

Water and Wastewater Cost of Service Study Overview

- **Introduction**

- To provide adequate water and service to all of its customers, each utility must receive sufficient total revenue to ensure proper operation and maintenance (O&M) and continued development of both systems.

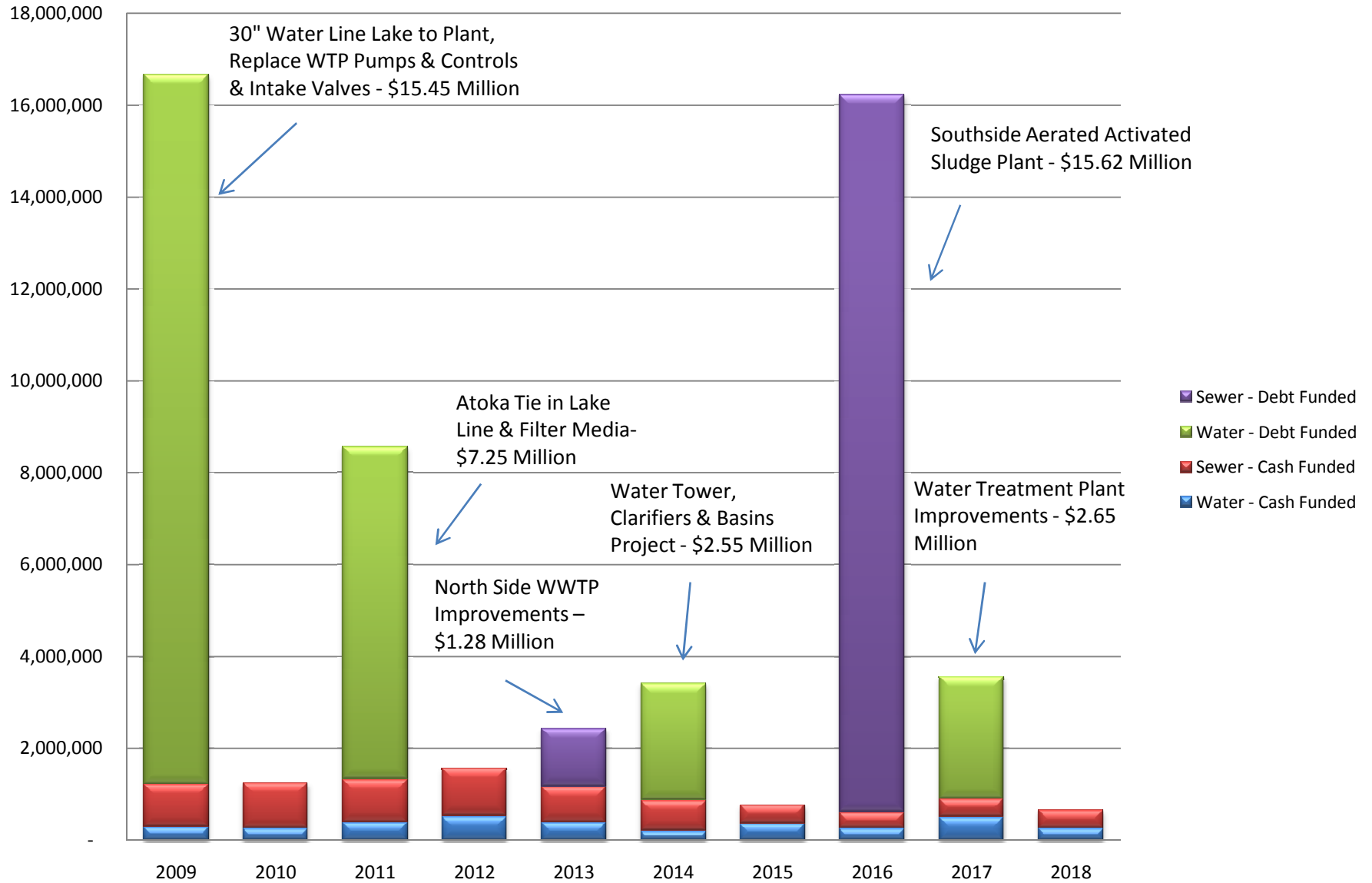
- **Revenue Adequacy**

- The objective for projecting revenue requirements is to ensure that the utility revenues are sufficient to recover annual total cash needs (O&M, interdepartmental/fund cost transfers, debt service needs and short term capital needs – normal or routine replacement).

- **Utility System Cash Needs Analysis**

- Using the cash-needs approach, MFS focused on Shawnee Municipal Authority's historical trend (FY 2004/05 thru FY 2007/08) of both water and wastewater expenses for personal services, materials and supplies, other services and charges, capital, debt service and interfund transfers .

Capital Needs - Next Ten Years



Water Rate Increase Detail

Rates Effective July 1											
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Residential Inside											
First 1,000 gal.	6.70	7.30	11.05	18.15	21.80	24.50	24.65	26.55	26.55	28.85	29.75
Next 3,000 gal.	3.69	3.69	3.69	3.79	3.79	3.89	3.99	4.29	4.49	4.69	4.69
Next 996,000 gal.	3.40	3.79	3.79	3.89	3.89	3.99	4.09	4.39	4.59	4.79	4.79
Next 1,000,000 gal.	2.84	3.89	3.89	3.99	3.99	4.09	4.19	4.49	4.59	4.89	4.89
Over 2,000,000 gal.	2.77	3.99	3.99	4.09	4.09	4.19	4.29	4.59	4.59	4.99	4.99
Additional Cumulative Revenues Generated		\$ 148,167.56	\$ 595,910.06	\$ 1,487,707.65	\$ 1,923,510.35	\$ 2,289,956.74	\$ 2,351,938.23	\$ 2,711,009.80	\$ 2,799,153.38	\$ 3,161,912.36	\$ 3,269,370.56
Residential Outside											
First 1,000 gal.	10.06	10.66	14.41	21.51	25.16	27.86	28.01	29.91	29.91	32.21	33.11
Next 3,000 gal.	5.53	5.53	5.54	5.69	5.69	5.84	5.99	6.44	6.74	7.04	7.04
Next 996,000 gal.	5.10	5.63	5.69	5.84	5.84	5.99	6.14	6.59	6.89	7.19	7.19
Next 1,000,000 gal.	4.26	5.73	5.84	5.99	5.99	6.14	6.29	6.74	6.89	7.34	7.34
Over 2,000,000 gal.	4.16	5.83	5.99	6.14	6.14	6.29	6.44	6.89	6.89	7.49	7.49
Additional Cumulative Revenues Generated		\$ 1,989.67	\$ 6,795.54	\$ 16,335.36	\$ 20,875.96	\$ 24,942.17	\$ 25,836.19	\$ 30,322.03	\$ 31,736.86	\$ 36,012.89	\$ 37,132.49
Commercial Inside											
First 1,000 gal.	6.70	9.13	13.81	22.69	27.25	30.63	30.81	33.19	33.19	36.06	37.19
Next 3,000 gal.	3.69	3.69	3.69	3.79	3.79	3.89	3.99	4.29	4.49	4.69	4.69
Next 996,000 gal.	3.40	3.79	3.79	3.89	3.89	3.99	4.09	4.39	4.59	4.79	4.79
Next 1,000,000 gal.	2.84	3.89	3.89	3.99	3.99	4.09	4.19	4.49	4.59	4.89	4.89
Over 2,000,000 gal.	2.77	3.99	3.99	4.09	4.09	4.19	4.29	4.59	4.59	4.99	4.99
Additional Cumulative Revenues Generated		\$ 165,117.91	\$ 230,424.16	\$ 385,005.42	\$ 448,570.17	\$ 526,525.43	\$ 560,072.44	\$ 685,965.22	\$ 744,033.90	\$ 849,758.76	\$ 865,432.26
Commercial Outside											
First 1,000 gal.	10.06	13.33	18.01	26.89	31.45	34.83	35.01	37.39	37.39	40.26	41.39
Next 3,000 gal.	5.53	5.53	5.54	5.69	5.69	5.84	5.99	6.44	6.74	7.04	7.04
Next 996,000 gal.	5.10	5.63	5.69	5.84	5.84	5.99	6.14	6.59	6.89	7.19	7.19
Next 1,000,000 gal.	4.26	5.73	5.84	5.99	5.99	6.14	6.29	6.74	6.89	7.34	7.34
Over 2,000,000 gal.	4.16	5.83	5.99	6.14	6.14	6.29	6.44	6.89	6.89	7.49	7.49
Additional Cumulative Revenues Generated		\$ 1,052.64	\$ 1,610.30	\$ 2,742.21	\$ 3,212.14	\$ 3,777.55	\$ 4,014.65	\$ 4,912.63	\$ 5,348.20	\$ 6,079.90	\$ 6,195.77
Commercial Inside - Compound Mtr											
First 1,000 gal.	6.70	9.13	13.81	22.69	27.25	30.63	30.81	33.19	33.19	36.06	37.19
Next 3,000 gal.	3.69	3.69	3.69	3.79	3.79	3.89	3.99	4.29	4.49	4.69	4.69
Next 996,000 gal.	3.40	3.79	3.79	3.89	3.89	3.99	4.09	4.39	4.59	4.79	4.79
Next 1,000,000 gal.	2.84	3.89	3.89	3.99	3.99	4.09	4.19	4.49	4.59	4.89	4.89
Over 2,000,000 gal.	2.77	3.99	3.99	4.09	4.09	4.19	4.29	4.59	4.59	4.99	4.99
Additional Cumulative Revenues Generated		\$ 159,911.15	\$ 161,636.15	\$ 185,520.90	\$ 187,199.90	\$ 209,060.65	\$ 229,748.40	\$ 292,478.65	\$ 316,871.34	\$ 376,011.65	\$ 376,425.65
Aggregate Additional Cumulative Revenues Generated		\$ 476,238.94	\$ 996,376.21	\$ 2,077,311.54	\$ 2,583,368.52	\$ 3,054,262.55	\$ 3,171,609.91	\$ 3,724,688.34	\$ 3,897,143.69	\$ 4,429,775.56	\$ 4,554,556.74

Note: Based on 2007/08 Consumption Levels

Sewer Rate Increase Detail

Rates Effective July 1											
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Residential Inside											
First 1,000 gal.	4.25	9.95	11.25	11.60	13.50	13.50	13.65	13.75	13.95	15.60	21.40
Over 1,000 gal.	2.49	2.75	2.80	2.85	2.90	2.90	2.90	2.90	2.90	3.35	3.65
Additional Cumulative Revenues Generated		\$ 742,880.63	\$ 908,837.65	\$ 967,161.58	\$ 1,201,097.40	\$ 1,201,097.40	\$ 1,218,092.10	\$ 1,229,421.90	\$ 1,252,081.50	\$ 1,607,049.79	\$ 2,376,195.92
Residential Outside											
First 1,000 gal.	6.38	14.93	16.88	17.40	20.25	20.25	20.48	20.63	20.93	23.40	32.10
Over 1,000 gal.	3.74	4.13	4.20	4.28	4.35	4.35	4.35	4.35	4.35	5.03	5.48
Additional Cumulative Revenues Generated		\$ 11,631.14	\$ 14,207.27	\$ 15,142.15	\$ 18,776.68	\$ 18,776.68	\$ 19,047.16	\$ 19,223.56	\$ 19,576.36	\$ 25,229.57	\$ 37,279.63
Commercial Inside											
First 1,000 gal.	4.25	12.44	14.06	14.50	16.88	16.88	17.06	17.19	17.44	19.50	26.75
Over 1,000 gal.	2.49	2.75	2.80	2.85	2.90	2.90	2.90	2.90	2.90	3.35	3.65
Additional Cumulative Revenues Generated		\$ 202,260.59	\$ 241,731.46	\$ 266,134.92	\$ 315,310.23	\$ 315,310.23	\$ 317,608.65	\$ 319,268.62	\$ 322,460.87	\$ 517,830.84	\$ 723,116.65
Commercial Outside											
First 1,000 gal.	6.38	18.66	21.10	21.75	25.31	25.31	25.60	25.79	26.16	29.25	40.13
Over 1,000 gal.	3.74	4.13	4.20	4.28	4.35	4.35	4.35	4.35	4.35	5.03	5.48
Additional Cumulative Revenues Generated		\$ 1,620.97	\$ 1,925.84	\$ 2,148.07	\$ 2,519.02	\$ 2,519.02	\$ 2,536.13	\$ 2,547.34	\$ 2,569.17	\$ 4,314.52	\$ 5,990.81
Aggregate Additional Cumulative Revenues Generated		\$ 958,393.34	\$ 1,166,702.23	\$ 1,250,586.71	\$ 1,537,703.32	\$ 1,537,703.32	\$ 1,557,284.03	\$ 1,570,461.41	\$ 1,596,687.89	\$ 2,154,424.73	\$ 3,142,583.01

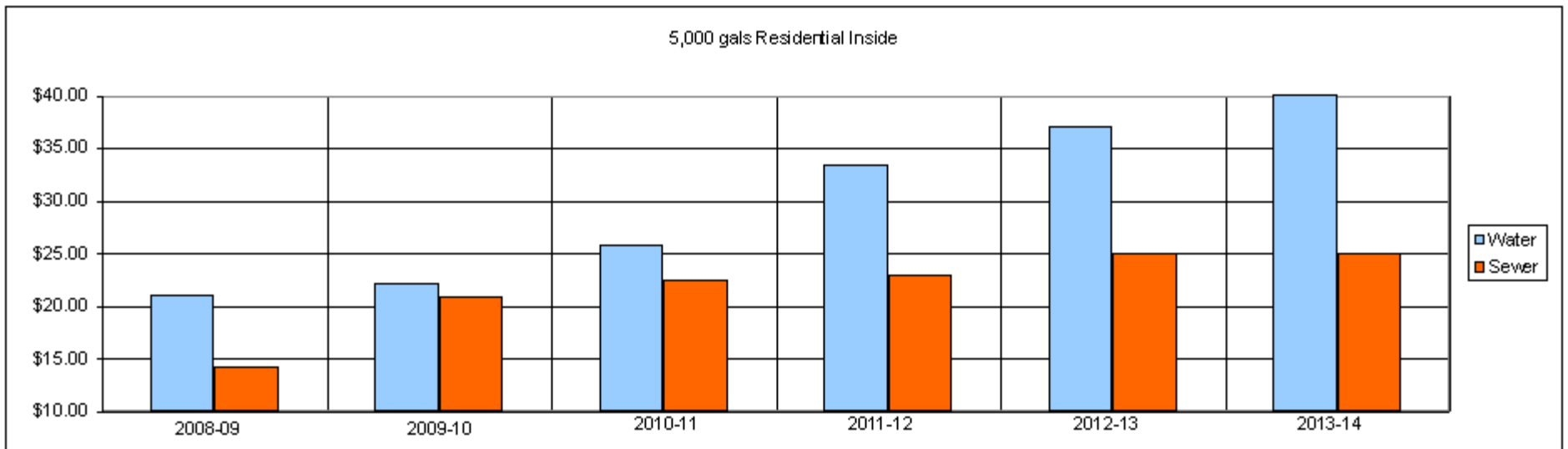
Note: Based on 2007/08 Consumption Levels

5000 Gallons Monthly Average Residential Usage

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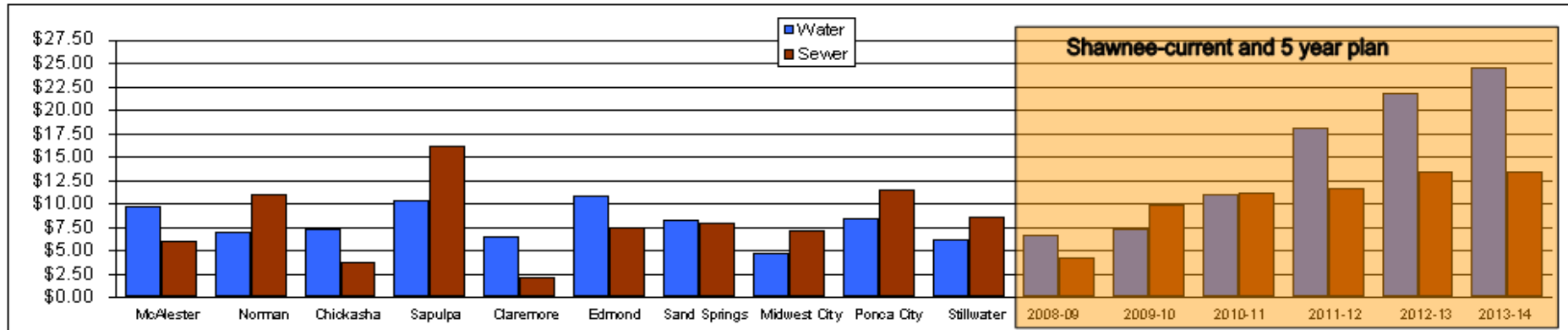
Residential-Inside-Water												
	2008-09		2009-10		2010-11		2011-12		2012-13		2013-14	
1000	\$6.70	\$6.70	\$7.30	\$7.30	\$11.05	\$11.05	\$18.15	\$18.15	\$21.80	\$21.80	\$24.50	\$24.50
3000	\$3.69	\$11.07	\$3.69	\$11.07	\$3.69	\$11.07	\$3.79	\$11.37	\$3.79	\$11.37	\$3.89	\$11.67
1,000	\$3.40	\$3.40	\$3.79	\$3.79	\$3.79	\$3.79	\$3.89	\$3.89	\$3.89	\$3.89	\$3.99	\$3.99
Water Total	\$21.17		\$22.16		\$25.91		\$33.41		\$37.06		\$40.16	

Residential-Inside-Sewer												
	2008-09		2009-10		2010-11		2011-12		2012-13		2013-14	
1000	\$4.25	\$4.25	\$9.95	\$9.95	\$11.25	\$11.25	\$11.60	\$11.60	\$13.50	\$13.50	\$13.50	\$13.50
4,000	\$2.49	\$9.96	\$2.75	\$11.00	\$2.80	\$11.20	\$2.85	\$11.40	\$2.90	\$11.60	\$2.90	\$11.60
Sewer Total	\$14.21		\$20.95		\$22.45		\$23.00		\$25.10		\$25.10	
Grand Total	\$35.38		\$43.11		\$48.36		\$56.41		\$62.16		\$65.26	

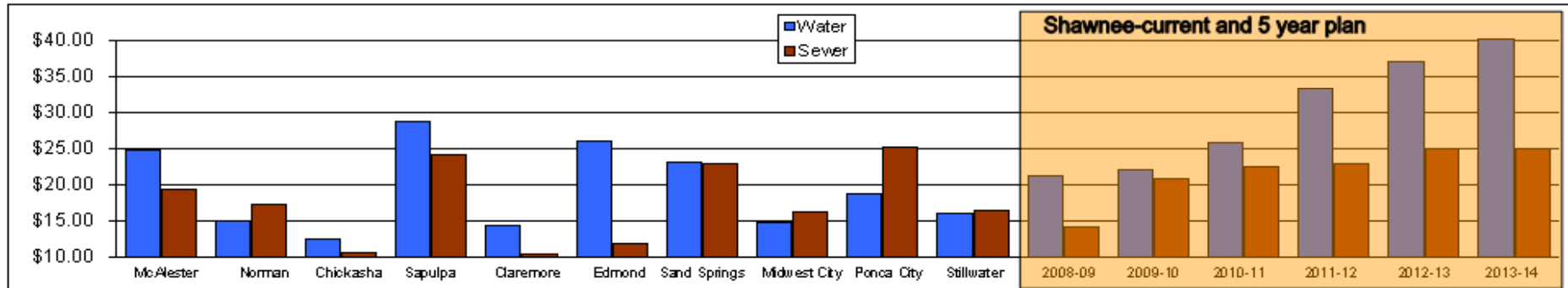


Rate Survey and Residential-5 Year Plan

Minimum Charge



5,000 gallons Usage



10,000 gallons Usage

