



## City Council Report

Date: September 23, 2021  
To: City Council  
Through: Michael Kennington, Deputy City Manager/Chief Financial Officer  
From: Brian Ritschel, Management and Budget Assistant Director  
Subject: Fiscal Year 2021/2022 Utility Rate Recommendations

The attached information outlines recommended electric, natural gas, solid waste, wastewater, and water utility rates, components, fees and/or charges to be presented to the City Council in association with the introduction of utility rate ordinances on November 15, 2021. This will be followed by the public hearing on December 8, 2021 as stated in the Notice of Intention, which is on the October 4, 2021 City Council Meeting agenda.

Discussions of the Utility forecast and utility rate recommendations were presented to the Audit, Finance and Enterprise Committee on September 9, 2021.

The purpose of this report is to provide staff recommendations for utility rate adjustments. The rate adjustments are recommended to be effective February 1, 2022.

The forecasted expenses for each utility are compared to the forecasted revenues based on the current rates. The increases in annualized revenues due to the recommended rate adjustments are in the table below. Additionally, the table below shows the increases in operating and debt service expenses for each utility from FY 2020/21 to FY 2021/22.

<u>Utility</u>	<u>Revenue</u>	<u>Expenses</u>
Solid Waste	\$1,421,000	\$4,845,000
Electric	\$495,000	\$2,656,000
Natural Gas	\$618,000	\$3,579,000
Water	\$5,818,000	\$16,012,000
Wastewater	\$3,089,000	\$3,723,000

The method of implementation of rate adjustments can vary from year to year based on the needs and goals of the individual utilities. The impact on individual customers can vary based on the method of implementation and the customer consumption.

For FY 2021/22, the following rate adjustments are being recommended (see Attachment 1 for more detail):

Solid Waste:

Residential barrel rates: 2% increase to monthly service charge  
Green and Clean Fee: Increase by \$0.05, from \$0.84 to \$0.89 per month  
Bulk item pick-up: Increase by \$3.00, from \$25.00 to \$28.00  
Appliance Collection trip charge: Increase by \$7.21, from \$11.79 to \$19.00  
Front-load rates: Overall 3.75% increase  
Commercial Roll-Off rates: Overall 3.25% increase

Electric:

Residential: service charge increase of \$1.50 per month  
Residential: 1.0% Summer Tier 1 usage rate increase and 5.0%  
Winter Tier 1 and Tier 2 usage rate increase  
Non-Residential: service charge increase of \$2.50 per month  
Non-Residential: 5.0% rate increase Summer and Winter Tier 2

Gas:

Residential: service charge increase of \$0.50 per month  
Residential: 10.0% Summer and Winter Tier 2 usage rate increase

Water:

Residential: 3.0% increase to service and usage components  
Non-residential General: 3.0% and 5.0% increases to service and usage  
components, respectively, across most customer classes  
Non-residential Landscape: 3.0% and 6.0% increases to service and usage  
components, respectively, across most customer classes  
Large Commercial and Industrial: 3.0% and 6.0% increases to service and usage  
components, respectively, and increase qualification threshold to 7,500 kgal of  
actual consumption  
Non-residential Excess Surcharge: 6.0% increase  
Pumping Surcharge: 3.0% increase  
Interdepartmental: no adjustment

Wastewater:

Residential rate: 3.5% increase to service and usage components  
Non-residential: 4.0% increase to service and usage components  
Interdepartmental: no adjustment

## **BACKGROUND AND DISCUSSION**

Each utility is operated as a separate business center. As such, rate schedules are adjusted annually in a manner consistent with costs of capital, as well as the fixed and variable costs of operation and maintenance within each utility. In addition, rates are reviewed and updated with the requirements of Title 3, Chapter 3 of the Mesa City Code. To develop rate recommendations, staff consider the following five (5) Financial Principles to ensure the reliability, sustainability, and affordability of the utilities:

- Balance net sources and uses
- 20% or higher reserve fund balance
- Rate adjustments that are predictable and smoothed throughout the forecast
- Equity between residential and non-residential rates
- Affordable utility services

In alignment with the City Code and the Financial Principles, the reserve balances are combined in the Utility Fund and are managed to maintain a targeted ending reserve balance of 20% or higher of the following year's estimated expenditures throughout the forecast period. The reserve balance allows for the smoothing of rate adjustments. This smoothing avoids large rate increases and minimizes the impact to customers in any single year.

The Utility Fund Cash Flow Projections (Attachment 2) includes projections of growth. The Water, Wastewater, and Solid Waste utilities have a citywide service area and are expected to grow by an average of about 1.5% per year during the forecast. With the inclusion of the Magma service area, the Natural Gas utility is expected to grow by 1,600 accounts in FY 2021/22. The Electric utility, with a smaller and largely built out service area when compared to the other utilities, is expected to grow by 200 accounts in FY 2021/22.

The Utility Fund Cash Flow Projections also include expenditures that are increased by inflationary factors in future years. Some inflationary factors are unique to the individual utilities, such as those used for chemicals or purchased water. Other citywide expenditure pressures that are included in the forecast are listed below.

### *Capital Investment*

The City continues to place a high priority on infrastructure investment to attract and service future development. The FY 2021/22 capital improvement program (CIP) includes the planning for increased customer demand, maintaining system reliability and satisfying contractual obligations. The debt service on utility revenue bonds is funded through the utility rates paid by customers. The City issues bonds on an as-needed basis in order to minimize the interest cost. Anticipated future debt service has been included in the forecast and rate recommendations.

*Review of the General Fund Contribution*

The Utility Fund contribution to the General Fund is calculated based off of 30% of each utility's gross operating revenues. The amount of the transfer throughout the forecast period is adjusted based the gross operating revenue forecast. The adjustment for FY 2021/22 is projected to be a slight increase of \$1.4 million, moving from \$113.9 million to \$115.3 million.

SOLID WASTE UTILITY

Solid waste services are charged flat monthly rates for the various services provided.

*Residential Rates*

Staff is recommending a 2.0% increase to all residential rates. The standard black barrel refuse service includes a blue barrel recycling service.

90-gallon trash barrel: Increase of \$0.58 per month, from \$29.34 to \$29.92

60-gallon trash barrel: Increase of \$0.52 per month, from \$26.19 to \$26.71

Additional trash barrel: Increase of \$0.28, from \$13.85 to \$14.13

Green barrel: Increase of \$0.14, from \$6.93 to \$7.07

The projected annualized revenue increase is \$1,066,000.

*Green and Clean Fee*

Staff is recommending an increase of \$0.05 per month, from \$0.84 to \$0.89

The projected annualized revenue increase is \$80,000

*Bulk Item Collection*

Staff is recommending increasing the following bulk item rates:

Bulk Item Service: increase of \$3.00 per load, from \$25.00 to \$28.00.

"Not Out" Fee: increase of \$3.00, from \$25.00 per occurrence to \$28.00 per occurrence.

The projected annualized revenue increase is \$18,000

*Appliance Collection*

Staff is recommending increasing the following appliance rates:

Appliance "Not Out" Fee increase of \$7.21, from \$11.79 to \$19.00

The projected annualized revenue increase is \$1,000.

### *Commercial Front-Load*

There are various rate factors related to Front-Load service. The Front-Load program serves customers in competition with private waste collection companies.

Staff is recommending increasing the base rate, out-of-zone, multi-day factor, multi-bin factor, and additional weight charges. In addition, staff is recommending increasing the special pick-up charge and converting it to a flat rate. The projected overall increase for Front-Load Trash is 3.8%.

- Increase base rates for all size bins by 3%
- Increase out-of-zone fee by \$2.50, from \$16.50 to \$19.00
- Increase multi-day and multi-bin discounts by 1 percentage point
- Convert special pick-up fee to a flat rate and increase the rate to \$60
- Increase compactor base rate by \$5
- Increase additional weight charge by 5%

The projected increase in annualized revenue is expected to be \$155,000 for Front-Load Trash.

### *Commercial Front-Load Recycling*

Staff is recommending an increase to the base rate for commercial cardboard customers.

- Base rate for cardboard:
- Increase 2-yard from \$45.06 to \$51.06
- Increase 3-yard from \$49.18 to \$54.18
- Increase 4-yard from \$53.30 to \$58.30
- Increase 6-yard from \$65.87 to \$70.87
- Increase 8-yard from \$78.12 to \$83.12

The projected increase in annualized revenue is expected to be \$19,000 for Front-Load Cardboard.

### *Commercial Roll-Off*

The Roll-Off program serves residents and business customers in competition with private waste collection companies.

Staff is recommending the following Roll-Off rate adjustments:

- Increase trash and green set fee by \$20.00, from \$60.00 to \$80.00
- Increase trash per ton charge by \$1.75, from \$33.50 to \$35.25
- Increase green waste per ton charge by \$2.00 from \$39.75 to \$41.75

The projected roll-off increase in annualized revenue is approximately \$82,000 for Roll-Off containers.

Solid waste rates across Arizona range from \$20.00 to \$60.00 a month. Costs to provide this service varies depending on many factors such as, but not limited to, distance to the landfill from collection location and landfill costs. An informal survey of private hauler service for county island residents within the City of Mesa resulted in costs comparable to those proposed by staff for FY 2021/22, but the private haulers do not provide recycling service in all locations.

The projected annualized increase in revenue for all Solid Waste utility recommendations is approximately \$1,421,000.

### ELECTRIC UTILITY

Rates for electric service are comprised of three major components: System Service Charge with a flat monthly rate, Energy Usage Charge based on units of consumption, and the Electric Energy Cost Adjustment Factor (EECAF) which passes the cost of the purchase of the electric commodity to the customer.

Adjustments to the system service charge component of the electric rate allows for a more stable revenue source for the program and insulates customers from higher energy costs during peak demand periods such as the summer. Currently only 14% of the revenues (excluding EECAF) from electric customers are fixed revenues. The program is heavily reliant on consumption to cover fixed expenses. Rate adjustments applied to the system service charge allows for a movement toward a more balanced rate structure.

Additionally, the electric program is experiencing normal inflationary pressures on operating costs, as well as increased debt service expenses related to system infrastructure improvements.

The EECAF component is adjusted monthly to “pass-through” increases and decreases in the costs of electric energy supplies acquired to meet customers’ needs. In August 2020 and February 2021, the electric energy market experienced a shrinking of reserves and decreases in generation, which increased prices. Additionally, population growth in the Western Market for electricity also put additional pressure on price increases for electricity. The impact of these factors results in an increase in forecasted costs for electricity. Electric energy supply costs are projected to increase from \$15.8M in FY 2020/21 to \$32.9M in FY 2021/22. Staff continues to actively monitor pricing for electricity and apply the increasing costs using a smoothing approach in order to prevent spikes in customer bills.

Staff recommends the following rate adjustments:

*Residential*

Residential System Service Charge: increase of \$1.50, from \$13.00 to \$14.50  
Residential Usage Charge: 1.0% increase in Summer Tier 1 usage charge, and 5.0% increase in Winter Tier 1 and Tier 2 usage charge

Average residential bill with customer charge, energy usage charge, and EECAF: from \$106.83 to \$109.59, a 2.2% increase

Salt River Project (SRP) comparison:

Service Charge: \$20.00 per month (\$5.50 more than Mesa's proposed)

Mesa's average residential customer:

Monthly bills for Mesa customers are anticipated to be approximately \$0.37 less per month (\$4.44 less per year) than SRP.

Lower use customers' bills (i.e. first quartile with an average consumption of 330.88 kWh per month) would be almost 6.7% less than if they were served by SRP.

*Non-Residential*

Non-Residential System Service Charge: increase of \$2.50, from \$7.22 to \$9.72  
Residential Usage Charge: 5.0% increase in Summer and Winter Tier 2 usage charge

Average residential bill with customer charge, energy usage charge, and EECAF: from \$417.81 to \$420.31, a 0.6% increase

Salt River Project (SRP) comparison:

Service Charge: \$22.72 per month (\$13.00 more than Mesa's proposed)

Mesa's average residential customer:

Monthly bills for Mesa customers are anticipated to be approximately \$54.16 more per month (\$649.92 more per year) than SRP.

Lower use customers' bills (i.e. first quartile with an average consumption of 653.91 kWh per month) would be almost 9.5% less than if they were served by SRP.

The projected annualized increase in revenue for all Electric utility recommendations is approximately \$495,000.

## NATURAL GAS UTILITY

Rates for natural gas service are comprised of three components: System Service Charge with a flat monthly rate, Usage Charge based on units of consumption, and the Purchased Natural Gas Cost Adjustment Factor (PNGCAF) which passes the cost of the purchase of the natural gas commodity to the customer. Those customers that reside in the Magma service area also have a Magma adjustment factor rate component. The adjustment factor benchmarks the City's rates to the rates of Southwest Gas to ensure market equity.

Additionally, the natural gas program is experiencing normal inflationary pressures on operating costs, as well as increased debt service expenses related to system infrastructure expansion and improvements.

As the recommended system service charge increase is a flat amount, the dollar impact would be equal on each bill but the percentage impact would vary based on consumption. The higher the consumption, the lower the percentage impact would be. The Tier 2 Summer/Winter Usage increase would increase rates over 25 therms of usage and lessen the rate disparity for higher consumption.

Adjustments to the system service charge component of the natural gas rate allows for a more stable revenue source for the program and insulates customers from higher natural gas costs during peak demand periods such as the winter. Currently only 42% of the revenues (excluding PNGCAF) from natural gas customers are fixed revenues. The program is heavily reliant on consumption to cover fixed expenses. Applying the rate adjustments to the system service charge allows for a movement toward a more balanced rate structure.

The PNGCAF component has been adjusted monthly to "pass-through" increases and decreases in the costs of natural gas supplies acquired to meet customers' needs. This rate component has varied between \$0.19906 and \$0.38284 per therm in the most recent twelve months.

Staff recommends the following rate adjustments:

### *Residential*

Residential System Service Charge - summer: increase \$0.50, from \$15.31 to \$15.81

Residential System Service Charge - winter: increase \$0.50, from \$18.24 to \$18.74

Average monthly Mesa resident bill with customer charge, usage charge, and PNGCAF: from \$39.51 to \$40.23, 1.8%

### Southwest Gas (SWG) comparison:

Mesa's average residential customer's monthly bill are anticipated to be approximately \$0.73 more per month (\$8.76 more per year) than if served by SWG.

The projected annualized increase in revenue for the Natural Gas utility recommendations is approximately \$618,000.

## WATER UTILITY

Rates for water service are comprised of two components: Service Charge, with a flat monthly rate based on the water meter size and Usage Charge, based on units of water consumption.

The water utility forecast includes increased costs for debt service, joint venture costs for the operation of the Val Vista Water Treatment Facility, and power, commodity, and chemicals at the City's water treatment plants. Staff reviews and forecasts all costs each year to ensure rates are sufficient to keep up with expenses. This includes significant cost increases for operational (\$7.6M) and debt service (\$8.4M) costs from FY 2020/21 to FY 2021/22.

Over the last few years, the City has concentrated on aligning its fixed revenues with fixed costs. The goal is to achieve revenues from the Service (fixed) Charge at 35% to 40% of overall rate revenues. FY 2020/21 fell just short of this goal at 34.44% of total rate revenues. This can be attributed to unusually high water consumption for all customer classes largely due to lack of rainfall. However, the goal is projected to be achieved in FY 2021/22, with revenues from the service charge component forecasted to come in at 36.07% of total estimated rate revenues.

The variable rate component (Usage Charge) is based on water consumption rounded to 1,000 gallon increments. There are four tiers (or levels of usage). Each tier has a different rate. The tier structure allows for a demand based rate as customers with higher usage patterns create a greater demand for infrastructure and service capacity.

For FY 2021/22, staff recommends a 3.0% increase to all service charges, and a 3.0% increase to residential usage charges.

### *Typical Residential Water Consumer Impact:*

Service Charge: \$0.86 increase per month, from \$28.52 to \$29.38  
Usage Charges: \$0.30 per month, from \$9.72 to \$10.02  
Total average monthly bill impact: \$1.16 per month, from \$38.24 to \$39.40

### Arizona Water Company comparison:

Service Charge: \$22.34 per month  
Usage Charges (6,000 gallons): \$16.66  
Total average monthly bill: \$39.00

### *Non-Residential Water*

Consistent with the direction promoting equity with residential rates and furthering conservation efforts, the City is focused on identifying necessary and discretionary water use. Additionally, FY 2020/21 continued the recent trend of higher usage for non-residential customers compared to residential customers. The impact of increased non-residential water usage impacts the amount of water and infrastructure needed to serve these customers.

Staff recommends a 5.0% rate increase to the Non-residential General Usage Charge and a 6.0% rate increase to the Non-residential Landscape Usage Charge, Large Commercial and Industrial Usage Charge, and Excess Usage Surcharge for all non-residential water. Additionally, for the Large Commercial and Industrial customer class, staff recommends increasing the threshold for the Eligibility Criteria for this rate from 6,000 kgal per month to 7,500 kgal per month of actual consumption.

Prior to FY 2020/21, the non-residential usage rate was aligned with the necessary usage tier (Residential Tier 1). The proposed rate increases continue to move the non-residential usage rates closer to the usage tiers representing discretionary usage (Residential Tiers 2, 3, and 4). Similar to residential customers, all non-residential customers would have a 3.0% increase in their Service Charge. As the recommended increase is higher for the Usage Charge, the monthly bill increase will be decreased for customers that consume less water.

#### *Typical Non-residential Water Consumer Impact:*

Commercial General typical monthly bill (consumption of 9,000 gallons):  
increase of \$2.04, from \$53.24 to \$55.28, or a 3.8% increase.

Commercial Landscape typical monthly bill (consumption of 40,000 gallons):  
increase of \$8.73, from \$163.29 to \$172.02, or a 5.3% increase

Interdepartmental water rates are recommended to be held constant.

The projected annualized increase in revenue for all Water utility recommendations is approximately \$5,818,000.

### WASTEWATER UTILITY

Rates for residential wastewater service are comprised of two components: Service Charge with a flat monthly rate, and Usage Charge based on wastewater demand volume. Wastewater volume is calculated for each customer based on 90% of the average monthly water use for the three lowest water usage months from December through March (also known as the “winter water monthly average”). This approximates indoor household usage and the resulting demand on the wastewater system. A City-

wide winter water monthly average is used for new customers until an individual customer average can be determined.

The wastewater utility forecast includes increased costs for debt service associated with the expansion of the Greenfield Water Reclamation Plant, which expanded operations beginning in FY 2020/21. Significant costs within the utility are the cost of chemicals, electricity, one-time maintenance at the Greenfield Water Reclamation Plant, and the cost of ownership, operation, and maintenance of the 91st Avenue Wastewater Treatment Plant (a joint venture with the cities of Glendale, Phoenix, Scottsdale, and Tempe). Staff reviews and forecasts costs each year to ensure rates are sufficient to keep up with expenses. The debt service costs are projected to decrease by \$1.7M, however operational costs are projected to increase by \$5.5M from FY 2020/21 to FY 2021/22.

Staff recommends a 3.5% increase to the Service Charge and the Usage Charge for Residential customers, and a 4.0% increase to the Service Charge and the Usage Charge for Non-residential customers.

*Typical Residential Wastewater Consumer Impact:*

Service Charge: \$0.70 increase per month, from \$19.94 to \$20.64  
Usage Charge (Winter water average): \$0.12 increase per month, from \$3.28 to \$3.40  
Total average monthly bill impact: Approximately \$0.82 per month, from \$23.22 to \$24.04

Liberty Utilities comparison:

Service Charge: \$52.40 per month  
Usage Charges: \$2.34  
Total average monthly bill: \$54.74

EPCOR (formerly Johnson Utilities) comparison:

Service Charge: \$39.24 per month  
Usage Charges: \$0.00  
Total average monthly bill: \$39.24

*Typical General Commercial Wastewater Consumer Impact:*

Service Charge: \$0.86 increase per month, from \$21.50 to \$22.36  
Usage Charge (based on water consumption): \$0.49 increase per month, from \$12.04 to \$12.53  
Surcharge (based on water consumption): \$0.48 increase per month, from \$12.40 to \$12.88  
Typical monthly bill impact: \$1.83 per month, from \$45.94 to \$47.77

Interdepartmental wastewater rates are recommended to be held constant.

The total projected annualized increase in wastewater revenue is approximately \$3,089,000.

**ALTERNATIVES**

Modify the FY 2021/22 utility rate adjustment proposal. Examples include but are not limited to: increase, reduce or eliminate a recommended percentage.

The budgetary impact would need to be calculated by staff based on the modification requested.

**FISCAL IMPACT**

The projected annualized increase in revenues in the Utility Fund from the recommended utility rate adjustments is \$11,441,000. The projected increase by individual utility is as follows:

<u>Utility</u>	<u>Amount</u>
Solid Waste	\$1,421,000
Electric	\$495,000
Natural Gas	\$618,000
Water	\$5,818,000
Wastewater	\$3,089,000

The projected ending reserve balance for the Utility Fund with similar adjustment to rates each year is:

<u>Fiscal Year</u>	<u>Ending Reserve Balance</u>
21/22	27.7%
22/23	25.0%
23/24	23.1%
24/25	20.1%
25/26	17.2%
26/27	15.8%

The projected increase on the typical residential customer for by individual utility is:

<u>Utility</u>	<u>Monthly</u>	<u>Annual</u>
Solid Waste	\$0.63	\$7.56
Electric	\$2.76	\$33.12
Natural Gas	\$0.72	\$8.64
Water	\$1.16	\$13.92
Wastewater	\$0.82	\$9.84

**Attachments:**

1. FY 2021/22 Utility Rate Adjustment Recommendation Summary
2. City of Mesa Utility Fund Cash Flow Projections