Town of Gilbert

Utility Fee and Rate Study

GILBERT
ARIZONA

Interim Report

June 17, 2014

Prepared by:

BURTON & ASSOCIATES
UTILITY RATES ▪ ASSESSMENTS ▪ FINANCIAL PLANNING

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SECTION 1. INTRODUCTION & OVERVIEW

The Town of Gilbert (Town) owns and operates water, wastewater, reclaimed water, and environmental services (commercial and residential collection) utility systems. The Town operates each system as a self-supporting enterprise, with revenues and expenses accounted for within one enterprise fund for each system (with the exception of reclaimed water, which is within the wastewater enterprise fund).

As part of the ongoing financial management of its utility systems, the Town issued a request for proposals to perform a comprehensive Utility Rate and Fee Study (Study), including the development of a multi-year financial forecasting model for each of its four existing utility enterprise funds (water, wastewater, residential environmental services, and commercial environmental services) for future use by the Town. Burton & Associates was selected through the Town's competitive bid process to conduct the Study, and is pleased to present this Interim Report which identifies the objectives, approach, source data, timeline for completion and implementation, as well as the initial findings and recommendations of the Study.

1.1 OBJECTIVES

Revenue Sufficiency Analysis - Develop and populate a multi-year forecasting model for each enterprise fund that will determine the level of annual revenue required to satisfy projected annual operating, debt service (including coverage), and capital cost requirements as well as maintain adequate operating reserves.

Cost Allocation & Rate Structure Analysis - Develop modifications, as appropriate, to ensure that the Town's utility rates conform to accepted industry practice and reflect the appropriate distribution of system costs, while promoting its public policy objectives, such as affordability, to the greatest extent possible.

Rate Surveys / Benchmarking - Perform rate surveys and monthly bill calculations for other communities in the region to benchmark the cost of services in the Town to neighboring communities.

Miscellaneous Service Charges - Assist Town staff in identifying the current cost of providing various miscellaneous services to serve as the basis for potential adjustment to its current charges.

Stormwater System Analysis – Identify costs incurred by the Town associated with stormwater management related activities as well as a recommended fee structure that could serve as a basis for the future establishment of a separate, self-supporting stormwater utility system enterprise fund.

1.2 APPROACH

1.2.1 Revenue Sufficiency Analysis

The Study was conducted using various modules of our proprietary FAMS-XL© modeling system. The modules of FAMS-XL© include a ten-year revenue sufficiency and financial planning module which was utilized to develop a long-term financial management plan or forecast for each of the Town's enterprise funds, inclusive of the projected annual revenue requirements of each system. As part of the Study, the revenue sufficiency module of FAMS-XL© was used to examine alternative capital improvement funding sources, target debt service coverage levels, levels of operating and capital reserves, and other financial policies/goals that affected the financial performance of each system and its respective future rate requirements.

As part of the revenue sufficiency component of the Study, we developed alternative ten-year financial management plans and corresponding rate revenue adjustment plans through several interactive work sessions with Town staff for each fund. During these work sessions we examined the impact of various alternatives upon key financial indicators by use of graphical representations projected on a large viewing screen. In this way, we developed rate revenue adjustment plans for each system, including the initial financial management plans presented in this report, which will allow each of the enterprise funds to fund their various system requirements throughout the projection period and meet their specific financial performance goals and objectives.

In order to initialize the revenue sufficiency analysis, we obtained the historical and budgeted financial information regarding the operation of the enterprise funds. We also counseled with Town staff regarding other assumptions and policies that would affect the financial performance of the fund such as demands, additional expenses outside of the fund's budgets, required levels of operating and capital reserves, earnings on invested funds, escalation rates for operating costs, etc. We then worked closely with Town staff to customize and populate individual modules for each enterprise fund to replicate their respective financial dynamics. The revenue sufficiency modules developed for each fund will be licensed to the Town for its use in evaluating the revenue sufficiency of each enterprise fund in the future.

1.2.2 Cost Allocation and Rate Structure Analysis

FAMS-XL© contains cost allocation and rate structure modules in which total revenue requirements for each system were allocated to each class of customer based upon appropriate allocation methods and factors, and alternative rate structures were then evaluated for each identified customer class. We then identify the most appropriate cost of service allocation and rate structure methodologies for the Town based upon its system configuration, available data, service agreements, resources, customer size and usage characteristics, and public policy objectives.

During this process, we performed an independent review of the current rate structure of each fund to determine if it conforms to accepted industry practice and to determine if the current rates are fair and equitable for each class of customer. We then identified, as appropriate, alternative rate structures that would better serve the Town's fiscal stability and/or public policy objectives while ensuring a fair and equitable distribution of costs and conformance to accepted industry practice and legal precedent.

1.2.3 Miscellaneous Service Charges

FAMS-XL© also includes a miscellaneous service charge cost of service template that is used to calculate miscellaneous charges and fees such as tap fees, connect fees, disconnect fees, locate fees, etc. During this portion of the Study, we reviewed the

Town's existing fees and current enterprise operations to determine if any additional fees or charges are appropriate based upon our knowledge of accepted industry practice.

We then provided a customized template to Town staff and instructed staff on how to populate and use the template to develop consistent cost of service based fees for each respective service. Upon population of the template by Town staff, we will review the template and provide any recommended adjustments, as well as provide any needed assistance in developing ordinances/resolutions to reflect the results of the analysis.

1.2.4 Rate Surveys / Benchmarking

In addition to detailed analysis conducted for each enterprise fund, we also prepared comparative rate surveys and monthly bill calculations for other communities in the region. The results of these surveys allow for the benchmarking of the Town's cost of service to its typical users against other communities in its general area.

1.3 BASIS OF ANALYSIS

The initial results of the Study as presented herein are based upon the following principal data and assumptions:

Beginning Fund Balances – The FY 2013 Comprehensive Annual Financial Report and supporting detail provided by Town staff as of June 30, 2013, was utilized to establish the beginning FY 2014 balances for each enterprise fund.

Growth Assumptions – The annual growth assumptions used in the Study are based upon the future growth projections as presented in the most recent System Development Fee Study (prepared by Tischler Bise; report dated January 16, 2014).

Customer Billing Data – Detailed billing records for all services were provided by Town staff from July of 2010 through December of 2013. This information was utilized significantly throughout the conduct of the Study, particularly as it related to evaluating rate structure alternatives, performing cost of service allocations by customer class, revenue projections, and for preparing customer impact analyses for each of the Town's respective utility systems.

Operating Expenditures – Operating cost requirements include all personnel expenses, operating and maintenance expenses, transfers for capital investment, inter-fund transfers, minor capital, and debt service expenses. The Study reflects the adopted budget amounts for FY 2014, and includes the preliminary FY 2015 Budget for FY 2015 operating expenditure requirements. The FY 2015 amounts are utilized as the basis for projecting future years of operating expenses, adjusted annually based upon assumed cost escalation factors (with the exception of annual debt service expenses which reflect the specific repayment schedules of each respective outstanding bond or loan, and vehicle replacements which reflect the annual schedules as provided by Town staff).

Relative to debt service expenses, it is important to note that the Study does incorporate other funding sources that can be used for debt service expenses as may be available (such as system development fees) based upon discussions with Town staff.

Cost Escalation – Annual cost escalation factors for the various types of operating and maintenance expenses were provided by Town staff and applied in each year of the projection period beginning in FY 2016. Additionally, growth factors were applied to the appropriate expenses that would increase as a function of assumed customer growth.

Minimum Operating Reserve Balances – The financial management plans presented in this report assumes that the Water and Wastewater Enterprise Funds will maintain a minimum fund balance in their respective operating funds of at least six months of operations & maintenance (O&M) expenses, while the Environmental Services Enterprise Funds will maintain a minimum fund balance in their respective operating funds of at least four months of O&M expenses. These levels of reserves were reviewed with and endorsed by Town staff, and are consistent with our industry experience for similar systems as well as the criteria published by municipal ratings agencies for financially strong systems.

Long Term Borrowing – Any capital projects designated to be funded with long-term borrowing were assumed to be financed over a 25 year term and at an interest rate of 5.00% in FY 2014, 5.25% in FY 2015, 5.50% in FY 2016, 5.75% in FY 2017, and 6.00% in FY 2018 and each year thereafter.

Debt Service Coverage – Debt service coverage refers to the ratio of net income (gross revenue minus operating expenses) to annual principal and interest expenses (debt service). Often times, utilities will have a minimum debt service coverage ratio established as part of its bond or loan covenants. As a policy decision, utilities often measure revenue sufficiency and set rates based upon a higher debt service coverage than their minimum requirements so as to ensure compliance with these type of covenants in the event future projections of revenue and expenses do not occur as predicted (due to extended drought conditions, unanticipated capital requirements or operating cost increases, natural disasters, etc.). As such, the financial management plans presented herein reflect a minimum target debt service coverage ratio for senior lien debt of 2.00 throughout the projection period, which is indicative of a "Strong" utility system per the evaluation criteria published by the municipal utility ratings agency, Standard & Poor's.

1.4 TIMELINE FOR IMPLEMENTATION

It is recommended that the results of the Study presented herein be updated as part of the FY 2016 budget development process and considered for implementation at the beginning of FY 2016 (i.e. July 1, 2015). This recommendation is being made in order to 1) allow for stakeholder outreach activities related to the recommended rate structure modifications presented herein prior to implementation, and 2) incorporate expected adjustments to the FY 2016 and future financial requirements of each system resulting from key initiatives, such as the integration of the costs of the Long Range Infrastructure Plan (LRIP), the impacts of a new "zero-based" budget process, and potential changes to the divisions included within each enterprise fund. Upon completion of the update to be conducted in concert with the FY 2016 budget development process, the comprehensive results of the Study will then be embodied in a Final Report that will include significantly more schedules supporting the detailed projections of the revenue sufficiency analysis and the impacts of the final recommended rate structure adjustments for each fund.

Based upon the recommended timeline for implementation, the reader should use caution when reviewing the results presented in this Interim Report, and understand that the final results of the Study that will be presented in the Final Report could vary materially from what is presented herein.

SECTION 2. WATER ENTERPRISE FUND

2.1 SYSTEM OVERVIEW

The Water Enterprise Fund accounts for all the financial transactions of the Town's water system, which in turn provides safe potable drinking water to all of its two hundred thousand plus residents. The Town's water distribution system consists of approximately 1,000 miles of pipe ranging in size from 4" - 48". The water production system consists of 2 surface water treatment plants. The North Water Treatment Plant is rated for 45 Million Gallons per Day (MGD) with a 16 MG reservoir and the San Tan Vista Water Treatment Plant is a co-op with the neighboring City of Chandler, and is rated for 24 MGD (12 MGD for the Town and 12 MGD for the City of Chandler) with a 6 MG reservoir. The San Tan Vista WTP is scheduled for an expansion to 48 MGD (24 MGD each, Chandler and Gilbert) within the next few years. The daily water demand for the Town will range from 20 MGD in the winter to 65 MGD in the summer, with a daily peak water flow during the summer months of approximately 95 MGD. The principal sources of the Town's water supply are surface water purchased from the Central Arizona Project (CAP), Salt River Project (SRP), and Roosevelt Water Conservation District (RWCD) as well as renewable groundwater resources.

2.2 REVENUE SUFFICIENCY ANALYSIS

2.2.1 Key Issues

Each of the Town's utility systems has its own unique issues that impact their respective multi-year financial management plans. The key items reflected in the financial management plan for the Water Enterprise Fund are presented below.

a) Existing Debt Service Expenses

The Water Enterprise Fund has three outstanding loans as of FY 2014. During the course of the Study, Town staff informed us of a plan to use a portion of fund balance to retire the Series 2004 Bonds during FY 2014. The Series

2004 Bonds have a total outstanding balance of $11.4 M, of which $9.7M was attributable to the Water Enterprise Fund. In addition, the final payment of $259.087.50 for the portion of the Series 2002 General Obligation Bonds supported by the enterprise fund, will be paid in FY 2015 using a secondary property tax. These actions remove all existing senior lien debt from the Water Enterprise Fund thereby moderating the level of needed rate adjustments until its next planned bond issuance for certain projects within the capital improvement program.

b) CAP Water Purchase Expenses

As part of the analysis we received the most current projections of CAP water rates (firm rates for FY 2015, provisional rates for FY 2016, and advisory rates for FY 2017 – FY 2020) in order to project the water purchase expenses of the Town to meet its current and projected future demand requirements. Based upon multiple discussions with the Town's Water Resources division staff, it is expected that the water demands associated with the majority of the future growth of the community will be met with CAP water. As such, the projections of this expense were an important component to this Study and will continue to be a key consideration in the future financial management of the Water Enterprise Fund.

c) Capital Projects & Future Borrowing

The Town's planned investment in capital infrastructure to meet its continued population growth is expected to require long-term financing in FY 2017. This borrowing represents the main driver of rate adjustments for the Water Enterprise Fund in the immediate five-year planning period, as the fund will need to generate net income to meet the debt service coverage target requirements of the new debt. In total, the analysis reflects the funding of several large, longer-lived projects via an approximate $100M bond issue in FY 2017.

2.2.2 Results

Based upon the data and assumptions presented herein, the Water Enterprise Fund would require inflationary-like revenue adjustments in FY 2016 through FY 2019 to produce the desired level of debt service coverage based upon the assumed bond issue in FY 2017.

Table 2-1 below presents the current five-year plan of rate revenue adjustments identified for the Water Enterprise Fund, while Figure 2-1 presents a screen capture of the current control panel of the ten-year financial management model for the water system. Upon completion of the update of the Study to be conducted as part of the FY 2016 budget development process, Appendix A to this report will be populated with detailed supporting schedules for the final financial management plan for the water system resulting from the Study.

Table 2-1. Water Enterprise Fund Rate Revenue Increases

	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19
Effective Date	7/1/13	7/1/14	7/1/15	7/1/16	7/1/17	7/1/18
Rate Increase	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%

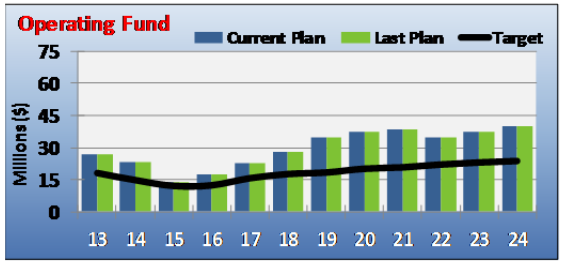
It is important to note that the plan of revenue adjustments presented herein is preliminary and may vary based upon a number of changes and updates that are likely to occur as part of the FY 2016 budget development process, such as the integration of the long range infrastructure plan (LRIP), changes to the capital improvement program, results of a zero-based budget, changes in growth rates and customer demands, etc.

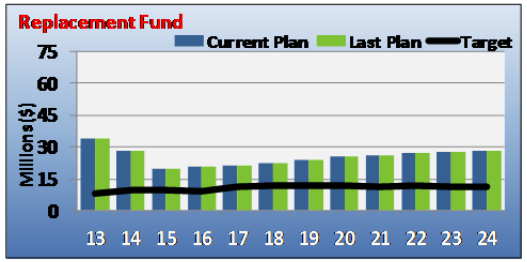
Figure 2-1 – Water System Financial Management Plan Screen Capture

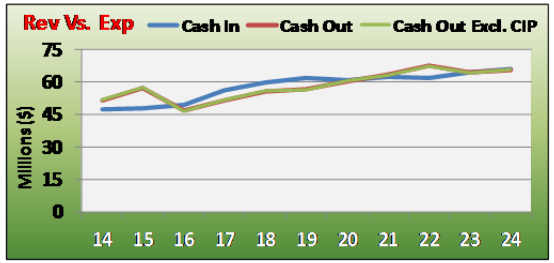
FINANCIAL ANALYSIS AND MANAGEMENT SYSTEM (FAMS) SUMMARY

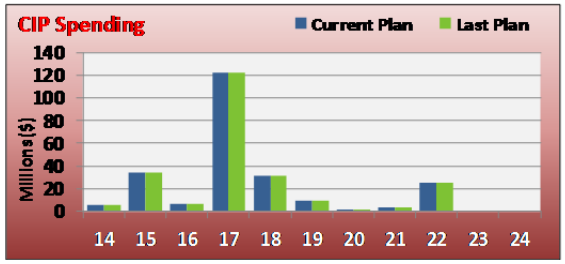
SAVE | CALC | ROLL

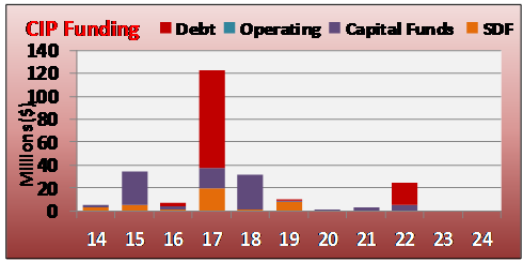
		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Cumulative Change FY 2019	Cumulative Change FY 2024
Override ▶			0.00%	2.00%	2.00%	2.00%	2.00%	2.00%						
Water Rate Increases		0.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%	0.41%	8.12%	3.79%	1.12%	8.20%	25.84%
Last Plan		0.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%	0.41%	8.12%	3.79%	1.12%	8.20%	25.84%
Rate Covenant		3.46			3.00	2.14	2.22	2.02	2.00	2.02	2.01	2.00	PS FY15 ▶	95%
Last Plan		3.46			3.00	2.14	2.22	2.02	2.00	2.02	2.01	2.00	OMV FY15 ▶	100%
Subordinate Coverage		2.01	3.13	3.29	2.15	1.90	1.97	1.90	1.92	1.64	1.66	1.68	OMF FY15 ▶	95%
Last Plan		2.01	3.13	3.29	2.15	1.90	1.97	1.90	1.92	1.64	1.66	1.68	Elasticity	0.10
SDF Surplus/(Shortfall) ($M)		$19.9	22.0	23.9	14.6	10.8	0.1	0.0	0.0	0.0	0.0	0.0	Debt Retirement	YES
Last Plan		$19.89	22.0	23.9	14.6	10.8	0.1	0.0	0.0	0.0	0.0	0.0		
CIP $ Redistribution ▶		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	SDF CIP limit	NO
CIP Execution % ▶		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	SDF Active	YES
Net CIP Funding % ▶		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Operating Reserve Mo ▶		6	6	6	6	6	6	6	6	6	6	6		
Fixed Charge	$14.63	$14.63	14.63	14.92	15.22	15.52	15.83	16.15	16.22	17.54	18.21	18.41		
Variable Charge	$13.08	$13.08	13.08	13.32	13.56	13.80	14.04	14.28	14.30	15.50	16.10	16.24		
Average Bill (12,000 gals.)		$27.71	27.71	28.24	28.78	29.32	29.87	30.43	30.52	33.04	34.31	34.65		
Last Plan		$27.71	27.71	28.24	28.78	29.32	29.87	30.43	30.52	33.04	34.31	34.65	Check	$ -

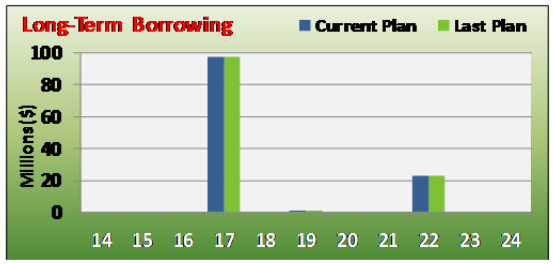












2.3 COST ALLOCATION & RATE STRUCTURE ANALYSIS

Burton & Associates examined the current monthly retail water rates and developed recommended rate structure modifications that should be considered to 1) better conform to legal precedent and generally accepted rate making practice in terms of a fair and equitable distribution of the cost of service, 2) enhance affordability for low and average users, and 3) provide a greater allocation of costs to larger volume users with discretionary water use.

2.3.1 Basis of Modifications

We have reviewed the Town's current water rate structure, and conclude that it is generally fair and equitable. However, we do recommend certain modifications to the rate structure to 1) separate the portion of base charge for billing & collection costs and recover those costs per service instead of by meter size or dwelling unit, 2) establish water base charges by meter size for all service types (excluding multi-family residential) based upon ratios of maximum flow capacity as published by the American Water Works Association (AWWA), 3) adjust multi-family base charges to reflect the current water use per unit as compared to the single-family residential class, 4) refine usage block ranges and pricing based on customer demand characteristics and actual cost of service metrics, and 5) synchronize the rate structure for separate potable water irrigation meters to be consistent with the recommended water inclining block rate structure.

2.3.2 Water Monthly Base Charge

Current Rates

The current monthly base charge for all residential and non-residential customers with a 3/4" meter is $14.63 per month. The current charge increases based upon the size of the meter, recognizing the larger potential demands of customers with larger meter sizes.

Recommendation

Generally accepted ratemaking practice would differentiate monthly base or readiness-to-serve charges by class of customer based upon the actual and potential usage

characteristics of each customer class. For instance, the monthly base charge per dwelling unit for master metered residential accounts should be based upon the ratio of usage per dwelling unit to that of the individually metered or single-family residential class. Moreover, commercial and individually-metered residential customers with larger meters should have monthly base charges scaled by meter size as compared to a 3/4" meter (the base meter size for individually-metered residential customers in the Town) based upon observed usage or the maximum capacity flow rates as published by an industry organization like the AWWA.

In addition, customer billing and collection costs should be isolated so that they are assessed equally to each account or service connection across all customer classes.

As such, we recommend the following modifications to the current water system monthly base charge structure:

1) Slightly decrease the level of revenue recovered in the readiness-to-serve charges from approximately 47% to 30% to enhance affordability for low volume and average users, resulting in a monthly charge to an individually-metered residential customer or a non-residential customer with a 3/4" meter of $8.88 for FY 2016.
2) Adjust the base charge for master-metered residential accounts to $4.44 per dwelling unit (charge is currently by meter size) to be equal to 50% of the charge to an individually-metered single-family residential customer based upon the observed ratio of water use per unit.
3) Establish a customer charge of $1.70 per month per service connection to all customer classes (i.e. individually metered residential, master metered residential, and non-residential accounts) for each service connection.

2.3.3 Water Usage Rates

Current Rates

Usage charges recover the portion of the operations and maintenance, debt service, and capital costs not recovered by monthly base charges. The Town currently has a four-tier

inclining block rate structure that is applied per service connection for all residential and non-residential customers, as shown in Table 2-2 below:

Table 2-2 – Current Water Consumption Rate Structure		
Tier	Usage	Rate per 1,000 gal
1	0-10,000 gal	$1.08
2	10,001 to 20,000	$1.14
3	20,001 to 30,000	$1.52
4	30,000 or more	$1.80

Inclining Block/Tier Structure: Water Use per Tier

We reviewed the Town's demographic data, domestic water use characteristics, and typical irrigation requirements to better quantify essential domestic requirements versus outdoor water use.

According to 2012 Census American Community Survey 1-year estimates, the Town has approximately three persons per typical household, and per discussions with Town staff from the Water Resources Division and our industry experience, it was estimated that each person uses on average approximately 60 gallons per day for essential domestic use (i.e. cooking. cleaning, showers, etc.). Applying this demographic to the per capita use identified herein results in a typical essential domestic water use of approximately 6,000 gallons per month. Based upon this analysis, we recommend establishing the first tier of the inclining block rate structure for all water use up to 6,000 gallons per month.

As it related to outdoor use, we discussed the typical residential property size, irrigable area, as well as the average number and amount (in inches) of watering per week (twice a week watering for four months of the year, once per week for eight months of the year). The result was an empirical basis for identifying a reasonable amount of watering for a typical residential property in the Town (see Figure 2-2) that represents the recommended amount of water use included in the second and third tiers of the inclining block rate structure (with the fourth tier capturing all use above the amount included in the third tier).

Figure 2-2 – Irrigation Analysis for a Typical Residential Property

Average Amount of Irrigation For a Typical Property	
1,568,160	square inches of area in 1/4 acre
25%	% of area that is irrigable
0.75	number of inches per watering
0.00432900433	gallons per cubic inch
1,273	number of gallons per watering
1.3	number of waterings per week
7,355	**gallons of irrigation per month**

Inclining Block/Tier Structure: Pricing per Tier

The price differential between tiers of an inclining block rate structure is typically established by each community based upon their unique balance of public policy objectives, such as affordability and customer impacts. As an added benefit for many communities, increased pricing for higher tiers generally promotes water conservation awareness. In this instance, we worked with Town staff to identify the marginal cost of additional water supply (including transmission) per thousand gallons as the basis of establishing the rate for the highest tier (see Table 2-3 below).

Table 2-3 – Top Tier Water Cost Details

Cost Component	Unit Cost (per 1,000 gal)
CAP Water	$0.45
Water Purchase Rights	$0.61
Plant Expansion	$0.75
Debt Service Coverage	$1.66
Credit for SDF Paid	-$1.05
Total Marginal Unit Cost of Water	$2.71
Unit Cost of Water Transmission	$0.56
Total Top Tier Rate	**$3.27**

We then established a discount factor expressed as a percentage of the rate for the second tier (80%) in order to calculate the rate of the first tier. With the second tier rate as

effectively the "base" rate of the inclining block rate system, we then developed the rate of third tier as the exact midpoint between the second tier rate and the marginal-cost based rate calculated for the fourth tier.

Recommendation – We recommend the following adjustments to the water rate structure and usage charges in order to reflect the recommended distribution of the Utility's revenue requirements between fixed and variable charges, to recognizing the lower level of multi-unit residential water usage per dwelling unit, and to enhance affordability for low volume and average residential users while providing a greater cost allocation and price incentive to larger users to conserve:

1) Increase the amount of revenue recovered in the usage rates from approximately 53% to 70% to provide a greater allocation of costs to large volume users to promote conservation and to enhance affordability for low volume/average users.
2) Adjust the water use within and pricing of each of the tiers or blocks of the inclining block rate structure as recommended herein.
3) Scale the amount of consumption included in each tier or block of the inclining block rate structure for individually metered residential and non-residential accounts by AWWA meter equivalency factors.
4) Adjust the amount of consumption include in each tier or block of the inclining block rate structure for master-metered residential accounts based upon the current ratio of usage per dwelling as compared the individually-metered residential class and apply the adjusted structure based upon the number of dwelling units.

2.3.4 Potable Irrigation Monthly Base Charge

Current Rates

For any customer with additional potable water irrigation only meters, an additional monthly readiness-to-serve charge is assessed for each additional irrigation meter based upon the size of the meter.

Recommendation

Applying additional monthly charges to a separate irrigation only meter is a well-accepted industry practice. As such, we recommend the Town continue that practice utilizing the water system monthly base charges presented in this report.

2.3.5 Potable Irrigation Usage Rates

Current Rates

The Town currently applies the same four-tier inclining block rate structure to separately metered potable irrigation usage.

Recommendation

We recommend synchronizing the water usage rate structure for potable water irrigation meters to be consistent with the rates and consumption recommended herein for each of the *top three tiers* of the residential inclining block rate structure (the first tier rate of the recommended residential inclining block rate structure is intended for essential domestic water use and should not be applied to separately metered irrigation usage). We recommend that the water use within each tier be scaled based upon the size of meter and that the rates for each tier will reflect the second, third, and fourth tier rates of the individually-metered residential inclining block rate structure presented in this report.

2.3.6 Hydrant Water Monthly Base Charge

Current Rates

The current base charges for the Town's metered hydrant water customers is scaled by the hydrant meter size and is consistent with the current water base charges (i.e. $116.60 for a 3" hydrant meter).

Recommendation

The current hydrant meter base charge structure conforms to legal precedent and accepted industry practice. However, we do recommend minor adjustments to the base charges:

1) Adjust the base charge to be equal to the water base charges recommended herein (i.e. $88.80 for a 3" hydrant meter).
2) Establish a customer charge of $1.70 per month for each hydrant meter account.

2.3.7 Hydrant Water Usage Rate

Current Rates

The Town currently charges a uniform usage rate of $1.80 per thousand gallons for all metered hydrant usage (equal to the highest rate of its inclining block rate structure).

Recommendation

We recommend the following adjustments to the hydrant water usage charges:

1) Set the uniform usage rate for metered hydrant water equal to the second tier rate for individually-metered residential customers consistent with industry practice

2.3.8 Price Elasticity

As water rates increase, discretionary water usage will generally decline. Because of this relationship between, the recommended modifications to the current rate structure are expected to have an impact on total water usage. The recommended rate structure is anticipated to produce an overall system-wide billed water use reduction of approximately 6%. That effect has been factored into the calculations of the recommended rates presented in the report.

2.3.9 Schedule of Recommended FY 2016 Water Rates

It is our recommendation that the adjustments discussed in the prior sub-sections should be made to the water rates in FY 2016 to address the allocation of system costs presented herein and enhance affordability for low volume and average users. Based upon discussions with Town staff, it is our understanding that the Town's customer billing system can accommodate these recommended changes. Specific recommended water rates are presented in Figure 2-3 for FY 2016 based upon the 2.0% revenue increase identified in the revenue sufficiency analysis and the rate structure modifications presented herein.

It is important to note that the recommended water rate structure modifications presented herein may be refined as part of the stakeholder outreach process and the resulting rates may differ slightly from those presented herein to reflect the final results of the revenue sufficiency analysis for the water system.

Figure 2-3 – FY 2016 Water Rates (Reflecting structure modifications and 2% revenue increase)

Monthly Fixed Charges

Customer Charge

Per Bill	$	1.70

Base Facility Charge - Single Family Residential, Non-Residential and Irrigation

Meter Size		
3/4"	$	8.88
1"	$	15.10
1 1/2"	$	29.30
2"	$	47.06
3"	$	88.80
4"	$	148.30
6"	$	295.70
8"	$	473.30
10"	$	681.10
12"	$	1,272.50

Base Facility Charge - Multi-unit Residential

Per Dwelling Unit	$	4.44

Usage Charges (in 1,000 gallons)

Single Family Residential and Non-Residential

Meter Size	Tier 1	Tier 2	Tier 3	Tier 4
3/4"	0 - 6,000	6,001 - 13,000	13,001 - 20,000	20,000+
1"	0 - 10,200	10,201 - 22,100	22,101 - 34,000	34,000+
1 1/2"	0 - 19,800	19,801 - 42,900	42,901 - 66,000	66,000+
2"	0 - 31,800	31,801 - 68,900	68,901 - 106,000	106,000+
3"	0 - 60,000	60,001 - 130,000	130,001 - 200,000	200,000+
4"	0 - 100,200	100,201 - 217,100	217,101 - 334,000	334,000+
6"	0 - 199,800	199,801 - 432,900	432,901 - 666,000	666,000+
8"	0 - 319,800	319,801 - 692,900	692,901 - 1,066,000	1,066,000+
10"	0 - 460,200	460,201 - 997,100	997,101 - 1,534,000	1,534,000+
12"	0 - 859,800	859,801 - 1,862,900	1,862,901 - 2,866,000	2,866,000+

Multi-unit Residential	Tier 1	Tier 2	Tier 3	Tier 4
Per Dwelling Unit	0 - 3,000	3,001 - 6,000	6,001 - 10,000	10,000+
Rate Per 1,000 Gallons	$0.87	$1.09	$2.18	$3.27

Irrigation Meters

Meter Size	Tier 1	Tier 2	Tier 3
3/4"	0 - 7,000	7,001 - 14,000	14,000+
1"	0 - 11,900	11,900 - 23,800	23,800+
1 1/2"	0 - 23,100	23,100 - 46,200	46,200+
2"	0 - 37,100	37,100 - 74,200	74,200+
3"	0 - 70,000	70,000 - 140,000	140,000+
4"	0 - 116,900	116,900 - 233,800	233,800+
6"	0 - 233,100	233,100 - 466,200	466,200+
8"	0 - 373,100	373,100 - 746,200	746,200+
10"	0 - 536,900	536,900 - 1,073,800	1,073,800+
12"	0 - 1,003,100	1,003,100 - 2,006,200	2,006,200+
Rate Per 1,000 Gallons	$1.09	$2.18	$3.27

2.3.10 Customer Impacts

In considering implementation of the recommended water rate structure modifications presented herein, it is important to examine the impact that those rates will have upon the monthly bill of the Town's customers. Implementation of the recommended rates will impact customers with different usage patterns differently. Figure 2-4 presents the customer impact upon the monthly bill of an individually-metered residential customer with a 3/4" meter at various consumption levels in 1,000 gallon per month increments up to 20,000 gallons per month. The calculated monthly bills, *which include both water and sewer charges,* show that lower volume users would see a reduction in their combined water and sewer bill as a result of the water and sewer rate structure modifications developed as part of the Study.

In addition to evaluating the impacts of the recommended rates to individually-metered residential customers, Figure 2-5 presents an analysis of the impact to the monthly bills, *which include both water and sewer charges,* of various non-residential customers as well as a master-metered residential customer with multiple dwelling units.

Figure 2-4 – Single-Family Residential Customer Impact Analysis

Single Family 3/4" Meter Monthly Water & Sewer Bill Calculations[1]								Across-The-Board Increase		
Monthly Use (Gal)	# of Bills	% of Bills	Agg. %	Current (FY 14/15)	Proposed (FY 16)	$ Chg	% Chg	FY 2016	$ Chg	% Chg.
-	20,124	3.1%	3.1%	$ 30.53	$ 22.52	$ (8.01)	-26.2%	$ 30.82	$ 0.29	0.9%
1,000	24,090	3.7%	6.9%	$ 32.48	$ 24.54	$ (7.94)	-24.4%	$ 32.79	$ 0.31	1.0%
2,000	36,839	5.7%	12.6%	$ 34.43	$ 26.56	$ (7.87)	-22.9%	$ 34.77	$ 0.34	1.0%
3,000	47,369	7.4%	20.0%	$ 36.37	$ 28.57	$ (7.80)	-21.4%	$ 36.73	$ 0.36	1.0%
4,000	53,054	8.2%	28.2%	$ 38.32	$ 30.59	$ (7.73)	-20.2%	$ 38.70	$ 0.38	1.0%
5,000	52,894	8.2%	36.4%	$ 40.27	$ 32.61	$ (7.66)	-19.0%	$ 40.67	$ 0.40	1.0%
6,000	49,301	7.7%	44.1%	$ 42.22	$ 34.63	$ (7.59)	-18.0%	$ 42.64	$ 0.42	1.0%
7,000	44,078	6.9%	50.9%	$ 44.17	$ 36.87	$ (7.30)	-16.5%	$ 44.61	$ 0.44	1.0%
8,000	38,975	6.1%	57.0%	$ 45.25	$ 37.96	$ (7.29)	-16.1%	$ 45.72	$ 0.47	1.0%
9,000	34,041	5.3%	62.3%	$ 46.33	$ 39.05	$ (7.28)	-15.7%	$ 46.82	$ 0.49	1.1%
10,000	29,860	4.6%	66.9%	$ 48.27	$ 41.28	$ (6.99)	-14.5%	$ 48.78	$ 0.51	1.1%
11,000	26,038	4.0%	71.0%	$ 48.55	$ 41.23	$ (7.32)	-15.1%	$ 49.08	$ 0.53	1.1%
12,000	22,583	3.5%	74.5%	$ 49.69	$ 42.32	$ (7.37)	-14.8%	$ 50.24	$ 0.55	1.1%
13,000	19,350	3.0%	77.5%	$ 50.83	$ 43.41	$ (7.42)	-14.6%	$ 51.41	$ 0.58	1.1%
14,000	17,215	2.7%	80.2%	$ 51.97	$ 45.59	$ (6.38)	-12.3%	$ 52.57	$ 0.60	1.2%
15,000	14,781	2.3%	82.5%	$ 53.11	$ 47.77	$ (5.34)	-10.1%	$ 53.73	$ 0.62	1.2%
16,000	13,102	2.0%	84.5%	$ 54.25	$ 49.95	$ (4.30)	-7.9%	$ 54.90	$ 0.65	1.2%
17,000	11,423	1.8%	86.3%	$ 55.39	$ 52.13	$ (3.26)	-5.9%	$ 56.06	$ 0.67	1.2%
18,000	9,993	1.6%	87.8%	$ 57.39	$ 55.45	$ (1.94)	-3.4%	$ 58.08	$ 0.69	1.2%
19,000	8,751	1.4%	89.2%	$ 57.67	$ 56.49	$ (1.18)	-2.0%	$ 58.38	$ 0.71	1.2%
20,000	7,927	1.2%	90.4%	$ 59.67	$ 59.81	$ 0.14	0.2%	$ 60.41	$ 0.74	1.2%

1 - Approximately 640,000 (72%) of the 900,000 FY 2013 utility bills reviewed were residential accounts with a 3/4" meter, and represents approximately 53,600 of the Town's 76,000 water & sewer utility customers in FY 2013.

Figure 2-5 – Non-Residential & Master-Metered Residential Customer Impact Analysis

Large Consumption/Meter Size Customer Impact Calculations[1]									Across the Board Increase		
Customer/ Account Type	Type	Avg. Monthly Usage (Gal)	Meter Size	Units	Current (FY 14/15)	Proposed (FY 16)	$ Chg	% Chg	FY 2016	$ Chg	% Chg
Financial Institution	C	25,000	1.5"	1	$ 120.89	$ 142.30	$ 21.41	17.7%	$ 122.31	$ 1.42	1.2%
Restaurant	C	47,000	1",1.5"	1	$ 214.92	$ 246.27	$ 31.35	14.6%	$ 217.35	$ 2.43	1.1%
Fast Food Restaurant	C	144,000	1.5"	1	$ 570.50	$ 717.13	$ 146.63	25.7%	$ 576.18	$ 5.68	1.0%
Convenience Store	C	13,000	1"	1	$ 61.98	$ 75.26	$ 13.28	21.4%	$ 62.70	$ 0.72	1.2%
Big Box Store	C	387,000	2"	1	$ 1,522.85	$ 1,986.06	$ 463.21	30.4%	$ 1,537.90	$ 15.05	1.0%
Car Wash	C	287,000	2"	1	$ 1,199.97	$ 1,356.94	$ 156.97	13.1%	$ 1,212.55	$ 12.58	1.0%
Automotive	C	271,000	2"	1	$ 1,139.33	$ 1,271.02	$ 131.69	11.6%	$ 1,151.33	$ 12.00	1.1%
Industrial	C	129,000	2"	1	$ 545.03	$ 600.60	$ 55.57	10.2%	$ 550.80	$ 5.77	1.1%
Medical Center	C	1,983,000	2",4"	1	$ 7,953.37	$ 10,012.47	$ 2,059.10	25.9%	$ 8,033.51	$ 80.14	1.0%
Apartment Complex	RM	1,083,000	2"	Multiple	$ 7,171.52	$ 4,422.31	$ (2,749.21)	-38.3%	$ 7,225.43	$ 53.91	0.8%

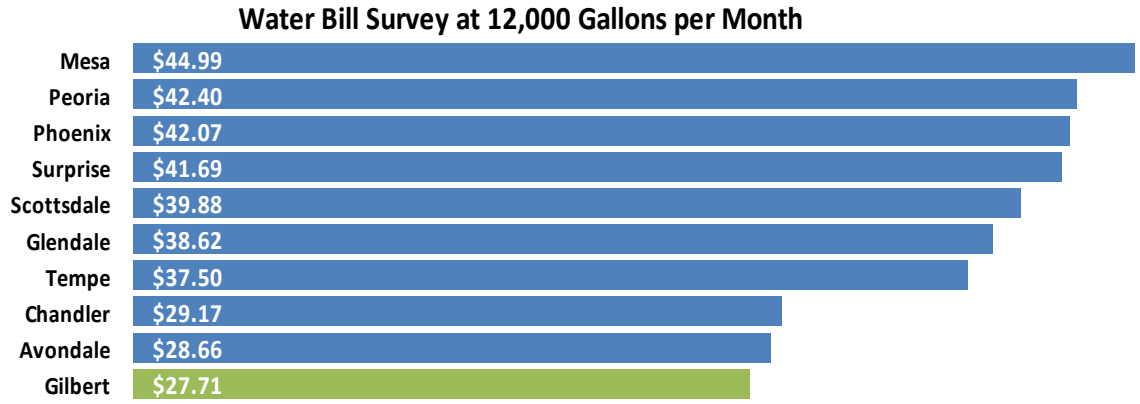
1 - Account information and average monthly usages are based on actual billing records of the Town of Gilbert for representative customer accounts.

2.4 RATE SURVEY / BENCHMARKING

As part of the Study, we conducted a FY 2014 residential rate survey that compares the current monthly cost for the Town's typical user to that of surrounding communities in order to compare or benchmark the Town's cost of service. The survey was performed to provide an understanding of the current market range of typical water costs in the area and how the Town fits within that range.

The following graph (Figure 2-6) presents a comparison of the monthly water charges for an individually-metered or single-family residential customer with a 3/4" meter based upon 12,000 gallons of water use (the average usage of an individually-metered residential customer in the Town) in the area for FY 2014. *As can be seen, the Town is one of the lowest cost service providers in the geographic area.*

Figure 2-6 – FY 2014 Residential Water Rate Survey / Bill Comparison



SECTION 3. WASTEWATER ENTERPRISE FUND

3.1 SYSTEM OVERVIEW

The Wastewater Enterprise Fund accounts for all of the financial transactions of the wastewater system that provides for the disposal of wastewater for the community. The Town's wastewater collection system consists of approximately 870 miles of gravity sanitary sewer pipelines, 17,700 sanitary sewer manholes, 14 lift stations, approximately 27 miles of sewer force mainlines, and 61 air release valves. There are two wastewater reclamation plants (WRPs) that serve the Town. The Neely WRP is operated under contract with a private firm, and there are no plans to expand this WRP. The Greenfield WRP is located in the Town, but is operated and maintained by the City of Mesa.

The Town's reclaimed water is supplied by its two WRPs. The reclaimed water distribution system is comprised of approximately 80 miles of distribution pipelines and three reclaimed water reservoirs and pump station sites. Reclaimed water is utilized by parks, golf courses, homeowners associations, etc. for the irrigation of large turf areas and to maintain aesthetic water features, such as lakes. The reclaimed water distribution system delivers water to three recharge facilities owned by the Town where it is recharged for long-term storage credits.

Some customers also use reclaimed water credits that have been recharged to the aquifer via the Town's three recharge facilities. This approach works well for customers who are not located close to reclaimed water distribution pipeline. The exchange is managed through groundwater pumping at recovery wells sites. There are currently two types of recovered water customers; 1) customers that own and pay for the operation of their own well and use the Town's groundwater storage credits, and 2) customers that are served from a recovered water well that is owned and operated by the Town. The Town currently maintains two separate pricing structures for the different type of recovered water customers.

3.2 REVENUE SUFFICIENCY ANALYSIS

3.2.1 Key Issues

Each of the Town's utility systems has its own unique issues that impact their respective multi-year financial management plans. The key items reflected in the financial management plan for the Wastewater Enterprise Fund are presented below.

a) Existing Debt Service Expenses

During the course of the Study, Town staff informed us of a plan to use a portion of fund balance to retire the Series 2004 Bonds during FY 2014. The Series 2004 Bonds have a total outstanding balance of $11.4 M, of which $2.7M is attributable to the Wastewater Enterprise Fund. This action removes all existing senior lien debt from the Wastewater Enterprise Fund thereby until its next planned bond issuance for certain projects within the capital improvement program.

b) Capital Projects & Future Borrowing

Similar to the Water Enterprise Fund, the Wastewater Enterprise Fund will have sizable expenditures related to expanding the system's capacity to meet the demands of the Town's expected growth. As a result, Town staff has indicated a probable plan of finance is to issue debt simultaneously in FY 2017 for the Water and Wastewater Enterprise Funds, with the wastewater funding proceeds identified for the phase three expansion of the Greenfield WRP. In total, the analysis reflects the funding of several large, longer-lived wastewater projects via an approximate $50M bond issue in FY 2017.

c) Reclaimed Water

The reclamation of wastewater creates a valuable commodity to the community. In the Town, there are three ways that this resource can be utilized; it can be delivered to large users directly, pumped into the aquifer and then recovered by a user's well or pumped into the aquifer and used as a recharge credit against future withdrawals. Within the financial model

developed as part of the Study for the wastewater system, we constructed separate cost of service tables to identify and capture the cost and value of each of the respective uses of reclaimed water and reviewed those tables with Town staff. It was noted that the next water resources master plan update would provide an opportunity to refine the analysis to reflect the value of credits for the applicable uses of reclaimed water for consideration in future pricing studies.

3.2.2 Results

Based upon the data and assumptions presented herein, the Wastewater Enterprise Fund does not require any rate revenue increases through FY 2019 in order to meet its financial requirements during that time.

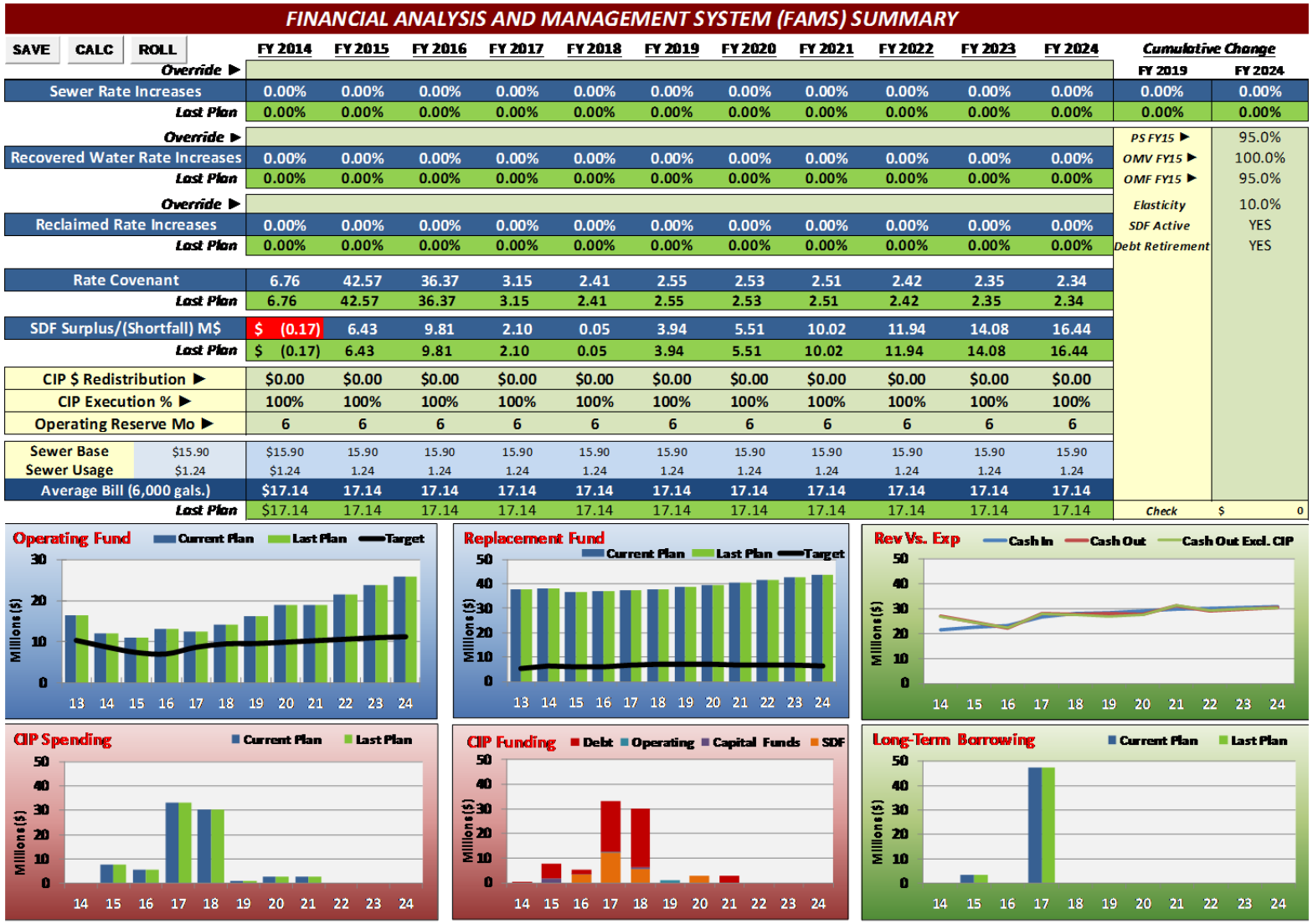
Table 3-1 below presents the current five-year plan of rate revenue adjustments identified for the Wastewater Enterprise Fund, while Figure 3-1 presents a screen capture of the current control panel of the ten-year financial management model for the wastewater system. Upon completion of the update of the Study to be conducted as part of the FY 2016 budget development process, Appendix B to this report will be populated with detailed supporting schedules for the final financial management plan for the wastewater system resulting from the Study.

Table 3-1. Wastewater Enterprise Fund Rate Revenue Increases

	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19
Effective Date	7/1/13	7/1/14	7/1/15	7/1/16	7/1/17	7/1/18
Rate Increase	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

It is important to note that the plan of revenue adjustments presented herein is preliminary and may vary based upon a number of changes and updates that are likely to occur as part of the FY 2016 budget development process, such as the integration of the long range infrastructure plan (LRIP), changes to the capital improvement program, results of a zero-based budget, changes in growth rates and customer demands, etc.

Figure 3-1 – Wastewater System Financial Management Plan Screen Capture



3.3 COST ALLOCATION AND RATE STRUCTURE ANALYSIS

Burton & Associates examined the current monthly retail wastewater and reclaimed water rates and developed recommended rate structure modifications that should be considered to better conform to legal precedent and generally accepted rate making practice in terms of a fair and equitable distribution of the cost of service.

3.3.1 Basis of Modifications

We have reviewed the Town's current wastewater and reclaimed water rate structure, and conclude that it is generally fair and equitable. However, we do recommend certain modifications to the rate structure to 1) separate the portion of base charge for billing & collection costs and recover those costs per service instead of by meter size or dwelling unit, 2) establish wastewater base charges by meter size for all service types (excluding multi-family residential) based upon ratios of maximum flow capacity as published by AWWA, 3) adjust multi-family base charges to reflect the current wastewater use per unit as compared to the single-family residential class, 4) update the wastewater rates for non-residential customers to include a base charge, and 5) adjust the uniform usage rate for non-residential to recover certain specific cost requirements associated with typical non-domestic strength wastewater influent.

3.3.2 Wastewater Monthly Base Charge

Current Rates

The current base charge for single and multi-family residential customers is $15.90 per unit per month. The Town's non-residential customers are not currently charged a wastewater monthly base charge.

Recommendation

As with water base charges, it is common industry practice to establish monthly base charges for all wastewater service connections and to differentiate these charges by class of customer based upon the actual and potential usage characteristics of each customer class. Many utility systems determine the monthly base charge per dwelling unit for

master-metered or multi-family residential accounts based upon the ratio of usage per dwelling unit to that of the individually metered or single-family residential class and scale the charge for nonresidential customers by meter size based upon usage or the maximum capacity flow rates as published by AWWA.

In addition, customer billing and collection costs should be isolated so that they are assessed equally to each account or service connection across all customer classes. As such, we recommend the following modifications to the Town's monthly base charges:

1) Establish a monthly wastewater base charge for non-residential customers and scale the charge by meter size based upon AWWA usage factors as recommended for water base charges.

2) Slightly reduce the level of revenue recovered in the base charges from approximately 65% to 50%, to enhance affordability for low volume and average users, resulting in a monthly charge to an individually-metered residential customer or a non-residential customer with a 3/4" meter of $10.42.

3) Adjust the base charge per dwelling unit for master-metered residential accounts to $5.21 to be equal to 50% of the charge to an individually metered residential customer based upon the observed ratio of water use per unit.

4) Establish a customer charge of $1.52 per month per service connection to all customer classes (i.e. individually metered residential, master metered residential, and non-residential accounts) for each service connection.

3.3.3 Wastewater Usage Rates

Current Rates

Usage charges recover the portion of the operations and maintenance, debt service, and capital costs not recovered by monthly base charges. The Town currently charges residential wastewater customers a uniform usage rate of $1.24 per thousand gallons. For single-family residential customers and multi-family residential

customers with four units or less, the residential usage rate is applied to 70% of the average billed water used during the months of January, February and March each year. For multi-family residential customers with five units or more, the residential usage rate is applied to 75% of the average billed water used during the months of January, February and March each year.

The Town currently employs a uniform usage rate to all non-residential wastewater customers of $1.99 per thousand gallons for all metered water usage.

Recommendation

We recommend the following adjustments to the wastewater usage charges in order to reflect the recommended distribution of the revenue requirements between fixed and variable charges and to more equitably distribute the charges among the Town's wastewater customer classes:

1) Increase the amount of revenue recovered in the usage rates from approximately 35% to 50% to provide a greater allocation of costs to larger volume users, resulting in a rate of $1.64 per thousand gallons of 3-month winter average as currently established.

2) Establish a non-residential uniform usage rate of $2.10 per thousand gallons of metered water use based upon the updated volume rate presented herein, adjusted to reflect assignment and recovery of the full cost of the Wastewater Quality Division from non-residential users.

3.3.4 Reclaimed water

Current Rates

The Town currently charges a monthly base fee of 15.00 for all reclaimed water service connections (direct reuse, direct recovery-recharge and recovery-recharge via a Town-owned well). The reclaimed water base charge is assessed per meter and is not scaled by meter size. The reclaimed water usage varies by customer/service type. The current rates per thousand gallon of reclaimed water used are $0.32 for direct

reuse customers, $0.63 for direct recovery-recharge customers and $1.20 for recovery-recharge customers served via Town-owned wells.

Cost Allocation

A detailed cost allocation was performed as part of the wastewater revenue sufficiency analysis to identify and isolate the operations, maintenance, and capital costs associated with the provision of reclaimed water service. Portions of wastewater treatments costs were allocated to reclaimed water by line item detail, recognizing that recharge from reclaimed water is needed for disposal and potable water credits as well as to provided recharge/recovered water service. A credit was applied against the cost of service to account for the benefit of the avoided cost of CAP water purchases resulting from reclaimed water. However, the net cost of service was still in excess of the current revenues for each service. As such, we are presently recommending no changes the reclaimed water monthly base fee and a minor increase to the usage rates of $0.01 for each service.

Recommendation

The current reclaimed water charge rate structure generally conforms to legal precedent and common industry practice. However, based upon the results of the revenue sufficiency, and cost allocation analyses conducted to date, we recommend the following minor adjustments to the reclaimed water monthly and usage charges:

1) Establish a customer charge of $1.52 per month per service connection to all reclaimed water customer classes (i.e. direct reuse, direct recovery-recharge and recovery-recharge via Town-owned wells) for each service connection. This charge is consistent with wastewater customer charge recommended herein, and is intended to distribute customer billing and collection costs equally across all customer classes.

2) Increase the usage rate for each reclaimed water customer class by $0.01 per thousand gallons. The resulting usage rates for direct reuse, direct recovery-

recharge and recovery-recharge via Town-owned wells are $0.33, $0.64, and $1.21 per thousand gallons, respectively.

3.3.5 Schedule of Recommended FY 2016 Wastewater Rates

It is our recommendation that the adjustments discussed in the prior sub-sections should be made to the wastewater and reclaimed water rates in FY 2016 to address the allocation of system costs presented herein, and to better conform to accepted industry practice. Based upon discussions with Town staff, it is our understanding that the Town's customer billing system can accommodate these recommended changes. Specific recommended rates are presented in Figure 3-2 for FY 2016 based upon the revenue increase identified in the revenue sufficiency analysis and the rate structure modifications presented herein.

It is important to note that the recommended rate structure modifications presented herein may be refined as part of the stakeholder outreach process and the resulting rates may differ slightly from those presented herein to reflect the final results of the revenue sufficiency analysis for the sewer system.

Figure 3-2 – FY 2016 Wastewater Rates (Reflecting structure modifications only)

Wastewater Monthly Fixed Charges		
Customer Charge		
Per Bill	$	1.52
Base Facility Charge - Single Family Residential and Non-Residential		
Meter Size		
3/4"	$	10.42
1"	$	17.71
1 1/2"	$	34.39
2"	$	55.23
3"	$	104.20
4"	$	174.01
6"	$	346.99
8"	$	555.39
10"	$	799.21
12"	$	1,493.19
Base Facility Charge - Multi-unit Residential		
Per Dwelling Unit	$	5.21

Wastewater Usage Charges (in 1,000 gallons)	
Single Family and Multi-unit Residential	
Per Dwelling Unit - 4 units or less	70% of 3-Month Winter Average
Per Dwelling Unit - 5 or more units	70% of 3-Month Winter Average
Rate Per 1,000 Gallons	$1.64
Non-Residential	
All Meter Sizes	All Use
Rate Per 1,000 Gallons	$2.10

3.3.6 Customer Impacts

In considering implementation of the recommended wastewater rate structure modifications presented herein, it is important to examine the impact that those rates will have upon the monthly bill of the Town's customers. Implementation of the recommended rates will impact customers with different usage patterns differently. Figure 3-3 presents the customer impact upon the monthly bill of an individually-metered residential customer with a 3/4" meter at various consumption levels in 1,000 gallon per month increments up to 20,000 gallons per month. The calculated monthly bills, *which include both water and sewer charges,* show that lower volume users would see a reduction in their combined water and sewer bill as a result of the water and sewer rate structure modifications developed as part of the Study.

In addition to evaluating the impacts of the recommended rates to individually-metered residential customers, Figure 3-4 presents an analysis of the impact to the monthly bills, *which include both water and sewer charges,* of various non-residential customers as well as a master-metered residential customer with multiple dwelling units.

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Figure 3-3 – Single-Family Residential Customer Impact Analysis

Single Family 3/4" Meter Monthly Water & Sewer Bill Calculations[1]								Across-The-Board Increase		
Monthly Use (Gal)	# of Bills	% of Bills	Agg. %	Current (FY 14/15)	Proposed (FY 16)	$ Chg	% Chg	FY 2016	$ Chg	% Chg.
-	20,124	3.1%	3.1%	$ 30.53	$ 22.52	$ (8.01)	-26.2%	$ 30.82	$ 0.29	0.9%
1,000	24,090	3.7%	6.9%	$ 32.48	$ 24.54	$ (7.94)	-24.4%	$ 32.79	$ 0.31	1.0%
2,000	36,839	5.7%	12.6%	$ 34.43	$ 26.56	$ (7.87)	-22.9%	$ 34.77	$ 0.34	1.0%
3,000	47,369	7.4%	20.0%	$ 36.37	$ 28.57	$ (7.80)	-21.4%	$ 36.73	$ 0.36	1.0%
4,000	53,054	8.2%	28.2%	$ 38.32	$ 30.59	$ (7.73)	-20.2%	$ 38.70	$ 0.38	1.0%
5,000	52,894	8.2%	36.4%	$ 40.27	$ 32.61	$ (7.66)	-19.0%	$ 40.67	$ 0.40	1.0%
6,000	49,301	7.7%	44.1%	$ 42.22	$ 34.63	$ (7.59)	-18.0%	$ 42.64	$ 0.42	1.0%
7,000	44,078	6.9%	50.9%	$ 44.17	$ 36.87	$ (7.30)	-16.5%	$ 44.61	$ 0.44	1.0%
8,000	38,975	6.1%	57.0%	$ 45.25	$ 37.96	$ (7.29)	-16.1%	$ 45.72	$ 0.47	1.0%
9,000	34,041	5.3%	62.3%	$ 46.33	$ 39.05	$ (7.28)	-15.7%	$ 46.82	$ 0.49	1.1%
10,000	29,860	4.6%	66.9%	$ 48.27	$ 41.28	$ (6.99)	-14.5%	$ 48.78	$ 0.51	1.1%
11,000	26,038	4.0%	71.0%	$ 48.55	$ 41.23	$ (7.32)	-15.1%	$ 49.08	$ 0.53	1.1%
12,000	22,583	3.5%	74.5%	$ 49.69	$ 42.32	$ (7.37)	-14.8%	$ 50.24	$ 0.55	1.1%
13,000	19,350	3.0%	77.5%	$ 50.83	$ 43.41	$ (7.42)	-14.6%	$ 51.41	$ 0.58	1.1%
14,000	17,215	2.7%	80.2%	$ 51.97	$ 45.59	$ (6.38)	-12.3%	$ 52.57	$ 0.60	1.2%
15,000	14,781	2.3%	82.5%	$ 53.11	$ 47.77	$ (5.34)	-10.1%	$ 53.73	$ 0.62	1.2%
16,000	13,102	2.0%	84.5%	$ 54.25	$ 49.95	$ (4.30)	-7.9%	$ 54.90	$ 0.65	1.2%
17,000	11,423	1.8%	86.3%	$ 55.39	$ 52.13	$ (3.26)	-5.9%	$ 56.06	$ 0.67	1.2%
18,000	9,993	1.6%	87.8%	$ 57.39	$ 55.45	$ (1.94)	-3.4%	$ 58.08	$ 0.69	1.2%
19,000	8,751	1.4%	89.2%	$ 57.67	$ 56.49	$ (1.18)	-2.0%	$ 58.38	$ 0.71	1.2%
20,000	7,927	1.2%	90.4%	$ 59.67	$ 59.81	$ 0.14	0.2%	$ 60.41	$ 0.74	1.2%

1 - Approximately 640,000 (72%) of the 900,000 FY 2013 utility bills reviewed were residential accounts with a 3/4" meter, and represents approximately 53,600 of the Town's 76,000 water & sewer utility customers in FY 2013.

Figure 3-4 – Non-Residential & Master-Metered Residential Customer Impact Analysis

Large Consumption/Meter Size Customer Impact Calculations[1]									Across the Board Increase		
Customer/ Account Type	Type	Avg. Monthly Usage (Gal)	Meter Size	Units	Current (FY 14/15)	Proposed (FY 16)	$ Chg	% Chg	FY 2016	$ Chg	% Chg
Financial Institution	C	25,000	1.5"	1	$ 120.89	$ 142.30	$ 21.41	17.7%	$ 122.31	$ 1.42	1.2%
Restaurant	C	47,000	1",1.5"	1	$ 214.92	$ 246.27	$ 31.35	14.6%	$ 217.35	$ 2.43	1.1%
Fast Food Restaurant	C	144,000	1.5"	1	$ 570.50	$ 717.13	$ 146.63	25.7%	$ 576.18	$ 5.68	1.0%
Convenience Store	C	13,000	1"	1	$ 61.98	$ 75.26	$ 13.28	21.4%	$ 62.70	$ 0.72	1.2%
Big Box Store	C	387,000	2"	1	$ 1,522.85	$ 1,986.06	$ 463.21	30.4%	$ 1,537.90	$ 15.05	1.0%
Car Wash	C	287,000	2"	1	$ 1,199.97	$ 1,356.94	$ 156.97	13.1%	$ 1,212.55	$ 12.58	1.0%
Automotive	C	271,000	2"	1	$ 1,139.33	$ 1,271.02	$ 131.69	11.6%	$ 1,151.33	$ 12.00	1.1%
Industrial	C	129,000	2"	1	$ 545.03	$ 600.60	$ 55.57	10.2%	$ 550.80	$ 5.77	1.1%
Medical Center	C	1,983,000	2",4"	1	$ 7,953.37	$ 10,012.47	$ 2,059.10	25.9%	$ 8,033.51	$ 80.14	1.0%
Apartment Complex	RM	1,083,000	2"	Multiple	$ 7,171.52	$ 4,422.31	$ (2,749.21)	-38.3%	$ 7,225.43	$ 53.91	0.8%

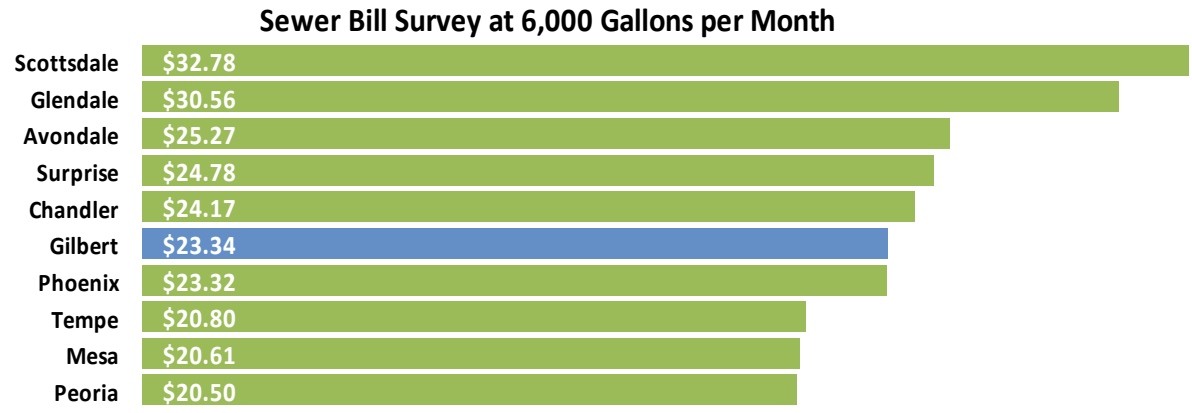
1 - Account information and average monthly usages are based on actual billing records of the Town of Gilbert for representative customer accounts.

3.4 RATE SURVEY / BENCHMARKING

As part of the Study, we conducted a FY 2014 residential rate survey that compares the current monthly cost for the Town's typical user to that of surrounding communities in order to compare or benchmark the Town's cost of service. The survey was performed to provide an understanding of the current market range of typical wastewater costs in the area and how the Town fits within that range.

The following graph (Figure 3-5) presents a comparison of the monthly wastewater charges for an individually-metered or single-family residential customer with a 3/4" meter based upon 6,000 gallons of billed water use (the average usage of an individually-metered residential customer in the Town) in the area for FY 2014. *As can be seen, the Town is very comparable in cost to the other service providers in the geographic area.*

Figure 3-5 – FY 2014 Residential Wastewater Rate Survey / Bill Comparison



SECTION 4. RESIDENTIAL ENVIRONMENTAL SERVICES ENTERPRISE FUND

4.1 SYSTEM OVERVIEW

The Residential Environmental Services Enterprise Fund accounts for all of the financial transactions of the residential portion of Environmental Services Division. The Environmental Services Division manages the Town's integrated solid waste operations and provides environmentally sound and economically cost effective services to meet the needs of the residents and commercial, industrial, and institutional establishments. These operations and services are directed toward ensuring the public health and welfare through the collecting and disposing of solid waste (garbage, hazardous waste and recyclable materials) from residential and commercial/industrial sources, educating members of the general public and business community regarding the proper disposal of wastes, and encouraging the diversion of waste from landfills through the recycling, reuse, and recovery of selected materials.

4.2 REVENUE SUFFICIENCY ANALYSIS

4.2.1 Key Issues

Each of the Town's utility systems has its own unique issues that impact their respective multi-year financial management plans. The key items reflected in the financial management plan for the Residential Environmental Services Enterprise Fund are presented below.

a) Incremental Expenses Due to Growth

Due to the impacts of the Town's growth projections, this revenue sufficiency analysis took into account the specific cost requirements needed to expand the fleet of trucks, drivers, and trash bins to serve assumed growth. Environmental Services Division staff provided the key metrics as to the cost of drivers and trucks, as well as the critical growth thresholds that would trigger additional drivers to be hired and trucks to be commissioned.

b) Recycling Dynamics

The Town as a community recycled over 18% of its waste stream as of 2013. Compared to other community's this is relatively high. Historical trends over the last few years indicate that waste diversion has steadily increased and can reasonably be expected to continue to do so in the future. Conversations with staff confirm that the Town sees this as a priority and will likely reinforce the trend that is already in place with public outreach. Recycling activities provide a unique dynamic for this fund, as there are savings from less tipping fees as waste is diverted and simultaneously the fund receives revenue from recycling contractors on a per ton basis for the marketable materials.

4.2.2 Results

Based upon the data and assumptions presented herein, the Residential Environmental Services Enterprise Fund does not require any rate revenue increases through FY 2019 in order to meet its financial requirements during that time.

Table 4-1 below presents the current five-year plan of rate revenue adjustments identified for the Residential Environmental Services Enterprise Fund, while Figure 4-1 presents a screen capture of the current control panel of the ten-year financial management model for the system. Upon completion of the update of the Study to be conducted as part of the FY 2016 budget development process, Appendix C to this report will be populated with detailed supporting schedules for the final financial management plan for the Residential Environmental Services Enterprise Fund resulting from the Study.

Table 4-1. Residential Environmental Services Enterprise Fund Rate Revenue Increases

	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19
Effective Date	7/1/13	7/1/14	7/1/15	7/1/16	7/1/17	7/1/18
Rate Increase	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

It is important to note that the plan of revenue adjustments presented herein is preliminary and may vary based upon a number of changes and updates that are likely to occur as part of the FY 2016 budget development process, such as the estimated

savings from the CNG facility, changes to the vehicle replacement and capital improvement program (including the timing and costs associated with a future transfer station), results of a zero-based budget, changes in growth rates and tonnage, etc.

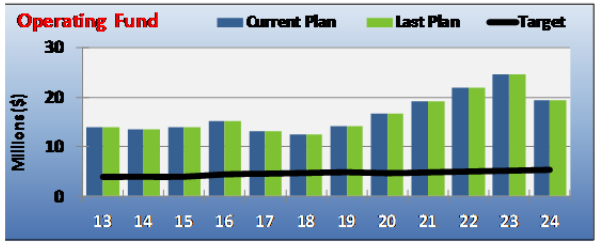
Figure 4-1 – Residential Environmental Services Financial Management Plan Screen Capture

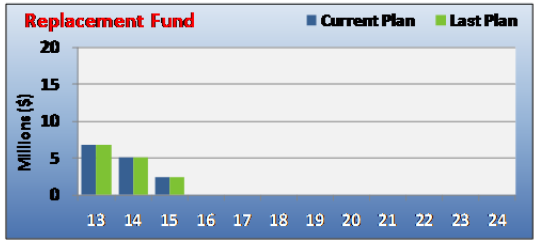
FINANCIAL ANALYSIS AND MANAGEMENT SYSTEM (FAMS) SUMMARY

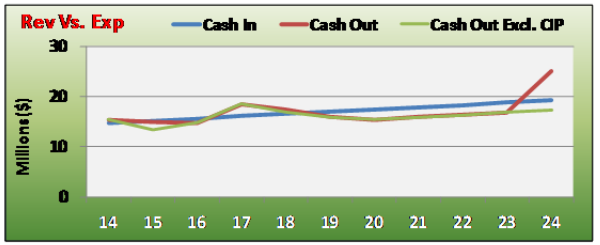
SAVE | CALC | ROLL

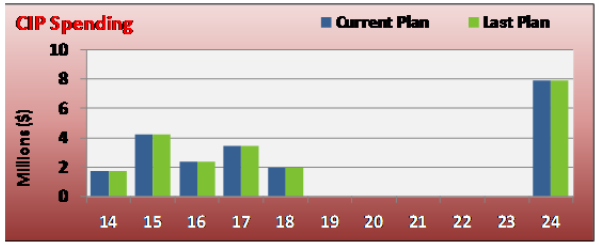
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Cumulative Change FY 2019	Cumulative Change FY 2024
Override ▶													
Residential 90 Gallon Rate Increases	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Last Plan	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Override ▶													
Extra Can (each) Rate Increases	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Last Plan	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Override ▶													
Residential 65 Gallon Rate Increases	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Last Plan	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Rate Covenant													
Last Plan													
CIP $ Redistribution ▶	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		
CIP Execution % ▶	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Operating Reserve Mo ▶	4	4	4	4	4	4	4	4	4	4	4		
Residential 90 Gallon	$16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00		
Residential 65 Gallon	$14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80		
Extra Can (each)	$8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80		

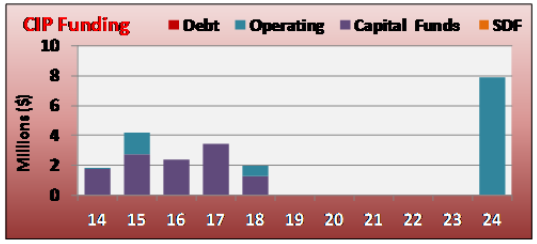
PS FY15 ▶	100.0%
OMV FY15 ▶	90.0%
OMF FY15 ▶	95.0%
Elasticity	0.00
Secd.Trip Fee	NO

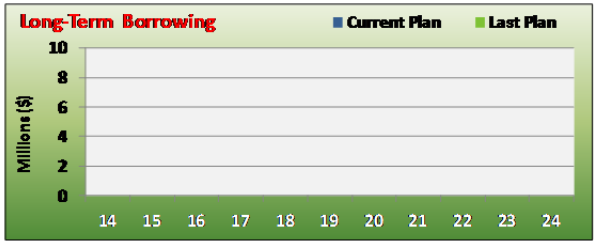












4.3 COST ALLOCATION AND RATE STRUCTURE ANALYSIS

As part of the Study, Burton & Associates was tasked with completing a cost of service analysis that would identify the allocation of the FY 2015 Proposed Budget for the Residential Environmental Services Enterprise Fund to each functional component of service (i.e. container, disposal, and collection costs) in order to update the calculation of specific residential environmental service rates for various container sizes, frequency of collection or pick-up, and number of containers. The following sub-sections present a description of the methodology employed in conducting the analysis, as well as the resulting cost allocation to each functional component of service and recommended rates for each type of service that should be considered in order to reflect the current distribution of the cost of service.

4.3.1 Description

This analysis began with an allocation of the Proposed FY 2015 Budget for the Residential Environmental Services Enterprise Fund between the container, disposal, and collection components of service. Once all of the costs were allocated to each functional component of service, they were then divided by the number of applicable service units billed in the most recent completed fiscal year (FY 2013) in order to determine the unit cost of service for each function that would then be aggregated to determine the specific charge schedules for each type of service offered by the Town.

Specifically, the annual costs associated with container maintenance and replacement were divided by the total number of containers in service to determine the monthly container cost for each container in service. Similarly, the total disposal costs were divided by the number of annual residential tons collected to determine the cost per ton that was then distributed to each type of service based upon the number and size of containers, and the frequency of pick-up for each respective service. Lastly, the annual collection cost of service was divided by the total number of annual service collections or pick-ups to determine a cost per pick-up that was then used to identify the collection cost for each service based upon the frequency of service collection or pick-up. The

functional cost allocations to each service type were then aggregated to determine the updated monthly charges or rates for each type of service offered by the Town.

4.3.2 Functional Cost Allocations

The distribution of costs to the container, disposal, and collection components of service was based upon a thorough review of each line item within each division of the Residential Environmental Services Enterprise Fund with Town staff. In some cases, the entire cost of certain divisions was assigned entirely to a specific component of service, such as Environmental Programs and Recycling Outreach, which were assigned entirely to the disposal cost category. Other divisions and individual line item expenses were allocated across multiple cost components. For examples, the expenses within the Residential Administration Division were allocated to each of the three functional cost components in proportion to the total expenses of each cost component. In summary, the cost of service analysis identified that 10.8% of the preliminary FY 2015 Budget requirements are associated with the maintenance and replacement of containers, 28.1% with waste disposal, and 61.1% with the collection of waste.

Container Cost Allocation

The cost of container maintenance and replacement includes management estimates of time spent on container maintenance activities, supplies and equipment expenses associated with container maintenance, the cost of new and replacement containers, as well as an allocation of administrative and indirect costs supporting container maintenance and replacement activities. The annual cost of service was then divided by the current number of containers in service to determine the unit cost of service. That unit cost was then applied to the number of containers for each service offered by the Town to determine the monthly costs associated with container maintenance and replacement activities for each type of service.

Disposal Cost Allocation

The cost of disposal includes landfill costs, the cost of the Recycling Outreach and Environmental Programs divisions, as well as an allocation of administrative and indirect costs supporting waste disposal activities. The annual cost of service was

then divided by the current number of annual tons of waste disposed to determine the cost of disposal per ton. That unit cost was then applied against the size and number of containers as well as the frequency of pick-up for each service offered by the Town to determine the monthly costs associated with disposal activities for each type of service.

Collection Cost Allocation

The cost of collection reflects the remaining cost of service, including such things as management estimates of equipment operator time spent on waste collection, fuel, automotive parts and supplies, vehicle maintenance and replacement expenses, as well as an allocation of administrative and indirect costs supporting collection activities. The annual cost of service was then divided by the current number of scheduled service collections or pick-ups made per year based upon the current accounts in service. It is important to note that no collection costs were allocated to additional containers for an account, as the marginal cost of collection associated with picking up additional containers for the same account was determined to be negligible in most cases per discussions with Town staff. The unit cost of service for collection was then applied based upon the frequency of collection for each service offered by the Town to determine the monthly costs associated with collection activities for each type of service.

4.3.3 Schedule of Recommended FY 2016 Rates

It is our recommendation that the adjustments discussed in the prior sub-sections should be made to the rates of the Residential Environmental Services Enterprise Fund in FY 2016 to reflect the allocation of system costs presented herein. Based upon discussions with Town staff, it is our understanding that the Town's customer billing system can accommodate these recommended changes in rate structure. In addition to updating the rates based upon the current cost of service, we also recommend one structural modification whereby multi-family residential accounts that are presently billed service charges based upon the number of dwelling units would instead be billed based upon the

number and size of containers as well as the frequency of collection services being provided.

Specific recommended rates are presented in Figure 4-2 for FY 2016 based upon the revenue requirements identified in the revenue sufficiency analysis and the rate structure modifications presented herein.

Figure 4-2 – FY 2016 Residential Collection Rates (Reflecting structure modifications only)

Charge Code Description	Chg Code	PU / WK.	Cont. Size	Recommended Total Charges - 1st Container	Recommended Total Charges - Additional Container
Residential 65 Gal	res65g	1	65	$14.98	$4.82
Municipal 65 Gal	mu65g	1	65	$14.98	$4.82
Res picked up by Comm 90 Gal	rescom	1	90	$16.19	$6.03
Residential 90 Gal	res90g	1	90	$16.19	$6.03
HOA Paid - Residential 90 Gal	sfr90g	1	90	$16.19	$6.03
Residential MF 90 Gal	rm90g	1	90	$16.19	$6.03
Residential MF 90 Gal	rm90g	2	90	$30.71	$10.38
Commercial 90 Gal (2x/wk)	com90	1	90	$16.19	$6.03
Commercial 90 Gal (2x/wk)	com90	2	90	$30.71	$10.38
Commercial 90 Gal - >2 cans	com90g	1	90	$16.19	$6.03
Commercial 90 Gal - >2 cans	com90g	2	90	$30.71	$10.38
Commercial 90 Gal - Other	gps90g	1	90	$16.19	$6.03
Municipal 90 Gal	mu90g	1	90	$16.19	$6.03
Residential MF 300 Gal	rm300g	1	300	$26.35	$16.19
Residential MF 300 Gal	rm300g	2	300	$51.03	$30.70
300 Gal Container - 1 times/wk	com300-1	1	300	$26.35	$16.19
300 Gal Container - 2 times/wk	com300-2	2	300	$51.03	$30.70
300 Gal Container - 3 times/wk	com300-3	3	300	$75.71	$45.21
300 Gal Container - 4 times/wk	com300-4	4	300	$100.39	$59.73
300 Gal Container - 5 times/wk	com300-5	5	300	$125.07	$74.24
300 Gal Container - 6 times/wk	com300-6	6	300	$149.75	$88.75
300 Gal Container - 7 times/wk	com300-7	7	300	$174.43	$103.27

It is important to note that the recommended rate structure modifications presented herein may be refined as part of the stakeholder outreach process and the resulting rates may differ slightly from those presented herein to reflect the final results of the revenue sufficiency analysis for the Residential Environmental Services Enterprise Fund.

4.3.1 Customer Impacts

When considering implementation of the recommended rates presented herein, it is important to examine the impact that those rates will have to the monthly bill of customers. Figure 4-3 presents the number of accounts and containers by service types along with the current and recommended monthly service charges. As can be seen, the vast majority of the system's customers are residential properties with a single 90-gallon container. The monthly charge for such service would increase by $0.19. For those residential accounts that have two 90-gallon containers, they would see a net reduction of $2.58 to their monthly bill (i.e. $0.19 - $2.77).

Figure 4-3 – FY 2016 Residential Environmental Service Customer Impact Analysis

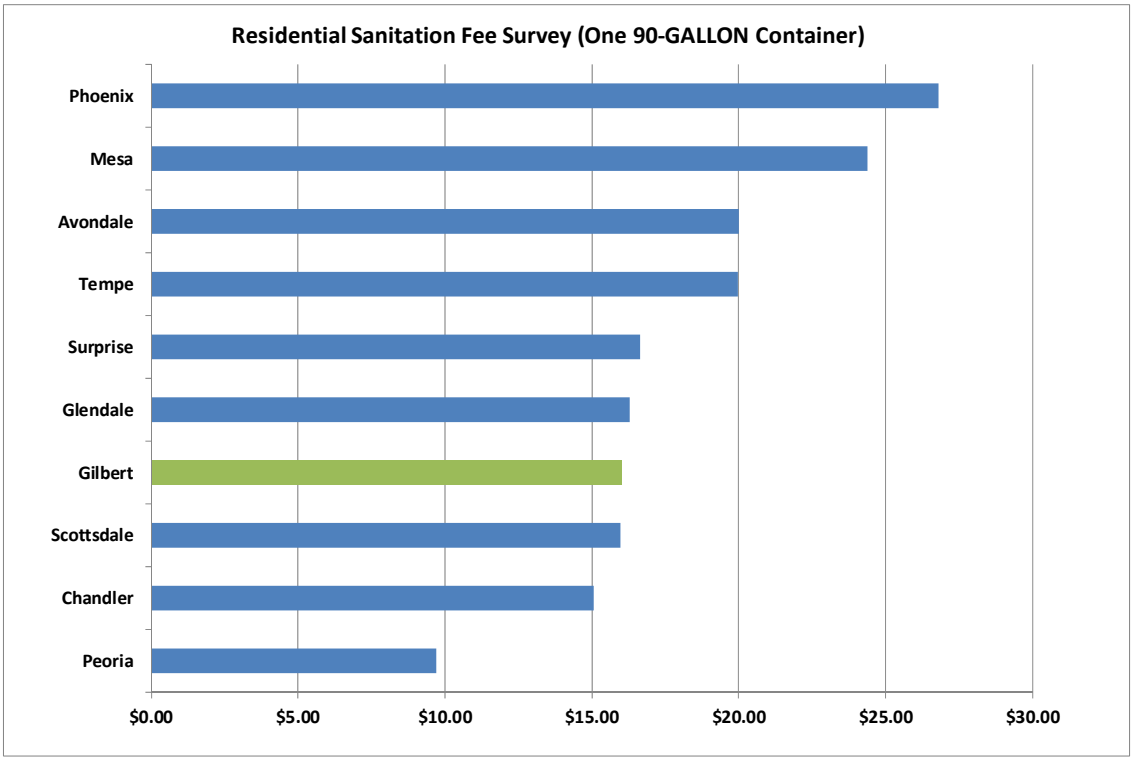
Charge Code Description	Avg Accounts for FY13	1st Container	Additional Containers	Total Containers	Current Monthly Charge: 1st Container	Current Monthly Charge: Additional Container	Recommended Total Charges - 1st Container	Recommended Total Charges - Additional Container	$ CHG From Current Charges - 1st Container	$ CHG From Current Charges - Add. Container
Residential 65 Gal	827	827	1	828	$14.80	$0.00	$14.98	$4.82	$0.18	$4.82
Municipal 65 Gal	2	2	23	25	$14.82	$8.16	$14.98	$4.82	$0.16	-$3.34
Res picked up by Comm 90 Gal	169	169	-	169	$16.02	$0.00	$16.19	$6.03	$0.17	$6.03
Residential 90 Gal	66,757	66,757	4,677	71,434	$16.00	$8.80	$16.19	$6.03	$0.19	-$2.77
HOA Paid - Residential 90 Gal	9	32	-	32	$16.02	$0.00	$16.19	$6.03	$0.17	$6.03
Residential MF 90 Gal	6	6	6	12	$16.02	$8.80	$16.19	$6.03	$0.17	-$2.77
Residential MF 90 Gal	4	4	10	14	$16.02	$8.80	$30.71	$10.38	$14.69	$1.58
Commercial 90 Gal (2x/wk)	33	33	17	50	$16.02	$15.03	$16.19	$6.03	$0.17	-$9.00
Commercial 90 Gal (2x/wk)	22	22	9	31	$16.02	$15.03	$30.71	$10.38	$14.69	-$4.65
Commercial 90 Gal - >2 cans	5	5	-	5	$16.02	$15.03	$16.19	$6.03	$0.17	-$9.00
Commercial 90 Gal - >2 cans	3	3	4	7	$16.02	$15.03	$30.71	$10.38	$14.69	-$4.65
Commercial 90 Gal - Other	1	10	-	10	$7.70	$3.90	$16.19	$6.03	$8.49	$2.13
Municipal 90 Gal	28	28	201	229	$16.02	$8.16	$16.19	$6.03	$0.17	-$2.13
Residential MF 300 Gal	1	1	1	2	$16.02	$8.80	$26.35	$16.19	$10.33	$7.39
Residential MF 300 Gal	7	7	10	17	$16.02	$8.80	$51.03	$30.70	$35.01	$21.90
300 Gal Container - 1 times/wk	10	10	13	23	$44.83	$24.17	$26.35	$16.19	-$18.48	-$7.98
300 Gal Container - 2 times/wk	4	4	1	5	$76.89	$36.09	$51.03	$30.70	-$25.86	-$5.39
300 Gal Container - 3 times/wk	-	-	-	-	$108.94	$48.01	$75.71	$45.21	-$33.23	-$2.79
300 Gal Container - 4 times/wk	-	-	-	-	$140.99	$59.92	$100.39	$59.73	-$40.60	-$0.20
300 Gal Container - 5 times/wk	-	-	-	-	$173.05	$71.84	$125.07	$74.24	-$47.98	$2.40
300 Gal Container - 6 times/wk	-	-	-	-	$205.10	$83.76	$149.75	$88.75	-$55.35	$4.99
300 Gal Container - 7 times/wk	-	-	-	-	$237.15	$95.68	$174.43	$103.27	-$62.72	$7.59

4.4 RATE SURVEY / BENCHMARKING

As part of the Study, we conducted a FY 2014 residential rate survey that compares the current monthly cost for the Town's typical customer (90 gallon container service) to that of surrounding communities in order to compare or benchmark the Town's cost of service. The survey was performed to provide an understanding of the current market range of typical sanitation costs in the area and how the Town fits within that range.

The following graph (Figure 4-4) presents a comparison of the monthly charges for a residential customer with 90-gallon container service (the most residential customer in the Town) in the area for FY 2014. *As can be seen, the Town is one of the lowest cost service providers in the geographic area.*

Figure 4-4 – FY 2014 Residential Sanitation Rate Survey / Bill Comparison



SECTION 5. COMMERCIAL ENVIRONMENTAL SERVICES ENTERPRISE FUND

5.1 OVERVIEW

The Commercial Environmental Services Enterprise Fund accounts for all of the financial transactions of the commercial portion of Environmental Services Division. The Environmental Services Division manages the Town's integrated solid waste operations and provides environmentally sound and economically cost effective services to meet the needs of the residents and commercial, industrial, and institutional establishments. These operations and services are directed toward ensuring the public health and welfare through the collecting and disposing of solid waste (garbage, hazardous waste and recyclable materials) from residential and commercial/industrial sources, educating members of the general public and business community regarding the proper disposal of wastes, and encouraging the diversion of waste from landfills through the recycling, reuse, and recovery of selected materials.

5.2 REVENUE SUFFICIENCY ANALYSIS

5.2.1 Key Issues

Each of the Town's utility systems has its own unique issues that impact their respective multi-year financial management plans. The key items reflected in the financial management plan for the Commercial Environmental Services Enterprise Fund are presented below.

a) Potential Loss of Special Contract Pricing Customers

Arguably the biggest challenge for this fund is that it operates in a competitive marketplace with private collection companies. As a result, when certain of the Town's special pricing contracts expire, the fund has a level of risk associated with the potential loss of certain very large customers.

4.2.2 Results

Based upon the data and assumptions presented herein, the Commercial Environmental Services Enterprise Fund does not require any rate revenue increases through FY 2019 in order to meet its financial requirements during that time.

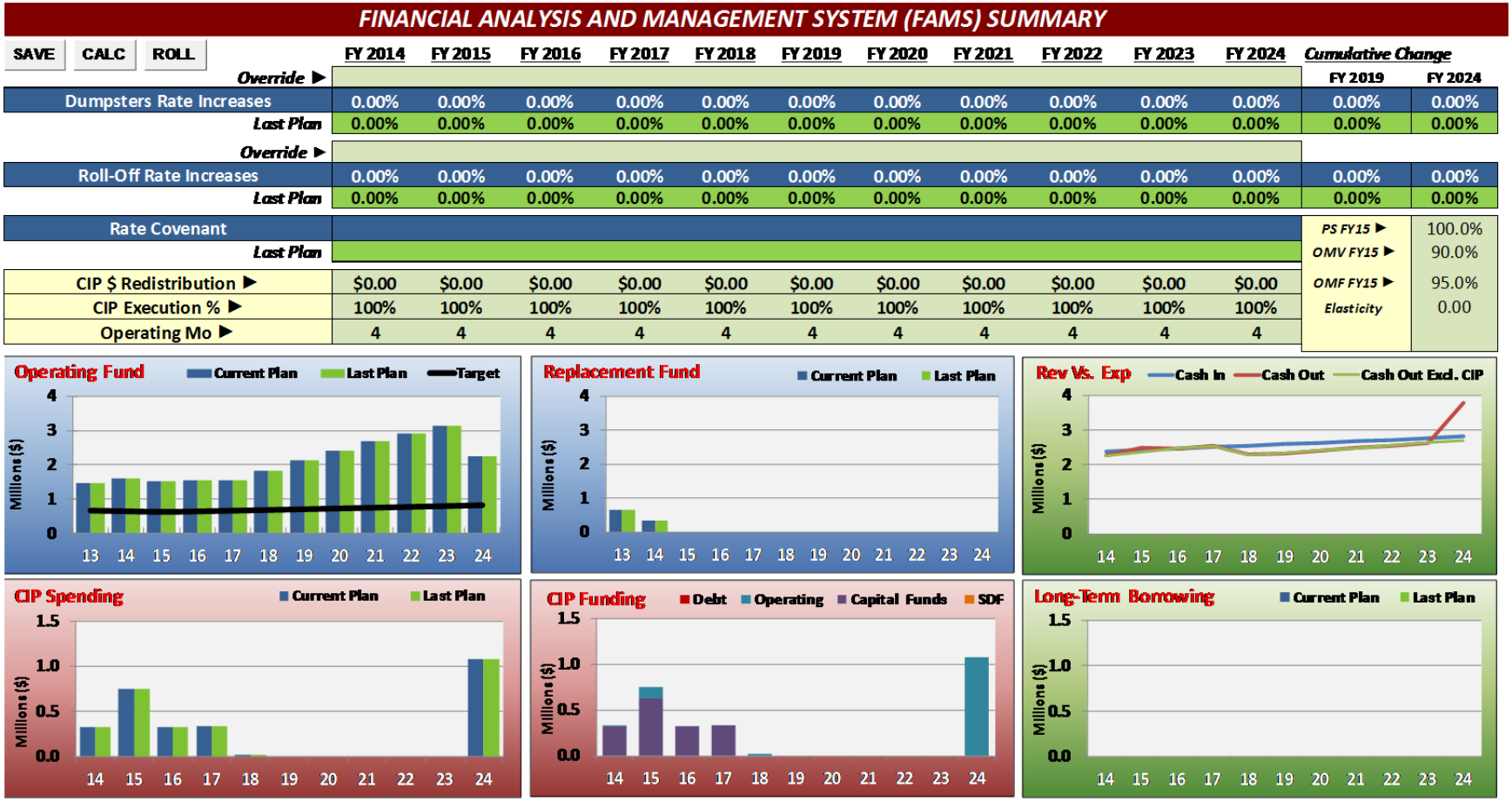
Table 5-1 below presents the current five-year plan of rate revenue adjustments identified for the Commercial Environmental Services Enterprise Fund, while Figure 5-1 presents a screen capture of the current control panel of the ten-year financial management model for the system. Upon completion of the update of the Study to be conducted as part of the FY 2016 budget development process, Appendix D to this report will be populated with detailed supporting schedules for the final financial management plan for the Commercial Environmental Services Enterprise Fund resulting from the Study.

Table 5-1. Commercial Environmental Services Enterprise Fund Rate Revenue Increases

	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19
Effective Date	7/1/13	7/1/14	7/1/15	7/1/16	7/1/17	7/1/18
Rate Increase	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

It is important to note that the plan of revenue adjustments presented herein is preliminary and may vary based upon a number of changes and updates that are likely to occur as part of the FY 2016 budget development process, such as the estimated savings from the CNG facility, changes to the vehicle replacement and capital improvement program (including the timing and costs associated with a future transfer station), results of a zero-based budget, changes in growth rates, special contracts, and tonnage, etc.

Figure 5-1 – Commercial Environmental Services Financial Management Plan Screen Capture



5.3 COST ALLOCATION AND RATE STRUCTURE ANALYSIS

As part of the Study, Burton & Associates was tasked with completing a cost of service analysis that would identify the allocation of the FY 2015 Proposed Budget for the Commercial Environmental Services Enterprise Fund to each functional component of service (i.e. container, disposal, and collection costs) in order to update the calculation of specific commercial environmental service rates for various container sizes, frequency of collection or pick-up, and number of containers. The following sub-sections present a description of the methodology employed in conducting the analysis, as well as the resulting cost allocation to each functional component of service and recommended rates for each type of service that should be considered in order to reflect the current distribution of the cost of service.

5.3.1 Description

This analysis began with an allocation of the Proposed FY 2015 Budget for the Commercial Environmental Services Enterprise Fund between the container, disposal, and collection components of service. Once all of the costs were allocated to each functional component of service, they were then divided by the number of applicable service units billed in the most recent completed fiscal year (FY 2013) in order to determine the unit cost of service for each function that would then be aggregated to determine the specific charge schedules for each type of service offered by the Town.

Specifically, the annual costs associated with container maintenance and replacement (separated between roll-off and dumpsters) were divided by the total number of containers in service to determine the monthly container cost for each container in service. Similarly, the total disposal costs (again separated between roll-off and dumpsters) were divided by the number of annual tons collected to determine the cost per ton that was then distributed to each type of service based upon the number and size of containers, and the frequency of pick-up for each respective service. Lastly, the annual collection cost of service (separated between roll-off and dumpsters) was divided by the total number of annual service collections or pick-ups to determine a cost per pick-up that was then used to identify the collection cost for each service based upon the frequency of

service collection or pick-up. The functional cost allocations to each service type were then aggregated to determine the updated monthly charges or rates for each type of service offered by the Town.

5.3.2 Functional Cost Allocations

The distribution of costs to the container, disposal, and collection components of service was based upon a thorough review of each line item within each division of the Commercial Environmental Services Enterprise Fund with Town staff. In some cases, the entire cost of line items was assigned entirely to a specific component of service, such as landfill costs, which were assigned entirely to the disposal cost categories for roll-off and dumpster services, respectively. Most divisions and individual line item expenses were allocated across multiple cost components. For examples, the expenses within the Commercial Administration Division were allocated to each of the three functional cost components in proportion to the total expenses of each cost component (with roll-off expenses separated from dumpster-related expenses).

In summary, the cost of service analysis identified that 20% of the total Commercial Environmental Services Enterprise Fund preliminary FY 2015 Budget requirements are associated with roll-off services, and 80% with dumpster service. Of the roll-off expenses, 5.0% is associated with the maintenance and replacement of containers, 51.4% with waste disposal, and 43.6% with the collection of waste. Of the dumpster expenses, 8.4% is associated with the maintenance and replacement of dumpsters, 33.8% with waste disposal, and 57.8% with the collection of waste.

Container Cost Allocation

The cost of container maintenance and replacement for roll-off and dumpster services includes management estimates of time spent on container maintenance activities, supplies and equipment expenses associated with container maintenance, the cost of new and replacement containers, as well as an allocation of administrative and indirect costs supporting container maintenance and replacement activities. The annual cost of service was then divided by the current number of containers in service to determine the unit cost of service. That unit cost was then applied to the number of

containers for each service offered by the Town to determine the monthly costs associated with container maintenance and replacement activities for each type of roll-off and dumpster service offered.

Disposal Cost Allocation

The cost of disposal includes landfill costs, as well as an allocation of administrative and indirect costs supporting waste disposal activities. The annual cost of service was then divided by the current number of annual tons of waste disposed to determine the cost of disposal per ton for roll-off and dumpster service, respectively. These unit costs were then applied against the size and number of containers as well as the frequency of pick-up for each service offered by the Town to determine the monthly costs associated with disposal activities for each type of service.

Collection Cost Allocation

The cost of collection reflects the remaining cost of service, including such things as management estimates of equipment operator time spent on waste collection, fuel, automotive parts and supplies, vehicle maintenance and replacement expenses, as well as an allocation of administrative and indirect costs supporting collection activities. The annual cost of service was then divided by the current number of scheduled service collections or pick-ups made per year based upon the current accounts in service. It is important to note that no collection costs were allocated to additional containers for an account, as the marginal cost of collection associated with picking up additional containers for the same account was determined to be negligible in most cases per discussions with Town staff. The unit cost of service for collection was then applied based upon the frequency of collection for each service offered by the Town to determine the monthly costs associated with collection activities for each type of roll-off and dumpster service provided by the Town.

5.3.3 Schedule of Recommended FY 2016 Rates

It is our recommendation that the adjustments discussed in the prior sub-sections should be made to the rates of the Commercial Environmental Services Enterprise Fund in FY 2016 to reflect the allocation of system costs presented herein. Based upon discussions

with Town staff, it is our understanding that the Town's customer billing system can accommodate these recommended changes in rate structure. Specific recommended rates are presented in Figure 5-2 for FY 2016 based upon the revenue requirements identified in the revenue sufficiency analysis and the rate structure modifications presented herein.

It is important to note that special contract pricing will need to continue to be developed on a case by case basis in the future. Historically, special contract pricing has been offered to Gilbert and Higley Public Schools, and our analysis reflects the continuation of the current discounts for those two agencies within the new recommended rates presented herein. However, the Town will determine the pricing for those agencies upon expiration of the existing contracts, as well as any new special contracts, in the future based upon consideration of the cost of service, economies of scale, market conditions, and other relevant factors.

Figure 5-2 – FY 2016 Commercial Collection Rates (Reflecting structure modifications only)

Charge Code Description	Chg Code	PU / WK.	Cont. Size	Recommended Total Charges - 1st Container	Recommended Total Charges - Additional Container
3 Yd Container - 1 times/wk	com3yd-1	1	3	$95.02	$23.95
3 Yd Container - 2 times/wk	com3yd-2	2	3	$178.07	$35.91
3 Yd Container - 3 times/wk	com3yd-3	3	3	$261.11	$47.87
3 Yd Container - 4 times/wk	com3yd-4	4	3	$344.15	$59.84
3 Yd Container - 5 times/wk	com3yd-5	5	3	$427.20	$71.80
3 Yd Container - 6 times/wk	com3yd-6	6	3	$510.24	$83.77
3 Yd Container - 7 times/wk	com3yd-7	7	3	$593.28	$95.73
4 Yd Container - 1 times/wk	com4yd-1	1	4	$99.01	$27.93
4 Yd Container - 2 times/wk	com4yd-2	2	4	$186.04	$43.89
4 Yd Container - 3 times/wk	com4yd-3	3	4	$273.07	$59.84
4 Yd Container - 4 times/wk	com4yd-4	4	4	$360.11	$75.79
4 Yd Container - 5 times/wk	com4yd-5	5	4	$447.14	$91.75
4 Yd Container - 6 times/wk	com4yd-6	6	4	$534.17	$107.70
4 Yd Container - 7 times/wk	com4yd-7	7	4	$621.20	$123.65
6 Yd Container - 1 times/wk	com6yd-1	1	6	$106.99	$35.91
6 Yd Container - 2 times/wk	com6yd-2	2	6	$202.00	$59.84
6 Yd Container - 3 times/wk	com6yd-3	3	6	$297.00	$83.77
6 Yd Container - 4 times/wk	com6yd-4	4	6	$392.01	$107.70
6 Yd Container - 5 times/wk	com6yd-5	5	6	$487.02	$131.63
6 Yd Container - 6 times/wk	com6yd-6	6	6	$582.03	$155.56
6 Yd Container - 7 times/wk	com6yd-7	7	6	$677.04	$179.49
8 Yd Container - 1 times/wk	com8yd-1	1	8	$114.96	$43.89
8 Yd Container - 2 times/wk	com8yd-2	2	8	$217.95	$75.79
8 Yd Container - 3 times/wk	com8yd-3	3	8	$320.93	$107.70
8 Yd Container - 4 times/wk	com8yd-4	4	8	$423.92	$139.61
8 Yd Container - 5 times/wk	com8yd-5	5	8	$526.90	$171.51
8 Yd Container - 6 times/wk	com8yd-6	6	8	$629.89	$203.42
8 Yd Container - 7 times/wk	com8yd-7	7	8	$732.87	$235.32

5.4 RATE SURVEY / BENCHMARKING

As part of the Study, we conducted a FY 2014 commercial rate survey that compares the current monthly cost for the Town's most common types of commercial customers to that of surrounding communities in order to compare or benchmark the Town's cost of service. The survey was performed to provide an understanding of the current market range of typical sanitation costs in the area and how the Town fits within that range.

The following chart (Figure 5-3) presents a comparison of the monthly charges for various types of dumpster service in the area for FY 2014. *As can be seen, the Town is*

currently one of the lowest cost service providers in the geographic area for smaller dumpsters, but one of the highest cost providers for larger dumpster sizes. The recommended or proposed rates presented herein would moderate the charge for the larger size dumpsters, however, it would likely result in the Town being one of the higher cost providers for smaller dumpster sizes.

Figure 5-2 – FY 2014 Commercial Sanitation Rate Survey / Bill Comparison

	3 Cubic Yards	4 Cubic Yards	6 Cubic Yards	6 Cubic Yards (2 Conantiers)	8 Cubic Yards	8 Cubic Yards (2 Contaniers)
Mesa	$ 78.00	$ 85.00	$ 94.00	$ 152.00	$ 88.00	$ 170.00
Scottsdale	$ 71.00	$ 74.00	$ 81.00	$ 129.60	$ 81.74	$ 140.80
Peoria	$ 66.40	$ 70.43	$ 78.42	$ 156.84	$ 97.09	$ 172.78
Gilbert	$ 56.98	$ 65.00	$ 81.05	$ 141.43	$ 105.00	$ 173.52
Glendale	$ 47.76	$ 49.22	$ 64.63	$ 129.26	$ 86.39	$ 163.48
Tempe	N/A	$ 61.10	$ 67.74	$ 116.47	$ 76.44	$ 130.90
Avondale	N/A	N/A	N/A	N/A	N/A	N/A
Chandler	N/A	N/A	N/A	N/A	N/A	N/A
Surprise	N/A	N/A	N/A	N/A	N/A	N/A
Phoenix	N/A	N/A	N/A	N/A	N/A	N/A
Gilbert Proposed	$ 95.02	$ 99.01	$ 106.99	$ 142.90	$ 114.96	$ 158.85

SECTION 6. MISCELLANEOUS SERVICE CHARGES

This section of the report presents the analysis of miscellaneous service charges that was conducted as part of the Study.

6.1 DESCRIPTION

The Town currently charges miscellaneous service charges in relation to the provision of specific services to individual customers. Connection fees, service initiation charges, and meter tests are examples of the types of services for which the Town has various miscellaneous service charges. The intent of miscellaneous service charges is to ensure the recipient of the benefit of a specific service bears the costs associated with providing that service.

Miscellaneous service charges are typically calculated by determining the costs, including both the time and materials, necessary to provide the service. Identification of the type of employee(s) involved in providing the specific service (meter reader, service technician, billing clerk, customer service representative, etc.) and of the materials used (water meter, couplings, forms, vehicles, equipment, etc.) is the first step in developing the appropriate fee. The employee(s) cost, including any overhead allocations (i.e. benefits) are then added to the costs of materials, including any overhead allocations (purchasing, warehousing, etc.) to determine the charge for each respective service.

Burton & Associates created a cost-of-service template to be used for each miscellaneous service charge listed in the Town's code of ordinances and/or rate resolutions as well as any new charges the Town may wish to consider. This template provided a consistent methodology for assigning the appropriate time and material costs necessary for providing each service. Upon completion of the templates for each service, Town staff will identify any adjustments to the current schedule of fees for consideration by the Town Commission at a later date as part of a proposed ordinance and/or resolution revision.

SECTION 7. STORMWATER SYSTEM ANALYSIS

This section presents the results of a Stormwater Utility Cost Allocation and Rate Study (Study) that Burton & Associates conducted for the Town.

7.1 BACKGROUND

For years, the Town has operated, maintained, improved, and expanded the stormwater drainage system throughout its boundaries for the purposes of public health and safety, and protection of property. The Town utilizes an extensive network of street inlets and scuppers, detention basins, and dry wells to control and convey storm water for discharge to a series of regional drainage canals. The operations, maintenance, and capital cost of stormwater management activities continue to rise, as do the cost of system improvements driven by increased environmental regulations.

The Town currently assigns the services and resource requirements for operating and maintaining the stormwater system to multiple divisions, including Wastewater, Streets, and other divisions not necessarily intended for the explicit services provided. As part of the Study, the Town requested a review of the current cost of stormwater management activities and evaluation of potential cost recovery strategies.

7.2 METHODOLOGY

In order to determine the cost of providing stormwater service on an annual basis, we reviewed the Town's Stormwater Management Program dated February 2003 (revised June 2006) and specific operation and maintenance requirements for the system (i.e. salaries, benefits, equipment leases and purchases, vehicle maintenance, and other minor capital outlays) provided by Town staff. Additionally, we had extensive discussions with Town staff regarding the stormwater infrastructure and services provided by the Town in order to develop a clear understating of the Town's responsibilities in operating and maintaining the stormwater system, how its activities benefit the Town's residents and

businesses, and how the system operations are impacted by the various land uses (i.e. residential, commercial and undeveloped).

Once the annual capital and operating cost requirements were identified, Burton & Associates then evaluated fair and equitable stormwater utility fee structures that would recover the costs of providing stormwater service based upon GIS and property data provided by Town staff. As is common industry practice, we established unique customer classes for residential and non-residential property types, as well as a third vacant/undeveloped property class. A rate structure was then developed to apportion the stormwater costs within each customer class, and the amount of stormwater fees for each residential parcel and non-residential fee unit was determined.

7.3 BASIS OF COST APPORTIONMENT

There are several of methods used throughout the country to apportion stormwater costs. While many entities charge a flat fee, apportioning stormwater benefits to properties by square feet of impervious area or parcel frontage are also well-established practices. Burton & Associates evaluated the applicability of the three most common stormwater cost apportionment methodologies, as well as the data and resources required to implement and maintain each.

Initially, we considered each of the following stormwater user fee models:

- Equivalent Residential Unit (ERU) – Allocates costs based on the impervious area of a typical single family residence (SFR).
- Intensity of Development (ID) – Allocates costs based on the percentage of impervious area relative to the property's total area.
- Equivalent Hydraulic Area (EHA) – Allocates costs based on combined impact of measured impervious and pervious areas of the property.

These methods fundamentally associate the system costs (and benefit) with a property's impervious area (buildings, driveways, parking lots, etc.) and assume that the more

impervious area a property has, the more runoff the property will contribute to the stormwater collection and conveyance system during a storm event.

While this is generally the case in many parts of the country, discussion with Town staff suggested that a substantial portion of the stormwater falling on properties within the Town is retained or detained on the individual properties and does not contribute to runoff, and that the primary contributor to runoff from developed properties results from paved driveways and walkways along the property frontage. Based on this dynamic, the Town's property owners receive similar benefit from the stormwater utility operation regardless of property size or impervious area; specifically, safer travel conditions during typical storm events and protection from area-wide flooding.

In light of these factors and considerations, the property frontage along the Town's roadways was determined to be the most equitable measure for apportioning the Town's stormwater utility system cost.

7.4 COST ALLOCATION

7.4.1 Identification of Revenue Requirements

In order to initiate our analysis, we obtained and reviewed the Town's FY 2013 and year to date actual operating expenses as well as FY 2014 budget and FY 2015 preliminary operating expenses and capital costs as they relate to servicing, maintaining and improving/expanding the stormwater system. We met with Town staff in multiple interactive work sessions to discuss the specific cost requirements for the system (i.e. salaries, benefits, and other minor capital outlays) in order to understand the annual cost of service for the stormwater utility system. Because the Town does not currently have an explicit stormwater utility fund, the discussions with staff were key to isolating the various stormwater functions and costs currently contained in other various areas, such as Wastewater, Streets, and the General Fund.

Using the Proposed FY 2015 Budget, we determined the net stormwater rate revenue requirement for FY 2015 (see Table 7-1). It is important to note that the FY 2015

revenue requirement does include an allowance for potential mitigation credits for customers with onsite stormwater attenuation/mitigation facilities should the Town implement a mitigation credit policy as described later in this section. The table below presents a summary of the FY 2015 revenue requirement identified in this report.

Table 7-1 – Stormwater Revenue Requirement	
Department/Description	FY 2015 Budget Amount
Wastewater Expenses	$ 85,680
Streets Related Expenses	$ 1,043878
Debt Service	$ 376,519
Subtotal	$ 1,506,077
Estimated Mitigation Credits (5% of Total)	$ 79,267
Total Revenue Requirement	**$ 1,585,345**

7.4.2 Frontage and Customer Classes

In order to develop an estimate of total property frontage feet by customer class, each parcel was placed into either a residential, non-residential or vacant/undeveloped customer class based the property use designation and the vacant/non-vacant coding as defined by the Maricopa County Property Assessor (MCPA) and provided by Town staff. Residential properties include parcels designated as developed single-family homes, condominiums, and mobile homes, while Non-Residential properties consist of all other developed property types, including multi-family properties. Vacant/Undeveloped properties include all parcels identified vacant by the County, regardless of zoned or designated property type.

The GIS parcel data provided by Town staff was then scrubbed to remove all properties representing road rights-of-way, and was then processed using GIS spatial analysis tools to programmatically identify the length in feet of each segment (or side) of a parcel boundary which did not adjoin another parcel. In some cases, multiple segments were identified for the same parcel. Visual inspection of the GIS property data and aerial imagery for of a number of these instances indicated that this generally resulted from

properties located at street intersections or in residential neighborhoods with alleys along the rear of the property. For the purposes of this analysis, only one line segment (the shortest) was selected for each residential parcel having multiple segments, while the total segment length was included for non-residential and vacant properties with multiple frontage segments.

Based upon the data from the MCPA and the GIS frontage length calculations, the Town's residential parcels served by the stormwater utility have an estimated 4.9 million linear feet (LF) of frontage, with the typical or median frontage of a single-family property of just over 65 LF. Similarly, the Town's non-residential and vacant parcels have and estimated total frontage 2.5 million LF and 1.2 million LF of frontage, respectively.

Table 7-2 below presents a summary of the estimated property frontage and FY 2015 revenue requirement allocation between customer classes based upon frontage feet are recommended herein.

Table 7-2 – Summary of Frontage and Revenue Allocation

Department	Residential	Non-Residential*	Vacant/ Undeveloped	Total
Number of Properties	61,071	6,790	7,767	75,628
Estimated Frontage (LF)	4,939,938	2,477,655	1,210,342	8,627,935
Allocation Percentage	57%	29%	14%	100%
Revenue Allocation	$ 907,692	$ 455,258	$ 222,395	$ 1,585,345

*Includes multi-family properties.

7.5 RECOMMENDED RATE STRUCTURE

Based upon our evaluation of the rate structure alternatives described above and our discussions with Town staff, we would recommend the Town consider implementing a flat fee for developed residential properties and a unit rate applied to linear feet of property frontage for commercial, multi-unit and undeveloped properties to the extent the Town were to move forward with a stormwater rate structure.

In this rate structure, the Single-Family Residential class would have a single flat rate regardless of property size or impervious area. As noted by Town staff, a substantial portion of the stormwater is retained on the individual residential properties and stormwater contribution from these properties is typically limited to runoff from driveways, and varies only slightly from property to property. Based on this dynamic, the Town's homeowner's receive similar benefit from the stormwater utility operation regardless of property or home size; specifically, safer travel conditions during typical storm events and protection from area-wide flooding.

The stormwater fee for Non-Residential, Multi-Unit and Vacant/Undeveloped, properties would be determined based upon each property's frontage, or the lineal distance that a lot borders on a street (or multiple streets as applicable). It should be noted that while the GIS-based approximation of frontage feet presented herein is adequate to apportion stormwater costs and estimate potential user fees; the Town should develop and maintain a reliable database of frontage units using more detailed GIS data mapping, property documentation review or field measurements for billing and cost allocation purposes.

We recommend establishing a rate per 10 linear feet (LF) of property frontage (Frontage Unit). Rounding down to the nearest number of Frontage Units serves to minimize the effects of errors in the Maricopa County Property Assessor's data or in the fee calculation process. Also, by converting all applicable properties into Frontage Units, the Town is able to distribute the fee fairly and consistently among all commercial and undeveloped properties. Table 7-3 below presents an example stormwater rate structure based on the process and data described herein, and Table 7-4 presents example monthly bills for various property types.

Table 7-3 – Example Rate Structure

Customer Type	Monthly Fee/Rate	Annual Revenue
Monthly Residential (per Parcel)	$ 1.24	$ 907,692
Non-Residential (per Frontage Unit)	$ 0.15	$ 455,258
Vacant/Undeveloped (per Frontage Unit)	$ 0.15	$ 222,395
Total Annual Revenue		**$ 1,585,345**

Table 7-4 – Example Monthly Stormwater Bills		
Customer Type	Estimated Frontage Units	Monthly Bill Amount
Single Family Residential Home	N/A	$ 1.24
Bank	35	$ 5.25
Service Station/Convenience Store	40	$ 6.00
Drug Store	45	$ 6.75
Office Building	60	$ 9.00
Median-size Vacant Property	65	$ 9.75
Shopping Center	200	$ 30.00

For the purposes of this Study, we aggregated the Town's properties into three general categories, and apportioned costs by frontage foot. As part of an implementation plan, the Town may consider further isolating costs specifically to certain property categories based upon a detailed apportionment of the cost of service recognizing that some costs may not benefit each property type equally in proportion to their linear feet of frontage.

Property Exemptions

The stormwater rate structure recommendation presented herein is applicable to properties and communities which receive a benefit from the stormwater system and/or impact the collection, conveyance, and treatment operations of the system. As discussed with Town staff, there may be instances where certain properties or areas do not experience the same benefit or impact. Some examples include, but are not limited to the following:

- Properties that don't drain to roadways due to lack of sidewalks/curb & gutter system
- Neighborhoods with privately maintained retention basins

The Town would need to examine the benefit to and/or system cost impact from these types of users/properties in greater detail if it were to move forward with a stormwater

fee structure to determine the applicability of exempting specific property types from all or a portion of the implemented stormwater fee. For example, basin costs may be directly assigned to properties not benefiting from other stormwater system infrastructure and maintenance costs; however this was determined to be impractical due to the comparatively small in proportion to the total system costs based on our analysis.

Mitigation Credits

Many municipalities provide credits or reductions to stormwater fees for properties with onsite stormwater attenuation and mitigation facilities, recognizing that such facilities reduce the property's impact on the municipal stormwater operations and maintenance costs. This credit program is important in instances where certain types of properties may be mandated to retain/collect all stormwater from their properties and adjoining roadways.

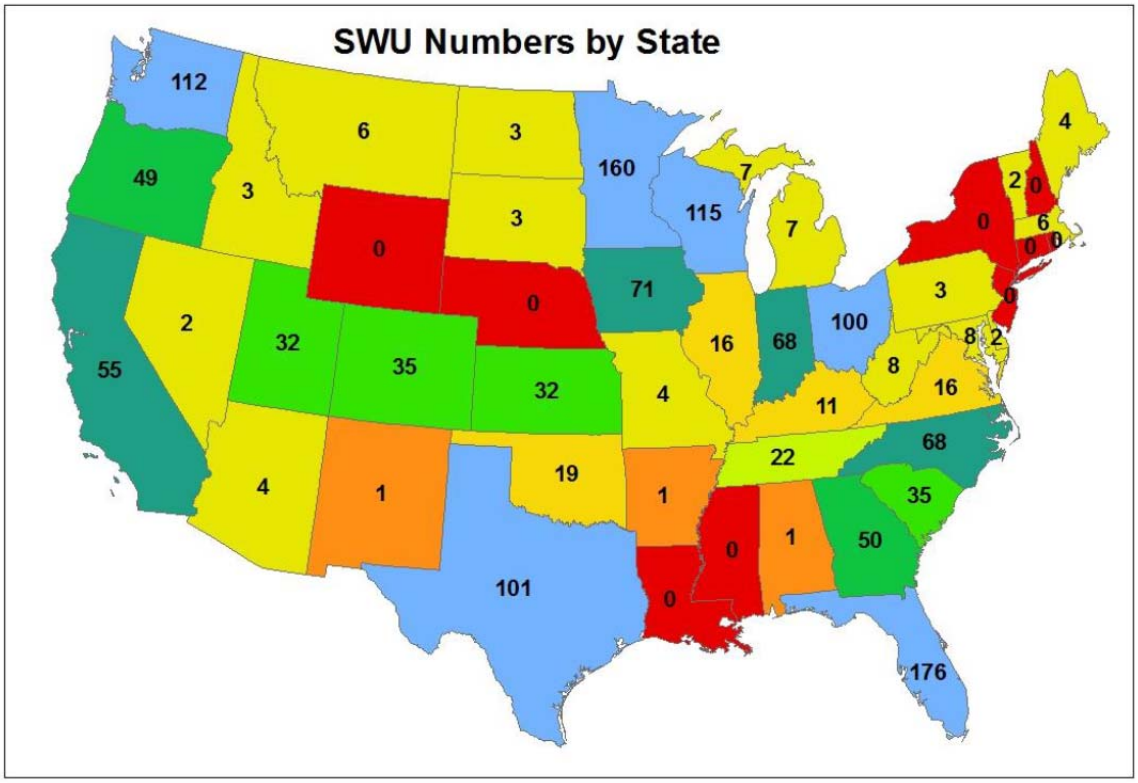
The Town may want to consider, in addition to certain exemptions as discussed above, implementing such a credit policy or program with certain qualifications, allowing properties to be eligible for a credit to their stormwater charges for up to 100% of the portion of charges associated with the day-to-day operation and maintenance of the system. A credit based upon the costs associated with day-to-day operation and maintenance of the system recognizes that while these properties may not contribute to the Town's system on a regular basis, the Town must have the infrastructure in place to accommodate runoff from these properties in extreme weather conditions or in the event their onsite systems fail.

The amount of credit would be determined by the Town on a case by case basis, and require property owner demonstration of the attenuation and mitigation provided by the onsite facilities. In no event should the credit exceed portion of the property owner's monthly charges that represent the portion of the stormwater cost of service associated with day-to-day operation and maintenance activities.

7.6 RATE SURVEY / BENCHMARKING

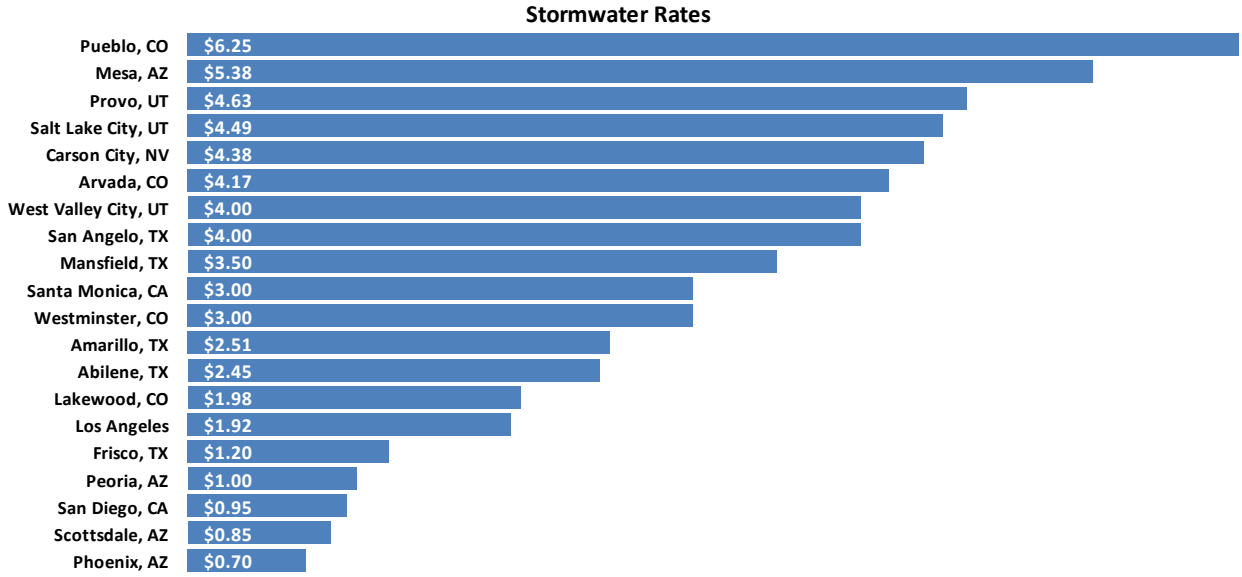
While the number of stormwater utility systems is growing, largely due to increasing regulations relative to water quality, there still remain very few within the State of Arizona (per Western Kentucky University Stormwater Utility Survey 2013).

Figure 7-1 – WKU Stormwater Utility Survey 2013 Map



As such, we have performed a more regional survey (Figure 7-2) to identify the FY 2014 residential stormwater rates for a number of communities in the Western United States that would likely have systems more similar to the Town than in other parts of the country. As can be seen, most stormwater fees in Arizona have much lower fees, with the exception of the City of Mesa, whose fee recovers the cost of a number of programs besides stormwater. The calculated residential fee presented herein for the Town would be very consistent with the level of other fees in Arizona, while also being one of the lower charges in the general region.

Figure 7-2 – FY 2014 Residential Stormwater Rate Survey / Bill Comparison



APPENDIX A – WATER ENTERPRISE FUND

Supporting Schedules

The supporting schedules to be completed as part of the update and will be included in the Final Report.

APPENDIX B – WASTEWATER ENTERPRISE FUND

Supporting Schedules

The supporting schedules to be completed as part of the update and will be included in the Final Report.

APPENDIX C – RESIDENTIAL ENVIRONMENTAL SERVICES ENTERPRISE FUND

Supporting Schedules

The supporting schedules to be completed as part of the update and will be included in the Final Report.

APPENDIX D – COMMERCIAL ENVIRONMENTAL SERVICES ENTERPRISE FUND

Supporting Schedules

The supporting schedules to be completed as part of the update and will be included in the Final Report.

APPENDIX E – MISCELLANEOUS SERVICE CHARGES

Supporting Schedules

The supporting schedules to be completed as part of the update and will be included in the Final Report.

APPENDIX F – STORMWATER SYSTEM ANALYSIS

Supporting Schedules

The supporting schedules to be completed as part of the update and will be included in the Final Report.