

September 17, 2019

Water and Wastewater Rate Study Deer Park, TX



ECONOMICS

STRATEGY

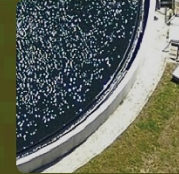
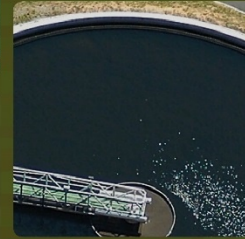
STAKEHOLDERS

SUSTAINABILITY

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Agenda

- Introduction
- Revenue Requirement
- Rate Options

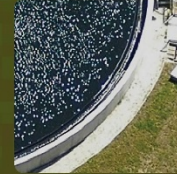


Introduction

NewGen
Strategies & Solutions

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

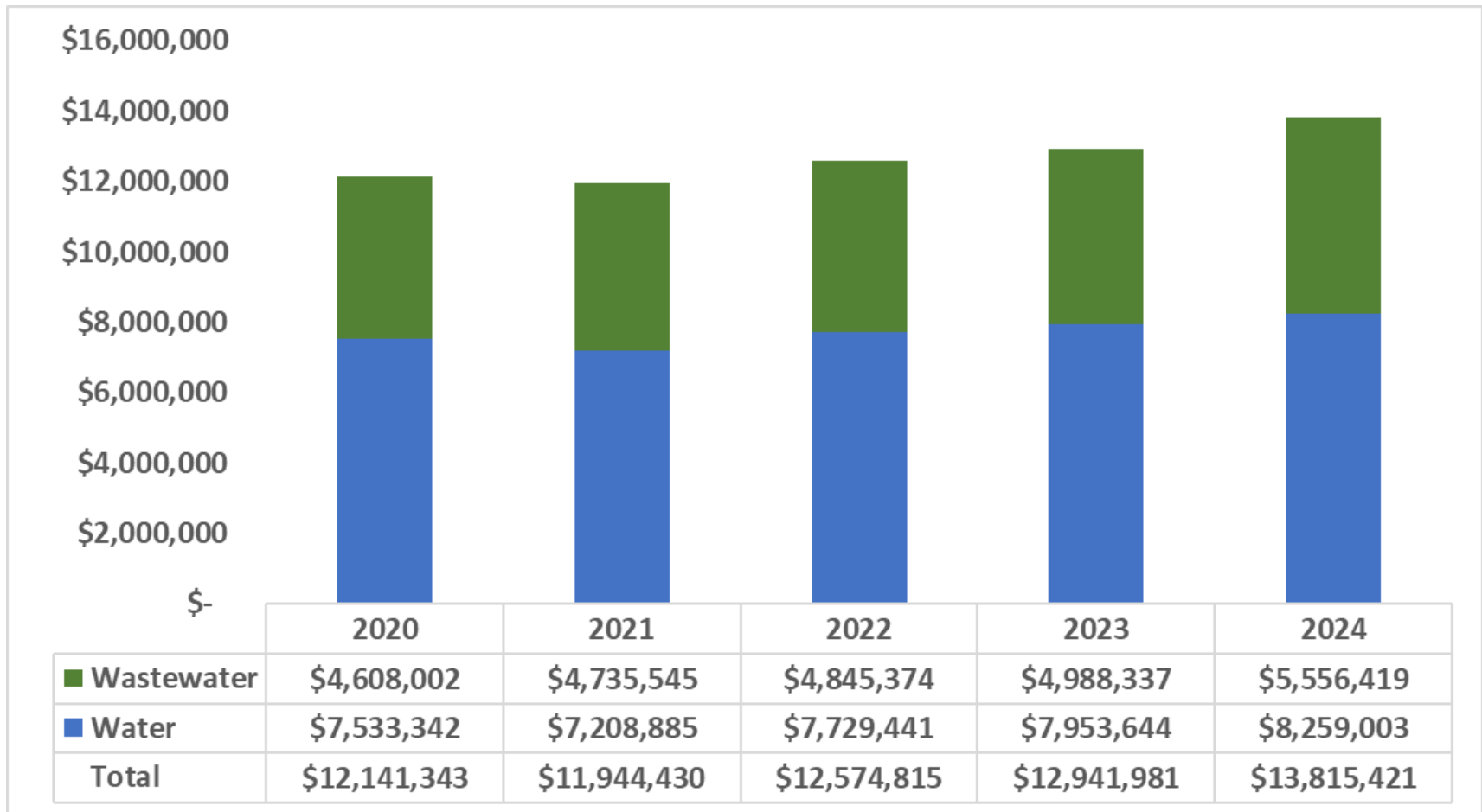


Revenue Requirements

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	FY 2021	FY 2022	FY 2023	FY 2024
Water	\$ 3,462,500	\$ 5,350,500	\$ -	\$ -	\$ -
Wastewater	1,140,700	200,000	-	-	-
Total	\$ 4,603,200	\$ 5,550,500	\$ -	\$ -	\$ -

*Funded by
2019 Bond*

*To be Funded
by 2020 Bond*

Existing Debt Service

	2020	2021	2022	2023	2024
Water	\$ 1,545,028	\$ 1,564,440	\$ 1,496,081	\$ 1,489,078	\$ 1,552,271
Wastewater	1,530,190	1,608,471	1,578,077	1,588,311	2,015,630
Total Existing 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
Wastewater	-	-	13,731	13,731	13,731
Total Projected 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
Wastewater	1,530,190	1,608,471	1,591,808	1,602,042	2,029,361
Total Combined Debt Service	\$ 3,075,217	\$ 3,172,911	\$ 3,455,217	\$ 3,458,448	\$ 3,948,960

Cash Capital

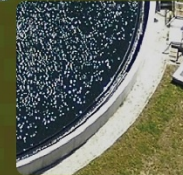
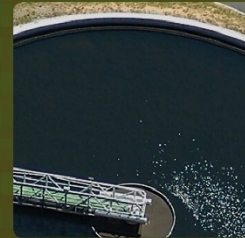
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Water	\$ -	\$ 937,500	\$ 966,754	\$ 996,921	\$ 1,028,029
Wastewater	-	312,500	322,251	332,307	342,676
Total	\$ -	\$ 1,250,00	\$ 1,289,005	\$ 1,329,227	\$ 1,370,705

*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

Water

Revenue Requirement	\$7,533,342
Projected Revenue Under Current Rates	<u>5,885,062</u>
Over / (Under) Recovery	(\$1,648,279)

Wastewater

Revenue Requirement	\$4,608,002
Projected Revenue Under Current Rates	<u>5,490,671</u>
Over / (Under) Recovery	\$882,669

Total Combined Water and Wastewater

Revenue Requirement	\$12,141,343
Projected Revenue Under Current Rates	<u>11,375,733</u>
Over / (Under) Recovery	(\$765,610)

Days Cash on Hands (180 Days)



346

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

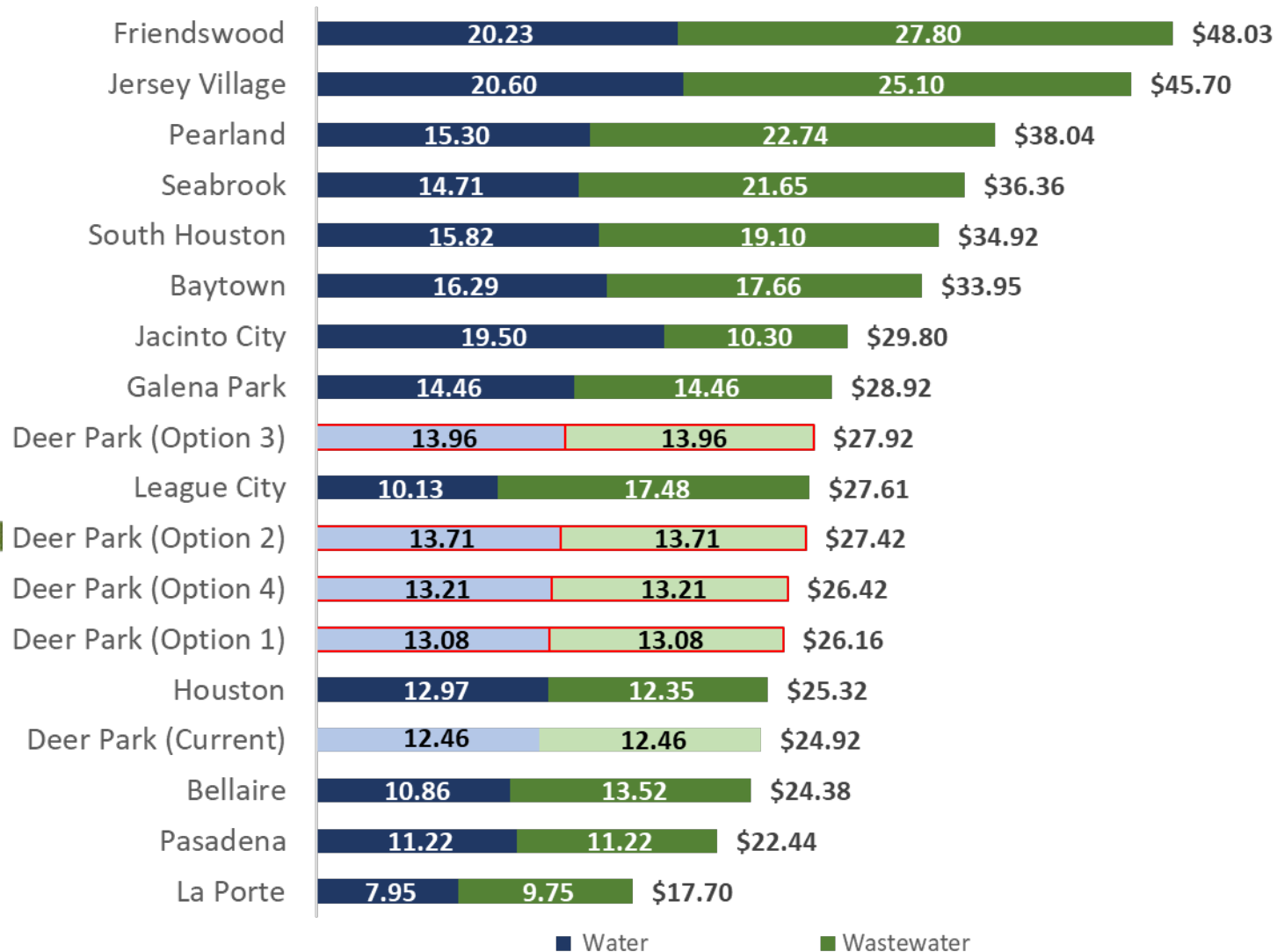
*Rate is per 1,000 gallons

**Residential has a 20,000 gallons maximum

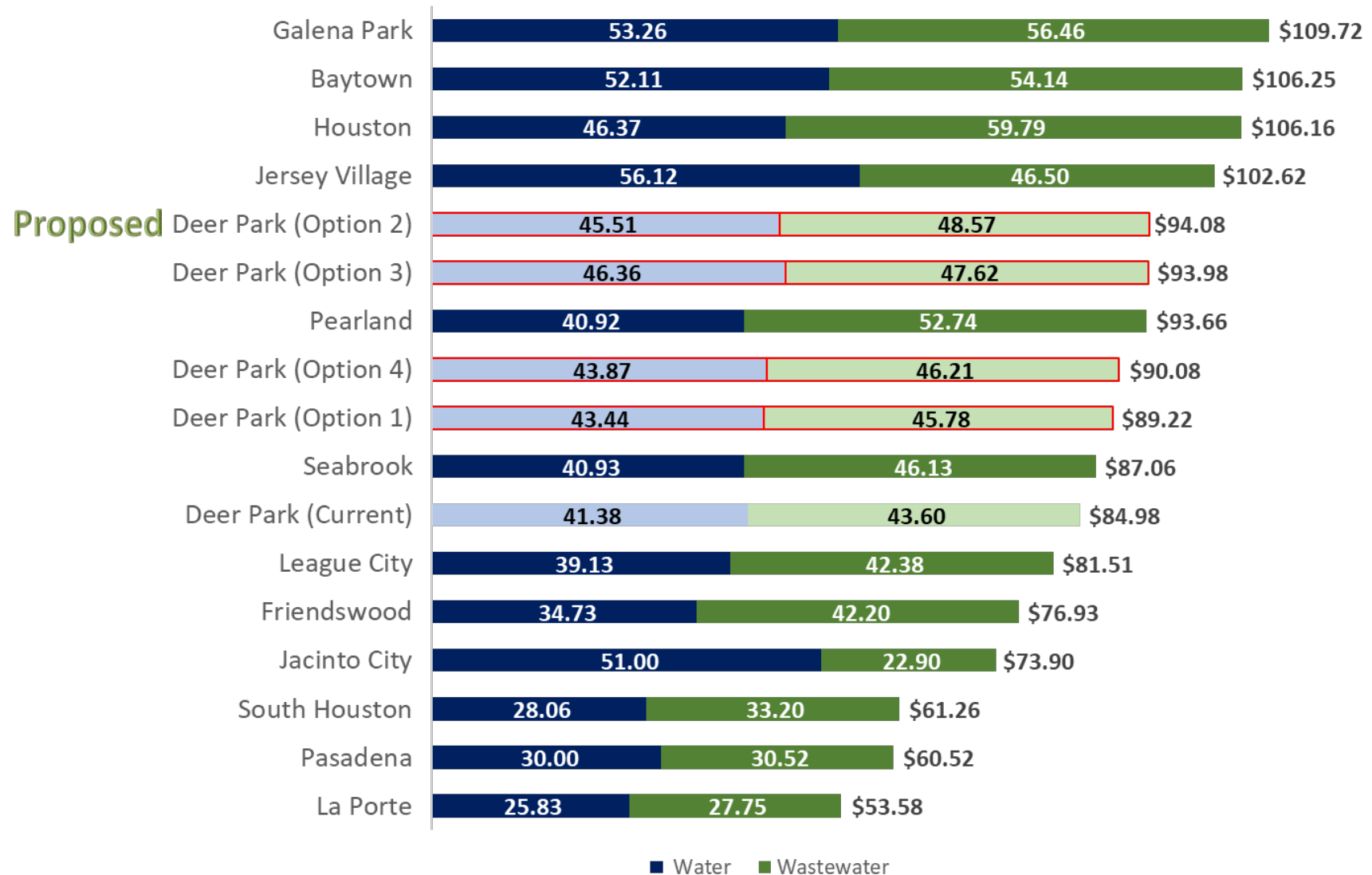
Community Rate Comparisons

- 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

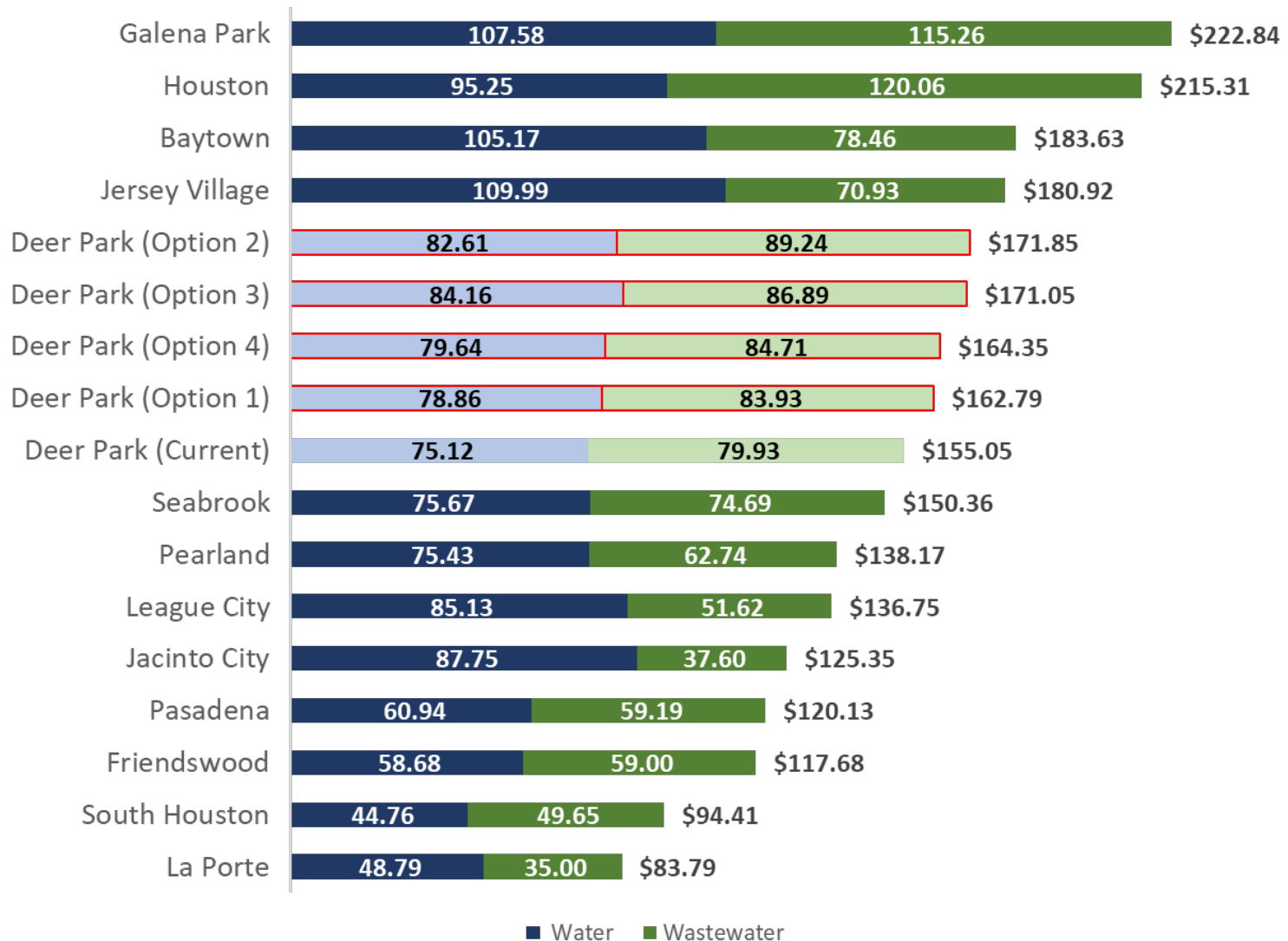


Residential Current Rate Comparisons – 8,000 Gallons



Residential Current Rate Comparisons – 15,000 Gallons

Proposed





Thank you for your time.



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