### Council Work Session – City of League City, Texas

## 2019 Water and Wastewater Rate Study and Financial Forecast

December 17, 2019





### **Presentation Contents**



- Background on Rates
- Customers and Volumes
- Current and Forecast Cost of Service
- Rate Plan Alternatives
- Summary



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Background on Rates



# Facts about Water and Wastewater Rates in the 21st Century



- Average utility has been increasing rates 5-6% per year;
   trend expected to continue
- AWWA forecasts that water and wastewater rates across the U.S. will triple in the next 15 years
- Rate adjustments are primarily due to reasons beyond a utility's control – inflation, Capital Improvement Plans, etc.
- 30-40% of utilities charge rates that do not cover their costs



### **Current Water Rate Structure**



Residential Rates									
Minimum Charge (All Meter Sizes)	\$	7.13							
Residential Volume Rate (per 1,000 G	Sallons)								
0 - 3,000		1.50							
3,001 - 10,000		5.50							
10,001 - 25,000		7.00							
25,001 - Above		8.50							

Commercial, Multiple Unit, an	d Scho	ool Rates
Minimum Charge (All Meter Sizes)	\$	7.13
Volume Rate (per 1,000 Gallons) 0 - 3,000 3,001 - Above		3.00 5.90
Irrigation Rates	S	
Volume Rate (per 1,000 Gallons) (For all water usage including zero u	\$ isage)	7.00



### **Current Wastewater Rate Structure**



#### **Residential Rates**

Minimum Charge (All Meter Sizes) \$ 13.88

Residential Volume Rate (per 1,000 Gallons)

0 - 3,000 1.80

3,001 - 10,000 4.62

### **Commercial, Multiple Unit, and School Rates**

Minimum Charge (All Meter Sizes) \$ 13.88

Volume Rate (per 1,000 Gallons)

0 - 3,000 3.00

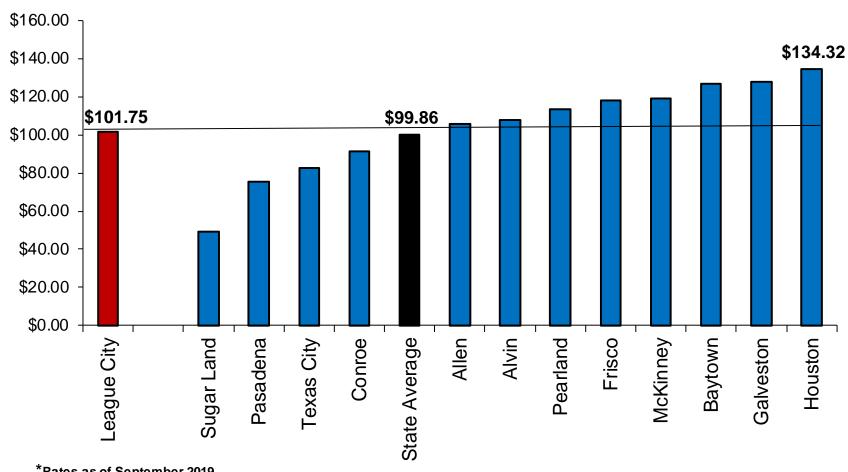
3,001 - Above 4.62



<sup>\*</sup> Residential rates have a maximum charge cap of 10,000 gallons per month

### **Monthly Residential Charge Comparison** 10,000 Gallons Water and Wastewater





<sup>\*</sup>Rates as of September 2019

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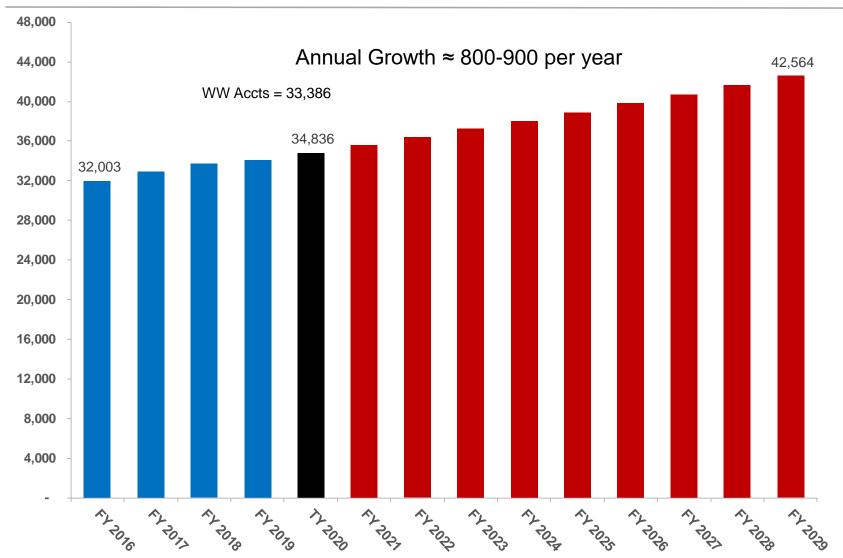


Water and Wastewater: Customers and Volumes



### **Actual and Forecast Water Accounts**



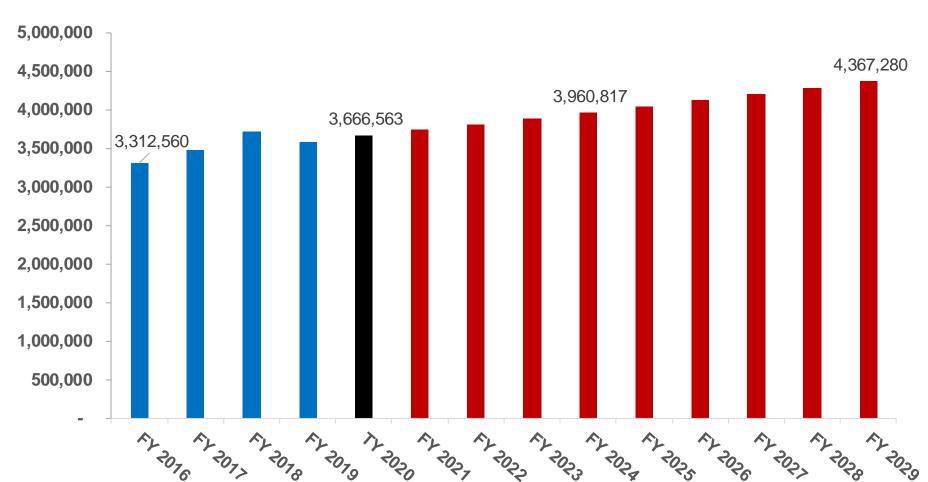




### **Actual and Forecast Water Billed Consumption**



### 1,000 Gallons





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Water and Wastewater:
Current and Forecast Cost of
Service



### **Components of Cost of Service**



- Operating Expenses
- Capital Outlays
- Debt Principal and Interest
  - o Current
  - Forecast
- Transfers



## **Key Assumptions Driving Forecast Financial and Rate Plan**



Most personnel and operating expenses increase
 3% per year



- Certain expenses increase at higher rates and/or are tied increases in accounts/volumes
- City will implement its current Capital Improvement Plan with \$501 million in water and wastewater system improvements over the next 10 years
- Capital recovery fees projected to fund approximately 26% of CIP
- Biggest impact on rate plan: New debt service required to fund
   CIP



## **Long-Term Financing Forecast Water and Wastewater Bond Issues**



Year		Amount
TY 2020	\$	13,517,000
FY 2021		6,234,000
FY 2022		14,894,000
FY 2023		62,630,000
FY 2024		21,039,000
FY 2025		27,896,000
FY 2026		42,232,000
FY 2027		19,412,000
FY 2028		70,383,000
FY 2029		12,654,000
Total	\$ 2	90,891,000

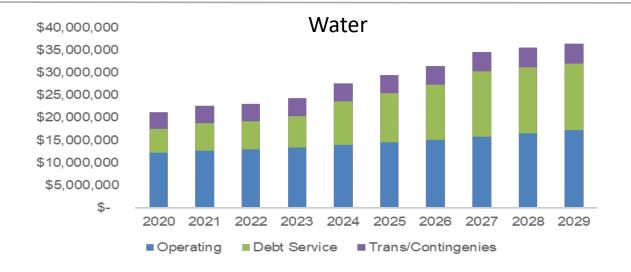
# Term Trmt Plant = 30 Years Lines = 25 Years Other = 20 Years Interest = 3.0% Fixed P&I





### **Forecast Cost of Service**









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Water and Wastewater: Rate Plan Scenarios



### **Notes on Rate Proposal**



- Only moderate rate adjustments required for water and wastewater, due to the following reasons:
  - Overall financial health of utility
  - Continued strong account growth expectations
  - Prudent management of revenues and expenses
  - Retirement of some current debt
  - Favorable debt issuance terms
- Recommend implement multi-year plan but review every 2-3 years



# Water Rate Plan Scenario I – Status Quo FY 2020 – FY 2024



						Effective		
		Current		Jan-20	Oct-20	Oct-21	Oct-22	Oct-23
WATER								
Residential								
Monthly Minimum Charge								
All Meters		\$ 7	.13 \$	7.34	\$ 7.56	\$ 7.79	\$ 8.02	\$ 8.34
Volume Rate Per 1,000 Gal								
1	3,000	1	.50	2.00	2.06	2.12	2.19	2.50
3,001	10,000		.50	5.67	5.83	6.01	6.19	6.44
	-							
10,001	25,000		.00	7.21	7.43	7.65	7.88	8.19
25,001	Above	8	.50	8.76	9.02	9.29	9.57	9.95
Commercial, Multi Unit, Sch	nools							
Monthly Minimum Charge								
All Meters		7	.13	7.34	7.56	7.79	8.02	8.34
Volume Rate Per 1,000 Gal								
1	3,000	3	.00	3.50	3.61	3.71	3.82	4.50
3,001	Above	5	.90	6.08	6.26	6.45	6.64	6.91
Irrigation								
Volume Rate Per 1,000 Gal								
	Above	7	.00	7.21	7.43	7.65	7.88	8.19
-	Above	1	.00	1.21	1.43	7.05	1.00	0.19



# Wastewater Rate Plan Scenario I – Status Quo FY 2020 – FY 2024



						Effective		
		Cu	ırrent	Jan-20	Oct-20	Oct-21	Oct-22	Oct-23
WASTEWATER		'						_
Residential								
Monthly Minimum Charge All Accts		\$	13.88	\$ 14.16	\$ 14.44	\$ 14.73	\$ 15.02	\$ 15.32
Volume Rate Per 1,000 Gal								
1	3,000		1.80	2.25	2.30	2.34	2.39	2.75
3,001	10,000		4.62	4.71	4.81	4.90	5.00	5.10
Commercial, Multi Unit, Sc Monthly Minimum Charge	hools							
All Accounts			13.88	14.16	14.44	14.73	15.02	15.32
Volume Rate Per 1,000 Gal								
1	3,000		3.00	3.50	3.57	3.64	3.71	4.25
3,001	Above		4.62	4.71	4.81	4.90	5.00	5.10



# Rate Plan Scenario I Impact on Ratepayers FY 2020 – FY 2024



					Effective		
		Current	Jan-20	Oct-20	Oct-21	Oct-22	Oct-23
<b>Residential Mo</b> 5,000 Water	onthly Charges 3/4" 5,000 WW	\$ 51.15	\$ 55.00	\$ 56.35	\$ 57.73	\$ 59.14	\$ 62.49
	Increase \$		3.85	1.34	1.39	1.41	3.35
10,000 Water	10,000 WW	101.75	106.89	109.56	112.30	115.10	120.18
	Increase \$		5.14	2.66	2.74	2.80	5.08
30,000 Water	10,000 WW Increase \$	249.25	258.82 <b>9.57</b>	266.04 <b>7.22</b>	273.47 <b>7.44</b>	281.11 <b>7.64</b>	292.83 <b>11.72</b>
Commercial Me	onthly Charges 2" 20,000 WW	217.85	225.92	231.65	237.53	243.56	254.03
20,000 114.0.	Increase \$	2	8.07	5.73	5.89	6.03	10.47
40,000 Water	40,000 WW Increase \$	428.25	441.71 <b>13.46</b>	452.97 <b>11.26</b>	464.53 <b>11.56</b>	476.39 <b>11.86</b>	494.17 <b>17.78</b>



### Scen II -- Increase Water Base Charges by Meter Size League



- Phased in over next decade; no change to WW rates
- o Advantages:
  - Lesser increases needed for residential and small meters
  - Incentive for customers to install only the size meter needed
  - Provides more stable revenue source (fixed charges)
- o Challenges:
  - Larger increase on bigger meters



## Scen II -- Increase Water Base Charges by Meter Size League City



					Effective		
		Current	Jan-20	Oct-20	Oct-21	Oct-22	Oct-23
WATER							
Residential							
Monthly Minimum Charge							
3/4"		\$ 7.13	\$ 7.27	\$ 7.49	\$ 7.71 \$	7.94	8.26
1"		7.13	7.27	7.49	7.71	7.94	8.26
1 1/2"		7.13	9.00	9.27	12.00	12.36	15.00
2"		7.13	11.00	11.33	15.00	15.45	20.00
Volume Rate Per 1,000 Gal							
1	3,000	1.50	2.00	2.06	2.12	2.19	2.50
3,001	10,000	5.50	5.61	5.78	5.95	6.13	6.38
10,001	25,000	7.00	7.14	7.35	7.57	7.80	8.11
25,001	Above	8.50	8.67	8.93	9.20	9.47	9.85
Commercial, Multi Unit, Sch	ools						
Monthly Minimum Charge							
3/4"		7.13	7.27	7.49	7.71	7.94	8.26
1"		7.13	7.27	7.49	7.71	7.94	8.26
1 1/2"		7.13	9.00	9.27	12.00	12.36	15.00
2"		7.13	11.00	11.33	15.00	15.45	20.00
3"		7.13	14.00	14.42	20.00	20.60	30.00
4"		7.13	19.00	19.57	30.00	30.90	40.00
6"		7.13	25.00	25.75	50.00	51.50	65.00
Volume Rate Per 1,000 Gal							
1	3,000	3.00	3.50	3.61	3.71	3.82	4.50
3,001	Above	5.90	6.02	6.20	6.38	6.58	6.84
Irrigation							
Volume Rate Per 1,000 Gal							
	Above	7.00	7.14	7.35	7.57	7.80	8.11



## Scen II -- Increase Water Base Charges by Meter Size League City



						Effective		
		Cu	rrent	Jan-20	Oct-20	Oct-21	Oct-22	Oct-23
WASTEWATER								
Residential Monthly Minimum Charge All Accts		\$	13.88	\$ 14.16	\$ 14.44	\$ 14.73	\$ 15.02	\$ 15.32
Volume Rate Per 1,000 Gal 1 3,001	3,000 10,000		1.80 4.62	2.25 4.71	2.30 4.81	2.34 4.90	2.39 5.00	2.75 5.10
Commercial, Multi Unit, Sc Monthly Minimum Charge All Accounts	hools		13.88	14.16	14.44	14.73	15.02	15.32
Volume Rate Per 1,000 Gal 1 3,001	3,000 Above		3.00 4.62	3.50 4.71	3.57 4.81	3.64 4.90	3.71 5.00	4.25 5.10



## Scen II -- Increase Water Base Charges by Meter Size League City



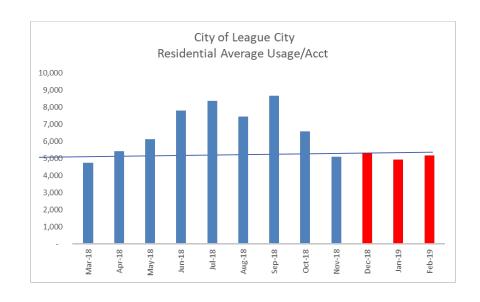
					Effective		
	Cı	urrent	Jan-20	Oct-20	Oct-21	Oct-22	Oct-23
Residential Monthly Charges 3/4"							
5,000 Water 5,000 WW Scen I Status Quo Scen II Higher Base Chgs	\$	<b>51.15</b> 51.15	\$ 55.00 54.82	\$ 56.35 56.16	\$ 57.73 57.54	\$ 59.14 58.94	\$ 62.49 62.28
10,000 Water 10,000 WW Scen I Status Quo Scen II Higher Base Chgs	\$	101.75 101.75	\$ 106.89 106.44	\$ 109.56 109.09	\$ 112.30 111.81	\$ 115.10 114.60	\$ 120.18 119.66
Commercial Monthly Charges 2"							
40,000 Water 40,000 WW Scen I Status Quo Scen II Higher Base Chgs	\$	428.25 428.25	\$ 441.71 443.18	\$ 452.97 454.49	\$ 464.53 469.42	\$ 476.39 481.43	\$ 494.17 503.35



## Scen III -- Increase Meter Charges by Meter Size Wastewater Winter Average



- Very popular and common form of wastewater rate design
- Advantages: most closely tied to actual customer usage
- Disadvantages: more difficult to understand/administer; not as effective in warm weather climates; large increase needed in first year



Residential Average Monthly Gallons	6,314
Residential Winter Average Gallons	5,141
Reduction in Billed Volume	18.6%
Approximate Residential WW Volume Rate Increase	14.0%



# **Presentation Summary Benefits of Proposed Rate Plan**



- Will enable utility to operate on a stand-alone basis and independent of general fund assistance
- Will result in financially-healthy utility that has ability to fund operations and capital needs
- Will ensure that ratepayers paying only what it costs to provide water and wastewater service
- Will allow capital investment into system to improve quality of service and provide a well-functioning system for future generations



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Questions and Discussion



# Scen III – Increase Meter Charges by Meter Size Wastewater Winter Average



		Current	Jan-20	Oct-20	Oct-21	Oct-22	Oct-23
WASTEWATER							
<u>Adjustment</u>							
Minimum Charge			14.00%	2.00%	2.00%	2.00%	2.00%
Volume Rate			14.00%	2.00%	2.00%	2.00%	2.00%
Residential							
Monthly Minimum Charge							
3/4"		\$ 13.88	\$ 15.82	\$ 16.14	\$ 16.46 \$	16.79	17.13
1"		13.88	15.82	16.14	16.46	16.79	17.13
1 1/2"		13.88	15.82	16.14	16.46	16.79	17.13
2"		13.88	15.82	16.14	16.46	16.79	17.13
Volume Rate Per 1,000 Gal							
1	3,000	1.80	2.25	2.30	2.34	2.39	2.75
3,001	10,000	4.62	5.27	5.37	5.48	5.59	5.70
Commercial, Multi Unit, Sch	nools						
Monthly Minimum Charge							
3/4"		13.88	15.82	16.14	16.46	16.79	17.13
1"		13.88	15.82	16.14	16.46	16.79	17.13
1 1/2"		13.88	15.82	16.14	16.46	16.79	17.13
2"		13.88	15.82	16.14	16.46	16.79	17.13
3"		13.88	15.82	16.14	16.46	16.79	17.13
4"		13.88	15.82	16.14	16.46	16.79	17.13
6"		13.88	15.82	16.14	16.46	16.79	17.13
Volume Rate Per 1,000 Gal							
1	3,000	3.00	3.50	3.57	3.64	3.71	4.25
3,001	Above	4.62	5.27	5.37	5.48	5.59	5.70



# Scen III -- Increase Meter Charges by Meter Size Wastewater Winter Average



	Residential Monthly Charges							
Gallons	Scenario 2	Scenario 3	Difference					
1,000	\$ 25.75	\$ 27.41	\$ 1.66					
2,000	30.00	31.66	1.66					
3,000	34.25	35.91	1.66					
4,000	44.63	46.84	2.21					
5,000	55.01	57.77	2.76					
6,000	65.39	68.71	3.32					
7,000	75.77	74.37	(1.40)					
8,000	86.15	80.04	(6.11)					
9,000	96.53	85.70	(10.83)					
10,000	106.91	91.37	(15.54)					
11,000	114.12	98.58	(15.54)					
12,000	121.33	105.79	(15.54)					
13,000	128.54	113.00	(15.54)					
14,000	135.75	120.21	(15.54)					
15,000	142.96	127.42	(15.54)					

