

September 17, 2019

Water and Wastewater Rate Study Deer Park, TX

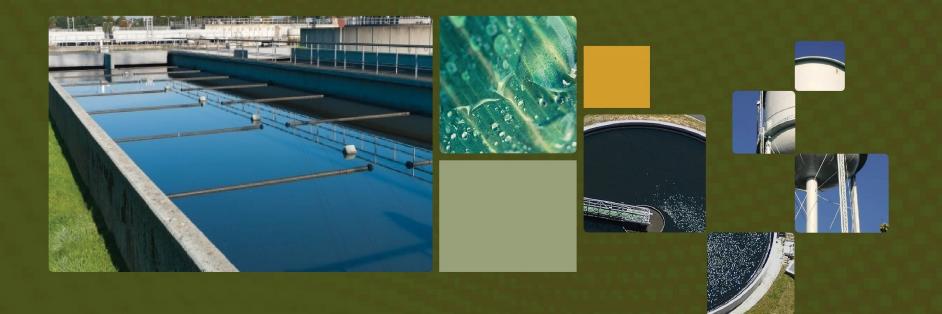


ECONOMICS STRATEGY STAKEHOLDERS SUSTAINABILITY

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Agenda

- Introduction
- Revenue Requirement
- Rate Options



Introduction



Introduction to Firm and Project Lead

• Our Firm

- NewGen is a management and economic consulting company specializing in municipalities and municipal utilities
- Project Manager
 - Matthew Garrett, MBA, CGFO, CPM
 - Former Municipal Finance Director with 16 years experience
- Lead Analyst
 - Megan Kirkland
 - Petroleum Engineering Degree from Texas A&M
 - With NewGen since 2018
 - Completed or supported a number of rate studies



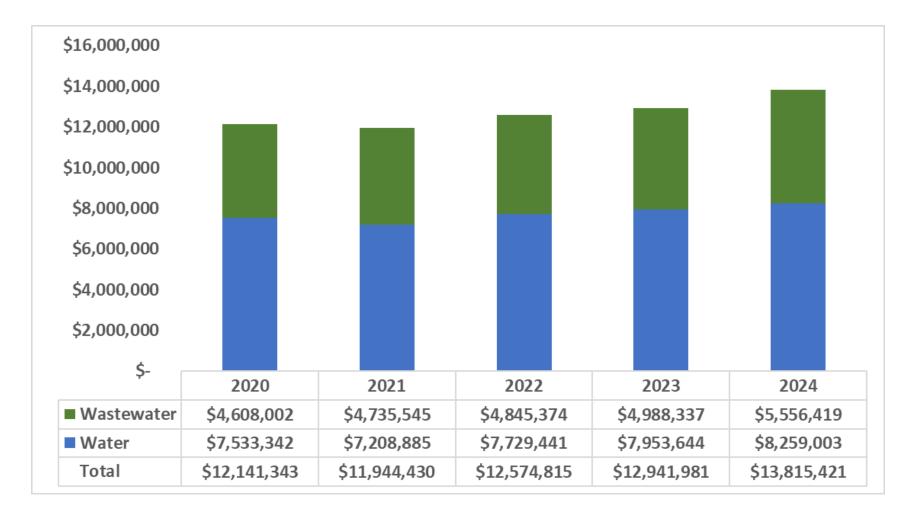
Revenue Requirements



Financial Resources Needed for 2020

- \$13,098,280 Total Expenses
- \$12,141,343 Net Revenue Requirement
 - Removes \$ 956,937 in Non-rate Revenues
 - \$ 655,937 in Prior Year Revenue
 - Water Allocation \$7,533,342 (62%)
 - Wastewater Allocation \$4,608,002 (38%)

Projected Revenue Requirements



Key Issues

- Capital Improvement Projects
 - \$10,153,700 in Capital Projects in the next 2 years
- Cash Capital Outlay
 - Approximately \$1,250,000 each year beginning FY 2021
- Raw Water from City of Houston
 - \$1,065,000 in FY 2020

CIP Funding – Estimated Project Costs

		FY 2020	F	Y 2021	FY 2022		FY 2023		FY 202	4	
	Water	\$ 3,462,500	\$5	,350,500	\$	-	c T	\$ -		\$-	
	Wastewater	1,140,700		200,000		-		-		-	
	Total	\$ 4,603,200	\$ 5	,550,500	\$ -	-		\$ -		\$-	
		Funded by 2019 Bond		e Funded 020 Bond							
Existing D	ebt Service			2020	2021		2022		2023		2024
Water			\$	1,545,028	\$ 1,564,440	\$	1,496,081	\$	1,489,078	\$	1,552,271
Wastev	vater			1,530,190	1,608,471		1,578,077		1,588,311		2,015,630
Total Exist	ing Debt Service		\$	3,075,217	\$ 3,172,911	\$	3,074,158	\$	3,077,389	\$	3,567,901
Projected	Debt Service										
Water			\$	-	\$ -	\$	367,329	\$	367,329	\$	367,329
Wastev	vater			-	-		13,731		13,731		13,731
Total Proje	ected Debt Service		\$	-	\$ -	\$	381,059	\$	381,059	\$	381,059
Combined	Debt Service										
Water			\$	1,545,028	\$ 1,564,440	\$	1,863,410	\$	1,856,406	\$	1,919,599
Wastev				1,530,190	 1,608,471		1,591,808		1,602,042		2,029,361
Total Com	bined Debt Service		\$	3,075,217	\$ 3,172,911	\$	3,455,217	\$	3,458,448	\$	3,948,960

Cash Capital

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Water	\$ -	\$ 937,500	\$ 966,754	\$ 996,921	\$ 1,028,029
Wastewater	-	312,500	322,251	332,307	342,676
Total	\$ -	\$ 1,250,00	\$ 1,289,005	\$ 1,329,227	\$ 1,370,705

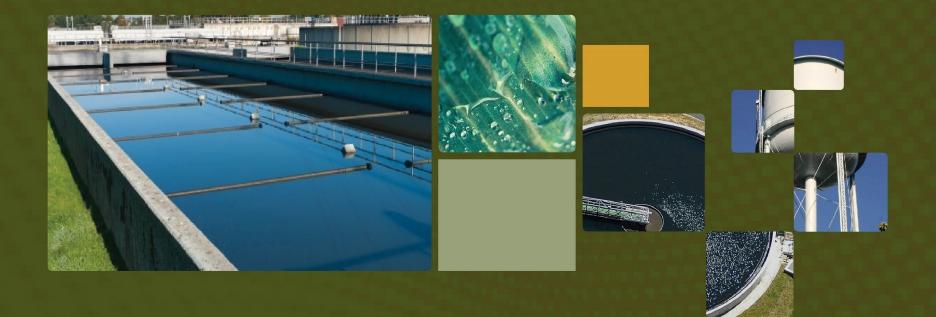
*Inflated by Construction Cost Index each year

• Assumes project totals split between areas

- 75% Water
- 25% Wastewater

Raw Water

- Purchase Raw Water from City of Houston
- Current Cost: \$1,065,000 (8% of expenses)
- Contract expiring in 2020
- Currently increase by 3.50% plus growth in water consumption each year



Rate Options



Current Rate Performance in FY 2020

• Estimated sufficiency with current rates

Revenue Requirement	\$7,533,342
Projected Revenue Under Current Rates	5,885,062
Over / (Under) Recovery	(\$1,648,279)
<u>Wastewater</u>	
Revenue Requirement	\$4,608,002
Projected Revenue Under Current Rates	5,490,671
Over / (Under) Recovery	\$882,669
Total Combined Water and Wastewater	
Revenue Requirement	\$12,141,343
Projected Revenue Under Current Rates	11,375,733
Over / (Under) Recovery	(\$765,610)
Days Cash on Hands (180 Days)	346

Water

Rate Options*

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024			
Option 1		5%						
Option 2	10%		5%					
Option 3	12%	2%	5%	2.5%	6%			
Option 4		6% 5%						

Staff Recommendation

*Each option assumes annual water/wastewater increase each fiscal year.

Option 2 Water Rates – Staff Recommended

Water - Current

	Inside City	Residential Outside	Commercial Outside
Minimum Charge	\$ 12.46	\$ 15.58	\$ 18.69
Volumetric Charge*			
0-2,000 gallons	\$ 0	\$ 0	\$ 0
2,001+ gallons	4.82	6.02	7.23

Water – FY 2020

	Inside City	Residential Outside	Commercial Outside
Minimum Charge	\$ 13.71	\$ 17.14	\$ 20.56
Volumetric Charge*			
0-2,000 gallons	\$ 0	\$ 0	\$ 0
2,001+ gallons	5.30	6.62	7.95

*Rate is per 1,000 gallons

Option 2 Wastewater Rates – Staff Recommended

Wastewater** - Current

	Inside City	Residential Outside	Commercial Outside
Minimum Charge	\$ 12.46	\$ 15.58	\$ 18.69
Volumetric Charge*			
0-2,000 gallons	\$ 0	\$ 0	\$ 0
2,001+ gallons	5.19	6.49	7.78

Wastewater** - FY 2020

	Inside City	Residential Outside	Commercial Outside
Minimum Charge	\$ 13.71	\$ 17.14	\$ 20.56
Volumetric Charge*			
0-2,000 gallons	\$ 0	\$ 0	\$ 0
2,001+ gallons	5.71	7.14	8.56

*Rate is per 1,000 gallons

**Residential has a 20,000 gallons maximum

Community Rate Comparisons

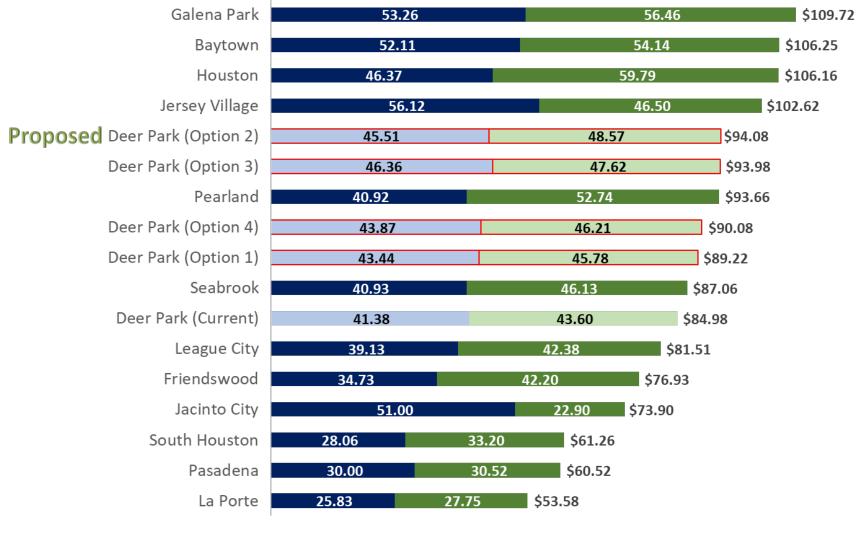
 Comparisons between communities are very common, but may not tell the whole story

 Each system is unique in geography, age of infrastructure, capital maintenance effort and typical usage patterns

Residential Current Rate Comparisons – 2,000 Gallons

Friendswood	20.23		27.	.80	\$48.03
Jersey Village	20.60		25.1	0	\$45.70
Pearland	15.30		22.74	\$38.04	
Seabrook	14.71		21.65	\$36.36	
South Houston	15.82		19.10	\$34.92	
Baytown	16.29		17.66	\$33.95	
Jacinto City	19.50		10.30 \$29.8	80	
Galena Park	14.46	14.4	5 \$28.92	2	
Deer Park (Option 3)	13.96	13.96	\$27.92		
League City	10.13	17.48	\$27.61		
Proposed Deer Park (Option 2)	13.71	13.71	\$27.42		
Deer Park (Option 4)	13.21	13.21	\$26.42		
Deer Park (Option 1)	13.08	13.08	\$26.16		
Houston	12.97	12.35	\$25.32		
Deer Park (Current)	12.46	12.46	\$24.92		
Bellaire	10.86	13.52	\$24.38		
Pasadena	11.22	11.22	\$22.44		
La Porte	7.95 9.	.75 \$17.70)		
		 Water 	Wastew	ater	

Residential Current Rate Comparisons – 8,000 Gallons



Water Wastewater

Residential Current Rate Comparisons – 15,000 Gallons

Galena Park	107.58		115.26	\$222.84
Houston	95.25		120.06	\$215.31
Baytown	105.17		78.46 \$183.63	
Jersey Village	109.99		70.93 \$180.92	
Proposed Deer Park (Option 2)	82.61	89.24	\$171.85	
Deer Park (Option 3)	84.16	86.89	\$171.05	
Deer Park (Option 4)	79.64	84.71	\$164.35	
Deer Park (Option 1)	78.86	83.93	\$162.79	
Deer Park (Current)	75.12	79.93	\$155.05	
Seabrook	75.67	74.69	\$150.36	
Pearland	75.43	62.74	\$138.17	
League City	85.13	51.62	\$136.75	
Jacinto City	87.75	37.60 \$1	25.35	
Pasadena	60.94	59.19 \$120	0.13	
Friendswood	58.68	59.00 \$117	.68	
South Houston	44.76 49.65	\$94.41		
La Porte	48.79 35.00	\$83.79		

Water Wastewater



Thank you for your time.



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