



City of Mesa

FY 2018/19

Utility Rate Recommendations

Audit, Finance and Enterprise Committee

March 22, 2018

Presented by

Brian A. Ritschel – Deputy Budget Director
Scott Bouchie – Environmental Management and Sustainability Director
Frank McRae – Energy Resources Director
Jake West – Water Resources Director



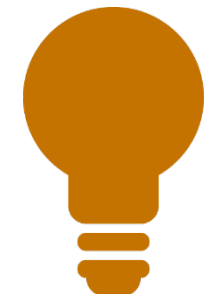
Enterprise Operations

Each utility is operated as a separate business center

Combined Ending Reserve Balance adheres to the adopted financial policy of at least 8-10% over the forecast period

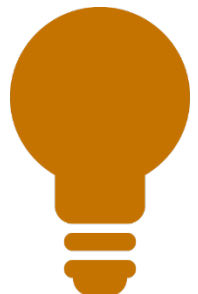
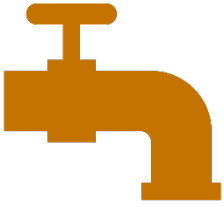
Reserve balance can be used to smooth rate adjustments year-to-year

Reserve balance can be used to phase in new programs or changes in operations





Total Enterprise Fund



	FY 16/17 Actuals	FY 17/18 Year End Estimate	FY 18/19 Forecast	FY 19/20 Forecast	FY 20/21** Forecast	FY 21/22 Forecast	FY 22/23 Forecast	FY 23/24 Forecast
Sources of Funding								
Revenues	\$329.7	\$342.9	\$357.7	\$373.1	\$379.5	\$391.2	\$408.8	\$425.5
EECAF/PNGCAF Revenues	\$24.7	\$25.5	\$25.0	\$25.2	\$25.1	\$25.3	\$26.4	\$27.1
Total Sources	\$354.5	\$368.4	\$382.7	\$398.3	\$404.6	\$416.5	\$435.2	\$452.6
Uses of Funding								
Operating Expenditures	\$127.1	\$137.3	\$143.0	\$150.8	\$155.8	\$160.5	\$165.1	\$168.6
EECAF/PNGCAF Expenditures	\$24.8	\$25.7	\$25.0	\$25.2	\$25.1	\$25.3	\$26.4	\$27.1
Expenditure Subtotal	\$151.9	\$163.1	\$168.1	\$176.0	\$180.9	\$185.8	\$191.5	\$195.7
Project Costs	\$0.7	\$0.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
General Fund Transfer	\$103.9	\$106.5	\$108.4	\$110.9	\$114.0	\$117.0	\$120.1	\$123.3
Debt Service Transfer	\$54.4	\$77.0	\$84.5	\$89.3	\$97.8	\$107.4	\$112.5	\$115.2
Lifecycle/ Infrastructure Transfers	\$6.8	\$7.2	\$7.5	\$7.8	\$8.0	\$8.2	\$8.6	\$8.9
Capital Transfer	\$4.7	\$4.0	\$3.4	\$3.5	\$3.8	\$3.2	\$3.2	\$3.3
Economic Investment Fund Transfer	\$5.5	\$5.2	\$8.9	\$9.3	\$9.4	\$9.1	\$9.4	\$9.2
Total Uses	\$328.0	\$363.7	\$380.8	\$396.7	\$413.9	\$430.7	\$445.2	\$455.5
Net Sources and Uses	\$26.5	\$4.7	\$2.0	\$1.6	(\$9.2)	(\$14.2)	(\$10.0)	(\$2.9)
Beginning Reserve Balance	\$66.2	\$92.7	\$97.5	\$99.4	\$101.0	\$91.8	\$77.6	\$67.6
Ending Reserve Balance	\$92.7	\$97.5	\$99.4	\$101.0	\$91.8	\$77.6	\$67.6	\$64.7
Ending Reserve Balance Percent*	25.2%	25.6%	25.1%	24.4%	21.3%	17.4%	14.8%	13.7%

*As a % of Next Fiscal Year's Expenditures

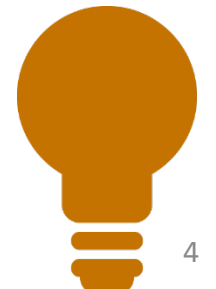
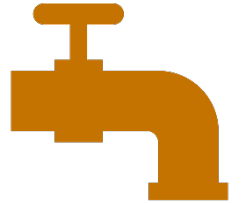
**This forecast includes an economic correction starting in FY 20/21

Dollars in millions

Utility Operating Expenditures

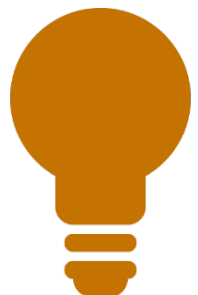
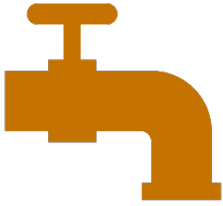
	FY14/15	FY15/16	FY16/17	FY17/18	FY18/19	Per Cent Change			
	Actuals	Actuals	Actuals	Projected	Forecasted	FY14/15 to FY15/16	FY15/16 to FY16/17	FY16/17 to FY17/18	FY17/18 to FY18/19
Electric	\$ 6.7	\$ 6.8	\$ 6.7	\$ 6.7	\$ 7.6	1.5%	-1.5%	0.0%	13.4%
Gas	12.1	11.9	13.0	13.1	14.1	-1.7%	9.2%	0.8%	7.6%
Water	38.0	37.9	40.8	48.3	50.0	-0.3%	7.7%	18.4%	3.5%
Wastewater	21.0	21.3	23.1	24.0	25.8	1.4%	8.5%	3.9%	7.5%
Solid Waste	32.0	32.5	33.0	34.4	35.0	1.6%	1.5%	4.2%	1.7%
Total	\$ 109.8	\$ 110.4	\$ 116.6	\$ 126.5	\$ 132.5	0.5%	5.6%	8.5%	4.7%

Dollars in millions





Utility Operating Expenditure Pressures



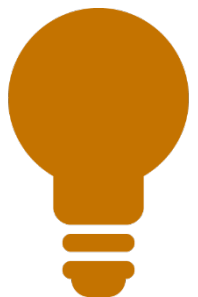
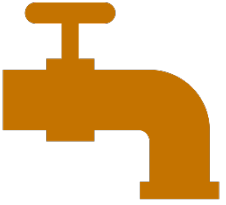
- Increase in on-going operation and maintenance costs (1 new plant and 1 plant expansion)
- Customer growth greater than anticipated
- Water purchase costs increasing (\$1.2M)
- Chemical costs increasing due to quality of water (\$456K)

Proposed Rate Adjustments

	FY 2017/18	Prior Year	FY 2018/19	FY 2018/19
	Adopted	Projection	Proposal	
Electric	\$ 1.25	\$ 1.75	\$ 1.75	
Gas	\$ 0.75	\$ 0.75	\$ 0.75	
Water	3.5%	3.5%	3.5%	
Wastewater	4.0%	4.0%	4.0%	
Solid Waste *	3.5%	3.5%	3.5%	

* Residential





Rate Adjustment Implementation

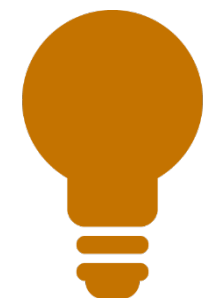
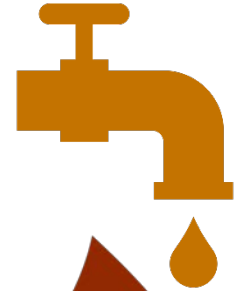
- Methods of implementation of rate adjustments can vary from year to year based on needs and goals of the individual utilities
- Impact on individual customers can vary based on the method of implementation and the customer consumption of services

Revenue Impact

Forecasted expenses are compared with forecasted revenues based on current rates and projected customer growth

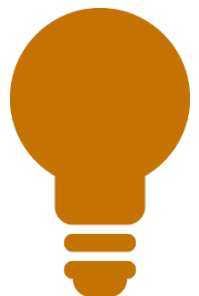
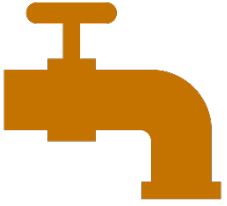
In FY 2018/19, the following increase in revenues is needed to accommodate the estimated costs

Utility	Revenue
Electric	\$252,000
Natural Gas	\$474,000
Solid Waste	\$1,555,000
Wastewater	\$2,680,000
Water	\$3,965,000





Average Residential Customer Impact



<u>Utility</u>	<u>Monthly</u>	<u>Annual</u>
Electric	\$1.25	\$15.00
Natural Gas	\$0.75	\$9.00
Solid Waste	\$1.01	\$12.12
Wastewater	\$1.15	\$13.80
Water	\$1.62	\$19.44



Environmental Management & Sustainability Department

Solid Waste Services

Residential Services			Commercial Services		
	Number of Customers	Rate		Number of Customers	Rate
Black (trash) barrel	135,183	\$28.76/ month for 90 gal 1xwk	Front Load bin service	2,406	Varies with size & quantity of bin and frequency of service
		\$25.68/ month for 60 gal 1xwk			
Blue (recycle) barrel	131,650	Included with trash service	Rolloff boxes	1,450	Varies with size of rolloff box
Green (yard waste) barrel	41,316	\$6.79/ month for 90 gal 1xwk			





Solid Waste Utility Rate Recommendations

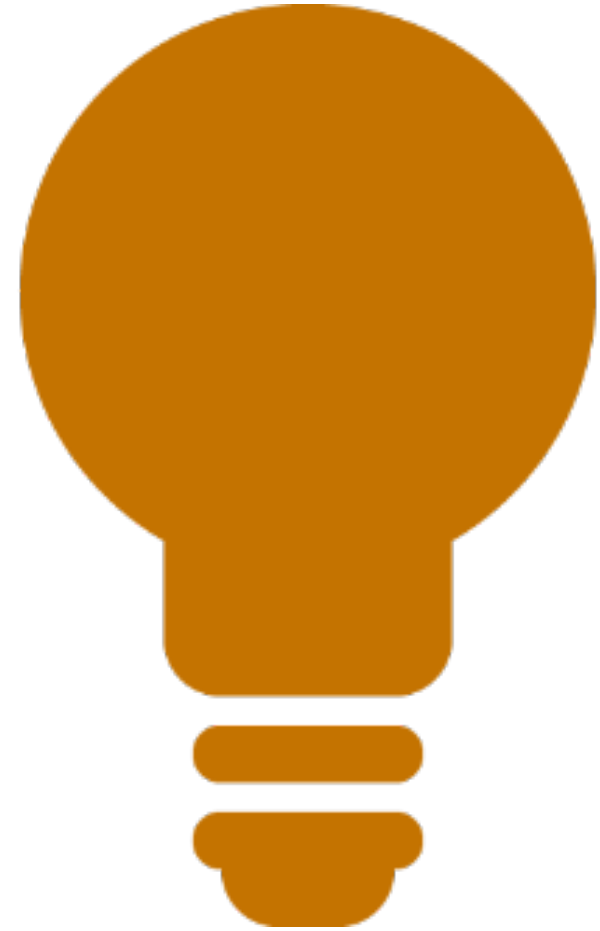
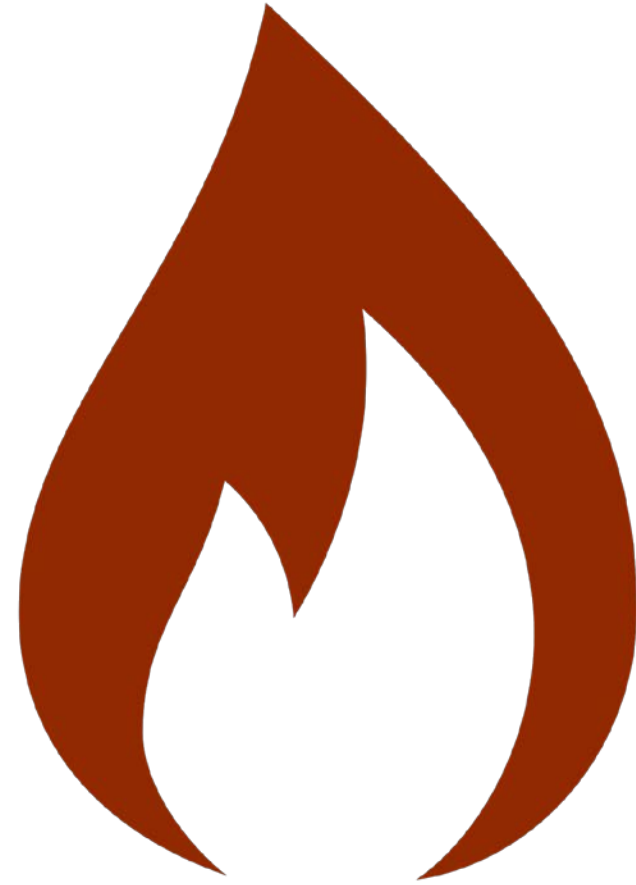
- 3.5% increase on all residential rates
 - Residential 90 gallon barrel rate: from \$28.76 to \$29.77
 - Residential 60 gallon barrel rate: from \$25.68 to \$26.58
 - Additional black barrel rate: from \$13.58 to \$14.06
 - Residential green barrel service: from \$6.79 to \$7.03



Solid Waste Utility Rate Recommendations

- Mesa Green and Clean Fee: no adjustment recommended
- Average residential customer: \$29.60 to \$30.61
- 3.5% increase on bulk item and appliance collection for City of Mesa refuse customers
- Commercial Front Load Rates:
 - Trash: Overall 2.0% increase
 - Commingled: Increase Base Rate from \$28.00 to \$36.00 while providing a 15% discount for additional bins
 - Cardboard: Increase Base Rate from \$24.00 to \$28.00 while slightly increasing the Multi-Day and Multi-Bin factors
- Commercial Roll Off Rates:
 - Trash: no adjustment recommended
 - Green Waste: increase per ton charge 6.9%
 - Overweight Containers: increase per ton charge 4.5%





Energy Resources Department

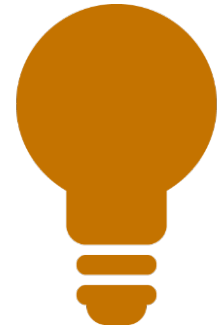
Electric & Gas Utilities

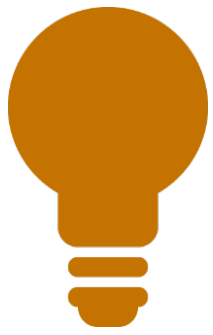
- Electric Utility

- Residential: 14,265 customer billed in February 2018
- Non-Residential: 2,585 customer billed in February 2018

- Gas Utility

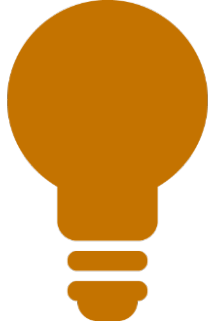
- Residential: 59,949 customer billed in February 2018
- Non-Residential: 2,496 customer billed in February 2018





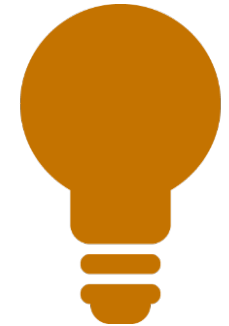
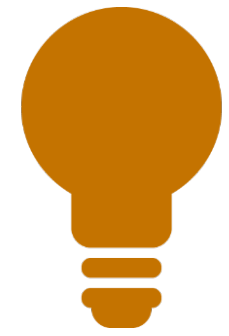
Electric Utility Rate Recommendations

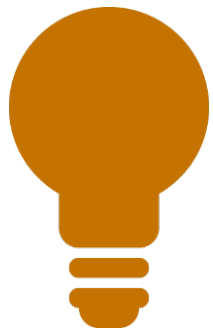
- Residential System Service Charge component: from \$10.75 to \$12.50
- Consumption component of rate: No adjustment recommended
- Average residential customer: from \$93.41 to \$95.16, 1.9% (Including commodity pass-through cost)
- Non-residential rates: No adjustment recommended



Electric Utility Rate Recommendations

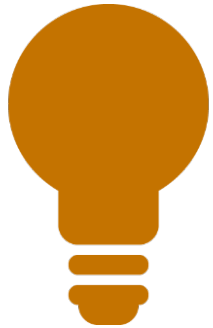
- Proposed System Service Charge of \$12.50 is:
 - \$7.50 per month less than SRP's monthly service charge of \$20.00
- Monthly bills during calendar year 2017 (at FY 2018/19 Mesa rates) would be approximately \$12.80 less per month than if served by SRP (\$153.60 less per year)
- Commodity costs for power are passed through to the customers and are not included in the annual rate review

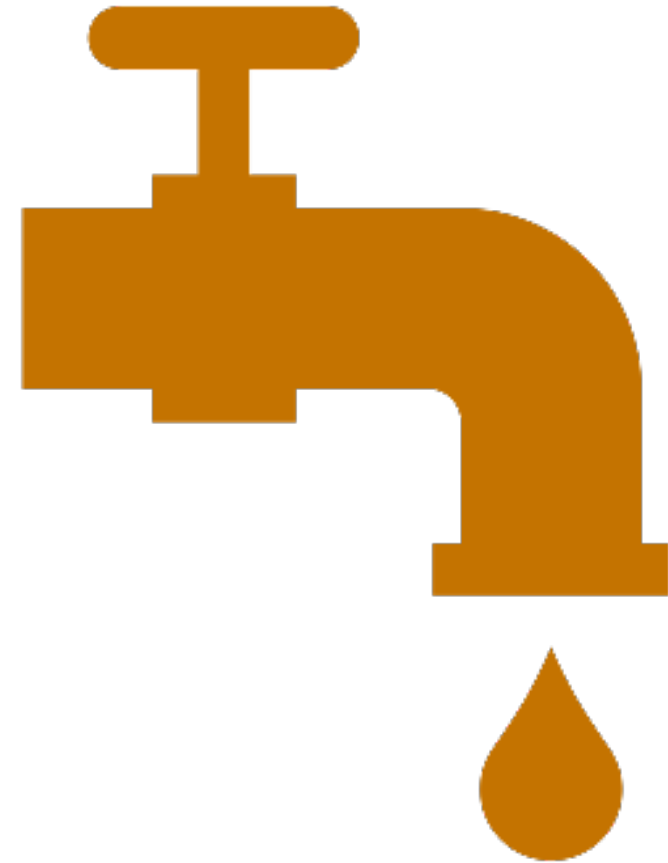




Natural Gas Utility Rate Recommendations

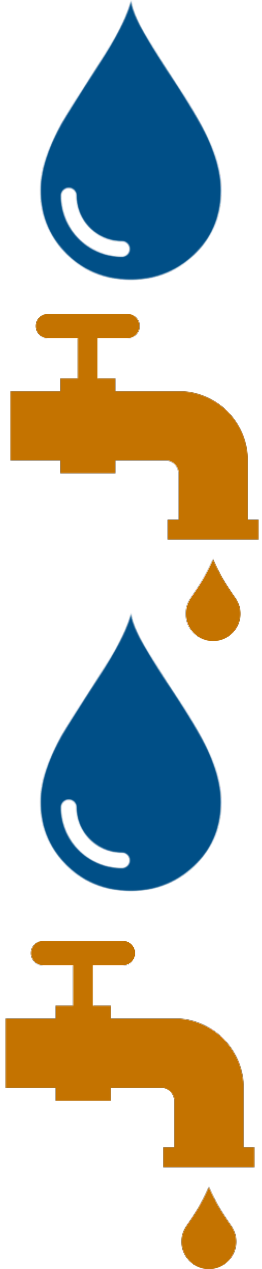
- All customers System Service Charge: increase \$0.75 per month
 - Residential customers summer: from \$13.86 to \$14.61 per month
 - Residential customers winter: from \$16.79 to \$17.54 per month
- Average residential monthly bill: from \$32.92 to \$33.67, 2.3% (Including commodity pass-through)
- Monthly bills during calendar year 2017 (at FY 2018/19 Mesa rates) were approximately \$1.88 more per month (\$22.56 more per year) than if served by Southwest Gas.
- Commodity costs for natural gas are passed through to the customers and are not included in the annual rate review





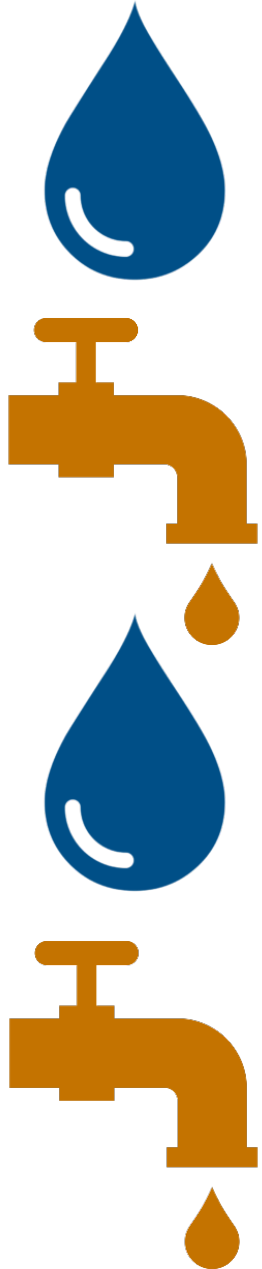
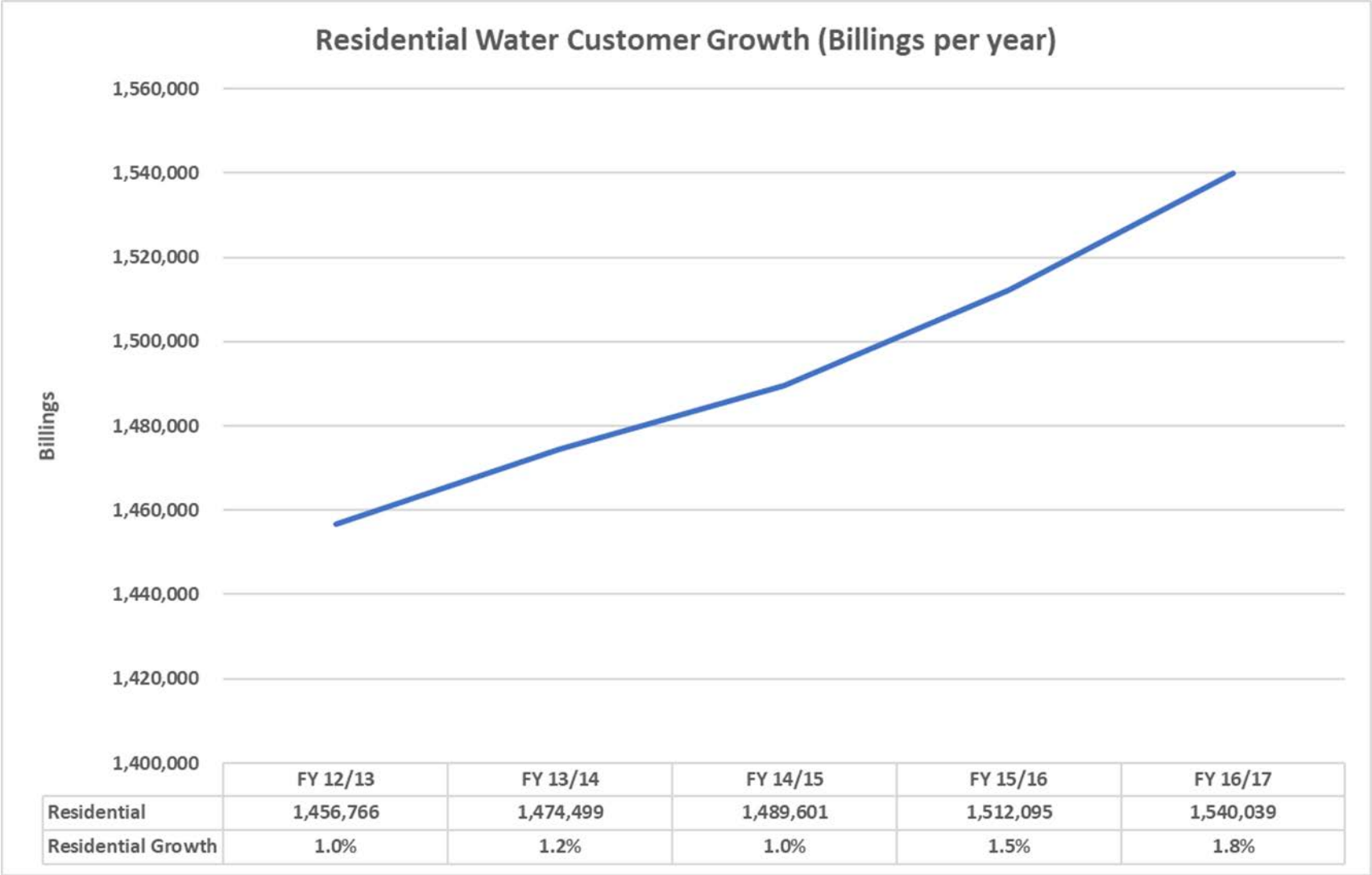
Water Resources Department

Water Utility Rate Structure

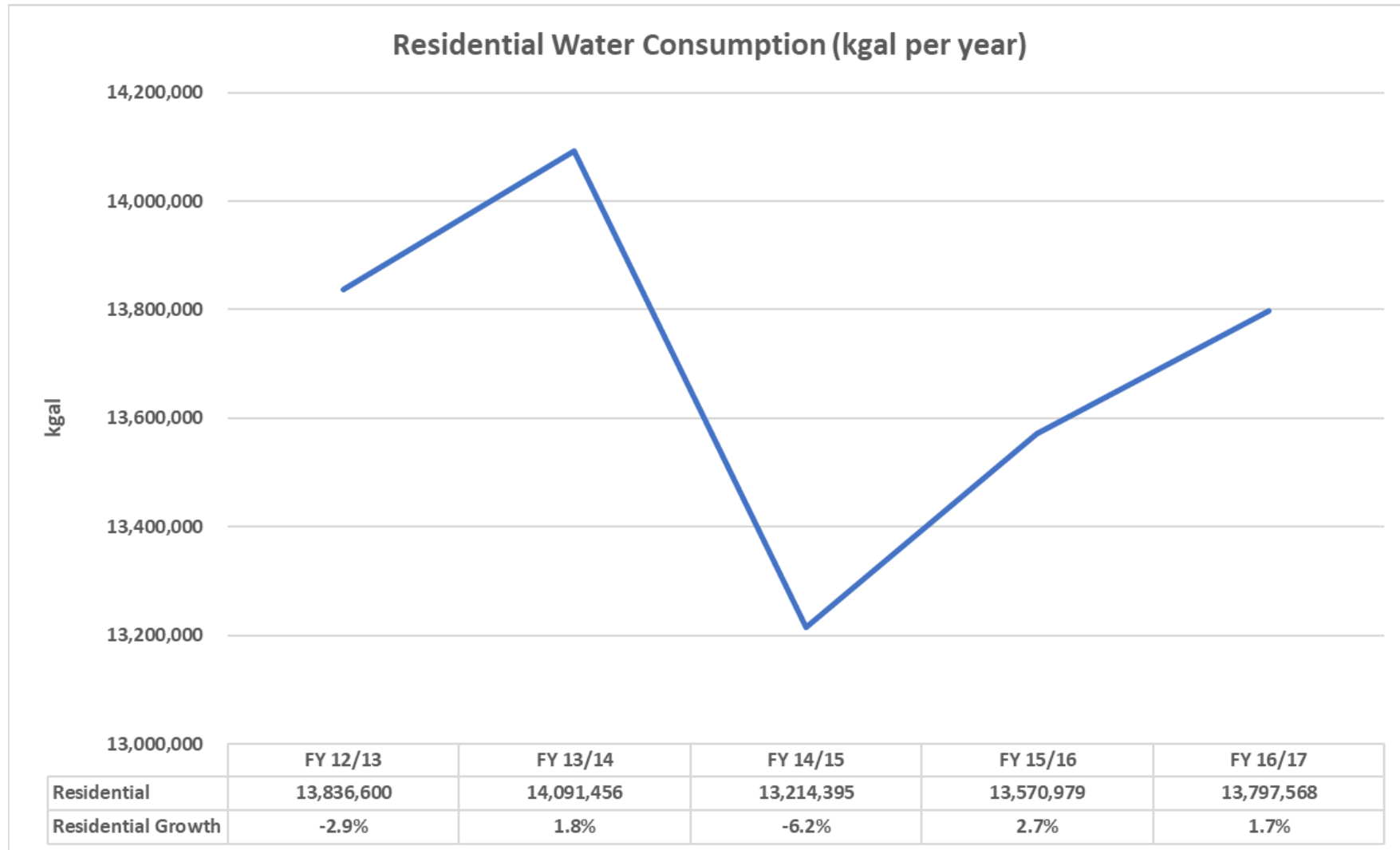
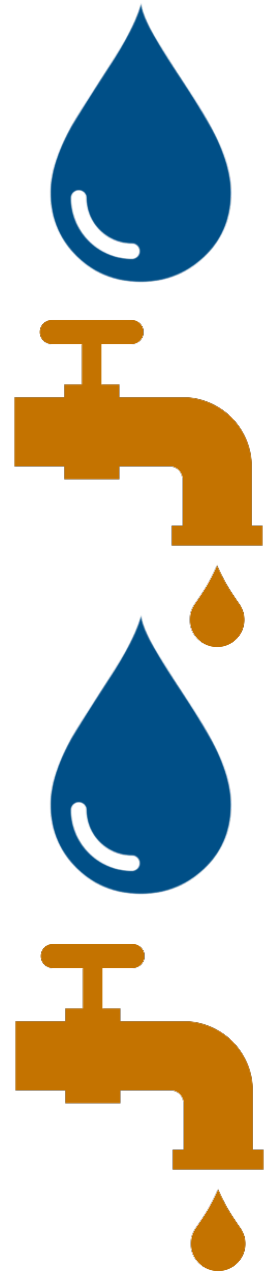


- Over the last few years the City has focused on better aligning fixed revenues with fixed costs. Target is fixed revenues at 35-40% of total costs. FY 2017/18 is estimated at 36.09%
- Water consumption per account has declined in recent years: more widespread use of water saving appliances, smaller number of people per household, less landscaping and more water conservation awareness

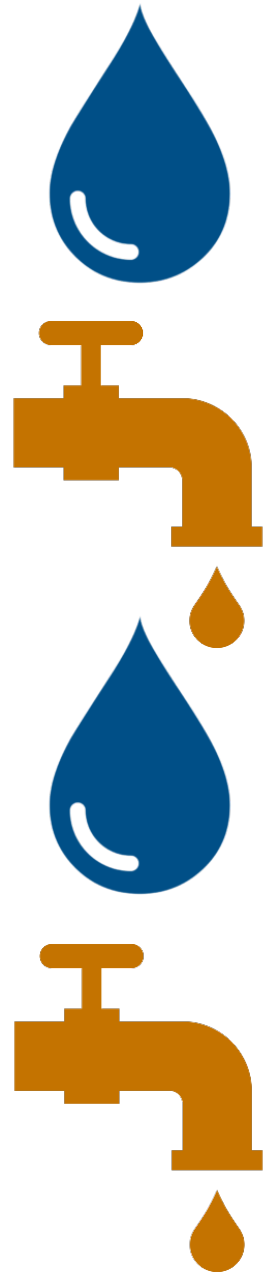
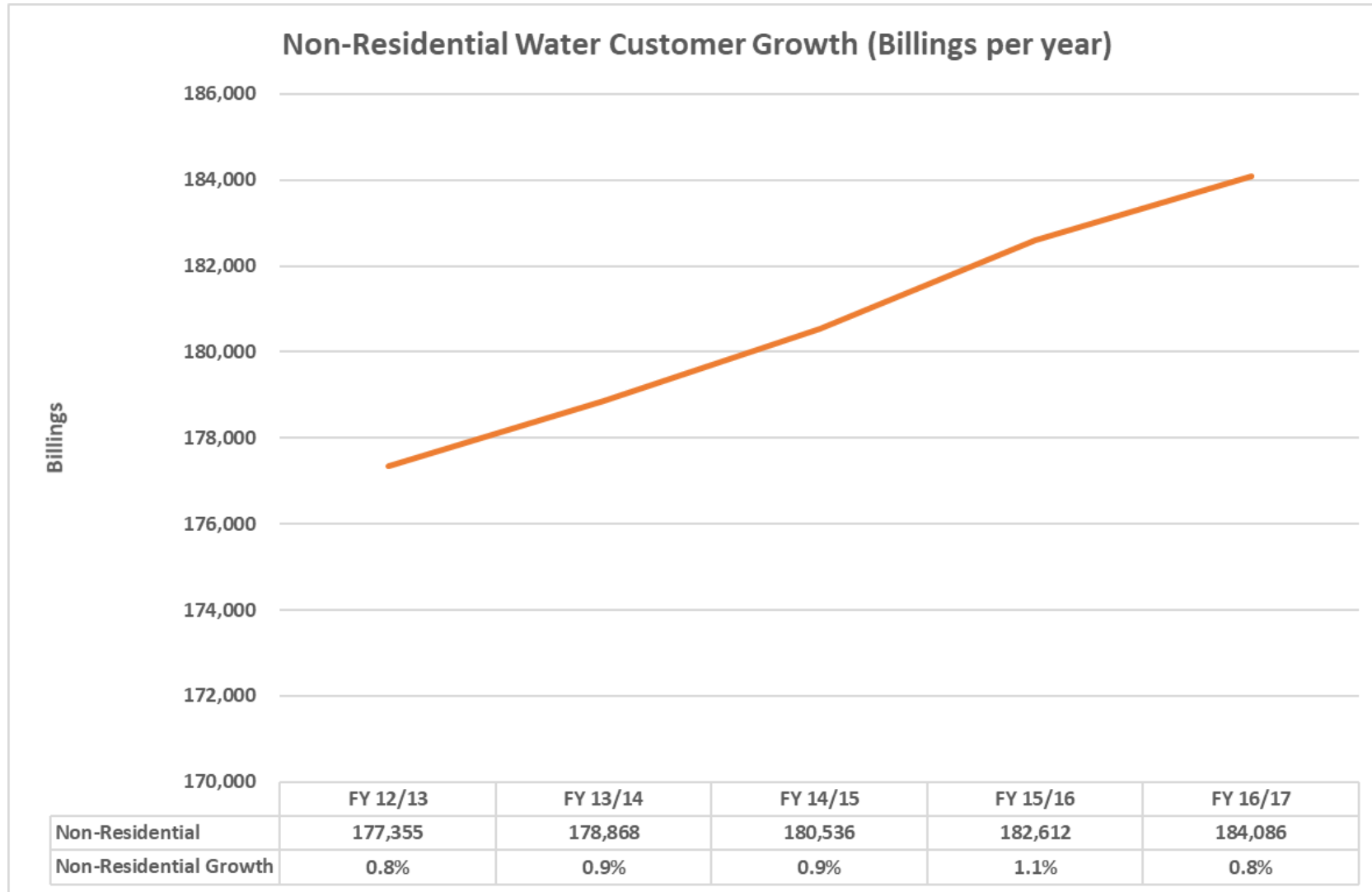
Residential Water Customer Growth



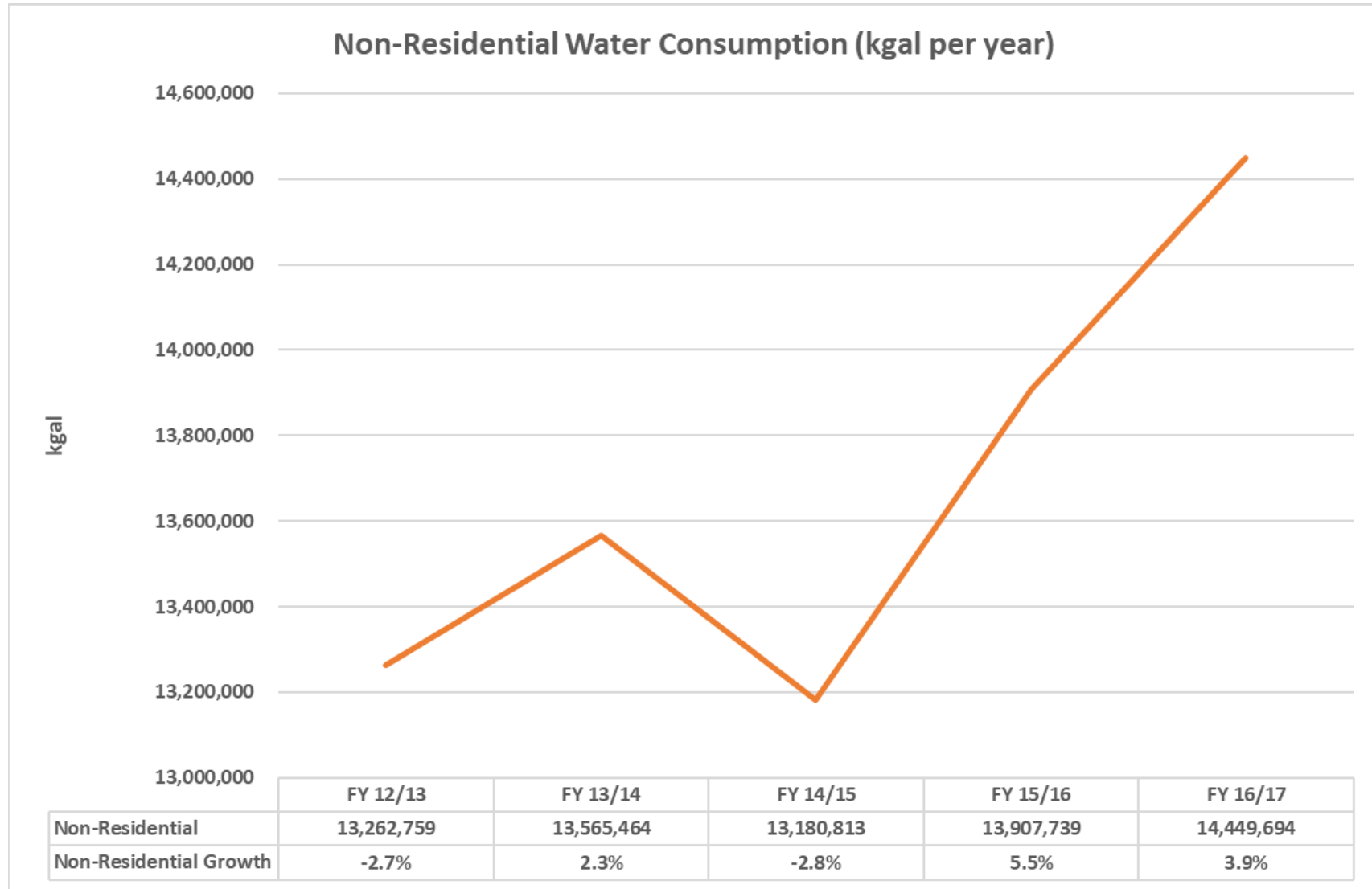
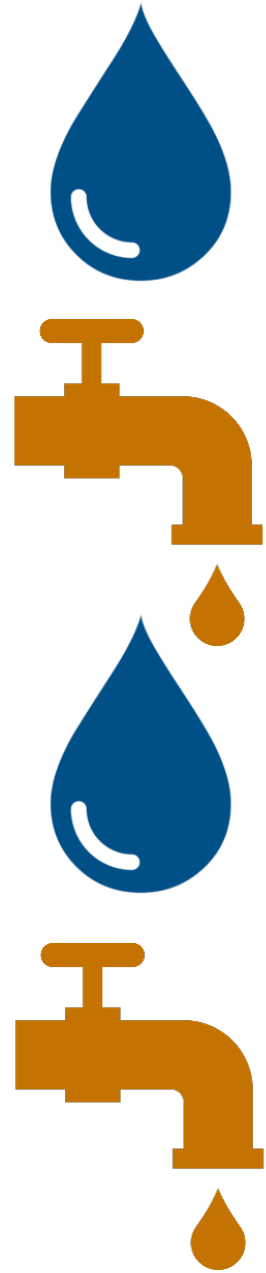
Residential Water Consumption



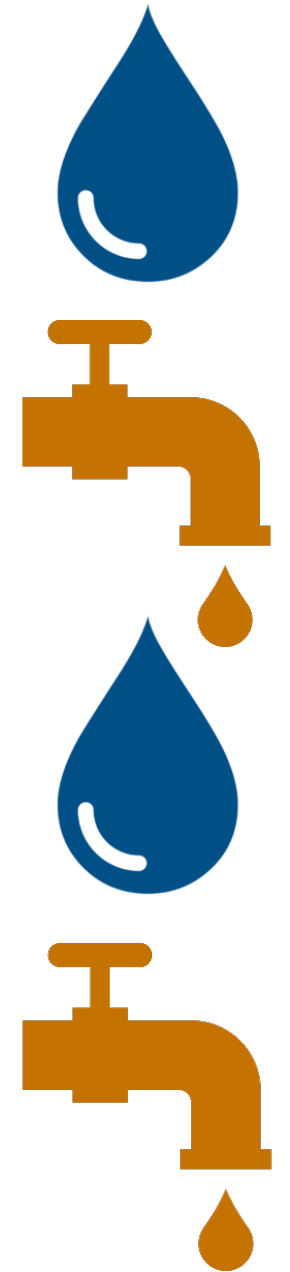
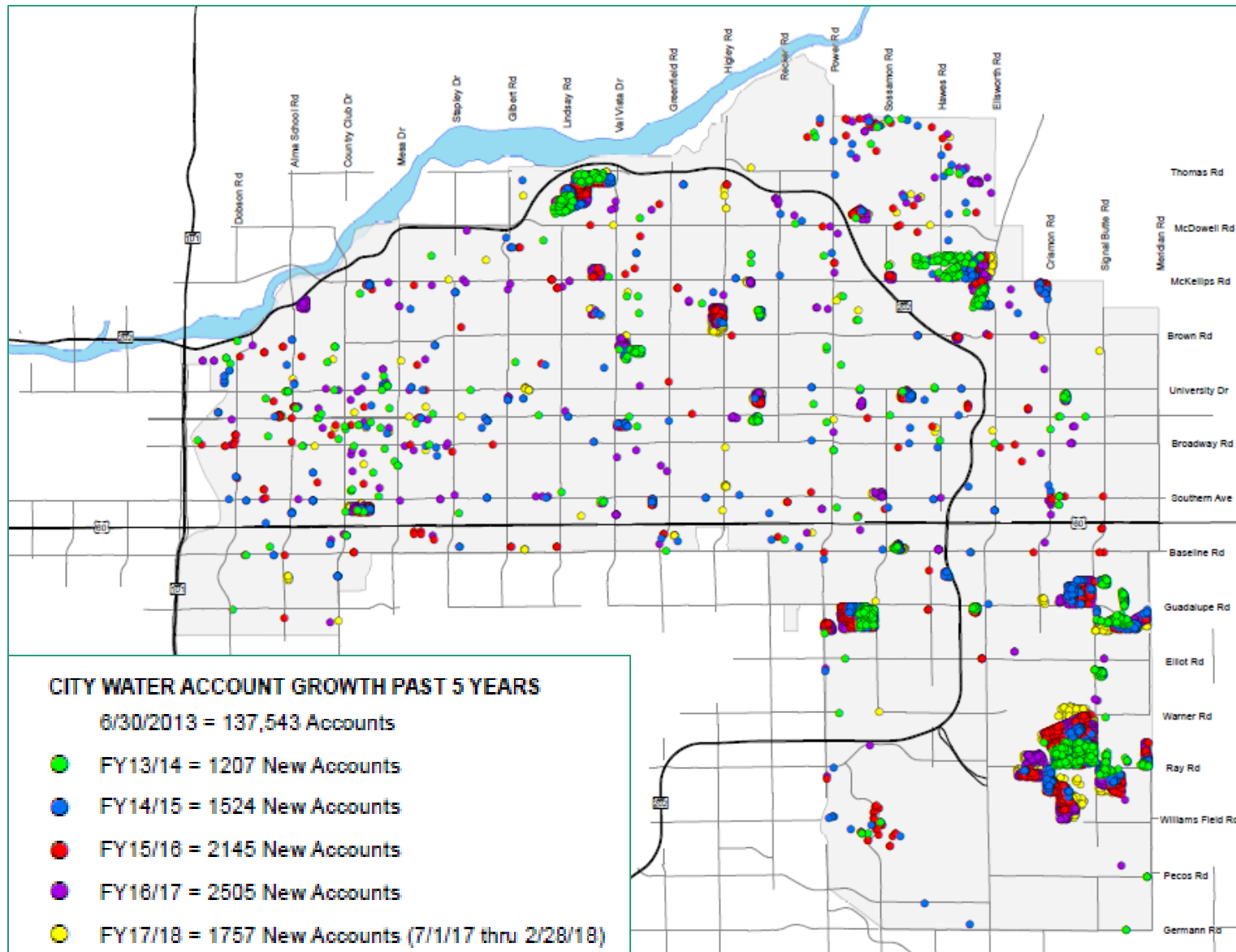
Non-Residential Water Customer Growth

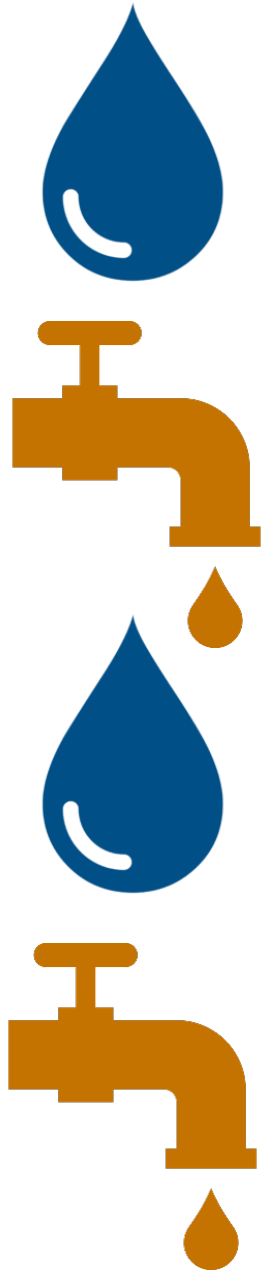


Non-Residential Water Consumption



Water Account Growth since FY 13/14





Water Utility Rate Structure

Current Residential Tier Structure for FY 17/18

First 3,000 gallons included in service charge

Gallons	Cost per 1,000 gal
4,000-10,000	\$3.13
Next 10,000 gallons	\$4.70
Next 4,000 gallons	\$5.57
All additional 1,000 gallons	\$6.07

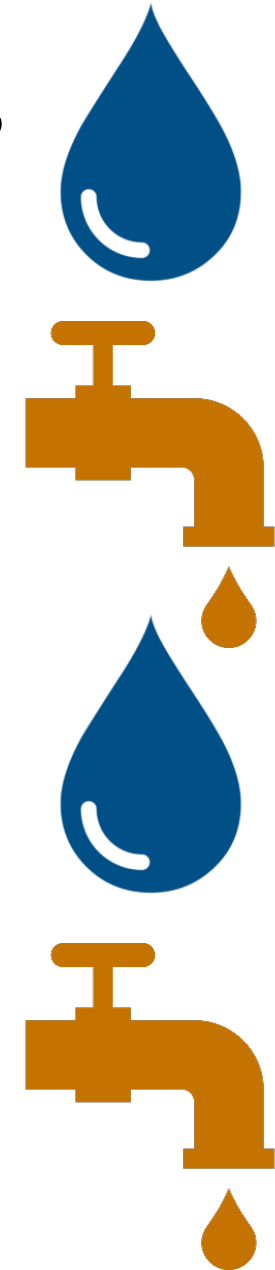
Proposed Residential Tier Structure for FY 18/19

First 3,000 gallons included in service charge

Gallons	Cost per 1,000 gal
4,000-9,000	\$3.24
Next 9,000 gallons	\$4.86
Next 6,000 gallons	\$5.80
All additional 1,000 gallons	\$6.51

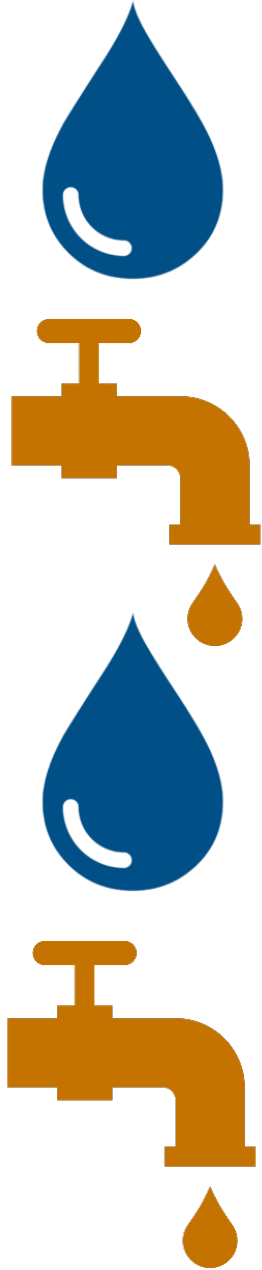
Water Utility Rate Recommendations

- All customers: 3.5% increase on all rate components
- Residential Service Charge: from \$27.55 to \$28.51
- Residential average monthly seasonal consumption total bill: from \$46.33 to \$47.95
- 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.

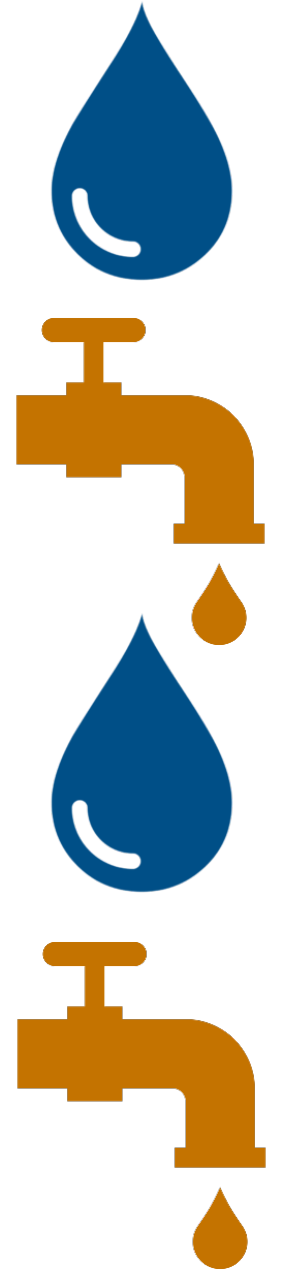


Water Utility Rate Recommendations

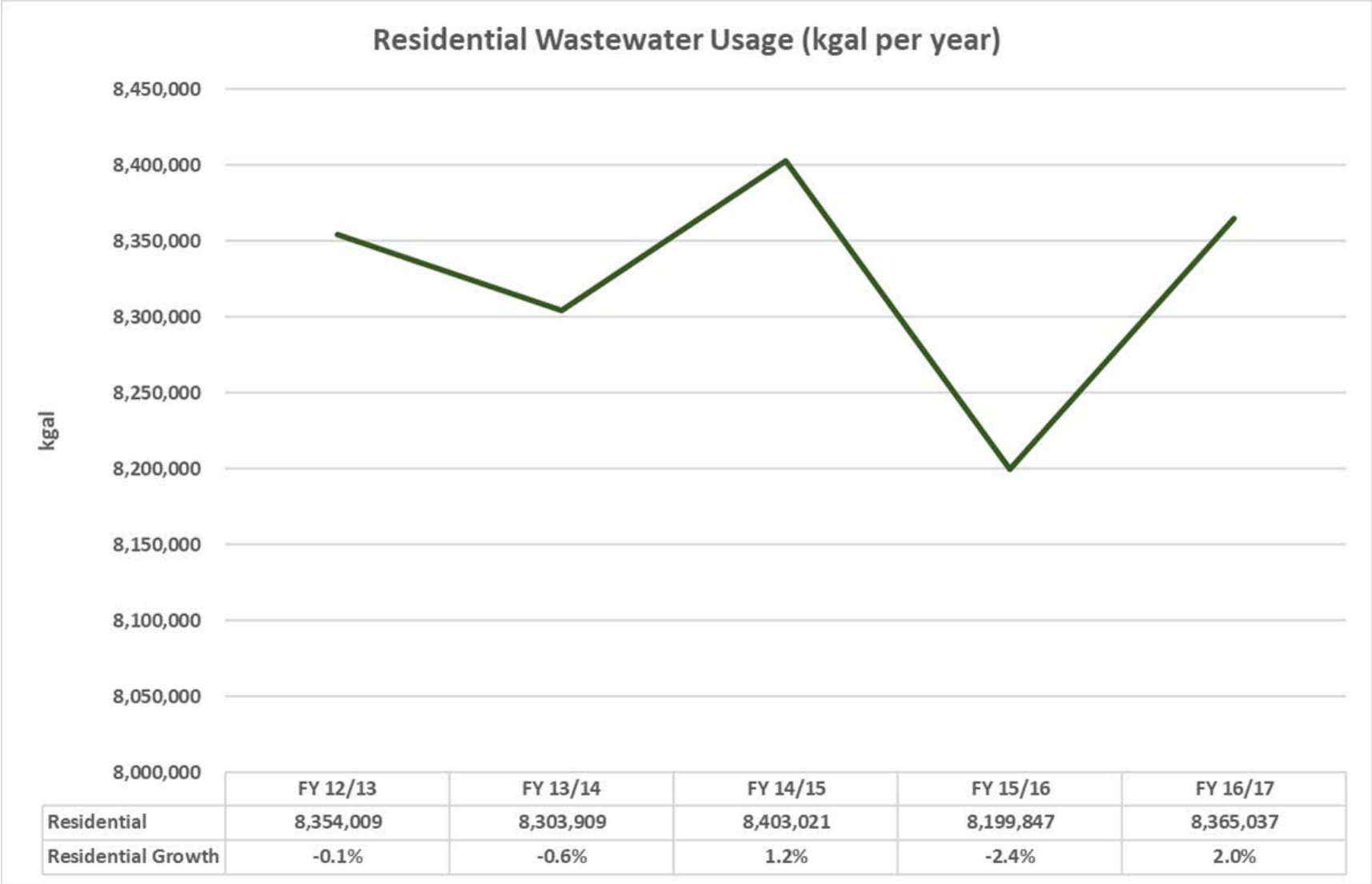
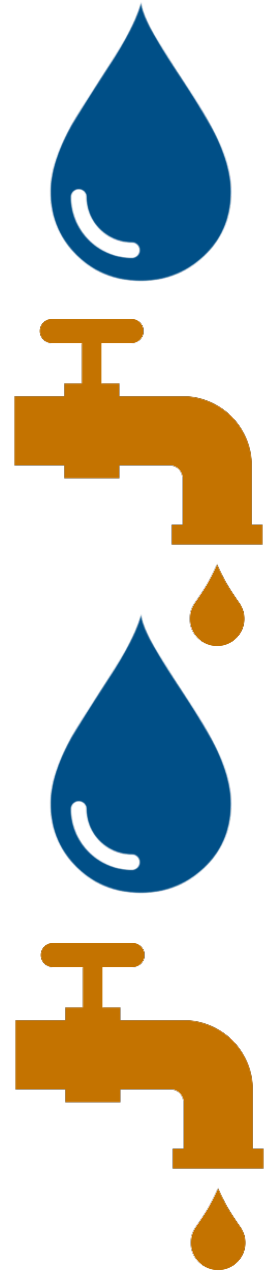
- Implement year-round excess water surcharge over three years
 - Affects commercial, multi-unit dwelling and public authorities customers
 - Currently the surcharge is operative for 9 months (March through November)
 - Financial impact: additional \$92,000 of water revenues in FY 2018/19
- Remove first 3,000 gallons from service charge for Water Hydrant Meter Service
 - The provision of the first 3,000 gallons of water is included in the service charge to sustain life or business
 - Water Hydrant meters are utilized for temporary water use, typically construction projects
 - Financial impact: additional \$30,000 of water revenues in FY 2018/19



Residential Wastewater Customer Growth



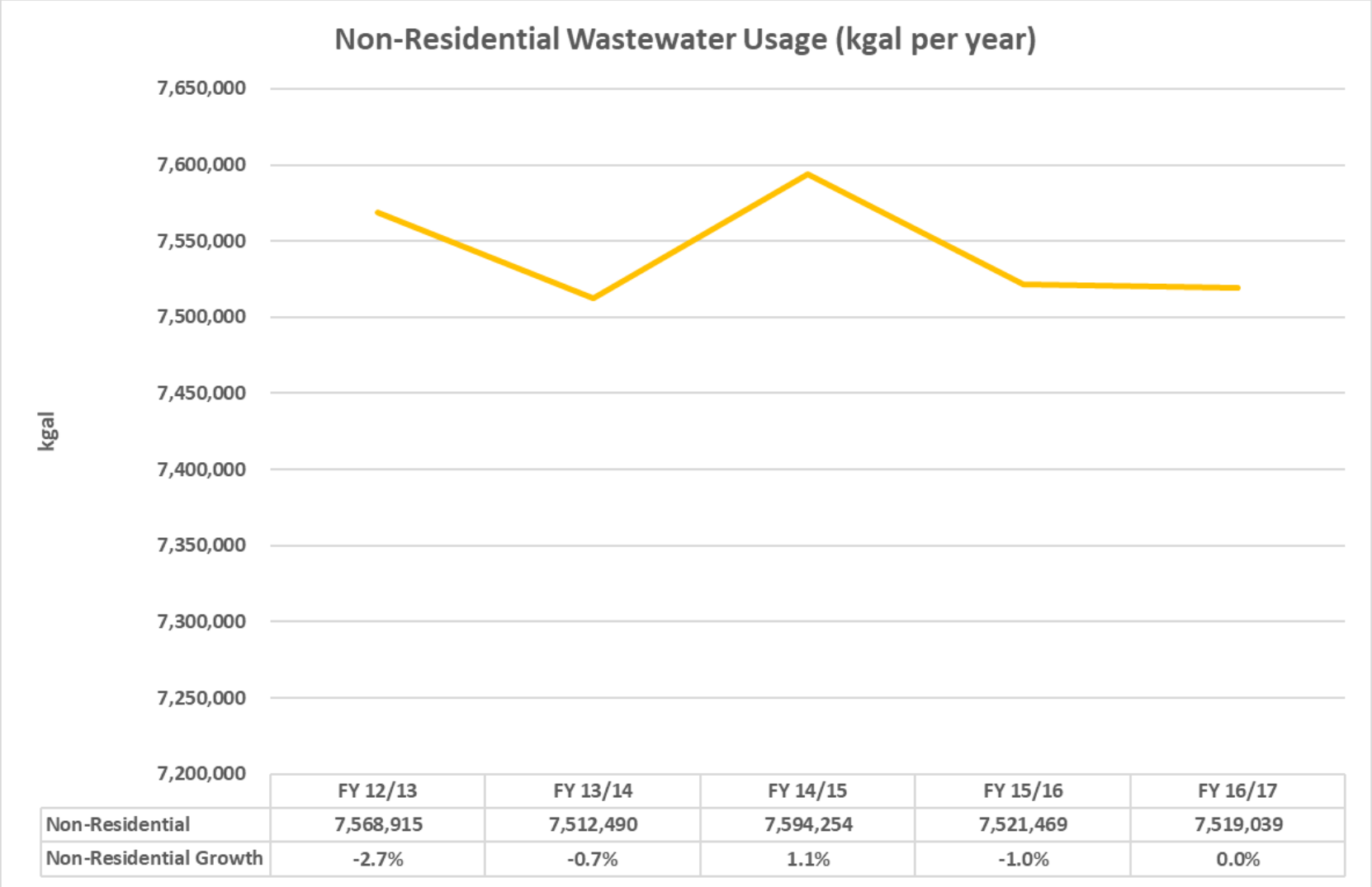
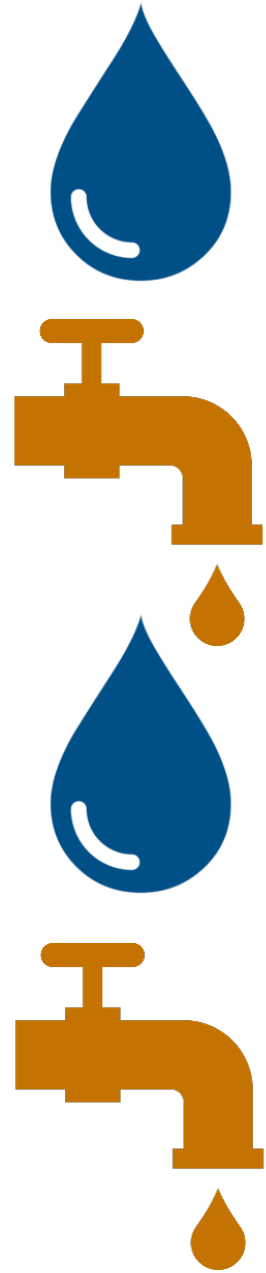
Residential Wastewater Usage



Non-Residential Wastewater Customer Growth

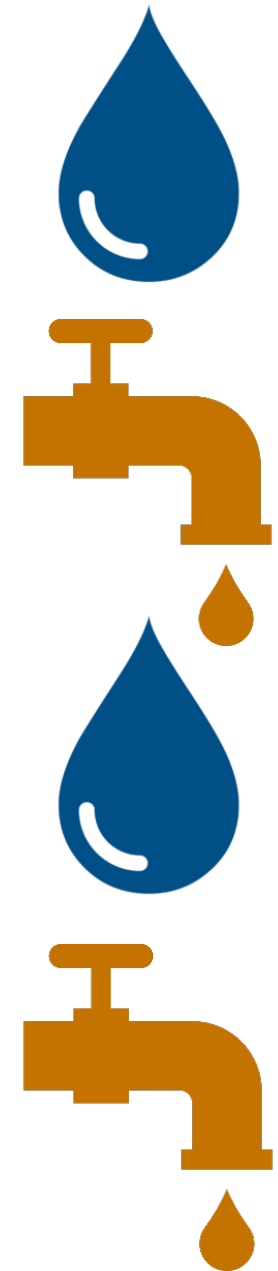


Non-Residential Wastewater Usage

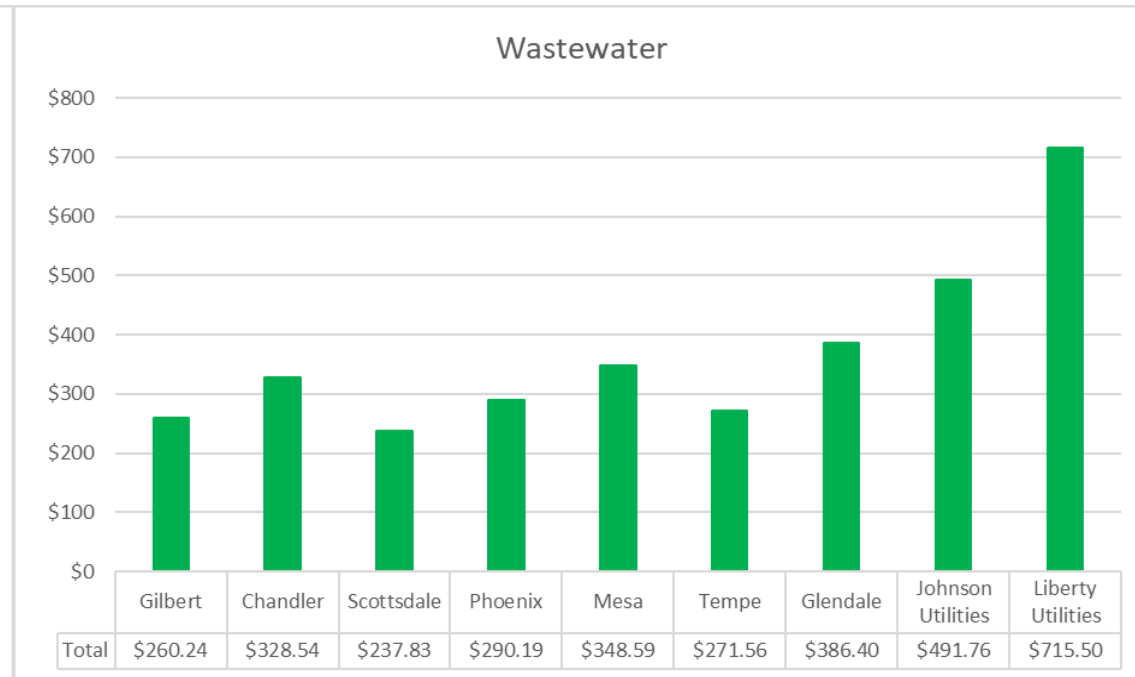
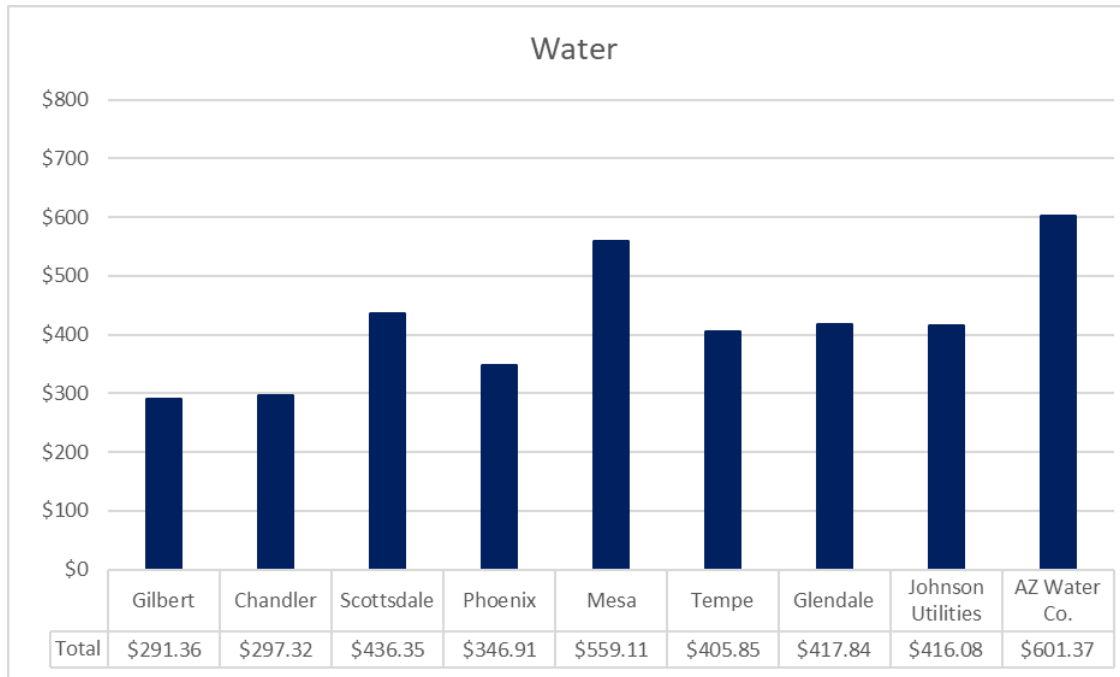


Wastewater Utility Rate Recommendations

- All customers: 4% increase on all rate components
- Residential Service Charge: from \$18.80 to \$19.55
- Residential average monthly consumption total bill: from \$29.05 to \$30.20
- Wastewater rates are not subject to seasonality. The monthly rate is adjusted annually based on the winter water average usage of the individual customer



Average Residential Water and Wastewater Annual Cost Comparisons – FY 2017/18 Rates





Schedule for FY 2018/19 Utility Rate Consideration

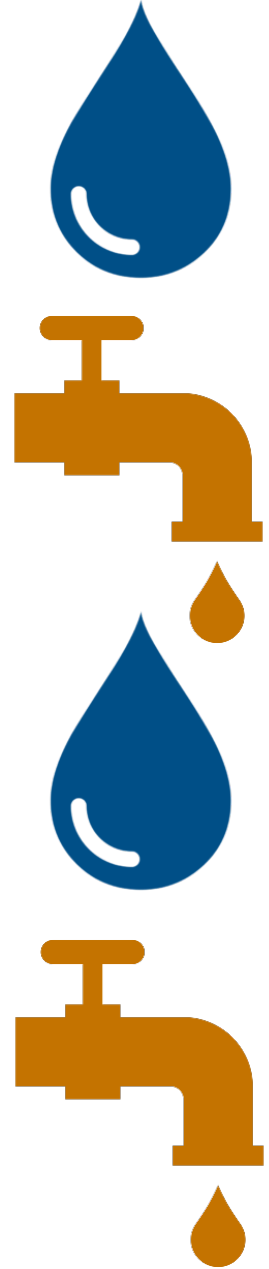
- Apr 5** – City Council Discussion of Utility Rates
- May 7** – Introduce Utility Rate Ordinances
- May 21** – City Council Action on Utility Rates
- July 1** – Effective date for Utility Rate changes



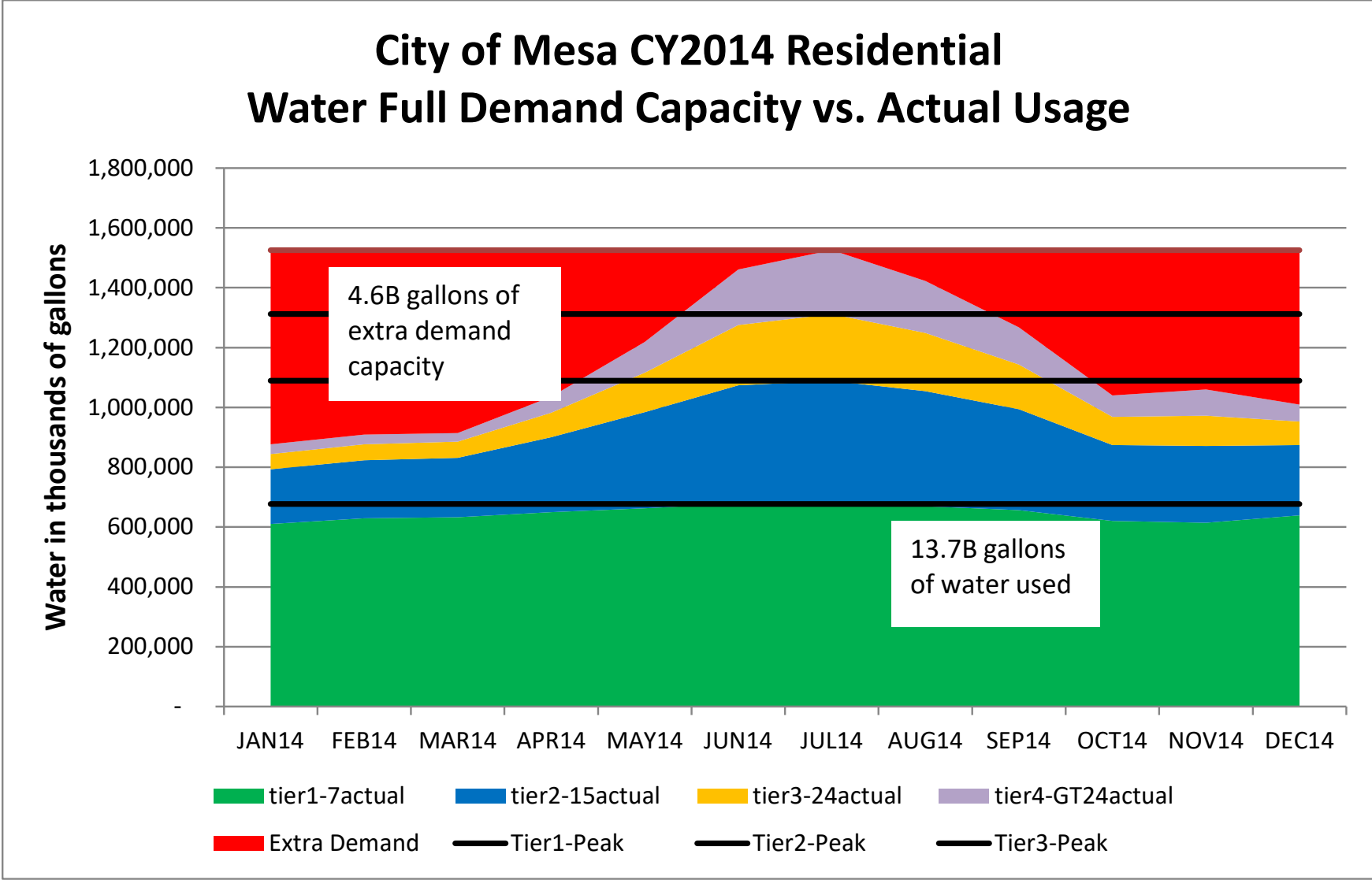
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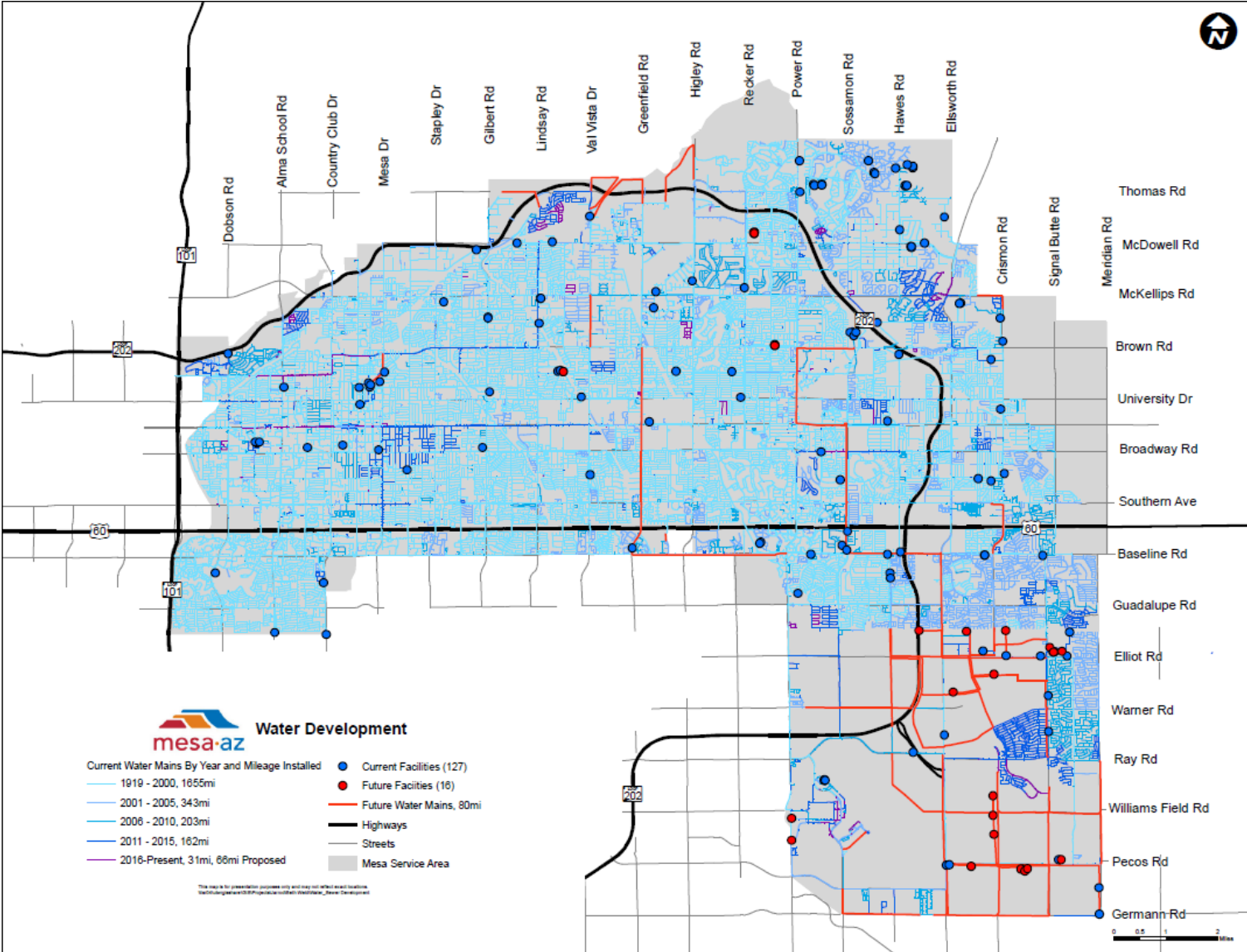
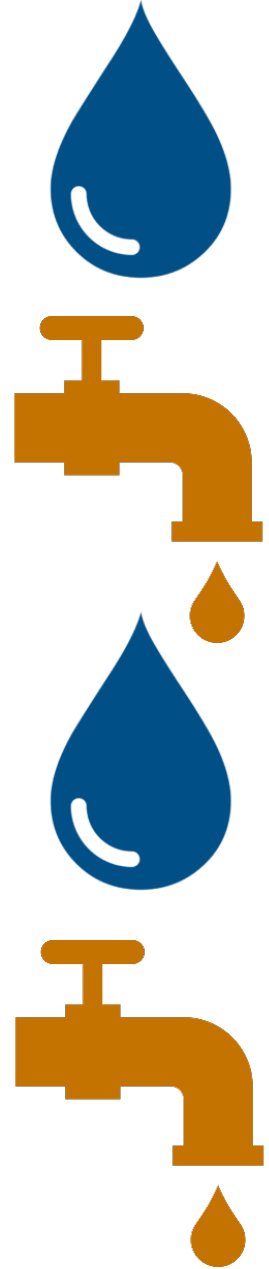
Residential Demand vs. Actual Usage



City of Mesa CY2014 Residential Water Full Demand Capacity vs. Actual Usage



Water Main Development



Wastewater Main Development

