

Town of Erie, CO

2020 Water, Wastewater, and Storm Drainage Rate and Fee Study

September 15, 2020



Agenda

- Rate study process
- Financial plan
- Cost of service
- Rate design
- Tap, acquisition and impact fees

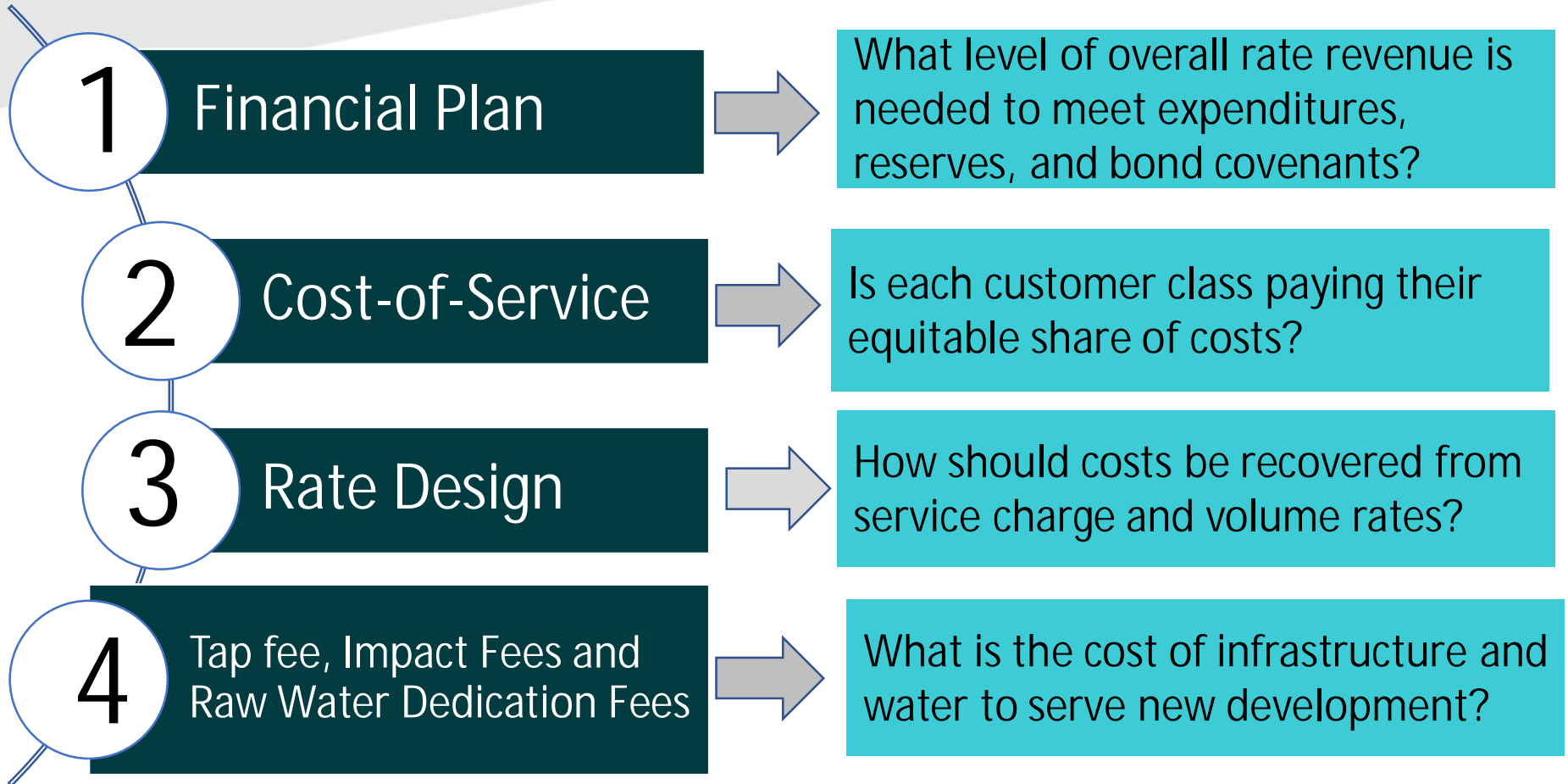


Study goals and objectives

- Development of a financial forecast, rates and fees which sustain the long-term financial health of the water, wastewater, and storm drainage utilities
 - › Rate revenues sufficient to meet annual operating expenses, debt service, and capital expenditures
 - › Funding capital projects while minimizing revenue increases
 - › Maintain reserve levels and debt service coverage which meets bond covenants
 - › Rates that equitably recover the cost to provide service
 - › Tap and impact fees which recover the cost to serve growth



The 4 components of a rate and fee study



1. Financial Plan

Water utility highlights

Financial Plan

- No revenue adjustments over the study period

Residential Bill Impact

- Typical monthly residential bill with 8,000 gallons will decrease by \$1.02 from \$68.79 to \$67.77 based on cost of service analysis

Tap Fees

- Single family tap fee will decrease from \$15,080 to \$12,050

Raw Water Dedication Fee

- Raw water dedication fee will increase from \$15,300 to \$16,243



Wastewater utility highlights

Financial Plan

- No revenue adjustments over the study period

Residential Bill Impact

- Typical monthly residential bill with 4,000 gallons billable volume will decrease by \$0.38 from \$48.48 to \$48.10 based on cost of service analysis

Tap Fees

- ¾-inch tap fee will increase from \$5,200 to \$8,860



Storm Drainage utility highlights

Financial Plan

- No revenue adjustments over the study period

Residential Bill Impact

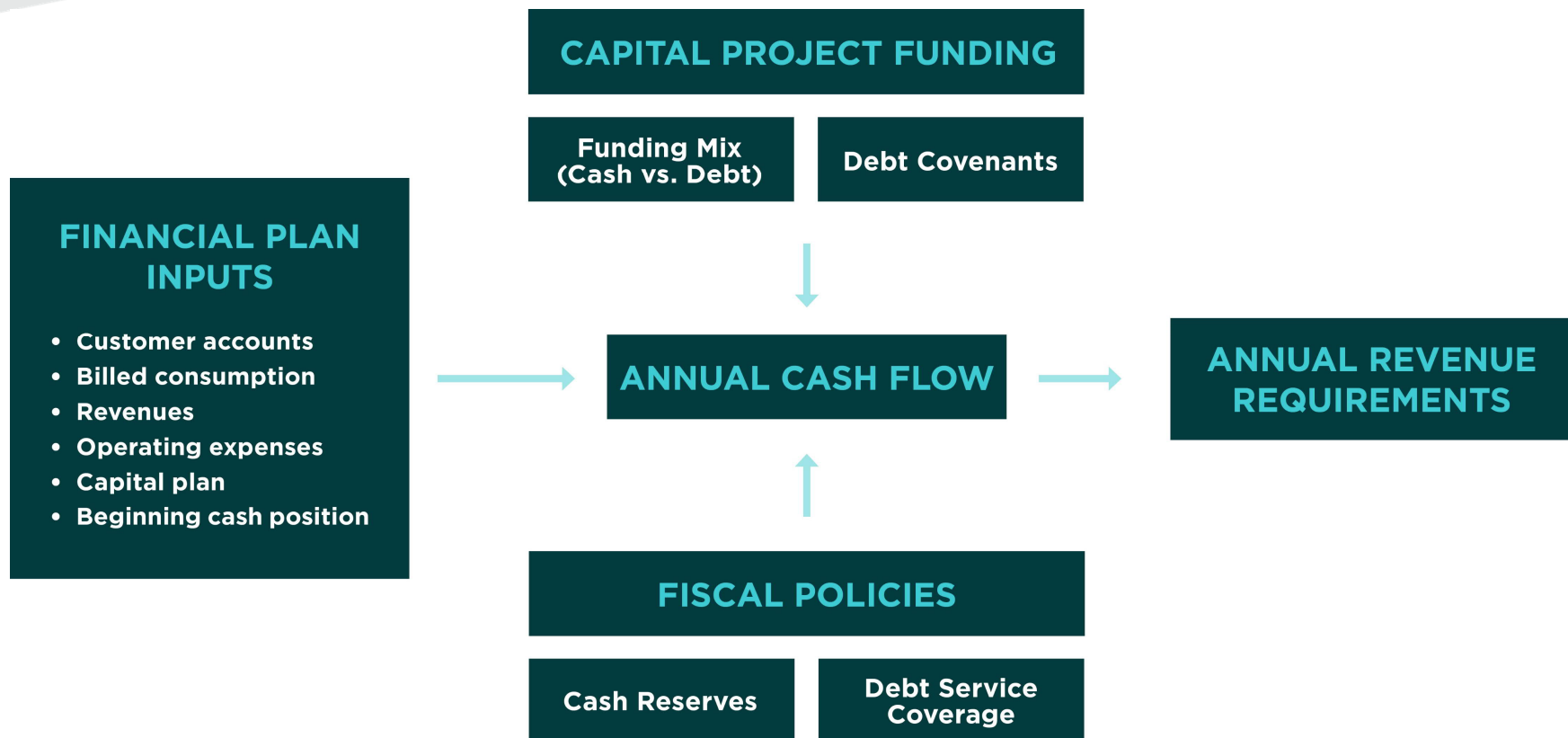
- No changes to the residential bill

Impact Fees

- No changes to storm drainage impact fee



Financial planning process



Financial plan assumptions

- Water, wastewater, and storm drainage utilities treated as stand-alone enterprise funds
- Each utilities' financials separated into funding for operations and funding for growth-related projects
 - › Operating fund
 - › Infrastructure fund
 - › Water acquisition fund
- Study period: 2021 - 2025



Fund sources and uses summary

Operating Fund	Infrastructure Fund (growth-related funds)
<p>Sources:</p> <ul style="list-style-type: none">• Rate revenue• Other operating revenue• Interest income	<p>Sources:</p> <ul style="list-style-type: none">• Tap fees• Water acquisition fees• Growth-related bond issues• Transfers from operating fund
<p>Uses:</p> <ul style="list-style-type: none">• O&M expense• R&R debt service• R&R capital projects• Transfers to infrastructure/ acquisition fund (water only)	<p>Uses:</p> <ul style="list-style-type: none">• Growth-related capital projects• Growth-related debt service



Financial plan assumptions

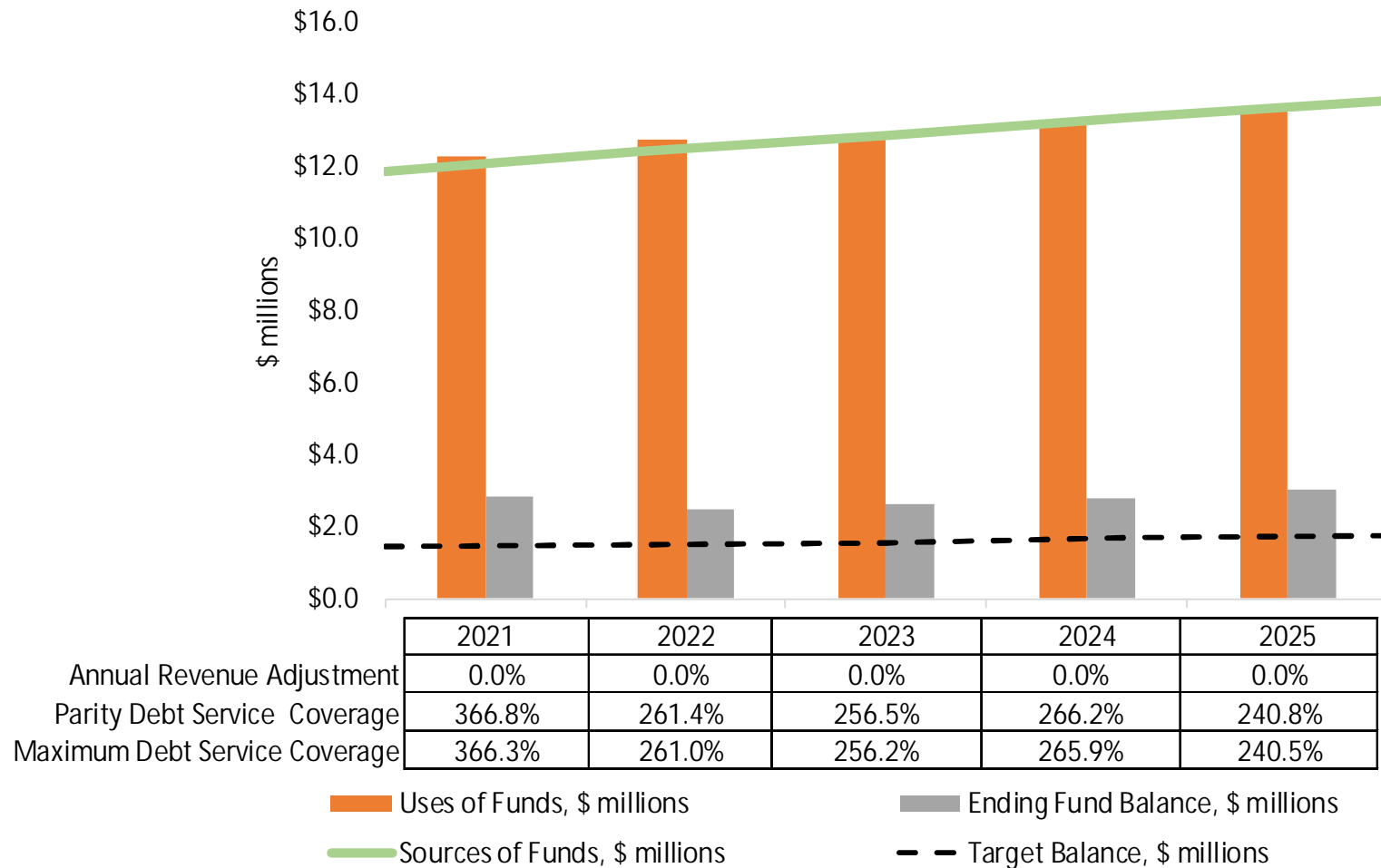
Item	Water	Wastewater	Storm Drainage
Projected Beginning Fund Balances, \$ mil	\$43.7	\$4.0	\$6.1
Operation and Maintenance Expenses	Salaries & wages: 4.0% Benefits: 8.0% General expenses: 3.0%		
Target Reserves			
• Operating, Days of O&M	90	90	60
• Capital	One year's depreciation expense		
Debt service coverage	1.25x on parity debt 1.25x on maximum debt 1.00x on COPs		
Proposed Bond Issues			
• Revenue Bonds (Inf. Projects/NISP*)	5.0% interest rate, 20-year term		
• Windy Gap Firming Project*	2.6/2.1% interest rate, 20-year term		

*Windy Gap and NISP bonds will be issued by Northern and considered an operating expense by the Town.

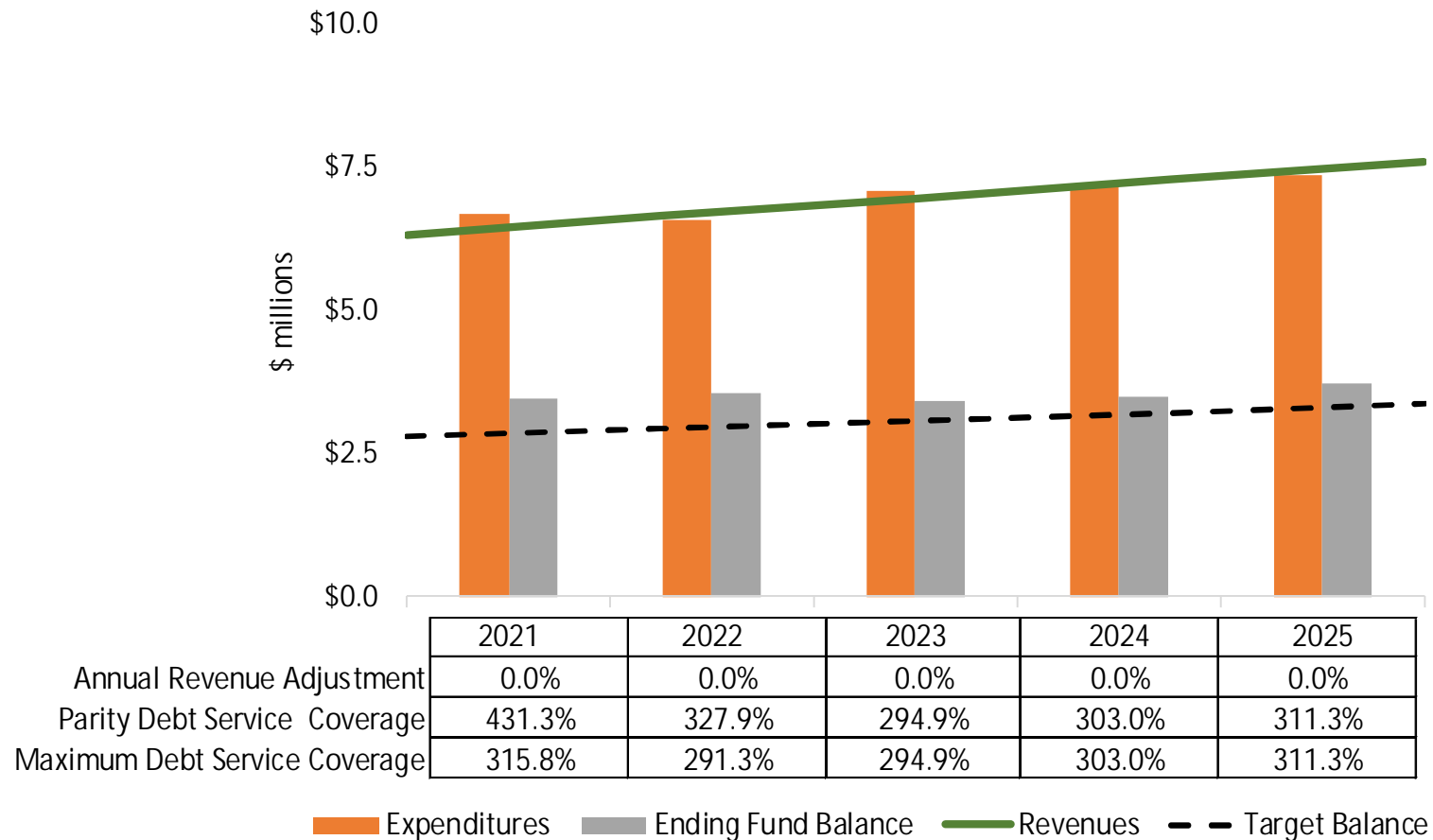


Source: "Financial Information" document, provided by Town

Water operating cash flow no revenue adjustments, 2021 – 2025



Wastewater operating cash flow no revenue adjustments, 2021 – 2025



2. Cost-of-Service Analysis



what is **COST OF SERVICE?**

- Identifies cost responsibility by customer class
- Ensures full cost recovery and supports equitable rates

**REVENUE
REQUIREMENTS**



**CUSTOMER
CLASS
USE OF UTILITY
SYSTEM**



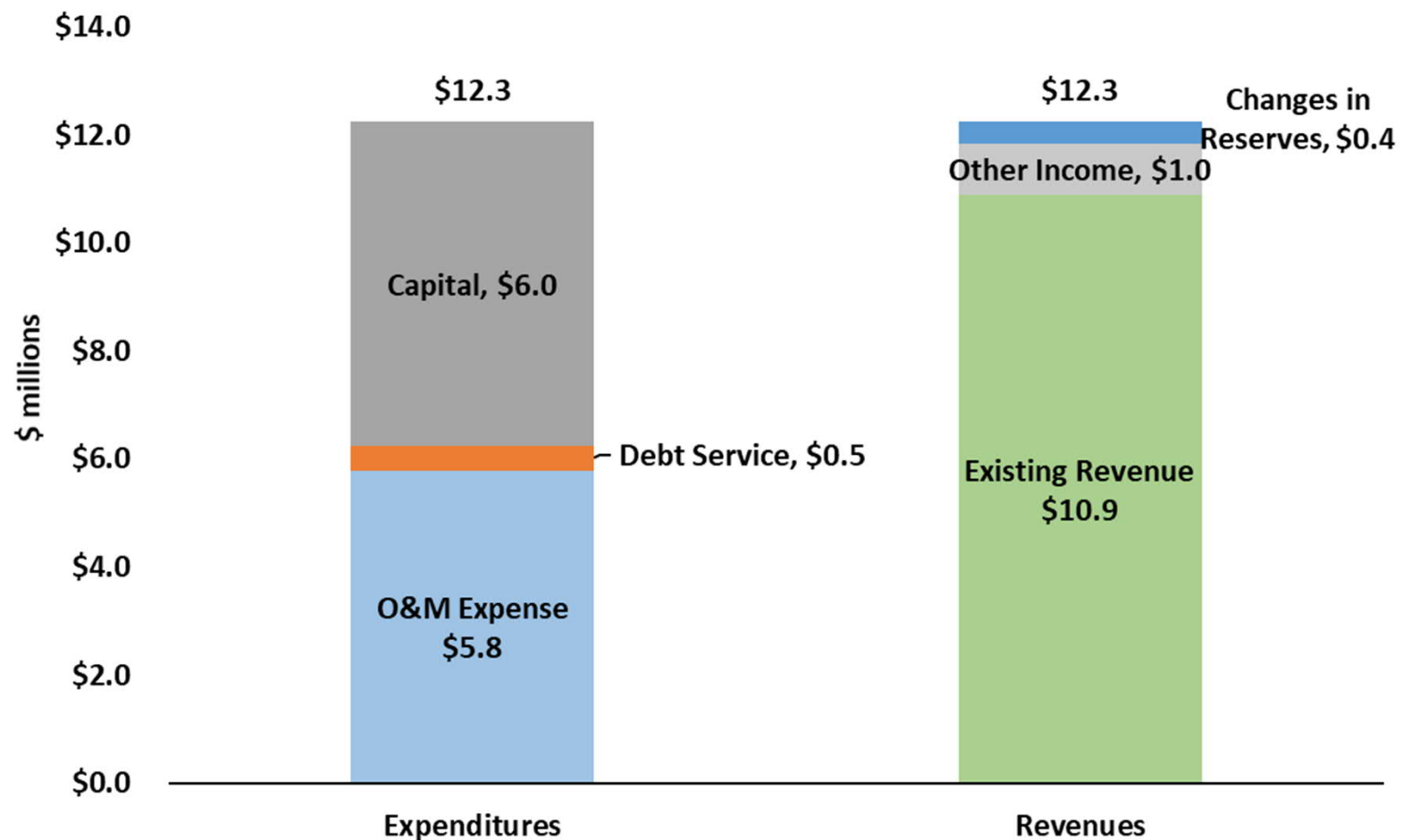
**UTILITY COST
OF SERVICE
BY CLASS**

Cost-of-service analysis

- Determines cost to provide service to each customer class based on the demands they impose on the utility
- Recognizes customer classes' differing service characteristics
 - › Water
 - Average demands
 - Peak demands
 - Equivalent meters
 - Accounts
 - › Wastewater
 - Flow
 - Accounts
- Costs vary by customer class



Water revenue requirement 2021



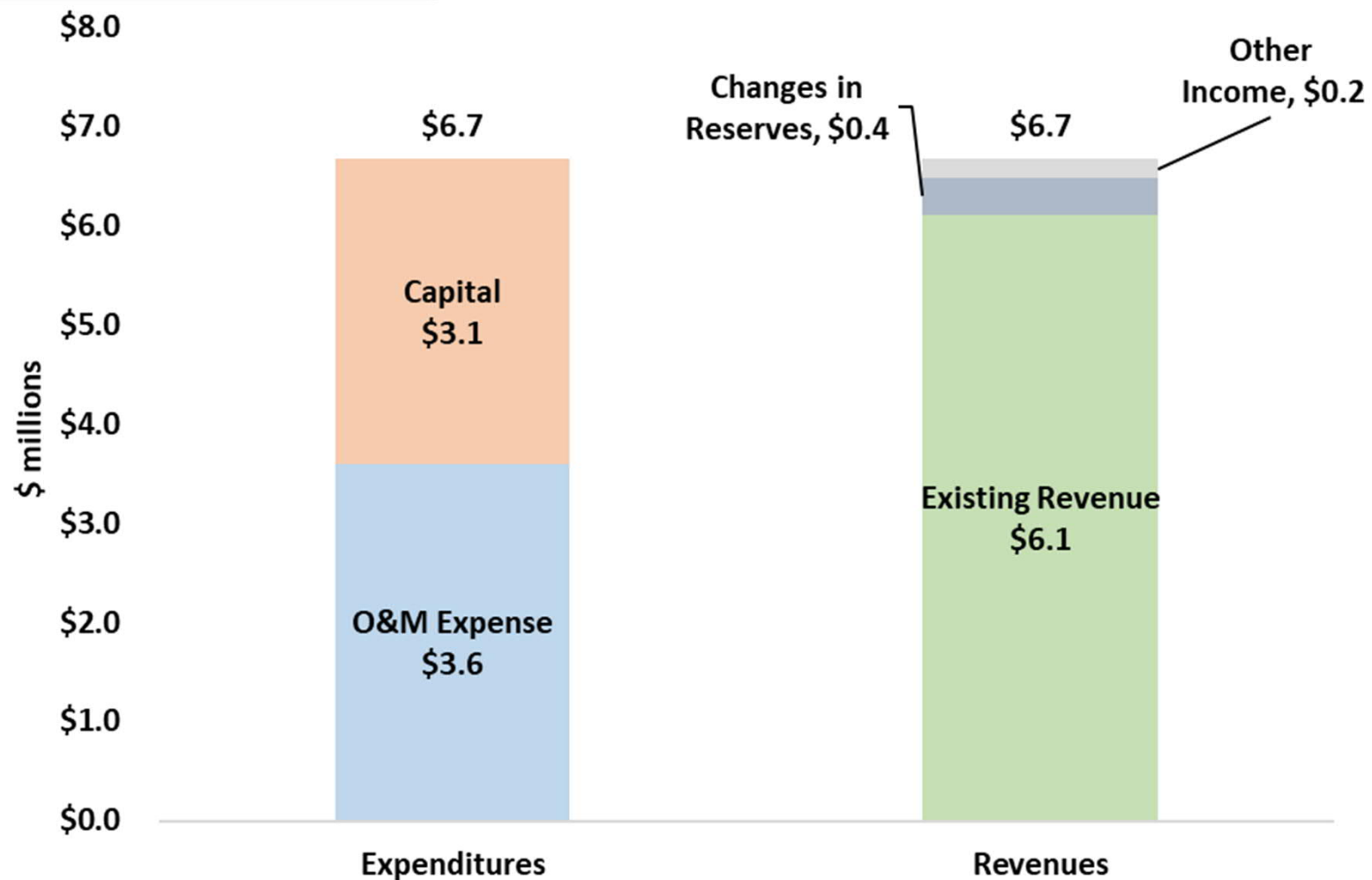
Water

Comparison of cost of service to revenue under existing rates

Customer Class	Cost of Service	Revenue Under Existing Rates	Change	Indicated Revenue Adjustment
	\$	\$	\$	
Single Family/Townhomes	\$8,516,171	8,487,522	28,649	
Residential - Multi Family	\$413,213	584,864	(171,651)	
Commercial	\$388,970	430,675	(41,706)	
Irrigation	\$1,532,919	1,348,211	184,708	
Total System	\$10,851,273	\$10,851,273	(\$0)	0.0%



Wastewater revenue requirement 2021



Wastewater

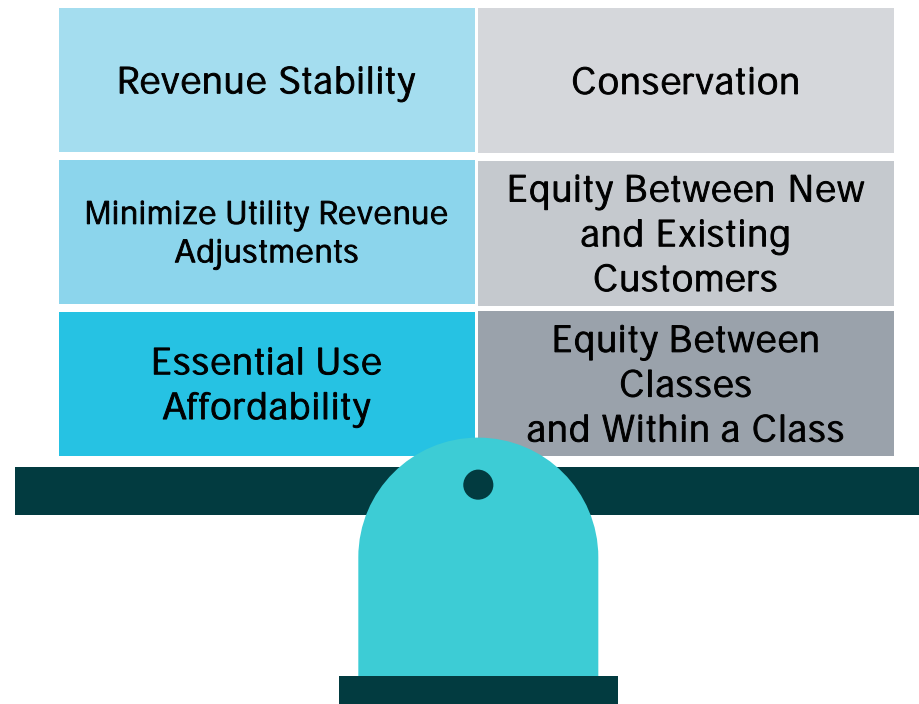
Comparison of cost of service to revenue under existing rates

Customer Class	Cost of Service	Revenue Under Existing	Change	Indicated Revenue Adjustment
Residential	\$5,057,650	\$5,131,616	-\$73,966	-1.4%
Commercial	367,218	330,608	36,610	11.1%
Multifamily	545,488	499,688	45,800	9.2%
Townhomes	143,647	152,091	(8,444)	-5.6%
Total	\$6,114,003	\$6,114,003	\$0	0.0%



3. Rate Design

Balancing rate structure pricing objectives to meet Town goals



Basic components rate design

Monthly Service Charge

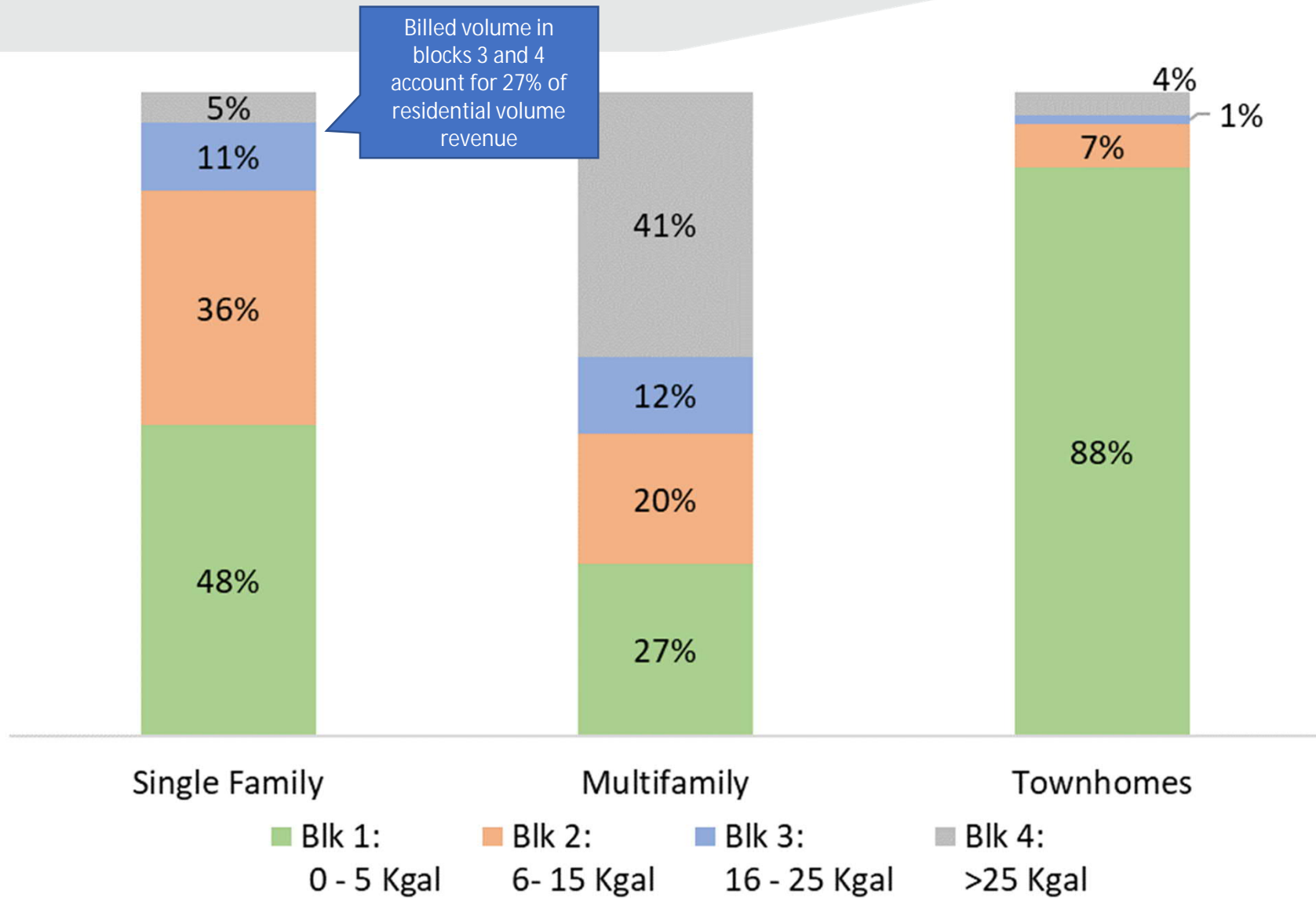
- Billing costs
- Customer costs
 - Field service crews
 - Meter repair and replacement

Volume Charge

- Recovers the cost to:
 - Collect
 - Treat and
 - Distribute water
 - Fire protection



% of billed water usage by tier



Comparison of existing and Proposed rate structures

Rate Structure Component	Existing	Proposed
Monthly Service Charge	Varies by class Varies by meter size	Same for each class Varies by meter size
Volume Rate		
Single family	4-tiered inclining block	No change
Multifamily	4-tiered inclining block	Uniform rate for all usage
Commercial/Irrigation	Uniform rate for all usage	No change



Water Utility

Comparison of existing and proposed 2021 rates

Monthly Service Charge, \$ per bill

Description	Existing	Proposed
Residential Single Family/Townhomes/Multifamily		
5/8 Inch	\$30.00	\$19.36
3/4 inch	\$30.00	\$19.36
1 inch	\$31.51	\$26.83
1.5 inch	\$43.14	\$45.53
2 inch	\$70.62	\$67.96
3 inch	\$84.57	\$127.78
4 inch	\$84.57	\$195.08
6 inch	\$84.57	\$382.01
Commercial/Irrigation		
5/8 Inch	\$31.51	\$19.36
3/4 inch	\$31.51	\$19.36
1 inch	\$31.51	\$26.83
1.5 inch	\$43.14	\$45.53
2 inch	\$70.62	\$67.96
3 inch	\$84.57	\$127.78
4 inch	\$84.57	\$195.08
6 inch	\$84.57	\$382.01

Volume Rate, \$ per 1,000 gallons

Description	Existing	Proposed
Residential Single Family/Townhomes		
Tier 1 0 - 5	\$4.44	\$5.53
Tier 2 6 - 15	\$5.53	\$6.92
Tier 3 16 - 25	\$8.30	\$10.35
Tier 4 >25	\$12.44	\$15.49
Residential - Multi Family		
Tier 1 0 - 5	\$4.44	\$5.53
Tier 2 6 - 15	\$5.53	\$5.53
Tier 3 16 - 25	\$8.30	\$5.53
Tier 4 >25	\$12.44	\$5.53
Commercial All Usage	\$7.12	\$6.57
Irrigation All Usage	\$7.48	\$8.64



Wastewater utility

Comparison of existing and proposed 2021 rates

Customer Class	Existing	Proposed
Service Charge, \$ per bill	\$15.68	\$10.30
Volume Rates, \$ per 1,000 gallons		
Residential	\$8.20	\$9.45
Commercial	\$8.20	\$9.45
Multifamily	\$8.20	\$9.45
Townhomes	\$8.20	\$9.45
Total	\$8.20	\$9.45



Proposed water and wastewater rates highlights

- Water

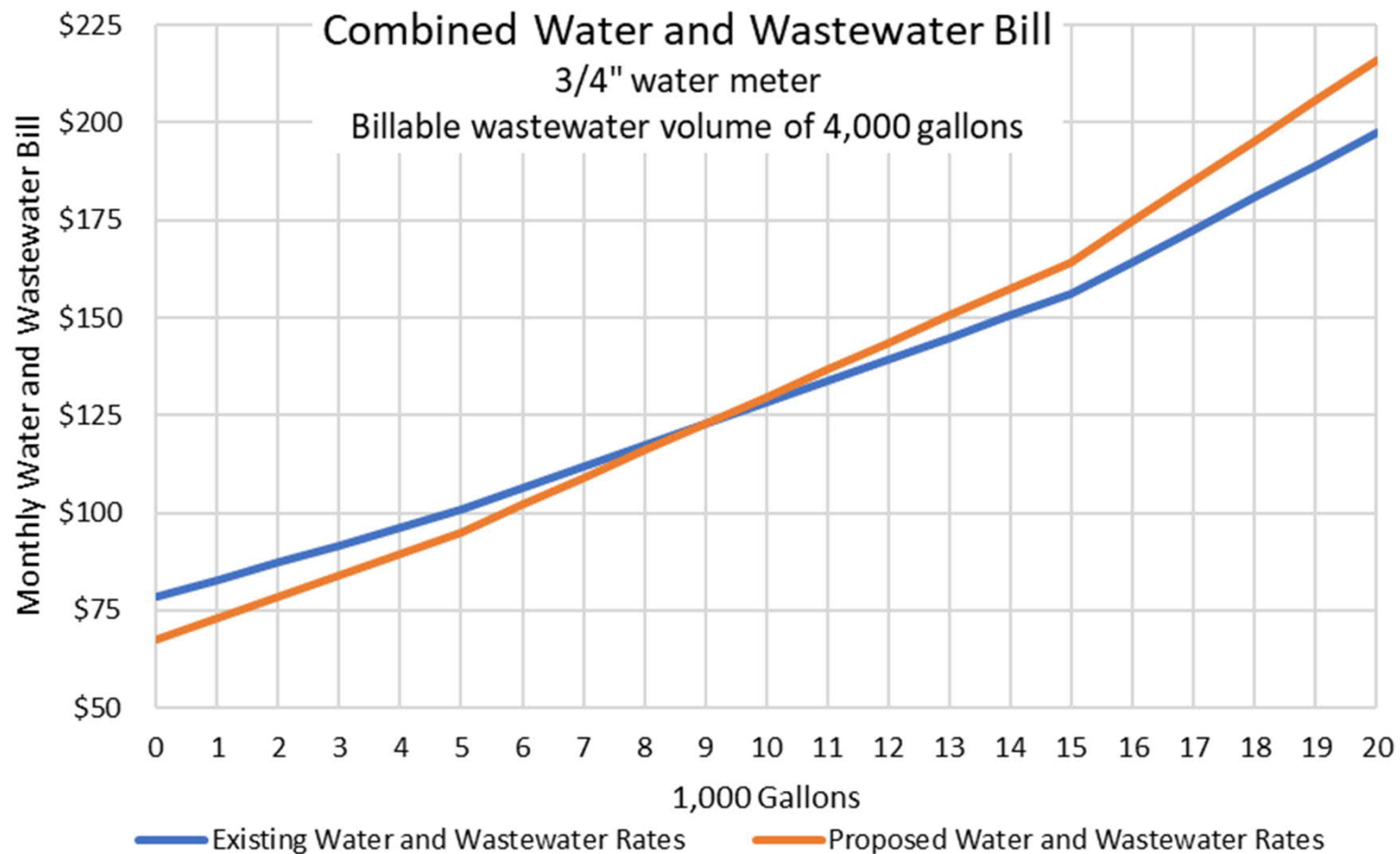
- › The average monthly water residential bill for 2021 is a decrease by \$1.02
- › Usage below 10,000 gallons will see a decrease in monthly water bill
- › Essential use bill (indoor use of 4,000 gallons) will decrease \$6.28 per month

- Wastewater

- › Typical monthly residential wastewater bill will decrease \$0.38 per month



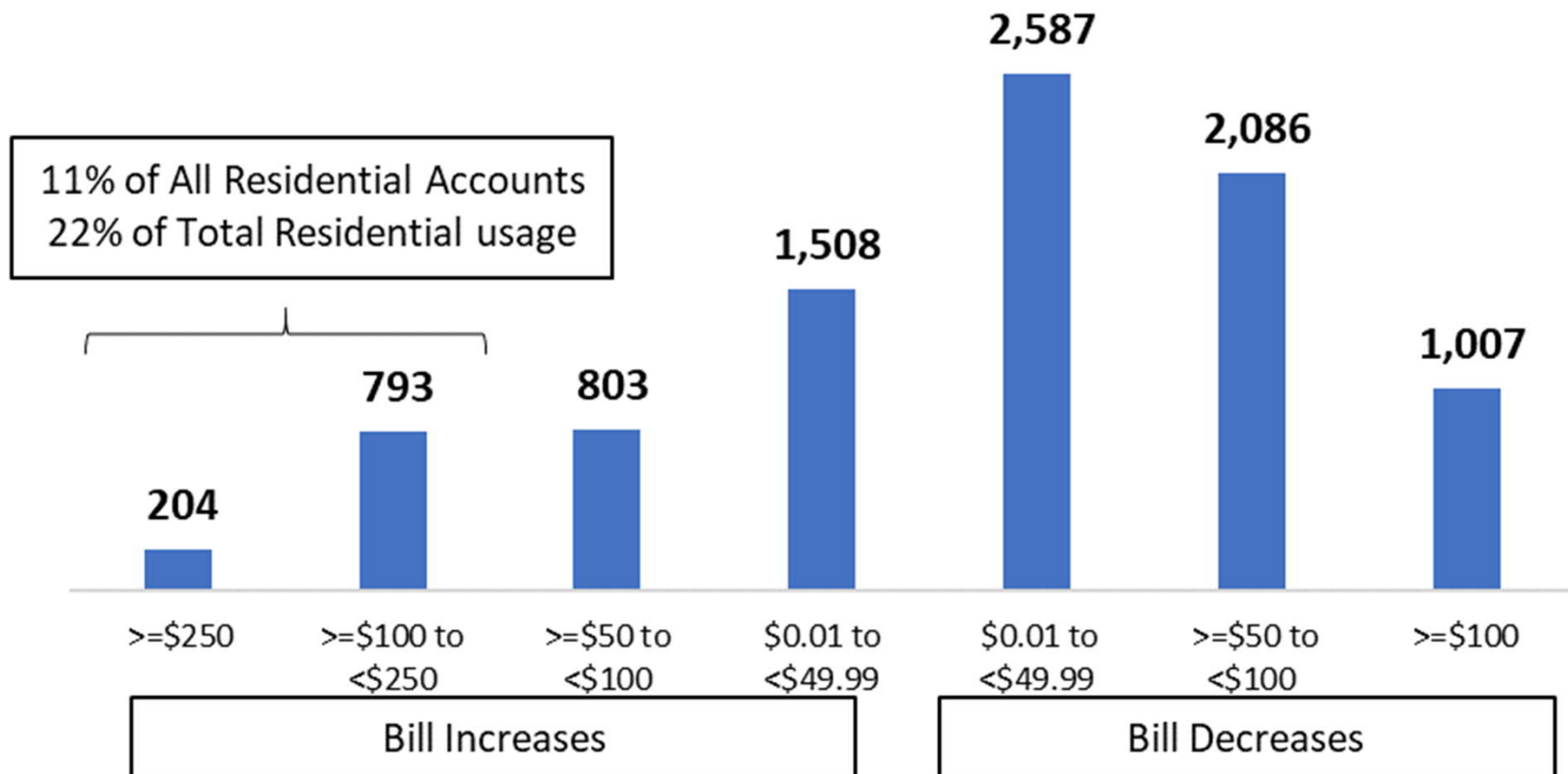
Residential monthly bills at various levels of water consumption



* Average winter wastewater usage will be used during the following 12 months to calculate the volume charge.

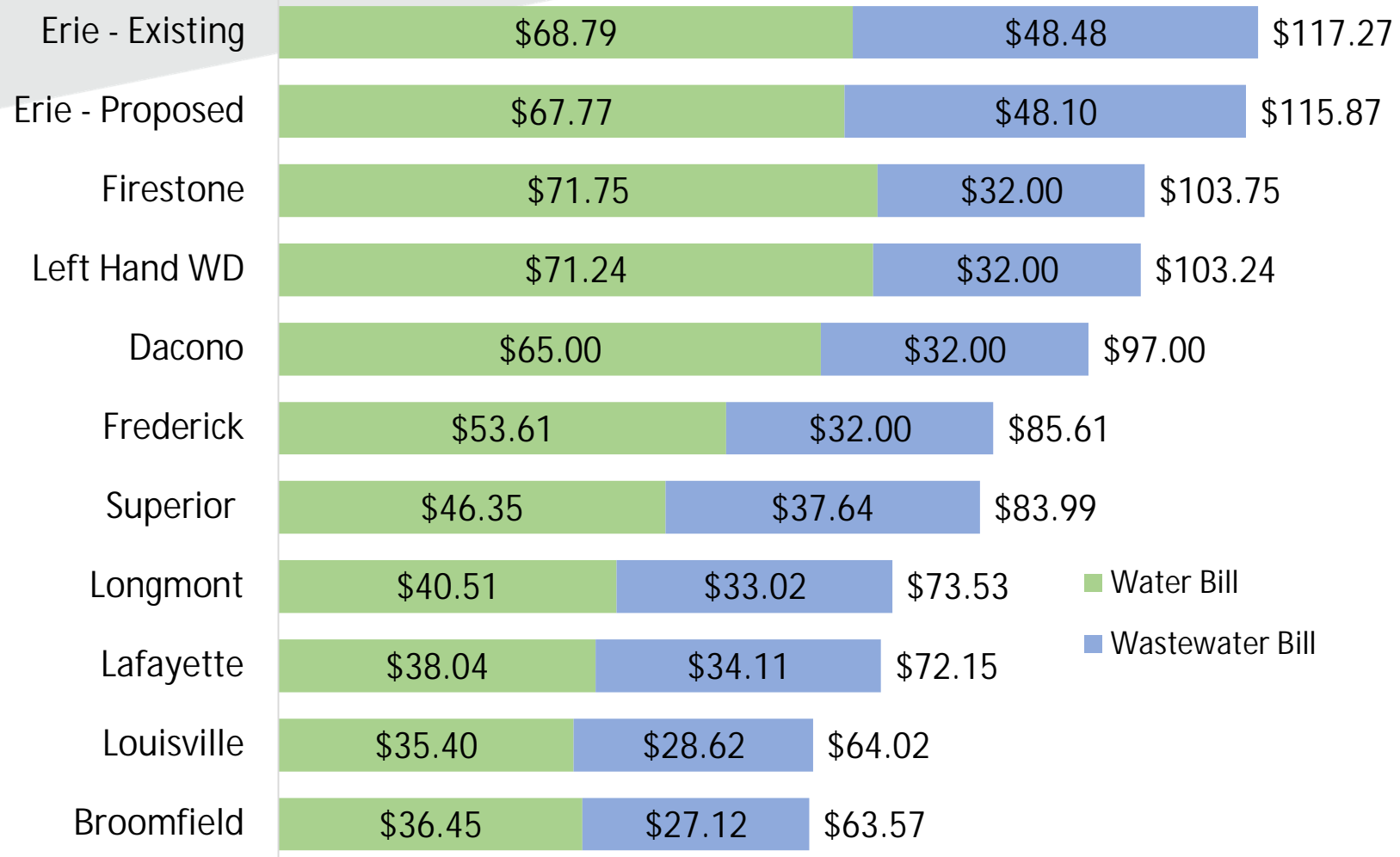


Combined annual residential bill impacts Water, wastewater, storm drainage



Monthly residential water and wastewater bill survey, ¾" meter

8,000 gallons water use; 4,000 gallons ww volume



Town of Frederick, Firestone, Dacono and portions of Left Hand WD wastewater are served by St. Vrain Sanitation District



Monthly residential water and wastewater bill survey, ¾" meter, 8,000 gal water use, 4,000 gal ww volume

Utility	Water	Wastewater	Total
Erie - Existing	\$68.79	\$48.48	\$117.27
Erie - Proposed	\$67.77	\$48.10	\$115.87
Firestone	\$71.75	\$32.00	\$103.75
Left Hand Water District	\$71.24	\$32.00	\$103.24
Dacono	\$65.00	\$32.00	\$97.00
Frederick	\$53.61	\$32.00	\$85.61
Superior	\$46.35	\$37.64	\$83.99
Longmont	\$40.51	\$33.02	\$73.53
Lafayette	\$38.04	\$34.11	\$72.15
Louisville	\$35.40	\$28.62	\$64.02
Broomfield	\$36.45	\$27.12	\$63.57



Town of Frederick, Firestone, Dacono and portions of Left Hand WD wastewater are served by St. Vrain Sanitation District

4. Water and wastewater tap fees

Raw water dedication fees

Tap fee and acquisition fee assumptions

- Water and wastewater tap fees include
 - › Value of current backbone assets at today's dollars
 - › Growth-related projects from 11-year capital plan, 2019 – 2029
 - › Interest costs of outstanding growth-related debt
 - › Credit for outstanding principal on repair and replacement debt
- Raw water dedication fee includes
 - › Value of water rights portfolio
 - › Current estimate of water rights in acre-feet
 - › Current demand from a $\frac{3}{4}$ " meter



Water tap fees and raw water dedication fee

Comparison of Existing and Proposed 2021 Tap Fees

Meter Size	Existing	Proposed 2021	Change - \$
3/4"	\$15,080	\$12,050	(\$3,030)
1"	25,133	20,080	(5,053)
1-1/2"	50,267	40,170	(10,097)
2"	80,427	64,270	(16,157)
3"	150,800	120,500	(30,300)
4"	251,333	200,830	(50,503)
6"	502,667	401,670	(100,997)

Comparison of Existing and Proposed 2021 Raw Water Dedication Fees

Item	Acre-Feet	Total Cost (\$ mil)	\$ per AF
Erie Shares in NISP	6,500	\$215,426	\$33,142
Erie Shares in WGFP	2,000	\$60,697	\$30,349
Total	8,500	\$276,123	\$32,485

Annual 3/4" Demand, acre feet 0.500

Proposed Fee, \$ per 3/4" equivalent \$16,243

Existing Fee, \$ per 3/4" equivalent \$15,300

Change - \$ \$943



Wastewater tap fees

Comparison of Existing and Proposed 2021 Tap Fees

Meter Size	Existing	Proposed 2021	Change - \$
3/4"	\$5,200	\$8,860	\$3,660
1"	8,667	14,767	6,100
1-1/2"	17,333	29,533	12,200
2"	27,733	47,253	19,520
3"	52,000	88,600	36,600
4"	86,667	147,667	61,000
6"	173,333	295,333	122,000

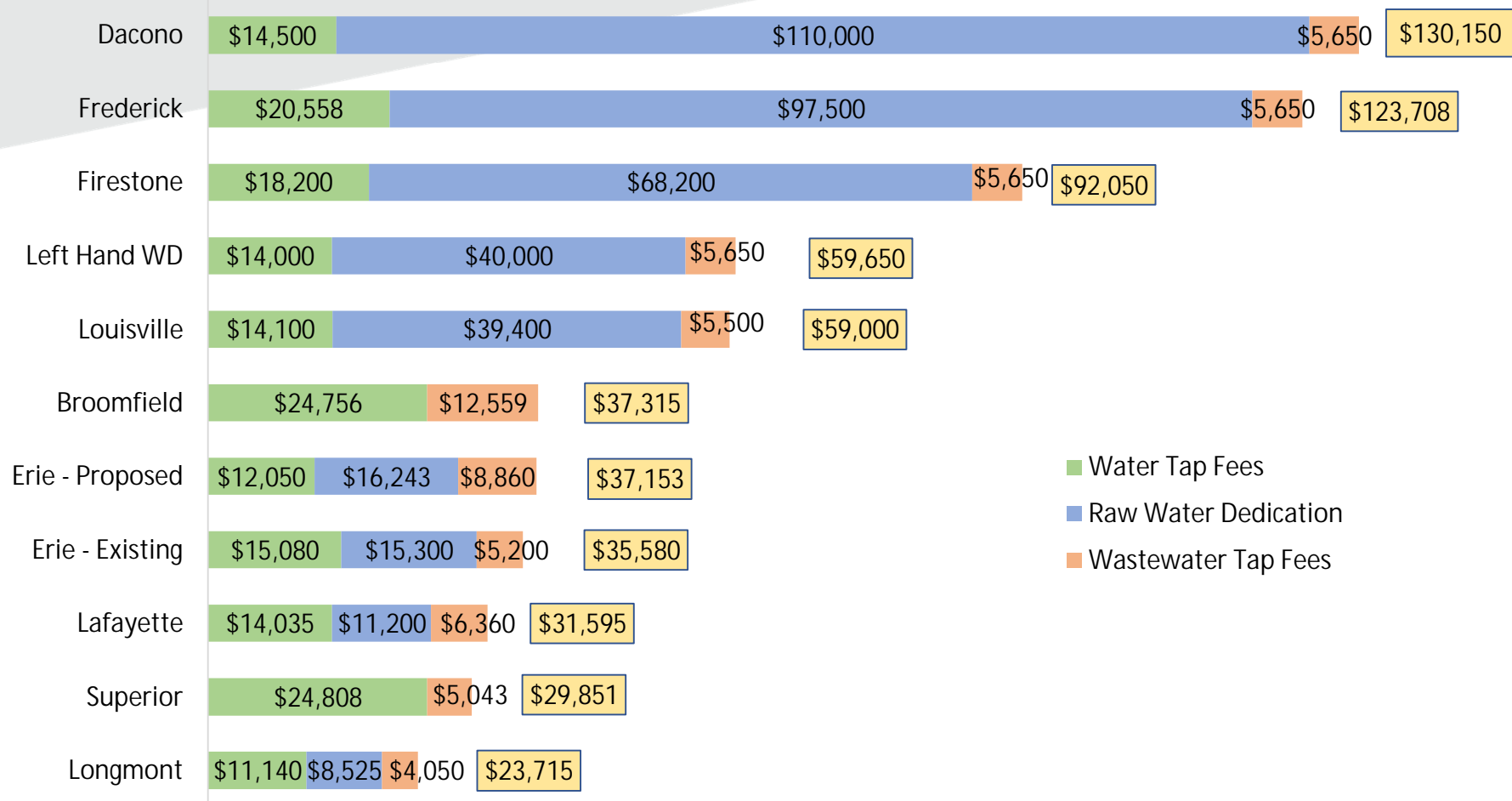


Fee summary

Fee	Existing	Proposed	Change - \$	Change - %
Water Tap Fee	\$15,080	\$12,050	(\$3,030)	-20.1%
Raw Water Dedication Fee	\$15,300	\$16,243	\$943	6.2%
Wastewater Tap Fee	\$5,200	\$8,860	\$3,660	70.4%
Storm Drainage Impact Fee	\$1,628	\$1,628	\$0	0.0%
Total Fees	\$37,208	\$38,781	\$1,573	4.2%



Water and wastewater tap fee survey, Residential ¾" meter



Town of Frederick, Firestone, Dacono and portions of Left Hand WD wastewater are served by St. Vrain Sanitation District City of Broomfield and City of Superior water tap fees include water resource/dedication fees

Water and wastewater tap fee survey, 3/4" residential

(tabular format)

Utility	Water Tap Fees	Raw Water Dedication	Wastewater Tap Fees	Total
Dacono	\$14,500	\$110,000	\$5,650	\$130,150
Frederick	\$20,558	\$97,500	\$5,650	\$123,708
Firestone	\$18,200	\$68,200	\$5,650	\$92,050
Left Hand WD	\$14,000	\$40,000	\$5,650	\$59,650
Louisville	\$14,100	\$39,400	\$5,500	\$59,000
Broomfield	\$24,756	\$0	\$12,559	\$37,315
Erie - Proposed	\$12,050	\$16,243	\$8,860	\$37,153
Erie - Existing	\$15,080	\$15,300	\$5,200	\$35,580
Lafayette	\$14,035	\$11,200	\$6,360	\$31,595
Superior	\$24,808	\$0	\$5,043	\$29,851
Longmont	\$11,140	\$8,525	\$4,050	\$23,715

 Town of Frederick, Firestone, Dacono and portions of Left Hand WD wastewater are served by St. Vrain Sanitation District
City of Broomfield and City of Superior water tap fees include water resource/dedication fees

Thank you

