City of Peoria, Arizona

FY2018 Water and Wastewater Rate Update

FINAL REPORT

April 13, 2017

Prepared by

Management and Budget Department

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INTRODUCTION

The FY2018 – FY2022 rate forecast for the City's Water and Wastewater funds has been completed by City staff. Consultants from Raftelis Financial Consultants (RFC) completed a rate study of the City's Water and Wastewater services for the FY2016 – FY2020 forecast period. The recommended rate and structure adjustments were adopted by Council for FY2016 and FY2017. RFC and staff jointly completed a modification of the City's Utility Forecasting Model (Model) for the FY2016 Rate Study that staff have updated and used for the current forecast.

BACKGROUND

A number of recommended adjustments to the Water and Wastewater rate structures from the FY2016 Rate Study were adopted and effective beginning in FY2016. Most notably, a change was made in both the Water and Wastewater base fee components that changed how each system's debt costs were allocated to customers. To improve equity and more realistically reflect a meter's capacity requirements, the portion of debt costs recovered in the base fee was allocated using equivalent residential units (ERUs) for multi-family accounts rather than simply by meter capacity ratios. The calculation of a multi-family customer's base charge is now derived based on the number of dwelling units per meter than simply by the meter's size.

A summary of additional structural revisions are outlined below by fund:

<u>Water</u>

- Usage tiers for multi-family customers were reduced from three to one, reflecting the consistent inside usage demands from these customers.
- Usage tiers for hydrant accounts were reduced from two to one, reflecting the discretionary nature of this usage.

<u>Wastewater</u>

- A larger portion of the system's debt service costs was allocated to customer base charges to improve revenue stability.
- The winter season averaging period used to establish single-family wastewater monthly usage levels was modified from three months to four months to reduce volatility caused by seasonal anomalies.
- The wastewater volumetric rate was reduced due to the increased recovery from base charges.

A. Objectives of this Update

With each review and update of the City's Water and Wastewater rates and charges, staff follow the following goals:

- Ensure revenues fully recover the utility system costs.
- Ensure that rates support each fund's long-term financial condition.
- Ensure that rates and rate forecasts reflect current costs of service and customer usage patterns.
- Ensure equitable recovery of costs from the system's customers.
- Seek to minimize the impact to customers whenever possible.

B. System Overview

At the completion of FY2016, Peoria serviced approximately 52,100 water accounts and 54,700 wastewater accounts. Single family residential customers make up the majority of the customers in both systems. Within the Water system, the City classifies its customers by the general description of the customer's water meter usage, resulting in the following usage categories: Residential, Multi-Family, Commercial, Landscape and Hydrant. In the case of Wastewater service, customers are classified more generally based on the account's description. Three categories are used: Single Family Residential, Multi-Family Residential and Commercial.

Peoria's Water average customers by meter size during FY2016:

Meter Size	Residential	Multi-Family	Commercial	Landscape	Hydrants	Meter Totals
3/4"	37,740	40	160	192	-	38,131
1"	10,918	46	323	551	-	11,837
1 1/2"	6	61	326	314	-	707
2"	3	270	559	444	-	1,275
3"	-	15	15	4	72	106
4"	-	12	12	4	-	28
6"	-	9	2	1	-	12
8"	-	2	-	-	-	2
Customer Totals:	**48,667**	**453**	**1,396**	**1,510**	**72**	**52,098**

Peoria's Wastewater average customers by meter size during FY2016:

Meter Size	Residential	Multi-Family	Commercial	Meter Totals
3/4"	38,768	30	120.0	38,918
1"	10,501	28	254	10,783
1 1/2"	8	64	292	364
2"	3	255	522	780
3"	-	15	12	27
4"	-	11	13	24
6"	-	12	10	22
8"	-	2	2	4
Private Water	3,722	22	33	3,777
Customer Totals:	**53,001**	**439**	**1,258**	**54,698**

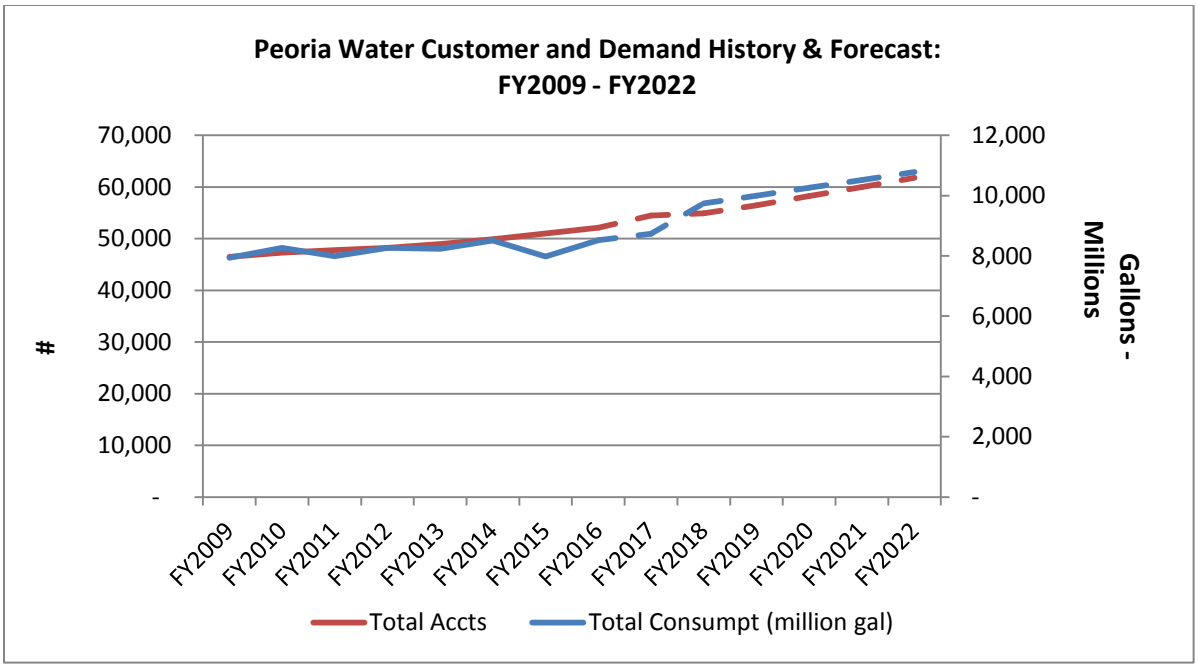
For purposes of billing system capacity charges, the City further identifies the number of dwelling units within its Multi-Family accounts. When these units are considered, the number of Multi-Family units exceeds 12,000 for each service.

During FY2016, the City acquired the privately-owned New River Utility Company (NRUC) water system (located within the City's municipal boundaries) and began serving the system's approximately 2,900 customers in November, 2015. These customers already received wastewater service from the City and are included in the above Wastewater customer counts. The City immediately assumed billing and customer service functions of this system and utilized the system's water treatment and delivery infrastructure for the system's continued demand. Over a period following the acquisition, the City began replacing all of the system's water meters with new meters that were compatible with the City's automated meter reading technology. Additionally, and in accordance with its pre-acquisition due diligence research of the system, the City began making plans to upgrade the NRUC's well, reservoir and transmission infrastructure to improve the system's reliability.

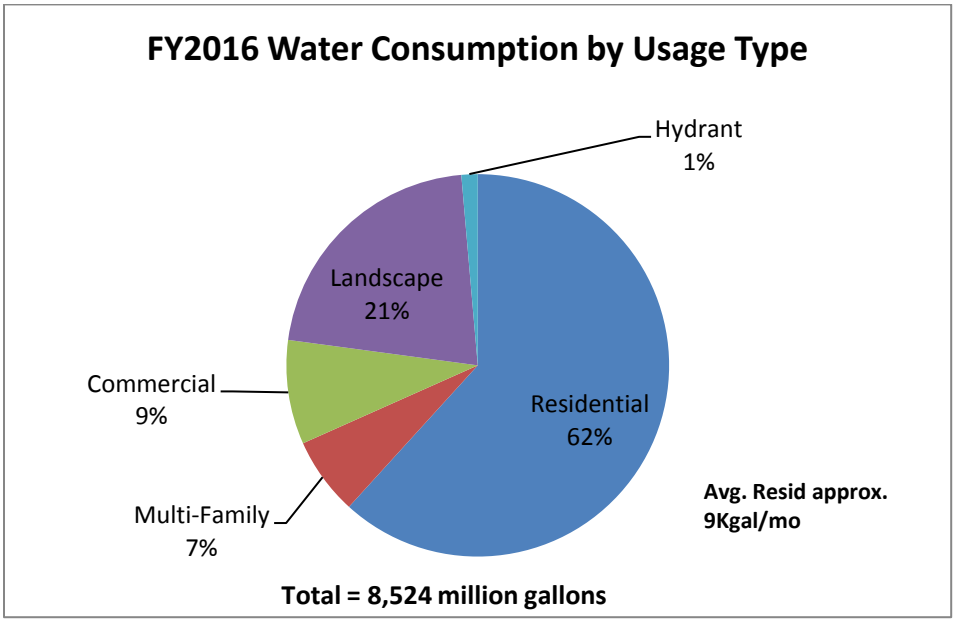
For a period of twelve months lasting until December 31, 2016, NRUC customers continued to pay water rates in effect under NRUC's ownership. These customers did not transition to the City's prevailing water rate structure and fee schedule until January 1, 2017. Therefore, demand information cited below at the conclusion of FY2016 does not include customers acquired in the NRUC system. As part of the staff's update process, however, the consumption by NRUC customers was compiled and added to the system's demand forecast under City's rate structure. Based on the consumption of these customers for the period from January, 2016 to December, 2016, the NRUC accounts are estimated to add slightly more than 600,000 units (000's gallons, or Kgals) to the City's potable water demand. This estimate is slightly higher, but consistent with the system's recent reported consumption while under private ownership.

C. Demand Patterns

Staff update the economic forecasting model used in the City's long-term financial and rate planning every six months with consumption by usage/customer category, along with current meter and customer counts for both the Water and Wastewater systems. The City has experienced modest water consumption growth over the past several years following the recession, but has experienced some recent fluctuations in consumption. Customer growth, however, has not been subject to the same variations following the recession and is expected to continue to grow through the forecast period. The following chart displays the City's Water consumption and annual account growth from FY2009-2016 and the forecasted change in both series through FY2022:



Based on Peoria's Water System rate base being comprised of predominantly single-family residential accounts, it's not surprising that this usage category accounts for most of the system's potable water demand at approximately 62%. The second largest category of usage is made up from the landscaping and hydrant usage that is over 20% of the system's demand. Although these two categories of use represent less than 5% of the City's Water accounts, they have accounted for over 20% of the system's overall demand growth since FY2014. The growth in Residential demand has represented a percentage that is largely proportional to the number of accounts. Commercial and Multi-Family usage has been relatively stable over this period. The following chart illustrates the make-up of the City's potable water consumption for FY2016 by usage type:



D. Peoria's Rate History

The City must balance its financial performance objective with the objective of maintaining affordable Water and Wastewater rates for its customers. To that end, the City has been able to maintain relatively modest rate adjustments over the past seven years for both Water and Wastewater services. The table below provides a history of adopted Water and Wastewater rate adjustments for the period from FY2010-2017.

Fiscal Year	Water	Wastewater
2010	0.00%	0.00%
2011	0.00%	0.00%
2012	4.60%	4.50%
2013	0.00%	8.20%
2014	0.00%	0.00%
2015	0.00%	0.00%
2016	2.80%	1.90%
2017	2.60%	2.60%

REVENUE REQUIREMENTS

As part of a rate study and this update, staff must determine and forecast each system's revenue requirements over the forecast period. The revenue requirements will consist of the system's annual operating costs made up of division operating and maintenance expenses, existing and proposed debt service costs, capital project costs over the forecast period, and projected reserve requirements for each fund according to the City's Principles of Sound Financial Management.

Staff utilizes the most recent budgeted operational expenses as a starting point in the forecast and escalates these categories based on historical trends and expected changes during the forecast period. Staff seeks to identify any material one-time operating costs that might occur during the forecast period or whether the systems might incur additional ongoing costs during the forecast period as a result of changes in operations. During the update, staff are also updating the Utilities 10-year Capital Program and including those projects that will require funding during the forecast period. Additional ongoing costs to operate and/or support completed projects during the forecast period are identified and included. Lastly, should a capital project require outside financing to construct, staff identifies the method of borrowing and forecast the additional costs of financing required over the borrowing period.

The Table below represents the annual cost escalation and inflationary factors used to forecast each system's operational costs over the current FY2017 budget levels during the forecast period of FY2018-FY2022:

O&M Expense Category		2018	2019	2020	2021-2024	2025-2028
Benefits		6.3%	6.3%	6.3%	5.7%	5.7%
Salaries		4.0%	3.5%	3.5%	3.5%	3.5%
Contractual		0.0%	2.0%	2.0%	2.0%	2.0%
Electricity		0.0%	3.0%	3.0%	3.0%	3.0%
Chemicals		0.0%	2.0%	2.0%	2.0%	2.0%
Other Svc. Chgs.		2.0%	3.0%	3.0%	3.0%	3.0%
Repair Maint.		0.0%	2.0%	2.0%	2.0%	2.0%
Vehicle Costs		0.0%	2.0%	2.0%	2.0%	2.0%

O&M Expense Category		2018	2019	2020	2021-2024	2025-2028
Genl Fund SvcChg		5.1%	2.7%	2.7%	3.1%	3.0%
Water Acq Costs		1.0%	1.0%	1.0%	1.0%	1.0%
Pyramid Peak Treatment Costs		7.5%	5.0%	5.0%	5.0%	5.0%
Utilities Indirect Charges		0.0%	2.0%	2.0%	3.0%	3.0%
Commodities		0.0%	2.0%	2.0%	2.0%	2.0%
System Supplies & Equip.		0.0%	2.0%	2.0%	2.0%	2.0%

As expenditures for FY2018 became clearer with the approach of recommended budgets for both funds, the escalation factors could be adjusted to the anticipated levels, which is why some of the factors are set at 0%. The factor used for Water Acquisition Costs ("Water Acq Costs") previously included the cost factors for the City's Central Arizona Project (CAP) costs and was normally much higher than the 1% indicated in the table. With the planned forecast of higher CAP delivery charges, this component was forecasted separately as is discussed below. The remaining items in the Acquisition Costs category are therefore estimated to rise at the smaller rate of inflation.

A. Factors Influencing the System's Operating Costs

Staff anticipate that both the Water and Wastewater systems will experience annual ongoing increases to the largest expense categories such as salaries and benefits, electricity, repair and maintenance, supplies and equipment and indirect costs that the systems incur from the City's General Fund and City internal service funds that provide services to the Water and Wastewater funds.

One of the major components of the Water fund's operating expenses is its costs related to the delivery of raw surface water supplies from both the Salt River Project (SRP) and Central Arizona Project (CAP) systems. The City treats SRP water supplies at its Greenway Water Treatment Plant in the southern part of the City and treats CAP water at the Pyramid Peak Water Treatment Plant operated and owned by the City of Glendale, in which Peoria owns a 23% share. This plant treats and delivers potable water in the northern part of the City.

Forecasts of the Water system's operating costs are expected to be significantly influenced by increasing costs from the CAP system. In the near term, the City's fixed costs of its CAP supply allocation – paid through Capital Charges—will increase by approximately 80% from FY2016 to FY2018, or an additional $610,000. The larger component of the City's CAP costs are based on Peoria's annual water deliveries multiplied by the rates charged for each acre foot of water delivered (known as the M&I Delivery Rates). These rates are influenced by the CAP's normal costs of operations, but are expected to rise at a higher-than-normal rate during the forecast period due to reduced deliveries by the CAP system as a result of a potential drought condition faced on the system's primary delivery reservoir, Lake Mead. The CAP released rates under this condition that would begin to rise more rapidly beginning in FY2019 through FY2022, adding an average of $700,000 in additional costs each year over the forecasted rates under normal conditions.

B. Capital Project Costs

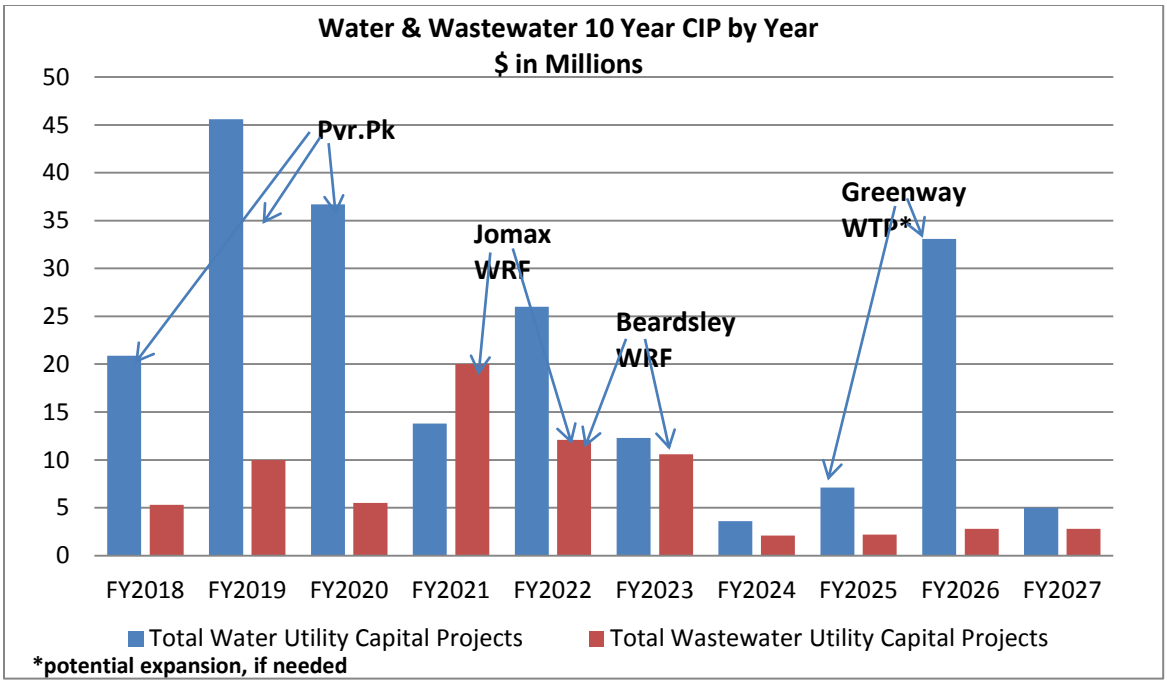
The 10 year Capital Improvement Program (CIP) for the Water and Wastewater systems represents approximately $280 million, of which $195 million is planned during the first five years of the program. The City's CIP for Water and Wastewater includes over 50 projects that address both systems' need to

expand and add facilities and infrastructure to meet demands expected from growth, maintain and repair existing infrastructure, and address regulatory requirements. During both periods, monies from both operating funds make up the largest share of the total funding requirements at about 45%, followed by bond financing at 35%. Impact fee sources in both funds contribute about 20% of both the 5 and 10 year funding requirements.

The City plans to expand its capacity at the Glendale Pyramid Peak WTP during FY2018-2020 by an additional 13MGD at an estimated cost of $52 million to serve anticipated growth in the northern areas of the City. The project will be funded primarily through an approved 20-year loan with the Arizona Water Infrastructure Authority (WIFA). Once the expansion is completed, the City will pay an increased share of the plant's operating costs that are expected to rise at a faster rate due to increased production requirements. The City will also fund a share of planned upgrades to this plant over the 10 year program at a cost over $6 million.

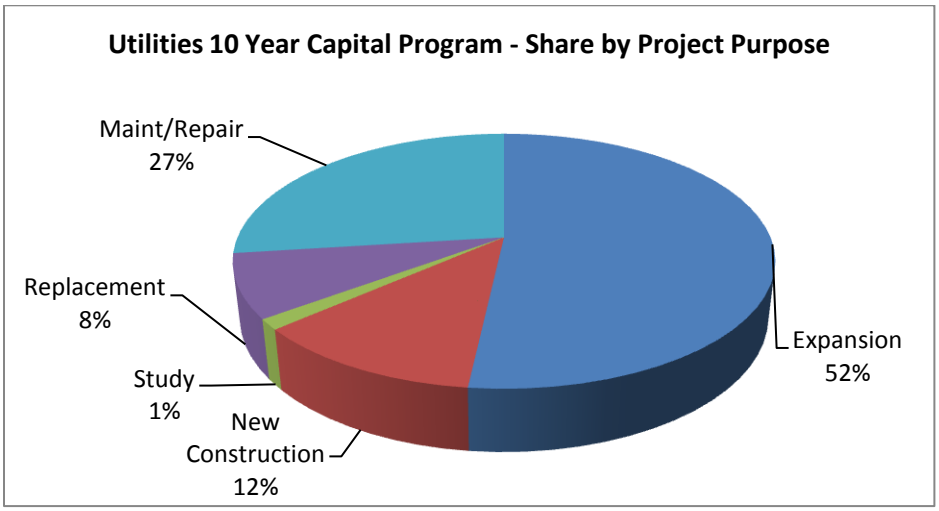
The City also plans to expand its capacity by 1.25MGD at the Jomax Water Reclamation Facility (WRF) near the end of the 5 year forecast period to have available treatment capacity for this service area at an estimated cost of over $24 million. As the plant has a dual purpose of making treated effluent available as a renewal water resource, the Water Fund contributes 25% of the costs of this expansion. The City also has planned a second Wastewater plant expansion at the end of the forecast period at its Beardsley WRF serving the north and central areas of the City that are east of the Agua Fria River. The costs (also shared 25% with the Water Fund) are estimated to exceed $21 million. Both WRF expansions will incur additional operating expenses as a result of the increases in capacity.

The chart below provides a 10 year view of the Utilities CIP for the Water and Wastewater utilities:



The above chart of estimated capital program costs includes sources in addition to the operating funds of the two utilities – i.e. bonds and expansion funds.

The second chart provides information on the types of projects that are funded in the 10 year program for the Water and Wastewater funds combined:



RATE RECOMMENDATIONS

Staff recommend the following rate adjustments for each system to sufficiently recover the anticipated costs of operations, meet the City's PoSFMs for enterprise funds, and to ensure revenue stability for each fund. Staff are not recommending changes to the existing structures of either the Water or Wastewater rates.

Water

Water Base & Capacity Charges:

WATER METER & CAPACITY CHARGES

Base Charge:	Meter Size	Current	Proposed FY2018	Proposed FY2019
- Residential -	5/8" - 3/4"	$ 15.61	$ 15.88	$ 16.04
- Homeowner's Associations -	1"	$ 18.62	$ 18.94	$ 19.13
- Commercial -	1 1/2"	$ 29.62	$ 30.13	$ 30.43
- Landscape / Irrigation -	2"	$ 41.65	$ 42.36	$ 42.79
	3"	$ 73.76	$ 75.02	$ 75.78
	4"	$ 109.84	$ 111.71	$ 112.84
	6"	$ 210.02	$ 213.60	$ 215.75
	8"	$ 330.29	$ 335.92	$ 339.30
	Hydrant	$ 73.76	$ 75.02	$ 75.78
- Multi-Residential -	ALL SIZES	$ 9.60	$ 9.68	$ 9.67
- Residential Care -				
Capacity Charge Per Dwelling Unit				
	ALL SIZES	$ 3.61	$ 3.72	$ 3.82

Water Volumetric Charges:

WATER VOLUME CHARGES

Volume Charges per 1,000 gallons:	Consumption Range	**Current**	**Proposed FY2018**	**Proposed FY2019**
- Residential -	1,000 - 4,000	$ 1.09	$ 1.13	$ 1.18
	5,000 - 10,000	$ 2.83	$ 2.92	$ 3.05
	11,000 - 20,000	$ 4.01	$ 4.12	$ 4.30
	20,000+	$ 4.38	$ 4.50	$ 4.70
- Multi-Residential & - Residential Care -	1,000+	$ 2.83	$ 2.92	$ 3.05
- Commercial/Industrial & - Homeowners Associations -	1,000 - 10,000	$ 1.09	$ 1.13	$ 1.18
	11,000 - 50,000	$ 2.83	$ 2.92	$ 3.05
	50,000+	$ 4.01	$ 4.12	$ 4.30
- Landscape/Irrigation -	1,000 - 50,000	$ 2.83	$ 2.92	$ 3.05
	50,000+	$ 4.01	$ 4.12	$ 4.30
- Hydrants -	1,000+	$ 4.01	$ 4.12	$ 4.30

Wastewater

Wastewater Base & Capacity Charges:

WASTEWATER BASE & CAPACITY CHARGES

Base Charge:	Meter Size	**Current**	**Proposed FY2018**	**Proposed FY2019**
- Residential -	5/8" - 3/4"	$ 9.08	$ 9.38	$ 9.64
	1"	$ 9.08	$ 9.38	$ 9.64
	1 1/2"	$ 20.60	$ 20.62	$ 21.19
	2"	$ 30.48	$ 30.27	$ 31.11
	3"	$ 56.87	$ 56.03	$ 57.58
	4"	$ 86.53	$ 84.97	$ 87.33
	6"	$ 168.87	$ 165.34	$ 169.92
	8"	$ 267.73	$ 261.82	$ 269.07
- Commercial / Industrial -	5/8" - 3/4"	$ 9.08	$ 9.38	$ 9.64
- Homeowners Associations -	1"	$ 11.55	$ 11.79	$ 12.12
	1 1/2"	$ 20.60	$ 20.62	$ 21.19
	2"	$ 30.48	$ 30.27	$ 31.11
	3"	$ 56.87	$ 56.03	$ 57.58
	4"	$ 86.53	$ 84.97	$ 87.33
	6"	$ 168.87	$ 165.34	$ 169.92
	8"	$ 267.73	$ 261.82	$ 269.07
- Multi-Residential -	ALL SIZES	$ 4.14	$ 4.23	$ 4.27
- Residential Care-				
Capacity Charge Per Dwelling Unit		$ 2.97	$ 3.09	$ 3.22

Wastewater Volumetric Charges:

	Current	**Proposed FY2018**	**Proposed FY2019**
Volume Charges per 1,000 gallons:	$ 2.09	$ 2.11	$ 2.12
- All Customers -			

FY2018 & FY2019 Estimated Water & Wastewater Bills Under Proposed Rates:

The bill and adjustment estimates presented reflect the anticipated adjustments to an average single-family residential customer with a 1" water meter, consuming 10,000 gallons per months and with a winter wastewater average of 8,000 gallons.

	Current	FY2018	$ Change	% Change	FY2019	$ Change	% Change
Water	$ 39.96	$ 40.98	$ 1.02	**2.6%**	$ 42.15	$ 1.17	2.9%
Wastewater	$ 25.80	$ 26.26	$ 0.46	**1.8%**	$ 26.60	$ 0.34	1.3%
Combined	**$ 65.76**	**$ 67.24**	**$ 1.48**	**2.25%**	**$ 68.75**	**$ 1.51**	**2.25%**

RATE & FINANCIAL FORECASTS

The five-year program of user rates are required to achieve revenue sufficiency for the Water and Wastewater funds and are determined based on a number of factors. These factors included projected customer demand, annual water and wastewater revenue requirements, financial guidelines and metrics established under the City's Principles of Sound Financial Management, and the City's annual capital project funding requirements.

Recommended Water and Wastewater Rate Adjustments:

	FY2018	FY2019	FY2020	FY2021	FY2022
Est. Water Adjustments	2.60%	2.90%	3.60%	3.10%	3.20%
Est. Wastewater Adjustments	1.80%	1.30%	0.00%	0.00%	0.00%
Combined Adjustment	**2.25%**	**2.25%**	**2.18%**	**2.00%**	**2.00%**

The adjustments for the last three years of the forecast period (FY2020 – FY2022) are estimated to impact the average single-family residential customer by an average $1.45 per year for the combined services. This forecast will be reviewed and updated at least every two years and will be adjusted as influencing factors change.

Forecasted Water Operating Revenues under Forecasted Rates ($ in millions):

Five-Year Forecast	FY2018	FY2019	FY2020	FY2021	FY2022
Water Operating Revenues	$ 44.3	$ 46.9	$ 50.3	$ 53.1	$ 56.2

Forecasted Wastewater Operating Revenues under Forecasted Rates ($ in millions):

Five-Year Forecast	FY2018	FY2019	FY2020	FY2021	FY2022
Wastewater Operating Revenues	$ 22.8	$ 23.7	$ 24.4	$ 25.0	$ 25.7

Both of the above forecasts include other operating revenues in addition to those generated from rate adjustments, but exclude estimated interest revenues. Forecasted customer growth and modest estimated increases in demand will add to the revenue increases generated by rate adjustments.

Forecasted Water Fund Balances to Reserve Requirements ($ in millions):

Five-Year Forecast	FY2018	FY2019	FY2020	FY2021	FY2022
Water Fund Balances	$ 26.9	$ 25.4	$ 28.7	$ 35.7	$ 38.1
Water Reserve Requirement	$ 21.1	$ 22.2	$ 23.4	$ 24.1	$ 24.3

Forecasted Wastewater Fund Balances to Reserve Requirements ($ in millions):

Five-Year Forecast	FY2018	FY2019	FY2020	FY2021	FY2022
Wastewater Fund Balances	$ 16.5	$ 16.9	$ 21.5	$ 25.4	$ 23.4
Wastewater Reserve Requirement	$ 15.4	$ 15.6	$ 15.9	$ 16.4	$ 16.5

The above tables compare: 1) the combined forecasted balances in both Water and Wastewater Operating Funds with each system's Asset Maintenance Fund, to 2) the combined policy reserve levels as required in the City's PoSFMs. The PoSFM's policy requirements for enterprise funds provides for the following reserves:

- An Operating Reserve equal to 25% of the fund's operating expenses for the current fiscal year.
- An Asset Maintenance Reserve equal to 2% of the fund's capital assets.
- A Debt Stabilization Reserve equal to 50% of the fund's maximum debt service requirement during the five following years.
- A Rate Stabilization Reserve equal to 5% of the fund's average revenues for the past three years.

Maintaining healthy reserve levels in both funds provides the City with the ability to respond to unanticipated changes in operating or capital costs and/or revenue fluctuations, should they occur. As future capital project requirements are identified in the later years of the above forecast period, available funds above the reserve levels will allow the funds to absorb these costs.

Forecasted Combined Debt Service Coverage Ratio (excl. Impact Fees):

The debt service coverage ratio measures the utility's performance in generating sufficient operating revenues to cover its annual debt service obligations. This is an important metric evaluated by the City's bond rating agencies when determining a municipality's bond rating. Peoria is currently rated AA by the major credit rating agencies. The City has adopted a target coverage ratio of 2.0X as part of its PoSFMs for enterprise funds and believes that the target coverage ratio is consistent with the expectations for an AA-rated municipal utility.

Five-Year Forecast	FY2018	FY2019	FY2020	FY2021	FY2022
Debt Service Coverage Ratio	2.10	2.27	2.31	2.30	2.78

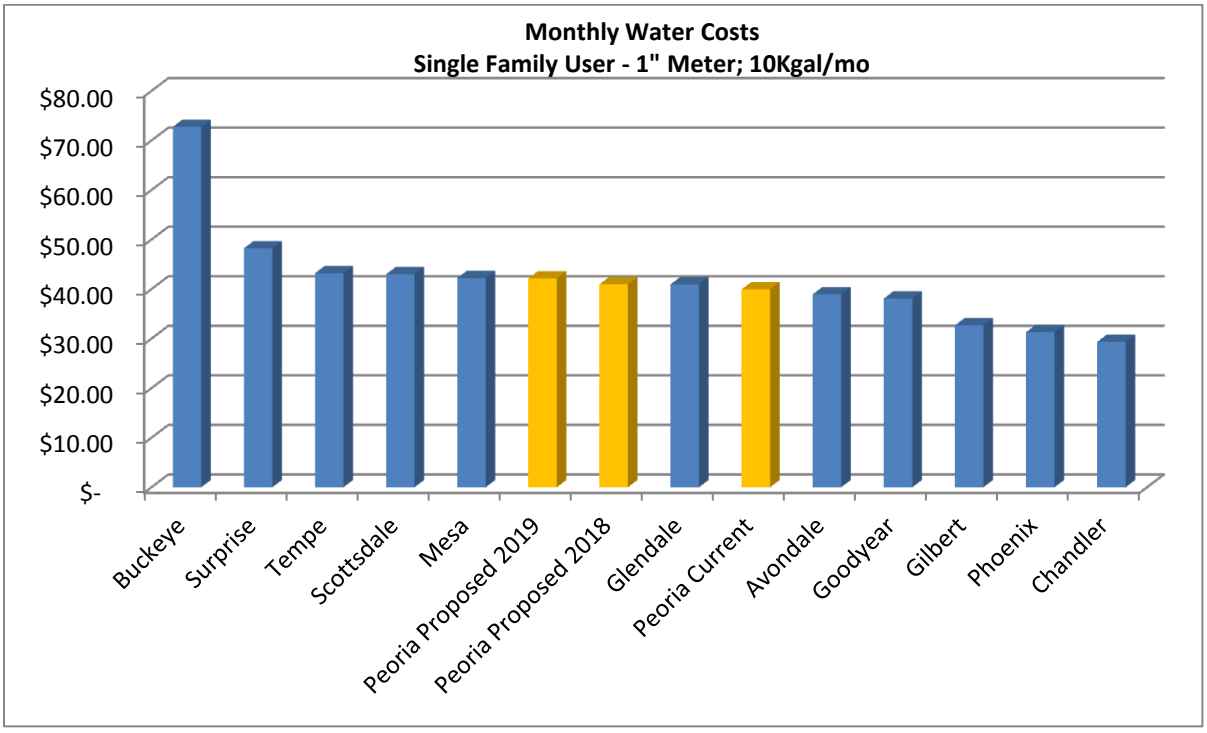
In the Appendix that follows this report, a summary of each fund's sources and uses of funds is presented for the forecast period to present the statutorily-required statement of cash flows.

UTILITY RATE COMPARISONS

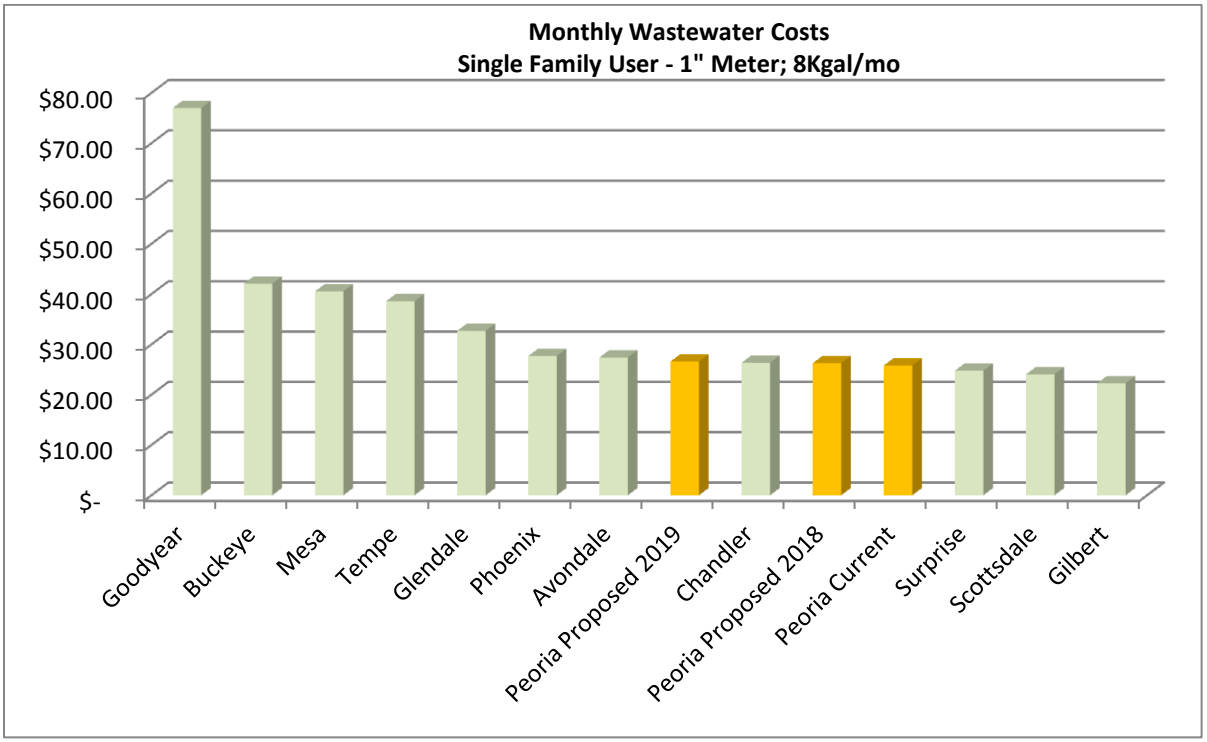
As provided in the objectives of the review and as one of the City's primary pricing principles, staff seeks to minimize the impacts of utility rate adjustments to customers whenever possible. With this goal in mind, the City also compares its costs of water and wastewater services to those of other cities in the Valley. Peoria has been able to maintain cost-effective water and wastewater rates when compared to these cities, while delivering quality and reliable utility services to its customers.

The following charts compare the current, proposed FY2018 and FY2019 monthly costs for Peoria's Water, Wastewater and combined services for an average single family customer that has a 1" water meter and consumes and average of 10,000 gallons monthly with a winter Wastewater average of 8,000 gallons per month. While Peoria's estimated monthly bills will remain at the forecasted levels below for two fiscal years, other Valley cities are likely to adjust their rates for FY2018 and/or FY2019, which could change the illustrated position of Peoria relative to these communities.

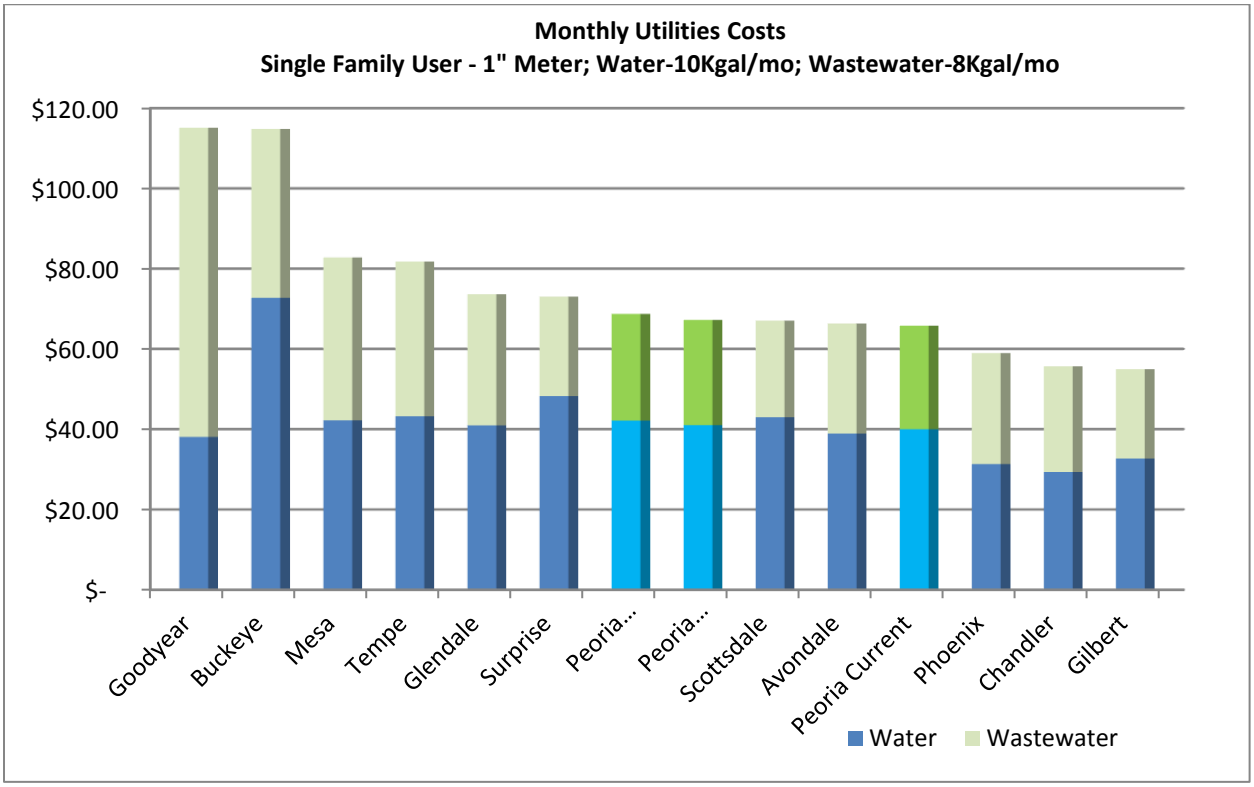
Comparison of Typical Monthly Water Bills:



Comparison of Typical Monthly Wastewater Bills:



Comparison of Typical Combined Monthly Water & Wastewater Bills:



APPENDIX

City of Peoria
FY2018 Utility Rate Report **Statement of Cash Flows**

WATER FUND

	2018	2019	2020	2021	2022
Sources:					
Rate Revenue under Proposed Rates	$ 41,498,962	$ 43,951,029	$ 46,861,834	$ 49,640,440	$ 52,621,503
Other Operating Revenues	$2,816,777	$2,987,411	$3,389,002	$3,473,105	$3,561,554
Interest Revenues	$ 379,826	$ 510,280	$ 529,464	$ 711,488	$ 819,318
Total Revenues	**$ 44,695,565**	**$ 47,448,720**	**$ 50,780,300**	**$ 53,825,033**	**$ 57,002,375**
Uses:					
Operating & Maintenance	24,891,435	26,703,278	28,272,929	29,448,145	30,670,313
Expensed Capital Projects	1,537,112	1,990,311	2,126,888	2,037,250	1,968,625
Total O&M	**$26,428,547**	**$28,693,589**	**$30,399,817**	**$31,485,395**	**$32,638,938**
Debt Service					
Existing	$ 8,239,036	$ 7,563,182	$ 6,026,380	$ 5,035,535	$ 2,633,845
Proposed	$ 118,455	$ 730,540	$ 2,640,720	$ 4,090,474	$ 4,999,870
Total Debt	**$8,357,491**	**$8,293,722**	**$8,667,099**	**$9,126,009**	**$7,633,715**
Balance (Deficiency) of Funds	**$9,909,527**	**$10,461,409**	**$11,713,384**	**$13,213,629**	**$16,729,722**
Proposed Cash-Funded Capital Projects	7,924,484	11,711,367	8,232,435	5,922,097	13,998,386
Amt. from Operating Balance	$7,924,484	$10,461,409	$8,232,435	$5,922,097	$13,998,386
Amt. Needed from Available Fund Balance	$0	($1,249,957)	$0	$0	$0
Remaining Overage (Addt'n to Reserves)	**$1,985,043**	**$0**	**$3,480,949**	**$7,291,532**	**$2,731,336**

WASTEWATER FUND

	2018	2019	2020	2021	2022
Sources:					
Rate Revenue under Proposed Rates	$ 20,985,814	$ 21,855,346	$ 22,470,213	$ 23,108,061	$ 23,743,264
Other Operating Revenues	$1,806,177	$1,846,154	$1,887,027	$1,879,062	$1,920,595
Interest Revenues	229,572	326,446	377,885	520,754	543,894
Total Revenues	**$ 23,021,563**	**$ 24,027,946**	**$ 24,735,124**	**$ 25,507,877**	**$ 26,207,753**
Uses:					
Operating & Maintenance	11,691,756	12,070,243	$12,462,247	$12,861,857	$13,249,853
Expensed Capital Projects	2,336,238	1,875,700	2,029,188	1,992,070	1,910,747
Total O&M	**$14,027,994**	**$13,945,943**	**$14,491,435**	**$14,853,927**	**$15,160,600**
Debt Service					
Existing	4,649,532	4,400,863	4,283,605	4,109,773	3,641,744
Proposed	-	-	287,709	1,469,354	1,469,354
Total Debt	**$4,649,532**	**$4,400,863**	**$4,571,314**	**$5,579,127**	**$5,111,098**
Balance (Deficiency) of Funds	**$4,344,038**	**$5,681,140**	**$5,672,375**	**$5,074,822**	**$5,936,055**
Proposed Cash-Funded Capital Projects	2,781,210	5,112,098	1,046,117	1,057,445	7,873,392
Amt. from Operating Balance	$2,781,210	$5,112,098	$1,046,117	$1,057,445	$5,936,055
Amt. Needed from Available Fund Balance	$0	$0	$0	$0	($1,937,338)
Remaining Overage (Addt'n to Reserves)	**$1,562,827**	**$569,041**	**$4,626,258**	**$4,017,377**	**$0**

Estimated Combined Coverage	2.10	2.27	2.31	2.30	2.78