



BOARD OF TRUSTEES
January 21, 2020
LEEPER CENTER – 3800 WILSON AVE.

Regular Meeting - 6:30 AM

AGENDA

A. ITEMS

1. GovHR Finance Director Recruitment
2. Water Rate Study
3. 2020 Master Plan Update
4. Organizational Chart
5. Chamber/Town co-location discussion

The Town of Wellington will make reasonable accommodations for access to Town services, programs, and activities and special communication arrangements. Individuals needing special accommodation may request assistance by contacting the Deputy Clerk at Town Hall or at 970-568-3380 ext. 110 at least 24 hours in advance.

TOWN OF WELLINGTON, CO

WATER, SEWER, AND DRAINAGE UTILITIES

RATE STUDY REPORT

JANUARY 2020

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1. EXECUTIVE SUMMARY

The objective of this rate study is to evaluate the past, present and future operational budgets of the Wellington, and make recommendations for water, sewer and stormwater charges (together, a “rate structure”) which equitably recovers the costs of these critical services to each customer.

The rate study methodology used in this study involved:

- Gathering and analyzing historic water demands, billing information, future capitals improvements plans, growth projections and financing information.
- Creating estimates of the future revenue requirements for the five-year study period.
- Working with the Town to verify the goals and objectives of the study.
- Exploring alternative methodologies for the rate structures rates that can resolve financial challenges and equitably assign costs.

Rate setting is fundamentally a two-step process. In the first step, an informed projection of the revenue requirement for each utility is developed. Essentially, this projection identifies the amount of money which the rates need to raise in order to ensure the long-term fiscal stability of the Town’s services. In this draft version of the report, we have fully outlined the process by which this was completed and provided information on the projected revenue requirements of the utilities.

The second step of rate setting involves the use of historical billing trends and informed growth projections to identify ways to equitably raise that revenue. Given the significant changes that are underway in Wellington, Town staff wanted and worked with us to develop a comprehensive financial model of all three utilities that allow us to evaluate the financial impacts associated with making a number of possible changes to the basic rate structures. The variables that have been built into the financial model which are not included in the current rate structures include: (1) multi-tier rates, (2) customer class rates, and (3) billing sewer based upon meter readings amongst other variables.

Without final guidance on which variables the Town is committed to considering, this report presents a series of rate recommendations based upon setting rates without any changes to the underlying rate structure. The contract with the Town stipulates that we also provide guidance on other rate structures. We anticipate having these discussion at our meeting on the 21st, after which the additional evaluations will be completed and a final report can be issued.

2. BACKGROUND

The town's owns and operates public Water, Sewer and Storm Drainage Divisions divisions. Wellington has a stand-alone Water and Sewer (Utilities) Department. The Water and Sewer Department serves approximately 4,000 residential, commercial, institutional accounts, serving the entire City with water and sewer service.

According to the 2010 U.S. Census, the town has a population of 6,289 and occupies a land area of approximately three and one-half (3.5) square miles. Current (2018) population is estimated to be around 9,994 residents. The city has experienced above average growth rates since the year 2000, when the population was 2,672. This population growth over the past 20 years is expected to continue into the next decade, and will put increased demand on the city's water and sewer infrastructure.

Historically, rates have been enough to fund utility operations and system maintenance and also build a reserve fund for contingencies. Rates have covered costs and enabled the town to operate without the need for significant debt financing. However, population growth and system demand has caused a need for expanding capacity which will result in significant costs to the town in the next few years.

2.1 CURRENT RATE STRUCTURE

WATER

The existing residential Water rate structure in the town of Wellington is comprised of two components.

- Monthly service line fee
- Volumetric charge of each 1000 gallons of use

The town currently charges a monthly service line fee of \$18.86 per account. The volumetric charge has a tiered cost structure. The first 15,000 gallons are \$3.65 per 1,000 gallons. Usage from 15,001 to 30,000 gallons is \$3.93 per 1,000 gallons. All usage over 30,000 gallons in a month is at a rate of \$4.94 per 1,000 gallons.

Non-Residential Water rates also include a monthly service line fee and a volumetric charge. The monthly Service Line fee is based on the tap size:

Table 2-1: Current Water Rates

<u>Water Billing - Monthly</u>	<u>Size</u>	<u>Charge</u>
Monthly Service Line Fee	3/4" tap	\$ 18.86
Monthly Service Line Fee	1" tap	\$ 42.52
Monthly Service Line Fee	1 1/2" tap	\$ 116.18
Monthly Service Line Fee	2" tap	\$ 123.48
Monthly Service Line Fee	> 2" tap	Negotiated

The monthly non-residential volumetric charge is a flat rate of \$3.65 per 1,000 gallons.

Irrigation taps are charged a service line fee of \$5.00 per month.

Tank Trucks and Construction Bulk rates is \$6.25 per 1,000 gallons.

WASTEWATER

Wellington charges a flat sewer use charge of \$20.63 per month to all connected customers (both residential and non-residential). This sewer use charge includes the first 3,000 gallons of sewer use. Sewer usage in excess of 3,000 gallons/month are charged \$6.50 per 1,000 gallons of use. The sewer volumetric charge is based on metered water usage during the period from January 15-March 15th, or the winter base period. This is a period when water use is typically at the lowest point of the calendar year.

Table 2-2: Current Sewer Rates

<u>Sewer Billing - monthly</u>	Measured in winter base period of January - March	
monthly Service Line Fee	\$ 20.63	up to 3,000 gal
3001+ gallons	\$ 6.50	per 1000 gal

STORMWATER

Wellington charges residential customers a fee of \$11.33 a month for the stormwater drainage system. This fee can be split into two parts. The Town of Wellington collects \$5.00 per month and the Boxelder Basin Stormwater Authority collects \$6.33 per month.

Non-Residential customers are charged \$9.25 in town fees. They also pay a fee to Boxelder Basin based on the Impervious Surface type and size on their property. The non-residential stormwater fee schedule is shown below:

Table 2-3: Current Stormwater Rates

<u>Storm Drainage</u>	<u>Size</u>	<u>Charge</u>
local monthly fee		\$ 9.25
Stormwater Authority (Boxelder Basin) fee	based on Impervious area	
Weighted Impervious Area (sq. foot)	1 - 5,000	\$ 6.33
Weighted Impervious Area (sq. foot)	5,001 - 10,000	\$ 13.75
Weighted Impervious Area (sq. foot)	10,001 - 20,000	\$ 27.50
Weighted Impervious Area (sq. foot)	20,001 - 30,000	\$ 55.00
Weighted Impervious Area (sq. foot)	30,001 - 40,000	\$ 87.50
Weighted Impervious Area (sq. foot)	40,001 - 50,000	\$ 110.00
Weighted Impervious Area (sq. foot)	50,001 - 75,000	\$ 137.50
Weighted Impervious Area (sq. foot)	75,001 - 100,000	\$ 165.00
Weighted Impervious Area (sq. foot)	100,001 - 150,000	\$ 192.50
Weighted Impervious Area (sq. foot)	Over 150,000	\$ 220.00
<u>Impervious Surface</u>		<u>Value</u>
Rooftops		90%
Asphalt Surfaces		100%
Concrete Surfaces		90%
Gravel (packed)		40%
Grass, native ground, other		0%

2.1.1 Buy-in Charges and Basis

The town charges Tap Fees on new properties that want to tap into the existing water network. The fees are based on the size of the tap, and fees differ for Residential and Commercial customers. The schedule of charges is shown below:

Table 2-4: Current Connection and Fees

		<u>Residential</u>	<u>Commerical</u>
<u>Tap Fees - New</u>	<u>Size</u>	<u>Charge</u>	<u>Charge</u>
Water	3/4"	\$ 15,350.00	\$ 15,350.00
Water	1"	\$ 15,350.00	\$ 20,100.00
Water	1.5"	\$ 15,350.00	\$ 26,750.00
Water	2"	\$ 15,350.00	\$ 41,400.00
Water	>2"	N/A	Negotiated
Water - Multi family	3/4" - 2" initial tap	\$ 15,350.00	N/A
Water - Multi family	each add'l dwelling unit	\$ 12,600.00	N/A
Sewer	4"	\$ 7,500.00	\$ 7,500.00
Sewer	>4"	N/A	Negotiated

These tap fees are used to offset costs of the water utility, including water supply and treatment costs, water main installation and ongoing maintenance and system expansion.

2.2 EXPANSION OF SYSTEM

The primary source of water is the North Poudre Reservoir #3. The town has a contract with the North Poudre Irrigation company that enables them to draw up to 2,000 Acre Feet of raw water from the reservoir each year. The first 275 Acre feet per year is included in exchange for the 53 shares of NPIC stock in the agreement. The remaining 1,725 acre feet per year are available at an additional cost. The method of calculation of this cost is stipulated within the supply contract with NPIC.

The Town has an existing Water Treatment Plant with maximum capacity of three million gallons per day. The town is in the process of upgrading the water treatment plant, which will expand treatment capacity from three million gallons per day (MGD) to seven MGD and is in the process of completing a Wastewater Master Plan, which is expected to identify other significant capital investment needs. The expected fiscal impact of these investments is expected to significantly change the operating economics of the utilities and was a driver for the completion of this study.

3. SCOPE

3.1 METHODOLOGY OF RATE SETTING

Woodard & Curran conducted a cost of service/rate study of the water, sewer and stormwater use charges as a means ensuring that Wellington has a system of reliably generating the needed revenue for the Water, Sewer and Stormwater utilities. There were five primary objectives for the completion of this cost of service/rate study:

1. Examine the recent historical performance of water, sewer and stormwater rate structures;
2. Provide a projection of future operating budgets, including the budgetary impacts of expected capital upgrades;
3. Evaluate the rate impacts of debt financing and cash financing of the proposed capital upgrades; and
4. Use both historical consumption and non-consumption revenue data to calculate water and sewer usage charges that generate revenues sufficient to fully fund the City's water, sewer and stormwater operations, make needed capital investments, and maintain adequate reserve fund balances; and
5. Provide the Town with a spreadsheet based financial model to allow the ability to make changes to the assumptions as capital planning for the utilities moves forward.

The Water, Sewer and Stormwater rate studies were completed as concurrent but distinct assessments.

The first phase of each rate study revolved around developing a full understanding of each Division's budgeting and expenditures and making informed, realistic estimates of the true cost of providing water and sewer service to the City of Somerville. For both Divisions, these estimates include the Division's operating budgets, the cost of existing debt repayment, and the cost of all capital investments to be made over the projection period. The period for these estimates is from FY2020 through FY2024, providing a five-year projection.

The second phase of the rate study was to review the Division's historical billing records and make projections of the volume of water and sewer sales that are expected from the Divisions' customer bases. Using these projections, the monthly charges and volumetric charges can be set in a manner that is expected to generate the funds needed to operate the Division, make payments on outstanding debt, and make needed investments to ensure the long-term adequacy of the infrastructure.

In any utility that is operating on a stand-alone (non-subsidized) basis, the actual cost of service must be less than or equal to the amount of revenues which are generated through the utility's billing practices. On a long-term basis, any shortfall from this level produces deficits and any revenue over-run produces surpluses. In the short-term, deficits can be covered through budgetary under-runs, but this leads to reduced levels of service and/or delayed maintenance, which can impair the long-term performance of the utility. The rate setting performed as part of this study attempts to ensure the generation of adequate revenue and maintenance of adequate reserves to allow the utilities to ability to operate efficiently.

Rate Study

As indicated, the primary actions in appropriately setting rates are:

1. Developing realistic projections of the full costs associated with operating the utilities;
2. Reviewing multiple years of water billed consumption records to identify statistical trends in billed usage;
3. Projecting and accounting for future use in customer base; and
4. Calculating the monthly, fixed and volumetric charges necessary to provide for the utility's long-term financial sustainability.

Division Operating Budgets

Woodard & Curran examined the FY2016 – FY2018 Division budgets. Based on these budgets, a projection of the expected costs of running the Division were developed. As there have been no major changes to the level of service that is expected from the Divisions, the projection included in the rate model is based on FY2018 projections, escalated in line with industry standards.

Existing Debt Service

Similar to most enterprise funded utilities; the Wellington utility divisions has a series of bond issuances that it is responsible to repay to bondholders. A summary of these obligations was developed and is presented in charts in later sections of this document. The debt service obligations for the water utility are scheduled to increase in 2020 due to a new \$25M bond from the State. Payments are scheduled to decrease slightly in 2023-2024 as older bonds reach maturity.

Capital Improvement Program

The City provided Woodard & Curran with a five-year Capital Improvement Plan (CIP), which will guide investments over the projection period. Using this Plan, combined with the current investments that the City is aware of, we compiled a full list of projects that have been incorporated into the model. Between FY2020 and FY2024, the list includes 39 projects with FY2019 construction cost estimates totaling \$6.2M. The full list, including the capital projects being completed this fiscal year, is attached to the back of this Memo as Attachment A.

From the financial perspective, having a comprehensive capital projects list is critical since the value, completion schedule and manner of financing all have important impacts on the way that the utility will experience the fiscal impacts of the capital projects. As is apparent on Attachment A, each of the projects has an associated value, a year of construction, and a manner of financing identified. These assumptions all build into the utilities' cash flows shown later in this report.

4. PROJECTIONS OF FUTURE COSTS

In the rate setting process, the ability to access and analyze raw data from the billing system is a critical consideration in assessing the reliability of the consumption data. A high level of reliability in the data allows both for the institution of multi-tier rate structures and ensures confidence that the rates recommended in the study will generate revenue for the utility as expected. There are several challenges, as discussed below, which presented themselves in the accessing and assessment of historical consumption data as it pertains to sewer billing.

Woodard and Curran conducted a review of the FY2016, FY2017 and FY2018 Wellington consumption records for the Town, as well as the annual consumption totals. The consumption records were sorted to assess the level of water usage for residential and non-residential users.

The Wellington water consumption records were provided as annual class-based consumption. Tier based assumptions for Wellington were made based on consumption data and applied proportionally.

The chart below shows the breakdown of total water consumption for the Town of Wellington and the residential and non-residential portions of the consumption.

4.1 WATER UTILITY

4.1.1 Water Operations

Annual water costs are running at \$2.18 million per year. The expenses are primarily for raw water treatment and distribution, staffing and administration and small equipment. These costs projected to rise to \$2.5 million by fiscal year 2024 based on standard annual escalation rates. The table below is a breakdown of these costs by year and line item.

Obj	Operational Budget Projection					
	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
ADMINISTRATIVE EXPENSES	\$ 435,206	\$ 450,438	\$ 466,204	\$ 482,521	\$ 499,409	\$ 516,888
OPERATING EXPENSES	\$ 1,485,306	\$ 1,537,292	\$ 1,591,097	\$ 1,646,785	\$ 1,704,423	\$ 1,764,078
RAW WATER PURCHASES	\$ 757,852					
SMALL EQUIPMENT	\$ 195,100	\$ 201,929	\$ 208,996	\$ 216,311	\$ 223,882	\$ 231,718
Water Cost	\$ 2,873,464	\$ 2,189,658	\$ 2,266,296	\$ 2,345,617	\$ 2,427,713	\$ 2,512,683

4.1.2 Water Debt Service

Wellington has four outstanding loans on their water utility:

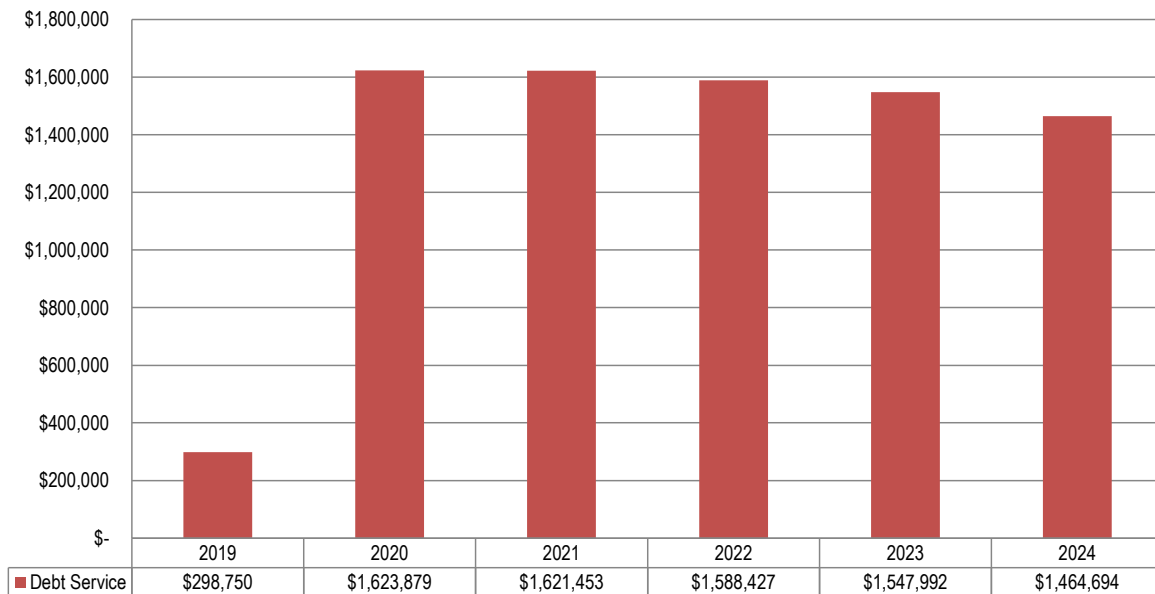
- 1982 Colorado Water Conservation Board Loan - 4.0%, due Dec 2023
- 1984 GO Water Bond - 5.0%, due December 2023
- 2001 CWRPDA - 4% due May 2022
- 2019 - Water Plant Upgrade - \$25M SRF, 1.69% due 2039

The first three loans are all maturing and rolling off the books in the next three years. The fourth is a newly issued \$25M State loan to upgrade the water treatment plant which will result in payments of around \$1.5M annually through 2039.

The debt service payments on the four loans is currently \$1.6M annually. This total is expected to decrease to \$1.46M annually in FY 2024, once the three smaller bonds mature.

Debt Issuance	Annual Debt Service Repayment Values					
	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
PRINCIPAL PAYMENTS						
1982 Colorado Water Conservation Board Loan - 4.0%, due 2023	45,518	45,518	45,518	45,518	45,518	-
1984 GO Water Bond - 5.0%, due December 2023	23,000	24,000	25,000	27,000	28,000	-
2001 CWRPDA - 4% due May 2022	64,645	67,257	69,974	36,040	-	-
2019 - Water Plant Upgrade - \$25M SRF, 1.69% due 2039	6,219	1,006,798	1,025,372	1,049,857	1,068,483	1,091,978
INTEREST PAYMENTS						
1982 Colorado Water Conservation Board Loan - 4.0%, due 2023	12,075	12,075	12,075	12,075	12,075	-
1984 GO Water Bond - 5.0%, due December 2023	5,200	4,000	4,000	2,750	700	-
2001 CWRPDA - 4% due May 2022	8,877	6,265	3,548	721	-	-
2019 - Water Plant Upgrade - \$25M SRF, 1.69% due 2039	133,216	457,966	435,966	414,466	393,216	372,716
Existing Total	\$ 298,750	\$ 1,623,879	\$ 1,621,453	\$ 1,588,427	\$ 1,547,992	\$ 1,464,694

Existing Debt Service Obligation - Water



4.1.3 Water Capital Costs

The Capital improvement Plan for the Water Division totals \$2.03 Million over the next five years. \$1.4M of this spend is planned for the next year. Additional detail is shown in the chart below.

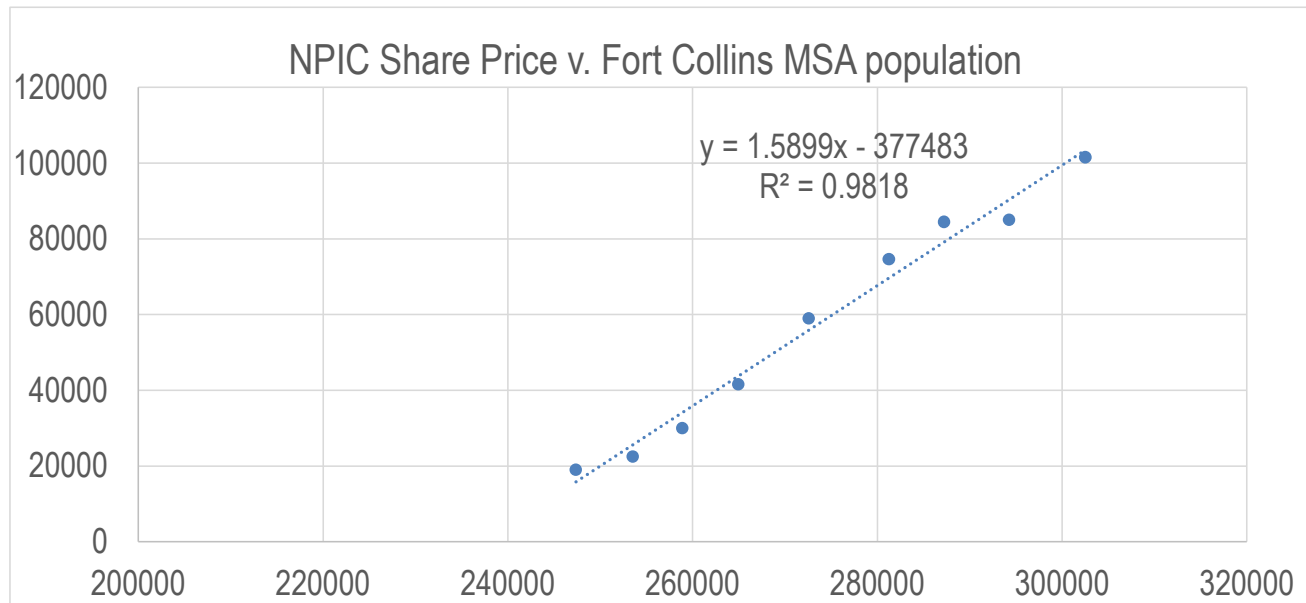
Fund	Project	Funding - Model	Total	FY19	FY20	FY21	FY22	FY23	FY24
				Construction/ Purchase	Construction/ Purchase	Construction/ Purchase	Construction/ Purchase	Construction/ Purchase	Construction/ Purchase
Water Enterprise	Leak Detection Equipment	Cash	\$ 43,000	\$ 43,000					
	On-Line Process Equipment	Cash	\$ 15,750	\$ 15,750					
	Vehicle Replacement Policy	Cash	\$ 104,517	\$ 31,500		\$ 34,729	\$ -	\$ 38,288	
	Bulk NaOH and Antiscalant	Cash	\$ 30,000	\$ 30,000					
	Membranes and Nano/RO	Cash	\$ 37,173	\$ 11,589	\$ 12,168	\$ 13,416			
	Emergency Power for main water treatment plant	Cash	\$ 212,000	\$ 212,000					
	Disinfection rules compliance (tank aeration)	Cash	\$ 106,000	\$ 106,000					
	Back up 2 MGD Pump	Cash	\$ 60,000	\$ 60,000					
	Redundancy for pumps to water tower storage	Cash	\$ 50,000	\$ 50,000					
	Wellhouse Improvements (Nano/Ro and Irrigation)	Cash	\$ 300,000	\$ 300,000					
	Nano plant expansion	Cash	\$ 47,513	\$ 47,513					
	Clearwater High Service Pump upgrade	Cash	\$ 25,000	\$ 25,000	\$ -				
	Old Town Water Main replacements	Cash	\$ 558,025	\$ 80,000	\$ 84,800	\$ 89,888	\$ 95,281	\$ 100,998	\$ 107,058
	Water Efficiency Study	Cash	\$ 53,000	\$ 53,000					
	Water rate Study	Cash	\$ 25,000	\$ 25,000					
	Grant Ave - 1st to 4th	Cash	\$ 309,660	\$ 309,660					
	Bulk Water Dispenser	Cash	\$ 55,000		\$ 55,000				
	Total Water Enterprise Fund - Current		\$ 2,031,638	\$ 1,400,012	\$ 151,968	\$ 138,033	\$ 95,281	\$ 139,286	\$ 107,058

4.1.4 Water Purchases

Wellington has a contract with North Poudre Irrigation Company to purchase raw water. The source of this water is the North Poudre Reservoir #3, located about 3 miles northwest of town. Although there are other smaller sources, the NPIC is the only source with a significant purchase cost, the other sources being wells.

As discussed earlier, the water is purchased under contract and the primary variables which play into the cost of purchasing water for the system are the share price of NPIC shares and the amount of water needed. To provide an estimate of future water costs, a projection of future NPIC share price was prepared by comparing historical NPIC share value with the population of the Greater Fort Collins MSA (Municipal Statistical Area) prepared by the US Census.

The correlation which was found, presented on a chart on the following page found that the value of NPIC shares was correlated to population with a R2 of >0.98, indicating that 90-95% of the variability of NPIC share price is associated with the regions population growth.



	2019	2020	2021	2022	2023	2024
Wellington Population	10,588	11,296	12,010	12,862	13,376	13,912
Ft Collins MSA Population	309,703	317,141	324,737	332,625	340,334	348,226
Projected NPIC Share Price	\$ 114,914	\$ 126,740	\$ 138,816	\$ 151,357	\$ 163,614	\$ 176,161

A population growth projection from the State was then used to make a projection of NPIC share price, which this analysis indicates should rise to approximately \$175,000 by the end of FY2024.

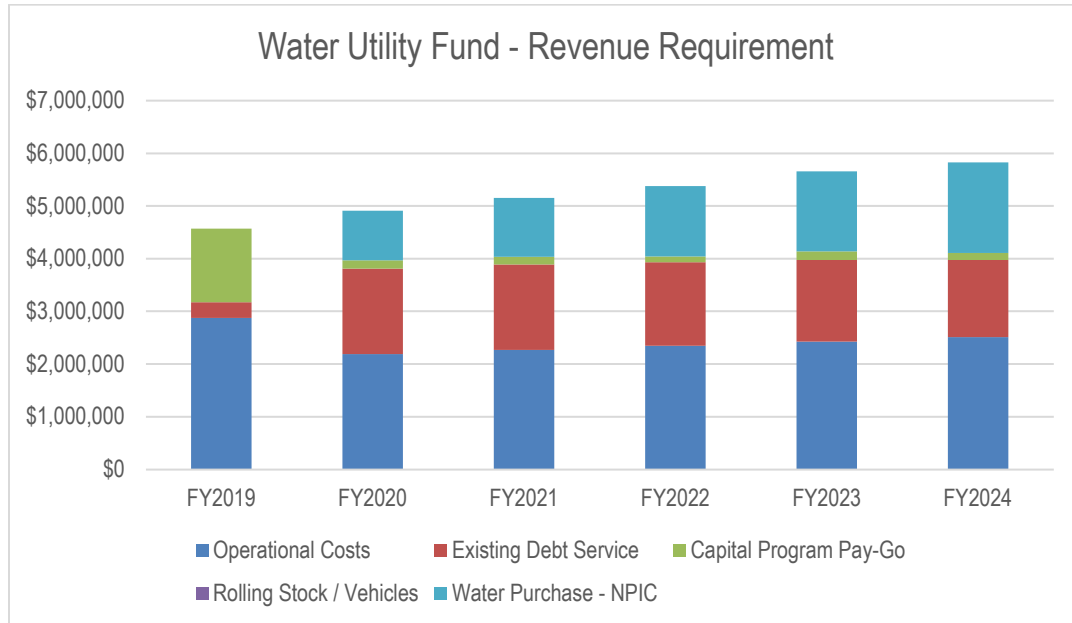
The combination of these factors was used to calculate the expected cost of purchased water through FY2024.

NPIC Share Allotment Water	2019	2020	2021	2022	2023	2024
Assessment Fee	\$ 240.00	\$ 250.00	\$ 260.00	\$ 270.00	\$ 280.00	\$ 290.00
Original 53 Shares of North Poudre stock	53	53	53	53	53	53
Fee x Shares	\$ 12,720.00	\$ 13,250.00	\$ 13,780.00	\$ 14,310.00	\$ 14,840.00	\$ 15,370.00
7% Admin Fee	\$ 890.40	\$ 927.50	\$ 964.60	\$ 1,001.70	\$ 1,038.80	\$ 1,075.90
Total Charge for first 275 AF	\$ 13,610.40	\$ 14,177.50	\$ 14,744.60	\$ 15,311.70	\$ 15,878.80	\$ 16,445.90
Excess Allotment	2019	2020	2021	2022	2023	2024
Wellington Annual Water Use	847.04	903.68	960.80	1028.96	1070.12	1112.92
Less allotment	(275.00)	(275.00)	(275.00)	(275.00)	(275.00)	(275.00)
Use in Excess of Base	572.04	628.68	685.80	753.96	795.12	837.92
Charge per Acre Foot	\$ 1,337.04	\$ 1,471.64	\$ 1,609.05	\$ 1,751.67	\$ 1,891.10	\$ 2,033.79
Charge for excess	\$ 764,842.15	\$ 925,192.51	\$ 1,103,485.46	\$ 1,320,691.30	\$ 1,503,651.25	\$ 1,704,156.37
Total Water Cost	\$ 778,452.55	\$ 939,370.01	\$ 1,118,230.06	\$ 1,336,003.00	\$ 1,519,530.05	\$ 1,720,602.27

This analysis indicates that the water utility should expect for the cost of water purchases to rise to a little over \$1.7million per year over the next five years. These numbers were incorporated into the rate model.

4.1.5 Overall Revenue Requirement

The projected revenue requirement, meaning the overall sum of revenue streams to the utility, which is necessary to break even in each fiscal cycle is shown on the chart below.



It is projected that the utility's revenue requirement will rise from around \$4.6 Million in FY2019 to approximately \$5.85 Million in FY2024, with the large majority of the increase due to the debt service from the water treatment plant upgrade and the increase in expected water purchase costs. Please note that in the preceding chart, the water purchase costs were included in the utility's operation cost line item and was accounted for separately in following years.

4.2 WASTEWATER (SEWER) UTILITY

4.2.1 Wastewater Operations

Annual Wastewater costs are running at \$1.2 million per year. The expenses are primarily for treatment, staffing and small equipment. These costs projected to rise to \$1.4 million by fiscal year 2024 based on standard annual escalation rates. The table below is a breakdown of these costs by year and line item.

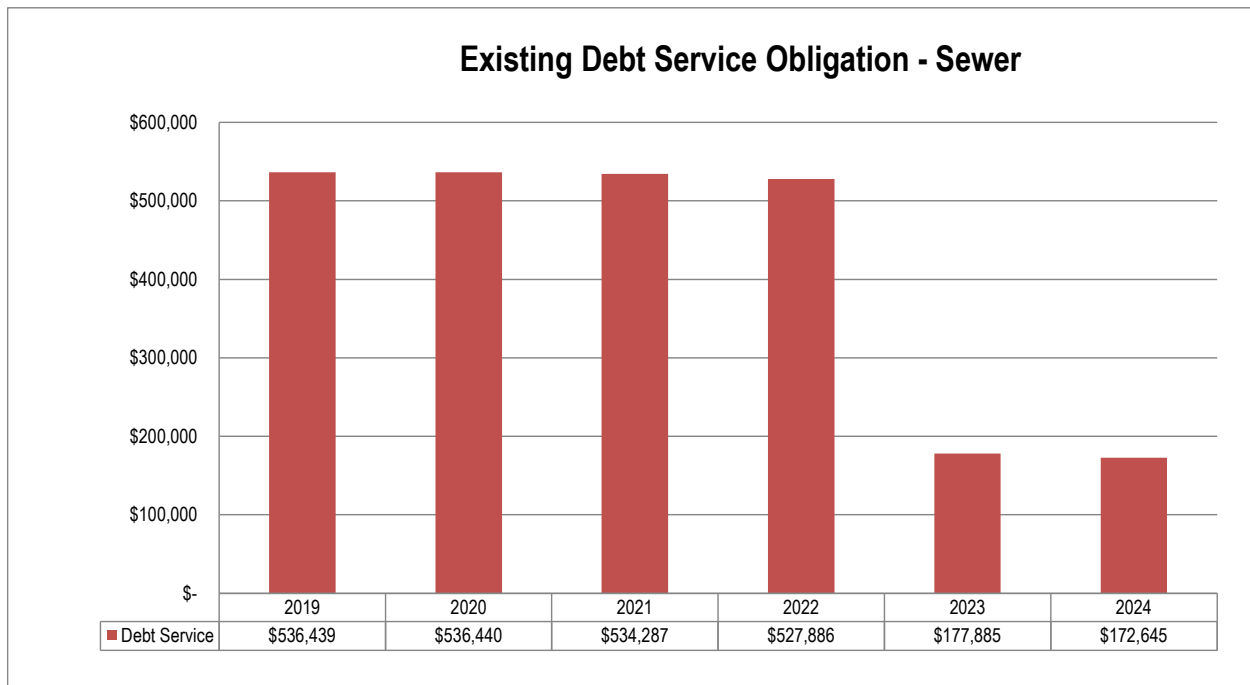
Obj	Operational Budget Projection					
	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
ADMINISTRATIVE EXPENSES	\$ 271,115	\$ 280,604	\$ 290,425	\$ 300,590	\$ 311,111	\$ 322,000
OPERATING EXPENSES	\$ 869,814	\$ 900,257	\$ 931,767	\$ 964,378	\$ 998,132	\$ 1,033,066
SMALL EQUIPMENT	\$ 30,395	\$ 31,459	\$ 32,560	\$ 33,699	\$ 34,879	\$ 36,100
SEWER CAPITAL OUTLAY	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sanitary Cost	\$ 1,171,324	\$ 1,212,320	\$ 1,254,752	\$ 1,298,668	\$ 1,344,121	\$ 1,391,165

4.2.2 Wastewater Debt Service

Wellington has two outstanding loans on their sewer utility. The first issuance is a 2002 Colorado Water Resource bond, which will mature in 2022. The second is a 20-year, General obligation bond issued in 2014 and maturing in 2034.

The debt service payments on the two loans is currently \$536K annually. This total is expected to decrease to \$177K annually in FY 2023, once the Colorado Water bond matures.

Debt Issuance	Annual Debt Service Repayment Values					
	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
PRINCIPAL PAYMENTS						
2002 Colorado Water Resource and Power Dev. - 3.71% due August 2022	287,085	297,919	314,169	335,835	-	-
2014 GO Sewer Bond - \$2.4M, variable rate due August 2034	105,000	105,000	105,000	105,000	115,000	115,000
INTEREST PAYMENTS						
2002 Colorado Water Resource and Power Dev. - 3.71% due August 2022	74,896	65,953	49,703	24,166	-	-
2014 GO Sewer Bond - \$2.4M, variable rate due August 2034	69,458	67,568	65,415	62,885	62,885	57,645
Existing Total	\$ 536,439	\$ 536,440	\$ 534,287	\$ 527,886	\$ 177,885	\$ 172,645



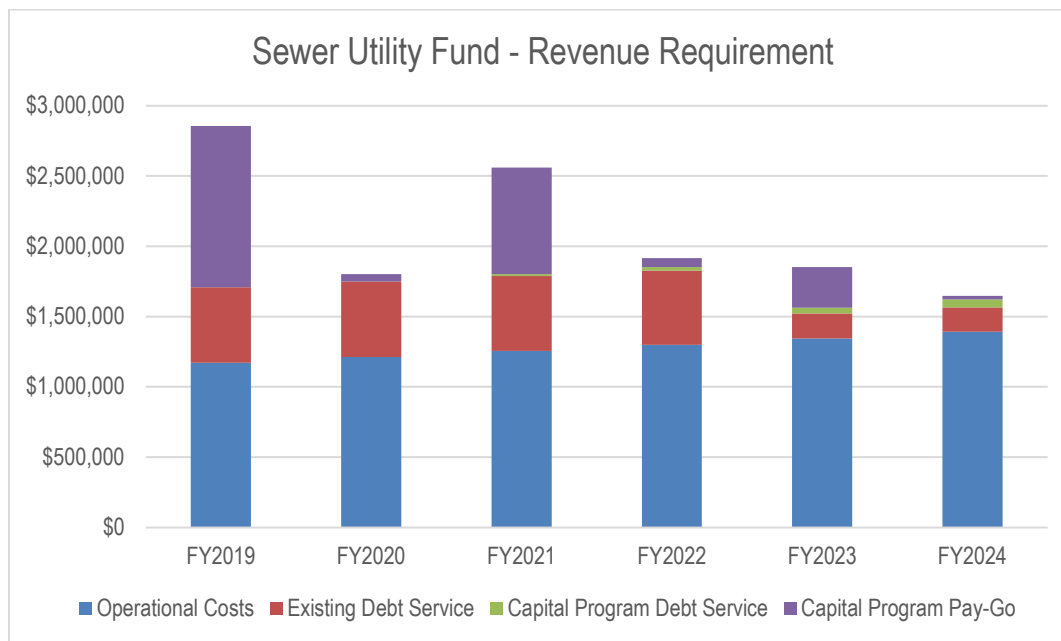
4.2.3 Wastewater Capital Costs

Capital Improvement Plan for Wastewater totals \$3.35 M in spending over the next five years. The largest portion of this is the \$1.1 million in sewer line rehab and replacement costs. The detail is in the chart below:

Fund	Project	Funding - Model	Total	FY19	FY20	FY21	FY22	FY23	FY24
				Construction/ Purchase	Construction/ Purchase	Construction/ Purchase	Construction/ Purchase	Construction/ Purchase	Construction/ Purchase
Sewer Enterprise	Wet Well Pump	Cash	\$ 10,000	\$ 10,000					
	Collection - Camera Equipment	Cash	\$ 125,000	\$ 125,000					
	WWTP Master Plan	Cash	\$ 190,000	\$ 190,000					
	WWTP Blower/Digester Improvement Project	Cash	\$ 173,500	\$ 173,500					
	WWTP Pumps	Cash	\$ 109,724	\$ 15,730	\$ 16,674	\$ 17,675	\$ 18,735	\$ 19,859	\$ 21,051
	WWTP Clarifier Upgrades	Cash	\$ 350,000	\$ 350,000					
	WWTP Biosolids Storage	Cash	\$ 35,000	\$ 35,000					
	WWTP Driveway Paving	Cash	\$ 68,900	\$ 68,900					
	WWTP Effluent Irrigation Systems and Landscaping	Cash	\$ 28,000	\$ 28,000					
	Sewer Rehab Roosevelt Grant Street	Cash	\$ 48,255	\$ 48,255					
	Vehicle Replacement Policy	Cash	\$ 69,540		\$ 33,075		\$ 36,465		
	Grant Ave - 1st to 4th	Cash	\$ 60,598	\$ 60,598					
	Sewer Line Rehab/Replacement	SRF	\$ 1,127,418		\$ 200,000	\$ 212,000	\$ 224,720	\$ 238,203	\$ 252,495
	Vacuum Truck	Cash	\$ 540,000			\$ 540,000			
	WWTP Shop Building Expansion Project	Cash	\$ 142,922			\$ 142,922			
	WWTP UV Disinfection Replacement Project	Cash	\$ 226,967					\$ 226,967	
	Skid Loader	Cash	\$ 43,232	\$ 43,232					
	Total Sewer Enterprise Fund - Current		\$ 3,349,056	\$ 1,148,215	\$ 249,749	\$ 912,597	\$ 279,920	\$ 485,029	\$ 273,546

4.2.4 Overall Revenue Requirement

The projected revenue requirement, meaning the overall sum of revenue streams to the utility, which is necessary to break even in each fiscal cycle is shown on the chart below.



While the baseline operational and debt service budgets remain fairly level at around \$1.6 Million per year, combined, the variability in year-to-year cash financed capital investment makes the consistency of Sewer utility budgets less certain than that of the water fund. Debt financing larger capital projects would assist in evening out the year-to-year expenditures which would help stabilize rates. One significant note is that the Master Plan Study currently underway is likely to significantly change the capital spending picture currently in this assessment and as it nears completion, the recommended capital work in the Master Study should be entered into the rate model.

4.3 STORM DRAINAGE/STORMWATER UTILITY

4.3.1 Storm Drainage Operations

Annual stormwater costs are running at \$575,000 per year. The expenses are primarily for staffing and administration, with some small costs associated with system maintenance and equipment. These costs projected to rise to \$682,000 by fiscal year 2024 based on standard annual escalation rates. The table below is a breakdown of these costs by year and line item.

Obj	Operational Budget Projection					
	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
ADMINISTRATIVE EXPENSES	\$ 502,662	\$ 520,255	\$ 538,464	\$ 557,310	\$ 576,816	\$ 597,005
OPERATING EXPENSES	\$ 69,321	\$ 71,747	\$ 74,258	\$ 76,857	\$ 79,547	\$ 82,332
SMALL EQUIPMENT	\$ 2,500	\$ 2,588	\$ 2,678	\$ 2,772	\$ 2,869	\$ 2,969
Storm Drainage Cost	\$ 574,483	\$ 594,590	\$ 615,401	\$ 636,940	\$ 659,232	\$ 682,306

4.3.2 Storm Drainage Debt Service

There is currently no existing debt on the stormwater utility.

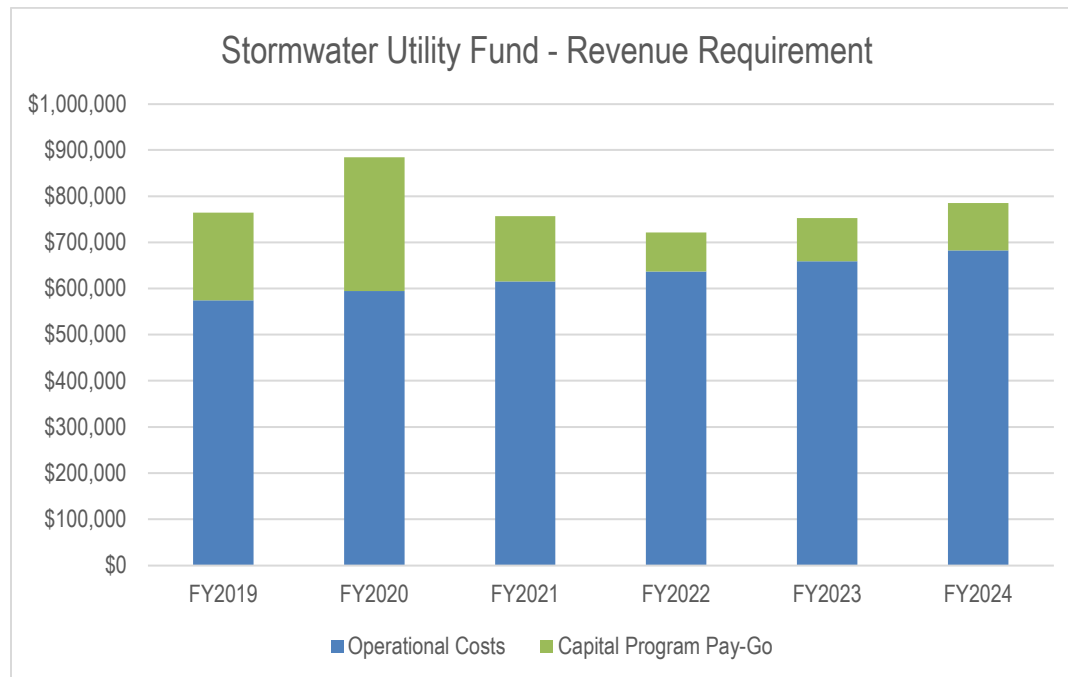
4.3.3 Storm Drainage Capital Costs

The Capital plan for Storm Drainage for the five years totals \$838,000. The largest project is the Old Town Street rehab which will cost around \$470,000. The project list and timing is illustrated in the chart below.

Fund	Project	Funding - Model	Total	FY19	FY20	FY21	FY22	FY23	FY24
				Construction/ Purchase	Construction/ Purchase	Construction/ Purchase	Construction/ Purchase	Construction/ Purchase	Construction/ Purchase
Storm Drain Enterprise	Cleveland Avenue Drainage 4th Street	Cash	\$ 212,000		\$ 212,000				
	Old Town Street Rehab	Cash	\$ 369,692	\$ 53,000	\$ 56,180	\$ 59,551	\$ 63,124	\$ 66,911	\$ 70,926
	Storm Drain and Pan Replacements	Cash	\$ 69,753	\$ 10,000	\$ 10,600	\$ 11,236	\$ 11,910	\$ 12,625	\$ 13,382
	Master Storm Water Plan	Cash	\$ 127,200	\$ 127,200					
	Bragg Lane Storm Drain	Cash	\$ 60,000			\$ 60,000			
	Total Sewer Enterprise Fund - Current		\$ 838,645	\$ 190,200	\$ 278,780	\$ 130,787	\$ 75,034	\$ 79,536	\$ 84,308

4.3.4 Overall Revenue Requirements

The chart below shows the expected overall revenue requirement for the Stormwater utility. Although changes in either the local or regional drainage infrastructure investment programs could impacts this assessment, it currently appears that the stormwater utility should design rates to produce annual revenues in the \$750,000 to \$800,000 range.



5. PROJECTION OF CUSTOMER BILLING METRICS

In order to accurately determine the rates that will be needed to fully fund operations, it is important to have an excellent understanding of historical metrics for the items which generate revenues to the utilities. In the case of Wellington, the primary metrics for the Water and Sewer utilities are connections (generating fixed charge revenues) and water usage (generating volumetric revenues). The primary metrics for Stormwater are residential counts property and impermeable surface metrics.

For all of these items, historical data were analyzed to identify usage trends in the existing customer base. Given the rapid pace of development existing trends needed to be augmented to account for expected growth in the coming 5 years. To these trends were added projections for additional customers and usage, as identified by the Town of Wellington.

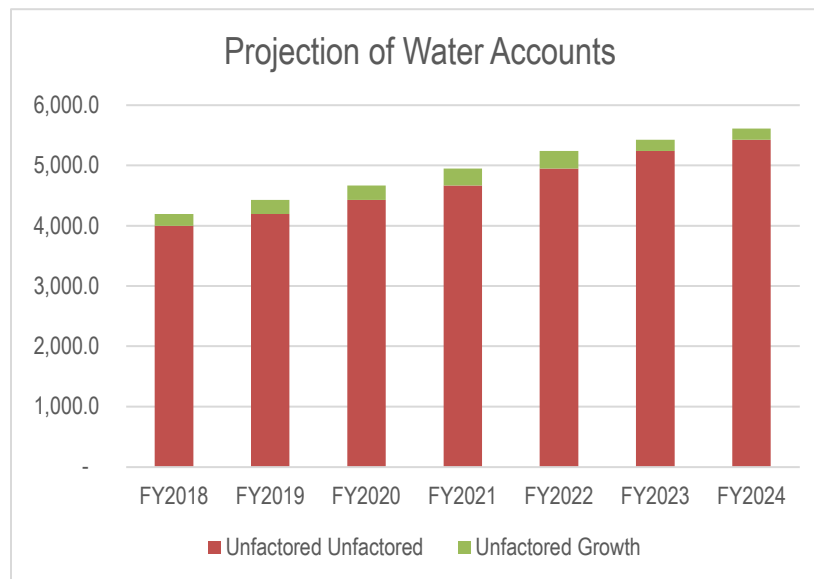
5.1 WATER UTILITY

5.1.1.1 Customer Base

Using billing records from 2015 through 2018, Woodard & Curran completed a statistical breakdown the water utility's billing characteristics. As of the end of FY2018, the existing customer base stood at 3,997 connections and billed metered water usage of approximately 384,000 units.

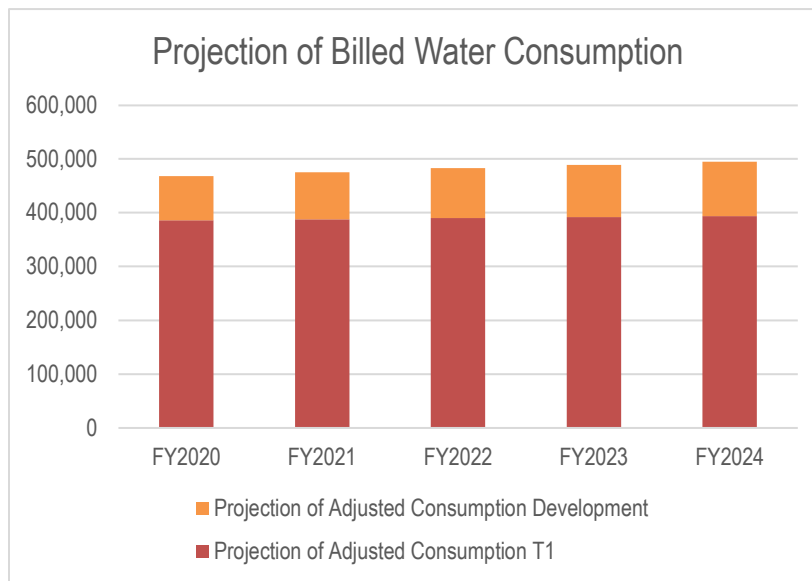
Using this analysis, combined with the expected development projections for growth within the customer base, we have made a projection of growth in both the unfactored customer accounts and expected volumetric billings. These are presented below.

5.1.1.2 Connections



Our projection expects that, through FY2024 period, the existing user base will grow from the FY2018 value of approximately 4,000 customers to over 5,500 customer based upon Wellington growth expectations.

5.1.1.3 Volumetric Usage



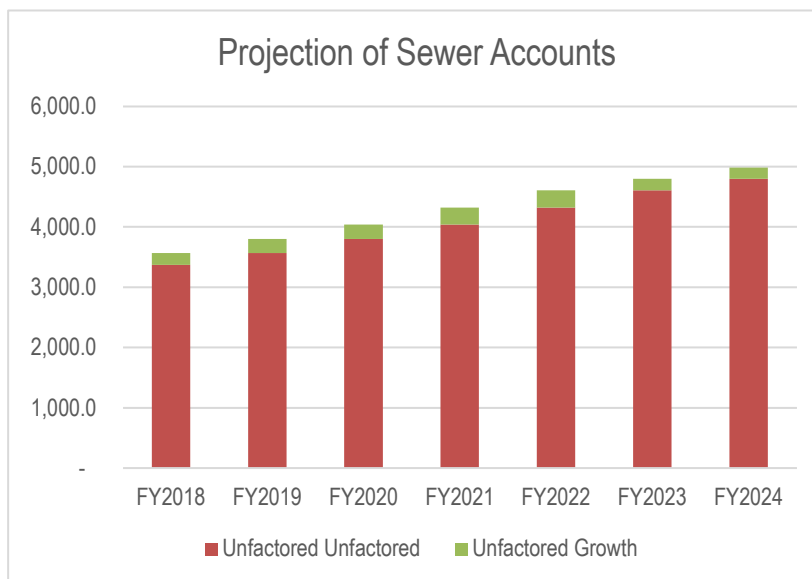
Similarly, we project that the billed volumes of water will increase significantly over the coming five years, increasing from under 400,000 units to almost 500,000 units per year.

5.2 SEWER UTILITY

5.2.1.1 Customer Base

Using billing records from 2015 through 2018, Woodard & Curran also completed a statistical breakdown the sewer utility's billing characteristics. As of the end of FY2018, the existing customer base stood at 3,369 connections and billed sewer usage of approximately 67,100 units, not inclusive of the approximately 110,000 units in the "included usage" practice. It is important to note that both of these figures are based upon the "winter adjustment" values, rather than the metered water use at these properties.

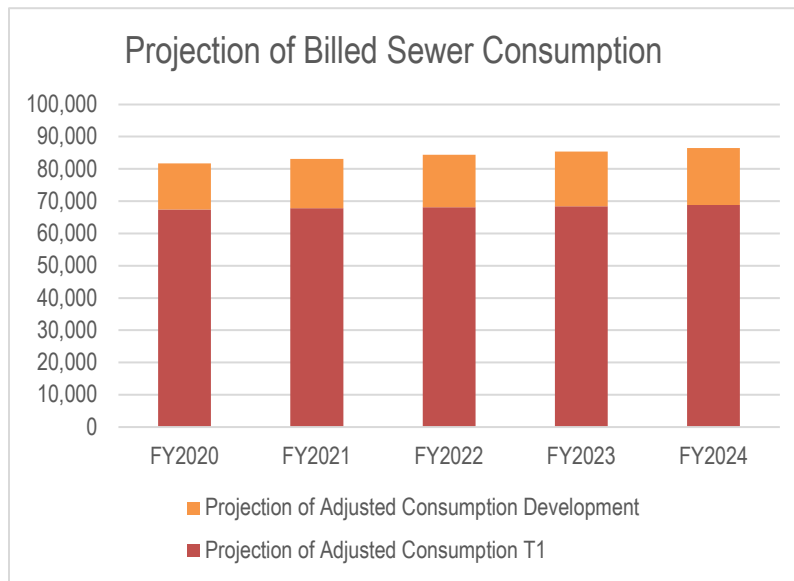
Using this analysis, combined with the expected development projections for growth within the customer base, we have made a projection of growth in both the unfactored customer accounts and expected volumetric billings. These are presented below.



5.2.1.2 Connections

With similar growth as the water utility, we project that the sewer utility customer base will grow from the FY2018 value of under 3,400 connections to almost 5,000.

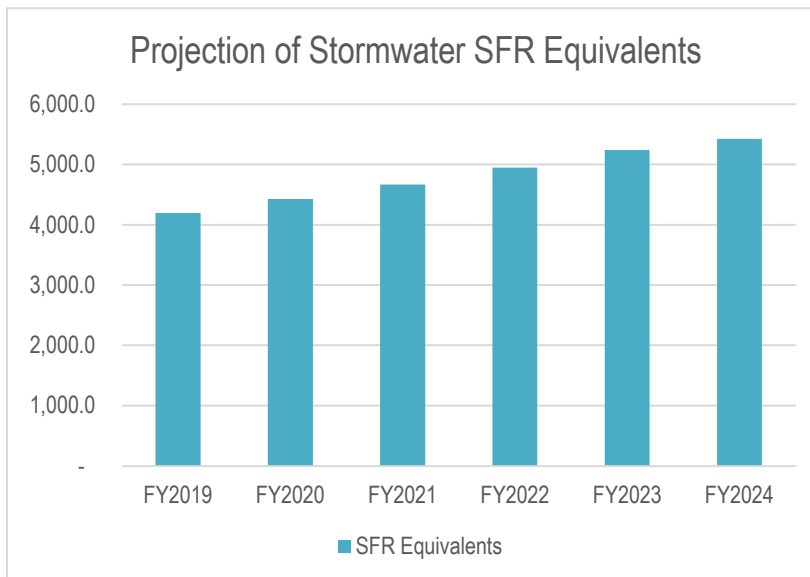
5.2.1.3 Billed Usage



As we saw in the water utility, we project that the growth in the customer base will lead to a significant increase in volumetric billings within the sewer utility. Our projection, based upon the billing records between 2015 and 2018 lead us to project that billed sewer volumes will increase from 67,000 units in 2018 to almost 90,000 units over the next 5 years, assuming current billing policies remain active.

5.3 STORMWATER UTILITY

5.3.1 Customer Base



For setting stormwater rates, we analyzed billing records to determine the number of SFR equivalents over time and projected these numbers forward on the basis of the development expectations provided by the Town. The chart to the left presents the values used in the evaluation of stormwater rates.

6. RECOMMENDED RATES

The tables below present our recommended water, sewer, and stormwater rates assuming the Town elects to use essentially the same rate structures in force currently, changing only the unit charges. As list of all of the assumptions included in these rates is included in the attachments.

6.1 RATE TABLES

WATER Rates

Fixed and Volumetric Charges

Water Rates (\$/unit)								
Tier	Current	Tier Size	2019	2020	2021	2022	2023	2024
Fixed Charge Increase (%)			0.0%	7.5%	7.5%	7.5%	7.5%	7.5%
Monthly Fixed Charge			\$ 18.86	\$ 32.00	\$ 34.40	\$ 36.98	\$ 39.75	\$ 42.73
Volumetric Increase (%)			0.0%	0.0%	7.5%	7.5%	7.5%	7.5%
Included		0	n/a	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1		15	\$3.65	\$3.65	\$3.92	\$4.22	\$4.53	\$4.87
2		15	\$3.93	\$4.20	\$4.51	\$4.85	\$5.21	\$5.61
3		>30	\$4.94	\$5.48	\$5.89	\$6.33	\$6.80	\$7.31

Connection Charges

We recommend that the connection charges remain at the current level.

SEWER Rates

Volumetric Charges

Sewer Rates (\$/unit)								
Tier	Current	Tier Size	2019	2020	2021	2022	2023	2024
Fixed Charge Increase (%)			0.0%	2.5%	2.5%	2.5%	2.5%	2.5%
Monthly Fixed Charge			\$ 20.63	\$ 25.00	\$ 25.63	\$ 26.27	\$ 26.93	\$ 27.60
Volumetric Increase (%)			0.0%	3.5%	3.5%	3.5%	3.5%	3.5%
Included			n/a	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1		ALL	\$6.50	\$6.73	\$6.96	\$7.21	\$7.46	\$7.72
2				\$7.74	\$8.01	\$8.29	\$8.58	\$8.88
3				\$9.42	\$9.75	\$10.09	\$10.44	\$10.81

Connection Charges

Similar to the water connection charges, we recommend no change to the current connection fees. Depending upon the level of investment recommended in the Wastewater Master Study, the Town may want to revisit this recommendation.

STORMWATER Rates

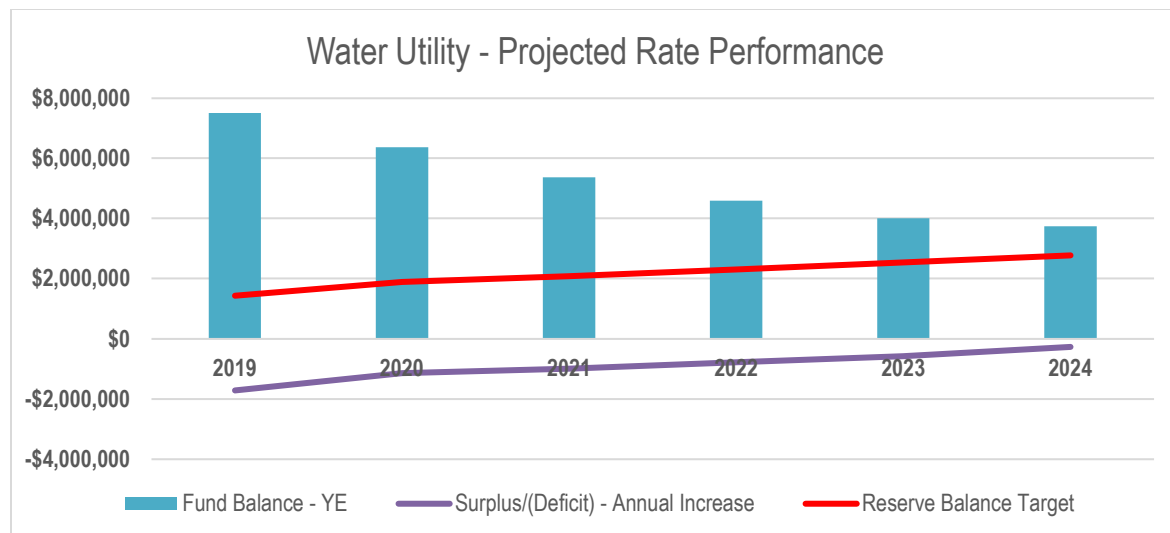
Residential & Commercial Charges

Level Increase Rates - Stormwater						
Current		2020	2021	2022	2023	2024
Rate Increase (%)		0.0%	10.0%	5.0%	5.0%	5.0%
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$11.33	Residential	\$11.33	\$12.46	\$13.09	\$13.74	\$14.43
\$9.25	Commercial	\$9.25	\$10.18	\$10.68	\$11.22	\$11.78
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

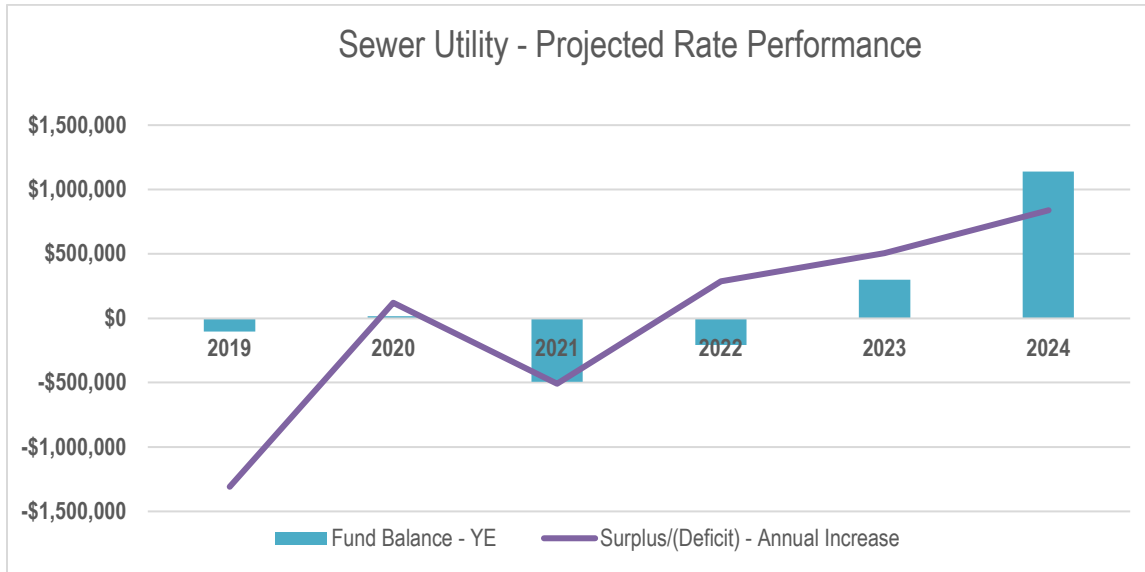
6.2 PROJECTED FISCAL PERFORMANCE

The tables below present the expected fiscal performance of the rates presented in the preceding section. Each graph presents a combination chart where the line presents the expected annual Surplus/deficit and the bars represent the reserves funds remaining at the end of each fiscal cycle. For the water utility, where it is expected we will be using current fund balances to reduce the immediate impact on rates, we have also presented the Town's stated fund balance target

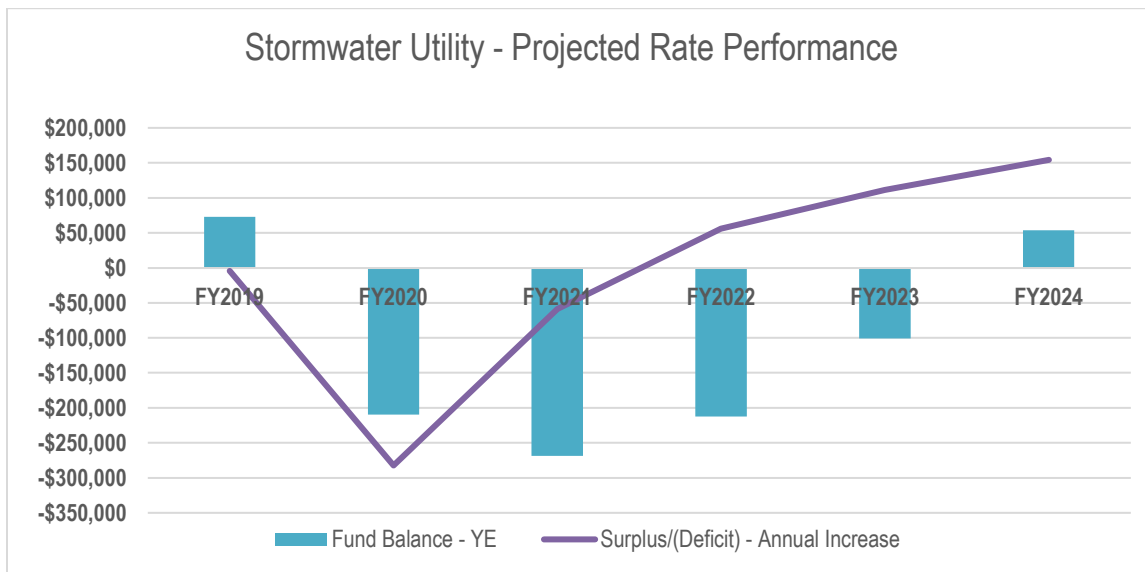
Water Utility



Sewer Utility



Stormwater Utility



7. RATE MODEL DEVELOPMENT

The model has been developed over the past six months after review of town budgets and financial reports, review of contracts with North Poudre Irrigation Co., and in-depth consultation with Wellington staff. This consultation was critical in constructing the model so that it could provide Wellington with rate guidance under a number of different scenarios for rate setting. A description of significant portions of the model are included below.

7.1 UPLOAD OF COST DATA

As part of the model construction, budgetary values for each of the utilities was review with Town staff, modified to appropriately account for expected changes (i.e. increased operating costs associated with the new water treatment plant) and escalated in accordance with industry standards. Within the model we have left a series of fields open to modification to allow Wellington to make appropriate changes over the course of the next five fiscal years.

The three primary cost tabs which are open to modification to reflect changed conditions not currently foreseeable are the operational budgets, the debt service tab (in case future bonds are issued to fund capital, and the Capital Investment Program (CIP) tab. The CIP tab allows for changes to the assumed capital program in all three utilities and will be critical to adjust as the results of the currently underway Sewer Master Plan become more certain.

7.2 UPLOAD OF CONSUMPTION DATA

The consumption/billing data and the analytical breakdown of the data is carried out in a separate "Consumption Analysis" spreadsheet, separate from the primary model. This is due to the level of flexibility Wellington staff desired to have in assessing different potential future billing practices. These different practices could range from the institution of multi-tier rates to carrying a different set of rates based upon customer class. The resulting spreadsheet, with its multi-layer search algorithms resulted in a spreadsheet that was greater than 75Mbyte in size and would crash the rate model if they were combined.

Upload of the statistical breakdown from the Consumption Analysis is handled manually via one of the modules within the rate model. Wellington staff will be fully briefed on the interaction of the two spreadsheets.

7.3 IDENTIFICATION OF RECOMMENDED RATES

The identification of the rates recommended by Woodard & Curran is based upon conversations with Town staff on the appropriate levels of reserves and the general principal that utility revenues should be targeted to fully fund operations. The rate table are automatically calculated within the model based upon factors such as annual rate increases, the relative value and size of various utility tiers, and multiple other variables.

7.4 ADDITIONAL RATE CONSIDERATIONS

There are a number of practices which could have a significant impact on the rates of the average rate payer which the Town should consider. The three primary considerations are outlined below.

Factored fixed charges

Wellington currently assesses its fixed charges equally to all size customers. This is a fairly uncommon practice as many utilities feel it is appropriate to place higher fixed charges on customers with larger connections. The American Water Works Association has published a list of recommended meter size charge factors whereby larger customer pay a multiple of the fixed charges paid by the single family residential customer. The table is presented on the following page.

Size	Equiv. Factor
3/4	1
1	1.67
1-1/2	3.33
2	5.33
3	10
Inactive	1
Irrigation	1

This table presents the factors assuming a 3/4" meter (the largest generally seen in single family residences and the vast majority of the meters in Wellington) as the base meter. For meters larger than 3/4", these customers would be charged a multiple of the base charge. For example, for each \$10 in base charge to a 3/4" meter customer, a customer with a 1-1/2" meter would be charged \$33.30.

While this change would provide a fairly small change in overall billings it would align town practice with industry standards and better align fixed charges with the burden that larger customers place upon the system. This change is supported in the model.

Elimination of "Winter quarter" for Sewer billing

Under current practices, the Town issues sewer bills based upon customer usage during the three months which have little to no outside irrigation. While this type of policy is certainly not unheard of, it (as all policies can) these have become rare than they used to be and can significantly under report a customer contribution of wastewater to the sewer system. While there is no generally accepted "best practice" many communities have decided to bill off of water usage, especially where portions of the population spend significant amounts of time away from home in the winter.

While we haven't completed a full evaluation, it should be expected that the volume of sewer usage billed if this practice were to be discarded would increase substantially, suggesting either the ability to raise additional revenues for capital projects or the ability to lower volumetric rates from their current levels.

Included Consumption on Sewer Bills

Similar to the prior consideration, the inclusion of a set consumption level within the fixed charge substantially reduces the volume of sewer which is billed to the customers. In FY2018, almost 2/3s of the sewer volumes fell within the included consumption. A change in this policy (even barring the elimination of the "winter quarter" could substantially increase volumetric billings for the sewer utility. The ability to assess this impact is supported by the model.

Variable Volumetric Tier Size & Relative Value

Many communities have adopted multi-tier billing practices under which larger users pay incrementally more per unit for the utility service as their usage passes set points. These practices do a couple of things:

- they provide an incentive for conservation which can both save on resource purchase costs and also, potentially, reduce that amount of capital investment needed as the system grows; and
- they drive revenue generation onto the largest users of the system.

The model supports the assessment of multi-tier rates.

Flow & Load Rates

These rates are generally used with industrial and commercial sewer customers who discharge either large volumes of wastewater or high-strength wastewater to the sewer system. They are most frequently used when industrial constitute a sizeable proportion of the wastewater within a service area. While Wellington may wish to consider them at some point in the future, the lack of information on waste strength from the existing dischargers precludes our calculation as part of this study. Additionally, the use of these rates requires the institution of a waste sampling program and can cause a significant increase in the administrative load within the billing office. Calculation of Flow and Load rates are not supported by the model.

7.5 MODEL HANDOFF

The finalized model will be delivered to the town upon completion of the rate study. The model will have many features “locked-down” so essential formulas and algorithms (where changes would be hidden from the Town and could materially impact the rate recommendations from the model) cannot be changed. Training on use of the model will be provided to town staff, prior to final hand-off.

Attachments

CAPITAL INVESTMENT PROGRAMS
RATE ASSUMPTIONS FOR RATES RECOMMENDED IN THIS REPORT
PROJECTED CASH FLOW TABLES

Attachment A – Capital Investment Programs

Fund	Project	Funding - Model	Total	FY19	FY20	FY21	FY22	FY23	FY24
				Construction/ Purchase	Construction/ Purchase	Construction/ Purchase	Construction/ Purchase	Construction/ Purchase	Construction/ Purchase
Water Enterprise	Leak Detection Equipment	Cash	\$ 43,000	\$ 43,000					
	On-Line Process Equipment	Cash	\$ 15,750	\$ 15,750					
	Vehicle Replacement Policy	Cash	\$ 104,517	\$ 31,500		\$ 34,729	\$ -	\$ 38,288	
	Bulk NaOH and Antiscalant	Cash	\$ 30,000	\$ 30,000					
	Membranes and Nano/RO	Cash	\$ 37,173	\$ 11,589	\$ 12,168	\$ 13,416			
	Emergency Power for main water treatment plant	Cash	\$ 212,000	\$ 212,000					
	Disinfection rules compliance (tank aeration)	Cash	\$ 106,000	\$ 106,000					
	Back up 2 MGD Pump	Cash	\$ 60,000	\$ 60,000					
	Redundancy for pumps to water tower storage	Cash	\$ 50,000	\$ 50,000					
	Wellhouse Improvements (Nano/RO and Irrigation)	Cash	\$ 300,000	\$ 300,000					
	Nano plant expansion	Cash	\$ 47,513	\$ 47,513					
	Clearwater High Service Pump upgrade	Cash	\$ 25,000	\$ 25,000	\$ -				
	Old Town Water Main replacements	Cash	\$ 558,025	\$ 80,000	\$ 84,800	\$ 89,888	\$ 95,281	\$ 100,998	\$ 107,058
	Water Efficiency Study	Cash	\$ 53,000	\$ 53,000					
	Water rate Study	Cash	\$ 25,000	\$ 25,000					
	Grant Ave - 1st to 4th	Cash	\$ 309,660	\$ 309,660					
	Water Source Development	SRF	\$ -						
	Bulk Water Dispenser	Cash	\$ 55,000		\$ 55,000				
		Cash	\$ -						
	Total Water Enterprise Fund - Current		\$ 2,031,638	\$ 1,400,012	\$ 151,968	\$ 138,033	\$ 95,281	\$ 139,286	\$ 107,058
Sewer Enterprise	Wet Well Pump	Cash	\$ 10,000	\$ 10,000					
	Collection - Camera Equipment	Cash	\$ 125,000	\$ 125,000					
	WWTP Master Plan	Cash	\$ 190,000	\$ 190,000					
	WWTP Blower/Digester Improvement Project	Cash	\$ 173,500	\$ 173,500					
	WWTP Pumps	Cash	\$ 109,724	\$ 15,730	\$ 16,674	\$ 17,675	\$ 18,735	\$ 19,859	\$ 21,051
	WWTP Clarifier Upgrades	Cash	\$ 350,000	\$ 350,000					
	WWTP Biosolids Storage	Cash	\$ 35,000	\$ 35,000					
	WWTP Driveway Paving	Cash	\$ 68,900	\$ 68,900					
	WWTP Effluent Irrigation Systems and Landscaping	Cash	\$ 28,000	\$ 28,000					
	Sewer Rehab Roosevelt Grant Street	Cash	\$ 48,255	\$ 48,255					
	Vehicle Replacement Policy	Cash	\$ 69,540		\$ 33,075		\$ 36,465		
	Grant Ave - 1st to 4th	Cash	\$ 60,598	\$ 60,598					
	Sewer Line Rehab/Replacement	SRF	\$ 1,127,418		\$ 200,000	\$ 212,000	\$ 224,720	\$ 238,203	\$ 252,495
	Vacuum Truck	Cash	\$ 540,000			\$ 540,000			
	WWTP Shop Building Expansion Project	Cash	\$ 142,922			\$ 142,922			
	WWTP UV Disinfection Replacement Project	Cash	\$ 226,967					\$ 226,967	
	Skid Loader	Cash	\$ 43,232	\$ 43,232					
		Cash	\$ -						
	Cleveland Avenue Drainage 4th Street	Cash	\$ 212,000		\$ 212,000				
	Old Town Street Rehab	Cash	\$ 369,692	\$ 53,000	\$ 56,180	\$ 59,551	\$ 63,124	\$ 66,911	\$ 70,926
	Storm Drain and Pan Replacements	Cash	\$ 69,753	\$ 10,000	\$ 10,600	\$ 11,236	\$ 11,910	\$ 12,625	\$ 13,382
	Master Storm Water Plan	Cash	\$ 127,200	\$ 127,200					
	Bragg Lane Storm Drain	Cash	\$ 60,000			\$ 60,000			
		Cash	\$ -						
	Total Sewer Enterprise Fund - Current		\$ 4,187,701	\$ 1,338,415	\$ 528,529	\$ 1,043,384	\$ 354,954	\$ 564,565	\$ 357,854
			\$ -						
	Grand Total - Current		\$ 6,219,339	\$ 2,738,427	\$ 680,497	\$ 1,181,417	\$ 450,235	\$ 703,851	\$ 464,912
			\$ -						
	Grand Total - Escalated		\$ 6,619,460	\$ 2,738,427	\$ 707,717	\$ 1,277,821	\$ 506,453	\$ 823,406	\$ 565,637

Attachment B – Rate Assumptions

Attachment C – Projected Cash Flow Tables – page 1

Sewer Utility

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Operating Expenditures								
ADMINISTRATIVE EXPENSES			\$271,115	\$280,604	\$290,425	\$300,590	\$311,111	\$322,000
OPERATING EXPENSES			\$869,814	\$900,257	\$931,767	\$964,378	\$998,132	\$1,033,066
SMALL EQUIPMENT			\$30,395	\$31,459	\$32,560	\$33,699	\$34,879	\$36,100
SEWER CAPITAL OUTLAY			\$0	\$0	\$0	\$0	\$0	\$0
INDIRECT COSTS			\$0	\$0	\$0	\$0	\$0	\$0
Existing Debt Service								
Bonded DS	\$0		\$536,439	\$536,440	\$534,287	\$527,886	\$177,885	\$172,645
Capital Program								
New Debt Service			\$0	\$0	\$12,343	\$25,950	\$40,951	\$57,488
Budgeted Expenses			\$1,148,215	\$51,739	\$757,766	\$62,092	\$288,752	\$25,612
Total Costs	\$0	\$0	\$2,855,978	\$1,800,499	\$2,559,148	\$1,914,597	\$1,851,709	\$1,646,909
Projected Revenues - Annual Increase								
Fixed Charges			\$882,551	\$1,140,300	\$1,242,235	\$1,362,783	\$1,489,768	\$1,588,899
Volumetric Charges			\$436,124	\$549,833	\$578,361	\$608,302	\$637,036	\$667,049
Non-operating Revenues			\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Other revenues			\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000
Total Revenues	\$0	\$0	\$1,548,675	\$1,920,133	\$2,050,596	\$2,201,084	\$2,356,803	\$2,485,947
Surplus/(Deficit) - Annual Increase	\$0	\$0	-\$1,307,303	\$119,634	-\$508,551	\$286,488	\$505,094	\$839,038
Fund Balance - YB	\$0	\$0	\$1,202,687	-\$104,616	\$15,019	-\$493,533	-\$207,045	\$298,049
Fund Balance - YE	\$0	\$1,202,687	-\$104,616	\$15,019	-\$493,533	-\$207,045	\$298,049	\$1,137,087
Reserve Balance Target	50%	\$0	\$774,338	\$960,067	\$1,025,298	\$1,100,542	\$1,178,402	\$1,242,974

Water Utility

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Operating Expenditures								
ADMINISTRATIVE EXPENSES			\$435,206	\$450,438	\$466,204	\$482,521	\$499,409	\$516,888
OPERATING EXPENSES			\$1,485,306	\$1,537,292	\$1,591,097	\$1,646,785	\$1,704,423	\$1,764,078
SMALL EQUIPMENT			\$757,852	\$0	\$0	\$0	\$0	\$0
Water CAPITAL OUTLAY			\$195,100	\$201,929	\$208,996	\$216,311	\$223,882	\$231,718
Water Purchase			\$0	\$939,370	\$1,118,230	\$1,336,003	\$1,519,530	\$1,720,602
WATER CAPITAL OUTLAY	\$516,850		\$0	\$0	\$0	\$0	\$0	\$0
Existing Debt Service								
Bonded DS	\$0		\$298,750	\$1,623,879	\$1,621,453	\$1,588,427	\$1,547,992	\$1,464,694
Capital Program								
New Debt Service			\$0	\$0	\$0	\$0	\$0	\$0
Budgeted Expenses			\$1,400,012	\$158,047	\$149,296	\$107,178	\$162,945	\$130,252
Total Costs	\$516,850	\$0	\$4,572,226	\$4,910,954	\$5,155,276	\$5,377,225	\$5,658,181	\$5,828,232
Projected Revenues - Annual Increase								
Fixed Charges			\$948,960	\$1,700,736	\$1,926,538	\$2,197,056	\$2,498,526	\$2,781,928
Volumetric Charges			\$1,550,896	\$1,707,236	\$1,865,219	\$2,037,595	\$2,216,310	\$2,410,418
Bulk Water Sales			\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000
Non-operating Revenues			\$330,000	\$330,000	\$330,000	\$330,000	\$330,000	\$330,000
Other revenues			\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000
Total Revenues	\$0	\$0	\$2,864,856	\$3,772,972	\$4,156,757	\$4,599,650	\$5,079,836	\$5,557,346
Surplus/(Deficit) - Annual Increase	-\$516,850	\$0	-\$1,707,370	-\$1,137,982	-\$998,519	-\$777,575	-\$578,345	-\$270,886
Fund Balance - YB	\$0	\$9,205,918	\$9,205,918	\$7,498,548	\$6,360,566	\$5,362,046	\$4,584,472	\$4,006,127
Fund Balance - YE	\$0	\$9,205,918	\$7,498,548	\$6,360,566	\$5,362,046	\$4,584,472	\$4,006,127	\$3,735,240
Reserve Balance Target	50%	-	1,432,428	1,886,486	2,078,378	2,299,825	2,539,918	2,778,673

Attachment C – Projected Cash Flow Tables – page 2

Stormwater Utility

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Operating Expenditures								
ADMINISTRATIVE EXPENSES		\$496,667	\$502,662	\$520,255	\$538,464	\$557,310	\$576,816	\$597,005
OPERATING EXPENSES		\$29,773	\$69,321	\$71,747	\$74,258	\$76,857	\$79,547	\$82,332
SMALL EQUIPMENT		\$5,046	\$2,500	\$2,588	\$2,678	\$2,772	\$2,869	\$2,969
Stormwater CAPITAL OUTLAY		\$0	\$0	\$0	\$0	\$0	\$0	\$0
INDIRECT COSTS		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Existing Debt Service								
Bonded DS		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital Program								
New Debt Service		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Budgeted Expenses		\$0	\$0	\$289,931	\$141,459	\$84,403	\$93,046	\$102,574
Total Costs	\$0	\$531,486	\$574,483	\$884,521	\$756,860	\$721,343	\$752,278	\$784,879
Projected Revenues - Annual Increase	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Monthly Charges		\$543,432	\$570,080	\$602,167	\$697,978	\$777,474	\$863,670	\$939,298
Other revenues		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenues	\$0	\$543,432	\$570,080	\$602,167	\$697,978	\$777,474	\$863,670	\$939,298
Surplus/(Deficit) - Annual Increase	\$0	\$11,946	-\$4,403	-\$282,354	-\$58,882	\$56,132	\$111,392	\$154,419
Fund Balance - YB		\$65,190	\$77,136	\$72,733	-\$209,621	-\$268,503	-\$212,371	-\$100,979
Fund Balance - YE	\$65,190	\$77,136	\$72,733	-\$209,621	-\$268,503	-\$212,371	-\$100,979	\$53,440
Reserve Balance Target	30%	\$159,446	\$172,345	\$265,356	\$227,058	\$216,403	\$225,683	\$235,464



Organizational Chart
January 9, 2020

