



Water & Sewer Rate Discussion

**Presentation by
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Reasons for Water & Sewer Rate Change

- Rising cost of water – Gulf Coast Water Authority increased City’s water price by \$2.2 million for our share of:
 - New water supply (\$774,000);
 - Capital improvements in the Thomas Mackey water plant in Texas City and to the City’s supply lines from the plant (\$939,000); and
 - Increased plant operating expenses (\$495,000).

- Needs of the City
 - Promote water conservation – Single source of supply on the mainland and demands on Brazos as primary source of water
 - Increase capacity of water and sewer systems to serve growing city
 - Address deferred maintenance – Begin systematic replacement and renewal programs



How Did We Calculate the New Rates?

- City Retained utility rate analyst – Burton & Associates
 - Projected costs and revenues for water and sewer
 - Administration prepared Five Year Capital Improvement Plan
 - Analyst prepared five year operating costs forecast
 - Analyst forecasted revenue using existing customer base

- Final recommendations
 - Convert to a multi tiered rate structure that encourages water conservation while protecting the low user customer
 - Residential, non-residential and sprinkler rates
 - Base rates for each customer class using meter size



Water Rates for FY 2016

- Gulf Coast Water Authority increase in City's water price by \$2.2 million
- CIP Projects paid for with cash in FY 2016

Waterworks CIP 2016	Phase	Cost
1. Fire Hydrant replacement program	Construction	255,000
2. Rehabilitation of 30 inch 1890 waterline	Engineering	325,000
3. Gulf Drive 6 inch water line project	Engineering	307,650
4. Removal of 12 inch water line to Pelican Island	Construction	255,000
5. Water Master Plan	Engineering	204,000
6. Water Information Mgmt. Systems	Equipment/System	42,000
7. Water System Improvements	Construction	382,500
Total Draft Water CIP 2016		\$ 1,771,150

- Water Budget increased by \$4 million



Sewer Rates for FY 2016

➤ CIP Projects paid for with cash in FY 2016

Sewer CIP 2016	Phase	Cost
1. Rehabilitation of Sanitary sewer force main	Construction	510,000
2. Lift Station SCADA	Equipment/System	160,500
3. Pirates Beach WWTP	Engineering	666,000
4. Removal of 12 inch sewer line to Pelican Island	Construction	255,000
5. Sunny Beach 8 Mile Rd. Sanitary sewer	Engineering	375,000
6. Inflow & Infiltration line repairs	Construction	765,000
7. Seawolf Park WWTP Recon & Expansion	Construction	755,386
8. Bermuda Beach Sanitary Sewer Improve	Construction	724,200
9. Spanish Grant Lift Station # 57	Construction	306,000
Total Draft Sewer CIP 2016		\$ 4,517,086

➤ Sewer Budget increased by approximately \$3 million



Local Area Rate Structures Prior to Restructuring

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							



Overall Rate Structure

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 1st Tier rate

Non-Residential Rates – Uniform Rate = Cost / TGAL

Pay inclining block rates on separate irrigation meter; profit incentive to conserve

Set base or minimum monthly rates for water and sewer individually using meter size and bill all use.

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

Customer Impacts: Residential

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

Inside Residential Water 5/8" Meter Water & Sewer Bill Calculations									Across-The-Board Increase		
Monthly Use (CF)	Monthly Use (Gal)	# of Bills	% of Bills	Agg. %	Current FY 15	Proposed FY 16	\$ Chg	% Chg	FY 2016	\$ Chg	% Chg.
0	0	35,994	14.2%	14.2%	\$30.01	\$22.64	-\$7.37	-24.6%	\$37.63	\$7.62	25.4%
100	748	26,685	10.6%	24.8%	\$30.01	\$27.68	-\$2.33	-7.8%	\$37.63	\$7.62	25.4%
200	1,496	29,699	11.8%	36.5%	\$30.01	\$32.72	\$2.71	9.0%	\$37.63	\$7.62	25.4%
300	2,244	27,421	10.8%	47.4%	\$33.13	\$37.76	\$4.63	14.0%	\$41.65	\$8.52	25.7%
400	2,992	25,517	10.1%	57.5%	\$36.25	\$42.80	\$6.55	18.1%	\$45.68	\$9.43	26.0%
500	3,740	21,407	8.5%	66.0%	\$39.37	\$47.84	\$8.47	21.5%	\$49.70	\$10.33	26.2%
600	4,488	17,040	6.7%	72.7%	\$46.12	\$55.31	\$9.19	19.9%	\$58.20	\$12.08	26.2%
700	5,236	13,583	5.4%	78.1%	\$52.87	\$62.78	\$9.91	18.7%	\$66.68	\$13.81	26.1%
800	5,984	10,433	4.1%	82.2%	\$59.62	\$70.25	\$10.63	17.8%	\$75.18	\$15.56	26.1%
900	6,732	7,896	3.1%	85.3%	\$66.37	\$77.72	\$11.35	17.1%	\$83.66	\$17.29	26.1%
1,000	7,480	6,559	2.6%	87.9%	\$73.12	\$85.19	\$12.07	16.5%	\$92.16	\$19.04	26.0%
1,100	8,228	4,657	1.8%	89.8%	\$79.87	\$94.69	\$14.82	18.6%	\$100.64	\$20.77	26.0%
1,200	8,976	3,802	1.5%	91.3%	\$86.62	\$104.19	\$17.57	20.3%	\$109.13	\$22.51	26.0%
1,300	9,724	3,043	1.2%	92.5%	\$93.37	\$113.69	\$20.32	21.8%	\$117.62	\$24.25	26.0%
1,400	10,472	2,391	0.9%	93.4%	\$100.12	\$123.19	\$23.07	23.0%	\$126.10	\$25.98	26.0%
1,500	11,220	2,054	0.8%	94.2%	\$106.87	\$132.69	\$25.82	24.2%	\$134.60	\$27.73	25.9%
2,000	14,960	958	0.4%	96.7%	\$140.62	\$180.19	\$39.57	28.1%	\$177.04	\$36.42	25.9%
2,500	18,700	470	0.2%	97.8%	\$174.37	\$242.89	\$68.52	39.3%	\$219.50	\$45.13	25.9%
5,000	37,400	64	0.0%	99.5%	\$345.12	\$556.39	\$211.27	61.2%	\$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								Across-The-Board Increase		
Customer Type	Meter size	Monthly Use (CF)	Monthly Use (Gal)	Current FY 15	Proposed FY 16	\$ Chg	% Chg	FY 2016	\$ Chg	% Chg.
Commercial Shop	5/8"	1,000	7,480	\$73.12	\$97.34	\$24.22	33.1%	\$92.16	\$19.04	26.0%
Professional office	1"	2,000	14,960	\$143.21	\$201.27	\$58.06	40.5%	\$180.38	\$37.17	26.0%
Service Station	1.5"	3,000	22,440	\$209.64	\$324.66	\$115.02	54.9%	\$263.90	\$54.26	25.9%
Restruant	2"	9,000	67,320	\$622.44	\$831.30	\$208.86	33.6%	\$783.35	\$160.91	25.9%
Mutlitfamily	3"	15,000	112,200	\$1,040.87	\$1,435.34	\$394.47	37.9%	\$1,310.05	\$269.18	25.9%
Hotel	4"	25,000	187,000	\$1,734.29	\$2,357.66	\$623.37	35.9%	\$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 = 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	\$9.54	-\$2.38	-20.0%	\$15.38	\$3.46	29.0%
500	3,740	424	2.6%	46.3%	\$21.28	\$29.79	\$8.51	40.0%	\$27.45	\$6.17	29.0%
1,000	7,480	396	2.5%	58.7%	\$36.88	\$60.19	\$23.31	63.2%	\$47.58	\$10.70	29.0%
1,500	11,220	342	2.1%	69.4%	\$52.48	\$90.59	\$38.11	72.6%	\$67.70	\$15.22	29.0%
2,000	14,960	241	1.5%	77.5%	\$68.08	\$136.19	\$68.11	100.0%	\$87.82	\$19.74	29.0%
2,500	18,700	173	1.1%	83.3%	\$83.68	\$181.79	\$98.11	117.2%	\$107.95	\$24.27	29.0%
3,000	22,440	128	0.8%	87.3%	\$99.28	\$227.39	\$128.11	129.0%	\$128.07	\$28.79	29.0%
3,500	26,180	76	0.5%	90.3%	\$114.88	\$272.99	\$158.11	137.6%	\$148.20	\$33.32	29.0%
4,000	29,920	73	0.5%	92.4%	\$130.48	\$318.59	\$188.11	144.2%	\$168.32	\$37.84	29.0%
4,500	33,660	53	0.3%	94.1%	\$147.08	\$364.19	\$217.11	147.6%	\$189.73	\$42.65	29.0%
5,000	37,400	29	0.2%	95.3%	\$163.68	\$409.79	\$246.11	150.4%	\$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.

Questions

- To check the calculation of your water and sewer charges, go to the City's web page to use the Utility Bill Calculator at:

<http://www.cityofgalveston.org/176/Utility-Billing>

- Water Customer Service – (409) 797-3550
- Email address - customerservice@cityofgalveston.org