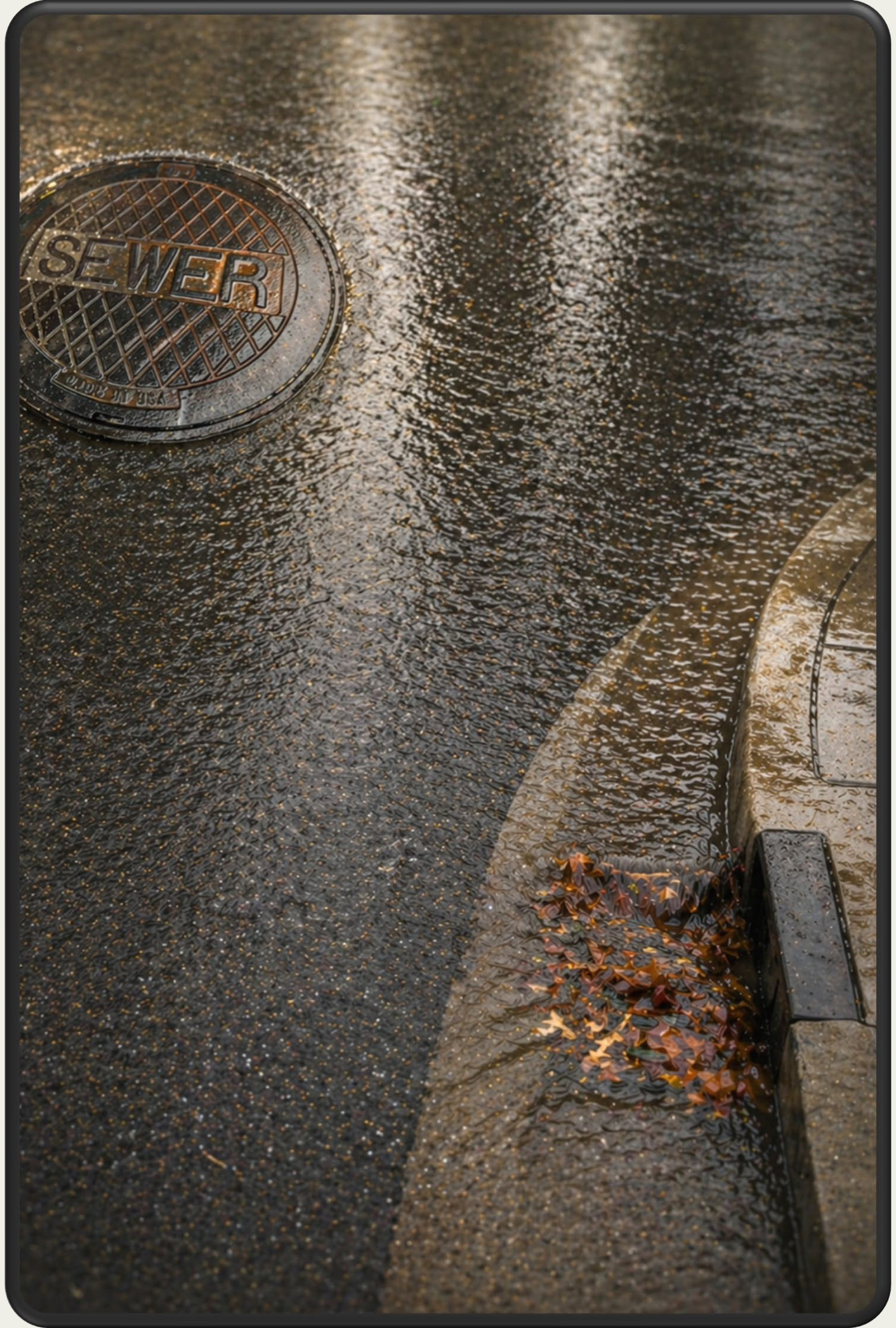
RAFTELIS

City of Littleton

Sewer and Storm Drainage Rate Study

August 11, 2026



Agenda

1. Rate study overview
2. Sewer financial plan update
3. Sewer pricing objectives & rate design
4. Storm drainage financial plan review
5. Customer billing frequency
6. Customer affordability
7. Public outreach
8. Staff recommendation

What is a Rate Study?

A rate study balances:

A rate study is a financial planning and rate-setting process that:

Identifies the cost to be recovered from rates:
- O&M
- Capital
- Reserves
- Debt Service

Sets legally defensible rates
- Cost of service analysis
- Follow industry best practices

Rates align with community objectives
- Revenue stability
- Essential use affordability
- Equity between customer classes
- Cost recovery within a class
- Conservation
- Ease of understanding, administration, and implementation

Sewer Financial Plan Update

Financial plan changes since 5/12 study session

Changes reduced initial revenue adjustments, and better-balanced use of debt issues and reserves to fund capital projects

CIP Adjustments

4-year replacement programs for line replacement, pipe patches and lining spread over 5-years.

Rate adjustment constraints

Added scenarios with annual revenue adjustments limited to 15% per year

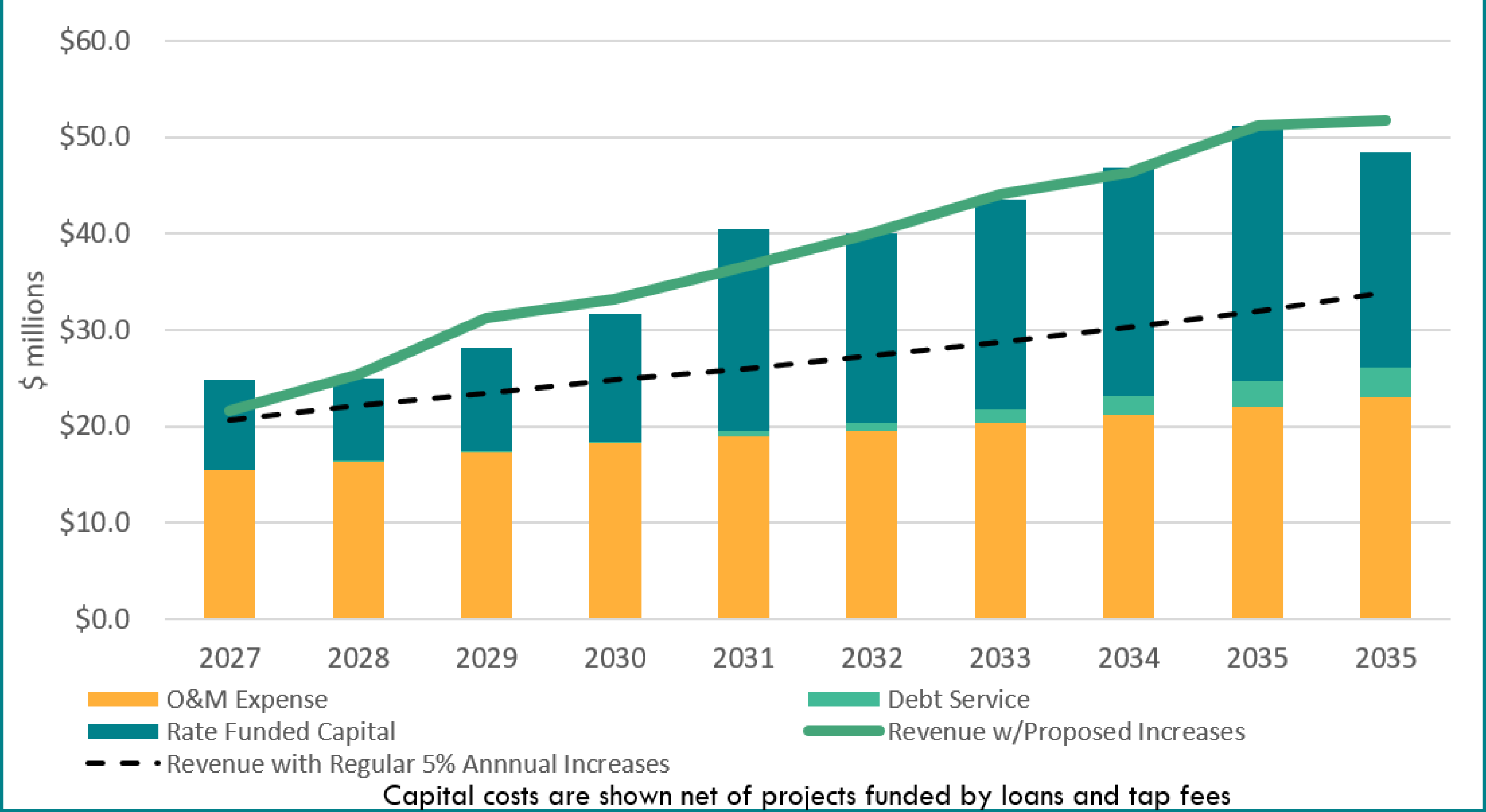
Debt structuring

Incorporated *Federal funding program - Water Infrastructure Finance and Innovation Act* (WIFIA) financing as first priority debt financing, then state loans, then revenue bonds to finance capital projects

Reserve management

Cash reserves kept close to target reserve levels to leverage cash spending prior to issuing debt, avoiding accruing large cash balances where possible

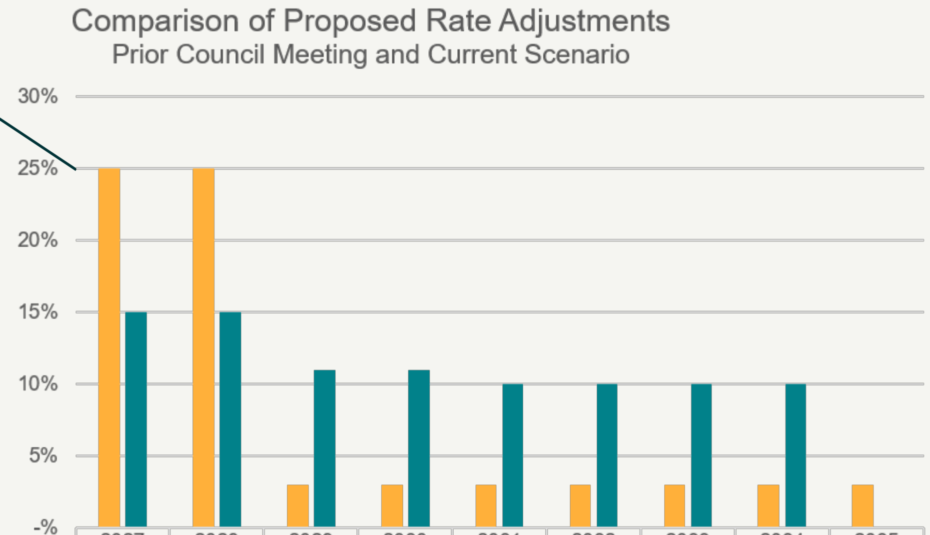
Sewer 10-Year financial forecast
Annual Revenues and Expenditures



Financial plan assumptions

- Funds the $256.2 million capital program, annual operating expenses, and debt service
- Debt issue cap of $65 million
- Remainder funded by rates, reserves, tap fees, and other operating revenues

Scenario from prior May 2026 meeting indicated a 25% increase in 2027 and 2028



	2027	2028	2029	2030	2031	2032	2033	2034	2035
5/2026 Council Meeting	25%	25%	3%	3%	3%	3%	3%	3%	3%
Current Scenario	15%	15%	11%	11%	10%	10%	10%	10%	0%

Revenue Adjustment Summary

1 **May 2026 Council Meeting**

2027: 25%

2028: 25%

Average increase:
2029 – 2035: 3%

2 **Updated Financial Plan Scenario**

2027: 15%

2028: 15%

Average increase:
2029 – 2035: 9%

Sterling Ranch (Dominion Water & Sanitation)

Start-up & emergency back-up agreement since August 2015

Purpose was to provide treatment at SPR until Dominion built treatment plant within about 6 years

Current timeframe for plant has exceeded start-up intent so new agreement currently under discussion

Revenue assumption in plan has been made accounting for Dominion system payments due over five-year period to avoid subsidy in of Sterling Ranch in rate model

Pricing Objectives

Sanitary Sewer

Rate schedule pricing objectives
Required objectives

Revenue sufficiency

Rates must be sufficient to recover utility's costs and sustain the utility's financial health.

Defensibility

Rate structure is compliant with relevant local, state, and federal laws; satisfies any debt obligation covenants or other requirements

Rate structure pricing objectives

Revenue stability

Rate structure should generate stable and predictable revenues sufficient to meet annual revenue requirements, bond covenants and other financial requirements.

Cost equity between customer classes

Through a cost-of-service analysis, costs are recovered proportionately from each customer class' rate structure based on their unique demand characteristics and level of service requirements.

Cost equity between customers within a class

The rate structure results in individual customers paying their cost to receive service based on their unique demand characteristics (e.g. low volume and high volume customers).

Basic sanitation affordability

Rate structure should provide essential services at the lowest possible cost all the while allowing the utility to generate revenue sufficient to maintain their financial health.

Rate structure pricing objectives

Conservation pricing signal

Rate structure contains a pricing signal to encourage the wise use of water.

Customer understanding

The rate structure is easy to explain and understood by customers with minimal misinterpretations as possible.

Ease of administration

Rate structure should be compatible with existing billing and accounting systems.

Information for implementation and administration should be based on readily available, and manageable data

Pricing objectives ranking

Objective	Current Fixed Structure	Alternative – Flexible Structure
Revenue sufficiency	■■■	■■■
Defensibility	■■◧	■■■
Revenue stability	■■■	■■◧
Cost equity between classes	■◧	■■■
Cost equity within a class	◧	■■■
Basic sanitation affordability	◧	■■■
Customer understanding	■■■	■■■
Ease of administration	■■■	T B D

Rate Design

Sanitary Sewer

Current sanitary sewer fixed rate structure

applies to all customers

Annual Charges

- Residential
  - Annual flat charge, $ per account
- Multifamily
  - Annual flat charge, $ per unit
- Commercial
  - Annual flat charge [1], $ per account
  - Volume rate, $ per 1,000 gallons

- Commercial volume rate applied to usage over 22,000 gallons for inside city customers and 44,000 gallons for outside city customers

Services provided

- Treatment and collection
  - Applies to City of Littleton customers
- Treatment only
  - Applies to:
    - Customers *within* City but served by District (i.e. Littleton Village)
    - Customers *outside* the City served by Districts

Areas served

- City of Littleton
- Ken Caryl
- Bow Mar
- Sterling Ranch (Dominion)
- Platte Canyon
- Grant Ranch
- Meadowbrook
- Roxborough
- Columbine

Rate comparison of fixed rate structure Existing 2026 and Proposed 2027

City of Littleton Treatment and Collection

- Residential

Residential	$ per Year	$ per Month
2026 Fixed	$360.57	$30.05
2027 Fixed	$414.66	$34.55
Inc/(Dec) - $	***$54.09***	***$4.50***

- Multifamily

Multifamily	$ per Year	$ per Month
2026 Fixed	$306.46	$25.54
2027 Fixed	$352.43	$29.37
Inc/(Dec) - $	***$45.97***	***$3.83***

- Commercial

Commercial	$ per Year*	$ per Month	$ per k-gal
2026 Fixed	$148.55	$12.38	$6.62
2027 Fixed	$170.83	$14.24	$8.28
Inc/(Dec) - $	***$22.28***	***$1.86***	***$1.66***

- *Commercial bill is the greater of the minimum charge or the billable volume x volume rate

Inside City, Served by District Treatment Only

- Residential

Residential	$ per Year	$ per Month
2026 Fixed	$273.66	$22.81
2027 Fixed	$314.71	$26.23
Inc/(Dec) - $	***$41.05***	***$3.43***

- Multifamily

Multifamily	$ per Year	$ per Month
2026 Fixed	$232.59	$19.38
2027 Fixed	$267.48	$22.29
Inc/(Dec) - $	***$34.89***	***$2.91***

Outside City Treatment Only

- Residential

Single Family	$ per Year	$ per Month
2026 Fixed	$328.37	$27.36
2027 Fixed	$377.63	$31.47
Inc/(Dec) - $	***$49.26***	***$4.11***

- Multifamily

Multifamily	$ per Year	$ per Month
2026 Fixed	$279.09	$23.26
2027 Fixed	$320.95	$26.75
Inc/(Dec) - $	***$41.86***	***$3.49***

- Commercial

Commercial	$ per Year*	$ per Month	$ per k-gal
2026 Fixed	$178.23	$14.85	$3.61
2027 Fixed	$204.96	$17.08	$4.15
Inc/(Dec) - $	***$26.73***	***$2.23***	***$0.54***

- *Commercial bill is the greater of the minimum charge or the billable volume x volume rate

Proposed flexible rate structure

Customer classes and service areas remain the same

City of Littleton
Treatment and Collection

- Residential
- Multifamily
- Commercial

Inside City, Served by District
Treatment Only

(i.e. Littleton Village)

- Residential
- Multifamily

Outside City
Treatment Only

- Residential
- Multifamily
- Commercial

Sanitary sewer flexible rate structure

Residential

Fixed Charge
$ per Bill

+

Volume Rate
$ per 1,000 gallons
Based on average winter water volume

=

Total Sewer Bill ($)

Multifamily

Fixed Charge
$ per unit per bill

+

Volume Rate
$ per 1,000 gallons
Based on average winter water volume

=

Total Sewer Bill ($)

Commercial

Fixed Charge
$ per Bill

+

Volume Rate
$ per 1,000 gallons
Based on <u>actual</u> water volume

=

Total Sewer Bill ($)

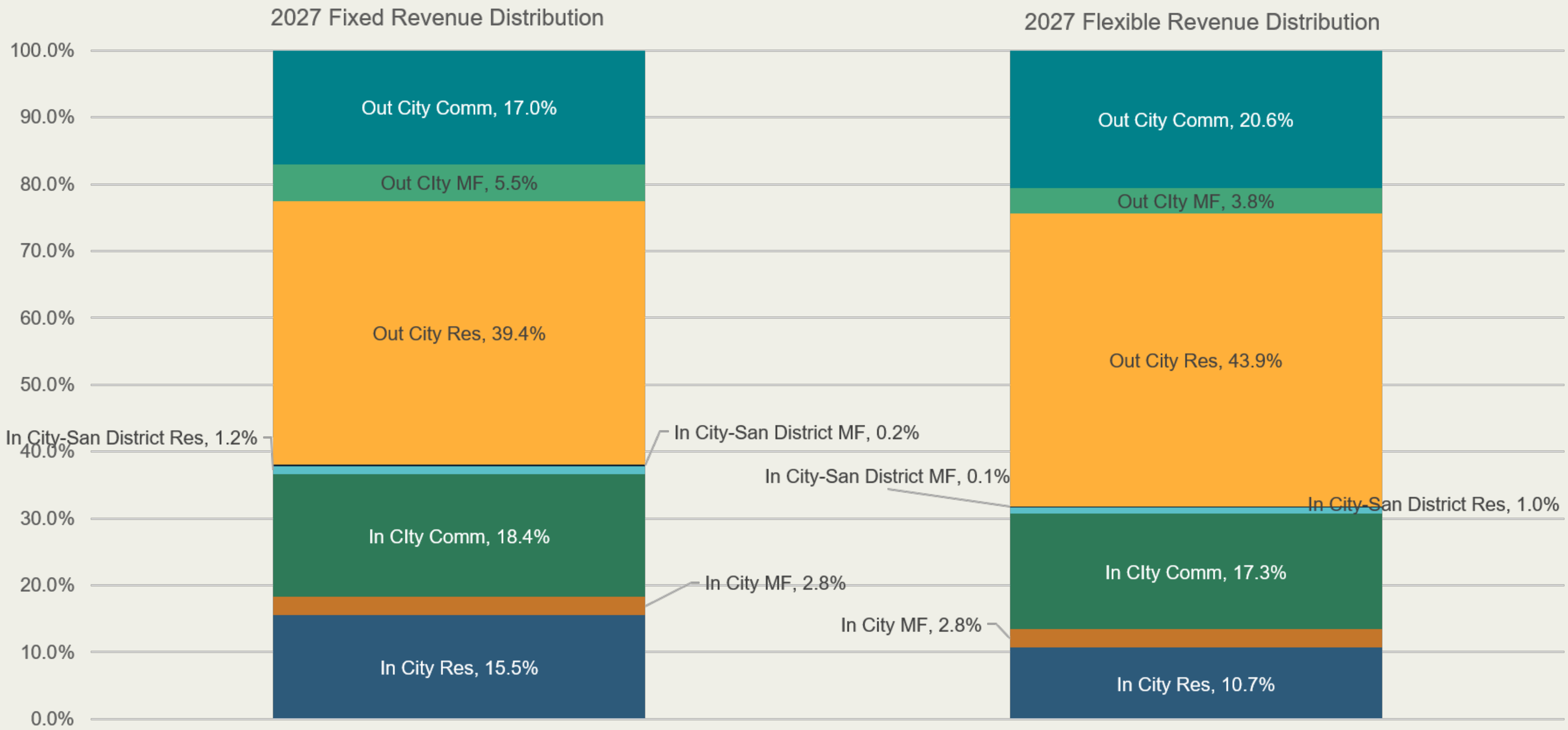
Flexible rate structure

- The fixed + variable rate structure is common among wastewater utilities along the front range
- Rebalances equity between customer classes and customers within a class
- Customers have more flexibility in managing their bill

1. **Average winter consumption**
   Average billed water use for the months January through March. Applies to residential and multifamily
2. **Actual water consumption**
   Based on commercial customer's actual 12-month water use
3. **Fixed charge**
   Recovers the cost of billing, general administrative costs and some capital costs
4. **Volume rate**
   Recovers the cost to collect, treat, and dispose of treated water that meets regulatory requirements

Distribution of revenues by customer class and service area

2027 Fixed Structure and 2027 Flexible Structure



2027 flexible rate structure

applies to all customers

City of Littleton

- Residential
  - $15.25 per bill
  - $4.10 per $1,000 gallons of average winter water use
- Multifamily
  - $11.44 per unit per bill
  - $4.10 per $1,000 gallons of average winter water use
- Commercial
  - $15.25 per bill
  - $4.10 per 1,000 gallons of actual water use

Customers in City, served by District

- Residential
  - $15.25 per bill
  - $2.98 per $1,000 gallons of average winter water use
- Multifamily
  - $11.44 per unit per bill
  - $2.98 per $1,000 gallons of average winter water use

Outside City

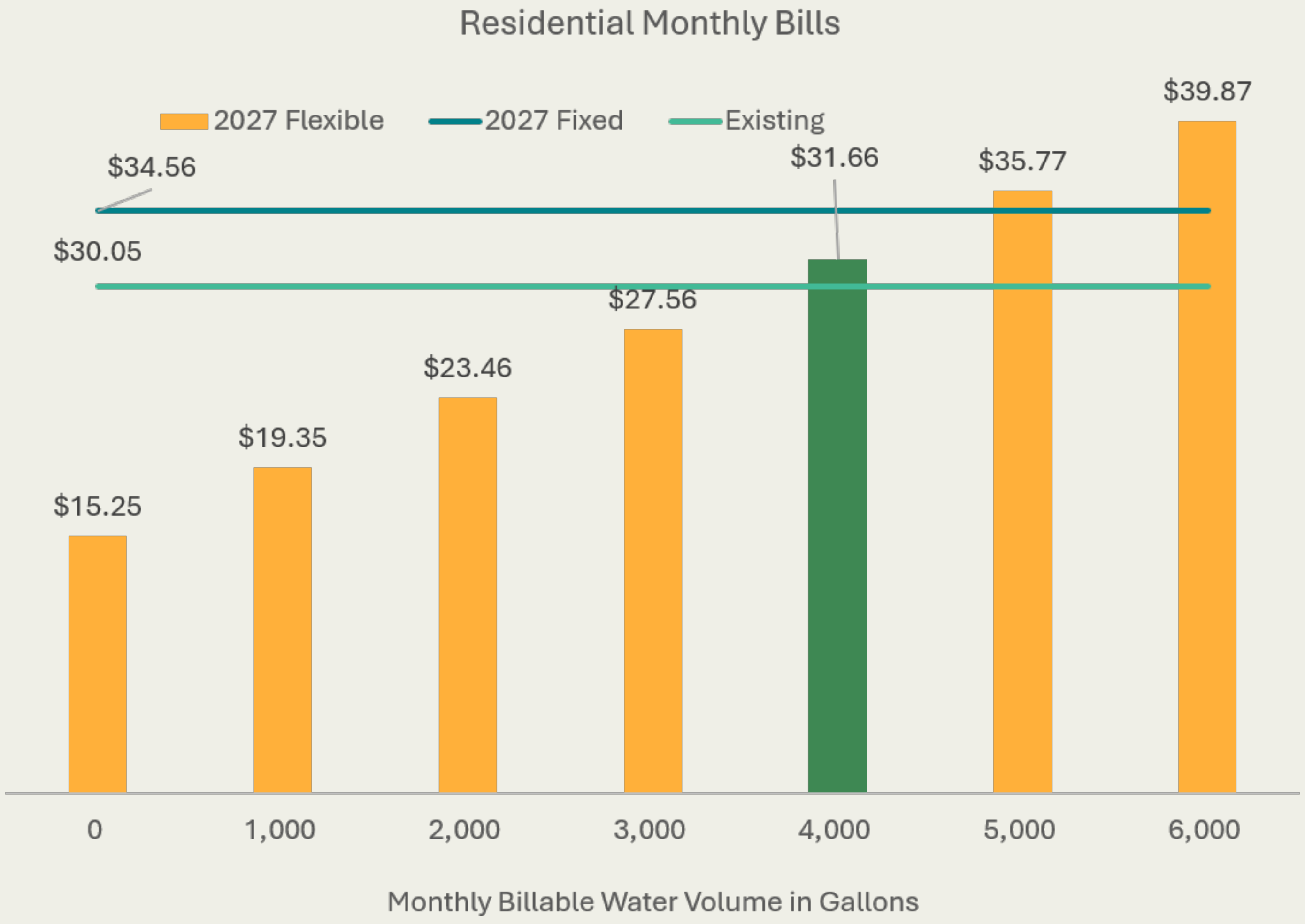
- Residential
  - $18.30 per bill
  - $3.57 per 1,000 gallons of average winter water use
- Multifamily
  - $13.73 per bill
  - $3.57 per 1,000 gallons of average winter water use
- Commercial
  - $18.30 per bill
  - $3.57 per 1,000 gallons of actual water use

Monthly Bill Comparison

Sanitary Sewer

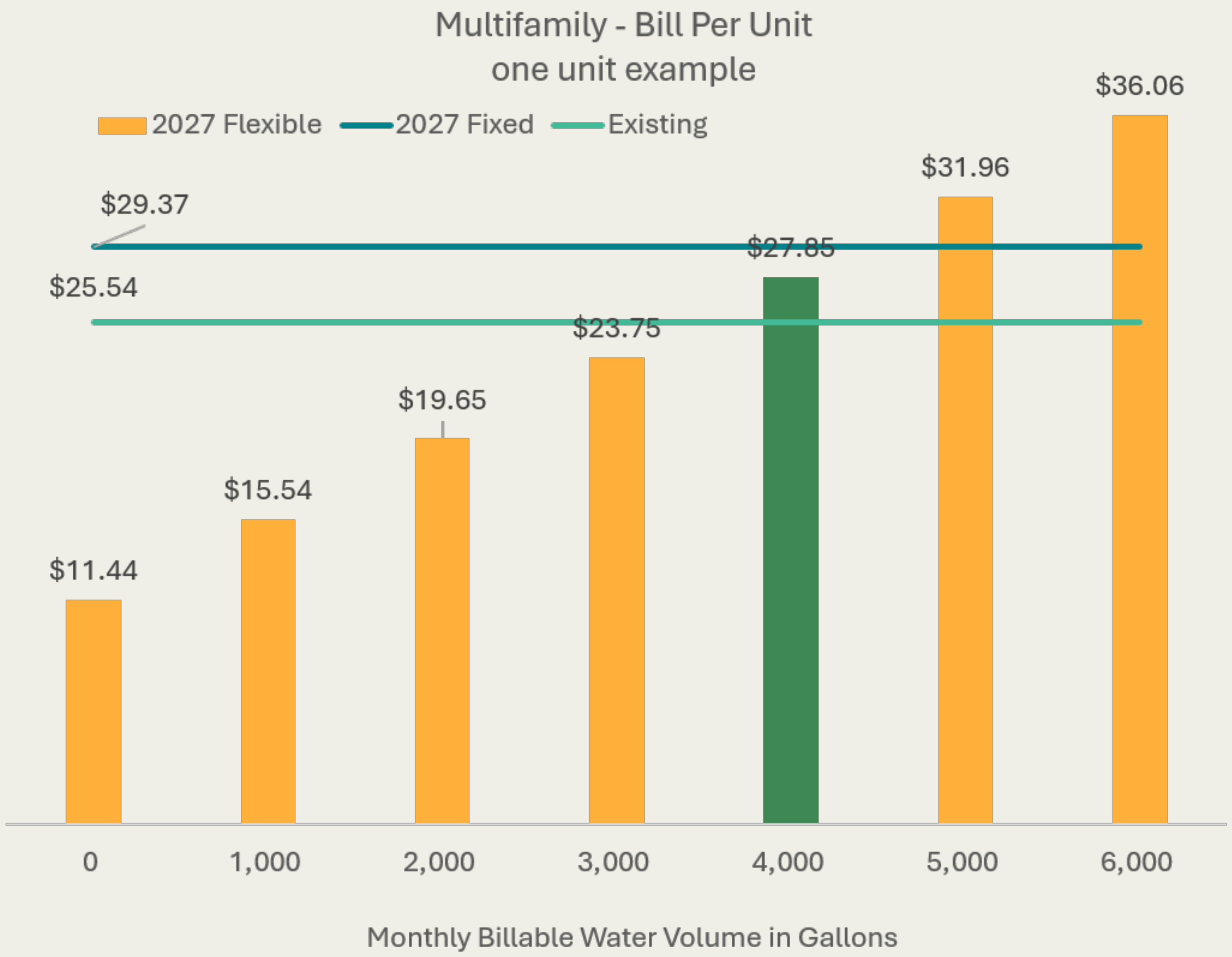
2027 Inside City residential customer bill

- Proposed rates exclude financial plan adjustments and generate the same revenue as existing rates.
- Most residential customer's winter volume averages 3,000 to 4,000 gallons per month
- Recovers collection and treatment costs
- Average winter consumption will be recalibrated annually based on most recent billing information



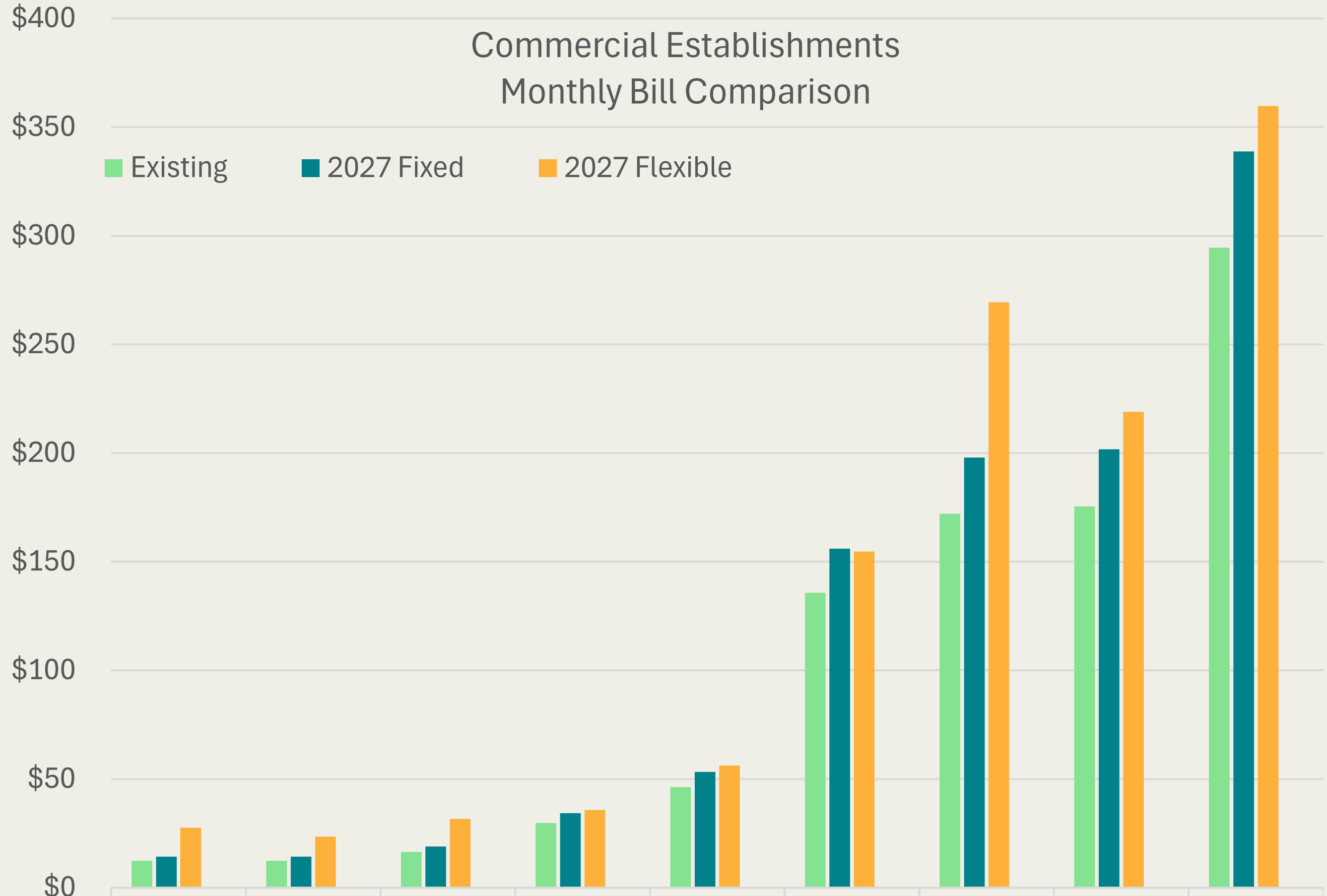
2027 Inside City multifamily customer bill (one unit)

- Multifamily customers are billed on a per unit basis for each bill
- Multifamily billable volume per unit averages 3,000 gallons
- Average winter consumption will be recalibrated annually based on most recent billing information



2027 Inside City commercial customer examples

- Current fixed rate structure is based on customers lowest bimonthly use
- Lowest bimonthly use may understate wastewater flows for some commercial customers.
- 2027 flexible structure bills customers are billed on actual water use
- Under 2027 flexible, customers with consistent year-round water use are expected to see little or no change, while those with greater seasonal variation are more likely to see an increase.

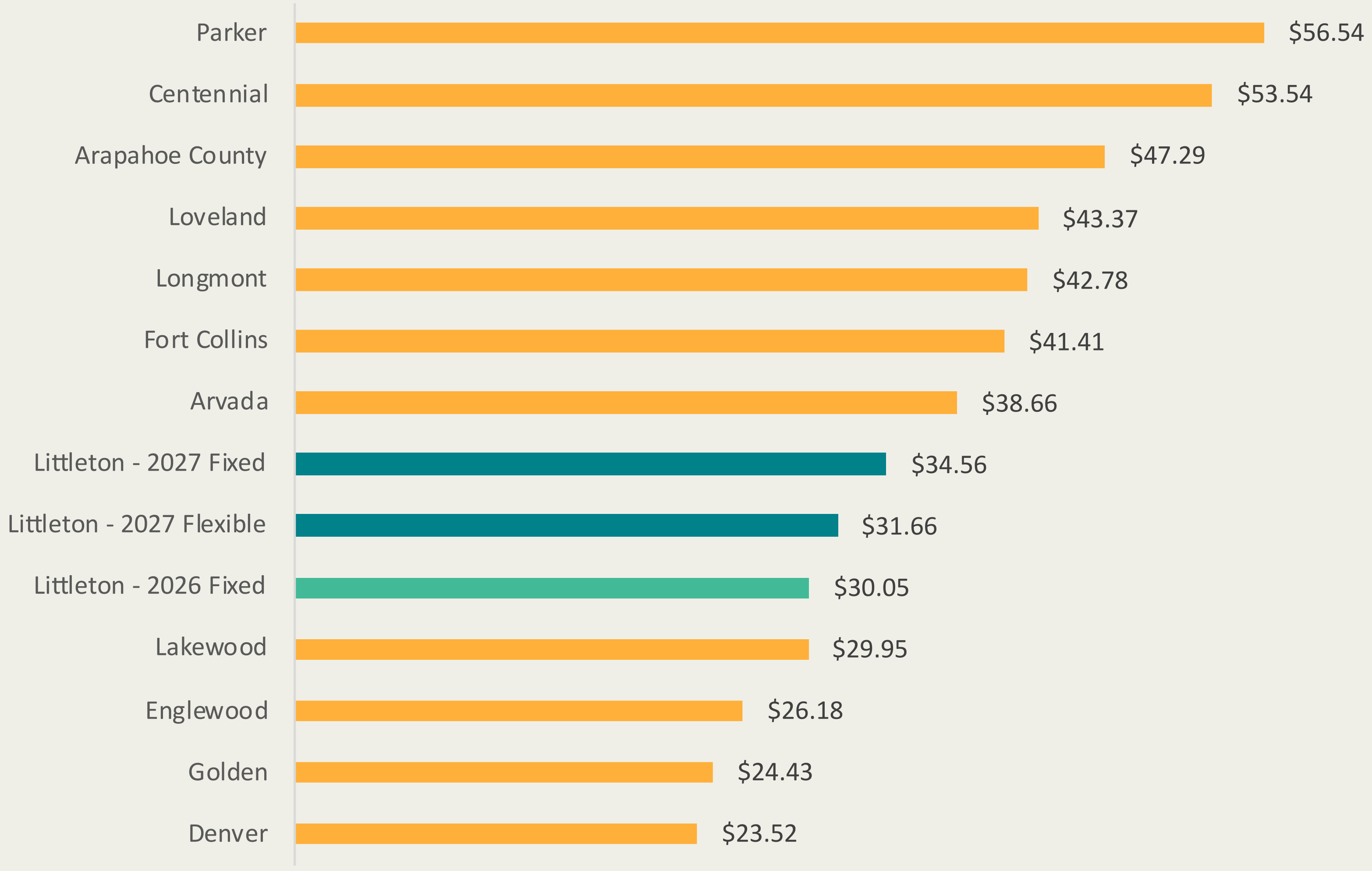


	Oil Change	Auto Parts	Bank	Convenience Store	Local Brew Pub	Small Grocery	Fast Food Burgers	Public School	Sit Down Restaurant
Existing	$12	$12	$17	$30	$46	$136	$172	$175	$295
2027 Fixed	$14	$14	$19	$34	$53	$156	$198	$202	$339
2027 Flexible	$28	$23	$32	$36	$56	$155	$269	$219	$360
Change	$13	$9	$13	$1	$3	($1)	$72	$17	$21

Peer utility survey – avg. single family (inside city)

Why sewer rates differ among utilities

- Rates reflect different operating and capital costs and funding approaches
- Rates reflect differing service levels, capital investments, funding approaches, and cost recovery
- Differences in rates do not necessarily reflect differences in efficiencies or service quality



Storm Drainage Financial Plan Update

Financial plan

No changes from May 11 Council meeting

Capital improvement program
10-year capital program totals $72.4 million

Capital funding sources

Revenue bonds:	$10.8 million
State loans:	$12 million
Other revenue:	$49.6 million

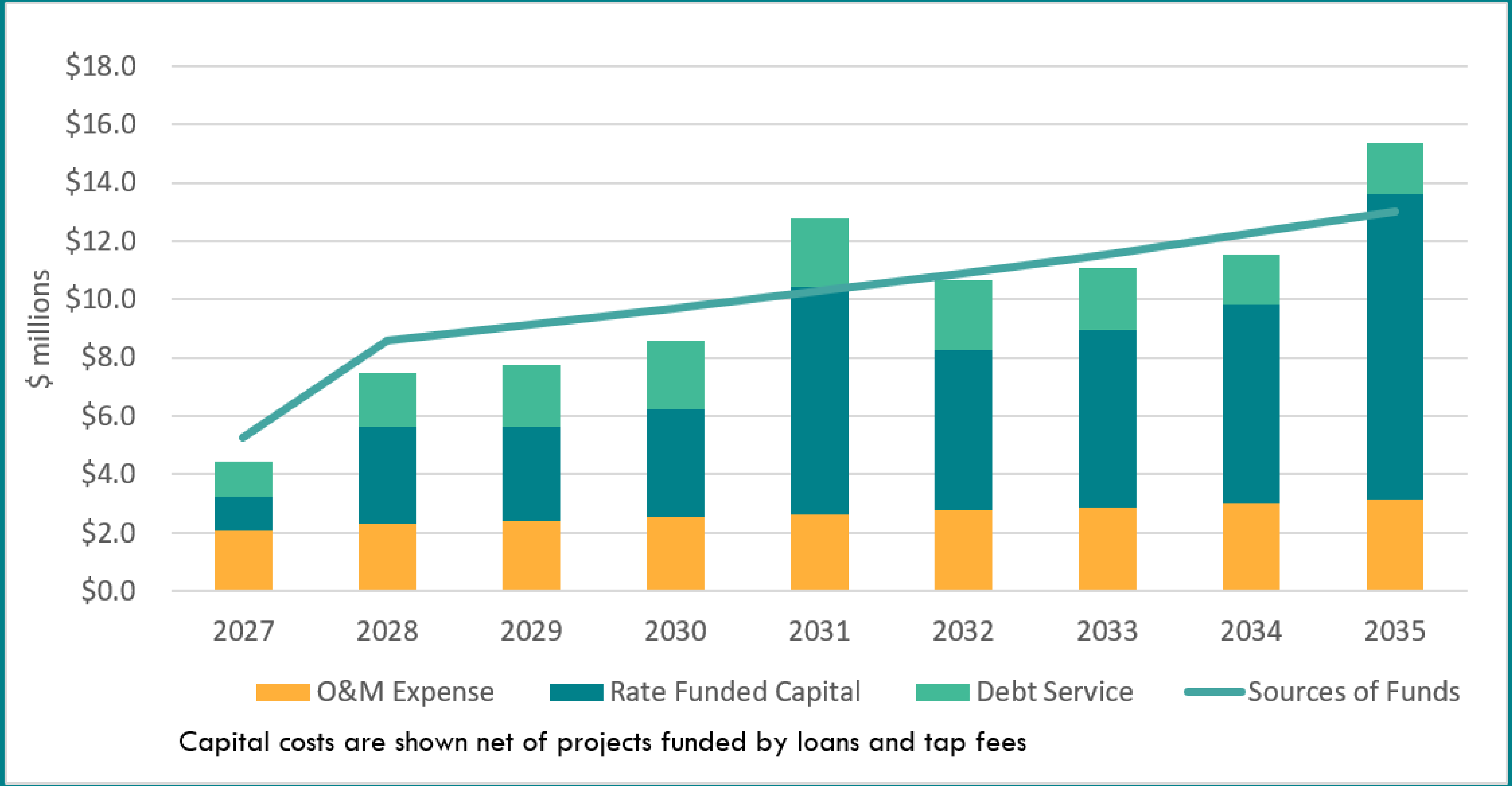
Capital driver for initial 2027 increase
Rangeview Gulch: $8.0 million

Fund balance building
2026 Balance: $31,800
2025 Balance: $2.1 million
Average target reserve requirement: $620,000

Revenue increases
2027: 60%
2028: 60%
2029 – 2035: 5.2% annually

Storm Drainage 10-Year financial forecast

Annual Revenues and Expenditures



Storm drainage
Existing and proposed rates

- Assessed annually
- Multifamily and nonresidential developed properties fee includes a charge for:
  - Impervious surfaces (parking lots, roofs, etc.)
  - Pervious surfaces (grass, gravel, permeable payment)
- Different charges for developed and undeveloped parcels

  Different charge for unsubdivided and subdivided parcel

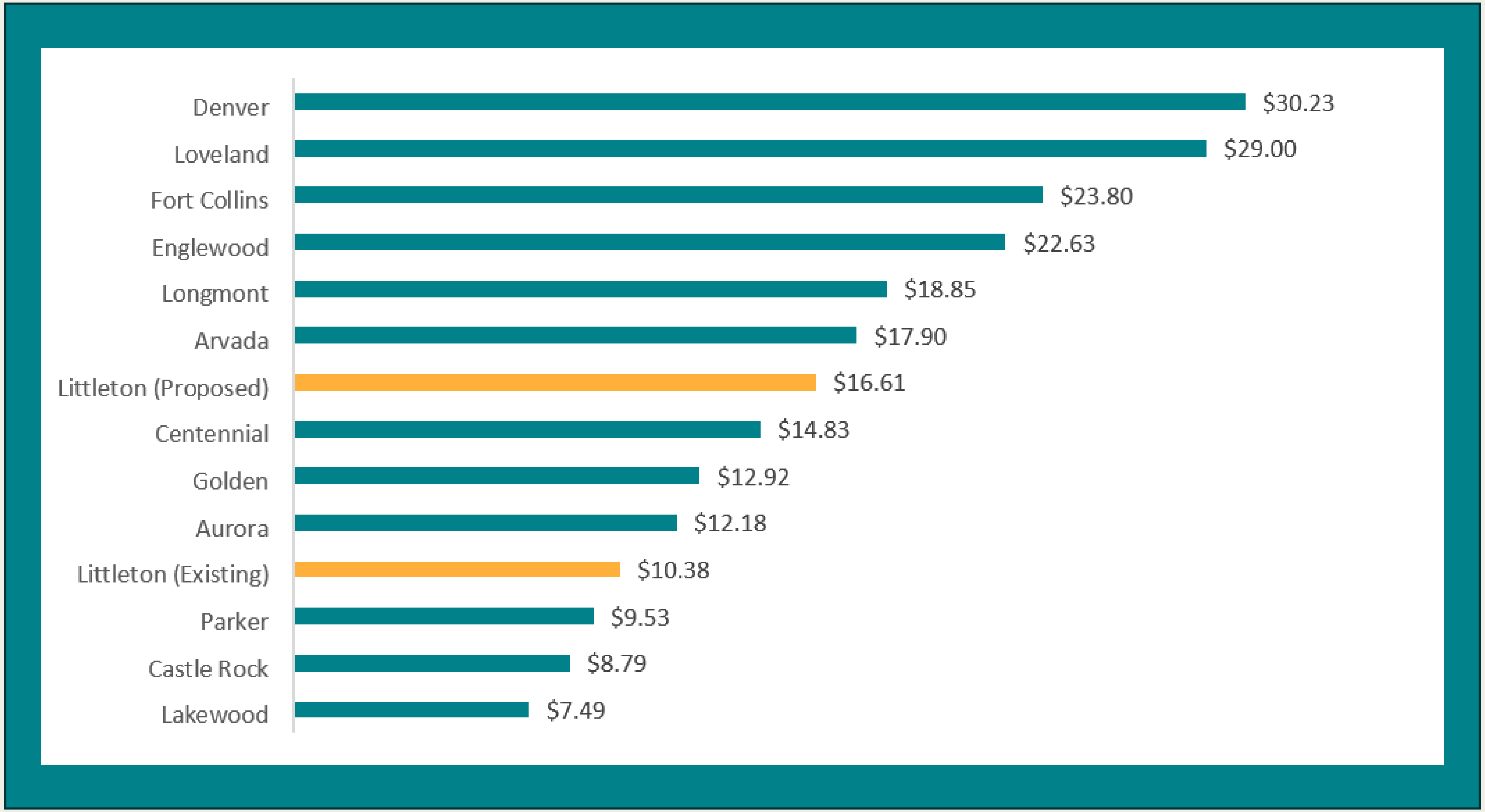
Description	Single Family Detached Structures	Multifamily Residential Commercial, Industrial, Public Properties Churches and Schools

Developed	$ per lot or property
	2026 $124.54
	2027 $199.26
	Inc/(Dec) ***$74.72***
		$ per developed acre of IA
		2026 $1,037.31
		2027 $1,659.70
		Inc/(Dec) ***$622.39***
		+
		$ per acre of pervious area
		2026 $259.33
		2027 $414.93
		Inc/(Dec) ***$155.60***

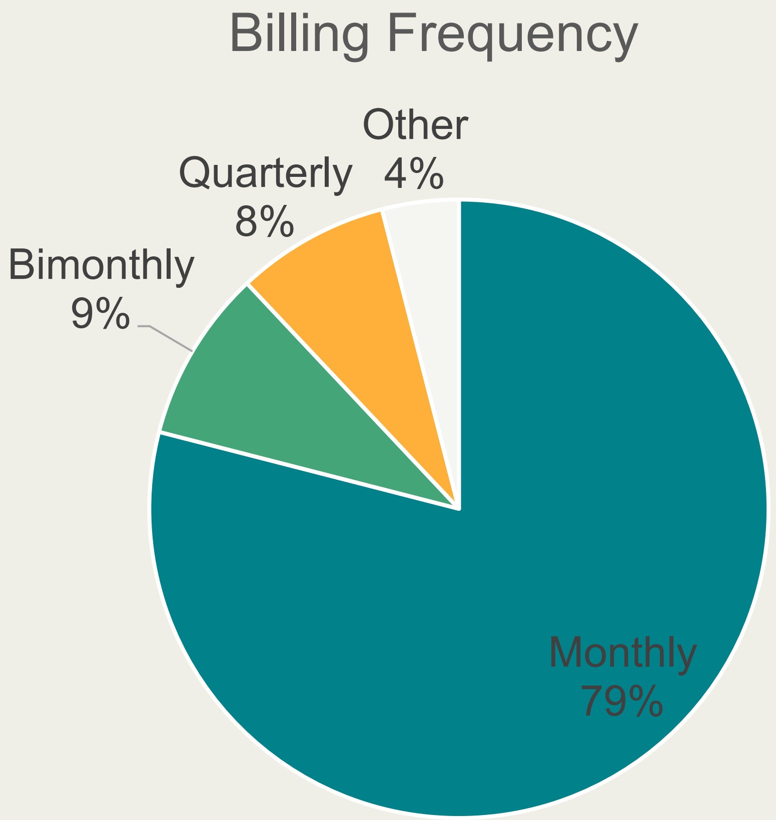
Subdivided/ Undeveloped	$ per undeveloped lot 2026 $31.12 2027 $49.79 *Inc/(Dec)* ***$18.67***	$ per undeveloped lot 2026 $259.33 2027 $414.93 *Inc/(Dec)* ***$155.60***
Undivided/ Undeveloped	$ per undeveloped lot 2026 $259.33 2027 $414.93 *Inc/(Dec)* ***$155.60***	$ per undeveloped lot 2026 $259.33 2027 $414.93 *Inc/(Dec)* ***$155.60***
Vacant and Undisturbed	$ per acre of vacant res property 2026 $25.95 2027 $41.52 *Inc/(Dec)* ***$15.57***	$ per acre of vacant res property 2026 $25.95 2027 $41.52 *Inc/(Dec)* ***$15.57***

Peer inside City residential storm drainage monthly bill comparison

11,000 sq ft
4,500 sq ft
impervious area



Customer billing frequency review



Current billing period: Annual
Industry standard practice: Monthly

Monthly billing benefits

More consistent cash flow/improved financial stability

Improved communication with customers – bill is often only regular form of communication

Avoids bill shock – allows customers to better budget their monthly expenses

Aligns with customers' budgeting/payment schedule

Other considerations

City relies on several datasets from other districts

Sufficient time required to recalibrate AWC billing. Many utilities recalibrate AWC billing with April bills

Affordability assistance program option

- Program considerations
  - Quantity of impacted customers
  - Enrollment
    - Collaboration with Xcel
  - Program administration and operating costs
  - Program funding source
  - Reaching multifamily/master metered customers
- Common measures
  - Percentage of income (median, lowest quintile)
  - Hours worked at minimum wage

Public Outreach

- On-going
  - Littleton Report articles
  - Social media posts
  - Let's Talk Littleton webpage
  - Meet Greet & Eat
  - Connect with Council
- Upcoming
  - Meeting w/ connector district staff in late August
  - Public meeting at Littleton Center on August 26th
  - Virtual public meeting on September 3rd
  - Final presentation to Council in September / October

Recap of Sewer Model Options and Staff Recommendation

Sewer rate structure options:

- Fixed rate per user class (with volumetric component for commercial), or
- Flexible model based mostly on actual water use

Staff Recommendation:

- Proceed with a flexible **sanitary sewer** rate system based on average winter consumption for residential and actual consumption for commercial
- Proceed with a **stormwater** rate model based on existing financial plan and impervious service model as modeled
- Direct staff to proceed with the public outreach schedule as proposed
- Provide direction on whether to proceed with more detailed analysis on a reduced rate structure for those customers who qualify based on income

RAFTELIS

Thank you!

Contact: Todd Cristiano
303.305.1138 / tcristiano@raftelis.com