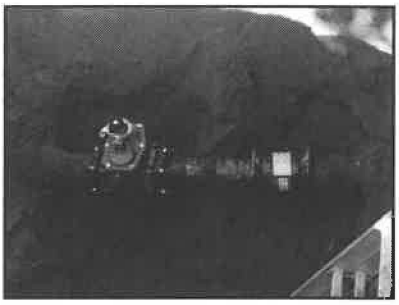
WATER AND WASTEWATER DEPARTMENT

The Bristol water system continues to operate in compliance with all state and federal drinking water standards. A consumer confidence report is generated each year that explains the quality of Bristol's water and terminology to help us understand what the Department of Environment Conservation requires we test for. It is available on our Website at www.bristolvt.org and at the Town Office.

The Bristol Selectboard also serves as the Water Commission. In this capacity, they review monthly budget reports, reports from our water operators, plan for infrastructure projects, and tend to the coordination of routine maintenance.

Pine Street Leak Repair

1905 Line at the Corner of Pine & Taylor



New Valve at the Corner of Pine & Taylor Replacing Old Valve

The Town continues to monitor for leaks and address repairs. The system participated in a free state-funded leak detection survey this summer resulting in one leak found at the hydrant on West Street.

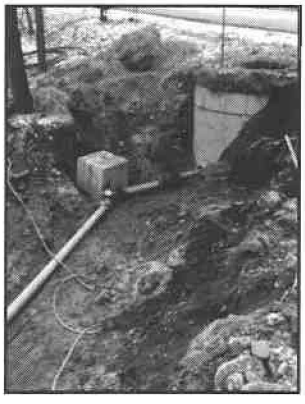
Several leak repairs were completed this year including:

- Repair of a leak in a service line on Pine Street;
- Replacement of a 100+ year old leaking valve on the corner of Pine and Taylor;
- Repair of a leaking service line on Taylor Ave.;
- Repair of a leaking service line on East Street;
- Replacement of a 100+ year old hydrant and valve addition on West Street near Paige and Campbell resulting in improved fire protection; and
- Repair of the leaking curb stop by Sargent's on Rocky Dale.

New Hydrant & Valve on West Street

We continue to monitor metered water use against water produced to achieve as little water loss and as much efficiency as possible.

Just before 2018 came to a close, Woodland Apartments, on Woodland Drive off Lovers Lane, connected to the system allowing them to abandon their well and benefit from the municipal water services. In addition, new water services were added on Meadow Lane and Devino Lane.



Woodland Apartments Connection

Selectboard meetings are held every other Monday night and the Water Commissioners hold an annual public meeting in the spring, where customers may voice concerns, ask questions, and make suggestions. That is when the budgets will also be approved. Customers may also contact the Town Office at 453-2410 any business day, and someone will be there to help.

The Core Area sewer system continues to serve the thirty-four properties located on Main Street and Prince Lane. The Selectboard also serves as the Sewer Commission and holds an annual public meeting and vote on the budget in the spring. In this capacity, they review monthly budget reports, reports from our wastewater operators, plan for infrastructure projects, and tend to the coordination of routine maintenance of the sewer system.

Per Green Mountain Engineering's recommendation in the annual inspection report, the dosing siphons were cleaned at the septic field this fall. Maintenance work was performed over the year to remove grease that was clogging various components of the system. In addition, the Town is working with businesses to continue to reduce grease coming into the system through routine internal grease trap maintenance.

Dosing Siphons Before Cleaning

Influent Hatch Clogged with Grease

Influent Hatch After Grease Removal and Cleaning

Green Mountain Engineering updated their 2007 study of options for increasing the capacity of the sewer system. The report identified four options as well as maintenance matters that will require attention in the coming year.

Vermont Utility Management Services (VTUMS) operates our water and wastewater systems as our contract operations firm. Cyrus Marsano is our designated operator and may be contacted via the Town Office at 453-2410.

Respectfully submitted,

Valerie Capels, Town Administrator
Jill Marsano, VTUMS
Cyrus Marsano, VTUMS

Water Department Capital Equipment Fund Long Range Plan

	2018-2019	2019-2020	2020-2021	2021-2022	2021-2022	2022-2023
Balance (6/30/18)	3,994	8,299	7,809	7,818	16,818	34,818
Appropriation	24,800	25,000	32,000	35,000	38,000	38,000
Estimated Interest	5	10	9			42
Other Revenue						
Total Available	28,799	33,309	39,818	42,818	54,818	72,860
	Replace 10-15 meters; replace leaking hydrant; refurbish high lift pump spare; repair low lift pump spare	*Replace 10-15 meters; replace hydrant; tranform 4" pump #1 to 2"; phase in SCADA panel replacement*	*Replace 10-15 meters; replace hydrant; replace low lift pump. Phase in SCADA panel replacement. Begin engineering for Pine Street water line replacement.*	*Replace 10-15 meters; replace hydrant. Upgrade pipe locator. Replace high lift pump. Engineering for Pine Street water line replacement.*	*Replace 10-15 meters; replace hydrant. Budget for unexpected repairs.*	*Replace 10-15 meters; replace hydrant. Budget for unexpected repairs.*
Equipment/Service	20,500	25,500	32,000	26,000	20,000	20,000
Closing Balance	8,299	7,809	7,818	16,818	34,818	52,860

The following project descriptions provide backup to the spreadsheet schedule for replacement of the Water Department's capital fund shown above. This is a planning tool and it is inevitable that circumstances will arise that require the plan to be altered. This plan is meant to be revisited each year, so adjustments, either financial, or in needs, may be made. The purpose of long range planning is to maintain the equipment and system in working order and to maintain a financial commitment. This plan was designed to reduce the need for bonding for all of our equipment and service needs. It does not reflect any emergency repairs. The Water Commission will be taking a close look at the system's captital needs in the coming year and for discussion at the annual Water District meeting.

2018-2019 Upgrade 10 -15 meters to a meter guaranteed to be accurate for 20 years (6,000). Replace leaking hydrant on West Street (6,000). Refurbish high lift pump (6,500); repair low lift pump spare (2,000).

2019-2020 Replace/upgrade 10-15 meters (6,000). Replace leaking hydrant on East Street (6,000). Tranform 4" pump #1 to 2" so that both high lift pumps #1 and #2 are indentical and interchangable (8,500). Phase in 30-year old SCADA panel replacement (unknown).

2020-2021 Replace 10-15 meters (6,000). Replace hydrant (6,000). Replace low lift pump (6,000). Phase in SCADA panel replacement (unknown). Begin process for engineering of Pine Street water line replacement (unknown + CWSRF planning loan).

2021-2022 Replace 10-15 meters (6,000). Replace hydrant (6,000). Upgrade pipe locator (4,000). Replace or rebuild a high lift pump (10,000). Engineering for Pine Street water line replacement (CWSRF planning loan).

Water District Budget

	2017-2018 BUDGET	2017-2018 ACTUAL	2018-2019 BUDGET	2018-2019 ACTUAL as of 12/31/18	2019-2020 PROPOSED
REVENUES					
Water Rents	270,709	251,610	252,000	65,617	257,600
Interest & Penalty	3,800	4,051	4,000	1,922	3,800
Water Service Connection Fees	500	4,077	500	1,000	2,000
Interest	-	-	-		-
Sugar Wood Revenue	625	1,038	950	-	950
Transfer In-Capital Asset	-	15,875	-	-	-
Miscellaneous Revenue	100	-	100	-	100
TOTAL REVENUES	**275,734**	**276,651**	**257,550**	**68,538**	**264,450**
	10.24%		-6.6%		2.68%
EXPENSES					
Personnel/Labor	350	2,499	2,000	857	2,000
Admin/Clerical Salaries	10,131	6,691	10,420	4,817	8,638
FICA/Medicare	775	685	810	404	669
Health Insurance	3,988	1,349	2,080	884	2,515
Retirement	747	394	770	-	648
Disability Insurance	111	52	115	56	97
Supplies	11,200	13,725	10,000	5,082	12,000
Computer Supplies	200	-	-	-	200
Meters, Touchpads, etc.	250	-	855	-	250
Electricity - Pump	35,000	30,650	33,000	11,972	35,000
Electricity - Basin St. Building	240	525	500	98	240
Operating Contract	68,803	66,266	66,150	33,079	69,458
Contracted Services	16,500	10,091	17,500	9,441	18,500
Rent at Town Garage	400	-	-	-	-
Postage & Office Supplies	1,500	250	1,000	29	750
Communications	600	563	600	563	600
Insurance	1,520	1,292	1,300	1,286	1,525
Building Overhead & Maintenance	8,000	2,753	7,000	2,400	6,000
Compliance Testing	2,000	1,280	2,000	1,390	2,000
Vt Water System Fee	4,700	3,311	4,000	2,077	5,000
Property Tax - Lincoln property	360	336	360	349	360
Bond and Note Payments	80,358	30,567	69,290	59,111	70,000
Capital Reserve Fund	25,000	25,000	24,800	-	25,000
Transfer to Capital Roads - Paving	2,500	2,500	2,500	400	2,500
Miscellaneous	500	16	500	450	500
TOTAL EXPENSES	**275,734**	**200,793**	**257,550**	**134,744**	**264,450**
	10.24%		-6.6%		2.68%

Sewer District Budget

	2017-2018 BUDGET	2017-2018 ACTUAL	2018-2019 BUDGET	2018-2019 ACTUAL as of 12/31/18	2019-2020 PROPOSED
REVENUES					
User Fees	40,500	43,718	41,500	21,130	42,000
Interest & Penalty Charge:	420	122	400	0	200
Misc. & Allocation Reven	0	250	0	0	200
TOTAL REVENUES	40,920	**44,090**	41,900	**21,130**	42,400
	1.10%		2.39%		1.19%
EXPENSES					
Admin/Clerical Salaries	2,724	2,529	2,815	1,347	2,800
FICA/Medicare	208	189	220	95	200
Health Insurance	997	569	600	299	650
Retirement	204	127	110	0	200
Disability Insurance	30	63	70	15	30
Operating Contract	9,592	9,450	9,450	4,725	9,923
Supplies	800	1,185	1,000	23	1,000
Insurance	202	186	205	191	213
Debt Retirement	11,874	1,527	11,886	10,791	12,300
Capital Reserve Fund	169	169	444	0	500
Maintenance & Septic Tai	11,100	10,352	11,100	6,526	11,284
Testing	1,200	612	1,000	0	1,200
Engineering	1,800	8,933	3,000	873	2,000
Miscellaneous	20	16	0	0	100
TOTAL EXPENSES	40,920	**35,907**	41,900	**24,884**	42,400
	1.10%		2.39%		1.19%