### Memorandum

### **Public Works Department**



**Date:** August 6, 2015

To: Mayor and Members of Council

From: Marilyn DeRosa, Public Works Deputy Director – Water Utilities

John Osgood, Public Works Deputy Director – Field Operations

**Through:** Don Bessler, Public Works Director

**Subject:** Water/Wastewater and Solid Waste Utility Rates Update

### **Background**

The City of Tempe operates two separate utility operations – water/wastewater and solid waste. Both operate within the accounting framework of an enterprise fund where the cost of service is recovered through user charges. At the April 9, 2015 Work Study Session, staff presented a strategy to combine water/wastewater and solid waste rate studies into one bi-annual study with rate adjustment recommendations, and use of a CPI or other appropriate index for rate adjustments in alternate years. The goal is to provide Council with a more holistic picture of customer impacts and assist customers in budgeting and financial planning. Council was supportive of this strategy.

At the August 6<sup>th</sup> Work Study Session staff will provide Council with an update regarding the process, a report of the customer workshops, and recommendations with respect to rate structure policies. Staff will return to Council at the September 17<sup>th</sup> Work Study Session to make recommendations regarding rate adjustments.

### **Customer Workshops**

In May staff held three customer workshops regarding the utility rate studies. The first workshop was specific to commercial and industrial customers and was attended by ten customers. The second and third workshops drew a total of approximately 25 attendees and were specific to residential customers. At each workshop staff reviewed the rate study process, described enhanced service levels and recent cost reduction measures, and shared data regarding current utility costs, changing customer classes, and historical utility rates. Recommendations made by workshop attendants were generally related to the single family residential customer class and rate structure, and have been included in our rate study analyses.

### **Rate Setting Challenges**

Setting rates for a municipally owned utility is a significant responsibility and can be a challenging process. A rate structure should recover costs, fund replacement infrastructure and regulatory costs, be consistent with adopted financial policies, and promote conservation, but be able to withstand changes

in demand. At the same time it should reflect the community's values, be balanced with local and regional trends, and be fair and equitable. To ensure a process that is measured, well-rounded, and sustainably balances competing priorities, staff has evaluated each step of the process using a triple bottom line approach consistent with the vision and goals articulated by Council.

#### **Rate Study Process**

Regardless of the service (water/wastewater or solid waste), a utility rate study process generally includes the following four steps:

CALCULATION OF COST OF SERVICE – this includes a comparison of current revenues to operating and
capital costs to determine the adequacy of existing rates to ensure maintenance of a fund balance
that meets industry best practices and City adopted financial policies.

<u>Solid Waste</u> – the Cost of Service analysis for Solid Waste showed that current costs are not recovered under the existing rate structure and, without increased revenue, the fund balance will be unable to continue supporting the program.

<u>Water/Wastewater</u> – the Cost of Service analysis for Water/Wastewater showed that current costs are recovered under the existing rate structure and the fund balance exceeds the City's existing fund balance policy. This assumes no increase in cost of service or development of new or enhanced programs.

• **DETERMINE COST ALLOCATION** – this step involves analysis of system expenses per customer class to ensure fair and equitable recovery of costs.

Both funds showed strong alignment with proportional costs and cost recovery per customer class.

 DEVELOPMENT OF RATE DESIGN — a rate design should reflect the values of the community, have a structure that provides for appropriate cost recovery from each customer class, be able to withstand changes in demand, and ensure long term solvency.

<u>Solid Waste</u> – staff will be recommending some minor changes to the following elements of the rate structure:

- Roll Off current pricing is a flat rate for use of the container plus six tons of material. To
  ensure customer costs more closely reflect disposal patterns, staff will be recommending a
  "base plus volume" structure which would include a flat rate for use of the container plus
  charges per ton. This is consistent with a pay for what you use philosophy, avoids overcharging,
  and provides best value pricing.
- 2. Large Customer Volume Adjustments Customers currently pay a rate per container, regardless of their number of containers or the proximity of containers to each other. Because providing services to large volume customers increases efficiency, reduces environmental impacts, and is less resource intensive, staff will be recommending downward rate adjustments for large volume customers with multiple containers in a small geographic area.

- 3. Commercial Recycling Expansion In order to continue to expand commercial recycling at business and multi-family, staff will be recommending establishment of a rate that will assist the Solid Waste fund in recovering some of the costs for this operation.
- 4. Flexibility in Pricing for Commercial Bids staff will be recommending development of a municipal code modification with language to allow flexibility in pricing for large commercial customers to provide best value.

<u>Water/Wastewater</u> – staff will be recommending all customer class rate structures remain the same. This includes a base charge for water and sewer services dependent upon meter size, plus a volume charge for gallons of water used and gallons of wastewater discharged. The water volume charge in all customer classes, with the exception of single family residential (SFR), would consist of a flat charge calculated per 100 gallons (or portion of 100 gallons) regardless of total volume. This includes commercial, construction, industrial, landscaping, and multi-family residential classes.

Based on feedback from customer workshops staff will also be recommending a modified inclining block structure for the SFR customer class. The current structure includes four volume tiers with proportional pricing as follows:

#### **Current SFR Water Rate Structure**

Tiers	Gallons of Use per Month	Pricing per 1,000 Gallons
Tier 1	0 – 8,000	\$2.00
Tier 2	8,001 – 15,000	Tier 1 x 125% = \$2.50
Tier 3	15,001 – 25,000	Tier 2 x 125% = \$3.13
Tier 4	≥ 25,000	Tier 3 x 125% = \$3.92

To improve affordability and to strengthen our conservation message, staff is recommending Council consider the following structural change:

#### **Recommended SFR Water Rate Structure**

Tiers	Gallons of Use per Month	Pricing per 1,000 Gallons
Tier 1	0 – 6,000	tbd but < \$2.00
Tier 2	6,001 – 12,000	Tier 1 x 125%
Tier 3	12,001 – 20,000	Tier 2 x 150%
Tier 4	≥ 20,000	Tier 3 x 150%

In this structure the volume of water per tier is reduced and the pricing per 1,000 gallons is lower in the first two tiers, increasing more steeply in the last two tiers. This is likely to result in a reduction of the volume charges for SFR customers using less than 12,000 gallons of water per month (approximately 68% of SFR customers) and potentially increasing the volume charges for those customers using more than 12,000 gallons per month. Actual pricing per tier will be presented to Council at the September 17<sup>th</sup> Work Study Session.

ANALYSIS OF IMPACTS – in this final step the possible impacts of a new rate and/or rate structure to
key customers is analyzed, keeping important issues and objectives in mind, recommendations are
compared with local and national trends, and adjustment drivers are evaluated and clarified. This
step will be completed before presentation to Council on September 17<sup>th</sup>.

#### **Direction Requested**

Staff will be seeking direction from Council on the following items:

<u>Solid Waste</u> – staff will be recommending a rate adjustment to bring the Solid Waste fund into solvency and compliance. Further, continued focus on conservation through diversion using a number of strategies including an expansion of the green organics program, continuation of the zero waste days, partnering in public/private recycling events, enhancing or implementing school, multi-family, and commercial recycling, and continued exploration of a waste to energy facility in partnership with Water and Environmental Services.

<u>Water/Wastewater</u> – staff will be recommending a continued focus on our existing replacement program for aging water infrastructure, working to support the CIP and spend down the reserve balance using short-term debt, improving affordability and strengthening our conservation message, and modifying the inclined block structure of the SFR customer water volume charge.



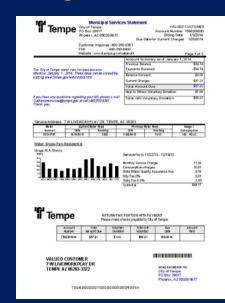
SOLID WASTE, WATER, WASTEWATER



August 6, 2015

## **Utility Rate Strategy**

- □ April WSS Combined, Bi-Annual Rate-Setting
  - Council Provided with More Complete Picture when Setting Rates
  - Increases Transparency
    - □ One combined utility adjustment
      - □ Predictability for customers
      - □ Facilitates financial planning
  - □ Use of CPI or Other Recommendation in Alternate Years
    - □ Levels impact of rate fluctuations
    - □ Helps combat rate fatigue

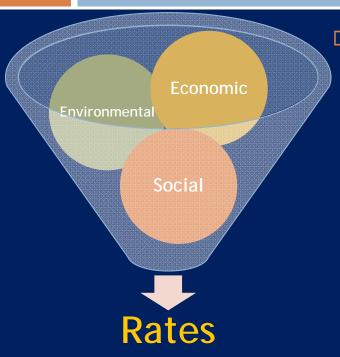


## Utility Rate Schedule

- □ May Customer Workshops
- □ TODAY WSS Process & Policy
- □ September WSS Recommended Rates
- □ October Customer Workshops
- □ November Public Hearing
- □ December Adoption of Rates
- □ January New Rates Effective



# Ratemaking Challenges



□ Triple Bottom Line

- □ Recovery of Costs
- □ Fund Infrastructure/Regulatory Costs
- Consistent with Financial Policies
- □ Reflect Community Values (Affordable and Conservation Based)
- □ Balanced with Local/Regional Trends
- ☐ Fair and Equitable!

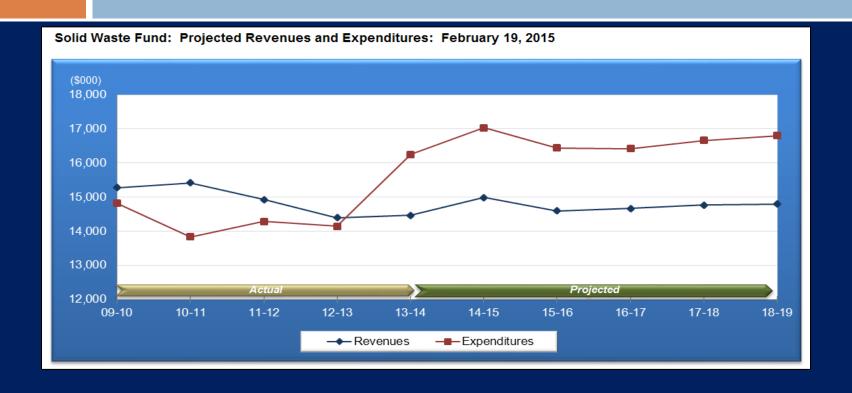
# Rate Study Process



Cost of Service

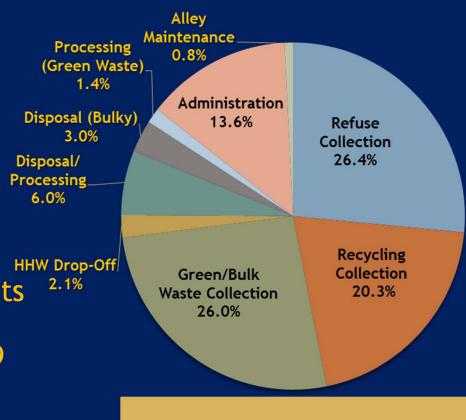
- Long-Range Forecast
- Operating Costs
- Capital Costs
- Fund Balance

# Solid Waste Long-Range Forecast

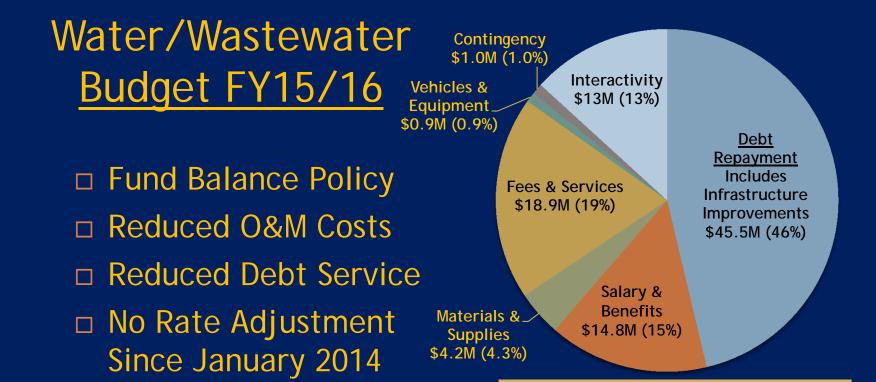


## Solid Waste Residential <u>Budget</u>

- □ Implemented Efficiencies
- □ Reduced Costs & H Environmental Impacts
- □ No Rate Adjustment Since November 2009
- □ Fund Balance Drawn Down



Estimated Fund Balance - \$3.1M



Estimated Fund Balance - \$68M

# Rate Study Process





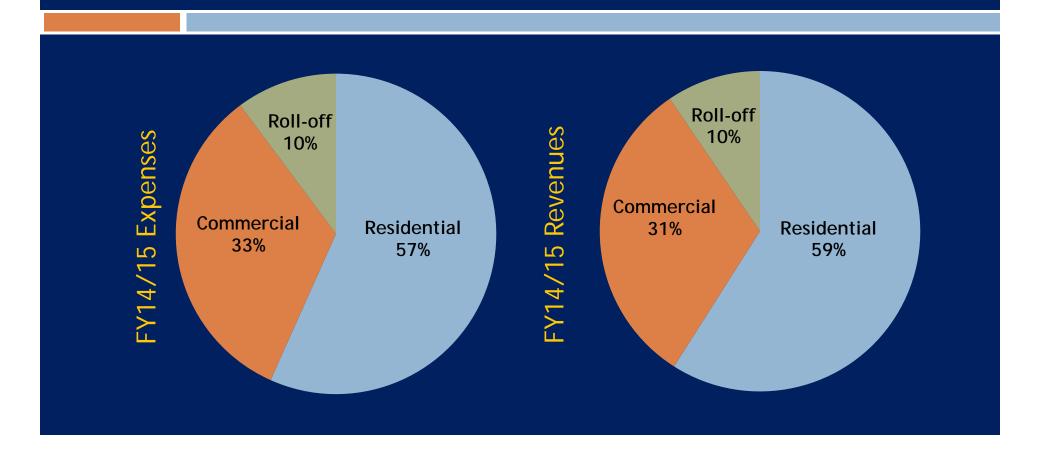
### Cost of Service

Cost Allocation

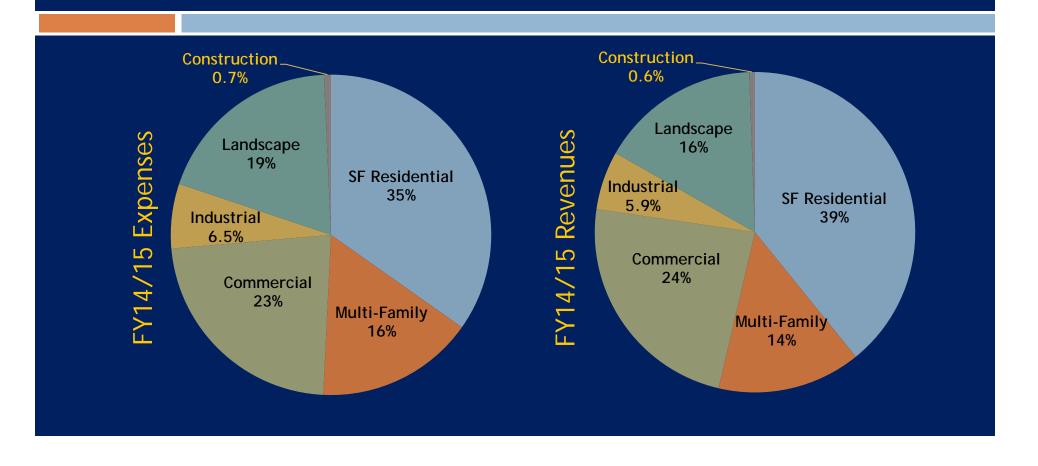
- Long-Range Forecast
- Operating Costs
- Capital Costs
- Fund Balance

- Customer Class Cost Recovery
- Just and Reasonable

## Solid Waste Customer Classes



## Water Customer Classes



## Rate Study Process



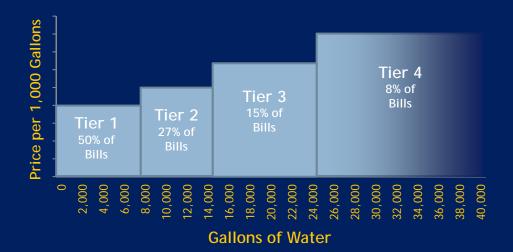
### Solid Waste Rate Structure

- □ Balance Cost Recovery with Customer Classes
- □ All Customer Class Revenues are Insufficient
- □ Minor Structural Rate Modification
  - □ Roll-off Rate
  - □ Large Volume Adjustments
  - □ Commercial Recycling Expansion
  - □ Flexibility in Pricing for Commercial Bids



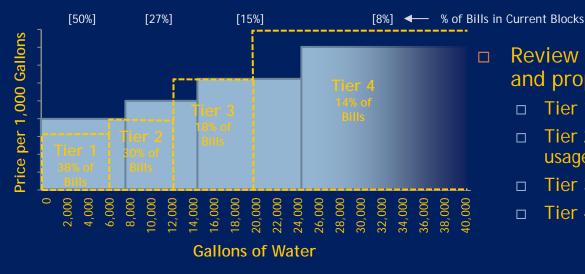
## **Current Water Rate Structure**

- □ Base Charge + Volume Charge
- □ SF Residential Affordable and Conservation Based



## Proposed Water Rate Structure

- □ Base Charge + Volume Charge
- SF Residential Affordable and Conservation Based



- Review Tempe usage profiles and property types
- ☐ Tier 1 = typical indoor usage
- ☐ Tier 2 = large family indoor usage
- ☐ Tier 3 = typical outdoor use
- □ Tier 4 = all additional use

## Rate Study Process









### Cost of Service

Cost Allocation Rate Design Analysis of Impact

- Long-Range Forecast
- Operating Costs
- Capital Costs
- Fund Balance

- Customer Class Cost Recovery
- Just and Reasonable
- Reflect Community Values
- Level/Structure of Customer Class
- Key Customer Impacts
- Issues/Objectives
- Consistent with Policies
- Adjustment Drivers

## Direction Requested

- □ Solid Waste
  - □ Balance Fund
  - □ Continue Focus on Alley Conditions
  - Continue Focus on Diversion
    - □ Green Organics
    - □ Recycling
- □ Water/Wastewater
  - □ Replacement Program for Aging Water Infrastructure
  - ☐ Short-Term Debt to Support CIP
  - □ Affordability and Conservation Messaging with Water Rates
- □ September 17<sup>th</sup> WSS Rate Adjustment Recommendations