



Water Utilities Financial Plan & Rate Recommendations

December 11, 2019



Safe and Reliable, Now and for Future Generations

Updates to Model



- Revenues for FY18 were approximately \$1.25m higher than budget expectations.
 - Water Sales
 - Interest Earnings
 - Reimbursement of Sewer Charges
- Expenses were below budget for FY18.
 - Approximately \$1m from personnel savings due to vacancies
- 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
 - Current year rate increase expected to be 1% - future rate increases set at 3% for 2022 to 2029
- Sewer Treatment
 - Middle Big Creek
 - Model anticipates rate increase from \$32.50 per connection each month to \$34.50
 - Little Blue Valley Sewer District
 - Adjusted due to wet weather for 2018 and basis of future expenditures

Rate funded CIP



- Completed
 - Water Main Rehab \$1.8m
 - SCADA Communications \$517k
 - Initial Condition Assessments \$650k
 - Pilot Cathodic Protection \$206k
- In Progress
 - Water Main Rehab \$4.9m
 - CC Interceptor Improvement \$5.1m
 - Sanitary Sewer CIPP \$900k
 - Water Tower Recoatings \$1.5m
 - Support of Development

CIP Summary - Water

Line No:	Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	WATER CONSTRUCTION										
1	SCADA Radio Communications	353,144	-	-	-	-	-	-	-	-	-
2	Water Main Rehab FY17	396,369	-	-	-	-	-	-	-	-	-
3	Water Main Rehab FY18	1,488,596	-	-	-	-	-	-	-	-	-
4	Water Main Rehab FY19	2,229,040	-	-	-	-	-	-	-	-	-
5	Water Main Rehab FY20	3,386,000	-	-	-	-	-	-	-	-	-
6	Water Main Rehab FY21	50,000	4,481,000	-	-	-	-	-	-	-	-
7	Water Main Rehab FY22 - FY29	-	-	4,952,000	4,265,000	5,465,000	5,610,000	6,940,000	6,460,000	6,500,000	7,500,000
8	Water Meter Replacement	528,349	750,000	750,000	750,000	750,000	349,950	349,950	349,950	349,950	349,950
9	Operations Site Remediation & Genset Reconditi	378,480	-	-	-	-	-	-	-	-	-
10	Water Master Plan Update	-	250,000	-	-	-	-	-	-	-	-
11	Transmission Main Condition Assessments	120,526	-	-	-	-	-	-	-	-	-
12	16" Independence Line	-	-	850,000	-	-	-	-	-	-	-
13	20" Independence Line	-	-	-	2,000,000	-	-	-	-	-	-
14	Water - Asset Mgmt Plan	100,000	-	-	-	-	-	-	-	-	-
15	Water System Cathodic Protection	544,361	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
16	Water System Audit - Level II	50,000	-	-	-	-	-	-	-	-	-
17	Harris Road - Herring to Haines	384,950	-	-	-	-	-	-	-	-	-
18	View High - Longview Golf to Chipman	112,200	-	-	-	-	-	-	-	-	-
19	Sampson Rd - Ext to Hook	62,702	-	-	-	-	-	-	-	-	-
	Street Projects - Water Construction										
20	Chipman Rd-Bent Tree to View High	629,103	-	-	-	-	-	-	-	-	-
21	Jefferson St - Persels to Oldham Pkwy	385,500	-	-	-	-	-	-	-	-	-
22	3rd Street - Pryor to Murray	713,000	-	-	-	-	-	-	-	-	-
23	Ward Road - M150 to Raintree Pkwy	95,294	-	-	-	-	-	-	-	-	-
24	Commerce Drive - Tudor Rd to Main St	17,016	-	-	-	-	-	-	-	-	-
25	Browning St Ext – Browning to Hamblen Rd	226,000	-	-	-	-	-	-	-	-	-
26	3rd Street - Jefferson to Blue Pkwy/US50	31,000	487,000	-	-	-	-	-	-	-	-
27	Ward - Blue Pkwy to O'Brien	-	-	20,000	255,000	-	-	-	-	-	-
28	Ward - O'Brien to Chipman	-	-	-	-	20,000	255,000	-	-	-	-
29	Douglas - Chipman to 2nd St	-	-	28,000	480,000	-	-	-	-	-	-
30	Pryor Rd - M150 Hwy to Hook Rd	-	-	-	-	15,000	135,000	-	-	-	-
31	Scherer - Ward to Jefferson	-	-	-	-	-	-	60,000	540,000	-	-
32	M291 & US50 Interchange	-	-	-	-	-	-	-	-	-	-
33	Total	\$ 12,281,629	\$ 6,468,000	\$ 7,100,000	\$ 8,250,000	\$ 6,750,000	\$ 6,849,950	\$ 7,849,950	\$ 7,849,950	\$ 7,349,950	\$ 8,349,950

CIP Summary - Sewer

Line No:	Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
SEWER CONSTRUCTION											
1	Small Diameter Main Replacement	1,713,244	-	-	-	-	-	-	-	-	-
2	Sewer Rehab - Relining, Manhole Rehab, Tap Rep	1,727,758	1,000,000	1,000,000	700,000	600,000	500,000	-	-	-	-
3	Odor Control	1,136,334	-	-	-	-	-	-	-	-	-
4	CC Watershed - Interceptor Improvements Winte	642,512	-	-	-	-	-	-	-	-	-
5	CC - Downtown	2,550,000	-	-	-	-	-	-	-	-	-
6	CC - Interceptor Improvements Phase III & IV	1,207,375	-	-	-	-	-	-	-	-	-
7	WasteWater Master Plan	500,000	-	-	-	-	-	-	-	-	-
8	Rehabilitate Tudor Detention Basin	131,000	-	-	-	-	-	-	-	-	-
9	Facilities - Asset Mgmt Plan	81,315	-	-	-	-	-	-	-	-	-
10	Sewer - Asset Mgmt Plan	100,000	-	-	-	-	-	-	-	-	-
11	Sewer Main Rehab & Creek Stabiliation	222,462	-	-	-	-	-	-	-	-	-
12	Large Force Main / Under Lake Condition Assesse	1,100,351	-	-	-	-	-	-	-	-	-
13	Trunk/Interceptor Condition Assessments	-	200,000	200,000	200,000	200,000	-	-	-	-	-
14	Baseline CIP	-	-	-	-	400,000	3,250,000	3,250,000	3,250,000	3,250,000	3,250,000
15	West Prairie Lee Sewer Capacity Improvements	-	-	1,000,000	-	-	-	-	-	-	-
16	Sewer System Cathodic Protection	-	-	-	-	300,000	-	-	-	-	-
17	Tudor Road Air Reliefs & Valves	-	230,000	-	-	-	-	-	-	-	-
18	Private I/J Rehab	-	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
19	WU Facility (Parking, Bay, Bins, Canopy)	-	250,000	-	-	-	-	-	-	-	-
20	Solar Array Expansion (Fencing)	-	254,000	-	-	-	-	-	-	-	-
21	Community Sewer Lines	-	500,000	500,000	500,000	500,000	-	-	-	-	-
22	Colbern Rd Force Main	-	500,000	-	-	-	-	-	-	-	-
23	WPL - Downtown Interceptor	-	700,000	2,000,000	-	-	-	-	-	-	-
24	EPL - Collector Main Upgrades	-	1,371,000	-	-	-	-	-	-	-	-
SS&S and I&I Rehab											
25	West Prairie Lee	-	-	-	-	-	-	370,000	1,640,000	1,640,000	1,640,000
26	South Prairie Lee	-	-	-	-	-	-	-	-	190,000	2,550,000
27	Little Cedar	-	-	-	-	-	-	-	-	10,000	210,000
28	Cedar Creek	-	-	-	-	-	-	180,000	1,440,000	-	-
29	Bogg's Hollow	-	-	-	-	-	-	-	-	-	110,000
30	Middle Big Creek	-	-	-	-	-	-	-	-	30,000	450,000
31	West Prairie Lee - North Branch	-	-	-	-	-	-	-	960,000	-	-
32	South Prairie Lee - Misc Projects	-	-	-	-	-	-	-	490,000	-	-
Street Projects - Sewer Construction											
33	Chipman Rd - Bent Tree to View High	121,076	-	-	-	-	-	-	-	-	-
34	Jefferson St - Persels to Oldham Pkwy	319,000	-	-	-	-	-	-	-	-	-
35	3rd Street - Pryor to Murray	50,000	-	-	-	-	-	-	-	-	-
36	Browning St Ext - Browning to Hamblen Rd	67,000	-	-	-	-	-	-	-	-	-
37	Misc Relocation Projects	-	-	-	-	200,000	-	-	-	-	-
38	Total	\$ 11,669,427	\$ 5,055,000	\$ 4,750,000	\$ 1,450,000	\$ 2,250,000	\$ 3,800,000	\$ 3,850,000	\$ 7,830,000	\$ 5,170,000	\$ 8,260,000

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	Current	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024
Required Revenue Increase	3.00%	3.00%	3.00%	3.00%	4.00%	4.00%

Monthly Base Charge (by meter size)	Current	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024
0.625	\$ 10.25	\$ 10.56	\$ 10.88	\$ 11.21	\$ 11.65	\$ 12.12
0.75	11.48	11.83	12.19	12.55	13.05	13.58
1	15.37	15.84	16.32	16.81	17.48	18.18
1.5	25.61	26.38	27.18	28.02	29.14	30.30
2	40.97	42.20	43.47	56.03	58.27	60.60
3	61.45	63.30	65.20	89.65	93.24	96.97
4	81.93	84.39	86.93	112.06	116.55	121.21
6	102.42	105.50	108.67	134.48	139.86	145.45
8	153.62	158.23	162.98	190.51	198.13	206.05
10	307.23	316.45	325.95	392.22	407.91	424.23

Water Volume Charge (\$/1,000 gal)						
Residential	Current	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024
0 - 7,000 gals	\$ 4.39	\$ 4.53	\$ 4.67	\$ 4.81	\$ 4.96	\$ 5.16
7,000 - 15,000 gals	5.18	5.34	5.51	5.68	5.82	6.06
Over 15,000 gals	6.46	6.67	6.86	7.07	7.28	7.57

Commercial:	Current	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024
All Usage	\$ 5.18	\$ 5.34	\$ 5.51	\$ 5.68	\$ 5.82	\$ 6.06

Sewer – Projected 5 Year Rate Schedule



SEWER

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

Monthly Base Charge (by meter size)	Current	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024
0.625	\$ 14.58	\$ 15.02	\$ 15.48	\$ 15.94	\$ 16.58	\$ 17.24
0.75	16.32	16.81	17.32	12.55	13.05	19.31
1	21.86	22.52	23.20	16.81	17.48	25.86
1.5	29.14	30.02	30.93	28.02	29.14	43.10
2	43.72	45.04	46.40	44.83	46.62	68.96
3	51.00	52.53	54.11	56.03	58.27	86.20
4	58.28	60.03	61.84	78.44	81.58	120.68
6	72.85	75.04	77.30	112.06	116.55	172.40
8	87.42	90.05	92.76	134.48	139.86	206.88
10	101.99	105.05	108.21	168.10	174.82	258.60

Sewer Volume Charge (\$/1,000 gal)						
Residential	Current	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024
All Usage	\$ 5.59	\$ 5.76	\$ 5.94	\$ 6.12	\$ 6.29	\$ 6.29

Commercial:	1/1/2019	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024
All Usage	\$ 5.59	\$ 5.76	\$ 5.94	\$ 6.12	\$ 6.29	\$ 6.29

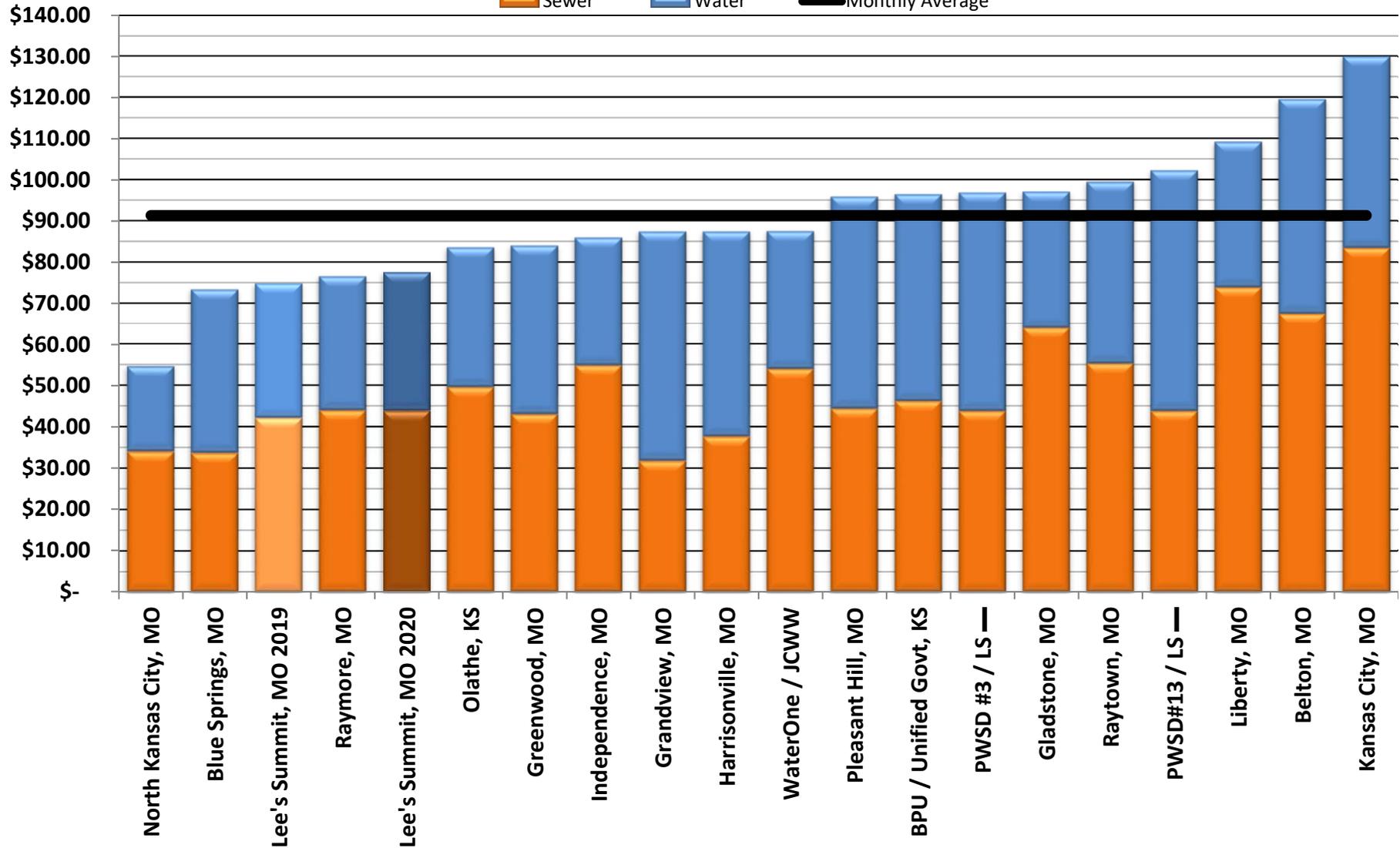
Monthly Cost of Combined Water & Sewer

Residential Rate Comparison

November 2019

based on 5,000 gallon per month consumption

Sewer Water Monthly Average





DISCUSSION

Water Utilities Annual Financial Plan and Rate Review



Safe and Reliable, Now and for Future Generations

Proposed WUAB Motion



I move to append the rate schedule with a 4% increase to water and sewer rates effective January 1, 2024 as set forth by the cost of service model.



Fund Balance



OPERATING FUND BALANCE SUMMARY

