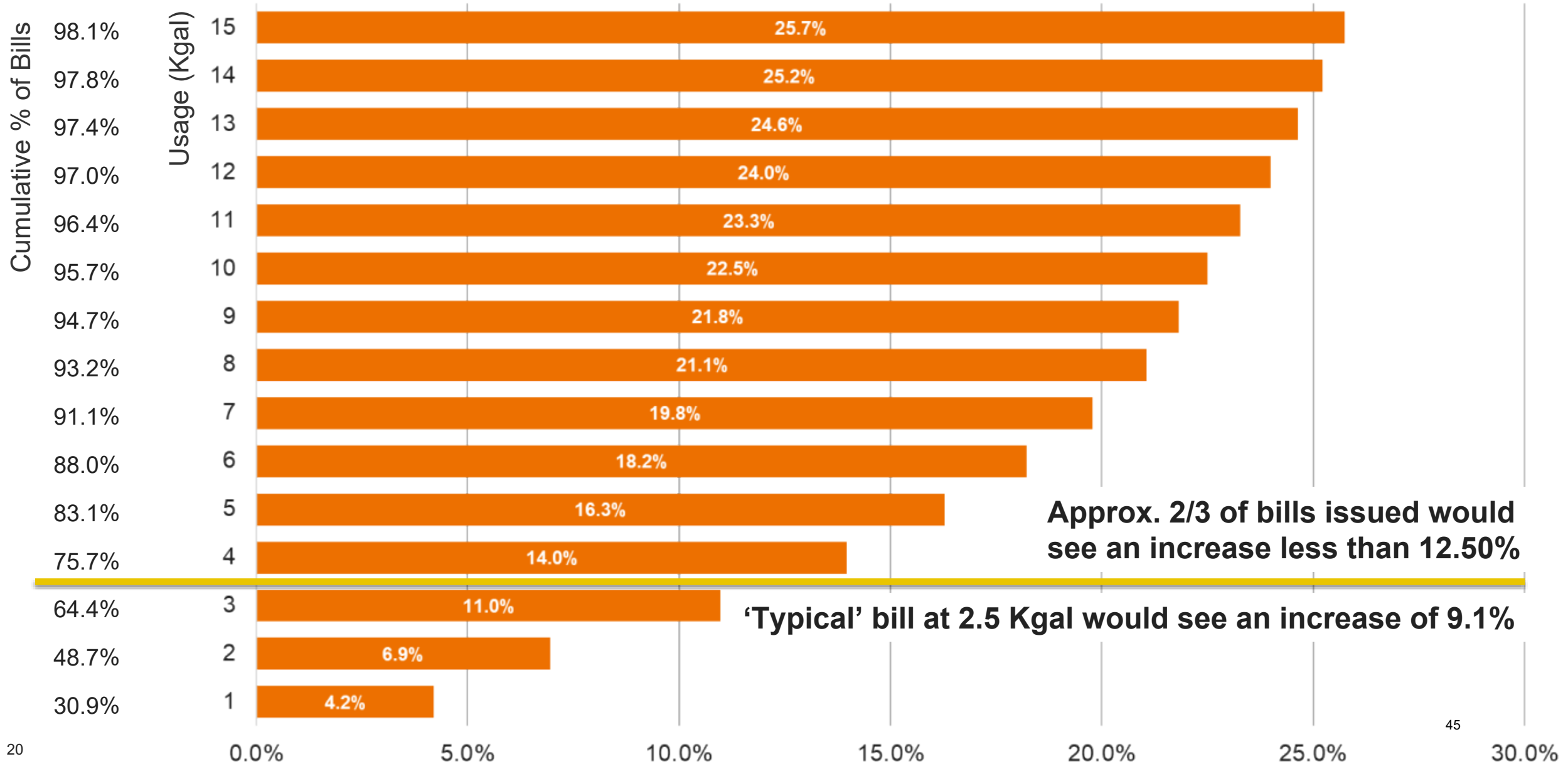
Wastewater Rates			
		Inside City	Outside City
Fixed Charge	All Customer Classes		
	5/8" x 3/4", 3/4"	\$ 21.19	\$ 26.49
	1"	\$ 52.92	\$ 66.15
	1.5"	\$ 105.82	\$ 132.28
	2"	\$ 169.31	\$ 211.64
	3"	\$ 338.67	\$ 423.34
	4"	\$ 529.12	\$ 661.40
	6"	\$ 1,058.28	\$ 1,322.85
	8"	\$ 1,693.28	\$ 2,116.60
	10"	\$ 2,434.07	\$ 3,042.59
Volume Charges		Inside City	Outside City
	Single-Family & Duplex		
	Up to 8,000 gallons	\$ 7.17	\$ 8.96
General & Multi-Family			
Up to 8,000 gallons	\$ 8.60	\$ 10.76	

- No change to Fixed Charges
- Fixed Charge Rev Recovery = 41.8%

- Recover all 12.50% increase (once)



Single Family Residential Bill Impacts: Scenario 1





Recommended Rate Structure Updates

Scenario 2: 6.00% on Apr 1, 2024

Water Rates			
		Inside City	Outside City
Fixed Charge	All Customer Classes		
	5/8" x 3/4", 3/4"	\$ 21.57	\$ 26.96
	1"	\$ 53.92	\$ 67.40
	1.5"	\$ 107.84	\$ 134.80
	2"	\$ 172.56	\$ 215.70
	3"	\$ 345.07	\$ 431.34
	4"	\$ 539.16	\$ 673.95
	6"	\$ 1,078.36	\$ 1,347.95
	8"	\$ 1,725.40	\$ 2,156.75
	10"	\$ 2,480.24	\$ 3,100.30
Volume Charges		Inside City	Outside City
	Single-Family & Duplex		
	0 - 2,000 gallons	\$ 5.28	\$ 6.60
	2,001 - 5,000 gallons	\$ 6.60	\$ 8.26
	5,001 - 10,000 gallons	\$ 7.26	\$ 9.08
	10,001 - 20,000 gallons	\$ 9.25	\$ 11.56
	Above 20,000 gallons	\$ 11.89	\$ 14.86
General & Multi-Family			
All Usage	\$ 7.60	\$ 9.49	

- No change to Fixed Charges
- Fixed Charge Rev Recovery = 44.2%

- Recover all 6.00% increase (once)
- New Lifeline Tier: 0-2,000 gallons
- Redistribution of Volume Charges to generate same level of revenues



Recommended Rate Structure Updates

Scenario 2: 6.00% on Apr 1, 2024

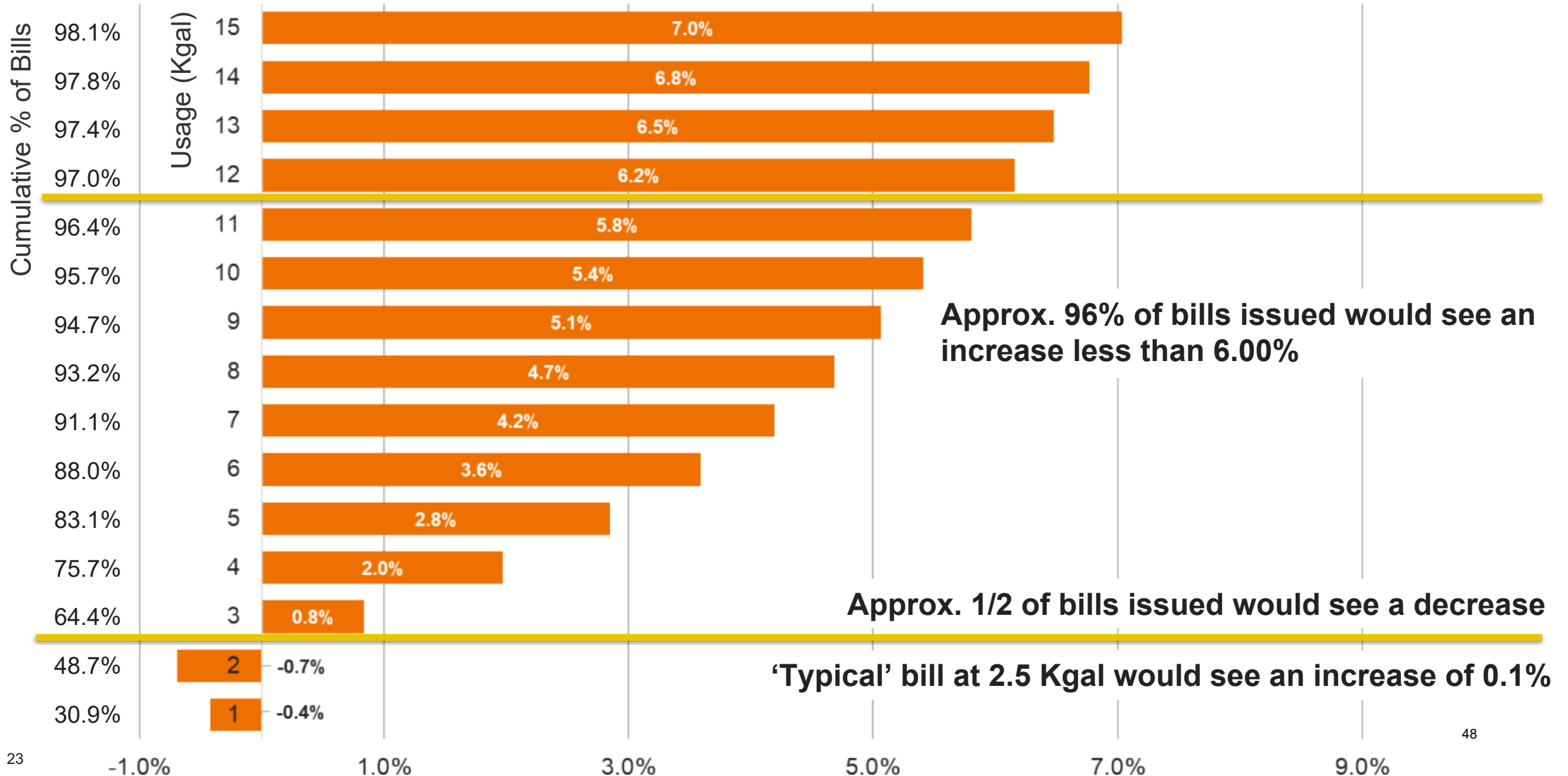
Wastewater Rates			
		Inside City	Outside City
Fixed Charge	All Customer Classes		
	5/8" x 3/4", 3/4"	\$ 21.19	\$ 26.49
	1"	\$ 52.92	\$ 66.15
	1.5"	\$ 105.82	\$ 132.28
	2"	\$ 169.31	\$ 211.64
	3"	\$ 338.67	\$ 423.34
	4"	\$ 529.12	\$ 661.40
	6"	\$ 1,058.28	\$ 1,322.85
	8"	\$ 1,693.28	\$ 2,116.60
	10"	\$ 2,434.07	\$ 3,042.59
Volume Charges		Inside City	Outside City
	Single-Family & Duplex		
	Up to 8,000 gallons	\$ 5.82	\$ 7.28
	General & Multi-Family		
Up to 8,000 gallons	\$ 6.98	\$ 8.73	

- No change to Fixed Charges
- Fixed Charge Rev Recovery = 47.0%

- Recover all 6.00% increase (once)



Single Family Residential Bill Impacts: Scenario 2





Rate Design Analysis – Key Takeaways

- Goals of recommended rate structure updates:
 - Mitigate bill impacts to fixed income / low water user
 - Promote water conservation
 - Ensure revenue stability is preserved

- Recommended solutions:
 - Add Lifeline Tier to Water Rates
 - Apply next increase to only Water / Wastewater Volume Charges

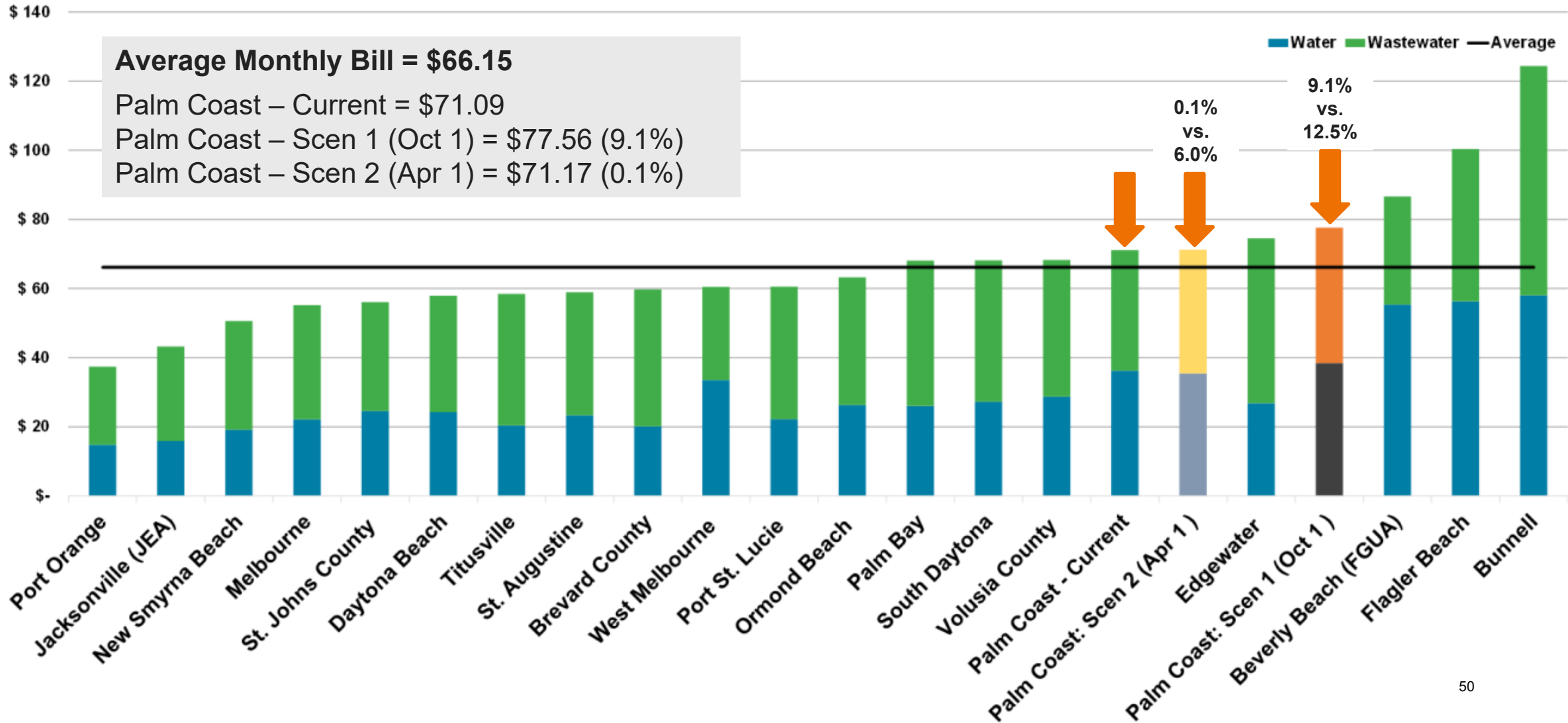
- Customer Bill Impacts:
 - Scenario 1 - Approx. 2/3 of bills issued would see an increase less than 12.50%
 - Scenario 2 - Approx. 96% of bills issued would see an increase less than 6.00%



Local Water & Wastewater Monthly Bill Survey:

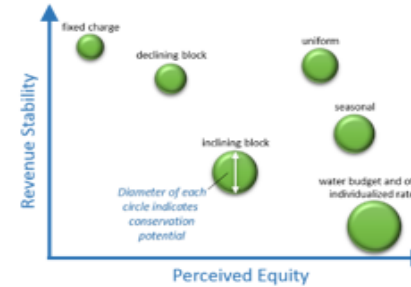
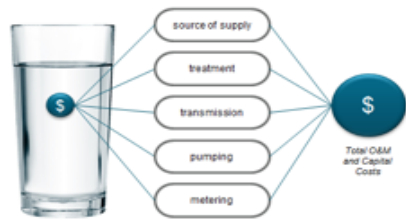
Current Single-Family Residential Bills at 2,500 gallons per month

CITY OF PALM COAST, FLORIDA





Best Practices to Ensure Sustainable & Equitable Rates



Revenue Sufficiency

- Operating Costs
- Capital Costs
- Financial Policies
 - Debt Coverage
 - Reserves

Annually (Budget)

Cost Allocation

- Evaluate Available Data
- Identify Methodology
- Compare to Revenue

Rate Design

- Evaluate Objectives
- Identify Structures
- Set Parameters
- Customer Impacts

Capacity Fees

- Recover specific costs
- Growth pays for share of capital investments



Update Every 3 to 5 Years Based on Changes in Costs, Usage Profiles, Development Patterns, Industry Practices, Legal Precedent, Technology, etc.



Capacity Charges Analysis – Overview

Contribution In Aid of Construction (CIAC) Fees

- One-time fees designed to recover cost of capacity to serve future growth
- Minimize cost burden to existing customers over time

$$\frac{\text{CAPACITY CHARGE} = (\text{Capital Costs} - \text{Credits})}{\text{Equivalent Residential Units}}$$

Methodology	Description	Appropriate For
Buy-In Method	Based on value of existing system	System with available capacity to serve growth
Incremental Cost Method	Based on cost of planned capital improvements	System with limited capacity and/or with much growth-related capital
Combined Method	Based on value of existing system & cost of planned capital improvements	System with available capacity and some growth-related capital



Contribution In Aid of Construction (CIAC) Fees

Full Cost Recovery Fees

Water CIAC Fee Calculation

Plant in Service - Reconst. Cost New	\$	256,845,227
Expansion-Related Capital Costs	\$	102,823,402
Less: Outstanding Debt	\$	(49,155,406)
Less: Grants & Contributed Capital	\$	(1,673,458)
Net System Investment	\$	308,839,766

Net System Capacity (mgd)	13.20
Level of Service (gpd)	225
Equivalent Residential Units	58,667

Calculated System CIAC Fee per ERC	\$	5,264
Current CIAC Fee	\$	2,960
Dollar Change	\$	2,304
Percent Change		78%

Sewer CIAC Fee Calculation

Plant in Service - Reconst. Cost New	\$	285,025,220
Expansion-Related Capital Costs	\$	143,979,857
Less: Outstanding Debt	\$	(49,155,406)
Less: Grants & Contributed Capital	\$	(10,784,427)
Net System Investment	\$	369,065,244

Net System Capacity (mgd)	10.10
Level of Service (gpd)	180
Equivalent Residential Units	56,111

Calculated System CIAC Fee per ERC	\$	6,605
Current CIAC Fee	\$	3,185
Dollar Change	\$	3,420
Percent Change		107%



Contribution In Aid of Construction (CIAC) Fees

Phase-In Limitations

- Recent Updates to Florida Impact Fee Law:
 - Caps any one-time total increase to 50% of current fee
 - Increases between 25% and 50% must be phased in over 4 equal increases

	Effective Date	Water CIAC	Sewer CIAC	Combined CIAC	Cumulative Increase
Current		\$ 2,960	\$ 3,185	\$ 6,145	
FY 2025	Nov 1, 2024	\$ 3,330	\$ 3,583	\$ 6,914	12.50%
FY 2026	Nov 1, 2025	\$ 3,700	\$ 3,982	\$ 7,682	25.00%
FY 2027	Nov 1, 2026	\$ 4,070	\$ 4,380	\$ 8,450	37.50%
FY 2028	Nov 1, 2027	\$ 4,440	\$ 4,778	\$ 9,218	50.00%



Capacity Charges Analysis – Key Takeaways

Contribution In Aid of Construction (CIAC) Fees

- One-time fees designed to recover cost of capacity to serve future growth
- Minimize cost burden to existing customers over time
- Recent Updates to Florida Impact Fee Law:
 - Caps any one-time total increase to 50% of current fee
 - Increases between 25% and 50% must be phased in over 4 equal increases

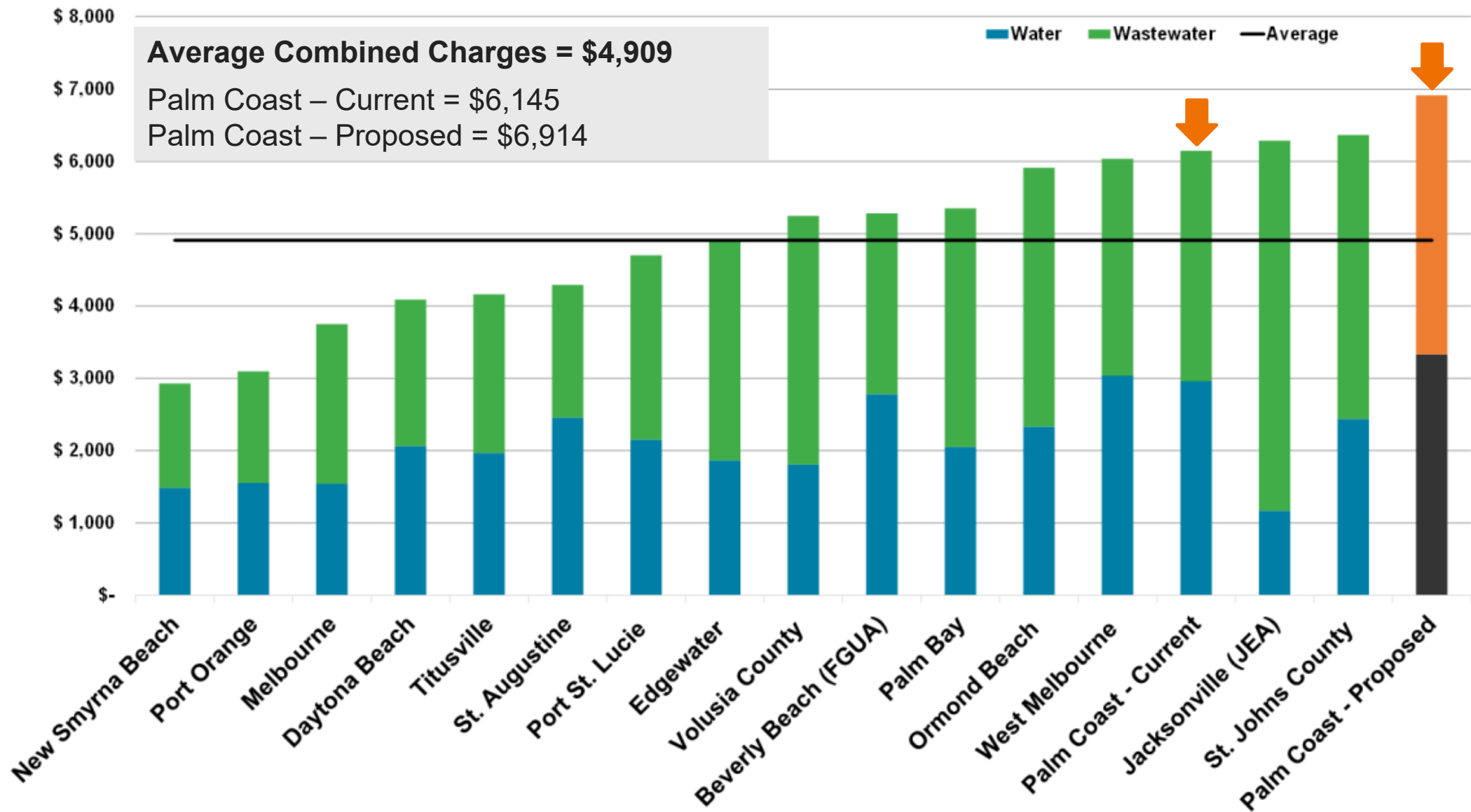
	Effective Date	Water CIAC	Sewer CIAC	Combined CIAC	Cumulative Increase
Current		\$ 2,960	\$ 3,185	\$ 6,145	
FY 2025	Nov 1, 2024	\$ 3,330	\$ 3,583	\$ 6,914	12.50%



Local Water & Wastewater Capacity Charges Survey:

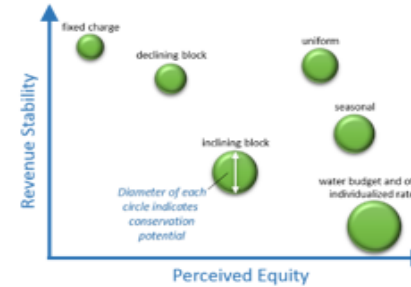
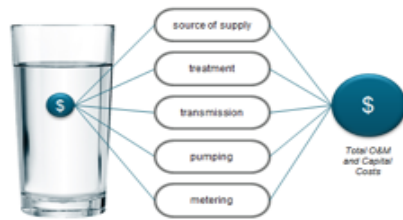
Combined Charges per Equivalent Residential Unit

CITY OF PALM COAST, FLORIDA





Best Practices to Ensure Sustainable & Equitable Rates



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- Capital Costs
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Cost Allocation

- Evaluate Available Data
- Identify Methodology
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Rate Design

- Evaluate Objectives
- Identify Structures
- Set Parameters
- Customer Impacts

Capacity Fees

- Recover specific costs
- Growth pays for share of capital investments

Update Annually per Budget Process

Update Every 3 to 5 Years Based on Changes in Costs, Usage Profiles, Development Patterns, Industry Practices, Legal Precedent, Technology, etc.



In Conclusion: Revenue Sufficiency Analysis

**Staff is seeking Council direction:
Adopt Scenario 1 or Scenario 2 rate plans?**

- Significant capital investment required to serve growth
- Indexing rates by US-CPI is not sufficient to fund capital needs
- Greater near-term increases are recommended:

	FY 2024	FY 2025	FY 2026
Effective Date	Apr 1, 2024	Oct 1, 2024	Oct 1, 2025
SCENARIO 1	N/A	12.50%	6.00%
SCENARIO 2	6.00%	6.00%	6.00%



In Conclusion: Rate Design Analysis

Staff is seeking Council direction:
Implement rate structure updates during next utility rate increase?

➤ **Goals of recommended rate structure updates:**

- Mitigate bill impacts to fixed income / low water user
- Promote water conservation
- Ensure revenue stability is preserved

➤ **Recommended solutions:**

- Add Lifeline Tier to Water Rates
- Apply next increase to only Water / Wastewater Volume Charges

➤ **Customer Bill Impacts:**

- Scenario 1 - Approx. 2/3 of bills issued would see an increase less than 12.50%
- Scenario 2 - Approx. 96% of bills issued would see an increase less than 6.00%



In Conclusion: Capacity Charges Analysis

**Staff is seeking Council direction:
Increase CIAC Fees by 50% over 4 years?**

- One-time fees designed to recover cost of capacity to serve future growth
- Minimize cost burden to existing customers over time
- Recent Updates to Florida Impact Fee Law:
 - Caps any one-time total increase to 50% of current fee
 - Increases between 25% and 50% must be phased in over 4 equal increases

	Effective Date	Water CIAC	Sewer CIAC	Combined CIAC	Cumulative Increase
Current		\$ 2,960	\$ 3,185	\$ 6,145	
FY 2025	Nov 1, 2024	\$ 3,330	\$ 3,583	\$ 6,914	12.50%



Questions & Discussion

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