



## Audit, Finance and Enterprise Committee Report

Date: September 8, 2022

To: Audit, Finance and Enterprise Committee

Through: Michael Kennington, Deputy City Manager/Chief Financial Officer  
Marc Heirshberg, Deputy City Manager

From: Brian A. Ritschel, Management and Budget Assistant Director  
Christopher Hassert, Water Resources Director  
Scott Bouchie, Interim Energy Resources Director  
Sheri Collins, Interim Solid Waste Director

Subject: Fiscal Year 2022/2023 Utility Rate Recommendations

### PURPOSE AND RECOMMENDATION

The purpose of this report is to provide staff recommendations for utility rate adjustments. The rate adjustments are recommended to be effective January 1, 2023.

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 projected increases in operating and debt service expenses for each utility from FY 2021/22 to FY 2022/23.

<u>Utility</u>	<u>Revenue Increase</u>	<u>Expense Increase</u>
Solid Waste	\$1,686,000	\$5,929,000
Electric	\$0	\$2,791,000
Natural Gas	\$1,135,000	\$5,195,000
Water	\$8,622,000	\$14,194,000
Wastewater	\$4,110,000	\$3,645,000

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 2022/23, 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 \$0.07, from \$0.89 to \$0.96 per month
- Bulk item pick-up: Increase by \$1.00, from \$28.00 to \$29.00
- Homeowner's Landfill: Increase by \$2.00, from \$13.00 to \$15.00
- Front-load rates: Overall 4.5% increase
- Commercial Roll-Off rates: Overall 4.25% increase

**Electric:**

- Residential: no recommended rate increases
- Non-Residential: no recommended rate increases
- Creation of Residential Electric Vehicle Rate
- Eliminate Direct Access Service

**Gas:**

- Residential: service charge increase of \$0.75 per month
- Residential: 10.0% Summer and Winter Tier 2 usage rate increase
- Non-residential: service charge increase of \$2.00
- Non-residential: 1% Summer and Winter Tier 1 usage rate increase
- Non-residential: 3% Summer and Winter Tier 2 usage rate increase
- Eliminate various gas rates that no longer have customers

**Water:**

- Residential: 2.75% increase to service and usage components
- Non-residential General: 2.75% and 5.5% increases to service and usage components, respectively, across most customer classes
- Non-residential Landscape: 2.75% and 6.5% increases to service and usage components, respectively, across most customer classes
- Large Commercial and Industrial: 2.75% and 6.5% increases to service and usage components, respectively
- Non-residential Excess Surcharge: 6.5% increase
- Pumping Surcharge: 2.75% increase
- Interdepartmental: 10.0% increase on usage components
- Drought Commodity Charge: \$0.08 usage charge per kgal, excluding first three (3) kgal

**Wastewater:**

- Residential rate: 4.25% increase to service and usage components
- Non-residential: 4.5% 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 1.1% per year during the forecast. With the inclusion of the Magma service area, the Natural Gas utility is expected to grow by 1,900 accounts in FY 2022/23. 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 2022/23.

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 2022/23 capital improvement program (CIP) includes the planning for increased customer demand, maintaining system reliability and satisfying contractual commitments. The debt service on utility systems revenue bonds and obligations is funded through the utility rates paid by customers. The City issues obligations 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 2022/23 is projected to be an increase of \$5.0 million, moving from \$115.7 million to \$120.7 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 \$0.60 per month, from \$29.92 to \$30.52

60-gallon trash barrel: Increase of \$0.53 per month, from \$26.71 to \$27.24

Additional trash barrel: Increase of \$0.28, from \$14.13 to \$14.41

Green barrel: Increase of \$0.14, from \$7.07 to \$7.21

The projected annualized revenue increase is \$1,061,000.

#### *Green and Clean Fee*

Staff is recommending an increase of \$0.07 per month, from \$0.89 to \$0.96

The projected annualized revenue increase is \$120,000

#### *Bulk Item Collection*

Staff is recommending increasing the following bulk item rate:

Bulk Item Service: increase of \$1.00 per load, from \$28.00 to \$29.00.

The projected annualized revenue increase is \$8,000

#### *Homeowner's Landfill*

Staff is recommending increasing the following homeowner's landfill rate by \$2.00 per load, from \$13.00 to \$15.00.

The projected annualized revenue increase is \$15,000

### *Commercial Front-Load Trash*

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, and multi-bin factor. The projected overall increase for Front-Load Trash is 4.5%.

- Increase base rates for all size bins by 2.5%

- Increase out-of-zone fee by \$1.00, from \$19.00 to \$20.00

- Decrease multi-day and multi-bin discounts by 1 percentage point

- Increase installation fee for casters by \$42.30, from \$34.14 to \$76.44

The projected increase in annualized revenue is expected to be \$370,000 for Front-Load Trash.

### *Commercial Front-Load Recycling*

Staff is recommending increasing the base rate, multi-bin factor, and special pick-up fee.

- Base rate for cardboard:

- Increase 2-yard from \$50.06 to \$50.94

- Increase 3-yard from \$54.18 to \$55.37

- Increase 4-yard from \$58.30 to \$59.80

- Increase 6-yard from \$70.87 to \$73.22

- Increase 8-yard from \$83.12 to \$86.32

- Decrease multi-bin discount by 1 percentage point

- Special pick-up fee increased by \$35.00, from \$25.00 to \$60.00

The projected increase in annualized revenue is expected to be \$12,000 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 haul fee by \$3.00:

- Increase 15-yard and 20-yard from \$130.00 to \$133.00

- Increase 30-yard from \$140.00 to \$143.00

- Increase 40-yard from \$155.00 to \$158.00

- Increase compactor from \$149.00 to \$152.00

- Increase trash and green set fee by \$6.50, from \$83.00 to \$89.50

- Increase trash per ton charge by \$2.19, from \$35.25 to \$37.44

- Increase green waste per ton charge by \$2.60 from \$41.75 to \$44.35

The projected roll-off increase in annualized revenue is approximately \$100,000 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 2022/23, 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 \$1,686,000.

### 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 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. The electric energy market is experiencing a shrinking of reserves and decreases in generation, which increase prices. Additionally, population growth in the Western Market for electricity also puts additional pressures on price increases for electricity. The impact of these factors results in increased costs for electricity. Electric energy supply costs were \$16.0M in FY 2020/21. Electricity costs were \$31.3M in FY 2021/22 and are projected to be \$25.9M in FY 2022/23. 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. Additionally, City Council approved the use of \$20M in federal American Rescue Plan Act (ARPA) funds to be used to offset a portion of the higher electricity prices reflected in the EECAF.

Due to the increased costs of electricity passed through the EECAF component, staff does not recommend rate adjustments to any other service or usage component for residential and commercial customers at this time.

### *Residential Electric Vehicle Rate*

Electric Vehicles (EVs) represent a growing opportunity for revenue growth for electric utilities, however, there is also the risk of having too many vehicles charging during peak hours which could cause the overload of local distribution facilities. In order to both maximize this revenue growth and avoid the expense of having to install a significant number of new distribution transformers, utilities implement EV time-of-use rates which provide very specific price signals to EV owners to charge their vehicles during the hours of the night when electricity is least expensive and when there is the most available capacity on the distribution system. The new rate is broken into “On-Peak” hours when the customer’s electric rate is most expensive (discouraging EV owners to charge during these hours), “Off Peak” hours when the customer’s electric rate is less expensive and “Super Off Peak” hours when the customer’s electric rate is very inexpensive (and therefore recommended they charge their vehicle). This benefits the EV owner because they are provided with electricity rates (and therefore “vehicle fuel”) that are much less expensive than during normal hours, saving them money to operate their vehicle. The owner may be able to program their home EV charger to start charging as soon as the “Super Off Peak” hours begin so that their vehicle is charged as cheaply as possible.

This new rate has been modeled off of Salt River Project’s E-29 Residential Electric Vehicle Price Plan. Energy Resources staff will verify that each rate applicant has an EV for in-home charging which will allow the resident to switch to the EV rate. The rate is subject to the availability of Advanced Metering Infrastructure (AMI) at the customer’s home and the ability for Business Services to implement the rate in the Customer Information System (CIS).

### *Elimination of Direct Access Service Rate*

The Direct Access electric service section (and rates) within the current Utility Rates and Fees book were added after the Arizona legislature adopted statutes, and the Arizona Corporation Commission (ACC) adopted Administrative Rules, which attempted to establish a framework for competition for the sale of retail electric power in Arizona. The ACC rules implementing Retail competition provided that electric utilities must allow for retail competition of electric providers, meaning that electric customers could choose their electric “supplier” and then Mesa would simply deliver that electricity to the customer’s meter. Subsequently, electric retail competition in Arizona was effectively stopped in large part due to a 2004 Arizona Court of Appeals decision, which among other holdings found parts of the adopted rules to be unconstitutional. However, Mesa had already implemented deregulation policies in its rate book, and these have remained in anticipation of the possibility that deregulation would become effective in the future. In

2022, the legislature passed House Bill 2101, which has been signed into law and has removed the deregulation statutes from Arizona law and so Mesa will now remove the retail competition Direct Access sections from the rate book.

## 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 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 \$0.39728 and \$0.63532 per therm in the most recent twelve months.

Staff recommends the following rate adjustments:

### *Residential*

Residential System Service Charge - summer: increase \$0.75, from \$15.81 to \$16.56

Residential System Service Charge - winter: increase \$0.75, from \$18.74 to \$19.49

Residential System Usage Charge – Tier 2 – usage over 25 therms: 10% increase for summer and winter



Average monthly Mesa resident bill with customer charge, usage charge, and PNGCAF: from \$42.47 to \$43.42, or 2.2%

Southwest Gas (SWG) comparison:

Mesa's average residential customer's monthly bill are anticipated to be approximately \$0.07 less per month (\$0.84 less per year) than if served by SWG.

*Non-Residential*

Non-Residential System Service Charge - summer: increase \$2.00, from \$37.66 to \$39.66

Non-Residential System Service Charge - winter: increase \$2.00, from \$47.34 to \$49.34

Non-Residential Usage Charge – Tier 1: 1% increase for summer and winter

Non-Residential Usage Charge – Tier 1: 3% increase for summer and winter

Average monthly Mesa resident bill with customer charge, usage charge, and PNGCAF: from \$572.65 to \$577.24, or 0.8%

Southwest Gas (SWG) comparison:

Mesa's average residential customer's monthly bill are anticipated to be approximately \$3.80 more per month than if served by SWG.

*Elimination of various natural gas rates*

Staff recommends the elimination of the following gas rates:

Gas Service to Street Lamps

General Gas Service for Air Conditioning

Seasonal Gas Services

Irrigation Pumping Gas Service

These gas rates have not had customers for more than 10 years. Customers that require these services are charged the General Gas Service rate.

The projected annualized increase in revenue for the Natural Gas utility recommendations is approximately \$1,135,000.

## 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 (\$12.7M) and debt service (\$1.5M) costs from FY 2021/22 to FY 2022/23.

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 2021/22 fell within this goal at 36.8% of total 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.

### *Drought Commodity Charge*

As a result of worsening drought conditions, the Water utility is experiencing cost pressures due to the rising price of the water commodity. As a result of increased pricing on the water commodity, staff recommends implementing a drought commodity charge. The drought commodity charge will be applied to all customers for all water usage above the 3,000 gallons that are included in the service charge. The charge amount will be determined by achieving cost recovery for the incremental cost increase between the price of water in drought conditions compared to the price of water if no drought conditions existed.

In August 2022, the federal Bureau of Reclamation declared a Tier 2a shortage which will result in increased water commodity costs. These increases will take effect beginning in January 2023. In order to achieve cost recovery for the increase in water commodity costs between Tier 2a and Tier 0, staff recommends a \$0.08 drought commodity charge per 1,000 gallons for all water usage above the 3,000 gallons that are included in the service charge. The drought commodity charge would be separately applied, in addition to the other rate recommendations described in this report.

Staff will continuously monitor shortage conditions for all City water sources and recommend changes to the drought commodity charge as conditions change. For example, if shortage conditions are eliminated, the drought commodity charge can be discontinued.

### *Residential Water*

For FY 2021/22, staff recommends a 2.75% increase to all service charges, and a 2.75% increase to residential usage charges.

#### *Typical Residential Water Consumer Impact:*

Service Charge: \$0.80 increase per month, from \$29.23 to \$30.03  
Usage Charges: \$0.51 per month, from \$9.96 to \$10.47  
Total average monthly bill impact: \$1.31 per month, from \$39.19 to \$40.50

#### Arizona Water Company comparison:

Service Charge: \$33.51 per month  
Usage Charges (6,000 gallons): \$15.64  
Total average monthly bill: \$49.15

### *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 2021/22 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 5.5% rate increase to the Non-residential General Usage Charge and a 6.5% rate increase to the Non-residential Landscape Usage Charge, Large Commercial and Industrial Usage Charge, and Excess Usage Surcharge for all non-residential water.

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 2.75% 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 \$2.64, from \$55.12 to \$57.76, or a 4.8% increase.

Commercial Landscape typical monthly bill (consumption of 31,000 gallons):  
increase of \$8.96, from \$138.08 to \$147.04, or a 6.4% increase

### *Interdepartmental Water*

For FY 2022/23, staff recommends a 10% increase to the interdepartmental water usage charges. The interdepartmental water rates have not been adjusted since FY 2013/14. The recommendation is the beginning of a 4-year plan to bring interdepartmental usage rates in line with the residential tier 1 usage charge.

The projected annualized increase in revenue for all Water utility recommendations is approximately \$8,622,000.

### 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 significant costs increases within the utility such as, 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 \$2.0M, however operational costs are projected to increase by \$5.7M from FY 2021/22 to FY 2022/23.

Staff recommends a 4.25% increase to the Service Charge and the Usage Charge for Residential customers, and a 4.50% increase to the Service Charge and the Usage Charge for Non-residential customers.

#### *Typical Residential Wastewater Consumer Impact:*

Service Charge: \$0.87 increase per month, from \$20.54 to \$21.41

Usage Charge (Winter water average): \$0.14 increase per month, from \$3.38 to \$3.52

Total average monthly bill impact: Approximately \$1.01 per month, from \$23.92 to \$24.93

#### 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: \$46.30 per month

Usage Charges: \$0.00

Total average monthly bill: \$46.30

*Typical General Commercial Wastewater Consumer Impact:*

Service Charge: \$1.01 increase per month, from \$22.36 to \$23.37

Usage Charge (based on water consumption): \$0.56 increase per month, from \$12.53 to \$13.09

Surcharge (based on water consumption): \$0.56 increase per month, from \$12.88 to \$13.44

Typical monthly bill impact: \$2.13 per month, from \$47.77 to \$49.90

Interdepartmental wastewater rates are recommended to be held constant.

The total projected annualized increase in wastewater revenue is approximately \$4,110,000.

## ALTERNATIVES

Modify the FY 2022/23 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 \$15,553,000. The projected increase by individual utility is as follows:

<u>Utility</u>	<u>Annual Increase</u>
Solid Waste	\$1,686,000
Electric	\$0
Natural Gas	\$1,135,000
Water	\$8,622,000
Wastewater	\$4,110,000

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>
22/23	24.4%
23/24	20.0%
24/25	16.7%
25/26	13.5%
26/27	11.8%
27/28	10.4%

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

<u>Utility</u>	<u>Monthly</u>	<u>Annual</u>
Solid Waste	\$0.67	\$8.04
Electric	\$0.00	\$0.00
Natural Gas	\$0.95	\$11.40
Water	\$1.31	\$15.72
Wastewater	\$1.01	\$12.12

### Attachments:

1. FY 2022/23 Utility Rate Adjustment Recommendation Summary
2. City of Mesa Utility Enterprise Fund Cash Flow Projections