



Water Utilities Financial Plan & Rate Recommendations

December 10, 2020



WATER UTILITIES
LEE'S SUMMIT

Safe and Reliable, Now and for Future Generations

FY 2019-20 Performance



- Revenues for FY20

– Water Sales	↓	-4.7%	(\$944k)
– Sewer Charges	↑	.4%	\$83k
– Interest Earnings	↑	408.9%	\$437k

- Expenses for FY20

– Personnel	↑	-6.9%	(\$365k)
– Supplies & Services	↑	-13.2%	(\$330k)
– Water Purchases	↓	2.5%	\$439k

- Incorporated gain into model

Updates to Model



- Water Purchases
 - City of Independence
 - No rate increase for current year – future rate increases set at 3%
 - Kansas City Water
 - Expected rate increase expected of 1.2% - due to COVID-19 KC delayed increase - future rate increases set at 3% for 2022 to 2029
- Sewer Treatment
 - Middle Big Creek
 - Anticipated rate increase from \$32.50 per connection to \$34.50, however increase was to \$37.00 as of October 2020. No other rate increases anticipated.
 - Little Blue Valley Sewer District
 - Rate methodology modified from linear projection over past 20 quarters to averaging of same period. Over time it is anticipated to reduce fluctuations and stabilize charges for all members.

Rate funded CIP



- Completed
 - Water Main Rehab \$2.62m
 - SCADA System upgrade \$530k
 - Harris Rd – Herring to Haines \$361k
 - Level II Water Audit \$49k
 - CC Interceptor Improvement \$1.66m
 - Sanitary Sewer CIPP \$1.22m
- In Progress
 - Water Main Rehab \$10.4m
 - CC Interceptor Improvement \$5.3m
 - Sanitary Sewer CIPP \$900k
 - Water Tower Recoatings \$1.5m
 - Road Relocations \$2.68m
 - Support of Development

CIP Summary - Water

Line No:	Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
SEWER CONSTRUCTION											
1	Small Diameter Main Replacement	1,657,616	-	-	-	-	-	-	-	-	-
	Sewer Rehab - Relining, Manhole Rehab, Tap Repairs										
2		900,000	1,000,000	1,000,000	700,000	600,000	500,000	-	-	-	-
3	Odor Control	210,039	-	-	-	-	-	-	-	-	-
4	CC - Downtown	2,550,000	-	-	-	-	-	-	-	-	-
5	CC - Interceptor Improvements Phase III & IV	949,132	-	-	-	-	-	-	-	-	-
6	WasteWater Master Plan	496,733	-	-	-	-	-	-	-	-	-
7	Rehabilitate Tudor Detention Basin	131,000	-	-	-	-	-	-	-	-	-
8	Facilities - Asset Mgmt Plan	2,884	-	-	-	-	-	-	-	-	-
9	WU Strategic Plan Update	200,000	-	-	-	-	-	-	-	-	-
10	Sewer Main Rehab & Creek Stabiliation	217,662	-	-	-	-	-	-	-	-	-
11	Large Force Main / Under Lake Condition Assesments	750,028	-	-	-	-	-	-	-	-	-
12	Trunk/Interceptor Condition Assesments	-	200,000	200,000	200,000	-	-	-	-	-	-
13	Baseline CIP	-	-	-	400,000	3,750,000	4,500,000	4,500,000	4,500,000	4,500,000	3,250,000
14	Sewer System Cathodic Protection	-	-	-	300,000	300,000	-	-	-	-	-
15	Tudor Road Air Reliefs & Valves	230,000	-	-	-	-	-	-	-	-	-
16	Private I/I Rehab	100,000	-	500,000	500,000	500,000	-	-	-	-	-
17	WU Facility (Parking, Bay, Bins, Canopy)	100,000	150,000	-	-	-	-	-	-	-	-
18	Solar Array Expansion (Fencing)	254,000	-	-	-	-	-	-	-	-	-
19	Community Sewer Lines	500,000	-	1,000,000	250,000	500,000	-	-	-	-	-
20	Colbern Rd Force Main	-	500,000	-	-	-	-	-	-	-	-
21	WPL - Downtown Interceptor	700,000	3,000,000	-	-	-	-	-	-	-	-
22	EPL - Collector Main Upgrades	1,371,000	-	-	-	-	-	-	-	-	-
SSES and I&I Rehab											
23	West Prairie Lee	-	-	-	-	-	-	370,000	1,640,000	1,640,000	1,640,000
24	South Prairie Lee	-	-	-	-	-	-	-	-	190,000	2,550,000
25	Little Cedar	-	-	-	-	-	-	-	-	10,000	210,000
26	Cedar Creek	-	-	-	-	-	-	180,000	1,440,000	-	-
27	Bogg's Hollow	-	-	-	-	-	-	-	-	-	110,000
28	Middle Big Creek	-	-	-	-	-	-	-	-	30,000	450,000
29	West Prairie Lee - North Branch	-	-	-	-	-	-	-	960,000	-	-
30	South Prairie Lee - Misc Projects	-	-	-	-	-	-	-	490,000	-	-
Street Projects - Sewer Construction											
31	Chipman Rd - Bent Tree to View High	121,076	-	-	-	-	-	-	-	-	-
32	Jefferson St - Persels to Oldham Pkwy	319,000	-	-	-	-	-	-	-	-	-
33	3rd Street - Pryor to Murray	45,500	-	-	-	-	-	-	-	-	-
34	Browning St Ext – Browning to Hamblen Rd	67,000	-	-	-	-	-	-	-	-	-
35	Misc Relocation Projects	-	-	-	-	200,000	-	-	-	-	-
36	Total	\$ 11,872,670	\$ 4,850,000	\$ 2,700,000	\$ 2,350,000	\$ 5,850,000	\$ 5,000,000	\$ 5,050,000	\$ 9,030,000	\$ 6,370,000	\$ 8,210,000

CIP Summary - Sewer

Line No:	Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
SEWER CONSTRUCTION											
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	Sewer Rehab - Relining, Manhole Rehab, Tap Repairs										
2		900,000	1,000,000	1,000,000	700,000	600,000	500,000	-	-	-	-
3	Odor Control	210,039	-	-	-	-	-	-	-	-	-
4	CC - Downtown	2,550,000	-	-	-	-	-	-	-	-	-
5	CC - Interceptor Improvements Phase III & IV	949,132	-	-	-	-	-	-	-	-	-
6	WasteWater Master Plan	496,733	-	-	-	-	-	-	-	-	-
7	Rehabilitate Tudor Detention Basin	131,000	-	-	-	-	-	-	-	-	-
8	Facilities - Asset Mgmt Plan	2,884	-	-	-	-	-	-	-	-	-
9	WU Strategic Plan Update	200,000	-	-	-	-	-	-	-	-	-
10	Sewer Main Rehab & Creek Stabiliation	217,662	-	-	-	-	-	-	-	-	-
11	Large Force Main / Under Lake Condition Assesments	750,028	-	-	-	-	-	-	-	-	-
12	Trunk/Interceptor Condition Assesments	-	200,000	200,000	200,000	-	-	-	-	-	-
13	Baseline CIP	-	-	-	400,000	3,750,000	4,500,000	4,500,000	4,500,000	4,500,000	3,250,000
14	Sewer System Cathodic Protection	-	-	-	300,000	300,000	-	-	-	-	-
15	Tudor Road Air Reliefs & Valves	230,000	-	-	-	-	-	-	-	-	-
16	Private I/I Rehab	100,000	-	500,000	500,000	500,000	-	-	-	-	-
17	WU Facility (Parking, Bay, Bins, Canopy)	100,000	150,000	-	-	-	-	-	-	-	-
18	Solar Array Expansion (Fencing)	254,000	-	-	-	-	-	-	-	-	-
19	Community Sewer Lines	500,000	-	1,000,000	250,000	500,000	-	-	-	-	-
20	Colbern Rd Force Main	-	500,000	-	-	-	-	-	-	-	-
21	WPL - Downtown Interceptor	700,000	3,000,000	-	-	-	-	-	-	-	-
22	EPL - Collector Main Upgrades	1,371,000	-	-	-	-	-	-	-	-	-
SS&S and I&I Rehab											
23	West Prairie Lee	-	-	-	-	-	-	370,000	1,640,000	1,640,000	1,640,000
24	South Prairie Lee	-	-	-	-	-	-	-	-	190,000	2,550,000
25	Little Cedar	-	-	-	-	-	-	-	-	10,000	210,000
26	Cedar Creek	-	-	-	-	-	-	180,000	1,440,000	-	-
27	Bogg's Hollow	-	-	-	-	-	-	-	-	-	110,000
28	Middle Big Creek	-	-	-	-	-	-	-	-	30,000	450,000
29	West Prairie Lee - North Branch	-	-	-	-	-	-	-	960,000	-	-
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31	Chipman Rd - Bent Tree to View High	121,076	-	-	-	-	-	-	-	-	-
32	Jefferson St - Persels to Oldham Pkwy	319,000	-	-	-	-	-	-	-	-	-
33	3rd Street - Pryor to Murray	45,500	-	-	-	-	-	-	-	-	-
34	Browning St Ext – Browning to Hamblen Rd	67,000	-	-	-	-	-	-	-	-	-
35	Misc Relocation Projects	-	-	-	-	200,000	-	-	-	-	-
36	Total	\$ 11,872,670	\$ 4,850,000	\$ 2,700,000	\$ 2,350,000	\$ 5,850,000	\$ 5,000,000	\$ 5,050,000	\$ 9,030,000	\$ 6,370,000	\$ 8,210,000

Rate Parameters



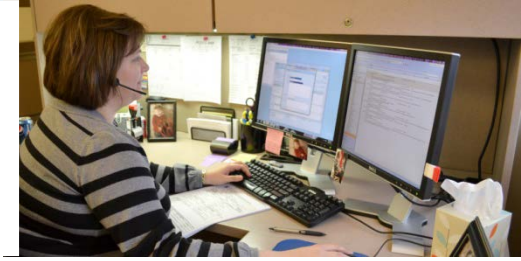
- The City has established a water rate (continuing service charge) and a sewer service rate (continuing service charge) designed to raise sufficient revenue to pay the cost of operating the City's water and sewer systems, including:
 1. The **cost of purchasing water** for human consumption and the cost of **purchasing sewage treatment** and disposal services;
 2. The **maintenance, repair, and operation** of all **water-service and sewer service equipment and facilities** owned and operated by the City;
 3. Related **accounting, administration and overhead costs**;
 4. Payments of all necessary **debt service** and maintenance of bond covenants for bond issues or other indebtedness related to the City's water and sewer facilities; and
 5. Maintenance of necessary **reserves for repair and replacement** of water and sewer facilities.

Rate Considerations



- Revenue to Expense Ratio – equal to or greater than 1:1 to ensure that system revenues are recovering expenses. (Operating Revenues divided by Operating Expenses)
- Coverage Ratio – minimum of 1.50:1 to assure that adequate revenues are maintained to satisfy debt obligations. (Net Revenues Available for Debt Service divided by Annual Debt Service Payments)
- Working Capital – working capital equal to 90 days of annual operating expenses
- Plan effectively for rate and revenue stability.
 - Incremental rate adjustments (annual review)
 - Rates are cost-based, equitable, and understandable
 - Promote water conservation
 - Adequately fund reinvestment in water and sewer infrastructure

Water – Projected 5 Year Rate Schedule



WATER

Effective Date	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024	1/1/2025
Required Revenue Increase	3.00%	3.00%	3.00%	4.00%	4.00%	3.00%

Monthly Base Charge (by meter size)	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024	1/1/2025
0.625	\$ 10.56	\$ 10.88	\$ 11.21	\$ 11.65	\$ 12.12	\$ 12.49
0.75	11.83	12.19	12.55	13.05	13.58	\$ 13.99
1	15.84	16.32	16.81	17.48	18.18	\$ 18.74
1.5	26.38	27.18	28.02	29.14	30.30	\$ 31.23
2	42.20	43.47	56.03	58.27	60.60	\$ 62.45
3	63.30	65.20	89.65	93.24	96.97	\$ 99.92
4	84.39	86.93	112.06	116.55	121.21	\$ 124.90
6	105.50	108.67	134.48	139.86	145.45	\$ 149.89
8	158.23	162.98	190.51	198.13	206.05	\$ 212.33
10	316.45	325.95	392.22	407.91	424.23	\$ 437.15

Water Volume Charge (\$/1,000 gal)	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024	1/1/2025
Residential						
0 - 7,000 gals	\$ 4.53	\$ 4.67	\$ 4.81	\$ 4.96	\$ 5.16	\$ 5.31
7,000 - 15,000 gals	5.34	5.51	5.68	5.82	6.06	\$ 6.24
Over 15,000 gals	6.67	6.86	7.07	7.28	7.57	\$ 7.80

Commercial:	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024	1/1/2025
All Usage	\$ 5.34	\$ 5.51	\$ 5.68	\$ 5.82	\$ 6.06	\$ 6.24

Sewer – Projected 5 Year Rate Schedule



SEWER

Effective Date	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024	1/1/2025
Required Revenue Increase	3.00%	3.00%	3.00%	4.00%	4.00%	3.00%

Monthly Base Charge (by meter size)	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024	1/1/2025
0.625	\$ 15.02	\$ 15.48	\$ 15.94	\$ 16.58	\$ 17.24	\$ 17.67
0.75	16.81	17.32	17.85	18.57	19.31	\$ 19.88
1	22.52	23.20	23.91	24.87	25.86	\$ 26.64
1.5	30.02	30.93	39.85	41.45	43.10	\$ 44.39
2	45.04	46.40	63.76	66.32	68.96	\$ 71.03
3	52.53	54.11	79.70	82.90	86.20	\$ 88.80
4	60.03	61.84	111.58	116.06	120.68	\$ 124.30
6	75.04	77.30	159.40	165.80	172.40	\$ 177.58
8	90.05	92.76	191.28	198.96	206.88	\$ 213.10
10	105.05	108.21	239.10	248.70	258.60	\$ 266.37

Sewer Volume Charge (\$/1,000 gal)	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024	1/1/2025
Residential						
All Usage	\$ 5.76	\$ 5.94	\$ 6.12	\$ 6.29	\$ 6.54	\$ 6.70

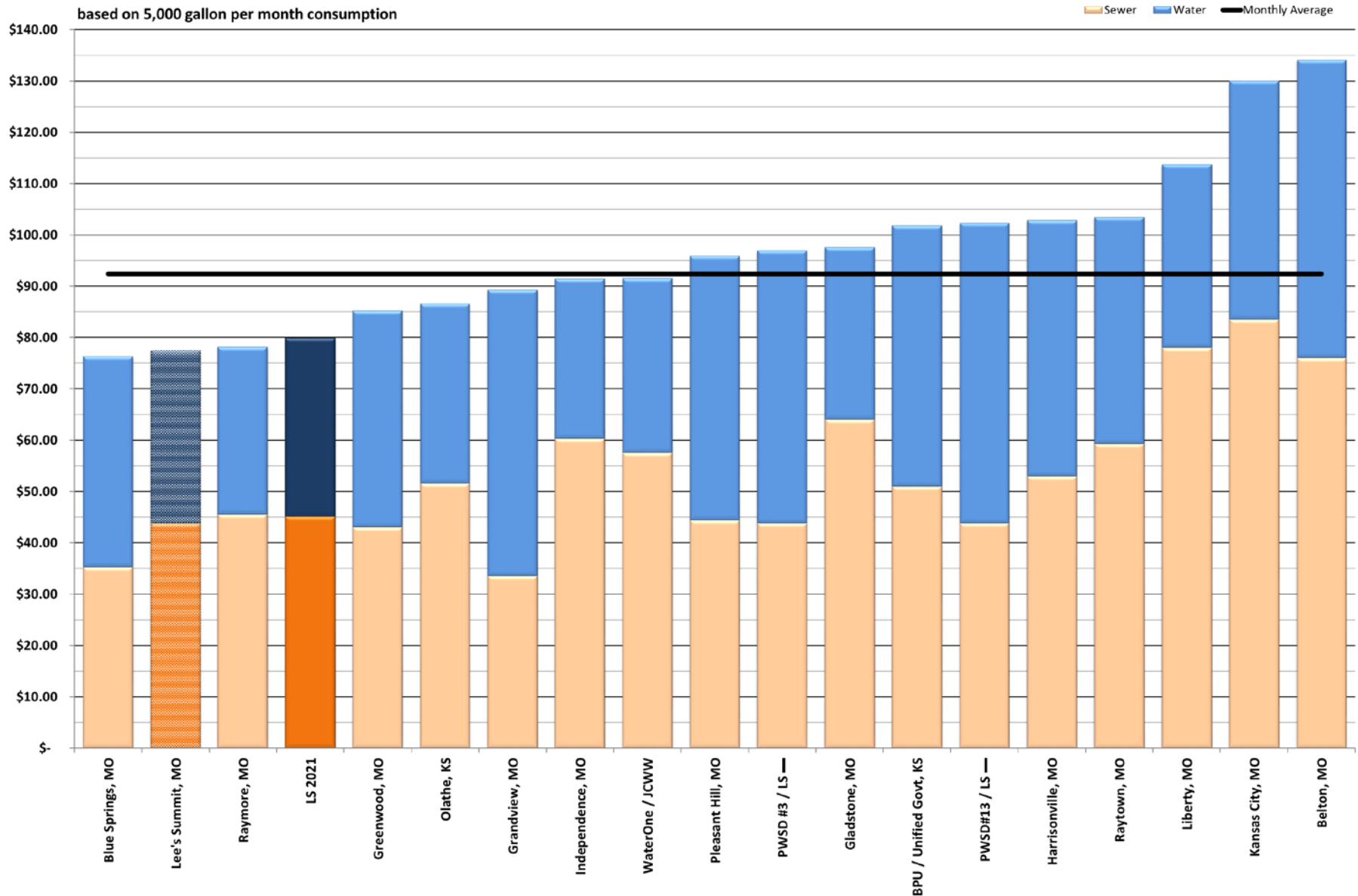
Commercial:	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024	1/1/2025
All Usage	\$ 5.76	\$ 5.94	\$ 6.12	\$ 6.29	\$ 6.54	\$ 6.70

Monthly Cost of Combined Water & Sewer

Residential Rate Comparison

November 2020

based on 5,000 gallon per month consumption

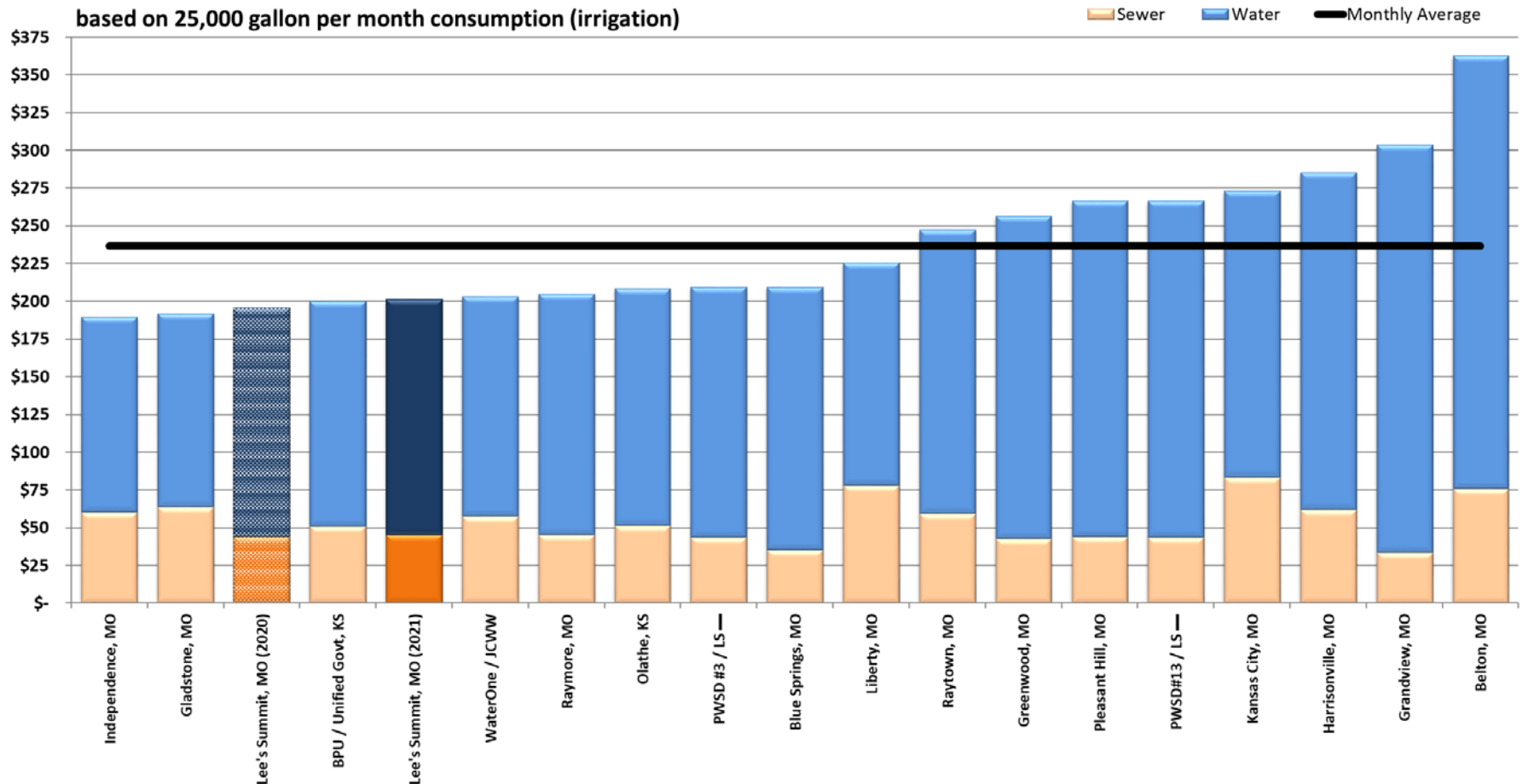


Monthly Cost of Combined Water & Sewer

Residential Rate Comparison

November 2020

based on 25,000 gallon per month consumption (irrigation)

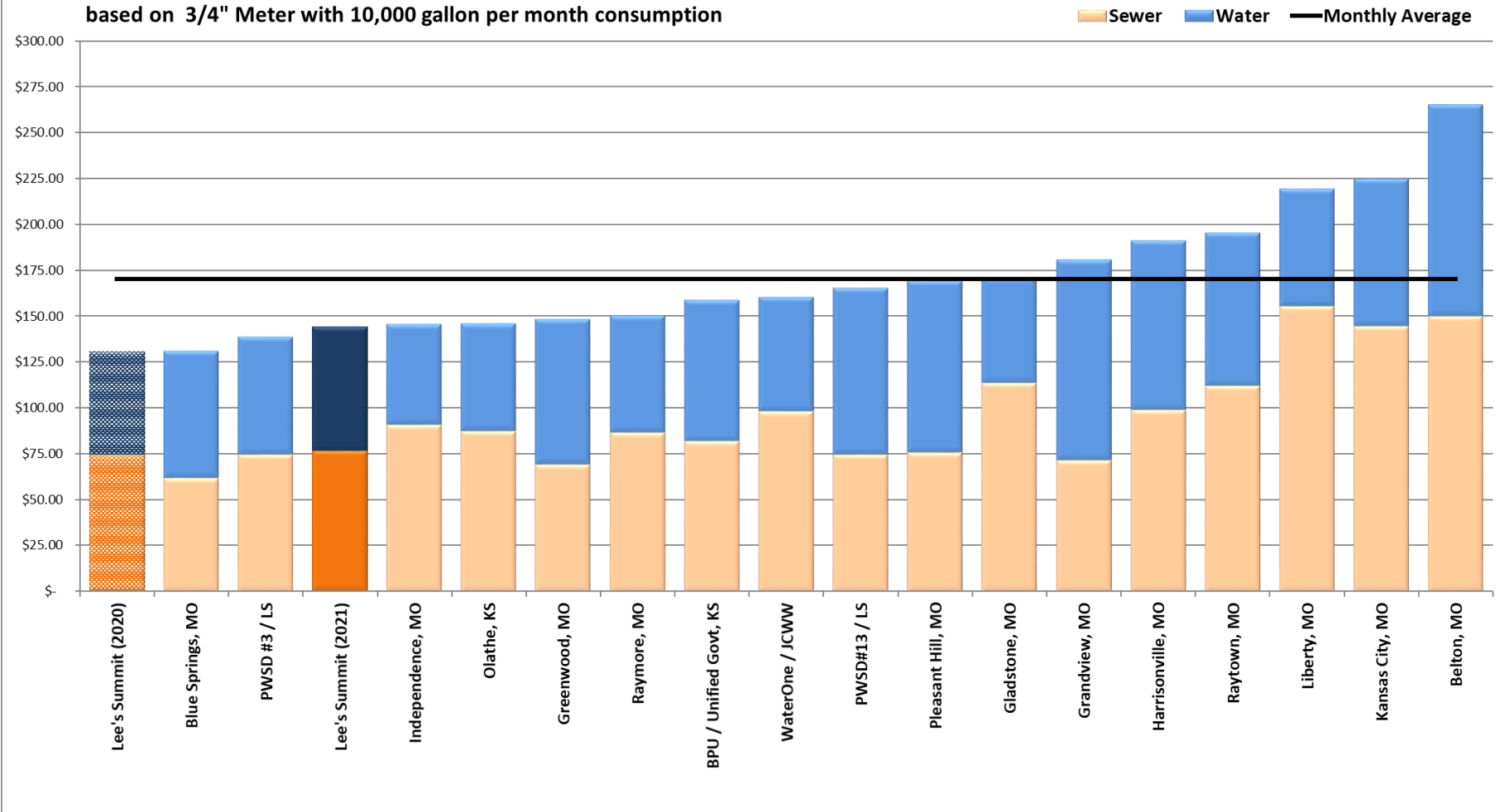


Monthly Cost of Combined Water & Sewer

Commercial Rate Comparison

November 2020

based on 3/4" Meter with 10,000 gallon per month consumption

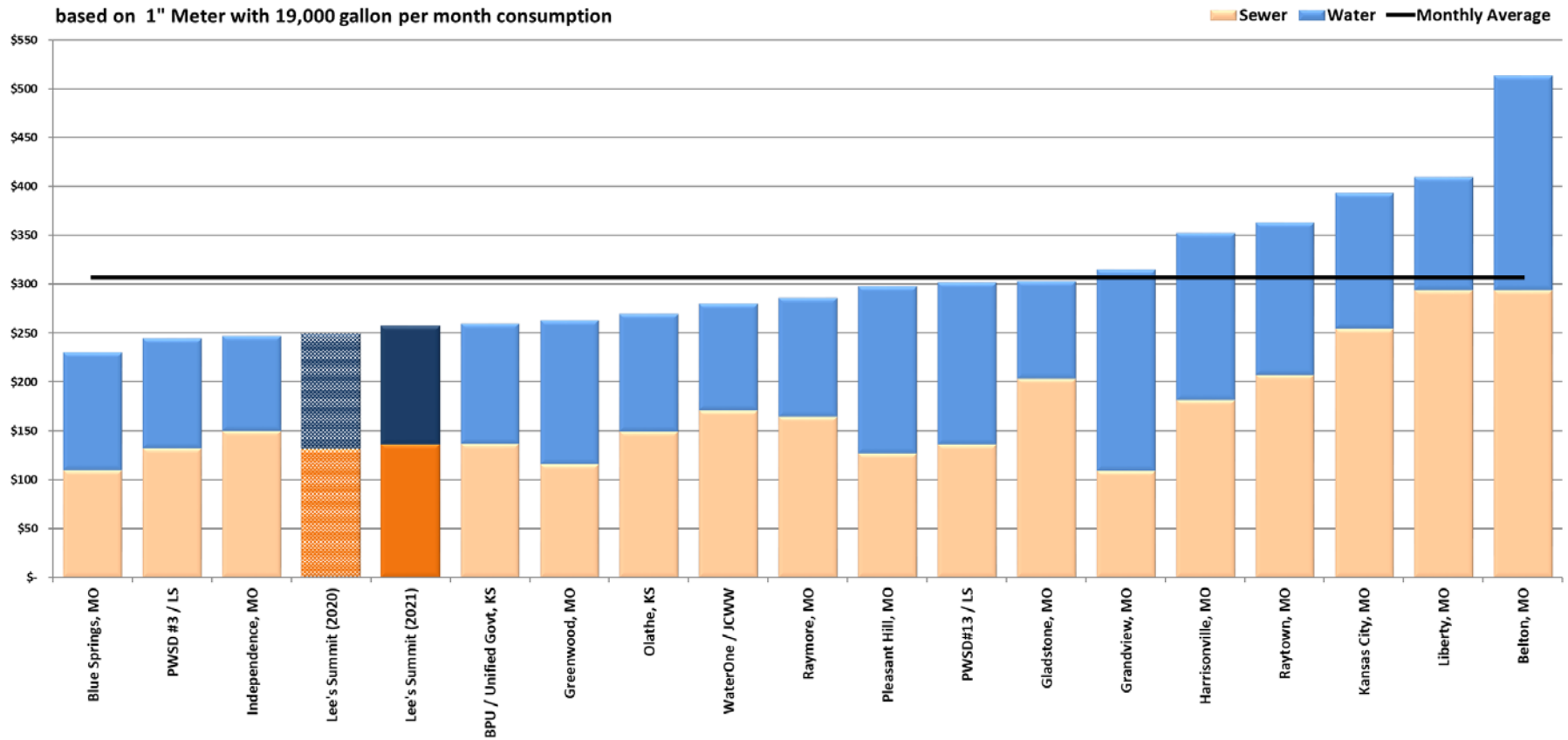


Monthly Cost of Combined Water & Sewer

Commercial Rate Comparison

November 2020

based on 1" Meter with 19,000 gallon per month consumption

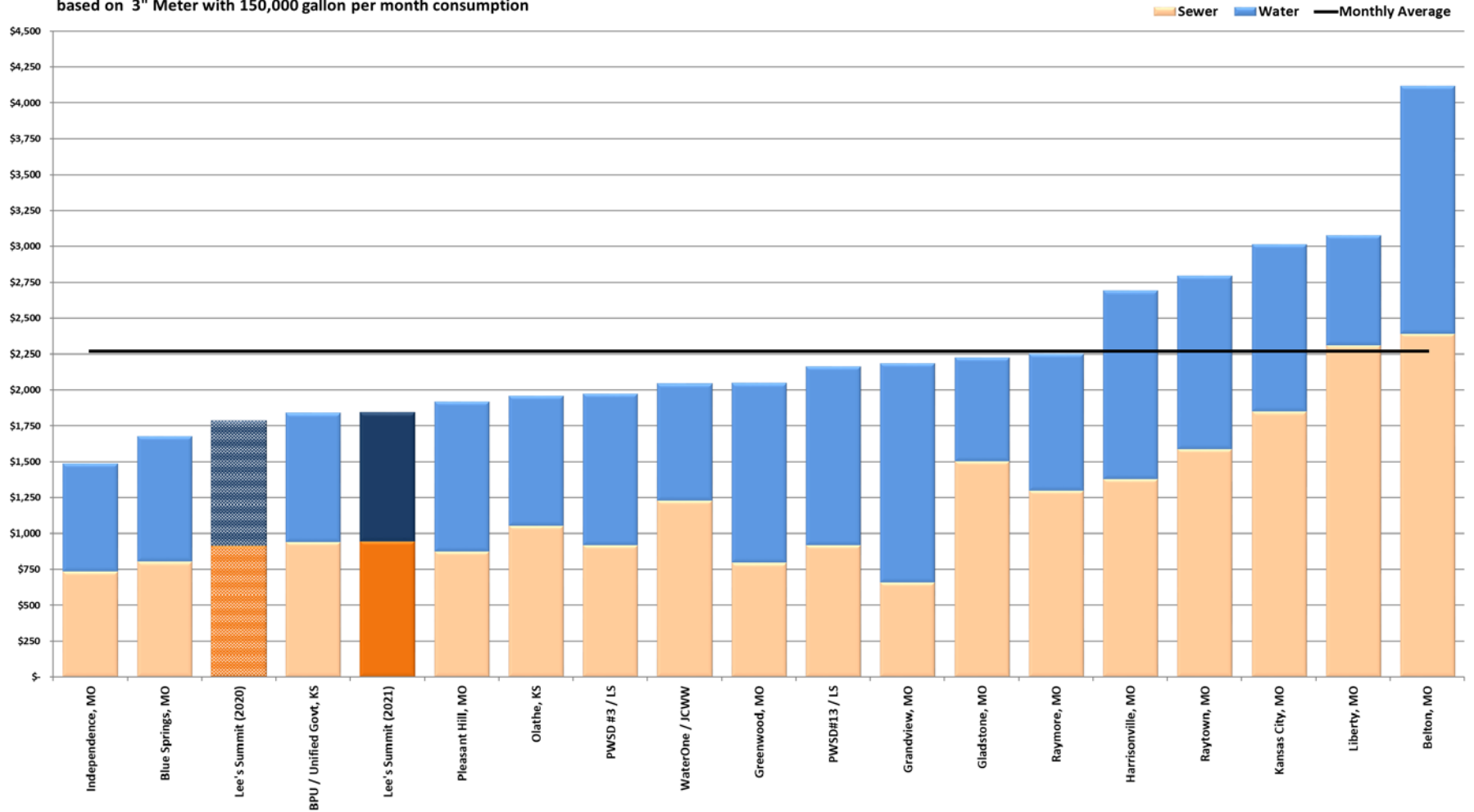


Monthly Cost of Combined Water & Sewer

Commercial Rate Comparison

November 2020

based on 3" Meter with 150,000 gallon per month consumption





DISCUSSION

Water Utilities Annual Financial Plan and Rate Review



WATER UTILITIES
LEE'S SUMMIT

Safe and Reliable, Now and for Future Generations

Proposed WUAB Motion



I move to append the rate schedule with a 3% increase to water and sewer rates effective January 1, 2025 as set forth by the cost of service model.

