

City of Mesa

FY 15/16

Utility Department Presentations and Rate Recommendations

City Council

April 16, 2015

Presented by the Office of Management and Budget
with the Solid Waste, Energy Resources and Water Resources Departments



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

Revenue Targets

- Forecasted expenses are compared with forecasted revenues based on current rates and projected customer growth
- In FY 15/16, the following increase in revenues is needed to accommodate the estimated costs:

Utility	Revenue	Increase
Electric	\$210,000	1.3%
Natural Gas	\$770,000	2.9%
Water	\$6,201,000	5.2%
Wastewater	\$3,673,000	5.2%
Solid Waste*	\$2,099,000	4.2%
Total	\$12,953,000	

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

Solid Waste Department



Solid Waste Dept. FY 14/15 Accomplishments

- CNG Fleet Conversion
- Garbage Truck Safety PSA
- Succession Planning
- Clean Sweep/Green Sweep Program

Solid Waste Dept. FY 15/16 Points of Pride/Emphasis

- Fleet Mind
- New Recycling Contracts
- Regional Partnerships

Solid Waste Dept. FY 15/16 Proposed Budget Reductions

- Diesel Fuel Savings
- Barrel Replacement Program
- Recycling Outreach

Solid Waste Utility Rate Recommendations

- CNG conversion continues to move forward over the next six years to reduce future fuel cost
 - Cost of capital investment creates pressure in early years with relief anticipated to begin in FY 18/19
- Two new contracts that will provide funds for recycling education and outreach program
- The tools and technology to further assist in maintaining a top-rated, competitive, customer service driven business operation are being continually reviewed and upgraded

Solid Waste Utility Rate Recommendations

- 5% increase on all residential rates
 - Residential 90 gallon barrel rate: \$1.27 per month, from \$25.45 to \$26.72
 - Residential 60 gallon barrel rate: \$1.14 per month, from \$22.72 to \$23.86
- Mesa Green and Clean Fee: \$0.09 per month, from \$0.65 to \$0.74
- Average residential customer increase: \$1.36 from \$26.10 to \$27.46
- 1.2% increase on Commercial Front Load rates
- Commercial Roll Off rates: no recommendation for adjustment at this time.

Energy Resources Department



Electric FY 14/15 Accomplishments

- First Place - American Public Power Association's (APPA) 2014 Safety Awards of Excellence program & 431 days (on 4.16.15) without a Lost Time Accident.
- 4 kV/12 kV Conversion completed; Four 4kV substations decommissioned; design for Pocket Park at the former Extension Substation begun.
- Electric Services for Central Mesa Extension of the Light Rail system including train power supply stations, train stations/platforms, park and rides, traffic controls and vendor power pedestals are complete.

Electric FY 15/16 Areas of Emphasis

- Safety: Continue No Lost Time Accidents streak; jointly pursue projects to convert overhead circuits to underground where car-pole accidents have become more frequent.
- Reliability: Optimize configuration and operations of the 12kV electric distribution system to reduce the duration of electric service interruptions.
- Continue to enhance renewable electric portfolio via Customer Owned Solar program and development of City-Owned Solar in collaboration with Development & Sustainability.

Electric Utility Rate Recommendations

- Residential Service Charge component: \$1.50 per month, from \$6.50 to \$8.00
- Consumption component of rate: No adjustment recommended
- Average residential customer: \$1.50 per month, from \$89.78 to \$91.28, 1.7% (Including commodity pass-through cost)
- Second proposed increase since FY 03/04
- Non-residential rates: No adjustment recommended
- Developing concepts for Low Income Electric residential

Electric Utility Rate Recommendations

- Proposed service charge of \$8.00 is:
 - \$10.50 per month less than SRP's Summer Monthly Service Charge of \$18.50
 - \$12.00 per month less than SRP's Winter Monthly Service Charge of \$20.00
- Monthly bills during calendar year 2014 were approximately \$8.97 less per month than if served by SRP (\$107.64 less per year)
- Commodity costs for power are passed through to the customers and are not included in the annual rate review

Natural Gas FY 14/15 Accomplishments

- Gold Award - American Public Gas Association's (APGA) System Operations & Achievement Recognition (SOAR) program; APGA 2014 System Growth Marketing & Sales Award - Key Accounts program.
- Underground Damage Prevention program, including our locating and marking of Mesa's underground infrastructure, has resulted in damages that are 1/16th (or 94 % lower than) of the national standard.
- Supervisory Control and Data Acquisition equipment was installed at nine Pressure Regulator Stations to enhance the safety, reliability and resiliency of Mesa's gas utility system.

Natural Gas FY 15/16 Areas of Emphasis

- Develop CNG Station(s) for Solid Waste's CNG Fleet; begin promoting CNG advantages to other Departments, allocate IRS rebates to offset some of the additional purchase costs; and initiate development of CNG Station at EVIT.
- Continue enhancement to Succession Plan – develop apprenticeship training/technician program for our Gas Service Specialists.
- Continue to grow our gas utility customers through effective planning and system expansion.

Natural Gas Utility Rate Recommendations

- All customers Service Charge: increase \$1.29 per month
 - Residential customers summer: from \$10.82 to \$12.11 per month
 - Residential customers winter: from \$13.75 to \$15.04 per month
- Average residential customer monthly bill: from \$33.55 to \$34.84, 3.8% (Including commodity pass-through)
- Commodity costs for natural gas are passed through to the customers and are not included in the annual rate review

Managing Proposed FY 15/16 Budget Changes

- Develop & begin implementation of Pilot Low Income Electric Residential program.
- Eliminate four electric & four gas positions:
 - Completion of 4 kV/12kV Conversion obviates need for four electric positions (\$366,708)
 - Current Gas Annual Work Plan, Efficiency Improvements & Utilization of job order contracting (JOC) obviates need for four gas positions (\$277,022)
- Reduced levels of equipment utilization, reduced overtime, miscellaneous reductions in memberships/outside materials, and efficiency improvements (~\$130,000).

Water Resources Department



Water Resources FY 14/15 Accomplishments

- Val Vista Transmission Main
 - Completion of Phase 1
- Salt River Pima – Maricopa Indian Community
 - Intergovernmental Agreement (\$1.6M Savings)
- Projecting over \$4M in savings
 - Sub-Regional Operating Group (SROG)
 - Val Vista Water Treatment Plant
 - Energy & Chemical Costs

Water Resources FY 15/16 Areas of Emphasis

- Southeast Mesa Infrastructure Planning
- Sanitary Sewer Overflow (SSO) Mitigation
- Odor Control Improvements
 - Wastewater Collection System
- Water Meters
 - Inventory Control System
 - Large Meter Replacement

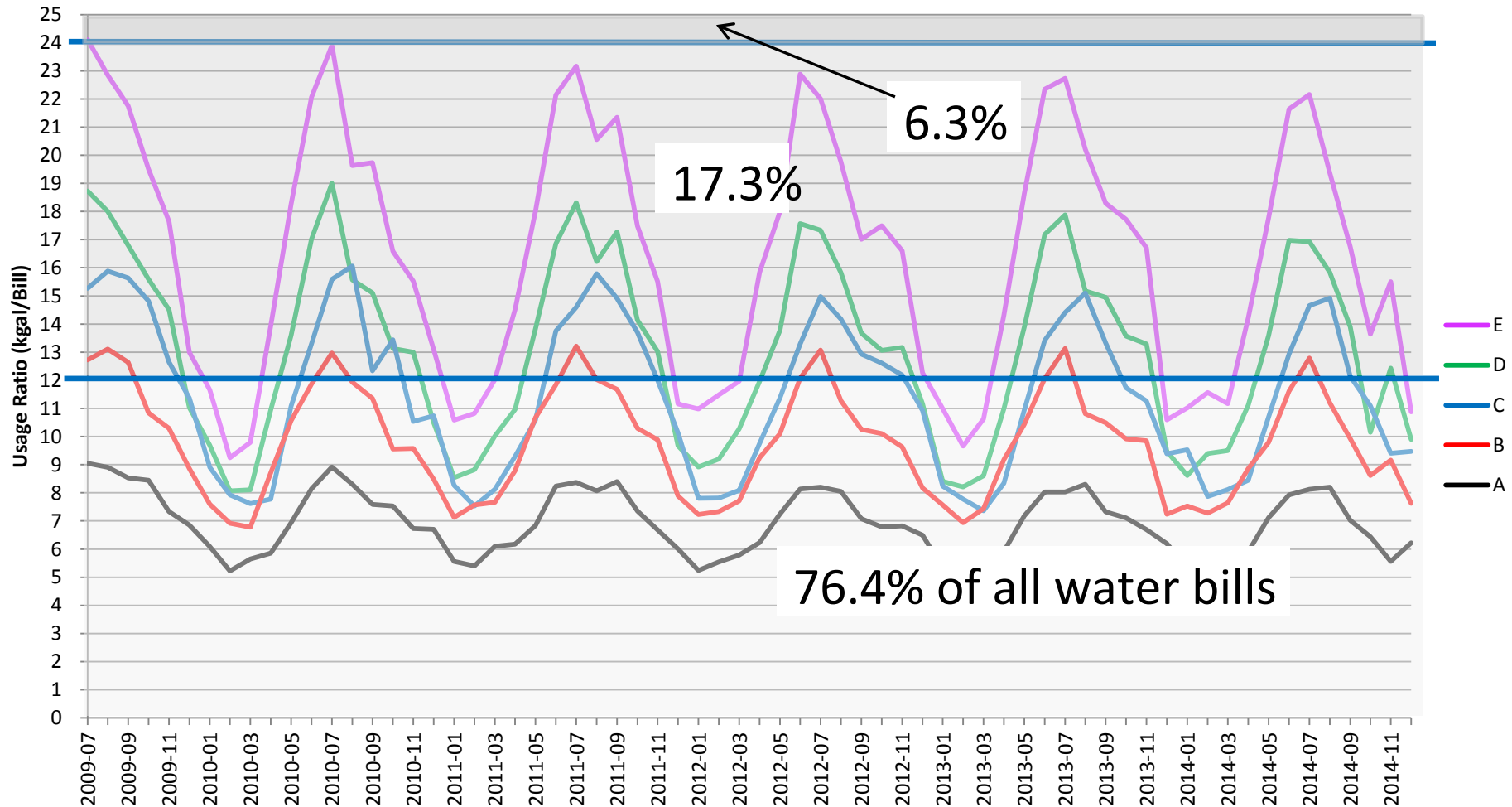
Water Resources FY 15/16 Budget Highlights

- Water Purchase costs increased \$787K
 - Projected \$2.5M increase over next 4 years
- Minimal increase in chemical budget
- Energy costs increased \$459K
- Joint Venture costs decreased \$1.6M
- 4 Positions added to support construction activities
- Rates
 - Proposed realignment of residential water tiers

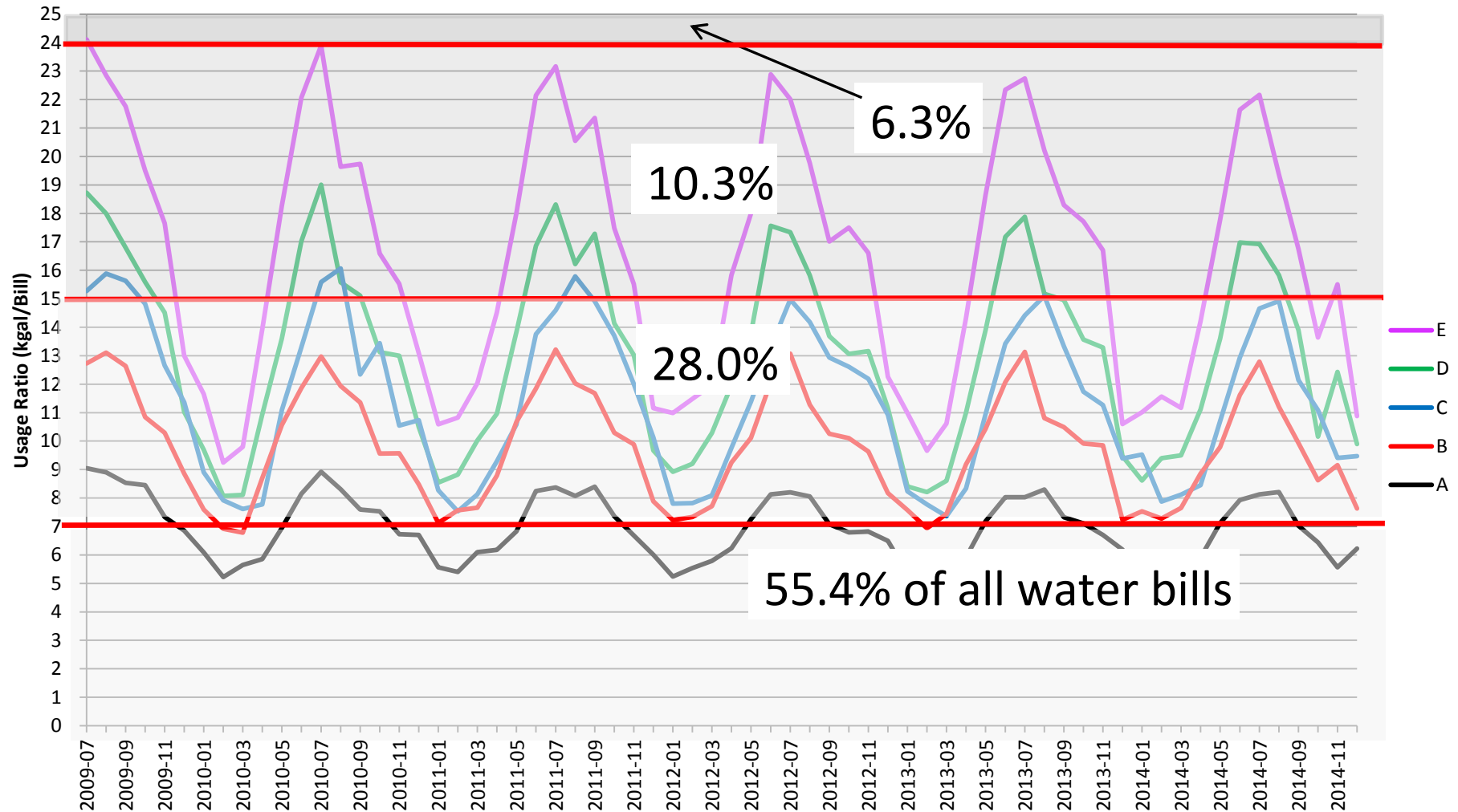
Water Utility Rate Structure

- City previously focused on better aligning fixed revenues with fixed costs. Target is fixed revenues at 35-40% of total costs. FY 15/16 estimated at 36.3%
- 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 tiers are based on demands on the system. The current tier levels do not align with standard usage patterns
 - Analysis revealed four or five standard levels of residential water usage

Avg. Residential Monthly Usage – Current Tiers



Avg. Residential Monthly Usage – Proposed Tiers



Water Utility Rate Structure Recommendation

- Current Residential Tier Structure:
 - First 3,000 gallons included in service charge
 - 4,000 – 12,000 gallons
 - 13,000 – 24,000 gallons
 - 25,000 gallons and greater
- Recommended Residential Tier Structure at full implementation:
 - First 3,000 gallons included in service charge
 - 4,000 – 7,000 gallons
 - 8,000 – 15,000 gallons
 - 16,000 – 24,000 gallons
 - 25,000 gallons and greater
- Transition to new tier structure over five years to decrease annual impact to customers and to allow time for customers to assess water usage and apply conservation techniques if possible

5 Year Implementation – Monthly Bill Amounts

	MONTHLY BILL AMOUNTS						
	YR0	YR1	YR2	YR3	YR4	YR5	YR6
30 kgal	\$125.72	\$136.01	\$147.31	\$159.74	\$173.35	\$187.24	\$196.62
29 kgal	\$121.12	\$130.96	\$141.77	\$153.67	\$166.71	\$179.98	\$189.00
28 kgal	\$116.52	\$125.91	\$136.23	\$147.60	\$160.07	\$172.72	\$181.38
27 kgal	\$111.92	\$120.86	\$130.69	\$141.53	\$153.43	\$165.46	\$173.76
26 kgal	\$107.32	\$115.81	\$125.15	\$135.46	\$146.79	\$158.20	\$166.14
25 kgal	\$102.72	\$110.76	\$119.61	\$129.39	\$140.15	\$150.94	\$158.52
24 kgal	\$98.12	\$105.71	\$114.07	\$123.32	\$133.51	\$143.68	\$150.90
23 kgal	\$94.01	\$100.81	\$108.84	\$117.75	\$127.58	\$137.37	\$144.27
22 kgal	\$89.90	\$95.91	\$103.61	\$112.18	\$121.65	\$131.06	\$137.64
21 kgal	\$85.79	\$91.59	\$98.38	\$106.61	\$115.72	\$124.75	\$131.01
20 kgal	\$81.68	\$87.27	\$93.15	\$101.04	\$109.79	\$118.44	\$124.38
19 kgal	\$77.57	\$82.95	\$88.61	\$95.47	\$103.86	\$112.13	\$117.75
18 kgal	\$73.46	\$78.63	\$84.07	\$89.90	\$97.93	\$105.82	\$111.12
17 kgal	\$69.35	\$74.31	\$79.53	\$85.13	\$92.00	\$99.51	\$104.49
16 kgal	\$65.24	\$69.99	\$74.99	\$80.36	\$86.07	\$93.20	\$97.86
15 kgal	\$61.13	\$65.67	\$70.45	\$75.59	\$81.06	\$86.89	\$91.23
14 kgal	\$57.02	\$61.35	\$65.91	\$70.82	\$76.05	\$81.63	\$85.71
13 kgal	\$52.91	\$57.03	\$61.37	\$66.05	\$71.04	\$76.37	\$80.19
12 kgal	\$48.80	\$52.71	\$56.83	\$61.28	\$66.03	\$71.11	\$74.67
11 kgal	\$46.06	\$48.39	\$52.29	\$56.51	\$61.02	\$65.85	\$69.15
10 kgal	\$43.32	\$45.51	\$47.75	\$51.74	\$56.01	\$60.59	\$63.63
9 kgal	\$40.58	\$42.63	\$44.73	\$46.97	\$51.00	\$55.33	\$58.11
8 kgal	\$37.84	\$39.75	\$41.71	\$43.80	\$45.99	\$50.07	\$52.59
7 kgal	\$35.10	\$36.87	\$38.69	\$40.63	\$42.66	\$44.81	\$47.07
6 kgal	\$32.36	\$33.99	\$35.67	\$37.46	\$39.33	\$41.31	\$43.39
5 kgal	\$29.62	\$31.11	\$32.65	\$34.29	\$36.00	\$37.81	\$39.71
4 kgal	\$26.88	\$28.23	\$29.63	\$31.12	\$32.67	\$34.31	\$36.03
3 kgal	\$24.14	\$25.35	\$26.61	\$27.95	\$29.34	\$30.81	\$32.35
2 kgal	\$24.14	\$25.35	\$26.61	\$27.95	\$29.34	\$30.81	\$32.35
1 kgal	\$24.14	\$25.35	\$26.61	\$27.95	\$29.34	\$30.81	\$32.35
0 kgal	\$24.14	\$25.35	\$26.61	\$27.95	\$29.34	\$30.81	\$32.35

5 Year Implementation – Monthly Bill Variance

	VAR\$ -MONTHLY BILL						VAR% - MONTHLY BILL					
	YR1	YR2	YR3	YR4	YR5	YR6	YR1	YR2	YR3	YR4	YR5	YR6
30 kgal	\$10.29	\$11.31	\$12.42	\$13.62	\$13.89	\$9.38	8.2%	8.3%	8.4%	8.5%	8.0%	5.0%
29 kgal	\$9.84	\$10.82	\$11.89	\$13.05	\$13.27	\$9.02	8.1%	8.3%	8.4%	8.5%	8.0%	5.0%
28 kgal	\$9.39	\$10.33	\$11.36	\$12.48	\$12.65	\$8.66	8.1%	8.2%	8.3%	8.5%	7.9%	5.0%
27 kgal	\$8.94	\$9.84	\$10.83	\$11.91	\$12.03	\$8.30	8.0%	8.1%	8.3%	8.4%	7.8%	5.0%
26 kgal	\$8.49	\$9.35	\$10.30	\$11.34	\$11.41	\$7.94	7.9%	8.1%	8.2%	8.4%	7.8%	5.0%
25 kgal	\$8.04	\$8.86	\$9.77	\$10.77	\$10.79	\$7.58	7.8%	8.0%	8.2%	8.3%	7.7%	5.0%
24 kgal	\$7.59	\$8.37	\$9.24	\$10.20	\$10.17	\$7.22	7.7%	7.9%	8.1%	8.3%	7.6%	5.0%
23 kgal	\$6.80	\$8.04	\$8.90	\$9.84	\$9.79	\$6.90	7.2%	8.0%	8.2%	8.4%	7.7%	5.0%
22 kgal	\$6.01	\$7.71	\$8.56	\$9.48	\$9.41	\$6.58	6.7%	8.0%	8.3%	8.4%	7.7%	5.0%
21 kgal	\$5.80	\$6.80	\$8.22	\$9.12	\$9.03	\$6.26	6.8%	7.4%	8.4%	8.6%	7.8%	5.0%
20 kgal	\$5.59	\$5.89	\$7.88	\$8.76	\$8.65	\$5.94	6.8%	6.7%	8.5%	8.7%	7.9%	5.0%
19 kgal	\$5.38	\$5.67	\$6.85	\$8.40	\$8.27	\$5.62	6.9%	6.8%	7.7%	8.8%	8.0%	5.0%
18 kgal	\$5.17	\$5.45	\$5.82	\$8.04	\$7.89	\$5.30	7.0%	6.9%	6.9%	8.9%	8.1%	5.0%
17 kgal	\$4.96	\$5.23	\$5.59	\$6.88	\$7.51	\$4.98	7.1%	7.0%	7.0%	8.1%	8.2%	5.0%
16 kgal	\$4.75	\$5.01	\$5.36	\$5.72	\$7.13	\$4.66	7.3%	7.2%	7.1%	7.1%	8.3%	5.0%
15 kgal	\$4.54	\$4.79	\$5.13	\$5.48	\$5.83	\$4.34	7.4%	7.3%	7.3%	7.2%	7.2%	5.0%
14 kgal	\$4.33	\$4.57	\$4.90	\$5.24	\$5.58	\$4.08	7.6%	7.4%	7.4%	7.4%	7.3%	5.0%
13 kgal	\$4.12	\$4.35	\$4.67	\$5.00	\$5.33	\$3.82	7.8%	7.6%	7.6%	7.6%	7.5%	5.0%
12 kgal	\$3.91	\$4.13	\$4.44	\$4.76	\$5.08	\$3.56	8.0%	7.8%	7.8%	7.8%	7.7%	5.0%
11 kgal	\$2.33	\$3.91	\$4.21	\$4.52	\$4.83	\$3.30	5.1%	8.1%	8.1%	8.0%	7.9%	5.0%
10 kgal	\$2.19	\$2.25	\$3.98	\$4.28	\$4.58	\$3.04	5.0%	4.9%	8.3%	8.3%	8.2%	5.0%
9 kgal	\$2.05	\$2.11	\$2.23	\$4.04	\$4.33	\$2.78	5.0%	4.9%	5.0%	8.6%	8.5%	5.0%
8 kgal	\$1.91	\$1.97	\$2.08	\$2.20	\$4.08	\$2.52	5.0%	4.9%	5.0%	5.0%	8.9%	5.0%
7 kgal	\$1.77	\$1.83	\$1.93	\$2.04	\$2.15	\$2.26	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
6 kgal	\$1.63	\$1.69	\$1.78	\$1.88	\$1.98	\$2.08	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
5 kgal	\$1.49	\$1.55	\$1.63	\$1.72	\$1.81	\$1.90	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
4 kgal	\$1.35	\$1.41	\$1.48	\$1.56	\$1.64	\$1.72	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
3 kgal	\$1.21	\$1.27	\$1.33	\$1.40	\$1.47	\$1.54	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
2 kgal	\$1.21	\$1.27	\$1.33	\$1.40	\$1.47	\$1.54	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
1 kgal	\$1.21	\$1.27	\$1.33	\$1.40	\$1.47	\$1.54	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
0 kgal	\$1.21	\$1.27	\$1.33	\$1.40	\$1.47	\$1.54	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%

Water Utility Rate Recommendations

- All customers: 5% increase on all rate components
- Residential Service Charge: \$1.21 per month, from \$24.14 to \$25.35
- Residential average monthly seasonal consumption: \$1.87 per month, from \$17.81 to \$19.68
- Residential average monthly seasonal consumption total bill: \$3.08, from \$41.95 to \$45.03, 7.3%
- The City average monthly consumption is about 9,600 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 9,600 gallons per month.

Wastewater Utility Rate Recommendations

- All customers: 5% increase on all rate components
- Residential Service Charge: \$0.82 per month, from \$16.40 to \$17.22
- Residential average monthly consumption: \$0.51 per month, from \$9.86 to \$10.37
- Residential average monthly consumption total bill: \$1.33, from \$26.26 to \$27.59, 5.1%
- 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 Customer Impact

Utility	Monthly	Annual
Solid Waste	\$1.36	\$16.32
Water	\$3.08	\$36.96
Wastewater	\$1.33	\$15.96
Total	\$5.77	\$69.24
Electric	\$1.50	\$18.00
Natural Gas	\$1.29	\$15.48

Enterprise Fund Fiscal Impact

The FY15/16 recommended utility rate/structure adjustments are anticipated to meet the revenue increase target of \$12,953,000

Utility	Revenue
Electric	\$210,000
Natural Gas	\$770,000
Water	\$6,201,000
Wastewater	\$3,673,000
Solid Waste*	\$2,099,000
Total	\$12,953,000

* Household Hazardous Waste Revenue not included

Enterprise Fund Reserves

	Actuals		Estimate	Forecast		Forecast
	FY 13/14		FY 14/15	FY 15/16		FY 16/17
						FY 17/18
Beginning Reserve Balance	\$	54,457,000	\$ 48,953,726	\$ 43,953,289	\$ 39,950,482	\$ 42,134,249
Total Sources	\$	306,179,518	\$ 321,297,471	\$ 337,613,350	\$ 355,404,576	\$ 374,518,822
Total Uses	\$	311,682,791	\$ 326,297,909	\$ 341,616,157	\$ 353,220,808	\$ 377,521,248
Ending Reserve Balance	\$	48,953,726	\$ 43,953,289	\$ 39,950,482	\$ 42,134,249	\$ 39,131,823
Ending Reserve Balance Percent*		15.0%	12.9%	11.3%	11.2%	10.0%
*As a % of Next Fiscal Year's Total Uses						

Schedule for FY 15/16 Utility Rate Consideration

May 4 – Introduce Utility Rate Ordinances

May 18 – City Council Action on Utility Rates

July 1 – Effective date for Utility Rate changes

