

**City of Galveston**



# **Water & Sewer Rate Study Results**

**City Council: August 27, 2015**

Presentation By:  
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# Key Changes Since Initial Discussion

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- ▶ Correction to rates due to clerical error
  - ▶ Resulted in lower annual “base” revenues for rate study
- ▶ Made adjustments to FY 16 O&M and CIP
  - ▶ Staff reduced nearly all categories of operating expenses
  - ▶ Reduced near-term CIP spending for certain programs
    - ▶ Water: Fire Hydrant Replacement & Distribution Improvements
    - ▶ Sewer: I&I Line Repairs & Force Main Rehabilitation
- ▶ Result: Cost reductions offset impacts of correction

# Recap of Prior Discussion

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- ▶ Identified key rate drivers for utility systems
  - ▶ Gulf Coast Water Authority (GCWA) Increases
    - 30% in FY 2016, 10% in FY 2017; Increasing from \$8.6 to \$12.1M by 2017
  - ▶ Weather
    - ▶ FY 2015 rainfall is historically high, leading to reduced irrigation demand
  - ▶ Reserves
    - ▶ Under pressure and will need to be restored to industry guidelines
  - ▶ Cash Funded Capital & Debt Service
    - ▶ Funding requirements for needed infrastructure improvements
- ▶ Identified multi-year impacts of rate adjustments
- ▶ Discussed rate structure modifications that would moderate impacts to low volume and typical users

# Updated Residential Utility Bill Impacts: “Low Volume” User

## Base O&M

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Water (200 CF)	\$ 11.92	\$ 11.45	\$ 13.17	\$ 13.17	\$ 13.17	\$ 13.17
Sewer (200 CF)	\$ 18.09	\$ 16.45	\$ 16.45	\$ 16.45	\$ 16.45	\$ 16.45
Storm water	\$ 7.00	\$ 7.00	\$ 7.00	\$ 7.00	\$ 7.00	\$ 7.00
Sanitation	\$ 20.48	\$ 20.48	\$ 20.48	\$ 20.48	\$ 20.48	\$ 20.48
Recycling	\$ -	\$ 1.96	\$ 1.96	\$ 1.96	\$ 1.96	\$ 1.96
<b>Total</b>	<b>\$ 57.49</b>	<b>\$ 57.34</b>	<b>\$ 59.06</b>	<b>\$ 59.06</b>	<b>\$ 59.06</b>	<b>\$ 59.06</b>
		\$ (0.15)	\$ 1.72	\$ -	\$ -	\$ -
		-0.26%	3.00%	0.00%	0.00%	0.00%

FY 16 revenue increases mitigated with rate structure  
 FY 17-20 are projections and will be updated  
 Impact of rate adjustments is moderate on a total bill basis  
 GCWA = 77% of increases

CIP results in additional, but modest increases  
 FY 17-20 are projections and will be updated  
 Impacts on total utility bill remain moderate  
 Represents basis of remainder of presentation

## O&M with CIP

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Water (200 CF)	\$ 11.92	\$ 12.78	\$ 16.49	\$ 17.64	\$ 17.99	\$ 18.35
Sewer (200 CF)	\$ 18.09	\$ 19.94	\$ 21.14	\$ 22.19	\$ 23.08	\$ 23.77
Storm water	\$ 7.00	\$ 7.00	\$ 7.00	\$ 7.00	\$ 7.00	\$ 7.00
Sanitation	\$ 20.48	\$ 20.48	\$ 20.48	\$ 20.48	\$ 20.48	\$ 20.48
Recycling	\$ -	\$ 1.96	\$ 1.96	\$ 1.96	\$ 1.96	\$ 1.96
<b>Total</b>	<b>\$ 57.49</b>	<b>\$ 62.16</b>	<b>\$ 67.06</b>	<b>\$ 69.27</b>	<b>\$ 70.51</b>	<b>\$ 71.57</b>
		\$ 4.67	\$ 4.90	\$ 2.21	\$ 1.24	\$ 1.05
		8.12%	7.89%	3.30%	1.79%	1.49%

# Updated Residential Utility Bill Impacts: “Average” User

## Base O&M

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Water (500 CF)	\$ 21.28	\$ 15.62	\$ 17.97	\$ 17.97	\$ 17.97	\$ 17.97
Sewer (500 CF)	\$ 18.09	\$ 24.70	\$ 24.70	\$ 24.70	\$ 24.70	\$ 24.70
Storm water	\$ 7.00	\$ 7.00	\$ 7.00	\$ 7.00	\$ 7.00	\$ 7.00
Sanitation	\$ 20.48	\$ 20.48	\$ 20.48	\$ 20.48	\$ 20.48	\$ 20.48
Recycling	\$ -	\$ 1.96	\$ 1.96	\$ 1.96	\$ 1.96	\$ 1.96
<b>Total</b>	<b>\$ 66.85</b>	<b>\$ 69.76</b>	<b>\$ 72.11</b>	<b>\$ 72.11</b>	<b>\$ 72.11</b>	<b>\$ 72.11</b>
		\$ 2.91	\$ 2.35	\$ -	\$ -	\$ -
		4.35%	3.37%	0.00%	0.00%	0.00%

FY 16 revenue increases mitigated with rate structure  
 FY 17-20 are projections and will be updated  
 Impact of rate adjustments is moderate on a total bill basis  
 GCWA = 77% of increases

## O&M with CIP

CIP results in additional, but modest increases  
 FY 17-20 are projections and will be updated  
 Impacts on total utility bill remain moderate  
 Represents basis of remainder of presentation

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Water (500 CF)	\$ 21.28	\$ 17.64	\$ 22.76	\$ 24.35	\$ 24.84	\$ 25.33
Sewer (500 CF)	\$ 18.09	\$ 30.20	\$ 32.01	\$ 33.61	\$ 34.96	\$ 36.01
Storm water	\$ 7.00	\$ 7.00	\$ 7.00	\$ 7.00	\$ 7.00	\$ 7.00
Sanitation	\$ 20.48	\$ 20.48	\$ 20.48	\$ 20.48	\$ 20.48	\$ 20.48
Recycling	\$ -	\$ 1.96	\$ 1.96	\$ 1.96	\$ 1.96	\$ 1.96
<b>Total</b>	<b>\$ 66.85</b>	<b>\$ 77.28</b>	<b>\$ 84.21</b>	<b>\$ 87.40</b>	<b>\$ 89.23</b>	<b>\$ 90.78</b>
		\$ 10.43	\$ 6.93	\$ 3.19	\$ 1.83	\$ 1.55
		15.60%	8.96%	3.79%	2.10%	1.73%

# Local Area Rate Structures

*(Per publicly available data/research as of 7/6/15)*

Entity	Block Range (1,000 Gallons)							
	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Tier 6	Tier 7	Tier 8
Galveston	28,424	344,080	7,106,000	>7106000				
La Porte	8,000	15,000	>15000					
Texas City	All Use							
Beaumont	All Use							
Pasadena	8,000	10,000	12,000	30,000	>30000			
Freeport	12,000	>12000						
Baytown	2,000	6,000	12,000	18,000	>18000			
Pearland	6,000	15,000	25,000	>25000				
Houston	1,000	2,000	3,000	4,000	5,000	6,000	12,000	>12000
Alvin	7,000	>7000						
Port Arthur	10,000	50,000	>50000					
League City	All Use							

Entity	Block Rates ( 1,000 Gallons)							
	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Tier 6	Tier 7	Tier 8
Galveston	\$ 4.17	\$ 4.44	\$ 4.51	\$ 5.41				
La Porte	\$ 2.98	\$ 3.28	\$ 3.77					
Texas City	\$ 3.83							
Beaumont	\$ 4.80							
Pasadena	\$ 2.75	\$ 3.00	\$ 3.25	\$ 4.00	\$ 4.50			
Freeport	\$ 3.80	\$ 5.00						
Baytown	\$ 2.57	\$ 5.60	\$ 6.71	\$ 8.74	\$ 11.36			
Pearland	\$ 2.93	\$ 3.67	\$ 4.40	\$ 5.86				
Houston	\$ 0.13	\$ 6.57	\$ 0.40	\$ 10.78	\$ 4.55	\$ 4.54	\$ 4.93	\$ 8.12
Alvin	\$ 2.93	\$ 4.45						
Port Arthur	\$ 4.40	\$ 4.62	\$ 4.85					
League City	\$ 5.90							

## Our Conclusions:

- ▶ Most have some form of inclining block structure
- ▶ City's tiers are very large, notably for residential users
- ▶ City's Conservation pricing signal is not very strong

# Summary of Rate Structure Decision Points

- ▶ Changes to **residential** rate structure
  - ▶ Adjust inclining blocks per current data, practices, costs, objectives
    - ▶ Smaller tiers with steeper pricing (promotes affordability & conservation)
- ▶ Alternative structure for **non-residential** users
  - ▶ Most common practice nationally and in the state is uniform rate
  - ▶ Pay inclining block rates on sprinkler meter; profit incentive to conserve
- ▶ Separate rate structure for **sprinkler** meters
  - ▶ Consistent with residential volumes and pricing for outdoor use (not low tiers)
  - ▶ Greater conservation pricing & cost allocation for these peak uses
- ▶ Scale base monthly charges by meter size
  - ▶ Result: more capacity costs to customers with larger potential demands
- ▶ Establish a customer charge component
  - ▶ Isolates customer-costs so they are not scaled by meter size
- ▶ Remove consumption allowances included in monthly charge
  - ▶ Results in all users paying volume charges only on what they use

# Recommended Commodity Charge Modifications

- ▶ **Adjust Tiers & Pricing of Residential Rate Structure:**
  - ▶ Tier 1 = Indoor use for typical family (500CF; 0 – 500CF)
  - ▶ Tier 2 = Indoor use for larger families (500CF; 501CF – 1,000CF)
  - ▶ Tier 3 = Irrigation for typical property (1,000 CF; 1,001 – 2,000CF)
  - ▶ Tier 4 = All remaining water use (>2,000CF)
- ▶ **Sprinkler Meters – Synchronize with Residential**
  - ▶ Start with Tier 2 Pricing and Block Ranges; do not give discounted 1<sup>st</sup> Tier rate
- ▶ **Non-Residential Rates – Uniform Rate = Cost / TGAL**
  - ▶ Pay inclining block rates on separate irrigation meter; profit incentive to conserve
- ▶ **Bill all use and remove 200 CF allowance for water and 500CF allowance for sewer for all users**



# Water Commodity Charges

Cubic Feet	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Current	4,000	50,000	1,000,000	<1000000	\$3.12	\$3.32	\$3.37	\$4.05
Proposed	500	1,000	2,000	>2000	\$1.62	\$4.05	\$6.08	\$9.12

*Note: rates are shown per 100 cubic feet*

## Notes on Proposed Rates:

- 1) Include 29% revenue increase for O&M and CIP needs
- 2) Are applied to all metered use (current rates start after 200CF)
- 3) Separate irrigation meter block structure starts with 2<sup>nd</sup> Tier
- 4) Non-residential billed uniform rate equal to 2<sup>nd</sup> tier rate
- 5) FY 2015 Sewer Rate = \$3.63; FY 2016 Proposed = \$3.42

# Recommended Base Charge Modifications

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- ▶ Slightly lower the % of revenue recovered in base charges due to removal of usage allowances
  - ▶ Current: Water = 23%, Sewer = 40%
  - ▶ Recommended: Water = 21%, Sewer = 38%
- ▶ Scale charges for larger meters (excl. customer costs)
  - ▶ Use AWWA factors (most common industry practice)
  - ▶ Result: More costs to customers with larger potential demands
- ▶ Establish a customer charge component (utility billing)
  - ▶ Isolates customer-costs so they are not scaled by meter size

# Base Charges

Size	Current			Proposed		
	Water	Sewer	Total	Water	Sewer	Total
5/8"	\$11.92	\$18.09	\$30.01	\$9.54	\$13.10	\$22.64
1"	\$23.87	\$18.09	\$41.96	\$21.56	\$30.30	\$51.85
1.5"	\$47.76	\$18.09	\$65.85	\$41.58	\$58.98	\$100.56
2"	\$95.48	\$18.09	\$113.57	\$65.61	\$93.39	\$159.00
3"	\$190.99	\$18.09	\$209.08	\$129.69	\$185.15	\$314.84
4"	\$381.97	\$18.09	\$400.06	\$201.78	\$288.38	\$490.16
6"	\$763.92	\$18.09	\$782.01	\$402.03	\$575.13	\$977.16
8"	\$763.92	\$18.09	\$782.01	\$642.33	\$919.23	\$1,561.56
10"	\$763.92	\$18.09	\$782.01	\$922.68	\$1,320.68	\$2,243.36
12"	\$763.92	\$18.09	\$782.01	\$1,723.68	\$2,467.68	\$4,191.36

## Notes on Proposed Rates:

- 1) Include 29% water and 23% sewer revenue increase for O&M and CIP needs
- 2) Do not include any consumption allowances
- 3) Reflects scaling of readiness-to-serve costs by size; customer costs are allocated equally

# Resulting Allocation of FY 16 Revenue

## ▶ Water:

### ▶ Sprinklers Up

- ▶ Tier structure

### ▶ Non-Residential Up

- ▶ Up: Scaling of base chg.
- ▶ Offset: Remove tiers

### ▶ Residential Down

- ▶ Results of above

## ▶ Sewer:

### ▶ Non-Residential Up

- ▶ Scaling of base chg.

### ▶ Residential Down

- ▶ Result of above

## NEW RATE STRUCTURE WITH INCREASE

	Residential Rev (000's)	Non-Residential Rev (000's)	Sprinklers Rev (000's)	Totals Rev (000's)
Water	\$ 6,600	\$ 12,515	\$ 2,433	\$ 21,548
Sewer	\$ 8,053	\$ 7,771	\$ -	\$ 15,824
<b>Total</b>	<b>\$ 14,653</b>	<b>\$ 20,286</b>	<b>\$ 2,433</b>	<b>\$ 37,372</b>

## CURRENT RATE STRUCTURE WITH INCREASE

	Residential Rev (000's)	Non-Residential Rev (000's)	Sprinklers Rev (000's)	Totals Rev (000's)
Water	\$ 7,627	\$ 12,190	\$ 1,731	\$ 21,548
Sewer	\$ 8,151	\$ 7,673	\$ -	\$ 15,824
<b>Total</b>	<b>\$ 15,779</b>	<b>\$ 19,862</b>	<b>\$ 1,731</b>	<b>\$ 37,372</b>

Water \$ Chg.	\$ (1,027)	\$ 326	\$ 701	\$ (0)
Sewer \$. Chg.	\$ (98)	\$ 98	\$ -	\$ (0)
<b>Total \$ Chg.</b>	<b>\$ (1,125)</b>	<b>\$ 424</b>	<b>\$ 701</b>	<b>\$ (0)</b>
<b>Total % Chg.</b>	<b>-7.1%</b>	<b>2.1%</b>	<b>40.5%</b>	<b>0.0%</b>



# Customer Impacts with Base O&M

# Customer Impacts: Residential

(Across-The-Board = 15% water & 0% sewer increases to existing structure)

Inside Residential Water 5/8" Meter Water & Sewer Bill Calculations								
Monthly Use (CF)	Monthly Use (Gal)	# of Bills	% of Bills	Agg. %	Current FY 15	Proposed FY 16	\$ Chg	% Chg
0	0	35,994	14.2%	14.2%	\$30.01	\$19.62	-\$10.39	-34.6%
100	748	26,685	10.6%	24.8%	\$30.01	\$23.76	-\$6.25	-20.8%
<b>200</b>	<b>1,496</b>	<b>29,699</b>	<b>11.8%</b>	<b>36.5%</b>	<b>\$30.01</b>	<b>\$27.90</b>	<b>-\$2.11</b>	<b>-7.0%</b>
300	2,244	27,421	10.8%	47.4%	\$33.13	\$32.04	-\$1.09	-3.3%
400	2,992	25,517	10.1%	57.5%	\$36.25	\$36.18	-\$0.07	-0.2%
<b>500</b>	<b>3,740</b>	<b>21,407</b>	<b>8.5%</b>	<b>66.0%</b>	<b>\$39.37</b>	<b>\$40.32</b>	<b>\$0.95</b>	<b>2.4%</b>
600	4,488	17,040	6.7%	72.7%	\$46.12	\$46.56	\$0.44	1.0%
700	5,236	13,583	5.4%	78.1%	\$52.87	\$52.80	-\$0.07	-0.1%
800	5,984	10,433	4.1%	82.2%	\$59.62	\$59.04	-\$0.58	-1.0%
900	6,732	7,896	3.1%	85.3%	\$66.37	\$65.28	-\$1.09	-1.6%
1,000	7,480	6,559	2.6%	87.9%	\$73.12	\$71.52	-\$1.60	-2.2%
1,500	11,220	2,054	0.8%	94.2%	\$106.87	\$111.42	\$4.55	4.3%
2,000	14,960	958	0.4%	96.7%	\$140.62	\$151.32	\$10.70	7.6%
2,500	18,700	470	0.2%	97.8%	\$174.37	\$204.27	\$29.90	17.1%
5,000	37,400	64	0.0%	99.5%	\$345.12	\$469.02	\$123.90	35.9%

Across-The-Board Increase		
FY 2016	\$ Chg	% Chg.
\$31.80	\$1.79	6.0%
\$31.80	\$1.79	6.0%
<b>\$31.80</b>	<b>\$1.79</b>	<b>6.0%</b>
\$35.39	\$2.26	6.8%
\$38.97	\$2.72	7.5%
<b>\$42.56</b>	<b>\$3.19</b>	<b>8.1%</b>
\$49.78	\$3.66	7.9%
\$57.00	\$4.13	7.8%
\$64.22	\$4.60	7.7%
\$71.43	\$5.06	7.6%
\$78.65	\$5.53	7.6%
\$114.74	\$7.87	7.4%
\$150.83	\$10.21	7.3%
\$186.92	\$12.55	7.2%
\$369.67	\$24.55	7.1%

Approximately 250,000 of the City's annual utility bills are for 5/8" residential service, representing about 97% of the City's residential bills and approximately 88% of all water bills and approximately 21,000 accounts

# Customer Impacts: Non-Residential Users

(Across-The-Board = 15% water & 0% sewer increases to existing structure)

Inside Commercial Water & Sewer Bill Calculations							
Customer Type	Meter size	Monthly Use (CF)	Monthly Use (Gal)	Current FY 15	Proposed FY 16	\$ Chg	% Chg
Commercial Shop	5/8"	1,000	7,480	\$73.12	\$82.02	\$8.90	12.2%
Professional office	1"	2,000	14,960	\$143.21	\$169.11	\$25.90	18.1%
Service Station	1.5"	3,000	22,440	\$209.64	\$272.66	\$63.02	30.1%
Restruant	2"	9,000	67,320	\$622.44	\$696.44	\$74.00	11.9%
Mutlitfamily	3"	15,000	112,200	\$1,040.87	\$1,202.52	\$161.65	15.5%
Hotel	4"	25,000	187,000	\$1,734.29	\$1,974.66	\$240.37	13.9%

Across-The-Board Increase		
FY 2016	\$ Chg	% Chg.
\$78.65	\$5.53	7.6%
\$153.81	\$10.60	7.4%
\$224.76	\$15.12	7.2%
\$666.81	\$44.37	7.1%
\$1,115.33	\$74.46	7.2%
\$1,858.32	\$124.03	7.2%

Approximately 25,000 of the City's annual utility bills are for 4" and smaller non-residential service, representing about 91% of the City's non-residential bills and approximately 10% of all water bills and approximately 2,000 accounts.

# Customer Impacts: Sprinklers

(Across-The-Board = 15% water increase to existing rate structure)

Inside 5/8" Meter Sprinkler Bill Calculations									Across-The-Board Increase		
Monthly Use (CF)	Monthly Use (Gal)	# of Bills	% of Bills	Agg. %	Current Sprinkler	Proposed Sprinkler	\$ Chg	% Chg	FY 2016	\$ Chg	% Chg.
0	0	4,830	29.9%	29.9%	\$11.92	\$7.14	-\$4.78	-40.1%	\$13.71	\$1.79	15.0%
500	3,740	424	2.6%	46.3%	\$21.28	\$24.57	\$3.29	15.4%	\$24.47	\$3.19	15.0%
1,000	7,480	396	2.5%	58.7%	\$36.88	\$50.71	\$13.83	37.5%	\$42.41	\$5.53	15.0%
<b>1,500</b>	<b>11,220</b>	<b>342</b>	<b>2.1%</b>	<b>69.4%</b>	<b>\$52.48</b>	<b>\$89.93</b>	<b>\$37.45</b>	<b>71.4%</b>	<b>\$60.35</b>	<b>\$7.87</b>	<b>15.0%</b>
2,000	14,960	241	1.5%	77.5%	\$68.08	\$129.14	\$61.06	89.7%	\$78.29	\$10.21	15.0%
2,500	18,700	173	1.1%	83.3%	\$83.68	\$168.36	\$84.68	101.2%	\$96.23	\$12.55	15.0%
3,000	22,440	128	0.8%	87.3%	\$99.28	\$207.58	\$108.30	109.1%	\$114.17	\$14.89	15.0%
3,500	26,180	76	0.5%	90.3%	\$114.88	\$246.79	\$131.91	114.8%	\$132.11	\$17.23	15.0%
4,000	29,920	73	0.5%	92.4%	\$130.48	\$286.01	\$155.53	119.2%	\$150.05	\$19.57	15.0%
4,500	33,660	53	0.3%	94.1%	\$147.08	\$325.23	\$178.15	121.1%	\$169.14	\$22.06	15.0%
5,000	37,400	29	0.2%	95.3%	\$163.68	\$364.44	\$200.76	122.7%	\$188.23	\$24.55	15.0%

Approximately 16,000 of the City's annual utility bills were for 5/8" sprinkler meters, representing about 86% of the City's sprinkler bills. Less than 7% of the City's customers have sprinkler service (mostly non-residential), approximately 1,300 accounts.





# Customer Impacts with O&M and Capital

# Customer Impacts: Residential

(Across-The-Board = 29% water & 23% sewer increases to existing structure)

Inside Residential Water 5/8" Meter Water & Sewer Bill Calculations									
Monthly Use (CF)	Monthly Use (Gal)	# of Bills	% of Bills	Agg. %	Current FY 15	Proposed FY 16	\$ Chg	% Chg	
0	0	35,994	14.2%	14.2%	\$30.01	\$22.64	-\$7.37	-24.6%	
100	748	26,685	10.6%	24.8%	\$30.01	\$27.68	-\$2.33	-7.8%	
<b>200</b>	<b>1,496</b>	<b>29,699</b>	<b>11.8%</b>	<b>36.5%</b>	<b>\$30.01</b>	<b>\$32.72</b>	<b>\$2.71</b>	<b>9.0%</b>	
300	2,244	27,421	10.8%	47.4%	\$33.13	\$37.76	\$4.63	14.0%	
400	2,992	25,517	10.1%	57.5%	\$36.25	\$42.80	\$6.55	18.1%	
<b>500</b>	<b>3,740</b>	<b>21,407</b>	<b>8.5%</b>	<b>66.0%</b>	<b>\$39.37</b>	<b>\$47.84</b>	<b>\$8.47</b>	<b>21.5%</b>	
600	4,488	17,040	6.7%	72.7%	\$46.12	\$55.31	\$9.19	19.9%	
700	5,236	13,583	5.4%	78.1%	\$52.87	\$62.78	\$9.91	18.7%	
800	5,984	10,433	4.1%	82.2%	\$59.62	\$70.25	\$10.63	17.8%	
900	6,732	7,896	3.1%	85.3%	\$66.37	\$77.72	\$11.35	17.1%	
1,000	7,480	6,559	2.6%	87.9%	\$73.12	\$85.19	\$12.07	16.5%	
1,100	8,228	4,657	1.8%	89.8%	\$79.87	\$94.69	\$14.82	18.6%	
1,200	8,976	3,802	1.5%	91.3%	\$86.62	\$104.19	\$17.57	20.3%	
1,300	9,724	3,043	1.2%	92.5%	\$93.37	\$113.69	\$20.32	21.8%	
1,400	10,472	2,391	0.9%	93.4%	\$100.12	\$123.19	\$23.07	23.0%	
1,500	11,220	2,054	0.8%	94.2%	\$106.87	\$132.69	\$25.82	24.2%	
2,000	14,960	958	0.4%	96.7%	\$140.62	\$180.19	\$39.57	28.1%	
2,500	18,700	470	0.2%	97.8%	\$174.37	\$242.89	\$68.52	39.3%	
5,000	37,400	64	0.0%	99.5%	\$345.12	\$556.39	\$211.27	61.2%	

Across-The-Board Increase		
FY 2016	\$ Chg	% Chg.
\$37.63	\$7.62	25.4%
\$37.63	\$7.62	25.4%
<b>\$37.63</b>	<b>\$7.62</b>	<b>25.4%</b>
\$41.65	\$8.52	25.7%
\$45.68	\$9.43	26.0%
<b>\$49.70</b>	<b>\$10.33</b>	<b>26.2%</b>
\$58.20	\$12.08	26.2%
\$66.68	\$13.81	26.1%
\$75.18	\$15.56	26.1%
\$83.66	\$17.29	26.1%
\$92.16	\$19.04	26.0%
\$100.64	\$20.77	26.0%
\$109.13	\$22.51	26.0%
\$117.62	\$24.25	26.0%
\$126.10	\$25.98	26.0%
\$134.60	\$27.73	25.9%
\$177.04	\$36.42	25.9%
\$219.50	\$45.13	25.9%
\$434.32	\$89.20	25.8%

Approximately 250,000 of the City's annual utility bills are for 5/8" residential service, representing about 97% of the City's residential bills and approximately 88% of all water bills and approximately 21,000 accounts

# Customer Impacts: Non-Residential Users

(Across-The-Board = 29% water & 23% sewer increases to existing structure)

## Inside Commercial Water & Sewer Bill Calculations

Customer Type	Meter size	Monthly Use (CF)	Monthly Use (Gal)	Current FY 15	Proposed FY 16	\$ Chg	% Chg
Commercial Shop	5/8"	1,000	7,480	\$73.12	\$97.34	\$24.22	33.1%
Professional office	1"	2,000	14,960	\$143.21	\$201.27	\$58.06	40.5%
Service Station	1.5"	3,000	22,440	\$209.64	\$324.66	\$115.02	54.9%
Restruant	2"	9,000	67,320	\$622.44	\$831.30	\$208.86	33.6%
Mutlitfamily	3"	15,000	112,200	\$1,040.87	\$1,435.34	\$394.47	37.9%
Hotel	4"	25,000	187,000	\$1,734.29	\$2,357.66	\$623.37	35.9%

## Across-The-Board Increase

FY 2016	\$ Chg	% Chg.
\$92.16	\$19.04	26.0%
\$180.38	\$37.17	26.0%
\$263.90	\$54.26	25.9%
\$783.35	\$160.91	25.9%
\$1,310.05	\$269.18	25.9%
\$2,182.79	\$448.50	25.9%

Approximately 25,000 of the City's annual utility bills are for 4" and smaller non-residential service, representing about 91% of the City's non-residential bills and approximately 10% of all water bills and approximately 2,000 accounts.

# Customer Impacts: Sprinklers

(Across-The-Board = 29% water increase to existing rate structure)

Inside 5/8" Meter Sprinkler Bill Calculations									Across-The-Board Increase		
Monthly Use (CF)	Monthly Use (Gal)	# of Bills	% of Bills	Agg. %	Current Sprinkler	Proposed Sprinkler	\$ Chg	% Chg	FY 2016	\$ Chg	% Chg.
0	0	4,830	29.9%	29.9%	\$11.92	\$8.01	-\$3.91	-32.8%	\$15.38	\$3.46	29.0%
500	3,740	424	2.6%	46.3%	\$21.28	\$28.28	\$7.00	32.9%	\$27.45	\$6.17	29.0%
1,000	7,480	396	2.5%	58.7%	\$36.88	\$58.69	\$21.81	59.1%	\$47.58	\$10.70	29.0%
<b>1,500</b>	<b>11,220</b>	<b>342</b>	<b>2.1%</b>	<b>69.4%</b>	<b>\$52.48</b>	<b>\$104.31</b>	<b>\$51.83</b>	<b>98.8%</b>	<b>\$67.70</b>	<b>\$15.22</b>	<b>29.0%</b>
2,000	14,960	241	1.5%	77.5%	\$68.08	\$149.92	\$81.84	120.2%	\$87.82	\$19.74	29.0%
2,500	18,700	173	1.1%	83.3%	\$83.68	\$195.54	\$111.86	133.7%	\$107.95	\$24.27	29.0%
3,000	22,440	128	0.8%	87.3%	\$99.28	\$241.16	\$141.88	142.9%	\$128.07	\$28.79	29.0%
3,500	26,180	76	0.5%	90.3%	\$114.88	\$286.77	\$171.89	149.6%	\$148.20	\$33.32	29.0%
4,000	29,920	73	0.5%	92.4%	\$130.48	\$332.39	\$201.91	154.7%	\$168.32	\$37.84	29.0%
4,500	33,660	53	0.3%	94.1%	\$147.08	\$378.00	\$230.92	157.0%	\$189.73	\$42.65	29.0%
5,000	37,400	29	0.2%	95.3%	\$163.68	\$423.62	\$259.94	158.8%	\$211.15	\$47.47	29.0%

Approximately 16,000 of the City's annual utility bills were for 5/8" sprinkler meters, representing about 86% of the City's sprinkler bills. Less than 7% of the City's customers have sprinkler service (mostly non-residential), approximately 1,300 accounts.

# Next Steps

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- ▶ Receive Direction from Council
- ▶ Potential stakeholder meetings
- ▶ Perform adjustments and hold public hearings in September

# Discussion



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THROUGH CLEAR VISION**

