

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: FY 2026 Water and Sewer Budget and Rates
Date: May 09, 2025

ISSUE:

The issue is whether the Selectboard will approve the proposed water and sewer budgets including approval of the proposed rate structure for FYE2026, with the new rates to be reflected in the next full billing period following budget approval.

DISCUSSION:

This operating budget projects our financial needs and resources for providing safe and quality drinking water, and sanitary sewer service to homes and businesses throughout the community. This proposed budget takes into consideration historical actual expenses as well as anticipated changes, such as wage/salary increases, benefit increases, inflation, and changes in costs of materials, supplies, transportation, and utilities.

Our approach to budgeting has been to keep up with inflation while being proactive with our overall infrastructure maintenance and replacements. Over the past five years, we've been able to maintain a water rate increase averaging 16 cents per 1,000 gallons, roughly a (2% to 3%) annual increase. The sewer rates have seen similar numbers with an average annual rate increases of 38 cents per 1,000 gallons, (3% to 4%) annual increase. The recent economy, material costs, and rate of inflation requires a slightly larger increase than seen in prior years. In addition, this budget addresses the need to increase funding for future asset replacement of critical, aging components of both the water and sewer systems.

Shared Accounts:

The total proposed FY 2026 budget for Shared Water and Sewer Accounts is \$1,059,076. This account includes all labor and benefits costs, and items for both water and sewer such as professional services, Repair and Maintenance, tools and general supplies, and other department admin costs. Labor and benefits continue to make up the largest costs making up 86.9% of this year's total Shared account budget. This year's budget will continue to use an allowance for one open water and sewer position in the department. Management continues to advertise for these open positions with no qualified candidates applying. Additionally, the 614,000 Meters and Parts line has increased to \$30,000 to reflect increases in costs of meters, parts, and the number of replacement meters or new meters fluctuates over time.

As in previous budgets, there is a distinction between how much of the shared budget relates to water distribution and how much actually relates to sewer. The shared budget includes line items that are used and/or required for both water and sewer. This ratio was changed over the years and

is greatly impacted by the reduced labor cost on the sewer side. The sewer pump station operations and maintenance has reduced the hours needed for staff to maintain the stations. This 60/40 water/sewer split 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. This year, using a 60/40 split between water/sewer, the total portion of the shared budget for each has been provided below.

Water: \$555,698.90
Sewer: \$371,540.10

Lastly, 330.000 Professional Services, has evolved overtime and continues to address some of the Engineering/technical services for the water and sewer department as needed. This account was previously consolidated from both the water and sewer professional services accounts. The account does not include professional services required in connection with an identified Capital account but may include engineering planning services needed to help define a Capital Project after identified by staff. The decrease to \$28,000 this year in this item reflects the actual expenditures over the past several years and the increased use of capital funding for other professional services related to an identified capital project.

Water Accounts:

The total proposed budget for Water Accounts for FY 2026 is \$1,164,030. The largest driver of cost for the water budget is the purchase of water from the Champlain Water District. The total cost for water purchases budgeted for FY 2026 is \$860,900. This equates to 74.0% of the Water Accounts budget. Other items budgeted include R&M costs associated with maintaining the water distribution infrastructure, asset depreciation costs associated with the distribution system, and other items including insurance, training costs and other purchased services. There are two new lines in this year's budget. The first being "920.000 Capital Transfer", for future projects associated with asset replacements identified on the capital plan. Further discussion on this Capital Transfer can be found on page 3 of this memo. The proposed FY 2026 budget for this line is \$60,000. Additionally, "980.003 Colchester Twin Tank Project", has been broken out of 411.000 Water Purchased line. The intent is to provide an accurate picture of all debt services associated with the system. Including the portion of the shared budget as it relates to water, this year's water rates are based on a total budget of \$1,638,623.28.

Sewer Accounts:

The total proposed budget for Sewer Accounts for FY 2026 is \$1,737,001. The largest drivers of cost for the sewer budget continue to be treatment costs from the City of Essex Junction, and the Repair and Maintenance costs associated with the contract the Town of Essex currently has with Champlin and Associates. The total costs budgeted in FY 2026 for these two items is \$1,062,157. This equates to 61.2% of the Sewer Accounts budget. As like the Water Account budget, this account covers other including R&M costs associated with maintaining the water distribution infrastructure, asset depreciation costs associated with the distribution system, and other items including insurance, training costs and other purchased services. The Sewer Account budget also added a new line, "920.000 Capital Transfer", for future projects associated with asset replacements identified on the capital plan. Further discussion on this Capital Transfer can be found on page 3 of this memo. The proposed FY 2026 budget for this line is \$30,000. Including

the portion of the shared budget as it relates to sewer, this year's sewer rates are based on a total budget of \$2,007,980.10.

Proposed FY 2026 Water Rate

Proposed Water Rate: **\$6.67/1,000 gallons**

Rate Increase: **31 cents per 1,000 gallons (4.81%)**

Average Family Increase: **\$1.86 per month**

For a single-family home using 200 gallons of water daily, this year's rate increase equates to an annual water bill increase of \$22.32. See enclosed table titled "Historical Water Rate Increase Impact on Average Family".

Minimum Water Charge:

The minimum water charge is equal to 50% of the average daily family usage which equates to 100 gpd. The minimum rate has stayed constant in past years. Historically, when the current minimum drops below 85% of the actual minimum charge calculated with the new water rate, using the assumed usage of 100 GPD, it has been past practice to raise the minimum water charge, to meet the current financial needs to provide a minimum of 100 GPD. Using the current proposed water rate, the use of 100 gpd will cost \$243.46. The current minimum water charge for a year is \$210. Staff recommends raising the minimum water charge from \$210 to \$240 for FY 2026 to better reflect actual costs.

Proposed FY 2026 Sewer Rate

Proposed Water Rate: **\$12.00/1,000 gallons**

Rate Increase: **67 cents per 1,000 gallons (4.97%)**

Average Family Increase: **\$3.46 per month**

For a single-family home using 200 gallons of water daily, this year's rate increase equates to an annual sewer bill increase of \$41.50. See enclosed table titled "Historical Water Rate Increase Impact on Average Family". For a single-family home connected to both water and sewer, the combined annual increase would be \$63.82, or \$5.32 per month. This would be a 4.91% increase over current rates.

Most other communities are in the process of setting rates currently. The attached chart, "Comparison of Water and Sewer Rates of Local Municipalities", reflects existing rates 2024 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 for a residential connection. 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 measure up to neighboring communities.

System Stabilization and Sustainability:

The long-term sustainability of both our water and sewer systems is critical not only for public health concerns but for the future growth and development of the community. Investing into our community on projects that can achieve these goals should be a priority. As of the conclusion of fiscal year 2024, the Town has a total of \$4.85M in unrestricted net position, which can be used

towards the long-term capital needs of the Water & Sewer Fund and to maintain an operating reserve for the Fund as well. The current FY26 budget proposal for the Water & Sewer Fund includes a planned set aside of \$90,000 for future capital improvements, like the \$74,000 surplus that is planned to set aside for FY25.

Over the next five years, from FY26-FY30, the Town has ambitious plans for developing the infrastructure and Capital needs of the Water & Sewer Fund, including projects for Fort Ethan Allen, Chelsea Road and Lang Farm Pump Station, among others. Even with the anticipated receipt of SRF funds to help offset the costs of these projects, the Fund could be spending a net of \$6M on planned capital projects over the next 5 fiscal years, with the larger projects funded through bond approved debt. The primary focus of our current Financial Model is to fund projects and programs that are critical to the long-term sustainability of our system while also serving as an operating revenue source during cash flow shortages.

The Finance Department will be developing an Unrestricted Net Position and Reserves Policy to assist with the long-term planning of the Water & Sewer Fund in the near future.

Future Rate and Fee Considerations:

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 Town released a Request for Qualifications, (RFQ), for a Rate and Fee Study in October 2024, and a contract was awarded to Aldrich and Elliott to complete this comprehensive look at the Towns existing rate and fee structure and provide recommendations for improvement. This project has been on hold this winter but has been scheduled to pick up early summer of 2025. The project will be presented to the Selectboard in early fall with recommendations.

In addition to the work with the rate and fee study, staff is currently reviewing and revising the sewer allocation process and updating the ordinance. The sewer service connection and allocation process is in need of updating. This work will continue through the summer and will likely be presented to the selectboard in the same timeframe as the rate and fee study. As this work is not complete, the current connection fees for both water and sewer have been left unchanged.

The Finance Department and Public Works will continue to work with our consultant to review our current rate and fee structure, and provide alternatives for future billing, and a revised water and sewer allocation / connection fee and procedure, to be reviewed and approved by the Selectboard at a future meeting in early fall.

ATTACHED DOCUMENTATION:

- Historical Water and Sewer Usage from FY 2015 Through FY 2024
- Historical Water and Sewer Rate Increase Impact on Average Family
- Comparative Retail Water and Sewer Rates Survey
- Proposed FY 2026 Shared, Water and Sewer Proposed Budgets

RECOMMENDATION:

It is recommended the Selectboard approve the proposed water and sewer budgets including approval of the proposed rate structure for FYE2026, resulting in the following changes to the rate and billing structure:

1. Water Rates/Fees:
 - a. Increase the water rate from \$6.36 per 1,000 gallons to \$6.67 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 minimum water charge per year at \$240.
 - d. Interim or Final Billing request at \$35
2. Sewer Rates/Fees:
 - a. Increase the sewer operating fee from \$11.43 per 1,000 gallons to \$12.00 per 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 2025 billings.

It is further recommended that the new rates be reflected in the next full billing period following budget approval.

Account Name	FY20 Actual	FY21 Actual	FY22 Actual	FY23 Actual	FY24 Actual	FY25 Budget	FY26 Proposal
REVENUES							
Water Charges	1,337,054	1,436,644	1,388,021	1,456,217	1,521,994	1,568,090	1,638,623
Sewer Charges	1,518,613	1,599,384	1,602,451	1,659,445	1,769,652	1,898,876	2,007,980
Penalties - Water	12,601	15,454	16,637	14,318	14,812	14,999	14,985
Penalties - Sewer	15,120	20,802	20,981	18,702	19,714	19,061	19,213
New Connections Water	115,805	63,185	31,731	60,150	41,992	74,433	66,121
Sewer Connections	141,449	66,220	20,085	36,968	26,893	81,348	81,348
Misc. Income	2,975	20,652	18,009	7,781	12,967	11,216	9,287
Interest Income	19,510	13,483	9,611	54,654	181,837	167,000	122,550
Transfers	583	925	455	-	-	-	-
Revenues Subtotal	3,163,709	3,236,750	3,107,979	3,308,235	3,589,861	3,835,023	3,960,108
SHARED ACCOUNTS							
Salaries - Regular	461,012	490,601	498,537	513,208	518,563	617,041	614,130
Salaries - Part-Time	-	-	5,625	10,267	16,905	42,873	44,587
Salaries - Overtime	28,161	44,587	45,631	48,357	34,011	44,720	31,383
Allowance for Vacancies	-	-	-	-	-	(88,216)	(92,680)
Group Insurance	104,483	107,554	116,333	130,135	128,559	195,102	204,247
Social Security	36,712	39,580	41,359	41,337	45,921	58,083	56,858
Retirement	127,281	121,083	57,210	91,145	95,307	59,072	59,239
Other Employee Benefits	1,742	1,305	1,808	1,835	1,260	2,940	3,030
Professional Services	1,508	4,719	1,842	28,500	14,043	65,000	28,000
Audit	-	-	3,900	3,075	3,975	4,350	5,250
R&M - Vehicles & Equipment	165	93	1,509	10,466	1,952	1,200	5,000
R&M Vehicles - Supplies	2,453	1,065	2,168	2,549	2,530	3,000	3,000
R&M - Buildings & Grounds	1,086	5,689	3,892	7,232	18,801	4,000	10,000
Rental Vehicle / Equip	767	607	681	879	827	650	2,107
Training, Conf. Dues	-	-	1,299	473	348	663	520
Tech Subs Licenses	-	-	153	2,081	2,887	14,094	9,685
Communications	2,851	3,104	4,440	4,396	5,391	5,300	5,565
Advertising	4,927	6,822	8,418	-	46	1,500	1,750
Printing & Binding	-	-	-	4,192	4,067	2,300	4,500
Postage	-	-	-	5,191	7,120	7,100	7,455
Travel	1,854	14	-	1,049	789	3,000	750
General Supplies	-	-	263	963	1,023	500	1,500
Small Tools & Equipment	2,702	5,425	1,254	4,371	2,602	3,250	3,500
Uniforms	1,052	1,506	2,605	2,604	2,219	2,400	3,200
Meters & Parts	31,977	12,641	5,916	23,522	28,996	15,500	30,000
Electricity	4,566	4,402	3,213	3,097	2,604	4,000	4,200
Natural Gas/Heating	1,278	1,271	2,895	2,671	2,810	2,800	3,300
Tech: Equip / Hardware	325	1,936	33	802	5,089	2,500	5,000
Machinery & Equipment	1,716	-	-	-	-	3,500	4,000
Shared Subtotal	818,618	854,006	810,982	944,397	948,646	1,078,222	1,059,076

Account Name	FY20 Actual	FY21 Actual	FY22 Actual	FY23 Actual	FY24 Actual	FY25 Budget	FY26 Proposal
WATER ACCOUNTS							
Water Purchase - CWD	672,698	688,587	708,068	738,489	762,130	815,000	860,900
R&M Infrastructure	26,744	44,083	112,997	46,579	74,683	65,000	70,000
Training, Conf. Dues	2,541	1,501	2,927	3,297	3,358	3,250	3,750
Insurance	10,317	8,243	18,488	19,238	11,324	10,400	8,306
Other Purchased Service	-	-	18,329	3,259	100	7,500	5,000
System Stabilization Fund	156,507	156,802	155,677	153,459	150,713	139,198	137,403
Colchester Twin Tank	-	-	-	-	-	-	18,671
Water Subtotal	868,807	903,059	1,023,033	964,321	1,002,307	1,040,357	1,104,030
SEWER ACCOUNTS							
Professional Services	-	26,309	3,653	13,802	16,701	-	-
Sewage Treatment - Village	530,736	647,096	602,646	691,486	787,333	806,250	803,357
R&M Infrastructure	67,258	120,920	43,242	151,216	269,136	306,480	362,300
Training, Conf. Dues	1,051	54	-	-	751	1,000	1,000
Insurance	14,401	12,251	22,848	24,356	17,247	16,582	12,343
Communications	-	58	12,043	21,505	51,506	7,200	22,000
Other Purchased Service	32,695	18,143	34,617	8,236	18,811	10,000	7,900
Natural Gas/Heating	-	-	-	-	1,477	1,750	1,850
Electricity	56,955	53,533	51,351	54,348	66,923	53,000	56,500
Machinery and Equipment	-	-	-	-	-	2,500	2,500
Meters & Parts	-	-	-	523	5,944	3,200	5,500
Sewer Stabilization Fund	156,507	156,802	155,677	153,459	150,713	139,198	137,403
WWTP Upgrade - Bradford Bond	34,274	33,689	33,084	30,804	30,214	29,600	28,971
Interest	3,651	(71)	3,088	2,798	2,502	2,200	1,893
RF1-148 SFR Loan WWTF	263,484	191,934	263,484	263,484	263,484	263,484	263,484
West Street Retrofit Bond	-	-	-	-	-	-	-
Sewer Subtotal	1,161,602	1,260,717	1,225,759	1,416,544	1,682,741	1,642,444	1,707,000
REVENUES TOTAL	3,163,709	3,236,750	3,107,979	3,308,235	3,589,861	3,835,023	3,960,108
EXPENSES TOTAL	2,849,027	3,017,782	3,059,774	3,325,263	3,633,694	3,761,023	3,870,107
NET OPERATIONS	314,682	218,968	48,205	(17,028)	(43,833)	74,000	90,001

Historical Water Usage

Year	Water Purchased (GPD)	Water Billed (GPD)	Unaccounted for Water (GPD)	Revenue Loss
2015	762,425	624,253	138,172	18.1%
2016	774,413	649,414	124,999	16.1%
2017	755,430	679,677	75,753	10.0%
2018	735,747	633,412	102,335	13.9%
2019	758,164	631,000	127,164	16.8%
2020	773,422	638,000	135,422	17.5%
2021	778,000	700,368	77,632	10.0%
2022	772,017	652,725	119,292	15.5%
2023	724,688	674,127	50,561	7.0%
2024	723,206	668,843	54,363	7.5%
2 Year Average	723,947	671,485	52,462	7.2%
5 Year Average	754,267	666,813	87,454	11.5%
10 Year Average	755,751	655,182	100,569	13.2%

Historical Sewer Usage

Year	Sewer Purchased (GPD)	Sewer Billed (GPD)	Unaccounted for Sewer (GPD)	Revenue Loss
2015	428,502	412,390	16,112	3.8%
2016	423,233	422,267	966	0.2%
2017	432,501	422,267	10,234	2.4%
2018	449,033	427,493	21,540	4.8%
2019	502,497	421,000	81,497	16.2%
2020	468,595	418,909	49,686	10.6%
2021	495,255	454,551	40,704	8.2%
2022	504,867	438,528	66,339	13.1%
2023	529,582	440,042	89,540	16.9%
2024	519,412	456,750	62,662	12.1%
2 Year Average	524,497	448,396	76,101	14.5%
5 Year Average	503,542	441,756	61,786	12.2%
10 Year Average	475,348	431,420	43,928	8.8%

Historical Water Rate Increase Impacts on Average Family

Fiscal Year Ending	Water Rate (per 1,000 Gallons)	Increase over Previous Year	Percent Increase Over Previous Year	Annual Average Cost @ 73,000 Gal. / Year
2016	\$ 4.88	\$ 0.28	6.90%	\$ 356.24
2017	\$ 5.06	\$ 0.18	3.69%	\$ 369.38
2018	\$ 5.13	\$ 0.07	1.38%	\$ 374.49
2019	\$ 5.26	\$ 0.13	2.53%	\$ 383.98
2020	\$ 5.56	\$ 0.30	5.70%	\$ 405.88
2021	\$ 5.62	\$ 0.06	1.08%	\$ 410.26
2022	\$ 5.78	\$ 0.16	2.85%	\$ 421.94
2023	\$ 5.90	\$ 0.12	2.08%	\$ 430.70
2024	\$ 6.18	\$ 0.28	4.75%	\$ 451.14
2025	\$ 6.36	\$ 0.18	2.91%	\$ 464.28
2026 (Proposed)	\$ 6.67	\$ 0.31	4.87%	\$ 486.91
2-Year Average		\$ 0.23	3.83%	
5-Year Average		\$ 0.16	2.73%	
10 - Year Average		\$ 0.18	3.39%	

Historical Sewer Rate Increase Impacts on Average Family

Fiscal Year Ending	Sewer Rate (per 1,000 Gallons)	Increase over Previous Year	Percent Increase Over Previous Year	Annual Average Cost @ 73,000 GPD
2016	\$ 7.73	\$ 0.59	8.26%	\$ 564.29
2017	\$ 8.09	\$ 0.36	4.66%	\$ 590.57
2018	\$ 8.59	\$ 0.50	6.18%	\$ 627.07
2019	\$ 8.98	\$ 0.39	4.54%	\$ 655.54
2020	\$ 9.54	\$ 0.56	6.24%	\$ 696.42
2021	\$ 9.64	\$ 0.10	1.05%	\$ 703.72
2022	\$ 9.93	\$ 0.29	3.01%	\$ 724.89
2023	\$ 10.27	\$ 0.34	3.42%	\$ 749.71
2024	\$ 10.91	\$ 0.64	6.23%	\$ 796.43
2025	\$ 11.43	\$ 0.52	4.77%	\$ 834.39
2026 (Proposed)	\$ 12.00	\$ 0.57	4.99%	\$ 876.00
2-Year Average		\$ 0.58	5.50%	
5-Year Average		\$ 0.38	3.70%	
10 - Year Average		\$ 0.43	4.84%	

Comparison of Water & Sewer Rates of Local Municipal Systems

Water System	August 2024 Retail Rate/1,000 Gallons	Annual Average Cost @ 73,000 Gal. / Year
Town of Shelburne	\$ 7.90	\$ 576.70
City of Winooski	\$ 7.19	\$ 524.87
Colchester Fire District #3	\$ 7.00	\$ 511.00
Town of Milton	\$ 6.78	\$ 494.94
Town of Essex (2026 Proposed)	\$ 6.67	\$ 486.91
Average	\$ 6.21	\$ 453.33
Town of Williston	\$ 6.19	\$ 451.87
Colchester Town	\$ 6.11	\$ 446.03
Mallets Bay Water Company	\$ 6.11	\$ 446.03
Colchester Fire District #1	\$ 5.67	\$ 413.91
City of Essex Junction	\$ 5.60	\$ 408.80
City of South Burlington	\$ 5.30	\$ 386.90
Village of Jericho	\$ 3.97	\$ 289.81

Sewer System	August 2024 Retail Rate/1,000 Gallons	Annual Average Cost @ 73,000 Gal. / Year
Shelburne	\$ 17.85	\$ 1,303.05
Hinesburg	\$ 14.73	\$ 1,075.29
Town of Essex (2026 Proposed)	\$ 12.00	\$ 876.00
Williston	\$ 10.44	\$ 762.12
Average	\$ 9.87	\$ 720.51
Burlington	\$ 9.73	\$ 710.29
Winooski	\$ 8.92	\$ 651.16
Milton	\$ 8.03	\$ 586.19
South Burlington	\$ 7.01	\$ 511.73
Essex Junction	\$ 5.84	\$ 426.32
Rutland	\$ 4.15	\$ 302.95

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	2026 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	Revised FY 26 interest with 21% W/S allocation on a portfolio of \$11M-\$12M and earning 3.25% - 4.00%; Reduced in FY27 and beyond assuming ramped up spending in the W/S Fund		122,550
098.000-Miscellaneous Revenue	FY26-30 projections based on 5 year average of FY18-19 & FY22-24		9,287
Total 098 Miscellaneous Revenues			131,837
Total Revenues			131,837
Expenditure			
100 Salaries			
110.000-Regular Salaries			614,130
120.000-Part Time Salaries			44,587
130.000-Overtime			31,383
199.000-Allowance for Vacancies	This represents 1 of 2 open positions for W/S Operators		(92,680)
Total 100 Salaries			597,420
200 Benefits			
210.000-Group Insurance			204,247
220.000-Social Security			56,858
230.000-Retirement			59,239
290.000-Other Employee Benefits			3,030
Total 200 Benefits			323,374
300-699 Operating Expenses			
330.000-Professional Services	Survey Assistance	-	
330.000-Professional Services	Legal assistance including with delinquent accounts	-	

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	2026 Budget
330.000-Professional Services	This line has evolved overtime and continues to address some of the Engineering/technical services for the water and sewer department as needed. This account was previously consolidated from both the water and sewer accounts professional services accounts. This account does not include professional services required in connection with an identified Capital account but may include engineering planning services needed to help define a Capital Project after identified by staff. In water, this may include such work as running the system water model, certifications of hydrant flow, water system analysis and similar efforts. In sewer, this may include pump station operation optimization studies, Inflow / Infiltration testing, checks on flow metering, investigation of odor complaints at the discharge point for the Alder Brook force main, studies relevant to high strength or unique waste from such users such as breweries, and sampling / testing of wastewater flows. The decrease this year in this item reflects the actual expenditures over the past several years and the increased use of capital funding for other professional services related to an identified capital project. Use : \$28,000	28,000	
		<hr/>	28,000
335.000-Audit	Annual Financial Statement Audit (85% GF; 15% W/S) - Possible bid process for FY25 audit - this assumes a \$35K total audit cost in FY26		5,250
430.000-R&M Vehicles & Equip.	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. Bumping this up for FY26 due to most recent history. FOR DISCUSSION		5,000
430.001-R&M Vehicles Supplies	Supplies purchased for R&M of the three water/sewer vehicles. The costs averaged \$2,153 over five years with FY 2024 seeing a total expenditure of \$2,530. Use \$3,000 for FY26		3,000
431.000-R&M Buildings & 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 several years. The five year average of actual costs is \$7,340, with costs averaging \$13,012 over the last two years. In addition, the Town is responsible for the building at the Alder Brook Pump Station. Use \$9,200 for FY26.	9,200	
431.000-R&M Buildings & 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 \$700 for FY25. Use \$800 for FY26?	800	
431.000-R&M Buildings & Grounds	DAN CAN YOU REMOVE ????????	-	
		<hr/>	10,000

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	2026 Budget
442.000-Rental of Vehicles or Equip.	The Department on occasion needs to use specialized equipment (such as tapping machine, special hydrant wrenches, leak detection equipment, excavator). Renting can be an inexpensive method to gain use of this equipment. The five-year average expenditure has been \$752 per year. Use \$1,500 for the FY26	1,500	
442.000-Rental of Vehicles or Equip.	Konica Minolta copier leases	607	
			2,107
500.000-Training, Conferences, Dues	25% of CPFO Designation program for Jessica Worn	-	
500.000-Training, Conferences, Dues	GFOA Annual Conference - DR 25% of anticipated registration costs here Wash, D.C. 2/29/25-7/2/25	75	
500.000-Training, Conferences, Dues	GFOA Memberships (25% allocated here) DR & JW	100	
500.000-Training, Conferences, Dues	GFOA virtual - intensive trainings; ~ \$500/each, 2 offerings Increase training for DR or JW (25% here)	250	
500.000-Training, Conferences, Dues	VT CPA license dues (Annual DR 25%)	95	
500.000-Training, Conferences, Dues	Miscellaneous - Are there specific events in consideration for FY26?	-	
			520
505.000-Tech. Subscription, Licenses	Tungsten (Formerly ReadSoft & Kofax) - \$6,525PY price *15% + 5% annual increase. This information needs an update for FY26 - Last invoice from Kofax covered to 4/30/23.	1,079	
505.000-Tech. Subscription, Licenses	Questica - Budgeting (this assumes acceptance of 5-yr offer)	3,144	
505.000-Tech. Subscription, Licenses	TI Sales (assume 5% annual increases)	5,462	
			9,685
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 land line telephone costs for the water sewer building. The two-year average for these costs has been \$4,893, and continue to rise. Use \$5,462 to reflect any rate increases.	333	
530.000-Communications	Verizon (currently runs at \$40 / month as of Feb '25) - Build in 3% for FY26	494	
530.000-Communications	Comcast (currently runs \$178 / month as of March '25) - Build in 3% for FY26	2,200	
530.000-Communications	AT & T (currently runs \$192 / month as of Feb '25) - Build in 3% for FY26	2,373	
530.000-Communications	CVC Paging	165	
			5,565
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. Use \$1,750 for FY26.		1,750
550.000-Printing & Binding	Review recent overspending		4,500
560.000-Postage	This line item includes the postage for billing. Use a budget of \$7,455.		7,455
580.000-Travel	This item is for travel expenses for conferences and trainings. In water and sewer, this travel is tied to the need for the operators to maintain their water licenses and certificates. Use \$550 for FY26.	550	

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	2026 Budget
580.000-Travel	Airfare/Hotel to GFOA national conference (Wash DC 6/29-7/2/25 so splits FYs) 25% here	200	
			750
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. Use \$1,500 for FY26.		1,500
611.000-Small Tools & 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 \$3,271, with the average over the last two years being \$3,487. Cost on tool purchases continue to rise. Use \$3,500 for FY26.		3,500
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, employee have not spent their entire allowed clothing allowance. The five-year average for this item was \$1,1,997, with the average cost over the last two years rising to \$2,412. Use \$3,200 for FY26.		3,200
614.000-Meters & Parts	This account includes all expenses related to purchase and installation of meters - both replacement and new meters. The department has in excess of 3,570 water meters. There are less than 80 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 \$20,610 for this item, in FY 2024, a total of \$28,996 was spent on this item. Increases in costs of meters, parts, and the number of replacement meters or new meters fluctuates over time. Use \$30,000 for FY26.		30,000
621.000-Natural Gas/Heating	This account is for the water sewer building. The five-average cost us \$2,185. The actual cost in FY24 was \$2,810. Use \$3,300 for FY26.		3,300
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 \$3,577. The budget estimate for FY26 is \$4,200.		4,200
Total 300-699 Operating Expenses			129,282
700 Capital or Property Objects			
735.000-Tech: Hardware, Software, Equip.	This account replaces an "Other Purchased Services" account that included the items noted: 1) software upgrades to enable the Town to utilize the Town billing software @ \$750 based upon history of expenditure 2) share of copier costs @ \$600 and 3) program costs for the "Water Smart" program @ \$1,150. Total budget request is \$2,500.		5,000

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	2026 Budget
750.000-Machinery & 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.</p> <p>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 tripod, portable light backup, additional safety signs, barricades, hydrant and valve wrenches, hydrant flags for the winter, new sump pump hoses and the like. Use \$4,000 for FY26.</p>		4,000
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			9,000
Total Expenditure			1,059,076
Net Total			(927,239)

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	2026 Budget
Revenues			
020 Charaes for Services			
021.000-Water User Fees	This is based off of 5% annual increases from the FY25 budget		1,638,623
024.000-Utility Connection Fee	FY26-30 projections based on 5 year average of FY18-19 & FY22-24		66,121
Total 020 Charges for Services			1,704,744
080 Fines & Forfeiture			
085.000-Penalties	FY26-30 projections based on 5 year average of FY18-19 & FY22-24		14,985
Total 080 Fines & Forfeiture			14,985
Total Revenues			1,719,729
Expenditure			
300-699 Operatina Expnses			
411.000-Water Purchase - CWD	This line item includes the costs for water purchased from the Chaplain Water District, (CWD). Further details on historic flow date, proposed flow estimates, and the current wholesale rate for CWD can be found in the attachments for this line item.		860,900
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 is based on the recent history of expenditures is \$47,250.	47,250	
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 \$22,750 based on the recent history of expenditures.	22,750	
			70,000
500.000-Training, Conferences, Dues	This line item includes costs for 1) American Water Works Association and New England Water Works Association annual membership (Public Works Director) @ \$700; 2) Green Mountain Water and Environmental Association dues and meetings @ \$700; 3) Operator licenses and training for 7 Class 3 Operators @ \$1,600; 4) Vermont Rural Water Association membership and training courses @\$500; and references, standards and manual updates @\$250; total \$3,750		3,750
520.000-Insurance	Property and Liability	2,330	
520.000-Insurance	Workers Comp	5,565	
520.000-Insurance	Unemployment	411	
			8,306

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	2026 Budget
570.000-Other Purchased Services	This line item includes costs for items not defined or included in other lines and can include but not limited to the following: Water program updates used for accounting program changes and also technical analysis of water programs aimed at system capability including calibration and use of the Towns system wide water model. Estimate \$1,500. 2) Use of consultant for acoustic water system monitoring to identify potential leaks and reduce system water loss. Estimate \$1,750. 3) safety-related purchases specific to water, calibration of testing equipment, waste disposal such as occurs during system flushing. Estimate \$1,000. 4) State water permit renewal fees Use \$750. total = \$5,000		5,000
Total 300-699 Operating Expenses			947,956
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 approximates the funds identified by accountants for depreciation of the water system. In effect, funds are being set aside to replace and improve existing water system assets. In FY26, the actual depreciation will be \$137,403.		137,403
Total 700 Capital or Property Objects			137,403
920 Transfer to capital (as expense)			
920.000-Transfer between funds (capital)	The current FY26 budget proposal for the Water & Sewer Fund includes a planned set aside of \$90,000 for future capital improvements, like the \$74,000 surplus that was a planned to set aside for FY25. For FY 2026, a total of \$60,000 of the planned \$90,000 has been set aside.		60,000
Total 920 Transfer to capital (as expense)			60,000
950-975 Debt Service			
980.003-Colchester Twin Tank - Water P&I	Separating this piece from the Water purchase line item 411 starting in FY26. Payment on the debt for the Towns portion of the expansion of the twin water tanks in Colchester on water tower hill. This project was bonded and completed by CWD. The payment for the Town's portion of the total costs is based on assigned reserve capacity within the tanks. These tanks help serve the west end of Town and Fort Ethan Allen. This years total bond payment will be \$18,671.38.		18,671
Total 950-975 Debt Service			18,671
Total Expenditure			1,164,030
Net Total			555,699

Details on the estimate for water purchases from CWD in FY2026

The history of purchase from CWD has been broken into six-month segments on an average daily usage basis:

<u>Dates</u>	<u>Average Gallons Used Per Day</u>
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	792,411
January 2023 – June 2023	709,552
July 2023 – December 2023	722,633
January 2024 – June 2024	715,798
July 2024 – December 2024	825,064

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

Avg. for 2024	770,431 gpd
Avg. past two years	743,262 gpd
Avg. past five years	765,790 gpd

It is recommended that the estimated CWD purchase for FYE26 be set at **767,123 gpd**.

CWD has approved a budget for FYE26 at an increased rate of \$3.011/1000 gallons effective July 1, 2025. This represents a 4.95% increase. At this rate, the budget for water purchased for FYE26 is estimated at:

$$767,123 \text{ gpd} \times 365 \text{ days} \times \$3.011/1,000 \text{ gal.} = \mathbf{\$843,080}$$

- 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.

$$780,822 \text{ gpd} \times 365 \text{ days} \times \$.0572/1,000 \text{ gal.} = \mathbf{\$16,302}$$

- Consumer Confidence Report (EPA requirement; produced by CWD for member communities), has an average annual cost over the last several roughly **\$1,500**

Total (1 through 3);	\$860,882
Use:	\$860,900

Water Billed by CWD

	(Gallons)
Nov-23	18,531,907
Dec-23	22,414,854
Jan-24	18,396,259
Feb-24	19,445,583
Mar-24	23,477,331
Apr-24	18,606,456
May-24	26,283,896
Jun-24	24,423,608
Jul-24	23,558,737
Aug-24	28,787,606
Sep-24	21,008,875
Oct-24	19,034,901
Total	263,970,013
	723,206
Billed by Town	244,127,671
Unbilled Water loss	7.52%

Sewer Billed by EJWWTP

	(Gallons)
Nov-23	16,411,850
Dec-23	15,829,965
Jan-24	15,262,638
Feb-24	13,565,562
Mar-24	15,527,695
Apr-24	16,079,089
May-24	16,766,926
Jun-24	15,497,563
Jul-24	16,476,239
Aug-24	17,073,063
Sep-24	15,760,984
Oct-24	15,333,878
Total	189,585,452
	519,412
Billed by Town	166,713,808
Inflow / Infiltration	12.06%

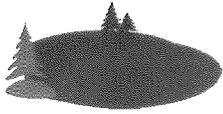
2 Year Average 279,513,251 Gallons
5 year High 291,097,430 Gallons

2 Year Average 192,006,683 Gallons
5 year High 195,695,221 Gallons

Use: 285,000,000 Gallons as FY 26 estimate

Use: 194,000,000 Gallons as FY 26 estimate

	FY26 Rate (/1000 Gal)	FY 26 Flow Estimate (Gallons)	FY26 Budget
Water	\$ 3.011	280,000,000	\$ 843,080.00
Sewer	\$ 4.112	195,368,805	\$ 803,356.53



CHAMPLAIN WATER DISTRICT
Dedicated to Quality Water & Service



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

Date: January 7, 2025
To: CWD Served Municipal Systems
From: Joe Duncan, CWD General Manager 
RE: Fiscal Year 2025-2026 Uniform Wholesale Water Rate

CWD's publicly elected Board of Water Commissioners has finalized the fiscal year budget for July 1, 2025 to June 30, 2026 setting the **uniform wholesale water rate at \$3.011/1000 gallons** from the existing rate of \$2.869/1,000 gallons. This is an increase of 14.2 cents per 1,000 gallons. With CWD's proposed rate increase, the average family using 65,700 gallons per year will see an increase of \$9.33 per year (\$0.78/month).

A family using 65,700 gallons/year (180 gallons/day), within CWD's twelve served municipal water systems in Chittenden County, has a present annual "average" water cost across CWD's served systems of \$415.46 per year (\$34.62/month). Of this \$415.46/year, \$197.82/year (\$16.485/month) is paid to CWD under the uniform wholesale water rate, and the remaining \$217.64/year (\$18.137/month) is the average retained by the respective served CWD municipal water system. Refer to the attached table titled "CWD Uniform Wholesale Rate Increase Impact on Served Municipal Systems".

We have attached a table entitled "Historical CWD Wholesale Rate Increase Impact on Average Family" which summarizes that CWD's annual wholesale rate increase over the past fifteen years has averaged \$5.79 per year for a family using 65,700 gallons/year. Also please find attached a table titled "Comparative Retail Water Rates" which was just updated as of our August 2024 Survey of CWD served systems retail rates based on CWD's current wholesale rate of \$2.869/1,000 gallons.

Our approach to budgeting is to keep up with inflation while being proactive with our overall infrastructure maintenance and replacements. We continue to see increases in materials and services that are critical to our mission of delivering safe, reliable, high quality drinking water efficiently and economically. We understand these are tight economic times, but we also know that any cuts in maintenance and upkeep have negative long-term effects. Our budgeting goal is to support today's and tomorrow's needs while respecting and balancing what rate increases mean to our users.

Lastly, one item of interest is that the State of Vermont "water fees" were scheduled for an increase on July 1, 2018, but the State did not raise them. Historically these fees have always increased on a three-year cycle, rather than annually, and they have increased historically at an average of 12%-15% every three years. There is no indication at this time that the fees will be revised but to be conservative we are budgeting for a potential fee increase for FY25-26.

Please contact Joe Duncan, CWD General Manager at 864-7454 (ext. 4808) or by email at joe.duncan@champlainwater.org, if you have any questions or need further information.

**CWD UNIFORM WHOLESale RATE INCREASE IMPACT ON SERVED MUNICIPAL SYSTEMS
PROPOSED FY25-26**

The following list represents the cost per 1,000 gallons and the annual cost for the Chittenden County average household occupancy (2.4 people per home) multiplied by 75 gallons per day per person for an average household usage of 180 gallons per day or 65,700 gallons per year. The annual cost of water reflects individual characteristics of the communities water rates, i.e. any base rate per quarter, incremental rates based upon usage, or any minimum charges.

CURRENT WHOLESale RATE			PROPOSED CWD RATE INCREASE	
\$2.869/1000 Gallons			For New Wholesale Water Rate of \$3.011/1000 Gallons	
Water System	August 2024 Retail Rate/1000 Gallons	Current Annual Average Family Cost	For New Wholesale Water Rate \$ Per Gallons	New Annual Average Family Cost
City of South Burlington	\$5.30	\$348.21	\$5.44	\$357.54
City of Essex Junction	\$5.60	\$367.92	\$5.74	\$377.25
Colchester Town	\$6.11	\$401.43	\$6.25	\$410.76
Malletts Bay Water Company	\$6.11	\$401.43	\$6.25	\$410.76
Town of Williston	\$6.19	\$406.68	\$6.33	\$416.01
Town of Essex	\$6.36	\$417.85	\$6.50	\$427.18
Town of Milton	\$6.78	\$445.45	\$6.92	\$454.78
Colchester Fire District #3	\$7.00	\$459.90	\$7.14	\$469.23
City of Winooski	\$7.19	\$472.38	\$7.33	\$481.71
Town of Shelburne	\$7.90	\$519.03	\$8.04	\$528.36
**Village of Jericho	\$3.97	\$260.83	\$4.11	\$270.16
***Colchester Fire District #1	\$5.67	\$372.52	\$5.81	\$381.85
Served System Annual Average	\$6.18	\$406.14	\$6.32	\$415.46
CWD's Portion of Total Annual Average Retail Bill	\$2.869	\$188.49	\$3.011	\$197.82
Average Family Annual Cost Increase				\$9.33
Average Family Monthly Cost Increase				\$0.78

**Village of Jericho – Rate does not include Village tax rate assessment charge

***Colchester Fire District #1 - Rate does not include bond special assessment charge

HISTORICAL CWD WHOLESALE RATE INCREASE IMPACT ON AVERAGE FAMILY

The following list shows the historical CWD uniform wholesale water rate. It also shows the annual average family using 75 gallons per day per person for an average household usage of 65,700 gallons per year. Assumes Chittenden County average family of 2.4 people/home use 180 gallons/day (75 gpd/person) for a total of 65,700 gallons per year.

Fiscal Year Ending	CWD Uniform Wholesale Water Rate \$ Per 1000 Gallons	Rate Increase Over Previous FY \$ Per 1000 Gallons	Percent Increase Over Previous FY	Annual Average Family Cost @65,700 Gallons/Year	Family \$ Increase Over Previous FY	
					Annual	Monthly
2011	\$1.650	\$0.050	3.12%	\$108.41	\$3.29	\$0.27
2012	\$1.714	\$0.064	3.88%	\$112.61	\$4.20	\$0.35
2013	\$1.782	\$0.068	3.97%	\$117.08	\$4.47	\$0.37
2014	\$1.840	\$0.058	3.25%	\$120.89	\$3.81	\$0.32
2015	\$1.913	\$0.073	3.97%	\$125.68	\$4.80	\$0.40
2016	\$1.978	\$0.065	3.40%	\$129.95	\$4.27	\$0.36
2017	\$2.038	\$0.060	3.03%	\$133.90	\$3.94	\$0.33
2018	\$2.100	\$0.062	3.04%	\$137.97	\$4.07	\$0.34
2019	\$2.165	\$0.065	3.10%	\$142.24	\$4.27	\$0.36
2020	\$2.230	\$0.065	3.00%	\$146.51	\$4.27	\$0.36
2021	\$2.313	\$0.083	3.72%	\$151.96	\$5.45	\$0.45
2022	\$2.392	\$0.079	3.42%	\$157.15	\$5.19	\$0.43
2023	\$2.494	\$0.102	4.26%	\$163.86	\$6.70	\$0.56
2024	\$2.731	\$0.237	9.50%	\$179.43	\$15.57	\$1.30
2025	\$2.869	\$0.138	5.05%	\$188.49	\$9.07	\$0.76
2026 (proposed)	\$3.011	\$0.142	4.95%	\$197.82	\$9.33	\$0.78
Average	--	\$0.088	4.04%	--	\$5.79	\$0.48

COMPARATIVE RETAIL WATER RATES
Survey Compiled August 2024

The following list represents the cost per 1000 gallons and the annual cost for the Chittenden County average household occupancy (2.4 people per home) multiplied by 75 gallons per day per person for an average household usage of 65,700 gallons per year. The annual cost of water reflects individual characteristics of the communities water rates, i.e. any base rate per quarter, incremental rates based upon usage, or any minimum charges.

Water System	Total Cost per 1,000 Gallons (Including any Base Rates)	Annual Cost Average Family
CWD Wholesale (Uniform Rate)	\$2.869	\$188.49
City of South Burlington	\$5.30	\$348.21
Village of Essex Junction	\$5.60	\$367.92
Colchester Town	\$6.11	\$401.43
Malletts Bay Water Company	\$6.11	\$401.43
Town of Essex	\$6.36	\$417.85
Town of Williston	\$6.19	\$406.68
Colchester Fire District #2	\$6.19	\$406.55
Colchester Fire District #3	\$7.00	\$459.90
Town of Milton	\$6.78	\$445.45
City of Burlington	\$7.29	\$479.03
City of Winooski	\$7.19	\$472.38
Town of Shelburne	\$7.90	\$519.03
**Village of Jericho	\$3.97	\$260.77
***Colchester FD#1	\$5.67	\$372.52

<i>CWD Served System Average</i>	<i>\$6.18</i>	<i>\$406.13</i>
----------------------------------	---------------	-----------------

***Bolted water systems are served by CWD**

Note: The annual average retail cost of water for the 12 above "bolted" CWD served municipal water systems is based on a family using 65,700 gallons per year. The average annual family cost includes the CWD uniform wholesale purchase price, plus any operating expenses by the respective CWD served water system for operation and maintenance of their system.

**Village of Jericho – Rate does not include Village Tax Rate assessment charge.

***Colchester FD#1 - Rate does not include bond special assessment charge.

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	2026 Budget
Revenues			
020 Charaes for Services			
022.000-Sewer User Fees	Based on a 5% annual increase from FY25 to FY26 budget		2,007,980
024.000-Utility Connection Fee	No FY25-28 projections included within the FY24 budget; FY25 based on 5 yr average		81,348
Total 020 Charges for Services			2,089,328
080 Fines & Forfeiture			
085.000-Penalties	FY26-30 projections based on 5 year average of FY18-19 & FY22-24		19,213
Total 080 Fines & Forfeiture			19,213
Total Revenues			2,108,541
Expenditure			
Utilities			
980.002-West Street Retrofit Bond			-
Total Utilities			-
300-699 Operatina 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 the costs for sanitary sewer treatment from the City of Essex Junction Wastewater Treatment Facility. Further details on historic flow date, proposed flow estimates, and the current wholesale rate for the city can be found in the attachments for this line item.		803,357
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. This line item includes all the supplies necessary to repair and maintain the sewer system, not including supplies for the sewer building maintenance or vehicles. Typical items include manhole risers and pump station repair parts. This line item should be \$15,000. As the age of the system increases, so will the repair and maintenance costs associated with its operation. It is difficult to provide an average annual cost for this account do to the significant variability caused by emergency breaks and repairs. The actuals spent in previous years has ranged from \$45k to \$150k, depending on repairs made, \$48,500. Use \$63,500	63,500	

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	2026 Budget
433.000-R&M Infrastructure	<p>This line item covers all costs associated with repair and maintenance activities on two pump stations within the City of Essex Junction that receive wastewater flow from the Town, West Street and Susie Wilson Pump Stations. The costs associated with R&M are governed by the Two Party Agreement between the Town of Essex and the City of Essex Junction. Casts are split between both communities based on total flow into the stations by each community. This line item should be \$40,000.</p>	40,000	
433.000-R&M Infrastructure	<p>The Town entered into a 24-month contract with Champlin and Associates for the operation and maintenance of 17 sanitary sewer pump stations throughout the community. This was done to back up and fill the gaps within our current water and sewer workforce. This contract includes the proactive remote monitoring of all stations through existing Mission Communications System, retainer for on call technical and emergency response, and all preventative maintenance on all pump stations. Costs for this annual contract are expected to increase. This line item should be \$258,800.</p>	258,800	
			362,300
500.000-Training, Conferences, Dues	<p>This account covers portions of membership dues for GMWEA and APWA, subscriptions to relevant trade journals and technical training. The budget is proposed for FY2025 is \$1,000.</p>		1,000
520.000-Insurance	Property and Liability	6,367	
520.000-Insurance	Workers Comp	5,565	
520.000-Insurance	Unemployment	411	
			12,343
530.000-Communications	<p>Mission Communications, Annual SCADA contracts for all 17 pump stations.</p>	8,570	
530.000-Communications	<p>This line item is for pump station communications as it relates to the alarm and SCADA systems. The Town of Essex has a total of 17 sanitary sewer pump stations throughout its collection system. Each station is monitored by SCADA through equipment purchased through Mission Communications. The annual contract cost for this online based SCADA system is \$8,568.20. In addition to this, each pumps station has a copper phone service with alarm system monitored and maintained through Safety Systems of Vermont, (\$4,800.00). Phone service is provided by Consolidated communications. The Mission equipment and yearly maintenance contracts are separate from the monitoring provided by the Town's sewer pump station operator contractor. These costs have been outlined in the attachments. Use \$22,000.</p>	13,430	
			22,000
570.000-Other Purchased Services	<p>This line item includes costs for items not defined or included in other lines. The attached document provides details on items covered by this account. Based on historic usage of this line item, this should be \$7,900.</p>		7,900

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	2026 Budget
614.000-Meters & Parts	This line item is for calibrating and maintaining flow metering equipment associated with wastewater flows between the Town and the City. As part of the Two-Party Agreement, all discharges of sanitary sewer into the City of Essex Junction at a four intermunicipal sewage metering locations, this work is essential to insure that accuracy of the billings for flows between the Town and the City. An additional metering manhole will be installed on the Susie Wilson pump station forcemain this summer. This increase is due to adding additional metering equipment. Use \$5,500.		5,500
621.000-Natural Gas/Heating	This line item covers fuel/heat for Alder Brook Pump Station and fuel for the generators associated with the wastewater system. In FY24, \$1650 was budgeted. Use \$1750 for FY25.		1,850
622.000-Electricity	A significant cost of running the pump stations is the electricity. used for pumping, heating the stations, lighting in the stations, etc. The average cost over the past three years has been \$53,077. This line was level funded at \$53,000.		56,500
Total 300-699 Operating Expenses			1,272,750
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 & 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. It is recommended that the budget be maintained at \$2,500.		2,500
790.000-Depreciation Expense			137,403
Total 700 Capital or Property Objects			139,903
920 Transfer to capital (as expense)			
920.000-Transfer between funds (capital)	The current FY26 budget proposal for the Water & Sewer Budget includes a planned set aside of \$90,000 for future capital improvements, like the \$74,000 surplus that was planned to set aside for FY25. For FY 2026, a total of \$30,000 of the planned \$90,000 has been set aside.		30,000
Total 920 Transfer to capital (as expense)			30,000

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	2026 Budget
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).		1,893
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 City's Wastewater Treatment Plant Note. The first note is \$30,461 and the second is \$263,457 for a total of \$293,918. More detail is found in the notes.	263,484	
980.000-Tri-Town: Bond Expense	RZEDB Bond for WWTF Upgrade Bradford	28,971	
		<hr/>	<hr/>
Total 950-975 Debt Service			292,455
			<hr/>
Total Expenditure			1,737,001
			<hr/>
Net Total			371,540
			<hr/> <hr/>

Memorandum

To: Selectboard, Greg Duggan, Town Manager
From: Aaron Martin, P.E., Public Works Director
Annie Costandi, P.E., Water Quality Director
Re: Presentation of FY26-30 Water and Sewer Capital Budget
Date: May 14, 2025

ISSUE:

The issue before the Selectboard is to approve the FYE 2026 Water and Sewer capital budget and planned capital revenues and expenditures for FYE 2027- FYE 2030.

DISCUSSION:

The capital budget is used to fund major infrastructure and equipment replacement in the Water and Sewer department. This includes scoping and design projects for both the water distribution and sewer collection systems, large equipment purchases such as pumps or controls for pump stations or portable stand-by generators. The budget is broken into three categories: Water, Sewer, and Equipment. Included with this memo is all the relevant information associated with planned capital revenues, expenses, and resulting fund balances between FY26-30, and descriptions of each project currently identified on the plan.

In FY 2026, the department is proposing to spend a total of \$865,000 between water, sewer and equipment purchases. There are three projects in water currently this year, two engineering studies and our annual fire hydrant replacement work. The largest of the three projects is the Step 1 Engineering design work for the Ethan Allen Asset Replacement project. This project is a significant lift for the Town and project costs associated with both engineering and construction are identified through the current five-year plan and likely father out. The proposed expenditure for water in FY 2026 will be \$225,000. The projected expenditure for sewer projects in FY 2026 totals \$480,000. There are a total of five projects this year, two small equipment installations, two engineering assessments, and the Maple Street Gravity Sewer Rehabilitation project. This project has moved to the top of the list due to the recent gravity sewer failures on the Town's gravity system on Maple Street. This project has been estimated to be \$250,000, but costs could be higher due to supply chain issues and the economic outlook moving forward. The department has planned to replace two pieces of equipment this year, our towable generator for powering all our sewer pump stations during power outages and one of the three maintenance trucks. The total projected cost for both purchases is \$160,000. Further details om costs and project descriptions can be found as attachments to this memo.

As the Towns water and sewer systems continue to age, increased investment in the water and sewer capital budget is necessary to keep up with expected capital expenditures over the next five years and into the future. Attached is a comprehensive list of current capital projects with descriptions. Increased capital spending is necessary for the replacement of aging water and sewer infrastructure throughout the community. A proactive approach to maintaining the Town's aging infrastructure is more cost effective over the long term. Additionally, costs associated with reactive maintenance on equipment and vehicles increase with the age of the asset. The vehicle replacement schedule has been updated to reflect that of the Highway equipment replacement schedule. The

decrease in vehicle life with the purchase of additional warranty coverage upon purchase is expected to reduce maintenance and repair costs but will increase the need for future capital spending.

The proposed capital plan includes a few significant changes from past capital plans, specifically identifying vehicle and equipment replacement schedules on the updated plan. In prior years, vehicles and equipment purchased were made on an “as needed” basis, with the approval of management and the selectboard. In an effort to streamline operations, staff made the decision to incorporate these purchases into the capital plan, and mirror how equipment and vehicles are purchased in the Highway department. Properly planning and budgeting for these large purchases. The goal is to minimize unanticipated maintenance and repair costs and to maximize trade-in values of equipment. The proposed replacement schedule reflects reasonable lifespans of the equipment and vehicles identified within this plan.

Overall capital expenses budgeted for FY 2026 are \$865,000 with the largest expense associated with the rehabilitation project planned for the Maple Street gravity sewer. Capital equipment purchases of a new portable / towable emergency generator and a maintenance truck also have significant impacts on this year’s expenditures at approximately \$150,000. These will be supported by \$4,850,000 in available fund balance.

COST:

n/a

ATTACHED DOCUMENTATION:

- FY 2026 Water and Sewer Capital Budget Expenditures Summary
- FY 2026 – FY 2030 Water and Sewer Capital Budget Financial Summary
- FY 2026 - FY 2030 Water and Sewer Capital Budget Project Descriptions

RECOMMENDATION:

The Selectboard approves the FYE 2026 Water and Sewer capital budget and planned capital revenues and expenditures for FYE 2027- FYE 2030.

Town of Essex FY26 Water / Sewer Capital Budget Expenditures Summary		Proposed Budget FY26	Planned Capital Program FY27-30			
			FY27	FY28	FY29	FY30
W A T E R	<i>Water System Leak Monitoring</i>	\$ 50,000	\$ 50,000	\$ 50,000		
	<i>Hydrant Asset Replacement</i>	\$ 25,000	\$ 25,875	\$ 26,800	\$ 27,750	\$ 28,725
	<i>Fort Ethan Allen Asset Replacement</i>	\$ 150,000	\$ 150,000		\$ 120,000	\$ 240,000
	<i>Route 15 / Sand Hill Rd Waterline</i>		\$ 175,000	\$ 175,000		
	<i>Creek Road Waterline Replacement</i>		\$ 50,000	\$ 275,000		
	<i>Birchwood Manor Loop Project</i>			\$ 75,000	\$ 275,000	
S E W E R	<i>Maple Street Gravity Sewer Rehabilitation</i>	\$ 250,000				
	<i>Susie Wilson Flow Meter</i>	\$ 50,000				
	<i>Alder Brook Forcemain Assessment (Smartball)</i>	\$ 35,000				
	<i>Pump Station Control Upgrades</i>	\$ 45,000	\$ 30,000			
	<i>Lang Farm Pump Station Redirect</i>	\$ 100,000	\$ 100,000		\$ 67,000	\$ 67,000
	<i>Fort Ethan Allen Sewer Rehabilitation</i>		\$ 175,000	\$ 175,000	\$ 175,000	
	<i>Center Road Forcemain</i>		\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
<i>Chelsea Road Gravity Sewer Rehab</i>					\$ 50,000	
E Q U I P	<i>Portable Generator</i>	\$ 75,000				
	<i>Truck 603 (8)</i>		\$ 87,895			
	<i>Truck 604 (8)</i>			\$ 91,100		
	<i>Truck 605 (8)</i>	\$ 85,000				
	<i>Sewer Cleaner</i>					\$ 150,000
	<i>Water Subtotal</i>	\$ 225,000	\$ 450,875	\$ 601,800	\$ 422,750	\$ 268,725
	<i>Sewer Subtotal</i>	\$ 480,000	\$ 355,000	\$ 225,000	\$ 292,000	\$ 167,000
	<i>Equipment Subtotal</i>	\$ 160,000	\$ 87,895	\$ 91,100	\$ -	\$ 150,000
	<i>Total Expenditures</i>	\$ 865,000	\$ 893,770	\$ 917,900	\$ 714,750	\$ 585,725

FY26-30 Water / Sewer Capital Budget Financial Summary	Proposed Capital Budget FY26	Planned Capital Program FY27-30			
		FY27	FY28	FY29	FY30
Beginning Fund Balance	\$ 4,850,000	\$ 4,075,001	\$ 3,281,231	\$ 2,473,331	\$ 1,878,581
Operating Transfer	\$ 90,001	\$ 100,000	\$ 110,000	\$ 120,000	\$ 130,000
Other Funding					
Expenditures - Water	\$ (225,000)	\$ (450,875)	\$ (601,800)	\$ (422,750)	\$ (268,725)
Expenditures - Sewer	\$ (480,000)	\$ (355,000)	\$ (225,000)	\$ (292,000)	\$ (167,000)
Expenditures - Vehicles	\$ (160,000)	\$ (87,895)	\$ (91,100)	\$ -	\$ (150,000)
Ending Fund Balance	\$ 4,075,001	\$ 3,281,231	\$ 2,473,331	\$ 1,878,581	\$ 1,422,856

Town of Essex

FY 2026 Water and Sewer Capital Budget

Project Descriptions

The water and sewer capital plan is presented separate from the overall Town Capital Plan. The Water and Sewer funds are enterprise funds, supported through user rates, impact fees and grants. Staff will continue to present the Water and Sewer Capital Program separately from the general fund capital budget being its primary funding is totally separate from the general fund. In addition, staff is of the opinion that the time to discuss utility capital expenditures is when the Water and Sewer Operating Budget is presented, discussed, and approved. The capital budget and five-year plan will continue to be presented and approved with the water and sewer operating budget.

The Town, through good resource management by the Selectboard and Town staff, has been able to accumulate a cash reserve that will assist in financing the near-term work without impacting the user rates. With the passage of the Federal Infrastructure Act, there is an opportunity to leverage Town resources through grants, low interest loans, and in certain circumstances the potential for loan forgiveness. The following project narratives have been provided for each project identified on the five-year plan with a current status report. Additionally, in FY 2025, using a portion of the available funds to continue preparing studies, plans/specifications, and final designs have put the Town in a position to move projects forward to construction during the next five years.

FY 2026 to FY 2030 Water Projects

Water System Leak Monitoring

Over the past three summers, the Department took on the task of performing an acoustic leak survey of the Town's entire water distribution system. This task has been completed, and the Town is moving forward with the next phase of this work. Staff has been working with the leak survey consultant to come up with a monitoring plan to ensure all the work and financial investment the department has put into the leak survey can be maintained.

The project will include multiple approaches to monitoring the system for leaks and investigate anomalies that may arise. This will include the installation of vaults equipped with pressure probes, at various locations throughout the distribution system, that can monitor slight pressure fluctuations that may indicate a leak. This equipment can triangulate the potential leak to a specific portion of the system, where the Town could utilize portable acoustic equipment to locate the leak. The department looks to phase this work in over a three-year period with the initial system study that will locate and plan where vaults will be needed. More design work will continue on this project before any equipment installation is initiated.

Hydrant Asset Replacement

The Town's hydrants are aging, and many are well beyond their useful life. This is a multi-year project to start the replacement of this asset. This work will include the repair of internal parts, addition of Storz connections, elimination of hydrants with older non-compatible threads and the total replacement of hydrants as needed. Staff recommends continuing with hydrant repair and maintenance into the future and making this a permanent line item. The water system not only must meet the needs of supplying safe drinking water to its residents but is there to provide the security of fire protection. The funding for this work would come from water stabilization funds.

Fort Ethan Allen Asset Replacement

With the increase in frequencies of water breaks within the Fort distribution system over recent years, and a long history of large significant breaks, Fort Ethan Allen has been and continues to be, a significant financial burden on the Town's distribution system. Most of the current water distribution system was installed in the early 1900s and is well over 120 years old. The condition of the pipe was observed while making repairs and found to be seriously deficient in places. The western portion of the system lies outside the Town of Essex, in the Town of Colchester but is legally part of the Town of Essex water system, having been deeded to the Town by the federal government in the 1970s.

To determine the extent of the problems and provide a phased solution, engineering costs need to be incurred for further investigation and design. The Department contracted with Aldrich and Elliott to complete the preliminary engineering report for this project. In this report, the recommendation was to take a phased approach for the construction due to the total project cost associated with completing the entire project. Construction of this project will likely take place over a three-to-four-year timeframe.

This is an ideal candidate for using DWSRF funding for staff has applied to the State to have this project placed on the Drinking Water State Revolving Fund, (DWSRF), Project Priority list for construction eligibility and loan forgiveness. The Town of Essex applied for, and received approval for a Step I engineering loan under the DWSRF program with approval from the selectboard and designs are currently underway with subsurface investigations currently taking place. Staff will recommend continuing on the DWSRF project path and apply for a Step II engineering loan when the Step I project has been completed.

Once there is a clear direction on project schedule, and costs have been estimated, the future direction of the project can be planned further out. Design Engineering for this project is expected to continue into FY 2026 and potentially early FY 2027. In order to move forward with a Step III Construction loan through the DWSRF program, this project will require a positive bond vote. It is not anticipated that construction would begin until late FY27 or FY28 at the earliest.

VT15/ Sand Hill Waterline

This project replaces older asbestos-cement waterline in the area of the intersection of Sand Hill Road and VT15. The section of waterline is beyond its useful life and VTrans has a pending project to provide a new intersection with traffic signals at this location. This section of Town waterline must be replaced before or during the VTrans project, or the road compaction equipment will likely have a negative impact on this pipe. The pipe material is old and subject to cracking and shear failure. Installation of new waterline is needed to prevent a pipe failure during or after the construction of the intersection. The water line designs are 95% complete and waiting for VTrans to provide further direction on the final design plans and project schedule. VTrans continues to push the project construction out to future years. The project is currently working through ROW and Design. The Town has been informed that this project was pushed back to FY27, possibly FY 28. This project construction cost is estimated at \$350,000.

Creek Road Waterline Replacement

This is a longer-term project where there is a current need to rehabilitate the roadway with new pavement and possibly subbase. Creek Road has a Pavement Condition Index value of 16 and is in need of reconstruction. The current watermain serving the homes along Creek Road is an 8-Inch Asbestos-Cement line that has a history of failure. It is recommended that the existing watermain be replaced prior to or in conjunction with the rehabilitation of the road. This project will require minimal scoping and the Town could go right to preliminary design, with final design and construction to follow the next fiscal year.

Birchwood Manor Waterline Loop

This is a longer-term project where discussions need to take place to determine if easements can be obtained to provide a second source of feed to the water system in this development. Currently, the development is fed via a single distribution line. With two recent water breaks in recent history, requiring staff to shut down the entire Birchwood Manor development, highlighted the need to provide a second interconnection at some point into the system. This project has been placed on hold to allow for other projects that need to be addressed before continuing with designs.

FY 2026 – FY 2030 Sewer Projects

Maple Street Gravity Sewer Rehabilitation

On March 26, 2025, Public Works was notified of a sink hole near one of our sewer manholes near Maple Street Park. Upon further inspection by staff, it was found that the concrete structure had failed, and surrounding material was falling into this structure, and

another one upstream. Work on replacing both drop manhole structures is ongoing and was complete April 25, 2025.

Due to this failure, the Public Works engineering team has researched alternatives for rehabilitation and initiated a plan to line all the concrete structures. We will continue to reach out to contractors that perform this work and eventually put a bid out this summer to perform this work. Our current research has estimated the costs for this project at \$250,000. This cost could increase or decrease some due to project scope and current contractor costs.

Susie Wilson Forcemain Flow Meter Vault

The sewer collection system within the Town of Essex enters the collection system within the City of Essex Junction at four locations. Two gravity locations in Shillingford Crossing and The Woodlands, and two directly by forcemain from the Alder Brook pump station and the Susie Wilson Road pump station. Sewer flows for the Town are reported to the city monthly. Accuracy of these readings is important both to fully account for flows leaving the Town system financially and to ensure accurate documentation of flows.

The Susie Wilson pump station is located entirely within the Town of Essex, and 99.9% of the flows received are from the Town. The Town currently monitors the Fort Ethan Allen pump station and reads all the water meters within the Susie Wilson corridor and Gauthier Industrial Park to account for all sewer flows. The flows reported can see variability and there is too much room for error. The proposed project would install a concrete vault with magnetic flow meter at a suitable location on the forcemain to meter all the flow currently entering the city from this portion of the Town's collection system. This new meter will provide accurate data both for monitoring of Town flows and the city billing for sewer treatment from the Town.

Alder Brook Forcemain Assessment

The sanitary sewer forcemain located on River Road carries sewer from the Alder Brook pump station to the city collection system. This forcemain is a 12-Inch Class 52 Ductile Iron pipe over a mile in length. The forcemain was installed in 1984 as part of the original sewer construction contract within the Town of Essex. Although this pipe is only 40 years old, there are concerns of corrosive soils in this area of Town. This could significantly impact the integrity of the pipe, affecting its longevity.

In addition to the potential for these corrosive soils, the Town has experienced high concentrations of Hydrogen Sulfide, (H₂S), at the discharge of the forcemain due to the long detention time in the forcemain and the breakdown of sewer during this time. High concentrations can lead to corrosion of concrete as seen with the recent repairs on Maple Street and corrosion of ferrous pipe materials like ductile iron.

Xylem is a company that provides a nondestructive pipe inspection process for the gas, water, and sewer industries. The "Smart Ball" technology allows utilities to assess the condition of pipelines with a low level of effort, identifying problem areas before they result

in larger failures. The Smart Ball platform is a free-swimming inspection tool used to detect leaks, gas pockets, and map pipelines. This tool can be used in pressurized water and wastewater pipelines without disrupting regular service. With the data collected using the Smart Ball, the department can focus on addressing any potential or existing leaks now, as a planned maintenance event, rather than waiting until it becomes a much larger problem.

This work will begin this month with locating the existing forcemain pipe and a few locations to install monitoring ports. The subcontractor will perform this inspection / study in late may, with a full report provided in June of this year.

Pump Station Controls Upgrade

This project is currently underway and scheduled to be completed FY27. This project is replacing controls located down in the dry wells of pump stations (a VOSHA confined space) to cabinets above grade. Work has continued on this project for several years now with three pump stations remaining to be upgraded.

Lang Farm/ Town Center Pump Station Upgrade Project.

This project was identified several years ago within a report entitled Wastewater Capacity Study by Hamlin Engineering. The “Lang Farm Pump Station” is currently at capacity and simple solutions like adding larger impellers will not suffice to meet anticipated future flows. Wastewater to this pump station comes from the current Town Center, the Essex Experience, the Inn at Essex, and most of the Woodlands. In the future, additional flows would also come from developable property at 80 and 90 Upper Main Street, north of VT15. A new pump station, discontinuance of some gravity and force main lines, and a new routing for a portion of the wastewater into the city was deemed the most cost-effective solution. This plan would also eliminate the need for upgrade of two, existing Town wastewater pump stations downstream of this area, Heritage Estates and Alder Lane.

The Town continues to work with the City of Essex Junction management team, city wastewater staff, and Hamlin Engineering to review and monitor existing gravity sewer flows within the city system that are impacted by the proposed redirect and verify the ability for the Town to discharge more wastewater into the city gravity sewer system without impacting the city’s existing flows and future needs. Hamlin Engineering has had some luck with flow study data collection but has ran into some issue with this data. More study is required to provide a clear design picture of the future system needs to ensure this redirection of sewer flows to the city can be completed. Once complete, a discussion will be had with the city and the direction of the new design will be selected, and a final design with anticipated construction schedule completed.

It is anticipated that the connection fees from the future growth anticipated under the ETC plan, including the development of 80 and 90 Upper Main Street could become a source of funding to replenish the funds used for the local share of this project. A allocation study is currently underway to verify the validity of the current connection fee or if a surcharge

may be required in addition to connection fees, for all new users of this new portion of the collection system.

Fort Ethan Allen Sewer Rehabilitation Project

The Town of Essex is the legal owner of the sewer system in the Fort – both within the Town of Essex and Colchester. All the existing gravity sewer system within Fort Ethan Allen was constructed in the early days of the Fort, (75+ years). This system, although intact, is nearing its useful life and is in need of rehabilitation before significant repairs are required. This project has been pushed back a year due to the failed sewer structures within the Town owned Maple Street gravity system.

There are a couple ways to approach the rehabilitation effort within this service area, conventional replacement, and trenchless methods like pipe bursting, slip lining, and cured in place pipe, (CIPP). Staff has researched all three, done the cost benefit, and recommends moving forward with CIPP. Staff has received a cost proposal to complete the entire FEA service area. Due to the costs of this project, staff would like to phase this work over a three-year period. Current cost estimates have the total project cost, over a three-year period at \$525,000.

Center Road Sewer Forcemain Rehabilitation Project

The existing 8-Inch CL 52 Ductile Iron sanitary sewer forcemain on Center Road, (VT RT 15), has had three breaks over the past few years. Because this section of forcemain is a critical component of the Town's sewer infrastructure within the Town Center area of the system, Public Works contracted for engineering services in FY2023 for the design of a new sanitary sewer forcemain along Center Road. Staff applied for CWSRF funding for design and construction for this project. The Town did receive \$23,400 in loan forgiveness for Step I and Step II engineering services.

This project met the requirements for funding on the States priority list and received a positive bond vote at Town Meeting. The State will provide SRF funding with a 2% interest rate. This project went out for bid early spring and the project was awarded to Courtland Construction. Work will begin on this project in early May with completion of construction to take place in August / September of 2025. The total project costs are expected to be \$1,250,000.

Chelsea Road Gravity Sewer Replacement

A section of gravity sewer on Chelsea Road has had a serious sag in the sewer line for over 30 years. It is monitored by Public Works for backups but three of these have occurred in the last 10 years. This is the only section of piping within the Town sewer system with this issue. More investigation needs to be conducted but the likely outcome is that some portion of the sewer line will have to be excavated and replaced. Due to scheduling and current work load, this project was pushed back. Maintenance crews will continue to make this section of gravity sewer line a priority and take extra effort to maintain this section of

sewer to ensure issues do not arise. Funds will be used starting in FY30 to perform the necessary site investigations and design to resolve this problem. This may be a candidate for future use of CWSRF funding.

Equipment Replacement

The department currently has five vehicle and equipment purchases proposed over the next five years. The towable generator, three maintenance trucks, and a sewer Jetter. Below is an inventory of our existing stock, with age. Equipment like the generator and the sewer-jetter sees minimal or seasonal use. If service and maintenance schedules are kept current, pieces of equipment like a sewer-jetter can be retained for 15 years and beyond. The departments newest vehicle is a 2017. Truck 603 and 604 are currently used as our daily maintenance trucks. Truck 605, is only used for emergency responses, containing all water and sewer repair materials and a full traffic control package with site lighting. The current plan mirrors the highway equipment replacement interval of 8 years for vehicles.

<u>Description</u>	<u>Make/Model</u>	<u>Model Year</u>	<u>Age (years)</u>
Towable Generator	Kohler 508E0VJ	1999	26
Truck 603	Ram 3500	2014	11
Truck 604	Ram 3500	2017	8
Truck 605	Ram 3500	2008	17
Sewer Jetter	John Beam 700	2010	15