

COUNCIL MINUTES

April 21, 2016

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 21, 2016 at 7:31 a.m.

COUNCIL PRESENT COUNCIL ABSENT OFFICERS PRESENT

John Giles Dennis Kavanaugh Christopher Glover Dave Richins Kevin Thompson Alex Finter David Luna John Pombier
Jim Smith

Dee Ann Mickelsen

(Mayor Giles excused Councilmembers Finter and Luna from the entire meeting.)

1-a. Hear a presentation, discuss and provide direction on proposed utility-related capital improvement projects, utility rates, and departmental budgets for the following:

Office of Management and Budget Director Candace Cannistraro displayed a PowerPoint presentation as it relates to the Utility Department and rate recommendations for FY 16/17. (See Attachment 1)

Ms. Cannistraro stated that each utility is operated as a separate business center and each is supportive of the priorities identified by Council. She identified the following projects that were not included in the presentations:

- The various plants in the Capital Improvement Program (CIP), such as the Signal Butte
 Water Treatment Facility and the expansion of Greenfield Water Reclamation Plant,
 which are impacting and supporting Economic Development and Sustainability.
- The Environmental Management and Sustainability Department's Solid Waste Roll-off Program, which supports the Council's strategic priority of "Transforming Neighborhoods".

Ms. Cannistraro reminded the Council that the Enterprise Fund is managed as one fund with several moving parts and reviewed the financial policy as it relates to the reserve balance. (See Pages 2 and 3 of Attachment 1)

City Engineer Beth Huning provided updates on the CIP projects as it relates to the 2014 election, which approved a bond package in support of utility systems. She displayed an overview of the areas of Water, Wastewater, Gas and Electric, and the categories for which the funds were approved. (See Page 5 of Attachment 1)

Ms. Huning stated that \$315.7 million is envisioned to fund 59 total Water projects and two contracts. She noted that over two-thirds of the utility bond program is made up of the contract with Val Vista and the City of Phoenix and five major projects, consisting of the SE Mesa water supply and Val Vista transmission main projects. (See Pages 6 and 7 of Attachment 1)

Ms. Huning reported that 36 Wastewater projects and one contract total \$178.2 million. She noted that the expansion of the Greenfield Water Reclamation Plant takes up over 70% of the bond program and indicated that contracts are in place and construction should begin in 2018. (See Pages 8 and 9 of Attachment 1)

Ms. Huning reviewed the bond program amounts that were approved for Electric and Natural Gas programs. She provided examples of how those project schedules are determined by others and added that 35% of the program is driven by customer demand and new customers. (See Pages 10 through 12 of Attachment 1)

In response to a question from Mayor Giles, Ms. Cannistraro explained that the CIP program for utilities results in debt service on the bonds issued for those projects, which plays into the proposed rate recommendations.

Ms. Cannistraro discussed the revenue targets for each utility for FY 16/17. (See Pages 14 and 15 of Attachment 1) She explained that the methods of managing the revenue targets depend on the individual utility, and the impact on customers varies by utility as well.

Environmental Management and Sustainability

Environmental Management and Sustainability Department Director Scott Bouchie highlighted the following accomplishments for FY 15/16 (See Page 17 of Attachment 1):

- Converted 24 of the 70 vehicles from diesel to Compressed Natural Gas (CNG).
- The Clean Sweep/Green Sweep program has been successful.
- The FleetMind system conversion continues to allow processes to be more automated and efficient.
- Regional landfill contracts have been fully implemented.
- Partnering with Energy and Water Resources to increase the City's solar portfolio.
- Urban Garden and Place Making efforts are coming together.

Mr. Bouchie recognized Mesa's Urban Garden Group for a job well done in making a beautiful place in Downtown Mesa.

Mr. Bouchie stated that a boundary change will be effective in FY 16/17 in order to cover the growing demand in East Mesa. He reported that another area of emphasis for FY 16/17 was that significant savings have resulted from converting to CNG and a permanent CNG station will be installed this summer. He noted that negotiations for regional contracts for recycling are being explored as well.

Mr. Bouchie gave a brief synopsis of the FY 16/17 budget highlights as follows (See Page 19 of Attachment 1):

- An increase is proposed for the Clean Sweep/Green Sweep program in order to expand the program for residents and City departments.
- \$75,000 is proposed for public outreach to adequately notify customers of the boundary change that will affect pick-up days.

- Combining tonnage as a result of the regional contracts for solid waste has resulted in \$30,000 annual savings.
- Recycling revenues have decreased by \$200,000 due to the pressures from the declining market.

Mr. Bouchie detailed that the following rate increases recommended for Solid Waste Utilities (See Pages 20 and 21 of Attachment 1):

- All residential barrel rates increase by 4%.
- Mesa Green and Clean Fee increase of \$0.10 per month.
- Average residential customer increase of \$1.17 per month.
- City of Mesa refuse customers receive a 4% increase on bulk items and appliance collection.
- Commercial roll-off rates increase of 4.9% due to increased demand in service.

In response to a question from Councilmember Thompson, Mr. Bouchie confirmed that the recommended rate increases are proposed in order to meet the requirements of current expenditures, especially on the residential side.

In response to a question from Mayor Giles, Mr. Bouchie explained that Mesa contracts with various recycling companies and that several charge a processing fee. He noted that some providers perform audits as well, which determines what percentage of the recycled material may be contaminated, which is then charged to Mesa as trash. He added that Mesa is not charged disposal fees on sellable portions that do not go into the landfill, and instead receives a share of any revenue generated.

Mr. Bouchie reported that the commodity prices worldwide are changing. He stated that Mesa has six vendors in eleven different locations and each vendor pays a different rate for commodities. He added that staff always takes into consideration the cost of traveling to the higher-paying locations.

In response to a question from Mayor Giles related to additional City-owned urban gardens, Mr. Bouchie advised that there are a few other urban gardens in Mesa that are not City-owned. He stated that the Urban Garden Group is very passionate about maintaining their garden and that is how it thrives in comparison to some others.

In response to a question from Mayor Giles, Mr. Bouchie explained that a majority of material collected in Mesa's Green Barrel Program becomes mulch by a third party. He mentioned that staff is researching the opportunity of having our own composting program in the future.

In response to a question from Councilmember Richins, Mr. Bouchie confirmed that all side-loading trucks will be replaced by FY 18/19. He noted that roll-off trucks and front loaders have longer life cycles and will all be replaced by CNG vehicles by FY 21/22.

Energy Resources

Energy Resources Department Director Frank McRae identified staff present to answer any questions the Council may have. He highlighted the FY 15/16 accomplishments for Electric to include safety, reliability and growth. (See Page 23 of Attachment 1) He explained that staff has installed trip savers, which are devices that enable the circuits to reclose if tripped by a bird or tree limb, consequently reducing service calls and saving money.

Mr. McRae informed the Council that the areas of emphasis for FY 16/17 are safety, reliability and efficiency enhancements, and provided examples of each. He commented that another point of emphasis was a few major joint projects for Streets and Water, in terms of underground conversions for Electric overhead. (See Page 24 of Attachment 1)

Mr. McRae provided the following budget highlights for FY 16/17 for Electric (See Page 25 of Attachment 1):

- Safety certification credentials and training \$40,000
- Various equipment and vehicle replacements \$664,000
- Regular tree trimming in order to cut down on outages \$150,000 -200,000
- Electronic reclosers (trip savers) \$200,000
- Pole replacements \$300,000

Mr. McRae announced that the priorities for Natural Gas are also safety, reliability and efficiency. (See Page 26 of Attachment 1) He discussed the accomplishments in FY 15/16 to include the success of the Blue Stake/811 program and the construction of the CNG station located at the 6th Street campus.

In response to a question from Councilmember Richins, Mr. McRae explained that the ingress and egress to the CNG station are problematic so a public interface is not anticipated at this time.

Mr. McRae discussed the areas of emphasis for Natural Gas for FY 16/17 (See Page 27 of Attachment 1) and focused on building four pressure regulator stations. He explained that two stations come with a higher price tag due to the fact that they have a significant amount of high pressure main. He noted that those stations will offer enhanced service to existing customers and have the capacity to serve growing customers as well.

Mr. McRae stated that safety and reliability are the highlights for the Natural Gas FY 16/17 budget. He reported that Natural Gas is highly regulated for operator qualifications and one-third of employees are recertified annually, as well as all new employees. He spoke in terms of reliability, that multiple pressure regulator stations will be enhanced to connect with the Supervisory Controlled and Data Acquisition (SCADA) systems, which will allow staff to monitor the stations remotely. (See Page 28 of Attachment 1)

Mr. McRae indicated that the Electric Utility Rate recommendations include a residential system service charge increase of \$1.50 per month, which is not tied to consumption in order to prevent customer bill spikes. He noted that this was only the third proposed increase since FY 03/04. He discussed that the rate recommendations are comparably less than SRP rates. He explained that the Summer Energy Assistance (SEA) Program will assist in minimizing the rate impact to lower-income customers due to the fact that the increased customer charge will be offset by an increased discount amount. (See Pages 29 and 30 of Attachment 1)

Mr. McRae continued the presentation by reporting that the utility rate recommendations for Natural Gas are expected to increase the revenue by approximately \$605,000 per year. He reported that the proposed system service charge increase of \$1.00 per month will apply to all customers. (See Page 31 of Attachment 1)

In response to a question from Councilmember Thompson related to Blue Stake/811, Mr. McRae said that there has not been a significant increase in the amount of third-party damage as a result of increased construction. He explained that staff charges contractors with any costs associated

with staff response and repair on the gas/electric side. He advised that the City's Risk Management Department follows up on recovering those costs.

In response to a question from Mayor Giles, Mr. McRae replied that Mesa has water, electric and gas meters. He stated that a few years ago, a pilot program began that converted approximately 100 manual meters to digital, which are read by the same meter reader.

Water Resources Department Director Dan Cleavenger reported that Mesa has 230,000 meters with approximately 3,500 equipped for automatic reading. He stated that Water Resources is working jointly with Energy Resources on an RFP to evaluate if the automated technology will be feasible for Mesa. He informed the Council that the most cost-effective route to take at this time is to hire additional meter readers who can read 10,000 meters per month each with a high accuracy rate.

Mr. McRae acknowledged that there are non-cost advantages associated with advanced meter reading technology, such as turning the meter on/off remotely. He mentioned that lessons have been learned from the smart meter systems on the market and now is a good time for Mesa to evaluate those options. He added that Mesa currently uses the automated meter approach in the more cost-effective areas, where there is a further distance between meters.

Councilmember Thompson expressed the opinion that a drawback of smart meters is the human element of seeing problems with meters that can be documented, such as corrosion or tampering.

Mr. McRae responded that staff is analyzing the adverse operating conditions identified that may be missed by the automatic approach.

Mayor Giles voiced his appreciation that Mesa's rates remain lower than Salt River Project and Southwest Gas.

Water Resources

Deputy Director of Water Enterprise Services Seth Weld highlighted the accomplishments of Water Resources for FY 15/16 as follows (See Page 33 of Attachment 1):

- The Field Force automated dispatch system upgrade was completed using internal staff for a savings of \$100,000.
- The Val Vista Transmission Main project is in the last of three phases.
- Reliability improvements have been addressed.
- \$3 million in savings is projected in FY 15/16 due to the Sub-Regional Operating Group, Val Vista Water Treatment Plant, and energy and chemical usage.

Mr. Weld discussed the areas of emphasis for Water Resources in FY 16/17, as well as the budget highlights. (See Pages 34 and 35 of Attachment 1) He stated that there is a decrease in the water quantity purchase for FY 16/17, but further reported that rate projections provided by suppliers show a potential increase of \$3 million over the next four years.

In response to a question from Mayor Giles, Mr. Weld explained that the projected \$3 million increase is due to our supplier rate increases, primarily the Central Arizona Project (CAP). He confirmed that CAP is increasing its available Capital Fund for improvements on the canal system, which is lawfully passed on to Mesa and other users.

Mr. Weld continued his presentation and reviewed the Water Utility Rate structure, which is made up of two components: a flat-rate service charge based on meter size, and a usage charge based on units of consumption. (See Page 36 of Attachment 1) He indicated that the water consumption per account has declined in recent years and this year will be the second year of the five year implementation plan to align residential water tiers with usage patterns and associated costs.

Councilmember Thompson commented that the decline in water usage inadvertently impacts Mesa's water treatment plant with the flow rates.

Mr. Weld reviewed the current Water Utility Rate structure compared to the recommended structure for FY 16/17. (See Page 37 of Attachment 1) He added that the recommendation is consistent with the five year plan presented a year ago.

In response to a question from Mayor Giles, Mr. Weld stated that the average customer uses approximately 9,000 gallons of water per month, or higher in the summer months.

Mr. Weld displayed charts illustrating the monthly bill variance during the five year tier implementation, as well as the residential capacity of the water distribution system versus demand. (See Pages 38 and 39 of Attachment 1) He pointed out that the red shaded areas represent available capacity that is not used during off-peak times. He clarified that such capacity must be available during the summer months in order to meet the demand.

In response to a question from Mayor Giles, Mr. Weld clarified that the water treatment plant will not have an impact on the distribution system, which is what the charts represent.

Mr. Weld reported that the recommended Water Utility Rate increase for FY 16/17 is 5% for all customers on all rate components. He explained that the average residential customer would see a monthly bill of \$47.26. He added that staff further recommends lowering the eligibility for the Commercial and Industrial Large Water Service Rate from 8,500 kgal per month to 6,000 kgal per month, in an effort to attract large customers to the City of Mesa. (See Page 40 of Attachment 1)

Mr. Weld stated that the Wastewater Utility Rate recommendation is a 5% increase for all customers on both the service charge, which is a flat monthly rate, and a user charge, which is based on demand volume. He explained that the demand volume is calculated annually based on 90% of the average monthly water use for the three lowest use months of December through March. He continued by saying that the resulting calculation and the approximate average indoor household usage is the volume charge that the customer sees on their billing statement for next 12 months. (See Page 41 of Attachment 1)

Mayor Giles commented that the focus should be on recruiting more large commercial customers in order to operate Utilities as an enterprise. He clarified that Mesa has an advantage when it comes to the Electric Utility in that it is not subject to the Arizona Corporation Commission, which should attract users.

Ms. Cannistraro summarized by saying that the average residential customer impact for a median household will be \$4.54/month. She explained that a Homeowners Comparison Report was created to show the effect on the median household and to provide a comparison across multiple municipalities. She noted that Mesa is the fourth lowest in our comparison pool. She stated that the recommended utility rate/structure adjustments for FY 16/17 are anticipated to meet the revenue needs of the Enterprise Fund. (See Pages 43 and 44 of Attachment 1)

Ms. Cannistraro reviewed the rate adjustment forecast for the next five years. She explained that the scheduled debt service for this fiscal year had unexpected savings, which combined with refundings results in a 16.5% Reserve Fund balance. She noted that those refundings allowed enough relief on the reserves that the anticipated 5% water rate increase annually over the next few years can be lowered to 4.5% beginning in FY 17/18. She displayed the forecasted dollars that coincide with the reviewed rates and percentages. (See Pages 45 and 46 of Attachment 1)

In response to a question from Mayor Giles, Chief Financial Officer Mike Kennington reported that the day Mesa went to market with the bond was unfortunately the same day as the disaster in Brussels, which had a major impact on the market and Mesa's bond savings far exceeded expectations. He reported that Mesa saved \$13 million in Utility Revenue bonds (overall present value) and approximately \$2.5 million in savings estimated over time for the General Obligation bonds.

In response to a question from Mayor Giles related to the new Signal Butte Water Treatment Plant and increased water rates, Ms. Cannistraro explained that the City is conservatively forecasting additional accounts. She stated that if the area acquires high water usage customers then it would offset the pressure from existing users.

Councilmember Thompson commented that he met with the director of the Arizona Municipal Water Users Association (AMWUA) and they wondered if the CAP was capable of refinancing its debt in order to lower their rates like Mesa.

Mayor Giles requested that staff provide a list of important measureable metrics for the Council dashboard.

Mr. McRae listed the following measurable items for Energy Resources:

- Safety measure the number of days without accidents for employees.
- Reliability measure the average response times and identify and analyze calls that exceed the 30 minute target.
- Bill comparison measure how favorable Mesa is in comparison to other residential providers.

Mr. Bouchie listed the following measureable items for Environmental Management and Sustainability:

- Sustainability measure the kilowatt hours generated from a solar prospective.
- Measure the savings through the Energy Conservation Program.
- Measure the customer growth on the Solid Waste commercial side.
- Measure the diversion rates from residential composting.

Ms. Cannistraro reported that the departments are collecting the data internally and she is working with them to create a more public format.

Mr. Weld listed the following metrics for Water Resources:

- Reliability of the system meeting the demand with minimal service interruption and preventing sewer overflows that can become a health issue.
- Water Quality monitoring quality closely, which can change rapidly causing a significant impact on the cost of the operation to treat degrading water quality.

In response to a question from Mayor Giles, Mr. Weld informed Council that Mesa's Consumer Confidence Report is under development to be released soon and several publications have been released to reassure the public that Mesa does not have lead pipes in their distribution. He noted that some older homes may have lead based copper, which is outside of the City's realm of distribution.

Mr. Cleavenger announced that Mesa has been performing copper and lead testing in homes every three years since 1999 with no exceedances. He also reported that a recent Mesa Now segment assures customers that Mesa supplies safe and reliable water.

Mayor Giles thanked staff for the presentation.

2. Information pertaining to the current Job Order Contracting project.

This item was not discussed by the Council.

3. Acknowledge receipt of minutes of various boards and committees.

3-a. Early Childhood Education Task Force meeting held on March 30, 2016.

It was moved by Mayor Giles, seconded by Vice Mayor Kavanaugh, that the receipt of the above-listed minutes be acknowledged.

Mayor Giles declared the motion carried unanimously by those present.

4. Hear reports on meetings and/or conferences attended.

Vice Mayor Kavanaugh: Grand Opening of the Arizona International Market

Mayor Giles: What Works Cities Conference

Mayor Giles commented that Mesa is one of the first eight cities accepted into the What Works Cities initiative, which helps us become better at measuring outcomes and be more data-oriented.

5. Scheduling of meetings and general information.

Deputy City Manager John Pombier stated that the schedule of meetings is as follows:

Thursday, April 28, 2016 - Council Study Session

Thursday, April 28, 2016 - Public Safety Committee

Saturday, April 23, 2016 - District 6 Building Strong Neighborhoods

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6.	Adjournment.
	Without objection, the Study Session adjourned at 8:56 a.m.
	JOHN GILES, MAYOR
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	ANN MICKEL OFN, CITY OF FRIC
DEE A	ANN MICKELSEN, CITY CLERK
of the	by certify that the foregoing minutes are a true and correct copy of the minutes of the Study Session City Council of Mesa, Arizona, held on the 21 st day of April, 2016. I further certify that the meeting uly called and held and that a quorum was present.
	DEE ANN MICKELSEN, CITY CLERK
hm (attach	nment – 1)

City of Mesa

FY 2016/17

Utility Departments Presentations and Rate Recommendations

City Council

April 21, 2016

Presented by the Office of Management and Budget, Engineering, **Energy Resources and Water Resources Departments Environmental Management and Sustainability**



Enterprise Operations

- center Each utility is operated as a separate business
- and the city's economic sustainability The utilities assist in transforming neighborhoods
- Environmental Management and Sustainability Department's solid waste roll off program
- Treatment plants and infrastructure expansions for new residential and commercial growth



Enterprise Operations (Continued)

- over the forecast period Combined Ending Reserve Balance adheres to the adopted financial policy of at least 8-10%
- adjustments year-to-year Reserve balance can be used to smooth rate
- programs or changes in operations Reserve balance can be used to phase in new



Utility Systems - 2014 Election CIP Projects Update



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November 2014 Election Projects

		Water	Wastewater Gas	Gas	Electric
•	Lifecycle Replacement/Reliability	\$63.3M	\$32.6M	\$22.6M	\$8.7M
•	Contractual Obligations	\$46.5M	\$20.4M	\$0	\$0
•	Customer Demand in SE Mesa	\$197.3M	\$122.8M	\$0	\$0
•	Customer Demand Citywide	\$8.6M	\$2.4M	\$24.2M	\$5.8M
•	System Reinforcement	\$0	\$0	\$12.3M	\$12.5M
	Total	\$315.7M	\$178.2M	\$59.1M	\$27M



Lifecycle Replacement

\$ 63.3M

26 Projects

Water

- 4 Well Projects Projects 10 Quarter Section Waterline Replacement
- Brown Rd Water Plant Misc. Improvements
- Val Vista Pipeline Phases II & III

Contractual Obligations

\$ 46.5M

Customer Demand in SE Mesa

\$197.3M

28 Projects

- Val Vista Water Plant Contract w/Phoenix Water Settlement Contract

2 Contracts 2 Projects/

- Signal Butte Water Plant CAP Raw Water Main
- 3 Transmission Main Projects
- 8 Well Projects
- 8 Pipeline Projects
- Gateway Infrastructure

Transfer Station 3 Upgrade

Misc. Waterlines

Totals

Customer Demand-Citywide

\$ 8.6M

3 Projects

\$315.7

59 Projects/

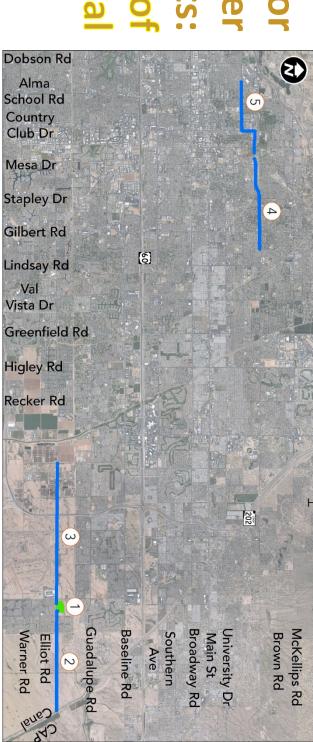
2 Contracts

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Water Projects

Major Water rojects:



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Project Name	Budget	Status	Construction Start	Construction End
1. Signal Butte Water Treatment Plant	\$128.2M	Design	July 2016	June 2018
2. CAP Raw Water Line	\$10.8M	Design	February 2017	January 2018
3. Elliot Road Water Line	\$17.9M	Design	October 2016	August 2017
4. Val Vista Transmission – Phase II	\$17.4M	Complete	February 2015	April 2016
5. Val Vista Transmission – Phase III	\$19.2M	Construction	January 2016	January 2017



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Wastewater

F				
Lifecycle Replacement	\$32.6M	21 Projects	•	Misc. Greenfield Water Rec Plant
			•	Improvements Lift Station Dipoline & Manhole
				Projects
			•	SE Plant Rehabilitation projects
Contractual Obligations	\$20.4M	1 Contract	•	91st Ave. WW Plant Mesa Share
Customer Demand in SE Mesa	\$122.8M	14 Projects	•	8 sewer projects
			•	Greenfield WRP Expansion
Customer Demands-Citywide	\$2.4M	1 Project	•	Septic to Sewer Program
TOTAL	\$178.2M	36 Projects/		
		1 Contract		



Greenfield Water Rec Plant 70% of Total Major Wastewater Project:



STATUS

Partners: Town of Gilbert
Town of Queen Creek

In Design Concept Phase

Est. Construction Start: 1st Quarter 2018

Est. Construction End: 3rd Quarter 2020



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Lifecycle Replacement	\$8.7M	 Distribution - Overhead
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Ap Att				
Lifecycle	Lifecycle Replacement	\$8.7M	• • • •	Distribution - Overhead Transmission Substation Improvements Metering
System F	System Reinforcement	\$12.5M	• • • •	Mesa Drive & Broadway Underground Electric Distri Master Plan Generation

\$3.3M \$0.7M \$2.9M \$1.8M

New Services 3roadway lectric Distribution \$2M \$8.9M \$0.6M \$1.0M \$5.8M

Totals

Customer Demand

\$5.8M

\$27M
\$27M



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Natural Gas

Totals	\$59 1M		\$59 1M
	•	New Service	\$9M
	•	Meters	\$0.9M
	•	Mains	\$13.8M
Customer Demand	\$24.2M •	 Magma Utility Svc Area & Tower Upgrades 	\$0.5M
	•	Cross Ties	\$0.6M
	•	SCADA	\$0.7M
	•	Regulator Stations	\$6.6M
	•	HP Mains	\$2.7M
System Reinforcement	\$12.3M •	Mains	\$1.7M
		Meters	\$2.6M
	•	Mesa System Line Replacements	\$10.1M
	•	 Magma System Line Replacements 	\$1.8M
	•	Other Street/Water projects	\$7.0M
Lifecycle Replacement	\$22.6M •	Mesa Dr. & Broadway	\$1.1M
S A A P			



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Nature of Electric & Gas Projects

PROJECT SCHEDULE DRIVERS:

- Gas & Electric are Under Streets + Gas
 Joint Trenched with Water:
 \$20M or 23% of Program
- Customer Demand + New Customers: \$30M or 35% of Program





Utility Rates and Revenues Fiscal Year 2016-17



Revenue Targets

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

accommodate the estimated costs In FY 2016/17, the following increases in revenues are needed to

Utility	Revenue
Electric	\$211,000
Natural Gas	\$605,000
Water	\$5,548,000
Wastewater	\$3,107,000
Solid Waste*	\$2,447,000



^{*} Household Hazardous Waste Revenue not included

Rate Adjustment Implementation

based on needs and goals of the individual adjustments can vary from year to year Methods of implementation of rate utilities

Impact on individual customers can vary and the customer consumption of services based on the method of implementation



Environmental Management and Sustainability Department



EM&S Dept. FY 15/16 Accomplishments

- CNG Fleet Conversion 24 of 70 vehicles have been converted
- Clean Sweep/Green Sweep Program success
- FleetMind routing and operational data tracking software system progressing
- Regional Partnerships established
- Landfill Contracts
- Solar Program public/private partnerships
- With Energy and Water Resources departments
- Urban Garden as part of the Place Making effort



EM&S Dept. FY 16/17 Areas of Emphasis

- Boundary change due to growth in the eastern parts of Mesa
- Permanent CNG Station to be installed
- for vendors that are coming up for renewal Explore option of regional recycle contracts



EM&S Dept. FY 16/17 Budget Highlights

- CNG vs. Diesel Savings
- FY14-15 \$305,000 savings
- FY 15-16 \$290,000 savings YTD
- Clean Sweep/Green Sweep program expansion \$60k
- FleetMind routing system implementation \$50k
- Boundary change \$75k
- Regional Contracts
- Savings from such contracts \$30k annually
- Recycling less revenues \$200k



Solid Waste Utility Rate Recommendations

- 4% increase on all residential rates
- Residential 90 gallon barrel rate: \$1.07 per month, from \$26.72 to \$27.79
- Residential 60 gallon barrel rate: \$0.95 per month, from \$23.86 to \$24.81
- Additional black barrel rate: \$0.50 per month from \$12.62 to \$13.12
- Residential green barrel service: \$0.25 per month, from \$6.31 to \$6.56



Solid Waste Utility Rate Recommendations

Mesa Green and Clean Fee: \$0.10 per month, from \$0.74

Average residential customer increase: \$1.17 from \$27.46 to \$28.63

to \$0.84

- 4.0% increase on bulk item and appliance collection for City of Mesa refuse customers
- Establishing a new bulk item and appliance collection for Non-City of Mesa refuse customers
- Commercial Front Load rates: no recommendations for adjustment at this time
- 4.9% increase on Commercial Roll Off rates



Energy Resources Department



Electric FY 15/16 Accomplishments

- Safety
- ▶ 896 days as of 3/22/16 without a Lost Time Accident
- Reliability: Continuing to optimize 12kV distribution system
- Reduced service interruptions
- Program) Pilot for Low Income Electric Residential-Summer Energy Assistance (SEA
- Commercial & Multi-Family Growth:
- Light Rail (Central Mesa Extension); Encore II, Escobedo II, El Rancho, Street Helen's Hope Chest, Ksport, Pioneer Park Food Truck Forest, Merry Main
- Electric Energy Supplies (EECAF)
- "Summer Peak Power" RFP to replace 2 expired Contracts to reduce costs
- Solar RFP
- With Water Resources and Environmental Management & Sustainability
- Evaluation of RFP responses
- Hoover Post 2017: Colorado River Hydroelectric power
- 1.5 MW allocation received via Az Power Authority
- Customer Owned Solar program
- 14 residential & 9 commercial customers as of January 31, 2016
- 1 residential customer in 15/16, Pending (5 residential & 1 commercial)



Electric FY 16/17 Areas of Emphasis

- Safety, Reliability & Efficiency
- Continue No Lost Time Accidents
- Inspection, Testing & Replacement Programs Steel, concrete, wood poles, vaults & vault lids, substation transformers, switchgear and breakers
- Substation security improvements
- Continue installation of devices that improve reliability (Trip Savers)
- ➤ 1st Avenue underground conversion
- Underground cable testing
- Electric Energy Supplies
- Administer new Summer Peak Power contracts
- Integrate Hoover Colorado Hydroelectric power
- Continue expanding Renewable Portfolio, Customer Owned Solar program
- Low Income residential rate (SEA Program)
- Enhance marketing
- Expand participation
- CP
- Underground conversions (1st Ave, Mesa Dr./Broadway)
- ArtSpace
- Gilbert light rail extension
- Economic Development & Expanding / New Customers



Electric FY 16/17 Budget Highlights

ELECTRIC

- Safety
- Training \$ 40,000
- Replacement of Equipment/Vehicles \$ 664,000
- Reliability
- Tree trimming \$ 150,000 to \$ 200,000
- Electronic Reclosers / Animal Guards \$ 200,000
- Pole Replacements \$ 300,000 +



Natural Gas FY 15/16 Accomplishments

- Safety
- ➤ 184 days as of 3/24/16 without a Lost Time Accident
- ➤ Underground damage prevention program (Blue Stake/811):
- 58% increase in locate requests in most recent 5 years
- infrastructure 15% decrease in damages to the city's natural gas utility
- Less than 1 damage per 1000 locates vs national average of 5.8 per 1000 locates for Gas infrastructure
- Natural gas supplies RFP & contract execution on 11/25/15
- Domestic & abundant energy source
- CNG Station for Environmental Management & Sustainability(EM&S) Solid Waste Trucks: RFQ, design, and prep/start construction
- Residential and commercial customer growth has remained steady



Natural Gas FY 16/17 Areas of Emphasis

- CNG Station for EM&S-Solid Waste Trucks
- Complete construction, preoperational testing & start-up September 2016
- RFP for CNG station O&M services:
- Apply IRS rebate to fund costs for O&M services
- Develop & administer training for gas service specialists
- CIP System redundancy, reliability & growth
- > Building of (4) pressure regulating stations
- Meet residential & commercial customer growth



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Natural Gas FY 16/17 Budget Highlights

<u>GAS</u>

- Safety
- Training \$ 250,000
- Replacement of Equipment/Vehicles \$ 500,000
- Reliability
- SCADA Enhancements \$ 70,000
- Pressure Regulator Stations \$ 3,000,000



Electric Utility Rate Recommendations

- month, from \$8.00 to \$9.50 Residential System Service Charge component: \$1.50 per
- Consumption component of rate: No adjustment recommended
- Average residential customer: \$1.50 per month, from \$92.92 to \$94.42, 1.5% (Including commodity pass-through cost)
- Third proposed increase since FY 2003/04
- Non-residential rates: No adjustment recommended



Electric Utility Rate Recommendations

- Proposed System Service Charge of \$9.50 is:
- ➤ \$10.50 per month less than SRP's monthly service charge of \$20.00
- Monthly bills during calendar year 2015 (at FY 2016/17 than if served by SRP (\$101.64 less per year) Mesa rates) would be approximately \$8.47 less per month
- 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 \$1.00 per
- Residential customers summer: from \$12.11 to \$13.11 per month
- Residential customers winter: from \$15.04 to \$16.04 per month
- \$34.83, 3% (Including commodity pass-through) Average residential customer monthly bill: from \$33.83 to
- served by SW Gas (\$8.64 less per year) Monthly bills during calendar year 2015 (at FY 2016/17 Mesa rates) would be approximately \$0.72 less per month than if
- Commodity costs for natural gas are passed through to the customers and are not included in the annual rate review



Water Resources Department



Water Resources FY 15/16 Accomplishments

- completed using internal staff. Field Force Automation (Mobile Dispatch) upgrade
- Val Vista Transmission Main
- Completion of Warranty Inspections Phase 1
- Completion of Phase 2
- Reliability Improvements
- Brown Rd. Water Treatment Plant Filters
- Pump Station Back Up Generators
- New Wells Drilled
- Projecting \$3M in savings
- Sub-Regional Operating Group (SROG)
- Val Vista Water Treatment Plant
- Energy & Chemical Costs



Water Resources FY 16/17 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 Staffing



Water Resources FY 16/17 Budget Highlights

- Water Purchase costs decreased \$454K
- Projected \$3M increase over next 4 years
- Increase in chemical budget \$124K
- Energy costs increased \$323K
- Joint Venture costs increased \$628K
- New positions for Signal Butte Water Treatment Plant
- Rates
- Continue with year 2 of 5 year residential water tier realignment plan



Water Utility Rate Structure

- 40% of total costs. FY 2016/17 estimated at 36.1% Over the last few years the City has focused on better aligning fixed revenues with fixed costs. Target is fixed revenues at 35-
- Water consumption per account has declined in recent years conservation awareness of people per household, less landscaping and more water more widespread use of water saving appliances, smaller number
- align the tiers with usage patterns and associated costs The City implemented a fourth residential water tier last year to
- This year will be the second year of the five year implementation
- conservation techniques if possible customers to continue assessing their water usage and apply Decreases annual impact to customers and allows time for



Water Utility Rate Structure Recommendation

Current Residential Tier Structure:

25,000 gallons and greater; \$5.05 per 1,000 gallons 23,000 - 24,000 gallons; \$4.90 per 1,000 gallons First 3,000 gallons included in service charge 12,000 - 22,000 gallons; \$4.32 per 1,000 gallons 4,000 - 11,000 gallons; \$2.88 per 1,000 gallons

Recommended Residential Tier Structure for FY 16/17: 25,000 gallons and greater; \$5.54 per 1,000 gallons 21,000 - 24,000 gallons; \$5.23 per 1,000 gallons 11,000 - 20,000 gallons; \$4.54 per 1,000 gallons First 3,000 gallons included in service charge 4,000 - 10,000 gallons; \$3.02 per 1,000 gallons



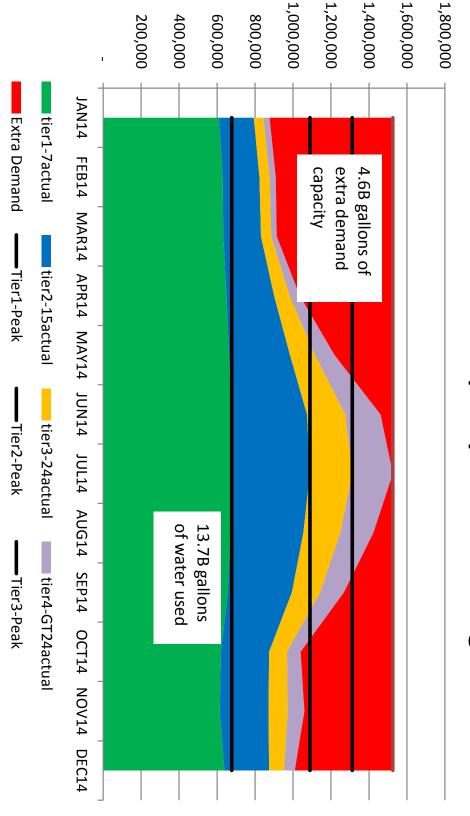
Original 2015 Five Year Implementation - Monthly Bill Variance

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



Residential Demand vs. Actual Usage

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



Water in thousands of gallons



Water Utility Rate Recommendations

- All customers: 5% increase on all rate components
- With phased adjustments in residential tiers 3 and 4
- **\$26.62** Residential Service Charge: \$1.27 per month, from \$25.35 to
- \$2.23, from \$45.03 to \$47.26 Residential average monthly seasonal consumption total bill:
- The City average monthly consumption is about 9,000 gallons resulting impact is greater than a straight 9,000 gallons per month. however seasonality takes into account high demand summer months that experience some water consumption in tier 2. The
- Water Service rate (W31.1) from 8,500 kgal per month to 6,000 Lowering the eligibility for the Commercial and Industrial Large kgal per month



Wastewater Utility Rate Recommendations

- All customers: 5% increase on all rate components
- from \$17.22 to \$18.08 Residential Service Charge: \$0.86 per month,
- from \$24.77 to \$26.01 Residential average monthly consumption total bill: \$1.24,
- average usage of the individual customer Wastewater rates are not subject to seasonality. The monthly rate is adjusted annually based on the winter water



Summary



Average Residential Customer Impact

Natural Gas	Electric	Total	Wastewater	Water	Solid Waste	Utility
\$1.00	\$1.50	\$4.54	\$1.24	\$2.23	\$1.07	Monthly
\$12.00	\$18.00	\$54.48	\$14.88	\$26.76	\$12.84	Annual



Enterprise Fund Fiscal Impact

adjustments are anticipated to meet the revenue needs of the enterprise fund. The FY 2016/17 recommended utility rate/structure

Utility	Revenue
Electric	\$211,000
Natural Gas	\$605,000
Water	\$5,548,000
Wastewater	\$3,107,000
Solid Waste*	\$2,447,000



^{*} Household Hazardous Waste Revenue not included

Rate Adjustment Forecast for the Next Five Years

	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21
	Estimate	Forecast	Forecast	Forecast	Forecast	Forecast
Ending Reserve Balance Percent*	16.5%	14.3%	11.1%	9.5%	9.8%	10.6%
*As a % of Next Fiscal Year's Expenditures						
ELC Residential (Customer Charge/Fixed Rate only)		\$1.50	\$1.50	\$2.00	\$2.50	\$2.75
ELC Non-Residential		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GAS Residential (Customer Charge/Fixed Rate only)		\$1.00	\$1.00	\$1.00	\$1.00	\$1.00
GAS Non-Residential (Customer Charge/Fixed Rate only)		\$1.00	\$1.00	\$1.00	\$1.00	\$1.00
WTR All Rate Revenue		5.0%	4.5%	4.5%	4.5%	4.0%
WW All Rate Revenue		5.0%	5.0%	5.0%	5.0%	4.5%
SW Residential		4.0%	4.0%	4.0%	4.0%	3.5%
SW Commercial		0.0%	2.0%	2.0%	2.0%	2.0%
SW Rolloff		4.9%	4.9%	2.0%	2.0%	2.0%



Enterprise Fund Reserves

	FY 15/16 Estimate	FY 16/17 Forecast	FY 17/18 Forecast	FY 18/19 Forecast	FY 19/20 Forecast	FY 20/21 Forecast
Beginning Reserve Balance	\$46.6	\$57.8	\$53.3	\$42.9	\$37.7	\$40.7
Total Sources	\$336.2	\$345.1	\$363.0	\$381.9	\$401.8	\$419.2
Total Uses	\$325.1	\$349.6	\$373.4	\$387.1	\$398.9	\$414.5
Ending Reserve Balance	\$57.8	\$53.3	\$42.9	\$37.7	\$40.7	\$45.4
Ending Reserve Balance Percentage*	16.5%	14.3%	11.1%	9.5%	9.8%	10.6%
*As a % of Next Fiscal Year's Expenditures	xpenditures					(in millions)



schedule for FY 2016/17 Utility Rate Consideration

May 2 – Introduce Utility Rate Ordinances

May 16 - City Council Action on Utility Rates

July 1 – Effective date for Utility Rate changes







Rate Adjustment Forecast Alternative

SW Rolloff	SW Commercial	SW Residential	WW All Rate Revenue	WTR All Rate Revenue	GAS Non-Residential (Customer Charge/Fixed Rate only)	GAS Residential (Customer Charge/Fixed Rate only)	ELC Non-Residential	ELC Residential (Customer Charge/Fixed Rate only)	*As a % of Next Fiscal Year's Expenditures	Ending Reserve Balance Percent*	TI TI
										16.5%	FY 15/16 Estimate
0.0%	0.0%	0.0%	0.0%	0.0%	\$1.00	\$1.00	\$0.00	\$1.50		11.8%	FY 16/17 Forecast
9.0%	2.0%	9.0%	14.1%	14.1%	\$1.00	\$1.00	\$0.00	\$1.50		10.0%	FY 17/18 Forecast
3.0%	2.0%	3.0%	1.8%	1.8%	\$1.00	\$1.00	\$0.00	\$2.00		9.4%	FY 18/19 Forecast
4.1%	2.0%	4.1%	3.2%	3.2%	\$1.00	\$1.00	\$0.00	\$2.50		9.8%	FY 19/20 Forecast
3.4%	2.0%	3.4%	4.4%	4.4%	\$1.00	\$1.00	\$0.00	\$2.75		10.5%	FY 20/21 Forecast

