

MEMORANDUM

To: Greg Duggan, Town Manager and the Selectboard
From: Aaron Martin, P.E., Public Works Director
Annie Costandi, P.E., Water Quality Director
Daniel Roy, Finance Director
Subject: FY2024 Water and Sewer Budget and Rates
Date: April 12, 2023

ISSUE:

The issue is whether the Selectboard will approve the proposed water and sewer budgets including approval of the proposed rate structure for FYE2024, with the new rates to be reflected in the next full billing period following budget approval.

DISCUSSION:

WATER RATES: The FYE2024 proposed water budget has an overall cost increase of 12.5% in budgeted line items and a resulting rate percentage increase of 4.74%. The water rate increases over the past few years are as follows:

<u>Fiscal Year Ending</u>	<u>Rate Increase Over the Previous Year</u>
<i>FYE24</i>	<i>4.74%</i>
FYE23	2.1%
FYE22	2.8%
FYE21	1%
FYE20	2.6%
FYE19	3.0%
FYE18	2.5%
FYE17	1.4%
FYE16	3.7%
FYE15	6.0%
FYE14	3.3%

There is no proposed increase in the water initiation fee and will remain \$5.90/1000 gallons of purchased capacity. The minimum water charge will also remain \$190 per year. The water budget increase proposed for FYE2024 is impacted to a great degree by two items.

- A 8.89% increase in water costs from the Champlain Water District (treatment costs make up a third of the budget increase this year).
- Increased costs to investigate and monitor water system losses.

SEWER RATES: The FYE2024 proposed sewer budget has an overall 14.2% increase in budgeted line items and a 6.28% corresponding increase in rates. In a manner similar to the water budget, only a limited number of line items have a significant impact on the budget:

- 16.8% increase in sewage treatment costs from the City of Essex Junction (treatment costs make up half of this year’s budget increase).
- Increased costs to investigate and monitor sewer system infiltration/inflow and sanitary sewer pump stations.

The sewer rate increases over the past few years are as follows:

<u>Fiscal Year Ending</u>	<u>Rate Increase Over the Previous Year</u>
FY24	6.28%
FY23	3.4%
FY22	3%
FY21	1%
FY20	2.9%
FY19	3.2%
FY18	4.5%
FY17	6.1%
FY16	4.6%
FY15	8.3%
FY14	6.5%

There is no increase in the current sewer initiation fees and will remain at \$10.60/gpd of capacity proposed.

GENERAL ISSUES:

The three major issues that impacted this year’s budget are:

- The need to maintain the sewer and water funds on a firm financial basis by continuing to set aside adequate funds for asset replacement and for needed system improvements.
- The need to continue to reduce unaccounted for water/wastewater.
- The need to reduce system inflow and infiltration, and to monitor pump station SCADA data to read system trends and adjust preventative maintenance on stations to decrease after hours call-outs.

System Stabilization/Elimination of Past Deficits:

The funds budgeted for asset replacement in both accounts for FY24 are close to the actual depreciation amounts identified in the Town audits. It is likely that the current amount in both water and sewer will require adjustment in the future. A comparison of budgeted system stabilization in each account versus actual expenditure is reflected in the following data:

System Stabilization Accounts

<u>Year</u>	<u>Water Budgeted</u>	<u>Water Actual</u>	<u>Sewer Budgeted</u>	<u>Sewer Actual</u>
FY2011	\$50,000	\$139,475	\$45,000	\$139,475
FY2012	\$97,500	\$147,864	\$97,500	\$147,864
FY2013	\$136,000	\$148,000	\$138,000	\$147,966
FY2014	\$148,000	\$145,834	\$148,000	\$145,834
FY2015	\$138,000	\$138,000	\$158,000	\$158,000
FY2016	\$138,000	\$138,000	\$158,000	\$158,000
FY2017	\$130,000	\$150,000	\$150,000	\$150,000
FY2018	\$125,000	\$150,000	\$175,000	\$150,000
FY2019	\$150,000	\$150,000	\$150,000	\$150,000
FY2020	\$158,000	\$157,747	\$158,000	\$157,747
FY2021	\$160,000	\$156,507	\$160,000	\$156,507
<i>FY2022</i>	<i>\$160,000</i>	<i>\$155,677</i>	<i>\$160,000</i>	<i>\$155,677</i>

The sewer and water accounts operated in a deficit for many years, dating back to the change in the rate structure done in 2004. At that time, the Town went away from a combination fixed charge/user fee rate system to a pure user rate system based on metered flow. With the metered flow type of billing and with the variability in water and sewer usage on a yearly basis, the sewer/water funds did not keep up with actual expenses. It has taken some time to correct the problem, but the accounts have been solvent since FY2015. An indicator of the past problem is found under the actual interest payments for recently completed financial years under both accounts as noted:

<u>Fiscal Year</u>	<u>Sum of Interest on Deficits Paid in Water and Sewer</u>
FY2022 to 2015	\$ 0
FY2014	\$ 773
FY2013	\$ 84
FY2012	\$1,060
FY2011	\$2,104
FY2010	\$4,730

Retail Sale of Water/Sewage

The unaccounted-for water and sewage rate calculated for the budget represents an economic loss rate and not the actual loss of unaccounted for water or sewage.

In water, the amount purchased from CWD is based on weekly readings which provide very close to a 365-day average. The Town customer-billed water usage is based on readings three times per year and over a different time frame. The difference in flows approximates the difference between water purchased and water sold during a 12-month period. Within this “revenue” loss stream there is water used for firefighting, water main/service connection breaks, and hydrant flushing losses which do not contribute revenue and not characterized as leaks. These uses do represent revenue loss. A comparison of the 2022 actual revenue from received user fees and the rate for that year provides a more accurate estimate of actual flow. In wastewater, a similar effect occurs with respect to billable flows and flows reported to the wastewater treatment plant.

System loss is an issue that is consistently being worked on between Public Works and Finance. The following tasks are being continued on a recurring basis to reduce the loss rate and increase the billing revenue.

- Review the recorded meter flow data from large users to determine if there are any inconsistencies.
- Make a physical check of the large users' systems to determine if the metering system is capturing all used water flows.
- Work with Champlain Water District to determine if there are any other meter issues between CWD and the Town.
- Walk the major cross-country routes to determine if there are any obvious water or sewer system leaks.
- Complete the acoustic leak detection testing on the water distribution system and research / implement methods to continuously monitor the system for leaks.

WATER

<u>Period</u>	<u>Purchased from</u> <u>CWD</u>	<u>Billed</u>	<u>Unaccounted</u> <u>Water</u>	<u>Percentage</u>
Jan 22- Dec 22	772,017 gpd	652,725 gpd	119,292 gpd	15.5%
Jan 21- Dec 21	778,000 gpd	700,368 gpd	77,632 gpd	10%
Jan 20-Dec20	773,422 gpd	638,000 gpd	135,422 gpd	17%
Jan19- Dec19	758,164 gpd	631,000 gpd	127,164 gpd	16%
Jan18-Dec18	735,747 gpd	633,412 gpd	102,335 gpd	14%
Jan17-Dec17	755,430 gpd	679,677 gpd	75,753 gpd	10%
Jan16-Dec16	774,413 gpd	649,414 gpd	124,999 gpd	16%
Jan15-Dec15	762,425 gpd	624,253 gpd	138,172 gpd	18%
Jan14-Dec14	773,891 gpd	633,356 gpd	140,535 gpd	18%
Jan 13-Dec13	749,682 gpd	633,035 gpd	116,647 gpd	15%
Jan 12-Dec12	746,609 gpd	683,709 gpd	62,900 gpd	8.4%
Jan11-Dec11	777,621 gpd	654,000 gpd	123,621 gpd	16%
Jan10-Dec10	772,953 gpd	630,206 gpd	142,747 gpd	18.5%
Jan09-Dec09	692,058 gpd	634,102 gpd	57,956 gpd	8.4%
Jan08-Dec08	760,035 gpd	665,067 gpd	94,968 gpd	12%
Jan07-Dec07	745,371 gpd	657,548 gpd	87,823 gpd	12%
Jan06-Dec06	827,938 gpd	669,000 gpd	158,938 gpd	19%
Jan05-Dec05	843,507 gpd	672,000 gpd	171,507 gpd	20%
Jan04-Dec04	825,137 gpd	705,000 gpd	120,137 gpd	15%
Jan03- Dec03	924,482 gpd	673,382 gpd	251,100 gpd	27%
Jan02-Dec02	882,521 gpd	728,024 gpd	154,497 gpd	18%

Long-term average = **15.4%**

SEWER

<u>Period</u>	<u>Metered Flow to EJWWTF</u>	<u>Billed to Users</u>	<u>Difference</u>	<u>Unaccounted Percentage</u>
<i>Jan 22- Dec 22</i>	<i>504,867 gpd</i>	<i>438,528 gpd</i>	<i>66,339 gpd</i>	<i>13.1%</i>
Jan 21- Dec 21	495,255 gpd	454,551 gpd	40,704 gpd	8.2%
Jan 2,- Dec 20	468,595 gpd	418,909 gpd	49,686 gpd	10.6%
Jan 19- Dec 19	502,497 gpd	421,000 gpd	81,497 gpd	16%
Jan 18- Dec 18	449,033 gpd	427,493 gpd	21,540 gpd	4.8%
Jan 17- Dec 17	432,501 gpd	422,267 gpd	10,234 gpd	2.4%
Jan 16- Dec16	423,233 gpd	422,267 gpd	966 gpd	1%
Jan 15-Dec15	428,502 gpd	412,390 gpd	16,112 gpd	4%
Jan 14-Dec14	462,942 gpd	411,826 gpd	51,116 gpd	11%
Jan13- Dec13	529,133 gpd	415,756 gpd	113,376 gpd	21%
Jan12- Dec12	475,047 gpd	438,086 gpd	43,124 gpd	9%
Jan11-Dec11	487,584 gpd	429,000 gpd	58,584 gpd	12%
Jan10-Dec10	446,119 gpd	419,528 gpd	26,591 gpd	6%
Jan09-Dec09	511,155 gpd	433,090 gpd	78,065 gpd	15%
Jan08-Dec08	532,301 gpd	435,816 gpd	96,485 gpd	18%
Jan07- Dec07	559,056 gpd	442,160 gpd	116,892 gpd	20%
Jan06- Dec06	624,004 gpd	447,192 gpd	176,812 gpd	28%
Jan05-Dec05	579,498 gpd	447,271 gpd	132,227 gpd	23%
Jan04-Dec04	589,883 gpd	439,049 gpd	150,834 gpd	26%
Jan03- Dec03	540,658 gpd	433,225 gpd	107,433 gpd	20%
Jan02-Dec02	532,056 gpd	437,660 gpd	94,396 gpd	18%

Long-term average = **13.7%**

As stated in the budgets of previous years, both the water and sewer unaccounted for percentage numbers should be in the 15% range recognized nationally for a reasonably “tight” system. Work is continuing to identify areas of loss from both infrastructure and billings.

Remote Pump Station Monitoring

The goal of this new service this fiscal year is to utilize the Mission Communications SCADA system to its fullest potential to monitor the health of the 16 pump stations, identify and fix issues during normal daylight hours. The goal of this would be to look for areas of system improvement, provide continuous operations and to prevent off hours overtime work. While viewing the data, the contracted technician may call the Town to discuss anomalies in the data. A weekly email report will be generated to identify any potential problems with the Town’s stations that may lead to a site visit for Town operators, the technician or both. Increasing the number of preventative maintenance events, however small, will lead to less failures overtime that Town operators must respond to during the day or after hours.

Additionally, included with the pump station monitoring agreement will be a 24/7 call-out service for all 16 Town owned pump stations. This portion of the service agreement will be to provide access to additional labor and technical resources for the Town of Essex when the need arises. Contracted technicians will work with Town employees to assist with pump station controls, clogged pumps, and

other issues that present themselves during and after work hours. This assistance will be initiated by the Town and the contractor will respond to after hour callouts on a needed basis.

BUDGET ANALYSIS

The proposed budgets for FY2024 compared to the current FY2023 budgets are as follows:

Table 1. Budget Comparison

	<u>FY2023</u>	<u>FY2024</u>	<u>Increase/Decrease</u>	
Water (all but CWD)	\$547,120	\$662,887	+ \$115,767	+21.2%
Water (Depreciation)	\$160,000	\$160,000	0	0%
Water (CWD Water Purchase)	<u>\$742,000</u>	<u>\$808,000</u>	<u>+\$66,000</u>	<u>+8.9%</u>
Total	\$1,449,120	\$1,630,887	+ \$181,767	+12.5%
Sewer (all but City+ Bradford)	\$551,435	\$660,768	+\$109,333	+19.8%
Sewer (Depreciation)	\$160,000	\$160,000	0	0%
Sewer (Bond Payments)	\$ 33,200	\$ 33,200	0	0%
Sewer (City Treatment)	\$667,000	\$795,771	+\$128,771	+19.3%
Sewer (City Bond)	<u>\$263,457</u>	<u>\$263,510</u>	<u>+\$53</u>	<u>+0.02%</u>
Total	\$1,675,212	\$1,913,249	\$238,037	+14.2%

PROPOSED RATES

	<u>Existing</u>	<u>Proposed</u>
Water Operating	\$5.90/1000 gal.	\$6.18/1000 gal.
Water Initiation Fee	\$1,000 base fee per connection +\$5.90/gpd of capacity	\$1,000 base fee per connection + \$5.90/gpd of capacity
Minimum Water Charge Per Year	\$190	\$190
Sewer Operating	\$10.27/1000 gal.	\$10.91/1000 gal.
Sewer Initiation Fee	\$1000 base +\$10.60/gpd of capacity	\$1000 base+\$10.60/gpd of capacity
Interim or Final Billing request	\$35	\$35

METHODOLOGY FOR RATES

For previous fiscal years dating back to 1998, it was determined that the budgets would be split into the following categories:

1. Shared water and sewer costs (primarily fixed costs)
2. Water only costs
3. Sewer only costs

History of Shared Costs Splits

	<u>2003</u>	<u>2004</u>	<u>2005to2011</u>	<u>2012to2014</u>	<u>2015</u>	<u>2016to2019</u>	<u>2020</u>	<u>2021</u>	<u>2022to2023</u>	<u>2024</u>
Water	60	61	55	53	54	58	57	57	55	56
Sewer	40	39	45	47	46	42	43	43	45	44

The first estimates for splitting of costs between water and sewer were based on a 50% water/50% sewer ratio (1998). The ratio was changed to a 55%/45% split in 2005 and remained at that level until 2011. In FY2012, the percentage shifted to 53% water and 47% sewer and the proposed budget for FY2014 retained this percentage split. The split in FY2016 through FY2019 was set at 58%/42%. Using the calculations on rate setting later in this memo, a 56% water/44% sewer split was utilized for the FY2024 budget. This closely approximates real shared costs percentages but also recognizes that the water and sewer bills should in a general sense reflect all costs including the cost increases for wholesale purchase of water and wholesale treatment of wastewater. In addition, slight changes in the percentages (which are only estimates) provide one of two mechanisms, the second being usage estimates, to allow both rates to rise in close proximity to each other on a percentage increase basis.

It is proposed for FY2024 that the split continue to be on a 56% water/44% sewer basis.

DEVELOPMENT OF WATER RATE

Assumptions:

1. Water Budget = **\$1,630,887**
2. No Direct Debt - debt through CWD line item 51.43201.411 for the west end tank in Colchester.
3. Unbudgeted Revenues

Connection Fees:	\$80,000
Penalties:	\$15,000
Interest:	\$6,720
Misc. Revenue:	<u>\$6,720</u>
	\$108,440
4. Billed Water Usage

2005	672,000 gpd -
2006	669,000 gpd
2007	658,000 gpd
2008	665,067 gpd
2009	637,000 gpd

2010	630,206 gpd
2011	654,000 gpd
2012	683,000 gpd
2013	633,035 gpd
2014	633,356 gpd
2015	624,653 gpd
2016	649,414 gpd
2017	649,414 gpd
2018	633,412 gpd
2019	631,000 gpd
2020	650,000 gpd
2021	700,368 gpd
2022	652,725 gpd
2023	672,000 gpd estimate
2024	675,000 gpd estimate

Calculation of Rate: Water budget = \$1,630,887

1.
$$\frac{(\$1,630,887 - \$108,440)}{365 \text{ days} \times 675,000 \text{gpd}} = \mathbf{\$6.18/1000 \text{ gallons}}$$

The current rate is \$5.90/1,000 gal.; recommend an increase to \$6.18/1000 gallons (4.74% increase in rates).

2. Minimum water charge: In earlier years, the minimum was equal to approximately 50% of the average daily family usage which would be 100 gpd. The minimum rate has stayed constant in past years dropping to 84% of the 100 gpd estimate to calculate the minimum. Last year’s recommendation was to raise the minimum water charge by \$10 to better reflect current user rates. Staff recommends leaving the minimum water charge at \$190 for FY2024.

Year	Minimum Charge	Water rate per 1000 gallons	Minimum if 100 gpd was used	Actual minimum as a % of 100 gpd
2013	\$160	\$4.45	\$162	99%
2014	\$165	\$4.60	\$168	98%
2015	\$165	\$4.88	\$178	93%
2016	\$165	\$5.06	\$184	90%
2017	\$165	\$5.13	\$187	87%
2018	\$165	\$5.24	\$191	86%
2019	\$170	\$5.42	\$198	86%
2020	\$180	\$5.56	\$203	89%
2021	\$180	\$5.62	\$205	86%
2022	\$180	\$5.78	\$211	83%
2023	\$190	\$5.92	\$216	88%
2024	\$190	\$6.18	\$225	84%

DEVELOPMENT OF SEWER RATE

<u>Assumptions:</u>	1.	Sewer Budget Operating	=	\$1,913,249
	2.	Unbudgeted Revenues		
		Connection Fees:		\$70,000
		Penalties:		\$20,000
		Interest:		\$5,280
		Misc. Revenue:		<u>\$5,280</u>
				\$100,560
	3.	Sewer Usage (billed)		

FYE2005	447,271 gpd
FYE2006	447,192 gpd
FYE2007	442,160 gpd
FYE2008	435,816 gpd
FYE2009	433,090 gpd
FYE2010	419,528 gpd
FYE2011	429,000 gpd
FYE2012	438,086 gpd
FYE2013	415,716 gpd
FYE2014	411,826 gpd
FYE2015	412,390 gpd
FYE2016	422,467 gpd
FYE2017	422,268 gpd
FYE2018	427,493 gpd
FYE2019	421,000 gpd
FYE2020	430,000 gpd
FYE 2021	454,551 gpd
FYE 2022	438,528 gpd
FYE 2023	447,000 gpd estimated
FYE 2024	455,000 gpd estimate

Calculation of Rate: Sewer Operating Budget: \$1,913,249

1.
$$\frac{(\$1,913,249 - \$100,560)}{365 \text{ days} \times 455,000 \text{ gpd}} = \mathbf{\$10.91/1,000 \text{ gal}}$$

The current rate is \$10.27/1,000 gal; increase the proposed rate to \$10.91/1000 gal (6.28% increase).

EFFECT OF RATE CHANGE ON THE CURRENT USERS:

An average residential household using 200 gpd for the household would see the following change in costs on an annual basis:

Annual Usage:	200 gpd x 365 days per year = 73,000 gpd/year		
Existing Water bill:	\$430.70	Water Bill with Rate Change:	\$451.14 (\$20.44 yearly increase)
Existing Sewer bill:	<u>\$749.71</u>	Sewer Bill with Rate Change:	<u>\$796.43</u> (\$46.72 yearly increase)
TOTAL	\$1,180.41	TOTAL	\$1,247.57 (\$67.16 yearly increase)

Net increase: A \$67.16 increase in both the water and sewer bill equates to a 5.69% total increase in residential charge for the year or a \$5.60/monthly increase. On a monthly basis, the monthly water cost for an average residential dwelling will be \$37.60 and \$66.37 for sewer. Treatment costs make up the majority of the rate increase in both water and sewer this year. Over a third of the water rate increase and nearly two-thirds of the sewer rate increase are due to increased treatment costs this year.

For the availability of clean drinking water and flushing toilets, this is a very low-cost utility charge compared to other monthly utility costs, such as phone, internet, electrical, natural gas.

COMPARISON RATES TO OTHER COMMUNITIES:

Most other communities are in the process of setting rates currently. The charts provided reflect existing rates as of December 2022 unless noted otherwise. Also, many municipalities have adopted a combined fixed and usage rate. In those cases, the rate numbers were adjusted based on an average 200 gpd usage. Please note, this compares the existing water and sewer rates to the Town’s new proposed rates. This is for comparison purposes only, to see how we compare to neighboring communities.

Municipality	Water Rate per 1,000 Gallons
Burlington	\$ 8.24
Shelburne	\$ 6.74
Milton	\$ 6.52
Colchester FD #3	\$ 6.25
Essex	\$ 6.18
Average Retail Rate	\$ 5.97
Winooski	\$ 5.88
Mallets Bay Water Company	\$ 5.81
Colchester Town	\$ 5.81
Williston	\$ 5.45
Colchester Fire District #1	\$ 5.18
Essex Junction	\$ 4.67
South Burlington	\$ 4.46
CWD Wholesale Rate	\$ 2.73

Municipality	Sewer Rate per 1,000 Gallons
Richmond	\$ 18.87
Shelburne	\$ 14.91
Essex	\$ 10.91
Average Retail Rate	\$ 9.76
Burlington	\$ 8.54
Rutland	\$ 8.52
Milton	\$ 8.03
Williston	\$ 7.87
Winooski	\$ 7.67
South Burlington	\$ 5.95
Essex Junction	\$ 5.44

In discussions with other utilities within the immediate area, some of the communities with lower rates do not appear to be accurately reflecting depreciation or replacement asset costs in their current rate structure. Over a long period of time, neighboring water systems will have to be replaced and the costs of replacements will most likely be paid for by greater costs of indebtedness.

SUMMARY:

The budget and rate development outlined in this memorandum follows the methods used in previous years. It uses the water meter as the only means of establishing usage and rates (except in a very few unique cases). Billings are currently three times per year for all customers, except the large users who are currently being billed quarterly. The staff believes that an alternative billing system to the 100% metered system should continue to be investigated in the future. Work will continue informally on this effort between the Finance Department and Public Works.

RECOMMENDATION:

The following timeline is recommended:

1. Place on the Reading File for the April 17, 2023 selectboard agenda.
2. Presentation and discussion of the budget to occur as a Business Agenda item at the Selectboard meeting on May 1, 2023.
3. A public hearing be warned on the proposed Budget for May 15, 2023.
4. The Water/Sewer Budget be adopted by the Selectboard following the Public Hearing on May 15, 2023.

It is further recommended that, following the Public Hearing, the Selectboard approve the proposed budget as submitted, resulting in the following changes to the rate and billing structure:

1. Water Rates/Fees:
 - a. Increase the water rate from \$5.90/1,000 gallons to \$6.18 per 1,000 gallons.
 - b. The water initiation fee at \$1000 base fee per connection plus \$5.90/gpd of capacity to remain the same.
 - c. Set the water minimum charge per year at \$190.
 - d. Interim or Final Billing request at \$35

2. Sewer Rates/Fees:
 - a. Increase the sewer operating fee from \$10.27/1,000 gallons to \$10.91/1,000 gallons.
 - b. The sewer initiation fee of \$1,000 base fee per connection plus \$10.60/gpd of capacity remains the same.
 - c. Interim or Final Billing request at \$35
3. The rate change and interim/final billing request would go into effect on all water/sewer usage with the billing period starting after the spring 2023 billings.

Memorandum

To: Selectboard; Greg Duggan, Town Manager
From: Dan Roy, Finance Director
Re: FY24 Water/Sewer Budget & 5-year Capital Plan (Enterprise Fund only)
Date: April 21, 2023

Issue

The issue is to inform the Selectboard of the proposed FY24 budget for the Water/Sewer fund and provide an outline for Capital spending within this fund.

Discussion

The proposal for the FY24 Water/Sewer operational budget is to include budgeting of \$209,000 for revenue line items that have not been historically budgeted. These items include new connections, penalties for late payments, interest income and miscellaneous income. This action helps to reduce the proposed water and sewer rate increases for FY24 to 4.74% and 6.28%, respectively.

This budgeting of revenue items is a unique circumstance, as actual revenues in these line items were used to build up the unrestricted portion of net position, with the intent of using for Capital projects. We are effectively passing on savings for the Capital aspect in FY24, even as we look to implement an aggressive group of Capital projects in the next four years (FY24-27).

The unrestricted portion of net position has grown from \$2.9M to nearly \$4.7M from FY17 to FY22. In FY24, we are budgeting a \$440,000 reduction in this fund balance based on a break-even operational budget, spending of \$833,500 on Capital projects, and an anticipated return of SRF (State Revolving Funds) revenue of \$393,750 for eligible projects. Continued Capital spending from FY25-27 of nearly \$5.16M, offset by SRF funding of \$2.8M would continue to erode the net position of the fund over the coming years along with more modest operational losses during that time frame (\$163K, \$96K and \$26K).

For budgets beyond FY24, we plan to eliminate the revenue budgeting and revert to our history of using any collections towards Capital projects, estimating this revenue at \$200K annually.

Overall, from FY24-27, this is a planned usage of \$2.475M of net position, which would leave the fund with \$2.2M of unrestricted net position. This would represent about 53% of the FY28 Water/Sewer operating budget.

Cost

No cost

Recommendation

Approve FY24 Water/Sewer budget plan and Capital layout for FY24-28.

Account Number	Account Name	FY17 Actual	FY18 Actual	FY19 Actual	FY20 Actual	FY21 Actual	FY22 Actual	FY23 Budget	FY24 Budget	FY25 Budget	FY26 Budget	FY27 Budget	FY28 Budget	Notes
	REVENUES													
151-4-51-20-021.000	Water Charges	1,209,242	1,165,161	1,249,500	1,337,054	1,436,644	1,388,021	\$ 1,443,395	\$ 1,522,447	\$ 1,613,794	\$ 1,710,621	\$ 1,813,259	\$ 1,922,054	6% Revenue increases annually from FY25-28
151-4-51-30-022.000	Sewer Charges	1,343,780	1,356,263	1,425,413	1,518,613	1,599,384	1,602,451	\$ 1,675,162	\$ 1,812,689	\$ 1,921,450	\$ 2,036,737	\$ 2,158,942	\$ 2,288,478	6% Revenue increases annually from FY25-28
151-4-51-20-085.000	Penalties - Water	13,563	13,172	15,987	12,601	15,454	16,637	\$ -	\$ 15,000	\$ -	\$ -	\$ -	\$ -	
151-4-51-30-085.000	Penalties - Sewer	16,035	16,969	19,700	15,120	20,802	20,981	\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -	
151-4-51-20-024.000	New Connections Water	132,769	95,438	101,295	115,805	63,185	31,731	\$ -	\$ 80,000	\$ -	\$ -	\$ -	\$ -	
151-4-51-30-024.000	Sewer Connections	163,571	196,452	142,020	141,449	66,220	20,085	\$ -	\$ 70,000	\$ -	\$ -	\$ -	\$ -	
151-4-51-10-098.000	Misc. Income	13,081	1,016	6,663	2,975	20,652	18,009	\$ -	\$ 12,000	\$ -	\$ -	\$ -	\$ -	
151-4-51-10-060.000	Interest Income	6,461	8,965	14,602	19,510	13,483	9,611	\$ -	\$ 12,000	\$ -	\$ -	\$ -	\$ -	
151-4-51-10-091.000	Transfers	12,854	24,436	2,210	583	925	455	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Revenues Subtotal	2,911,355	2,877,871	2,977,390	3,163,709	3,236,750	3,107,979	3,118,557	3,544,136	3,535,244	3,747,359	3,972,200	4,210,532	
	SHARED ACCOUNTS													
151-5-51-10-110.000	Salaries - Regular	449,320	411,194	451,019	461,012	490,601	498,537	\$ 498,334	\$ 600,751	\$ 624,612	\$ 649,512	\$ 675,416	\$ 702,253	Based on current Q numbers
151-5-51-10-120.000	Salaries - Part-Time						5,625	\$ 7,788	\$ 7,788	\$ 8,099	\$ 8,423	\$ 8,760	\$ 9,110	Based on current Q numbers
151-5-51-10-130.000	Salaries - Overtime	31,084	35,507	41,879	28,161	44,587	45,631	\$ 37,417	\$ 36,507	\$ 37,968	\$ 39,486	\$ 41,067	\$ 42,708	Based on current Q numbers
151-5-51-10-210.000	Group Insurance	91,270	114,684	99,743	104,483	107,554	116,333	\$ 130,289	\$ 180,297	\$ 194,721	\$ 210,298	\$ 227,122	\$ 245,292	Assuming 8% increases here
151-5-51-10-220.000	Social Security	37,552	33,412	37,209	36,712	39,580	41,359	\$ 41,528	\$ 50,072	\$ 52,030	\$ 54,104	\$ 56,262	\$ 58,498	Assuming 8.33% increases here
151-5-51-10-230.000	Retirement	69,567	62,164	86,920	127,281	121,083	57,210	\$ 44,739	\$ 54,970	\$ 56,215	\$ 58,456	\$ 60,787	\$ 63,203	Assuming 5% increases here
151-5-51-10-290.000	Other Employee Benefits	3,176	1,182	1,635	1,742	1,305	1,808	\$ 2,085	\$ 2,430	\$ 2,552	\$ 2,679	\$ 2,813	\$ 2,954	Assuming 5% increases here
151-5-51-10-330.000	Professional Services	4,571	1,616	378	1,508	4,719	1,842	\$ 51,500	\$ 55,000	\$ 58,300	\$ 61,798	\$ 65,506	\$ 69,436	Assuming 6% increases here
151-5-51-10-335.000	Audit						3,900	\$ 3,000	\$ 5,450	\$ 5,668	\$ 5,895	\$ 6,131	\$ 6,376	Assuming 4% increases here
151-5-51-10-430.000	R&M - Vehicles & Equipment		3,431	910	165	93	1,509	\$ 600	\$ 1,000	\$ 1,200	\$ 1,500	\$ 1,800	\$ 1,800	
151-5-51-10-430.001	R&M Vehicles - Supplies	4,681	4,902	1,786	2,453	1,065	2,168	\$ 2,000	\$ 2,500	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	
151-5-51-10-431.000	R&M - Buildings & Grounds	1,661	673	180	1,086	5,689	3,892	\$ 2,900	\$ 3,500	\$ 4,000	\$ 4,400	\$ 4,800	\$ 5,000	
151-5-51-10-442.000	Rental Vehicle / Equip	188		94	767	607	681	\$ 700	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	
151-5-51-10-505.000	Tech Subs. Licenses						153	\$ 2,050	\$ 2,175	\$ 2,262	\$ 2,352	\$ 2,447	\$ 2,544	Assuming 4% increases here
151-5-51-10-530.000	Communications	3,869	4,411	2,944	2,851	3,104	4,440	\$ 5,100	\$ 5,200	\$ 5,460	\$ 5,733	\$ 6,020	\$ 6,321	Assuming 5% increases here
151-5-51-10-540.000	Advertising	4,429	6,165	6,040	4,927	6,822	8,418	\$ 1,200	\$ 1,200	\$ 1,500	\$ 1,750	\$ 2,000	\$ 2,000	
151-5-51-10-560.000	Printing & Binding							\$ 1,200	\$ 1,200	\$ 1,500	\$ 1,750	\$ 2,000	\$ 2,000	
151-5-51-10-580.000	Postage							\$ 4,600	\$ 4,750	\$ 4,900	\$ 5,100	\$ 5,300	\$ 5,300	
151-5-51-10-580.000	Travel	1,065	2,135	644	1,854	14		\$ 2,500	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	
151-5-51-10-610.000	General Supplies		234				263	\$ 400	\$ 400	\$ 500	\$ 500	\$ 500	\$ 500	
151-5-51-10-611.000	Small Tools & Equipment	1,344	1,821	3,085	2,702	5,425	1,254	\$ 3,500	\$ 3,000	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	
151-5-51-10-612.000	Uniforms	1,540	1,962	1,747	1,052	1,506	2,605	\$ 2,000	\$ 2,400	\$ 2,800	\$ 3,200	\$ 3,500	\$ 3,500	
151-5-51-10-614.000	Meters & Parts	67,628	64,714	35,661	31,977	12,641	5,916	\$ 18,500	\$ 15,500	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	
151-5-51-10-622.000	Electricity	4,031	3,716	4,838	4,566	4,402	3,213	\$ 4,700	\$ 4,935	\$ 5,182	\$ 5,441	\$ 5,713	\$ 5,999	Assuming 5% increases here
151-5-51-10-621.000	Natural Gas/Heating	816	981	1,031	1,278	1,271	2,895	\$ 1,500	\$ 1,650	\$ 1,800	\$ 1,950	\$ 2,100	\$ 2,250	
151-5-51-10-735.000	Tech. Equip / Hardware		564		325	1,936	33	\$ 2,400	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	
151-5-51-10-750.000	Machinery & Equipment		1,881	1,850	1,716			\$ 6,000	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	
	Shared Subtotal	778,788	757,791	780,250	818,618	854,006	810,982	870,742	1,056,275	1,111,368	1,164,428	1,220,143	1,277,143	
										105.22%	104.77%	104.78%	104.67%	
	WATER ACCOUNTS													
151-5-51-20-411.000	Water Purchase - CWD	602,620	627,233	636,135	672,698	688,587	708,068	\$ 742,000	\$ 808,000	\$ 848,400	\$ 890,820	\$ 935,361	\$ 982,129	Assuming 5% increases here
151-5-51-20-433.000	R&M Infrastructure	13,235	35,391	8,663	26,744	44,083	112,997	\$ 46,500	\$ 47,000	\$ 50,000	\$ 52,500	\$ 55,000	\$ 57,500	
151-5-51-20-500.000	Training, Conf. Dues		3,771		2,541	1,501	2,927	\$ 3,000	\$ 3,250	\$ 3,500	\$ 3,750	\$ 4,000	\$ 4,250	
151-5-51-20-520.000	Insurance	9,345	10,194	9,153	10,317	8,243	18,488	\$ 9,756	\$ 9,623	\$ 12,000	\$ 12,000	\$ 15,000	\$ 15,000	
151-5-51-20-570.000	Other Purchased Service	1,947	792	547			18,329	\$ 9,000	\$ 11,500	\$ 11,500	\$ 11,500	\$ 11,500	\$ 11,500	

Account Number	Account Name	FY17 Actual	FY18 Actual	FY19 Actual	FY20 Actual	FY21 Actual	FY22 Actual	FY23 Budget	FY24 Budget	FY25 Budget	FY26 Budget	FY27 Budget	FY28 Budget	Notes
151-5-51-20-790.000	System Stabilization Fund	149,331	153,310	157,747	156,507	156,802	155,677	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	
	Water Subtotal	821,254	830,690	827,314	868,807	903,059	1,023,033	970,256	1,039,373	1,085,400	1,130,570	1,180,861	1,230,379	
										104.43%	104.16%	104.45%	104.19%	
	SEWER ACCOUNTS													
151-5-51-30-412.000	Sewage Treatment - Village	475,887	520,203	518,373	530,736	647,096	602,646	\$ 667,000	\$ 795,771	\$ 835,560	\$ 877,338	\$ 921,204	\$ 967,265	Assuming 5% increases here
151-5-51-30-433.000	R&M Infrastructure	18,332	18,332	18,332	67,258	120,920	43,242	\$ 60,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 65,000	
151-5-51-30-500.000	Training, Conf. Dues		219		1,051	54		\$ 500	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	
151-5-51-30-520.000	Insurance	7,425	17,808	15,288	14,401	12,251	22,848	\$ 15,526	\$ 16,467	\$ 26,000	\$ 27,000	\$ 28,000	\$ 29,000	
151-5-51-30-530.000	Communications					58	12,043	\$ 8,000	\$ 45,990	\$ 48,290	\$ 50,704	\$ 53,239	\$ 55,901	
151-5-51-30-570.000	Other Purchased Service	16,796	12,855	25,207	32,695	18,143	34,617	\$ 5,020	\$ 7,400	\$ 10,000	\$ 12,500	\$ 15,000	\$ 15,000	
151-5-51-30-621.000	Natural Gas/Heating							\$ 1,600	\$ 1,650	\$ 1,750	\$ 1,850	\$ 1,950	\$ 2,000	
151-5-51-30-622.000	Electricity	54,571	51,741	52,172	56,955	53,533	51,351	\$ 56,000	\$ 53,000	\$ 53,000	\$ 53,000	\$ 53,000	\$ 53,000	
151-5-51-30-750.000	Machinery and Equipment		95	477				\$ 4,000	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	
151-5-51-30-614.000	Meters & Parts	587	5,645	1,126				\$ 3,600	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	
151-5-51-30-790.000	Sewer Stabilization Fund	149,331	153,310	157,747	156,507	156,802	155,677	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	
151-5-51-70-980.000	WWTP Upgrade - Bradford Bond	28,037	35,029	34,843	34,274	33,689	33,084	\$ 29,735	\$ 30,208	\$ 29,600	\$ 28,971	\$ 28,311	\$ 27,629	
151-5-51-70-985.000	Interest	3,871	4,192	3,924	3,651	(71)	3,088	\$ 3,300	\$ 3,300	\$ 2,100	\$ 1,800	\$ 1,600	\$ 1,400	People's Bank or Wilmington?
151-5-51-70-980.001	RF 1-148 SFR Loan WWTF	271,315	263,484	263,457	263,484	191,934	263,484	263,484	263,484	263,484	263,484	263,484	263,484	1/3 of upgrade loan
	Sewer Subtotal	1,043,125	1,148,724	1,160,294	1,161,602	1,225,759	1,227,764	1,448,769	1,501,283	1,548,146	1,597,288	1,646,178	1,694,178	
										103.62%	103.12%	103.17%	103.06%	
	REVENUES TOTAL	2,911,355	2,877,871	2,977,390	3,163,709	3,236,750	3,107,979	3,118,557	3,544,136	3,535,244	3,747,359	3,972,200	4,210,532	
	EXPENSES TOTAL	2,643,167	2,737,205	2,767,859	2,849,027	3,017,782	3,059,774	3,118,762	3,544,417	3,698,051	3,843,144	3,998,293	4,153,700	
	NET OPERATIONS	268,189	140,666	209,531	314,682	218,968	48,205	(205)	(281)	(162,807)	(95,785)	(26,093)	56,832	
										104.33%	103.92%	104.04%	103.89%	
	CAPITAL Spending				5,531	7,806	6,574							
	Total Spending		2,737,205	2,767,859	2,854,558	3,025,588	3,066,348	3,118,762						
	Unbudgeted potential Ops. Revenue								\$ -	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	
	Grant Revenue (SRF) Items								\$ 393,750	\$ 1,128,750	\$ 813,750	\$ 866,250	\$ -	
	Capital Expense (Items to burn)								\$ 833,500	\$ 1,984,500	\$ 1,564,500	\$ 1,609,500	\$ 150,000	
	Total Net Position								(440,031)	(818,557)	(646,535)	(569,343)	106,832	
	Net Position													
	Net Investment in Capital Assets	4,892,312	4,666,483	4,804,941	4,544,770	4,305,301	4,047,016	4,047,016	4,047,016	4,047,016	4,047,016	4,047,016	4,047,016	
	Unrestricted - designated	815,427	1,044,047	870,334	871,635	1,005,336	1,002,261							
	Unrestricted	2,104,224	2,259,413	2,504,200	3,072,221	3,389,152	3,692,144	3,691,939	3,251,908	2,433,351	1,786,815	1,217,473	1,324,305	
	Total Net Position	7,811,963	7,969,943	8,179,475	8,488,626	8,699,789	8,741,421	8,741,216	8,301,185	7,482,628	6,836,092	6,266,750	6,373,582	
	Change in Net Position		157,980	209,532	309,151	211,163	41,632	(205)						
			17,314	1	0	1	1	(0)						
	Unrestricted changes FY17-22													
	Unrestricted changes FY23-27												(2,474,671)	

FY 2024
Water and Sewer
Operating Budget

Shared Budget

Costing Center Budget with Notes

151-51-10 - W/S - Shared Accounts

Report data returned based on the user's security permissions.

Objects	Comments	Object Subtotals	2024 Budget
Revenues			
091 Transfer between funds (as reve			
091.000-Transfer between funds			-
Total 091 Transfer between funds (as revenue)			-
098 Miscellaneous Revenues			
060.000-Interest Income			12,000
098.000-Miscellaneous Revenue			12,000
Total 098 Miscellaneous Revenues			24,000
Total Revenues			24,000
Expenditure			
100 Salaries			
110.000-Regular Salaries			600,751
120.000-Part Time Salaries			7,788
130.000-Overtime			36,507
Total 100 Salaries			645,046
200 Benefits			
210.000-Group Insurance			180,297
220.000-Social Security			50,072
230.000-Retirement			54,970
290.000-Other Employee Benefits			2,430
Total 200 Benefits			287,769
300-699 Operating Expenses			
330.000-Professional Services	Survey Assistance	-	
330.000-Professional Services	Legal assistance including with delinquent accounts	-	
330.000-Professional Services	Engineering/technical services as needed. This account will consolidate the engineering services for both the water and sewer accounts. It does not include engineering services needed in connection with an identified Capital account but may include engineering planning services needed to define a Capital Project. In water, this may include such work as system modeling costs, certifications of hydrant flow, water system analysis and similar efforts. In sewer, it may include (1) pump station operation optimization studies (2) I/I testing and analysis (3) checks on flow metering (4) odor complaints at the discharge point for the Alder Brook force main.(5) completion of a Study of the Lang Farm Pump Station and an alternate route to transmit wastewater through the Village. This study was identified as a needed element of the Town Center Study last year. It is estimated to cost an additional \$7,500 in FY24. 6) studies relevant to high strength or unique waste from such users such as breweries. The estimated costs for professional services is \$55,000	55,000	
335.000-Audit	KBS annual audit (85% GF; 15% W/S)		5,450

Costing Center Budget with Notes

151-51-10 - W/S - Shared Accounts

Report data returned based on the user's security permissions.

Objects	Comments	Object Subtotals	2024 Budget
430.000-R&M Vehicles and Equipment	Three vehicles: #603 a 2014 Dodge 3500 diesel; #604 a 2017 Dodge truck and #605 a 2008 Dodge 3500 diesel. Also covers services to equipment such as small portable pumps, generators, and sewer cleaner. This account has a five-year average of \$1,599. Use \$1,000 for the budget in FY24.		1,000
430.001-R&M Vehicles Supplies	Supplies purchased for R&M of the three water/sewer vehicles. The costs averaged \$2,475 over five years. \$2,000 was budgeted in FY23. use \$2,500 for FY24		2,500
431.000-R&M Buildings and Grounds	Although the water-sewer building is part of the overall PW highway complex of buildings, this building's primary purpose is to house the water-sewer offices and equipment. The cost to repair and maintain this building comes under the water-sewer budget and not the general fund. The building had minimal expenditures through FY20 but had significant repairs and maintenance completed over the last few years. The five-year average of actual costs is \$1,573. In addition, the Town is responsible for the building at the Alder Brook Pump Station. Recommend the budget increase to \$3,000	3,000	
431.000-R&M Buildings and Grounds	This account is for building supplies associated with the repair and maintenance of the water-sewer building and the Alder Brook Pump Station. Use \$500 for the budget	500	
			3,500
442.000-Rental of Vehicles or Equipment	The Department on occasion needs to use specialized equipment (such as a tapping machine, special hydrant wrenches, and leak detection equipment). Renting can be an inexpensive method to gain use of this equipment The five-year average expenditure has been \$524 per year. Use \$600 for the budget.		600
505.000-Technology Subscription, Licenses	Kofax AP Essentials (Formerly ReadSoft) - Paperless invoicing	-	
505.000-Technology Subscription, Lices	Questica - Budgeting	2,175	
			2,175
530.000-Communications	This account includes costs for pagers, cell phone charges, cellphone replacements, radio repair costs and replacements, Comcast cable costs, laptop computer services and landline telephone costs for the water sewer building. The five-year average for these costs has been \$3,413. The budget request for FY23 was \$5100 and appears to be an accurate value. Use \$5,200 to reflect any rate increases.		5,200
540.000-Advertising	This line item covers the cost for notices such as flushing hydrants, ads for new employees, due dates for billing and like activities. This account previously included printing and binding and postage. Use \$1200		1,200
550.000-Printing and Binding	Budget at \$1200		1,200
560.000-Postage	This line item includes the postage for billing. Use a budget of \$4,750		4,750

Costing Center Budget with Notes

151-51-10 - W/S - Shared Accounts

Report data returned based on the user's security permissions.

Objects	Comments	Object Subtotals	2024 Budget
580.000-Travel	This line item has been impacted by COVID afor previous budgets due to the reduction in in-person training opportunities It is anticipated that more in-person training that will require travel will be utilized by the department as it becomes available. In water and sewer, this travel is tied to the need for the operators to maintain their water licenses and certificates. Use \$3,000 for FY24		3,000
610.000-General Supplies	This line item includes supplies not specifically identified elsewhere in the budget. It can include new meter books, administrative supplies, spill clean-up supplies, report supplies, and the like. This is a new line item with an undefined history of expenditure. The FY23 budget is assigned \$400. Use \$400 for FY24.	400	
610.000-General Supplies		-	
		<hr/>	400
611.000-Small Tools and Equipment	This account covers new and replacement small tools and miscellaneous equipment. Items purchased in the past include a drill, drill bits, a weed whacker for hydrant maintenance, paint brushes, flashlights, wrenches, hydrant wrenches, valve tools, flare tools, brooms, cellular phone for emergencies, respirator mask, ladders, etc. These items generally do not duplicate the highway tools in the garage for general mechanical work but are specific to water & sewer operations. The average expenditure over the past 5 years was \$2,812. Budget \$3000 for FY24.		3,000
612.000-Uniforms	This line item includes the costs associated with the Union contract. A more detailed explanation is provided in the attached document. Historically, employees have not spent their entire allowed clothing allowance. The five-year average for this item was \$1,589. The FY23 budget is \$2,000. Use \$2,400 for FY24		2,400
614.000-Meters and Parts	This account includes all expenses related to the purchase and installation of meters- both replacement and new meters. The department has in excess of 3562 water meters. There are less than 100 old meters that need to be replaced and many of these meter changes are difficult due to location of meters, access, or customer reticence. Although the five-year average is \$30,152 for this item, there has been a significant decrease over the past two years due to nearing completion of the system-wide meter upgrade. The budget in FY23 was \$18,500. Use \$15,500 for FY2.		15,500
621.000-Natural Gas/Heating	This account is for the water sewer building. The five-year average cost is 1,464. The actual cost in FY22 was \$2,832. Use \$1,650 for the budget		1,650
622.000-Electricity	Electricity for the water sewer building. Electrical costs associated with the sewage pump stations is carried under the sewer electrical account. The five-year average actual cost is 4,034. The budget estimate for FY24 is \$4,935.		4,935
Total 300-699 Operating Expenses		<hr/>	113,460

Costing Center Budget with Notes

151-51-10 - W/S - Shared Accounts

Report data returned based on the user's security permissions.

Objects	Comments	Object Subtotals	2024 Budget
700 Capital or Property Objects			
735.000-Technology: Hardware, Software, Equipment	<p>This account replaces an "Other Purchased Services" account that included the items noted:</p> <p>1) software upgrades to enable the town to utilize the Town billing software @ \$750 based upon the history of expenditures, and meter reading updates</p> <p>2) share of copier costs @ \$600</p> <p>3) program costs for the "Water Smart" program @ \$1,150.</p> <p>The total budget request is \$2,500.</p>		2,500
750.000-Machinery and Equipment	<p>New machinery and equipment is constantly being developed for utility work to save time and improve safety and operations. Items included in this account are for both water and sewer use. Equipment not used by both utilities continues to be budgeted separately. Examples of items purchased in past years are Valve box clean-out tools, harness for lifting trench box, men working signs and bases, reflecting barricades, snap-on cone signs, portable flood light with the tripod, portable light backup, confined space systems, additional safety signs, barricades, pipe cut-off saws, hydrant and valve wrenches, hydrant flags for the winter, new sump pump hoses and the like.</p> <p>a) For miscellaneous items as noted, budget at \$1,000 based on the long-term history of expenditures.</p> <p>b) For FYE2021, a second small, trailer-mounted solar message board was purchased at a cost of \$15,000. This was purchased over a three-year period, budgeting \$5,000 per fiscal year between FY21 and FY23. The budget should be set at \$7,500</p>		7,500
751.000-Vehicle Purchases	<p>The expenditure for vehicle replacements in the water-sewer fund is included in the system depreciation account as an expense. Information on the water-sewer vehicles is contained in the attached documentation for this line item.</p>		-
Total 700 Capital or Property Objects			10,000
Total Expenditure			1,056,275
Net Total			(1,032,275)

Detail of the Uniform Line Item # 151-51-10-612.000

Under the current Union Contract, the majority of allowed uniform reimbursement costs are limited to an “allowance” of up to \$675/year/employee. This includes t-shirts, pants, boots, cleaning expenses and jackets. This line item has been historically underspent. The contract carries a 130% surcharge cost.

Basic Uniform Allowance = \$675 x 130% = \$878 per employee

Not included are:

2 sets of winter / 2 sets of summer gloves	\$ 70
safety sun glasses	\$ 5
safety related items such as welding gear, hard hats, protective goggles, hearing protection and related items	\$ 50
2 sets of coveralls	\$ 104

total per employee = \$ 1,107

3.5 full time employees x \$1,107 = \$3,874.50

(Note: 1 employee 1/2 water/sewer and 1/2 highway; carried under highway)

In addition, water & sewer work requires the use of some specialized items for use in cleaning sewers, working on water breaks in freezing temperatures, work in trenches, and pulling and cleaning impellers on sewage pumps. The uniform items involve such clothing as heavy-duty waders, rubber gloves, eye and ear protection, etc.

Special clothing items \$ 200

Total \$4,074.50

With the historic under-spending of this account, use a budget number of \$2400 in FY24

FY 2024
Water and Sewer
Operating Budget

Water Budget

Costing Center Budget with Notes

151-51-20 - W/S - Water Accounts

Report data returned based on the user's security permissions.

Objects	Comments	Object Subtotals	2024 Budget
Revenues			
020 Charges for Services			
021.000-Water User Fees			1,522,447
024.000-Utility Connection Fee			80,000
Total 020 Charges for Services			1,602,447
080 Fines & Forfeiture			
085.000-Penalties			15,000
Total 080 Fines & Forfeiture			15,000
Total Revenues			1,617,447
Expenditure			
300-699 Operating Expenses			
411.000-Water Purchase - CWD	This line item includes the cost for water purchased from CWD and two banknotes for payment on the debt for the expansion of water tanks by CWD to serve the west end of Town and the Fort. For details on the budget estimate, see the attached documentation.		808,000
433.000-R&M Infrastructure	All costs for outside services used to repair and maintain the water system, not including repair services for buildings and vehicles. The budget based on the recent history of expenditures is \$35,000. More detail can be found under notes.	35,000	
433.000-R&M Infrastructure	This account is for supplies for repairs and maintenance to include waterline pipe, couplings valves, saddles, flanges, hydrant repair flags, hoses, hydrant antifreeze, site repairs such as fill, topsoil, curbs and other small purchase items such as paver risers, grade stakes, paint. The budget is \$12,000 based on the recent history of expenditures.	12,000	
			47,000
500.000-Training, Conferences, Dues	This line item includes costs for 1) American Water Works Association and New England Water Works Association annual membership (Aaron Martin) @ \$500; 2) Green Mountain Water and Environmental Association dues and meetings @ \$700; 3) Operator licenses and training for Class D Operators @ \$1200; 4) Vermont Rural Water Association membership and training courses @\$700; and 50 references, standards and manual updates @ \$150; total \$3,250		3,250
520.000-Insurance	Property and Liability	3,145	
520.000-Insurance	Workers Comp	6,050	
520.000-Insurance	Unemployment	428	
			9,623

Costing Center Budget with Notes

151-51-20 - W/S - Water Accounts

Report data returned based on the user's security permissions.

Objects	Comments	Object Subtotals	2024 Budget
570.000-Other Purchased Services	This line item includes costs for items not defined or included in other lines and includes the following: 1) Water program updates used for accounting program changes and also technical analysis of water programs aimed at system capability. use \$500 2) acoustic water system Monitoring to identify potential leaks and reduce system water loss. Estimate \$10,500. 3) safety-related purchases specific to water, calibration of testing equipment, waste disposal such as occurs during system flushing, State water permit renewal fees Use \$500. total = \$11,500		11,500
Total 300-699 Operating Expenses			879,373
700 Capital or Property Objects			
790.000-Depreciation Expense	This account was previously identified as the "depreciation expense". The term was used to identify funds for system replacement/stabilization which approximated the funds identified by accountants for depreciation of the water system. The term "system stabilization" will now be used as it better describes the purpose and use of these funds. In effect, funds are being set aside to replace and improve existing components of the water system, Historically prior to FYE13, this line item was underfunded. The history of this line item is found in the notes. In FY22, the actual encumbrance as \$155,677.		160,000
Total 700 Capital or Property Objects			160,000
Total Expenditure			1,039,373
Net Total			578,074



CHAMPLAIN WATER DISTRICT

Dedicated to Quality Water & Service



First In The Nation - Excellence In Water Treatment, Partnership For Safe Water

The Board of Commissioners of the Champlain Water District presents a 2023-2024 Operating and Capital Improvement Budget for both the Wholesale and Retail Departments of the Champlain Water District to the citizens within its membership.

There will be a public meeting to discuss these proposed fiscal year 2023-2024 Operating and Capital Improvement Budgets **at 7:00 p.m. on Wednesday, February 1st at Champlain Water District in South Burlington.** All citizens of the Towns of Shelburne, Essex, Williston, Colchester, Milton, the Village of Jericho, and the Cities of South Burlington, Essex Junction, and Winooski are invited to attend.

Copies of the proposed budgets are displayed at each of the above municipal offices and on the Champlain Water District website: www.champlainwater.org. The proposed wholesale budget totaling \$10,156,235 requires an increase in the uniform wholesale rate from \$2.494 per 1000 gallons to \$2.731 per 1000 gallons. This 23.7 cents per 1000 gallon increase means that the average family using 65,700 gallons per year will pay an additional \$1.30 per month, which is an increase of \$15.57 per year.

The Annual Meeting of the District will be held at **7:00 p.m. on Tuesday, April 4, 2023 at Champlain Water District in South Burlington.** All citizens of the Towns of Shelburne, Essex, Williston, Colchester, Milton, the Village of Jericho, and the Cities of South Burlington, Essex Junction, and Winooski are invited to attend.

The meeting warning will include:

- Article I: To hear and act upon the reports of the Officers.
- Article II: To elect officers required by the Charter of the Champlain Water District; Moderator, Auditor, and Clerk/Treasurer.
- Article III: Capital Reserve Fund Motion.
- Article IV: To act upon both a wholesale and retail budgets as presented by the Board of Commissioners for the ensuing year, and appropriate such sums as may be necessary to meet the expenses of the District.

All questions in this regard should be made to Joe Duncan, General Manager, at the District address below.

Details on the estimate for water purchases from CWD in FY2024

The history of purchase from CWD over the past 18 years is shown broken into six-month segments on an average daily usage basis:

Dates	Average Gallons Used Per Day
January 2001 – December 2001	886,327
January 2002 – December 2002	882,521
January 2003 – December 2003	924,482
January 2004 – December 2004	825,137
January 2005 – December 2005	843,507
January 2006 – December 2006	827,939
January 2007 - December 2007	745,370
January 2008 - December 2008	760,035
January 2009 – December 2009	736,188
January 2010 – June 2010	713,251
July 2010 – December 2010	832,655
January 2011 – June 2011	788,813
July 2011 – December 2011	766,428
January 2012 – June 2012	733,304
July 2012 – December 2012	759,914
January 2013 – June 2013	750,186
July 2013 – December 2013	749,178
January 2014 – June 2014	782,645
July 2014 – December 2014	765,136
January 2015 - June 2015	758,472
July 2015 - December 2015	762,425
January 2016 – June 2016	735,812
July 2016 – December 2016	813,013 (very dry summer)
January 2017 –June 2017	746,717
July 2017 – December 2017	764,142
January 2018 – June 2018	719,280
July 2018 – December 2018	752,214
January 2019 – June 2019	772,380
July 2019 – December 2019	743,947
January 2020- June 2020	789,462
July 2020-December 2020	757,382
January 2021-June 2021	796,165
July 2021-December 2021	778,000
January 2022-June 2022	745,323
July 2022-December 2022	792,4110

The following numbers reflect the average use over the indicated period:

Avg. for 2022	768,867 gpd
Avg. past two years	777,975 gpd
Avg. past five years	764,656 gpd

Combination of average two highest six-month periods in last six billing cycles = 794,288 gpd.
Combination of average two lowest six-month periods in last six billing cycles = 751,353 gpd.

It is recommended that the estimated CWD purchase for FYE24 be set at 773,000 gpd.

CWD has approved a budget for FYE24 at an increased rate of \$2.731/1000 gallons effective 1 July 2023. This represents a 9.50% increase. At this rate, the budget for water purchased for FYE24 is estimated at:

773,000 gpd x 365 days x \$2.731/1,000 gal. = (1) \$770,538

The State of Vermont water supply tax must be added to this at \$.0572/1,000 gal. This is the rate to be charged by VANR after July 1, 2018.

773,000 gpd x 365 days x \$.0572/1,000 gal. = (2) \$16,139

First water tank construction (20 year bond repayment) - west end (3) \$4,668
(last payment 12/1/2024) (see attached)

Second water tank construction: The new water tank in Colchester has been completed and is on line. The Town now has a total allocation capacity of 466,340 gpd in this system with capacity for future economic development in the west end of Town. The fifth bond repayment (2022) = (4) \$18,671

Consumer Confidence Report (EPA requirement; produced by CWD for member communities) (5) \$1,350

\$1,491 in FY08, \$1,390.13 in FY09
\$1,287 in FY10, \$1,244 in FY11,
\$1,258 in FY12, \$1,312 in FY13
\$1,191 in FY14, \$1,288 in FYE15
\$1318 in FY16, \$1343 in FYE17,
\$1,198, \$1,248 in FY19, \$1278 in FY20)

Total (1 through 5) \$808,375

Use \$808,000

DEBT SERVICE SCHEDULE
 20 YEAR AMORTIZATION
 COLCHESTER SOUTH TWIN TANK
 TOWN OF ESSEX (25.40%)

DATED DATE: 07/08/04

BORROWING AMOUNT: \$410,000.00

DATE	TOTAL PRINCIPAL	ESSEX PRINCIPAL	TOTAL INTEREST	ESSEX INTEREST	ESSEX DEBT SERVICE	FY TOTAL	FISCAL YEAR
12/01/04			\$6,552.18	\$1,664.25	\$1,664.25		
06/01/05			\$8,247.50	\$2,094.87	\$2,094.87	\$3,759.12	2004-2005
12/01/05	\$25,000.00	\$6,350.00	\$8,247.50	\$2,094.87	\$8,444.87		
06/01/06			\$8,013.75	\$2,035.49	\$2,035.49	\$10,480.36	2005-2006
12/01/06	\$25,000.00	\$6,350.00	\$8,013.75	\$2,035.49	\$8,385.49		
06/01/07			\$7,710.00	\$1,958.34	\$1,958.34	\$10,343.83	2006-2007
12/01/07	\$20,000.00	\$5,080.00	\$7,710.00	\$1,958.34	\$7,038.34		
06/01/08			\$7,425.00	\$1,885.95	\$1,885.95	\$8,924.29	2007-2008
12/01/08	\$20,000.00	\$5,080.00	\$7,425.00	\$1,885.95	\$6,965.95		
06/01/09			\$7,107.00	\$1,805.18	\$1,805.18	\$8,771.13	2008-2009
12/01/09	\$20,000.00	\$5,080.00	\$7,107.00	\$1,805.18	\$6,885.18		
06/01/10			\$6,764.00	\$1,718.06	\$1,718.06	\$8,603.24	2009-2010
12/01/10	\$20,000.00	\$5,080.00	\$6,764.00	\$1,718.06	\$6,798.06		
06/01/11			\$6,399.00	\$1,625.35	\$1,625.35	\$8,423.41	2010-2011
12/01/11	\$20,000.00	\$5,080.00	\$6,399.00	\$1,625.35	\$6,705.35		
06/01/12			\$6,013.00	\$1,527.30	\$1,527.30	\$8,232.65	2011-2012
12/01/12	\$20,000.00	\$5,080.00	\$6,013.00	\$1,527.30	\$6,607.30		
06/01/13			\$5,607.00	\$1,424.18	\$1,424.18	\$8,031.48	2012-2013
12/01/13	\$20,000.00	\$5,080.00	\$5,607.00	\$1,424.18	\$6,468.08		
06/01/14			\$5,188.00	\$1,317.75	\$1,317.75	\$7,785.83	2013-2014
12/01/14	\$20,000.00	\$5,080.00	\$5,188.00	\$1,317.75	\$6,208.37		
06/01/15			\$4,758.00	\$1,208.53	\$1,208.53	\$7,416.80	2014-2015
12/01/15	\$20,000.00	\$5,080.00	\$4,758.00	\$1,208.53	\$5,972.72		
05/01/16			\$3,514.66	\$892.72	\$892.72	\$7,069.24	2015-2016
12/01/16	\$20,000.00	\$5,080.00	\$4,317.00	\$1,096.52	\$1,096.52		
06/01/17			\$3,038.14	\$771.69	\$771.69	\$6,834.16	2016-2017
12/01/17	\$20,000.00	\$5,080.00	\$3,868.00	\$982.47	\$982.47		
06/01/18			\$2,589.14	\$657.64	\$657.64	\$6,604.03	2017-2018
12/01/18	\$20,000.00	\$5,080.00	\$3,411.00	\$866.39	\$866.39		
06/01/19			\$2,132.14	\$541.56	\$541.56	\$6,369.84	2018-2019
12/01/19	\$20,000.00	\$5,080.00	\$2,946.00	\$748.28	\$748.28		
06/01/20			\$1,631.61	\$414.43	\$5,494.43	\$6,122.57	2019-2020
12/01/20	\$20,000.00	\$5,080.00	\$2,473.00	\$628.14	\$628.14		
06/01/21			\$1,194.14	\$303.31	\$5,383.31	\$5,889.53	2020-2021
12/01/21	\$20,000.00	\$5,080.00	\$1,993.00	\$506.22	\$506.22		
06/01/22			\$678.61	\$172.37	\$5,252.37	\$5,634.89	2021-2022
12/01/22	\$20,000.00	\$5,080.00	\$1,506.00	\$382.52	\$382.52		
06/01/23			\$49.52	\$12.58	\$5,092.58	\$5,349.37	2022-2023
12/01/23	\$20,000.00	\$5,080.00	\$1,011.00	\$256.79	\$256.79		
06/01/24			(\$90.24)	(\$22.92)	\$5,057.08	\$5,186.37	2023-2024
12/01/24	\$20,000.00	\$5,080.00	\$509.00	\$129.29	\$129.29		
06/01/25			(\$1,622.44)	(\$412.10)	\$4,667.90	\$4,667.90	2024-2025
12/01/25	0	0	0	\$0.00	\$0.00		
			(\$4,191.83)	(\$1,064.72)	(\$1,064.72)	(\$1,064.72)	
TOTAL:	\$410,000.00	\$104,140.00	\$178,328.03	\$45,295.32	\$149,435.32	\$149,435.32	

NET-INTEREST COST: 4.442869%

DEBT SERVICE SCHEDULE
 20 YEAR AMORTIZATION
 NEW COLCHESTER TWIN TANK
 TOWN OF ESSEX (17.65%)

STATE REVOLVING FUND

DATED DATE: 07/01/17

BORROWING AMOUNT: \$1,573,840.47

DATE	TOTAL PRINCIPAL	ESSEX PRINCIPAL	TOTAL INTEREST	TOTAL ADMIN FEE	ESSEX INT & ADMIN	ESSEX DEBT SERVICE
08/01/17	\$58,571.59	\$10,337.89	\$15,738.40	\$31,476.81	\$8,333.48	\$18,671.37
08/01/18	\$60,328.73	\$10,648.02	\$15,152.69	\$30,305.38	\$8,023.35	\$18,671.37
08/01/19	\$62,138.60	\$10,967.46	\$14,549.40	\$29,098.80	\$7,703.91	\$18,671.37
08/01/20	\$64,002.75	\$11,296.49	\$13,928.02	\$27,856.03	\$7,374.88	\$18,671.37
08/01/21	\$65,922.84	\$11,635.38	\$13,287.99	\$26,575.98	\$7,035.99	\$18,671.37
08/01/22	\$67,900.52	\$11,984.44	\$12,628.76	\$25,257.52	\$6,686.93	\$18,671.37
08/01/23	\$69,937.54	\$12,343.98	\$11,949.75	\$23,899.51	\$6,327.39	\$18,671.37
08/01/24	\$72,035.66	\$12,714.29	\$11,250.38	\$22,500.76	\$5,957.08	\$18,671.37
08/01/25	\$74,196.73	\$13,095.72	\$10,530.02	\$21,060.04	\$5,575.65	\$18,671.37
08/01/26	\$76,422.64	\$13,488.60	\$9,788.06	\$19,576.11	\$5,182.78	\$18,671.38
08/01/27	\$78,715.31	\$13,893.25	\$9,023.83	\$18,047.66	\$4,778.12	\$18,671.37
08/01/28	\$81,076.77	\$14,310.05	\$8,236.68	\$16,473.35	\$4,361.32	\$18,671.37
08/01/29	\$83,509.08	\$14,739.35	\$7,425.91	\$14,851.82	\$3,932.02	\$18,671.37
08/01/30	\$86,014.35	\$15,181.53	\$6,590.82	\$13,181.63	\$3,489.84	\$18,671.37
08/01/31	\$88,594.78	\$15,636.98	\$5,730.67	\$11,461.35	\$3,034.39	\$18,671.37
08/01/32	\$91,252.62	\$16,106.09	\$4,844.73	\$9,689.45	\$2,565.28	\$18,671.37
08/01/33	\$93,990.20	\$16,589.27	\$3,932.20	\$7,864.40	\$2,082.10	\$18,671.37
08/01/34	\$96,809.91	\$17,086.95	\$2,992.30	\$5,984.60	\$1,584.42	\$18,671.37
08/01/35	\$99,714.21	\$17,599.56	\$2,024.20	\$4,048.40	\$1,071.81	\$18,671.37
08/01/36	\$102,705.64	\$18,127.55	\$1,027.06	\$2,054.11	\$543.83	\$18,671.38
	\$1,573,840.47	\$277,782.85	\$180,631.87	\$361,263.71	\$95,644.57	\$373,427.42

**FY 2024
Water and Sewer
Operating Budget**

Sewer Budget

Costing Center Budget with Notes

151-51-30 - W/S - Sewer Accounts

Report data returned based on the user's security permissions.

Objects	Comments	Object Subtotals	2024 Budget
Revenues			
020 Charges for Services			
022.000-Sewer User Fees			1,812,689
024.000-Utility Connection Fee			70,000
Total 020 Charges for Services			1,882,689
080 Fines & Forfeiture			
085.000-Penalties			20,000
Total 080 Fines & Forfeiture			20,000
Total Revenues			1,902,689
Expenditure			
300-699 Operating Expenses			
330.000-Professional Services	This account is closed out for FY23 and all professional services for both water and sewer will be consolidated under the general category of professional services		-
412.000-Sewage Treatment - City	This line item includes two components -- 1) the cost to treat wastewater at the Essex Junction Tri-town Wastewater Treatment P and 2) contract/agreement costs between the Town and the Village for shared pump stations and lines. The details of this account are found in the documents section.		795,771
433.000-R&M Infrastructure	This line item includes all the outside services used to repair and maintain the sewer system, not including repair services for sewer buildings or vehicles. This account is used for outside contractor utilization such as line jetting and vacuum truck service for sewer backups, wet well cleaning, root removal, and pump station repairs. As the age of the system increases, so will the repair and maintenance costs. The five-year average is \$54,002 and has seen an increase over the past few years. In FY21, \$81,482 was spent in this category for six major repairs. In the current fiscal year, there were multiple forcemain breaks on Center Road costing the department over \$100K combined. As the system ages and more pump stations are added, this account has to increase to keep up with actual costs. This line item should be set at \$50,000 for FY24	50,000	
433.000-R&M Infrastructure	This line item includes all the supplies necessary to repair and maintain the sewer system, not including supplies for sewer buildings maintenance or vehicles. Typical items include manhole risers and pump station repair parts. The average expenditure in the account over the past five years has been \$13,285. Again, these costs are likely to increase as the age of the system increases. This line item should be increased to \$15,000.	15,000	
			65,000

Costing Center Budget with Notes

151-51-30 - W/S - Sewer Accounts

Report data returned based on the user's security permissions.

Objects	Comments	Object Subtotals	2024 Budget
500.000-Training, Conferences, Dues	This account covers portions of membership dues for GMWEA and APWA, subscriptions to relevant trade journals, and technical training. This cost was decreased in previous years due the the Covid 19 pandemic. Most of the training was completed in-house with the use of online training. The department plans to have more in-person training moving forward. The budget is proposed to be increased to \$1,000, due to the increased cost associated with in-person training.		1,000
520.000-Insurance	Property and Liability	9,989	
520.000-Insurance	Workers Comp	6,050	
520.000-Insurance	Unemployment	428	
		<hr/>	16,467
530.000-Communications	This is a new line item this year. The department will contract with a local vendor for Mission monitoring services, including 24/7 on-call services for emergencies. The monthly monitory fee is \$1,500, with a weekly fee for being on-call 24-7. All emergency response time will be billed to R&M Infrastructure. Use \$30,740.	30,740	
530.000-Communications	This line item is for the primary, telephone alarm systems and monitoring annual costs for the 16 pump stations. These costs have averaged nearly \$4,570 over the past five years. In addition to the primary alarms, the department has installed a secondary backup based on cellular technology. Thirteen of the pump stations have upgraded to the Mission systems with an average annual cost of \$650 per station. This cost It is anticipated that the remaining three stations will convert in FY24. This line item should be increased to \$15,250.	15,250	
		<hr/>	45,990
570.000-Other Purchased Services	This line item is used for other purchased services that are not specifically covered under other line items. The details of this account are included in the attached document. The budget for FY24 should be set at \$7,400.		7,400
614.000-Meters and Parts	This line item is for flow metering equipment and services associated with checking wastewater flows between the Town and the Village at a number of inter-municipal sewage metering locations, This work is essential to insure that billings between the Town and the Village are accurate for billing. The calibration is completed annually through the use of a consultant. Use \$3,000		3,000
621.000-Natural Gas/Heating	This line item cover fuel/heat for Alder Brook Pump Station and fuel for the generators associated with the wastewater system. This cost has averaged \$1218 over the past six years. The amount budgeted for FY23 is \$1620. Use \$1650.		1,650
622.000-Electricity	A significant cost of running the department's 16 pump stations. There is a significant amount of electricity required for pumping, heating the stations, lighting in the stations, etc. The average cost over the past five years has been \$51,467. In FY23, \$56,000 was budgeted. It is recommended to increase this line item to \$53,500 in FY2024.		53,000
Total 300-699 Operating Expenses			<hr/> 989,278

Costing Center Budget with Notes

151-51-30 - W/S - Sewer Accounts

Report data returned based on the user's security permissions.

Objects	Comments	Object Subtotals	2024 Budget
700 Capital or Property Objects			
	This line item is for equipment/machinery that is designated for exclusive use by the sewer department.		
750.000-Machinery and Equipment	The Town currently has a significant inventory of specialized equipment for the sewer system, ranging from small pumps to the tow-behind sewer cleaner with a lot of different attachments for use in cleaning the sewer system. There are portable lighting systems, equipment for working in confined spaces, hazardous chemical monitors, and the like. Funds need to be allocated each year to replace equipment as it extends beyond its useful life or becomes inoperable. The department does not intend to purchase any additional equipment next fiscal year. It is recommended that the budget be decreased to \$2,500.		2,500
790.000-Depreciation Expense	This account was previously identified as the "depreciation expense". The term was used to identify funds for system replacement/stabilization which approximated the funds identified by accountants for the depreciation of the sewer system. The term "system stabilization" will now be used as it better describes the purpose and use of these funds. In effect, funds are being set aside to replace and improve existing components of the sewer system, Historically prior to FYE13, this line item was underfunded. The history of this line item is found in the notes. In FY22, the actual encumbrance was \$155,677.		160,000
Total 700 Capital or Property Objects			162,500
950-975 Debt Service			
955.000-Interest on Long Term Debt	This line item includes interest on the bonded debt of the sewer system and any other system interest payments. At this time, there is only the interest debt on the Alder Brook Pump Station upgrade (this is the 11th year of a 20 year note and the interest decreases annually). The principal on this debt is paid annually from the stabilization account (depreciation)		3,300
980.000-Tri-Town: Bond Expense	There are two bond note repayments in connection with the upgrade of the Tri-town wastewater facility: 1) the Bradford Note and 2) the Village's Wastewater Treatment Plant Note. The first note is \$29,9261 and the second is \$263,484 for a total of \$293,410. More detail is found in the notes		293,410
Total 950-975 Debt Service			296,710
Total Expenditure			1,448,488
Net Total			454,201

FY24 DRAFT WW BUDGET AND RATES REVISED TABLES

Wastewater Budget Significant Changes:

1. Increased chemical costs \$145,000 (40.8%)
2. Equipment maintenance increase to reflect actual historical expenditures \$65,000 (50.0%)
3. Biosolids – increased disposal costs \$60,000 (40.0%)
4. Admin Fees increase based on established calculation \$43,023 (68.3%) – It should be noted that the majority of this increase is a result of the FY23 calculated increase being reduced by management. The FY23 increase was calculated at \$93,544 (56%) but was reduced down to \$62,980 (12%). If the increase had been budgeted as calculated for FY23, the FY24 increase would only be \$12,459 (13%). The admin fee calculation will be looked at over the coming months, but it is not anticipated that there will be a significant reduction in the calculated amount from the existing calculation method.
5. Transfer to capital reflects the planned annual increase of \$20,000 (4.8%)

Wastewater User Rates:

	FY20	FY21	FY22	FY23	FY24	Average
WWTF						
Fixed Charge, annual	103.28	113.95	113.95	122.37	\$ 134.07	
\$ Change	\$ 9.04	\$ 10.67	\$ -	\$ 8.42	\$ 11.70	\$ 3.49
% Change	9.59%	10.33%	0.00%	7.39%	9.56%	3.26%
Usage, per Cubic Foot	0.0098	0.0107	0.0107	0.011	0.0108	
\$ Change	\$ 0.0010	\$ 0.0009	\$ -	\$ 0.0003	\$(0.0002)	\$ 0.00
% Change	11.36%	9.18%	0.00%	2.80%	-1.84%	1.75%

WWTF Wholesale Rate:

WHOLESALE RATE HISTORY	Rate	\$ Change	% Change
FY17 Wholesale Sewer Rate	2.731	0.0434	1.6%
FY18 Wholesale Sewer Rate	2.843	0.1119	4.1%
FY19 Wholesale Sewer Rate	2.983	0.1400	4.9%
FY20 Wholesale Sewer Rate	3.154	0.1710	5.7%
FY21 Wholesale Sewer Rate	3.205	0.0510	1.6%
FY22 Wholesale Sewer Rate	3.251	0.0460	1.4%
FY23 Wholesale Sewer Rate	3.565	0.3140	9.7%
FY24 Wholesale Sewer Rate	4.164	0.5993	16.8%

Details of the Budget for Sewage Treatment under line Item 151-51-30-412.000

The history of sewage flows generated within the Town's service area, including flows in the Colchester area of Fort Ethan Allen, is provided in the chart under documents. There is fluctuation from year to year as users change and as the weather impacts infiltration and inflow into the Town collection system.

Part 1) Wastewater flow impacts on the budget

Existing users contribute to the treated flow as well as infiltration/ inflow. For comparison purposes, the average daily flow over the past five years was 483,150 gallons per day (GPD). Over the past two years, the number has averaged 498,500 gpd. For FY24, the estimate of flow is 490,000 gpd.

Another element of flow for FY23 is the anticipated connection of new users. The historical background is that over the last ten years, the average new flow that has been added per year is on the order of 3,500 gpd.

Adding these two flow numbers, the budget for FY24 should be based on 493,500 gpd.

The current rate charged by the Tri-town facility (FY23) was \$3.601/1000 gallons. The history of rate increase by the Village since FY12 has been the following:

<u>Year</u>	<u>Percentage Increase Over the Previous Year</u>
FY12	6%
FY13	7%
FY14	4.5%
FY15	4%
FY16	2.2%
FY17	3.8%
FY18	4.3%
FY19	4.2%
FY20	5.7%
FY21	1.6%
FY22	.09%
FY23	10.38%

For FY24, the percentage increase is 16.8%. The new rate is \$4.167/1000 gallons.

The amount to be budgeted for Part 1 is therefore:

$$493,500 \text{ gpd} \times 365 \text{ days} \times \$4.168 \text{ gal}/1000 \text{ gal} = \$750,771$$

Part 2)

In FYE2000, the Village identified a contract provision that required the Town to proportionately share in the cost of maintenance of sewer lines and pump stations based on flow, for those lines in the Village that are jointly shared. This agreement goes back to the early 1980's and until the last few years costs were not charged. Costs are now being allocated and following is an estimate of the amount: (\$15,227 in FYE05, \$13,720 in FYE06, \$16,137 in FYE07, \$18,116 in FYE09, \$29,988 in FYE10, \$37,411 in FYE11, \$31,270 in FYE12, \$32,666 in FY13, \$35,735 in FYE14; \$44,120 in FYE15; \$48,659; in FYE16, \$48,657, \$43,275 in FYE18, \$41,094 in FYE19; \$43,032 in FYE20). Continue to use previous year cost for FY2024, \$45,000.

The total of Part 1 and Part 2 is \$795,771. Use \$795,500 for the budget.

Essex Sewer Flow History

<u>Period</u>	<u>Avg.Flows Gallon/Day</u>	<u>Year to Year Gallons/day Change</u>	<u>% Change</u>
May 84 to Dec 85	191,079		N/A
Jan 86 to Dec 86	264,288	73,209	38 %
Jan 87 to Dec 87	258,588	- 5,700	- 2 %
Jan 88 to Dec 88	296,027	37,439	14 %
Jan 89 to Dec 89	354,378	58,351	20 %
Jan 90 to Dec 90	431,276	76,898	22 %
Jan 91 to Dec 91	459,541	28,265	6.5 %
Jan 92 to Dec 92	437,234	-22,307	- 5 %
Jan 93 to Dec 93	464,477	27,243	6 %
Jan 94 to Dec 94	484,299	19,822	4 %
Jan 95 to Dec 95	488,022	3,723	1 %
Jan 96 to Dec 96	532,108	44,086	9 %
Jan 97 to Dec 97	502,176	-29,932	- 6 %
Jan 98 to Dec 98	567,763	65,587	13 %
Jan 99 to Dec 99	507,095	-60,668	- 11 %
Jan 00 to Dec 00	537,933	30,838	6.1%
Jan 01 to Dec 01	487,200	-50,733	- 9.4%
Jan 02 to Dec 02	532,056	44,856	9.2%
Jan 03 to Dec 03	540,658	8,602	1.6%
Jan 04 to Dec 04	589,883	49,225	9.1%
Jan 05 to Dec 05	579,498	-10,385	- 1.8%
Jan 06 to Dec 06	624,004	44,507	7.6%
Jan 07 to Dec 07	559,052	-64,952	- 10%
Jan 08 to Dec 08	532,301	-46,735	- 8.3%
Jan 09 to Dec 09	511,155	-21,146	- 4.0%
Jan 10 to Dec 10	446,119	-65,036	-12.7%
Jan 11 to Dec 11	487,584	41,465	8.5%
Jan 12 to Dec 12	475,047	-12,537	-2.6%
Jan 13 to Dec 13	529,133	54,086	11%
Jan 14 to Dec 14	462,942	-66,191	- 12%
Jan 15 to Dec 15	428,502	-34,440	- 7%
Jan 16 to Dec 16	423,233	-5,269	- 1%
Jan 17 to Dec 17	441,768	18,535	4.4%
Jan 18 to Dec 18	449,033	7,765	1.6%
Jan 19 to Dec 19	502,497	53,464	12%
Jan 20 to Dec 20	468,595	-33,902	-6.7%
Jan 21 to Dec 21	497,846	29,251	6.2%
Jan 22 to Dec 22	499,027	3,772	0.7%

Details of Sewer Other Purchased Services Line Item 151-51-30-570.000

DESCRIPTION OF ACTIVITY: This line item is used for other purchased services that are not specifically covered under other line items, such as:

Budget

1. Waste Disposal (oil/debris from maintenance facility & septic waste)	\$500	
2. Misc. (testing, internet, etc.)	\$500	
3. Safety Training	\$200	
4. Service on Gas Detector	\$400	
5. Vaccination of employees		
6. Generator repairs and services	\$5,659	
Annual service contracts for generators		
Alder Brook	\$2,945	
Alder Lane	\$1,723	
Portable	\$991	
7. Lease on sewer easement to Central Vermont Properties (\$240/year)	<u>\$120</u>	
	Total	\$7,379
	Use:	\$7,400

NOTES ON THE TRI-TOWN BOND EXPENSE

UNDER LINE ITEM# 151-51-30-980.000

The latest upgrade to the Village Tri-Town Wastewater Treatment facility was completed through bond cost incurred by the Town of Essex, The Town of Williston and the Village of Essex Junction. Two bonds were obtained. The Village assumed unused bond capacity from the Town of Bradford and the Village incurred its own Bond for the project. These two bond payment schedules are attached to this document.

pdf
Bond Bank Series 2016-
pdf

**Vermont Municipal Bond Bank
Series 2010-5 New Money (RZEDBs)**

Loan Debt Service, Bradford

Date	Principal	Net Coupon	Net Interest	Total Debt Service	Net Annual Debt Service
12/8/10					
6/1/11			23,745.48	23,745.48	
12/1/11			24,706.28	84,706.28	108,451.76
6/1/12	60,000.00	0.777%	24,473.29	24,473.29	
12/1/12			24,473.29	84,473.29	108,946.57
6/1/13	60,000.00	1.087%	24,147.06	24,147.06	
12/1/13			24,147.06	84,147.06	108,294.13
6/1/14	60,000.00	1.252%	23,771.34	23,771.34	
12/1/14			23,771.34	83,771.34	107,542.69
6/1/15	60,000.00	1.544%	23,308.17	23,308.17	
12/1/15			23,308.17	83,308.17	106,616.35
6/1/16	60,000.00	1.709%	22,795.50	22,795.50	
12/1/16			22,795.50	82,795.50	105,591.00
6/1/17	60,000.00	1.956%	22,208.58	22,208.58	
12/1/17			22,208.58	82,208.58	104,417.16
6/1/18	60,000.00	2.280%	21,524.48	21,524.48	
12/1/18			21,524.48	81,524.48	103,048.95
6/1/19	60,000.00	2.456%	20,787.57	20,787.57	
12/1/19			20,787.57	80,787.57	101,575.14
6/1/20	60,000.00	2.676%	19,984.66	19,984.66	
12/1/20			19,984.66	79,984.66	99,969.33
6/1/21	60,000.00	2.731%	19,165.26	19,165.26	
12/1/21			19,165.26	79,165.26	98,330.52
6/1/22	55,000.00	3.089%	18,238.60	18,238.60	
12/1/22			18,238.60	73,238.60	91,477.21
6/1/23	55,000.00	3.089%	17,389.17	17,389.17	
12/1/23			17,389.17	72,389.17	89,778.34
6/1/24	55,000.00	3.226%	16,539.73	16,539.73	
12/1/24			16,539.73	71,539.73	88,079.47
6/1/25	55,000.00	3.309%	15,652.49	15,652.49	
12/1/25			15,652.49	70,652.49	86,304.98
6/1/26	55,000.00	3.546%	14,742.55	14,742.55	
12/1/26			14,742.55	69,742.55	84,485.11
6/1/27	55,000.00	3.546%	13,767.28	13,767.28	
12/1/27			13,767.28	68,767.28	82,534.56
6/1/28	55,000.00	3.546%	12,792.00	12,792.00	
12/1/28			12,792.00	67,792.00	80,584.01
6/1/29	55,000.00	3.546%	11,816.73	11,816.73	
12/1/29			11,816.73	66,816.73	78,633.46
6/1/30	55,000.00	3.546%	10,841.46	10,841.46	
12/1/30			10,841.46	65,841.46	76,682.91
6/1/31	55,000.00	3.546%	9,866.18	9,866.18	
12/1/31			9,866.18	64,866.18	74,732.36
6/1/32	55,000.00	3.546%	8,890.91	8,890.91	
12/1/32			8,890.91	63,890.91	72,781.81
6/1/33	55,000.00	3.546%	7,915.63	7,915.63	
12/1/33			7,915.63	62,915.63	70,831.27
6/1/34	55,000.00	3.546%	6,940.36	6,940.36	
12/1/34			6,940.36	61,940.36	68,880.72
6/1/35	55,000.00	3.546%	5,965.08	5,965.08	
12/1/35			5,965.08	60,965.08	66,930.17
6/1/36	55,000.00	3.629%	4,989.81	4,989.81	
12/1/36			4,989.81	59,989.81	64,979.62
6/1/37	55,000.00	3.629%	3,991.85	3,991.85	
12/1/37			3,991.85	58,991.85	62,983.70
6/1/38	55,000.00	3.629%	2,993.89	2,993.89	
12/1/38			2,993.89	57,993.89	60,987.77
6/1/39	55,000.00	3.629%	1,995.92	1,995.92	
12/1/39			1,995.92	56,995.92	58,991.85
6/1/40	55,000.00	3.629%	997.96	997.96	
12/1/40			997.96	55,997.96	56,995.92
6/1/41	55,000.00	3.629%	-	-	
12/1/41			-	-	

109,174.57
108,620.35

Total	1,705,000.00	865,438.82	2,570,438.82	2,570,438.82
Average Life	15.17	Net Interest Cost	3.345029%	

Tri-Town Committee Memo 5/26/2011

Town of Bradford RZEDB (Recovery Zone Economic Development Bond)

The breakdown of the amounts due from each community based on capacity will be as follows:

<u>Community</u>	<u>FY12 Capacity Percentage*</u>	<u>Payment Due 11/15/2011</u>	<u>Payment Due 5/15/2012</u>
Village of Essex Junction	36.67%	31,058.97	8,973.54
Town of Essex	33.33%	28,235.43	8,157.76
Town of Williston	30.00%	<u>25,411.88</u>	<u>7,341.99</u>
Total		84,706.28	24,473.29

* The Town of Williston has signed an agreement to purchase 50,000 gallons of capacity from the Village over 5 years.

These percentages reflect an additional 10,000 gallons for Williston and 10,000 reduction for the Village in FY12

The Village Manager is inclined to make a recommendation to the Village Trustees that they adopt a "Capital Debt Retirement Assessment" effective July 1, 2011 to cover the above bond payments. I look forward to hearing your comments on this funding proposal.

Please also note that we will be discussing the SRF priorities with the State next week to have the most current information before making the final decision on the Bradford Bond.

Village of Essex Junction
RF1-148-4

SUPERK: wtrby\FED\Projects\Municipality\Essex Junction\RF1-148 WWTF Rehab\Repayment Schedules\RF1-148-4 Essex Junction Amendment #4 Repayment Schedule.xls

Loan Terms

Loan Amount	\$13,525,000.00	Loan amount eligible for subsidy	\$4,000,000.00	FY 2011 Funds
CWSRF Subsidy	\$600,000.00	Subsidy Percentage	10.00%	
Repayment Amount:	\$12,925,000.00	Subsidy Amount	\$400,000.00	
Loan Term Years:	20	Loan amount eligible for subsidy	\$4,000,000.00	FY 2012 Funds
Interest Rate:	0.0000	Subsidy Percentage	5.00%	
Admin Fee:	0.0200	Subsidy Amount	\$100,000.00	
		Loan amount eligible for subsidy	\$4,000,000.00	FY 2013 Funds
		Subsidy Percentage	5.00%	
		Subsidy Amount	\$100,000.00	

Repayment Due Date	Loan Term	Principal Due	Principal Payment	CWSRF Subsidy	Interest Payment	Admin Fee	Total Payment	Repayment Received Date
CWSRF Subsidy		\$13,525,000.00	\$0.00	\$600,000.00	\$0.00	\$0.00	\$600,000.00	Subsidy Date
July 1, 2016	1	\$12,925,000.00	\$531,950.58	\$0.00	\$0.00	\$258,500.00	\$790,450.58	Repayment Rec'd
July 1, 2017	2	\$12,393,049.42	\$542,589.59	\$0.00	\$0.00	\$247,860.99	\$790,450.58	
July 1, 2018	3	\$11,850,459.83	\$553,441.39	\$0.00	\$0.00	\$237,009.20	\$790,450.59	
July 1, 2019	4	\$11,297,018.44	\$564,510.21	\$0.00	\$0.00	\$225,940.37	\$790,450.58	
July 1, 2020	5	\$10,732,508.23	\$575,800.42	\$0.00	\$0.00	\$214,650.16	\$790,450.58	
July 1, 2021	6	\$10,156,707.81	\$587,316.43	\$0.00	\$0.00	\$203,134.16	\$790,450.59	
July 1, 2022	7	\$9,569,391.38	\$599,062.75	\$0.00	\$0.00	\$191,387.83	\$790,450.58	
July 1, 2023	8	\$8,970,328.63	\$611,044.01	\$0.00	\$0.00	\$179,406.57	\$790,450.58	
July 1, 2024	9	\$8,359,284.62	\$623,264.89	\$0.00	\$0.00	\$167,185.69	\$790,450.58	
July 1, 2025	10	\$7,736,019.73	\$635,730.19	\$0.00	\$0.00	\$154,720.39	\$790,450.58	
July 1, 2026	11	\$7,100,289.54	\$648,444.79	\$0.00	\$0.00	\$142,005.79	\$790,450.58	
July 1, 2027	12	\$6,451,844.75	\$661,413.69	\$0.00	\$0.00	\$129,036.90	\$790,450.59	
July 1, 2028	13	\$5,790,431.06	\$674,641.96	\$0.00	\$0.00	\$115,808.62	\$790,450.58	
July 1, 2029	14	\$5,115,789.10	\$688,134.80	\$0.00	\$0.00	\$102,315.78	\$790,450.58	
July 1, 2030	15	\$4,427,654.30	\$701,897.50	\$0.00	\$0.00	\$88,553.09	\$790,450.59	
July 1, 2031	16	\$3,725,756.80	\$715,935.45	\$0.00	\$0.00	\$74,515.14	\$790,450.59	
July 1, 2032	17	\$3,009,821.35	\$730,254.15	\$0.00	\$0.00	\$60,196.43	\$790,450.58	
July 1, 2033	18	\$2,279,567.20	\$744,859.24	\$0.00	\$0.00	\$45,591.34	\$790,450.58	
July 1, 2034	19	\$1,534,707.96	\$759,756.42	\$0.00	\$0.00	\$30,694.16	\$790,450.58	
July 1, 2035	20	\$774,951.54	\$774,951.54	\$0.00	\$0.00	\$15,499.03	\$790,450.57	
		\$12,925,000.00		\$600,000.00	\$0.00	\$2,884,011.64	\$16,409,011.64	