



COUNCIL MINUTES

April 17, 2023

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 17, 2023, at 4:30 p.m.

COUNCIL PRESENT

John Giles
Francisco Heredia
Jennifer Duff
Mark Freeman
Alicia Goforth
Scott Somers
Julie Spilsbury

COUNCIL ABSENT

None

OFFICERS PRESENT

Christopher Brady
Holly Moseley
Jim Smith

Mayor Giles conducted a roll call.

1. Review and discuss items on the agenda for the April 17, 2023, 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: None

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

Energy and Sustainability Director Scott Bouchie introduced Senior Fiscal Analyst John Petrof and Energy Resources Program Manager Anthony Cadorn, and displayed a PowerPoint presentation. **(See Attachment 1)**

Mr. Bouchie summarized the Department public purpose, as well as the priorities and objectives. (See Pages 2 and 3 of Attachment 1)

Mr. Bouchie discussed the performance metrics for blue stake accuracy, gas emergency response times, and electric outage duration. (See Pages 4 through 6 of Attachment 1)

Mr. Cadorn remarked the electric utility is a critical piece of the City of Mesa (COM) making progress on the Climate Action Plan (CAP). He highlighted CAP projects and their progress. (See Page 7 of Attachment 1)

Responding to a question from Mayor Giles regarding the electric vehicle (EV) time of use (TOU) rate, Mr. Cadorin explained the rate is specifically for residential customers who have a Level 1 or 2 charger at their home to ensure the customer is charging their EV during the super off-peak hours of 11:00 p.m. to 5:00 a.m. He added that the utility electric fleet rate is being developed to establish off-peak hours.

In response to multiple questions posed by Vice Mayor Heredia, Mr. Bouchie acknowledged that the 16 Megawatts (MW) of Salt River Project (SRP) renewable energy is in addition to the SRP sustainable energy offer. He mentioned the difference is this is a utility-to-utility deal as opposed to utility-to-customer. He said the energy will be delivered to Pinnacle Peak and will be followed by renewable energy credits.

Mr. Cadorin reported after the challenges in the electric market in 2021, the COM began focusing on generating its own power locally. He described the Downtown solar projects that combined will bring 2.3 MW of renewable power. He added the microgrid at the Police Department (PD) campus is one of the first steps to generating electricity with efficient natural gas generators, which will save customers money by avoiding peak market purchases. (See Page 8 of Attachment 1)

Responding to several questions from Mayor Giles, Mr. Cadorin estimated the microgrid will be used between 2,000 to 6,000 hours per year with higher usage during the summer. He confirmed that the COM is considering expanding with additional projects that are in the evaluation stage.

In response to a question from Councilmember Freeman, Mr. Cadorin estimated the timeframe of 18 months to two years for renewable energy project completion.

Further discussion ensued regarding storage, additional ways to offset costs, and the timeline for projects.

In response to a comment by Councilmember Duff relative to making sure the projects are in line with the City's sustainability goals, Mr. Bouchie remarked that the different pieces include solar, batteries, and natural gas, in addition to the base load purchase contracts that the City has, and the key is finding the best combination to meeting the demand and having reliable utilities.

Mr. Cadorin discussed two advanced methane detection pilot projects that the COM is working on with Canary to detect leaks and human intrusion into critical facilities. He continued by saying the Flare to Fuel project will cover 20% of the city's natural gas usage. (See Page 9 of Attachment 1)

Mr. Petrof gave an overview of the Department's expenditure summary for electric and gas. He stated the increased expenses are due to additional staff needed for the fiber project, and rising inflation costs. (See Page 10 of Attachment 1)

Mr. Bouchie outlined the budget adjustment requests for four utility service workers to expand the rotation schedule and alleviate burnout. He mentioned that as the Advanced Metering Infrastructure (AMI) project gets started, in-house staff will be used for meter exchanges. He reviewed the requests for a gas valve crew leader, three gas field workers, and an AMI data analyst. (See Pages 11 through 15 of Attachment 1)

In response to multiple questions posed by Councilmember Freeman, Mr. Bouchie clarified that the PD microgrid will be natural gas, and the current diesel backup generator is used in

emergencies only. He mentioned the AMI project is behind schedule because the meters have been delayed. He remarked the total installation will take four to five years to complete.

Responding to a question from Vice Mayor Heredia relative to whether the City expended all the Covid relief funding, City Manager Christopher Brady described the Coronavirus Aid, Relief, and Economic Security Act (CARES) dollars were used for utility assistance and the American Rescue Plan Act (ARPA) dollars were utilized to mitigate against the spike in electric prices.

Mr. Cadorin expanded that the ARPA funding is scheduled to run through November of 2023. He said when SRP raised their rates, this allowed the COM to be more competitive in pricing.

Mr. Brady explained normally an increase in commodity cost would be directly passed through to the customer; however, by using the ARPA dollars, the City was able to pay down on the increased costs of utilities over a three-year period.

Mr. Cadorin discussed the circumstances that led to the increase in utility costs, adding the City is in a better position today. He mentioned the circumstances that occurred support the idea of the COM generating energy to maintain better control of the market. He stated in terms of risk tolerance, the aim will be 5% to 10% of energy received from the market. He said the concept is that the generators will offset the contracts that the City has to purchase electricity.

Mayor Giles thanked staff for the presentation.

2-b. Hear a presentation, discuss, and provide direction on the Environmental Sustainability Department budget, including Mesa Climate Action Plan (MCAP) projects from last year and proposed future projects.

Energy and Sustainability Director Scott Bouchie introduced Environmental and Sustainability Deputy Director Laura Hyneman and Management Assistant II Rachel Butler, who displayed a PowerPoint presentation. **(See Attachment 2)**

Mr. Bouchie stated the public purpose and the priorities and objectives of the Environmental and Sustainability Department. He pointed out the priorities are interrelated with each other and focus on Mesa's CAP. (See Pages 2 and 3 of Attachment 2)

Ms. Hyneman presented the performance measures based on work done by the environmental team to ensure operations follow environmental regulations. She mentioned a notice of violation that occurred in 2018. She described the performance measures related to electrical energy usage in all operations, adding the COM is making investments in efficiency improvements and using less electricity even though still growing. (See Pages 4 and 5 of Attachment 2)

Ms. Butler provided a summary of the expenditures. She noted \$600,000 was transferred for the Fleet EV charging infrastructure, as well as a mid-year adjustment for water conservation for the Xeriscape program. (See Page 6 of Attachment 2)

Discussion ensued regarding the use of landscaping blowers, the dust ordinance, and the difficulty for Mesa to affect a change alone without county or regional support.

Ms. Hyneman remarked that Mesa is making strides to achieve the CAP goals of reaching carbon neutrality by 2050. She provided an update on the current ongoing projects. She highlighted plans to assist the COM in preparing for an electric future. (See Pages 7 and 8 of Attachment 2)

Mr. Brady advised that staff are considering incentives for employees who drive electric vehicles and allowing them to connect to the City's power source.

Ms. Hyneman presented the CAP projects and costs for the upcoming year. She explained the Trees are Cool initiative has a goal to plant one million trees by 2050. She pointed out that the initiative is beneficial to the CAP because trees reduce heat and improve air quality. (See Pages 9 through 11 of Attachment 2)

In response to a question from Councilmember Duff, Ms. Hyneman informed Council that the million trees are based on science from a canopy study that was conducted showing that Mesa is currently at 6% coverage and the target is 15% coverage, which comes close to needing a million trees planted.

Ms. Hyneman shared tree planting events and the COM partners who are assisting in meeting the goal. (See Page 12 of Attachment 2)

Mr. Bouchie described the Food to Energy process to produce renewable natural gas that will be used to fuel the Solid Waste vehicles. He advised the Guaranteed Maximum Price (GMP) No. 2, which includes the final construction needs and equipment, will be coming to Council on May 1, 2023. He added the \$1.8 million cost is to begin the design of the food processing facility. He remarked the project reduces the amount of waste going into landfills, increases the production of renewable energy, and decreases carbon intensity. (See Page 13 of Attachment 2)

In response to a question from Mayor Giles, Mr. Bouchie stated there are two digesters at the Northwest Water Reclamation Plant (NWWRP) that are used everyday for wastewater treatment; however, there is stranded capacity that provides the ability to utilize the digesters for the organic material. He recapped the digester process.

Ms. Hyneman reported \$2.1 million is being requested for the first phase of the Red Mountain Sports Complex lighting project. She provided information about the water conservation program and the Water – Use it Wisely campaign. (See Pages 14 through 16 of Attachment 2)

Mr. Bouchie mentioned the biomass agreement and its benefits. (See Page 17 of Attachment 2)

Mayor Giles thanked staff for the presentation.

3. Current events summary including meetings and conferences attended.

Mayor Giles and Councilmembers highlighted the events, meetings and conferences recently attended.

4. Scheduling of meetings.

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

Thursday, April 20, 2023, 7:30 a.m. – Study

5. Adjournment.

Without objection, the Study Session adjourned at 5:53 p.m.



JOHN GILES, MAYOR

ATTEST:



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 17th day of April 2023. I further certify that the meeting was duly called and held and that a quorum was present.



HOLLY MOSELEY, CITY CLERK

1a
(Attachment – 2)



Energy Resources

April 17, 2023

Presented by:

Scott Bouchie, Energy and Sustainability Director

Anthony Cadorin, Energy Resources Program Manager

John Petrof, Senior Fiscal Analyst

Fiscal Year 2023/24

Public Purpose

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



Priorities/Objectives



Stabilize and reduce supply costs



Meet customer needs

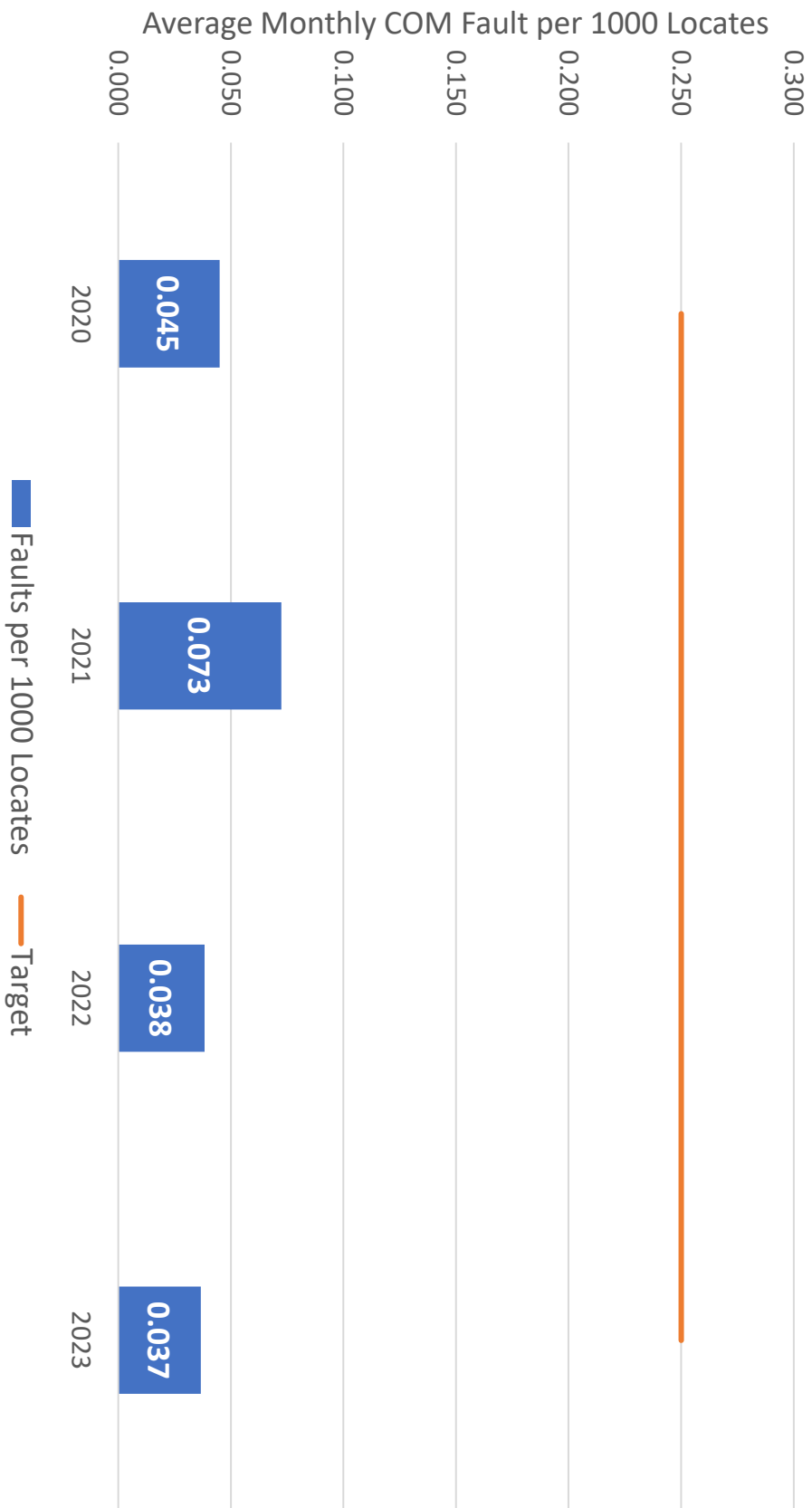
Staffing
Equipment



Provide opportunities for staff
within department

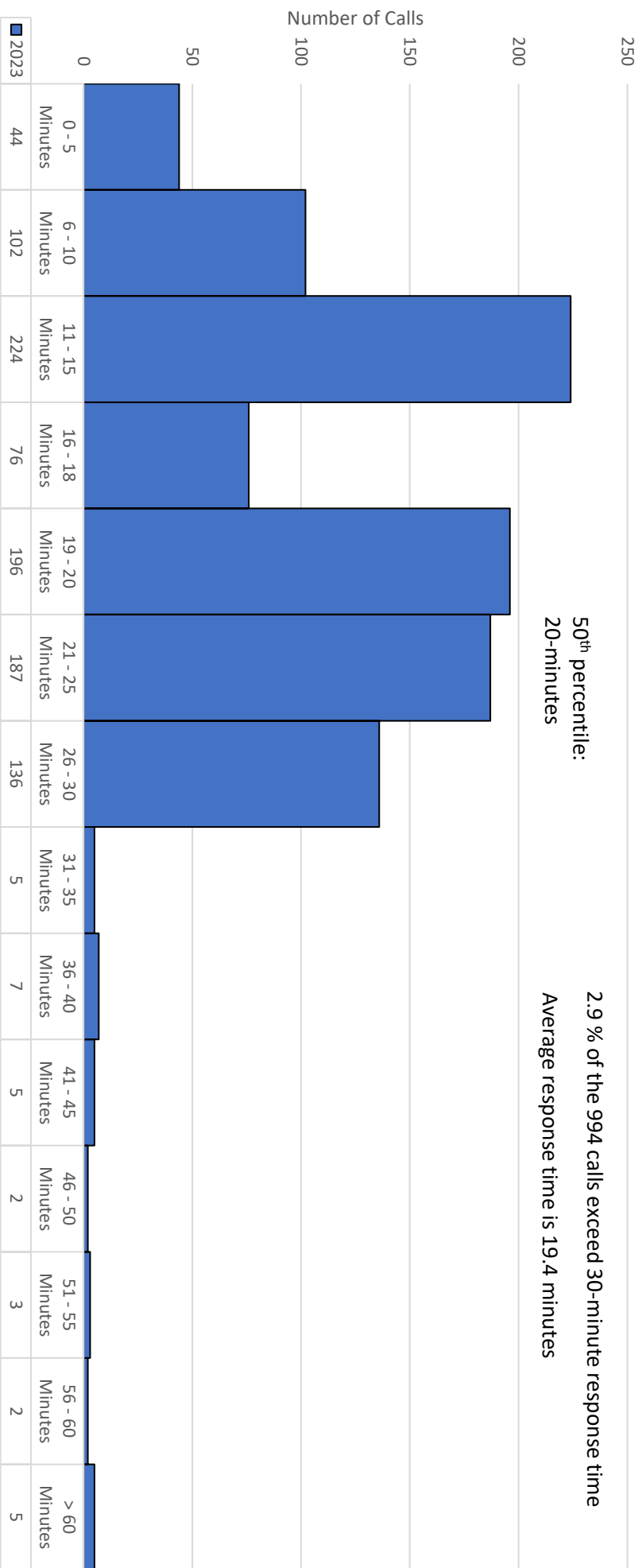
Succession Planning
Cross Training

Stake Accuracy

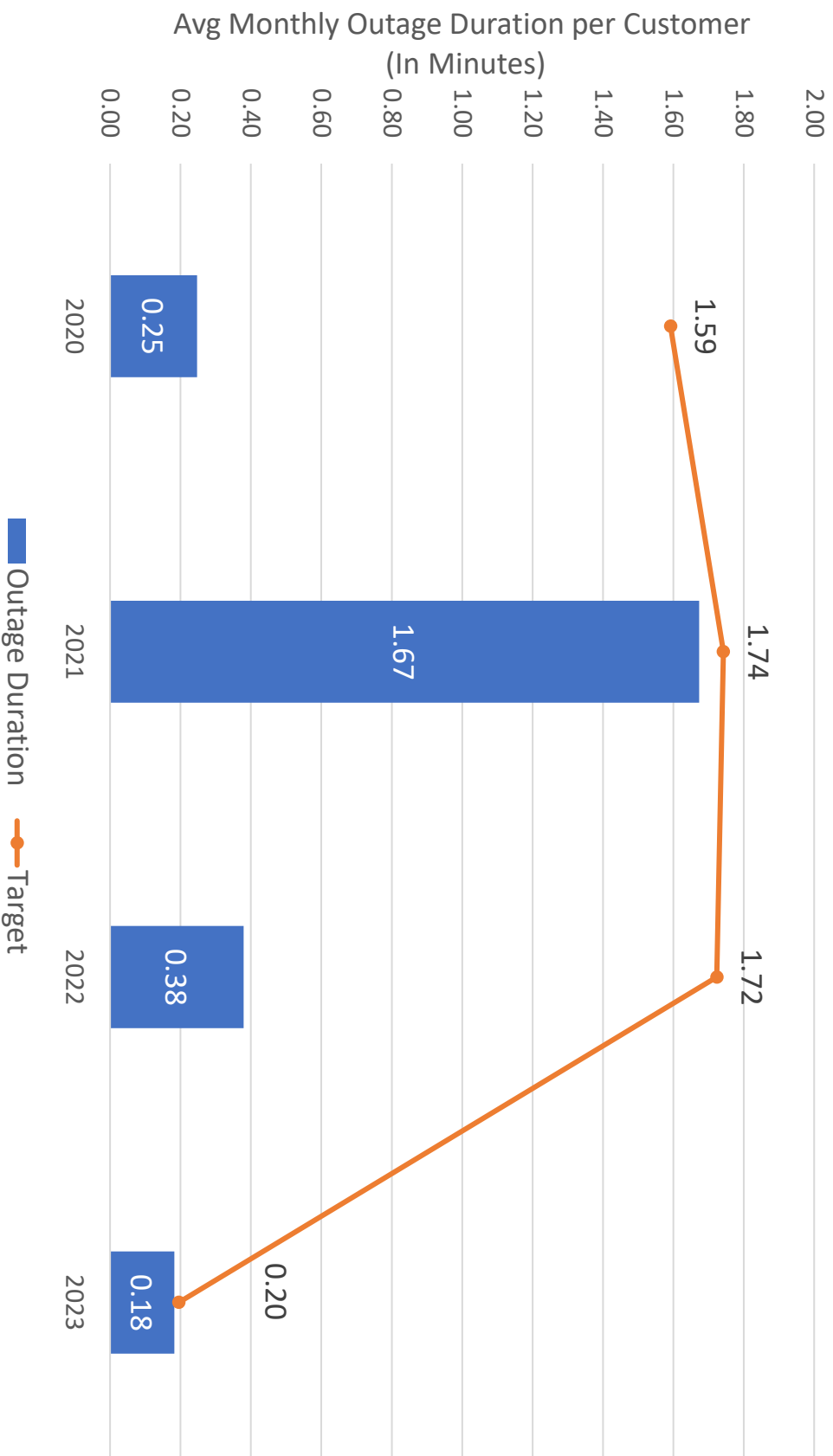


Emergency Response - Mesa

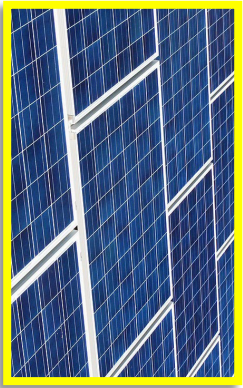
FY 22-23 Response Time (Mesa)



Electric Outage Duration



ate Action Plan Progress - **mesa**.az electric utility



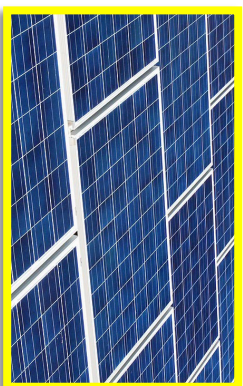
Customer Solar – 1.7 MW
149 customers, 1%
annual energy



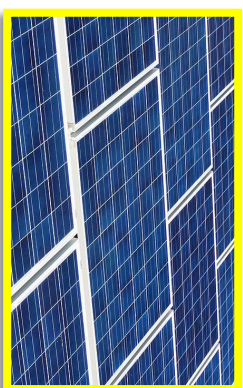
Residential EV/TOU
Rate



Aggregated Demand
Response – 1 MW 1%
of peak demand



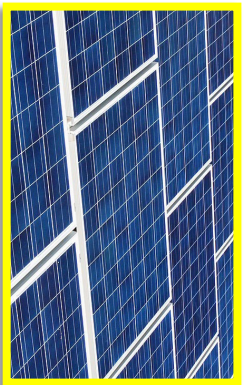
SFP Utility Scale
Renewable Power
16 MW 15% annual energy



Downtown Solar 2
2.3 MW 1.2% annual
energy



Energy - mesa·az electric utility



Downtown Sdlar 1
0.8 MW 0.4% annual energy

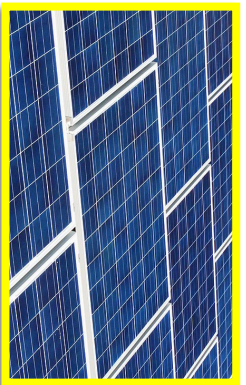
- MGP
- 55 N Center
- ASU
- Ice Rink

Complete



PDMacrogrid
3 MW 4.4% annual energy

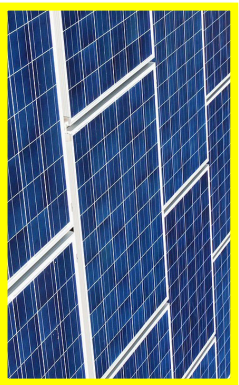
In design



Downtown Sdlar 2A
2.3 MW 0.9% annual energy

- Library
- Transportation Building
- OK Luster Building

In RFP Review



Downtown Sdlar 2B
0.5 MW 0.3% annual energy

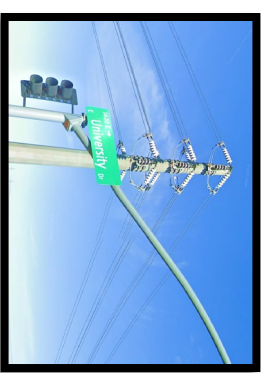
- Mesa Arts Center

In RFP Review



DC Macrogrid
3 MW 4.4% annual energy

Concept Level



Rogers Substation Site
Under Study

ate Action Plan Progress - **mesa**·**az** natural gas utility



Advanced Methane Detection

Project Canary -
Stationary Pldt



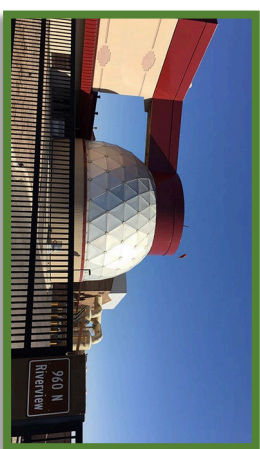
Advanced Methane Detection

Project Canary -
Mobile Survey



72 RNG Refuse Trucks

Local Energy



Flare to Fuel - 20% of
City Natural Gas Use



Additional RNG
Projects



Expenditure Summary

	FY 21/22	FY 22/23	FY 22/23	FY 23/24
Core Business Processes	Year End Actuals	Revised Budget	Year End Estimate	Proposed Budget
Expenditures				
Energy Resources				
Electric				
Electric Business Development	\$0.2	\$0.3	\$0.3	\$0.3
Electric Substation Operations and Maintenance	\$0.8	\$1.2	\$1.0	\$1.1
Electric Meter Operations and Maintenance	\$0.5	\$0.7	\$0.6	\$0.7
Electric Transmission & Distribution Ops & Maint	\$4.0	\$4.6	\$4.4	\$4.7
Gas				
Gas Business Development	\$1.3	\$0.3	\$0.3	\$0.3
Gas System Operations	\$0.6	\$1.0	\$1.0	\$0.7
Gas Emergency Response	\$0.6	\$0.7	\$0.6	\$0.7
Gas Meter Installation and Maintenance	\$1.1	\$0.9	\$0.9	\$1.3
Gas System Maintenance	\$4.0	\$4.1	\$4.6	\$4.5
Gas Regulatory Compliance	\$0.8	\$1.0	\$0.9	\$1.0
Utility Locating	\$1.6	\$2.0	\$2.0	\$2.1
Gas Administration	\$2.6	\$2.7	\$2.8	\$2.7
Expenditures Total:	\$18.2	\$19.3	\$19.4	\$20.1
Energy Supplies				
Planning and Acquisition of Electric Energy Supplies	\$32.4	\$27.1	\$24.1	\$25.5
Planning and Acquisition of Natural Gas Supplies	\$18.7	\$16.0	\$22.2	\$19.3
Grand Total:	\$69.3	\$62.4	\$65.7	\$65.0



ports Community Needs and Growth

Four Utility Service Workers (4 FTE)

- Ongoing Cost: \$428,350
- One-time Cost: \$540,000
- Improve retention and recruitment
 - Reduce standby recurrence
 - Maintaining 30-minute response time
 - Improving employee morale
- AMI installation benefits (In-house vs. Contractor)
 - Workmanship
 - Improved customer experience
- Deliver natural gas safely to our customers

ports Community Needs and Growth

Gas Valve Crew Leader (1 FTE)

- Ongoing Cost: \$110,483
- One-time Cost: \$170,000
- Valve maintenance is required throughout the gas system
 - Three maintenance areas
 - Growing number of new valves and main added
- System safety / regulatory compliance
 - Primary means of controlling natural gas
 - One to five-year frequency of inspections
- Lower emergency response times

ports Community Needs and Growth




Gas Field Workers (3 FTE)

- Ongoing Cost: \$246,426
- Reduce overtime & project costs
- Provides flexibility
- Reduces dependency on weekend work
- Deliver natural gas safely
- Maintenance completed on time
- System reliability
- Reduce outstanding maintenance work packets
- Promptly address maintenance activities

Data Analyst (1 FTE)

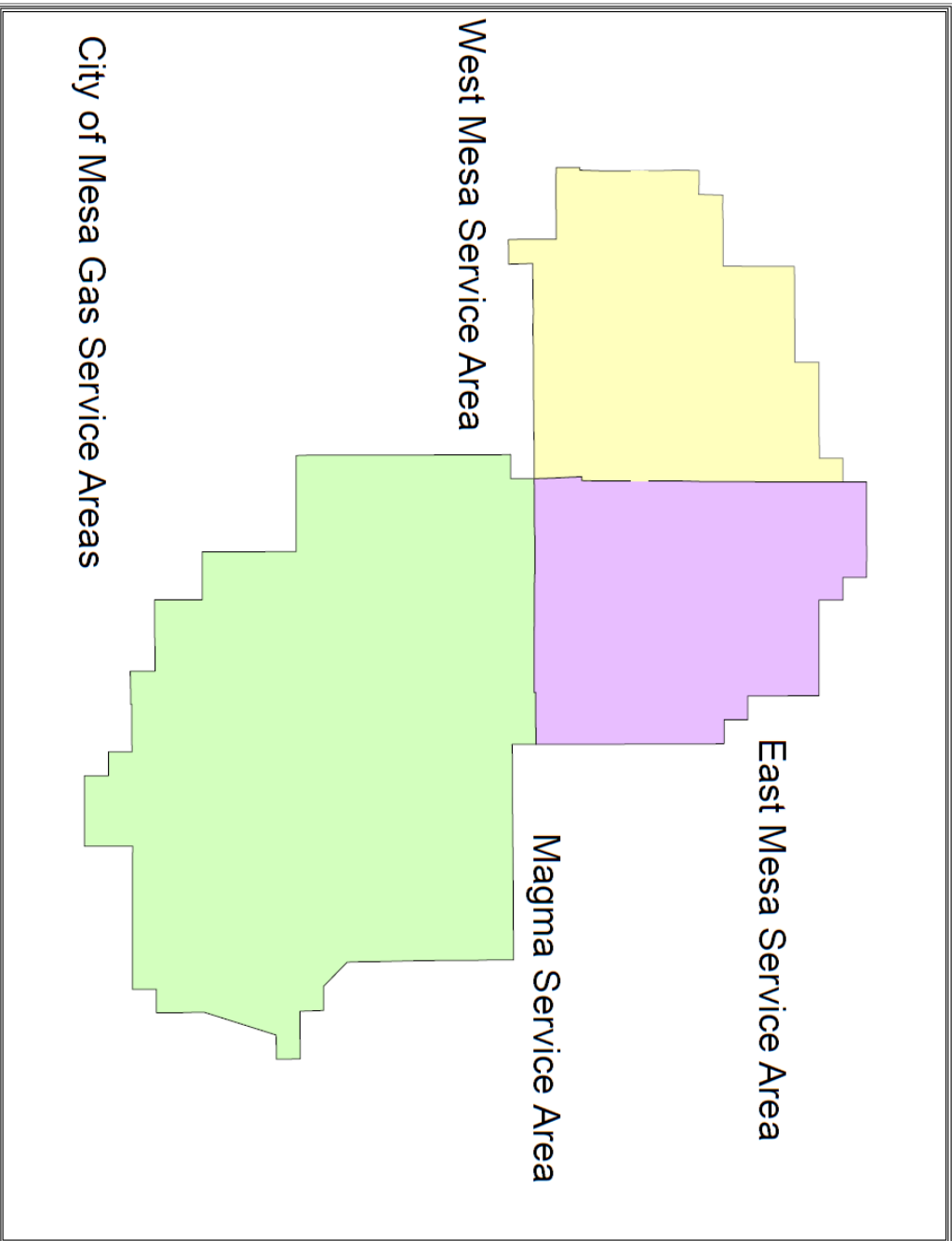
- One-time Cost: \$6,960
- Ongoing Cost: \$104,728
- Assist with project planning and development
- Support, administer and analyze the AMI and MDMS system data and reports
- Validate rate making decisions with frequent interval usage data reporting

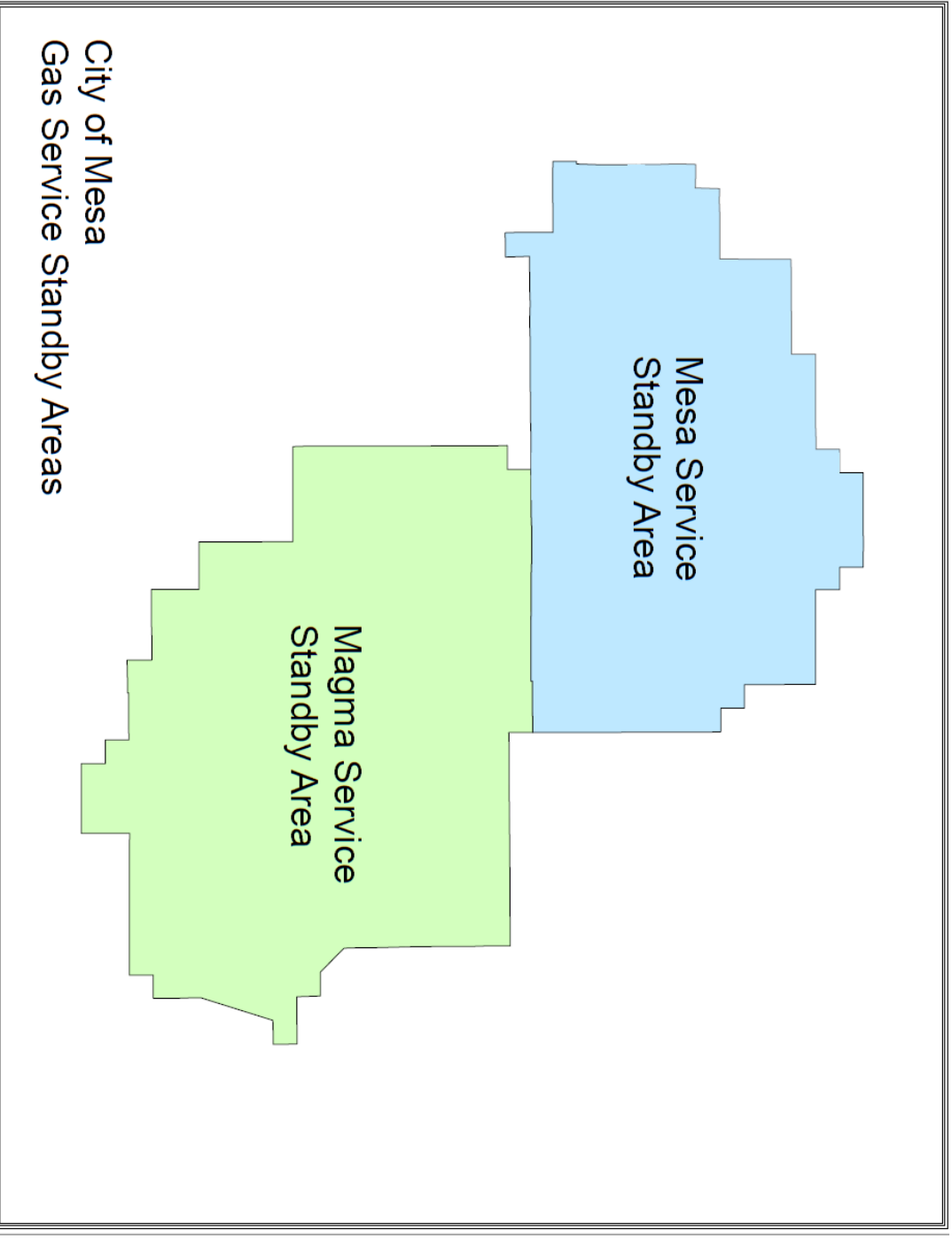
3/24 Budget Adjustment Summary

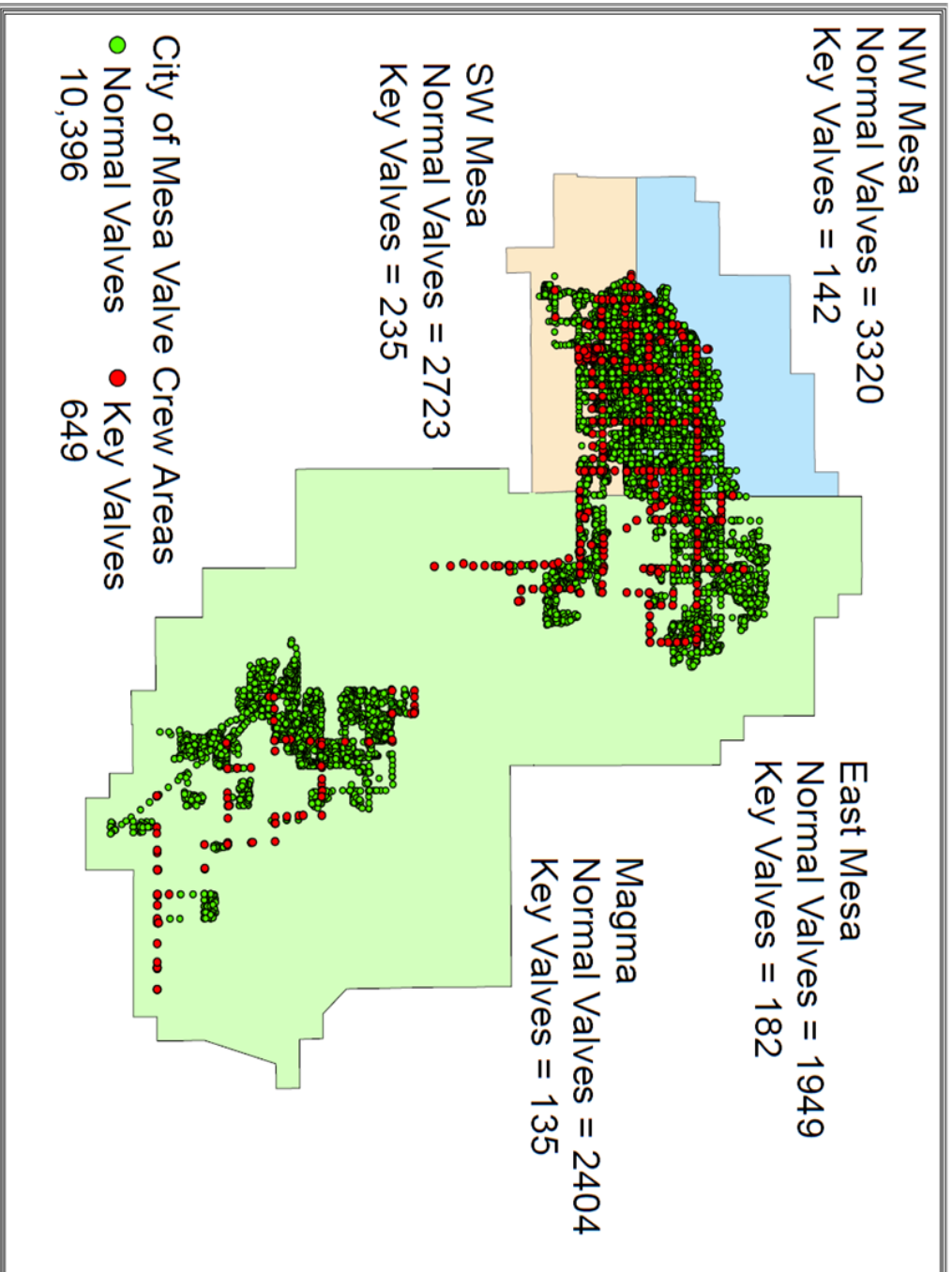
Adjustment	FTE	One-Time	Ongoing	Council Strategic Priorities
Utility Service Workers	4	\$540,000	\$428,350	 Community Health & Safety  Thriving Economy  Sustainable Environment
Gas Valve Crew Leader	1	\$170,000	\$110,483	
Gas Field Worker IIs	3		\$246,426	
AMI Data Analyst	1	\$6,960	\$104,728	
Total	9	\$716,960	\$889,987	

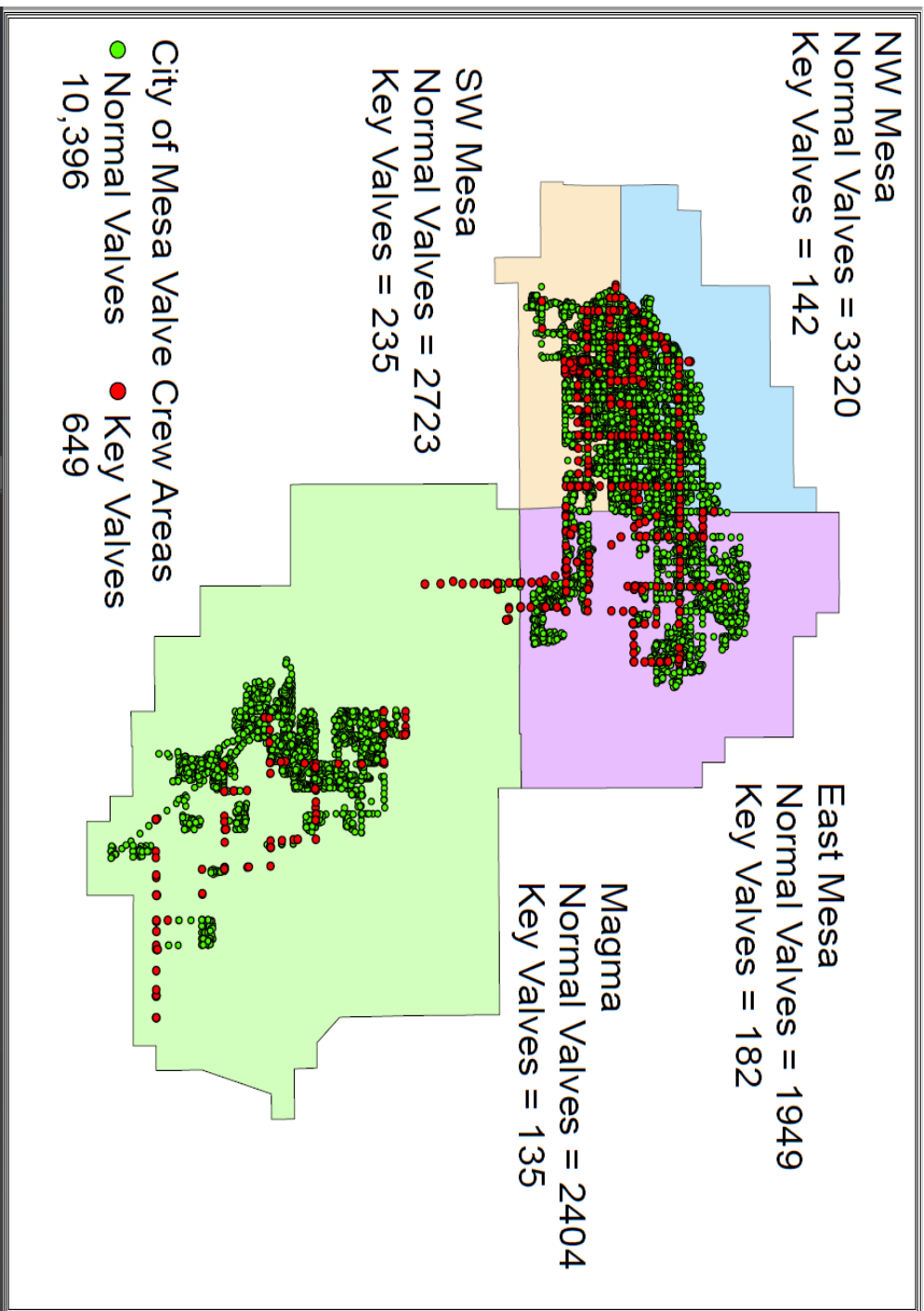
m.e.s.a.az











Adjustments

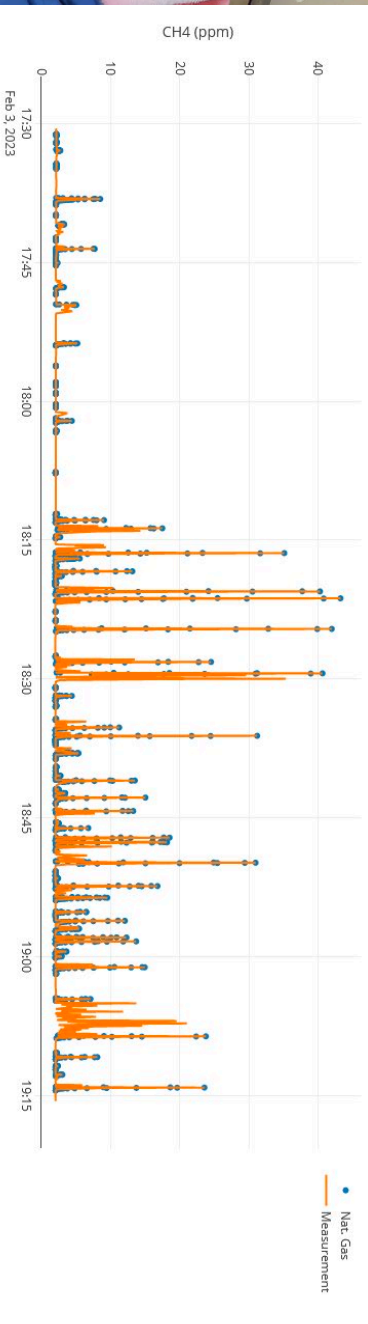
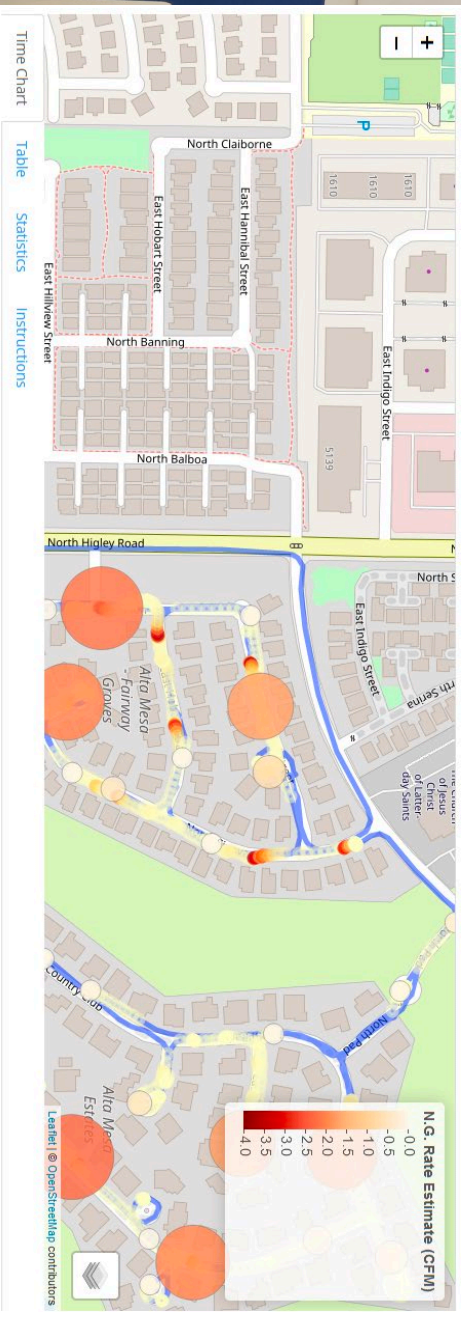
- Warehouse Internal Charge - Gas
 - Ongoing - \$138,310
 - 115% increase in FY 22



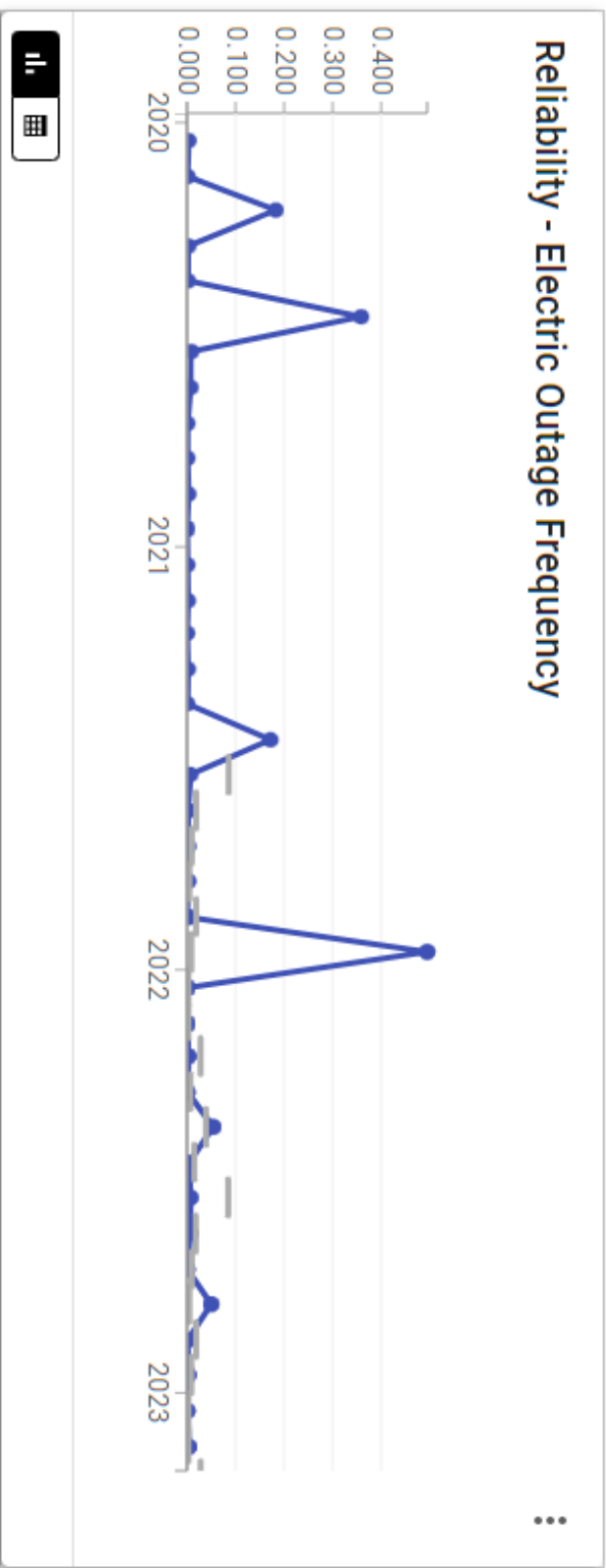
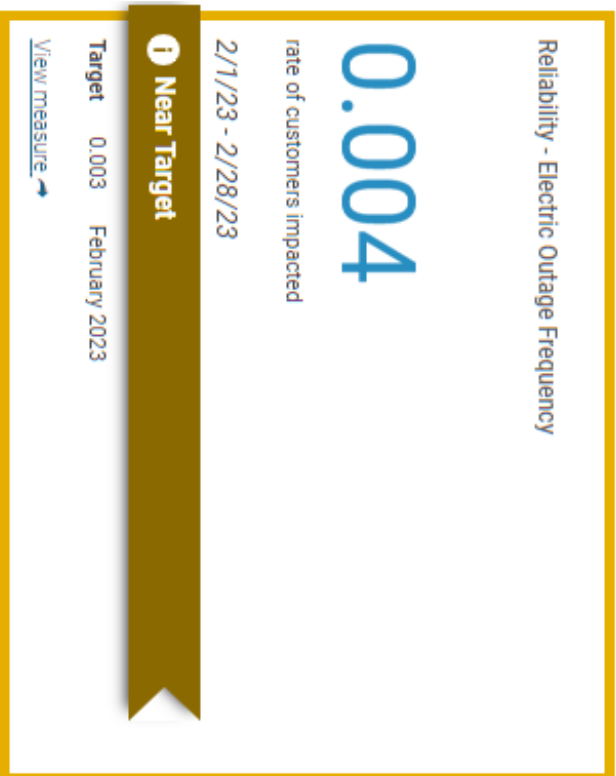
Project Canary - Advanced Methane Detection - Stationary



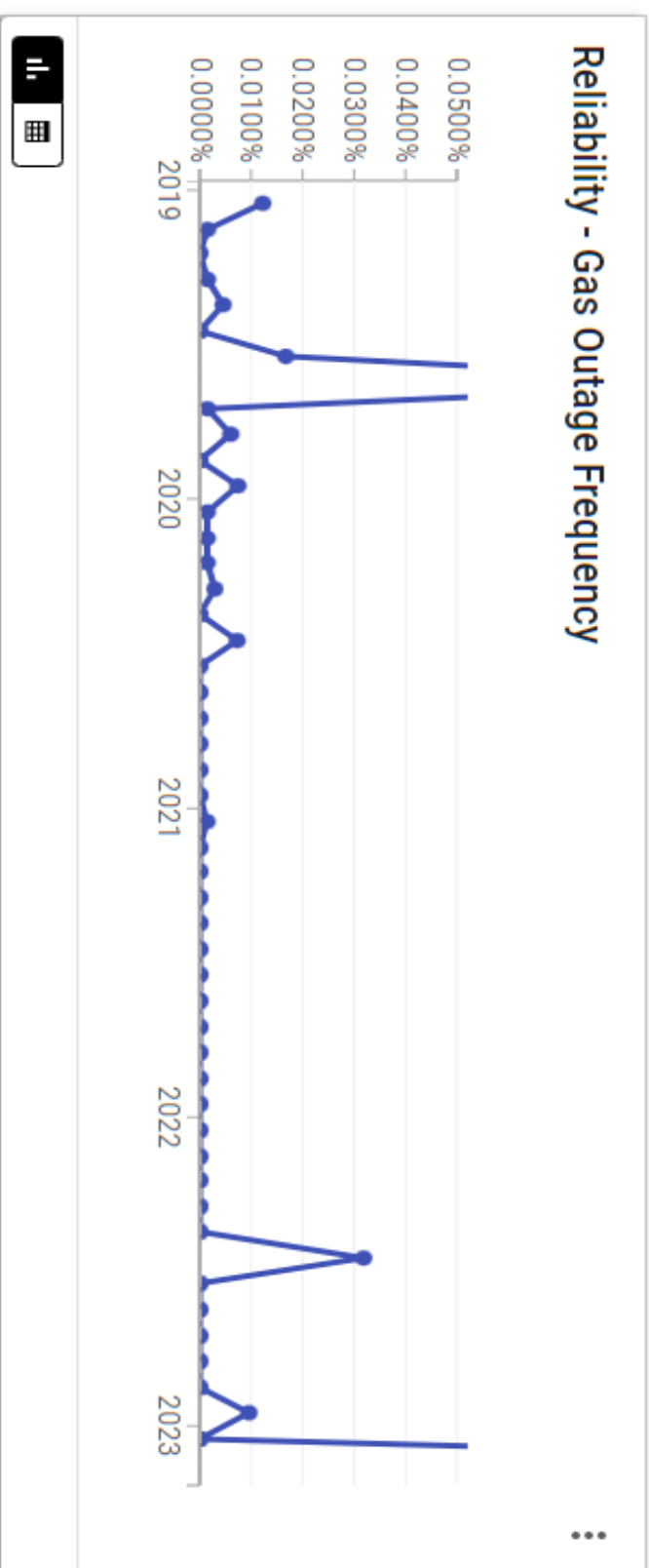
Project Canary - Advanced Methane Detection – Mobile



Electric Outage Frequency



Outage Frequency



Environmental & Sustainability Department

April 17, 2023

Presented by: Scott Bouchie, Director

Laura Hyneman, Deputy Director

Rachel Butler, Management Assistant II



Fiscal Year 2023/24

Public Purpose

We proactively and responsibly protect and conserve Mesa’s environment and natural resources for a resilient and healthy community for all.

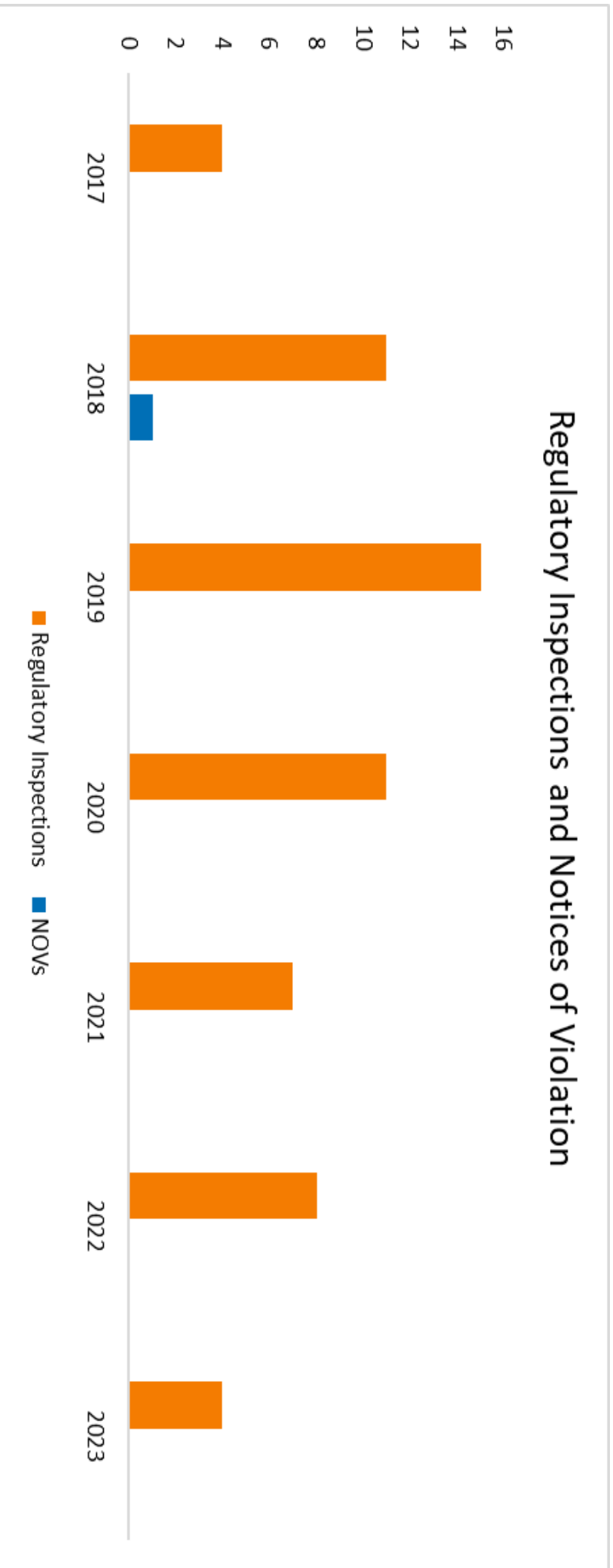


Principles/Objectives

- Emissions & Air Quality
- Water Conservation & Stormwater Quality
- Energy Efficiency & Renewable Energy
- Hazardous Materials & Waste Management
- Urban Heat Mitigation
- Sustainable Food Systems

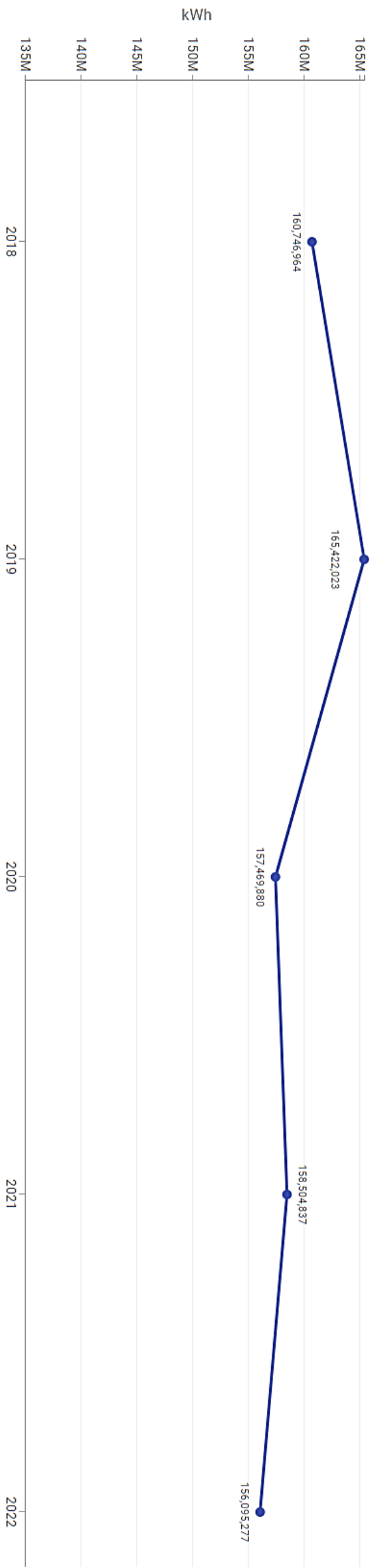


Performance Measures



Performance Measures

City Energy Usage By Year Total consumption by kWh



Expenditure Summary

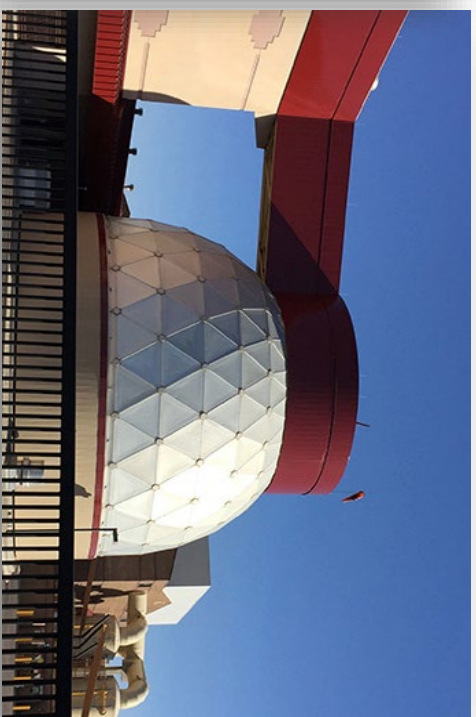
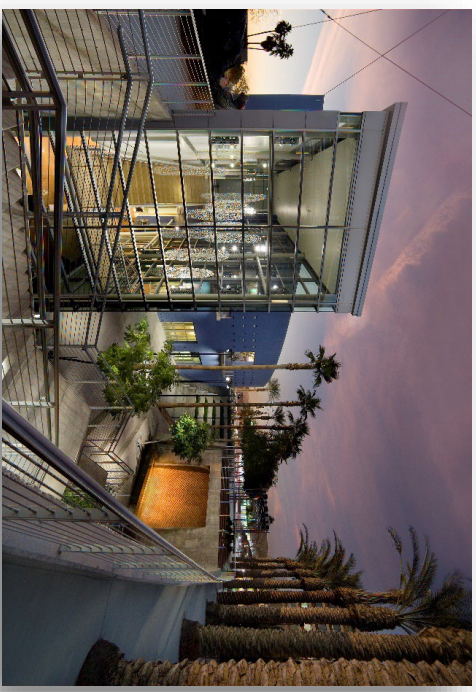
	FY 21/22 Year End Actuals	FY 22/23 Revised Budget	FY 22/23 Year End Estimate	FY 23/24 Proposed Budget
Core Business Process				
Water Quality	\$0.2	\$0.3	\$0.3	\$0.3
Air Quality	\$0.2	\$0.2	\$0.2	\$0.2
Hazardous				
Materials/Waste	\$0.2	\$0.2	\$0.2	\$0.2
Storage Tanks	\$0.1	\$0.5	\$0.5	\$0.5
Sustainability	\$1.1	\$1.5	\$1.4	\$1.5
Asbestos and Lead	\$0.1	\$0.2	\$0.2	\$0.2
Total	\$1.9	\$2.9	\$2.8	\$2.9

Dollars in Millions

MAP Project Update

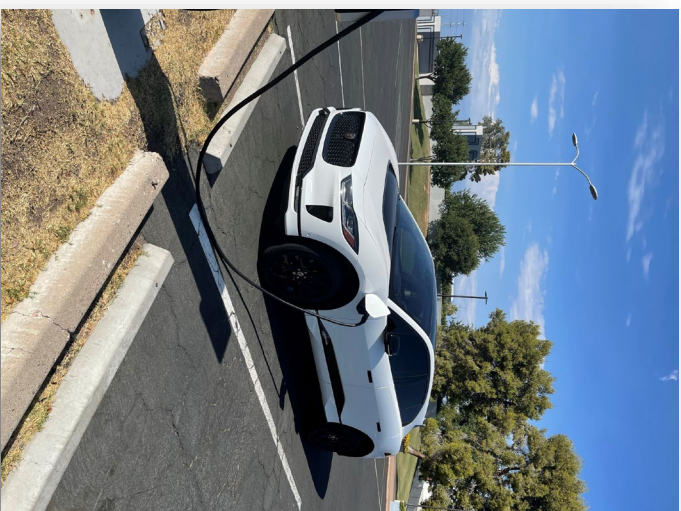
\$10M Funding:

- Community Electric Vehicle Adoption Project
- Flare to Fuel Project
- Lighting in City Buildings
- Solar @ Red Mountain Ball Park



Electric Vehicle Master Plan

- Fleet electrification
- Community EV adoption
- Workplace charging
- Regional partnerships
- Grant opportunities



23/24 Proposed Budget MCAP Projects



Adjustment	One-Time Funding	Ongoing	Council Strategic Priorities
Trees Are Cool Initiative	\$1,054,100	\$143,000	
Food To Energy – Design	\$1,800,000		
Red Mountain Sports Complex LED Lighting	\$2,152,000		
Water – Use It Wisely	\$100,000	\$10,000	
SRP Biomass Agreement	\$344,500		
Total	\$5,371,600	\$153,000	

“Any meaningful climate action plan in Mesa must address heat mitigation, and trees have a significant role to play in providing shade, keeping temperatures low and filtering greenhouse gas emissions.”

1 MILLION TREES BY 2050



Trees Are Cool Initiative



New trees for Parks, City Buildings, and Transit Centers

Tree and Shade Programs Events

Public Benefits:

- Mitigate Urban Heat
- Improve Air Quality
- Reduce Energy Use



es Are Cool – Let's Plant!

Celebrate Mesa: Living Green Village – Tree Hugging Booth & Tree Planting in The Village (with tree booths staffed by West Coast Arborist, Trees Matter, AZ Dept. of Forestry & Fire Management, AZ Sustainability Alliance)

Arbor Day Proclamation at Mesa City Council Meeting

National Volunteer Week Proclamation – Plant 5 trees at Emerald Park.

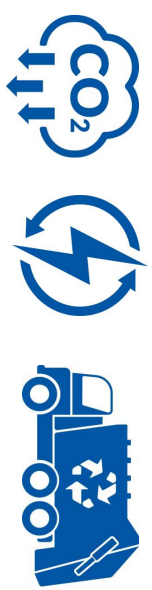
Tree Planting at Skyline Park – Plant 20 trees with high school students

Partnerships:

- Corporate volunteers and donors
- Nonprofit organizations
- Nurseries and contractors
- Government Agencies



Food to Energy - Design

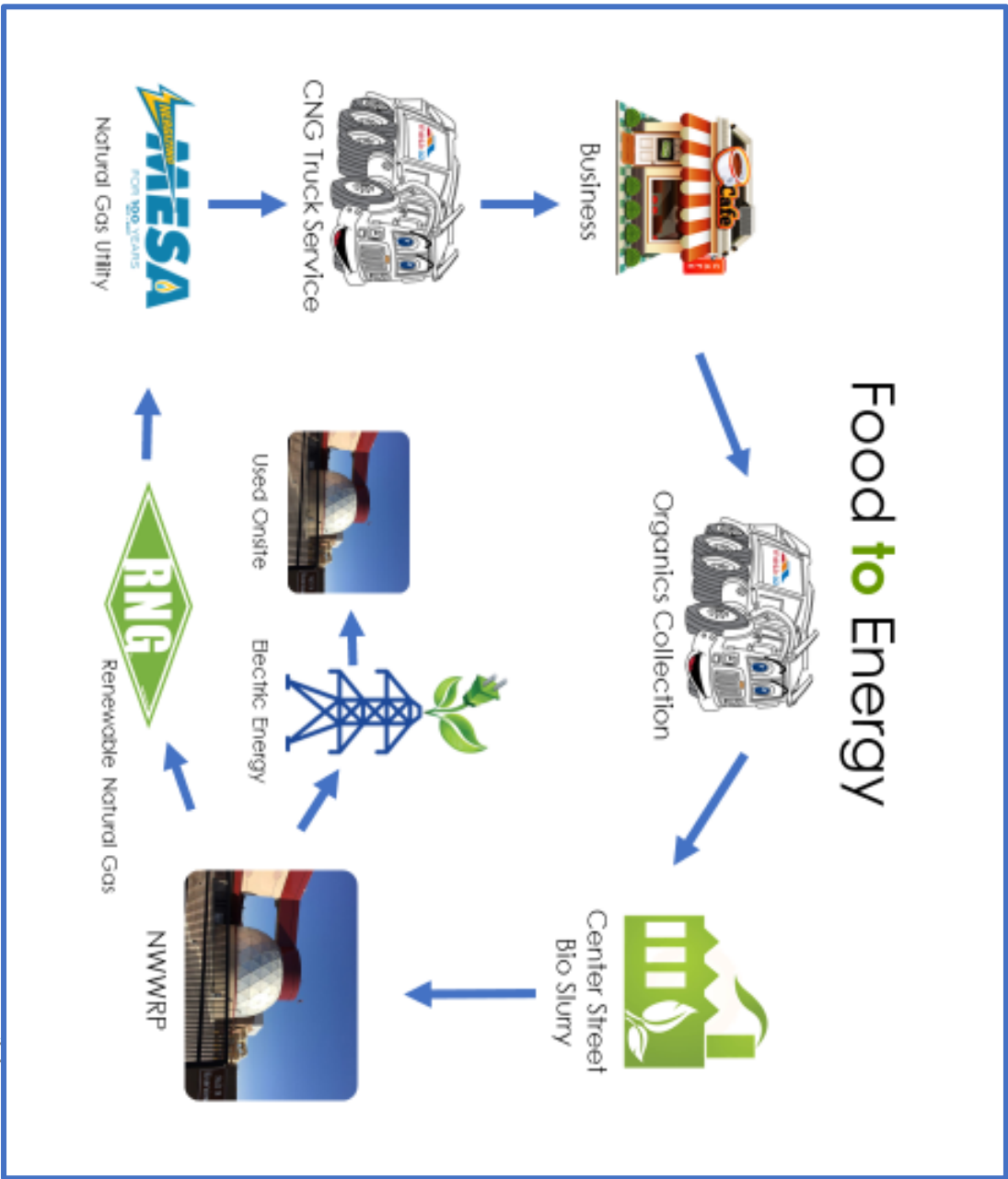


Using waste for renewable energy

Technical study of collection, processing, treating and delivery

Public Benefits:

- Waste reduction
- Renewable fuel source
- Reduced greenhouse gas emissions



Mountain Sports Complex LED Lighting



Energy Efficiency Project

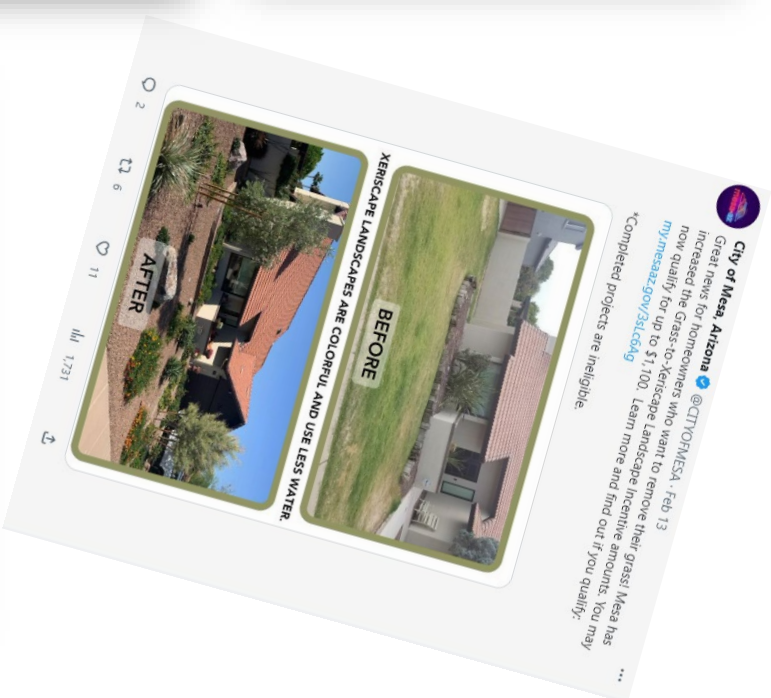
Description & Public Benefits:

- New technology
- Improve quality of lighting and reduce glare
- 10.4 metric tons GHG removed



ter Conservation

- Living Green
- Conservation Programs
- Program Development
- Amplified Messaging
- Investments
- Regional Partnerships

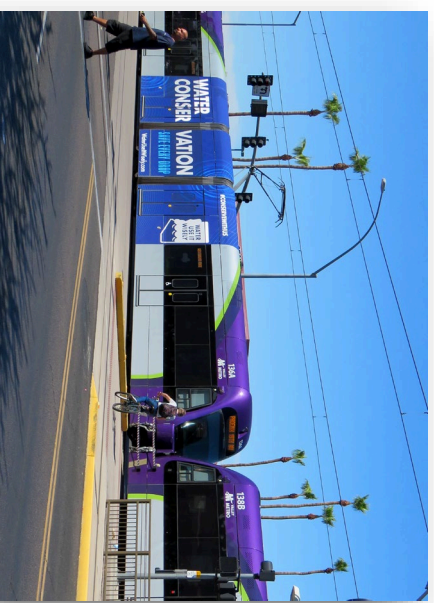


Water – Use It Wisely Campaign

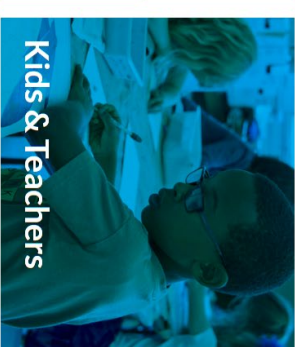
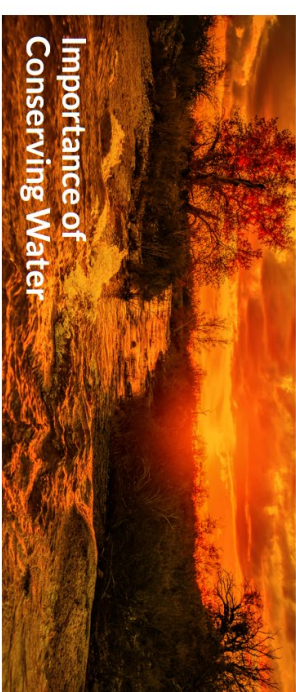


Campaign shows people how to use water more thoughtfully

- \$80,000 – Supplement WUIW’s base budget for a more “Robust” budget that includes funding for different mass-media tactics
- \$20,000 – “Know Your Numbers” campaign + co-brand WUIW/Mesa messaging



Light Rail wrap



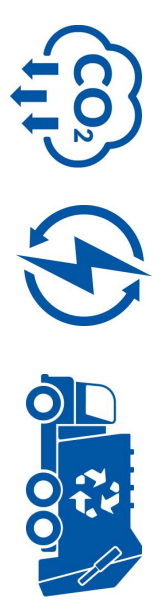
Biomass Agreement

Watershed Protection

- Use forest thinning biomass to generate renewable power
- Description:**
- Contract Term – 10 years

Public Benefits:

- Restore forests and watersheds to more natural conditions
- Provide reliable source of baseload renewable energy to SRP customers



m.e.s.a.az

