



## Water and Wastewater Rate Study

City of Deer Park, Texas



PREPARED BY:

**NewGen  
Strategies & Solutions**

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## Section 1

# INTRODUCTION

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The City of Deer Park (City) retained NewGen Strategies and Solutions, LLC (NewGen) to perform a rate study (Study) completed in September 2019 for the City's water and wastewater utilities. The purpose of the Study was to determine the total cost of providing water and wastewater services, review performance under the current rates and propose rate changes (if required) to safeguard the financial integrity of the City. This report describes the analysis performed for the City and makes recommendations with respect to rates to be charged to the City's water and wastewater customers. This report consists of four sections, the last of which details NewGen's recommendations. Schedules, which supplement the findings in this report, are provided in the Appendix.

### 1.1 Background

The City is a suburb east of Houston in Harris County. The City provides water services to approximately 14,300 retail units and wastewater services to approximately 13,100 retail units.

The City currently purchases wholesale raw water from the City of Houston (COH) and treats its own wastewater. Under the terms of the City's water contract, COH has the ability to annually adjust the rates charged to the City to ensure they can fully recover the cost of providing service. Failure by the City of Deer Park to annually pass along these rate adjustments to the City's retail customers can adversely impact the financial integrity of the City's water utility. The City's existing contract is scheduled to expire at the end of 2020. Currently, it is our understanding that it will be renewed under the same terms. As it is approximately 8% of the City's FY 2020 combined utility expenses, the rates will need to be reviewed for sufficiency if the terms are different from the current contract.

## 1.2 Current Retail Rates

The current retail water rates are shown in Table 1-1 below. The minimum charges are the same for all customers, not dependent on the meter size. The City uses a two-tiered volumetric rate structure wherein the first 2,000 gallons of usage are included in the minimum charge. The City currently charges a 1.25 multiplier for providing service to residential customers outside city limits and a 1.50 multiplier for commercial customers outside city limits. Per discussions with City staff, the rate design and structure are to remain the same.

**Table 1-1**  
**Current Retail Water Rates**

<b>Minimum Charge</b>	<b>Inside City</b>	<b>Residential Outside City</b>	<b>Commercial Outside City</b>
All	\$ 12.46	\$ 15.58	\$ 18.69
<b>Volumetric Charges (per 1,000 gallons)</b>	<b>Inside City</b>	<b>Residential Outside City</b>	<b>Commercial Outside City</b>
0 - 2,000	\$ 0.00	\$ 0.00	\$ 0.00
2,001+	4.82	6.02	7.23

The current retail wastewater rates are shown in Table 1-2 below. The minimum charges for wastewater are not dependent on meter size and customers are charged a flat volumetric rate per 1,000 gallons after the first 2,000 gallons. The volumetric charges for residential customers are capped at 20,000 gallons. The volumetric charges for non-residential (i.e., commercial) customers are based on actual water consumption and are not capped.

**Table 1-2**  
**Current Retail Wastewater Rates**

<b>Minimum Charge</b>	<b>Inside City</b>	<b>Residential Outside City</b>	<b>Commercial Outside City</b>
All	\$ 12.46	\$ 15.58	\$ 18.69
<b>Volumetric Charges (per 1,000 gallons)</b>	<b>Inside City</b>	<b>Residential Outside City</b>	<b>Commercial Outside City</b>
0 - 2,000	\$ 0.00	\$ 0.00	\$ 0.00
2,001+	5.19	6.49	7.78

## Section 2

### REVENUE REQUIREMENT

#### 2.1 Revenue Requirement

NewGen developed a “Test Year” for the Study based on the Fiscal Year (FY) 2019 Estimated Actuals and the FY 2020 Preliminary Budget.<sup>1</sup> A Test Year is a common term in rate studies that refers to an adjusted budget that is used as a basis for setting rates. The Test Year should be representative of “typical” conditions, with adjustments for unusual or one-time expenses. The Test Year separates costs and allocates them specifically to the water and wastewater functions. The development of the Test Year was completed in coordination with City staff and reflects all known and measurable changes as of this report.

The Test Year was used to develop a five-year revenue requirement forecast for FY 2020 through FY 2024. The net revenue requirement identifies the amount that should be recovered from rates in order to fully recover the cost of providing service. In addition to the Test Year, the revenue requirement incorporates inflation factors, a capital improvement plan, and debt service. General inputs and additional inflation factor details can be found in Appendix Schedule 1. The following subsections within Section 2 summarize the key factors affecting the projected revenue requirement. The five-year water and wastewater revenue requirement forecast is shown in Appendix Schedule 2. Table 2-1 below shows the net revenue requirement forecast for each utility.

**Table 2-1**  
**Total Revenue Requirement Forecast**

	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
Water	\$ 7,533,342	\$ 7,208,885	\$ 7,729,441	\$ 7,953,644	\$ 8,259,003
Wastewater	4,608,002	4,735,545	4,845,374	4,988,337	5,556,419
<b>Total</b>	<b>\$ 12,141,343</b>	<b>\$ 11,944,430</b>	<b>\$ 12,574,815</b>	<b>\$ 12,941,981</b>	<b>\$ 13,815,421</b>

Tables 2-2 and 2-3 on the following page show more detail for the individual service revenue requirements. Table 2-2 provides detail for Water, and Table 2-3 provides detail for Wastewater.

<sup>1</sup> The City’s fiscal year starts October 1 and ends September 30; the year cited is the year the fiscal year ends.

**Table 2-2**  
**Net Water Rate Revenue Requirement**

	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
<b>Expenses</b>					
Capital & Debt	\$ 3,062,552	\$ 2,505,533	\$ 2,833,852	\$ 2,857,114	\$ 2,951,516
Raw Water	1,065,000	1,102,630	1,141,521	1,181,727	1,223,349
Personnel	2,079,375	2,183,344	2,292,511	2,407,136	2,527,493
Other	1,913,739	1,597,713	1,641,892	1,688,001	1,736,979
<b>Expenses</b>	<b>\$ 8,120,666</b>	<b>\$ 7,389,220</b>	<b>\$ 7,909,776</b>	<b>\$ 8,133,979</b>	<b>\$ 8,439,337</b>
<b>Revenue Offsets</b>	<b>\$ 587,324</b>	<b>\$ 180,335</b>	<b>\$ 180,335</b>	<b>\$ 180,335</b>	<b>\$ 180,335</b>
<b>Revenue Requirement</b>	<b>\$ 7,533,342</b>	<b>\$ 7,208,885</b>	<b>\$ 7,729,441</b>	<b>\$ 7,953,644</b>	<b>\$ 8,259,003</b>

**Table 2-3**  
**Net Wastewater Rate Revenue Requirement**

	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
<b>Expenses</b>					
Capital & Debt	\$ 1,818,565	\$ 1,924,564	\$ 1,917,748	\$ 1,938,136	\$ 2,375,925
Personnel	1,537,421	1,614,292	1,695,007	1,779,757	1,868,745
Other	1,621,628	1,317,354	1,353,285	1,391,109	1,432,414
<b>Expenses</b>	<b>\$ 4,977,615</b>	<b>\$ 4,856,210</b>	<b>\$ 4,966,039</b>	<b>\$ 5,109,002</b>	<b>\$ 5,677,084</b>
<b>Revenue Offsets</b>	<b>\$ 369,613</b>	<b>\$ 120,665</b>	<b>\$ 120,665</b>	<b>\$ 120,665</b>	<b>\$ 120,665</b>
<b>Revenue Requirement</b>	<b>\$ 4,608,002</b>	<b>\$ 4,735,545</b>	<b>\$ 4,845,374</b>	<b>\$ 4,988,337</b>	<b>\$ 5,556,419</b>

### 2.2 Inflation Factors

The Test Year revenue requirement was used as the basis for the five-year financial forecast. Certain expenses were projected based on fixed costs such as debt service payments. However, the majority of expenses were Operations and Maintenance (O&M) related costs, which were inflated based on historical averages or industry standards as follows:

- General inflation at 2.66% per year.<sup>2</sup>
- Personnel increase 5.00% per year, which includes salaries and benefits.<sup>3</sup>
- COH Water Contract increases by approximately 3.50% in FY 2021. Fiscal Years 2022, 2023, and 2024 are estimated to increase by 3.50% plus water consumption growth each year.<sup>4</sup>

### 2.3 Capital Improvement Plan

The revenue requirement incorporates a capital improvement plan (CIP) provided by the City for the five-year forecast period. NewGen, per conversations with City staff, has budgeted \$8,813,000 in water projects for FY 2020 and FY 2021 combined and \$1,340,700 for FY 2020 and FY 2021 combined for wastewater projects. Further detail on the CIP projects can be seen in Appendix Schedule 3. In addition to the CIP, \$1,250,000 is budgeted as cash capital outlay for each of the outgoing years, with \$937,500 to water and \$312,500 to wastewater. These amounts are shown as capital outlay in Appendix Schedule 2 in the Water & Sewer Maintenance department.

### 2.4 Debt Service

The revenue requirement includes the City's existing debt and the associated principal and interest payments. Each individual series of debt was allocated to water and wastewater based on how the funds were used, with total existing debt being allocated 48% to water and 52% to wastewater. The amount of debt service in the revenue requirement is equal to the annual debt service needed to be recovered from rate revenues. Within the CIP, some projects are projected to be funded by debt in FY 2021. A total of \$5,550,500 is issued in FY 2021 with the first payment in FY 2022. It was assumed that this debt would have a 20-year term at a 3.23% interest rate<sup>5</sup>. Annual debt service requirements can be seen in further detail in Appendix Schedule 3.

### 2.5 Revenue Offsets

In order to determine the revenues that are required to be recovered through rates, it is necessary to subtract other miscellaneous utility related revenues. The revenue offsets identified in this Study correlate with the budgeted values in the FY 2020 Preliminary Budget, and mostly remain constant throughout the five-year forecast, to be conservative. The use of Prior Year Revenue of \$655,937 is included in FY 2020 as a one-time revenue and does not continue through the rest of the forecast.

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<sup>2</sup> American City and County Municipal Cost Index 20-Year Average as of April 2019.

<sup>3</sup> Per staff.

<sup>4</sup> Per staff.

<sup>5</sup> Per Mergent AAA Long Term Maturity Rate as of January 2019.

## Section 3 RATES

### 3.1 Recovery from Current Rates

In evaluating the performance of existing water and wastewater rates and to project future water and wastewater rates, some estimation of billed water consumption and billed wastewater flow is required. In making this estimation, NewGen relied on twelve (12) months of billing data that were chosen based on the relative similarity to the 30-year normal precipitation. Consumption data from the City's utility billing system for these most representative months was then evaluated to determine average usage per connection.

Table 3-1 provides a summary of the projected revenue to be realized if current rates remain unchanged. It should be noted that for the purpose of this analysis, NewGen has assumed an annual growth of two (2) new accounts for residential and commercial each. The residential growth is applied for FY 2020 and FY 2021, and the commercial growth is applied for each year of the forecast.<sup>6</sup>

**Table 3-1  
Revenue Recovery Under Current Rates**

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
<b>Water</b>					
Revenue Requirement	\$ 7,533,342	\$ 7,208,885	\$ 7,729,441	\$ 7,953,644	\$ 8,259,003
Projected Revenue Under Current Rates	5,885,062	5,886,977	5,888,525	5,889,776	5,891,027
Over/ (Under) Recovery	<b>(\$ 1,648,297)</b>	<b>(\$ 1,321,908)</b>	<b>(\$ 1,840,916)</b>	<b>(\$ 2,063,868)</b>	<b>(\$ 2,367,975)</b>
<b>Wastewater</b>					
Revenue Requirement	\$ 4,608,002	\$ 4,735,545	\$ 4,845,374	\$ 4,988,337	\$ 5,556,419
Projected Revenue Under Current Rates	5,490,671	5,492,697	5,494,345	5,495,683	5,497,022
Over/ (Under) Recovery	<b>\$ 882,669</b>	<b>\$ 757,153</b>	<b>\$ 648,971</b>	<b>\$ 507,346</b>	<b>(\$ 59,397)</b>
<b>Total</b>					
Revenue Requirement	\$ 12,141,343	\$ 11,944,430	\$ 12,574,815	\$ 12,941,981	\$ 13,815,421
Projected Revenue Under Current Rates	11,375,733	11,379,674	11,382,870	11,385,460	11,388,049
Over/ (Under) Recovery	<b>(\$ 765,610)</b>	<b>(\$ 564,756)</b>	<b>(\$ 1,191,945)</b>	<b>(\$ 1,556,522)</b>	<b>(\$ 2,427,372)</b>

As shown above, the City is projected to fall short of its combined water and wastewater FY 2020 revenue requirements with no rate changes.











<sup>6</sup> Per staff.



## Section 3

Table 3-2 illustrates the City's combined utility performance as compared to the City's financial policy objectives for the utility. These metrics include achieving a Debt Service Coverage Ratio of at least 1.1 times the debt service requirements and maintaining an Operating Reserve of no less than the cost of operating expenses for 180 days.

**Table 3-2**  
**Combined Utility Performance Under Current Rates**

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
<b>Beginning Unrestricted Net Position</b>	\$8,552,323	\$7,786,713	\$7,221,957	\$6,030,012	\$4,473,491
Total Revenues	12,332,670	11,680,674	11,683,870	11,686,460	11,689,049
Total Expenses	13,098,280	12,245,430	12,875,815	13,242,981	14,116,421
<b>Ending Unrestricted Net Position</b>	<b>\$7,786,713</b>	<b>\$7,221,957</b>	<b>\$6,030,012</b>	<b>\$4,473,491</b>	<b>\$2,046,118</b>
<b>Days Cash on Hand (180 Days)</b>	 346  337  271  193  85				
<b>Debt Service Coverage</b>					
Total Revenues	\$ 12,332,670	\$ 11,680,674	\$ 11,683,870	\$ 11,686,460	\$ 11,689,049
Total Expenses Less Debt Service Less Capital Outlay	8,224,163	7,822,519	8,131,593	8,455,306	8,796,756
<b>Available for Debt Service Coverage</b>	<b>\$ 4,108,507</b>	<b>\$ 3,858,155</b>	<b>\$ 3,552,278</b>	<b>\$ 3,231,154</b>	<b>\$ 2,892,293</b>
Debt Service	3,075,217	3,172,911	3,455,217	3,458,448	3,948,960
<b>Coverage Ratio</b>	 1.34  1.22  1.03  0.93  0.73				
<b>Target Debt Service Coverage Ratio</b>	1.10	1.10	1.10	1.10	1.10

## 3.2 Rate Options

NewGen recommended four (4) different options to the City for possible rate changes; for each option, the percentages were the same for both water and wastewater. Table 3-3 shows the percentages for each option by year. In each option, there is a rate increase in each year. Option 1 is 5% each year, which is what the City has previously done. Option 2 has a 10% increase in FY 2020 and then back down to 5% each year after that. This is the option that City staff recommends. Option 3 has percentages that are determined to make the utility breakeven each year. Option 4 smooths out the rate increases each to ultimately have the utility breakeven by FY 2024. All these options are based on the current assumptions and may merit revision if future needs vary from the current expectations.

**Table 3-3**  
**Summary of Rate Options**

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
<b>Option 1</b>	← 5% →				
<b>Option 2</b>	10%	← 5% →			
<b>Option 3</b>	12%	2%	5%	2.5%	6%
<b>Option 4</b>	← 6% →			← 5% →	

### 3.3 Proposed Rates Summary

The remainder of this report represents the proposed rates, which are the same as the staff recommended rates shown in Option 2. Tables 3-4 and 3-5 show the proposed inside residential rates for each year, for water and wastewater, respectively. The full rate schedules for the proposed rates can be found in Appendix Schedule 4 (water) and Appendix Schedule 5 (wastewater). The proposed rates achieve the utility's objectives of full cost recovery and meeting both its Debt Service Coverage Target and Days Cash on Hand Target. Table 3-6 shows the revenue recovery with the proposed rates and Table 3-7 shows the combined utility performance. The complete summary of utility performance using the proposed rates can be found in Appendix Schedule 6. Also, Appendix Schedule 7 provides a residential bill impact of each option along with a regional comparison of rates from different cities.

**Table 3-4  
Proposed Residential Water Rates**

Minimum Charge	Current	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
All	\$ 12.46	\$ 13.71	\$ 14.39	\$ 15.11	\$ 15.87	\$ 16.66
<b>Volumetric Charges (per 1,000 gallons)</b>						
0 - 2,000	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
2,001+	4.82	5.30	5.57	5.85	6.14	6.44

**Table 3-5  
Proposed Residential Wastewater Rates**











Minimum Charge	Current	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
All	\$ 12.46	\$ 13.71	\$ 14.39	\$ 15.11	\$ 15.87	\$ 16.66
<b>Volumetric Charges (per 1,000 gallons)</b>						
0 - 2,000	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
2,001+	5.19	5.71	5.99	6.29	6.61	6.94

## Section 3

**Table 3-6**  
**Revenue Recovery Under Option 2 Rates**

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
<b>Water</b>					
Revenue Requirement	\$ 7,533,342	\$ 7,208,885	\$ 7,729,441	\$ 7,953,644	\$ 8,259,003
Projected Revenue Under Proposed Rates	6,473,569	6,799,458	7,141,309	7,499,968	7,876,639
Over/ (Under) Recovery	<b>(\$ 1,059,773)</b>	<b>(\$ 409,427)</b>	<b>(\$ 588,132)</b>	<b>(\$ 453,677)</b>	<b>(\$ 382,364)</b>
<b>Wastewater</b>					
Revenue Requirement	\$ 4,608,002	\$ 4,735,545	\$ 4,845,374	\$ 4,988,337	\$ 5,556,419
Projected Revenue Under Proposed Rates	6,039,738	6,344,066	6,663,267	6,998,134	7,349,831
Over/ (Under) Recovery	<b>\$ 1,431,736</b>	<b>\$ 1,608,521</b>	<b>\$ 1,817,893</b>	<b>\$ 2,009,797</b>	<b>\$ 1,793,412</b>
<b>Total</b>					
Revenue Requirement	\$ 12,141,343	\$ 11,944,430	\$ 12,574,815	\$ 12,941,981	\$ 13,815,421
Projected Revenue Under Proposed Rates	12,513,307	13,143,524	13,804,576	14,498,102	15,226,469
Over/ (Under) Recovery	<b>\$ 371,963</b>	<b>1,199,094</b>	<b>1,229,761</b>	<b>1,556,121</b>	<b>1,411,048</b>

**Table 3-7**  
**Combined Utility Performance Under Option 2 Rates**

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
<b>Beginning Unrestricted Net Position</b>	\$8,552,323	\$8,924,286	\$10,123,380	\$11,353,141	\$12,909,261
Total Revenues	13,470,244	13,444,524	14,105,576	14,799,102	15,527,469
Total Expenses	13,098,280	12,245,430	12,875,815	13,242,981	14,116,421
<b>Ending Unrestricted Net Position</b>	<b>\$8,924,286</b>	<b>\$10,123,380</b>	<b>\$11,353,141</b>	<b>\$12,909,261</b>	<b>\$14,320,309</b>
<b>Days Cash on Hand (180 Days)</b>	 396  472  510  557  594				
<b>Debt Service Coverage</b>					
Total Revenues	\$ 13,470,244	\$ 13,444,524	\$ 14,105,576	\$ 14,799,102	\$15,527,469
Total Expenses Less Debt Service	8,224,163	7,822,519	8,131,593	8,455,306	8,796,756
<b>Available for Debt Service Coverage</b>	<b>\$ 5,246,081</b>	<b>\$ 5,622,005</b>	<b>\$ 5,973,983</b>	<b>\$ 6,343,796</b>	<b>\$ 6,730,713</b>
Debt Service	3,075,217	3,172,911	3,455,217	3,458,448	3,948,960
<b>Coverage Ratio</b>	 1.71  1.77  1.73  1.83  1.70				
<b>Target Debt Service Coverage Ratio</b>	1.10	1.10	1.10	1.10	1.10

## Section 4

# RECOMMENDATIONS

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Listed below are the findings and recommendations from the water and wastewater rate study.

### ■ **Recommended Rates:**

NewGen recommends the City implement the staff recommended rates for FY 2020, which were presented at Option 2. NewGen also recommends the City review rate requirements and revenue sufficiency annually.

### ■ **Monitor Wholesale Contract:**

As the City's current contract with the City of Houston expires soon, NewGen recommends that the City closely monitor the terms of the renewed contract. If the new contract terms differ from the current contract or assumptions made in this Study, the future proposed rates might need to be adjusted in order to cover any additional costs.

### ■ **Ensure Financial Stability:**

The City has internal financial policies requiring the utility to maintain a 1.1 Debt Service Coverage Ratio and Days Cash on Hand at a minimum amount of 180 days of annual operating expenses. To the extent rates do not generate sufficient revenue to meet these policies, then action should be taken to amend the City's rates. Failure to abide by the City's own financial policies and/or maintain required debt service coverage ratios could result in a reduced bond rating which, consequentially, can result in a higher, long-term borrowing cost for the City and ultimately higher rates to ratepayers.

## Appendix

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### List of Schedules

- 1 General Inputs and Inflation Assumptions
- 2 Five-Year Combined Water and Wastewater Revenue Requirement
- 3 Capital Improvement Plan and Debt Service
- 4 Proposed Water Rates
- 5 Proposed Wastewater Rates
- 6 Performance Summary Under Proposed Rates
- 7 Regional Bill Comparison – Monthly Bills at 2,000, 8,000, and 15,000 Gallons

# Schedule 1

## City of Deer Park, Texas Water and Wastewater Rate Model Water and Wastewater General Assumptions

Test Year	2019
Beginning Unrestricted Net Position (Water & WW)	\$ 8,126,168 Per 2018 Audit, Page 43
Debt Service Coverage Target	1.10
Days Cash On Hand Required	180
Interest Rate	3.23%
Term	20

<u>Allocation Factors</u>	<u>Water</u>	<u>Wastewater</u>
Water	100%	0%
Wastewater	0%	100%
50/50	50%	50%
Customer Count	52%	48%
COS	61%	39%
Workpaper		
Personnel	58%	42%

<u>Inflation Factor</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
Growth		7.13%	0.03%	0.03%	0.02%	0.02%
None		0.00%	0.00%	0.00%	0.00%	0.00%
Municipal Cost Index		2.66%	2.66%	2.66%	2.66%	2.66%
Construction Cost Index		3.12%	3.12%	3.12%	3.12%	3.12%
Personnel		5.00%	5.00%	5.00%	5.00%	5.00%
Chemicals		1.26%	1.26%	1.26%	1.26%	1.26%
Electricity		0.68%	1.40%	2.51%	2.63%	3.11%
Natural Gas		4.00%	2.21%	3.48%	5.63%	6.17%
Water Purchases		3.50%	3.53%	3.53%	3.52%	3.52%
Fuel		5.87%	3.46%	2.84%	3.91%	3.80%
One Time		-100.00%	-100.00%	-100.00%	-100.00%	-100.00%
Schedule		0.00%	0.00%	0.00%	0.00%	0.00%

Municipal Cost Index - 20 year average MCI as of 4/2019

Construction Cost Index - 20 year average CCI as of 4/2019

Chemicals - Producer Price Index, Water Treating Compounds 20 year average

Electricity - EIA outlook as of 4/2019

Natural Gas - EIA outlook as of 4/2019

Fuel - EIA outlook as of 4/2019

## Schedule 2

City of Deer Park, Texas  
Water and Wastewater Rate Model  
5-year Forecast Revenue Requirement - Water & Wastewater

Department	Account Number	Account Description	2019	2020	2021	2022	2023	2024
<b>Expenditures</b>								
<b>Public Works Administration</b>								
	<b>Personnel &amp; Related</b>							
	500-4101	Salaries - Full Time	\$ 199,650	\$ 212,575	\$ 223,204	\$ 234,364	\$ 246,082	\$ 258,386
	500-4104	Salaries - Overtime	-	500	525	551	579	608
	500-4106	Social Security/Medicare	15,150	16,215	17,026	17,877	18,771	19,709
	500-4107	TMRS	27,600	30,197	31,707	33,292	34,957	36,705
	500-4108	Health & Life Insurance	16,400	17,580	18,459	19,382	20,351	21,369
	500-4109	Workers Compensation	115	218	229	240	252	265
	500-4114	Section 125 Admin Fee	-	-	-	-	-	-
	500-4117	Health Savings Account	1,245	1,245	1,307	1,373	1,441	1,513
	<b>Total Personnel &amp; Related</b>		\$ 260,160	\$ 278,530	\$ 292,457	\$ 307,079	\$ 322,433	\$ 338,555
	<b>Services</b>							
	500-4216	Mobile Telephone	\$ 2,230	\$ 2,330	\$ 2,392	\$ 2,456	\$ 2,521	\$ 2,588
	500-4233	Insurance - Liability	40,898	40,000	41,066	42,160	43,283	44,436
	500-4234	Insurance - Casualty	49,709	43,900	45,070	46,270	47,503	48,769
	500-4239	Audit Fees	13,000	17,000	17,453	17,918	18,395	18,885
	500-4240	Consultant Fees	50,000	40,000	41,066	42,160	43,283	44,436
	500-4250	Training & Travel	2,000	2,285	2,346	2,408	2,473	2,538
	500-4252	Dues & Fees	1,000	75	77	79	81	83
	500-4255	Community/Employee Affairs	1,000	1,000	1,027	1,054	1,082	1,111
	500-4279	Software - Other	-	-	-	-	-	-
	<b>Total Services</b>		\$ 159,837	\$ 146,590	\$ 150,496	\$ 154,505	\$ 158,622	\$ 162,848
	<b>Supplies</b>							
	500-4301	Office Supplies	\$ 2,500	\$ 3,000	\$ 3,080	\$ 3,162	\$ 3,246	\$ 3,333
	500-4303	Operational Supplies	1,200	2,000	2,053	2,108	2,164	2,222
	500-4304	Data Processing Supplies	-	250	257	263	271	278
	500-4305	Printing	1,200	2,000	2,053	2,108	2,164	2,222
	500-4307	Postage	2,000	2,000	2,053	2,108	2,164	2,222
	500-4308	Small Tools & Minor Equipment	600	2,000	2,053	2,108	2,164	2,222
	500-4311	Uniforms	1,500	3,500	3,593	3,689	3,787	3,888
	500-4328	Gasoline	250	250	259	266	276	287
	500-4348	Books	900	350	359	369	379	389
	<b>Total Supplies</b>		\$ 10,150	\$ 15,350	\$ 15,761	\$ 16,181	\$ 16,616	\$ 17,062
	<b>Repairs &amp; Maintenance</b>							
	500-4401	Vehicles	\$ 100	\$ 250	\$ 257	\$ 263	\$ 271	\$ 278
	500-4404	Buildings	-	-	-	-	-	-
	<b>Total Repairs &amp; Maintenance</b>		\$ 100	\$ 250	\$ 257	\$ 263	\$ 271	\$ 278
	<b>Other Operating Expenditures</b>							
	500-4510	Contingency	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

## Schedule 2

City of Deer Park, Texas  
Water and Wastewater Rate Model  
5-year Forecast Revenue Requirement - Water & Wastewater

Department	Account Number	Account Description	2019	2020	2021	2022	2023	2024
		Budget Requests	-	-	-	-	-	-
		Capital Outlay	-	-	-	-	-	-
	<b>Total Other Operating Expenditures</b>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Public Works Administration</b>			\$ 430,247	\$ 440,720	\$ 458,970	\$ 478,030	\$ 497,942	\$ 518,742
<b>Water &amp; Sewer Maintenance</b>								
	<b>Personnel &amp; Related</b>							
	501-4101	Salaries - Full Time	\$ 597,700	\$ 631,898	\$ 663,493	\$ 696,668	\$ 731,501	\$ 768,076
	501-4103	Salaries - Temporary	5,850	6,966	7,314	7,680	8,064	8,467
	501-4104	Salaries - Overtime	37,100	40,000	42,000	44,100	46,305	48,620
	501-4106	Social Security/Medicare	47,900	50,281	52,795	55,435	58,207	61,117
	501-4107	TMRS	87,600	92,867	97,510	102,386	107,505	112,880
	501-4108	Health & Life Insurance	120,500	133,296	139,961	146,959	154,307	162,022
	501-4109	Workers Compensation	3,710	5,884	6,178	6,487	6,811	7,152
	501-4114	Section 125 Admin Fee	89	135	142	149	156	164
	501-4117	Health Savings Account	3,020	2,535	2,662	2,795	2,935	3,081
	<b>Total Personnel &amp; Related</b>		\$ 903,469	\$ 963,862	\$ 1,012,055	\$ 1,062,658	\$ 1,115,791	\$ 1,171,580
	<b>Services</b>							
	501-4212	Utilities - Electric	\$ 155,000	\$ 155,000	\$ 157,170	\$ 161,122	\$ 165,358	\$ 170,494
	501-4214	Utilities - Gas	400	400	409	423	447	474
	501-4215	Utilities - Telephone	425	400	411	422	433	444
	501-4216	Mobile Telephone	3,160	3,200	3,285	3,373	3,463	3,555
	501-4219	Mobile Technology	355	460	472	485	498	511
	501-4231	Equipment Rental	-	300	308	316	325	333
	501-4241	Consulting Engineer Fee	-	-	-	-	-	-
	501-4250	Training & Travel	4,000	5,500	5,647	5,797	5,951	6,110
	501-4252	Dues & Fees	1,500	1,600	1,643	1,686	1,731	1,777
	501-4290	Contract Labor	-	-	-	-	-	-
	<b>Total Services</b>		\$ 164,840	\$ 166,860	\$ 169,344	\$ 173,623	\$ 178,206	\$ 183,700
	<b>Supplies</b>							
	501-4301	Office Supplies	\$ 200	\$ 300	\$ 308	\$ 316	\$ 325	\$ 333
	501-4303	Operational Supplies	16,045	16,045	16,472	16,911	17,362	17,825
	501-4308	Small Tools & Minor Equipment	12,290	17,090	17,545	18,013	18,493	18,985
	501-4311	Uniforms	3,575	3,975	4,081	4,190	4,301	4,416
	501-4314	Protective Clothing	-	-	-	-	-	-
	501-4328	Gasoline	19,500	21,000	21,726	22,344	23,218	24,100
	501-4329	Diesel	11,500	11,500	11,897	12,236	12,715	13,198
	501-4344	Water Meters & Boxes	36,000	42,000	43,119	44,268	45,447	46,658
	<b>Total Supplies</b>		\$ 99,110	\$ 111,910	\$ 115,149	\$ 118,277	\$ 121,861	\$ 125,515
	<b>Repairs &amp; Maintenance</b>							
	501-4401	Vehicles	\$ 14,500	\$ 15,650	\$ 16,067	\$ 16,495	\$ 16,935	\$ 17,386
	501-4402	Machinery & Equipment	3,000	18,298	18,786	19,286	19,800	20,327



# Schedule 2

## City of Deer Park, Texas Water and Wastewater Rate Model 5-year Forecast Revenue Requirement - Water & Wastewater

Department	Account Number	Account Description	2019	2020	2021	2022	2023	2024
	501-4404	Buildings	-	-	-	-	-	-
	501-4405	Radios	-	250	257	263	271	278
	501-4410	Sanitary Sewer	110,000	145,000	148,863	152,830	156,901	161,082
	501-4415	Water Mains & Hydrants	40,000	64,075	65,782	67,535	69,334	71,181
	<b>Total Repairs &amp; Maintenance</b>		\$ 167,500	\$ 243,273	\$ 249,755	\$ 256,409	\$ 263,241	\$ 270,254
	<b>Other Operating Expenditures</b>							
	501-4510	Contingency	\$ 100,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -
		Budget Requests	-	-	-	-	-	-
		New Program O&M	-	-	-	-	-	-
	<b>Total Other Operating Expenditures</b>		\$ 100,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -
	<b>Capital Outlay</b>							
	501-4903	Improvements Other Than Bldgs.	\$ 90,000	\$ -	\$ -	\$ -	\$ -	\$ -
	501-4904	Machinery & Equipment	73,560	72,900	-	-	-	-
	501-4906	Automobiles & Light Trucks	44,543	-	-	-	-	-
	501-4913	Sanitary Sewer	-	-	-	-	-	-
	501-4941	Consulting Engineer Fee	-	-	-	-	-	-
		Capital Outlay	-	-	1,250,000	1,289,005	1,329,227	1,370,705
	<b>Total Capital Outlay</b>		\$ 208,103	\$ 72,900	\$ 1,250,000	\$ 1,289,005	\$ 1,329,227	\$ 1,370,705
<b>Total Water &amp; Sewer Maintenance</b>			\$ 1,643,022	\$ 2,058,805	\$ 2,796,302	\$ 2,899,972	\$ 3,008,325	\$ 3,121,754

### Central Collections

#### Personnel & Related

503-4101	Salaries - Full Time	\$ 238,400	\$ 251,972	\$ 264,571	\$ 277,799	\$ 291,689	\$ 306,274
503-4104	Salaries - Overtime	1,000	2,500	2,625	2,756	2,894	3,039
503-4106	Social Security/Medicare	17,900	19,054	20,007	21,007	22,057	23,160
503-4107	TMRS	31,800	35,568	37,346	39,214	41,174	43,233
503-4108	Health & Life Insurance	47,100	49,716	52,202	54,812	57,552	60,430
503-4109	Workers Compensation	115	180	189	198	208	219
503-4114	Section 125 Admin Fee	90	90	95	99	104	109
	<b>Total Personnel &amp; Related</b>	\$ 336,405	\$ 359,080	\$ 377,034	\$ 395,886	\$ 415,680	\$ 436,464

#### Services

503-4201	Public Notices	\$ -	\$ 400	\$ 411	\$ 422	\$ 433	\$ 444
503-4215	Utilities - Telephone	9,552	10,000	10,266	10,540	10,821	11,109
503-4216	Mobile Telephone	960	900	924	949	974	1,000
503-4231	Equipment Rentals	-	1,200	1,232	1,265	1,298	1,333
503-4250	Training & Travel	11,000	11,700	12,012	12,332	12,660	12,998
503-4251	Subscriptions	1,400	1,400	1,437	1,476	1,515	1,555
503-4252	Dues & Fees	94,221	95,000	97,531	100,130	102,797	105,536
503-4261	Software - Tax Services	16,770	17,400	17,864	18,340	18,828	19,330
503-4277	Software - Incode	77,314	77,502	79,567	81,687	83,863	86,098
503-4279	Software - Other	298	400	411	422	433	444
503-4290	Contract Labor	15,600	22,400	22,997	23,610	24,239	24,884

## Schedule 2

City of Deer Park, Texas  
Water and Wastewater Rate Model  
5-year Forecast Revenue Requirement - Water & Wastewater

Department	Account Number	Account Description	2019	2020	2021	2022	2023	2024
	<b>Total Services</b>		\$ 227,115	\$ 238,302	\$ 244,651	\$ 251,169	\$ 257,861	\$ 264,732
	<b>Supplies</b>							
	503-4301	Office Supplies	\$ 3,400	\$ 3,500	\$ 3,593	\$ 3,689	\$ 3,787	\$ 3,888
	503-4304	Data Processing Supplies	1,460	2,500	2,567	2,635	2,705	2,777
	503-4305	Printing	12,148	11,000	11,293	11,594	11,903	12,220
	503-4307	Postage	66,000	79,000	81,105	83,266	85,484	87,762
	503-4308	Small Tools & Minor Equipment	2,000	9,657	9,914	10,178	10,450	10,728
	503-4348	Books	-	50	51	53	54	56
	<b>Total Supplies</b>		\$ 85,008	\$ 105,707	\$ 108,523	\$ 111,415	\$ 114,383	\$ 117,431
	<b>Repairs &amp; Maintenance</b>							
	503-4402	Machinery & Equipment	\$ 5,000	\$ 6,000	\$ 6,160	\$ 6,324	\$ 6,492	\$ 6,665
	503-4403	Computer Equipment	1,000	1,500	1,540	1,581	1,623	1,666
		Budget Requests	-	-	-	-	-	-
		Contingency	-	-	-	-	-	-
		Capital Outlay	-	-	-	-	-	-
	<b>Total Repairs &amp; Maintenance</b>		\$ 6,000	\$ 7,500	\$ 7,700	\$ 7,905	\$ 8,116	\$ 8,332
<b>Total Central Collections</b>			\$ 654,528	\$ 710,589	\$ 737,908	\$ 766,375	\$ 796,040	\$ 826,958
<b>Meter Readers</b>								
	<b>Personnel &amp; Related</b>							
	504-4101	Salaries - Full Time	\$ 207,300	\$ 217,684	\$ 228,568	\$ 239,997	\$ 251,996	\$ 264,596
	504-4104	Salaries - Overtime	2,000	2,000	2,100	2,205	2,315	2,431
	504-4106	Social Security/Medicare	15,700	16,636	17,468	18,341	19,258	20,221
	504-4107	TMRS	27,800	31,056	32,609	34,239	35,951	37,749
	504-4108	Health & Life Insurance	44,000	46,200	48,510	50,936	53,482	56,156
	504-4109	Workers Compensation	1,210	1,980	2,079	2,183	2,292	2,407
	504-4114	Section 125 Admin Fee	100	135	142	149	156	164
	504-4117	Health Savings Account	1,845	1,845	1,937	2,034	2,136	2,243
	<b>Total Personnel &amp; Related</b>		\$ 299,955	\$ 317,536	\$ 333,413	\$ 350,083	\$ 367,588	\$ 385,967
	<b>Services</b>							
	504-4216	Mobile Telephone	\$ 4,471	\$ 4,500	\$ 4,620	\$ 4,743	\$ 4,869	\$ 4,999
	504-4279	Software - Other	-	220	226	232	238	244
	504-4290	Contract Labor	3,200	5,920	6,078	6,240	6,406	6,577
	<b>Total Services</b>		\$ 7,671	\$ 10,640	\$ 10,923	\$ 11,215	\$ 11,513	\$ 11,820
	<b>Supplies</b>							
	504-4301	Office Supplies	\$ -	\$ 50	\$ 51	\$ 53	\$ 54	\$ 56
	504-4302	Cleaning Supplies	-	50	51	53	54	56
	504-4303	Operational Supplies	1,850	1,200	1,232	1,265	1,298	1,333
	504-4308	Small Tools & Minor Equipment	800	940	965	991	1,017	1,044
	504-4311	Uniforms	1,220	1,200	1,232	1,265	1,298	1,333
	504-4314	Protective Clothing	-	226	232	238	245	251

## Schedule 2

City of Deer Park, Texas  
Water and Wastewater Rate Model  
5-year Forecast Revenue Requirement - Water & Wastewater

Department	Account Number	Account Description	2019	2020	2021	2022	2023	2024
	504-4328	Gasoline	5,800	8,000	8,276	8,512	8,845	9,181
	504-4344	Water Meters & Boxes	-	1,000	1,027	1,054	1,082	1,111
	<b>Total Supplies</b>		\$ 9,670	\$ 12,666	\$ 13,067	\$ 13,430	\$ 13,894	\$ 14,364
	<b>Repairs &amp; Maintenance</b>							
	504-4401	Vehicles	\$ 5,200	\$ 7,000	\$ 7,187	\$ 7,378	\$ 7,575	\$ 7,776
	504-4403	Computer Equipment	2,895	4,200	4,312	4,427	4,545	4,666
		Budget Requests	-	-	-	-	-	-
		Contingency	-	-	-	-	-	-
	<b>Total Repairs &amp; Maintenance</b>		\$ 8,095	\$ 11,200	\$ 11,498	\$ 11,805	\$ 12,119	\$ 12,442
	<b>Capital Outlay</b>							
	504-4906	Automobiles & Light Trucks	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Capital Outlay	-	-	-	-	-	-
	<b>Total Capital Outlay</b>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Meter Readers</b>			\$ 325,391	\$ 352,042	\$ 368,901	\$ 386,532	\$ 405,114	\$ 424,594
<b>Wastewater Treatment Plant</b>								
	<b>Personnel &amp; Related</b>							
	505-4101	Salaries - Full Time	\$ 316,500	\$ 363,771	\$ 381,960	\$ 401,058	\$ 421,110	\$ 442,166
	505-4103	Salaries - Temporary	5,850	6,966	7,314	7,680	8,064	8,467
	505-4104	Salaries - Overtime	56,500	53,500	56,175	58,984	61,933	65,030
	505-4106	Social Security/Medicare	28,200	31,954	33,552	35,229	36,991	38,840
	505-4107	TMRS	51,500	58,654	61,587	64,666	67,899	71,294
	505-4108	Health & Life Insurance	56,600	79,380	83,349	87,516	91,892	96,487
	505-4109	Workers Compensation	1,500	2,380	2,499	2,624	2,755	2,893
	505-4114	Section 125 Admin Fee	130	135	142	149	156	164
	505-4117	Health Savings Account	-	-	-	-	-	-
	<b>Total Personnel &amp; Related</b>		\$ 516,780	\$ 596,740	\$ 626,577	\$ 657,906	\$ 690,801	\$ 725,341
	<b>Services</b>							
	505-4212	Utilities - Electric	\$ 330,000	\$ 400,000	\$ 405,599	\$ 415,797	\$ 426,731	\$ 439,985
	505-4214	Utilities - Gas	750	800	818	846	894	949
	505-4216	Mobile Telephone	1,700	1,700	1,745	1,792	1,840	1,889
	505-4231	Equipment Rental	500	1,000	1,027	1,054	1,082	1,111
	505-4240	Consultant Fee	-	-	-	-	-	-
	505-4250	Training & Travel	500	3,000	3,080	3,162	3,246	3,333
	505-4252	Dues & Fees	500	1,000	1,027	1,054	1,082	1,111
	505-4253	Disposal Fees	48,500	50,400	51,743	53,121	54,537	55,990
	505-4254	Inspections & Permits	37,395	38,000	39,012	40,052	41,119	42,215
	505-4271	Water Analysis	40,000	43,200	44,351	45,533	46,746	47,991
	505-4290	Contract Labor	-	4,850	4,979	5,112	5,248	5,388
	<b>Total Services</b>		\$ 459,845	\$ 543,950	\$ 553,381	\$ 567,523	\$ 582,525	\$ 599,961

# Schedule 2

## City of Deer Park, Texas Water and Wastewater Rate Model 5-year Forecast Revenue Requirement - Water & Wastewater

Department	Account Number	Account Description	2019	2020	2021	2022	2023	2024
	<b>Supplies</b>							
	505-4301	Office Supplies	\$ 600	\$ 600	\$ 616	\$ 632	\$ 649	\$ 667
	505-4303	Operational Supplies	10,400	10,400	10,677	10,962	11,254	11,553
	505-4304	Data Processing Supplies	-	500	513	527	541	555
	505-4308	Small Tools & Minor Equipment	20,000	7,700	7,905	8,116	8,332	8,554
	505-4311	Uniforms	1,800	1,800	1,848	1,897	1,948	2,000
	505-4312	Lab Supplies	2,000	2,500	2,567	2,635	2,705	2,777
	505-4313	Lab Equipment	3,500	2,500	2,567	2,635	2,705	2,777
	505-4316	Chemicals	26,000	25,000	25,666	26,350	27,052	27,773
	505-4328	Gasoline	330	800	828	851	884	918
	505-4329	Diesel	3,700	5,000	5,173	5,320	5,528	5,738
	<b>Total Supplies</b>		\$ 68,330	\$ 56,800	\$ 58,359	\$ 59,925	\$ 61,599	\$ 63,313
	<b>Repairs &amp; Maintenance</b>							
	505-4401	Vehicles	\$ 2,000	\$ 4,500	\$ 4,620	\$ 4,743	\$ 4,869	\$ 4,999
	505-4402	Machinery & Equipment	4,885	4,885	5,015	5,149	5,286	5,427
	505-4404	Buildings	500	200	205	211	216	222
	505-4409	Air Conditioner	-	-	-	-	-	-
	505-4418	Mechanical Equipment	70,000	75,000	76,998	79,050	81,156	83,318
	<b>Total Repairs &amp; Maintenance</b>		\$ 77,385	\$ 84,585	\$ 86,839	\$ 89,152	\$ 91,528	\$ 93,966
	<b>Other Operating Expenditures</b>							
	505-4510	Contingency	\$ -	\$ 95,000	\$ -	\$ -	\$ -	\$ -
		Budget Requests	-	-	-	-	-	-
	<b>Total Other Operating Expenditures</b>		\$ -	\$ 95,000	\$ -	\$ -	\$ -	\$ -
	<b>Capital Outlay</b>							
	505-4903	Improvements other than Bldgs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	505-4904	Machinery & Equipment	32,000	250,000	-	-	-	-
		Capital Outlay	-	-	-	-	-	-
	<b>Total Capital Outlay</b>		\$ 32,000	\$ 250,000	\$ -	\$ -	\$ -	\$ -
<b>Total Wastewater Treatment Plant</b>			\$ 1,154,340	\$ 1,627,075	\$ 1,325,156	\$ 1,374,506	\$ 1,426,452	\$ 1,482,581
<b>Water Treatment Plant</b>								
	<b>Personnel &amp; Related</b>							
	506-4101	Salaries - Full Time	\$ 560,000	\$ 570,336	\$ 598,853	\$ 628,795	\$ 660,235	\$ 693,247
	506-4103	Salaries - Temporary	2,900	2,900	3,045	3,197	3,357	3,525
	506-4104	Salaries - Overtime	50,500	40,000	42,000	44,100	46,305	48,620
	506-4106	Social Security/Medicare	45,800	46,311	48,627	51,058	53,611	56,291
	506-4107	TMRS	84,500	86,034	90,336	94,852	99,595	104,575
	506-4108	Health & Life Insurance	95,300	131,040	137,592	144,472	151,695	159,280
	506-4109	Workers Compensation	3,500	5,512	5,788	6,077	6,381	6,700
	506-4114	Section 125 Admin Fee	167	270	284	298	313	328
	506-4117	Health Savings Account	645	645	677	711	747	784
	<b>Total Personnel &amp; Related</b>		\$ 843,312	\$ 883,048	\$ 927,200	\$ 973,560	\$ 1,022,238	\$ 1,073,350

# Schedule 2

## City of Deer Park, Texas Water and Wastewater Rate Model 5-year Forecast Revenue Requirement - Water & Wastewater

Department	Account Number	Account Description	2019	2020	2021	2022	2023	2024
	<b>Services</b>							
	506-4212	Utilities - Electric	\$ 165,300	\$ 225,000	\$ 228,150	\$ 233,886	\$ 240,036	\$ 247,492
	506-4216	Mobile Telephone	3,934	5,720	5,872	6,029	6,189	6,354
	506-4219	Mobile Technology	-	-	-	-	-	-
	506-4240	Consultant Fee	6,000	8,950	9,188	9,433	9,685	9,943
	506-4241	Consulting Engineer Fees	74,862	-	-	-	-	-
	506-4250	Training & Travel	3,500	10,000	10,266	10,540	10,821	11,109
	506-4252	Dues & Fees	37,000	37,500	38,499	39,525	40,578	41,659
	506-4254	Inspections & Permits	-	4,800	4,928	5,059	5,194	5,332
	506-4271	Water Analysis	9,000	10,000	10,266	10,540	10,821	11,109
	506-4279	Software - Other	-	60,000	61,599	63,240	64,925	66,655
	506-4290	Contract Labor	34,820	44,800	45,994	47,219	48,477	49,769
	<b>Total Services</b>		\$ 334,416	\$ 406,770	\$ 414,763	\$ 425,471	\$ 436,726	\$ 449,422
	<b>Supplies</b>							
	506-4301	Office Supplies	\$ 500	\$ 500	\$ 513	\$ 527	\$ 541	\$ 555
	506-4303	Operational Supplies	15,000	20,000	20,533	21,080	21,642	22,218
	506-4304	Data Processing Supplies	-	-	-	-	-	-
	506-4305	Printing	200	200	205	211	216	222
	506-4307	Postage	100	250	257	263	271	278
	506-4308	Small Tools & Minor Equipment	21,630	25,934	26,625	27,334	28,063	28,810
	506-4311	Uniforms	3,000	3,500	3,593	3,689	3,787	3,888
	506-4316	Chemicals	378,000	369,050	378,883	388,977	399,341	409,981
	506-4328	Gasoline	2,350	2,350	2,431	2,500	2,598	2,697
	506-4329	Diesel	-	2,000	2,069	2,128	2,211	2,295
	506-4348	Books	392	200	205	211	216	222
	506-4350	Raw Water	1,065,000	1,065,000	1,102,630	1,141,521	1,181,727	1,223,349
	<b>Total Supplies</b>		\$ 1,486,172	\$ 1,488,984	\$ 1,537,945	\$ 1,588,442	\$ 1,640,613	\$ 1,694,516
	<b>Repairs &amp; Maintenance</b>							
	506-4401	Vehicles	\$ 1,000	\$ 1,000	\$ 1,027	\$ 1,054	\$ 1,082	\$ 1,111
	506-4402	Machinery & Equipment	16,550	16,550	16,991	17,444	17,908	18,386
	506-4403	Computer Equipment	1,146	-	-	-	-	-
	506-4404	Buildings	19,460	-	-	-	-	-
	506-4411	Sludge Removal from Lagoon	27,800	-	-	-	-	-
	506-4416	Water Wells	20,000	22,900	23,510	24,137	24,780	25,440
	506-4418	Mechanical Equipment	95,000	74,750	76,742	78,786	80,885	83,040
	<b>Total Repairs &amp; Maintenance</b>		\$ 180,956	\$ 115,200	\$ 118,269	\$ 121,420	\$ 124,655	\$ 127,977
	<b>Other Operating Expenditures</b>							
	506-4510	Contingency	\$ -	\$ 95,000	\$ -	\$ -	\$ -	\$ -
		Budget Requests	-	-	-	-	-	-
	<b>Total Other Operating Expenditures</b>		\$ -	\$ 95,000	\$ -	\$ -	\$ -	\$ -
	<b>Capital Outlay</b>							

## Schedule 2

City of Deer Park, Texas  
Water and Wastewater Rate Model  
5-year Forecast Revenue Requirement - Water & Wastewater

Department	Account Number	Account Description	2019	2020	2021	2022	2023	2024
	506-4902	Buildings	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	506-4903	Improvements other than Bldgs	60,610	1,000,000	-	-	-	-
	506-4904	Machinery & Equipment	348,125	476,000	-	-	-	-
	506-4906	Automobile & Light Trucks	-	-	-	-	-	-
	506-4941	Consulting Engineer Fee	-	-	-	-	-	-
		Capital Outlay	-	-	-	-	-	-
	<b>Total Capital Outlay</b>		\$ 408,735	\$ 1,476,000	\$ -	\$ -	\$ -	\$ -
<b>Total Water Treatment Plant</b>			\$ 3,253,591	\$ 4,465,002	\$ 2,998,177	\$ 3,108,894	\$ 3,224,233	\$ 3,345,265
<b>Employee Benefits &amp; Other</b>								
	<b>Personnel &amp; Related</b>							
	550-4106	Social Security/Medicare	\$ -	\$ 500	\$ 525	\$ 551	\$ 579	\$ 608
	550-4107	TMRS	-	1,000	1,050	1,103	1,158	1,216
	550-4108	Health & Life Insurance	50,000	50,000	52,500	55,125	57,881	60,775
	550-4109	Workers Compensation	12,670	16,000	16,800	17,640	18,522	19,448
	550-4110	State Unemployment	-	500	525	551	579	608
	550-4114	Section 125 Admin Fee	-	-	-	-	-	-
	550-4117	Health Savings Account	-	-	-	-	-	-
	550-4197	Pension Expense	50,000	50,000	52,500	55,125	57,881	60,775
	550-4198	OPEB Expense	100,000	100,000	105,000	110,250	115,763	121,551
	<b>Total Personnel &amp; Related</b>		\$ 212,670	\$ 218,000	\$ 228,900	\$ 240,345	\$ 252,362	\$ 264,980
	<b>Services</b>							
	550-4252	Dues & Fees	\$ 150	\$ 150	\$ 154	\$ 158	\$ 162	\$ 167
	<b>Total Services</b>		\$ 150	\$ 150	\$ 154	\$ 158	\$ 162	\$ 167
	<b>Other Operating Expenditures</b>							
	550-4530	Operating Transfers - Storm Water	\$ 20,643	\$ 39,297	\$ 41,262	\$ 43,325	\$ 45,491	\$ 47,766
	550-4530	Operating Transfers - General Fund	102,330	104,383	109,602	115,082	120,836	126,878
		Budget Requests	-	-	-	-	-	-
		Contingency	-	-	-	-	-	-
		Capital Outlay	-	-	-	-	-	-
	<b>Total Other Operating Expenditures</b>		\$ 122,973	\$ 143,680	\$ 150,864	\$ 158,407	\$ 166,328	\$ 174,644
<b>Total Employee Benefits &amp; Other</b>			\$ 335,793	\$ 361,830	\$ 379,918	\$ 398,910	\$ 418,852	\$ 439,791
<b>Water/Sewer Debt Service</b>								
	<b>Fiscal Charges</b>							
	900-4525	Paying Agent Fees	\$ 6,500	\$ 7,000	\$ 7,187	\$ 7,378	\$ 7,575	\$ 7,776
		Existing Debt Service	2,777,677	3,075,217	3,172,911	3,074,158	3,077,389	3,567,901
		Proposed Debt Service	-	-	-	381,059	381,059	381,059
		Budget Requests	-	-	-	-	-	-
		Contingency	-	-	-	-	-	-
		Capital Outlay	-	-	-	-	-	-

## Schedule 2

City of Deer Park, Texas  
Water and Wastewater Rate Model  
5-year Forecast Revenue Requirement - Water & Wastewater

Department	Account Number	Account Description	2019	2020	2021	2022	2023	2024
	<b>Total Fiscal Charges</b>		\$ 2,784,177	\$ 3,082,217	\$ 3,180,097	\$ 3,462,595	\$ 3,466,023	\$ 3,956,737
	<b>Principal Payments</b>							
	900-4531	2002 Rev Bonds \$5,000,000 (TWDB)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	900-4531	2010 GO Ref Bonds \$6,295,000 (% Alloc)	-	-	-	-	-	-
	900-4531	2011 GO Ref Bonds \$3,490,000	-	-	-	-	-	-
	900-4531	2014 GO Ref Bonds \$1,955,000 (% Alloc)	-	-	-	-	-	-
	900-4531	2011 CO \$3,390,000	-	-	-	-	-	-
	900-4531	2012 CO \$4,725,000	-	-	-	-	-	-
	900-4531	2013 CO \$6,925,000	-	-	-	-	-	-
	900-4531	2014 CO \$6,275,000	-	-	-	-	-	-
	900-4531	2015-A \$7,110,000	-	-	-	-	-	-
	900-4531	2016-A CO \$6,885,000	-	-	-	-	-	-
	900-4531	2017-A CO \$5,150,000	-	-	-	-	-	-
	900-4531	2018 CO \$6,335,000 - Proposed	-	-	-	-	-	-
	<b>Total Principal Payments</b>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>Interest Payments</b>							
	900-4531	2002 Rev Bonds \$5,000,000 (TWDB)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	900-4531	2010 GO Ref Bonds \$6,295,000 (% Alloc)	-	-	-	-	-	-
	900-4531	2011 GO Ref Bonds \$3,490,000	-	-	-	-	-	-
	900-4531	2014 GO Ref Bonds \$1,955,000 (% Alloc)	-	-	-	-	-	-
	900-4531	2011 CO \$3,390,000	-	-	-	-	-	-
	900-4531	2012 CO \$4,725,000	-	-	-	-	-	-
	900-4531	2013 CO \$6,925,000	-	-	-	-	-	-
	900-4531	2014 CO \$6,275,000	-	-	-	-	-	-
	900-4531	2015-A \$7,110,000	-	-	-	-	-	-
	900-4531	2016-A CO \$6,885,000	-	-	-	-	-	-
	900-4531	2017-A CO \$5,150,000	-	-	-	-	-	-
	900-4531	2018 CO \$6,335,000 - Proposed	-	-	-	-	-	-
	<b>Total Interest Payments</b>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Water/Sewer Debt Service</b>			\$ 2,784,177	\$ 3,082,217	\$ 3,180,097	\$ 3,462,595	\$ 3,466,023	\$ 3,956,737
<b>Gross Revenue Requirement</b>			\$ 10,581,089	\$ 13,098,280	\$ 12,245,430	\$ 12,875,815	\$ 13,242,981	\$ 14,116,421
<b>Revenue Offsets</b>								
	<b>Service Fee</b>							
	3210	Water Usage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3211	Sewer Usage	-	-	-	-	-	-
	3212	Late Charges	196,402	206,000	206,000	206,000	206,000	206,000
	3221	Reconnect Fees	20,790	21,000	21,000	21,000	21,000	21,000
	<b>Total Service Fee</b>		\$ 217,192	\$ 227,000	\$ 227,000	\$ 227,000	\$ 227,000	\$ 227,000
	<b>Permits &amp; Licenses</b>							
	3415	Tapping Permits	\$ 11,000	\$ 11,500	\$ 11,500	\$ 11,500	\$ 11,500	\$ 11,500

## Schedule 2

City of Deer Park, Texas  
Water and Wastewater Rate Model  
5-year Forecast Revenue Requirement - Water & Wastewater

Department	Account Number	Account Description	2019	2020	2021	2022	2023	2024
	3417	Plumbing Permits	29,000	30,000	30,000	30,000	30,000	30,000
	<b>Total Permits &amp; Licenses</b>		\$ 40,000	\$ 41,500	\$ 41,500	\$ 41,500	\$ 41,500	\$ 41,500
	<b>Other Revenues</b>							
	3620	Investment Revenue	\$ 44,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
	3631	Miscellaneous Revenue	8,500	2,500	2,500	2,500	2,500	2,500
	3660	Cash Over/Short	-	-	-	-	-	-
		Prior Year Revenue	-	655,937	-	-	-	-
	<b>Total Other Revenues</b>		\$ 52,500	\$ 688,437	\$ 32,500	\$ 32,500	\$ 32,500	\$ 32,500
<b>Total Revenue Offsets</b>			\$ 309,692	\$ 956,937	\$ 301,000	\$ 301,000	\$ 301,000	\$ 301,000
<b>Net Revenue Requirement</b>			\$ 10,271,397	\$ 12,141,343	\$ 11,944,430	\$ 12,574,815	\$ 12,941,981	\$ 13,815,421



## Schedule 3

### City of Deer Park, Texas Water and Wastewater Rate Model CIP and Debt Service

Base Year of Costs 2019  
Cost Escalation Factor 3.12%  
Escalate Costs? No

	2019	2020	2021	2022	2023	2024
<b>Existing Debt Service</b>						
Water	\$ 1,330,606	\$ 1,545,028	\$ 1,564,440	\$ 1,496,081	\$ 1,489,078	\$ 1,552,271
Wastewater	1,447,071	1,530,190	1,608,471	1,578,077	1,588,311	2,015,630
<b>Total Existing Debt Service</b>	<b>\$ 2,777,677</b>	<b>\$ 3,075,217</b>	<b>\$ 3,172,911</b>	<b>\$ 3,074,158</b>	<b>\$ 3,077,389</b>	<b>\$ 3,567,901</b>
<b>Projected Debt Service</b>						
Water	\$ -	\$ -	\$ -	\$ 367,329	\$ 367,329	\$ 367,329
Wastewater	-	-	-	13,731	13,731	13,731
<b>Total Projected Debt Service</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 381,059</b>	<b>\$ 381,059</b>	<b>\$ 381,059</b>
<b>Combined Debt Service</b>						
Water	\$ 1,330,606	\$ 1,545,028	\$ 1,564,440	\$ 1,863,410	\$ 1,856,406	\$ 1,919,599
Wastewater	1,447,071	1,530,190	1,608,471	1,591,808	1,602,042	2,029,361
<b>Total Combined Debt Service</b>	<b>\$ 2,777,677</b>	<b>\$ 3,075,217</b>	<b>\$ 3,172,911</b>	<b>\$ 3,455,217</b>	<b>\$ 3,458,448</b>	<b>\$ 3,948,960</b>

Existing Debt Service	2019	2020	2021	2022	2023	2024	Water	Wastewater
2010 GO Ref Bonds \$6,295,000 (% Alloc)	\$ 152,157	\$ 144,663	\$ 101,359				53%	47%
2011 GO Ref Bonds \$3,490,000	257,484	247,500	233,363	223,144	209,344		85%	15%
2014 GO Ref Bonds \$1,955,000 (% Alloc)	178,267	173,917	169,567	162,178	158,921	469,691	0%	100%
2011 CO \$3,390,000	190,341	190,838	194,625	190,800	190,669	193,425	11%	89%
2012 CO \$4,725,000	210,189	226,202	285,339	256,877	273,414	296,664	18%	82%
2013 CO \$6,925,000	273,788	277,800	336,994	386,888	387,075	445,744	27%	73%
2014 CO \$6,275,000	334,181	336,169	337,931	387,488	387,338	353,719	20%	80%
2015-A \$7,110,000	332,231	331,331	333,094	286,613	290,194	450,319	50%	50%
2016-A CO \$6,885,000	291,019	292,031	292,969	293,831	290,906	394,369	88%	12%
2017-A CO \$5,150,000	213,825	241,350	242,288	239,438	240,300	277,275	88%	12%
2018 CO \$6,300,000	344,195	393,855	391,755	393,405	393,655	439,511	66%	34%
2019-A CO \$4,605,000 - Proposed		219,562	253,627	253,498	255,573	247,184	75%	25%

All CIP Projects	2019	2020	2021	2022	2023	2024	Water	Wastewater
P Street GST (paint inside and out)	\$ 600,000	\$ 300,000					100%	0%
Sanitary Sewer, Manhole rehabilitation (City Wide, estimating 377 manholes)	250,000						0%	100%
Sewer Rehab., Park Meadows Sections 1,2,3,4	2,102,309						0%	100%
Sewer Rehab., Parkview West, Sc. 1 & 2		370,700					0%	100%
Sewer Rehab., San Jacinto, Sec. 1 & 2, & Delo-Eleaine, Sec. 2	380,000						0%	100%
Coy Street Water Plant EST Painting		800,000					100%	0%
Chlorine containment system (Passive) @ WTP (11/28/2017 \$1.5 m of \$2.0 m moved to 2018-2019)	1,500,000	862,500	2,587,500				100%	0%
Waterline Replacement, replace 2-inch with Larger Line (remaining lines throughout the City)	500,000	500,000	750,000				100%	0%
Waterline Replacement, Trunk Mains	1,000,000	500,000	500,000				100%	0%
SWTP - Sludge Handling		770,000					0%	100%
Surface Water Plant, Upsize Transfer Pump & Expand Clear Well		500,000	1,513,000				100%	0%
SEWER - SCADA at (4) major lift stations			200,000				0%	100%

# Schedule 3

## City of Deer Park, Texas Water and Wastewater Rate Model CIP and Debt Service

Already Funded CIP	2019	2020	2021	2022	2023	2024	Water	Wastewater
P Street GST (paint inside and out)	\$ 600,000	\$ 300,000					100%	0%
Sanitary Sewer, Manhole rehabilitation (City Wide, estimating 377 manholes)	250,000						0%	100%
Sewer Rehab., Park Meadows Sections 1,2,3,4	2,102,309						0%	100%
Sewer Rehab., Parkview West, Sc. 1 & 2	-	370,700					0%	100%
Sewer Rehab., San Jacinto, Sec. 1 & 2, & Delo-Eleaine, Sec. 2	380,000						0%	100%
Coy Street Water Plant EST Painting	-	800,000					100%	0%
Chlorine containment system (Passive) @ WTP (11/28/2017 \$1.5 m of \$2.0 m moved to 2018-2019)	1,500,000	862,500					100%	0%
Waterline Replacement, replace 2-inch with Larger Line (remaining lines throughout the City)	500,000	500,000					100%	0%
Waterline Replacement, Trunk Mains	1,000,000	500,000					100%	0%
SWTP - Sludge Handling		770,000					0%	100%
Surface Water Plant, Upsize Transfer Pump & Expand Clear Well		500,000					100%	0%
SEWER - SCADA at (4) major lift stations							0%	100%
CIP with Future Debt Need	2019	2020	2021	2022	2023	2024	Water	Wastewater
P Street GST (paint inside and out)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	100%	0%
Sanitary Sewer, Manhole rehabilitation (City Wide, estimating 377 manholes)	-	-	-	-	-	-	0%	100%
Sewer Rehab., Park Meadows Sections 1,2,3,4	-	-	-	-	-	-	0%	100%
Sewer Rehab., Parkview West, Sc. 1 & 2	-	-	-	-	-	-	0%	100%
Sewer Rehab., San Jacinto, Sec. 1 & 2, & Delo-Eleaine, Sec. 2	-	-	-	-	-	-	0%	100%
Coy Street Water Plant EST Painting	-	-	-	-	-	-	100%	0%
Chlorine containment system (Passive) @ WTP (11/28/2017 \$1.5 m of \$2.0 m moved to 2018-2019)	-	-	2,587,500	-	-	-	100%	0%
Waterline Replacement, replace 2-inch with Larger Line (remaining lines throughout the City)	-	-	750,000	-	-	-	100%	0%
Waterline Replacement, Trunk Mains	-	-	500,000	-	-	-	100%	0%
SWTP - Sludge Handling	-	-	-	-	-	-	0%	100%
Surface Water Plant, Upsize Transfer Pump & Expand Clear Well	-	-	1,513,000	-	-	-	100%	0%
SEWER - SCADA at (4) major lift stations	-	-	200,000	-	-	-	0%	100%
	\$ -	\$ -	\$ 5,550,500	\$ -	\$ -	\$ -		

## Schedule 4

**City of Deer Park, Texas**  
**Water and Wastewater Rate Model**  
**Proposed Rates - Water**

		2019	2020	2021	2022	2023	2024
Rate Adjustments		0.00%	10.00%	5.00%	5.00%	5.00%	5.00%
	Current	2019	2020	2021	2022	2023	2024
Residential Inside City							
Minimum Charge							
All	\$ 12.46	\$ 12.46	\$ 13.71	\$ 14.39	\$ 15.11	\$ 15.87	\$ 16.66
Volumetric Charge (per Kgal)							
0-2,000 gallons	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2,001+ gallons	4.82	4.82	5.30	5.57	5.85	6.14	6.44
Residential Outside City							
Minimum Charge							
All	\$ 15.58	\$ 15.58	\$ 17.14	\$ 17.99	\$ 18.89	\$ 19.84	\$ 20.83
Volumetric Charge (per Kgal)							
0-2,000 gallons	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2,001+ gallons	6.02	6.02	6.62	6.95	7.30	7.67	8.05
Commercial Inside City							
Minimum Charge							
All	\$ 12.46	\$ 12.46	\$ 13.71	\$ 14.39	\$ 15.11	\$ 15.87	\$ 16.66
Volumetric Charge (per Kgal)							
0-2,000 gallons	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2,001+ gallons	4.82	4.82	5.30	5.57	5.85	6.14	6.44
Commercial Outside City							
Minimum Charge							
All	\$ 18.69	\$ 18.69	\$ 20.56	\$ 21.59	\$ 22.67	\$ 23.80	\$ 24.99
Volumetric Charge (per Kgal)							
0-2,000 gallons	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2,001+ gallons	7.23	7.23	7.95	8.35	8.77	9.21	9.67
Irrigation							
Minimum Charge							
All	\$ 12.46	\$ 12.46	\$ 13.71	\$ 14.39	\$ 15.11	\$ 15.87	\$ 16.66
Volumetric Charge (per Kgal)							
0-2,000 gallons	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2,001+ gallons	4.82	4.82	5.30	5.57	5.85	6.14	6.44
Residential Outside Irrigation							
Minimum Charge							
All	\$ 15.58	\$ 15.58	\$ 17.14	\$ 17.99	\$ 18.89	\$ 19.84	\$ 20.83
Volumetric Charge (per Kgal)							
0-2,000 gallons	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2,001+ gallons	6.02	6.02	6.62	6.95	7.30	7.67	8.05

**City of Deer Park, Texas**  
**Water and Wastewater Rate Model**  
**Proposed Rates - Wastewater**

		2019		2020		2021		2022		2023		2024			
Rate Adjustments		0.00%		10.00%		5.00%		5.00%		5.00%		5.00%			
		Current		2019		2020		2021		2022		2023		2024	
Residential Inside City															
Minimum Charge															
All	\$	12.46	\$	12.46	\$	13.71	\$	14.39	\$	15.11	\$	15.87	\$	16.66	
Volumetric Charge (per Kgal)															
0-2,000 gallons	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
2,001 - 20,000 gallons MAX		5.19		5.19		5.71		5.99		6.29		6.61		6.94	
Residential Outside City															
Minimum Charge															
All	\$	15.58	\$	15.58	\$	17.14	\$	17.99	\$	18.89	\$	19.84	\$	20.83	
Volumetric Charge (per Kgal)															
0-2,000 gallons	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
2,001 - 20,000 gallons MAX		6.49		6.49		7.14		7.50		7.87		8.26		8.68	
Commercial Inside City															
Minimum Charge															
All	\$	12.46	\$	12.46	\$	13.71	\$	14.39	\$	15.11	\$	15.87	\$	16.66	
Volumetric Charge (per Kgal)															
0-2,000 gallons	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
2,001+ gallons		5.19		5.19		5.71		5.99		6.29		6.61		6.94	
Commercial Outside City															
Minimum Charge															
All	\$	18.69	\$	18.69	\$	20.56	\$	21.59	\$	22.67	\$	23.80	\$	24.99	
Volumetric Charge (per Kgal)															
0-2,000 gallons	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
2,001+ gallons		7.78		7.78		8.56		8.99		9.44		9.91		10.40	

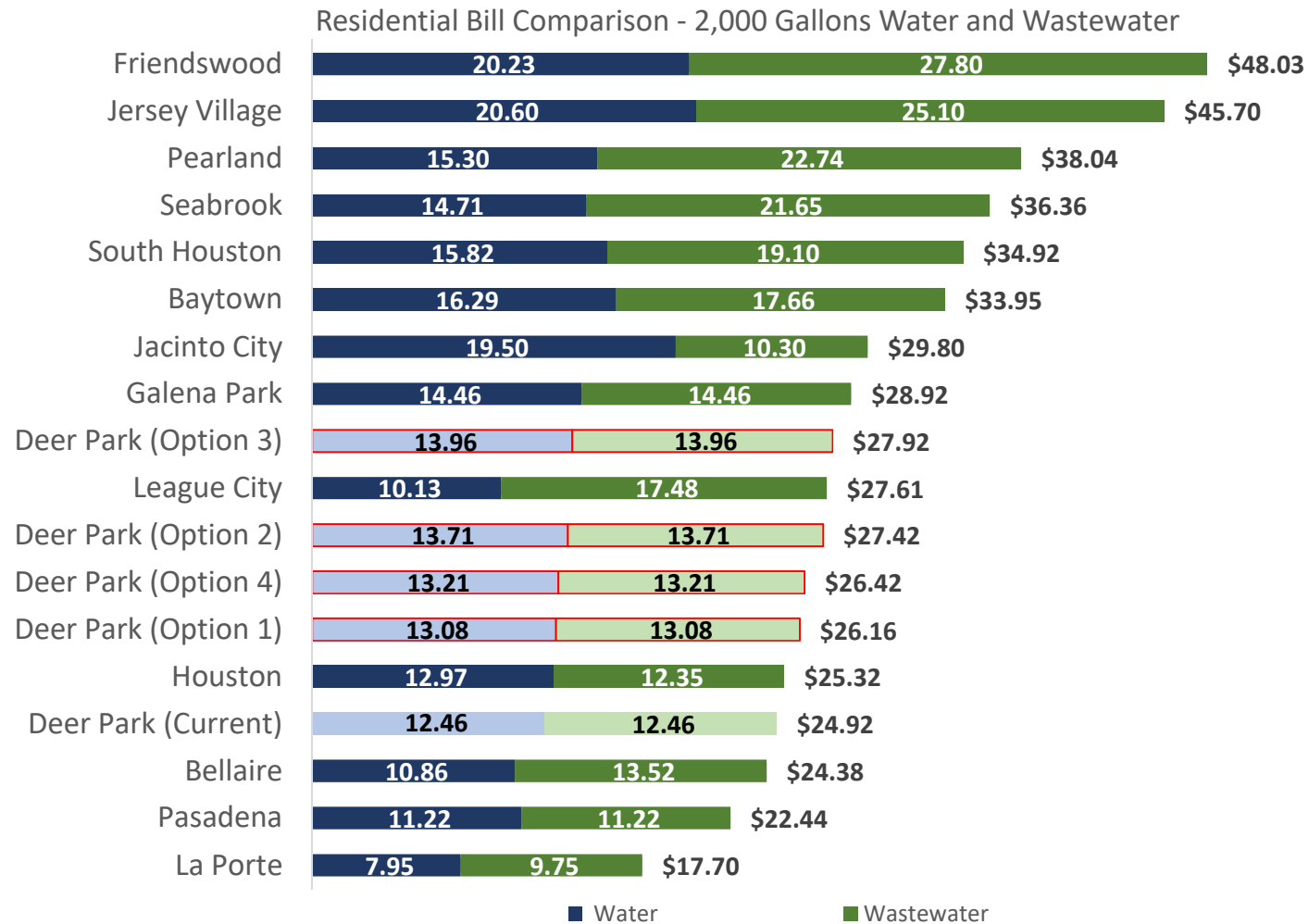
## Schedule 6

City of Deer Park, Texas Water and Wastewater Rate Model Summary of Proposed Rate Performance - Water & Wastewater						
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
<b>WATER</b>						
Rate Revenue Requirement	\$6,233,904	\$7,533,342	\$7,208,885	\$7,729,441	\$7,953,644	\$8,259,003
Projected Revenue Under Proposed Rates	5,542,286	6,473,569	6,799,458	7,141,309	7,499,968	7,876,639
YTD Adjustment						
Over / (Under) Recovery	(\$691,618)	(\$1,059,773)	(\$409,427)	(\$588,132)	(\$453,677)	(\$382,364)
Draw down of Reserves	-	-	-	-	-	-
<b>Adjusted Over / (Under) Recovery</b>	<b>(\$691,618)</b>	<b>(\$1,059,773)</b>	<b>(\$409,427)</b>	<b>(\$588,132)</b>	<b>(\$453,677)</b>	<b>(\$382,364)</b>
<b>Adjusted Over / (Under) Recovery (%)</b>	<b>(11.09%)</b>	<b>(14.07%)</b>	<b>(5.68%)</b>	<b>(7.61%)</b>	<b>(5.70%)</b>	<b>(4.63%)</b>
Projected Annual Billed Water Consumption (000's)	1,007,158	1,078,995	1,079,354	1,079,647	1,079,886	1,080,126
<b>WASTEWATER</b>						
Rate Revenue Requirement	\$4,037,493	\$4,608,002	\$4,735,545	\$4,845,374	\$4,988,337	\$5,556,419
Projected Revenue Under Proposed Rates	5,155,266	6,039,738	6,344,066	6,663,267	6,998,134	7,349,831
YTD Adjustment						
Over / (Under) Recovery	\$1,117,773	\$1,431,736	\$1,608,521	\$1,817,893	\$2,009,797	\$1,793,412
Draw down of Reserves	-	-	-	-	-	-
<b>Adjusted Over / (Under) Recovery</b>	<b>\$1,117,773</b>	<b>\$1,431,736</b>	<b>\$1,608,521</b>	<b>\$1,817,893</b>	<b>\$2,009,797</b>	<b>\$1,793,412</b>
<b>Adjusted Over / (Under) Recovery (%)</b>	<b>27.68%</b>	<b>31.07%</b>	<b>33.97%</b>	<b>37.52%</b>	<b>40.29%</b>	<b>32.28%</b>
Projected Annual Billed Water Consumption (000's)	901,597	963,653	964,015	964,310	964,552	964,794
<b>WATER AND WASTEWATER TOTAL</b>						
Rate Revenue Requirement	\$10,271,397	\$12,141,343	\$11,944,430	\$12,574,815	\$12,941,981	\$13,815,421
Projected Revenue Under Proposed Rates	10,697,552	12,513,307	13,143,524	13,804,576	14,498,102	15,226,469
YTD Adjustment	-	-	-	-	-	-
Over / (Under) Recovery	\$426,155	\$371,963	\$1,199,094	\$1,229,761	\$1,556,121	\$1,411,048
Draw down of Reserves	-	-	-	-	-	-
<b>Adjusted Over / (Under) Recovery</b>	<b>\$426,155</b>	<b>\$371,963</b>	<b>\$1,199,094</b>	<b>\$1,229,761</b>	<b>\$1,556,121</b>	<b>\$1,411,048</b>
<b>Adjusted Over / (Under) Recovery (%)</b>	<b>4.15%</b>	<b>3.06%</b>	<b>10.04%</b>	<b>9.78%</b>	<b>12.02%</b>	<b>10.21%</b>

Schedule 6

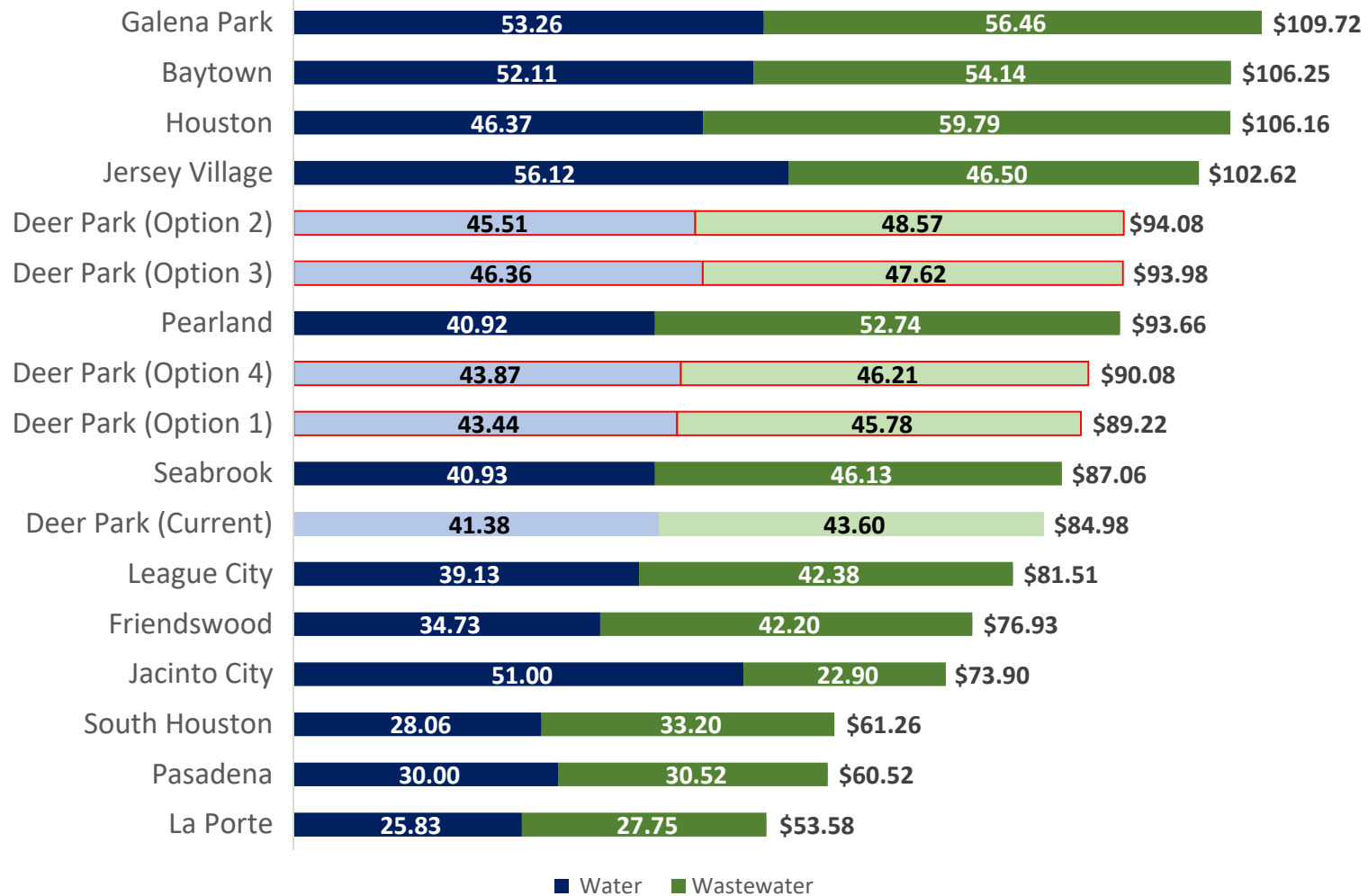
City of Deer Park, Texas Water and Wastewater Rate Model Summary of Proposed Rate Performance - Water & Wastewater						
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
WATER AND WASTEWATER KEY FINANCIAL STATISTICS						
<b>Beginning Unrestricted Net Position</b>	\$8,126,168	\$8,552,323	\$8,924,286	\$10,123,380	\$11,353,141	\$12,909,261
Total Revenues	11,007,244	13,470,244	13,444,524	14,105,576	14,799,102	15,527,469
Total Expenses	10,581,089	13,098,280	12,245,430	12,875,815	13,242,981	14,116,421
<b>Ending Unrestricted Net Position</b>	<b>\$8,552,323</b>	<b>\$8,924,286</b>	<b>\$10,123,380</b>	<b>\$11,353,141</b>	<b>\$12,909,261</b>	<b>\$14,320,309</b>
<b>Days Cash on Hand (180 Days)</b>	● 436 ● 396 ● 472 ● 510 ● 557 ● 594					
<b>Debt Service Coverage</b>						
Total Revenues	\$ 11,007,244	\$ 13,470,244	\$ 13,444,524	\$ 14,105,576	\$ 14,799,102	\$ 15,527,469
Total Expenses Less Debt Service	7,154,574	8,224,163	7,822,519	8,131,593	8,455,306	8,796,756
<b>Available for Debt Service Coverage</b>	<b>\$ 3,852,670</b>	<b>\$ 5,246,081</b>	<b>\$ 5,622,005</b>	<b>\$ 5,973,983</b>	<b>\$ 6,343,796</b>	<b>\$ 6,730,713</b>
Debt Service	2,777,677	3,075,217	3,172,911	3,455,217	3,458,448	3,948,960
<b>Coverage Ratio</b>	● 1.39 ● 1.71 ● 1.77 ● 1.73 ● 1.83 ● 1.70					
<b>Target Debt Service Coverage Ratio</b>	1.10	1.10	1.10	1.10	1.10	1.10

**City of Deer Park, Texas**  
**Water and Wastewater Rate Model**  
**Regional Bill Comparison**



**City of Deer Park, Texas**  
**Water and Wastewater Rate Model**  
**Regional Bill Comparison**

Residential Bill Comparison - 8,000 Gallons Water and Wastewater





**City of Deer Park, Texas**  
**Water and Wastewater Rate Model**  
**Regional Bill Comparison**

Residential Bill Comparison - 15,000 Gallons Water and Wastewater

