



Topsfield Water Department
Monthly Control Sheet
January 2020

	Commitments				Payments					Miscellaneous Transactions			Tax Liens	Balance Forward
Date	User Fees	Conn. Fees	Penaties	Misc. Charges	Manual	Lockbox	Electronic	Unibank	Bounced Checks	Refunds	Abatements			
											BOWC	TWD		
														234,956.58
01-Jan-20	-	-	-	-	-	-	-	(268.85)	-	-	-	-	-	234,687.73
02-Jan-20	-	-	-	-	-	(7,894.96)	-	(1,137.69)	-	-	-	-	-	225,655.08
03-Jan-20	119.00	-	-	-	(19,376.26)	(335.13)	-	(1,409.78)	-	-	-	-	-	204,652.91
04-Jan-20	-	-	-	-	-	-	-	(715.10)	-	-	-	-	-	203,937.81
05-Jan-20	-	-	-	-	-	-	-	(619.67)	-	-	-	-	-	203,318.14
06-Jan-20	-	-	-	-	(18,310.73)	(3,385.32)	-	(168.30)	-	-	-	-	-	181,453.79
07-Jan-20	-	-	-	-	-	(6,295.86)	-	(738.70)	-	-	-	-	-	174,419.23
08-Jan-20	-	-	-	-	(359.30)	(3,195.30)	-	(61.50)	-	-	-	-	-	170,803.13
09-Jan-20	778.44	-	-	-	(3,238.93)	(1,450.24)	-	(570.40)	-	-	-	-	-	166,322.00
10-Jan-20	-	-	-	-	(4,276.10)	(2,766.64)	-	-	-	-	-	(667.66)	-	158,611.60
11-Jan-20	-	-	-	-	-	-	-	(100.00)	-	-	-	-	-	158,511.60
12-Jan-20	-	-	-	-	-	-	-	(1,531.05)	-	-	-	-	-	156,980.55
13-Jan-20	-	-	-	-	-	(9,502.89)	-	(986.50)	-	-	-	-	-	146,491.16
14-Jan-20	231.75	-	-	-	(6,682.81)	-	-	(2,585.70)	-	-	-	-	-	137,454.40
15-Jan-20	153,316.04	-	-	-	-	(4,057.40)	(174.60)	(4,287.91)	-	-	-	-	-	282,250.53
16-Jan-20	140.10	-	-	-	(17,337.35)	(1,677.40)	-	(45.00)	-	-	-	-	-	263,330.88
17-Jan-20	23.19	-	-	-	-	(1,292.70)	-	(922.33)	-	1,573.68	-	-	-	262,712.72
18-Jan-20	-	-	-	-	-	-	-	-	-	-	-	-	-	262,712.72
19-Jan-20	-	-	-	-	-	-	-	(1,865.04)	-	-	-	-	-	260,847.68
20-Jan-20	-	-	-	-	-	-	-	(1,960.65)	-	-	-	-	-	258,887.03
21-Jan-20	16.50	-	-	-	-	(5,911.11)	-	(958.15)	-	-	-	-	-	252,034.27
22-Jan-20	-	-	-	-	-	-	-	(494.50)	-	-	-	-	-	251,539.77
23-Jan-20	-	-	-	-	-	(10,886.00)	-	(390.85)	-	-	-	(25.00)	-	240,237.92
24-Jan-20	1,757.20	-	-	-	-	(3,775.20)	-	(554.19)	-	-	-	(52.81)	-	237,612.92
25-Jan-20	253.47	-	-	-	-	-	-	(152.10)	-	-	-	-	-	237,714.29
26-Jan-20	-	-	-	-	-	-	-	(697.60)	-	-	-	-	-	237,016.69
27-Jan-20	13,569.93	-	-	-	(17,792.30)	(4,789.83)	-	(367.23)	-	-	-	(2,768.86)	-	224,868.40
28-Jan-20	-	-	-	-	-	-	-	(22.50)	-	-	-	-	-	224,845.90
29-Jan-20	-	-	-	-	-	(5,748.37)	-	(368.72)	-	-	-	-	-	218,728.81
30-Jan-20	209.40	-	-	-	(6,573.51)	(4,737.10)	-	(420.67)	-	-	-	(10.81)	-	207,196.12
31-Jan-20	-	-	-	-	-	(3,993.09)	-	(267.20)	-	-	-	-	-	202,935.83
Sub Totals	170,415.02	-	-	-	(93,947.29)	(81,694.54)	(174.60)	(24,667.88)	-	1,573.68		(3,525.14)	-	(32,020.75)
Totals	170,415.02				(200,484.31)					(1,951.46)			0.00	202,935.83



Topsfield Water Department
Statement of Revenues and Commitments
As of the last day of: January 2020

COMMITMENTS	This Month	Fiscal Year to Date
User Fees	170,415.02	1,351,523.61
Connections	-	-
Misc. Charges	-	1,000.00
Penalties	-	16,692.72
TOTAL	170,415.02	1,369,216.33

INCOME	This Month	Fiscal Year to Date
Manual Payments	(93,947.29)	(603,166.43)
Lockbox Payments	(81,694.54)	(541,182.24)
Electronic Transfers	(174.60)	(588.00)
Unibank Payments	(24,667.88)	(163,570.63)
Bounced Checks	-	1,347.78
TOTAL	(200,484.31)	(1,307,159.52)

ADJUSTMENTS	This Month	Fiscal Year to Date
Refunds	1,573.68	2,039.58
Abatements	(3,525.14)	(14,985.12)
TOTAL	(1,951.46)	(12,945.54)

TAX LIENS		
Tax Liens	-	(39,466.07)

NET TOTAL	(32,020.75)	49,111.27
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BALANCE FORWARD	234,956.58
THIS MONTH'S TRANSACTIONS	(32,020.75)
OUTSTANDING BALANCE	\$ 202,935.83

	<u>FY2020</u>	<u>FY2019</u>
ESTIMATED TOTAL INCOME	2,111,147.00	1,835,272.00
ACTUAL TOTAL INCOME	1,307,159.52	1,669,095.00
% REALIZED Y-T-D	61.9%	90.9%



TOPSFIELD WATER DEPARTMENT
MONTHLY COMMITMENTS
FY 2020

61000-13110 User Charges & Water Connections - Fees Receivable

For the Month of January 2020 in the amount of \$170,415.02

TO: Catherine Gabriel, Town Accountant

You are hereby notified that the **COMMITMENTS** in the amount shown above have this day been made by the Board of Water Commissioners. Included in this amount are water rates & fees, connection fees, miscellaneous charges and penalties.

DATE:

Philip Knowles, Chairman

Richard Stone, Clerk

Mark Gallagher

Water Department
Expense Budget for FY2020

12-Feb-20

Expended Period 1/13/2020 7:48:47 AM - 2/12/2020 7:48:47 AM

Budget Month: 8

		Budgeted	Revised	Expended This Period	Expended YTD	Available	Percent Remaining
Operating Budget							
E4501 Salary							
51120	Superintendent	103,920	103,920	7,932.80	63,462.40	40,457.60	39%
51490	Longevity, Superintendent	1,750	1,750	0.00	1,750.00	0.00	0%
Sub Total Salary		105,670	105,670	7,932.80	65,212.40	40,457.60	38%
E4502 Wages							
51130	Laborers, Full Time	122,552	122,552	9,355.08	74,840.64	47,711.36	39%
51131	Clerical, Full Time	38,079	38,079	2,906.80	23,254.40	14,824.60	39%
51140	Laborers, Part Time W/E	0	0	0.00	0.00	0.00	N/A
51141	Seasonal Wages	6,000	6,000	369.30	4,093.09	1,906.91	32%
51200	Outside Help, Labor	11,649	11,649	0.00	1,772.90	9,876.10	85%
51310	Overtime, Labor	93,187	93,187	6,636.25	60,691.01	32,495.99	35%
51490	Longevity	1,250	1,250	0.00	1,737.50	-487.50	-39%
51970	Meal Allowance	1,400	1,400	220.00	1,910.00	-510.00	-36%
Sub Total Wages		274,117	274,117	19,487.43	168,299.54	105,817.46	39%
E4505 Other							
51920	Uniform Allowance	2,730	2,730	0.00	2,730.00	0.00	0%
52100	Electricity	115,000	115,000	7,051.52	46,995.82	68,004.18	59%
52106	PWB Electricity	3,000	3,000	248.07	1,887.34	1,112.66	37%
52150	Gas	2,600	2,600	754.72	3,269.38	-669.38	-26%
52156	PWB Gas	2,200	2,200	380.12	1,159.90	1,040.10	47%
52400	Building Maintenance	750	750	0.00	137.62	612.38	82%
52406	PWB Building Maintenance	2,800	2,800	188.25	2,570.18	229.82	8%
52415	Property Maintenance, Wellfi	14,000	14,000	581.25	4,897.01	9,102.99	65%
52416	PWB Cleaning	700	700	46.00	507.00	193.00	28%
52420	Systems Maintenance	16,000	16,000	2,872.45	11,489.38	4,510.62	28%
52430	Systems Maintenance, Emerg	25,000	25,000	894.42	15,270.90	9,729.10	39%
52450	Vehicle Maintenance	2,000	2,000	136.58	1,003.80	996.20	50%
52510	Equipment Maintainance	500	500	0.00	530.89	-30.89	-6%
52520	Radio Maintenance	1,000	1,000	0.00	206.25	793.75	79%
52700	Equipment Rental	1,500	1,500	0.00	1,516.88	-16.88	-1%
52720	Street Paving, Contract.	3,500	3,500	0.00	0.00	3,500.00	100%
52750	Security, Contracted	7,094	7,094	0.00	4,429.28	2,664.72	38%
52940	Waste Disposal	2,500	2,500	1,080.00	3,731.00	-1,231.00	-49%
53050	Annual DEP Maintainence	10,000	10,000	5,950.00	10,348.43	-348.43	-3%
53110	Engineering	0	0	0.00	0.00	0.00	N/A
53120	Water Testing	26,000	26,000	6,657.00	20,362.74	5,637.26	22%
53150	Contract Clerical Service	0	0	0.00	0.00	0.00	N/A
53400	Telephone	4,800	4,800	639.85	3,167.74	1,632.26	34%
53430	Postage	6,000	6,000	0.00	3,679.88	2,320.12	39%
53450	Advertising	1,000	1,000	0.00	0.00	1,000.00	100%
53800	DEP Volume Assessment	1,500	1,500	0.00	0.00	1,500.00	100%
53801	Lock Box	1,600	1,600	0.00	443.20	1,156.80	72%
53806	PWB Tank Cleaning	250	250	0.00	0.00	250.00	100%
53810	Water Treatment Services	1,000	1,000	0.00	0.00	1,000.00	100%
53870	Police Detail	2,000	2,000	1,248.00	2,652.00	-652.00	-33%
54100	Gasoline	5,500	5,500	0.00	0.00	5,500.00	100%
54200	Office Supplies	3,500	3,500	213.81	1,231.25	2,268.75	65%

		Budgeted	Revised	Expended This Period	Expended YTD	Available	Percent Remaining
54210	Forms & Printing	7,500	7,500	0.00	1,781.05	5,718.95	76%
54300	Building Supplies	1,000	1,000	0.00	1,755.23	-755.23	-76%
54506	PWB Custodial Supplies	400	400	0.00	285.34	114.66	29%
54800	Vehicular Supplies	1,000	1,000	0.00	630.66	369.34	37%
55300	Public Works Supplies	18,000	18,000	4,163.45	38,949.27	-20,949.27	-116%
55310	Meters	30,000	30,000	2,831.83	24,118.89	5,881.11	20%
55800	Water Treatment Supplies	65,000	65,000	6,375.03	34,126.74	30,873.26	47%
55820	Safety Gear	1,500	1,500	0.00	3,637.39	-2,137.39	-142%
55860	Computer Software	5,000	5,000	1,320.00	5,387.04	-387.04	-8%
57100	In State Travel	0	0	0.00	0.00	0.00	N/A
57200	Out of State Travel	0	0	0.00	0.00	0.00	N/A
57300	Dues, Conferences, Licenses	4,000	4,000	0.00	2,336.96	1,663.04	42%
57810	Water Conservation Program	0	0	0.00	0.00	0.00	N/A
58500	Additional Equipment	5,000	5,000	388.24	4,541.54	458.46	9%
58510	Computer	5,000	5,000	1,689.95	8,059.88	-3,059.88	-61%
58700	Replacement Equipment	5,000	5,000	0.00	859.00	4,141.00	83%
Sub Total Other		414,424	414,424	45,710.54	270,686.86	143,737.14	35%
Total Operating Budget		794,211	794,211	73,130.77	504,198.80	290,012.20	37%
Reserves							
E4515 Unanticipated Emergenci							
52730	Unanticipated Emerg.	100,000	100,000	1,204.68	24,901.59	75,098.41	75%
Sub Total Unanticipated Emerge		100,000	100,000	1,204.68	24,901.59	75,098.41	75%
E4590 Reserve Fund							
52730	Reserve Fund	50,000	50,000	0.00	0.00	50,000.00	100%
Sub Total Reserve Fund		50,000	50,000	0.00	0.00	50,000.00	100%
Total Reserves		150,000	150,000	1,204.68	24,901.59	125,098.41	83%
Debt Service							
E4591 Multipurpose, Interest							
59195	Interest	342,695	342,695	0.00	105,865.00	236,830.00	69%
Sub Total Multipurpose, Interest		342,695	342,695	0.00	105,865.00	236,830.00	69%
E4593 Multipurpose, Principal							
59195	Principal	529,000	529,000	0.00	340,000.00	189,000.00	36%
Sub Total Multipurpose, Princip		529,000	529,000	0.00	340,000.00	189,000.00	36%
E4594 Short-Term Debt							
59210	Principal	0	0	0.00	0.00	0.00	N/A
59250	Debt Issuance Cost	5,000	5,000	0.00	0.00	5,000.00	100%
59251	Interest	115,375	115,375	0.00	0.00	115,375.00	100%
Sub Total Short-Term Debt		120,375	120,375	0.00	0.00	120,375.00	100%
Total Debt Service		992,070	992,070	0.00	445,865.00	546,205.00	55%
Grand Total		1,936,281.00	1,936,281.00	74,335.45	974,965.39	961,315.61	50%

Warrant Articles

Water Department

Fiscal Year: 2020

Period Start: 13-Jan-20

Period End: 12-Feb-20

	Appropriation	Revised	Period Total	Fiscal Total	Total Spent	Remainder	Percent
36000 Prospect Street & River Road Water Main Improvements							
88003 Construction	1,600,000.00	1,070,000.00	0.00	94,235.44	980,941.61	89,058.39	8.3%
	1,600,000.00	1,070,000.00	0.00	94,235.44	980,941.61	89,058.39	8.3%
E4580 Water Warrant Articles							
88049 FY19STM/A9 Prospect Street/River Ro	300,000.00	300,000.00	0.00	79,204.56	79,204.56	220,795.44	73.6%
88050 FY20A15 Water System Improvements	100,000.00	100,000.00	0.00	0.00	0.00	100,000.00	100.0%
88051 FY20/A16 Meter Reading System	25,000.00	25,000.00	0.00	0.00	0.00	25,000.00	100.0%
88052 FY20/A17 North Street Drilling	100,000.00	100,000.00	0.00	0.00	0.00	100,000.00	100.0%
88053 FY20/A18 Front End Loader	15,000.00	15,000.00	0.00	15,000.00	15,000.00	0.00	0.0%
	540,000.00	540,000.00	0.00	94,204.56	94,204.56	445,795.44	95.0%

Water Treatment Plant Project

Water Department

Fiscal Year: 2020

Period Start: 13-Jan-20

Period End: 12-Feb-20

	Appropriation	Revised	Period Total	Fiscal Total	Total Spent	Remainder	Percent
38600 A3/17STM Water Treatment Plant Construction							
58300 Owner's Project Manager	259,000.00	259,000.00	573.50	4,648.02	148,882.47	110,117.53	42.5%
58310 Engineering	782,166.00	782,166.00	222.15	9,066.22	761,631.72	20,534.28	2.6%
58320 Transmission Mains	1,524,629.85	1,524,629.85	0.00	0.00	1,486,421.24	38,208.61	2.5%
58330 Plant Construction	7,246,000.00	7,246,000.00	0.00	170,634.37	7,164,009.18	81,990.82	1.1%
58380 Miscellaneous	588,204.15	588,204.15	105.70	78,298.70	237,774.64	350,429.51	59.6%
	10,400,000.00	10,400,000.00	901.35	262,647.31	9,798,719.25	601,280.75	8.2%



Town of Topsfield

Task Sheet Report - Water Department

January 2020

Category	Andrew Dwinell	Anne-Marie Yeo	Ben Reuell	Gary Wildes	Gregory Krom	Ken Thompson	Travis Fontaine	Total
Accrued Time								
Holidays		12	8		16		16	52
Sick							24	24
Vacation			8		11			19
		12	16		27		40	95
Administrative								
Accrual Tracking		2						2
Charts							13	13
Contracts					2			2
Correspondence		18						18
Data Tracking					2			2
File Maintenance		15			3			18
Meeting Prep.		3			13			16
Meetings		2			12			14
Plan Review					2			2
Purchasing/Procurement					15			15
Training							3	3
		40			49		16	105
Billing								
Bill Prep.					2			2
Meter Problems						16	2	18
Meter Reading							1	1
Meter Reading Radio						12	2	14
Other					2			2
					4	28	5	37
Building Maintenance								
Annual							2	2
Preventative						28		28
Repairs					2			2
Security					2			2
					4	28	2	34
Computer Systems								
Assistance					1			1
Networking					2			2
Repairs					8			8
					11			11



Town of Topsfield
Task Sheet Report - Water Department
January 2020

Category	Andrew Dwinell	Anne-Marie Yeo	Ben Reuell	Gary Wildes	Gregory Krom	Ken Thompson	Travis Fontaine	Total
Customer Service								
Billing Questions		5			7		1	13
Dispute Resolution					2			2
High Use Investigation							4	4
Lien Requests		6						6
Title 5 Requests		4						4
Water Quality Questions					2			2
Water Service Flushing							1	1
		15			11		6	32
DEP Projects								
Lead & Copper Rule Sampling							2	2
Other							1	1
							3	3
Equipment Maintenance								
Annual							3	3
Other							2	2
							5	5
Financials								
Other		3						3
Payment Processing		23						23
Payroll/Bills		20			3			23
		46			3			49
Fire Department								
Fire Call							1	1
							1	1
Mapping								
CAD/Maps					8			8
					8			8
PFAS Project								
Testing					2		2	4
					2		2	4
Public Service								
Markouts/DigSafe							3	3
Other					2		1	3
Public Records Request		11			5			16
		11			7		4	22



Town of Topsfield

Task Sheet Report - Water Department

January 2020

Category	Andrew Dwinell	Anne-Marie Yeo	Ben Reuell	Gary Wildes	Gregory Krom	Ken Thompson	Travis Fontaine	Total
Quality Control								
Bacteria Sampling							17	17
Other							4	4
pH Testing							8	8
Phosphates							2	2
Records Management							3	3
							34	34
Road Maintenance								
Patching				1				1
Trench Repair							2	2
				1			2	3
Special Projects								
North Street Wellfield Exploration					1			1
					1			1
Water Controls								
Alarm Testing					4		3	7
Alarms					1		2	3
SCADA Apps					2			2
SCADA System					4			4
					11		5	16
Water Distribution								
Hydrant Repair							2	2
Leak Detection					11		2	13
Meter Replacements							6	6
Service Repair					3		6	9
Tanks							2	2
Water Main Repair	13				3			16
	13				17		18	48
Water Supply								
Dam Management							2	2
Vacuum System							2	2
							4	4
Water Treatment								
Analyzer Calibration							3	3
Analyzer Maintenance							2	2
Chlorine					1			1



Town of Topsfield
Task Sheet Report - Water Department
January 2020

Category	Andrew Dwinell	Anne-Marie Yeo	Ben Reuell	Gary Wildes	Gregory Krom	Ken Thompson	Travis Fontaine	Total
Filters					1			1
Fluoride							1	1
KOH							3	3
Recycling System					4		1	5
Sequestrant							1	1
WTP Staffing			230		70		81	381
			230		76		92	398
Grand Total	13	124	246	1	231	56	239	910
Total Monthly Work Hours (40 hrs/wk)	184							

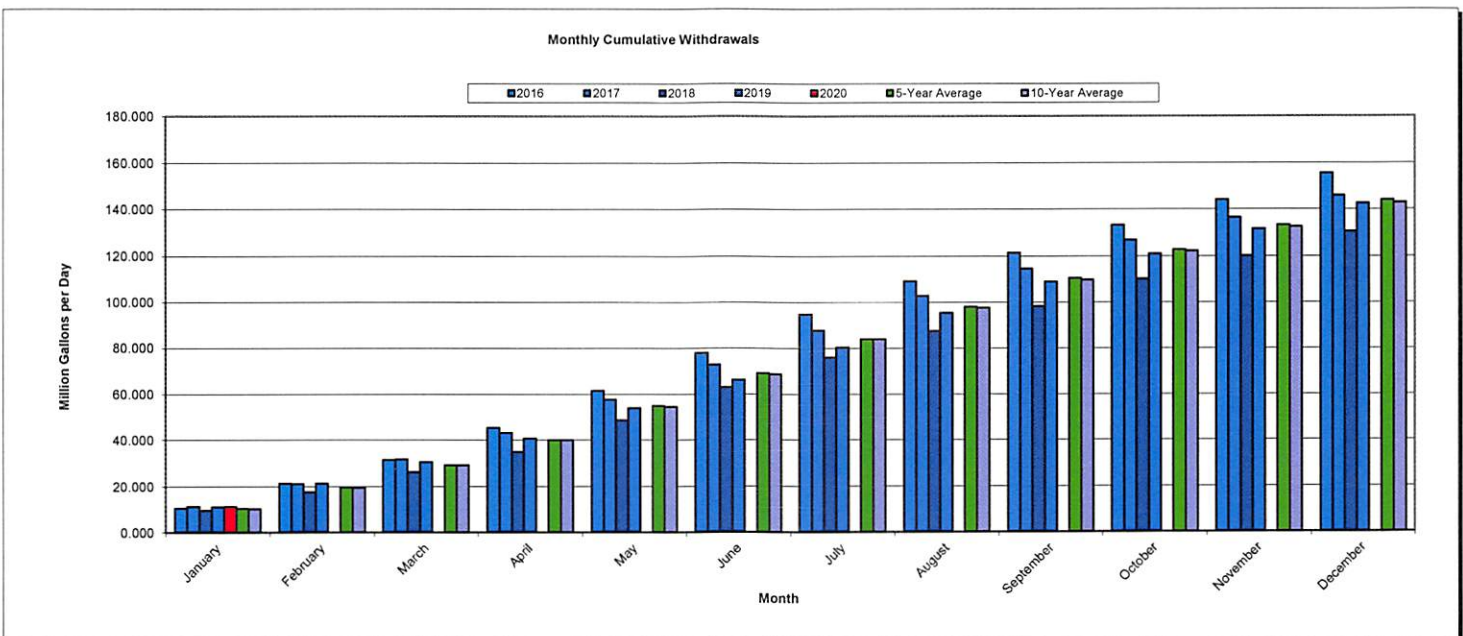
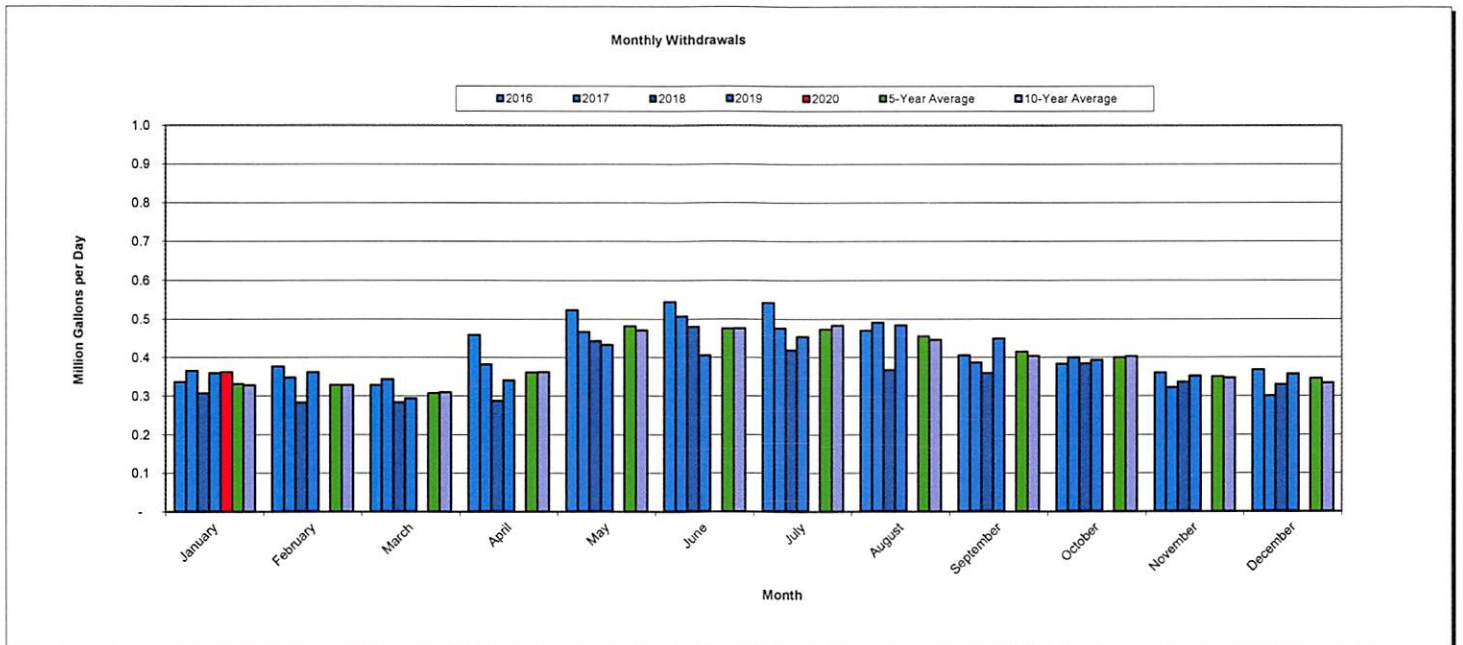
Topsfield Water Department

Annual Withdrawal Report

Calendar Year

2020

Month	North Street	Perkins Row	Raw Total	WTP	Total	Error	Month AGD	5-Year Average	10-Year Average	Running Average	Historical Rank
January	6.443	4.155	10.598	11.212	11.212	5%	0.362	0.331	0.328	0.362	53%
February	-	-	-	-	-			0.329	0.329	0.320	
March	-	-	-	-	-			0.307	0.310	0.330	
April	-	-	-	-	-			0.361	0.361	0.330	
May	-	-	-	-	-			0.482	0.471	0.330	
June	-	-	-	-	-			0.475	0.476	0.330	
July	-	-	-	-	-			0.473	0.483	0.330	
August	-	-	-	-	-			0.455	0.446	0.330	
September	-	-	-	-	-			0.415	0.403	0.330	
October	-	-	-	-	-			0.400	0.402	0.330	
November	-	-	-	-	-			0.351	0.347	0.330	
December	-	-	-	-	-			0.345	0.334	0.320	
Total	6.443	4.155	10.598	11.212	11.212		0.362	Indicates source of monthly total			



FY 2019 TOPSFIELD WATER ENTERPRISE FUND BUDGET

					FY18	FY19	FY20	FY20	FY21	FY21	FY21	FY21	FY21
					EXPENSES	EXPENSES	APPROPRIATION	EXPENSES YTD 12/31/2019	LEVEL FUNDED BUDGET	CHANGES/ GROWTH	PROPOSED DEPT BUDGET	% Change	BUDGET NOTES
WATER ENTERPRISE FUND													
061	E4501	51120	SALARY	SUPERINTENDENT, APPOINTED	93,891.20	98,404.80	103,920.00	47,596.80	103,920.00	4,155.00	108,075.00	4.00%	
	E4501	51490	SALARY	LONGEVITY	1,500.00	1,750.00	1,750.00	1,750.00	1,750.00	-	1,750.00	0.00%	
					95,391.20	100,154.80	105,670.00	49,346.80	105,670.00	4,155.00	109,825.00	3.93%	-
061	E4502	51130	WAGES	LABORERS, FULL TIME	115,354.72	118,191.66	122,552.00	56,130.48	122,552.00	-	122,552.00	0.00%	
	E4502	51131	WAGES	CLERICAL, FULL TIME	34,394.88	36,044.32	38,079.00	17,440.80	38,079.00	1,506.00	39,585.00	3.95%	
	E4502	51141	WAGES	SEASONAL WAGES	3,460.29	4,542.76	6,000.00	2,646.66	6,000.00	300.00	6,300.00	5.00%	
	E4502	51200	WAGES	OUTSIDE HELP, LABOR	698.73	7,791.88	11,649.00	1,124.80	11,649.00	1.00	11,650.00	0.01%	
	E4502	51310	WAGES	OVERTIME	37,438.71	53,157.78	93,187.00	47,710.84	93,187.00	(26,687.00)	66,500.00	-28.64%	Assuming water to run WTP unattended is issued
	E4502	51490	WAGES	LONGEVITY	987.50	987.50	1,250.00	1,487.50	1,250.00	500.00	1,750.00	40.00%	
	E4505	51920	EXPENSE	UNIFORM ALLOWANCE	2,730.00	2,730.00	2,730.00	2,730.00	2,730.00	-	2,730.00	0.00%	
	E4505	51970	EXPENSE	MEAL ALLOWANCE	900.00	2,270.00	1,400.00	1,460.00	1,400.00	1,600.00	3,000.00	114.29%	
					195,964.83	225,715.90	276,847.00	130,731.08	276,847.00	(22,780.00)	254,067.00	-8.23%	-
WATER SALARY & WAGES:					291,356.03	325,870.70	382,517.00	180,077.88	382,517.00	(18,625.00)	363,892.00	-4.87%	-
061	E4505	52100	EXPENSE	ELECTRICITY	41,066.65	52,495.32	115,000.00	27,755.77	115,000.00	(20,000.00)	95,000.00	-17.39%	FY20 WTP Electrical Estimate too high
	E4505	52106	EXPENSE	PUBLIC WORKS BLDG ELECTRICITY	8,396.87	8,098.60	3,000.00	1,349.61	3,000.00	3,000.00	6,000.00	100.00%	PWB Booster station electrical costs
	E4505	52150	EXPENSE	GAS	1,825.63	5,050.84	2,600.00	6,611.81	2,600.00	900.00	3,500.00	34.62%	
	E4505	52156	EXPENSE	PUBLIC WORKS BLDG GAS	2,174.65	2,351.06	2,200.00	405.80	2,200.00	200.00	2,400.00	9.09%	
	E4505	52400	EXPENSE	BUILDING MAINTENANCE	2,604.85	3,085.50	750.00	137.62	750.00	250.00	1,000.00	33.33%	
	E4505	52406	EXPENSE	PUBLIC WORKS BLDG MAINT BUILD	5,117.36	4,920.48	2,800.00	1,814.43	2,800.00	700.00	3,500.00	25.00%	
	E4505	52415	EXPENSE	PROPERTY MAINTENANCE	13,397.60	3,936.80	14,000.00	4,315.76	14,000.00	-	14,000.00	0.00%	
	E4505	52416	EXPENSE	PUBLIC WORKS BLDG CLEANING SER	230.00	414.00	700.00	269.00	700.00	105.00	805.00	15.00%	
	E4505	52420	EXPENSE	SYSTEMS MAINTENANCE	30,527.95	23,872.95	16,000.00	8,499.43	16,000.00	-	16,000.00	0.00%	
	E4505	52430	EXPENSE	SYSTEMS EMERGENCY MAINTENANCE	20,250.97	20,177.03	25,000.00	14,376.48	25,000.00	-	25,000.00	0.00%	
	E4505	52450	EXPENSE	VEHICLE MAINTENANCE	2,072.54	5,819.55	2,000.00	732.22	2,000.00	-	2,000.00	0.00%	
	E4505	52510	EXPENSE	EQUIPMENT MAINTENANCE	534.72	-	500.00	159.45	500.00	-	500.00	0.00%	
	E4505	52520	EXPENSE	RADIO MAINTENANCE	-	-	1,000.00	206.25	1,000.00	-	1,000.00	0.00%	
	E4505	52700	EXPENSE	EQUIPMENT RENTAL	900.00	3,289.51	1,500.00	1,516.88	1,500.00	500.00	2,000.00	33.33%	
	E4505	52720	EXPENSE	STREET PAVING, CONT.	-	-	3,500.00	125.00	3,500.00	4,500.00	8,000.00	128.57%	Additional fire & burglar monitoring for PWB & WTP
	E4505	52750	EXPENSE	SECURITY, CONTRACTED	5,005.47	5,209.60	7,094.00	2,967.93	7,094.00	(1,094.00)	6,000.00	-15.42%	
	E4505	52940	EXPENSE	WASTE DISPOSAL	1,559.40	2,274.55	2,500.00	2,246.00	2,500.00	3,500.00	6,000.00	140.00%	Additional waste removal cost at WTP
	E4505	53050	EXPENSE	ANNUAL D.E.P. MAINT.	9,838.67	1,938.00	10,000.00	1,770.43	10,000.00	(1,000.00)	9,000.00	-10.00%	
	E4505	53110	EXPENSE	ENGINEERING	1,529.80	-	-	-	-	-	-	-	
	E4505	53120	EXPENSE	WATER TESTING	17,723.43	20,743.85	26,000.00	13,498.24	26,000.00	11,000.00	37,000.00	42.31%	Additional monitoring for PFAs
	E4505	53400	EXPENSE	TELEPHONE	4,503.74	4,969.38	4,800.00	2,062.00	4,800.00	200.00	5,000.00	4.17%	
	E4505	53420	EXPENSE	SYSTEM PRINTS	-	184.80	-	-	-	-	-	-	
	E4505	53430	EXPENSE	POSTAGE	4,563.93	5,816.00	6,000.00	3,523.23	6,000.00	-	6,000.00	0.00%	
	E4505	53450	EXPENSE	ADVERTISING	1,496.40	372.76	1,000.00	-	1,000.00	-	1,000.00	0.00%	
	E4505	53800	EXPENSE	DEP VOLUME ASSESSMENT	1,237.63	1,302.97	1,500.00	-	1,500.00	-	1,500.00	0.00%	
	E4505	53801	EXPENSE	LOCK BOX BANK SERVICES	1,371.92	1,341.14	1,600.00	443.20	1,600.00	-	1,600.00	0.00%	
	E4505	53806	EXPENSE	PUBLIC WORKS BLDG TANK PUMPING	87.50	-	250.00	-	250.00	-	250.00	0.00%	
	E4505	53810	EXPENSE	WATER TREATMENT SERVICES	-	199.16	1,000.00	-	1,000.00	-	1,000.00	0.00%	
	E4505	53870	EXPENSE	POLICE SPECIAL DETAIL	2,856.00	1,248.00	2,000.00	1,404.00	2,000.00	-	2,000.00	0.00%	
	E4505	54100	EXPENSE	GASOLINE	5,990.00	4,939.33	5,500.00	-	5,500.00	-	5,500.00	0.00%	
	E4505	54200	EXPENSE	OFFICE SUPPLIES	3,371.18	6,747.41	3,500.00	853.80	3,500.00	500.00	4,000.00	14.29%	
	E4505	54210	EXPENSE	FORMS & PRINTING	4,823.38	6,764.40	7,500.00	1,897.96	7,500.00	-	7,500.00	0.00%	
	E4505	54300	EXPENSE	BUILDING SUPPLIES	-	-	1,000.00	1,755.23	1,000.00	-	1,000.00	0.00%	
	E4505	54506	EXPENSE	PUBLIC WORKS CUSTODIAL SUPPLIE	251.21	208.79	400.00	285.34	400.00	-	400.00	0.00%	
	E4505	54800	EXPENSE	VEHICULAR	569.52	1,455.95	1,000.00	577.29	1,000.00	500.00	1,500.00	50.00%	
	E4505	55300	EXPENSE	PUBLIC WORKS SUPPLIES	28,570.46	35,410.85	18,000.00	29,616.05	18,000.00	2,000.00	20,000.00	11.11%	
	E4505	55310	EXPENSE	METERS	30,129.12	27,345.35	30,000.00	19,548.06	30,000.00	-	30,000.00	0.00%	
	E4505	55800	EXPENSE	WATER TREATMENT SUPPLIES	63,357.85	59,894.54	65,000.00	24,109.77	65,000.00	(9,000.00)	56,000.00	-13.85%	Treatment chemical savings due to aeration
	E4505	55820	EXPENSE	SAFETY GEAR	908.01	1,587.07	1,500.00	3,637.39	1,500.00	-	1,500.00	0.00%	
	E4505	55860	EXPENSE	COMPUTER SOFTWARE	5,414.92	4,217.01	5,000.00	876.10	5,000.00	2,000.00	7,000.00	40.00%	Additional mapping software expenses

FY 2019 TOPSFIELD WATER ENTERPRISE FUND BUDGET

				FY18	FY19	FY20	FY20	FY21	FY21	FY21	FY21	FY21
				EXPENSES	EXPENSES	APPROPRIATION	EXPENSES YTD	LEVEL FUNDED BUDGET	CHANGES/ GROWTH	PROPOSED DEPT BUDGET	% Change	BUDGET NOTES
E4505	57100	EXPENSE	WAT TRAVEL, MTGS, CONF (IN)			-		-	-	-		
E4505	57300	EXPENSE	WAT DUES, PUBL & MMBRSHPS	3,023.33	2,769.33	4,000.00	1,836.96	4,000.00	-	4,000.00	0.00%	
					280.00				-	-		
E4505	57810	EXPENSE	WATER CONSERVATION PROGRAM			-		-	-	-		
E4505	58500	EXPENSE	ADDITIONAL EQUIPMENT	491.38	3,660.99	5,000.00	4,153.20	5,000.00	-	5,000.00	0.00%	
E4505	58510	EXPENSE	COMPUTER	6,747.93	1,628.01	5,000.00	6,362.98	5,000.00	-	5,000.00	0.00%	
E4505	58700	EXPENSE	REPLACEMENT EQUIPMENT	6,349.92	1,858.51	5,000.00	859.00	5,000.00	-	5,000.00	0.00%	
E4505	59600	EXPENSE	TRANSFER OUT	-	159,760.00				-			
				340,871.89	497,639.39	411,694.00	192,559.67	411,694.00	(1,239.00)	410,455.00	-0.30%	
E4515	52730		UNANTICIPATED EMERGENCY	59,452.58	-	100,000.00		100,000.00	130,000.00	230,000.00	130.00%	Additional labor for manned operation of WTP if needed
E4590	58800		ENTERPRISE RESERVE FUND	-	-	50,000.00		50,000.00	-	50,000.00	0.00%	
E4591	59195		DEBT INTEREST - WATER 2011	21,192.00	131,949.71	342,695.00	174,173.13	342,695.00	61,430.00	404,125.00	17.93%	Long-term bond costs
E4593	59195		DEBT PRINCIPAL - WATER 2011	79,500.00	152,500.00	529,000.00	260,000.00	529,000.00	126,000.00	655,000.00	23.82%	
E4594	59210		S/T DEBT PRINCIPAL	207,000.00		-		-	-	-		
E4594	59250		DEBT SERVICE	-		5,000.00		5,000.00	(5,000.00)	-	-100.00%	Short-term converted to long-term
E4594	59251		BAN INTEREST	29,430.24	273,883.57	115,375.00	35,953.98	115,375.00	(115,375.00)	-	-100.00%	
WATER EXPENSES:				737,446.71	1,055,972.67	1,553,764.00	662,686.78	1,553,764.00	195,816.00	1,749,580.00	12.60%	-
TOTAL WATER ENTERPRISE FUND:				1,028,802.74	1,381,843.37	1,936,281.00	842,764.66	1,936,281.00	177,191.00	2,113,472.00	9.15%	-

Topsfield Water Department

PFAS Screening Test Results

Feb-20

Parameter	9/24/2019			10/24/2019 Plant Finished Water	12/20/2019					
	Raw Water				Raw Water		Plant Results			
	North Street	Perkins Row	BS Plant		North Street	Perkins Row	Raw	Filter Top	PreClear	Finished
PFBS	3.29	2.48	2.92	2.95	2.49	2.06	2.03	2.38	2.19	2.34
PFHxA	3.77	7.40	5.30	5.59	2.58	4.73	3.50	3.55	3.26	3.38
HFPO-DA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PFHpA	3.63	1.90	2.90	3.55	2.59	ND	2.11	2.16	2.04	2.06
PFHxS	ND	2.06	ND	ND	ND	2.09	ND	ND	ND	ND
ADONA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PFOA	13.40	6.83	10.60	13.60	9.11	5.88	7.80	8.35	7.26	7.60
PFNA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PFOS	4.25	5.90	5.06	7.21	3.41	5.90	5.06	4.48	4.08	4.48
PFDA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9Cl-PF#ONS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NMeFOSAA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PFUnA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NEtFOSAA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PFDoA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11Cl-PF3OUdS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PFTTrDA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PFTA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PFOA/PFOS Total	17.70	12.70	15.70	20.81	12.52	11.78	12.86	12.83	11.34	12.08
Total Detections	28.34	26.57	26.78	32.90	20.18	20.66	20.50	20.92	18.83	19.86
MassDEP Total	21.28	16.69	18.56	24.36	15.11	13.87	14.97	14.99	13.38	14.14
MassDEP Limit				20.00						20.00

all results shown in parts per trillion (ppt)

**Topsfield Water Department
Superintendent's Report
February 12, 2020**

1. Leaks & Breaks

A number of leaks were repaired in the last month saving approximately 25 gallons per minute. A private service leak was repaired at 139 Ipswich Road and two Town owned service leaks were repaired, one on Perkins Row and one on Towne Lane.

Also, one of the repair couplings installed during the last main break at 100 High Street was leaking and had to be replaced. A couple of these repairs have leaked in the past few years. Typically, the leak is on the concrete pipe side of the repair coupling which is likely due to insufficient tightening of the clamp. This is likely due to the risk of cracking the pipe if the clamp is overtight. We've purchased a couple of torque wrenches to make sure fittings are tightened to the proper level.

A saddle failed at 10 Parsonage Lane this past weekend. It appears the failure is due to stray current traveling down the service line and corroding the cast iron saddle and steel clamps. One of the two steel clamps eventually failed. This may have leaked for a bit before the failure but usually the leak is minor until one or both of the saddle straps fail.

A fire hydrant was struck on Washington Street near Colrain Road as part of a road rage incident. I plan to have Bartlett handle the hydrant replacement and bill the insurance company directly.

2. Leak Detection and Unaccounted for Water (UAW)

A full round of leak detection was completed in the last month. All of the leaks have been repaired. Unaccounted for Water in January was lower than it was in December but remains over 10%. Early morning water use remains high. It was down to 92 gallons per minute following the leak repairs but has crept up to 105 gpm in the last week. We're double checking the hydrant that got hit to make sure that isn't leaking. An early morning use of 70 gpm corresponds to 10% UAW and 43 gpm is the estimated base use at 0% UAW. Another round of leak detection by a different vendor might be needed this spring.

3. PFAs

The results of December's PFA testing are in and look much better. All of the results were below the proposed MassDEP MCL and they don't show any increase in contamination as the water passes through the plant. Another round of tests was taken on February 10th so hopefully we'll have some more results in a couple of weeks. I plan to take another round of tests in March. If these results look OK then we'll stop testing inside the plant and collect samples from North Street, Perkins Row and the plant's finished water to help reduce testing expenses. I plan to take monthly samples through June and may reduce it to quarterly as long as the variability in the results diminishes. We should discuss public notification as the 2019 test results will have to be included in this year's water quality report that needs to be sent to customers by the end of June.

4. Water Meters

Attached is a histogram that shows the age of our metering fleet. It shows that two-thirds of the fleet are now over 10 years old. Meter replacements should get a greater share of our time once the plant can run unattended so I'd like to get closer to 10% replacement per year. The plan is to start with the larger users such as Masco RSD and Masco health care and then concentrate on the older residential

meters, particularly those in the northern section of town.

I recently requested quotes for upgrading our drive-by reading equipment and two vendors responded. The quote provided by EJ Prescott for a Sensus system the provider of existing meter reading system, was for \$25,000 and includes a vehicle reading unit, a handheld unit, 50 iPerl meters and 50 FlexNet radios. Ti-Sales provided a quote for Neptune system that includes the vehicle unit and associated software for just over \$10,000. The Neptune system is not compatible with the Sensus system and operates differently which raises some concerns.

The cost of the Sensus upgrade is higher than expected and I was hoping to purchase just the vehicle unit but I'm told this is \$23,000 by itself. The meters and radios included in the package are worth approximately \$15,000 so the packages are comparable and I'd say the Sensus quote, even though more expensive, is a better overall value and doesn't have any operational concerns.

Before committing to this purchase, I had discussion with the Board about metering issues including our particular needs, reading options, replacement options, etc.

5. Meter Disputes

We've been working to resolve a series of meter disputes due to high bills. Most of the meters in question tested OK. Two tested high by 1-2% which was very unusual so the accounts associated with those meters were adjusted. We've also received several leak abatements requests due mainly to leaking toilets.

6. Water Restriction By-law

I'd like to get the by-law updated but I'm not sure we have enough time before Town Meeting to give it its proper consideration. The existing by-law gives the Board the ability to implement water restrictions, just not due to low stream flow and not on private well owners. We should look at our by-laws in general and see if there are any that could be added to deal with cross connections, create a water bank to make room, demand-wise, for new customers and possibly remove some that haven't been exercised.