City of Mesa
FY 2017/18
Water Resources Department Presentation and Rate Recommendations
City Council
April 13, 2017

Presented by
the Water Resources Department
City of Mesa Water Resources has provided reliable, safe, economical, and environmentally responsible water and wastewater services to the community for over a century.
Value

We provide these valuable services that protect public health and the environment, bolster the local economy, and are an integral part of the vibrant lifestyle enjoyed in Mesa.

Service

Our service area consists of 170 square miles with a growing population of over 471,000 people.

Connections

The water system provides service to approximately 148,000 residential and commercial connections. The wastewater collection system serves nearly 124,000 residential and commercial connections.
FY 16/17 Accomplishments

- **2016 Association of Metropolitan Water Agencies (AMWA) Platinum Award for Utility Excellence**
- In the more than 100-year history of the City of Mesa water utility, the City has never delivered a drop of water found to be unsafe by any local, state or federal agency
- Implemented a backflow ordinance to protect the City’s potable water system
- Unveiled compliance software for monitoring and reporting water, wastewater, and backflow
- Our meter readers are some of the most productive and have one of the lowest error rates in the industry. 1.8M meters read with a .0003 error rate (**3 errors per 10,000 reads**)}
FY 17/18 Areas of Emphasis

• Southeast Mesa Infrastructure Planning
  • Signal Butte Water Treatment Plant Construction
  • Greenfield Water Reclamation Plant Expansion

• Waterline Replacements

• Succession Planning

• Recruitment
  • Signal Butte Water Treatment Plant
  • Greenfield Water Reclamation Plant
Wastewater Business Objective

• Mission
  • Provide reliable, high quality, and environmentally responsible wastewater services at fair and reasonable rates for the people in our community.

• Desired Outcomes
  • Wastewater treatment is cost effective
  • The system reliably collects and treats wastewater and delivers reclaimed water
  • Treated wastewater meets all regulations for beneficial reuse
  • The environment is protected from wastewater contamination
Measuring Success - Wastewater

• # of miles of sewer lines cleaned
  • Target – 26 per month
  • Current – 15 per month

• # of miles sewer lines inspected
  • Target – 20 per quarter
  • Current – 14 per quarter

• # of Sanitary Sewer Overflows (SSO’s)
  • Target – 0 per quarter
  • Current – 1.5 per quarter
Water Business Objective

• Mission
  • Provide reliable, high quality water services at fair and reasonable rates for the people in our community.

• Desired Outcomes
  • Mesa's water demands are met
  • Mesa's water is safe and reliable
  • Mesa's water quality meets Mesa's goals for taste, odor, and fluoride
  • Water is provided in a cost-effective manner
Measuring Success - Water

- Water Meter Read Error Rate
  - Target - Meter readers are measured as a group will not exceed 4 errors per 10,000 reads per month.
  - Current – 3 errors per 10,000 reads per month

- % of Groundwater Pumped
  - Target – 10% - per month
  - Current – 21.5% per month

- # of Leaks and Breaks per 100 miles of Pipe
  - Target – 1 per month
  - Current – 1.5 per month
Overview of Funding Sources

89% Enterprise Fund

11% Restricted Funds
  • Greenfield WRP Joint Venture
  • Utility Replacement Extension and Renewal
  • Environmental Compliance Fee
Significant Budget Changes for FY17/18

**Increase**
- Water Commodity $1.2M
- Greenfield Plant Infrastructure $207K (Mesa share)
- Plant Chemicals $85K
- Signal Butte Plant Operations $2.9M

**Decrease**
- Val Vista WTP $200K
- 91st Avenue WRP $150K
- Electrical $113K
Water Commodity Costs – Central Arizona Project

MUNICIPAL & INDUSTRIAL (M&I) WATER RATES PER ACRE FOOT

<table>
<thead>
<tr>
<th>CALENDAR YEAR</th>
<th>M&amp;I Delivery Rate</th>
<th>M&amp;I Capital Rate</th>
<th>Total</th>
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<tbody>
<tr>
<td>2017</td>
<td>$164</td>
<td>$31</td>
<td>$195</td>
</tr>
<tr>
<td>2018</td>
<td>$171</td>
<td>$49</td>
<td>$220</td>
</tr>
<tr>
<td>2019</td>
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<tr>
<td>2022*</td>
<td>$227</td>
<td>$45</td>
<td>$272</td>
</tr>
</tbody>
</table>

MCAP SHORTAGE

Purchased Water vs. Water Projections (AF)

*Assumes CAP Shortage
Water Commodity Costs - SRP

MESA COST BASED ON SALT RIVER PROJECT (SRP) FLOW PROJECTIONS

Purchased Water

Water Projections (AF)

FISCAL YEAR

ACRE FEET

THOUSANDS

2018 2019 2020 2021 2022 2023

$843 $860 $877 $894 $912 $1,010

33,300 33,600 33,900 34,300 34,600 35,000 35,500

$1,010

33,000 33,500 34,000 34,500 35,000 35,500 36,000

13
Water Utility Rate Structure

• Over the last few years the City has focused on **better aligning fixed revenues with fixed costs**. Target is fixed revenues at 35-40% of total costs. FY 2017/18 estimated at 36.62%

• **Water consumption per account has declined** in recent years: more widespread use of water saving appliances, smaller number of people per household, less landscaping and more water conservation awareness

• The City **implemented a fourth residential water tier** to align the tiers with usage patterns and associated costs

• This year will be the **third year of a five year implementation**
  • **Decreases annual impact to customers** and allows time for customers to continue assessing their water usage and apply conservation techniques if possible
Water Utility Rate Recommendations

• All customers: 3.5% increase on all rate components
• Residential Service Charge: $0.93 per month, from $26.62 to $27.55
• Residential average monthly seasonal consumption total bill: $1.57, from $44.74 to $46.31
• The City average monthly consumption is about 9,000 gallons however seasonality takes into account high demand summer months that experience some water consumption in tier 2. The resulting impact is greater than a straight 9,000 gallons per month.
• Arizona Water Company filed with the ACC to increase residential rates by approximately 21%. Approximately 2,300 parcels within City limits.
## Water Utility Rate Structure Recommendation

### Current Residential Tier Structure for FY 16/17

- *First 3,000 gallons included in service charge*

<table>
<thead>
<tr>
<th>Gallons</th>
<th>Cost per 1,000 gal</th>
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<tbody>
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<td>4,000-10,000</td>
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<td>11,000-20,000</td>
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<tr>
<td>21,000-24,000</td>
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<tr>
<td>25,000 and greater</td>
<td>$5.54</td>
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### Proposed Residential Tier Structure for FY 17/18

- *First 3,000 gallons included in service charge*

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<tbody>
<tr>
<td>4,000-9,000</td>
<td>$3.13</td>
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<tr>
<td>10,000-18,000</td>
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<td>19,000-24,000</td>
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<td>25,000 and greater</td>
<td>$6.07</td>
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Wastewater Utility Rate Recommendations

• All customers: 4% increase on all rate components
• Residential Service Charge: $0.72 per month, from $18.08 to $18.80
• Residential average monthly seasonal consumption total bill: $1.12, from $27.93 to $29.05
• Wastewater rates are not subject to seasonality. The monthly rate is adjusted annually based on the winter water average usage of the individual customer.