



## COUNCIL MINUTES

April 14, 2022

The City Council of the City of Mesa met in a Study Session in the lower-level meeting room of the Council Chambers, 57 East 1st Street, on April 14, 2022, at 7:30 a.m.

### COUNCIL PRESENT

John Giles  
Jennifer Duff  
Mark Freeman  
Francisco Heredia  
Julie Spilsbury  
Kevin Thompson

### COUNCIL ABSENT

David Luna

### OFFICERS PRESENT

Christopher Brady  
Holly Moseley  
Jim Smith

Mayor Giles conducted a roll call.

Mayor Giles excused Councilmember Luna from the entire meeting.

### 1. Review and discuss items on the agenda for the April 18, 2022, Regular Council meeting.

All of the items on the agenda were reviewed among Council and staff and the following was noted:

Conflict of interest: None

Items removed from the consent agenda: 8-a

Councilmember Thompson declared a potential conflict of interest on Agenda Item 8-a, (**"Map of Dedication for Eastmark Development Unit 1" (District 6) Within the 3600 to 4400 blocks of South Ellsworth Road. Located along Ellsworth Road between Elliot and Warner Roads (0.16 ± acres). Redale, LLC, developers; Ronnie E. Dorsey, Sunrise Engineering, surveyor**), on the Regular Council agenda and said he would refrain from discussion/consideration of this item.

In response to multiple questions from Vice Mayor Duff regarding Agenda Item 5-n, (**Authorizing and supporting the submittal of a grant application by the Energy Resources Department to the Fort McDowell Yavapai Nation in the amount of \$50,000 and authorizing the City Manager to accept and administer subsequent awarded funds. The funds will be used for the Mesa Electric Utility Summer Indoor Health and Safety program. (Districts 1 and 4)**), on the Regular Council agenda, Energy Resources Director Frank McRae remarked the grant targets low-income renters who have challenges replacing older, inefficient air conditioners. He stated staff will collaborate with a local nonprofit to identify eligible customers with the hope of expanding

this pilot program in the future with alternate funding sources. He anticipates most of the units will be replaced; however, there could be instances where the unit is repaired.

In response to a question posed by Mayor Giles on the pass-through grant applications, Grant Coordinator Sharon Skinner clarified this is an opportunity for Council to support applications by local organizations to the tribes for funding and the tribes determine which organizations will receive an award. She confirmed Council will receive a report showing which projects received grant awards.

2-a. Hear a presentation, discuss, and provide direction for the City's 2022 Capital Financing Plan.

City of Mesa Treasurer Ryan Wimmer displayed a PowerPoint presentation on the 2022 City's Capital Financing Plan. He noted Janelle Gold, financial advisor with Hilltop Securities, and Zach Sakas, bond attorney with GreenburgTraurig, are available for questions. (**See Attachment 1**)

Mr. Wimmer explained capital financing is necessary to support infrastructure, provide quality of life, fund the Capital Improvement Program, and promote equity. He outlined the municipal financing process. (See Pages 2 and 3 of Attachment 1)

Mr. Wimmer defined debt service as principal and interest payment paid to investors. He explained the City issues debt with payments for up to 25 years with the option to pay off early after 10 years. He added the City's financial forecast includes debt service for existing and future debt issuances. (See Page 4 of Attachment 1)

Mr. Wimmer outlined the financing process which includes issuing new debt or refinancing existing debt at lower rates. He explained the City looks at using available cash to pay off existing debt early and pay off bonds from past issuances due. (See Page 5 of Attachment 1)

Mr. Wimmer summarized the difference between taxable and tax-exempt debt. He stated most debt is tax-exempt; however, the IRS does not allow tax-exempt debt in every case. (See Page 6 of Attachment 1)

Mr. Wimmer displayed a map highlighting the CMC Steel expansion with the Meridian Road and the Queen Creek Road Gate Station natural gas line extension projects. He noted the City is proposing to issue taxable debt to finance these two projects. (See Page 7 of Attachment 1)

Mr. Brady stressed the City's preference is to issue tax-exempt bonds, but since the projects are specifically benefiting a private enterprise, the project will not qualify as tax-exempt. He explained the City will issue taxable bonds at the front end of the project and there is a service agreement to pay back the debt over five to seven years.

In response to a question from Vice Mayor Duff regarding whether the City's utility bond debts are taxable or non-taxable, Mr. Brady advised this is an exception as the City rarely issues taxable bonds. He explained the incentive to achieve this economic development project was to pass the premium on to the user and the City will be reimbursed. He added another benefit was solidifying a very large user that helps the enterprise in the long term.

In response to a question posed by Councilmember Freeman, Mr. Wimmer stated the taxable debt is structured to mature first which will be outstanding for eight to ten years, but the City will have recovered the costs to pay the debt in less than ten years. He pointed out that the gas line

extension will serve the neighborhood to the south but because CMC Steel is such a large user the IRS regulations are strict about service ratio.

Mr. Wimmer outlined the proposed 2022 debt issuances for general obligation bonds and utility systems revenue obligations. He explained the process for refinancing older bonds. He summarized the City will issue new debt at a lower interest rate and pay off older debt at a higher interest rate to achieve interest savings. (See Page 8 of Attachment 1)

In response to a question from Councilmember Freeman regarding the rates the City is adjusting to, Mr. Wimmer said on the general obligation side the City is currently at 3% to 3.25% on existing debt and the utility bonds are at 4% and the desire is to get down to 2.25% and 3.5%.

Mr. Wimmer presented a list of current utility systems projects and highlighted the Natural Gas Gate Station and the Central Mesa Re-Use Pipeline as part of the debt issuance. He identified general obligation projects such as the Mesa Police evidence facility project and invited City Engineer Beth Huning to provide an update. (See Pages 9 and 10 of Attachment 1)

Ms. Huning stated the project scope has changed from its original vision in 2017 and costs have increased to \$21 million from \$11 million. She explained after a workflow analysis, the project site was relocated adjacent to police headquarters and the forensic lab. She added 35% in inflation costs over the last four or five years have resulted in additional construction costs.

Mr. Brady reiterated this series of bonds will only cover approximately half of the cost due to the skyrocketing project costs. He mentioned staff will return to Council in November with revisions to the proposed bond package.

In response to a question from Mr. Freeman regarding the façade of the Police evidence facility, Ms. Huning clarified the picture shows the initial building concept and will continue to work on the design and color scheme.

In response to a question from Councilmember Thompson regarding the Southeast Library Project, Ms. Huning commented the contractor was selected and will bring the numbers back to Council when available, but challenges may occur due to increased costs.

Mr. Brady responded to a question from Mayor Giles regarding funding for the entire project by stating that staff will recommend that Council authorize the full amount of the project. He reiterated the preference is to have the projects split between two bonds and identify other funding sources if necessary.

Responding to Vice Mayor Duff regarding the timeline for building the police evidence facility, Ms. Huning stated staff will bring the final concepts and Guaranteed Maximum Price (GMP) to Council in the summer with an estimated construction start in the fall.

Mr. Wimmer defined the financial policy on refunding savings. He identified the estimated cost savings for 2022 refunding, adding that if the savings does not meet the 3% as stated in the policy, the City will not refinance at this time. He emphasized the City has saved \$68 million by refunding over the past five years. (See Page 11 and 12 of Attachment 1)

In response to a question from Mayor Giles regarding the purpose for the 3% threshold, Mr. Brady stated the reason is due to the cost, effort, and risk to refinance and is standard with other organizations.

Discussion ensued relative to the climate action plan and natural gas.

Mayor Giles thanked staff for the presentation.

2-b. Hear a presentation and discuss utility projects included in the Capital Improvement Program.

Office of Management & Budget Assistant Director Brian Ritschel displayed a PowerPoint presentation focusing on the capital improvement of utilities for 2023-2027 and upcoming projects for the next fiscal year (FY). **(See Attachment 2)**

Mr. Ritschel identified CIP funding sources. He explained the forecast and budget process for operations and maintenance and noted project costs and staffing are considered. (See Pages 3 and 4 of Attachment 2)

Mr. Ritschel highlighted the Val Vista Water Treatment Reservoir project that totaled \$4.2 million and the Lewis East Transformer Switchgear replacement that totaled \$4.7 million. (See Pages 5 and 6 of Attachment 2)

Mr. Ritschel summarized the proposed water projects and costs for FY 22/23 include Signal Butte Water Treatment Plant and the Central Mesa Reuse Pipeline. He added the City is also looking into groundwater wells to help meet demand from growth. (See Page 7 of Attachment 2)

Mr. Ritschel presented the proposed wastewater improvement projects for FY 22/23 and costs. He highlighted the Northwest and Southeast Water Reclamation Plant process improvement and sewer line replacement projects. (See Page 8 of Attachment 2)

Mr. Ritschel discussed the natural gas improvement projects and costs for FY 22/23, including the Gantzel Road Projects, the Broadway Road Improvements, and the Residential and Commercial Developments. (See Page 9 of Attachment 2)

Mr. Ritschel outlined the proposed electric utility projects and costs for FY 2022-23 including the Police Department Campus Microgrid that will generate power in the event of an outage. He explained the Smart Cities 69kV Looping System project will add reliability and redundancy, and in the event of an outage only an isolated area will be affected. (See Page 10 of Attachment 2)

Mr. Ritschel identified the next steps for utility CIP to include public notice, public hearing, and Council consideration on May 16, 2022. (See Page 11 of Attachment 2)

In response to multiple questions from Vice Mayor Duff, Water Resources Department Director Christopher Hassert pointed out that the City currently has approximately 10 wells in different stages of activity, noting new wells are being added for peak usage and growth, and six wells are being redrilled because they are beyond their useful life. He reported the City has over half a million long-term storage credits built up over time by recharging into the Granite Reef Underground Storage Project (GRUSP) recharge basins, and noted the well capacity is needed to supplement the surface water.

In response to a question from Mayor Giles on groundwater pumping, Mr. Hassert clarified the City prefers not to pump groundwater; however, during peak demand pumping is necessary. He stated 80-90% of water is supplied through surface water and water treatment, and 10-20% is

supplied through pumping. He explained the City receives a certain allocation for groundwater pumping as part of the 100-year water supply.

Councilmember Freeman recommended the City look at getting well sites in North Mesa. He noted the importance of water credits for the City's portfolio but exchanging some credits with other water suppliers is required.

Water Resources Advisor Brian Draper commented a portion of the shared water supply is groundwater. He explained GRUSP is water that has been recharged into the aquifer in North Mesa, and all wells are permitted as recovery wells and pumping those recharge credits. He stated Mesa has been in contact with SRP about sharing some of the new wells in North Mesa and pumping the water into the distribution system to recover those credits from the area of impact.

Further discussion ensued relative to the return on investment (ROI), the status, and timeline for the City's utility CIP projects.

Mayor Giles thanked staff for the presentation.

2-c. Hear a presentation, discuss, and provide direction on Water Resources Department budget.

Water Resources Department Director Christopher Hassert introduced Water Enterprise Services Deputy Director Seth Weld and displayed a PowerPoint presentation on the Water Resources FY 22/23 proposed budget. **(See Attachment 3)**

Mr. Hassert defined the Water Resources Department purpose as providing superior water and wastewater service to the community by focusing on reliability, safety, and sustainability. (See Page 2 of Attachment 3)

Mr. Hassert explained the water distribution rate performance metrics for water disruption, system water loss, and the percent of beneficial reclaimed water used. He pointed out March was an active month for main breaks resulting in going over the target of three events in one month. He added the typical 5% water loss is caused by leaks, main breaks, and meters that are underreporting. He noted once the Smart Water project is completed, the water meters will be changed over to new accurate meters, and water loss will be approximately 3-4%. He commented that the acceptable industry standard for water loss is 10%. (See Page 3 of Attachment 3)

In response to a question posed by Vice Mayor Duff regarding providing annual or year to date metrics, Mr. Brady agreed that providing the annual metrics will give a clearer perspective on the trend rather than using a monthly snapshot.

In response to a question from Vice Mayor Duff regarding the status of the Smart Meter Project, Mr. Hassert explained Phase 1 includes approximately 2,000 water, gas, and electric meters to ensure connectivity, verifies a proper signal, and timely and accurate bill. He remarked full deployment to the City will take three to four years.

Mr. Hassert reported the City's sanitary sewer overflow measure has stayed below the industry's wastewater collection threshold of 17 to 18 events per year due to the effective maintenance program. He noted the City sets a threshold of two events per quarter and has had none so far this year. (See Page 4 of Attachment 3)

Mr. Hassert displayed a graph on nitrogen removal at the Greenfield Water Reclamation Plant. He stressed the importance of this measure to protect aquatic life. He remarked the state regulatory limit is 10 milligrams per liter and the alert level is 8 milligrams per liter. He reported since the Greenfield expansion was completed, the numbers are trending down. (See Page 5 of Attachment 3)

In response to a question posed by Vice Mayor Duff regarding the Arizona State University (ASU) Polytech pilot algae program, Mr. Hassert stated research has concluded, and is pending final report. He explained the program's benefits and noted its success. He added the school is hopeful about the results and expressed interest in future opportunities with the City.

Mr. Weld identified staffing needs for the Signal Butte Water Treatment Plant expansion and the Central Mesa Reuse Pipeline, and Northwest Water Reclamation Plant (NWWRP). He added these positions work closely with the design and construction team, complete inspections, identify potential issues, and are necessary to maintain new systems and equipment. (See Page 6 of Attachment 3)

Mr. Hassert summarized the request to reclassify the Chemist position from .5 FTE to 1.0 FTE. He noted the Chemist takes the field samples and completes laboratory testing and he stressed the need for an additional chemist to bring the work in-house. Mr. Hassert discussed the staffing needs at Greenfield Water Reclamation Plant. He added the two new maintenance positions will focus on preventative work orders and reduce the number of reactive work orders. Mr. Hassert explained the need for four new valve trucks. He noted the uses and emphasized their importance. (See Page 7-9 of Attachment 3)

In response to a question from Vice Mayor Duff, Mr. Hassert confirmed the leaf footnote on the presentation is related to the Climate Action Plan and ties into specific performance measures.

Mr. Weld reported FY 20/21 year-end actuals were \$83 million, which was under the adopted budget. He emphasized the challenges from price increases and vacant positions. He pointed out pay adjustments were required to retain and recruit new staff and added the department is down to 24 active recruitments. He outlined the high-cost budget items. (See Pages 10 and 11 of Attachment 3)

Mr. Weld commented on the struggle to retain water operators. He discussed the City's Water Operator intern program and partnering with Maricopa Community College.

Councilmember Thompson recommended working with East Valley Institute of Technology (EVIT) to develop a water resources program.

Responding to a question from Vice Mayor Duff regarding the City's assured water supply portfolio projections, Mr. Brady commented the requirement is to have a 100-year water plan to issue permits.

Mayor Giles thanked the staff for the presentation.

Mayor Giles declared a recess at 9:16 a.m. The meeting reconvened at 9:27 a.m.

2-d. Hear a presentation, discuss, and provide direction on Energy Resources Department budget.

Energy Resources Director Frank McRae introduced Energy Resources Program Manager Anthony Cadorin, Senior Fiscal Analyst John Petrof, and Electric System Superintendent Kyle Nicholson and displayed a PowerPoint presentation on the Water Resources FY 22/23 proposed budget. **(See Attachment 4)**

Mr. McRae stated Mesa has owned the gas/electric utilities since 1917. He added there are 131 employees who strive to provide superior service, a high level of safety, and affordability. He noted the City serves 17,500 electric customers and 72,000 gas customers and announced Energy Resources recently received an award from the American Public Power Association Certificate of Excellence and Reliability.

Mr. McRae defined the Energy Resources Department purpose and emphasized how the priorities align with Council's strategic initiatives. He stated the department has an internship program and encourages employees to take advantage of Mesa's tuition reimbursement program. He highlighted programs to help low-income customers with their summer electric bills, the solar program, and alternative fuels.

Mr. McRae gave examples of efforts to enhance energy efficiency and collaboration with environmental management to compress natural gas. He explained the process for monitoring natural gas leaks and discussed the addition of enhanced technology used to survey natural gas system leaks. (See Page 2 of Attachment 4)

Mr. Nicholson explained the emergency response time for electric personnel and the measures used to gauge the safety of the electric utility system. He noted the response time of 17 minutes is well below the 30-minute threshold. He summarized minimizing response time improves the reliability of service. (See Page 3 of Attachment 4)

Mr. McRae emphasized the importance of limiting the gas response time to 30 minutes. He displayed a graph showing the percentage of responses that exceeded 30 minutes. He compared the response times from 2021 to 2020. He said approximately 3% of the calls exceed 30 minutes and explained the reasons for longer response times. (See Pages 4 and 5 of Attachment 4)

In response to a question posed by Councilmember Thompson, Mr. McRae stated in terms of emergency response personnel, there are dedicated crews in the Magma area. He added there is also a small yard with equipment and materials.

Mr. McRae discussed measuring electric reliability using industry-standard indexes called "System Average Interruption Average Index." He explained the process for measuring the data related to an outage and noted most interruptions are related to weather and animals. He displayed a graph and noted spikes are due to equipment failure or human error. He emphasized the importance of inspections and outage prevention. (See Page 6 of Attachment 4)

Mr. McRae presented the average interruption frequency index measuring the frequency of gas outages. He stressed the biggest challenge is contractors not taking precautions before digging. (See Page 7 of Attachment 4)

Mr. Cadorin summarized cumulative gas and electric supply costs. He noted the numbers were substantially below projections. He added staff have been working hard to lock in prices for the Mesa PD campus. He elaborated staff are working on diversifying the City's electric supply portfolio.

In response to a question posed by Mayor Giles on continued COVID relief for electric costs, Mr. Brady stated the City will continue to utilize American Rescue Plan Act (ARPA) funding to offset costs while available.

Mr. McRae explained the reasons for peak prices over the last five years. He noted the ARPA money helped to keep rates comparable with SRP. He recognized the City Manager and Council for finding ways to offset costs to customers.

At 10:01 a.m., Mayor Giles excused Councilmember Thompson from the remainder of the meeting.

Mr. McRae identified staffing requests for Utility Locators. He noted the importance of this team to protect the City's underground assets and respond to blue stake requests. He pointed out the federal requirements to identify infrastructure and excavate safely. (See Page 11 of Attachment 4)

Mr. McRae discussed plans to add a dedicated energy utility system control room that will monitor and control the electric gas systems and maximize solar energy and energy storage. He highlighted strategic benefits, the climate action plan, and renewable gas. (See Page 12 of Attachment 4)

Mayor Giles thanked staff for the presentation.

3. Acknowledge receipt of minutes of various boards and committees.

3-a. Economic Development Advisory Board meeting held on March 1, 2022.

3-b. Education and Workforce Development Roundtable meeting held on February 9, 2022.

3-c. Judicial Advisory Board meeting held on February 2, 2022.

It was moved by Vice Mayor Duff, seconded by Councilmember Spilsbury, that receipt of the above-listed minutes be acknowledged.

Upon tabulation of votes, it showed

AYES – Giles-Duff-Freeman-Heredia-Spilsbury

NAYS –None

ABSENT – Luna-Thompson

Mayor Giles declared the motion carried unanimously by those present.

4. Current events summary including meetings and conferences attended.

Mayor Giles –

First Presbyterian Church - 75<sup>th</sup> anniversary  
Celebrate Mesa  
Tom Simplot - AZ State Housing Director Meeting  
Arizona Housing Coalition Conference

Vice Mayor Duff –

First Presbyterian Church - 75<sup>th</sup> anniversary  
Celebrate Mesa

Councilmember Freeman – Police Dispatch Center tour  
Farm Bureau breakfast

Councilmember Freeman announced the death of long time Mesa resident Kevin Rogers. He noted Mr. Rogers was president of Maricopa Arizona Farm Bureau and Executive Director of Arizona Cotton Growers. He added Mr. Rogers was a great asset to many people in Arizona and his influence will be missed.

5. Scheduling of meetings.

City Manager Christopher Brady stated that the schedule of meetings is as follows:

Monday, April 18, 2022, 4:30 p.m. – Study Session

Monday, April 18, 2022, 5:45 p.m. – Regular

6. Adjournment.

Without objection, the Study Session adjourned at 10:13 a.m.

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JOHN GILES, MAYOR

ATTEST:

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HOLLY MOSELEY, CITY CLERK

I hereby certify that the foregoing minutes are a true and correct copy of the minutes of the Study Session of the City Council of Mesa, Arizona, held on the 14<sup>th</sup> day of April 2022. I further certify that the meeting was duly called and held and that a quorum was present.

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HOLLY MOSELEY, CITY CLERK

td  
(Attachments-4)



# 2022 Capital Financing Plan

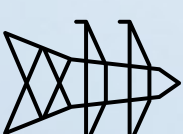
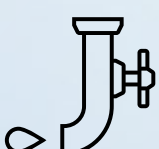
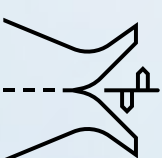
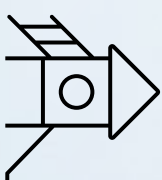
April 14, 2022

Ryan Wimmer, Treasurer

# Need for Capital Financing

## Infrastructure

- Support new development
- Update aging infrastructure



## Quality of Life

- Provide public safety facilities, parks, libraries, streets, utilities

## Process

- Funding source for Capital Improvement Program (CIP) projects

## Equity

- Infrastructure paid for over useful life
- Those benefitting from infrastructure pay for it (intergenerational equity)

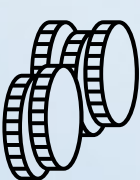
# Municipal Financing Process

1. City borrows money by selling debt to investors
2. Proceeds are used to construct City infrastructure
3. City pays back principal with interest for the life of the debt



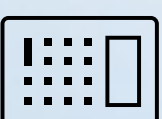
# Debt Service

Principal and interest payments made to investors



- City issues debt with payments for up to 25 years with the option to pay off early (call) after 10 years
- New debt service coordinated with existing debt service to maintain stable payments from year to year
- City's financial forecast includes debt service for existing and future debt issuances

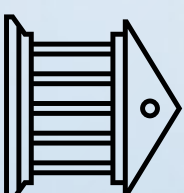
# Mesa's Annual Financing Process



City financing team evaluates needs and opportunities:

- **Issue (sell) new debt** to finance active capital projects
- **Refinance (“refund”) existing debt** at lower interest rates to reduce interest costs over same timeframe
- Use available cash balances to defease (pay off early) existing debt
- Pay off bonds from past issuances that mature (come due)

# Tax-Exempt vs. Taxable City Debt

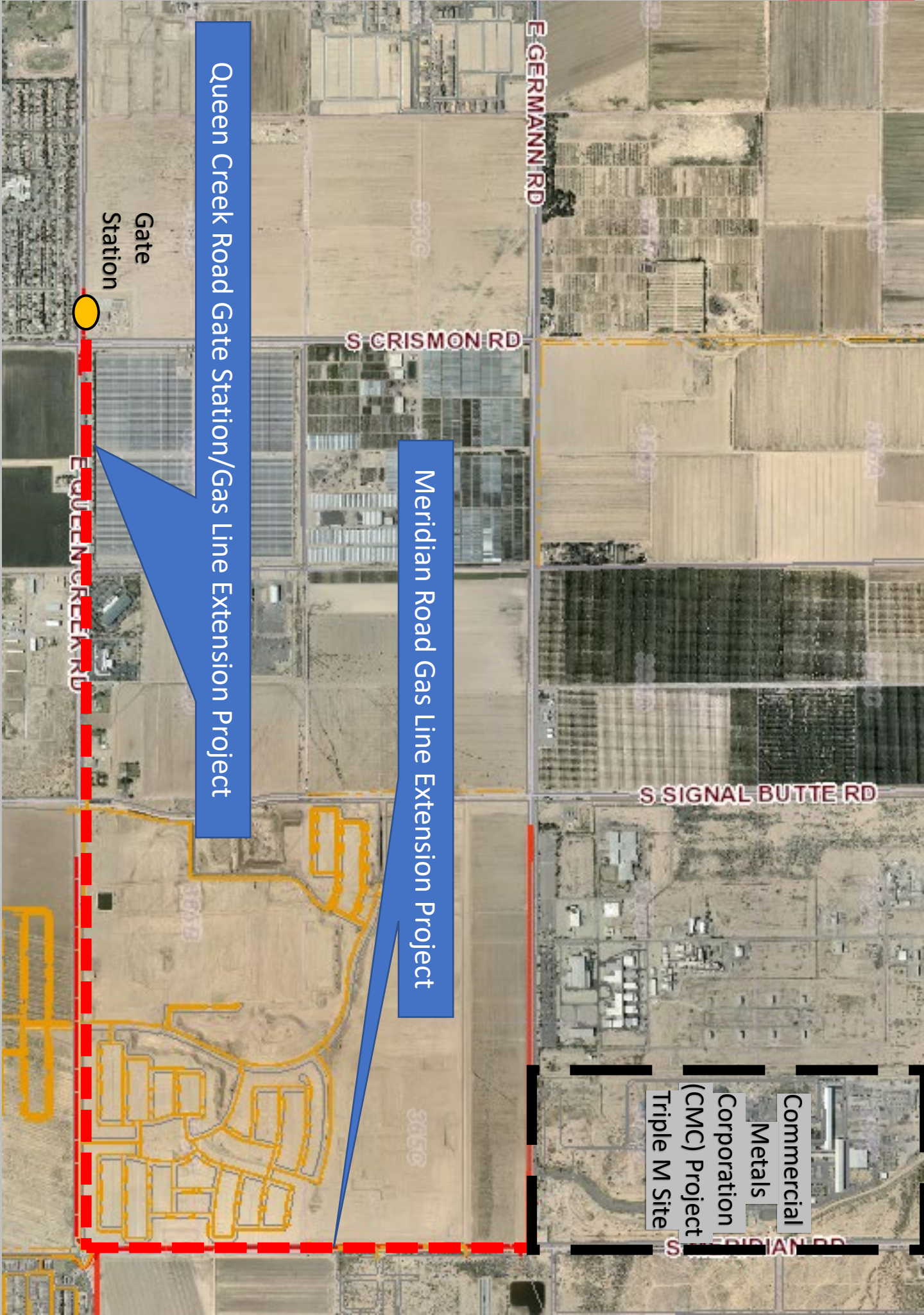


## Tax-Exempt

- The federal government does not tax investors on interest income earned from municipal debt used for a *public purpose*.
- Because interest income on municipal debt is **tax-exempt**, investors are willing to earn a lower interest rate (the City pays a lower interest rate).

## Taxable

- Municipal debt that substantially supports a specific *commercial purpose* is not eligible to be tax-exempt.
- If interest income is **taxable**, investors require (and the City pays) a marginally higher interest rate.



# Proposed 2022 Debt Issuances

(tax-exempt unless noted otherwise)

## Parks and Culture – Public Safety – Transportation

### General Obligation Bonds

<i>New (authorized in 2018 &amp; 2020) . . .</i>	<i>\$ 24 million</i>
<i>Refunding (from 2012) . . . . .</i>	<i>\$ 19 million</i>

## Electric – Natural Gas – Wastewater – Water

### Utility Systems Revenue Obligations

<i>New . . . . .</i>	<i>\$ 59 million</i>
<i>New (taxable*) . . . . .</i>	<i>\$ 16 million</i>
<i>Refunding (from 2012) . . . . .</i>	<i>\$ 69 million</i>

*\*Financing of natural gas projects that support CMC Steel expansion*

## UTILITY SYSTEMS ACTIVE PROJECT EXAMPLES

- Electric System Improvements
- Natural Gas Gate Station
- Wastewater System Improvements
- Groundwater Well Drilling
- Central Mesa Re-Use Pipeline



# GENERAL OBLIGATION ACTIVE PROJECT EXAMPLES

- Historic Post Office
- Multi-Use Fields
- Police Evidence Facility
- Street Improvements



# Refunding Savings - City Financial Policy

“To ensure that bond refundings produce anticipated savings, **refunding bonds should have a net present value savings exceeding 3%** of the debt service amount of the bonds being refunded . . . .” (*City of Mesa Financial Policies, section 5.6, 2017*)

# 2022 Refundings – Estimated Cost Savings

(present value, estimates as of 03-28-2022)

Action: Refinancing bonds issued in 2012 at lower interest rates

General Obligation Bonds

Estimated Interest Savings: **\$0.7 million** (2.9% of debt service)

Utility Systems Revenue Bonds/Obligations

Estimated Interest Savings: **\$7.6 million** (7.2% of debt service)

Total Estimated Interest Savings: **\$8.3 million**

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**Actual savings over past 5 years: \$68 million** (present value)

# Timeline for 2022 Financing Transactions (subject to market conditions)

April 18      Council considers authorization of resolutions

May 23 – June 2      Bonds and obligations are priced and sold

June 22      Closing - proceeds are received



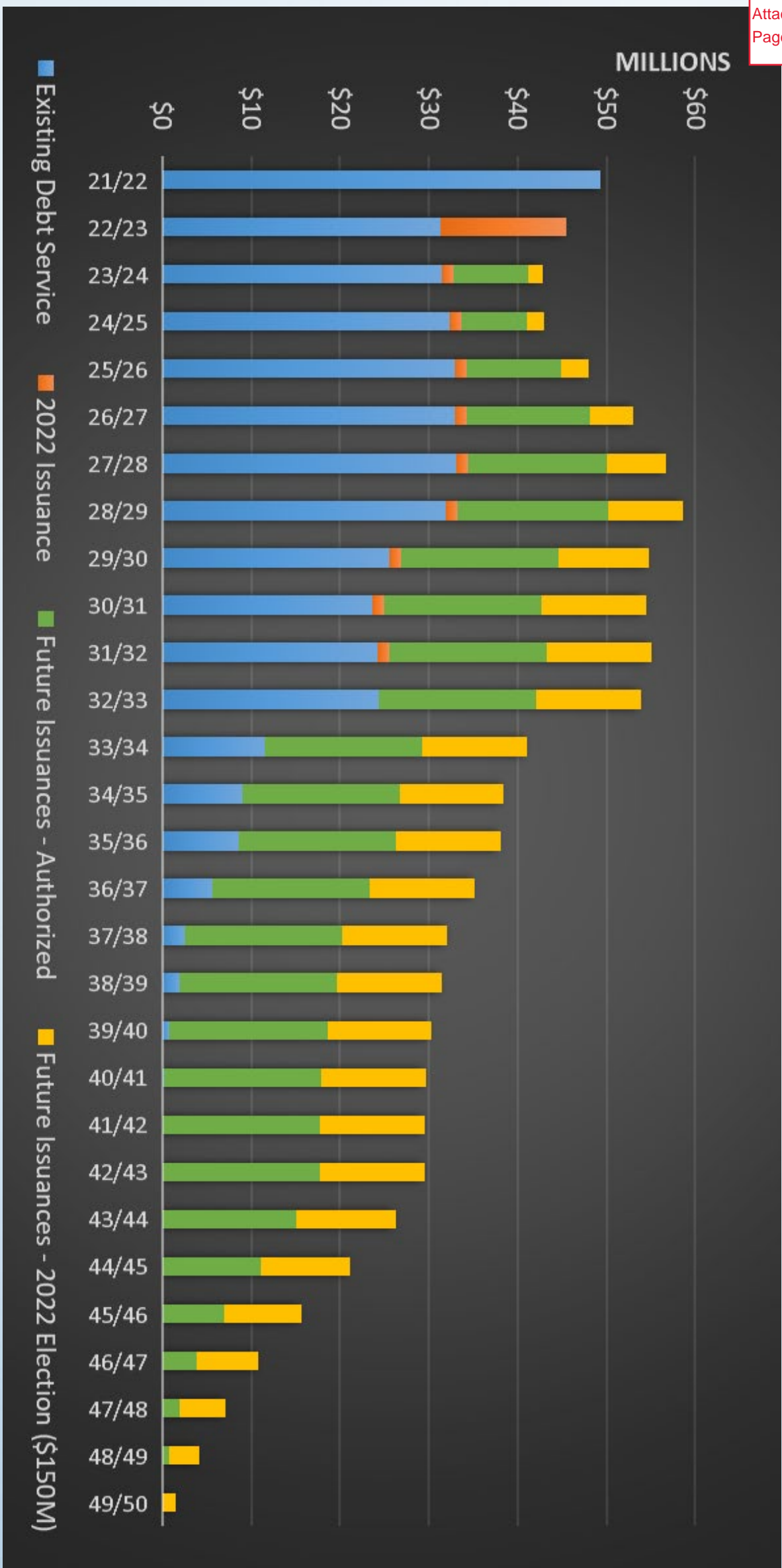
# General Obligation (GO) Bonds

- Secured by full faith and credit of City (property tax)
- Paid for primarily from secondary property tax revenue
- Projects submitted to voters most recently in 2018 and 2020

## Proposed 2022 Sale: \$24,070,000

Purpose	Authorization Year	Available Authorization	Proposed Sale Series 2022	Remaining Authorization
Library	2018	\$ 16,660,000	\$ 0	\$ 16,660,000
Parks and Culture	2018	78,150,000	12,035,000	66,115,000
Public Safety	2018	61,720,000	10,030,000	51,690,000
Transportation	2020	98,950,000	2,005,000	96,945,000
Total		\$ 255,480,000	\$ 24,070,000	\$ 231,410,000

# General Obligation Debt Service

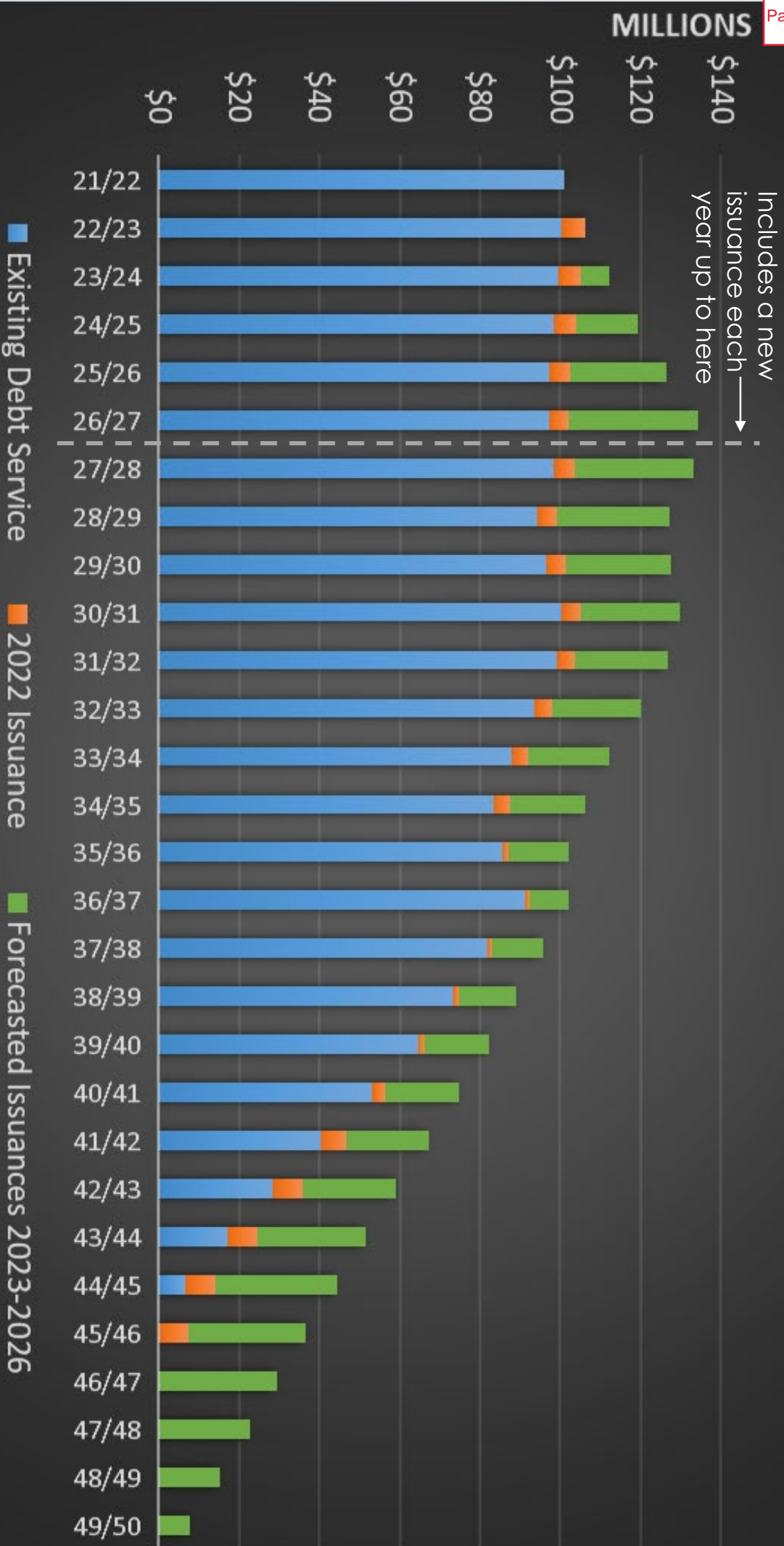


- # Utility Systems Revenue Obligations
- Finances utility systems infrastructure
  - Secured by utility systems revenue
  - Paid for primarily from utility systems revenue
  - Provides flexibility in meeting utility infrastructure needs

**Proposed 2022 Sale: not-to-exceed \$76,000,000**

Utility System	Series 2022A Tax-Exempt	Series 2022B Taxable	Total
Electric	\$ 10,080,000	\$	\$ 10,080,000
Natural Gas	5,040,000	16,072,316	21,112,316
Wastewater	6,050,000		6,050,000
Water	38,316,232		38,316,232
Total	\$ 59,486,232	\$ 16,072,316	\$ 75,558,548

# Utility Systems Debt Service



research.n





# Utilities Capital Improvement Program Budget FY 2023-2027

City Council Study Session  
4/14/2022

Brian A. Ritschel  
Management & Budget Assistant Director



# Agenda

- Discuss Five Year Utilities Capital Improvement Program (CIP)
- Review Active Utilities Projects
- Next CIP Steps

# Utilities CIP Funding Sources

- Local Revenues
- Utility Revenue Obligations

# Operations & Maintenance

- Reviewed throughout the CIP project lifecycle
- Budgeted to ensure City can meet the operational requirements of capital improvements

## Examples:

- Plant maintenance costs for expansion of wastewater facility
- Chemical cost to treat wastewater
- Additional staff for water treatment plant expansion

**Current Year Completed Project:  
Val Vista WTP Reservoir 1 Liner  
Replacement**

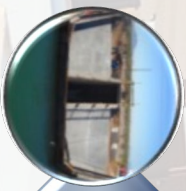
**Total Project Cost: \$4.2M**



**Current Year Completed Project:**  
**Lewis East Transformer**  
**Switchgear Replacement**

**Total Project Cost: \$4.7M**

# Proposed Utilities Projects FY 2022-23



## Water

- Signal Butte Water Treatment Plant Expansion
  - Increase water treatment capacity by 24 MGD and add an 8 MG reservoir
  - Estimated cost: \$145M total (FY22-23 \$9.7M)
- Central Mesa Reuse Pipeline
  - 10.5 miles of 36" pipeline to provide reuse water to the Gila River Indian Community
  - Maximize surface water credits to support customer demand
  - Estimated cost: \$100M total (FY22-23 \$10.1M)
- New Groundwater Wells
  - Drill 4 new wells and 5 collection lines to provide redundancy for water treatment and meet demand growth
  - Estimated cost: \$22M total (FY22-23 \$8.5M)

# Proposed Utilities Projects FY 2022-23



## Wastewater

- Northwest Water Reclamation Plant Process Improvements
  - Replace aging infrastructure and make efficiency improvements
  - Estimated cost: \$35M (FY22-23 \$7M)
- Southeast Water Reclamation Plant Process Improvements
  - Process improvements along with electrical and control upgrades and replacements
  - Estimated cost: \$8.2M (FY22-23 \$4M)
- Sewer Line Replacements
  - Replace aging sewer pipes throughout the system
  - Estimated costs: \$31.1M (FY22-23 \$8M)

# Proposed Utilities Projects FY 2022-23



## Natural Gas

- Gantzel Road Projects
  - New 12" high pressure gas main for commercial and residential growth and redundancy for Gantzel and future gate station
  - Estimated costs: \$28M total (FY22-23 \$2.3M)
- Broadway Road Improvements
  - Replacement of existing high and intermediate pressure gas mains to improve system reliability
  - Estimated costs: \$3.7M total (FY22-23 \$2.3M)
- Residential and Commercial Developments
  - Add new natural gas pipelines due to an increase in residential and commercial developments in East Mesa and the Magma District
  - Estimated costs: \$12M total (FY22-23 \$4M)

# Proposed Utilities Projects FY 2022-23



## Electric

- Police Department Campus Mircogrid
  - Install electric generator sets, communications, and electrical switching to generate power for the electric utility and provide power to buildings during outages. Operations will offset peak power purchases for the utility, saving supply costs for customers.
  - Estimated costs: \$9M total (FY22-23 \$7M)
- Smart Cities 69kv Looping
  - Converting the two 69kV transmission lines from an “open loop” scheme to a “closed loop” scheme for reliability and redundancy
  - Estimated costs: \$2.6M total (FY22-23 \$2.6M)
- New Electrical Services
  - Add new electrical services primarily due to the growth commercial developments in the electrical service area
  - Estimated costs: \$10.8M total (FY22-23 \$1.1M)

# Next Utility CIP Steps

- April 30<sup>th</sup> – Public Notice of Proposed FY 2023-2027 Capital Improvement Program
- May 16<sup>th</sup> – Public Hearing and Council consideration of FY 2023-2027 Capital Improvement Program

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## Water Resources

# Fiscal Year 22/23 Proposed Budget

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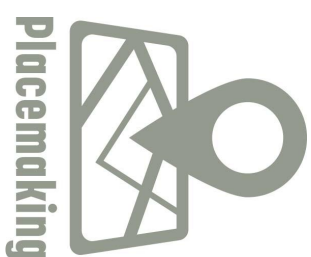
APRIL 14, 2022

CHRISTOPHER HASSERT, WATER RESOURCES DEPARTMENT DIRECTOR  
SETH WELD, DEPUTY DIRECTOR WATER ENTERPRISE SERVICES

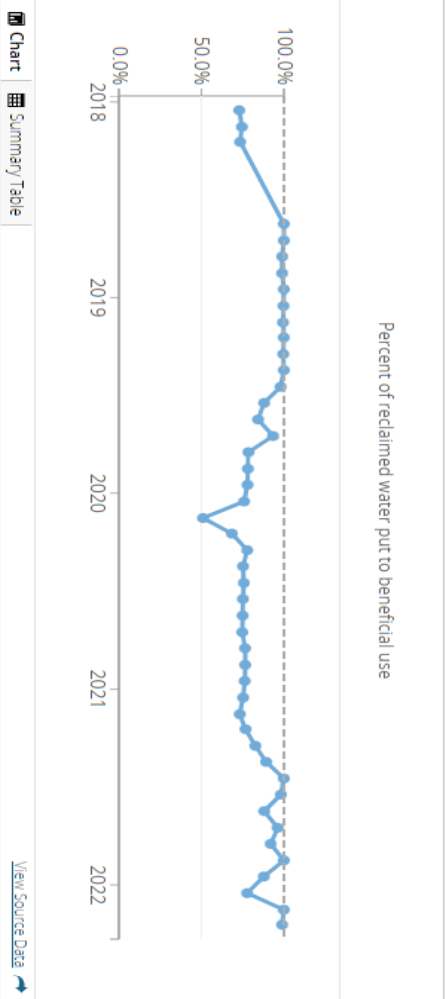
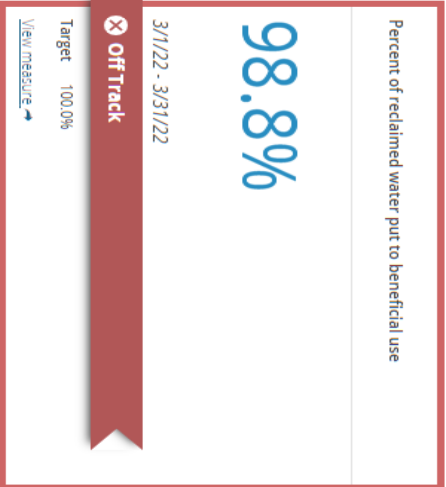
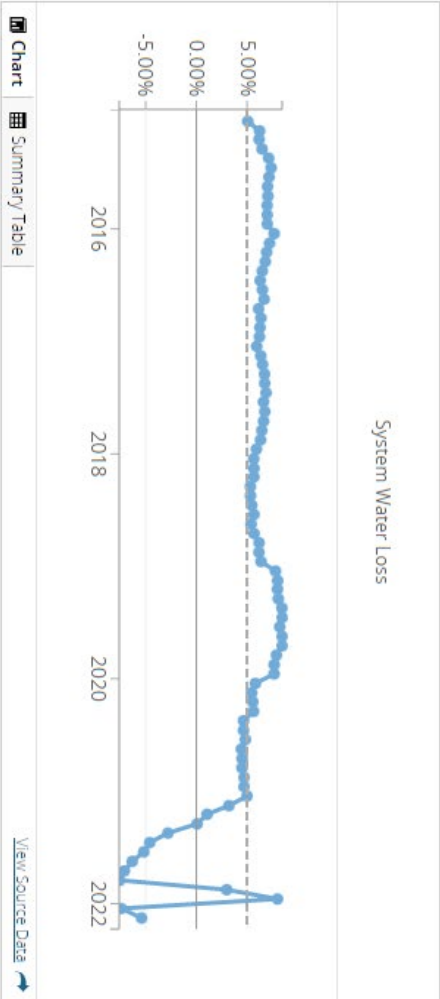
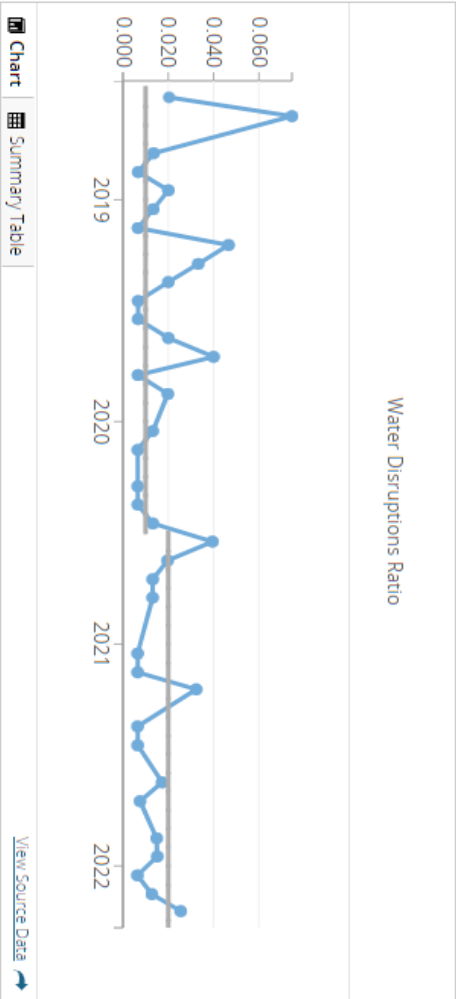
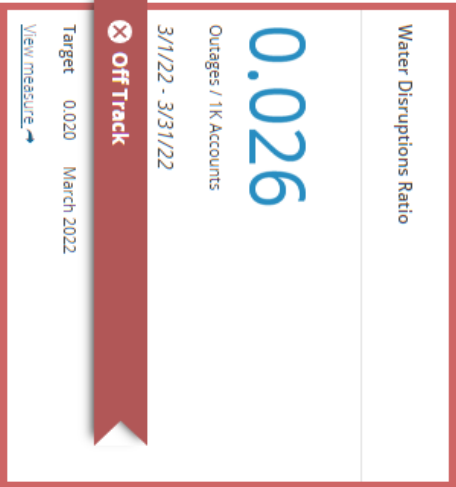
# Our Purpose

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*To provide superior water and wastewater services to our community*

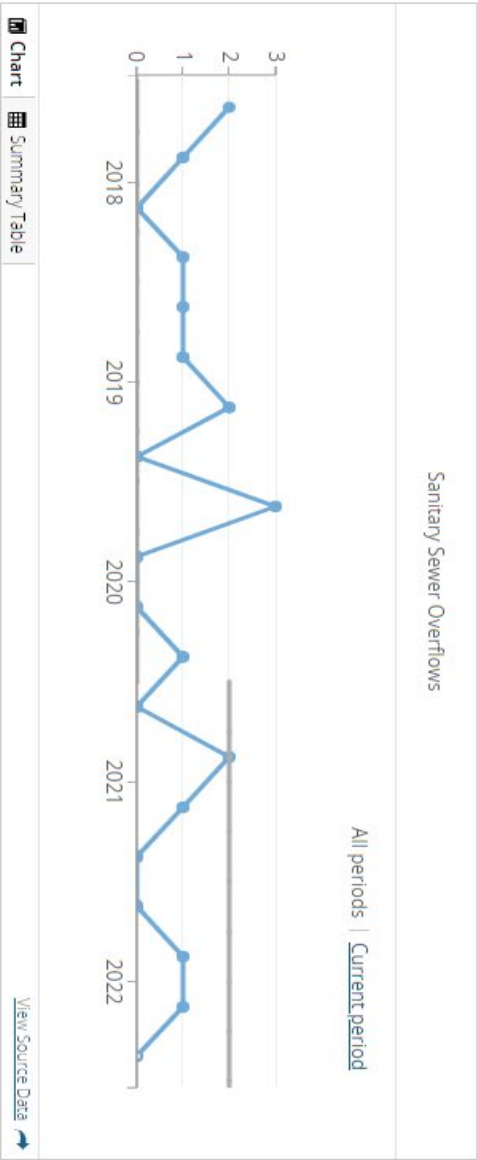
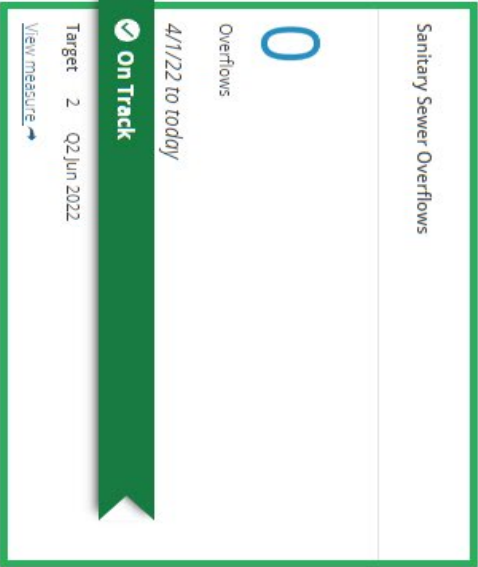


- Performance Measures:
- Water Distribution
  - Reclaimed Water



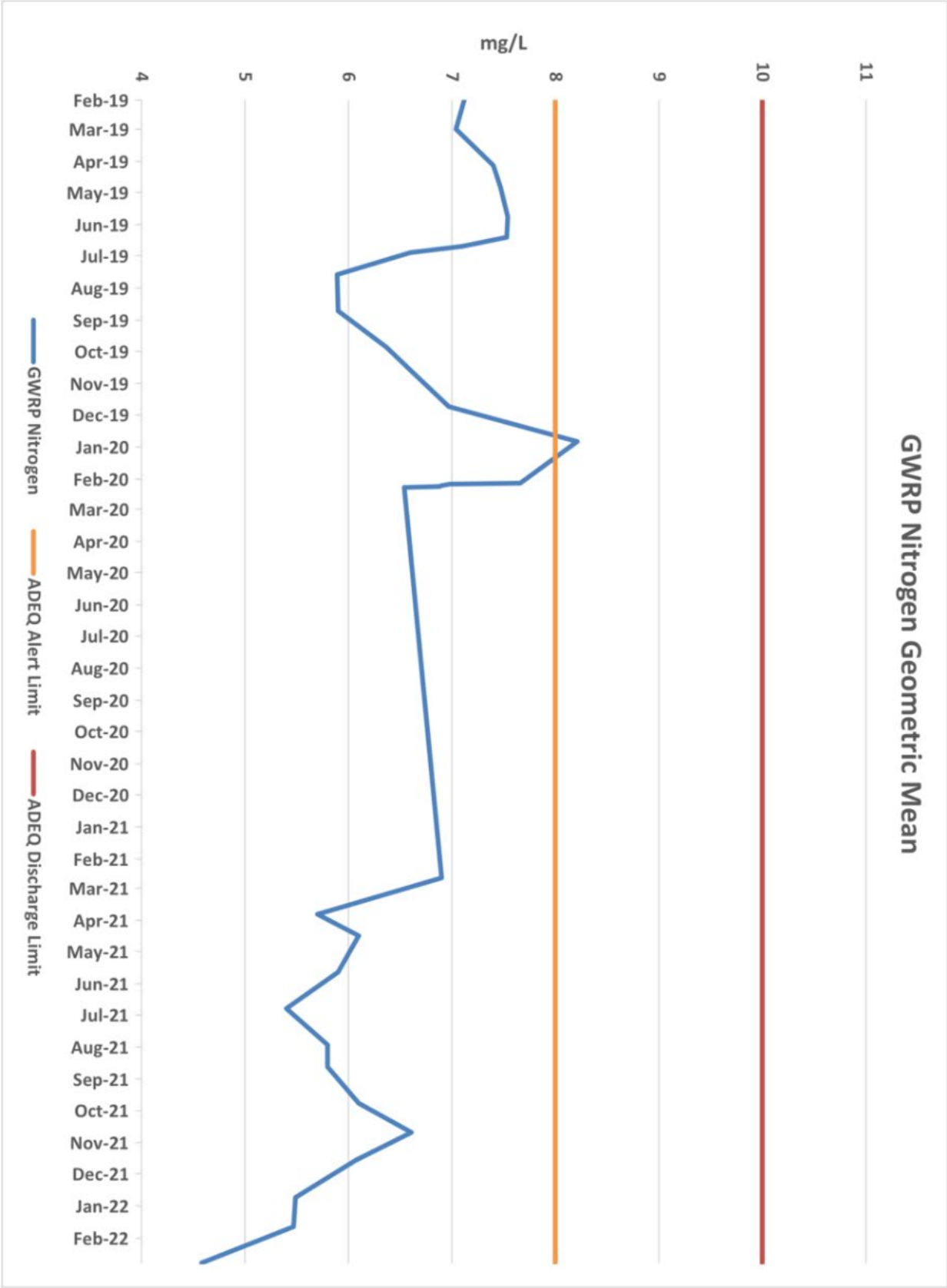
# Performance Measure:

- Wastewater Collections



# Performance Measure:

- Wastewater Treatment (Plant efficiency)



# 2/23 Capital Improvement

## Project Support

Operational Sustainability and Improvement



- **Ongoing Costs: \$767,544**
- **One-Time Costs: \$654,000**

Goal: Support significant water and wastewater projects and maintain current service levels

- ❖ CBP: Water Treatment – Organic Matter Removal
- ❖ CBP: Reclaimed Water - Reclaimed Water put to Beneficial Use
- ❖ CBP: Wastewater Treatment – Nitrogen Removal



Focus Area 4: Water Stewardship



### Signal Butte Water Treatment Plant Expansion

- Water Resources Treatment Process Specialist



### Central Mesa Reuse Pipeline

- Water/Wastewater Field Coordinators (2)
- Water/Wastewater Utility Systems Crew Leader
- Equipment Operator
- Field Worker
- Backhoe
- 10-Yard Dump Truck



### Northwest Water Reclamation Plant

- Water Resources Operator II
- Water Resources Maintenance Specialist II

# Replace Chemist from .5 FTE to 1 FTE Operational Improvement

## Additional Ongoing Cost Increase: \$7,582

- Ongoing Position Cost Increase: \$68,452
  - Position cost to be offset by \$60,870 in reduced 3<sup>rd</sup> party testing expenditures.

## One-time Cost: \$6,901

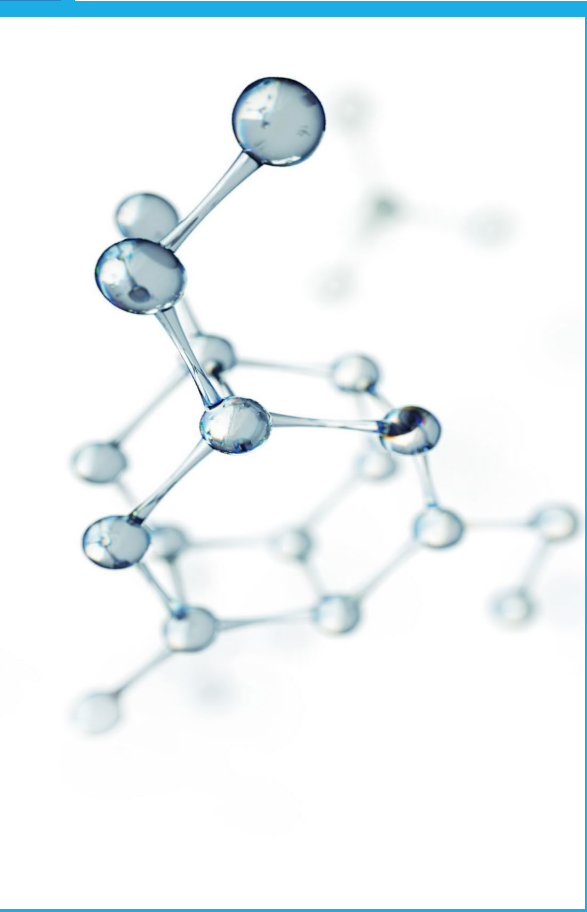
- Computer and Minor Equipment
- Workspace
- Licensing parameters increased from 57 to 314 since 2006
- Shorter testing turnaround times at reduced cost vs. 3<sup>rd</sup> party testing

CBP: Water Treatment – Organic Matter Removal

CBP: Wastewater Treatment – Nitrogen Removal



Focus Area 4: Water Stewardship



# Greenfield Water Reclamation Plant (GWRP Joint Venture) 2 FTE – Water Resources Maintenance Specialist II

*Operational Sustainability*

## Ongoing Cost: \$169,884

- Position Costs
- Mesa Cost Share \$71,352 (42%)

## One-time Cost: \$4,300

- Workspace, Computer and Minor Equipment
- Mesa Cost Share \$1,806 (42%)

This large, complex, end of the line treatment plant is now the 3<sup>rd</sup> largest wastewater treatment facility in the State of Arizona

Two additional positions are requested to reduce preventative maintenance backlog and adequately support the effective operations of the newly expanded plant 24/7.

### CBP: Wastewater Treatment – Nitrogen Removal



Focus Area 1.1: Reduce Energy Demands  
Focus Area 4: Water Stewardship

## e Truck er Distribution)

*Operational Sustainability and Improvement*

**One Time Cost: \$128,000**

**Ongoing Cost: \$10,000**

- 43,618 water valves in City of Mesa system
- 4,700 new valves since FY11/12
- Avg 700 additional valves to be added to system annually
- Current fleet includes 4 valve trucks
  - Last truck added in FY08/09

**Goal: Exercise each valve once every 5 years**

CBP: Water Distribution – Water Disruption Ratio

CBP: Water Distribution – System Water Loss



Focus Area 4: Water Stewardship



# Water Resources Expenditure Summary

Core Business Processes				
	FY 20/21	FY 21/22	FY 21/22	FY 22/23
	Year End Actuals	Revised Budget	Year End Estimate	Proposed Budget
Expenditures				
Water				
Water Distribution	\$25.2	\$29.3	\$27.7	\$30.5
Water Treatment	\$18.7	\$20.0	\$18.7	\$21.5
Reclaimed	\$10.4	\$13.1	\$13.1	\$14.4
Wastewater				
Wastewater Collection	\$9.0	\$9.4	\$9.5	\$10.8
Wastewater Treatment	\$19.7	\$28.9	\$28.2	\$30.4
Water Resources Total:	\$83.0	\$100.7	\$97.2	\$107.6
Expenditures Total:	\$83.0	\$100.7	\$97.2	\$107.6
Total FTE	293.5	295.5	295.5	306

Dollars in Millions

# Water Resources

## FY21/22 to FY 22/23 Cost Summary

Baseline Cost	FY21/22	FY22/23	Variance
Val Vista WTP Obligation	\$ 7,700,000	\$ 8,850,000	\$ 1,150,000
Water Chemicals	\$ 2,135,000	\$ 2,085,000	\$ (50,000)
Water Electric	\$ 4,899,600	\$ 4,957,100	\$ 57,500
Water Purchases	\$ 12,825,578	\$ 14,013,674	\$ 1,188,096
SROG (91st Ave WRP) Obligation	\$ 7,140,000	\$ 7,900,000	\$ 760,000
Wastewater Chemicals	\$ 3,395,000	\$ 3,860,000	\$ 465,000
Wastewater Electric	\$ 3,993,300	\$ 3,873,000	\$ (120,300)
Greenfield WRP - Mesa Share*	\$ 5,755,991	\$ 4,486,234	\$ (1,269,757)
Total	\$ 47,844,469	\$ 50,025,008	\$ 2,180,539

\* Estimated GWRP Mesa Share. Actuals to be 42% of approved GWRP Joint Venture Budget

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# Energy Resources Fiscal Year 22/23 Budget

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APRIL 14, 2022

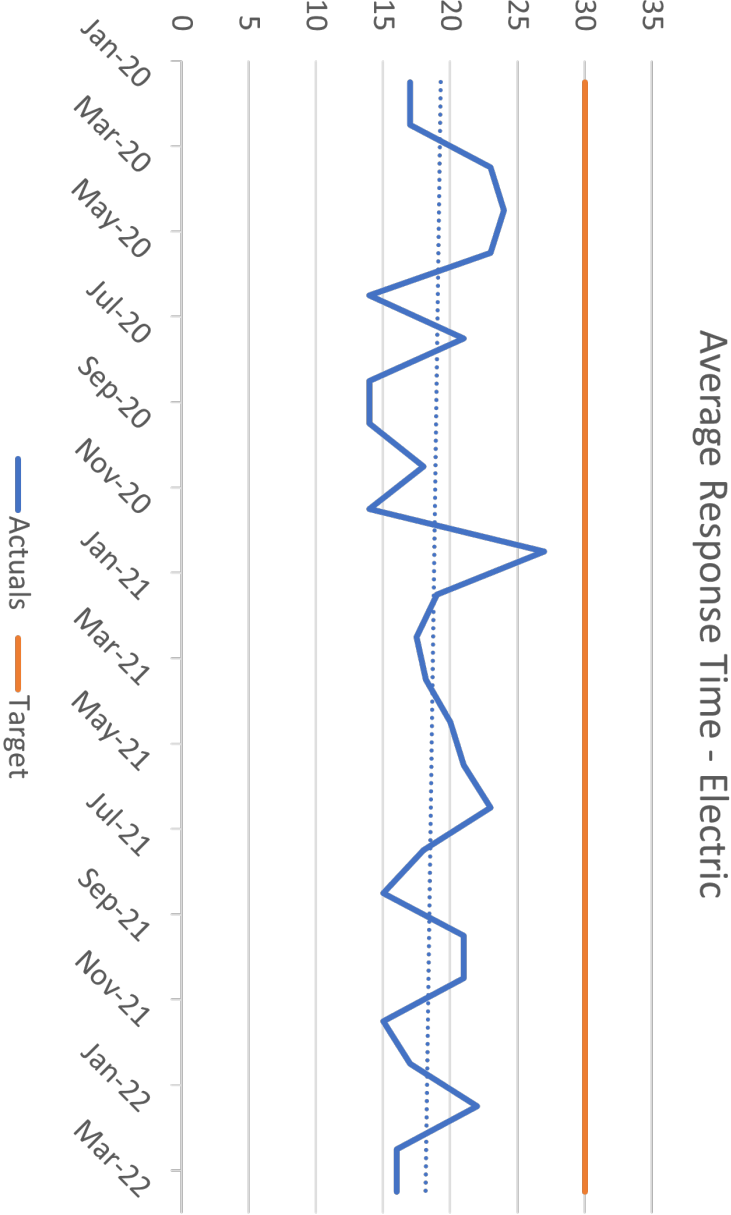
FRANK MCRAE, ANTHONY CADORIN, KYLE NICHOLSON, KEITH KORCH, JOHN PETROF

# ENERGY RESOURCE'S PURPOSE

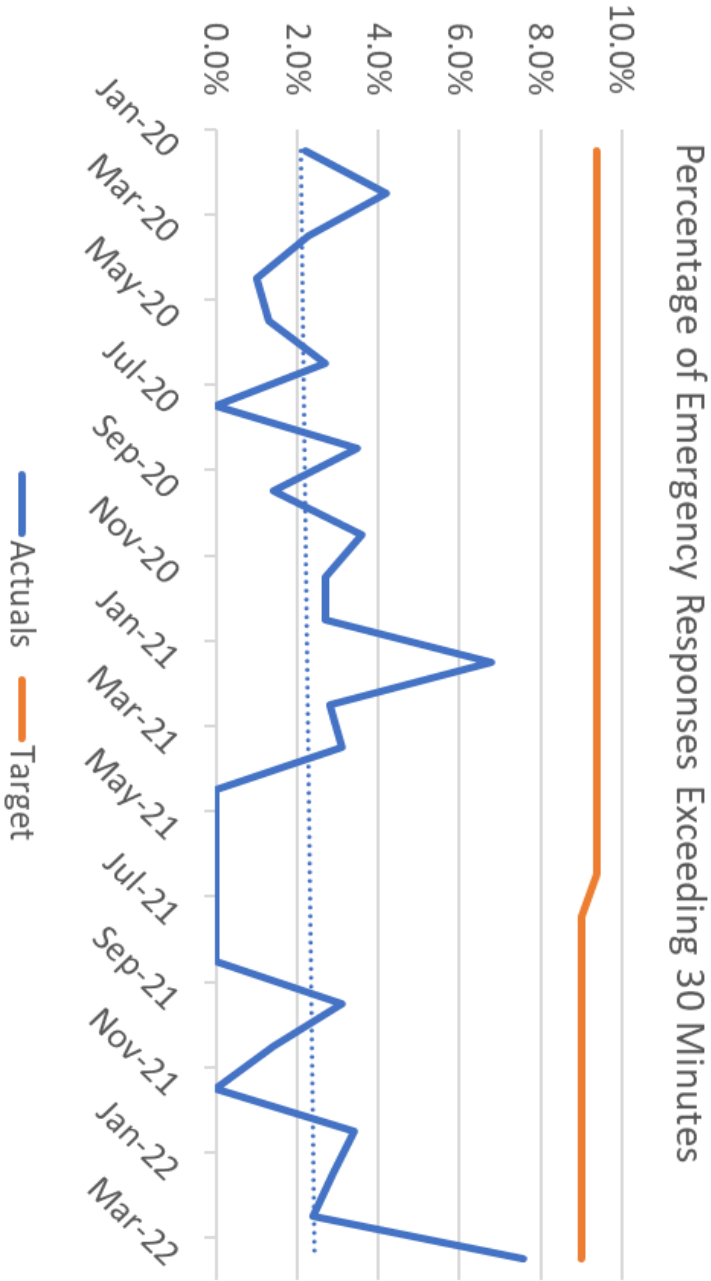
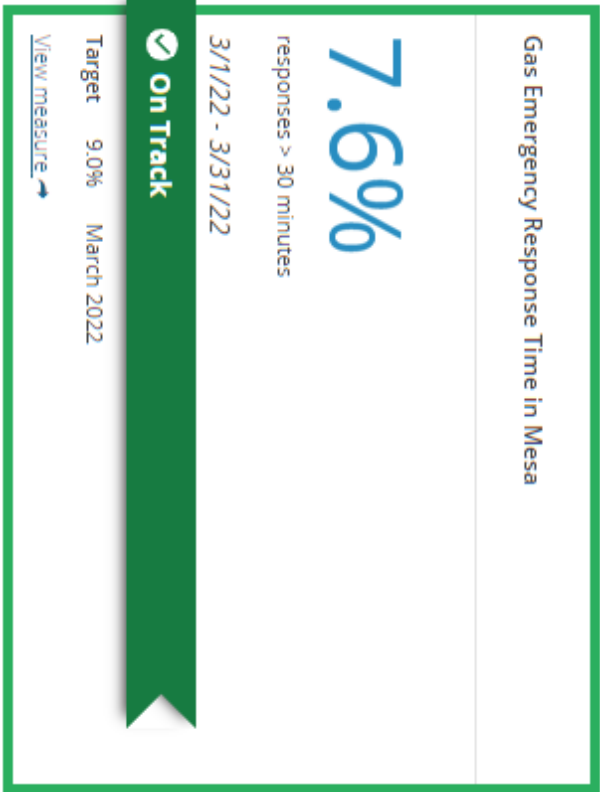
*Provide safe, reliable, and affordable Electric and Gas utility Services to our customers*

	Community Safety	Skilled and Talented Workforce	Sustainable Economy	Transform Neighborhoods	Placemaking	Healthy Environment
Safety	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Reliability	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Affordability	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

# SAFETY—ELECTRIC EMERGENCY RESPONSE TIME

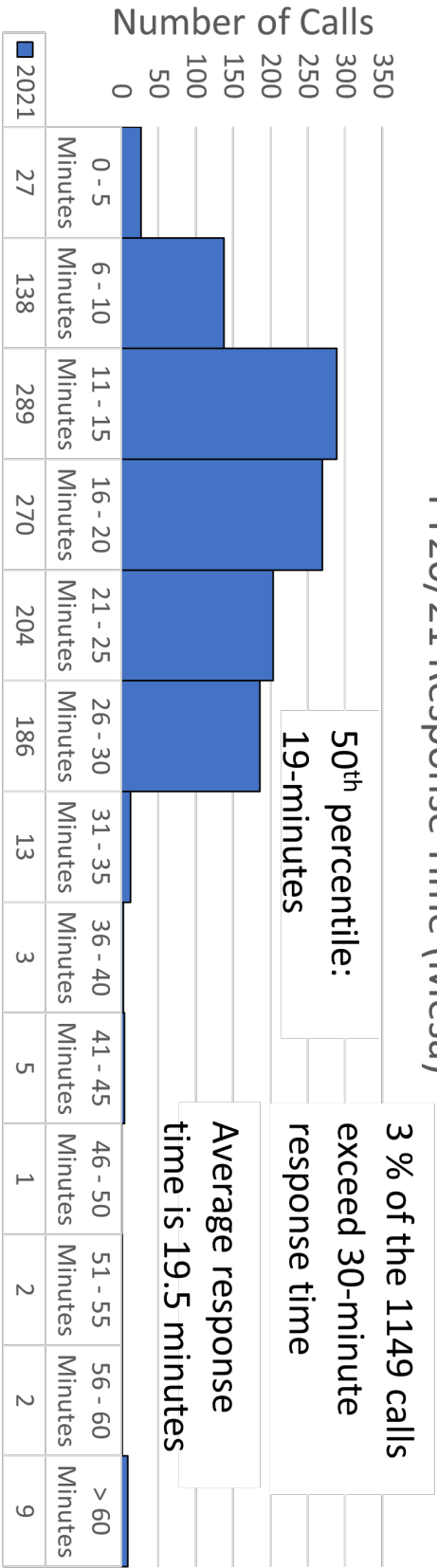


# SAFETY—GAS EMERGENCY RESPONSE TIME

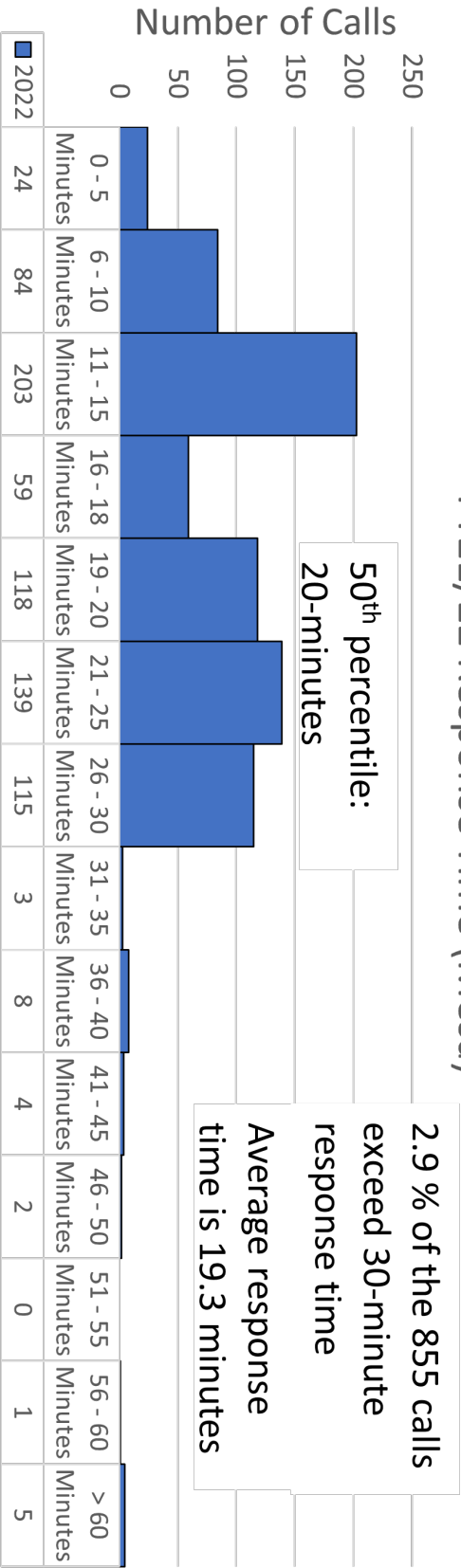


# SAFETY—GAS EMERGENCY RESPONSE TIME

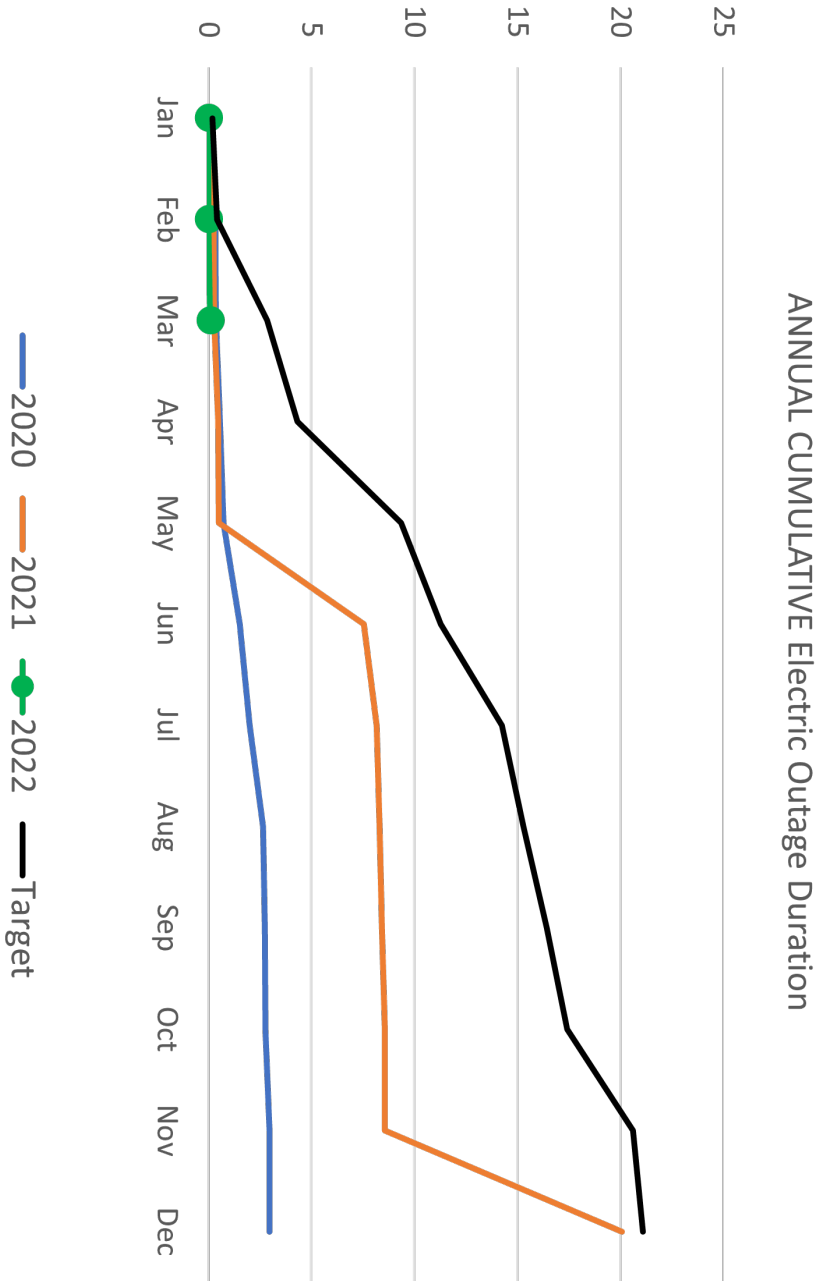
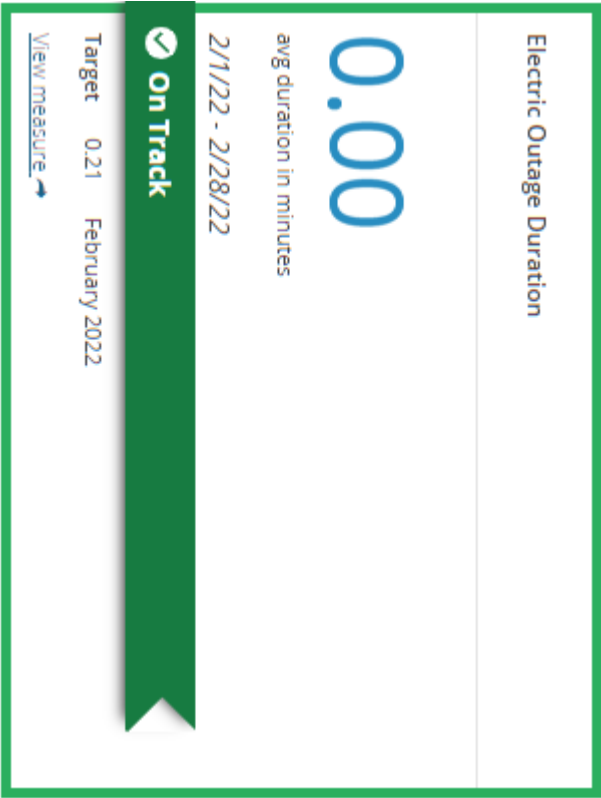
FY20/21 Response Time (Mesa)



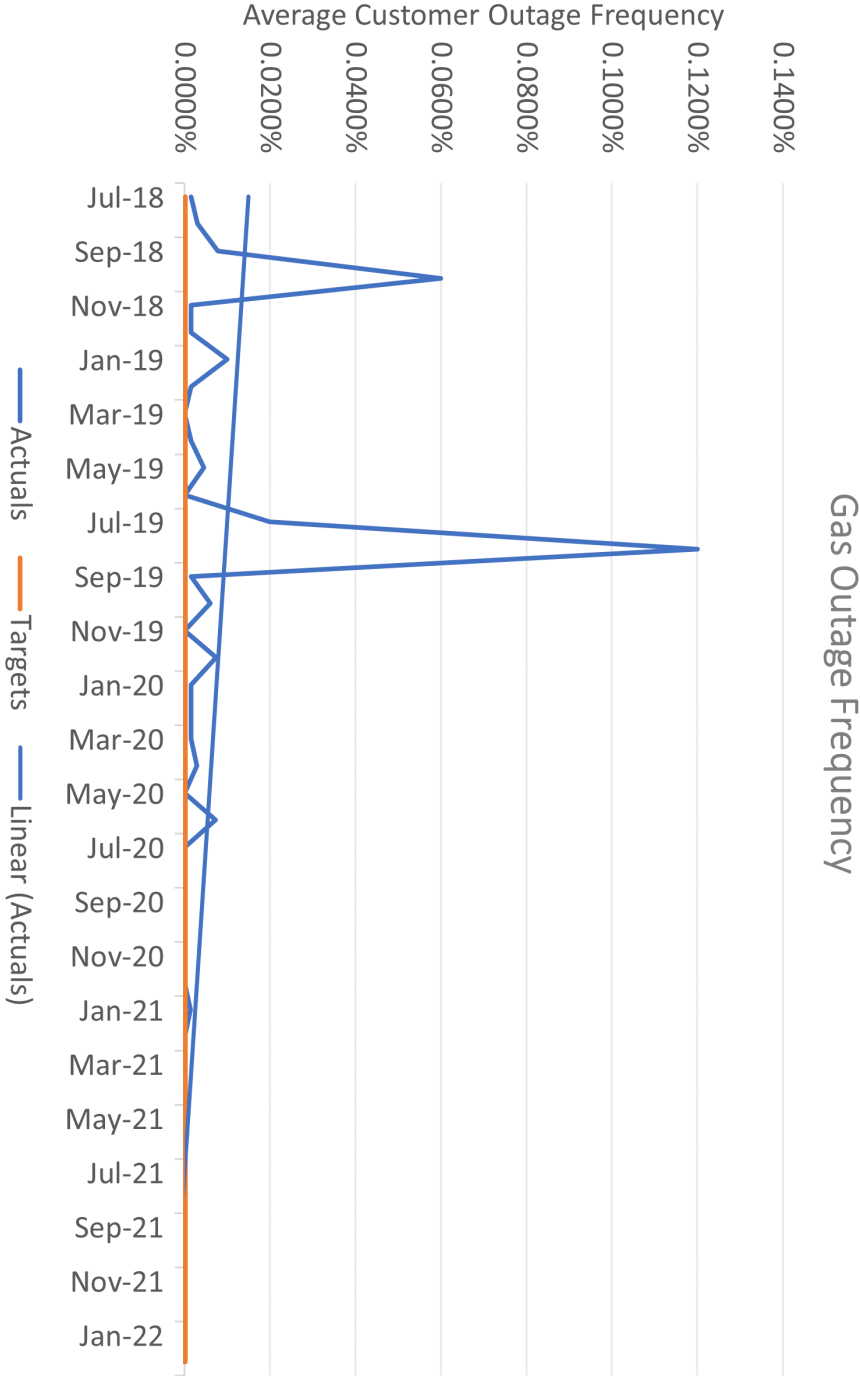
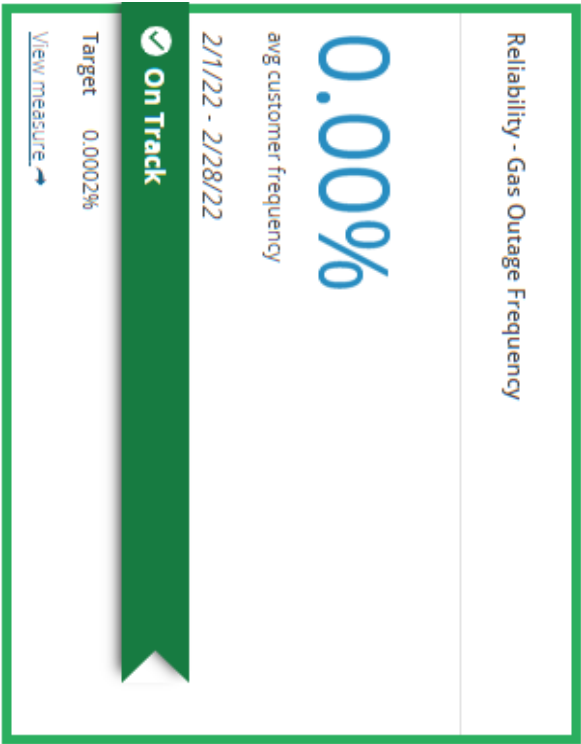
FY21/22 Response Time (Mesa)



# RELIABILITY-DURATION OF ELECTRIC OUTAGES



# RELIABILITY-FREQUENCY OF GAS OUTAGES



# AFFORDABILITY-ELECTRIC SUPPLY COSTS

Electric Energy Supply Costs

\$24.1M

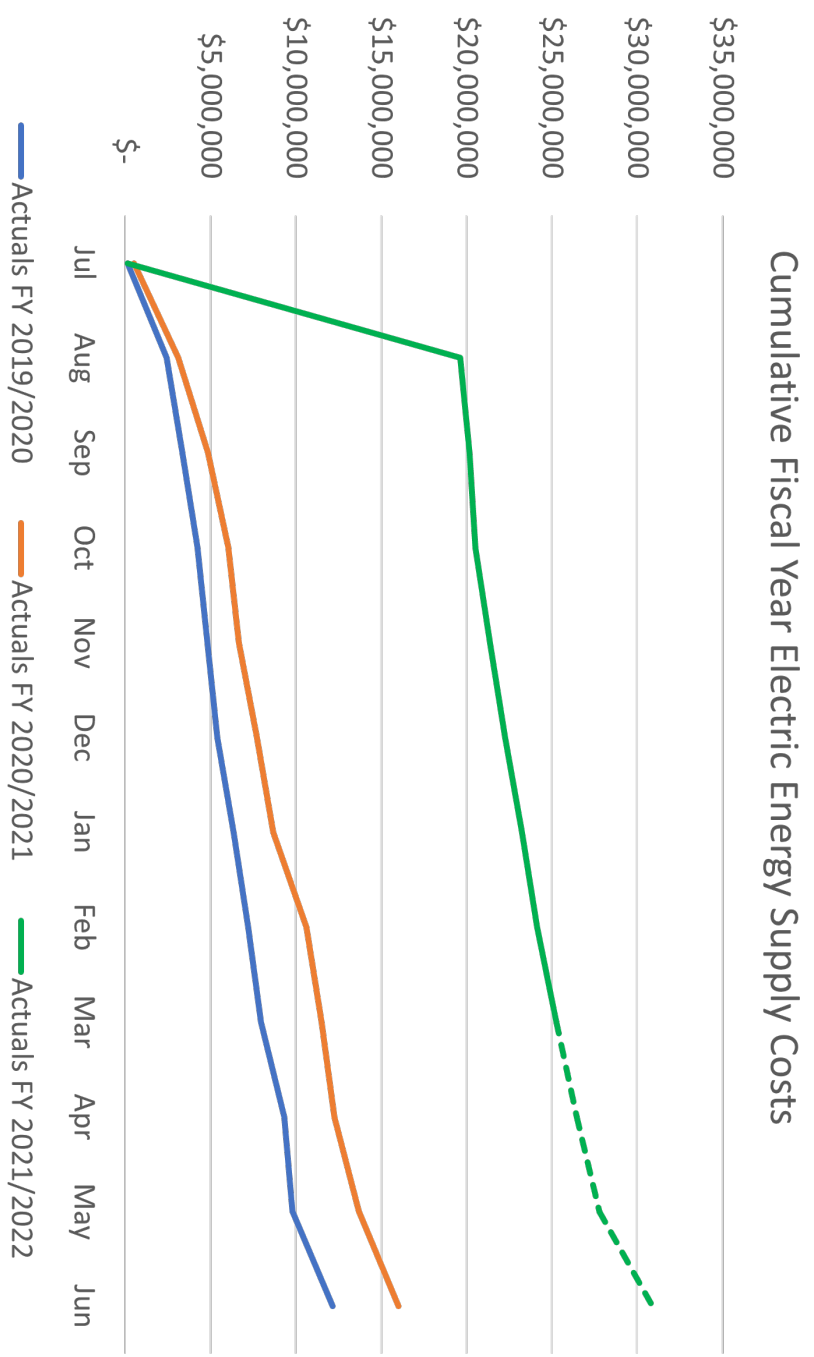
Dollars

2/1/22 - 2/28/22

Off Track

Target \$9.1M February 2022

[View measure](#)



# AFFORDABILITY-GAS SUPPLY COSTS

Natural Gas Supply Costs

\$9.54M

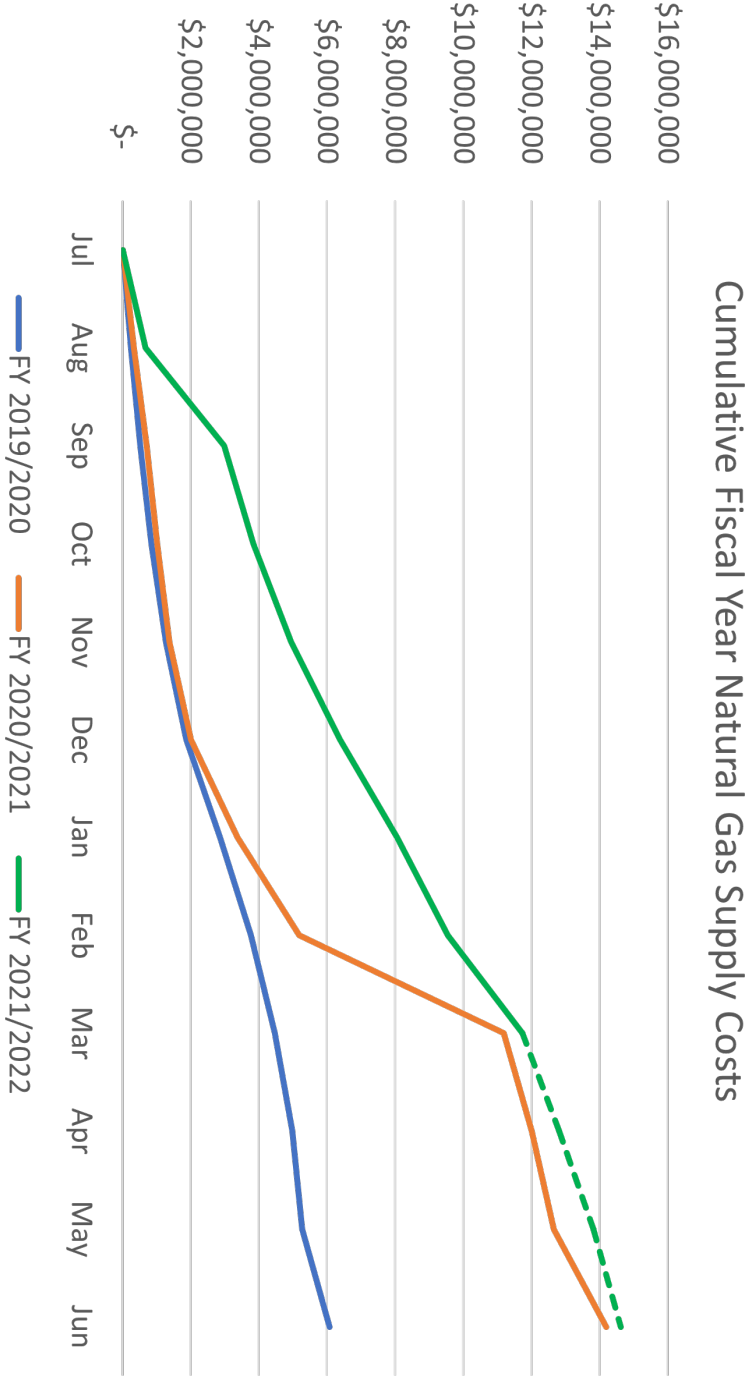
Cumulative FY

2/1/22 - 2/28/22

Off Track

Target \$7.55M February 2022

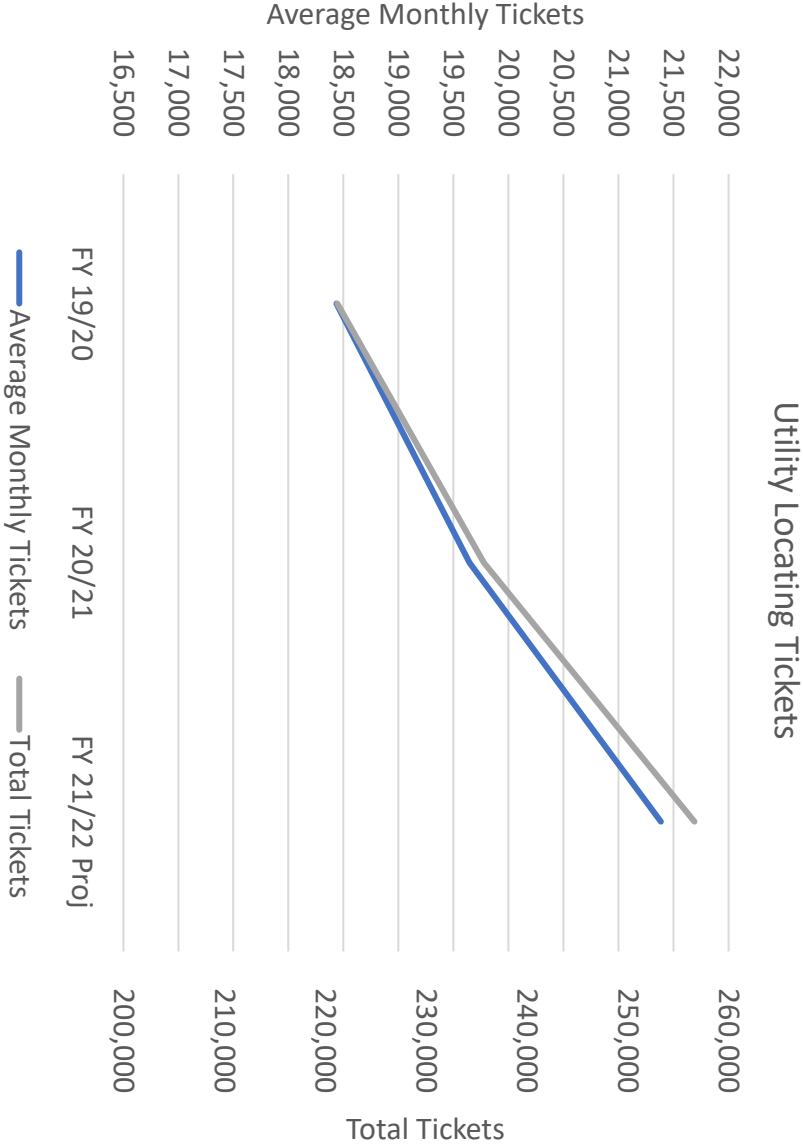
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# FY 22/23 BUDGET ENHANCEMENTS SUSTAINING & IMPROVING OPERATIONS AND PERFORMANCE

# ADD 1 LEAD UTILITY LOCATOR & 1 UTILITY LOCATOR

- \$124,000 One-time & \$209,272 Ongoing
- 2 EVs WILL AVOID 6 tons CO2/year
- Maintain Compliance With State Law & ACC Regulation
- Multiple Safety Related Performance Measures
- Locate Accuracy & Damage Prevention
- Organizational Health(Emp Survey)
- Average Cost per Locate



# ADD 1 ENERGY CONTROL ROOM SUPERVISOR

- A Dedicated Energy Utility System Control Room
- Phased in-staffing - ultimately 7X24
- \$158,112 ongoing & \$800,000 CIP (One-time)
- “Strategic Benefits” offset one time and ongoing costs
- Enhance Employee & System Safety
- Enhance System Reliability
- Mesa Climate Action Plan
- Minimize Electric & Gas Supply costs



# DEPARTMENT EXPENDITURE SUMMARY

Core Business Processes		FY 20/21	FY 21/22	FY 21/22	FY 22/23
Expenditures		Year End Actuals	Revised Budget	Year End Estimate	Proposed Budget
Energy Resources					
Electric					
Electric Business Development		\$0.3	\$0.2	\$0.2	\$0.3
Electric Substation Operations and Maintenance		\$0.5	\$1.0	\$0.8	\$1.1
Electric Meter Operations and Maintenance		\$0.5	\$0.6	\$0.5	\$0.7
Electric Transmission & Distribution Operations & Maint		\$3.4	\$4.2	\$4.1	\$4.6
Gas					
Gas Business Development		\$0.3	\$1.4	\$1.3	\$0.3
Gas System Operations		\$0.5	\$0.9	\$0.6	\$0.6
Gas Emergency Response		\$0.6	\$0.6	\$0.6	\$0.7
Gas Meter Installation and Maintenance		\$1.1	\$0.8	\$1.1	\$1.0
Gas System Maintenance		\$3.7	\$3.5	\$3.9	\$4.1
Gas Regulatory Compliance		\$0.8	\$0.9	\$0.8	\$1.0
Utility Locating		\$1.5	\$1.4	\$1.6	\$1.7
Gas Administration		\$2.3	\$2.6	\$2.7	\$2.7
Expenditures Total:		\$15.5	\$18.1	\$18.2	\$18.8
Energy Supplies					
Planning and Acquisition of Electric Energy Supplies		\$16.1	\$26.5	\$28.5	\$27.0
Planning and Acquisition of Natural Gas Supplies		\$14.3	\$12.3	\$18.3	\$16.0
Grand Total:		\$45.9	\$56.9	\$65.0	\$61.8
FTEs		124	131	131	134

Dollars in Millions

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