



Town of Topsfield

Task Sheet Report - Water Department

April 2018

Category	Anne-Marie Yeo	Ben Reuell	Gregory Krom	Travis Fontaine	Total
Accrued Time					
Comp				8	8
Holidays	8	8	8	8	32
Sick			8		8
Vacation	40			40	80
	48	8	16	56	128
Administrative					
Charts		58		40	98
Correspondence	11				11
Data Tracking			4		4
Meeting Prep.			10		10
Meetings			7		7
Minutes			1		1
Other				2	2
Purchasing/Procurement			4		4
System Review			4		4
	11	58	30	42	141
Billing					
Bill Prep.			4		4
Collections			2		2
Meter Reading Radio			4		4
			10		10
Building Maintenance					
Preventative		2	2		4
		2	2		4
Computer Systems					
Development			10		10
Website			4		4
			14		14
Cross Connections					
Testing Administration			2		2
			2		2
Customer Service					
Customer Complaints				2	2
Dispute Resolution				1	1
Lien Requests	1				1



Town of Topsfield

Task Sheet Report - Water Department

April 2018

Category	Anne-Marie Yeo	Ben Reuell	Gregory Krom	Travis Fontaine	Total
Pressure Questions				1	1
Water Quality Questions			4		4
Water Service Flushing				3	3
	1		4	7	12
DEP Projects					
Annual Statistical Report			10		10
Consumer Confidence Report			2		2
Lead & Copper Rule Administration			6		6
			18		18
Equipment Maintenance					
Annual				2	2
Repairs				2	2
				4	4
Financials					
Other			4		4
Payment Processing	8				8
Payroll/Bills	6				6
Rate Modelling			4		4
	14		8		22
Fire Department					
Fire Call				3	3
				3	3
Grants					
SWMI Round 2			2		2
			2		2
Mapping					
CAD/Maps			4		4
			4		4
Public Service					
Citizen Concerns			2		2
Markouts/DigSafe		16	2	7	25
Other		2			2
Private Flow Test		2			2
Public Records Request			6		6
		20	10	7	37
Quality Control					



Town of Topsfield

Task Sheet Report - Water Department

April 2018

Category	Anne-Marie Yeo	Ben Reuell	Gregory Krom	Travis Fontaine	Total
Bacteria Sampling		16		9	25
Fluoride Testing		40		13	53
In-house Testing		4			4
Manganese Testing				4	4
Other				4	4
pH Testing		14		6	20
Phosphates		4			4
		78		36	114
Special Projects					
Andrews Farm			7	1	8
Water Quality Database			4		4
Water Use Application			4		4
			15	1	16
Treatment Plant Project					
Altitude Valve		2	26	4	32
Plant Construction			4	2	6
		2	30	6	38
Vehicle Maintenance					
Other				1	1
Preventive		2			2
		2		1	3
Water Controls					
Alarms				2	2
				2	2
Water Distribution					
Meter Replacements		14		2	16
Tanks				1	1
Valve				2	2
		14		5	19
Water Treatment					
Analyzer Calibration		2			2
Analyzer Maintenance				2	2
Chlorine			4	5	9
Fluoride				1	1
KOH			2		2
Sequestrant				2	2

**Town of Topsfield****Task Sheet Report - Water Department****April 2018**

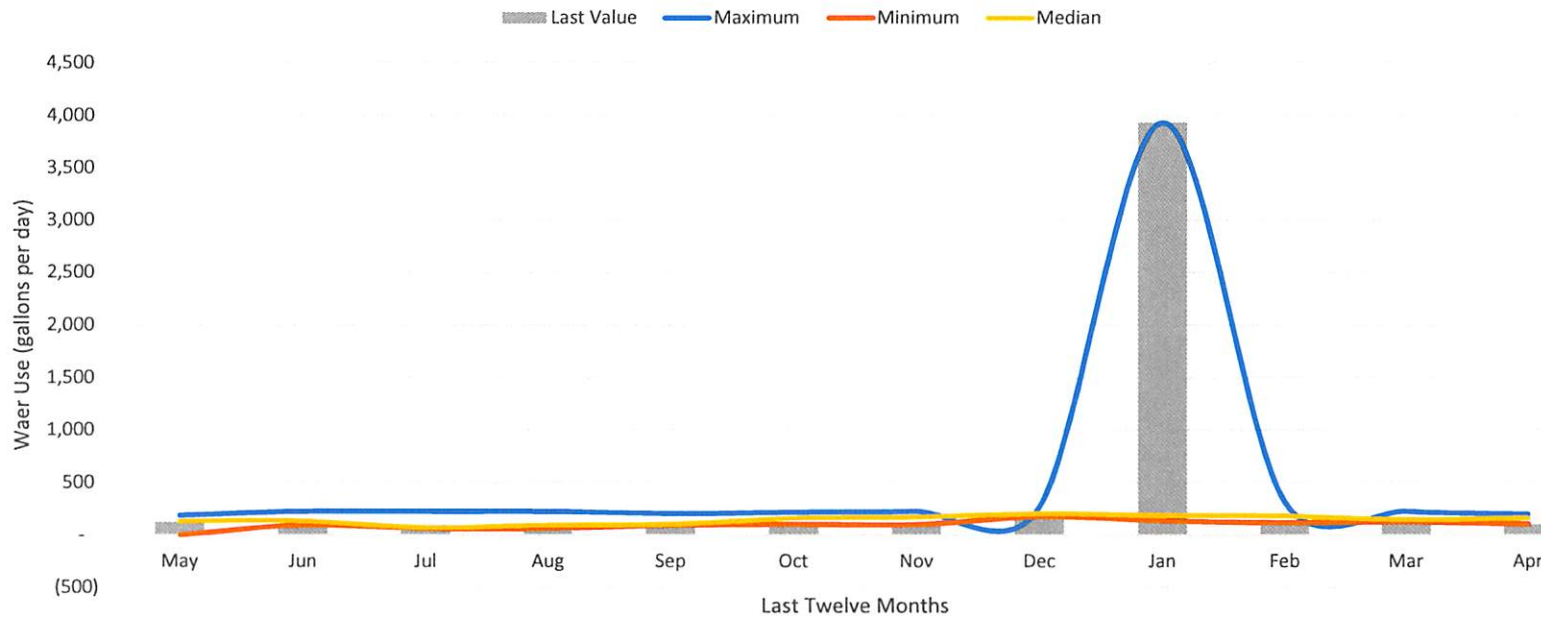
Category	Anne-Marie Yeo	Ben Reuell	Gregory Krom	Travis Fontaine	Total
		2	6	10	18
Grand Total	74	186	171	180	611
Total Monthly Work Hours (40 hrs/wk)	168				

Monthly Water Use Statistics

Service Id: 800005501

Parameter	Month											
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Count	10	9	9	9	9	9	9	9	10	10	10	10
Maximum	188	226	225	225	205	219	226	265	3,932	321	226	200
Minimum	-	94	63	65	94	103	100	176	136	117	124	104
Average	122	148	102	115	128	158	165	208	555	198	160	159
Median	134	135	72	97	104	161	172	207	187	182	148	164
Deviation	52	42	50	46	39	39	41	31	1,126	61	35	32
Last Date	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
Last Value	125	94	99	69	127	103	111	176	3,932	117	124	104

Monthly Water Use - Average Gallons per Day



Greg Krom

From: Katherine <kathcarlson@gmail.com>
Sent: Tuesday, May 8, 2018 12:29 PM
To: Greg Krom
Subject: Fwd: Question for the water commissioners

----- Forwarded message -----

From: Katherine <kathcarlson@gmail.com>
Date: Tue, May 8, 2018 at 12:26 PM
Subject: Question for the water commissioners
To: Greg Krom <gkrom@topsfieldpublicworks.org>

Greg:
I did not find an email contact for the commissioners on-line. Please pass this comment on to them.
Thank you in advance,
Katherine

Dear Mr. Knowles, Mr. Gallagher, Mr. Stone,

C. Costello is running again for selectman in Boxford: his position re: Andrews Farm is quite clear.

Boxford leadership is quite adept at protecting their interests.

The question is: what will YOU do to protect the interests of Topsfield residents and water users?

Cordially,

Katherine Carlson
23 Perkins Row

On behalf of the town and the residents of Andrews Farm, I led the flow of information to the Department of Public Utilities, Department of Housing and Community Development, and the Department of Environmental Protection regarding the management deficiencies at the Andrews Farm Water Company. When the water company president resigned leaving our neighbors at Andrews Farm with the uncertainty of their water supply, I led a coalition that included members of our legislative delegation, the Board of Selectmen and the leadership of the Andrews Farm Homeowners Association to a Topsfield Water Commissioners meeting. At that meeting, we received assurances that Topsfield would continue to provide our residents with emergency water. I am prepared to continue to work with the AFHOA to achieve a permanent, sustainable solution to the Andrews Farm water supply.

<http://boxford.wickedlocal.com/news/20180502/candidate-statement-chuck-costello-running-for-re-election-to-boxford-board-of-selectmen>



Town of Topsfield

Monthly Report of Accrued Time

Water Department

For the month of April 2018

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
24.00	0.00	0.00	24.00	757.57	10.00	0.00	767.57	168.00	0.00	-40.00	128.00	109.00	0.00	-8.00	101.00

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
6.00	0.00	0.00	6.00	1,664.00	10.00	-12.00	1,662.00	45.00	0.00	0.00	45.00	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	285.50	10.00	-8.00	287.50	46.00	0.00	0.00	46.00	82.50	0.00	0.00	82.50

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
19.50	24.00	0.00	43.50	194.00	10.00	0.00	204.00	71.50	152.00	-36.00	187.50	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	860.00	0.00	0.00	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

Tuesday, May 08, 2018

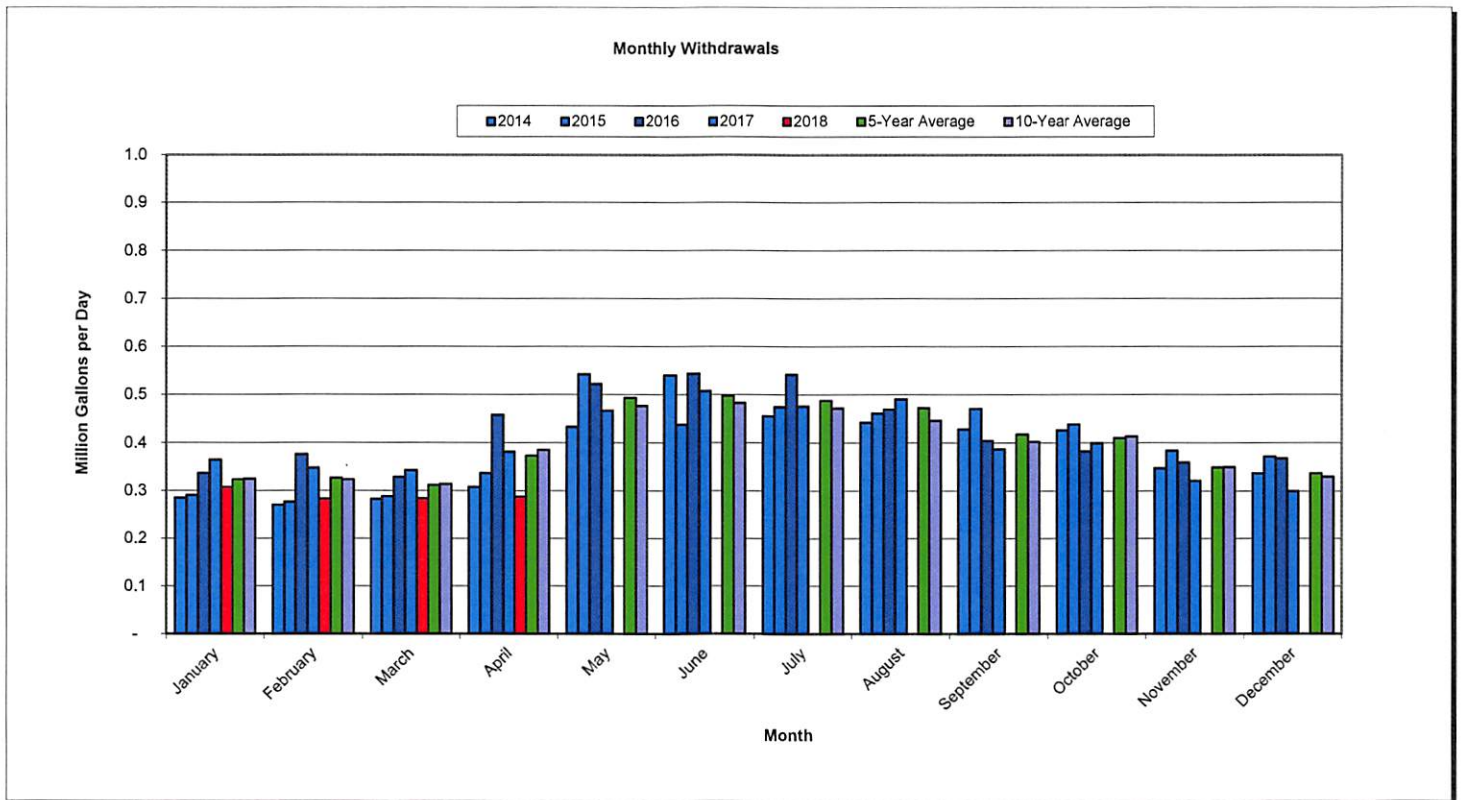
Topsfield Water Department

Annual Withdrawal Report

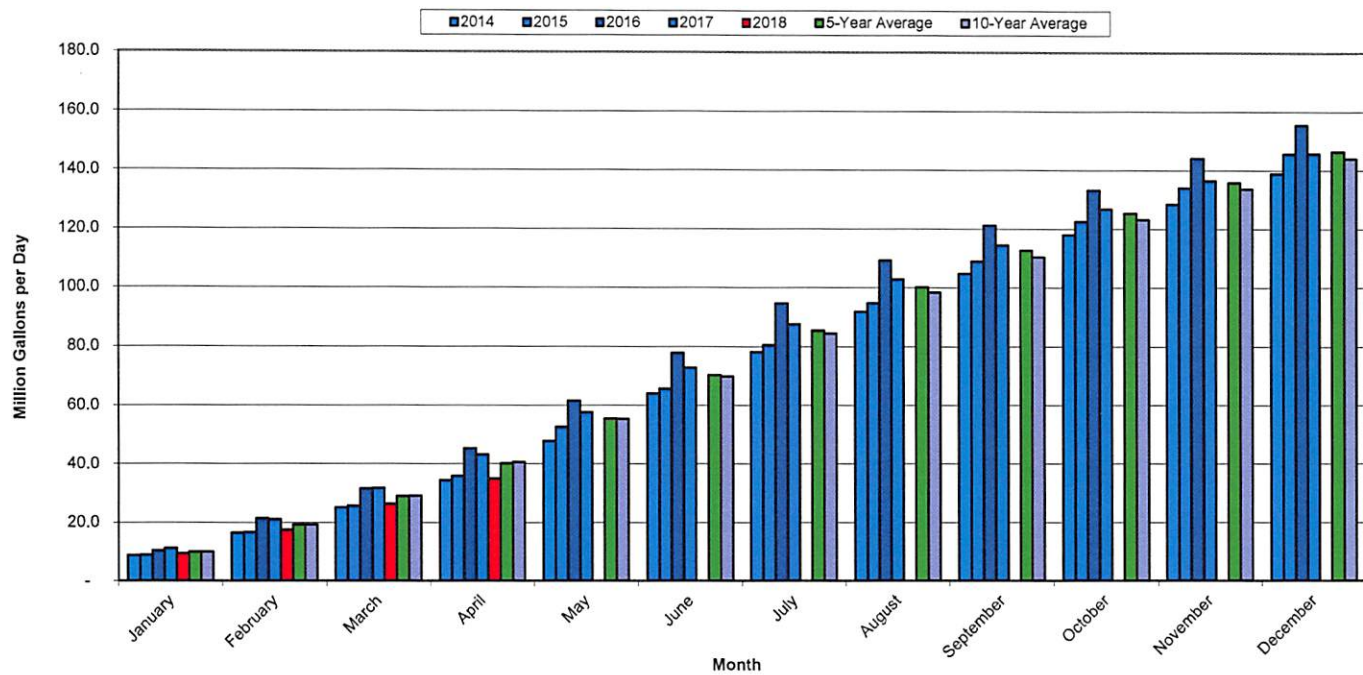
Calendar Year

2018

Month	North Street	Perkins Row	Total	Month AGD	5-Year Average	10-Year Average	Running Average	Historical Rank
January	9.509	0.016	9.525	0.307	0.323	0.325	0.307	19%
February	7.814	0.113	7.927	0.283	0.327	0.324	0.291	12%
March	8.666	0.122	8.788	0.283	0.312	0.314	0.292	10%
April	8.499	0.121	8.620	0.287	0.373	0.385	0.291	8%
May	-	-	-	#N/A	0.494	0.477	#N/A	
June	-	-	-	#N/A	0.497	0.483	#N/A	
July	-	-	-	#N/A	0.488	0.472	#N/A	
August	-	-	-	#N/A	0.473	0.447	#N/A	
September	-	-	-	#N/A	0.418	0.403	#N/A	
October	-	-	-	#N/A	0.411	0.413	#N/A	
November	-	-	-	#N/A	0.350	0.350	#N/A	
December	-	-	-	#N/A	0.337	0.330	#N/A	
Total	34.488	0.372	34.860	0.291				



Monthly Cumulative Withdrawals



Water Department
Expense Budget for FY2018

08-May-18

Expended Period 4/8/2018 12:32:12 PM - 5/8/2018 12:32:12 PM

Budget Month 11

		Budgeted	Revised	Expended This Period	Expended YTD	Available	Percent Remaining
Operating Budget							
E4501 Salary							
51120	Superintendent	93,982	93,982	7,222.40	78,724.16	15,257.84	16%
51490	Longevity, Superintendent	1,500	1,500	0.00	1,500.00	0.00	0%
Sub Total Salary		95,482	95,482	7,222.40	80,224.16	15,257.84	16%
E4502 Wages							
51130	Laborers, Full Time	113,016	113,016	8,660.16	94,395.74	18,620.26	16%
51131	Clerical, Full Time	34,395	34,395	2,645.76	28,838.78	5,556.22	16%
51141	Seasonal Wages	7,000	7,000	0.00	0.00	7,000.00	100%
51200	Outside Help, Labor	2,933	2,933	0.00	502.14	2,430.86	83%
51310	Overtime, Labor	42,398	42,398	1,461.40	27,171.28	15,226.72	36%
51490	Longevity	988	988	0.00	987.50	0.50	0%
Sub Total Wages		200,730	200,730	12,767.32	151,895.44	48,834.56	24%
E4505 Other							
51920	Uniform Allowance	2,730	2,730	0.00	2,730.00	0.00	0%
51970	Meal Allowance	1,400	1,400	0.00	450.00	950.00	68%
52100	Electricity	40,000	40,000	5,289.99	33,557.70	6,442.30	16%
52106	PWB Electricity	3,200	3,200	845.77	7,617.92	-4,417.92	-138%
52150	Gas	2,600	2,600	528.82	1,843.03	756.97	29%
52156	PWB Gas	2,200	2,200	567.15	2,141.11	58.89	3%
52400	Building Maintenance	1,500	1,500	0.00	2,604.85	-1,104.85	-74%
52406	PWB Building Maintenance	2,800	2,800	121.88	2,260.24	539.76	19%
52415	Property Maintenance, Wellfi	14,000	14,000	0.00	13,397.60	602.40	4%
52416	PWB Cleaning	1,000	1,000	0.00	230.00	770.00	77%
52420	Systems Maintenance	17,000	17,000	453.43	29,527.95	-12,527.95	-74%
52430	Systems Maintenance, Emerg	25,000	25,000	0.00	14,844.68	10,155.32	41%
52450	Vehicle Maintenance	2,000	2,000	0.00	2,072.54	-72.54	-4%
52510	Equipment Maintainance	500	500	0.00	534.72	-34.72	-7%
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	1,191.35	5,005.47	-505.47	-11%
52940	Waste Disposal	2,000	2,000	0.00	681.95	1,318.05	66%
53050	Annual DEP Maintainence	10,000	10,000	0.00	8,812.67	1,187.33	12%
53060	Deeds	0	0	0.00	0.00	0.00	N/A
53110	Engineering	0	0	0.00	1,529.80	-1,529.80	N/A
53120	Water Testing	22,000	22,000	542.00	15,357.93	6,642.07	30%
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	464.96	3,868.71	1,131.29	23%
53420	System Prints	0	0	0.00	0.00	0.00	N/A
53430	Postage	6,800	6,800	274.26	2,503.00	4,297.00	63%
53450	Advertising	1,800	1,800	0.00	466.90	1,333.10	74%
53800	DEP Volume Assessment	1,500	1,500	0.00	1,237.63	262.37	17%
53801	Lock Box	2,000	2,000	127.97	1,094.15	905.85	45%
53806	PWB Tank Cleaning	500	500	0.00	87.50	412.50	83%
53810	Water Treatment Services	2,000	2,000	0.00	0.00	2,000.00	100%
53870	Police Detail	2,050	2,050	0.00	2,856.00	-806.00	-39%

		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	24.34	4,062.98	-862.98	-27%
54210	Forms & Printing	6,800	6,800	870.89	2,969.22	3,830.78	56%
54300	Building Supplies	1,500	1,500	0.00	0.00	1,500.00	100%
54506	PWB Custodial Supplies	650	650	0.00	340.10	309.90	48%
54800	Vehicular Supplies	2,000	2,000	332.54	496.55	1,503.45	75%
55300	Public Works Supplies	16,000	16,000	1,104.93	22,133.46	-6,133.46	-38%
55310	Meters	30,000	30,000	0.00	23,500.22	6,499.78	22%
55800	Water Treatment Supplies	75,000	75,000	2,030.14	49,698.46	25,301.54	34%
55820	Safety Gear	1,500	1,500	0.00	596.59	903.41	60%
55860	Computer Software	5,000	5,000	1,460.99	5,414.92	-414.92	-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	3,023.33	976.67	24%
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	491.38	3,508.62	88%
58510	Computer	5,000	5,000	226.24	6,100.62	-1,100.62	-22%
58700	Replacement Equipment	5,000	5,000	0.00	2,717.00	2,283.00	46%
Sub Total Other		348,730	348,730	16,457.65	279,758.88	68,971.12	20%
Total Operating Budget		644,942	644,942	36,447.37	511,878.48	133,063.52	21%
Reserves							
E4515 Unanticipated Emergenci							
52730	Unanticipated Emerg.	138,000	138,000	0.00	34,815.00	103,185.00	75%
Sub Total Unanticipated Emerge		138,000	138,000	0.00	34,815.00	103,185.00	75%
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	34,815.00	248,185.00	88%
Debt Service							
E4591 Multipurpose, Interest							
59195	Interest	21,192	21,192	0.00	21,402.50	-210.50	-1%
Sub Total Multipurpose, Interest		21,192	21,192	0.00	21,402.50	-210.50	-1%
E4593 Multipurpose, Principal							
59195	Principal	79,500	79,500	0.00	79,500.00	0.00	0%
Sub Total Multipurpose, Princip		79,500	79,500	0.00	79,500.00	0.00	0%
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	100,902.50	229,641.50	69%
Grand Total		1,258,486.00	1,258,486.00	36,447.37	647,595.98	610,890.02	49%

Warrant Articles

Water Department

Fiscal Year: 2018

Period Start: 08-Apr-18

Period End: 08-May-18

	Appropriation	Revised	Period Total	Fiscal Total	Total Spent	Remainder	Percent
36000 Prospect Street & River Road Water Main Improvements							
88003 Construction	1,600,000.00	1,600,000.00	1,534.10	11,904.84	11,904.84	1,588,095.16	99.3%
	1,600,000.00	1,600,000.00	1,534.10	11,904.84	11,904.84	1,588,095.16	99.3%
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%
	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: 08-Apr-18

Period End: 08-May-18

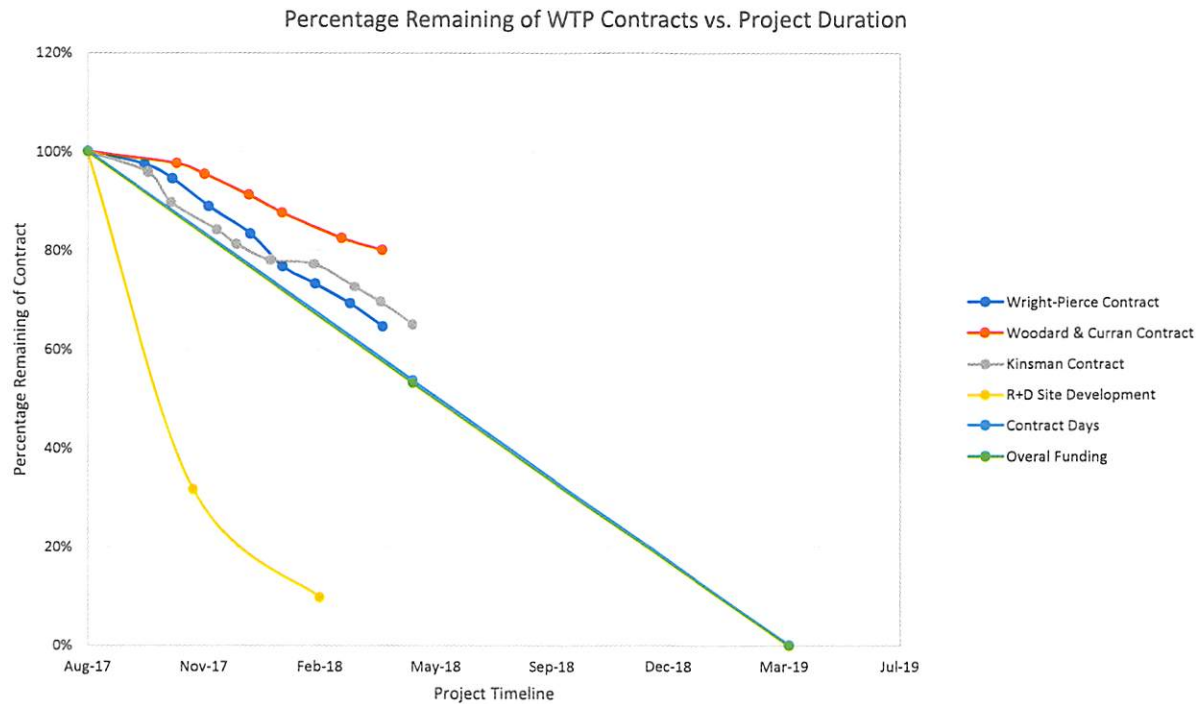
	Appropriation	Revised	Period Total	Fiscal Total	Total Spent	Remainder	Percent
38600 A3/17STM Water Treatment Plant Construction							
58300 Owner's Project Manager	259,000.00	259,000.00	5,348.35	43,129.66	43,129.66	215,870.34	83.3%
58310 Engineering	782,166.00	782,166.00	37,100.41	298,297.30	298,297.30	483,868.70	61.9%
58320 Transmission Mains	1,524,629.85	1,524,629.85	0.00	987,363.12	987,363.12	537,266.73	35.2%
58330 Plant Construction	7,246,000.00	7,246,000.00	518,964.72	2,390,913.75	2,390,913.75	4,855,086.25	67.0%
58380 Miscellaneous	588,204.15	588,204.15	6,801.20	50,909.98	50,909.98	537,294.17	91.3%
	10,400,000.00	10,400,000.00	568,214.68	3,770,613.81	3,770,613.81	6,629,386.19	80.3%

WTP Construction Progress
May 8, 2018

Contracts	Total	Spent	Remaining
Kinsmen	7.270	2.539	4.731 65%
Wright-Pierce	0.782	0.297	0.485 62%
Woodard & Curran	0.259	0.043	0.216 83%
R+D Site Development	1.525	1.374	0.151 10%
Total	9.835	4.253	5.582 57%

Misc	0.050	
Funded	10.400	
Contingency	0.514	5%

Contract Days			
Start Date	8/1/2017	100%	100%
Current Date	5/8/2018	54%	53%
Completion	3/28/2019	0%	0%





Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

April 24, 2018

Mr. Gregory Krom, Superintendent
Topsfield Water Department
279 Boston Street
Topsfield, MA 01983

RE: Topsfield - BWR\WMA
Renewal Application
WMA Permit #9P-3-17-298.01
Order to Complete

Dear Mr. Krom:

Enclosed please find the Permit Renewal Order to Complete for the renewal of Topsfield Water Department's Water Management Act (WMA) permit #9P-3-17-298.01.

This document describes the specific information required for renewing your WMA permit. Please submit a response to the Order to Complete within 90 days of issuance of this letter to: Department of Environmental Protection, One Winter Street, 5th floor, Boston, MA 02108, Attn: Shi Chen.

If you have any questions regarding this letter, or need assistance complying with this Order, please contact Shi Chen at 617-292-5532.

Sincerely,

Duane LeVangie, Chief
Water Management Program
Bureau of Water Resources, MassDEP

Attachments: Order to Complete for Permit Renewal Application WMA Permit #9P31729801
Y:\DWP WMA\Permit Renewals\Ipswich\Topsfield-WMA-Permit Renewal OTC #9P31729801 2018-04-24
ecc: Wayne Castonguay, Ipswich River Watershed Association
Jen Pederson, MWWA

**ORDER TO COMPLETE
IPSWICH BASIN
WATER WITHDRAWAL PERMIT RENEWAL APPLICATION REVIEW
MASSACHUSETTS WATER MANAGEMENT ACT
M.G.L. c. 21G**

TOPSFIELD WATER DEPARTMENT WATER MANAGEMENT ACT PERMIT #9P-3-17-298.01

The Massachusetts Department of Environmental Protection (MassDEP) is reviewing the application to renew Water Management Act (WMA) permit #9P-3-17-298.01 issued to the Topsfield Water Department under the Water Management Act (M.G.L. c.21G). This Order to Complete describes the additional information required to complete the review. Please submit a response to the items in bold by within 90 days of issuance of this letter. MassDEP may, at its option, agree to a request for an extension of the time allowed to submit all or part of the additional information required, if the request is received in writing by within 90 days of issuance of this letter. Please note that failure to respond within that timeframe could result in an enforcement action by MassDEP.

The regulations at 310 CMR 36.21 define the required contents of a complete permit renewal application. This section identifies all information necessary to complete the application as defined by the regulations. The information required by this Order to Complete must be provided to complete the review of the renewal application. Failure to submit the required information may result in a determination by MassDEP that your application is incomplete pursuant to 310 CMR 36.25(6). Such determination may result in any of the actions described in 310 CMR 36.25(6), including denial of your application.

Following the completion of the review of your response to this Order to Complete, MassDEP will prepare a draft of the renewed permit issued to the Topsfield Water Department for review and comment. Any modified conditions of your renewed permit will be based on your response, and will be consistent with the Massachusetts *Water Conservation Standards* approved by the Water Resource Commission in July 2006 and updated in 2012. These standards can be found at:

<http://www.mass.gov/eea/docs/dcr/watersupply/intbasin/waterconservationstandards.pdf>

Nothing contained in this Order to Complete should be interpreted to preclude MassDEP from requiring any additional information it deems reasonable and necessary to review your permit renewal application. MassDEP reserves the right to take future enforcement action for any violation of the Water Management Act, or its regulations, found during this review.

**ORDER TO COMPLETE
TOPSFIELD WATER DEPARTMENT WATER MANAGEMENT ACT
PERMIT #9P-3-17-298.01**

This Order to Complete (OTC) outlines information necessary to complete the permit renewal process, and the proposed modifications to Topsfield's Water Management Act (WMA) permit. By **July 24, 2018**, please submit all requested information and documentation as depicted in **bold text** to the Department of Environmental Protection, One Winter Street, Boston, MA 02108, Attn: Shi Chen.

On March 27, 2006 MassDEP issued Topsfield a modified permit intended to reflect a balance between the public's need for a safe and reliable source of drinking water and competing environmental and recreational interests. The revised permit conditions were based in part on the results of the studies on streamflow and habitat in the Ipswich River conducted by the United States Geological Survey (USGS). The permit was modified to include what were referred to as the "Ipswich River Basin Performance Standards" which were standard conditions for all public water supply permittees in the basin. These conditions included:

1. Residential per capita water use of 65 gallons per day or less;
2. Unaccounted for water of 10% or less; and
3. A summer withdrawal cap based on minimizing the difference between summer (May through September) and winter (January through March and November through December) withdrawals derived from each community's summer to winter withdrawal ratio.

DEP further determined that unless and until conditions in the Ipswich River significantly improve, it was unlikely that any permittees in the Ipswich River Basin will be approved to increase their authorized withdrawals. Conditions were included requiring a water bank should use increase beyond the authorized volume during the term of the permit.

WATER CONSERVATION QUESTIONNAIRE

Please complete the attached "Water Conservation Questionnaire for Public Water Suppliers". An electronic version is available at <http://www.mass.gov/eea/agencies/massdep/water/watersheds/water-management-act-program.html#5> . Some of the information requested below may be answered by completing the questionnaire.

EXISTING PERMIT CONDITIONS refer to the conditions included in the 2006 modified permit.

In addition to completing the conservation questionnaire, the Department also requires that your OTC response provide more detailed information on the following items regarding the special conditions of the March 2006 permit. Specific request for information are in **bold type**.

Special Condition 1, Maximum Authorized Annual Average Withdrawal Volume

The Topsfield Water Department holds a WMA registration statement for 0.43 million gallons per day (MGD) (or 156.95 MGY) in the Ipswich River Basin. Topsfield was permitted on March 27, 2006 to withdraw an additional 0.17 MGD from its North St. Well for a total authorized withdrawal of 0.6 MGD. Topsfield's reported withdrawal volumes have been in compliance with the authorized volume during the past five years (Table 1).

Table 1 Topsfield's Water Withdrawals (MGD) 2012-2016

Topsfield	2016	2015	2014	2013	2012
Actual (MGD)	0.43	0.4	0.38	0.4	0.38
Authorized (MGD)	0.43 registered + 0.17 permitted = 0.6 for 2012-2016				

The Massachusetts Department of Conservation and Recreation's Office of Water Resources (DCR-OWR) developed two sets of water needs forecasts for Topsfield in 2009; the first based on meeting the statewide performance standards of 65 residential gallons per capita day (RGPCD) and 10% unaccounted for water (UAW), and the second based on the Topsfield's RGPCD and UAW when the forecasts were developed (Table 2). Topsfield filed a permit renewal application in 2009 requesting withdrawal volumes based on the forecast using the performance standards of 65 RGPCD and 10% UAW.

Table 2 Topsfield's DCR Water Needs Forecast (WNF)

Time Period	TBD-2019	2020-2024	2025-2029
Projection assuming 65 RGPCD and 10% UAW (MGD):	0.46	0.46	0.46 + 0.02 buffer = 0.48
Projection assuming current trends for RGPCD and UAW (MGD):	0.42	0.42	0.42 + 0.02 buffer = 0.44

Based on this information, Topsfield's water needs will be less than the currently permitted amount and less than the permitting threshold of 0.10 mgd above the registered amount. The following is a summary of options should Topsfield want to maintain a permitted volume:

- Renew at the current trends projection for 0.44 mgd. No mitigation requirements since allocation is below Topsfield's baseline of 0.46 mgd (see Mitigation below).
- Renew at 65/10 projection of 0.48 mgd which will require mitigation for the 0.02 mgd above Topsfield's baseline withdrawal.
(Note that permitting any volume above the registered amount becomes the maximum authorized withdrawal for the permittee).
- Renew the permit at the permit threshold of 0.53 mgd. This would clearly preserve Topsfield's ability to withdraw the permitting threshold should water needs increase more than anticipated in the WNF. It would require a mitigation plan for 0.07 mgd, but it would also preserve all permit conditions to conserve water and protect Topsfield's water sources.

Please indicate what volumes Topsfield would like to pursue in their permit renewal application.

Special Condition 2, Maximum Authorized Daily Withdrawal Volume

This condition specifies the maximum daily volume that Topsfield is authorized to withdraw from its permitted well. Topsfield has submitted maximum daily withdrawal volumes in compliance with the authorized volumes from 2012 to 2016 (Table 3).

Table 3 Topsfield's Recent Maximum Daily Withdrawal Volumes (MGD)

Withdrawal Point	Maximum Authorized Daily Withdrawal Volumes (MGD)	2016	2015	2014	2013	2012
North St. Well (3298000-01G)	1.3	0.75	0.68	0.64	0.65	0.78

Special Condition 3 and 4, Zone of Contribution (Zone II or Zone III) Delineations and Wellhead Protection

According to MassDEP's records, Topsfield is in compliance with the Zone II delineation and wellhead protection requirements in the current WMA permit.

Special Condition 5, Wetlands Monitoring

This condition although listed in the 2006 permit modification, was no longer required. This condition will be removed from the modified permit.

Special Condition 6, Streamflow Triggers and Outside Water Use Restrictions

From May 1 to September 30 each year, Topsfield is required to notify its customers of voluntary restrictions when streamflow at USGS gage #01102000 falls below 70 cubic feet per second (cfs) and must institute mandatory restrictions when the streamflow falls below 52.5 cfs for three consecutive days. Mandatory restrictions imposed must at a minimum limit nonessential use to hand-held hoses, to the hours outside of 9AM to 5PM.

Table 3 summarizes the date that mandatory restrictions were required to be implemented from 2012 to 2017 based on streamflow in the Ipswich River and when Topsfield actually reported implementing restrictions according to MassDEP's records. Please explain the delay on implementing the restrictions on 2013.

Table 3 Dates of First Annual Outdoor Water Use Restrictions

	2012	2013	2014	2015	2016	2017
Date of first implementation of restrictions required by permit*	July 13	May 19	June 22	May 19	May 21	Aug 13
Date of first implementation of restrictions reported by Topsfield	Apr 11	Aug 22	June 26	May 26	May 26	July 17

* Fourth consecutive day when streamflow at the Ipswich River at Ipswich, MA USGS gage fell below 52.5 cubic feet per second, per Special Condition 6.

Special Condition 7, Ipswich River Basin Performance Standards

Performance Standard for Unaccounted for Water

Topsfield Water Department's performance standard for Unaccounted for Water (UAW) is 10% of overall water withdrawal. Topsfield has been reporting a UAW percentage below 10% in recent years except for the 2016 (19% in 2016, 9% in 2015, and 8% in 2014). Please explain why the UAW increased from 9% in 2015 to 19% in 2016. MassDEP has updated the Functional Equivalence requirements for UAW based on the AWWA/IWA Water Audits and Loss Control Programs, Manual of Water Supply Practices M36. If Topsfield fails to document compliance with the UAW performance standard (UAW of 10% or less for 2 of the 3 most recent years) within three years, it shall develop and implement a water loss control program following the AWWA M36 Water Audits and Loss Control Programs.

Performance Standard for Residential Per Capita Water Use

Topsfield Water Department's performance standard for Residential Per Capita Water Use (RGPCD) is 65. Topsfield's RGPCD in the past 3 years is 54 in 2016, 52 in 2015 and 51 in 2014. If Topsfield fails to meet the RGPCD performance standard in its 2017 Annual Statistical Report (ASR) or in any ASR thereafter, Topsfield may be required to implement restrictions on nonessential outside water use that

are more stringent than the restrictions set forth in the Special Condition #6 Streamflow triggers and outside water use restrictions. Topsfield is also required to develop and implement an enhanced water conservation plan according to the Special Condition #8 Enhanced Water Conservation Plan if it fails to comply with the RGPCD performance standards.

Performance Standard for Seasonal Water Use

Topsfield is required to keep its water use at or below an average daily volume of 0.55 MGD from May 1st through September 30th. According to MassDEP's record, Topsfield has been in compliance with this requirement in the past 5 years. Should Topsfield withdraw more than 0.55 MGD during the month of May to September, more stringent restrictions on nonessential outside water use may be required and an Enhanced Water Conservation Plan should be developed and implemented according to the Special Condition # 8 Enhanced Water Conservation Plan.

Performance Standard for Restricting the Use of Unregulated Irrigation Wells

Topsfield is required to documenting all actions taken by the Town to make unregulated irrigation wells subject to the restrictions on nonessential outside water use in its ASRs. According to MassDEP's record, Topsfield passed a bylaw holding private irrigation wells to the same watering restrictions as Topsfield Water Department's customers. Please provide an update on implementation and enforcement of nonessential outdoor water use restrictions for private wells.

Special Condition 8, Enhanced Water Conservation Plan

Topsfield is required to develop and implement the enhanced water conservation plan if it fails to comply with the Performance Standards for RGPCD and/or Seasonal Water Use. Topsfield has been in compliance with the RGPCD and Seasonal Water Use requirements therefore it has not had to implement an enhanced water conservation plan. Because Topsfield is located in a minimization subbasin (discussed below), Topsfield will have to increase conservation as outlined in the 2014 WMA regulations. The renewed permit's requirements for minimization will be consistent with any additional requirements expected should an enhanced conservation plan condition be triggered in the future.

Special Condition 9, Control of Unaccounted for Water

Topsfield's UAW for the 2016 was 19%. Please explain what steps Topsfield will take moving forward to comply with the 10% UAW requirement.

Special Condition 10, Requirement to Report Raw and Finished Water Volumes

Topsfield is required to report on the ASR both the raw and finished water volumes for the entire water system. A review of Topsfield's recent 5 years' ASRs show that Topsfield only reported finished water volumes for its entire water system and individual sources in the ASRs. Please provide an explanation of why the raw water was not reported in the ASRs.

Special Condition 11, Commercial and Industrial Conservation Program

Topsfield was not required to implement a special program to reduce water use by its ten largest industrial and commercial customers since they are not the significant water users in Town. MassDEP will review the updated water conservation questionnaire submitted by Topsfield and decide whether this condition needs to be amended.

Special Condition 12, General Conservation Requirements

Topsfield is required to complete the retrofit of all public buildings with water saving devices on or before December 31, 2008. Please provide an update on the status of the retrofit and a timeline of completing the retrofit if applicable.

MODIFIED PERMIT CONDITIONS:

Mitigation

Permittees requesting an increase above their baseline withdrawal rate must undertake mitigation activities commensurate with the impact of their increased withdrawals. The calculated baseline withdrawal volume for Topsfield is 0.46 MGD or 167.9 MGY, the 2005 withdrawal volume plus 5%. Topsfield Water Department may be subject to mitigation requirements depending on the volume it seeks to renew. As noted above Topsfield has some options about the volumes they seek to renew.

If Topsfield renews its permit for volumes greater than their baseline (0.46 mgd), a mitigation plan is required for the difference between the request and the baseline. However, an 85% wastewater adjustment can be applied against the volume required to be mitigated for systems with wastewater that is returned to the ground within the same major basin as the withdrawal. Topsfield reported on the permit renewal application that about 0.8% of its wastewater is discharged to a public sewer system and 99.2% of the wastewater is disposed of through on-site disposal systems. MassDEP is going to assume that the wastewater generated by the additional withdrawal over baseline will be returned to groundwater via on-site disposal systems and to the public sewer system in the same percentages as is returned now. Water that is returned to groundwater in the Ipswich Basin will receive 85% credit, leaving a volume of 15% to be mitigated.

According to the previous discussions with Topsfield, the following potential mitigation activities may have been completed by Topsfield since January 1, 2005:

- Stormwater Recharge Projects (Please note that this is a direct mitigation activity and needs to be evaluated before indirect mitigation options can be explored);
- Land Purchase and Protection;
- Private Well Bylaw;
- Habitat restoration projects.

If Topsfield intends on renewing its WMA permit for more than its 0.46 mgd baseline, please identify the potential mitigation activities Topsfield is considering and contact MassDEP to identify the specific information necessary to be submitted to determine the eligibility and score for each activity.

Coldwater Fish Resource Protection

All WMA permit applicants with a Coldwater Fish Resources (CFRs) in any of their permitted subbasins (per MassDEP's interactive map showing DFW designated CFRs http://maps.env.state.ma.us/flexviewers/SWMI_Viewer/index.html) will be required to conduct a desktop optimization. Topsfield's North St Well (3298000-01G) appears to impact a CFR located in the subbasin 21009. Therefore Topsfield should conduct a desktop optimization following the steps listed in the Table 4 and respond to MassDEP whether it has feasibility to make operational changes aimed at minimizing impacts to CFRs.

Table 4: Source Optimization – for use in Coldwater Fish Resource (CFR) Protection Planning, Minimization Planning, and Alternative Source Review	
Optimization Parameter	Guidance
1) Is there a CFR present? ¹	Withdrawals with no known impact or least impact to a CFR are preferred.
2) What is the Mass Water Indicators (MWI) August affected streamflow in cubic feet per second per square mile (cfs/mi)? MWI affected flow is (unaffected streamflow – groundwater withdrawals + all returns)/drainage area	Withdrawals in subbasins with a higher cfs/mi are preferred.
3) Does the increase over baseline cause a change in BC or GWC? (This step is applicable to Tier 2 and 3 applicants only and is not used for minimization.)	Withdrawals that do not result in a subbasin changing BC or GWC are preferred.
4) What is the groundwater withdrawal percentage (withdrawals/unaffected streamflow)?	Withdrawals in subbasins with lower percentages are preferred (as long as there is no change in BC or GWC).
5) Is there an available surface water supply with a release plan approved by the Department?	Shifting pumping from groundwater to surface water sources with approved release plans during low-flow periods is generally preferred. Surface water sources without ability to be released may be preferred based on a case-by-case evaluation.
6) Are other sensitive resources present such as vernal pools?	Withdrawals with no known impact or least impact to sensitive resources are preferred.

Minimization

Permittees with groundwater sources in subbasins having August net groundwater depletion (August NGD) of 25% or greater are required to develop a plan to minimize the impacts of their withdrawals to the greater extent feasible. Both of Topsfield's wells are located in subbasins that have August net groundwater depletion over 25% (102% for subbasin 21003 and 47% for subbasin 21009). Therefore Topsfield cannot optimize by shifting pumping to a less impacted subbasin.

To fulfill the minimization requirement, Topsfield will be required to institute additional conservation measures identified as feasible in addition to those already in place. According to the conservation questionnaire submitted with the permit renewal application, Topsfield uses an automatic or radio-read meter reading system, evaluates its rate structure annually and have a bylaw or ordinance that restricts installation or operation of automatic sprinkler system. **Please discuss all conservation measures Topsfield implements now. Also discuss conservation measures Topsfield may implement in the future to conserve water, both year-round and in the summer.**

For reference, the following two tables identify conservation measures from the 2014 Water Management Act Permit Guidance Document and from Special Condition 8 (Enhanced Conservation

¹ If a CFR is present, optimization should focus on reducing potential impact to CFR.

Plan) of Topsfield's 2006 WMA permit. There is some overlap between the two tables, and these are not comprehensive lists of all conservation measures the town may wish to consider.

2014 Guidance Document Chapter 6 Minimization Additional Conservation Measures

Conservation Measures to Reduce Demand (other than outdoor use)
<ul style="list-style-type: none"> • Implement a rebate program for residential customers for high-efficiency WaterSense-labeled products (toilets, lavatory faucets, showerheads, and irrigation controllers) and Energy Star-labeled clothes washers. • Offer incentives for those seeking municipal approvals to install high-efficiency WaterSense-labeled products and Energy Star-labeled appliances in new construction and renovations. Document numbers of products installed in annual report. • Evaluate rate structure every two years and increase rates for the highest rate block. • Implement a seasonal rate structure that sets higher rates from May 1 to September 30. • Increase billing frequency to at least quarterly. • On water bills, provide customers with water consumption information in gallons and show consumption history.
Conservation Measures to Reduce Water Losses
<ul style="list-style-type: none"> • Conduct comprehensive water audit of water system every five years. • Develop and implement a meter replacement program to ensure that all nonresidential water use is properly accounted for. • Establish penalties and fines for stealing water. • Install an automated, remote meter reading system. • Install an automated, remote leak detection system.
Conservation Measures to Reduce Nonessential Outdoor Watering
<ul style="list-style-type: none"> • Include some or all of the following provisions in an outdoor water use bylaw or ordinance to ensure proper installation and efficient operation of automatic sprinkler systems: <ul style="list-style-type: none"> ◦ require registration of automatic irrigation systems. ◦ minimize installation of high water use landscape areas. ◦ restrict land clearing and lawn size in new developments and require a minimum 6-inch depth of topsoil on all cleared areas to help retain moisture; and ◦ prohibit topsoil stripping. • Provide incentives to improve efficiency of automatic irrigation systems. • On municipal properties with automatic irrigation systems, install WaterSense-labeled weather-based controllers. • Target highest water users with monthly mailing about their use from May 1 through Sept. 30. Provide information comparing their use with most efficient customers. • Extend seasonal limits on nonessential outdoor water use to private well users. • Provide incentives for customers to infiltrate rainwater; infiltrate rainwater on municipal properties. • Provide incentives for customers to enhance soil health; enhance soil health on municipal properties.

Topsfield permit Enhanced Water Conservation Plan

The enhanced water conservation plan may include, but is not limited to, the items listed below:
<ul style="list-style-type: none"> • Adoption and enforcement of a bylaw or other regulation to require moisture sensors or similar control technology on automatic sprinklers;

- Adoption and enforcement of a bylaw or other regulation to limit the amount of land clearing for the creation of lawns;
- Adoption and enforcement of a bylaw or other regulation to promote infiltration of stormwater to recharge groundwater at a rate 1.5 times the volume of recharge for new development projects and a rate of 1.0 times the volume of recharge for redevelopment projects for the appropriate hydrologic group, as identified in Standard 3 of the DEP Stormwater Management Standards;
- Irrigation of recreational fields and parks in accordance with the Water Resources Commission's 2006 Water Conservation Standards, Section 9 Lawn and Landscape;
- Encouragement of the use of cisterns or rain barrels for outside watering thru the use of a rebate or at-cost program;
- Enhanced public education outreach; and/or
- Purchase and/or development of out-of-basin sources

At a minimum, the enhanced water conservation plan shall meet the requirements set forth below.

- If Topsfield fails to comply with the performance standard for keeping residential per capita water use at or below 65 gallons per day, the enhanced water conservation plan shall include the implementation of a program to make water saving devices such as faucet aerators, low flow shower heads, and toilet displacement bottles/dams available to its customers at cost and to provide rebates or other incentives for the purchase of low flow appliances (washing machines, dishwashers, and toilets) and the installation of moisture sensors or similar control technology on irrigation systems.
- Any enhanced water conservation plan required by this permit shall include (1) submission of a report that evaluates the effectiveness of an increasing block rate or a seasonal rate as a tool for encouraging water conservation; (2) implementation of any changes to the current rate structure that will enable the Town to encourage water conservation; and (3) notification to MassDEP of the changes along with the reason for these changes.

**Topsfield Water Department
Superintendent's Report
May 9, 2018**

1. Water Treatment Plant Project

Plant

The mason has finished the load bearing walls. Roof trusses are expected to arrive this week. The general contractor has made up a few weeks of time on the construction schedule. Originally the project was scheduled to be completed by the end of February 2019. Last month they were looking at 4/19/19 and are now saying 3/28/19 so things are moving in the right direction.

Transmission Mains

All of the mains installed by R+D are in service and the only remaining work is some cleanup and final paving.

Boston Street Altitude Valve

The valve is in place and the tank is back in service. The remaining items include the installation of electrical conduit, pipe supports, a ladder in the vault and testing of the pipes.

Change Orders

- Change Order Request #1 in the amount of \$9,316 was approved by the Board and signed by the Selectmen last month.
- Change Order Request #2 involves the smooth face masonry veneer to the building. There has been a great deal of discussion regarding this amongst Wright-Pierce (designer), Woodard & Curran (OPM), Kinsmen (GC), Costa Brothers (mason) and myself. After several iterations we've settled on a change order of just over \$14,300. Part of the change is the increased labor caused by switching from a split faced veneer to a smooth veneer. Having researched this, including consulting estimators and other masons, WP and WC agree the increased price in labor for this change is approximately \$5,300. Correcting the block order will cost an additional \$7,100. The remainder of the change order being a 10% markup for the mason and 5% for the general contractor. There are some options for reducing the total cost such as switching back to a split-face veneer and avoiding the labor charge and/or using more of the brown split-face block that was ordered. The price quoted is the to make the plant match the public works building. I hope to have a final copy of the change order for your review at the meeting. A decision is required as the block order is on hold.

2. Leaks & Breaks

Nothing to report except UAW is still low, 3.9% for April.

3. Prospect Street & River Road Water Main Project

The pre-construction meeting is scheduled for later today and work will begin on 5/10. R+D will start on Prospect Street near South Main Street and work towards Washington Street. They expect to complete the pipe work and temporary paving by the end of June.

4. Withdrawal Permit Renewal

We've received an Order to Complete (OTC) from MassDEP. This one of the first steps to renew our withdrawal permit. A copy of the order is attached. I'd like to review some of our options before getting into the details of the new Sustainable Water Management Initiative requirements.

The Water Management Act was adopted in 1986. As part of the implementation of the act water suppliers were asked to summarize their historical water use. These values were used to quantify how much suppliers were withdrawing and formed the basis of their “registered” volume or grandfathered water rights. Our registered volume is 0.43 million gallons per day on an average annual basis. Our current permitted volume, the amount we can withdraw in addition to our registered volume, is 0.17 MGD. The new permitting process is based largely on population estimates. We are requesting 0.03 MGD as part of the renewal. Water allocation in the Ipswich Basin is rather tight and I do not expect to receive any more than what has been requested.

We have the option of not renewing the permit because the permitted volume is rather small and given that we haven’t really used any of the permitted volume since 2006. Abandoning the permit would cap our withdrawals at 0.53 MGD, our registered volume plus 0.1 MGD that we could withdraw without obtaining a permit, and we would be free of MassDEP special conditions. However, we would have to formulate our own conditions to keep use below the 0.53 MGD limit, regulate use during the summer to keep it below our pumping capacity and maintain water quality. If we pursue a permit then our volume will be capped at 0.46 MGD and we’ll have to comply with the conditions.

The OTC is requesting information that MassDEP will use in evaluating our permit application. Many of the requests are related to conditions set in our old permit plus some new wrinkles due to the Sustainable Water Management Initiative. The conditions that may present an issue or require some explanation/research are:

- MassDEP records show a delay in implementing water restrictions. We typically implement them on the first weekday following a streamflow trigger so the actual times will have to be documented so their records can be corrected.
- They have requested information about regulating private irrigation wells. They are provided this information on an annual basis which consists of a list of enforcement actions taken.
- Unaccounted for Water was high for the past couple of years so we’ll have to document steps taken to reduce UAW and show that the efforts were successful.
- Water saving devices in public buildings. This will require further research.
- Mitigation – if we receive more than 0.03 MGD then we’ll have to submit a mitigation plan that includes projects that will lessen the impact of the withdrawals.
- Coldwater Fisheries – MassDEP’s SWMI map shows a cold-water fishery near the North Street station, it’s actually closer to the Aaron Drive end of North Street on a separate stream segment. They’ll require a desktop study to essentially minimize the use of the station unless we are able to prove that it is not a cold-water fishery.
- Minimization – We’ll be required to minimize the use of our sources during the summer due to low streamflow.

Abandoning the permit and returning to unregulated irrigation raises some concerns. First, we would have to run Perkins Row a lot more which would degrade water quality, at least until the plant is completed. Also, we have not run at full capacity in over a decade and the returning to uncontrolled irrigation while opening the plant could present some staffing and supply problems.

5. Sampling Notice of Noncompliance

Bacteria samples were not taken from the water sources during the month of March. Typically, each

station is sampled for raw and finished water Total Coliform on the second Tuesday of each month. A major snow storm coincided with the sample day in March and the lab was closed so the samples were postponed for a week. Routine samples were taken on the third Tuesday but the sources were skipped.

MassDEP has issued a Notice of Noncompliance which requires that a plan be submitted detailing how this can be avoided in the future and include a notice in the next water quality report. I'm going to create a monthly checklist for samples to make sure they're taken and add some additional functions to the water quality website to track samples that were scheduled but not taken.

6. Rate Hearing

We're due for another rate hearing next month. The hearing needs to be advertised in advance.

7. Andrews Farm

The valve at the town line is off and the site has been returned to the pre-explosion conditions. A fire truck will have to connect the Andrews Farm hydrant and our hydrant at the town line to pressurize their fire main. We received an email from Katherine Carlson regarding Andrews Farm, a copy of which is included in the packet.

8. Union Contract

The Highway and Water Union settled their contract for FY2018-20. This year they received a 2% increase starting 7/1/17 and an additional \$0.25 per hour starting 1/1/18 and applied retroactively. The union labor line items were level funded for FY2018 and FY2019 because the contract was being negotiated so a transfer of some type might be needed.

KINSMEN CORPORATION

TEL. 603-625-9199

CONTRACTORS • ENGINEERS

FAX 603-625-9399

May 8, 2018

Wright-Pierce
40 Shattuck Road, Suite 305
Andover, MA 01810

Attn: Mr. James E. Cray, P.E.

Re: Topsfield Water Treatment Plant
Contract 1
Topsfield, MA

Gentlemen:

Pursuant to the provisions of Article 11 of the General Conditions (EJCDC) and as amended in Supplementary General Conditions, we are submitting, herewith, our breakdown of costs for Proposed Change Order No. 007(R3) to Revise CMU Veneer Masonry at Filter Building, generally in accordance with Designer's direction in email correspondence dated April 5, 2018. This proposed change revises the veneer masonry scheme from split-face veneer with smooth-face accent band per the Contract drawings, to smooth-face veneer with split-face accent band per Owner's request. This revised PCO incorporates reductions to previous pricing and breakdown of extra costs resulting from the veneer scheme change as was agreed upon at site meeting on May 4, 2018.

Please issue a Contract Change Order at the earliest authorizing the scheduling and performance of this additional work.

Very truly yours,

KINSMEN CORPORATION



Eugene B. Connor, Jr., P.E.
President
ERC/kb

TOPSFIELD WTP PCO 007R3

PROPOSED CHANGE ORDER NO. 007(R3)
REVISE CMU VENEER MASONRY

**ADDITIONAL CONTRACT TIME REQUIRED: ADDITIONAL CONTRACT TIME NOT
REQUIRED FOR THIS CHANGE IF APPROVED ON OR BEFORE MAY 11, 2018.
(EXCLUSIVE OF ALL OTHER PCO'S CONTRIBUTING TO CONTRACT TIME
EXTENSIONS.)**



CHANGE ORDER REQUEST

To: Gene Connors

COR No.: 2 R2

Contractor: Kinsmen Corporation
35 Londonderry Turnpike #A
Hooksett, NH 03106

Project: Topsfield WWTP
279 Boston St.
Topsfield, MA 01983

Phone: 603 625 9199

Date: 5/7/2018

DESCRIPTION

Cost breakdown for COR#2 R2 to switch from split face veneer to smooth face veneer. Supervision added for the foreman based on every 5 masons on site. Loss of production is 20 block per mason per day.

LABOR

Classification	No. of Workers	Total Hrs. Worked	Base Wage Rate	Total Wage Rate	Total Cost
Foreman	1	5.8	\$ 57.06	\$ 119.00	\$ 690.20
Mason	1	29	\$ 52.06	\$ 107.37	\$ 3,113.73
Operator	1	5.8	\$ 36.65	\$ 78.16	\$ 453.33
Labor Foreman	1	0	\$ 36.65	\$ 78.16	\$ -
Laborer	1	15	\$ 32.65	\$ 69.49	\$ 1,042.35
Road Supervisor	1	0	\$ 57.06	\$ 119.00	\$ -
Shop Labor	1	0	\$ 32.65	\$ 69.49	\$ -

Total Labor Cost
\$ 5,299.61

MATERIALS

Type of Material	Qty.	Unit	Unit Price	Total Cost
Smooth Face Block	1	LS	\$ 7,143.00	\$ 7,143.00
				\$ -
				\$ -
				\$ -
				\$ -
Taxes on Material	6.50%		\$ 7,143.00	\$ -

Total Material Cost
\$ 7,143.00

EQUIPMENT

Type of Equipment	Qty.	Unit	Price	Total Cost
				\$ -
				\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -

Total Equipment Cost
\$ -

SUB TOTAL COST for Materials, Labor & Equipment

SUB TOTAL: \$ 12,442.61

MISC. LUMP SUM SERVICES PROVIDED

Type of Misc. Service	Qty.	Price	Total Cost
		\$ -	\$ -
Consumables		3%	
Shop Burden	55.6	\$ 11.23	

\$ -

SUB TOTAL: \$ 12,442.61

Overhead & Profit	15.0%	\$ 1,866.39	1244.26
	SUB TOTAL:	\$ 14,309.00	13686.81
Pollution Insurance	0.4179%	\$ 59.80	
P&P Bond	2.0%	\$ 286.18	273.73
Textura Fee	.18% + 6.25%	\$ -	
TOTAL COST:		\$ -14,654.98	14020.8



QUOTATION

QUOTED TO:	Costa Brothers	DATE:	03/29/18
ADDRESS:	2 Lambeth Park Dr.	SALESPERSON:	TR
CITY:	Fairhaven	EST. START DATE:	TBD
TALKED TO:	Aaron Martel	ARCHITECT:	Wright Pierce
EMAIL:	aaron@costamasonry.com		
JOB:	Topsfield WTP	LOCATION:	279 Boston St., Topsfield, MA

QUANTITY	DESCRIPTION		
SMOOTH FACE 5100 W/INTEGRAL WATER REPELLANT			
	4x8x8 Saw Cut	1.86	
	4x8x16	2.48	
	4x8x16x8 L Corners	4.80	
SPLIT FACE LT-13 W/INTEGRAL WATER REPELLANT			
	4x8x16	3.10	
	4x8x8 Saw Cut	2.28	
	4x8x16x8 L Corners	5.82	

NOTES: Fuel surcharges will apply depending on market conditions
Prices subject to change after 08/31/18