

# CITY OF GOLDEN

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## Utility Rate Citizen Committee Meeting #5

July 16, 2019



# Agenda

- Cost of service review
- Irrigation structure alternatives assumptions
- Irrigation rate alternatives
- The big picture – combined bill impacts



# Assumptions

- Alternatives based on the initial pricing objectives selected by the URCC
- Results are for illustrative purposes
- All scenarios are revenue neutral
  - › Values based on 2020 projected expenditures
  - › Rate alternatives recover the same level of revenue as existing rates
- Alternatives based on a cost of service analysis



# Water Utility

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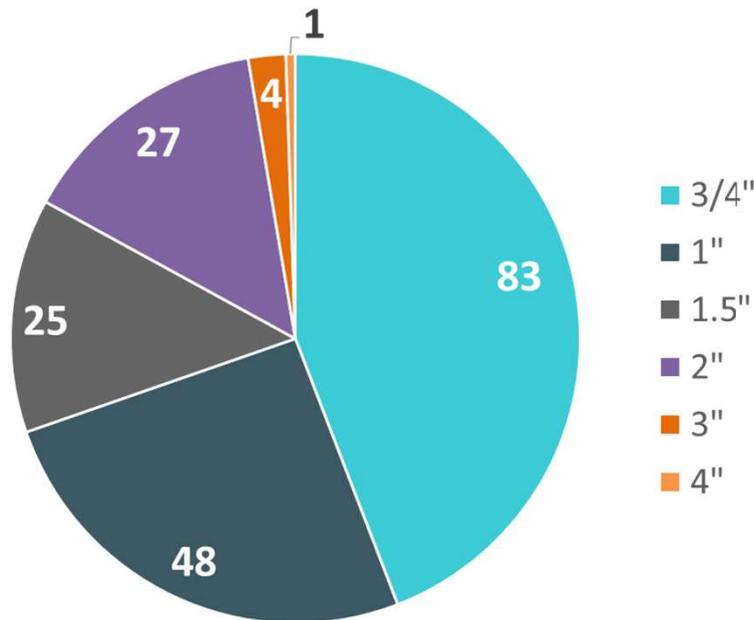
Irrigation rate structure alternatives

Irrigation customer impacts

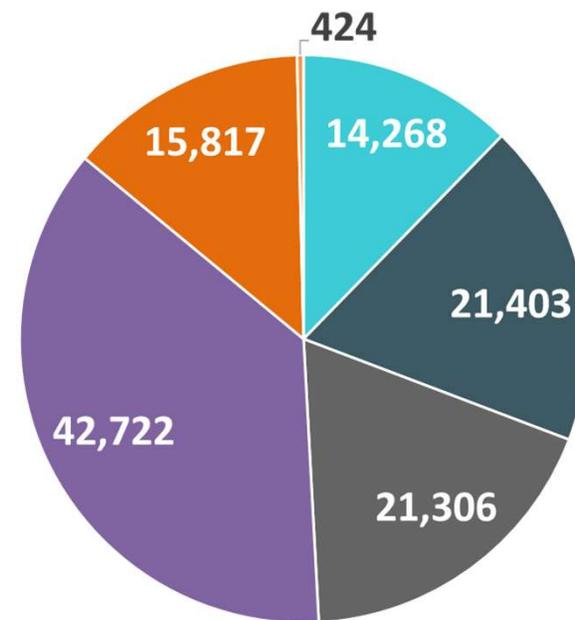
# Irrigation class profile

- 188 accounts
- Consumption = 13% of total treated water
- Average bill = 105 kgal
- Median bill = 43 kgal
- Maximum billed monthly use (2018) = 1,366 kgal

Accounts by Meter Size



Consumption by Meter Size (kgal)



# Irrigation Rate alternative assumptions

- Fixed inclining block by meter size
  - › Thresholds are set to recover same percentage of volume for each meter size

Meter Size	Total Accounts	Volume (kgal)	Block 1 Threshold	% of Volume in Block 1	Block 2 Threshold	% of Volume in Block 2
¾"	83	14,268	0-30	50.3%	>30	49.7%
1"	48	21,403	0-65	50.7%	>65	49.3%
1.5"	25	21,306	0-90	50.1%	>90	49.9%
>2"	32	58,964	0-210	49.3%	>210	50.7%



# Irrigation Rate alternative assumptions

- Water Budget
  - › Based on each customers' annual budget
    - Budget: irrigable area \* 15 gallons per square foot (gpsf)
  - › Block 1 captures 100% of each customer's budget
  - › Block 2 captures use above 100% of budget
  - › Water budget allocated based on monthly water requirements (ET<sup>1</sup>, plant factors, irrigation efficiency) for the irrigation season (April through October)



<sup>1</sup> Source: Northern Colorado Water Conservancy District

# Irrigation

## Existing and alternative volume rates

Uniform		
Meter	Existing, per kgal	Alternative – COS, per kgal
3/4"	\$5.26	\$6.71
1"		
1.5"		
>=2"		



# Irrigation

## Existing and alternative volume rates

Fixed Inclining Block by Meter Size					Water Budget			
Meter	Block 1 Threshold, kgal	Block 1, per kgal	Block 2 Threshold, kgal	Block 2, per kgal	Block 1 Threshold	Block 1, per kgal	Block 2 Threshold	Block 2, per kgal
¾"	0 – 30	\$5.37	>30	\$8.05	0-100%	\$6.20	>100%	\$9.30
1"	0 – 65	\$5.37	>65	\$8.05				
1.5"	0 – 90	\$5.37	>90	\$8.05				
>=2"	0 – 210	\$5.37	>210	\$8.05				



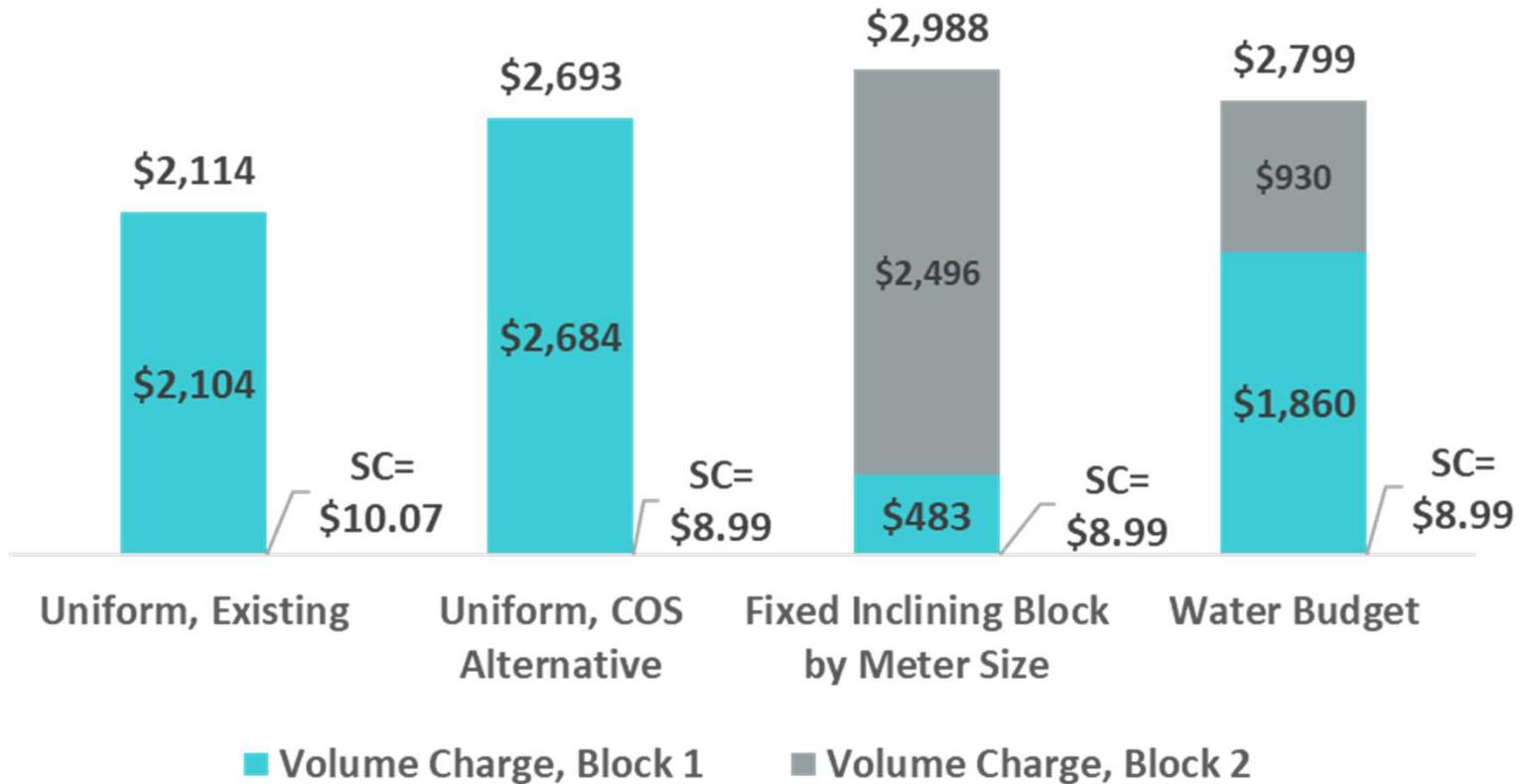
# Irrigation

## Sample August bill for high-volume user

400,000 gallons

1.5" meter

August water budget = 300,000 gallons



SC = Service Charge



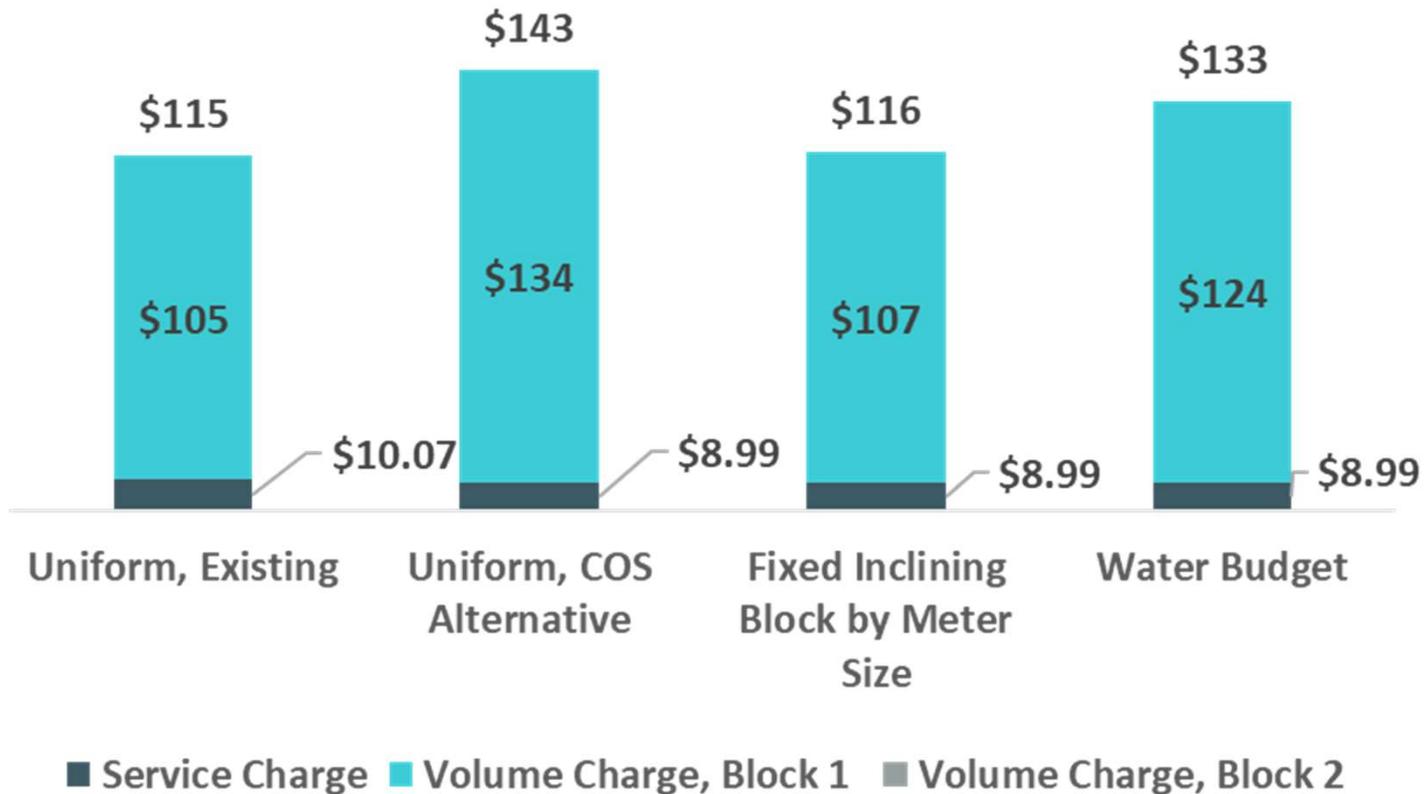
# Irrigation

## Sample August bill for low-volume user

20,000 gallons

1.5" meter

August water budget = 48,000 gallons



# COS Review

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Water

Wastewater

Drainage

# Water

## Comparison of COS and revenue under existing rates

Customer Class	COS	Revenue at Existing Rates	Change \$	Change %
Residential	\$2,264,850	\$2,008,517	\$256,333	12.8%
Comm/MF	\$2,354,435	\$2,798,783	(\$444,348)	-15.9%
Irrigation	\$872,935	\$684,920	\$188,015	27.5%
Total	\$5,492,220	\$5,492,220	\$0	0%



# Wastewater Comparison of COS and revenue under existing rates

Customer Class	COS	Revenue at Existing Rates	Change \$	Change %
Residential	\$753,501	\$1,057,055	(\$303,554)	-28.7%
Non-Residential	\$1,660,258	\$1,356,704	\$303,554	22.4%
Total	\$2,413,759	\$2,413,759	\$0	0%



# Drainage

## Comparison of COS and revenue under existing rates

Customer Class	COS	Revenue at Existing Rates	Change \$	Change %
Residential and units <=4	\$354,383	\$256,086	\$98,296	38.4%
Comm and MF >4 units	\$884,000	\$982,296	(\$98,296)	-10.0%
<b>Total</b>	<b>\$1,238,382</b>	<b>\$1,238,382</b>	<b>\$0</b>	<b>0%</b>

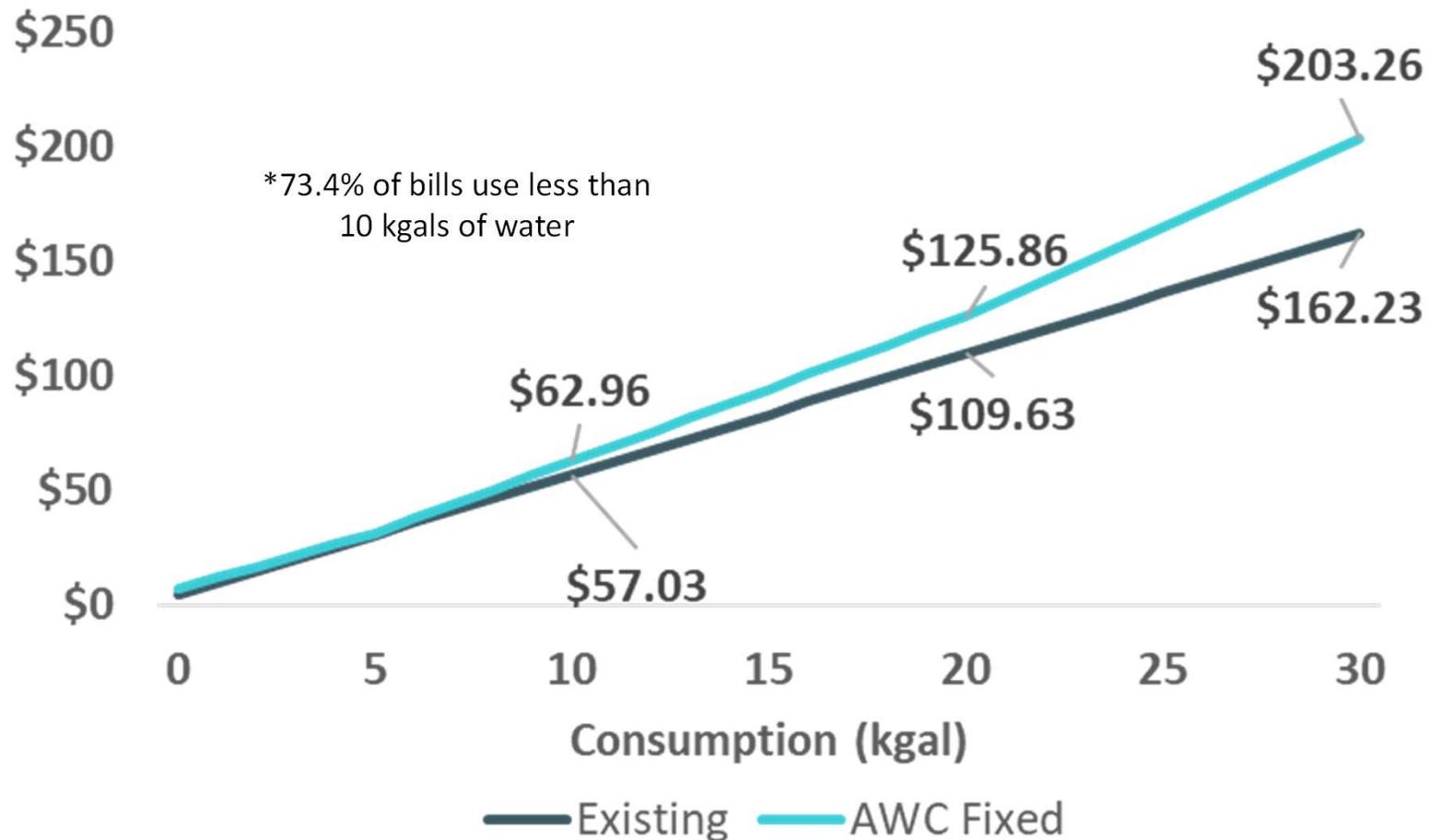


# The Big Picture – Combined Bill Impacts

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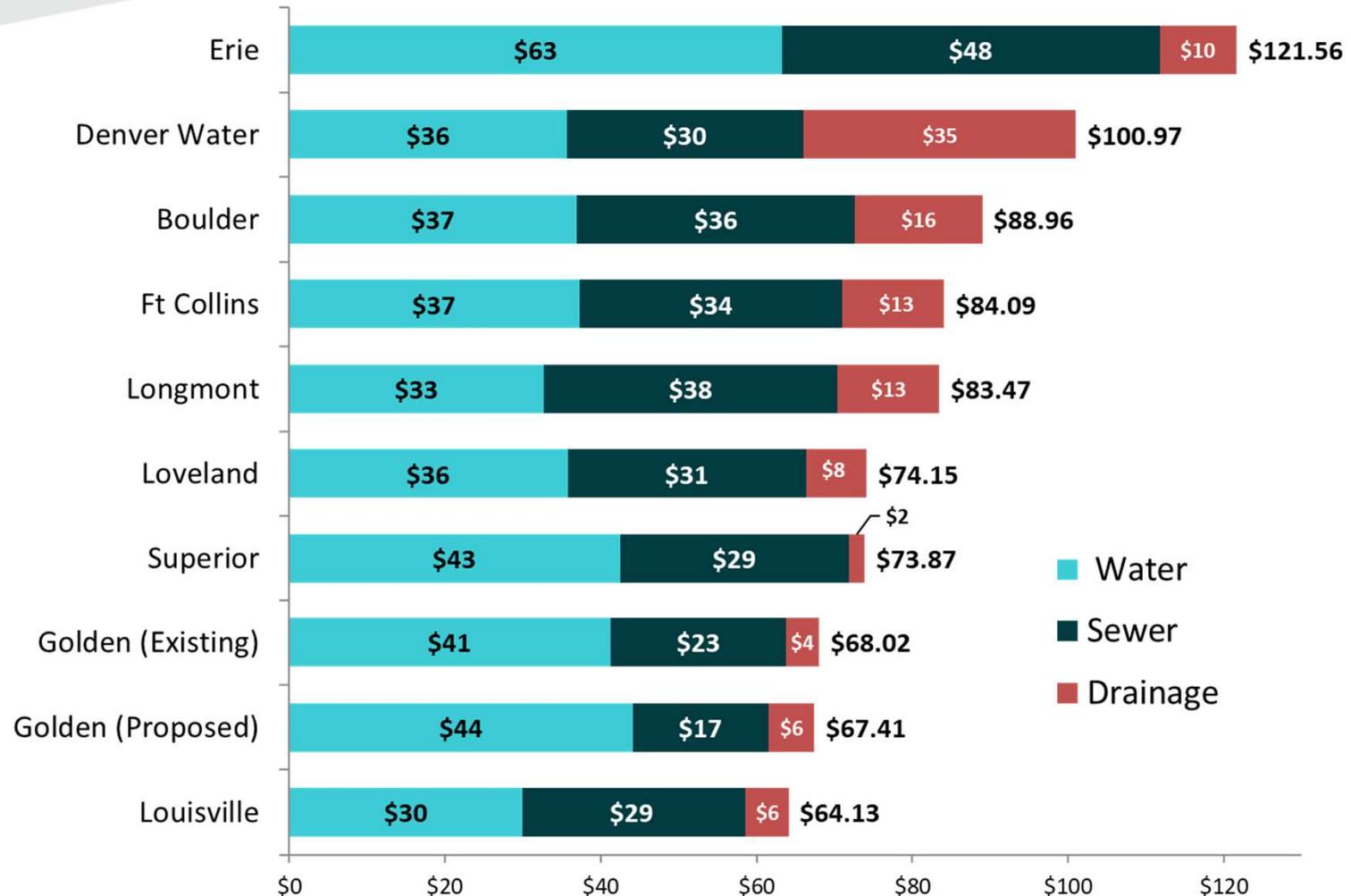
Residential  
Commercial/Multifamily

# Residential monthly water bill at increasing levels of usage Existing vs. AWC Fixed



# Water, wastewater, and drainage Single family residential

Water = 7,000 gal/month, Sewer = 4,000 gal/month

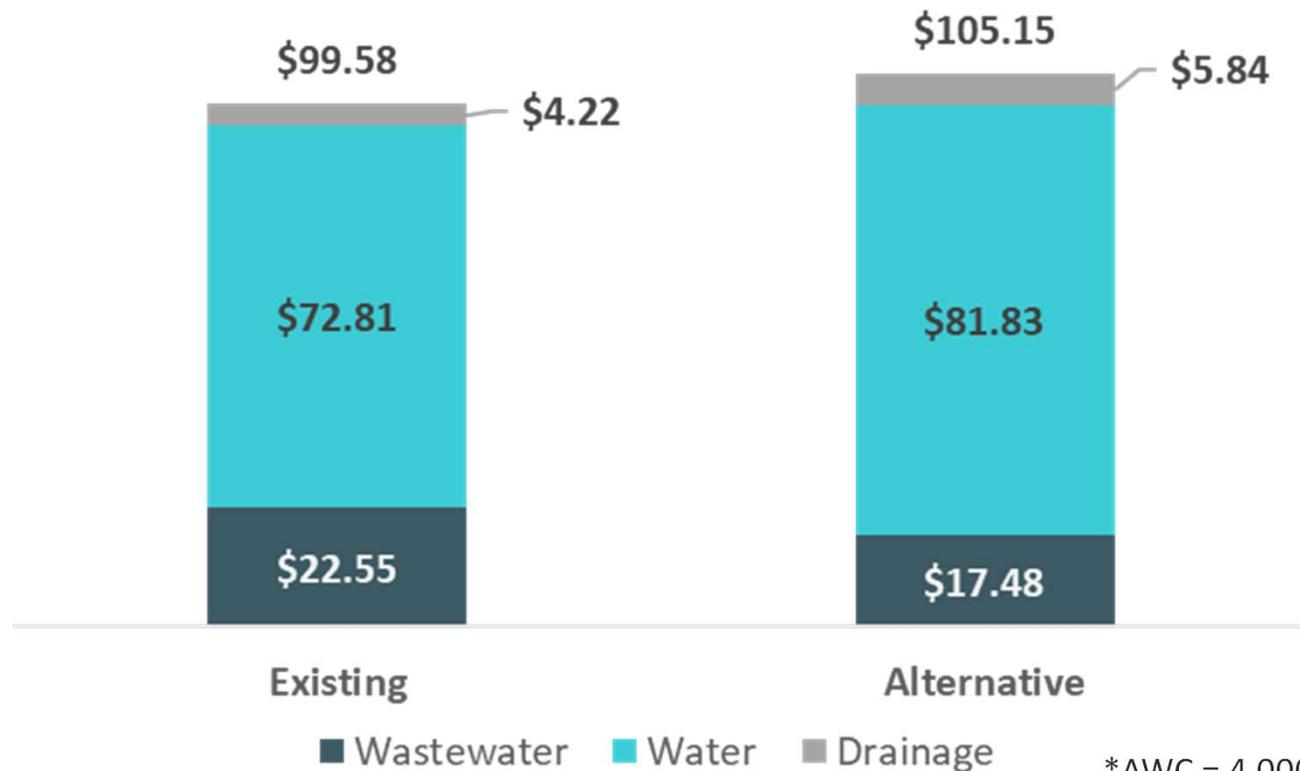


# Residential monthly bill Water, wastewater, drainage

Water use: 13,000 gallons

Wastewater billable volume: 4,000 gallons

Drainage impervious area = 2,950 sq. Ft.

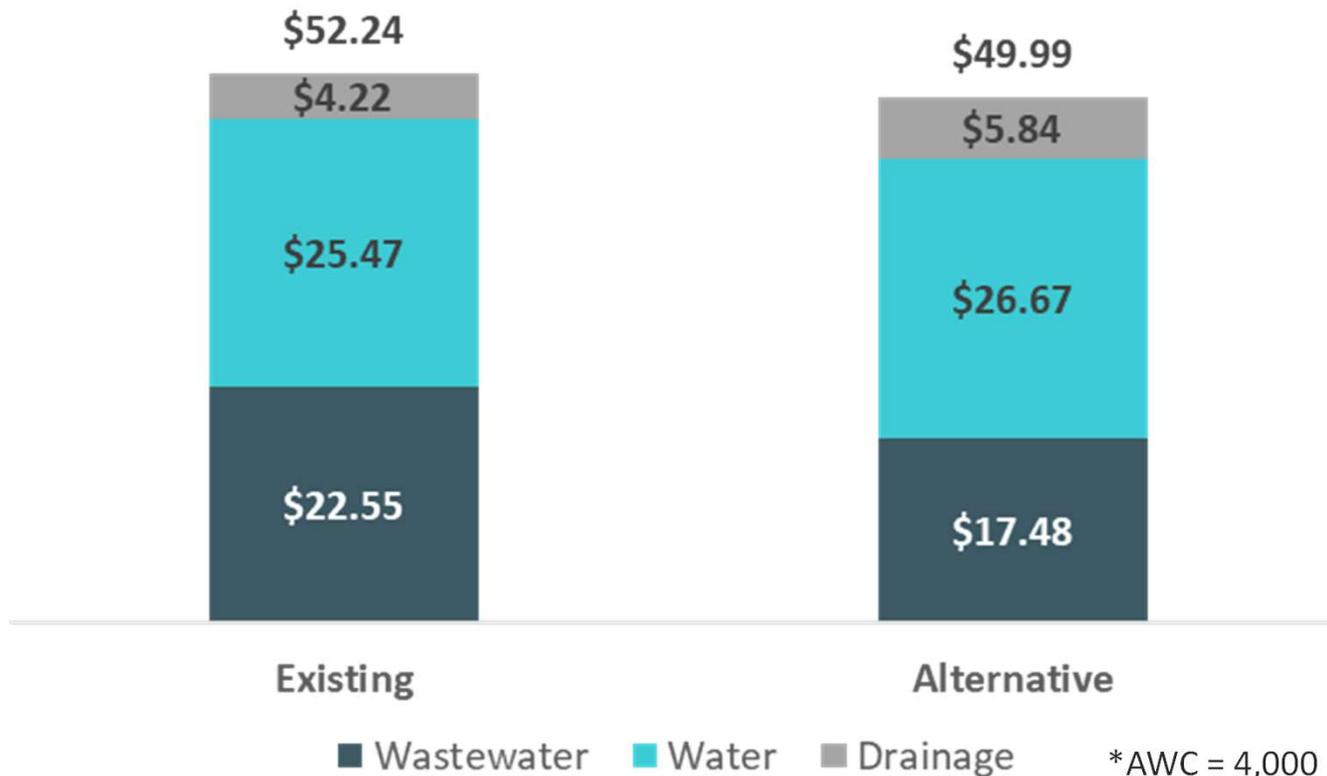


# Residential monthly bill Water, wastewater, drainage

Water use: 4,000 gallons

Wastewater billable volume: 4,000 gallons

Drainage impervious area = 2,950 sq. ft.



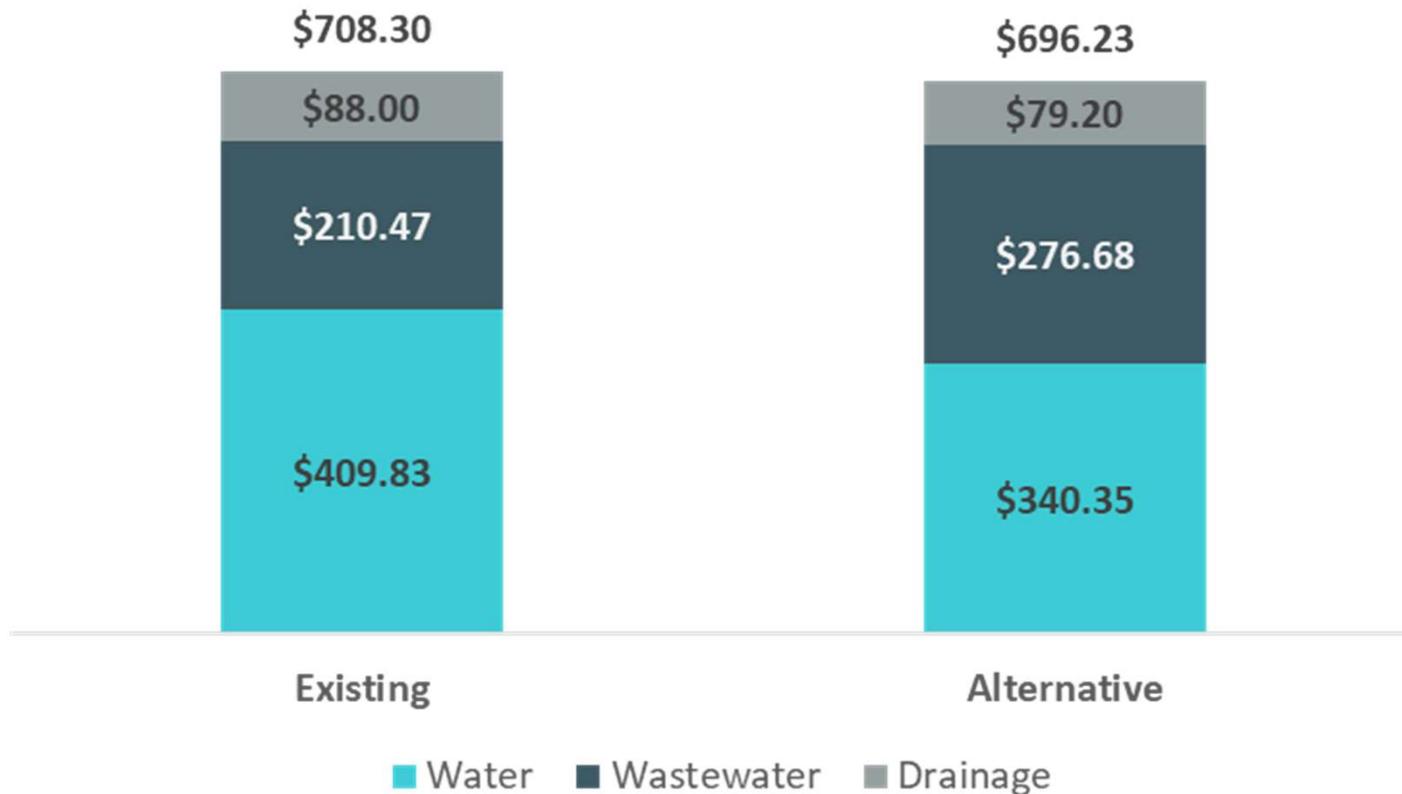
# Commercial/Multifamily monthly bill

## Water, wastewater, drainage

Water use: 76,000 gallons

Wastewater billable volume: 76,000 gallons

Drainage impervious area = 40,000 sq. ft.



# Commercial/Multifamily monthly bill

## Water, wastewater, drainage

Water use: 17,000 gallons

Wastewater billable volume: 17,000 gallons

Drainage impervious area = 15,000 sq. ft.



# Thank You

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