



1.5

TOWNSEND WATER DEPARTMENT
540 Main Street West Townsend, Massachusetts 01474

Nathan Mattila, Chairman
David Vigeant, Superintendent

Todd Melanson, Vice-Chairman
(978) 597-2212

Michael MacEachern, Clerk
Email water@townsendwater.org

WATER COMMISSIONERS MEETING MINUTES

February 1, 2021 – 6:00 P.M.

Water Department 540 Main Street, Meeting Room

NOTE REGARDING ACCESS AND PARTICIPATION

Governor Baker declared a State of Emergency to respond to COVID-19 on March 10, 2020 and ordered a suspension of certain provisions of the Open Meeting Law M.G.L. c. 30A, s 20 on March 12, 2020. The Board of Selectmen closed the town offices, including boards and committee meetings consistent with the Governor's March 12th order, to public access to promote social distancing and reduce the spread of COVID-19. The Board of Water Commissioner's meetings will not be open to the public for physical attendance until further notice. The meeting will be available on Zoom.

Join Zoom Meeting

<https://us02web.zoom.us/j/81752950954?pwd=Zjdrb3F6ZU5aUllvYmF0RVZtcG1YUT09>

Meeting ID: 817 5295 0954 Password: 422941 Log on Monday February 1, 2021 at 6:00 P.M. to participate.

I. PRELIMINARIES:

- 1.1 NM called the meeting to order at 6:03PM via Zoom.
- 1.2 NM announced that the meeting is being audio recorded and recorded on Zoom.
- 1.3 Roll call showed members present: Nathan Mattila (NM)-Chairman, Todd Melanson (TM)-Vice Chairman. Michael MacEachern (MM)-Clerk was absent. Roll call showed citizens present: Laurie Shifrin-Country Estates, David Vigeant (DV)-Water Superintendent, and Mistie Demazure (MD)-Office Assistant.
- 1.4 Chairman's additions or deletions. There were no additions made by the Chairman.
- 1.5 Approve meeting minutes of January 5, 2021. Tabled.
- 1.6 Review correspondence. None available.

II. APPOINTMENTS-VOTES MAY BE TAKEN

2.1

III. MEETING BUSINESS-VOTES MAY BE TAKEN:

- 3.1 Update/Discuss 512 Main Street. DV is having cost estimates provided using an engineer to upgrade the wells at the Main St pumping station. TM had concerns about why there would need to be a test well installed if there was one put there in the past. DV explained that it was put there in 2002 and has since been removed. **TM motioned to approve \$70,000 to engineering construction and pump test. NM seconded. Unanimous vote.**
- 3.2 Update/Discuss Cross Charge Agreement. Tabled.
- 3.3 Discuss/Review Master Plan. DV is waiting to hear from Tighe and Bond if there are any updates.
- 3.4 Update/Discuss Billing Software-Vadar. The software is being customized and will be installed soon.
- 3.5 Update/Discuss COVID-19. TM asked if DV knew how the town was handling the COVID vaccine. DV explained that there has been no communication, but the Department is in Phase 2 and will have to wait. Prior to the meeting, MM requested the MD ask if COVID protocols such as mask wearing, and social distancing were being followed. DV said that Department is doing their part.
- 3.6 Update/Discuss FY21 revenue review for budgeting. DV explained what he is planning on revising for the upcoming budget. TM requested that he organize it into a file that indicates the changes, and it will be reviewed in the next meeting.
- 3.7 Abate acct 61448, Townsend Police \$26.79, customer is disputing late fees. NM is looking for any correspondence regarding these types of issues. DV said that he will find the supporting documentation and speak with the technicians regarding what happened.

- 3.8 Abate accts 60476-60477-60478, Country Estates, \$200.00 unit charge adjustments for Oct, Nov, and Dec 2020. One of the accounts was found to be underbilled last quarter. DV suggested that it be considered a wash. **TM motioned that the request for the abatement of accounts 60476-60477-60478 be denied based on not back charging the account. NM seconded. Unanimous vote.** MM requested that MD ask for no further decisions be made on the underbilled accounts until all three board members can be together.
- 3.9 Approve 1" service EKC Development, 7 Lois Lane, Acct 61667. RE: Received \$2,500. Ck#1123. **TM motioned to approve a 1" service for EKC Development at 7 Lois Lane, Acct 61667. NM seconded. Unanimous vote.**
- 3.10 Approve Superintendent signing Application of Water Service when in compliance the by-laws. **TM motioned to approve DV to approve and sign all Single Service applications, when in compliance with the by-laws. NM seconded. Unanimous vote.**
- 3.11 Review/Discuss Updated SOP's. TM requested that the SOP's be reformatted before sending to DEP. TM requested that there be a requirement for checking irrigation systems included somewhere in the SOP's. There also should be an SOP regarding summer restrictions and fines.
- 3.12 Update/Discuss PFAS testing. DV is waiting for the state to provide the testing bottles. TM suggested DV call the provider to get the ball rolling and get the testing done.
- 3.13 Update/Discuss Job descriptions. Mistie and Brenda's job descriptions are with the Town Administrator. These are going into negotiations with the union. Mistie will be moving to the Water Union.

IV. COMMISSIONERS UPDATES AND REPORTS-VOTES MAY BE TAKEN:

- 4.1 Discuss Comp Time. MM requested this be put on the meeting, MD explained that he was concerned about comp times getting excessive and specifically how they are earned. DV said that it is all under control, TM expressed that it is his job to make sure that it is controlled. NM discussed his concerns about multiple people making trips to the hardware store at a time. It should only require one person.
- 4.2 Update/Discuss Water Rate Study. TM felt that there should be a new rate study conducted to back any rate increases that happen in the future. DV said that there was a large amount found in revenue due to coding errors. These findings will take place of a rate increase for the next year.

V. SUPERINTENDENT'S UPDATES AND REPORTS-VOTES MAY BE TAKEN:

- 5.1 Update/Discuss on Cross St Well. DV is waiting for spring to do a two-week test. DEP wants a daytank installed within the next month to get a permit. TM questioned if there would need to be a warrant article for the delineation.
- 5.2 Update/Discuss Main Street Station. Duplicate
- 5.3 Update/Discuss Highland Storage Tank. The total cost should be under \$20,000.
- 5.4 Review/Discuss Holiday/On-Call stipend. The technicians are given 2 hours per day on the weekends in addition to the \$250 per week. The proposed \$350 weekly needs to be approved. MM requested that MD state he does not want the technicians to be paid overtime as well as the current \$75 holiday pay.
- 5.5 Discuss/Update on Meters and Hydrants. 17 of the 129 industrial meters comply. Sterlite on Scales Lane is next to be changed. The project is ongoing. Hydrants are being held off until the spring. TM questioned if it is a requirement in the specifications to have hydrants at dead end streets. It was requested that DV put together a spreadsheet for hydrants that are replaced between meetings for review.

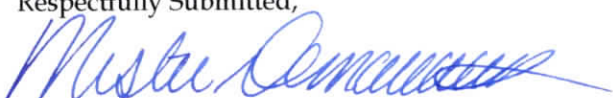
VI. OFFICE ADMINISTRATOR'S UPDATES AND REPORTS-VOTES MAY BE TAKEN:

- 6.1 The Board scheduled the next meeting for Monday February 8, 2021 at 6:00PM
- 6.2 Review and sign Bills Payable Warrants. Tabled
- 6.3 Review and sign January's Schedule of Bills Receivable report. Tabled
- 6.4 Review Accounts Receivable Report. Tabled
- 6.5 Review year to date expenditures. Tabled

ADJOURNMENT:

TM adjourned the Board of Water Commissioners meeting at 7:50PM. NM seconded. Unanimous vote.

Respectfully Submitted,


Mistie Demazure

3.1-5.2

David Vigeant

From: Connors, Susan (DEP) <susan.connors@state.ma.us>
Sent: Thursday, January 14, 2021 1:48 PM
To: David Vigeant
Cc: Sarafinas-Hamilton, Catherine (DEP); Bostwick, Robert (DEP); Finch, Amy (DEP)
Subject: 512 Main St/TW3-98, Townsend
Attachments: Appendix A.pdf; Townsend-2299000-Zone II-Well (3-98)-2000.pdf

Hi David,

I need to review the Water Management Act file in our office to review to give you a complete response. I will be in the office next Wednesday. I can tell you that our initial thoughts are that the source should be pumped to waste for 5 days and the collection of water quality samples should be in accordance with a 5-day pumping test, but perhaps with some exceptions. Sampling for PFAS6 would be included at the end of the test along with the parameters in the document attached to this email (with minimal exceptions). Water level monitoring would not be required, but is recommended to confirm specific capacity and other aquifer parameters. A land use survey of the Zone II should be completed and submitted to me to look for any new potential sources of contamination and to refine a groundwater monitoring plan. One was submitted with the original application, but it could be updated.

It seems that some ground water supply protection requirements in terms of Townsend's bylaw may have slipped through the cracks and edits may be needed. Specifically the map of Townsend's Aquifer Protection District may not cover the Zone II for this source and it must prior to activation. You may have time to have any necessary changes proposed for spring town meeting if you act now. For further guidance on ground water supply protection, please contact Catherine Hamilton from DEP-Boston and I have cc'd her on this email. You should start by contacting Townsend's planning board and ask if the Zone II is covered in the map that is formally adopted as part of the bylaw. Catherine's initial review showed that it may not be as the bylaw references a map from 1989. We need clarification on that. I have also attached a copy of the Zone II to this email. The Zone II is the solid line polygon. If the planning board has any questions, please direct them to Catherine at Catherine.Sarafinas-Hamilton@mass.gov.

I'll be in touch again after I review the WMA file. I will also respond soon regarding the Cross St Well.

Thank you,
Susan

Susan Connors
MassDEP-CERO
Drinking Water and Water Management Programs
8 New Bond Street, Worcester, MA 01606
Telework Google Voice phone 508.425.4694
susan.connors@mass.gov

From: David Vigeant <dvigeant@townsendwater.org>
Sent: Tuesday, January 12, 2021 11:11 AM
To: Connors, Susan (DEP) <susan.connors@mass.gov>
Subject: 512 Main st

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Hi Susan, yes , Tigh and Bond recommended a 48 hour pump test once I consulted you to see what the next step is to be. And we own the whole area of Zone 1. Ant help would be appreciated.

Thank You so much David

**David W Vigeant
Superintendent
Townsend Water Department
540 Main St
West Townsend Massachusetts 01474
Office Phone 978-597-2212
Cell Phone 978-332-0391
Email DVigeant@townsendwater.org**

Appendix A

Water Quality Testing Requirements for Source Approval

All testing must be done in accordance with 310 CMR 22.00 (Massachusetts Drinking Water Regulations). Among these requirements are the use of a laboratory certified in the specific analyte, using approved methodology and reporting on MassDEP forms (pursuant to 310 CMR 22.11A) as well as meeting all applicable method detection limits.

1. Coliform Bacteria

If the result of any analysis is positive for total coliform, then the sample must be analyzed for *E. coli* (or enterococci and/or coliphage at MassDEP's discretion).

2. Secondary Contaminants

- Alkalinity-Total (CaCO_3)
- Aluminum
- Calcium
- Chloride
- Color
- Copper
- Hardness (CaCO_3)
- Iron
- Manganese
- Magnesium
- Odor
- pH
- Potassium
- Silver
- Sulfate
- TDS
- Turbidity
- Zinc

3. Lead

4. Nitrate

5. Nitrite

6. Perchlorate

7. Inorganic Compounds

- | | |
|-------------|------------|
| • Antimony | • Fluoride |
| • Arsenic | • Mercury |
| • Barium | • Nickel |
| • Beryllium | • Selenium |
| • Cadmium | • Sodium |
| • Chromium | • Thallium |
| • Cyanide | |

8. Volatile Organic Compounds (VOCs)

All VOCs as per 22.07B(1) and 22.07C(5)

9. Synthetic Organic Compounds (SOCs)

All regulated and unregulated SOCs per 310 CMR 22.07A(1) excluding:

- Diquat
- Endothall
- Glyphosate
- 2,3,7,8-TCDD (Dioxin)

Note: Surface water sources do not have to test for EDB and DBCP.

10. Radionuclides

- Radon
- Gross alpha activity
- Radium 226 & Radium 228
- Uranium
- Beta particle and photon activity [if required, see 310 CMR 22.09A(3)]
 - Additional testing is required if the gross beta particle activity less the naturally occurring potassium-40 is greater than 50 pCi/L.
 - Iodine-131 (if required)
 - Tritium (if required)
 - Strontium-90 (if required)

11. Field Testing

Carbon dioxide (not for TNCs <10,000 gpd)

Nitrogen (Ammonia) – may substitute a laboratory analysis

pH
Specific conductance
Temperature

12. Other Contaminants of public health concern as per Section 4.3.1.2.3.j.(2)(g).

David Vigeant

From: DeNatale, Doug <Doug.DeNatale@aecom.com>
Sent: Monday, January 25, 2021 4:59 PM
To: David Vigeant
Subject: Main Street Well

Hi, Dave –

I spent some time on Friday estimating costs for the 8-inch well and pumping test vs. building the permanent 18 x 24-inch well.

Unfortunately, there was a server conversion here at AECOM over the weekend, and I am trying to recover those cost-estimating files.

So, I am going from memory here and these may not be exact:

- 8-inch well construction and pumping test (Maher Services pricing): \$40,000 - \$50,000
- 18- x 24-inch well construction and pumping test (Maher Services pricing): \$250,000 – \$300,000

I would also budget 25% for AECOM services on top of each. Plus, you'll need to budget the water-quality testing (maybe \$3,000) and there may be some additional miscellaneous costs. One thing you'll need to consider is wetland, floodplain, riverfront and NHESP permitting in addition to what DEP is requiring.

I hope to have the files restored this week, and I'll have a firmer answer. But I think you get the idea.

Also, Maher Services sent me records of the two sets of test wells behind the Cross Street Well drilled in May 2016. I think Paul was considering replacing the well at that time.

Be in touch this week.

Doug

Douglas DeNatale
Senior Hydrogeologist
AECOM
250 Apollo Drive
Chelmsford, MA 01824
T 978-905-2100
F 978-905-2101
D 978-905-2180
Cell Phone: 617-320-8670

doug.denatale@aecom.com

3.4



Utility Suite - Standard Offering

All meter readings will be imported and billed at cubic feet only

VADAR Systems, Inc.

Financial Software Proposal for Townsend, MA

Date: 1/8/2021

EST. 1996

One Time Set Up Charges:

File Set-Up Utility Master Application	Year 1
	\$ 5,980.00
Meter Reading Import Conversion to Cubic Feet	\$ 2,480.00
Data migration Utility	\$ 2,980.00
Software Installation & Implementation Utility	\$ 1,980.00
User Training Utility (3 live sessions - virtual or onsite TBD)	\$ 2,370.00
Subtotal One Time Charges:	\$ 15,830.00

Software Licenses & Support Charges:

Utility Billing & Collection - Water Billing & Collection	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	\$ 7,980.00	\$ 2,980.00	\$ 2,980.00	\$ 2,980.00	\$ 2,980.00	\$ 2,980.00
Annual Software & Support Subtotals:	\$ 7,980.00	\$ 2,980.00	\$ 2,980.00	\$ 2,980.00	\$ 2,980.00	\$ 2,980.00
Annual TOTAL Cost before Discount:	\$ 23,820.00	\$ 2,980.00	\$ 2,980.00	\$ 2,980.00	\$ 2,980.00	\$ 2,980.00
Current Client Discount:	\$ (2,796.50)					

VADAR Cloud - 4 Cloud Users:

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	8 Year Total
Total Cost - Traditional Acquisition	\$ 23,023.50	\$ 4,980.00	\$ 4,980.00	\$ 4,980.00	\$ 4,980.00	\$ 4,980.00	\$ 47,973.50
Total Cost - 8 Year Payment Plan (0%):	\$ 7,995.58	\$ 7,995.58	\$ 7,995.58	\$ 7,995.58	\$ 7,995.58	\$ 7,995.58	\$ 47,973.50

Additional Notes:

Above pricing is reflective of a three (3) year contract; support costs will be held firm for six (6) years (one renewal cycle)
 Above pricing includes the following "go live" training: 3 live sessions either virtual or onsite - TBD; additional on-site training is \$750 per day minimum one day billed
 Above pricing includes the following data migration services for utility: balance carry forward data, last read data and clerical information only; no historical transactions conversion included; additional data migration services provided on a project basis
 Above licensing costs for Utility are for VADAR's standard offering only; specialized processes or out of scope requirements may incur additional costs
 The VADAR Utility application is not a work order/scheduling/inventory application; work service fees can be billed and collected, however
 No manual data entry included
 Approved custom Programming or approved special programming/data migration services quoted on a project basis
 This proposal valid through March 31, 2021



**TOWN OF TOWNSEND
BOARD OF WATER COMMISSIONERS
APPLICATION TO ABATE OR ADJUST CHARGES**

3.7

Name: Police Dep Account # 61448

Address: 70 Brookline Rd

Phone # _____ Email Address _____

Billing date 10/1

AMOUNT: 26.79 ABATEMENT [] ADJUSTMENT [] (check one)

REQUESTED BY: CUSTOMER [] OFFICE [] OTHER [] - if other please explain below:

Reasons: (please attached supporting documentation if applicable)

APPROVED [] DENIED [] (check one)

DATE: _____

26.79 4210.

TOWNSEND BOARD OF WATER COMMISSIONERS

Townsend Water Department

1/13/2021

PO Box 321 Medford MA 02155-0004 PH: 978-597-2212

11

CUSTOMER HISTORY 12/31/2006 to 01/04/2021

Acct: 61448 TOWNSEND POL/COMM CENTER Home:(978) 597-6214
 70 BROOKLINE STREET TOWNSEND MA 01469 Current Balance: \$769.77 ACTIVE
 Loc ID: 61448 @ 70 BROOKLINE ROAD TOWNSEND
 Rte: 99 Seq.# 5255 Dep:\$0.00

Date	Code	Description	Previous	Present	Used	Charge	Payment	Balance
7/22/2020	SPKL1	Rec from Treasurer For \$229.50					105.00	0.00
10/1/2020	W02	Read on 08/28/2020 (X100) RemMR	3,132	3,475	343	1481.76		1481.76
10/1/2020	WR	Unit Charge				37.50		1519.26
10/1/2020	BKFL2	BACKFLOW DEVICE Added as Other Single Charge				110.00		1629.26
10/1/2020	SPKL1	SPRINKLER				105.00		1734.26
10/7/2020	WorkOrd	20180348 High Bill Complaint Bill Higher than it has ever been. Please check the meter to make sure it is reading correctly and there are no leaks.						1734.26
11/3/2020	LAT	Added on 11/3/2020				26.01		1760.27
11/5/2020	W02	LOCKBOX For \$1734.26					1481.76	278.51
11/5/2020	WR	LOCKBOX For \$1734.26					37.50	241.01
11/5/2020	LAT	LOCKBOX For \$1734.26					26.01	215.00
11/5/2020	BKFL2	LOCKBOX For \$1734.26					110.00	105.00
11/5/2020	SPKL1	LOCKBOX For \$1734.26					78.99	26.01
12/2/2020	LAT	Added on 12/2/2020				0.39		26.40
1/1/2021	W02	Read on 12/08/2020 (X100) RemMR	3,475	3,614	139	600.48		626.88
1/1/2021	WR	Unit Charge				37.50		664.38
1/1/2021	SPKL1	SPRINKLER				105.00		769.38
1/4/2021	LAT	Added on 1/4/2021				0.39		769.77

INSPECTED 10/13/20 -

Brenda Boudreau

From: Marcie Furlong <mfurlong@townsendpd.org>
Sent: Wednesday, January 13, 2021 9:09 AM
To: Water
Subject: Re: VOUCHER

Good morning,

We would like to request the late fees on our account be removed. Both the \$26.01 charge as well as the \$.39 charge totalling \$26.40. Our department had notified the Water department that we wanted to look into the amount of the water bill to see if there was a leak or other issue with running as the bill seemed unusually high. Upon meeting with members of the water department and learning that bill was accurate we did promptly process that bill for payment through town hall. Please understand this goes through the process of being on a town warrant for payment. We requestfully ask that the charges be removed as this was a special circumstance and was promptly paid after deemed a correct bill. Please contact me if you have any further questions.

Thank you,

Marcie Furlong

Another 39¢ was added on 1/4 totaling 26.79

On Wed, Jan 13, 2021 at 9:00 AM Water <water@townsendwater.org> wrote:

Hi Marcie,

The total is ~~26.40~~ not 26.01 please resend

Thanks,

Brenda 😊

From: Marcie Furlong <mfurlong@townsendpd.org>
Sent: Wednesday, January 13, 2021 8:55 AM
To: Water <water@townsendwater.org>
Subject: Fwd: VOUCHER

Good morning,

3.8



**TOWN OF TOWNSEND
BOARD OF WATER COMMISSIONERS
APPLICATION TO ABATE OR ADJUST CHARGES**

Name: Country Estates

Account # 60476-60477-6048

Address: _____

Phone # _____ Email Address _____

Billing date _____

AMOUNT: 200 - ABATEMENT [] ADJUSTMENT [] (check one)

REQUESTED BY: CUSTOMER [] OFFICE [] OTHER [] - if other please explain below:

Reasons: (please attached supporting documentation if applicable)

U/c Adjustments were not completed by former
Acct for the January Bill. Customer Request
Abatement.

APPROVED [] DENIED [] (check one)

DATE: _____

TOWNSEND BOARD OF WATER COMMISSIONERS

200 - 4210

Bldg 1 40476		Bldg 2 40477		Bldg 3 40478	
UNIT #	RESIDENT NAME	UNIT #	RESIDENT NAME	UNIT #	RESIDENT NAME
110	Goad	210	Vacant *	310	Razzboni
111	Metivier	211	Clark	311	Waggoner/Long
112	Connors/Dellano	212	Njumbe	312	Kelly
113	Payne	213	Simon	313	Curtin
114	Nicholls	214	Alicea	315	Bragdon
116	Buckley/Celli	215	Vacant *	316	Homoliski
117	LeBlanc	216	Tuunanen	317	Lausier/Martin
118	Byrne	217	Cates	320	Pleshaw
119	Schiller	218	Asselin	321	St. Onge
120	Ahern	219	Vacant *	322	Sarkissian
121	Browne	220	Dagostino	323	owner occupied
122	Norman	221	Goodine	324	Godin
123	Makumbi	222	Sammarco	325	Orton
124	Parisi	223	Kuzmitch	326	ChaseMcKenney
125	Matthews/Roche	224	Munnis	327	Bevis
126	Zipilivan	225	Thorpe	330	Haines / Sarkis
127	Vacant	226	Chen	331	Choi
128	Horvitz	227	Johnson	332	Vacant *
129	Teachout	228	Richards/Estes	333	Fitzpatrick
130	Rearick	229	Wyatt	334	Vacant *
131	Wilder	230	Egan	335	Vacant *
132	Tuxbury	231	Parker	336	Murphy
133	Currie	232	Farrar	337	Proctor/Agostinelli
134	Farrell	233	Lombardo		
135	Lau	234	Staley/Ravellette		
136	Ravellette	235	Parretti/Dale		
137	Vail	236	McLaughlin		
138	Forsaith	237	Andreasen		
139	Kasidakos	238	Bedard		
		239	Lee		

1 = 12.50

3 = 37.50

3 = 37.50

12.50 x 7 = 87.50

Country Estates

December 1 2020

7 VACANT UNITS

UNIT #	RESIDENT NAME	UNIT #	RESIDENT NAME	UNIT #	RESIDENT NAME
110	Goad	210	Vacant *	310	Razzboni
111	Metivier	211	Clark	311	Waggoner/Long
112	Connors/Dellano	212	Njumbe	312	Kelly
113	Payne	213	Simon	313	Curtin
114	Nicholls	214	Alicea	315	Bragdon
116	Buckley/Celli	215	Clark	316	Homoliski
117	LeBlanc	216	Tuunanen	317	Lausier/Martin
118	Byrne	217	Cates	320	Pleshaw
119	Schiller	218	Asselin	321	St. Onge
120	Ahern	219	Vacant *	322	Sarkissian
121	Browne	220	Dagostino	323	owner occupied
122	Norman	221	Goodine	324	Godin
123	Makumbi	222	Sammarco	325	Orton
124	Parisi	223	Kuzmitch	326	ChaseMcKenney
125	Matthews/Roche	224	Munnis	327	Bevis
126	Zipilivan	225	Thorpe	330	Haines / Sarkis
127	Vacant	226	Chen	331	Choi
128	Horvitz	227	Johnson	332	Vacant
129	Teachout	228	Richards/Estes	333	Fitzpatrick
130	Rearick	229	Wyatt	334	Vacant
131	Wilder	230	Egan	335	Jacob
132	Tuxbury	231	Parker	336	Murphy
133	Currie	232	Farrar	337	Proctor/Agostinelli
134	Farrell	233	Lombardo		
135	Lau	234	Staley/Ravellette		
136	Ravellette	235	Parretti/Dale		
137	Vail	236	McLaughlin		
138	Forsaith	237	Andreasen		
139	Kasidakos	238	Bedard		
		239	Lee		

Country Estates

1-Nov-20

5 VACANCIES

1 = 12.58

2 = 25.00

2 = 25.00

12.58 x 5 = 62.80.

UNIT #	RESIDENT NAME	UNIT #	RESIDENT NAME	UNIT #	RESIDENT NAME
110	Goad	210	Lucy	310	Razzboni
111	Metivier	211	Clark	311	Waggoner/Long
112	Connors/Dellano	212	Njumbe	312	Kelly
113	Payne	213	Simon	313	Curtin
114	Nicholls	214	Alicea	315	Bragdon
116	Buckley/Celli	215	Clark	316	Homoliski
117	LeBlanc	216	Tuunanen	317	Lausier/Martin
118	Byrne	217	Cates	320	Pleshaw
119	Schiller	218	Asselin	321	St. Onge
120	Ahern	219	Vacant *	322	Sarkissian
121	Browne	220	Dagostino	323	owner occupied
122	Norman	221	Goodine	324	Godin
123	Makumbi	222	Sammarco	325	Orton
124	Parisi	223	Kuzmitch	326	ChaseMcKenney
125	Matthews/Roche	224	Munnis	327	Bevis
126	Zipilivan	225	Thorpe	330	Haines / Sarkis
127	Vacant	226	Chen	331	Choi
128	Horvitz	227	Johnson	332	Vacant *
129	Teachout	228	Richards/Estes	333	Fitzpatrick
130	Rearick	229	Wyatt	334	Vacant *
131	Wilder	230	Egan	335	Jacob
132	Tuxbury	231	Parker	336	Murphy
133	Currie	232	Farrar	337	Proctor/Agostinelli
134	Farrell	233	Lombardo	Country Estates 1-Oct-20 4 Vacancies	
135	Lau	234	Staley/Ravellette		
136	Ravellette	235	Parretti/Dale		
137	Vail	236	McLaughlin		
138	Forsaith	237	Andreasen		
139	Kasidakos	238	Bedard		
		239	Lee		

1 = 12.50

1 = 12.50

2 = 25.00

4 x 12.50 = 50.00

3.8 ~~and~~ 5.2

Water Underbilling

5 Turnpike building 1 Country Estates; problem, coded as a .75 inch meter, the meter is 1.5 inches, customer was only charged for 10% of the water.

Last bill for water usage was \$116.65 Should have been \$1166.40 the difference is \$1049.76. The coding was corrected and will now be billed correctly.

The total back owed is \$10464.

Going forward \$4000 per year.

198 Main St Sterlite; problem , coded as a .75inch meter, the meter is a 2inch meter, customer was only charge for 10% of the water.

Last bill for water usage was \$1356.48, should have been \$13564.80, the difference is \$12208.32.

The total back owed \$29314.10.

19 Main st High School 6 meters.

3inch compound; last read 4 cu feet should have been 40. Missed revenue lost last quarter \$155.52. Total revenue lost \$4942.08.

.75 inch compound no problems

1.5 Irrigation meter; Missed revenue last quarter \$6100. Total lost revenue \$38880.

2inch field house; missed coded very little usage. Account inactive no sports in school. Total revenue lost \$77.76.

1 inch Maintenance building; no problems.

2in athletic field Irrigation meter; inactive in 2016 meter replaced post construction never read. Total revenue lost \$7382

Total quarterly lost \$20500

Unaccounted for water 354,953 gallons recovered per quarter

Townsend Water Department

1/25/2021

PO Box 321 Medford MA 02155-0004 PH: 978-597-2212

11

CUSTOMER HISTORY 12/31/2006 to 01/21/2021

Acct: 60930 STERILITE CORPORATION Home:(978) 597-8702

ATTN: ACCOUNTS PAYABLE P.O. BOX 8001 TOWNSEND MA 01469 Current Balance: \$0.00 ACTIVE

Loc ID: 60930 @ 198 MAIN STREET TOWNSEND

Rte: 99 Seq.# 1725 Mtr S/N: 68951670/46/18 Dep:\$0.00

Date	Code	Description	Previous	Present	Used	Charge	Payment	Balance
9/24/2020	WorkOrd	20180338 Perform Flow Test Fire Equipment will be performing test begining at 198 Main at 4AM. They will be moving to the 30 Scales location after that.						0.00
10/1/2020	W11	Read on 09/11/2020 (X100) KeyedIn	1,237	1,548	311	1343.52		1343.52
10/1/2020	WR	Unit Charge				37.50		1381.02
10/1/2020	BKFL2	BACKFLOW DEVICE Added as Other Single Charge				110.00		1491.02
10/1/2020	SPKL4	SPRINKLER				420.00		1911.02
10/15/2020	WR	LOCKBOX For \$1911.02					37.50	1873.52
10/15/2020	W11	LOCKBOX For \$1911.02					1343.52	530.00
10/15/2020	BKFL2	LOCKBOX For \$1911.02					110.00	420.00
10/15/2020	SPKL4	LOCKBOX For \$1911.02					420.00	0.00
11/5/2020	SERV	SERVICE CHARGES Annual Fire Flow Test Added as Other Single Charge				254.43		254.43
11/24/2020	SERV	LOCKBOX For \$254.43					254.43	0.00
1/1/2021	W11	Read on 12/11/2020 (X100) KeyedIn	1,548	1,862	314	1356.48		1356.48
1/1/2021	WR	Unit Charge				37.50		1393.98
1/1/2021	SPKL4	SPRINKLER				420.00		1813.98
1/21/2021	W11	LOCKBOX For \$1813.98					1356.48	457.50
1/21/2021	WR	LOCKBOX For \$1813.98					37.50	420.00
1/21/2021	SPKL4	LOCKBOX For \$1813.98					20.00	0.00

13435.26
1343.52
12191.78

13564.80
1356.48
12208.32

12,191.78
12,208.32
24,400.10
4,914
29,314.10

Townsend Water Department

1/25/2021

PO Box 321 Medford MA 02155-0004 PH: 978-597-2212

10

CUSTOMER HISTORY 12/31/2006 to 01/21/2021

Acct: 60930 STERILITE CORPORATION Home:(978) 597-8702

ATTN: ACCOUNTS PAYABLE P.O. BOX 8001 TOWNSEND MA 01469 Current Balance: \$0.00 ACTIVE

Loc ID: 60930 @ 198 MAIN STREET TOWNSEND

Rte: 99 Seq.# 1725 Mtr S/N: 68951670/46/18 Dep:\$0.00

Date	Code	Description	Previous	Present	Used	Charge	Payment	Balance
9/9/2019	WorkOrd	20180164 Annual flushing 9/10/19 @ 4am Main Street 1st then Scales LAne....Nancy 781-827-5144						0.00
10/1/2019	W11	Read on 09/23/2019 (X100) Manual-KK	2,400	6,006	3,606	10818.00		10818.00
10/1/2019	WR	Unit Charge				37.50		10855.50
10/1/2019	BKFL2	BACKFLOW DEVICE Added as Other Single Charge				100.00		10955.50
10/1/2019	SPKL4	SPRINKLER				420.00		11375.50
10/8/2019	WR	LOCKBOX For \$11375.50					37.50	11338.00
10/8/2019	W11	LOCKBOX For \$11375.50					10818.00	520.00
10/8/2019	BKFL2	LOCKBOX For \$11375.50					100.00	420.00
10/8/2019	SPKL4	LOCKBOX For \$11375.50					420.00	0.00
1/1/2020	W11	Read on 12/18/2019 (X100) KeyedIn MANUAL-KK	6,006	8,436	2,430	7290.00		7290.00
1/1/2020	WR	Unit Charge				37.50		7327.50
1/1/2020	SPKL4	SPRINKLER				420.00		7747.50
1/14/2020	WR	LOCKBOX For \$7747.50					37.50	7710.00
1/14/2020	W11	LOCKBOX For \$7747.50					7290.00	420.00
1/14/2020	SPKL4	LOCKBOX For \$7747.50					420.00	0.00
4/1/2020	W11	Read on 03/16/2020 (X100) KeyedIn -AG	8,436	1,055	2,619	7857.00		7857.00
4/1/2020	WR	Unit Charge				37.50		7894.50
4/1/2020	BKFL4	BACKFLOW DEVICE Added as Other Single Charge				200.00		8094.50
4/1/2020	SPKL4	SPRINKLER				420.00		8514.50
4/21/2020	W11	LOCKBOX For \$8514.50					7857.00	657.50
4/21/2020	WR	LOCKBOX For \$8514.50					37.50	620.00
4/21/2020	BKFL4	LOCKBOX For \$8514.50					200.00	420.00
4/21/2020	SPKL4	LOCKBOX For \$8514.50					420.00	0.00
7/1/2020	W11	Read on 06/22/2020 (X100)	1,055	1,237	182	546.00		546.00
7/1/2020	WR	Unit Charge				37.50		583.50
7/1/2020	SPKL4	SPRINKLER				420.00		1003.50
7/16/2020	W11	LOCKBOX For \$1003.50					546.00	457.50
7/16/2020	WR	LOCKBOX For \$1003.50					37.50	420.00
7/16/2020	SPKL4	LOCKBOX For \$1003.50					420.00	0.00

5460.00
546
49140

Townsend Water Department

1/25/2021

PO Box 321 Medford MA 02155-0004 PH: 978-597-2212

9

CUSTOMER HISTORY 12/31/2006 to 01/21/2021

Acct: 60930 STERILITE CORPORATION Home:(978) 597-8702

ATTN: ACCOUNTS PAYABLE P.O. BOX 8001 TOWNSEND MA 01469 Current Balance: \$0.00 ACTIVE

Loc ID: 60930 @ 198 MAIN STREET TOWNSEND

Rte: 99 Seq.# 1725 Mtr S/N: 68951670/46/18 Dep:\$0.00

Date	Code	Description	Previous	Present	Used	Charge	Payment	Balance
1/1/2019	WR	Unit Charge				37.50		9208.50
1/1/2019	SPKL4	SPRINKLER				420.00		9628.50
1/7/2019	WorkOrd	20180075 Put in meter Friday 1/11/19 between 9-11am						9628.50
1/31/2019	WR	LOCKBOX For \$9628.50					37.50	9591.00
1/31/2019	W11	LOCKBOX For \$9628.50					9171.00	420.00
1/31/2019	SPKL4	LOCKBOX For \$9628.50					420.00	0.00
3/8/2019	WorkOrd	20180087 Meter Change Out WEDNESDAY 3/13/2019 CALL TO LET THEM KNOW YOU WILL BE COMING						0.00
4/1/2019	W11	Estimated on 03/13/2019 (X100) KeyedIn	12,150	14,612	2,462	7386.00		7386.00
4/1/2019	WR	Unit Charge				37.50		7423.50
4/1/2019	BKFL4	BACKFLOW DEVICE Added as Other Single Charge				200.00		7623.50
4/1/2019	SPKL4	SPRINKLER				420.00		8043.50
4/2/2019	W11	Read on 03/14/2019 (X100) KeyedIn	14,612	14,612				8043.50
4/2/2019	W11	Read on 03/14/2019 (X100) KeyedIn						8043.50
4/11/2019	SERV	SERVICE CHARGES Replace and re-plumb meter Added as Other Single Charge				1132.93		9176.43
4/11/2019	W11	LOCKBOX For \$8043.50					6873.07	2303.36
4/11/2019	WR	LOCKBOX For \$8043.50					37.50	2265.86
4/11/2019	SERV	LOCKBOX For \$8043.50					1132.93	1132.93
4/25/2019	W11	LOCKBOX For \$1132.93					512.93	620.00
4/25/2019	BKFL4	LOCKBOX For \$1132.93					200.00	420.00
4/25/2019	SPKL4	LOCKBOX For \$1132.93					420.00	0.00
7/1/2019	W11	Read on 06/13/2019 (X100) KeyedIn REMMR		2,400	2,400	7200.00		7200.00
7/1/2019	WR	Unit Charge				37.50		7237.50
7/1/2019	SPKL4	SPRINKLER				420.00		7657.50
7/8/2019	WR	LOCKBOX For \$7657.50					37.50	7620.00
7/8/2019	W11	LOCKBOX For \$7657.50					7200.00	420.00
7/8/2019	SPKL4	LOCKBOX For \$7657.50					420.00	0.00
9/9/2019	WorkOrd	20180165 Annual flushing 9/10/19 @ 4am Main Street 1st then Scales LAne....Nancy 781-827-5144						0.00

Townsend Water Department

1/25/2021

PO Box 321 Medford MA 02155-0004 PH: 978-597-2212

8

CUSTOMER HISTORY 12/31/2006 to 01/21/2021

Acct: 60930 STERILITE CORPORATION Home:(978) 597-8702

ATTN: ACCOUNTS PAYABLE P.O. BOX 8001 TOWNSEND MA 01469 Current Balance: \$0.00 ACTIVE

Loc ID: 60930 @ 198 MAIN STREET TOWNSEND

Rte: 99 Seq.# 1725 Mtr S/N: 68951670/46/18 Dep:\$0.00

Date	Code	Description	Previous	Present	Used	Charge	Payment	Balance
1/1/2018	W11	Read on 12/05/2017 (X100) RemMR	8,499	1,556	3,057	9171.00		9171.00
1/1/2018	WR	Unit Charge				37.50		9208.50
1/1/2018	SPKL4	SPRINKLER				420.00		9628.50
1/25/2018	W11	LOCKBOX For \$9628.50					9171.00	457.50
1/25/2018	WR	LOCKBOX For \$9628.50					37.50	420.00
1/25/2018	SPKL4	LOCKBOX For \$9628.50					420.00	0.00
4/1/2018	W11	Read on 03/12/2018 (X100) RemMR	1,556	4,254	2,698	8094.00		8094.00
4/1/2018	WR	Unit Charge				37.50		8131.50
4/1/2018	BKFL4	BACKFLOW DEVICE Added as Other Single Charge				200.00		8331.50
4/1/2018	SPKL4	SPRINKLER				420.00		8751.50
4/16/2018	WR	LOCKBOX For \$8551.50					37.50	8714.00
4/16/2018	W11	LOCKBOX For \$8551.50					8094.00	620.00
4/16/2018	BKFL4	LOCKBOX For \$8551.50					200.00	420.00
4/16/2018	SPKL4	LOCKBOX For \$8551.50					220.00	200.00
4/23/2018	SPKL4	LOCKBOX For \$200.00					200.00	0.00
7/1/2018	W11	Read on 06/05/2018 (X100) RemMR	4,254	7,090	2,836	8508.00		8508.00
7/1/2018	WR	Unit Charge				37.50		8545.50
7/1/2018	SPKL4	SPRINKLER				420.00		8965.50
7/10/2018	W11	LOCKBOX For \$8965.50					8508.00	457.50
7/10/2018	WR	LOCKBOX For \$8965.50					37.50	420.00
7/10/2018	SPKL4	LOCKBOX For \$8965.50					420.00	0.00
10/1/2018	W11	Read on 08/30/2018 (X100) RemMR	7,090	9,093	2,003	6009.00		6009.00
10/1/2018	WR	Unit Charge				37.50		6046.50
10/1/2018	BKFL2	BACKFLOW DEVICE Added as Other Single Charge				100.00		6146.50
10/1/2018	SPKL4	SPRINKLER				420.00		6566.50
10/15/2018	W11	LOCKBOX For \$6566.50					6009.00	557.50
10/15/2018	WR	LOCKBOX For \$6566.50					37.50	520.00
10/15/2018	BKFL2	LOCKBOX For \$6566.50					100.00	420.00
10/15/2018	SPKL4	LOCKBOX For \$6566.50					420.00	0.00
12/21/2018	WorkOrd	20180060 Meter Change Out Stopped Meter						0.00
12/26/2018	WorkOrd	20180065 Inspect service Go with Paul to inspect why their is no new usage on this account.						0.00
1/1/2019	W11	Estimated on 12/07/2018 (X100)	9,093	12,150	3,057	9171.00		9171.00

Townsend Water Department

1/25/2021

PO Box 321 Medford MA 02155-0004 PH: 978-597-2212

7

CUSTOMER HISTORY 03/07/2007 to 01/01/2021

Acct: 60476 COUNTRY ESTATES CONDOMIN Home:(978) 502-6800
P.O. BOX 459 TOWNSEND MA 01469 Current Balance: \$1,204.14 ACTIVE
Loc ID: 60476 @ 5 TURNPIKE ROAD BLDG 1 TOWNSEND
Rte: 99 Seq.# 310 Mtr S/N: 16316898 Dep:\$0.00

Date	Code	Description	Previous	Present	Used	Charge	Payment	Balance
7/23/2019	WR	Uni-Bank Deposit For \$1122.00					1050.00	72.00
7/23/2019	W09	Uni-Bank Deposit For \$1122.00					72.00	0.00
10/1/2019	W09	Read on 09/04/2019 (X100) (29 Tenants) RemMR	219	240	21	63.00		63.00
10/1/2019	WR	Unit Charge				1087.50		1150.50
10/18/2019	WR	Uni-Bank Deposit For \$1150.50					1087.50	63.00
10/18/2019	W09	Uni-Bank Deposit For \$1150.50					63.00	0.00
1/1/2020	W09	Read on 12/06/2019 (X100) (29 Tenants) RemMR	240	266	26	78.00		78.00
1/1/2020	WR	Unit Charge				1087.50		1165.50
1/1/2020	WR	ADJ - Unit Charge Adjustment				-37.50		1128.00
1/15/2020	WR	Uni-Bank Deposit For \$1128.00					1050.00	78.00
1/15/2020	W09	Uni-Bank Deposit For \$1128.00					78.00	0.00
4/1/2020	W09	Read on 03/05/2020 (X100) (29 Tenants) RemMR	266	289	23	69.00		69.00
4/1/2020	WR	ADJ - Quarterly U/C Adjustment				-25.00		44.00
4/1/2020	WR	Unit Charge				1087.50		1131.50
4/21/2020	WR	Uni-Bank Deposit For \$1131.50					1062.50	69.00
4/21/2020	W09	Uni-Bank Deposit For \$1131.50					69.00	0.00
7/1/2020	W09	Read on 06/11/2020 (X100) (29 Tenants) RemMR	289	316	27	81.00		81.00
7/1/2020	WR	Unit Charge				1087.50		1168.50
7/21/2020	WR	Uni-Bank Deposit For \$1168.50					1087.50	81.00
7/21/2020	W09	Uni-Bank Deposit For \$1168.50					81.00	0.00
10/1/2020	W09	Read on 08/28/2020 (X100) (29 Tenants) RemMR	316	339	23	99.36		99.36
10/1/2020	WR	Unit Charge				1087.50		1186.86
10/1/2020	WR	ADJ - Quarterly Unit Charge Adjustment				-12.50		1174.36
10/22/2020	WR	Uni-Bank Deposit For \$1174.36					1075.00	99.36
10/22/2020	W09	Uni-Bank Deposit For \$1174.36					99.36	0.00
1/1/2021	W09	Read on 12/08/2020 (X100) (29 Tenants) RemMR	339	366	27	416.64		116.64
1/1/2021	WR	Unit Charge				1087.50		1204.14

Townsend Water Department

1/25/2021

PO Box 321 Medford MA 02155-0004 PH: 978-597-2212

6

CUSTOMER HISTORY 03/07/2007 to 01/01/2021

Acct: 60476 COUNTRY ESTATES CONDOMIN Home:(978) 502-6800
P.O. BOX 459 TOWNSEND MA 01469 Current Balance: \$1,204.14 ACTIVE
Loc ID: 60476 @ 5 TURNPIKE ROAD BLDG 1 TOWNSEND
Rte: 99 Seq.# 310 Mtr S/N: 16316898 Dep:\$0.00

Date	Code	Description	Previous	Present	Used	Charge	Payment	Balance
1/31/2018	WR	Uni-Bank Deposit For \$1177.50					1087.50	0.00
4/1/2018	W09	Read on 03/12/2018 (X100) (29 Tenants) RemMR	57	87	30	90.00		90.00
4/1/2018	WR	Unit Charge				1087.50		1177.50
4/19/2018	W09	Uni-Bank Deposit For \$1177.50					90.00	1087.50
4/19/2018	WR	Uni-Bank Deposit For \$1177.50					1087.50	0.00
7/1/2018	W09	Read on 06/05/2018 (X100) (29 Tenants) RemMR	87	111	24	72.00		72.00
7/1/2018	WR	Unit Charge				1087.50		1159.50
7/30/2018	W09	LOCKBOX For \$1159.50					72.00	1087.50
7/30/2018	WR	LOCKBOX For \$1159.50					1087.50	0.00
10/1/2018	W09	Read on 08/30/2018 (X100) (29 Tenants) RemMR	111	141	30	90.00		90.00
10/1/2018	WR	ADJ - Unit Charge Adjustment BOWC				-12.50		77.50
10/1/2018	WR	Unit Charge				1087.50		1165.00
10/24/2018	WR	Uni-Bank Deposit For \$1165.00					1075.00	90.00
10/24/2018	W09	Uni-Bank Deposit For \$1165.00					90.00	0.00
1/1/2019	W09	Read on 12/06/2018 (X100) (29 Tenants) RemMR	141	172	31	93.00		93.00
1/1/2019	WR	Unit Charge				1087.50		1180.50
1/1/2019	WR	ADJ - BOWC U/C Adjustment				-25.00		1155.50
1/23/2019	WR	Uni-Bank Deposit For \$1155.50					1062.50	93.00
1/23/2019	W09	Uni-Bank Deposit For \$1155.50					93.00	0.00
4/1/2019	W09	Read on 03/07/2019 (X100) (29 Tenants) RemMR	172	195	23	69.00		69.00
4/1/2019	WR	ADJ - Quarterly Unit Charge Adjustment				-37.50		31.50
4/1/2019	WR	Unit Charge				1087.50		1119.00
4/23/2019	WR	Uni-Bank Deposit For \$1119.00					1050.00	69.00
4/23/2019	W09	Uni-Bank Deposit For \$1119.00					69.00	0.00
7/1/2019	W09	Read on 06/11/2019 (X100) (29 Tenants) RemMR	195	219	24	72.00		72.00
7/1/2019	WR	ADJ - Total 3 units vacant for July billing-Unit Charge Adjustment				-37.50		34.50
7/1/2019	WR	Unit Charge				1087.50		1122.00

810.00

1164.50

900.00
90
810.00

930.00
93
837.00

690.00
69
621.00

720.00
72.00
648.00

Townsend Water Department

1/25/2021

PO Box 321 Medford MA 02155-0004 PH: 978-597-2212

5

CUSTOMER HISTORY 03/07/2007 to 01/01/2021

Acct: 60476 COUNTRY ESTATES CONDOMIN Home:(978) 502-6800
P.O. BOX 459 TOWNSEND MA 01469 Current Balance: \$1,204.14 ACTIVE
Loc ID: 60476 @ 5 TURNPIKE ROAD BLDG 1 TOWNSEND
Rte: 99 Seq.# 310 Mtr S/N: 16316898 Dep:\$0.00

Date	Code	Description	Previous	Present	Used	Charge	Payment	Balance
7/22/2016	WR	LOCKBOX For \$1489.50					1087.50	402.00
7/22/2016	W09	LOCKBOX For \$1489.50					402.00	0.00
10/1/2016	W09	Read on 09/06/2016 (X100) (29 Tenants) RemMR	187	451	264	792.00		792.00
10/1/2016	WR	Unit Charge				1087.50		1879.50
10/21/2016	W09	LOCKBOX For \$1879.50					792.00	1087.50
10/21/2016	WR	LOCKBOX For \$1879.50					1087.50	0.00
1/1/2017	W09	Read on 12/07/2016 (X100) (29 Tenants) RemMR	451	645	194	582.00		582.00
1/1/2017	WR	Unit Charge				1087.50		1669.50
1/25/2017	WR	LOCKBOX For \$1669.50					1087.50	582.00
1/25/2017	W09	LOCKBOX For \$1669.50					582.00	0.00
4/1/2017	W09	Read on 03/02/2017 (X100) (29 Tenants) RemMR	645	651	6	18.00		18.00
4/1/2017	WR	Unit Charge				1087.50		1105.50
4/28/2017	WR	Uni-Bank Deposit For \$1105.50					1087.50	18.00
4/28/2017	W09	Uni-Bank Deposit For \$1105.50					18.00	0.00
6/21/2017	WorkOrd	20141440 Meter Change Out Wednesday June 28th @ 2PM						0.00
7/1/2017	W09	Estimated on 06/08/2017 (X100) (29 Tenants) 7/2017	651	785	134	402.00		402.00
7/1/2017	WR	ADJ - BOWC U/C Adjustments				-12.50		389.50
7/1/2017	WR	Unit Charge				1087.50		1477.00
7/6/2017	W09	Read on 07/06/2017 (X100) (29 Tenants) KeyedIn	785	785				1477.00
7/6/2017	W09	Read on 07/06/2017 (X100) (29 Tenants) KeyedIn						1477.00
7/22/2017	WR	Uni-Bank Deposit For \$1477.00					1075.00	402.00
7/22/2017	W09	Uni-Bank Deposit For \$1477.00					402.00	0.00
10/1/2017	W09	Read on 09/06/2017 (X100) (29 Tenants) RemMR	785	27	27	81.00		81.00
10/1/2017	WR	Unit Charge				1087.50		1168.50
10/24/2017	WR	Uni-Bank Deposit For \$1168.50					1087.50	81.00
10/24/2017	W09	Uni-Bank Deposit For \$1168.50					81.00	0.00
1/1/2018	W09	Read on 12/05/2017 (X100) (29 Tenants) RemMR	27	57	30	90.00		90.00
1/1/2018	WR	Unit Charge				1087.50		1177.50
1/31/2018	W09	Uni-Bank Deposit For \$1177.50					90.00	1087.50



Office of the
Townsend Water Department
540 Main Street
West Townsend, MA 01474
Tel: 978-597-2212
Fax: 978-597-5611

3.9

Application No. 2021-1
Account No. 61667
Date 1/15/2021

APPLICATION FOR WATER SERVICE

Name of Property Owner: EKC Development LLC-Ken Chaplin
Service Address: 7 Lois Lane Lot 40
Townsend MA 01469
Tel No.: _____ Cell No. 978-815-6994
Billing Address:
(If different from service address): 6 Ball Road
Townsend MA 01469

Application Fee \$2,500.00 1" service

Units (Check all that apply):

☒ Single Family (If Professional Bldg.) No. of Businesses _____
☐ Multi Family (Apartment Building) No. Apartments _____
☐ Hotel/Motel No. Rooms: _____

Type of Use (Check One): ☒ Residential _____ Industrial _____
☐ Commercial/Business _____ Municipal _____
☐ Agricultural _____

Received
2,500
1/15/23

Is a sprinkler system required for fire protection? _____ Yes ☒ No

If yes a proposed design plan of the system must be submitted including required flows, required pipe size, and size and backflow prevention device.

Is a flow test/s required? _____ Yes ☒ No

If yes the owner will be billed separately at the current rate per flow test.

Is there an existing or proposed automatic lawn irrigation system? _____ Yes ☒ No On separate well

Has a sketch or plot plan been provided showing the location of the septic system, automatic lawn irrigation system and any known or proposed additions to the existing building? _____ Yes ☒ No *****Plot Plan Requested

I, the Owner understand this form is to be completed and all Fees, charges, and required documentation must be received before water service will be turned on. I also understand that I have from April 1st to November 1st of the same calendar year of the application date to complete the installation or this application shall be null and void and the Connection/System Development charge forfeited. In addition, I acknowledge receipt of the Townsend Water Department's current Rules and Regulations

Shane Chaplin
Signature of Owner/Applicant

1/15/2021
Date

BOARD OF WATER COMMISSIONERS

Chairman

Vice Chairman

Clerk

Date Signed by Board of Water Commissioners

Meter Exchange

SOP

Goal: No Meters to be over 10 years old!

- 1) A 10 percent yearly meter change out is to occur in any given year throughout the life of the system unless new technology or regulations accrue to change the State's 10-year policy.
- 2) In entering a house to check for leaks or highwater usage if a meter is 10 years old or older the meter must be changed out.
- 3) If the meter is less than but approaching 10 years of age the meter is also to be changed. (why disrupt a customer's life more then we must).
- 4) Frozen meters: any meter less than 10 years of age will be charged to the customer at full value of the replacement meter. Meters over 10 years of age will be replaced at no charge to the customer, due to the meter needing to be replaced.

David Vigeant

5.1

From: Connors, Susan (DEP) <susan.connors@state.ma.us>
Sent: Friday, January 15, 2021 3:48 PM
To: David Vigeant
Cc: Bostwick, Robert (DEP); Finch, Amy (DEP)
Subject: Cross St Well, Townsend

Hi David,

In order to reactivate the Cross Street Well you will need to sufficiently flush the well to waste and collect samples for total coliform, iron, manganese, and PFAS6 (PFOS, PFOA, PFHxS, PFNA, PFHpA, and PFDA). Results should be submitted on MassDEP lab forms and sent to me. Once we have the data and it is favorable, I could schedule a site visit to test alarms. However historical data from the well shows exceedances of the SMCL for both iron and manganese. What would Townsend's plan be to improve water quality that seemed to start to deteriorate around 2013/2014? MassDEP may not be able to approve reactivation if concentrations are elevated. Because of that your consultant should contact us with a pumping and sampling proposal prior starting the sample collection.

Additionally, there are a few items from past Sanitary Survey reports that should also be addressed. The report issued in 2019 required a day tank for sodium hydroxide to be installed in the Cross Street pump station. That will need to be completed prior to MassDEP issuing activation approval.

The Sanitary Survey report in 2017 identified some issues with the alarms. Below are excerpts from the description and the Table B requirement in that report. Although the Table B requirement was technically completed because Townsend responded that the electrician had been scheduled, please let me know if the hydroxide system for the Cross Street Well has been upgraded to comply with MassDEP's alarm requirements for critical chemicals.

Description:

The Cross Street Pump Station also serves as the fully automated treatment facility (2299000-02T) for corrosion control by chemical injection of 25% NaOH for pH adjustment. The 25% NaOH feed system consists of a 1,400 gallon bulk storage tank with secondary containment, an Iwaki E-series metering pump, a pH analyzer for continuous pH monitoring, and a pH chart recorder. The chemical feed is flow paced, but not electrically interlocked with the flow meter, the well pump, or the pH analyzer. The pump station is fully alarmed through the SCADA system (alarms are described under *Treatment*), and a high pH alarm is programmed to shut down the well pump, which in turn creates a no flow situation that stops chemical addition. There is a hard-piped shower and eye wash and a float in the containment area to detect a chemical spill. This pump station also has a 30 gallon day tank and an injection quill for emergency disinfection using 12.5% NaOCl, but there is no chemical feed pump installed and NaOCl is not currently stored on site.

There is no back-up generator at the Cross Street Pump Station, but a propane-fueled auxiliary engine can operate the well pump (not the chemical feed pumps) during a power outage. Propane is stored on-site in an underground tank. Because the chemical feed equipment cannot operate during a power outage, the TWD does not generally utilize the Cross Street Pump Station during emergencies.

Table B3

Submit to MassDEP a schedule for installing/programming the required interlocks such that all chemical feed pumps are electrically locked out (de-energized) when the well pump is off, no flow is detected by the flow meter/flow switch, or the pH analyzer is in alarm. (T-10)

Please contact me with any questions.

Thank you,
Susan

Susan Connors
MassDEP-CERO
Drinking Water and Water Management Programs
8 New Bond Street, Worcester, MA 01606
Telework Google Voice phone 508.425.4694
susan.connors@mass.gov

From: David Vigeant <dvigeant@townsendwater.org>
Sent: Tuesday, January 12, 2021 11:42 AM
To: Finch, Amy (DEP) <amy.finch@mass.gov>
Subject: RE: 512 Main St Well Townsend

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Hi Amy, You were a great help on 512 Main St. Now I have another question on our Cross St well. The well was shut down in 2015 for high levels of iron and manganese. I would like to restart the well and retest it to see what Tigh and Bond can figure out what we can do with the well. Any guidance would big help.\

Thank you so much David

David W Vigeant
Superintendent
Townsend Water Department
540 Main St
West Townsend Massachusetts 01474
Office Phone 978-597-2212
Cell Phone 978-332-0391
Email DVigeant@townsendwater.org

1) Paint 7,020,	Highland Tank 5.3
2) Paint Supplies	634.11
3) Building	8,774.13
4) Cement Mixer Power Washer	1,111.35
5) Cement + Metal	1,200.00
Total	\$ 11,719.59

ELEC
SCADA

? 3000 - 5000
 ? 1000 - 2000

~~16,000 TO 18~~
 16,000 TO 19,000

		Badger	Meters	Comparison ^{5.5}
1)	5/8	243.85	Poly / Orion	
2)	5/8	Neptune 270.99	Mach 10	
3)	5/8	Badger Itron 291.90		
4)	1"	Neptune Badger	\$ 382.46 356.60	
5)	1.5"	Badger Neptune	683.15 750.80	
6)	2"	Neptune Badger	892.47 883.92	



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

5.5

Department of Environmental Protection

Central Regional Office • 627 Main Street, Worcester MA 01608 • 508-792-7650

DEVAL L. PATRICK
Governor

MAEVE VALLELY BARTLETT
Secretary

DAVID W. CASH
Commissioner

June 30, 2014

Townsend Board of Selectmen
Attn: Andrew Sheehan, Town Administrator
272 Main St.
Townsend, MA 01469

RE: City/Town: Townsend
PWS Name: Townsend Water Department
PWS ID: 2299000
Program: Water Management Act
Action: 5 Year Review Final Permit

Dear Mr. Sheehan:

Please find the attached documents:

- Findings of Fact in Support of the Modified Permit Decision; and
- Final Water Management Act Permit #9P2-2-11-299.01 (Nashua River Basin) issued to the Town of Townsend, Massachusetts.

If you have any questions regarding the Permit, please contact Barbara Kickham at (508) 767-2724 or Susan Connors at (508) 767-2701.

Sincerely,

Marielle Stone
Deputy Regional Director
Bureau of Resource Protection

Enclosures

Cc: Duane LeVangie, WMA Manager, MassDEP-DWP-Boston
Paul Rafuse, Water Department, 540 Main St., West Townsend, MA 01474
Board of Health, 272 Main St., Townsend, MA 01469
Martha Morgan, Nashua River Watershed Association (via email)

Y:\DWP Archive\CERO\Townsend-2299000-WMA-Final-2014-06-30



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Commissioner

Findings of Fact in Support of the Modified Permit Decision Water Management Permit # 9P2-2-11-299.01

The Massachusetts Department of Environmental Protection (MassDEP or the Department) has completed its 5 Year Review of the Town of Townsend's (Townsend) Water Management Act Permit in the Nashua River Basin pursuant to the Water Management Act Regulations (WMA) M.G.L. ch 21G. This compliance review is conducted to insure that the terms of the permit and the goals of the Water Management program are being met. As a result of the review and Townsend's response dated October 21, 2013 to the Order to Complete issued July 22, 2013, MassDEP hereby issues this Water Management Act Permit #9P2-2-11-299.01 (the "Permit") in accordance with the Act. A Draft Permit was issued on April 15, 2014 and no comments on the draft were submitted to MassDEP. MassDEP makes the following Findings of Fact in support of the attached Permit, and includes herewith its reasons for approving the Permit and for conditions of approval imposed, as required by MGL c 21G, §11 and 310 CMR 36.00.

Townsend's Water Withdrawal History

Townsend is registered for an average annual daily withdrawal volume of 0.76 million gallons per day (MGD). Townsend was originally registered for 0.5 MGD and with the acquisition of the Witches Brook Water Co. in 2007, Townsend's registered withdrawal volume was increased by 0.26 MGD for a total of 0.76 MGD. Townsend has reported annual withdrawals below their registered volume. Townsend's WMA Permit includes the additional withdrawal locations; Well 3-98 and the Harbor Trace Well. The permit for Well 3-98 was issued with an effective date of May 29, 2002, however the well was never constructed due to financial constraints. Townsend received an amended permit on April 21, 2006, which added the Harbor Trace Well as an approved withdrawal point. Townsend's acquisition of the Witches Brook Water Co. included two additional, registered, groundwater sources. No increase in withdrawal capacity is authorized by this Modified Permit Decision. Townsend requested a 5 year review of the WMA permit in order to add the calendar triggered option for implementation of outside water use restrictions.

The Water Management Act

Permit Factors

Section 7 of the Act requires that MassDEP issue permits that balance a variety of factors including:

- Reasonable protection of existing water uses, land values, investments and enterprises;
- Reasonable conservation consistent with efficient water use;
- Reasonable protection of public drinking water supplies, water quality, wastewater treatment capacity, waste assimilation capacity, groundwater recharge areas, navigation, hydropower resources, water-based recreation, wetland habitat, fish and wildlife, agriculture, flood plains; and
- Reasonable economic development and job creation.

Safe Yield Permit Factor

Among the minimum permit factors Section 7 requires is a determination by MassDEP that permitted water withdrawals are within the safe yield of the water source from which they are made. Section 2 of the Act defines "safe yield" as: "the maximum dependable withdrawal that can be made continuously from a water source including ground or surface water during a period of years in which the probable driest period or period of greatest water deficiency is likely to occur; provided however, that such dependability is relative and is a function of storage and drought probability".

For the purposes of the Water Management Program, MassDEP considers a water source to be any one of Massachusetts' 28 major river basins. A map of the 28 major river basins has been developed by the Department of Conservation and Recreation and can be viewed in their guidance document "A Guide to the Interbasin Transfer Act and Regulations".

On December 14, 2009, MassDEP, with the assistance and concurrence of a group of stakeholders, identified a methodology for determining an Interim Safe Yield while a final Long-Term Safe Yield is developed. The Interim Safe Yield methodology is described at: <http://www.mass.gov/eea/agencies/massdep/water/watersheds/water-management-act-program.html>.

This permit is being issued under the Interim Safe Yield methodology. Pursuant to MGL c 21G, section 11 MassDEP cannot issue permits when the combined existing, permitted, and proposed withdrawal volumes exceed the safe yield of the water source. If MassDEP determines that the Long-Term Safe Yield is less than the Interim Safe Yield calculated for this basin, the volumes authorized in all Water Management permits in this basin shall be reviewed and the permitted volumes adjusted accordingly. MassDEP is using its best efforts to develop the final Long-Term Safe Yield for the Nashua River Basin.

Under the Permit Extension Act, which was created by Section 173 of Chapter 240 of the Acts of 2010, and amended by Sections 74 and 75 of Chapter 238 of the Acts of 2012 to promote job growth and long-term economic recovery, expiration dates for WMA permits were extended by four years. Therefore, WMA permits for withdrawals in the Nashua River Basin expire on February 28, 2018. Permit review in accordance with the Long-Term Safe Yield shall be no later than the permit renewal for Nashua River basin.

This permit will also enable MassDEP to incorporate the latest scientific information and to consider recommendations (including but not limited to stream flow criteria) from the currently ongoing Executive Office of Energy and Environmental Affairs' Sustainable Water Management Initiative (SWMI), along with United States Geological Survey (USGS) investigative studies, particularly, *Indicators of Streamflow Alteration, Habitat Fragmentation, Impervious Cover, and Water Quality for Massachusetts Stream Basins* (USGS SIR 2009-5272) which can be viewed at <http://pubs.usgs.gov/sir/2009/5272/>; *Preliminary Assessment of Factors Influencing Riverine Fish Communities in Massachusetts* (USGS OFR 2010-1139), and *Factors Influencing Riverine Fish Assemblages in Massachusetts* (USGS SIR 2011-5193), and other pertinent studies or site-specific analyses that become available. Access to water volumes authorized beyond Period Four of this permit is contingent upon all permitted withdrawals in the basin being within the Long-Term Safe Yield, and on MassDEP completing a permit renewal or a permit amendment incorporating the Long-Term Safe Yield determination.

Townsend's permit has been modified in response to a 5-year Review. No additional water has been allocated in this permit, therefore there are no changes to the remaining allocation by permitting under the ISY.

Findings of Fact for the Performance Standards in Townsend's Water Management Permit

MassDEP has determined that there is documented evidence that water withdrawals and an increase in development and impervious area, combined with the out-of-basin export of wastewater, substantially contribute to low flow in the Commonwealth. These low flows impact the ability of rivers and tributaries to adequately serve all of the competing uses described in the Act. To better achieve the balance of competing water uses mandated by the Act, the MassDEP refers to the Water Conservation Standards adopted by the Water Resources Commission.

Specific performance standards are applied to new Water Management permits and to existing permits at the time they are amended, during 5-year permit review, or permit renewal. Consistent with Section 3 of the Act, the performance standards of 65 residential gallons per capita day or less and 10% or less of unaccounted for water, summer limits on withdrawals, and efforts to offset the impacts of increasing withdrawal volumes are based on the Massachusetts Water Conservation Standards approved by the Water Resources Commission in July 2006 and revised in 2012. These standards can be found at:
<http://www.mass.gov/eea/docs/eea/wrc/water-conservation-standards-rev-june-2012.pdf>

MassDEP believes these standards are reasonable based on studies and data developed throughout the country, the 1996 AWWA Leak Detection and Water Accountability Committee report on water accountability (AWWA Journal; July 1996; pp. 108-111), and the fact that the average

values in 2012 for Massachusetts were 59 RGPCD, and 13% UAW. While these performance standards represent the minimum standards required for compliance with the Permit, MassDEP believes that through the implementation of all the terms and conditions of Water Management permits, municipalities can meet the performance standards for RGPCD and UAW.

Townsend was required to meet the 65 residential gallons per capita day (RGPCD) and 10% unaccounted-for-water (UAW) performance standards beginning in calendar year 2008.

MassDEP will consider any permittee that has been unable to meet the 65 RGPCD or 10% UAW performance standard within 5 years of receiving its permit to be achieving functionally equivalent compliance with the performance standards, if they:

- are complying with the Water Conservation requirements included in the permit,
- have implemented the required limits on nonessential outdoor water use, and
- are making demonstrable efforts to finance, implement and enforce a MassDEP-approved compliance plan.

Because circumstances vary, a permittee may present an analysis of the cost effectiveness of implementing certain conservation measures required by MassDEP and offer alternative measures. The analysis must explicitly consider environmental impacts and must produce environmental benefits. MassDEP will allow permittees to:

- Document economic hardship and present an analysis demonstrating that implementation of specific measures will cause or exacerbate significant economic hardship;
- Present reasons why specific measures are not cost effective because the cost would exceed the costs of alternative methods of achieving the appropriate standard; and
- Propose specific conservation measures that would result in equal or greater system-wide water savings or equal or greater environmental benefits than the conservation measures included in the MassDEP Functional Equivalence Plan(s) (See Appendix A & B).

Findings of Fact for Specific Permit Conditions

In issuing permits, MassDEP looks primarily at site-specific impacts and other issues specific to the system, such as impacts to nearby streams, wetlands, or other water users, justification of long-term demand projections and the capacity of permitted withdrawal points. The conditions are intended to ensure the efficient use of water and to mitigate the potential impact of withdrawals.

The existing permit included a condition that Townsend complete Zone II delineations for all sources. MassDEP records indicate that all of Townsend's sources have approved Zone II delineations. Public Water Systems are required to obtain MassDEP approval of Zone II delineations during the new source approval process and prior to activating any new sources; therefore this condition has been removed as a condition of the permit modification.

The summary of permit conditions, as part of MassDEP's findings of fact, is not intended to, and should not be construed as, modifying any of the Permit conditions. In the event of any ambiguity between the summary and the actual permit conditions, the Permit language shall be controlling.

Special Condition 1, Maximum Authorized Annual Average Withdrawal Volume, reflects the registered withdrawal volume of 0.76 MGD through February 28, 2018.

Special Condition 2, Maximum Authorized Daily Withdrawals From Each Withdrawal Point, reflects the volume of groundwater withdrawal expressed as a daily rate for each source, according to the approved Zone II rates. The Permit includes the Zone II approved rate of 0.86 MGD for Well 3-98 and 1.0 MGD for Harbor Trace Well.

Special Condition 3, Wellhead Protection, requirement have been fulfilled by Townsend. The Groundwater Protection District Bylaw to include the Zone II of the Harbor Trace Well prior to receiving approval to place that well in operation.

Special Condition 4, Performance Standard for Residential Gallons Per Capita Day Water Use, discussed previously. Townsend's RGPCD was 66 in 2012 and reported to be 57 in 2013.

Special Condition 5, Performance Standard for Unaccounted for Water, discussed previously. Townsend's UAW was 6% in 2012 and reported to be 22.1% in 2013. Since Townsend's UAW increased above 10% as a result of improvements to RGPCD, a UAW Compliance Plan is required.

Special Condition 6, Seasonal Limits on Nonessential Outdoor Water Use is based upon Townsend's Residential Gallons per Capita Day (RGPCD) for the preceding year, and will be implemented according to either: 1) calendar triggered restrictions; or 2) streamflow triggered restrictions. The restrictions have been modified from your prior permit based on both technical and policy decisions by the Department. Future permit modifications may include a Drought Trigger and a new Low-Flow statistic that triggers tighter restrictions during unusually dry weather.

1. Calendar triggered restrictions: Restrictions shall be implemented from May 1st through September 30th. Many public water suppliers will find this option easier to implement and enforce than the streamflow triggered approach.

2. Streamflow triggered restrictions: Restrictions shall be implemented at those times when streamflow falls below designated flow triggers measured at an assigned, web-based, real-time U.S. Geologic Survey (USGS) stream gage from May 1st through September 30th. At a minimum, restrictions shall commence when streamflow falls below the trigger for three consecutive days. Once implemented, the restrictions shall remain in place until streamflow at the assigned USGS local stream gage meets or exceeds the trigger streamflow for seven consecutive days.

The basis for streamflow triggers is derived from Aquatic Base Flow (ABF) values calculated by the Sustainable Yield Estimator (SYE)¹ for simulated natural flow applied to

¹ Archfield, S.A., Vogel, R.M., Steeves, P.A., Brandt, S.L., Weiskel, P.K., and Garabedian, S.P., 2010, The Massachusetts Sustainable-Yield Estimator: A decision-support tool to assess water availability at ungaged stream locations in Massachusetts: U.S. Geological Survey Scientific Investigations Report 2009-5227, 41 p. plus CD-ROM. See <http://pubs.usgs.gov/sir/2009/5227/>

the assigned local USGS stream gage. The two-tiered trigger values are based on flow levels that are protective of aquatic habitat for fish spawning during the spring bioperiod, designated with the June ABF; and protective flows for fish rearing and growth during the summer bioperiod, designated with the August ABF trigger. Protective flow levels are derived from index gage flow data which represent the least altered stream flows in Massachusetts, and are further described in the Department of Conservation and Recreation (DCR)² and USGS Index Reports³.

If Townsend selects the streamflow approach, it has been assigned the USGS local stream gage of 01096000 - Squannacook River near West Groton, MA. The June ABF estimated using SYE is 0.97 cfs and the August ABF value is 0.37 cfs. These cfs units translate to your local gage streamflow triggers as 62 cubic feet per second (cfs) for May and June, and 24 cfs for July, August and September.

Should the reliability of flow measurement at the Squannacook River gage be so impaired as to question its accuracy, Permittee may request MassDEP's review and approval to transfer to another gage to trigger restrictions. MassDEP reserves the right to require use of a different gage.

Special Condition 7, Water Conservation Requirements, incorporates the Water Conservation Standards for the Commonwealth of Massachusetts reviewed and approved by the Water Resources Commission in 2006 and revised in 2012. Townsend must amend its Bylaws and Regulations to allow water use restrictions consistent with the Permit.

² Massachusetts Department of Conservation and Recreation (DCR), 2008 Index Streamflows for Massachusetts, May 2008, Prepared by Office of Water Resources for the Massachusetts Water Resources Commission, 45 p., plus CD-ROM.

³ Armstrong, D.S., Parker, G.W., and Richards, T.A., 2008, Characteristics and classification of least altered streamflows in Massachusetts: U.S. Geological Survey Scientific Investigations Report 2007-5291, 113 p., plus CD-ROM.



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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Governor

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Secretary

DAVID W. CASH
Commissioner

WATER WITHDRAWAL PERMIT MGL c 21G

This permit is issued pursuant to the Massachusetts Water Management Act (the Act) for the sole purpose of authorizing the withdrawal of a volume of water as stated herein and subject to the following special and general conditions. This permit conveys no right in or to any property beyond the right to withdraw the volume of water for which it is issued.

PERMIT NUMBER: 9P2-2-11-299.01

RIVER BASIN: Nashua

PERMITTEE: Town of Townsend

ORIGINAL ISSUANCE DATE: May 29, 2002

MODIFICATION DATE: June 30, 2014

EXPIRATION DATE: February 28, 2018

NUMBER OF WITHDRAWAL POINTS:

Groundwater: 2

USE: Public Water Supply

DAYS OF OPERATION: 365

LOCATION(S):

Table 1: Withdrawal Point Identification

Well Name	PWS Source ID Code
Well 3-98	2299000-0AG
Harbor Trace Well	2299000-03G

SPECIAL CONDITIONS

1. Maximum Authorized Annual Average Withdrawal Volume

This permit authorizes the Town of Townsend to withdraw water from the Nashua River Basin at the rate described below (Table 2). The volume reflected by this rate is the 0.76 million gallons per day (MGD) previously authorized to Townsend under WMA Registration #211299.02 and to the former Witches Brook Water Company WMA Registration #211299.01 for withdrawal from the Nashua River Basin. The authorized volume is expressed in millions of gallons, both as an average daily withdrawal rate (MGD), and as a total annual withdrawal volume (million gallons per year or MGY) for each year of the five-year period of the permit term. No additional withdrawal volume is authorized under this permit.

Table 2: Maximum Authorized Withdrawal Volumes

5-Year Periods		Total Raw Water Withdrawal Volumes			
		Permit		Permit + Registration	
		Daily Average (MGD)	Total Annual (MGY)	Daily Average (MGD)	Total Annual (MGY)
Period One	3/1/1994 to 2/28/1999	No permit	No permit	0.76	277.4
Period Two	3/1/1999 to 2/29/2004	No permit	No permit	0.76	277.4
Period Three	3/1/2004 to 2/28/2009	0.0	0.0	0.76	277.4
Period Four	3/1/2009 to 2/28/2018	0.0	0.0	0.76	277.4

* This permit is issued under the Interim Safe Yield methodology adopted by MassDEP on December 14, 2009. Under MGL c21G, §11 MassDEP cannot issue permits when the combined existing, permitted and proposed withdrawal volumes exceed the safe yield of the water source. If MassDEP determines that the Long-Term Safe Yield is less than the Interim Safe Yield calculated for this basin, the volumes authorized in all Water Management permits in this basin shall be reviewed and the permitted volumes adjusted accordingly. MassDEP is currently developing the final Long-Term Safe Yield for the Nashua River Basin. Access to water volumes authorized beyond Period Four of this permit is contingent upon all permitted withdrawals in the basin being within the Long-Term Safe Yield, and on MassDEP completing a permit renewal or a permit amendment incorporating the Long-Term Safe Yield determination.

2. Maximum Authorized Daily Withdrawals From Each Withdrawal Point

Withdrawals from individual withdrawal points are not to exceed the approved maximum daily volumes listed below without specific advance written approval from MassDEP (Table 3). The authorized maximum daily volume is the approved rate of each source. In no event shall the combined withdrawals from the individual withdrawal points exceed the withdrawal volumes authorized above in Special Condition 1.

Table 3: Maximum Daily Withdrawal Volumes

Well Name	PWS Source ID Code	Maximum Daily Rate (MGD)
Well 3-98	2299000-0AG	0.86
Harbor Trace Well	2299000-03G	1.0

3. Wellhead Protection

Townsend is in compliance with the Groundwater Protection District Bylaw consistent with the requirements of the MassDEP's Wellhead Protection Regulations, 310 CMR 22.21(2). Furthermore, Lunenburg has protected the portion of Townsend's Zone II that is within the Town of Lunenburg through its Wellhead Protection Bylaw and Maps. No further work is required at this time.

4. Performance Standard for Residential Gallons Per Capita Day Water Use

Townsend's Performance Standard for Residential Gallons Per Capita Day (RGPCD) is 65 gallons. Townsend was required to be in compliance with this Performance Standard by December 31, 2008. Townsend shall report its RGPCD water use annually in its Annual Statistical Report (ASR) and document compliance with this Performance Standard each year.

Townsend shall report its RGPCD and the calculation used to derive that figure as part of its ASR including, without limitation, the source of the data used to establish the service population and the year in which this data was developed. See Appendix A for additional information on the requirements if the Performance Standard for RGPCD is not met.

5. Performance Standard for Unaccounted for Water

Townsend's Performance Standard for Unaccounted for Water (UAW) is 10% of overall water withdrawal. Townsend was required to be in compliance with this Performance Standard by December 31, 2008. Townsend shall report its UAW annually in its Annual Statistical Report (ASR) and document compliance with this Performance Standard each year.

Townsend shall report its UAW and the calculation used to derive that figure as part of its ASR. UAW is defined as the difference between water pumped or purchased and water that is metered or confidently estimated. UAW shall include, without limitation, water that cannot be accounted for due to meter problems, unauthorized hydrant openings, unavoidable leakage, recoverable leakage, illegal connections, stand pipe overflows, and fire protection where it cannot be confidently estimated. The need for water main flushing and the use of water in construction or meter calibration shall be metered or estimated as appropriate to assist in determining actual demand. Volumes flushed to waste shall be reported on Townsend's ASR.

Townsend's first year to meet this performance standard was 2012, in which UAW was reported as 6%. For 2013, Townsend reported 22.1% UAW. See Appendix B for additional information on requirements if UAW is above 10%.

6. Seasonal Limits on Nonessential Outdoor Water Use

Permittee shall limit nonessential outdoor water use through mandatory restrictions from May 1st through September 30th as outlined in Table 4 below.

Permittee shall be responsible for tracking streamflows and drought advisories and recording when restrictions are implemented if streamflow triggered restrictions are implemented. See *Accessing Streamflow and Drought Advisory Website Information* in Table 4 for instructions.

Permittee shall document compliance with the summer limits on nonessential outdoor water use annually in its Annual Statistical Report (ASR), and indicate whether it anticipates implementing calendar triggered restrictions or streamflow triggered restrictions during the next year. Nothing in this permit shall prevent Permittee from implementing water use restrictions that are more restrictive than those set forth in this permit.

Water Uses Restrictions

Nonessential outdoor water uses that are subject to mandatory restrictions include:

- irrigation of lawns via sprinklers or automatic irrigation systems;
- washing of vehicles, except in a commercial car wash or as necessary for operator safety; and
- washing of exterior building surfaces, parking lots, driveways or sidewalks, except as necessary to apply surface treatments such as paint, preservatives, stucco, pavement or cement.

The following uses may be allowed when mandatory restrictions are in place:

- irrigation to establish a new lawn and new plantings during the months of May and September;
- irrigation of public parks and recreational fields by means of automatic sprinklers outside the hours of 9 am to 5 pm; and
- irrigation of lawns, gardens, flowers and ornamental plants by means of a hand-held hose.

Water uses NOT subject to mandatory restrictions are those required:

- for health or safety reasons;
- by regulation;
- for the production of food and fiber;
- for the maintenance of livestock; or
- to meet the core functions of a business (for example, irrigation by golf courses as necessary to maintain tees, greens, and limited fairway watering, or irrigation by plant nurseries as necessary to maintain stock).

To the extent feasible, all summer outdoor water use should take place before 9 am and after 5 pm when evaporation and evapotranspiration rates are lower.

Table 4: Seasonal Limits on Nonessential Outdoor Water Use

Permittees meeting the 65 RGPCD standard for the preceding year (as reported in the ASR and accepted by MassDEP) must implement either:	
1. Calendar Triggered Restrictions from May 1st through September 30th No nonessential outdoor water use from 9 am - 5 pm, OR,	
2. Streamflow Triggered Restrictions from May 1st through September 30th No nonessential outdoor water use from 9 am - 5 pm whenever: a) Streamflow at the assigned USGS local stream gage 01096000 – Sqannacook River Near West Groton, MA falls below the following designated flow triggers for three (3) consecutive days: <ul style="list-style-type: none">• May 1st through June 30th: 62 cfs (based on minimum flows that are protective of habitat for fish spawning during the spring bioperiod), and• July 1st through September 30th: 24 cfs (based on minimum flows that are protective of habitat for fish rearing and growth during the summer bioperiod). <p>Once implemented, the restrictions shall remain in place until streamflow at the assigned USGS local stream gage meets or exceeds the trigger streamflow for seven (7) consecutive days; or</p> <p>b) A Drought Advisory or higher is declared by the Massachusetts Drought Management Task Force.</p>	
Permittees NOT meeting the 65 RGPCD standard for the preceding year (as reported in the ASR and accepted by MassDEP) must implement either:	
1. Calendar Triggered Restrictions from May 1st through September 30th a) Nonessential outdoor water use is allowed TWO DAYS per week before 9 am and after 5 pm; and b) Nonessential outdoor water use is allowed ONE DAY per week whenever A Drought Advisory or higher is declared by the Massachusetts Drought Management Task Force, OR,	
2. Streamflow Triggered Restrictions from May 1st through September 30th Nonessential outdoor water use is allowed ONE DAY per week before 9 a.m. and after 5 p.m. whenever: a) Streamflow at the assigned USGS local stream gage 01096000 – Sqannacook River near West Groton, MA falls below the following designated flow triggers for three (3) consecutive days: <ul style="list-style-type: none">• May 1st through June 30th: 62 cfs (based on minimum flows that are protective of habitat for fish spawning during the spring bioperiod), and• July 1st through September 30th: 24 cfs (based on minimum flows that are protective of habitat for fish rearing and growth during the summer bioperiod). <p>Once implemented, the restrictions shall remain in place until streamflow at the assigned USGS local stream gage meets or exceeds the trigger streamflow for seven (7) consecutive days; or</p> <p>b) A Drought Advisory or higher is declared by the Massachusetts Drought Management Task Force.</p>	

Instructions for Accessing Streamflow and Drought Advisory Website Information

Streamflow information is available at the USGS National Water Information System (NWIS): Web Interface. The USGS NWIS default shows Massachusetts streamflows in real time, i.e., the most recent, usually quarterly hourly, reading made at each USGS stream gage.

Seasonal Limits on Nonessential Outdoor Water Use are implemented when the mean daily streamflow falls below the designated trigger. The mean daily flow is not calculated until after midnight each day when the USGS computes the hourly data into a mean daily streamflow. As a result, permittees must use the mean daily streamflow from the preceding day when tracking streamflows.

Mean daily streamflow gage readings are available at the USGS NWIS Web Interface at <http://waterdata.usgs.gov/ma/nwis/current/?type=flow>.

- Scroll down to 01096000 – Squannacook River near West Groton, MA.
- Click on the gage number.
- Scroll down to “Provisional Date Subject to Revision – Available data for this site” and click on the drop down menu.
- Click on “Time-series: Daily data” and hit GO.
- Scroll down to the “Available Parameters” box. Within the box, be sure “Discharge (mean)” is checked, then, under “Output Format” click “Table” and hit GO.
- Scroll down to “Daily Mean Discharge, cubic feet per second” table and find the current date on the table.
- Compare the cubic feet per second (cfs) measurement shown on the table to the cfs shown under Streamflow Triggered Restrictions above.

Drought Advisory information is available at the Massachusetts Department of Conservation and Recreation (DCR) Drought Status Website at <http://www.mass.gov/dcr/waterSupply/rainfall/drought.htm>.

- Under “Drought Status Reports”, click on “drought map” on the right-hand side of the page. The color coded map displays the six drought regions in Massachusetts. Restrictions are implemented when a Drought Advisory, Watch, Warning or Emergency is announced through the DCR website.

Public Notice of Water Use Restrictions

Permittee shall notify its customers of the restrictions and the consequences of failing to adhere to the restrictions.

- For calendar-triggered restrictions, customers shall be notified by April 15th each year.
- For streamflow-triggered restrictions, when streamflow at the assigned USGS local stream gage falls below a streamflow trigger for three consecutive days, customers shall be notified as soon as possible, but within three days of implementing the restrictions.

Notice to customers shall include the following:

- A detailed description of the restrictions and penalties for violating the restrictions;
- The need to limit water use, especially nonessential outdoor water use, to ensure a sustainable drinking water supply and to protect natural resources and streamflow for aquatic life; and
- Ways individual homeowners can limit water use, especially nonessential outdoor water use.

Notice that restrictions have been put in place shall be filed each year with MassDEP within 14 days of the restriction's effective date. Filing shall be in writing on the Water Use Restrictions Form at <http://www.mass.gov/dep/water/approvals/wmgforms.htm#conserve>.

Notice to customers and MassDEP need not be provided if Permittee has already implemented water use restrictions that conform to the applicable restrictions and those restrictions are still in force.

7. Water Conservation Requirements

At a minimum, Townsend shall implement the following conservation measures forthwith and shall be in compliance with these measures on or before February 28, 2017. Compliance with the water conservation requirements shall be reported to MassDEP upon request or by February 28, 2017, unless otherwise noted below.

Table 5: Minimum Water Conservation Requirements

System Water Audits and Leak Detection
<ol style="list-style-type: none">1. At a minimum, conduct a full leak detection survey every three years. The first full leak detection survey shall be completed no later than 3 years from the date of last documented leak detection survey.2. Perform a leak detection survey of those sections of the distribution system that have not been surveyed within the last year whenever the percentage of unaccounted for water increases by 5% or more (for example an increase from 3% to 8%) over the percentage reported on the ASR for the prior calendar year. Within 60 days of completing the leak detection survey, Permittee shall submit to MassDEP a report detailing the leak detection survey, any leaks uncovered as a result of the survey or otherwise, dates of repair and the estimated water savings as a result of the repairs.3. Conduct field surveys for leaks and repair programs in accordance with the <i>AWWA Manual 36</i>.4. Permittee shall have repair reports available for inspection by MassDEP. Permittee shall establish a schedule for repairing leaks that is at least as stringent as the following:<ul style="list-style-type: none">• Leaks of 15 gallons per minute or more shall be repaired as soon as possible but not later than one month after leak detection.*• Leaks of less than 15 gallons per minute, but greater than 5 gallons per minute, shall be repaired as soon as possible but not later than two months after leak detection.*• Leaks of 5 gallons per minute or less shall be repaired as soon as possible but not later than six months after leak detection, except that hydrant leaks of one gallon or less per minute shall be repaired as soon as possible.*• Leaks shall be repaired in accordance with the priority schedule including leaks up to the property line, curb stop or service meter, as applicable.• Have water use regulations in place that require property owners to expeditiously repair leaks on their property.The following exceptions can be considered:<ul style="list-style-type: none">• Repair of leakage detected during winter months can be delayed until weather conditions become favorable for conducting repairs;* and• Leaks in freeway, arterial or collector roadways may be coordinated with other scheduled projects being performed on the roadway.**
*Reference: MWRA regulations 360 CMR 12.09

Table 5: Minimum Water Conservation Requirements

****Mass Highway or local regulations may regulate the timing of tearing up pavement on roads to repair leaks.**

Metering

1. Calibrate all source and finished water meters at least annually and report date of calibration on the ASR.
2. Ensure that the system is 100% metered, including all water use at municipal facilities (schools, school athletic fields, etc.).
3. All water distribution system users shall have properly sized service lines and meters that meet AWWA calibration and accuracy performance standards.

AWWA References:

AWWA Manual M22 – Sizing Water Service Lines and Meters

AWWA Manual M6 – Water Meters, or as amended

4. Permittee shall have an ongoing program to inspect individual service meters to ensure that all service meters accurately measure the volume of water used by your customers. The metering program shall include regular meter maintenance, including testing, calibration, repair, replacement and checks for tampering to identify and correct illegal connections.
5. Ensure placement of sufficient funds in the annual water budget to calibrate, repair, or replace meters as necessary.

Pricing

1. Implement a water revenue structure that includes the full cost of operating the water supply system in compliance with state and federal requirements. Evaluate revenues every three to five years and adjust rates as needed. Full cost pricing factors all costs - operations, maintenance, capital, and indirect costs (environmental impacts, watershed protection) - into the revenue structure.

AWWA References for Additional Information on Pricing:

AWWA Manual 1- Principals of Water Rates, Fees and Charges

AWWA Manual 29- Fundamentals of Water Utility Financing

2. Permittee reports using an increasing block rate structure and shall continue to do so.

Residential and Public Sector Conservation

1. Permittee shall meet the standards set forth in the Federal Energy Policy Act, 1992 and the Massachusetts Plumbing Code.
2. Meter or estimate water used by contractors using fire hydrants for pipe flushing and construction.
3. Municipal buildings
 - Townsend reported in 2005 that all municipally owned public buildings in the service area were retrofitted with water saving devices.

Industrial and Commercial Water Conservation

1. Permittee shall review the use records for its industrial, commercial and institutional water users and develop an inventory of the largest water users. Permittee shall develop and implement an outreach program designed to inform and (where appropriate) work with its largest industrial, commercial and institutional water users on ways to reduce their water use. Such outreach plans can include, but are not limited to: information on water audits, meter sizing, water reuse, low-flow plumbing fixtures, mandatory outdoor water use restrictions, suggestions for contacting trade

Table 5: Minimum Water Conservation Requirements

associations for process specific information on water use reductions, and information on contacting the Executive Office of Environmental Affairs Office of Technical Assistance for Toxics Use Reduction (OTA) which offers a range of assistance and information to help facilities improve water use efficiency and reduce wastewater discharge. OTA can be contacted at (617) 626-1060 or at www.mass.gov/envir/ota .
2. Upon request by MassDEP, Permittee shall report on industrial, commercial and institutional water conservation including the results of its review of water use records for industrial, commercial and institutional water users, the inventory of the largest water users, copies of any outreach materials distributed to industrial, commercial and institutional water users, and to the extent practical, a summary of water use reductions or savings that have resulted. Upon receipt of this report, MassDEP will take whatever action it deems appropriate to promote the interests of the Water Management Act, including without limitation requiring Permittee to take additional actions to reduce industrial, commercial and institutional water use.
Lawn and Landscape
1. Review Permittee's water use restriction bylaw to determine if it provides authority to implement and enforce water use restrictions required by the Special Condition, "Seasonal Limits on Nonessential Outdoor Water Use". Adopt a water use restriction bylaw, ordinance or regulation by May 1, 2015, to allow implementation of the new restrictions if necessary.
Public Education and Outreach
1. Develop and implement a Water Conservation Education Plan. Permittee's Water Conservation Education Plan shall be designed to educate Permittee's water customers of ways to conserve water. Without limitation, Permittee's plan may include the following actions: <ul style="list-style-type: none">• Annual work sheets, included in water bills or under separate cover, to enable customers to track water use and conservation efforts and estimate the dollar savings;• Public space advertising/media stories on successes (and failures);• Conservation information centers perhaps run jointly with electric or gas company;• Speakers for community organizations;• Partner with garden clubs, or other private and non-profit organizations, to promote efficient water use;• Provide information on water-wise landscaping, gardening, efficient irrigation and lawn care practice;• Public service announcements; radio/T.V./audio-visual presentations;• Joint advertising with hardware stores to promote conservation devices;• Water conservation workshops for the general public• Use of civic and professional organization resources;• Special events such as Conservation Fairs;• Develop materials that are targeted to schools with media that appeals to children, including materials on water resource projects and field trips; and• Make multilingual materials available as needed. References and additional information available through the USEPA Water Sense Program at http://www.epa.gov/watersense .
2. Upon request of MassDEP, Permittee shall report on its public education and outreach effort, including a summary of activities developed for specific target audiences, any events or activities sponsored to promote water conservation and copies of written materials.

GENERAL PERMIT CONDITIONS (applicable to all permittees)

No withdrawal in excess of 100,000 gallons per day over the registered volume (if any) shall be made following the expiration of this permit, unless before that date the Department has received a renewal permit application pursuant to 310 CMR 36.00.

1. **Duty to Comply** The permittee shall comply at all times with the terms and conditions of this permit, the Act and all applicable State and Federal statutes and regulations.
2. **Operation and Maintenance** The permittee shall at all times properly operate and maintain all facilities and equipment installed or used to withdraw water so as not to impair the purposes and interests of the Act.
3. **Entry and Inspections** The permittee or the permittee's agent shall allow personnel or authorized agents or employees of the Department to enter and examine any property for the purpose of determining compliance with this permit, the Act or the regulations published pursuant thereto, upon presentation of proper identification and an oral statement of purpose.
4. **Water Emergency** Withdrawal volumes authorized by this permit are subject to restriction in any water emergency declared by the Department pursuant to MGL c 21G ss 15-17, MGL c 150 ss 111, or any other enabling authority.
5. **Transfer of Permits** This permit shall not be transferred in whole or in part unless and until the Department approves such transfer in writing, pursuant to a transfer application on forms provided by the Department requesting such approval and received by the Department at least thirty (30) days before the effective date of the proposed transfer. No transfer application shall be deemed filed unless it is accompanied by the applicable transfer fee established by 310 CMR 36.37.
6. **Duty to Report** The permittee shall complete and submit annually, on a form provided by the Department, all of the information required by said form including, without limitation, a certified statement of the withdrawal. Such report shall be received by the Department by the date specified on the form each year.
7. **Duty to Maintain Records** The permittee shall maintain withdrawal records and other information in sufficient detail to demonstrate compliance with this permit.
8. **Metering** All withdrawal points included within the permit shall be metered within one year of the date of issuance of the permit. Meters shall be maintained and replaced as necessary to ensure the accuracy of the withdrawal records.

APPEAL RIGHTS AND TIME LIMITS

This permit is a decision of the Department. Any person aggrieved by this decision may request an adjudicatory hearing under the provisions of MGL c 30A. Any such request must be made in writing, by certified mail and received by the Department within twenty-one (21) days of the date of receipt of this permit. No request for an appeal of this permit shall be validly filed unless a copy of the request is sent by certified mail or delivered by hand to the local water resources management official in the city or town in which the withdrawal point(s) is located; and for any person appealing this decision, who is not the applicant, unless such person notifies the permit applicant of the appeal in writing by certified mail or by hand within five (5) days of mailing the appeal to the Department.

CONTENTS OF HEARING REQUEST

310 CMR 1.01(6)(b) requires the request to include a clear and concise statement of the facts which are the grounds for the request and the relief sought. In addition, the request must include a statement of the reasons why the decision of the Department is not consistent with applicable rules and regulations, and for any person appealing this decision who is not the applicant, a clear and concise statement of how that person is aggrieved by the issuance of this permit.

FILING FEE AND ADDRESS

The hearing request, together with a valid check, payable to the Commonwealth of Massachusetts in the amount of \$100 must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

The request shall be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below.

EXEMPTIONS

The filing fee is not required if the appellant is a city or town (or municipal agency), county, district of the Commonwealth of Massachusetts, or a municipal housing authority.

WAIVER

The Department may waive the adjudicatory hearing filing fee for any person who demonstrates to the satisfaction of the Department that the fee will create an undue financial hardship. A person, seeking a waiver must file, together with the hearing request, an affidavit setting forth the facts which support the claim of undue hardship.

Appendix A – Residential Gallons Per Capita Day (RGPCD)

I. Compliance Plan Requirement

If the permittee fails to achieve and document compliance with the RGPCD performance standard in its Annual Statistical Report (ASR), then the permittee must file with that ASR a Residential Gallons Per Capita Day Compliance Plan (RGPCD Plan) which shall:

- a. meet the requirement set forth below in Section II;
- b. include measures to be implemented to meet the performance standard; and
- c. include the schedule for implementing such measures.

The filing of an RGPCD Plan shall not constitute a return to compliance, nor shall it affect MassDEP's authority to take action in response to the permittee's failure to meet the performance standard.

If an RGPCD Plan is required, the permittee must:

- a. submit information and supporting documentation sufficient to demonstrate compliance with its RGPCD Plan annually at the time it files its ASR; and
- b. continue to implement the RGPCD Plan until it complies with the performance standard and such compliance is documented in the permittee's ASR for the calendar year in which the standard is met.

II. Contents of an RGPCD Plan

A permittee that does not meet the 65 RGPCD performance standard within 2 years, has the choice to file an RGPCD Plan containing measures that the permittee believes will be sufficient to bring the system into compliance with the performance standard (Individual RGPCD Plan) or may adopt the MassDEP RGPCD Functional Equivalence Plan that includes mandated Best Management Practices (BMPs).

A permittee that has been unable to meet the 65 RGPCD performance standard within 5 years must implement the MassDEP RGPCD Functional Equivalence Plan to be considered functionally equivalent with the performance standard. At a minimum, all RGPCD Compliance Plans must include a detailed:

- a. description of the actions taken during the prior calendar year to meet the performance standard;
- b. analysis of the cause of the failure to meet the performance standard;
- c. description and schedule of the actions that will be taken to meet the performance standard; and
- d. analysis of how the actions described in c. will address the specific circumstances that resulted in the failure to meet the performance standard.

RGPCD Plans may be amended to revise the actions that will be taken to meet the performance standard.

Individual RGPCD Plan

Individual RGPCD Plan will document a plan to adopt and implement measures tailored to the specific needs of the water supply system that the permittee believes will be sufficient to bring the system into compliance with the performance standard within three years.

At a minimum, all Individual RGPCD Plans for failure to meet the RGPCD performance standard must include implementation of at least one of the following residential conservation programs:

- a. a program that provides water saving devices such as faucet aerators and low flow shower heads at cost;
- b. a program that provides rebates or other incentives for the purchase of low water use appliances (washing machines, dishwashers, and toilets); or
- c. the adoption and enforcement of an ordinance, bylaw or regulation to require the installation of moisture sensors or similar climate related control technology on all automatic irrigation systems.

If the permittee is already implementing one or more of these programs, it must include in its Individual RGPCD Plan the continued implementation of such program(s), as well as implementation of at least one additional program. All programs must include a public information component designed to inform customers of the program and to encourage participation in the program.

Without limitation, the Individual RGPCD Plan for failure to meet the RGPCD performance standard may include any of the actions set forth in the MassDEP RGPCD Functional Equivalence Plan below.

MassDEP RGPCD Functional Equivalence Plan

In order to be considered functionally equivalent with the RGPCD performance standard, the permittee must adopt and implement the MassDEP RGPCD Functional Equivalence Plan that requires all the following residential conservation programs:

- a. a program that provides water saving devices such as faucet aerators and low flow shower heads at cost;
- b. a program that provides rebates or other incentives for the purchase of low water use appliances (washing machines, dishwashers, and toilets);
- c. the adoption and enforcement of an ordinance, bylaw or regulation to require the installation of soil moisture sensors or similar climate related control technology on all automatic irrigation systems;
- d. the use of an increasing block water rate or a seasonal water rate structure as a tool to encourage water conservation;
- e. the adoption and enforcement of an ordinance, bylaw or regulation to require that all new construction include water saving devices and low water use appliances; and
- f. the implementation of monthly or quarterly billing.

Hardship

A permittee may present an analysis of the cost effectiveness of implementing certain conservation measures included in the MassDEP RGPCD Functional Equivalence Plan and offer alternative measures. Any analysis must explicitly consider environmental impacts and must produce equal or greater environmental benefits. Suppliers will be able to present:

- a. Reasons why specific measures are not cost effective because the cost would exceed the costs of alternative methods of achieving the appropriate standard;
- b. Alternative specific conservation measures that would result in equal or greater system-wide water savings or equal or greater environmental benefits than the conservation measures included in the MassDEP RGPCD Functional Equivalence Plan; and
- c. When applicable, an analysis demonstrating that implementation of specific measures will cause or exacerbate significant economic hardship.

Appendix B – Unaccounted for Water (UAW)

UAW is defined as the residual resulting from the total amount of water supplied to a distribution system as measured by master meters, minus the sum of all amounts of water measured by consumption meters in the distribution systems, and minus confidently estimated and documented amounts used for certain necessary purposes.

UAW shall include, without limitation: unavoidable leakage, recoverable leakage, meter inaccuracies (unless they fall under the category of source meter calibration which allows for adjustment per results of source meter calibration); errors in estimation of stopped meters, unauthorized hydrant openings, illegal connections, stand pipe overflows, data processing errors; and undocumented fire fighting uses. The need for water main flushing and the use of water in construction or meter calibration shall be metered or estimated as appropriate to assist in determining actual demand. Volumes flushed to waste shall be reported on permittee's ASR.

Uses that can be confidently estimated and documented in writing include: storage tank overflow and drainage; water main flushing and flow testing; fire fighting; bleeding or blow-offs; sewer and storm water system flushing; and cleaning and street cleaning. Any adjustments made as a result of the properly documented source meter calibration shall be provided as required by the ASR. Any adjustment in the calculation of UAW made as a result of confidently estimated uses shall be fully documented as required in the ASR.

I. Compliance Plan Requirement

If the permittee fails to document compliance with the UAW performance standard in its Annual Statistical Report (ASR), then the permittee must file with that ASR an Unaccounted for Water Compliance Plan (UAW Plan) which shall:

- a. meet the requirements set forth below in Section II;
- b. include measures to be implemented to meet the performance standard; and
- c. include the schedule for implementing such measures.

The filing of a UAW Plan shall not constitute a return to compliance, nor shall it affect MassDEP's authority to take action in response to the permittee's failure to meet the performance standard.

If a UAW Plan is required, the permittee must:

- a. submit information and supporting documentation sufficient to demonstrate compliance with its UAW Plan annually at the time it files its ASR; and
- b. continue to implement the UAW Plan until it complies with the performance standard and such compliance is documented in the permittee's ASR for the calendar year in which the standard is met.

II. Contents of a UAW Compliance Plan

A permittee that does not meet the 10% UAW performance standard within 2 years, has the choice to file a UAW Plan containing measures that the permittee believes will be sufficient to bring the system into compliance with the performance standard (Individual UAW Plan) or may

adopt the MassDEP UAW Functional Equivalence Plan that includes mandated Best Management Practices (BMPs).

A permittee that has been unable to meet the 10% UAW performance standard within 5 years must implement the MassDEP UAW Functional Equivalence Plan to be considered functionally equivalent with the performance standard.

At a minimum, all UAW plans must include a detailed:

- a. description of the actions taken during the prior calendar year to meet the applicable performance standard;
- b. analysis of the cause of the failure to meet the performance standard;
- c. description and schedule of the actions that will be taken to meet the performance standard; and
- d. analysis of how the actions described in c. will address the specific circumstances that resulted in the failure to meet the performance standard.

UAW plans may be amended to revise the actions that will be taken to meet the performance standard.

Individual UAW Compliance Plan

Individual UAW Plan will document a plan to adopt and implement measures tailored to the specific needs of the water supply system that the permittee believes will be sufficient to bring the system into compliance with the performance standard within three years. Individual UAW compliance plans may include any of the actions set forth in the MassDEP UAW Functional Equivalence Plan compliance plan below.

MassDEP UAW Functional Equivalence Plan

In order to be considered functionally equivalent with the UAW performance standard, the permittee must adopt and implement the MassDEP UAW Functional Equivalence Plan that, at a minimum, requires all the following measures:

- a. within one year of filing the MassDEP UAW Functional Equivalence Plan, complete a water audit and leak detection survey of the entire system and submit completed audit and survey to MassDEP;
within one year of completing the audit and leak detection survey, conduct sufficient repairs to reduce by 75% (by water volume) all leaks detected in the survey;
within one year of completing such repairs, conduct additional repairs of leaks detected in the survey as may be necessary to reduce permittee's UAW to 10% or the minimum level possible;
- b. if UAW remains above 10%, repeat the steps outlined in paragraph a.;
- c. implementation of a program that ensures the inspection and evaluation of all water meters and, as appropriate, the repair, replacement and calibration of water meters in accordance with the following schedule:
 - Large Meters (2" or greater) - within one year of filing the MassDEP UAW Functional Equivalence Plan
 - Medium Meters (1" or greater and less than 2") - within two years of filing the MassDEP UAW Functional Equivalence Plan
 - Small Meters (less than 1") - within three years of filing the MassDEP UAW Functional Equivalence Plan;

- d. implementation of monthly or quarterly billing within three years of filing the MassDEP UAW Functional Equivalence Plan; and
- e. within one year of filing the MassDEP UAW Functional Equivalence Plan, implementation of a water pricing structure that achieves sufficient revenues to pay the full cost of operating the system including, without limitation, the costs of repairs under paragraph a., the costs of meter repairs, replacements and calibrations under paragraph c., the costs of employees and equipment, and ongoing maintenance and capital costs.

Hardship

A permittee may present an analysis of the cost effectiveness of implementing certain conservation measures included in the MassDEP UAW Functional Equivalence Plan and offer alternative measures. Any analysis must explicitly consider environmental impacts and must produce equal or greater environmental benefits. Suppliers will be able to present:

- a. Reasons why specific measures are not cost effective because the cost would exceed the costs of alternative methods of achieving the appropriate standard;
- b. Alternative specific conservation measures that would result in equal or greater system-wide water savings or equal or greater environmental benefits than the conservation measures included in the MassDEP UAW Functional Equivalence Plan; and
- c. When applicable, an analysis demonstrating that implementation of specific measures will cause or exacerbate significant economic hardship.

TOWN OF TOWNSEND
WATER DEPARTMENT

NO. 21-7
1/31/2021

SCHEDULE OF BILLS RECEIVABLE

To the Accountant: Lauri Plourde

The following bills, amounting in the aggregate to

THREE HUNDRED TWELVE THOUSAND THREE HUNDRED EIGHTY SEVEN AND 73/100 DOLLARS

are herewith committed for collection.

DATE	USER CHARGES	SERVICE CHARGES	CONN CHARGES	BACK FLOW	TOTAL
01/31/21	303,169.90	6,717.83	2,500.00	-	312,387.73

BOARD OF WATER COMMISSIONERS

Nathan Mattila, Chairman

Todd Melanson, Vice-Chairman

Michael MacEachern, Clerk

6.4

FISCAL YEAR 21 SUMMARY
TOWNSEND WATER DEPARTMENT - ACCOUNTS RECEIVABLE
January 31, 2021

UNCOLLECTED FROM JUNE 30, 2020

93,833.10

<u>CHARGED</u>	<u>07/01/20</u>	<u>01/31/21</u>	<u>1/31/2021</u>	<u>Previous Balance</u>	<u>Total</u>	
USER CHARGES			303,169.90	666,768.62	969,938.52	
SERVICE CHARGES			6,717.83	16,010.35	22,728.18	
CONNECTION CHARGES			2,500.00	4,000.00	6,500.00	
LATE CHARGES			978.51	10,626.75	11,605.26	
BACKFLOW			0.00	4,730.00	4,730.00	
SUBTOTAL			313,366.24			
TOTAL CHARGES						1,015,501.96
						1,109,335.06
<u>RECEIVED</u>	<u>07/01/20</u>	<u>01/31/21</u>	<u>1/31/2021</u>			
USER CHARGES			225,917.51	674,027.73	899,945.24	
SERVICE CHARGES			5,187.34	17,088.99	22,276.33	
CONNECTION CHARGES			2,500.00	4,000.00	6,500.00	
LATE CHARGES			991.91	9,320.64	10,312.55	
BACKFLOW			55.00	5,564.44	5,619.44	
SUBTOTAL			234,651.76			
TOTAL RECEIPTS						944,653.56
SENT TO LIEN						26,291.35
LIENS COLLECTED						
ABATEMENTS						-757.02
ADJUSTMENTS						-1,269.81
AJD TO MASTER						
UNCOLLECTED						140,416.98
						1,109,335.06

OUTSTANDING:

USER CHARGES	135,113.33
SERVICE CHARGES	3,971.69
CONNECTION CHARGES	-1,600.00
LATE CHARGES	2,919.34
BACKFLOW	12.62
TOTAL OUTSTANDING	140,416.98

6.5

	Jul '20 - Jan 21	Budget	\$ Over (Under) Budget	% of Budget
Ordinary Income/Expense				
Expense				
061.000 · General Operations 000				
061.001 · Personal Services 1				
5100 · Salaries & Wages-Water Super	\$ 13,083.08	\$ 110,000.00	\$ (96,916.92)	11.90%
5110 · Salary & Wages-Oper Staff	\$ 86,200.32	\$ 168,135.55	\$ (81,935.23)	51.30%
5112 · Salary & Wages-Support Staff	\$ 37,891.84	\$ 70,624.22	\$ (32,732.38)	53.70%
5130 · Additional Gross	\$ 5,374.25	\$ 14,240.00	\$ (8,865.75)	37.70%
5134 · Additional Gross-Reg&SpecOncall	\$ 8,042.20	\$ 20,363.10	\$ (12,320.90)	39.50%
5190 · Other Stipened-Longevity	\$ 1,200.00	\$ 1,200.00	\$ -	100.00%
5191 · Other - Stipend BOWC	\$ -	\$ 3.00	\$ (3.00)	0.00%
5192 · Other-Certification/Stipend	\$ 1,500.00	\$ 1,500.00	\$ -	100.00%
5193 · Retirement Benefit	\$ -	\$ -	\$ -	0.00%
5195 · Other-Clothing Allowance	\$ 600.00	\$ -	\$ 600.00	100.00%
5197 · Vehicle Allowance -Super	\$ 1,995.80	\$ -	\$ 1,995.80	100.00%
5198 · Snow Storm Stipend	\$ -	\$ 4,000.00	\$ (4,000.00)	0.00%
Total 061.001 · Personal Services 1	\$ 155,887.49	\$ 390,065.87	\$ (234,178.38)	40.00%
061.002 · Purchased Services 2				
5210 · Energy	\$ 42,508.32	\$ 80,000.00	\$ (37,491.68)	53.10%
5240 · Repair & Maint Building	\$ 715.46	\$ 50,000.00	\$ (49,284.54)	1.40%
5245 · Repair & Maint Equipment	\$ 4,273.33	\$ 40,000.00	\$ (35,726.67)	10.70%
5245006 · Repair & Maintain Equip SCADA	\$ 6,390.00	\$ 10,500.00	\$ (4,110.00)	60.90%
5245007 · Repair & Maintain-Distribution	\$ 4,800.00	\$ 30,000.00	\$ (25,200.00)	16.00%
5270 · Rentals	\$ 900.00	\$ 1,050.00	\$ (150.00)	85.70%
Total 061.002 · Purchased Services 2	\$ 59,587.11	\$ 211,550.00	\$ (151,962.89)	28.20%
061.003 · Purchased Services 3				
5300-02 · Proff Legal Expense	\$ -	\$ 12,000.00	\$ (12,000.00)	0.00%
5300 · Professional Services	\$ 36,364.59	\$ 63,000.00	\$ (26,635.41)	57.70%
5300100 · Proff Service Backflow	\$ 4,300.00	\$ 9,500.00	\$ (5,200.00)	45.30%
5340 · Communication	\$ 11,916.62	\$ 21,000.00	\$ (9,083.38)	56.70%
5380 · Other Services	\$ -	\$ 2,730.00	\$ (2,730.00)	0.00%
Total 061.003 · Purchased Services 3	\$ 52,581.21	\$ 108,230.00	\$ (55,648.79)	48.60%
061.004 · Purchased Supplies 4				
5420 · Office Supplies	\$ 2,141.05	\$ 5,250.00	\$ (3,108.95)	40.80%
5430 · Building Supplies	\$ 108.93	\$ 1,575.00	\$ (1,466.07)	6.90%
5435 · Equipment Maint Supplies	\$ -	\$ 1,575.00	\$ (1,575.00)	0.00%
5460 · Groundskeeping Supplies	\$ 86.95	\$ 525.00	\$ (438.05)	16.60%
5480 · Vehicular Supplies	\$ 2,199.09	\$ 9,000.00	\$ (6,800.91)	24.40%
Total 061.004 · Purchased Supplies 4	\$ 4,536.02	\$ 17,925.00	\$ (13,388.98)	25.30%
061.005 · Purchased Supplies 5				
5530 · Public Works Supplies	\$ 47,772.16	\$ 55,000.00	\$ (7,227.84)	86.90%
5531 · Chemicals	\$ 12,186.74	\$ 24,150.00	\$ (11,963.26)	50.50%
5580 · Other Supplies	\$ -	\$ 1,050.00	\$ (1,050.00)	0.00%
5585 · Clothing Allowance	\$ 2,486.32	\$ 5,250.00	\$ (2,763.68)	47.40%
Total 061.005 · Purchased Supplies 5	\$ 62,445.22	\$ 85,450.00	\$ (23,004.78)	73.10%

061.007 · Other Charges & Exp 7

5710 · Travel/mileage-in state	\$ 149.32	\$ 1,155.00	\$ (1,005.68)	12.90%
5720 · Out of State Travel	\$ -	\$ -	\$ -	0.00%
5730 · Dues and Memberships	\$ 3,623.00	\$ 4,300.00	\$ (677.00)	84.30%
5780 · Other Charges	\$ -	\$ 525.00	\$ (525.00)	0.00%
5785 · Water Assessment D.E.P.	\$ 1,946.25	\$ 2,200.00	\$ (253.75)	88.50%
5850 · New Equipment	\$ 8,105.41	\$ 10,500.00	\$ (2,394.59)	77.20%
Total 061.007 · Other Charges & Exp 7	\$ 13,823.98	\$ 18,680.00	\$ (4,856.02)	74.00%

061.400 · Special Projects 400

5012 · System Enhancement	\$ -	\$ 122,632.92	\$ (122,632.92)	0.00%
5805 · Meadow Rd Main Replacement	\$ 30,480.50	\$ 41,435.98	\$ (10,955.48)	73.60%
5895 · Main Line Gate/Valve Replacemen	\$ 25,048.21	\$ 60,000.00	\$ (34,951.79)	41.70%
5902-18 · Main St Cleaning	\$ -	\$ -	\$ -	0.00%
Total 061.400 · Special Projects 400	\$ 55,528.71	\$ 224,068.90	\$ (168,540.19)	24.80%

061.500 · Special Articles 500

5000 · Water Oper Emergency Res Fund	\$ -	\$ -	\$ -	0.00%
5005-18 · Update Master Plan	\$ 15,500.00	\$ 25,000.00	\$ (9,500.00)	62.00%
5020 · Storage Tank Maintenance	\$ -	\$ 5,198.40	\$ (5,198.40)	0.00%
5803-19 · Generator 540 Main St	\$ -	\$ 30,000.00	\$ (30,000.00)	0.00%
5804-16 · Upgrade Witches Brook	\$ -	\$ 40,000.00	\$ (40,000.00)	0.00%
5809-17 · Highland Street Storage Tank	\$ 599.97	\$ 75,000.00	\$ (74,400.03)	0.80%
5895-21 · Witches Brook Daytank	\$ 36,145.12	\$ 75,000.00	\$ (38,854.88)	48.20%
590218 · STM ART Utility Billing	\$ -	\$ 18,000.00	\$ (18,000.00)	0.00%
Total 061.500 · Special Articles 500	\$ 52,245.09	\$ 268,198.40	\$ (215,953.31)	19.50%
Total 061.000 · General Operations 000	\$ 456,634.83	\$ 1,324,168.17	\$ (867,533.34)	34.50%

061.009 · Debt Service 9

5910 · Long Term Debt-East Side Phase1	\$ -	\$ 37,962.00	\$ (37,962.00)	0.00%
5911 · Long Term Debt-East Side Ph 2	\$ -	\$ 54,078.00	\$ (54,078.00)	0.00%
5920 · Long term Interest-Phase1	\$ -	\$ 4,412.00	\$ (4,412.00)	0.00%
5921 · Long Term Int East Side Ph2	\$ -	\$ 7,505.00	\$ (7,505.00)	0.00%
Total 061.009 · Debt Service 9	\$ -	\$ 103,957.00	\$ (103,957.00)	0.00%

063.400 · Projects

5895-18 · West End-Water Main	\$ 46,146.37	\$ 70,884.23	\$ (24,737.86)	65.10%
Total 063.400 · Projects	\$ 46,146.37	\$ 70,884.23	\$ (24,737.86)	65.10%
Total Expense	\$ 502,781.20	\$ 1,499,009.40	\$ (996,228.20)	33.50%
Net Ordinary Income	\$ (501,478.65)	\$ (1,499,009.40)	\$ 997,530.75	33.50%
Net Income	\$ (501,478.65)	\$ (1,499,009.40)	\$ 997,530.75	33.50%