City of Jersey Village

2020-2021 Financial Planning and Rate Study Report

Report / August 11, 2020

JONES | CARTER

RAFTELIS

Exhibit A

RAFTELIS

August 11, 2020

Austin Bleess
Jersey Village City Manager
16327 Lakeview Dr.
Jersey Village, TX 77040

Subject: City of Jersey Village Financial Planning and Rate Study Report

Dear Mr. Bleess,

Raftelis Inc. (Raftelis) is pleased to provide this Financial Planning and Rate Study Report for the City of Jersey Village. The financial planning model considered the FY 2020 budget and the City's most recent 10-year Capital Improvements Plan. The model forecast includes costs for a 5-year study period and defines the amount of revenue needed for the utility.

The following report summarizes the key findings and recommendations related to the development of the financial plan and update of rates. The model can be updated annually by the City to determine the impact of the latest budget. Our staff will be available to help review any changes made by the City to ensure complete accuracy of the updates.

It has been a pleasure working with you, and we thank you and the City staff for the support provided during the course of this Study.

Sincerely,

Angie Flores

Angie Flores
Senior Manager

Table of Contents

List of Tables

List of Figures

1. Executive Summary

1.1. Introduction

The City of Jersey Village (City) is a city of around 8,000 people northwest of Houston. The City serves roughly 3,300 water customers and roughly 2,400 wastewater customers, inside and outside the city limits. While the City must have enough well capacity for guaranteed supply for the existing system, the City intends to operate on nearly 100% surface water from the City of Houston. The City is part of the North Harris County Regional Water Authority's (Water Authority) Groundwater Reduction Plan and therefore is required to pay a fee for every 1,000 gallons of groundwater pumped. Based on these operations, the City contractually has enough surface water to meet the average day flows but would be using more than the maximum contractual amount for any usage above average day flows.

For wastewater, the City is also a partner in the White Oak Bayou Wastewater Treatment Plant (WWTP) Joint Powers, along with West Harris County Municipal Utility District (MUD) No. 1, Harris County MUD No. 25, Windfern Forest Utility District and Baker Oil Tools. Collectively the partners own the White Oak Bayou WWTP, which has a permitted effluent flow of 2.0 million gallons per day (MGD) and a peak flow of 5,556 gallons per minute (gpm). The City owns 40.63% of the WWTP and is billed accordingly for any improvement projects at the plant. The City is also billed monthly based on the percentage contributed of the total flow per month to the WWTP.

1.2. Rate Study Objectives

The City retained Raftelis in March 2020 to complete a water and wastewater financial plan and rate study. In addition, the City also requested a customized rate model for their use in annual updates. Raftelis completed this study with assistance from Jones Carter, the City's engineer of record.

When Raftelis was engaged it was tasked to:

- Develop a 10-year water and wastewater financial plan to ensure that the City maintains the health of its utilities;
- Update the City's rates to reflect annual revenue adjustments and recover the cost to provide service;
- Develop a funding profile for capital projects which minimize the impact to customers and financial risk to the utility; and
- Provide recommendations on changes to their existing rate structures.

The key outcomes of the study included:

- Rate increases are needed in the 5-year forecast period to provide for the cash-funding of capital;
- Outside-City-Limit (OCL) rates should not be increased in the 5-year forecast period;
- Impact Fee balances can be used to fund capital projects in the 5-year forecast period; and
- Operating reserve targets will be met throughout the 5-year forecast period based on the proposed rate increases.

1.3. Summary Results

Combined Utility

Raftelis considered the City's system as a combined utility, but also allocated costs between water and wastewater. This process is described in more detail further in this report. Rate revenue should be sufficient to meet annual operating expenses, fund capital improvement projects, debt service and meet debt service coverage and reserve requirements. Raftelis recommends the following revenue adjustments for the 5-year study period. The proposed rate increases sufficiently fund the annual revenue requirements.

Table 1 Combined Utility Cash Flow

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Cash Flow Summary					
Beginning Balance	$3,788,929	$4,375,338	$2,798,341	$2,959,218	$1,664,476
Sources of Funds					
Rate Revenue	$4,600,313	$4,702,630	$4,808,075	$4,916,917	$5,027,919
Other Income	$150,000	$150,000	$150,000	$150,000	$150,000
Total Sources of Funds	$4,750,313	$4,852,630	$4,958,075	$5,066,917	$5,177,919
Uses of Funds					
Operation and Maintenance Expense	$4,063,904	$4,149,627	$4,237,198	$4,326,658	$4,418,049
Capital Expenditures	$100,000	$2,280,000	$560,000	$2,035,000	$460,000
Total Uses of Funds	$4,163,904	$6,429,627	$4,797,198	$6,361,658	$4,878,049
Ending Balance	$4,375,338	$2,798,341	$2,959,218	$1,664,476	$1,964,346
Target Reserve	*$1,015,976*	*$1,037,407*	*$1,059,300*	*$1,081,665*	*$1,104,512*
Annual Rate Adjustments					
Monthly Base Fee [1]	8.7%	0.0%	0.0%	0.0%	0.0%
Volumetric Rate	3.0%	3.0%	3.0%	3.0%	3.0%
Outside City Rates	0.0%	0.0%	0.0%	0.0%	0.0%

[1] Applies to the residential, commercial, and irrigation classes.

It is recommended that the financial plan be updated annually to reflect the most current financial information.

1.4. Reliance on City-Provided Data

During this project, the City (and/or its representatives) provided Raftelis with a variety of technical information, including cost and revenue data. Raftelis has relied on this data in the formulation of our findings and subsequent recommendations, as well as in the preparation of this report. Some of the assumptions used in this report will not be realized, and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the data or results projected in this report and actual results achieved, and those differences may be material. It is recommended that the City update the utility financial plans annually to reflect current estimates of revenue, operating expenses, capital improvement needs, and maintenance of reserve targets, and to determine whether the projected increases are still appropriate.

2. Water Financial Plan and Rate Design

2.1. Introduction

The City tracks water and wastewater financial activities as a combined enterprise fund. For the purposes of this study, Raftelis developed separate cash flows for each utility. This separation of cash flow allows for ensuring that annual water rate revenues adequately recover water revenue requirements and wastewater revenues meet wastewater revenue requirements. Revenue requirements include operation and maintenance expenses, debt service, capital expenditures, reserve targets and debt service coverage.

2.2. Assumptions

Raftelis used the following assumptions in developing the water financial plan cash flow. Changes in these assumptions could materially affect the outcome of the analysis. With the exception of Salaries, Wages and Benefits which were increased 3% for the study period, expenses were increased by 3% in FY 2021 and 2% for the remainder of the study period.

2.3. Sources of Funds

Sources of funds include unrestricted beginning balances carried over from previous years, rate revenue, and miscellaneous revenue. Rate revenue projections consist of monthly base fees and volume charges. These revenue projections are based on a detailed analysis of historical accounts and consumption by customer class. Growth projections were provided by Jones Carter and are estimated to remain flat. This assumption was considered in order to be conservative since growth has been minimal historically. Revenue under existing rates averages about $4.5 million annually. Miscellaneous revenue includes Water Authority fees, credit card fees, interest income on fund balances, penalties and other miscellaneous sources. Miscellaneous revenue is projected to average $86,000 annually through the study period. The City also collects impact fees and uses them to cash-fund capital projects. The impact fees have been excluded from the cashflow and are accounted for in the model separately.

2.4. Revenue Requirements

Revenue requirements include cash funded capital and O&M expenses. Raftelis worked with staff to determine the portions of the O&M budget related to water and the portion related to wastewater. Most O&M items are allocated at a 50% split between water and wastewater. O&M expenses are allocated entirely to water if applicable. O&M expense averages $2.8 million over the study period, including inflation.

The capital plan totals $2.175 million over the study period. This plan was developed by Jones Carter based on their analysis of future system needs. Some examples of projects are upgrades and improvements to the City treatment plants, line replacement, and well rehabilitation. Some of the projects are impact fee eligible projects and are funded with impact fees.

2.5. Target Reserves

The City is required by policy to maintain a target operating reserve level equal to 90 days operation and maintenance expense. This level of reserves is commonly used in the industry and is usually sufficient to meet the variability in cash flow over the course of a year. The model assumes that this target is maintained throughout the 5-year forecast period.

2.6. Indicated Revenue Adjustments

Revenue from rates should be sufficient to meet annual revenue requirements which include operation and maintenance expenses, rate-funded capital, payments on existing and proposed debt service, debt service coverage and target reserves. A one-time adjust of 8.7% to the monthly base fee is proposed in FY 2021 and equal annual increases to the volumetric rate of 3% in FY 2021 through FY 2025.

Table 2 Water Utility Cash Flow

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Cash Flow Summary					
Beginning Balance	$2,066,334	$2,431,846	$1,696,244	$1,634,882	$728,134
Sources of Funds					
Rate Revenue	$2,951,899	$3,021,847	$3,093,951	$3,168,452	$3,244,084
Other Income	$82,500	$82,500	$82,500	$82,500	$82,500
Total Sources of Funds	$3,034,399	$3,104,347	$3,176,451	$3,250,952	$3,326,584
Uses of Funds					
Operation and Maintenance Expense	$2,713,503	$2,770,741	$2,829,213	$2,888,946	$2,949,968
Capital Expenditures	$100,000	$1,175,000	$125,000	$750,000	$25,000
Total Uses of Funds	$2,813,503	$3,945,741	$2,954,213	$3,638,946	$2,974,968
Ending Balance	$1,943,492	$1,102,098	$1,324,336	$936,342	$1,287,957
Target Reserve	$678,376	$692,685	$707,303	$722,237	$737,492
Annual Rate Adjustments					
Monthly Base Fee [1]	8.7%	0.0%	0.0%	0.0%	0.0%
Volumetric Rate	3.0%	3.0%	3.0%	3.0%	3.0%
Outside City Rates	0.0%	0.0%	0.0%	0.0%	0.0%

[1] Applies to the residential, commercial, and irrigation classes.

2.7. Rate Design

In considering the City's current rates, the City's classes and rate structures are typical of the industry. All rate classes have a minimum charge. The residential class and residential sprinkler rate have an inclining block volumetric charge The commercial rate class has a uniform rate that is also typical of the industry. The City has a sprinkler rate specifically for commercial customers that have a uniform rate. Raftelis is not recommending any changes to these rate structures at this time. In the future, the City may consider an inclining block rate for commercial sprinkler rate.

2.8. Outside City Rates

The City requested Raftelis to review the current outside City rate differential and provide recommendation on possible changes. Outside City rate differentials or multipliers are often determined in several ways: through a costing analysis which identifies costs that are specific to serving customers outside the jurisdictional limits, a analysis using a rate of return on invested facilities servicing customers outside the City and policy driven. Outside City multipliers typically range from 0% to 200% of inside City rates. The average is 125% for both the fixed charge and the volumetric rates. The City's current differential for the monthly base fee is 8.48 times greater than inside City. This level of differential is outside what is typical in the industry and within the state. Within Texas we typically see 125% to 150%, although recently, with an increase in rate appeals these differentials have been challenged. The outside City volumetric rate is 1.42 times greater than the inside City rate. Raftelis recommends that the outside city limit rate not be increased until an actual cost of service analysis is completed to determine the appropriate amount of the differential.

3. Wastewater Financial Plan and Rate Design

3.1. Introduction

The City tracks water and wastewater financial activities as a combined enterprise fund. For the purposes of this study, Raftelis developed separate cash flows for each utility. This separation of cash flow allows for ensuring that annual water rate revenues adequately recover water revenue requirements and wastewater revenues meet wastewater revenue requirements. Revenue requirements include operation and maintenance expenses, debt service, capital expenditures, reserve targets and debt service coverage.

3.2. Assumptions

Raftelis used the following assumptions in developing the wastewater financial plan cash flow. Changes in these assumptions could materially affect the outcome of the analysis. With the exception of Salaries, Wages and Benefits which were increased 3% for the study period, expenses were increased by 3% in FY 2021 and 2% for the remainder of the study period.

3.3. Sources of Funds

Sources of funds include unrestricted beginning balances carried over from previous years, rate revenue, and miscellaneous revenue. Rate revenue projections consist of monthly base fees and volume charges. These revenue projections are based on a detailed analysis of historical accounts and consumption by customer class. Growth projections were provided by Jones Carter and are estimated to remain flat. This assumption was considered in order to be conservative since growth has been minimal historically. Revenue under existing rates averages about $1.6 million annually. Miscellaneous revenue includes credit card fees, interest income on fund balances, penalties and other miscellaneous sources. Miscellaneous revenue is projected to average $68,000 annually through the study period. The City also collects impact fees and uses them to cash-fund capital projects. The impact fees have been excluded from the cashflow and are accounted for in the model separately.

3.4. Revenue Requirements

Revenue requirements include cash funded capital and O&M expenses. Raftelis worked with staff to determine the portions of the O&M budget related to water and the portion related to wastewater. Most O&M items are allocated at a 50% split between water and wastewater. O&M expenses are allocated entirely to wastewater, if applicable. O&M expense averages $1.4 million over the study period, including inflation.

The capital plan totals $3.26 million over the study period. This plan was developed by Jones Carter based on their analysis of future system needs. Some examples of projects are upgrades and improvements to the City wastewater treatment plant, lift station repair, and line maintenance. The capital plan also includes impact fee eligible projects that are cash-funded with impact fees.

3.5. Target Reserves

The City is required by policy to maintain a target operating reserve level equal to 90 days operation and maintenance expense. This level of reserves is commonly used in the industry and is usually sufficient to meet the variability in cash flow over the course of a year. The model assumes that this target is maintained throughout the 5-year forecast period.

3.6. Indicated Revenue Adjustments

Revenue requirements include cash-funded capital and O&M expenses. The cash-funded capital is derived from the capital plan and the O&M expenses are sourced from the budget. The 2020 O&M Budget is the most up to date budget at the time of the study. In 2021 the O&M expenses are assumed to be $1.35 million.

The capital plan Raftelis used was created by the City and Jones Carter. The plan contains new projects and rehabilitation of existing assets.

Table 3 Wastewater Utility Cash Flow

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Cash Flow Summary					
Beginning Balance	$2,066,334	$2,431,846	$1,696,244	$1,634,882	$728,134
Sources of Funds					
Rate Revenue	$1,648,414	$1,680,783	$1,714,124	$1,748,464	$1,783,835
Other Income	$67,500	$67,500	$67,500	$67,500	$67,500
Total Sources of Funds	$1,715,914	$1,748,283	$1,781,624	$1,815,964	$1,851,335
Uses of Funds					
Operation and Maintenance Expense	$1,350,401	$1,378,886	$1,407,985	$1,437,712	$1,468,080
Capital Expenditures	$0	$1,105,000	$435,000	$1,285,000	$435,000
Total Uses of Funds	$1,350,401	$2,483,886	$1,842,985	$2,722,712	$1,903,080
Ending Balance	$2,431,846	$1,696,244	$1,634,882	$728,134	$676,389
Target Reserve	$337,600	$344,722	$351,996	$359,428	$367,020

Annual Rate Adjustments					
Monthly Base Fee [1]	8.7%	0.0%	0.0%	0.0%	0.0%
Volumetric Rate	3.0%	3.0%	3.0%	3.0%	3.0%
Outside City Rates	0.0%	0.0%	0.0%	0.0%	0.0%

[1] Applies to the residential and commercial classes.

3.7. Rate Design

In considering the City's current rates, the City's classes and rate structures are typical of the industry. All rate classes have a minimum charge. The residential class has a two-block rate structure with a uniform rate structure above 3,000 gallons. The residential class is based on a winter average of water consumption from November through February. The commercial rate class is a uniform rate based on water usage which is also typical of the industry.

3.8. Outside City Rates

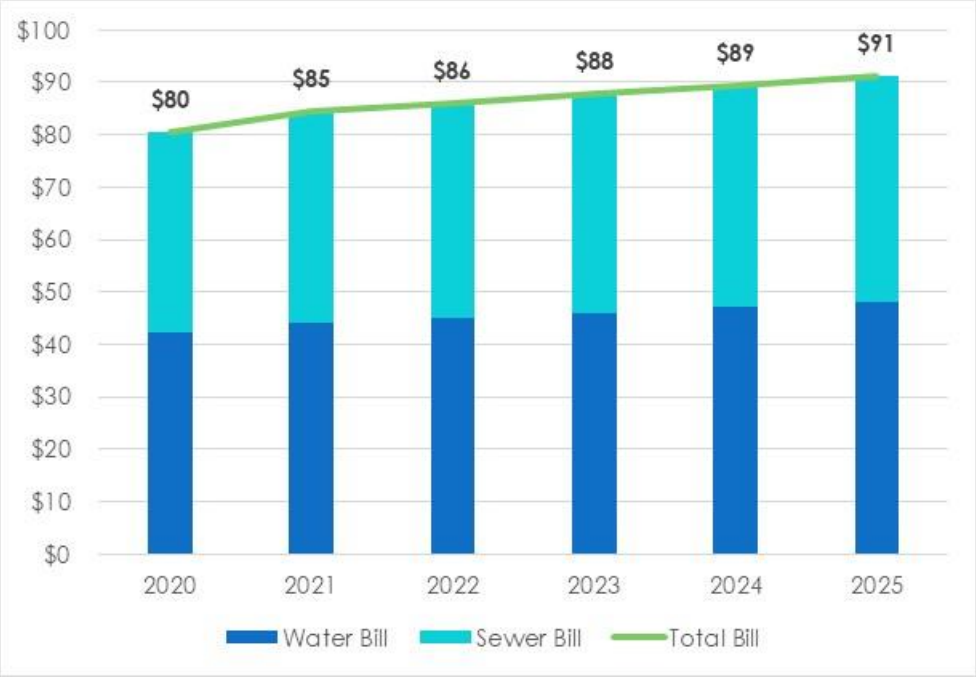
The Utility does not currently serve any outside sewer customers. If the Utility ever serves any outside customers, it is recommended that a cost of service study be considered for the outside rates. The City's current differential for the monthly base fee is 16.2 times greater than inside City. This level of differential is outside what is typical in the industry and within the state. Within Texas we typically see 125% to 150%, although recently, with an increase in rate appeals these differentials have been challenged. The outside City volumetric rate is 2.23 times greater than the inside City rate.

4. Customer Impacts

4.1. Residential Bill

During the course of the study Raftelis calculated that the average residential customer uses roughly 6,000 gallons of water and 5,000 gallons of wastewater. The difference is due to the winter average used to calculate wastewater bills. Raftelis used the average usages to calculate a typical water and wastewater bill. To illustrate the proposed impacts for the 5-year forecast period on residential customers Raftelis created the below graphs. The wastewater consumption represents the

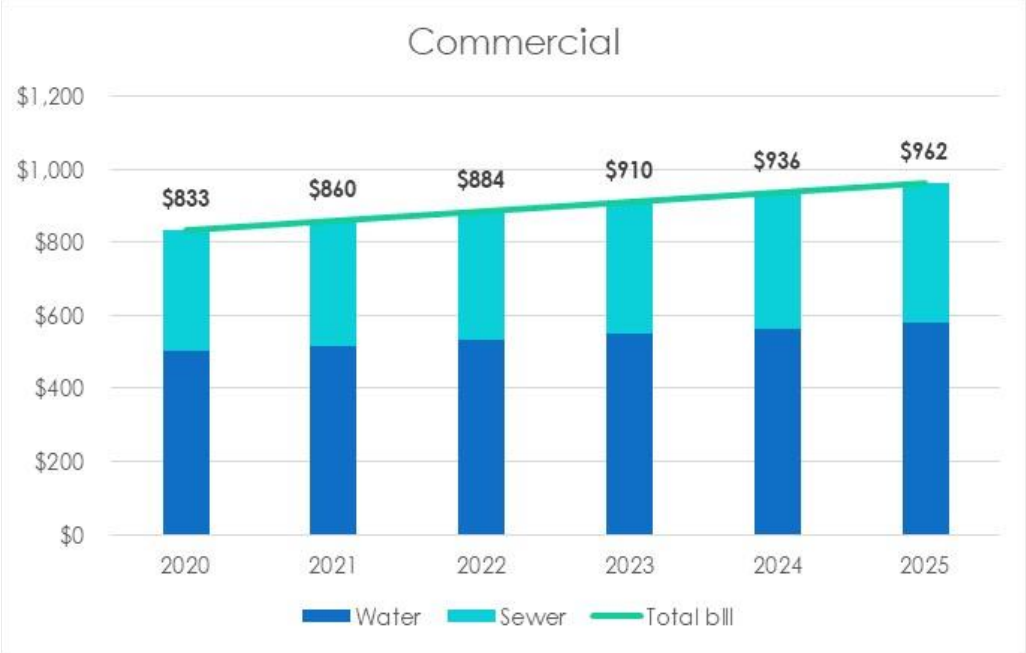
Figure 1 Residential Bill



4.2. Commercial Bill

The average commercial customer uses roughly 66,000 gallons of water and 64,000 gallons of wastewater. Raftelis used this average usage to calculate a typical water and wastewater bill for a commercial customer. To illustrate the proposed impacts for the 5-year forecast period on commercial customers, Raftelis created the graph below.

Figure 2 Commercial Bill



APPENDIX A:

Financial Plan

Figure 3 Water Financial Plan With No Rate Increases

Click to return to index	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Water Revenues						
User Charge Revenue						
Minimum Charge	$ 567,204	$ 566,654	$ 566,654	$ 566,654	$ 566,654	$ 566,654
Volumetric Charge	$ 2,268,870	$ 2,268,870	$ 2,268,870	$ 2,268,870	$ 2,268,870	$ 2,268,870
Water Miscellaneous Revenue	$ 82,500	$ 82,500	$ 82,500	$ 82,500	$ 82,500	$ 82,500
Total: Revenues	**$ 2,918,573**	**$ 2,918,023**	**$ 2,918,023**	**$ 2,918,023**	**$ 2,918,023**	**$ 2,918,023**
Revenue Requirements						
Operating Expenditures	$ 2,634,469	$ 2,713,503	$ 2,770,741	$ 2,829,213	$ 2,888,946	$ 2,949,968
Debt Service	$ -	$ -	$ -	$ -	$ -	$ -
Cash-Fund	$ 1,200,000	$ 100,000	$ 1,175,000	$ 125,000	$ 750,000	$ 25,000
Transfers	$ -	$ -	$ -	$ -	$ -	$ -
Total: Revenue Requirements	**$ 3,834,469**	**$ 2,813,503**	**$ 3,945,741**	**$ 2,954,213**	**$ 3,638,946**	**$ 2,974,968**
Current Revenue Surplus/(Deficit)	$ (915,896)	$ 104,520	$ (1,027,718)	$ (36,190)	$ (720,923)	$ (56,945)

Figure 4 Wastewater Financial Plan With No Rate Increases

Click to return to index	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Sewer Revenues						
User Charge Revenue						
Minimum Charge	$ 523,863	$ 523,863	$ 523,863	$ 523,863	$ 523,863	$ 523,863
Volumetric Charge	$ 1,047,548	$ 1,047,548	$ 1,047,548	$ 1,047,548	$ 1,047,548	$ 1,047,548
Sewer Miscellaneous Revenue	$ 67,500	$ 67,500	$ 67,500	$ 67,500	$ 67,500	$ 67,500
	$ 1,638,912	**$ 1,638,912**	**$ 1,638,912**	**$ 1,638,912**	**$ 1,638,912**	**$ 1,638,912**
Total: Revenues						
Revenue Requirements						
Operating Expenditures	$ 1,311,069	$ 1,350,401	$ 1,378,886	$ 1,407,985	$ 1,437,712	$ 1,468,080
Debt Service	$ -	$ -	$ -	$ -	$ -	$ -
Cash-Fund	$ 900,000	$ -	$ 1,105,000	$ 435,000	$ 1,285,000	$ 435,000
Transfers	$ -	$ -	$ -	$ -	$ -	$ -
	$ 2,211,069	**$ 1,350,401**	**$ 2,483,886**	**$ 1,842,985**	**$ 2,722,712**	**$ 1,903,080**
Total: Revenue Requirements						
Current Revenue Surplus/(Deficit)	$ (572,157)	$ 288,510	$ (844,975)	$ (204,074)	$ (1,083,801)	$ (264,169)

Figure 5 Water Financial Plan With Rate Increases

Click to return to index	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Water Revenues						
User Charge Revenue						
Minimum Charge	$ 567,204	$ 615,049	$ 615,049	$ 615,049	$ 615,049	$ 615,049
Volumetric Charge	$ 2,268,870	$ 2,336,850	$ 2,406,798	$ 2,478,902	$ 2,553,403	$ 2,629,035
Water Miscellaneous Revenue	$ 82,500	$ 82,500	$ 82,500	$ 82,500	$ 82,500	$ 82,500
Total: Revenues	**$ 2,918,573**	**$ 3,034,399**	**$ 3,104,347**	**$ 3,176,451**	**$ 3,250,952**	**$ 3,326,584**
Revenue Requirements						
Operating Expenditures	$ 2,634,469	$ 2,713,503	$ 2,770,741	$ 2,829,213	$ 2,888,946	$ 2,949,968
Debt Service	$ -	$ -	$ -	$ -	$ -	$ -
Cash-Fund	$ 1,200,000	$ 100,000	$ 1,175,000	$ 125,000	$ 750,000	$ 25,000
Transfers	$ -	$ -	$ -	$ -	$ -	$ -
Total: Revenue Requirements	**$ 3,834,469**	**$ 2,813,503**	**$ 3,945,741**	**$ 2,954,213**	**$ 3,638,946**	**$ 2,974,968**
Current Revenue Surplus/(Deficit)	$ (915,896)	$ 220,896	$ (841,394)	$ 222,238	$ (387,994)	$ 351,616

Figure 6 Wastewater Financial Plan With Rate Increases

Click to return to index	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Sewer Revenues						
User Charge Revenue						
Minimum Charge	$ 523,863	$ 569,440	$ 569,440	$ 569,440	$ 569,440	$ 569,440
Volumetric Charge	$ 1,047,548	$ 1,078,975	$ 1,111,344	$ 1,144,684	$ 1,179,025	$ 1,214,395
Sewer Miscellaneous Revenue	$ 67,500	$ 67,500	$ 67,500	$ 67,500	$ 67,500	$ 67,500
	$ 1,638,912	**$ 1,715,914**	**$ 1,748,283**	**$ 1,781,624**	**$ 1,815,964**	**$ 1,851,335**
Total: Revenues						
Revenue Requirements						
Operating Expenditures	$ 1,311,069	$ 1,350,401	$ 1,378,886	$ 1,407,985	$ 1,437,712	$ 1,468,080
Debt Service	$ -	$ -	$ -	$ -	$ -	$ -
Cash-Fund	$ 900,000	$ -	$ 1,105,000	$ 435,000	$ 1,285,000	$ 435,000
Transfers	$ -	$ -	$ -	$ -	$ -	$ -
	$ 2,211,069	**$ 1,350,401**	**$ 2,483,886**	**$ 1,842,985**	**$ 2,722,712**	**$ 1,903,080**
Total: Revenue Requirements						
Current Revenue Surplus/(Deficit)	$ (572,157)	$ 365,513	$ (735,603)	$ (61,362)	$ (906,748)	$ (51,745)

APPENDIX B:

Rates

Exhibit A

Figure 7 Water Inside Meter Rates

Residential Meter Size	FY 2017	FY 2018	FY 2019	FY 2020
5/8" x 3/4"	$ 11.00	$ 11.50	$ 11.50	$ 11.50
1"	$ 11.00	$ 11.50	$ 11.50	$ 11.50
1 1/2"	$ 11.00	$ 11.50	$ 11.50	$ 11.50
2"	$ 11.00	$ 11.50	$ 11.50	$ 11.50
3"	$ 11.00	$ 11.50	$ 11.50	$ 11.50
4"	$ 11.00	$ 11.50	$ 11.50	$ 11.50
6"	$ 11.00	$ 11.50	$ 11.50	$ 11.50
8"	$ 11.00	$ 11.50	$ 11.50	$ 11.50
10"	$ 11.00	$ 11.50	$ 11.50	$ 11.50
Residential Sprinkler Meter Size				
5/8" x 3/4"	$ 11.50	$ 11.50	$ 11.50	$ 11.50
1"	$ 11.50	$ 11.50	$ 11.50	$ 11.50
1 1/2"	$ 11.50	$ 11.50	$ 11.50	$ 11.50
2"	$ 11.50	$ 11.50	$ 11.50	$ 11.50
3"	$ 11.50	$ 11.50	$ 11.50	$ 11.50
4"	$ 11.50	$ 11.50	$ 11.50	$ 11.50
6"	$ 11.50	$ 11.50	$ 11.50	$ 11.50
8"	$ 11.50	$ 11.50	$ 11.50	$ 11.50
10"	$ 11.50	$ 11.50	$ 11.50	$ 11.50
Commercial				
5/8" x 3/4"	$ 50.00	$ 50.00	$ 50.00	$ 50.00
1"	$ 50.00	$ 50.00	$ 50.00	$ 50.00
1 1/2"	$ 50.00	$ 50.00	$ 50.00	$ 50.00
2"	$ 50.00	$ 50.00	$ 50.00	$ 50.00
3"	$ 50.00	$ 50.00	$ 50.00	$ 50.00
4"	$ 50.00	$ 50.00	$ 50.00	$ 50.00
6"	$ 50.00	$ 50.00	$ 50.00	$ 50.00
8"	$ 50.00	$ 50.00	$ 50.00	$ 50.00
10"	$ 50.00	$ 50.00	$ 50.00	$ 50.00
Commercial Sprinkler				
5/8" x 3/4"	$ 50.00	$ 50.00	$ 50.00	$ 50.00
1"	$ 50.00	$ 50.00	$ 50.00	$ 50.00
1 1/2"	$ 50.00	$ 50.00	$ 50.00	$ 50.00
2"	$ 50.00	$ 50.00	$ 50.00	$ 50.00
3"	$ 50.00	$ 50.00	$ 50.00	$ 50.00
4"	$ 50.00	$ 50.00	$ 50.00	$ 50.00
6"	$ 50.00	$ 50.00	$ 50.00	$ 50.00
8"	$ 50.00	$ 50.00	$ 50.00	$ 50.00
10"	$ 50.00	$ 50.00	$ 50.00	$ 50.00

Figure 8 Water Outside Meter Rates

Commercial	FY 2017	FY 2018	FY 2019	FY 2020
5/8" x 3/4"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
1"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
1 1/2"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
2"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
3"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
4"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
6"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
8"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
10"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
Commercial Sprinkler				
5/8" x 3/4"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
1"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
1 1/2"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
2"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
3"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
4"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
6"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
8"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
10"	$ 424.00	$ 424.00	$ 424.00	$ 424.00

Figure 9 Water Inside Volumetric Rates

Residential	FY 2017	FY 2018	FY 2019	FY 2020
0-3,000 Gallons	$ 4.08	$ 4.31	$ 4.55	$ 4.55
3-6,000 Gallons	$ 5.10	$ 5.39	$ 5.69	$ 5.69
6-12,000 Gallons	$ 6.23	$ 6.58	$ 6.95	$ 6.95
12-25,000 Gallons	$ 7.79	$ 8.23	$ 8.69	$ 8.69
Over 25,000 Gallons	$ 11.69	$ 12.35	$ 13.04	$ 13.04
Residential Sprinkler				
0-6,000 Gallons	$ 6.23	$ 6.58	$ 6.95	$ 6.95
6-19,000 Gallons	$ 7.79	$ 8.23	$ 8.69	$ 8.69
Over 19,000 Gallons	$ 11.69	$ 12.35	$ 13.04	$ 13.04
Commercial				
All	$ 6.77	$ 7.10	$ 7.44	$ 7.44
Commercial Sprinkler				
All	$ 6.36	$ 6.48	$ 6.60	$ 6.60

Figure 10 Water Outside Volumetric Rates

Commercial	FY 2017	FY 2018	FY 2019	FY 2020
All	$ 10.60	$ 10.60	$ 10.60	$ 10.60
Commercial Sprinkler				
Usage	$ 10.60	$ 10.60	$ 10.60	$ 10.60

Figure 11 Wastewater Meter Rates

Residential	FY 2017	FY 2018	FY 2019	FY 2020
5/8" x 3/4"	$ 16.10	$ 16.60	$ 17.20	$ 17.90
1"	$ 16.10	$ 16.60	$ 17.20	$ 17.90
1 1/2"	$ 16.10	$ 16.60	$ 17.20	$ 17.90
2"	$ 16.10	$ 16.60	$ 17.20	$ 17.90
3"	$ 16.10	$ 16.60	$ 17.20	$ 17.90
4"	$ 16.10	$ 16.60	$ 17.20	$ 17.90
6"	$ 16.10	$ 16.60	$ 17.20	$ 17.90
8"	$ 16.10	$ 16.60	$ 17.20	$ 17.90
10"	$ 16.10	$ 16.60	$ 17.20	$ 17.90
Commercial				
5/8" x 3/4"	$ 26.20	$ 26.20	$ 26.20	$ 26.20
1"	$ 26.20	$ 26.20	$ 26.20	$ 26.20
1 1/2"	$ 26.20	$ 26.20	$ 26.20	$ 26.20
2"	$ 26.20	$ 26.20	$ 26.20	$ 26.20
3"	$ 26.20	$ 26.20	$ 26.20	$ 26.20
4"	$ 26.20	$ 26.20	$ 26.20	$ 26.20
6"	$ 26.20	$ 26.20	$ 26.20	$ 26.20
8"	$ 26.20	$ 26.20	$ 26.20	$ 26.20
10"	$ 26.20	$ 26.20	$ 26.20	$ 26.20

Figure 12 Outside Wastewater Meter Rates

Commercial	FY 2017	FY 2018	FY 2019	FY 2020
5/8" x 3/4"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
1"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
1 1/2"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
2"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
3"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
4"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
6"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
8"	$ 424.00	$ 424.00	$ 424.00	$ 424.00
10"	$ 424.00	$ 424.00	$ 424.00	$ 424.00

Figure 13 Wastewater Volumetric Rates

Residential	FY 2017	FY 2018	FY 2019	FY 2020
First 3,000 Gallons	$ 2.55	$ 3.02	$ 3.49	$ 3.95
Over 3,000 Gallons	$ 4.00	$ 4.08	$ 4.16	$ 4.24
Commercial				
All	$ 4.60	$ 4.65	$ 4.70	$ 4.75

Figure 14 Projected Water Base Rates

Residential Meter Size	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
5/8" x 3/4"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
1"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
1 1/2"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
2"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
3"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
4"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
6"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
8"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
10"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
Residential Sprinkler Meter Size						
5/8" x 3/4"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
1"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
1 1/2"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
2"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
3"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
4"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
6"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
8"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
10"	$ 11.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50	$ 12.50
Commercial						
5/8" x 3/4"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35
1"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35
1 1/2"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35
2"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35
3"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35
4"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35
6"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35
8"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35
10"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35
Commercial Sprinkler						
5/8" x 3/4"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35
1"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35
1 1/2"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35
2"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35
3"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35
4"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35
6"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35
8"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35
10"	$ 50.00	$ 54.35	$ 54.35	$ 54.35	$ 54.35	$ 54.35

Figure 15 Projected Outside Water Base Rates

Commercial	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
5/8" x 3/4"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
1"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
1 1/2"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
2"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
3"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
4"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
6"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
8"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
10"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
Commercial Sprinkler						
5/8" x 3/4"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
1"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
1 1/2"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
2"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
3"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
4"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
6"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
8"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
10"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00

Figure 16 Projected Water Volumetric Rates

Residential	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
0-3,000 Gallons	$ 4.55	$ 4.69	$ 4.83	$ 4.97	$ 5.12	$ 5.27
3-6,000 Gallons	$ 5.69	$ 5.86	$ 6.04	$ 6.22	$ 6.41	$ 6.60
6-12,000 Gallons	$ 6.95	$ 7.16	$ 7.37	$ 7.59	$ 7.82	$ 8.05
12-25,000 Gallons	$ 8.69	$ 8.95	$ 9.22	$ 9.50	$ 9.79	$ 10.08
Over 25,000 Gallons	$ 13.04	$ 13.43	$ 13.83	$ 14.24	$ 14.67	$ 15.11
Residential Sprinkler						
0-6,000 Gallons	$ 6.95	$ 7.16	$ 7.37	$ 7.59	$ 7.82	$ 8.05
6-19,000 Gallons	$ 8.69	$ 8.95	$ 9.22	$ 9.50	$ 9.79	$ 10.08
Over 19,000 Gallons	$ 13.04	$ 13.43	$ 13.83	$ 14.24	$ 14.67	$ 15.11
Commercial						
All	$ 7.44	$ 7.66	$ 7.89	$ 8.13	$ 8.37	$ 8.62
Commercial Sprinkler						
All	$ 6.60	$ 6.80	$ 7.00	$ 7.21	$ 7.43	$ 7.65

Figure 17 Projected Outside Water Volumetric Rates

Commercial	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
All	$ 10.60	$ 10.60	$ 10.60	$ 10.60	$ 10.60	$ 10.60
Commercial Sprinkler						
Usage	$ 10.60	$ 10.60	$ 10.60	$ 10.60	$ 10.60	$ 10.60

Figure 18 Projected Wastewater Base Rates

Residential	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
5/8" x 3/4"	$ 17.90	$ 19.46	$ 19.46	$ 19.46	$ 19.46	$ 19.46
1"	$ 17.90	$ 19.46	$ 19.46	$ 19.46	$ 19.46	$ 19.46
1 1/2"	$ 17.90	$ 19.46	$ 19.46	$ 19.46	$ 19.46	$ 19.46
2"	$ 17.90	$ 19.46	$ 19.46	$ 19.46	$ 19.46	$ 19.46
3"	$ 17.90	$ 19.46	$ 19.46	$ 19.46	$ 19.46	$ 19.46
4"	$ 17.90	$ 19.46	$ 19.46	$ 19.46	$ 19.46	$ 19.46
6"	$ 17.90	$ 19.46	$ 19.46	$ 19.46	$ 19.46	$ 19.46
8"	$ 17.90	$ 19.46	$ 19.46	$ 19.46	$ 19.46	$ 19.46
10"	$ 17.90	$ 19.46	$ 19.46	$ 19.46	$ 19.46	$ 19.46
Commercial						
5/8" x 3/4"	$ 26.20	$ 28.48	$ 28.48	$ 28.48	$ 28.48	$ 28.48
1"	$ 26.20	$ 28.48	$ 28.48	$ 28.48	$ 28.48	$ 28.48
1 1/2"	$ 26.20	$ 28.48	$ 28.48	$ 28.48	$ 28.48	$ 28.48
2"	$ 26.20	$ 28.48	$ 28.48	$ 28.48	$ 28.48	$ 28.48
3"	$ 26.20	$ 28.48	$ 28.48	$ 28.48	$ 28.48	$ 28.48
4"	$ 26.20	$ 28.48	$ 28.48	$ 28.48	$ 28.48	$ 28.48
6"	$ 26.20	$ 28.48	$ 28.48	$ 28.48	$ 28.48	$ 28.48
8"	$ 26.20	$ 28.48	$ 28.48	$ 28.48	$ 28.48	$ 28.48
10"	$ 26.20	$ 28.48	$ 28.48	$ 28.48	$ 28.48	$ 28.48
Outside Commercial						
5/8" x 3/4"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
1"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
1 1/2"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
2"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
3"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
4"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
6"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
8"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00
10"	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00	$ 424.00

Figure 19 Projected Wastewater Volumetric Rates

Residential	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
First 3,000 Gallons	$ 3.95	$ 4.07	$ 4.19	$ 4.32	$ 4.45	$ 4.58
Over 3,000 Gallons	$ 4.24	$ 4.37	$ 4.50	$ 4.63	$ 4.77	$ 4.92
Commercial						
All	$ 4.75	$ 4.89	$ 5.04	$ 5.19	$ 5.35	$ 5.51
Outside Commercial						
All	$ 10.60	$ 10.60	$ 10.60	$ 10.60	$ 10.60	$ 10.60