

TOPSFIELD WATER DEPARTMENT**Aged Receivables****As of 10/18/2017**

Service	0-30 days	31-60 days	61-90 days	91-120 days	> 120 days	Balance
Grand Total						
WATER	138138.52	52258.70	14936.06	7999.14	27145.73	240478.15
WATER Penalty	1733.71	1116.92	1288.08	793.25	5526.02	10457.98
	139872.23	53375.62	16224.14	8792.39	32671.75	250936.13
Number of Accounts in Each Column:	696	235	118	100	81	
Total Number of Outstanding Accounts:	922					

Water Department
Expense Budget for FY2018
18-Oct-17

Expended Period 9/18/2017 11:17:44 AM - 10/18/2017 11:17:44 AM

Budget Month 4

		Budgeted	Revised	Expended This Period	Expended YTD	Available	Percent Remaining
Operating Budget							
E4501 Salary							
51120	Superintendent	93,982	93,982	9,028.00	28,167.36	65,814.64	70%
51490	Longevity, Superintendent	1,500	1,500	0.00	0.00	1,500.00	100%
Sub Total Salary		95,482	95,482	9,028.00	28,167.36	67,314.64	70%
E4502 Wages							
51130	Laborers, Full Time	113,016	113,016	10,825.20	33,774.62	79,241.38	70%
51131	Clerical, Full Time	34,395	34,395	3,307.20	10,318.46	24,076.54	70%
51141	Seasonal Wages	7,000	7,000	0.00	0.00	7,000.00	100%
51200	Outside Help, Labor	2,933	2,933	80.92	80.92	2,852.08	97%
51310	Overtime, Labor	42,398	42,398	4,289.49	8,565.43	33,832.57	80%
51490	Longevity	988	988	0.00	0.00	988.00	100%
Sub Total Wages		200,730	200,730	18,502.81	52,739.43	147,990.57	74%
E4505 Other							
51920	Uniform Allowance	2,730	2,730	0.00	2,730.00	0.00	0%
51970	Meal Allowance	1,400	1,400	120.00	120.00	1,280.00	91%
52100	Electricity	40,000	40,000	3,024.10	11,249.42	28,750.58	72%
52106	PWB Electricity	3,200	3,200	325.26	821.66	2,378.34	74%
52150	Gas	2,600	2,600	21.00	108.02	2,491.98	96%
52150	PWB Gas	2,200	2,200	17.88	67.17	2,132.83	97%
52400	Building Maintenance	1,500	1,500	0.00	89.96	1,410.04	94%
52406	PWB Building Maintenance	2,800	2,800	253.41	768.92	2,031.08	73%
52415	Property Maintenance, Wellfi	14,000	14,000	3,600.00	3,600.00	10,400.00	74%
52416	PWB Cleaning	1,000	1,000	46.00	92.00	908.00	91%
52420	Systems Maintenance	17,000	17,000	2,453.00	8,349.00	8,651.00	51%
52430	Systems Maintenance, Emerg	25,000	25,000	1,200.00	1,200.00	23,800.00	95%
52450	Vehicle Maintenance	2,000	2,000	0.00	948.00	1,052.00	53%
52510	Equipment Maintainance	500	500	179.00	179.00	321.00	64%
52520	Radio Maintenance	1,000	1,000	0.00	0.00	1,000.00	100%
52700	Equipment Rental	2,000	2,000	0.00	900.00	1,100.00	55%
52720	Street Paving, Contract.	4,000	4,000	0.00	0.00	4,000.00	100%
52750	Security, Contracted	4,500	4,500	1,066.35	2,132.70	2,367.30	53%
52940	Waste Disposal	2,000	2,000	0.00	681.95	1,318.05	66%
53050	Annual DEP Maintainence	10,000	10,000	988.00	988.00	9,012.00	90%
53060	Deeds	0	0	0.00	0.00	0.00	N/A
53110	Engineering	0	0	0.00	1,418.30	-1,418.30	N/A
53120	Water Testing	22,000	22,000	1,189.50	4,603.22	17,396.78	79%
53150	Contract Clerical Service	0	0	0.00	0.00	0.00	N/A
53200	Tuition	0	0	0.00	0.00	0.00	N/A
53400	Telephone	5,000	5,000	285.26	1,322.71	3,677.29	74%
53420	System Prints	0	0	0.00	0.00	0.00	N/A
53430	Postage	6,800	6,800	366.68	973.82	5,826.18	86%
53450	Advertising	1,800	1,800	0.00	466.90	1,333.10	74%
53800	DEP Volume Assessment	1,500	1,500	0.00	0.00	1,500.00	100%
53800	Lock Box	2,000	2,000	106.34	247.23	1,752.77	88%
53806	PWB Tank Cleaning	500	500	0.00	0.00	500.00	100%
53810	Water Treatment Services	2,000	2,000	0.00	0.00	2,000.00	100%
53870	Police Detail	2,050	2,050	672.00	2,016.00	34.00	2%

		Budgeted	Revised	Expended This Period	Expended YTD	Available	Percent Remaining
54100	Gasoline	6,000	6,000	0.00	0.00	6,000.00	100%
54200	Office Supplies	3,200	3,200	0.00	3,031.12	168.88	5%
54210	Forms & Printing	6,800	6,800	176.96	1,226.69	5,573.31	82%
54300	Building Supplies	1,500	1,500	0.00	0.00	1,500.00	100%
54506	PWB Custodial Supplies	650	650	83.26	165.84	484.16	74%
54800	Vehicular Supplies	2,000	2,000	0.00	48.97	1,951.03	98%
55300	Public Works Supplies	16,000	16,000	2,276.46	8,190.10	7,809.90	49%
55310	Meters	30,000	30,000	3,637.33	10,756.22	19,243.78	64%
55800	Water Treatment Supplies	75,000	75,000	12,803.90	20,424.08	54,575.92	73%
55820	Safety Gear	1,500	1,500	0.00	304.29	1,195.71	80%
55860	Computer Software	5,000	5,000	0.00	399.99	4,600.01	92%
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	1,525.33	2,474.67	62%
57800	Elem. School Educ. Expense	0	0	0.00	0.00	0.00	N/A
57810	Water Conservation Program	0	0	0.00	0.00	0.00	N/A
58500	Additional Equipment	4,000	4,000	0.00	0.00	4,000.00	100%
58510	Computer	5,000	5,000	2,414.51	5,550.77	-550.77	-11%
58700	Replacement Equipment	5,000	5,000	0.00	2,717.00	2,283.00	46%
Sub Total Other		348,730	348,730	37,306.20	100,414.38	248,315.62	71%
Total Operating Budget		644,942	644,942	64,837.01	181,321.17	463,620.83	72%
Reserves							
E4515 Unanticipated Emergenci							
52730	Unanticipated Emerg.	138,000	138,000	0.00	17,700.00	120,300.00	87%
Sub Total Unanticipated Emerge		138,000	138,000	0.00	17,700.00	120,300.00	87%
E4590 Reserve Fund							
52730	Reserve Fund	145,000	145,000	0.00	0.00	145,000.00	100%
Sub Total Reserve Fund		145,000	145,000	0.00	0.00	145,000.00	100%
Total Reserves		283,000	283,000	0.00	17,700.00	265,300.00	94%
Debt Service							
E4591 Multipurpose, Interest							
59195	Interest	21,192	21,192	0.00	10,701.25	10,490.75	50%
Sub Total Multipurpose, Interest		21,192	21,192	0.00	10,701.25	10,490.75	50%
E4593 Multipurpose, Principal							
59195	Principal	79,500	79,500	0.00	0.00	79,500.00	100%
Sub Total Multipurpose, Princip		79,500	79,500	0.00	0.00	79,500.00	100%
E4594 Short-Term Debt							
59210	Principal	207,000	207,000	0.00	0.00	207,000.00	100%
59250	Debt Issuance Cost	5,000	5,000	0.00	0.00	5,000.00	100%
59251	Interest	17,852	17,852	0.00	0.00	17,852.00	100%
Sub Total Short-Term Debt		229,852	229,852	0.00	0.00	229,852.00	100%
Total Debt Service		330,544	330,544	0.00	10,701.25	319,842.75	97%
Grand Total		1,258,486.00	1,258,486.00	64,837.01	209,722.42	1,048,763.58	83%

Warrant Articles

Water Department

Fiscal Year: 2018

Period Start: 18-Sep-17

Period End: 18-Oct-17

	Appropriation	Revised	Period Total	Fiscal Total	Total Spent	Remainder	Percent
E4545 A39/13ATM Minor Water Main Replacement							
58000 General	100,000.00	100,000.00	0.00	0.00	79,079.76	20,920.24	20.9%

Water Treatment Plant Project

Water Department

Fiscal Year: 2018

Period Start: 18-Sep-17

Period End: 18-Oct-17

	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	0.00	0.00	0.00	259,000.00	100.0%
58310 Engineering	782,166.00	782,166.00	0.00	0.00	0.00	782,166.00	100.0%
58320 Transmission Mains	1,524,629.85	1,524,629.85	0.00	0.00	0.00	1,524,629.85	100.0%
58330 Plant Contruction	7,246,000.00	7,246,000.00	241,378.53	241,378.53	241,378.53	7,004,621.47	96.7%
58380 Miscellaneous	588,204.15	588,204.15	6,729.28	6,729.28	6,729.28	581,474.87	98.9%
C3640 A34/14ATM Water Treatment Plant Design							
88000 Engineering	800,000.00	800,000.00	45,811.47	74,156.97	800,000.00	0.00	0.0%



Town of Topsfield

Monthly Report of Accrued Time
Water Department

For the month of September 2017

Date Reviewed: _____

Signature: _____

Department Head

Fontaine, Travis

12/2/2009

Personal Time (hours)				Sick Time (hours)				Vacation Time (hours)				Comp Time (hours)			
Previous	Added	Used	Total	Previous	Added	Used	Total	Previous	Added	Used	Total	Previous	Added	Used	Total
0.00	0.00	0.00	0.00	687.57	10.00	0.00	697.57	112.00	0.00	0.00	112.00	102.00	0.00	-8.00	94.00

Krom, Gregory

3/12/1992

Personal Time (hours)				Sick Time (hours)				Vacation Time (hours)				Comp Time (hours)			
Previous	Added	Used	Total	Previous	Added	Used	Total	Previous	Added	Used	Total	Previous	Added	Used	Total
26.00	0.00	0.00	26.00	1,760.00	0.00	0.00	1,760.00	135.00	0.00	-24.00	111.00	0.00	0.00	0.00	0.00

Reuell, Ben

6/2/2014

Personal Time (hours)				Sick Time (hours)				Vacation Time (hours)				Comp Time (hours)			
Previous	Added	Used	Total	Previous	Added	Used	Total	Previous	Added	Used	Total	Previous	Added	Used	Total
16.00	0.00	0.00	16.00	232.00	10.00	0.00	242.00	86.00	0.00	0.00	86.00	72.50	0.00	-5.00	67.50

Yeo, Anne-Marie

4/14/2005

Personal Time (hours)				Sick Time (hours)				Vacation Time (hours)				Comp Time (hours)			
Previous	Added	Used	Total	Previous	Added	Used	Total	Previous	Added	Used	Total	Previous	Added	Used	Total
23.00	0.00	0.00	23.00	138.00	10.00	0.00	148.00	148.00	0.00	0.00	148.00	0.00	0.00	0.00	0.00

Sick Bank, Union

7/1/2013

Personal Time (hours)				Sick Time (hours)				Vacation Time (hours)				Comp Time (hours)			
Previous	Added	Used	Total	Previous	Added	Used	Total	Previous	Added	Used	Total	Previous	Added	Used	Total
0.00	0.00	0.00	0.00	642.00	280.00	-62.00	860.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Per Union contract,

- 40 hours per employee put in sick bank July 1st with a maximum sick bank of 1760 hours
- Maximum of 14 working days (112 hours) of compensatory time allowed

Wednesday, October 18, 2017

**Topsfield Water Department
Superintendent's Report
October 19, 2017**

Old Business

1. Water Treatment Plant

A great deal of progress has been made constructing the foundation of the plant. The basement floor slab and half of the walls will be poured by the end of today. I expect the remaining walls will be constructed by the end of this month. The walls have to cure and be leak tested before the foundation can be backfilled. Kinsmen wants to get the floor slab installed before winter weather sets in. I would guess they will be lucky to finish it by the end of November.

2. Transmission Mains

Just about all of the ductile iron main has been installed in the roadways. The direction drilling remains and will likely begin in a couple of weeks.

3. River Road & Prospect Street

Stantec has requested a change order for the River Road & Prospect Street project. The request has three parts. The first part is they incurred higher costs than expected during the design process (\$4,915), specifically additional work delineating wetlands, soil borings, etc. The second is anticipated cost increases caused by extending the bid date out until later this winter (\$2,500) and the third covers the construction administration of the project (\$32,903). We can discuss the merits of these at the meeting but for your reference the contract already included \$5,748 for wetlands work and the construction administration estimate from last year was \$23,988.

4. Leaks & Breaks

A private service leak on Pemberton Road was repaired this past month along with a water main leak on River Road.

5. Unaccounted for Water (UAW)

Water withdrawals for the month of September were well below normal. Despite this UAW was 13%.

6. Manganese

Manganese levels at both stations dropped to approximately 0.1 mg/L this month.

7. Ipswich River Flow & Water Restrictions

Water restrictions were removed on October 1st.

8. Lead & Copper

The annual lead and copper testing was completed in September. We collected enough samples and didn't have a single lead exceedance. MassDEP was notified of the results.

9. Hydrant Flushing

Hydrant flushing is underway with several weeks remaining.

New Business

1. Capital Planning

Attached is a draft capital plan for FY2019. Some of the projects, particularly the well field projects, have been shifted to the later years for a variety of reasons. The tanks are due for another round of inspections and possibly more repairs and we will likely be spending a great deal of time starting up the plant in calendar year 2019.

My concern with shifting the supply projects is the capacity of the pumping stations is now lower than previously thought due to the recalibration of the master meters. Perkins Row is producing only 200 gpm and North Street is at 420 gpm. Some testing at North Street will be done in the next few weeks to see if the station can run both main pumps for an extended period which it was not able to do the last time we checked. This could be an issue when starting up and testing the plant.

There are some short-term options that will help improve the capacity such as rebuilding the main pump at Perkins Row which could increase flow by 50 gpm and would cost somewhere around \$15,000. It's an expensive band-aid but could make a difference, especially when testing the plant with just Perkins Row connected. The other options include a more aggressive acid cleaning of all of the wells which could lower vacuum pressures and increase flows. However, this only removes deposits inside the well casing and does little for corrosion build up on the outside.

2. Control Upgrades

The SCADA control upgrades that will be done during the water treatment plant project are in process. We've ordered some of the parts and have selected a vendor to upgrade the radios. The work should be completed before the end of November. This was not included in the WTP contract to help save on the cost of engineering and construction.

3. Water Management Act Permit

MassDEP is scheduling meetings with Ipswich River Basin permit holders to kick off the permitting process. We're setting up a time to meet in mid-November.



Town of Topsfield
Task Sheet Report - Water Department
September 2017

Category	Anne-Marie Yeo	Ben Reuell	Gregory Krom	Travis Fontaine	Total
Accrued Time					
Holidays	6	8	8	8	30
Vacation			26	8	34
	6	8	34	16	64
Administrative					
Accrual Tracking	5				5
Charts		61		42	103
Correspondence	26				26
File Maintenance	16				16
General Survey			2		2
Inspections		2			2
Meeting Prep.	3		4		7
Meetings	4		2		6
Other				1	1
Purchasing/Procurement			3		3
System Review			2		2
Training				2	2
	54	63	13	45	175
Billing					
Bill Prep.			2		2
Meter Problems		6	4	5	15
Meter Reading Radio		2	6	2	10
		8	12	7	27
Building Maintenance					
Grounds				1	1
Repairs			2		2
			2	1	3
Computer Systems					
Backup			2		2
Networking			7		7
Other			6		6
			15		15
Cross Connections					
Testing Administration			2		2
			2		2
Customer Service					



Town of Topsfield

Task Sheet Report - Water Department

September 2017

Category	Anne-Marie Yeo	Ben Reuell	Gregory Krom	Travis Fontaine	Total
Billing Questions				1	1
Customer Complaints		2	1		3
Dispute Resolution				2	2
Lien Requests	5				5
Pressure Questions				1	1
Title 5 Requests	4				4
Water Service Flushing				2	2
	9	2	1	6	18
DEP Projects					
Lead & Copper Rule Administration			10		10
Lead & Copper Rule Sampling			1	2	3
Other				2	2
			11	4	15
Equipment Maintenance					
Preventative		2			2
Repairs				3	3
		2		3	5
Financials					
Other			4		4
Payment Processing	22				22
Payroll/Bills	19				19
	41		4		45
Fire Department					
Fire Call				4	4
				4	4
Mapping					
CAD/Maps			4		4
			4		4
Public Service					
Markouts/DigSafe		20	4	6	30
Public Records Request			2		2
		20	6	6	32
Quality Control					
Bacteria Sampling		16		9	25
Fluoride Testing		40		11	51
In-house Testing		6			6



Town of Topsfield
Task Sheet Report - Water Department
September 2017

Category	Anne-Marie Yeo	Ben Reuell	Gregory Krom	Travis Fontaine	Total
Manganese Testing		6		9	15
Other		2		2	4
pH Testing		10		6	16
Phosphates		4		6	10
		84		43	127
Road Maintenance					
Trench Repair				2	2
				2	2
Special Projects					
Water Use Application			18		18
			18		18
Treatment Plant Project					
Plant Construction			13	1	14
RFS Protest			1		1
Water Main Construction			19	9	28
			33	10	43
Vehicle Maintenance					
Preventive		2			2
		2			2
Water Controls					
Alarms			4	2	6
SCADA System			4		4
			8	2	10
Water Distribution					
Leak Detection			4	1	5
Meter Replacements				3	3
Meter Testing				1	1
Service Repair			2		2
Tanks				2	2
Water Main Repair			4		4
			10	7	17
Water Management					
Ban Enforcement				1	1
				1	1
Water Treatment					
Analyzer Calibration				2	2



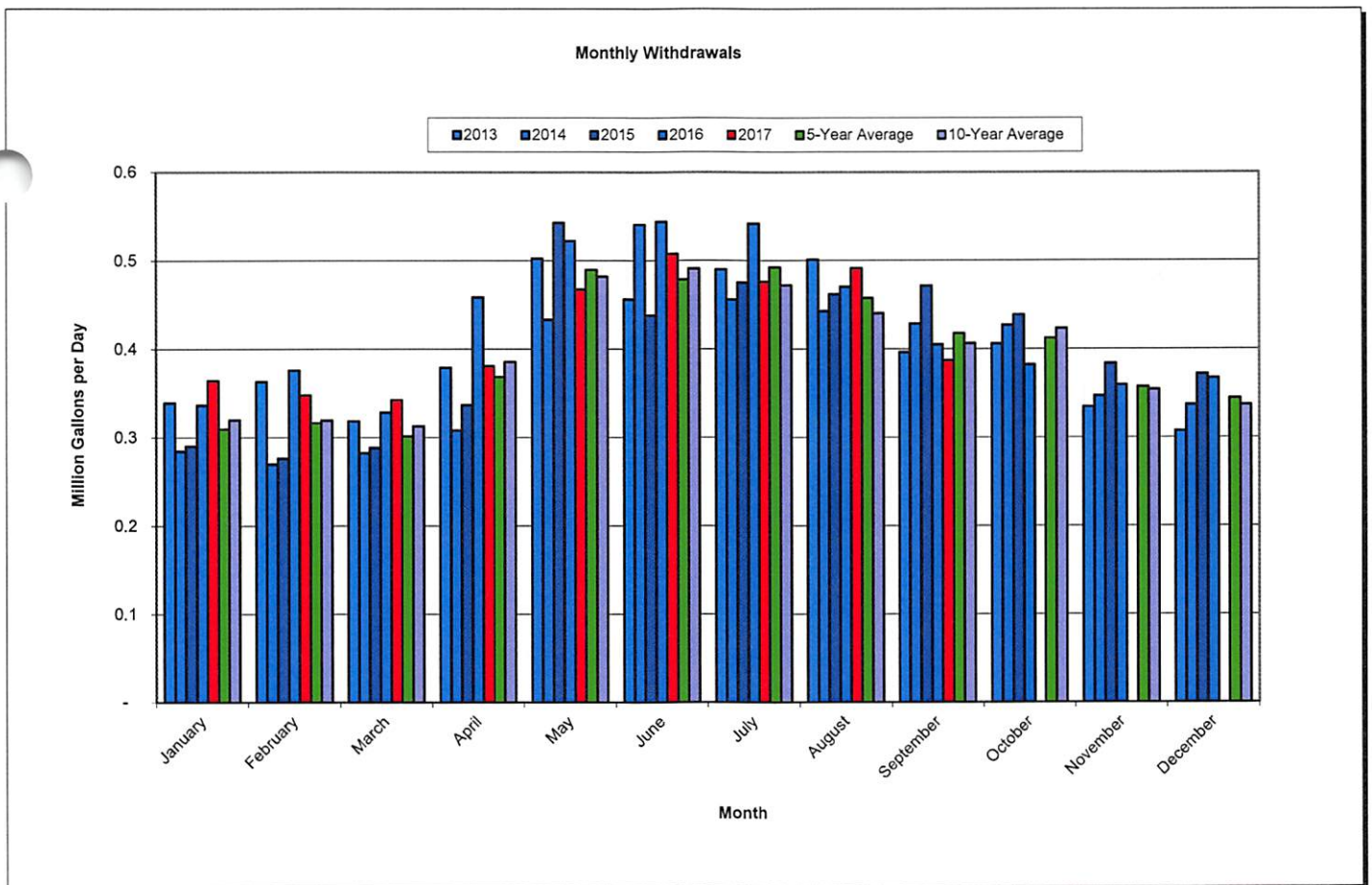
Town of Topsfield
Task Sheet Report - Water Department
September 2017

Category	Anne-Marie Yeo	Ben Reuell	Gregory Krom	Travis Fontaine	Total
Analyzer Maintenance				2	2
Chlorine				5	5
Fluoride				3	3
KOH				1	1
Sequestrant			2	3	5
			2	16	18
Grand Total	110	189	175	173	647
Total Monthly Work Hours (40 hrs/wk)	168				

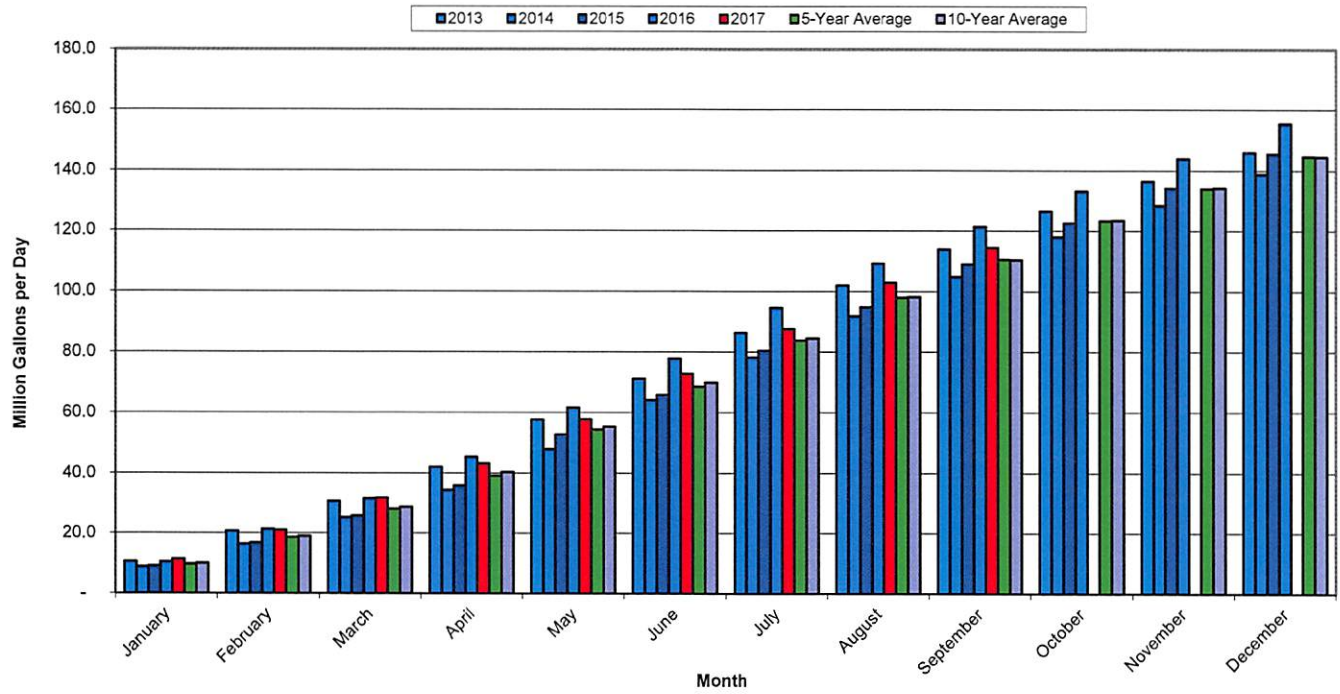
Topsfield Water Department
Annual Withdrawal Report
 Calendar Year

2017

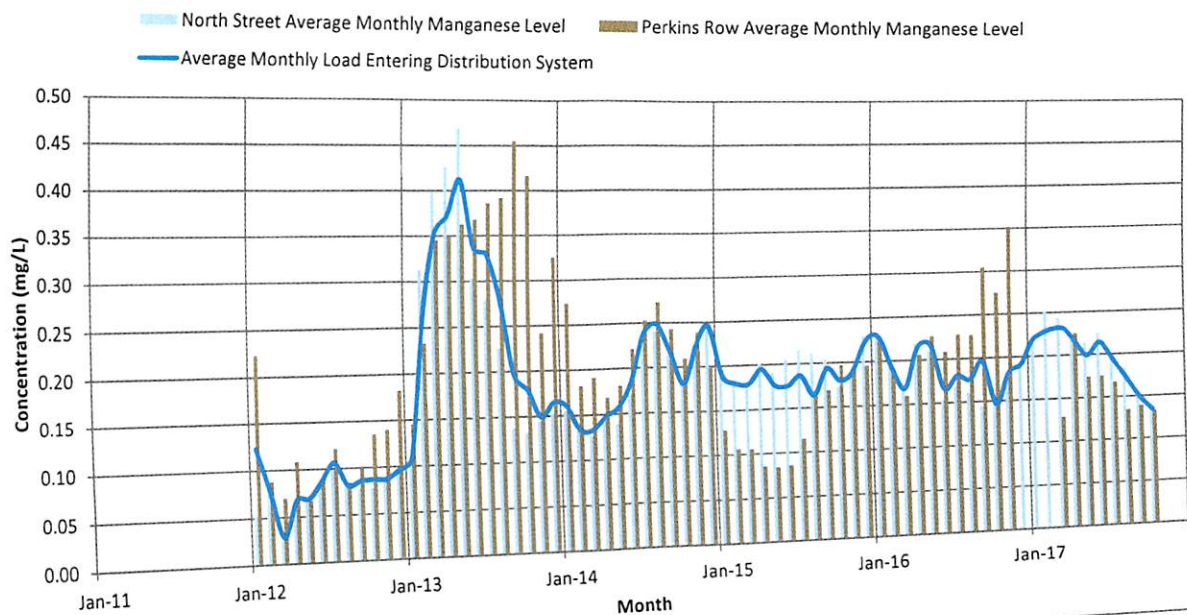
Month	North Street	Perkins Row	Total	Month AGD	5-Year Average	10-Year Average
January	11.311	-	11.311	0.365	0.310	0.320
February	9.711	0.041	9.752	0.348	0.317	0.320
March	10.565	0.063	10.628	0.343	0.302	0.313
April	11.397	0.041	11.438	0.381	0.369	0.386
May	14.095	0.390	14.485	0.467	0.490	0.482
June	14.218	1.008	15.226	0.508	0.479	0.491
July	13.609	1.145	14.754	0.476	0.492	0.472
August	14.101	1.123	15.224	0.491	0.457	0.440
September	10.536	1.077	11.613	0.387	0.417	0.406
October	-	-	-	#N/A	0.412	0.423
November	-	-	-	#N/A	0.358	0.355
December	-	-	-	#N/A	0.345	0.338
Total	109.543	4.888	114.431			



Monthly Cumulative Withdrawals



Monthly Source Water Manganese Concentrations & System Loading based on TWD Test Kit Results and Withdrawals



Monthly Source Water Manganese Concentrations & System Loading based on Lab Tests and Withdrawals

