

City of Loveland

Water and Wastewater Cost-of-Service Study and Rate Design

COS & Rates Review
July 18, 2018

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Andy Baker, Project Manager



Discussion Outline

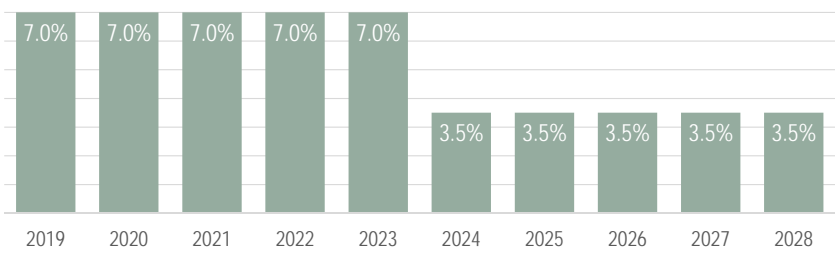
- ◆ Water Cost of Service & Rate Findings
- ◆ Wastewater Cost of Service & Rate Findings
- ◆ Raw Water Development Fee
- ◆ Next steps/questions

Water



LUC-Recommended Rates

Annual Water Utility Increases to Systemwide Rate Revenues





Cost Allocation Results

System Function	(a) Total O&M Costs Requirements	(b) Total Capital Costs Requirements	(c) Total Non- Rate Revenue Credits	(a) + (b) - (c) Total Revenue Requirements By Class
Single-Family Residential	\$9,296,241	\$1,773,400	\$986,519	\$10,083,122
Multi-Family Residential	1,707,886	343,726	\$188,042	1,863,570
Commercial	2,446,091	530,839	\$283,947	2,692,983
Irrigation	2,104,437	454,115	\$243,307	2,315,244
City Government	304,401	70,877	\$195,767	179,511
Fire Protection	348,847	69,495	\$38,138	380,204
TOTALS	\$16,207,903	\$3,242,452	\$1,935,720	\$17,514,635



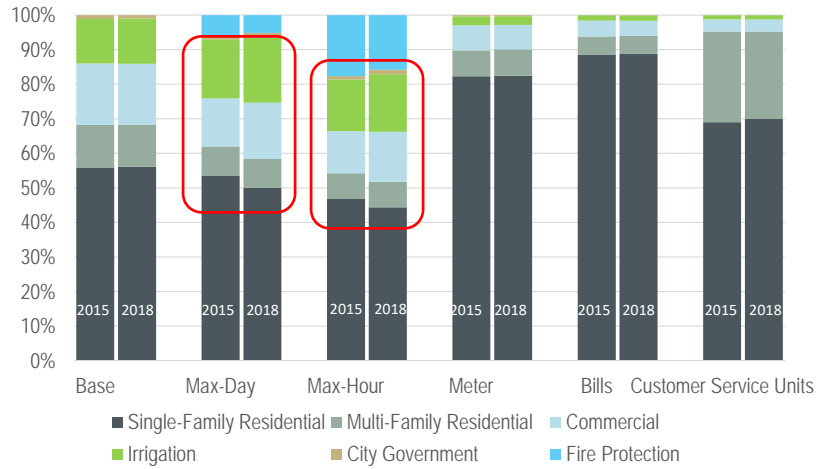
Change in Typical Water Bill

Customer Class	Class Cost-of- Service	Revenues at Existing Rates	% Difference	Average \$ Change in Monthly Bill
Single-Family Residential	10,348,602	10,442,828	-0.9%	\$0.00
Multi-Family Residential	1,959,630	1,753,175	11.8%	\$4.88
Commercial	2,706,259	2,217,342	22.0%	\$9.24
Irrigation	2,319,758	1,794,410	29.3%	\$27.61
City Government	180,385	162,944	10.7%	\$13.34
GRAND TOTALS	\$17,514,635	\$16,370,699	7.0%	

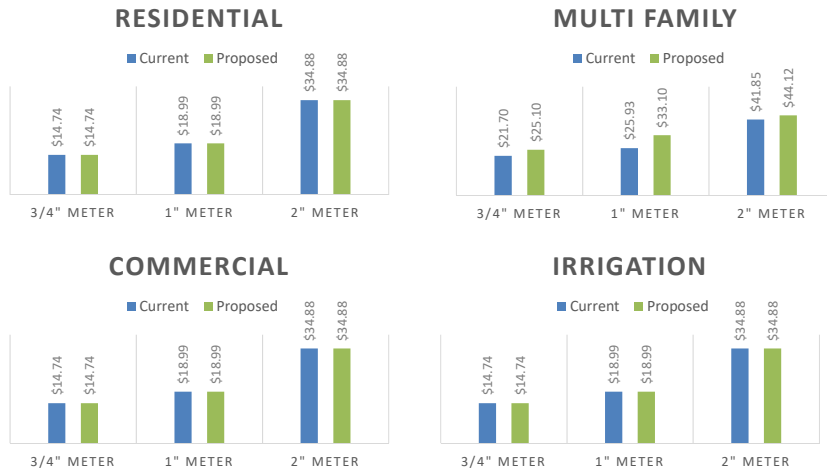
Rates for non-residential classes require adjustment but the residential class' rates are already sufficient to recover the correct amount



Water Cost Allocation Shifting Explained



Proposed Monthly Service Charges

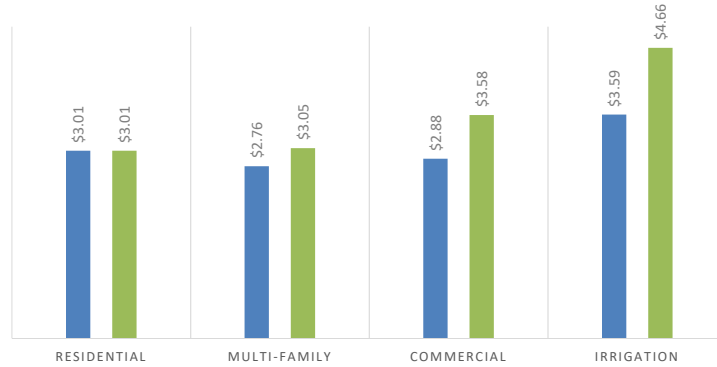


* Outside-city customers pay an additional 50% on top of the rates shown



Proposed Volume Charges

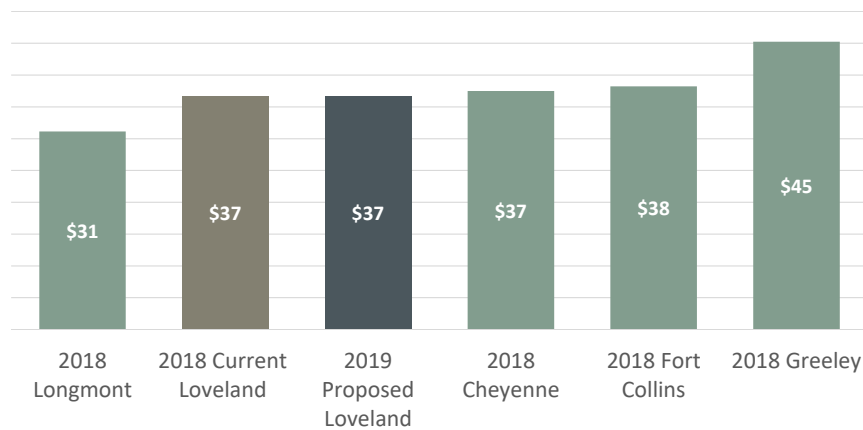
VOLUME RATES PER 1,000 GALLONS



* Outside-city customers pay an additional 50% on top of the rates shown



Regional Monthly Water Bill Comparison Residential ¾" Customer – 7,300 Gallons

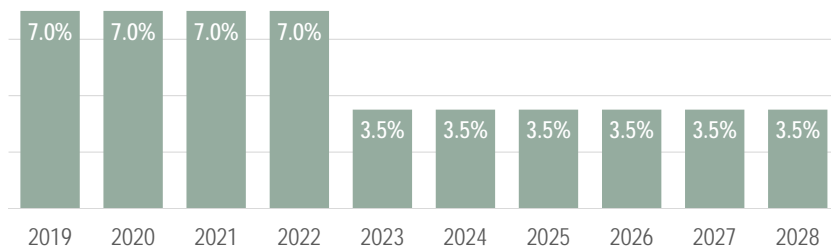


Wastewater



LUC-Recommended Rates

Annual Wastewater Utility Increases to Systemwide Rate Revenues





Cost Allocation Results

System Function	(a) Total O&M Costs Requirements	(b) Total Capital Costs Requirements	(c) Total Non- Rate Revenue Credits	(a) + (b) - (c) Total Revenue Requirements By Class
Single-Family Residential	\$5,813,512	\$3,349,267	\$920,830	\$8,241,949
Multi-Family Residential	1,380,907	710,762	218,066	1,873,602
Commercial	1,649,842	851,375	260,552	2,240,665
City Government	78,406	40,255	39,366	79,295
I&I/Unbilled/Unaccounted Loa	966,827	0	148,790	818,037
Extra-Strength Surcharge	396,907	0	61,082	335,825
TOTALS	\$10,286,401	\$4,951,658	\$1,648,686	\$13,589,373



Allocation Comparisons





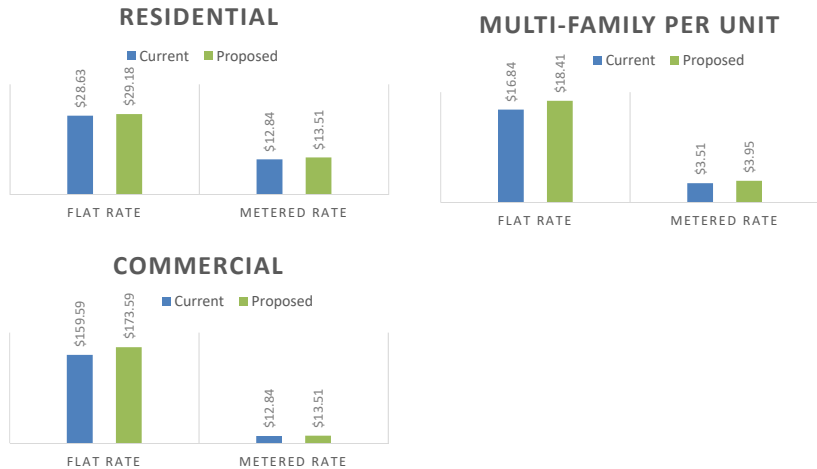
Change in Typical Bill

Customer Class	Class Cost-of-Service	Revenues at Existing Rates	% Difference	Average \$ Change in Monthly Bill
Single-Family Residential	8,699,344	8,264,840	5.3%	\$1.58
Multi-Family Residential	2,022,892	1,799,387	12.4%	\$2.28
Commercial	2,385,466	2,156,171	10.6%	\$6.21
City Government	86,208	86,208	0.0%	\$0.00
Extra-Strength Surcharge	395,464	427,320	-7.5%	(\$8.73)
GRAND TOTALS	\$13,589,373	\$12,733,925	6.7%	

Smaller adjustments are needed in the residential class than in the non-residential class; a reduction to the extra-strength charge is appropriate



Proposed Monthly Service Charges

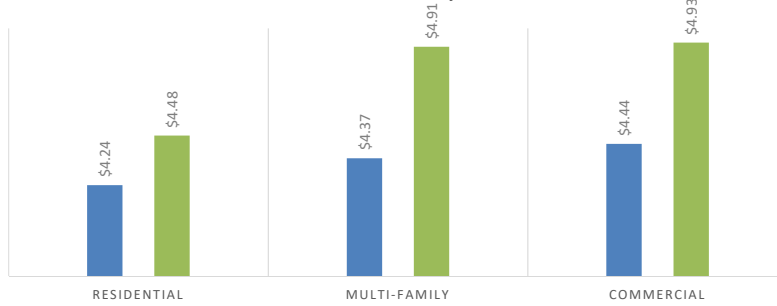


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Proposed Volume Charges

VOLUME RATES PER 1,000 GALLONS



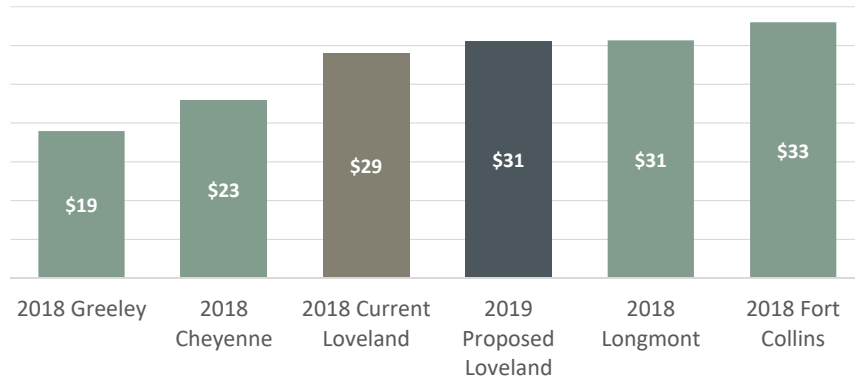
Proposed Extra-Strength Surcharges

Surcharge	Current (\$/LB)	Proposed (\$/LB)
BOD (> 333 mg/l)	\$0.67	\$0.52
TSS (> 199 mg/l)	\$0.43	\$0.32

* Outside-city customers pay an additional 50% on top of the rates shown



Regional Monthly Wastewater Bill Comparison Residential Customer – WQA 3,800 Gallons



Raw Water Development Fee



Raw Water Development Fee

- ◆ A one-time fee charged to new connections to the water system
- ◆ Reimburses the City for the costs it has incurred in the past to acquire
 - Raw water resources (e.g. water rights)
 - Raw water storage (e.g. reservoirs)
 - Other raw water management assets
- ◆ We reviewed this fee in 2015 and there was no proposed change
- ◆ In our review this year, we made one significant change in methodology
 - Using firm yield as the basis for measuring capacity
 - Results in almost 2x potential increase to the fee



Indicated Fee Adjustment

Customer	Ratio to 3/4"	Existing Fee	Proposed Fee	% Change
Single family, detached	1.000	\$1,087	\$1,994	83%
Single family, attached	1.000	1,087	1,994	83%
Multi-family 2-24 units, per unit	0.626	680	1,248	84%
Multi-family > 24 units, per unit	0.123	134	245	83%

Meter Size	Non-residential Customers			
	Ratio to 3/4"	Existing Fee	Buy In Fee	Buy In Fee
3/4"	1.0	\$1,087	\$1,994	83%
1"	1.7	1,848	3,390	83%
1 1/2"	3.3	3,588	6,581	83%
2"	5.3	5,763	10,569	83%
3"	10.0	10,873	19,942	83%

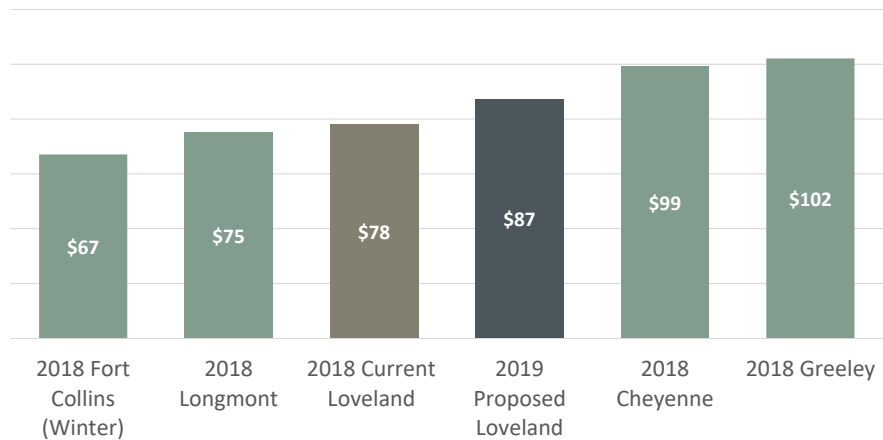


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Water Regional Bill Comparisons

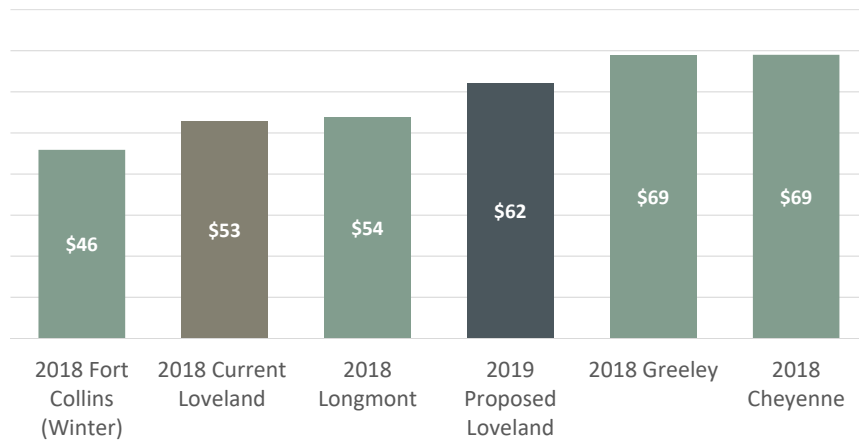


Regional Monthly Water Bill Comparison Multi-Family 3/4" Customer – 4 units; 5,100 Gallons/unit

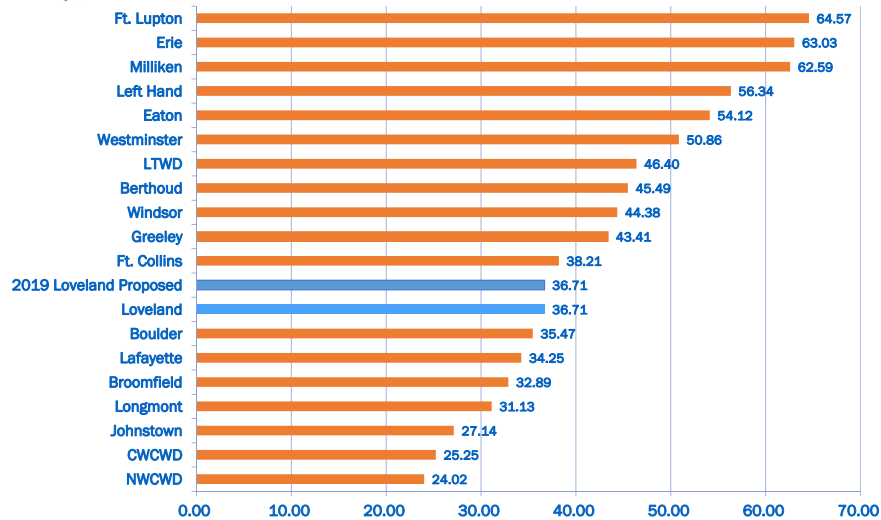




Regional Monthly Water Bill Comparison Commercial 3/4" Customer – 13,200 Gallons



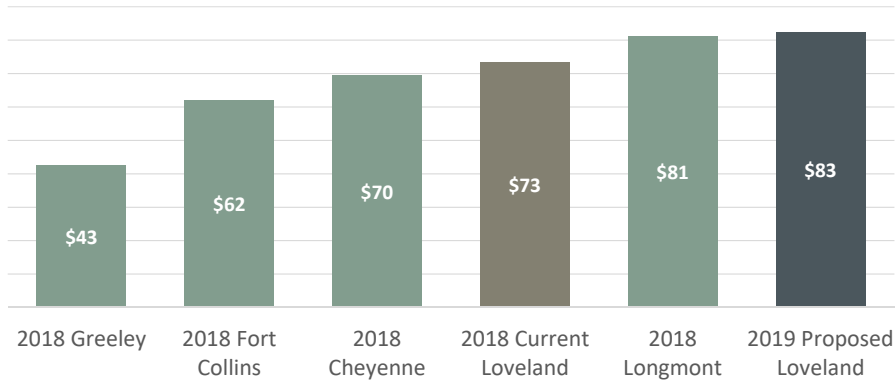
2018 Water Average Residential Bill Comparison



Wastewater Regional Bill Comparisons

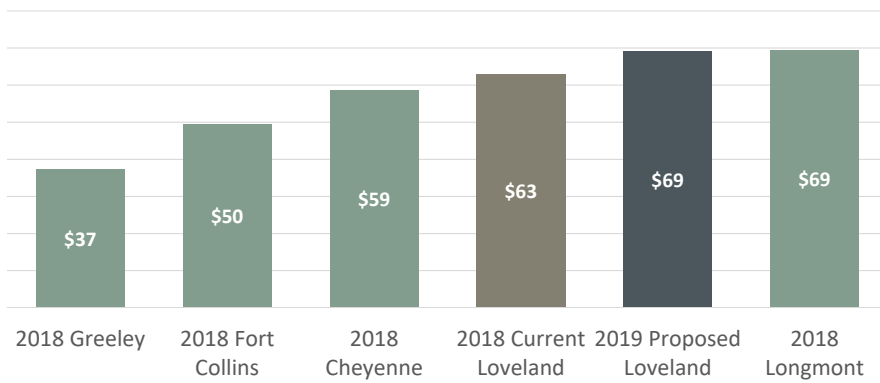


Regional Monthly Wastewater Bill Comparison Multi-Family ¾" Customer – 4 Units; WQA 3,400 Gallons/unit





Regional Monthly Wastewater Bill Comparison Commercial 3/4" Customer – 11,300 Gallons



2018 Wastewater Average Residential Bill Comparison

