

City of Adel - Sewer Utility  
 Volumetric Rate Review Analysis



**NOTES**

Sewer Flat Rate includes 2,000 gallons of usage  
 Historic consumption, approximately 38% of customers use 2,000 gallon minimum or less  
 Sewer usage revenue calculated using 62% of water sold above minimum

Sewer Revenue Adjustments			
7/1/2016	2.30%	7/1/2021	20.00%
7/1/2017	3.00%	7/1/2022	5.00%
7/1/2018	3.00%	7/1/2023	5.00%
7/1/2019	3.00%	7/1/2024	3.00%
7/1/2020	50.00%	7/1/2025	

Sewer Rates		FY 2015-16 9/1/2015	FY 2016-17 7/1/2016	FY 2017-18 7/1/2017	FY 2018-19 7/1/2018	FY 2019-20 7/1/2019	FY 2020-21 7/1/2020	FY 2021-22 7/1/2021	FY 2022-23 7/1/2022	FY 2023-24 7/1/2023	FY 2024-25 7/1/2024
Sewer Flat Rate (2,000 gal included)	1	\$ 13.86	\$ 14.18	\$ 14.60	\$ 15.04	\$ 15.50	\$ 23.26	\$ 27.92	\$ 29.32	\$ 30.80	\$ 31.74
> 2,000 gallons per 1,000 gallons	2	\$ 6.93	\$ 7.09	\$ 7.30	\$ 7.52	\$ 7.75	\$11.63	\$13.96	\$14.66	\$15.40	\$15.87
> 5,000 gallons per 1,000 gallons	3	\$ 4.98	\$ 5.09	\$ 5.24	\$ 5.40	\$ 5.56					
CSI Surcharge	4	\$ -	\$ -	\$ 7.00	\$ 12.00	\$ 15.00					
Beginning of FY # of Accounts	5	-	-	1,745	1,906	2,027	2,095	2,110	2,125	2,140	2,155
Average Rate/1,000 gallons	6	\$ 5.94	\$ 5.88	\$ 5.91	\$ 7.54	\$ 7.54	\$ 12.98	\$ 15.56	\$ 16.32	\$ 17.12	\$ 17.62
<b>WATER SOLD (1,000 gallons)</b>	<b>7</b>	<b>\$ 97,240</b>	<b>\$ 105,531</b>	<b>\$ 115,108</b>	<b>\$ 102,866</b>	<b>\$ 100,425</b>	<b>\$ 101,429</b>	<b>\$ 102,443</b>	<b>\$ 103,468</b>	<b>\$ 104,503</b>	<b>\$ 105,548</b>

OPERATING REVENUES		FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Sewer Flat Rate Revenues							\$ 584,756	\$ 706,934	\$ 747,660	\$ 790,944	\$ 820,796
Sewer Usage Revenues	8	\$ 577,788	\$ 620,972	\$ 680,807	\$ 775,601	\$ 757,204	\$ 731,364	\$ 886,665	\$ 940,441	\$ 997,795	\$ 1,038,529
Connection Fee	9	\$ 51,750	\$ 62,750	\$ 131,000	\$ 44,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500
CSI Charge	10	\$ -	\$ 5	\$ 146,586	\$ 274,480	\$ 364,860	\$ -	\$ -	\$ -	\$ -	\$ -
% CSI Charge of Total Operating Revenue		0%	0%	15%	25%	32%	0%	0%	0%	0%	0%
Miscellaneous Revenue	11	\$ 2,308	\$ 3,150	\$ 1,643	\$ 303	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Operating Revenues</b>		<b>\$ 631,846</b>	<b>\$ 686,877</b>	<b>\$ 960,036</b>	<b>\$ 1,094,884</b>	<b>\$ 1,129,564</b>	<b>\$ 1,323,620</b>	<b>\$ 1,601,099</b>	<b>\$ 1,695,601</b>	<b>\$ 1,796,239</b>	<b>\$ 1,866,825</b>

OPERATING EXPENSES		FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Business Type Expenditures	13	\$ 441,169	\$ 480,548	\$ 499,946	\$ 570,940	\$ 637,458	\$ 715,179	\$ 839,616	\$ 930,930	\$ 972,742	\$ 1,016,645
Reserved	14	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Operating Expenses	15	\$ 441,169	\$ 480,548	\$ 499,946	\$ 570,940	\$ 637,458	\$ 715,179	\$ 839,616	\$ 930,930	\$ 972,742	\$ 1,016,645
<b>Net Operating Revenues</b>	<b>16</b>	<b>\$ 190,677</b>	<b>\$ 206,329</b>	<b>\$ 460,090</b>	<b>\$ 523,945</b>	<b>\$ 492,106</b>	<b>\$ 741,999</b>	<b>\$ 811,205</b>	<b>\$ 779,690</b>	<b>\$ 791,363</b>	<b>\$ 802,869</b>

SEWER DEBT SERVICE		FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Series 1997 SRF	21	\$ 15,930	\$ 16,480	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Series 2013 Sewer Revenue Notes	22	\$ 39,763	\$ 39,513	\$ 39,263	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interim Construction Loan Interest	23	\$ -	\$ -	\$ 17,737	\$ 9,539	\$ 89,695	\$ -	\$ -	\$ -	\$ -	\$ -
2018 USDA Loan #1	24	\$ -	\$ -	\$ 14,096	\$ 42,288	\$ 42,288	\$ 42,288	\$ 42,288	\$ 42,288	\$ 42,288	\$ 42,288
2019 USDA East Annex Loan #4	25	\$ -	\$ -	\$ -	\$ -	\$ 105,114	\$ 210,228	\$ 210,228	\$ 210,228	\$ 210,228	\$ 210,228
2021 USDA Treatment Plant Loan #5	26	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 35,143	\$ 421,716	\$ 421,716	\$ 421,716
Service Fees	27	\$ 515	\$ 507	\$ 2,497	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous	28	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Sewer Debt</b>	<b>29</b>	<b>\$ 56,208</b>	<b>\$ 56,500</b>	<b>\$ 73,593</b>	<b>\$ 51,827</b>	<b>\$ 237,097</b>	<b>\$ 252,516</b>	<b>\$ 287,659</b>	<b>\$ 674,232</b>	<b>\$ 674,232</b>	<b>\$ 674,232</b>

RESERVES + CAPITAL EXPENDITURES		FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Capital improvement Projects	33	\$ -	\$ (75,121)	\$ (1,258,670)	\$ (3,523,267)	\$ (3,943,714)	\$ (7,817,008)	\$ (6,230,000)	\$ -	\$ (8,400)	\$ (73,500)
other cash (uses)/sources	34	\$ (1)	\$ (1)	\$ -	\$ (1)	\$ 912,125	\$ -	\$ 4,574,698	\$ -	\$ -	\$ -
Bond Proceeds	35	\$ -	\$ -	\$ 1,033,614	\$ 3,124,667	\$ 3,031,589	\$ 7,817,008	\$ 1,655,302	\$ -	\$ -	\$ -
Interfund loans to/(from) Sewer Fund	36	\$ -	\$ -	\$ -	\$ 124,302	\$ 19,400	\$ 19,400	\$ 19,400	\$ 19,400	\$ -	\$ -
Transfers (to)/from other funds	37	\$ -	\$ (100,250)	\$ 111,121	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transfers (to)/from USDA Reserves	38	\$ -	\$ -	\$ (11,765)	\$ (14,236)	\$ (31,948)	\$ (43,660)	\$ (99,862)	\$ (99,862)	\$ (91,462)	\$ (26,362)
Transfers (to)/from Other Funds	39	\$ 20,999	\$ 75,122	\$ 104,913	\$ (222,653)	\$ (95,815)	\$ (319,754)	\$ (359,419)	\$ 21,844	\$ 8,134	\$ (62,276)
<b>Total Reserves + Capital Expenditures</b>	<b>40</b>	<b>\$ 20,998</b>	<b>\$ (100,250)</b>	<b>\$ (20,787)</b>	<b>\$ (511,188)</b>	<b>\$ (108,363)</b>	<b>\$ (344,014)</b>	<b>\$ (439,881)</b>	<b>\$ (58,618)</b>	<b>\$ (91,728)</b>	<b>\$ (162,138)</b>

**Annual Surplus/ (Deficit) - Volumetric**   **\$ 155,467   \$ 49,579   \$ 365,710   \$ (39,070)   \$ 146,646   \$ 11,911   \$ 33,943   \$ 31,821   \$ 57,537   \$ 13,811**



Comparison of 40 Largest Sewer Customers by Volume: Current Rate Structure vs. Volumetric Rate Structure															
Sewer Customer	Average Monthly Usage				Lowest Month Usage				Highest Month Usage						
	Usage (gal)	Current Sewer		Volumetric Sewer Bill FY 21	Difference	Usage (gal)	Current Sewer		Volumetric Sewer Bill FY 21	Difference	Usage (gal)	Current Sewer		Volumetric Sewer Bill FY 21	Difference
		Bill FY 21	Sewer Bill FY 21				Bill FY 21	Sewer Bill FY 21				Bill FY 21	Sewer Bill FY 21		
Top Sewer User #1	320,458	\$ 1,978.43	\$ 3,726.93	\$ 1,748.50	122,000	\$ 775.77	\$ 1,418.86	\$ 643.09	603,000	\$ 3,690.63	\$ 7,012.89	\$ 3,322.26			
Top Sewer User #2	285,333	\$ 1,765.57	\$ 3,318.42	\$ 1,552.85	239,000	\$ 1,484.79	\$ 2,779.57	\$ 1,294.78	445,000	\$ 2,733.15	\$ 5,175.35	\$ 2,442.20			
Top Sewer User #3	200,000	\$ 1,248.45	\$ 2,326.00	\$ 1,077.55	140,000	\$ 884.85	\$ 1,628.20	\$ 743.35	280,000	\$ 1,733.25	\$ 3,256.40	\$ 1,523.15			
Top Sewer User #4	97,000	\$ 624.27	\$ 1,128.11	\$ 503.84	83,000	\$ 539.43	\$ 965.29	\$ 425.86	118,000	\$ 751.53	\$ 1,372.34	\$ 620.81			
Top Sewer User #5	90,441	\$ 584.52	\$ 1,051.83	\$ 467.31	60,200	\$ 401.26	\$ 700.13	\$ 298.86	119,500	\$ 760.62	\$ 1,389.79	\$ 629.17			
Top Sewer User #6	68,500	\$ 451.56	\$ 796.66	\$ 345.10	57,000	\$ 381.87	\$ 662.91	\$ 281.04	80,000	\$ 521.25	\$ 930.40	\$ 409.15			
Top Sewer User #7	57,833	\$ 386.92	\$ 672.60	\$ 285.68	11,000	\$ 103.11	\$ 127.93	\$ 24.82	109,000	\$ 696.99	\$ 1,267.67	\$ 570.68			
Top Sewer User #8	53,500	\$ 360.66	\$ 622.21	\$ 261.55	1,000	\$ 42.51	\$ 23.26	\$ (19.25)	85,000	\$ 551.55	\$ 988.55	\$ 437.00			
Top Sewer User #9	49,833	\$ 338.44	\$ 579.56	\$ 241.12	43,000	\$ 297.03	\$ 500.09	\$ 203.06	58,000	\$ 387.93	\$ 674.54	\$ 286.61			
Top Sewer User #10	47,666	\$ 325.31	\$ 554.36	\$ 229.05	34,000	\$ 242.49	\$ 395.42	\$ 152.93	82,000	\$ 533.37	\$ 953.66	\$ 420.29			
Top Sewer User #11	47,583	\$ 324.80	\$ 553.39	\$ 228.59	37,000	\$ 260.67	\$ 430.31	\$ 169.64	118,000	\$ 751.53	\$ 1,372.34	\$ 620.81			
Top Sewer User #12	47,416	\$ 323.79	\$ 551.45	\$ 227.66	29,000	\$ 212.19	\$ 337.27	\$ 125.08	124,000	\$ 787.89	\$ 1,442.12	\$ 654.23			
Top Sewer User #13	46,666	\$ 319.25	\$ 542.73	\$ 223.48	36,000	\$ 254.61	\$ 418.68	\$ 164.07	56,000	\$ 375.81	\$ 651.28	\$ 275.47			
Top Sewer User #14	38,416	\$ 269.25	\$ 446.78	\$ 177.53	30,000	\$ 218.25	\$ 348.90	\$ 130.65	53,000	\$ 357.63	\$ 616.39	\$ 258.76			
Top Sewer User #15	34,166	\$ 243.50	\$ 397.35	\$ 153.85	30,000	\$ 218.25	\$ 348.90	\$ 130.65	50,000	\$ 339.45	\$ 581.50	\$ 242.05			
Top Sewer User #16	33,583	\$ 239.96	\$ 390.57	\$ 150.61	28,000	\$ 206.13	\$ 325.64	\$ 119.51	38,000	\$ 266.73	\$ 441.94	\$ 175.21			
Top Sewer User #17	33,500	\$ 239.46	\$ 389.61	\$ 150.15	28,000	\$ 206.13	\$ 325.64	\$ 119.51	44,500	\$ 306.12	\$ 517.54	\$ 211.42			
Top Sewer User #18	32,166	\$ 231.38	\$ 374.09	\$ 142.71	22,000	\$ 169.77	\$ 255.86	\$ 86.09	45,000	\$ 309.15	\$ 523.35	\$ 214.20			
Top Sewer User #19	28,916	\$ 211.68	\$ 336.29	\$ 124.61	23,500	\$ 178.86	\$ 273.31	\$ 94.45	40,500	\$ 281.88	\$ 471.02	\$ 189.14			
Top Sewer User #20	27,500	\$ 203.10	\$ 319.83	\$ 116.73	23,000	\$ 175.83	\$ 267.49	\$ 91.66	32,000	\$ 230.37	\$ 372.16	\$ 141.79			
Top Sewer User #21	25,500	\$ 190.98	\$ 296.57	\$ 105.59	20,000	\$ 157.65	\$ 232.60	\$ 74.95	37,000	\$ 260.67	\$ 430.31	\$ 169.64			
Top Sewer User #22	23,833	\$ 180.88	\$ 277.18	\$ 96.30	0	\$ 41.40	\$ 23.26	\$ (18.14)	166,000	\$ 1,042.41	\$ 1,930.58	\$ 888.17			
Top Sewer User #23	21,841	\$ 168.81	\$ 254.01	\$ 85.20	1,000	\$ 41.40	\$ 23.26	\$ (18.14)	72,000	\$ 472.77	\$ 837.36	\$ 364.59			
Top Sewer User #24	21,250	\$ 165.23	\$ 247.14	\$ 81.91	8,000	\$ 84.93	\$ 93.04	\$ 8.11	26,000	\$ 194.01	\$ 302.38	\$ 108.37			
Top Sewer User #25	20,666	\$ 161.69	\$ 240.35	\$ 78.66	13,000	\$ 115.23	\$ 151.19	\$ 35.96	35,000	\$ 248.55	\$ 407.05	\$ 158.50			
Top Sewer User #26	19,916	\$ 157.14	\$ 231.62	\$ 74.48	7,800	\$ 83.72	\$ 90.71	\$ 7.00	47,500	\$ 324.30	\$ 552.43	\$ 228.13			
Top Sewer User #27	19,000	\$ 151.59	\$ 220.97	\$ 69.38	16,000	\$ 133.41	\$ 186.08	\$ 52.67	24,000	\$ 181.89	\$ 279.12	\$ 97.23			
Top Sewer User #28	18,541	\$ 148.81	\$ 215.63	\$ 66.82	10,500	\$ 100.08	\$ 122.12	\$ 22.04	28,000	\$ 206.13	\$ 325.64	\$ 119.51			
Top Sewer User #29	17,583	\$ 143.00	\$ 204.49	\$ 61.49	3,000	\$ 49.85	\$ 34.89	\$ (14.96)	155,000	\$ 975.75	\$ 1,802.65	\$ 826.90			
Top Sewer User #30	17,583	\$ 143.00	\$ 204.49	\$ 61.49	12,000	\$ 109.17	\$ 139.56	\$ 30.39	21,000	\$ 163.71	\$ 244.23	\$ 80.52			
Top Sewer User #31	17,333	\$ 141.49	\$ 201.58	\$ 60.09	12,000	\$ 109.17	\$ 139.56	\$ 30.39	24,000	\$ 181.89	\$ 279.12	\$ 97.23			
Top Sewer User #32	16,916	\$ 138.96	\$ 196.73	\$ 57.77	15,000	\$ 127.35	\$ 174.45	\$ 47.10	19,000	\$ 151.59	\$ 220.97	\$ 69.38			
Top Sewer User #33	14,833	\$ 126.34	\$ 172.51	\$ 46.17	7,000	\$ 78.87	\$ 81.41	\$ 2.54	28,000	\$ 206.13	\$ 325.64	\$ 119.51			
Top Sewer User #34	14,833	\$ 126.34	\$ 172.51	\$ 46.17	1,000	\$ 41.40	\$ 23.26	\$ (18.14)	46,000	\$ 315.21	\$ 534.98	\$ 219.77			
Top Sewer User #35	14,500	\$ 124.32	\$ 168.64	\$ 44.32	5,000	\$ 66.75	\$ 58.15	\$ (8.60)	42,000	\$ 290.97	\$ 488.46	\$ 197.49			
Top Sewer User #36	13,833	\$ 120.28	\$ 160.88	\$ 40.60	4,000	\$ 58.30	\$ 46.52	\$ (11.78)	108,000	\$ 690.93	\$ 1,256.04	\$ 565.11			
Top Sewer User #37	13,833	\$ 120.28	\$ 160.88	\$ 40.60	5,000	\$ 66.75	\$ 58.15	\$ (8.60)	39,000	\$ 272.79	\$ 453.57	\$ 180.78			
Top Sewer User #38	13,616	\$ 118.96	\$ 158.35	\$ 39.39	0	\$ 41.40	\$ 23.26	\$ (18.14)	86,000	\$ 557.61	\$ 1,000.18	\$ 442.57			
Top Sewer User #39	13,583	\$ 118.76	\$ 157.97	\$ 39.21	9,000	\$ 90.99	\$ 104.67	\$ 13.68	29,000	\$ 212.19	\$ 337.27	\$ 125.08			
Top Sewer User #40	13,458	\$ 118.01	\$ 156.52	\$ 38.51	7,500	\$ 81.90	\$ 87.23	\$ 5.32	19,500	\$ 154.62	\$ 226.79	\$ 72.17			

Usage (gal)	Volumetric Rate Billed Expense					Difference Between Current Rate & Volumetric Rate Billed Expense				
	FY 21	FY 22	FY 23	FY 24	FY 25	FY 21	FY 22	FY 23	FY 24	FY 25
2,000	\$ 23.26	\$ 27.92	\$ 29.32	\$ 30.80	\$ 31.74	(\$18.14)	(\$19.57)	(\$18.71)	(\$18.35)	(\$18.19)
3,000	\$ 34.89	\$ 41.88	\$ 43.98	\$ 46.20	\$ 47.61	(\$14.96)	(\$14.61)	(\$13.50)	(\$12.77)	(\$12.54)
5,000	\$ 58.15	\$ 69.80	\$ 73.30	\$ 77.00	\$ 79.35	(\$8.60)	(\$4.69)	(\$3.08)	(\$1.61)	(\$1.24)
10,000	\$ 116.30	\$ 139.60	\$ 146.60	\$ 154.00	\$ 158.70	\$19.25	\$32.86	\$36.32	\$40.14	\$41.46
20,000	\$ 232.60	\$ 279.20	\$ 293.20	\$ 308.00	\$ 317.40	\$74.95	\$107.96	\$115.12	\$123.64	\$126.86
50,000	\$ 581.50	\$ 698.00	\$ 733.00	\$ 770.00	\$ 793.50	\$242.05	\$333.26	\$351.52	\$374.14	\$383.06
100,000	\$ 1,163.00	\$ 1,396.00	\$ 1,466.00	\$ 1,540.00	\$ 1,587.00	\$520.55	\$708.76	\$745.52	\$791.64	\$810.06
200,000	\$ 2,326.00	\$ 2,792.00	\$ 2,932.00	\$ 3,080.00	\$ 3,174.00	\$1,077.55	\$1,459.76	\$1,533.52	\$1,626.64	\$1,664.06