

**CITY OF SOMERTON, ARIZONA
WATER AND WASTEWATER RATE STUDY
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Acknowledgements

During the course of this rate study, several City of Somerton employees expended considerable time and effort in assisting the project team. These employees included the Mayor and Council, Mr. Ian McGaughey, Mr. Samuel Palacios, Mr. Hector Tapia and Mr. Ralph Villa. The project team owes a debt of gratitude to the hard work, dedication and professionalism of these individuals, without whom this project would not have been successfully completed.

The project team has relied upon the extensive data supplied by the City of Somerton. Thus, the integrity of the study is largely dependent upon the accuracy of this financial and customer data. Every effort has been made by the project team to validate and confirm the information contained herein prior to the preparation of the final study documents. **This report presents no assurance or guarantee that the forecast contained herein will be consistent with actual results or performances.** These represent forecasts based on a series of assumptions about future behavior, and are not guarantees. Any changes in assumptions or actual events may result in significant revisions to the forecast and its conclusions. The cash flow projections and debt service coverage calculations are not intended to present overall financial positions, results of operations, and/or cash flows for the periods indicated, which is in conformity with guidelines for presentation of a forecast established by the American Institute of Certified Public Accountants.

Executive Summary

Background



In February 2018, the City of Somerton, Arizona (the “City”) engaged **Willdan Financial Services**, to conduct a water and wastewater rate study and long-term financial plan. The City was interested in developing a comprehensive water and wastewater rate plan for FY 2018 and beyond. The objective is to develop a long-term rate plan that will enable the City to recover sufficient funds to meet operating expenses, capital outlays, debt service and coverage requirements, while at the same time minimizing the impact on ratepayers.

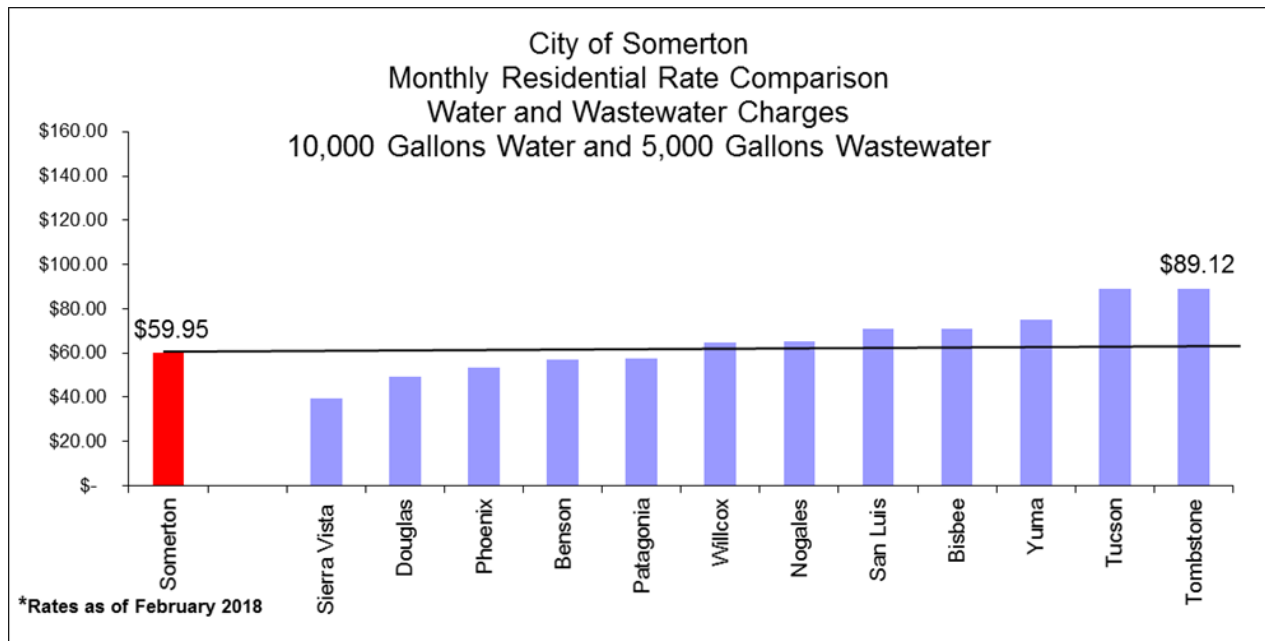
The City identified numerous objectives for this study, including but not limited to the following:

- A comprehensive analysis and evaluation of the water and wastewater systems’ current cost of service and revenue requirements.
- A forecast of operating expenses over the next ten years, taking into consideration salient factors such as cost of water and wastewater treatment, inflation, system growth, and increases in staffing levels.
- A thorough review of the water and wastewater systems’ known capital improvement needs, as well as a determination of the need for funding capital requirements through the issuance of long-term debt for the existing identified capital improvements.
- An estimate of current and forecast accounts, volumes and billing units for the ten-year forecast period.
- An analysis of alternative rate structures for water and wastewater rates.
- A detailed analysis and comparison of the City’s current and proposed rates to rates in other surrounding communities.
- An analysis of the impact of peak demands on the cost of providing service.

Water and Wastewater Rate Comparison

Chart ES-1 compares Somerton’s current monthly water and wastewater charges to those of nearby cities in the region. A billing volume of 10,000 gallons for water and 5,000 gallons for wastewater was used for the residential comparison as it represents typical usage levels for an average household in the City. The rate data is based on published rates and ordinances posted by each municipality on their websites as of February 2018. These rates do not include sales tax, activation or other charges beyond the basic minimum and volume charges. Some cities charge residential customers by meter size while Somerton does not. The comparisons reflect 5/8” meters for the cities that charge by meter size. The table reveals that the City’s rates compare very favorably to most other cities in the region.

CHART ES-1



Water and Wastewater Customers and Meters – Test Year & Forecast

The majority of the water and wastewater accounts served by Somerton are residential accounts. **Table ES-2** presents total water connections (customers) by customer class for the City for the test year and forecast period. Total wastewater connections by customer class for the test year and forecast period are presented in **Table ES-3**. As shown, overall water accounts are forecast to increase from **3,930** in the test year to **5,181** in FY 2027, an annual average increase of 3.12%. Similarly, wastewater accounts are forecast to increase from **3,998** in the test year to **5,096** in FY 2027. The addition of these new connections will likely result in both non-recurring connection fees and increasing monthly water and wastewater revenues.

TABLE ES-2

CITY OF SOMERTON					
FORECAST TOTAL CUSTOMERS WATER Customer Classes					
Fiscal Year	Residential	Commercial	Multi Family / Trailers	Mesa Orange Grove	Total
WATER Total Customers					
FY 2016	3,308	83	61	241	3,693
FY 2017	3,427	89	61	265	3,842
Nov 2016 - Oct 2017	3,459	89	57	267	3,872
TY 2018	3,511	93	49	277	3,930
FY 2019	3,616	96	49	291	4,052
FY 2020	3,725	99	49	305	4,178
FY 2021	3,837	102	49	321	4,308
FY 2022	3,952	105	49	337	4,442
FY 2023	4,070	108	49	354	4,581
FY 2024	4,192	111	49	371	4,724
FY 2025	4,318	114	49	390	4,871
FY 2026	4,448	118	49	409	5,024
FY 2027	4,581	121	49	430	5,181
WATER Annual New Customers					
FY 2017	119	6	-	24	149
Nov 2016 - Oct 2017	32	-	(4)	2	30
TY 2018	52	4	(8)	10	58
FY 2019	105	3	-	14	122
FY 2020	108	3	-	15	126
FY 2021	112	3	-	15	130
FY 2022	115	3	-	16	134
FY 2023	119	3	-	17	139
FY 2024	122	3	-	18	143
FY 2025	126	3	-	19	148
FY 2026	130	3	-	19	152
FY 2027	133	4	-	20	157

TABLE ES-3

CITY OF SOMERTON				
FORECAST TOTAL CUSTOMERS WASTEWATER Customer Classes				
	Residential	Commercial	Multi Family / Trailers	Total
WASTEWATER Total Customers				
FY 2016	3,169	77	529	3,775
FY 2017	3,297	79	531	3,907
Nov 2016 - Oct 2017	3,333	81	524	3,938
TY 2018	3,398	84	516	3,998
FY 2019	3,503	87	516	4,106
FY 2020	3,612	90	516	4,217
FY 2021	3,724	93	516	4,332
FY 2022	3,839	96	516	4,450
FY 2023	3,957	99	516	4,572
FY 2024	4,079	102	516	4,697
FY 2025	4,205	105	516	4,826
FY 2026	4,335	109	516	4,959
FY 2027	4,468	112	516	5,096
WASTEWATER Annual New Customers				
FY 2017	128	2	2	132
Nov 2016 - Oct 2017	36	2	(7)	31
TY 2018	101	5	(15)	91
FY 2019	105	3	-	108
FY 2020	108	3	-	111
FY 2021	112	3	-	115
FY 2022	115	3	-	118
FY 2023	119	3	-	122
FY 2024	122	3	-	125
FY 2025	126	3	-	129
FY 2026	130	3	-	133
FY 2027	133	4	-	137
NOTE: Multi-family represent total units in each building not total meters				

Net Revenue Requirement

Table ES-4 presents the City’s forecast Net Revenue Requirement for the ten-year period FY 2018 through FY 2027. The table reveals that the total revenue requirement is expected to increase from **\$3,108,298** in FY 2018 to **\$4,394,478** in FY 2027, an annual average increase of 3.98%. Detailed calculations are presented in the rate model contained in **Appendix A** of this report. These net revenue requirements must be raised from rates in the test year FY 2018 and the forecast period.

TABLE ES-4

CITY OF SOMERTON						
CURRENT AND FORECAST NET REVENUE REQUIREMENT						
SCENARIO:						
2018 09 28 -- Scenario 1 -- COS Adjustments						
	Operating Expenses	Capital Outlays	Debt Service	Total Cost of Service	Less Non-Rate Revenues	Net Revenue Requirement
WATER Revenue Requirement						
TY 2018	\$ 1,210,111	\$ -	\$ 158,513	\$ 1,368,625	\$ 175,616	\$ 1,193,008
FY 2019	1,284,584	-	159,649	1,444,233	175,616	1,268,616
FY 2020	1,389,539	-	160,818	1,550,357	175,616	1,374,741
FY 2021	1,462,753	-	249,025	1,711,778	175,616	1,536,162
FY 2022	1,540,121	-	250,264	1,790,385	175,616	1,614,769
FY 2023	1,621,896	-	251,541	1,873,437	175,616	1,697,820
FY 2024	1,708,349	-	252,855	1,961,204	175,616	1,785,587
FY 2025	1,799,767	-	254,208	2,053,975	175,616	1,878,359
FY 2026	1,896,458	-	255,601	2,152,060	175,616	1,976,443
FY 2027	1,998,750	-	257,036	2,255,785	175,616	2,080,169
WASTEWATER Revenue Requirement						
TY 2018	\$ 1,172,019	\$ -	\$ 767,832	\$ 1,939,851	\$ 24,561	\$ 1,915,290
FY 2019	1,244,080	-	768,180	2,012,260	24,561	1,987,699
FY 2020	1,309,048	-	767,704	2,076,752	24,561	2,052,191
FY 2021	1,415,142	-	811,287	2,226,429	24,561	2,201,868
FY 2022	1,489,579	-	811,914	2,301,494	24,561	2,276,932
FY 2023	1,568,261	-	817,313	2,385,573	24,561	2,361,012
FY 2024	1,651,447	-	473,658	2,125,105	24,561	2,100,544
FY 2025	1,739,418	-	473,361	2,212,779	24,561	2,188,218
FY 2026	1,832,468	-	463,628	2,296,096	24,561	2,271,534
FY 2027	1,930,913	-	407,957	2,338,870	24,561	2,314,309
TOTAL Revenue Requirement						
TY 2018	\$ 2,382,131	\$ -	\$ 926,345	\$ 3,308,476	\$ 200,177	\$ 3,108,298
FY 2019	2,528,663	-	927,829	3,456,493	200,177	3,256,315
FY 2020	2,698,587	-	928,522	3,627,109	200,177	3,426,931
FY 2021	2,877,895	-	1,060,312	3,938,207	200,177	3,738,029
FY 2022	3,029,700	-	1,062,179	4,091,879	200,177	3,891,701
FY 2023	3,190,156	-	1,068,853	4,259,010	200,177	4,058,832
FY 2024	3,359,796	-	726,513	4,086,309	200,177	3,886,131
FY 2025	3,539,185	-	727,569	4,266,754	200,177	4,066,577
FY 2026	3,728,926	-	719,229	4,448,155	200,177	4,247,978
FY 2027	3,929,663	-	664,993	4,594,655	200,177	4,394,478

One of the key assumptions used in the development of the long-term revenue requirement is the City's Capital Improvement Plan. The City's CIP assumptions are summarized in **Table ES-5**. The table reveals that the City's CIP over the next ten years is estimated to be **\$1,345,419** for the water system and **\$695,149** for the wastewater system. The CIP funding is forecasted to come from revenue bond issues totaling \$2,250,000 for the currently identified water and wastewater system capital improvements in the next ten years.

Table ES-5

CITY OF SOMERTON					
CAPITAL IMPROVEMENT PLAN PROJECTS ASSIGNED FUNDING THROUGH AVAILABLE RESOURCES					
SCENARIO:	2018 09 28 – Scenario 1 – COS Adjustments				
	Total	FY 2018	FY 2019	FY 2020	FY 2021
WATER					
WTP Completion	\$ 95,419	\$ 95,419	\$ -	\$ -	\$ -
Repair Water Tanks 1 & 2	50,000	50,000	-	-	-
12" Water Main Extension along CO.16TH La Mesa	300,000	300,000	-	-	-
Construction of New Water Tank for WTP	800,000	-	800,000	-	-
Repaint Water Tank No.2	100,000	-	-	100,000	-
Total Water CIP	\$ 1,345,419	\$ 445,419	\$ 800,000	\$ 100,000	\$ -
WASTEWATER					
WWTP Completion	\$ 346,149	\$ 346,149	\$ -	\$ -	\$ -
Design and Built Biosolids Temporary Storage	60,000	60,000	-	-	-
Replace pumps, wet well and Force Main at Zocalo Lift Station	141,000	141,000	-	-	-
New Bobcat	11,000	11,000	-	-	-
Waste Water Master Plan Update	75,000	75,000	-	-	-
New Tractor Backhoe	27,000	-	27,000	-	-
Purchase and Replace Carbon at the WWTP Odor Control Unit	35,000	-	-	-	35,000
Total Wastewater CIP	\$ 695,149	\$ 633,149	\$ 27,000	\$ -	\$ 35,000
Total Water and Wastewater CIP	\$ 2,040,568	\$ 1,078,568	\$ 827,000	\$ 100,000	\$ 35,000

It should be noted that if the City materially revises its CIP, the rate plan may be subject to potentially significant revision.

Water and Wastewater Rate Recommendations

The project team presents the final recommended rate plans for the City under two scenarios. These scenarios are as follows:

Scenario I – COS Adjustments – this scenario assumes that the City immediately implements the rate adjustments required to fund the cost of service in each year of the ten year forecast. This scenario requires more significant adjustments in the initial years with only nominal adjustments in subsequent years.

Scenario II – Phased In Adjustments – this scenario assumes that the City implements rate adjustments in similar increments over a longer period of time. This scenario results in a “smoothing out” or consistent set of adjustments, though it also result in less revenue in the initial years of the forecast.

Table ES-6 presents a summary of the Scenario I water rate plan proposed for all customer classes. **Table ES-7** presents a summary of the Scenario I wastewater rate plan proposed for all customer classes. **Table ES-8** presents a summary of the impact of this scenario on monthly customer charges.

Table ES-9 presents a summary of the Scenario II water rate plan proposed for all customer classes. **Table ES-10** presents a summary of the Scenario II wastewater rate plan proposed for all customer classes. **Table ES-11** presents a summary of the impact of this scenario on monthly customer charges.

TABLE ES-6

CITY OF SOMERTON		Proposed Water Rate Plan									
Scenario: 2018 09 28 -- Scenario 1 -- COS Adjustments											
	Current	Effective Jan-19	Effective Jan-20	Effective Jan-21	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	
Water Rates -- Residential											
Monthly Minimum Charge --All Meters	\$ 11.50	\$ 13.00	\$ 14.29	\$ 15.72	\$ 16.04	\$ 16.36	\$ 16.69	\$ 17.02	\$ 17.36	\$ 17.71	
<u>Volume Rate Per 1,000 Gal</u>											
5,000 Above	2.39	2.70	2.97	3.27	3.33	3.40	3.47	3.54	3.61	3.68	
Water Rates -- Commercial											
Monthly Minimum Charge --All Meters	13.63	15.40	16.94	18.64	19.01	19.39	19.78	20.17	20.58	20.99	
<u>Volume Rate Per 1,000 Gal</u>											
5,000 Above	2.63	2.97	3.27	3.60	3.67	3.74	3.82	3.89	3.97	4.05	
Water Rates -- Multi Family / Trailers											
Monthly Minimum Charge --All Meters	12.54	14.17	15.59	17.15	17.49	17.84	18.20	18.56	18.93	19.31	
<u>Volume Rate Per 1,000 Gal</u>											
5,000 Above	2.51	2.84	3.12	3.43	3.50	3.57	3.64	3.71	3.79	3.86	
Water Rates -- MESA ORANGE GROVE											
<u>Volume Rate Per 1,000 Gal</u>											
- 3,000	2.00	2.26	2.49	2.73	2.79	2.85	2.90	2.96	3.02	3.08	
3,001 8,000	2.75	3.11	3.42	3.76	3.84	3.91	3.99	4.07	4.15	4.23	
8,001 Above	3.31	3.74	4.11	4.53	4.62	4.71	4.80	4.90	5.00	5.10	

TABLE ES-7

CITY OF SOMERTON		Proposed Wastewater Rate Plan									
Scenario: 2018 09 28 -- Scenario 1 -- COS Adjustments											
	Current	Effective Jan-19	Effective Jan-20	Effective Jan-21	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	
Wastewater Rates -- Residential											
Monthly Charge --All Meters	\$ 36.50	\$ 40.52	\$ 44.16	\$ 45.04	\$ 45.95	\$ 46.86	\$ 47.80	\$ 48.76	\$ 49.73	\$ 50.73	
Wastewater Rates -- Commercial											
Monthly Charge --All Meters	19.40	21.53	23.47	23.94	24.42	24.91	25.41	25.92	26.43	26.96	
Volume Rate Per 1,000 Gal	3.28	3.64	3.97	4.05	4.13	4.21	4.30	4.38	4.47	4.56	
Wastewater Rates -- Multi Family / Trailers											
Monthly Charge --All Meters	36.50	40.52	44.16	45.04	45.95	46.86	47.80	48.76	49.73	50.73	

TABLE ES-8

CITY OF SOMERTON		Impact on Monthly Customer Charges									
Scenario: 2018 09 28 -- Scenario 1 -- COS Adjustments		Current	Effective Jan-19	Effective Jan-20	Effective Jan-21	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25	Effective Jan-26	Effective Jan-27
Residential Average Monthly Bill											
5,000 Gal	Total	\$ 48.00	\$ 53.51	\$ 58.46	\$ 60.77	\$ 61.98	\$ 63.22	\$ 64.49	\$ 65.78	\$ 67.09	\$ 68.44
Water & WW	Increase -- \$		5.51	4.95	2.31	1.22	1.24	1.26	1.29	1.32	1.34
10,000 Gal	Total	\$ 59.95	\$ 67.01	\$ 73.31	\$ 77.11	\$ 78.65	\$ 80.22	\$ 81.83	\$ 83.46	\$ 85.13	\$ 86.84
Water & WW	Increase -- \$		7.06	6.30	3.80	1.54	1.57	1.60	1.64	1.67	1.70
Commercial Average Monthly Bill											
25,000 Gal	Total	\$ 167.63	\$ 187.39	\$ 205.01	\$ 215.69	\$ 220.01	\$ 224.41	\$ 228.90	\$ 233.47	\$ 238.14	\$ 242.91
Water & WW	Increase -- \$		19.76	17.61	10.69	4.31	4.40	4.49	4.58	4.67	4.76

TABLE ES-9

CITY OF SOMERTON		Proposed Water Rate Plan									
Scenario: 2018 09 28 -- Scenario II Uniform Adjustments		Current	Effective Jan-19	Effective Jan-20	Effective Jan-21	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25	Effective Jan-26	Effective Jan-27
Water Rates -- Residential											
	Monthly Minimum Charge --All Meters	\$ 11.50	\$ 12.19	\$ 12.92	\$ 13.70	\$ 14.52	\$ 15.39	\$ 15.70	\$ 16.01	\$ 16.33	\$ 16.66
	<u>Volume Rate Per 1,000 Gal</u>										
	5,000 Above	2.39	2.53	2.69	2.85	3.02	3.20	3.26	3.33	3.39	3.46
Water Rates -- Commercial											
	Monthly Minimum Charge --All Meters	13.63	14.45	15.31	16.23	17.21	18.24	18.60	18.98	19.36	19.74
	<u>Volume Rate Per 1,000 Gal</u>										
	5,000 Above	2.63	2.79	2.96	3.13	3.32	3.52	3.59	3.66	3.73	3.81
Water Rates -- Multi Family / Trailers											
	Monthly Minimum Charge --All Meters	12.54	13.29	14.09	14.94	15.83	16.78	17.12	17.46	17.81	18.16
	<u>Volume Rate Per 1,000 Gal</u>										
	5,000 Above	2.51	2.66	2.82	2.99	3.17	3.36	3.43	3.49	3.56	3.64
Water Rates -- MESA ORANGE GROVE											
	<u>Volume Rate Per 1,000 Gal</u>										
	- 3,000	2.00	2.12	2.25	2.38	2.52	2.68	2.73	2.78	2.84	2.90
	3,001 8,000	2.75	2.92	3.09	3.28	3.47	3.68	3.75	3.83	3.91	3.98
	8,001 Above	3.31	3.51	3.72	3.94	4.18	4.43	4.52	4.61	4.70	4.79

TABLE ES-10

CITY OF SOMERTON		Proposed Wastewater Rate Plan									
Scenario: 2018 09 28 -- Scenario II Uniform Adjustments											
	Current	Effective Jan-19	Effective Jan-20	Effective Jan-21	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	
Wastewater Rates -- Residential											
Monthly Charge --All Meters	\$ 36.50	\$ 38.69	\$ 41.01	\$ 43.47	\$ 46.08	\$ 48.85	\$ 49.82	\$ 50.82	\$ 51.83	\$ 52.87	
Wastewater Rates -- Commercial											
Monthly Charge --All Meters	19.40	20.56	21.80	23.11	24.49	25.96	26.48	27.01	27.55	28.10	
Volume Rate Per 1,000 Gal	3.28	3.48	3.69	3.91	4.14	4.39	4.48	4.57	4.66	4.75	
Wastewater Rates -- Multi Family / Trailers											
Monthly Charge --All Meters	36.50	38.69	41.01	43.47	46.08	48.85	49.82	50.82	51.83	52.87	

TABLE ES-11

CITY OF SOMERTON		Impact on Monthly Customer Charges									
Scenario: 2018 09 28 -- Scenario II Uniform Adjustments											
	Current	Effective Jan-19	Effective Jan-20	Effective Jan-21	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	
Residential Average Monthly Bill											
5,000 Gal Total	\$ 48.00	\$ 50.88	\$ 53.93	\$ 57.17	\$ 60.60	\$ 64.23	\$ 65.52	\$ 66.83	\$ 68.17	\$ 69.53	
Water & WW Increase -- \$		2.88	3.05	3.24	3.43	3.64	1.28	1.31	1.34	1.36	
10,000 Gal Total	\$ 59.95	\$ 63.55	\$ 67.36	\$ 71.40	\$ 75.69	\$ 80.23	\$ 81.83	\$ 83.47	\$ 85.14	\$ 86.84	
Water & WW Increase -- \$		3.60	3.81	4.04	4.28	4.54	1.60	1.64	1.67	1.70	
Commercial Average Monthly Bill											
25,000 Gal Total	\$ 167.63	\$ 177.69	\$ 188.35	\$ 199.65	\$ 211.63	\$ 224.33	\$ 228.81	\$ 233.39	\$ 238.06	\$ 242.82	
Water & WW Increase -- \$		10.06	10.66	11.30	11.98	12.70	4.49	4.58	4.67	4.76	

SECTION I

Introduction and Demographic Profile

Background



In February 2018, the City of Somerton, Arizona (the “City”) engaged Willdan Financial Services, to conduct a water and wastewater rate study and long-term financial plan. The City was interested in developing a comprehensive water and wastewater rate plan for FY 2018 and beyond. The objective of this study is to develop a long-term rate plan that will enable the City to recover sufficient funds to meet operating expenses, capital outlays, debt service and coverage requirements, while minimizing the impact of adjustments on ratepayers.

The City identified numerous objectives for this study, including but not limited to the following:

- A comprehensive analysis and evaluation of the water and wastewater systems’ current cost of service and revenue requirements.
- A forecast of operating expenses over the next ten years, taking into consideration such factors as inflation, system growth, and increases in staffing levels.
- A thorough review of the water and wastewater systems’ known capital improvement needs, as well as a determination of the need for funding capital requirements through the issuance of long-term debt for the existing identified capital improvements.
- An estimate of current and forecast accounts, volumes and billing units for the ten-year forecast period.
- An analysis of alternative multi-year water and wastewater rate plans that will distribute costs equitably.
- A detailed analysis and comparison of the City’s current and proposed rates to rates in other surrounding communities.

Report Organization

This report is organized into the following sections:

Section I – Introduction and Demographic Profile - outlines the background, objectives and scope of this rate study and long-term financial plan. It also presents the City’s current rate structure and a community profile of the City of Somerton. This includes a comparison of the City’s water and wastewater charges with other several neighboring cities.

Section II – Water and Wastewater Test Year and Forecast Volumes – analyzes the City’s customer base, total accounts and current volumes of treated water and wastewater. This section presents totals for the current year and a forecast ten years into the future.

Section III – Water and Wastewater Test Year and Forecast Revenue Requirement – outlines the process of analyzing the City’s current water and wastewater utility cost structure. The total current or “test year” revenue requirements are developed, and costs are functionalized between treatment, distribution/collection, administration and customer billing. Using the test year as a basis, costs are forecast for a ten-year period.

Section IV – Water and Wastewater Rate Design – summarizes rate recommendations presented to the City of Somerton City Council and Staff which would enable it to meet its revenue requirements over the next ten years. This section also presents an analysis of the impact of this rate plan.

Appendix A – presents a hard copy printout of the interactive Microsoft Excel spreadsheet model summaries developed for the City of Somerton to calculate water and wastewater current and future revenue requirements. The model automatically generates all calculations based on a set of defined user inputs and has an executive dashboard for users to develop real-time “what-if” scenarios.

Community Overview



The City of Somerton is located approximately 19 miles southwest of Yuma, Arizona. The City encompasses approximately 1.3 square miles and had an estimated population of 14,866 in 2016.

The City of Somerton owns its water rights. Furthermore, the City owns and operates both its water and wastewater treatment plants.

The City has a Council-Manager form of government in which the elected Mayor and City Council Members establish policy. Those policies are then implemented by the City Manager who is appointed by, and reports to,

the City Council. The City Council consists of five Council Members and the Mayor.

The City Manager operates much in the same way as a Chief Executive Officer of a corporation. The City Manager's Office is responsible for the day-to-day administration of the City’s government, including

managing the City's budget, the City's departments and operations, and programs for communicating with residents and employees.

Water and Wastewater Current Rates

Table I-1 summarizes the City's current water and wastewater rate structure.

TABLE I-1

CITY OF SOMERTON			
CURRENT WATER AND WASTEWATER RATES			
Water Rates		Wastewater Rates	
Residential Rates		Residential Wastewater Rates	
Minimum Charge (Includes 5,000 Gallons in Base)	\$ 11.50	Base Charge	\$ 36.50
Volume Rate (per 1,000 Gallons)	2.39	Non-Residential Wastewater Rates	
Commercial Rates		Minimum Charge	\$ 19.40
Minimum Charge (Includes 5,000 Gallons in Base)	\$ 13.63	Volume Rate (per 1,000 Gallons)	\$ 3.28
Volume Rate (per 1,000 Gallons)	2.63	Multi Family / Trailers Rates	
Multi Family / Trailers Rates		Base Charge	\$ 36.50
Minimum Charge (Includes 5,000 Gallons in Base)	\$ 12.54		
Volume Rate (per 1,000 Gallons)	2.51		
MESA ORANGE GROVE Rates			
Minimum Charge	\$ -		
Volume Rate (per 1,000 Gallons)			
0 - 3,000	\$ 2.00		
3,000 - 8,000	2.75		
8,001 - Above	3.31		

The City has not adjusted its rates since 2010. The water rate structure assesses a base charge for all rate classes except the Mesa Orange Grove customer class. The City does not currently charge the customer classes by meter size. The base charge includes 5,000 gallons for all customer classes except the Mesa Orange Grove customer class. For all customer classes, except the Mesa Orange Grove customer class, volumes in excess of the 5,000 gallons included in the base charge are billed based on a uniform rate per 1,000 gallons. For the Mesa Orange Grove customer class, consumption volume is billed based on tiered rates per 1,000 gallons.

All customer classes wastewater accounts are assessed a base charge and only commercial customer classes are assessed a uniform volume rate per 1,000 gallons consumption based on the water consumption.

Water and Wastewater Rate Comparison

Chart I-2 and Table I-3 compare the City’s monthly residential water and wastewater charges to surrounding cities in Arizona. Volumes of 10,000 gallons for water and 5,000 gallons for wastewater were used for the residential comparison as it represents typical usage levels for an average household.

The rate data is based on published rates and ordinances posted by each municipality on their website. These rates do not include sales tax, activation or other charges beyond the basic minimum and volume charges.

The following points are also notable:

- Many cities do not assess rates that recover the full cost of service, choosing instead to subsidize their water and wastewater utilities with other revenues or to defer needed repairs and maintenance at the expense of system reliability and integrity.
- Some cities use tax bonds to fund water/wastewater system construction. This results in lower rates but higher ad valorem taxes.
- Some cities charge residential customers by meter size while the City does not. The comparisons reflect 5/8” meters for the cities that charge by meter size.

CHART I-2

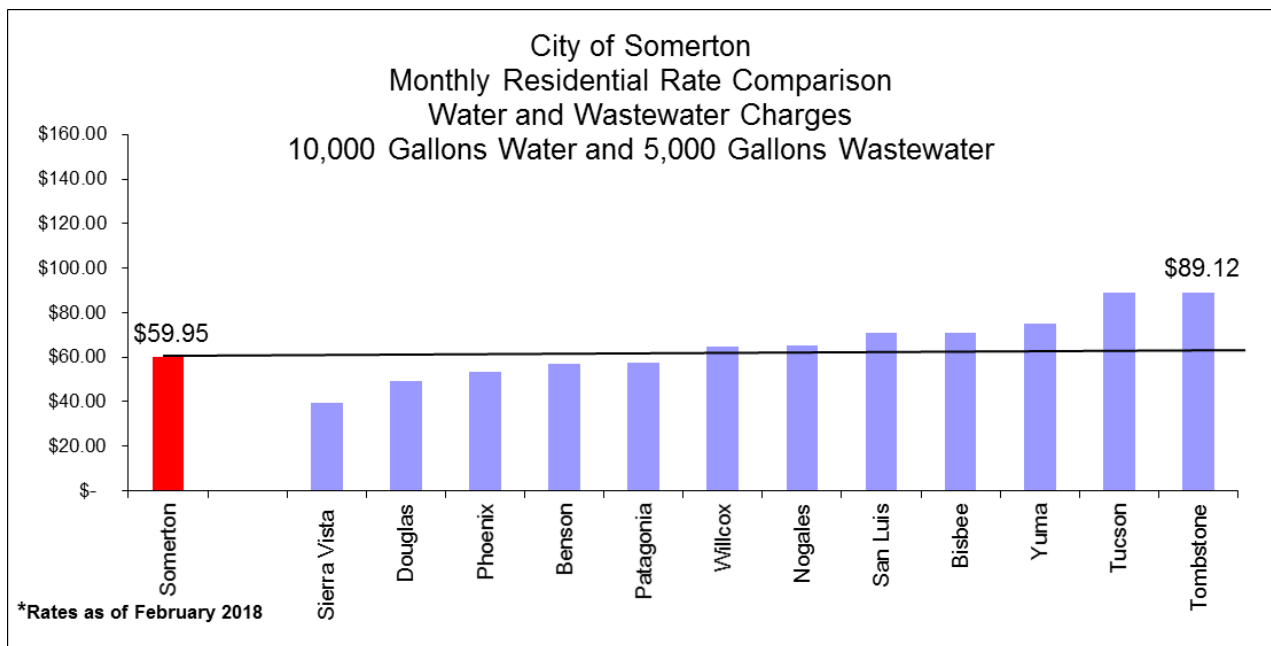


TABLE I-3

CITY OF SOMERTON						
MONTHLY RESIDENTIAL CHARGES -- 10,000 GALLONS WATER; 5,000 GALLONS WW						
	Median HH Income	Population	Water	Wastewater	Total	
Somerton	34,318	14,970	\$ 23.45	\$ 36.50	\$ 59.95	
Douglas	29,207	16,604	24.45	25.00	49.45	
San Luis	31,743	32,148	30.68	40.00	70.68	
Nogales	27,929	20,008	34.35	31.04	65.39	
Phoenix	49,328	1,615,017	32.01	21.22	53.23	
Sierra Vista	56,280	43,208	23.45	16.19	39.64	
Patagonia	21,375	878	28.05	29.50	57.55	
Benson	30,010	4,870	31.01	25.99	57.00	
Tucson	37,973	530,706	52.38	36.50	88.88	
Willcox	43,324	3,511	29.03	35.87	64.90	
Yuma	44,216	94,906	38.80	36.19	74.99	
Tombstone	30,921	1,300	57.03	32.09	89.12	
Bisbee	31,134	5,221	23.45	47.60	71.05	
Sample Average			\$ 32.93	\$ 29.05	\$ 64.76	

Source: Cities' Website ; US Census Bureau & municipal websites

SECTION II

Water & Wastewater Test Year and Forecast Volumes



In order to accurately forecast future revenues and expenses, it is necessary to examine current water and wastewater utility conditions. The first step in developing cost of service rates is to analyze patterns of usage, both for the system as a whole, and for specified customer classes.

For the City of Somerton, monthly water and wastewater records were reviewed for the period August 2014 through December 2017. These records provided summary information on the monthly water volumes distributed system-wide as well as the number of accounts for each period by defined customer class and the associated revenues. Additionally, these records provided the number of accounts and revenues monthly for all classifications of wastewater customers.

According to standard utility ratemaking methodology, in order to allocate revenue requirements equitably among system users, customers must be classified into relatively homogeneous groups with similar usage characteristics or service demands. Costs are then allocated to the customer classes in proportion to the usage characteristics of each class. For the water system, costs are typically allocated to customers based on their average and peak water demands. For the wastewater system, costs are allocated to customers based on their estimated wastewater flows, and in some cases, based on wastewater strengths.

The project team finds these customer class distinctions to be reasonable and appropriate, meeting the criteria of homogenous groups with similar usage patterns.

In this section, the City's functional customer classes and test year usage patterns will be thoroughly analyzed. A ten-year projection of customers and usage will also be presented. These forecasts, along with the revenue requirements, will form the basis of the proposed rate designs.

Water and Wastewater Customers and Accounts – Test Year and Ten-Year Forecast

The majority of the water accounts served by Somerton are residential accounts, with the balance being commercial, multi-family/trailers, and Mesa Orange Grove customers. Similarly, the majority of wastewater accounts are residential accounts with the remaining being commercial and multi-family customers. **Table II-1** presents total water accounts for the City for the test year and forecast period.

TABLE II-1

CITY OF SOMERTON					
FORECAST TOTAL CUSTOMERS WATER Customer Classes					
Fiscal Year	Residential	Commercial	Multi Family / Trailers	Mesa Orange Grove	Total
WATER Total Customers					
FY 2016	3,308	83	61	241	3,693
FY 2017	3,427	89	61	265	3,842
Nov 2016 - Oct 2017	3,459	89	57	267	3,872
TY 2018	3,511	93	49	277	3,930
FY 2019	3,616	96	49	291	4,052
FY 2020	3,725	99	49	305	4,178
FY 2021	3,837	102	49	321	4,308
FY 2022	3,952	105	49	337	4,442
FY 2023	4,070	108	49	354	4,581
FY 2024	4,192	111	49	371	4,724
FY 2025	4,318	114	49	390	4,871
FY 2026	4,448	118	49	409	5,024
FY 2027	4,581	121	49	430	5,181
WATER Annual New Customers					
FY 2017	119	6	-	24	149
Nov 2016 - Oct 2017	32	-	(4)	2	30
TY 2018	52	4	(8)	10	58
FY 2019	105	3	-	14	122
FY 2020	108	3	-	15	126
FY 2021	112	3	-	15	130
FY 2022	115	3	-	16	134
FY 2023	119	3	-	17	139
FY 2024	122	3	-	18	143
FY 2025	126	3	-	19	148
FY 2026	130	3	-	19	152
FY 2027	133	4	-	20	157

For each of the historical years, the average number of accounts for the year is shown and the growth reflects the difference from one fiscal year to the next. Overall water accounts are forecast to increase from **3,930** in the test year to **5,181** in FY 2027, an average annual increase of 3.12%. **Table II-2** presents the project team’s ten-year forecast of wastewater account growth. Wastewater accounts are forecast to increase from **3,998** in the test year to **5,096** in FY 2027.

TABLE II-2

CITY OF SOMERTON				
FORECAST TOTAL CUSTOMERS WASTEWATER Customer Classes				
	Residential	Commercial	Multi Family / Trailers	Total
WASTEWATER Total Customers				
FY 2016	3,169	77	529	3,775
FY 2017	3,297	79	531	3,907
Nov 2016 - Oct 2017	3,333	81	524	3,938
TY 2018	3,398	84	516	3,998
FY 2019	3,503	87	516	4,106
FY 2020	3,612	90	516	4,217
FY 2021	3,724	93	516	4,332
FY 2022	3,839	96	516	4,450
FY 2023	3,957	99	516	4,572
FY 2024	4,079	102	516	4,697
FY 2025	4,205	105	516	4,826
FY 2026	4,335	109	516	4,959
FY 2027	4,468	112	516	5,096
WASTEWATER Annual New Customers				
FY 2017	128	2	2	132
Nov 2016 - Oct 2017	36	2	(7)	31
TY 2018	101	5	(15)	91
FY 2019	105	3	-	108
FY 2020	108	3	-	111
FY 2021	112	3	-	115
FY 2022	115	3	-	118
FY 2023	119	3	-	122
FY 2024	122	3	-	125
FY 2025	126	3	-	129
FY 2026	130	3	-	133
FY 2027	133	4	-	137
NOTE: Multi-family represent total units in each building not total meters				

Historical and Forecast Water Consumption

Total water system consumption data was analyzed over the same time period as customer data. A combination of consumption over the past 12 months and historical trends were used as the basis for the development of the forecast water and wastewater volumes within the rate model.

The project team prepared a ten-year forecast of water usage based on the same principles on which customer accounts were projected. An annual combined growth rate of 2.90% for all customer classes. The results of this forecast for water usage are presented in **Table II-3** and **Chart II-4**.

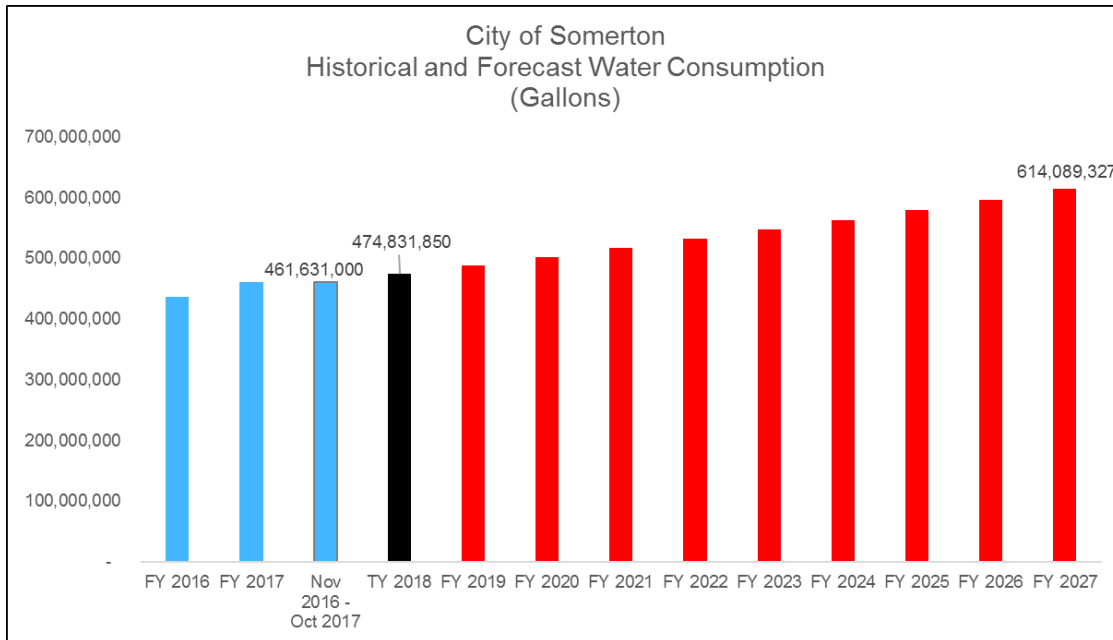
Projections contained in this report include adjustments based on the impacts of normal customer growth and the lifting of drought restrictions, and are designed to forecast usage under normal conditions.

With these adjustments, and assuming the drought restrictions are no longer in place, by FY 2027 water usage is expected to reach **614,089,327** gallons.

TABLE II-3

CITY OF SOMERTON					
FORECAST BILLED CONSUMPTION WATER Customer Classes					
	Residential	Commercial	Multi Family / Trailers	Mesa Orange Grove	Total
WATER Historical Volume					
FY 2016	369,058,000	16,804,000	33,115,000	17,915,000	436,892,000
FY 2017	386,219,000	17,792,000	35,950,000	20,402,000	460,363,000
Nov 2016 - Oct 2017	387,458,000	18,897,000	35,072,000	20,204,000	461,631,000
WATER Forecast Volume					
TY 2018	399,081,740	19,463,910	35,072,000	21,214,200	474,831,850
FY 2019	411,054,192	20,047,827	35,072,000	22,274,910	488,448,930
FY 2020	423,385,818	20,649,262	35,072,000	23,388,656	502,495,736
FY 2021	436,087,393	21,268,740	35,072,000	24,558,088	516,986,221
FY 2022	449,170,014	21,906,802	35,072,000	25,785,993	531,934,809
FY 2023	462,645,115	22,564,006	35,072,000	27,075,292	547,356,413
FY 2024	476,524,468	23,240,926	35,072,000	28,429,057	563,266,452
FY 2025	490,820,202	23,938,154	35,072,000	29,850,510	579,680,866
FY 2026	505,544,808	24,656,299	35,072,000	31,343,035	596,616,142
FY 2027	520,711,153	25,395,988	35,072,000	32,910,187	614,089,327

CHART II-4



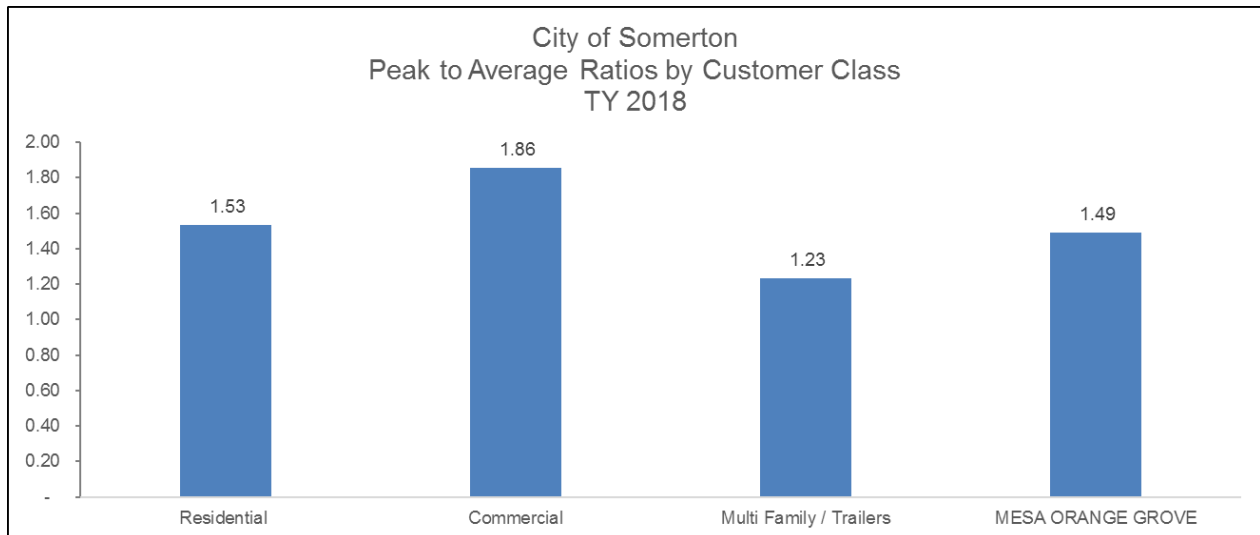
Peaking Factors

The cost of providing water to customers depends not only on the amount of water each class uses, but also on how that usage occurs over time. The maximum-day and maximum-hour peaking requirements of a water utility’s customers are an important influence on the utility’s costs. Because water utilities attempt to meet all of the demands of their customers, water systems are sized to meet customers’ peak requirements. Therefore, during off-peak periods, there are usually significant costs associated with the unused capacity of the system. These costs must be allocated to customers in proportion to the contribution of each customer class to the system peak, in order to develop equitable cost-based rates. Thus, it is necessary to determine the peak rate of use relative to the average rate of use for each class. This ratio is called a **Peaking Factor**.

The calculation of peaking factors for individual classes relies on available pumping and consumption information as well as professional judgment. It is accepted practice in the water industry to develop peaking factor estimates based on standard formulas using system peak day information and monthly customer class usage records. This is a conservative methodology, since customer class peaking factors based on peak months will inevitably be lower than the system-wide peaking factor, which is based on the peak day.

Based on AWWA guidelines, the customer class peaking factors calculated in this study are for non-coincidental peaks. The peaking factors developed for this analysis are based on the annualized water consumption by customer class for November 2016 to October 2017. The calculations of the peaking factors by class are presented graphically in **Chart II-5**.

CHART II-5



SECTION III

Water and Wastewater Revenue Requirement



In this section of the water and wastewater rate study and long-term financial plan, the City of Somerton's test year and forecast water and wastewater utility revenue requirements are developed. The test year consists of the City's fiscal year, July 1, 2017 through June 30, 2018. The estimates presented in this section are based on the City's proposed budget for FY 2018.

The calculation of a revenue requirement differs from a utility's budget in that it represents only that amount that must be raised through the City's user rates. This means that non-rate revenue (such as reconnection fees, late payment charges and interest) must be subtracted from the budgeted operating and capital expenditures to determine the net revenue requirement to be raised from rates.

As is typical for publicly owned utilities, the City of Somerton's system revenue requirements were developed using the cash basis of ratemaking. Under the cash basis, as defined by the AWWA Manual M-1,

system revenue requirements consist of cash expenditures and other financial commitments (such as debt service coverage or reserves) that must be met through system operating revenues and other revenue sources.

All data used in the development of the revenue requirements was obtained from the financial statements, budgets and other information provided by the City. Calculation summaries are presented in the rate model provided in **Appendix A** in conjunction with this report. For rate design purposes, revenue requirements are developed separately for the water and wastewater systems.

The assumptions utilized in this expense forecast will be thoroughly detailed in this section of the report. These assumptions are critical to the development of both the revenue requirement and the ultimate rate recommendation. The project team reviewed these assumptions with the City staff and considers all to be consistent with staff recommendations.

In this section, current and forecast Operating Costs, Capital Outlays, Transfers, and Debt Service will be examined first. Non-rate revenues will be subtracted from the total to yield the Net Revenue Requirement.

Operating Expenses and Capital Outlays – Test Year

Table III-1 on the following page summarizes the test year FY 2018 water system operating expenses and capital outlays in detail by department. Table III-2 on the following page summarizes the test year FY 2018 wastewater system operating expenses and capital outlays in detail by department.

The following is noteworthy about these tables:

- There are two departments within the City’s Water Fund, each with their own budget: Water Department and Wastewater Department.
- Each department’s budget includes one or more of the following divisions:
 - **Personnel**, which includes all staff costs, such as salary and benefit expenses, and payroll taxes.
 - **Operating**, which captures the primary operating expenses such as office supplies, chemical supplies, postage, minor tools and equipment, maintenance, equipment rentals, and other operating expenses.
 - **Capital Outlays**, which include the capital outlays for the water and wastewater operations.
 - **Debt Service**, these expenses include the debt service. Principal and interest are reported separately in this analysis.
 - **Transfers**, includes transfers to the General Fund and other funds from the Water and Wastewater Fund.

Tables III-1 and III-2 also allocate total budget expenses by functionality and general ratemaking principles. As the tables show, total operating expenses, transfers, and capital outlays in the test year are **\$2,382,131**, of which \$1,210,111 is for the water utility and \$1,172,019 is for the wastewater utility.

TABLE III-1

CITY OF SOMERTON					
WATER Operating Expenses, Transfers and Capital Outlays					
SCENARIO:	2018 09 28 -- Scenario 1 -- COS Adjustments				
	Net Budget	Supply	Distribution	Admin	Customer Billing
Operating & Maintenance					
Personnel	\$ 712,032	\$ 197,233	\$ 197,233	\$ 214,322	\$ 103,245
Operating	498,079	233,499	108,996	137,565	18,019
Total Operating & Maintenance	1,210,111	430,732	306,229	351,886	121,263
Transfers	-	-	-	-	-
Capital Outlays	-	-	-	-	-
Total WATER Operating Expenses, Transfers and Capital Outlays	1,210,111	430,732	306,229	351,886	121,263

TABLE III-2

CITY OF SOMERTON					
WASTEWATER Operating Expenses, Transfers and Capital Outlays					
SCENARIO:	2018 09 28 -- Scenario 1 -- COS Adjustments				
	Net Budget	Treatment	Collection	Admin	Customer Billing
<u>Operating & Maintenance</u>					
Personnel	\$ 599,221	\$ 299,611	\$ 299,611	\$ -	\$ -
Operating	572,798	269,900	111,600	173,427	17,871
Total Operating & Maintenance	1,172,019	569,511	411,211	173,427	17,871
Transfers	-	-	-	-	-
Capital Outlays	-	-	-	-	-
Total WATER Operating Expenses, Transfers and Capital Outlays	1,172,019	569,511	411,211	173,427	17,871

Operating Expenses and Capital Outlays – Ten Year Forecast

Table III-3 presents the water and wastewater utility operating expense and capital outlay forecast for the ten-year period FY 2018 – FY 2027. Details behind these calculations can be found in the rate model accompanying this report in **Appendix A**. This forecast is based on the following set of assumptions:

- Most operating costs are expected to increase at an annual rate of 3.0%, which is approximately equivalent to the rate of inflation.
- Certain expenses will increase at above-inflation rates, to reflect the rapid rate of increase of these costs. These expenses include chemicals, workers’ compensation, Medicare and insurance.
- Capital outlays are not specifically budgeted, and are instead assumed to be funded through revenues acquired for debt coverage purposes.

TABLE III-3

CITY OF SOMERTON						
FORECAST OPERATING EXPENSES AND CAPITAL OUTLAYS						
SCENARIO:						
2018 09 28 -- Scenario 1 -- COS Adjustments						
	Operating Expenses	Capital Outlays	Transfers & Contingencies	Total Operating/ Capital Outlays		
WATER Revenue Requirement						
2018	\$ 1,210,111	\$ -	\$ -	\$ 1,210,111		
2019	1,284,584	-	-	1,284,584		
2020	1,389,539	-	-	1,389,539		
2021	1,462,753	-	-	1,462,753		
2022	1,540,121	-	-	1,540,121		
2023	1,621,896	-	-	1,621,896		
2024	1,708,349	-	-	1,708,349		
2025	1,799,767	-	-	1,799,767		
2026	1,896,458	-	-	1,896,458		
2027	1,998,750	-	-	1,998,750		
WASTEWATER Revenue Requirement						
2018	\$ 1,172,019	\$ -	\$ -	\$ 1,172,019		
2019	1,244,080	-	-	1,244,080		
2020	1,309,048	-	-	1,309,048		
2021	1,415,142	-	-	1,415,142		
2022	1,489,579	-	-	1,489,579		
2023	1,568,261	-	-	1,568,261		
2024	1,651,447	-	-	1,651,447		
2025	1,739,418	-	-	1,739,418		
2026	1,832,468	-	-	1,832,468		
2027	1,930,913	-	-	1,930,913		
TOTAL Revenue Requirement						
2018	\$ 2,382,131	\$ -	\$ -	\$ 2,382,131		
2019	2,528,663	-	-	2,528,663		
2020	2,698,587	-	-	2,698,587		
2021	2,877,895	-	-	2,877,895		
2022	3,029,700	-	-	3,029,700		
2023	3,190,156	-	-	3,190,156		
2024	3,359,796	-	-	3,359,796		
2025	3,539,185	-	-	3,539,185		
2026	3,728,926	-	-	3,728,926		
2027	3,929,663	-	-	3,929,663		

As shown in the table, water and wastewater utility operating expenses and capital outlays in the test year are \$2,382,131, and by FY 2027 water and wastewater utility operating expenses and capital outlays are expected to reach \$3,929,663.

Capital Improvement Plan

The purpose of the CIP is to rehabilitate and maintain the existing system, expand the system and to service new growth. In addition, the project team consulted with City Staff to forecast CIP through the end of the rate plan period.

The capital improvement plan is an integral part of any long-term rate and financing plan. **Table III-4** reveals that the City’s current CIP over the next ten years is estimated to be **\$1,345,419** for the water system and **\$695,149** for the wastewater system. The City intends to fund a majority of the CIP projects with revenue-funded long-term debt.

Further, the City is forecast to issue revenue bonds totaling **\$2,250,000** for the currently identified and future water and wastewater system projects. The City plans to issue water and wastewater debt in FY 2020 to pay for the CIP. If the City’s makes significant changes to the CIP provided by the City staff than the assumption in the rate model will need to be revised.

Table III-4

CITY OF SOMERTON		CAPITAL IMPROVEMENT PLAN PROJECTS ASSIGNED FUNDING THROUGH AVAILABLE RESOURCES				
SCENARIO: 2018 09 28 – Scenario 1 – COS Adjustments		Total	FY 2018	FY 2019	FY 2020	FY 2021
WATER						
WTP Completion	\$	95,419	\$ 95,419	\$ -	\$ -	\$ -
Repair Water Tanks 1 & 2		50,000	50,000	-	-	-
12" Water Main Extension along CO. 16TH La Mesa		300,000	300,000	-	-	-
Construction of New Water Tank for WTP		800,000	-	800,000	-	-
Repaint Water Tank No.2		100,000	-	-	100,000	-
Total Water CIP	\$	1,345,419	\$ 445,419	\$ 800,000	\$ 100,000	\$ -
WASTEWATER						
WWTP Completion	\$	346,149	\$ 346,149	\$ -	\$ -	\$ -
Design and Built Biosolids Temporary Storage		60,000	60,000	-	-	-
Replace pumps, wet well and Force Main at Zocalo Lift Station		141,000	141,000	-	-	-
New Bobcat		11,000	11,000	-	-	-
Waste Water Master Plan Update		75,000	75,000	-	-	-
New Tractor Backhoe		27,000	-	27,000	-	-
Purchase and Replace Carbon at the WWTP Odor Control Unit		35,000	-	-	-	35,000
Total Wastewater CIP	\$	695,149	\$ 633,149	\$ 27,000	\$ -	\$ 35,000
Total Water and Wastewater CIP	\$	2,040,568	\$ 1,078,568	\$ 827,000	\$ 100,000	\$ 35,000

Existing and Forecast Debt Service

Table III-5 presents current and forecast debt service assuming that the City issues new water and/or Wastewater revenue bond in FY 2020 to fund the CIP. The City currently has eight bond issues outstanding in the Test Year that was issued to fund both water and wastewater system improvements. Debt service on these issues is currently being paid from contributions from the City’s Utility System Revenue. For FY 2018 forward, it is projected that bonds will be repaid entirely with Utility System Revenues. Future revenue debt is assumed to have a 25-year term, 3% interest rate, 1% issuing cost and level principal and interest payments.

As shown in the rate model presented in Appendix A, the City is assumed to issue approximately **\$1,500,000** in water-related debt and **\$750,000** in wastewater-related debt in FY 2020.

These assumptions are preliminary in nature and subject to change. Should the City Council choose to issue more or less revenue debt than assumed in this study, or should different financing terms be available at the time the debt is issued, then the rate plans contained in this study may require revision.

Table III-5

CITY OF SOMERTON						
CURRENT AND FORECAST DEBT SERVICE						
SCENARIO: 2018 09 28 -- Scenario 1 -- COS Adjustments						
Year	Water		Wastewater		Total	
	Current	Forecast	Current	Forecast		
TY 2018	\$ 158,513	\$ -	\$ 767,832	\$ -	\$ 926,345	
FY 2019	159,649	-	768,180	-	927,829	
FY 2020	160,818	-	767,704	-	928,522	
FY 2021	162,022	87,003	767,785	43,502	1,060,312	
FY 2022	163,261	87,003	768,413	43,502	1,062,179	
FY 2023	164,538	87,003	773,811	43,502	1,068,853	
FY 2024	165,852	87,003	430,156	43,502	726,513	
FY 2025	167,205	87,003	429,860	43,502	727,569	
FY 2026	168,598	87,003	420,126	43,502	719,229	
FY 2027	170,033	87,003	364,455	43,502	664,993	

Non-Rate Revenues

Although sales revenues constitute the majority of the revenue received by the City of Somerton for water and wastewater service, a certain amount of revenue is accrued from non-rate sources. These revenues include other general revenues, miscellaneous charges, impact fee transfers and contractual receipts. These non-rate revenues are subtracted from the overall budget to determine the revenue requirement to be raised from rates. Non-rate revenues are conservatively forecasted not to increase during the next ten years. Annual non-rate revenue totals are presented in **Table III-6**.

Table III-6

CITY OF SOMERTON					
FORECAST NON-RATE REVENUES					
SCENARIO:					
2018 09 28 – Scenario 1 – COS Adjustments					
	Water		Wastewater		Total Water & WW
2018	\$	175,616	\$	24,561	\$ 200,177
2019		175,616		24,561	200,177
2020		175,616		24,561	200,177
2021		175,616		24,561	200,177
2022		175,616		24,561	200,177
2023		175,616		24,561	200,177
2024		175,616		24,561	200,177
2025		175,616		24,561	200,177
2026		175,616		24,561	200,177
2027		175,616		24,561	200,177

Net Revenue Requirement

Table III-7 presents the test year and ten-year forecast for the City’s net revenue requirement to be raised from rates for the water and wastewater utility for the test year 2018 and forecast period. The water and wastewater net revenue requirement is expected to increase from **\$3,108,298** in FY 2018 to **\$4,394,478** in FY 2027.

Table III-7

CITY OF SOMERTON						
CURRENT AND FORECAST NET REVENUE REQUIREMENT						
SCENARIO: 2018 09 28 -- Scenario 1 -- COS Adjustments						
	Operating Expenses	Capital Outlays	Debt Service	Total Cost of Service	Less Non-Rate Revenues	Net Revenue Requirement
WATER Revenue Requirement						
TY 2018	\$ 1,210,111	\$ -	\$ 158,513	\$ 1,368,625	\$ 175,616	\$ 1,193,008
FY 2019	1,284,584	-	159,649	1,444,233	175,616	1,268,616
FY 2020	1,389,539	-	160,818	1,550,357	175,616	1,374,741
FY 2021	1,462,753	-	249,025	1,711,778	175,616	1,536,162
FY 2022	1,540,121	-	250,264	1,790,385	175,616	1,614,769
FY 2023	1,621,896	-	251,541	1,873,437	175,616	1,697,820
FY 2024	1,708,349	-	252,855	1,961,204	175,616	1,785,587
FY 2025	1,799,767	-	254,208	2,053,975	175,616	1,878,359
FY 2026	1,896,458	-	255,601	2,152,060	175,616	1,976,443
FY 2027	1,998,750	-	257,036	2,255,785	175,616	2,080,169
WASTEWATER Revenue Requirement						
TY 2018	\$ 1,172,019	\$ -	\$ 767,832	\$ 1,939,851	\$ 24,561	\$ 1,915,290
FY 2019	1,244,080	-	768,180	2,012,260	24,561	1,987,699
FY 2020	1,309,048	-	767,704	2,076,752	24,561	2,052,191
FY 2021	1,415,142	-	811,287	2,226,429	24,561	2,201,868
FY 2022	1,489,579	-	811,914	2,301,494	24,561	2,276,932
FY 2023	1,568,261	-	817,313	2,385,573	24,561	2,361,012
FY 2024	1,651,447	-	473,658	2,125,105	24,561	2,100,544
FY 2025	1,739,418	-	473,361	2,212,779	24,561	2,188,218
FY 2026	1,832,468	-	463,628	2,296,096	24,561	2,271,534
FY 2027	1,930,913	-	407,957	2,338,870	24,561	2,314,309
TOTAL Revenue Requirement						
TY 2018	\$ 2,382,131	\$ -	\$ 926,345	\$ 3,308,476	\$ 200,177	\$ 3,108,298
FY 2019	2,528,663	-	927,829	3,456,493	200,177	3,256,315
FY 2020	2,698,587	-	928,522	3,627,109	200,177	3,426,931
FY 2021	2,877,895	-	1,060,312	3,938,207	200,177	3,738,029
FY 2022	3,029,700	-	1,062,179	4,091,879	200,177	3,891,701
FY 2023	3,190,156	-	1,068,853	4,259,010	200,177	4,058,832
FY 2024	3,359,796	-	726,513	4,086,309	200,177	3,886,131
FY 2025	3,539,185	-	727,569	4,266,754	200,177	4,066,577
FY 2026	3,728,926	-	719,229	4,448,155	200,177	4,247,978
FY 2027	3,929,663	-	664,993	4,594,655	200,177	4,394,478

Water Utility Cost Functionalization

Once the total water and wastewater system costs have been identified, the next step in the rate development process is to isolate the costs associated with each system function. Some of these expenditures are a function of base water demand; others are based on the peak demands placed on the system. Certain costs are associated with serving customers regardless of the volume of water use or wastewater discharge. The basic steps used to allocate the City’s water revenue requirements include the following:

1. Each system’s costs (revenue requirements) are categorized by utility function (i.e. treatment, distribution, administrative, customer). This process is known as *functionalization*.

2. Functionalized costs are classified based on the service characteristics or the types of demand served by the utility (base and maximum day). This process is known as *classification*.
3. Costs by service characteristic are allocated to customer classes in proportion to the service demands demonstrated by each class.

This three-step process allows for the allocation of system costs in the same terms as customer classes. The approaches described in this section follow standard industry practices. Water system costs are allocated to the following functions:

Treatment – the process by which raw water is converted to potable water

Distribution – the lines that carry water to individual customers’ properties

Administration – miscellaneous overhead and other non-operating costs

Customer Billing – the processes involved in billing and providing other services to customers

The project team allocated operating budget line item expenses individually to system functions based on general guidelines, specific research and input from the City of Somerton staff. The results of the allocation process for the test year are summarized in **Table III-8**.

TABLE III-8

CITY OF SOMERTON			
TEST YEAR WATER COST FUNCTIONALIZATION			
SCENARIO: 2018 09 28 -- Scenario 1 -- COS Adjustments			
FY 2018			
Function	Revenue Requirement	Percent	
Treatment	\$ 480,266	40.3%	
Distribution	266,935	22.4%	
Administration	306,734	25.7%	
Customer	139,074	11.7%	
Flood Irrigation	-	0.0%	
Total	1,193,008	100.0%	

Water Utility Cost Classification

The allocation of functionalized water system costs to service characteristics follows the base-extra capacity cost allocation method recommended by AWWA. Using this method, costs are segregated into the following categories:

Base costs – capital costs and O&M expenses associated with service to customers under average demand conditions. This category does not include any costs attributable to variations in water use resulting from peaks in demand. Base costs tend to vary directly with the total quantity of water used.

Maximum Day/Extra Capacity costs – costs attributable to facilities that are designed to meet peaking requirements. These costs include capital and operating charges for additional plant and system capacity beyond that required for average usage.

Customer Billing costs – costs associated with any aspect of customer service, including billing, accounting, and meter services. These costs are independent of the amount of water used and the size of the customer’s meter, and are not subject to peaking factors.

According to AWWA Manual M-1, in the base-extra capacity method, care must be taken in separating costs between those devoted to base capacity and those devoted to extra capacity. The peak to average factor is calculated by dividing the volume on the peak day of the year by the average daily volume. Facilities designed to meet maximum-day requirements, such as the treatment and distribution functions, are allocated 50% (1/2.0) to base, and 50% to extra capacity (Max Day). This means that facilities designed to meet maximum-day requirements, such as the treatment and distribution functions, are allocated 50% to base, and 50% to extra capacity.

All customer service-related costs are allocated 100% to customer billing. Administration costs are generally not directly-assignable to individual classifications. Therefore, it is standard rate-making practice to allocate these costs on an indirect basis to service characteristics.

The system-wide costs by service characteristic are shown in **Table III-9**. As with cost functionalization, these percentages are not expected to change significantly in the forecast period.

TABLE III-9

CITY OF SOMERTON			
TEST YEAR WATER COST CLASSIFICATION			
SCENARIO: 2018 09 28 -- Scenario 1 -- COS Adjustments			
Function	FY 2018 Revenue Requirement		Percent
Base	\$	695,977	58.34%
Maximum Day		347,988	29.17%
Customer		149,044	12.49%
Total		1,193,008	100.0%

Water Utility Cost Allocation

Allocation of costs by service characteristic to customer classes is based on the proportionate use levels of each characteristic by each class. The total water utility costs by customer class for the test year are summarized in **Table III-10** and for the ten-year forecast period in **Table III-11**.

TABLE III-10

CITY OF SOMERTON			
TEST YEAR WATER COST ALLOCATION			
SCENARIO: 2018 09 28 -- Scenario 1 -- COS Adjustments			
FY 2018			
Function	Revenue Requirement	Percent	
Residential	\$ 1,016,676	85.2%	
Commercial	55,421	4.6%	
Multi Family / Trailers	64,678	5.4%	
Mesa Orange Grove	56,233	4.7%	
Total	1,193,008	100.0%	

TABLE III-11

CITY OF SOMERTON						
FORECAST WATER COST ALLOCATION						
SCENAR 2018 09 28 -- Scenario 1 -- COS Adjustments						
Year	Residential	Commercial	Multi Family / Trailers	Mesa Orange Grove	Total	
TY 2018	\$ 1,016,676	\$ 55,421	\$ 64,678	\$ 56,233	\$ 1,193,008	
FY 2019	1,081,811	58,972	66,841	60,992	1,268,616	
FY 2020	1,172,996	63,943	70,390	67,411	1,374,741	
FY 2021	1,311,418	71,490	76,431	76,823	1,536,162	
FY 2022	1,379,166	75,184	78,065	82,354	1,614,769	
FY 2023	1,450,689	79,084	79,748	88,299	1,697,820	
FY 2024	1,526,210	83,202	81,483	94,692	1,785,587	
FY 2025	1,605,970	87,552	83,271	101,567	1,878,359	
FY 2026	1,690,222	92,147	85,113	108,962	1,976,443	
FY 2027	1,779,237	97,001	87,013	116,918	2,080,169	

Wastewater Utility Cost Functionalization and Classification

Wastewater system costs are allocated to the following functions:

Treatment -- Volume – the costs associated with treating wastewater volume discharges

Collection – the lines that transport wastewater from customers’ properties to the wastewater treatment plant

Administration – miscellaneous overhead and other non-operating costs

Customer Billing – the processes involved in billing and other services to customers

As was the case for the water system, wastewater utility operating budget line item expenses are allocated individually to functions. The results of the allocation process are presented on **Table III-12**. As with the water utility, these percentages are not forecast to change significantly during the next ten years.

TABLE III-12

CITY OF SOMERTON			
TEST YEAR WASTEWATER COST FUNCTIONALIZATION			
SCENARIO: 2018 09 28 -- Scenario 1 – COS Adjustments			
Function	FY 2018 Revenue Requirement		Percent
Treatment	\$	1,320,410	68.9%
Collection		406,004	21.2%
Administration		171,231	8.9%
Customer		<u>17,645</u>	<u>0.9%</u>
Reclaimed Water		-	0.0%
Total		1,915,290	100.0%

Wastewater Utility Cost Allocation

Allocation of wastewater utility costs by service characteristic to customer classes is performed in the same manner as described for the water utility. The total wastewater utility costs by customer class for the test year are summarized in **Table III-13** and for the ten-year forecast period in **Table III-14**.

TABLE III-13

CITY OF SOMERTON			
TEST YEAR WASTEWATER COST ALLOCATION			
SCENARIO: 2018 09 28 -- Scenario 1 -- COS Adjustments			
Function	FY 2018 Revenue Requirement	Percent	
Residential	\$ 1,693,252	88.4%	
Commercial	74,608	3.9%	
Multi Family / Trailers	147,430	7.7%	
Total	1,915,290	100.0%	

TABLE III-14

CITY OF SOMERTON					
FORECAST WASTEWATER COST ALLOCATION					
SCENARIO: 2018 09 28 -- Scenario 1 -- COS Adjustments					
Year	Residential	Commercial	Multi Family / Trailers	Total	
TY 2018	\$ 1,693,252	\$ 74,608	\$ 147,430	\$ 1,915,290	
FY 2019	1,761,198	77,593	148,907	1,987,699	
FY 2020	1,822,303	80,278	149,609	2,052,191	
FY 2021	1,959,367	86,313	156,187	2,201,868	
FY 2022	2,030,345	89,432	157,155	2,276,932	
FY 2023	2,109,548	92,914	158,550	2,361,012	
FY 2024	1,880,369	82,740	137,434	2,100,544	
FY 2025	1,962,584	86,352	139,282	2,188,218	
FY 2026	2,041,080	89,797	140,657	2,271,534	
FY 2027	2,083,243	91,631	139,435	2,314,309	

SECTION IV

Water and Wastewater Rate Design



Rate design involves determining charges for each class of customers that will generate a desired level of revenue in accordance with AWWA and other industry cost of service rate-making principles. The water and wastewater rates developed in this section are designed to recover the test year and forecast revenue requirements while providing funding for the identified capital improvements and existing debt service.

In this section the project team presents the final recommended rate plans for the City under two scenarios. These scenarios are as follows:

Scenario I – COS Adjustments – this scenario assumes that the City immediately implements the rate adjustments required to fund the cost of service in each year of the ten year forecast. This scenario requires more significant adjustments in the initial years with only nominal adjustments in subsequent years.

Scenario II – Phased In Adjustments – this scenario assumes that the City implements rate adjustments in similar increments over a longer period of time. This scenario results in a “smoothing out” or consistent set of adjustments, though it also result in less revenue in the initial years of the forecast.

Scenario I – COS Adjustments

Table IV-1 presents a summary of the Scenario I water rate plan proposed for all customer classes. **Table IV-2** presents a summary of the Scenario I wastewater rate plan proposed for all customer classes. **Table IV-3** presents a summary of the impact of this scenario on monthly customer charges.

The following is notable about this scenario:

- Scenario I implements higher rate increases in the first years and lower rate increases in the outer years.
- While the rate plan presents a forecast of rates for ten years, the project team recommends that the City adopt a three-year rate plan and suggests an update to revise the rate model assumptions in FY 2021 to make any needed modifications to future rate plans.

- Given the potential for unexpected events, this will allow the City to incorporate any changes to costs, volumes or growth assumptions that may occur during that time.
- The most significant impact on rates will be debt issued to fund the CIP. The initial cost of service and rate proposal assumes that the Utility rate adjustments will be funded on a stand-alone basis, whereby debt service will be fully funded through rates.
- The scenarios also assume that debt will be used to fund the majority of the current 10-year Capital Improvement Plan.
- Uniform adjustments are applied to the existing base and volumetric rates for each rate class in FY 2019 and the forecast period.

The projected rate revenues developed in this section are forecast to be sufficient to fund all operating and current scheduled capital obligations starting FY 2020 for Scenario I. Rate revenues are forecast to be sufficient to fund the water and wastewater existing debt service and future debt service over the forecast period.

TABLE IV-1

CITY OF SOMERTON		Proposed Water Rate Plan									
Scenario: 2018 09 28 – Scenario 1 – COS Adjustments		Current	Effective Jan-19	Effective Jan-20	Effective Jan-21	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25	Effective Jan-26	Effective Jan-27
Water Rates – Residential											
Monthly Minimum Charge –All Meters		\$ 11.50	\$ 13.00	\$ 14.29	\$ 15.72	\$ 16.04	\$ 16.36	\$ 16.69	\$ 17.02	\$ 17.36	\$ 17.71
<u>Volume Rate Per 1,000 Gal</u>											
5,000	Above	2.39	2.70	2.97	3.27	3.33	3.40	3.47	3.54	3.61	3.68
Water Rates – Commercial											
Monthly Minimum Charge –All Meters		13.63	15.40	16.94	18.64	19.01	19.39	19.78	20.17	20.58	20.99
<u>Volume Rate Per 1,000 Gal</u>											
5,000	Above	2.63	2.97	3.27	3.60	3.67	3.74	3.82	3.89	3.97	4.05
Water Rates – Multi Family / Trailers											
Monthly Minimum Charge –All Meters		12.54	14.17	15.59	17.15	17.49	17.84	18.20	18.56	18.93	19.31
<u>Volume Rate Per 1,000 Gal</u>											
5,000	Above	2.51	2.84	3.12	3.43	3.50	3.57	3.64	3.71	3.79	3.86
Water Rates – MESA ORANGE GROVE											
<u>Volume Rate Per 1,000 Gal</u>											
-	3,000	2.00	2.26	2.49	2.73	2.79	2.85	2.90	2.96	3.02	3.08
3,001	8,000	2.75	3.11	3.42	3.76	3.84	3.91	3.99	4.07	4.15	4.23
8,001	Above	3.31	3.74	4.11	4.53	4.62	4.71	4.80	4.90	5.00	5.10

TABLE IV-2

CITY OF SOMERTON		Proposed Wastewater Rate Plan									
Scenario: 2018 09 28 -- Scenario 1 -- COS Adjustments											
	Current	Effective Jan-19	Effective Jan-20	Effective Jan-21	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	
Wastewater Rates -- Residential											
Monthly Charge --All Meters	\$ 36.50	\$ 40.52	\$ 44.16	\$ 45.04	\$ 45.95	\$ 46.86	\$ 47.80	\$ 48.76	\$ 49.73	\$ 50.73	
Wastewater Rates -- Commercial											
Monthly Charge --All Meters	19.40	21.53	23.47	23.94	24.42	24.91	25.41	25.92	26.43	26.96	
Volume Rate Per 1,000 Gal	3.28	3.64	3.97	4.05	4.13	4.21	4.30	4.38	4.47	4.56	
Wastewater Rates -- Multi Family / Trailers											
Monthly Charge --All Meters	36.50	40.52	44.16	45.04	45.95	46.86	47.80	48.76	49.73	50.73	

TABLE IV-3

CITY OF SOMERTON		Impact on Monthly Customer Charges									
Scenario: 2018 09 28 -- Scenario 1 -- COS Adjustments											
	Current	Effective Jan-19	Effective Jan-20	Effective Jan-21	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	
Residential Average Monthly Bill											
5,000 Gal Total	\$ 48.00	\$ 53.51	\$ 58.46	\$ 60.77	\$ 61.98	\$ 63.22	\$ 64.49	\$ 65.78	\$ 67.09	\$ 68.44	
Water & WW Increase -- \$		5.51	4.95	2.31	1.22	1.24	1.26	1.29	1.32	1.34	
10,000 Gal Total	\$ 59.95	\$ 67.01	\$ 73.31	\$ 77.11	\$ 78.65	\$ 80.22	\$ 81.83	\$ 83.46	\$ 85.13	\$ 86.84	
Water & WW Increase -- \$		7.06	6.30	3.80	1.54	1.57	1.60	1.64	1.67	1.70	
Commercial Average Monthly Bill											
25,000 Gal Total	\$ 167.63	\$ 187.39	\$ 205.01	\$ 215.69	\$ 220.01	\$ 224.41	\$ 228.90	\$ 233.47	\$ 238.14	\$ 242.91	
Water & WW Increase -- \$		19.76	17.61	10.69	4.31	4.40	4.49	4.58	4.67	4.76	

Scenario II – Phased Adjustments

Table IV-4 presents a summary of the Scenario II water rate plan proposed for all customer classes. Table IV-5 presents a summary of the Scenario II wastewater rate plan proposed for all customer classes. Table IV-6 presents a summary of the impact of this scenario on monthly customer charges.

The following is notable about this scenario:

- Scenario II implements uniform adjustments throughout the forecast period.

- While the rate plan presents a forecast of rates for ten years, the project team recommends that the City adopt a three-year rate plan and suggests an update to revise the rate model assumptions in FY 2021 to make any needed modifications to future rate plans.
- Given the potential for unexpected events, this will allow the City to incorporate any changes to costs, volumes or growth assumptions that may occur during that time.
- The most significant impact on rates will be debt issued to fund the CIP. The initial cost of service and rate proposal assumes that the Utility rate adjustments will be funded on a stand-alone basis, whereby debt service will be fully funded through rates.
- The scenarios also assume that debt will be used to fund the majority of the current 10-year Capital Improvement Plan.
- Uniform adjustments are applied to the existing base and volumetric rates for each rate class in FY 2019 and the forecast period.

The projected rate revenues developed in this section are forecast to be sufficient to fund all operating and current scheduled capital obligations starting FY 2021 for Scenario II. Rate revenues are forecast to be sufficient to fund the water and wastewater existing debt service and future debt service over the forecast period.

TABLE IV-4

CITY OF SOMERTON		Proposed Water Rate Plan									
Scenario: 2018 09 28 -- Scenario II Uniform Adjustments											
	Current	Effective Jan-19	Effective Jan-20	Effective Jan-21	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	
Water Rates -- Residential											
Monthly Minimum Charge --All Meters	\$ 11.50	\$ 12.19	\$ 12.92	\$ 13.70	\$ 14.52	\$ 15.39	\$ 15.70	\$ 16.01	\$ 16.33	\$ 16.66	
<u>Volume Rate Per 1,000 Gal</u>											
5,000 Above	2.39	2.53	2.69	2.85	3.02	3.20	3.26	3.33	3.39	3.46	
Water Rates -- Commercial											
Monthly Minimum Charge --All Meters	13.63	14.45	15.31	16.23	17.21	18.24	18.60	18.98	19.36	19.74	
<u>Volume Rate Per 1,000 Gal</u>											
5,000 Above	2.63	2.79	2.96	3.13	3.32	3.52	3.59	3.66	3.73	3.81	
Water Rates -- Multi Family / Trailers											
Monthly Minimum Charge --All Meters	12.54	13.29	14.09	14.94	15.83	16.78	17.12	17.46	17.81	18.16	
<u>Volume Rate Per 1,000 Gal</u>											
5,000 Above	2.51	2.66	2.82	2.99	3.17	3.36	3.43	3.49	3.56	3.64	
Water Rates -- MESA ORANGE GROVE											
<u>Volume Rate Per 1,000 Gal</u>											
- 3,000	2.00	2.12	2.25	2.38	2.52	2.68	2.73	2.78	2.84	2.90	
3,001 8,000	2.75	2.92	3.09	3.28	3.47	3.68	3.75	3.83	3.91	3.98	
8,001 Above	3.31	3.51	3.72	3.94	4.18	4.43	4.52	4.61	4.70	4.79	

TABLE IV-5

CITY OF SOMERTON		Proposed Wastewater Rate Plan									
Scenario: 2018 09 28 -- Scenario II Uniform Adjustments											
	Current	Effective Jan-19	Effective Jan-20	Effective Jan-21	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	
Wastewater Rates -- Residential											
Monthly Charge --All Meters	\$ 36.50	\$ 38.69	\$ 41.01	\$ 43.47	\$ 46.08	\$ 48.85	\$ 49.82	\$ 50.82	\$ 51.83	\$ 52.87	
Wastewater Rates -- Commercial											
Monthly Charge --All Meters	19.40	20.56	21.80	23.11	24.49	25.96	26.48	27.01	27.55	28.10	
Volume Rate Per 1,000 Gal	3.28	3.48	3.69	3.91	4.14	4.39	4.48	4.57	4.66	4.75	
Wastewater Rates -- Multi Family / Trailers											
Monthly Charge --All Meters	36.50	38.69	41.01	43.47	46.08	48.85	49.82	50.82	51.83	52.87	

TABLE IV-6

CITY OF SOMERTON		Impact on Monthly Customer Charges									
Scenario: 2018 09 28 -- Scenario II Uniform Adjustments											
	Current	Effective Jan-19	Effective Jan-20	Effective Jan-21	Effective Jan-22	Effective Jan-23	Effective Jan-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	
Residential Average Monthly Bill											
5,000 Gal Water & WW	Total	\$ 48.00	\$ 50.88	\$ 53.93	\$ 57.17	\$ 60.60	\$ 64.23	\$ 65.52	\$ 66.83	\$ 68.17	\$ 69.53
	Increase -- \$		2.88	3.05	3.24	3.43	3.64	1.28	1.31	1.34	1.36
10,000 Gal Water & WW	Total	\$ 59.95	\$ 63.55	\$ 67.36	\$ 71.40	\$ 75.69	\$ 80.23	\$ 81.83	\$ 83.47	\$ 85.14	\$ 86.84
	Increase -- \$		3.60	3.81	4.04	4.28	4.54	1.60	1.64	1.67	1.70
Commercial Average Monthly Bill											
25,000 Gal Water & WW	Total	\$ 167.63	\$ 177.69	\$ 188.35	\$ 199.65	\$ 211.63	\$ 224.33	\$ 228.81	\$ 233.39	\$ 238.06	\$ 242.82
	Increase -- \$		10.06	10.66	11.30	11.98	12.70	4.49	4.58	4.67	4.76

Notes on Rate Recommendations

The forecast and recommendations presented in this study represent a combination of the best information available from the City of Somerton and the project team's expertise. However, this forecast relies in part on assumptions about future events and events beyond the control of the project team (such as account growth rates within the City). The forecast and recommendations contained in this study may be subject to revision if any of the following events occurs:

- Actual growth in accounts and consumed volumes is less than (or significantly greater than) forecast.
- Capital improvement plan funding costs increase significantly due to the rising cost of materials or other factors.
- An unforeseen event impacts the City, such as an extended recession, natural catastrophe or terrorist attack.
- Significant and long lasting changes in weather patterns.
- Increases or decreases in interest rates, coverage requirements, or reserve requirements for long-term debt.
- The City of Somerton budget levels or priorities change significantly from those forecast in this study.

It should be noted that none of these events are foreseen by the project team or the City of Somerton at this time.

If any of these events occur, the City may be compelled to consider further adjustments to its water and wastewater rates.