Town of Harwich

BOARD OF WATER/WASTEWATER COMMISSIONER'S MEETING AGENDA* Thursday, April 8, 2021, 1:00pm

REMOTE PARTICIPATION ONLY OPEN PUBLIC FORUM

For those members of the public wishing to make comment you may do so by a combination of email and phone by;

- First, send an email to: dpelletier@harwichwater.com
 (Send emails at any time after the meeting agenda has been officially posted)
 - a. In the subject line enter "request to speak Jane Doe"
 - b. Replace Jane Doe with your name No need to add any more detail to email
- 2. Please wait until the Chairman has opened this agenda item for Open Public Forum
- 3. Join from your computer: https://global.gotomeeting.com/join/910148933
- 4. Or by phone, dial: +1 (571) 317-3122
- 5. Enter Access Code: 910-148-933
- 6. Please be patient and eliminate any background noise
- 7. Callers will be taken in the order the emails are received
- 8. When your name is called use *6 to unmute yourself

I. CALL TO ORDER

II. CONSENT AGENDA

- A. Minutes
 - 1. March 19, 2021

III. ABATEMENTS

- A. 25 Old Carriage Dr
- B. 53 Neel Rd
- C. FY21 Q3 Water Department Usage
- D. FY21 Q3 Internal Adjustments

IV. OLD/UNFINISHED BUSINESS

- A. Water Rules & Regulations
- B. Irrigation/Sewer Deduct Meter Policy

V. <u>NEW BUSINESS</u>

- A. FY21 Q3 Water Budget Report & Commitment Update
- B. FY21 Q3 Wastewater Budget Report Update
- C. Waterworks Materials Bid Vote to Award

VI. SUPERINTENDENT'S REPORT

- A. Annual Statistical Report
- B. Consumer Confidence Report

VII. <u>COMMISSIONER'S REPORT</u>

- VIII. CORRESPONDENCE/ANY OTHER BUSINESS

 IX. NEXT MEETING: TBD
- X. <u>OPEN PUBLIC FORUM</u>

A. See dial in instructions above

XII. ADJOURNMENT

*Per the Attorney General's Office: The Board of Water Commissioners may hold an open session for topics not reasonably anticipated by the Chair 48 hours in advance of the meeting following "New Business." *If you are deaf or hard of hearing or are a person with a disability who requires an accommodation, contact the Water Department Office at 508-432-0304 x.0 or by email at customerservice@harwichwater.com

Authorized Posting Officer:	Posted By:	
Tracey Alves	200.	Town Clerk
Tracey Alves, Board Secretary	Date:	

III. ABATEMENTS

- A. 25 Old Carriage Ln
- B. 53 Neel Rd
- C. FY21 Q3 Water Department Usage
- D. FY21 Q3 Internal Adjustments

Abatement Application | Harwich Water Department

Contact Us

GO

HARWICH WATER DEPARTMENT

Enter Search...

About Us

Customer Service

News & Events Water Quality Water Protection Water Conservation

Address Change	Please enter a value for	"Location and Description of Property"
Contact Us	Please enter a number f	or "Total Amount Assessed"
Civic Ready Notification	Please enter a number f	or "Total Amount Requested"
Find It Fast	Please enter a number f	or "If request is for a late fee, what is the requested amount?"
rind it rast	Please enter a value tha	t is no longer than 250 characters
Forms	Please enter a value for	"AGREE?"
Paying Your Water Bill		
Pay Now online	Abatement Applicat	tion
Water Rates	Name of Applicant*	
Bill Payment Options	Mailing Address*	25 Old Carriage Drive
Bill Schedule	City/Town*	East Harwich
Bill Assistance	State*	Massachusetts 💙
Abatement Application	Zip/Postal Code*	02645
Pay by Phone 844-953-0665	Phone Number*	
Danert a Violation	Mobile Phone Number Email Address*	
Report a Violation		aggrieved by a Water Use Charge, hereby applies for an abatement
Services Offered	me above nameu person,	aggreed by a water use Charge, nereby applies for an abatement
Service Tight Protection Plan	Date of Water Use Charge'	
Wastewater Plans for Phase 2	Name of Person Assessed Location and Description of	
wastewater Flatis for Filase 2	Location and Description (
	< Please enter a value for	"Location and Description of Property"
	Total Amount Assessed*	\$ 25.00 < Please enter a number for "Total
	Amount Assessed"	
	Total Amount Requested*	\$ 25.00 < Please enter a number for "Total
	Amount Requested"	
		e, what is the requested amount?
	300	/hat is the requested amount? \$ 25.00
		request is for a late fee, what is the requested amount?"
		son, what is the requested amount?
	Reason For Abatement Req	
	payment over three mon	that having been granted the right to spread heavy nths before it would be allowed again. It was so done and ayments were on time. I therefore ask for rebate and in qu

February

27 v 2021 v

www.harwichwater.com/customer-service/billing-payments/abatement-application.html

<--- Please enter a value that is no longer than 250 characters SUBSCRIBED THIS DAY UNDER PENALTIES OF PERJURY*

munis a tyler erp solution

Accounts

Account: 09257

25 OLD CARRIAGE DR

ONE TIME LATE FORGIVENESS 2-6-18

3/23/21 CALLED OWNER TO RELAY THAT BOWWC WILL REVIEW AT THEIR MEETING ON 4/8 AT 1PM AND WE WOULD CONTACT HIM AFTER RE: THEIR DECISION.

3/16/21 OWNER CALLED RE: \$25 LATE FEE. HE DIDNT REALIZE THAT THE PAY PLAN WE DREW UP AND EMAILED TO HIM IN OCTOBER REQUIRED A SIGNATURE PAGE BE RETURNED TO HWD. HE THOUGHT HE WAS AUTOMATICALLY ACCEPTED. HE WILL FILE FOR AN ABATEMENT OF THE \$25 LATE FEE. TA

2/25/21 OWNER WILL FILE FOR AN ABATEMENT. HE DID NOT SIGN AND RETURN THE PLAN SO IT DID NOT GO INTO PLACE. WM

10/29/20 PAY PLAN REQUESTED AND EMAILED.

12/2/19 OWNER WOULD LIKE PAY PLAN FOR REMAINDER OF FALL BILL, \$160.

5/3/19 SENT POSTCARD RE: REMITTANCE WITH STAR TO SEND TO TOWN HALL. (BANK CHECK) 11/27/18 PAYMENT SENT TO HWD. SENT EMAIL WITH MAIL INSTRUCTIONS. WM

2/6/18 PROVIDED ONE-TIME LATE FORGIVENESS. HE WILL CALL IN THE FUTURE IF A PAYMENT PLAN IS NEEDED. WM

10/15/15 PAY PLAN REQUESTED AND E-MAILED. TA

6/13/13 C/O METER AND INSTALLED RADIO. 1422060. ANNA 6/3/13 EMAILED CUSTOMER RE: METER. ANNA 2/7/13 LEFT MESSAGE RE: SENSUS METER.AB

DATE	COI	ÞΕ	READING	USAGE	AMOUNT	BALANCE
06/21/20		1			57.00-	.00
05/12/20		10	352000	19000	57.00	57.00
12/15/20		1			539.00-	.00
11/16/20		10	333000	163000	539.00	539.00
06/02/20		1			51.75-	.00
05/11/20		10	170000	16000	51.75	51.75
12/12/20		1			261.50-	.00
11/13/20		10	154000	89000	261.50	261.50
06/10/20		1			25.00-	.00
05/19/20		10	65000	6000	25.00	25.00
12/27/20		1			86.20-	.00
11/22/20		10	59000	48000	86.20	86.20
07/29/20		1			25.00-	.00
06/28/20		10	11000	11000	25.00	25.00
03/07/20		2			700.00-	.00
03/07/20	02	40			700.00	700.00



04/07/2021 11:28 talves

TOWN OF HARWICH - LIVE DATA UB Consumption History Report

P 1 ubcnsinq

^{**} END OF REPORT - Generated by Tracey **

Abatement: 53 Neel Rd

Form Name: Abatement Application

Date of Submission: Fri, 02 Apr 2021 18:13:21 -0400

Your server: www.harwichwater.com

IP address of person using form: 208.87.236.201

URL of page containing form: http://www.harwichwater.com/customer-service/billing-

payments/abatement-application.html

Name of Applicant:	A*************************************
Mailing Address:	
City/Town:	
State: 1	
Zip/Postal Code:	
Phone Number: 2	
Email Address: H	
Date of Water Use Charge: 2 April 2021	
Name of Person Assessed (Owner):	
Location and Description of Property: 53 Neel Road	
Total Amount Assessed: 1,772.74	
Total Amount Requested: 1,000.00	
If request is for Water Usage, what is the requested amount?: 1,000.00	
Reason For Abatement Request: Hi. Wellsley brought this to my attention the other day, so the	ank vou
, and the state of	arm you.

Background: Jane, my children and I rented this home for 2 weeks every year for 25 years. We were able

to purchase from Phil Way stack in Nov 2018. We plan on retiring there in a SUBSCRIBED THIS DAY UNDER PENALTIES OF PERJURY: 2 April 2021 AGREE?: Checked

OFFICE USE ONLY						
Board of Water/Wastewater C	ommissioners:					
Meeting Date:	Approved Amount:	Denied				
Signature(s):						
X	Notes:					
x						
x						

Hi. Thank you for the opportunity to complete the "Reason for Abatement" section of the form.

Hi. Wellesley brought this to my attention the other day, so thank you Wellesley . Background: Jane, my children and I rented this home for 2 weeks every year for 25 years. We were able to purchase from Phil Waystack in Nov 2018. We plan on retiring there in a few years but until then can only enjoy it during the summer and some weeks/weekends in the off season (Jane is a teacher and only off in the summer). Our basement is approx 15 years old. It has concrete walls and floor. It is approx 15' x 8'. Jane and I were at our home on February 14. As always, I check the basement to ensure all is ok. One of the valves at the boiler failed. Even though there was approx 6" of water down there, I was able to turn off the main valve quickly. I caught the leak in time, at least I thought I did. The boiler and the hot water heater were not ruined and didn't even need repair (they are approx 6" off the floor). We had our plumber, Scott Andreasson, came over in less than 1/2 hour and fixed the issue. I'm sure the meter is working fine, I'm just confused about where 266,000 gallon of water may have gone. Everything else seems in order. We have 3 brand new toilets, no apparent other leaks and we put in a well for irrigation approx 2 years ago. I think of myself as a conservationist, the thought of wasting water makes me mad. Jane and I would appreciate any abatement amount that you might consider. The total water bill was \$1,455.34. I inadvertently put \$1,772.74 on the form (that is my current tax bill amount).

Thank you for the consideration. Sincerely,



04/07/2021 11:26 talves

TOWN OF HARWICH - LIVE DATA UB Consumption History Report

P 1 ubcnsinq

Account Number Service	Customer # Name Mfr Meter Numbe	r Cd Read Date Time	Parcel By Bill	# Curr Read	Location Usage Repl	Usage (Charge Amt	Status Billed Amt
00842	107974		16/N1-42-R		53 NEEL RD			Active
1WATER- 1 WTR 1WATER- 1 WTR		A 03/22/2021 A 12/21/2020 A 09/24/2020 A 06/19/2020 A 03/30/2020 A 01/03/2020 A 09/30/2019 A 06/21/2019 A 04/01/2019 A 12/28/2018	395; 384; 373; 363; 353; 342; 332; 311; 301;	500,000 931 494,000 505 471,000 248 471,000 470,000 178 469,000 109 454,000 451,000	266,000 6,000 23,000 0 1,000 1,000 15,000 3,000	0 0 0 0 0 0 0	1,455.34 42.74 95.47 35.00 36.29 36.29 63.87 38.87 35.00 35.00	1,455.34 42.74 95.47 35.00 36.29 36.29 113.87 38.87 85.00 35.00

^{**} END OF REPORT - Generated by Tracey **

Accounts

Account: 00842

53 NEEL RD.

4/5/21 ABATEMENT REQUEST RECEIVED. RESPONSE SENT THAT BOWWC WILL REVIEW ON 4/8 AT 1PM

3/29/21 OWNER CALLED IN READ OF 766,200 CONFIRMING OUR READ. HE WAS TOLD ABOUT METER TESTING, ABATEMENT, AND PAYMENT PLANS OPTIONS. WM
3/26/21 HIGH USE OF 266,000 GALLONS (READ OF 766,000). LEFT COURTESY MESSAGE AND SENT EMAIL. WM / OWNER HAD A FLOOD OF ABOUT 6 INCHES IN HIS BASEMENT BUT HE TOUGHT IT WAS ONLY LEAKING FOR ABOUT AN HOUR. HE WILL CHECK THE READ TOMORROW AND CALL US ON MONDAY. WM

1/16/20 OWNER WILL NOT BE SHUTTING WATER OFF THIS YEAR. REMOVED AS SEASONAL AND WILL CREDIT ACCT. WM 1/15/20 MADE SEASONAL COURTESY CALL. LEFT MESSAGE & SENT EMAIL. WM

4/1/19 will have the service box raise to grade / SERVICE BOX RAISED TO GRADE. 3/25/19 IRRIGATION TECH (PETER 802-258-7203) CALLED TO ASK WHEN THE GATE BOX WOULD BE REPLACED/RAISED TO GRADE? SENT EMAIL TO SH. WM 3/20/19 IRRIGATION TECH CALLED TO REPORT WATER LINE NEAR SURFACE? DISPATCHED SH. WM

3/18/19 Oip :0451000 3/11/19 TURN ON REQUEST. TA

11/27/18 OFF. 0451440

11/19/18 Seasonal turn off request from Philip Waystack./ New owners will call us in spring to schedule turning on service.

11/16/18 L/M FOR OWNER TO SEE IF HE WILL BE HAVING WATER SHUT OFF FOR SEASON OR IF SEASONAL CHARGE SHOULD BE REMOVED FROM ACCOUNT PRIOR TO SENDING FINAL BILL.

11/16/18 final read 045100

11/15/18 final read request. ta

4/11/18 Oip:0431840

4/3/18 ON REQEUSTED BY OWNER FOR ANYTIME. WM

12/19/17 Oip:0431830

12/18/17 TURN OFF REQUEST. TA

11/21/17 Renewed service from main to curb stop.

4/14/17 Oip:0418740

4/13/17 TURN ON PER SCOTT'S PLUMBING. TA

11/10/16 041874 o off

11/9/16 TURN OFF PER SCOTT'S. TA

3/30/16 040143 o on 3/23/16 TURN ON PER SCOTT'S BY 4/8/16. TA 11/16/15 OFF 040143 o 11/12/15 TURN OFF ASAP PER SCOTTS. TA 5/6/15 ON 38467. TA 4/24/15 TURN ON REQUEST PER SCOTTS. TA 11/6/14 OFF 38467. TA 10/31/14 TURN OFF PER SCOTTS ASAP. TA 3/24/14 ON 363100. TA 3/24/14 TURN ON PER SCOTT'S BEFORE 4/8. TA 11/18/13 OFF 0363110 TA

11/15/13 SEASONAL OFF REQUESTED BY SCOTT'S PLUMBING FOR ANYTIME. WM

4/4/13 ON/SEASONAL 3/18/13 SEASONAL ON REQUESTED BY SCOTT'S PLUMBING BY $4/15.\mathrm{AB}$ 11/30/12 OFF/SEASONAL 0343150

MUST BE FILED WITH <u>THE HARWICH BOARD OF WATER COMMISSIONERS</u> NO LATER THAN THE DUE DATE WHICH THE WATER CHARGE BECAME A PART

TOWN OF HARWICH WATER DEPARTMENT APPLICATION FOR ABATEMENT

RECEIVED: 4/5/2021
ACCOUNT: VARIOUS

To the Board of Water Co	ommissioners:				
NAME OF APPLICANT:	HARWICH WATER DEPARTMENT hereby applies for abatement.				
PROPERTY OWNER:	HARWICH WATER DEPARTMENT				
PROPERTY LOCATION:	VARIOUS				
EMAIL ADDRESS:					
PHONE:		M	OBILE:		
TOTAL BILL AMOUNT:	\$2,008.55	W	ATER BILL #:	SEE ATTACHED	
AMOUNT REQUESTED:	\$2,008.55	·			
REASON FOR ABATEMEN	T REQUEST (attac	ch additional sheet	if necessary)		
QUARTERLY DEPARTMEN	IT WATER BILL A	BATEMENTS			
SIGNATURE OF APPLICAN	т: Уиш	my place	DATE:	April 5, 2021	
SUBMIT THIS FORM TO ATTN: BC	O THE HARWICH W ARD OF WATER C	ATER DEPT.196 CH OMMISSIONERS OF	HATHAM ROAD, R FAX TO (888) 7	HARWICH, MA 02645 74-3557.	
		BOARD OF WAT	TER COMMISSI	ONERS	
		APPROVED [DENIED		
NOTES:		\$ 	-		
	×	DATE	s	SIGNATURE	

SEE REVERSE SIDE (PAGE 2) FOR RELATED REGULATIONS & APPEAL PROCESS

Account	Invoice #	Balance
9733	404144	\$322.78
Account	Invoice #	Balance
150	394592	\$37.58
Account	Invoice #	Balance
349	394790	\$36.29
Account	Invoice #	Balance
2949	397383	\$37.58
Account	Invoice #	Balance
8003	402420	\$38.87
Account	Invoice #	Balance
9725	404137	\$35.00
Account	Invoice #	Balance
9726	404138	\$35.00
Account	Invoice #	Balance
9727	404139	\$391.42
Account	Invoice #	Balance
9728	404140	\$36.29
Account	Invoice #	Balance
9730	404141	\$374.26
Account	Invoice #	Balance
9731	404142	\$35.00
Account	Invoice #	Balance
9732	404143	\$53.27
Account	Invoice #	Balance
9734	404145	\$196.94
Account	Invoice #	Balance
9735	404146	\$35.00
Account	Invoice #	Balance
9740	404151	\$35.00

Account	Invoice #	Balance
8337	402752	\$35.00
Account	Invoice #	Balance
9981	404391	\$36.29
Account	Invoice #	Balance
10204	404600	\$236.98

Total \$2,008.55

Water Enterprise Fund FY21 Q3 INTERNAL A/R ADJUSTMENTS

Total	(\$1,386.79)	
Meeting Date	04/08/21	
		Judith Underwood, Vice Chair
Gary Carr	reiro, Chairman	Allin Thompson, Clerk

EFF DATE	ADJTYPE	PER	JOURNAL	5	SRC REF1	AMOUNT
01/08/21	1WATER	7	49	UBM	1821	78.86
02/02/21	1WATER	8	17	UBM	REFUND	-35.00
02/11/21	1WATER	8	119	UBM	021121	-91.52
02/11/21	3SEASN	8	119	UBM	021121	-950.00
02/11/21	3STIP	8	119	UBM	021121	-170.00
02/14/21	3STIP	8	193	UBM	REVADJ	17.00
02/23/21	1WATER	8	266	UBM	BASE	35.00
02/24/21	NSF	8	288	UBM	07661	25.00
03/17/21	SVCLAB	9	179	UBM	031721	-25.00
03/30/21	1WATER	9	306	UBM	33021	28.87
TOTAL SERVICE AD	JUSTEMENTS					-1,086.79

DATE	TYPE	ACCT	BILLNO	ADDRESS	AMOUNT
02/11/21	1XLFEE REMOVAL	04386	377465	21 VICTORIA RD	-25.00
03/09/21	1XLFEE REMOVAL	05455	389432	36 STERLIN RD	-25.00
03/15/21	1XLFEE REMOVAL	07505		2 SHERWOOD RD	-25.00
03/15/21	1XLFEE REMOVAL	02653		10 SEVENTH ST	-25.00
02/11/21	1XLFEE REMOVAL	06000	379077	1 BELMONT RD #134	-25.00
02/11/21	1XLFEE REMOVAL	09527	382589	766 DEPOT ST	-25.00
02/11/21	1XLFEE REMOVAL	03824	376903	368 QUEEN ANNE RD	-25.00
02/11/21	1XLFEE REMOVAL	02328	386311	15 PINEWOOD LN	-25.00
03/02/21	LFEE ERROR	99994	383911	NEUCO UTILTIES	-25.00
03/16/21	1XLFEE REMOVAL	08412	392374	38 NORTH WESTGATE RD	-25.00
03/16/21	1XLFEE REMOVAL	00206	384195	65 SNOW INN RD	-25.00
03/17/21	1XLFEE REMOVAL	05571	_	12 WINTERGREEN LN	-25.00
TOTAL LATE FEES					-300.00

IV. OLD/UNFINISHED BUSINESS

- A. Water Rules & Regulations
- B. Irrigation/Sewer Deduct Meter Policy

WATER RULES & REGULATIONS

Please note the following:

- 1. Previously approved changes have been incorporated into the following pages.
- 2. Page 12, Section 4: Meters, Item 4.13 is the new and proposed Irrigation/Sewer Deduct Meter for your review.
- 3. Page 21, Section 9: Irrigation Systems, Item 9.3, is a reference to the Irrigation/Sewer Deduct Meter section.
- Appendix A. Schedule of Rates and Fees contains only proposed water and sewer rates.
 Review of fees and related recommendation is anticipated at a future meeting.



Harwich Water Department

Water Rules & Regulations

Board of Water & Wastewater Commission

Introduction

Under authority of the General Laws, Acts of the State Legislature of the Commonwealth of Massachusetts, the following rules and regulations are hereby established by the Town of Harwich in the county of Barnstable, and hereby made and shall be considered a part of the contract between the Harwich Water Department and every person or persons liable for water charges or other charges subject to our jurisdiction, and the filing of an application to take water, or the taking of water, shall be considered express assent to be bound by these rules and regulations and any other changes which may hereinafter be made.

By the virtue of Massachusetts General Law Chapter 41 and other authority and powers, the Water/Wastewater Commissioners of the Town of Harwich, Massachusetts establish the following Rules and Regulations relating to the provision of water by the Harwich Water Department. All customers on the Harwich Water System are bound by these Rules and Regulations and future amendments thereto and are further bound to take water only for purposes stated in an application made by the customer for water service, made to and approved by the Harwich Water Department.

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SECTION 1: Definitions

- **1.1 Backflow** The flow of water or other fluids, mixtures or substances into the distribution pipes of a potable water source.
- **1.2** Backflow Prevention Device –A n approved mechanical device designed to prevent Backflow.
- **1.3 Corporation Stop** A shut off valve near the main that is used to isolate water from the main from the service connection.
- 1.4 Cross Connection An actual or potential connection between a distribution pipe of potable water supplied by the public water system and any waste pipe, soil pipe, sewer, drain or any other contaminated or hazardous source. Without limiting the generality of the foregoing, the term "cross connection" shall also include any bypass arrangement, jumper connection, removal section, swivel or changeover connection and any other temporary or permanent connection through which Backflow can or may occur.
- **1.5 Contractors** and **Developers** Contractors and Developers shall mean an individual, firm, corporation or any entity who installs water mains and their appurtenances.
- **1.6 Curb Stop** Part of the water service, usually located at or near the owner's property line, where the Town has complete access and control to shut off the water supply to the premises.
- 1.7 Customer The term "customer" shall mean the individual, firm, corporation or any entity listed as the owner of the property. Customer shall mean the Owner of the Premise / Property, who shall be responsible for payment of bills for charges for water and sewer service to the property whether or not the premises is occupied by the Owner or the Owner's authorized representative.
- 1.7 Department "Department" shall mean the Town of Harwich Water Department.
- 1.8 Irrigation/Sewer Deduct Meter Meter used for the purpose of determining water use for lawn sprinklers or other approved process use that are either owned and maintained by the Water Department or the Owner of the Property.
- **1.9 Main** A "main" shall mean the supply pipe laid in the street from which property connections are made. The Department shall consider part of the main to include from the corporation stop to the street side of the curb stop.
- 1.10 Meter Pit An underground vault enclosing a meter.
- 1.11 Service A "service" shall mean the pipe running from the curb stop and a curb box into property. Customer Water Service shall be defined as the entire water service excluding any corporation stop and/or valves directly associated with the water main. The Customer will be assessed for any repairs, replacements, or other services rendered to the Customer Water Service.
- **1.12** Superintendent "Superintendent" shall mean the Superintendent of the Water Department or the Superintendent's designee.

Additional Definitions

Additional definitions as applicable are adopted as set forth in Massachusetts Universal State Plumbing Code, 248 CMR and in the Massachusetts Board of Fire Prevention Regulations, 527 CMR.

SECTION 2: General Provisions

2.1 Contractual Agreement

Acceptance of service shall bind the customer to the laws, rules, regulations and policies of the Commonwealth of Massachusetts, the Town of Harwich and the Harwich Water Department, and shall form a part of the contract with every customer and shall be adhered to and govern the relations between the Department and the customer who is connected to the municipal water system and is bound hereby.

2.2 Application for Water Service

All applications for any new installations, alterations, replacements or change to water service shall be submitted for approval to the Superintendent or Superintendent's designee to the water office by the owner of the property or their authorized agent in writing. All applications shall include an engineered plan stamped by the Board of Health locating the septic system on the property. A building permit must be acquired before a service tap can be furnished.

2.3 Ownership Responsibilities & Liability

All pipes, valves, taps and other appurtenances between the municipal water main and the curb stop up to the property line are the property and responsibility of the Department. All piping, valves, equipment and any other appurtenances "downstream" of the curb stop are the property and responsibility of the customer although such items are required to meet the standards and specifications of the Department. An exception to the above is the primary water meter, which will always be the property of the Department.

2.4 Responsibility for Charges

Customers of water shall be charged with and held responsible for all water passing through their water meter. All charges remain with the account until paid regardless of sale.

2.5 Availability of Municipal Water

Application will be accepted for review subject to there being an existing municipal water main in a street or right-of-way abutting the premises to be served, but approval of an application shall in no way obligate the Department to extend its mains to provide water to a property.

2.6 Location, Plans and Specifications

The Department has the exclusive right as to the location of any and all water services, fire service lines, hydrants and water meters on the distribution system. Plans for said construction and or replacement shall be submitted with the application showing the curb box connection, the service line to the structure and the meter location. In the event that more than one meter is serviced by one service line, there will be a manifold used to provide a separate meter hookup for each designation. This must be provided on each preliminary plan before final approval is given. Any service line over 100' must have a meter pit closest to the curb stop or property line before their meter installation is approved.

2.7 Construction

Owner of property desiring construction, alterations or attachments connected with the water supply shall submit plans and specifications for the proposed work to the Superintendent for inspection and approval and for a determination as to whether the same is permissible. The Superintendent shall determine the terms, charges and conditions under which the proposed use shall be permitted.

2.8 Private Wells

All private wells used for irrigation shall not be connected to the Harwich water system or domestic plumbing at any time. Should any violation be noted, the Department reserves the right to shut the water off until the situation is resolved and all fees have been paid.

2.9 Right of Entry

Owner or occupants of any premises served by the Harwich water system shall, upon presentation by Department personnel of their credentials, authorize entry to their premises without a warrant for the purpose of inspecting and surveying their water system for new installation, cross connection, leak detection or to remove, repair, read or replace the water meter at any time the department deems necessary. When such access is refused, the water shall be shut off and shall not be turned on until such access has been allowed and fees have been paid.

2.10 Fires

In the event of a large fire all customers shall curtail the use of water in the affected area.

2.11 Conditions under Which Service is Furnished

The Town does not guarantee constant pressure or uninterrupted service, nor does it assure the customer either a full volume of water or the required pressure necessary to effectively operate hydraulic elevators, sprinkler systems or other appliances, the same being subject to all the variable conditions that occur in the supply of water from the Town's water system.

2.12 No Liability for Interruption of Service

No customer shall be entitled to damages or to have payment refunded for any interruption of supply, occasioned by accident to any portion of the works, by shutting off for the purpose of additions or repairs to the works or by the stoppage or shortage of supply due to causes beyond the control of the Department, such as excessive drought, excessive use of and waste of water by customers or by leaks or defects in the pipes or appliances owned by customer or other customers.

2.13 No Liability for Dirty Water

The Town shall not be responsible for damages caused by dirty water resulting from opening or closing of any gate, use of any hydrant, the breaking of any pipe, or maintenance of the water system.

2.14 No Liability for Customer's Pipes

The Town assumes no liability for conditions, which exist in customer's pipes and cause trouble coincident with or following the repairs of any main, service pipe, meter or other appliances belonging to the Department.

2.15 No Liability for Collapsed Boilers, Etc.

The Department reserves the right at any time and without notice to shut off the water in mains for the purposes of making repairs, extensions or for other necessary purposes. Customers having

boilers or other appliances on their premises depending on the pressure in pipes to keep them supplied with water are hereby CAUTIONED against danger from these sources and are required to provide, at their own expense, suitable safety appliances to protect themselves against such danger as per Massachusetts Drinking Water Regulations 310 CMR 22.22. In any event, it is expressly stipulated that the Department will not be liable for any damage resulting from water having been shut off either through accident or necessity.

2.16 No Liability for Shutting Off Water without Notice

When it becomes necessary to shut off the water from any section of the Town because of an accident or for the purpose of making changes or repairs, the Department shall endeavor to give timely notice to as many customers affected thereby as time and the character of the repairs or the accident will permit and shall, so far as practical, use its best efforts to prevent inconvenience and damage arising from any such cause. However, failure to give such notice shall not render the Department responsible or liable for any damages that may result from the shutting off of the water or any coincident conditions.

2.17 Restriction of Water Use

The Department reserves the right in periods of declared drought or emergencies or when, by Declaration of a State of Water Emergency under Massachusetts General Laws Chapter 21G are deemed essential to the protection of the public health, safety and welfare, to restrict water supply for secondary or non-essential purposes such as watering of lawns and gardens (either by hand or sprinkler) and vehicle washing (EXCEPT for sanitary purposes such as rubbish trucks). The Department shall have the right to fix the hours and periods when water may be used for such purposes. Any such restrictions will be promulgated by means of Special Water Regulations or By-Laws adopted by the Harwich Board of Water/Wastewater Commissioners. During this time the filling of swimming pools, hydro seeding, soaker hoses and power washing are strictly prohibited.

2.18 Easements

In any case where an existing municipal water main or appurtenances are located on private property and a recorded easement does not exist, an implied easement is deemed to exist with the same force and effect as a recorded one.

2.19 Liability for Freeze Ups

It is the responsibility of all water service customers to ensure that all plumbing, fixtures, meters and appliances are protected from freezing. The customer shall make any repairs, which may be necessary to prevent leaks and damage. Neither the Town nor the Department shall be held responsible for loss or damage to any plumbing, fixtures, meters or appliances due to freezing and any repairs to same made by the Department shall be paid for by the customer.

SECTION 3: Charges

3.1 Establishment of Rates

Rates chargeable for water and payable by the customer shall be determined by the Harwich Board of Water/Wastewater Commissioners as instructed under Massachusetts General Laws Chapter 41 § 69B.

3.2 Bills Payable

Bills for water service are due and payable upon issuance of the bill. The failure of the customer or his/her agent to receive notice of their water bill or other related charges does not relieve them

from the obligation for payment or from the consequences of nonpayment. All charges are due and payable upon issuance of billing and are past due THIRTY (30) DAYS after the date of the billing. The records of water supplied in the Department shall be sufficient basis for billing and to commence action for nonpayment against present and or consequent owners of record.

3.3 Overdue Charges

Any overdue charge including late fees or interest charges may be collected by any legal means, including a lien on the property or shutting off the water service as an action of contract as provided under the provisions of Massachusetts General Laws Chapter 40 § 42A-42F.

3.4 Payment Plans

If a payment plan is requested, the account must not be in arrears by more than two billing periods. If a payment plan is requested after the original billing due date, a late penalty will be assessed to the account. If the terms of the payment plan agreement are not kept, the plan becomes void.

3.5 Shut-Off for Non-Payment

The Water Department may shut off the flow of water to a property if the water customer has failed or refused to pay the lawful charges associated with the account. A water shut-off notice will be issued by means of a notice card left at the property and or by certified postal mail directed to the last address furnished to the department giving at least 36 business hours' notice as required by law. If the full balance is not paid within the 36 business hours, the water service may be terminated by department personnel between the hours of eight anti meridian and four post meridian, Monday through Friday. After the service has been shut off, the account will be assessed a reconnection fee to have the water reinstated and any associated administrative costs.

The balance must be paid in full before the water service can be reinstated. If the turn on is requested after regular operating hours, the after-hours rate will be assessed and the balance is to be paid no later than the next business day. If the water cannot be turned off due to special circumstances, a lien will be placed against the property. The property owner or tenant may at any time appear before the Board of Water/Wastewater Commissioners. The property owner may also appeal a Board's decision to the Appellate Tax Board within three months of the date hereof pursuant to the provisions of G. L. c. 59, §§ 64 to 65B, inclusive.

3.6 Collection of Miscellaneous Water Charges

All department services and materials rendered at a property shall be subject to the same conditions as charges for water.

3.7 Delinquent Accounts

No person who owes an overdue bill shall be entitled to further use of water or services at the same or any other premises until such charges are paid in full, together with any associated fees.

3.8 Claims for Adjustments on Bills

All claims for adjustments of water bills shall be made within thirty (30) days of the billing due date. Abatements will be made for clerical errors, misreads or failure of Department equipment. Abatements will not be issued for water leaks or high consumption, unless otherwise determined by the Board of Water/Wastewater Commissioners.

When determining abatements for domestic water leaks (excluding irrigation leaks), usage from three similar usage quarters can be averaged and any usage above may be considered for adjustment at the first-tier rate as a one-time disaster forgiveness occurrence.

3.9 All Water to be Metered and to be Paid

All water must be metered and paid for whether used or wasted. A minimum charge shall be assessed for water service from the date the water is connected to the town water supply, unless otherwise determined by the Board of Water/Wastewater Commissioners.

3.10 Leaks

The Department shall have the right to shut off water supplied to any property where a leak exists or is believed to exist. Any such leaks must be repaired and must pass inspection by the Department before water will be restored. In addition, each customer shall be responsible for the cost of any repairs to any private portions of the water system as well as the cost of water.

3.11 Service Tap Renewals or Replacements

In the event a new service tap is required or requested it shall be considered a service renewal using the existing main tap. If a new main tap is needed, applicable charges will apply.

SECTION 4: Meters

4.1 Meter Installation

A shut-off valve at the meter inlet shall be the first fitting inside of a serviced building and shall be installed by the Department. A ball valve as the first fitting "downstream" of the meter shall be installed at the expense of the customer. The meter shall be located in a clean, dry, warm and accessible location. A certified Plumber must complete any connection past the meter. Any service line over 100' must have a meter pit closest to the curb stop or property line before their meter installation is approved.

The appropriate size, type and location of the meter shall be determined and approved by the Department and based on the AWWA Manual Sections M22 and M6 or as amended. All meters will be remote read as required by the Department. Any meter larger than 2" must be a compound meter. Meter and installation are at the expense of the owner. Routine meter maintenance shall be provided by Department.

4.2 Customers to Pay for Meter Repairs

Meter repair or replacements due to damage caused by accident or negligence shall be charged to the customer.

4.3 Meters Purchased from Department

All water meters must be purchased from the Department. Only these meters may be used on its water system.

4.4 Meter Removal

Water meters shall not be removed from the water system by anyone other than Department personnel. Once a meter has been removed, it is the responsibility of the owner to maintain custody of the water meter at the property. Violation of this rule shall be considered meter tampering and be subject to applicable fines.

4.5 Meter Pits

Installation of meter pits shall be at the customer's expense. When it is necessary or expedient to locate the meter in an underground box or vault approved by the Department, the customer shall bear the expense of same and shall bear the responsibility of reasonable care and maintenance of said box or vault such as keeping it clean and dry. The customer shall not be permitted to cover the pit or in any way hinder access to the water meter. Meter pit covers must remain exposed at all times. Pits shall be furnished with inlet and outlet connections that accept a variety of Mueller underground service connection fittings that meet requirements of the latest revised AWWA Standard C800-89. For the purpose of standardization, the meter pit shall be Mueller with specifications determined by the Superintendent or Superintendent's designee.

4.6 Meter Tampering

A penalty or charge will be levied for each incident of tampering, installation alteration, and removal of a water meter by anyone not authorized by the Department. In addition, the Department reserves the right to pursue further prosecution in accordance with Massachusetts General Law Chapter 165 § 11.

4.7 Water Department's Right to Change Meters

If, in the opinion of the Superintendent, a meter does not fit the conditions of the service installation, the Department has the right to change such meter. Such a change shall be made in accordance with current regulations and paid by the customer.

4.8 When Meter is Out of Order

If a meter fails to register, the customer shall be charged based on the best available information concerning water use.

4.9 Repairing Meters

The Department shall have the right to remove, repair or replace any meter at any time it so determines.

4.10 Access to the Meter

It shall be the duty of all customers to ensure that meters on service connections be readily accessible at all times to Department personnel. Failure to provide access or remove any obstruction which prevents access to the meter within three days after being notified by the department shall cause the water to be shut off to the premises and it shall not be turned on until all obstructions are removed, all regulations complied with, and all expenses for shutting off and turning on the water are paid.

4.11 Residential Meter Testing vs. Testing Meters by Request

If during any dispute where a water meter reading is being contested, a customer may request to have the meter sent to a certified testing facility at the owner's expense. Should the Department request to have the meter tested, it will be at the Department's expense. If as a result of the test the meter is found to register over two (2) percent more water than actually passes through it, the meter shall be replaced. At that time, they may receive abatement. Their bill will also be adjusted in accordance with the result of this test.

However, if it appears that the customer was charged or has paid for less water than they should have been charged or should have paid, they shall, forthwith, be charged with the proper additional amount and shall pay the same together with the expense of the examination and test

to the Department. If the Department chooses to change a meter at any time, it is not an admission that there is something wrong with the present meter.

4.12 Commercial/Industrial Meter Testing

The Superintendent can require that a large commercial or industrial meter be tested if there is reason to believe that said meter is not registering water accurately. Based on AWWA Standard C700, all meters shall be tested by agents or representatives of the Department.

Commercial/Industrial Meter Testing will be done at the expense of Department. If Superintendent requires such testing, the owner will be notified via certified mail. The owner will have 10 business days from receipt of letter to notify the Water Department of what action has been taken for the repair or replacement of the meter and 20 business days to have the actual repair or replacement completed. Failure to respond to the first notice will result in a second notice informing the owner that if in 10 business days they have not responded, the water service to the building will be shut off. The billing will be based on the highest quarterly usage out of the last four billing cycles.

4.13 Irrigation/Sewer Deduct Meter

Properties served by the Towns wastewater collections system may install, at the owner's expense, a second meter to monitor outdoor usage. Properties electing install an irrigation/sewer deduct meter will have two (2) water meters, one meter will register all water entering the property and the second meter capturing only outdoor usage not contributing flow to the municipal sewer system. Outdoor usage captured by the second meter will NOT be subject to sewer usage fees. Irrigation/Sewer Deduct meters shall be installed in accordance with the Department Irrigation/Sewer Deduct Meter Policy.

SECTION 5: Service, Pipes and Fixtures

5.1 Service Pipes

Customers must keep their water pipes and fixtures in good repair and protected from freezing temperatures at their own expense. They shall be held responsible for any damage resulting from their failure to do so. They shall prevent any waste of water.

5.2 **Joint Use of Pipes or Trenches**

Water service pipes will NOT under any circumstances be placed in the same trench with other pipes, conduits or similar structures such as gas lines, electrical conduit, sewer pipe, etc.

5.3 Portion of Service Pipe Furnished by Water Department

New service connections shall be made by the Department and brought to the meter. The Customer shall be charged the current rate for tapping and connection fees.

5.4 Right to Repair and Replace Service Pipes

The pipe from the property line to the meter is the responsibility of the customer and all the repairs to the same shall be made at customer's expense unless covered by the Service Tight Protection plan. All service pipes between the street line and the meter must be repaired or replaced by the Department when it deems it necessary for the protection of the supply or the supplying of satisfactory water service. The cost shall be charged to the customer. The Department also reserves the right to assess the condition of "owner responsibility" service

piping, valves, etc. on a periodic basis in order to determine the functional and physical adequacy of the stated appurtenance and, if such is determined to be inadequate, the Water Superintendent may order the owner to replace such at the owner's expense. Failure to take corrective actions as prescribed by the Superintendent will be cause for termination of water service to those premises. In addition, each customer of water furnished by the Department shall be responsible in case of a break or a leak in the service pipe for both water loss and cost of repairs. Costs will be actual or estimated as determined by the Department.

5.5 Temporary Service from Adjacent Premises

When permission to open a permanently paved street is refused by the Highway Department or when, for any physical reason, it is impossible to open a street and the applicant requests that water be furnished temporarily from an adjacent service, the same may be done at the expense of the customer if approved by the Superintendent.

5.6 Materials on Private Premises

All fittings supplied by the Department to the customer shall be billed to the customer.

5.7 Irregular Service

Services that are not used for permanent and or habitable structures must be approved by the Department before any use is allowed.

5.8 One Service to Each Unit

The Department will only allow one (1) service connection per unit. A meter shall be placed in each individual unit located in a building. This includes all commercial or industrial buildings, new Condos and Town Houses.

5.9 Requests for Turning On or Shutting Off Water

Requests for turning on or shutting off a water service for repairs shall be made during normal business hours, except in case of an emergency. Customers shall be charged for turn on and turn off of each such service. Only Department personnel shall open and or close curb stops. Should the customer require after hour turn on or turn off, they shall be billed at the overtime rate. The Department shall not be held responsible for or perform any work downstream of meter.

5.10 Seasonal Service

All seasonal service requests for water turn on or shut off will require a two-week window for completion (the two-week window begins in advance of water turn on request date and for shut off requests, the two-week window begins after the property has been drained) and will be done between the hours of 7:00 a.m. and 3:30 p.m., Monday through Friday except for emergencies. All prior bills, charges, fees and liens must be paid in full prior to service being activated. If a seasonal customer fails to schedule their 2-week notice and wishes to pay the out of rotation fee, they shall be billed at the overtime rate. See applicable Rates and Fees. The owner shall be responsible for having the service properly winterized prior to scheduling the water to be shut off by the Department.

5.11 No Pipes Furnished in Winter

No new water mains shall be installed from November 15th through March 15th unless weather permits. The only other exception allowed are circumstances deemed an emergency. Applications must be received by November 1st for installation by November 15th. Installation of services beyond the end of an existing water main shall not be allowed. The main must be extended

(including necessary hydrants and appurtenances) to the furthest limit of the customer's property at their expense. Water mains shall be looped when required by the Superintendent.

5.12 Service Pipe Trenches

Service pipes shall not be placed within 10 feet of any other utilities, except under special conditions and with the approval of the Superintendent. The Department shall not be responsible for damage to other utilities laid within 10 feet of a water service or water main.

5.13 Standby Fire Protection

Customers desiring standby fire protection must submit a water service application to the Department. The Department shall furnish water for a fire protection service in accordance with the specifications for that sprinkler system. All equipment for this purpose shall be installed entirely at the expense of the customer and with the approval of the Superintendent. Such pipes shall not be used for supplying water for any other purpose than the fire system. The fire system must be arranged so that Department personnel can make easy inspection. Whenever it is considered necessary for the protection of the water supply and in the interest of the Town, the Superintendent shall have the right to require the installation of meters, alarms, backflow devices or other accessories. The installation and upkeep of such equipment shall be done so at the customer's expense. All installations and testing must be completed in accordance with Massachusetts General Laws.

5.14 Water Supply Availability

The Department shall make the determination as to the availability of adequate water supply for such services. The Department shall not bear responsibility to extend existing water mains in order to provide adequate water supply for such service. No fire service connection shall be less than a six (6) inch diameter and shall not be used for anything other than fire protection.

No water shall be taken or used through private fire systems for the purpose of testing unless the Superintendent issues written permission. Such test must be conducted under the supervision of the Department.

5.15 No Right to Furnish Water to Others

A customer shall not be permitted to supply the premises of another person with water, except in special emergencies and then only with the approval of the Superintendent.

5.16 Use of Fire Hydrants

The use of all fire hydrants is restricted to employees of the Water Department or by persons given specific authorization by the Water Department. During emergencies members of the Fire Department of the Town of Harwich and or other towns lending mutual aid are authorized to operate fire hydrants. In the event that a hydrant is to be used for any other purpose, the Department must be notified and a hydrant meter installed. If the hydrant meter is needed longer than a 24-hour period during frigid weather, the Superintendent or his/her acting agent may require the removal and reinstallation of the meter in order to protect it from freezing. All labor and usage charges incurred from the use of the hydrant, are the responsibility of the requesting party. Hydrants are not to be used to fill swimming pools. Any unauthorized use of fire hydrants without written permission of the Harwich Water Department will result in a \$1,000.00 Fine.

5.17 Cross Connection Control

If, in the opinion of the Superintendent, the installation of an approved backflow preventer (s) on the property side of a meter is considered necessary for the safety of the water system, such approved device(s) shall be immediately installed at the expense of the customer after due notice in writing has been given to the customer by the Superintendent. Said device(s) shall be installed and tested in accordance with the drinking water regulations of Massachusetts, 310 CMR 22.22. All tests shall be performed by the Department or agent and shall be charged as set forth in § 8. Failure to install or properly maintain a Department approved device, may result in the water being shut off to the property until compliance requirements are met. In addition, all private water lines running below grade shall be fit with a testable backflow device.

SECTION 6: Requirements & Specifications for Laying Water Mains

6.1 Materials and Installations

All materials to be used in conjunction with any and all water mains and installations of the same shall be in strict accordance with these "Specifications for Water Mains and Service Installation" of these regulations. All water mains and appurtenances shall be installed by the Department employees or a Contractor who has been approved by the Department.

6.2 Pipe Size

All water mains shall be sized by the Department in conjunction with the Master Plan of the distribution system, or as calculated by the Department or its consulting engineers. All new water mains shall have the minimum diameter of eight (8) inches. Piping for hydrant services shall have the minimum diameter of six (6) inches.

6.3 Fire Hydrant Spacing

Fire hydrants shall be spaced at a minimum distance of 500 feet in residential zoned areas; 250 feet in commercial, business, and industrial zoned areas. The Fire Chief can request a different spacing standard depending on the situation. The applicant must show proof that the Fire Chief has approved all proposed fire hydrant locations. Measurements shall be taken along traveled way, whether public or private. Space and additional fire hydrants shall begin at the closest existing hydrant. An additional fire hydrant shall be placed at the dead end of all water mains.

6.4 Fire Hydrant Access

No person shall obstruct access to a fire hydrant. Fire hydrants shall have a three-foot clear radius measured from the center of the stem of the top of the hydrant. No foliage, fencing, parking space, or other object shall obstruct the clear area. No person may landscape to change the grade around the base of the hydrant so as to prevent the use of a four inch cap. Location where existing objects such as, but not limited to, buildings, walls, fences, trees, on sloping grades that does not permit a three (3) foot clearance radius, may be granted a waiver by the Water Department. Before any waiver of this Regulation is granted, all other possible locations must be considered. Existing hydrant locations shall not be altered or moved for any reason unless determined by the Superintendent.

6.5 Cost of Water Mains and Hydrants

In private division of lands, commercial, business or industrial complexes, and all other areas not presently serviced by Harwich water system, the developer or owner shall be responsible for all costs with regard to water main installation(s), hydrants and connection(s) to existing system and or maintenance of already installed water mains and hydrants. All water mains shall be installed to the furthest property line.

6.6 Need for Water Mains

The developer or owner of a division of land where water is available within 500 feet will be required to serve and supply the development with water in accordance with these regulations. Any property that has existing public water service and is a division of land, the developer or owner will be required to upgrade the water mains and services to comply with these rules and regulations before the transfer of any parcel. Industrial, commercial, condominiums or multifamily residential, and like buildings that are not a division of land shall be reviewed by the Water Superintendent and the Fire Chief on an individual basis. They shall still be governed by these Rules and Regulations and be required to install and maintain water mains and fire hydrants.

6.7 Application for Water Main Installations

An application for water main installation shall be completed by the developer or owner and submitted to the Department for review and approval before any work can proceed. All applications must contain the complete information requested and an engineered construction plan prepared by a Massachusetts Registered Professional Engineer. Payment of all required tapping fees, and installation fees including the service availability charge and any other fees established by the Board of Water/Wastewater Commissioners shall be made at the time of application.

Water main installations must be performed by an approved contractor listed on the Department's certified Water Main Installer list. Water main inspections must be performed by an approved inspector listed on the Department's certified Water Main Inspector list.

Contractors and/or Inspectors interested in becoming certified, must first submit a letter of interest, credentials, certificates of insurance and three letters of reference for similar work performed in nearby, surrounding towns, to the Board of Water/Wastewater Commissioners for approval. Once approved, the contractor and/or inspector must complete 3 water main installations and/or inspections within the town of Harwich during a probationary timeframe. Upon the successful completion of 3 jobs that meet or exceed the Department's expectations, the contractor and/or inspector will be added to the certified list of Water Main Installers and/or certified Water Main Inspectors.

6.8 Pipe and Fittings

All water main pipes shall conform in design and manufactured to the latest issue.

ANSI/AWWA standard C151-91 Class 52 "Ductile-Iron pipe, Centrifugal cast, for water or other liquids". The pipes shall be supplied in lengths not to exceed 20 feet. Pipe shall have a pressure class of 300.

All fittings shall be Ductile-Iron and conform in design and manufactured to the latest issue of AWWA standard C110 "ductile-Iron and Gray-Iron fittings, 3 ins. through 48 in. for water and other liquids".

All pipe and fittings shall have a Cement-Mortar lining inside and a Bituminous Seal Coat applied both inside and outside to conform to AWWA C104, "Cement-Mortar lining for Ductile-Iron pipe and fittings for water".

Push on and Mechanical joints shall be manufactured domestically and shall conform in design and manufactured to the latest issue of AWWA standard C111 "Rubber-Gasket joint for Ductile-Iron pressure pipe and fittings".

6.9 Valves

All valves shall conform in design and manufactured to the latest issue of AWWA standard C500 "Resilient-Seated gate valves for water supply", rated at 150-psi working pressure and a minimum 300-psi pressure test.

All valves shall have a 2-inch operating nut, mechanical joint hubs (except for wet taps), and open in a counter clockwise direction. If shallow depth of burial or other conditions of service requires that the valve be installed in a horizontal position, a nut-operated bevel gear shall be fitted to the valve for service operation through a valve box.

6.10 Hydrants

Hydrants shall comply with the following:

- Direction of Opening Right Open
- Bury Length 5.5 feet
- Height (bury Line to Opening Nut) 28.75 inches minimum
- Model Traffic (Breakaway Design)
- Color Safety Blue Body
- All chains must be removed.

All hydrants shall have a permanently mounted marking device approved by the Department.

All hydrants must meet applicable parts of ANSI/AWWA C502 standard. In the event that a hydrant is not in service or temporarily taken out of service, the hydrant is to be clearly marked with an out of service ring and notification provided to the Fire Department.

6.11 Cover over Pipe

Pipe shall have five (5) feet of cover measured to finish grade of the street. Pipe to be hand covered one (1) foot with sand or stone free gravel and compacted and tamped around pipe to give good support and protection.

In case of any excavation, ground water swamps or when any unsuitable materials are encountered, the Contractor shall replace it with good material to provide proper support and alignment of the pipeline. In some cases, the Contractor shall use crushed stone for bedding covered with sand. Trench backfill shall be suitable material taken from excavation, approved common borrow or gravel hauled in. No mud, frozen earth, stones larger than 3/4" or other objectionable materials is to be used for refilling.

6.12 Ledge

All ledges shall be removed to width of two (2) feet or greater than the diameter of the pipe and one (1) foot below the underside of the pipe. A bed of sand shall be placed in the trench prior to laying pipe.

6.13 Blasting Precautions

All blasting shall be discussed with the Superintendent and or the Engineer's and the decision shall be made on individual bases.

6.14 Survey Markers

Survey markers (line and grade) shall be required on all newly proposed streets. Pipes shall be laid within the roadway layout (easement in certain cases) as shown on plans approved by the Harwich Planning & Zoning Board.

6.15 Excavation within the Limits of Public Ways

Permission shall be obtained from the Highway Department before any excavation can begin within any Town way. Road restoration shall be completed in accordance with local or state regulations. A street opening permit shall be obtained from Massachusetts Department of Public Works before any excavation can begin on any State Highway. This work shall be performed in accordance with permit.

6.16 Service Pipes

Each service shall consist of a corporation stop, curb stop, curb box, ball valve and a meter and remote reader as soon as the water service enters building.

6.17 Testing of Water Mains

Before acceptance by the Department, the pipe shall be pressure tested and chlorinated in accordance with "Installation of Ductile-Iron Water Mains and Appurtenances" AWWA Designation C600 latest edition. No one shall pressure test or chlorinate an installation without notifying the Department at least 48 hours prior. An employee of the Department must be present for the duration of the pressure test and chlorination to witness and sign the chain of custody forms. All pressure test reports shall consist of actual distance of pipe and size, and the number of valves and hydrants. The Town shall furnish a water meter to measure water usage for disinfection and flushing. A sample of water taken after the disinfection of water pipes shall be delivered to a testing laboratory approved by the Commonwealth of Massachusetts. The contractor must then deliver two consecutive copies of the test results with zero background to the Superintendent. Before final approval is given by the Superintendent, the contractor must submit an as-built drawing to the Department. It is at this time the Superintendent shall then determine whether the pipes (project) may be accepted into the Town's water system.

6.18 Tapping Sleeves & Valves: Gate & Butterfly Valves

Tapping sleeves & valves, gate and butterfly valves shall be furnished in accordance with the requirements of the latest revised AWWA Standards C509-94 and C504-94. Tapping sleeves and valves shall be of the same manufacturer. Gate valves 6" through 12" shall be mechanical joint, bronze mounted, resilient seat wedge type, open left (counterclockwise) with 2" operating nut. For the purpose of standardization, tapping sleeves and valves, gate and butterfly valves shall be Mueller.

6.19 Gate Boxes

Buffalo #5663 slide type 24" top with flange at top of box with 30" bottom. Boxes to be cast iron, bituminous coated with cast iron covers for heavy traffic use. Covers shall be identified with legend "WATER".

6.20 Water Mains on Private Roads

It is the sole responsibility of the residents or owner(s) of private roads to repair and maintain all water mains and appurtenances, valves and hydrants. It is also the responsibility of residents and or owner(s) to maintain sufficient amount of soil coverage over any water main. All water mains are required to maintain a minimum of a 5' depth below finish grade at all times. The Department is not responsible for water mains on private roads.

6.21 Road Layout

Any privately owned pipes and or wires in the Town's road layout are not the responsibility of the Department. Any items in the road layout that are damaged will not be paid for by the Town of Harwich.

SECTION 7: Violations

7.1 Violations of Regulations

Any violation of these regulations may result in the Superintendent and/or the Board of Water/Wastewater Commissioners ordering a fine in accordance with Massachusetts General Laws Chapter 165, § 11 and/or the shutting off of the water to the violator's premises. If the water is shut off for violations of rules it shall not be turned on again until the Department is satisfied that there shall not be further cause of complaint and charges have been paid.

7.2 Discontinuance of Service

A water service may be discontinued for any reason such as nonpayment of water bills, fees, charges and liens or for violations of any rules and regulations contained herein, and in accordance with Massachusetts General Law Chapter 40 §42. A water service may be terminated without notice for fraudulent use. Reconnection of terminated service will be done ONLY during normal working hours of the Department; a reconnection fee shall be applied. Water service will not be reconnected until all charges have been paid in full.

7.3 Inactive Services

If an account does not have a meter and has been inactive for more than 24 months, the Department may disconnect and cap the service from the distribution system. If the property owner wishes to keep the service connected to the system, he or she must apply for an extension that may not exceed one year unless there is a special condition made and set forth by the Board of Water/Wastewater Commissioners.

7.4 Cross Connections

Whoever maintains a cross connection in violation of M.G.L. c. 111, § 160A, shall be:

- 1. punished by a fine of not more than \$25,000 for each day such violation occurs or continues, or by imprisonment for not more than one year, or both such fine and imprisonment, or
- 2. subject to a civil penalty not to exceed \$25,000 per day for each day that such violation occurs or continues.

Water will be turned off immediately until violation has been corrected. There will be a Turn on and Turn off fee assessed per violation. There is also a testing fee per device, see non water related fees.

7.5 Treatment

No treatment by any unauthorized personnel shall be permitted. If anyone is found adding any treatment to Town's water, they will be subject to fines established by the Board of Commissioners for each individual offense.

7.6 Mandatory Water Use Restrictions

Any customer found in violation of a water ban shall be fined as follows:

- First Offense written warning
- Second Offense \$100.00 dollars
- Third and any subsequent offense \$300.00 dollars

7.7 Swimming Pools

The filling of swimming pools with the use of a fire hydrant is strictly prohibited. Violators will be subject to penalties in accordance with Massachusetts General Laws, Chapter 165.

7.8 Unauthorized Water Use

Whoever unlawfully and intentionally damages a water meter or prevents such meter from registering the quantity of water supplied through it or uses or causes to be used water without consent of Department shall be fined in accordance with Massachusetts General Law, Chapter 165, §11.

7.9 Defacing and Littering Upon Town Owned Property

Any person or persons willfully defacing and or littering upon Town owned property located within its watershed shall be fined no less than \$300.00 dollars.

7.10 Tampering

All gates, valves, shutoffs, water meters and standpipes and any other portion of the municipal system, are the sole property of the Department, and are not to be opened, closed, removed or in any way tampered with or made inaccessible. Only personnel authorized by the Superintendent may operate any portion of the municipal system. Violators will be subject to charges or penalties determined by the Board of Water/Wastewater Commissioners.

7.11 Markouts

No excavator shall, except in an emergency, make an excavation where town water exists unless notice is given to the Department at least 72 business hours before excavation. If an excavation is made without the request of a water mark out, the excavator shall be held solely responsible for any and all damages and injuries caused, and any penalties or legal action that may be brought against excavator, company, or its representatives.

7.12 Utility Markout Policy

- A. Utility shall submit road cut permit request directly to the Highway Department.
- B. Utility shall submit markout request to the Department 72 hours before markout is needed, for 10 or less residences. For 10+ residences, a 2-week notice is required. Bad weather may alter this schedule.
- C. There will be a fee charged per markout(s) per fee schedule.
- D. The markout package shall include the following:
 - Utility's work order/reference and dig safe number
 - A map/diagram highlighting area of utility service work to commence.
 - Dig safe documentation
 - Project start date
 - Contact name, number and/or email address of contact.

As of 8/20/13, utility shall provide a complete markout package as noted in item D above. For large projects, Utility Representative must deliver by hand a complete markout package.

Each utility shall not submit more markout request than the utility can complete within thirty (30) days of initial work request(s). If work is not completed within thirty (30) days, a new markout request is required and the utility will be charged for the new markout.

Each utility will receive a monthly bill for services rendered. Payment will be due within 60 days. Late payment will result in late fee charge as per fee schedule.

If payment is not made within 3 months (90 days), the Department will cease all markouts until balance is paid.

SECTION 8: Rates & Charges

8.1 Setting Fees and Charges

Fees and charges are subject to change upon approval of the Board of Water/Wastewater Commissioners and after all legally advertised public hearings and meetings have been completed.

See Appendix for Current Rates and Fees

SECTION 9: Irrigation Systems

9.1 Irrigation System Notification

All properties with irrigation systems must notify the Department. If a property owner has not notified the Department, the water may be shut off to the property until proper notification has been filed.

9.2 Irrigation Backflow Device

All irrigation systems must have a testable backflow device. All tests will be conducted by a State Certified Licensed Backflow Device tester. If a system is found to be operating without an approved backflow device, the water may be shut off to the property until all Department compliance requirements are met.

9.3 Irrigation/Sewer Deduct Meter

See Section 4.13 Irrigation/Sewer Deduct Meter

SECTION 10: Service Tight Program

10.1 Service Tight Program

The Town offers a voluntary Service Tight Protection Plan; this program offers eligible customers the right to apply for enrollment into the Service Tight Program for all services 2" and under from the curb stop to the water meter. Condominiums, apartments, multi-unit properties and service lines after meter pits are not eligible under this plan. All enrollees must agree to and meet all conditions set forth in the Service Tight Program. This service will have an automatic fee, billed quarterly and will provide all services mentioned in the program brochure.

Delinquent accounts over ninety (90) days will be automatically unenrolled and will not be eligible for re-enrollment until all account charges have been paid in full. The Department reserves the right to cancel this program at any time. The Service Tight Program is not transferrable.

Enrollment begins ninety (90) days after application is received. The Customer may cancel the Service Tight Program at any time by placing their request in writing to the Harwich Water Department, 196 Chatham Rd. Harwich, MA 02645.

If the customer chooses to cancel the plan prior to the initial waiting period, they may do so in writing. If cancellation is requested after the billing period, no refund will be given. When the customer chooses to sign up for this service, it is the customer's responsibility to become familiar with the Service Tight Plan guidelines.

The department reserves the right to change the terms and conditions of the policy at any time. Please refer to the applicable Rates and Fees. The Harwich Water Department reserves the right to deny plan coverage for any reason.

APPENDIX A. Schedule of Rates and Fees

Water Rates EFF. 7/1/21TBD	RATE			Sewer Rates EFF. 7/1/21 TBD	RATE		
Base Rate	45.00	QUA	ARTERLY	Base Rate	50.00		
1,000 - 8,000 Gallons	1.35	PER 1,00	00 GALLONS	1,000 - 8,000 Gallons	5.03		
8,001 - 15,000 Gallons	2.78		00 GALLONS	8,001 - 15,000 Gallons	5.43		
15,001 – 40,000 Gallons	4.15		00 GALLONS	15,001 - 40,000 Gallons	5.83		
40,001 + Remaining Gals	6.01	PER 1,00	00 GALLONS	40,001 + Remaining Gals	6.05		
Fire Protection							
	13.47530	40.00					
Residential Commercial		40.00	QUARTERLY				
Commercial		65.00	QUARTERLY				
Backflow Prevention Device	e Inspectio	n FREQUENCY	OF INSPECTION	N IS BASED ON DEVICE TYPE			
First Device		70.00	PER DEVICE, A	ANNUAL OR SEMI-ANNUAL BILLING			
Re-Test		45.00	PER DEVICE				
Backflow/Cross-Connection	Survey	100.00	PER HOUR				
Service Tight Protection Pla	an						
Up to and Incl. 2" Water Se	68.00	PER YEAR, BIL	LED QUARTERLY				
Administrative and Collect	ion Fees						
Notice Fee – Violation Col		10.00	Return	Check Fee	25.00		
Copies/Computer Printout		.05	Demand Charge				
Research Request PER HOUR		22.00	Demand Charge 2 Unauthorized Hydrant Use 1,00				
	§11: TRIPLE T			S SUSTAINED THEREBY OR \$1,000.0			
Service Fees							
Service Call During Work Ho	ours	50.00	PER HOUR				
Service Call After Work Hou		150.00	FEE FOR UP TO	O 4 HOURS			
Missed Appointment		50.00	FEE				
Electrician Labor/Water Ser	vices	50.00	PER HOUR				
Transfer of Property Reques	st	60.00	PER REQUEST				
Seasonal Turn On/Off or Plu		50.00	PER REQUEST				
Out-of-Rotation On/Off		150.00		S \$50 IF AUTO BILLED)			
Reconnection Fee		50.00		DES NOT INCLUDE COST FOR TURN ON)			
Markout Request		25.00	1-2 MARKOUT				
Markout Request		50.00		R MORE THAN 2 REQUESTS			
Inspection Fee		150.00	PER REQUEST				
Meter Test MGL, CH.40, §39	91	3.00	PLUS 1-HR SER	RVICE CALL			
Hydrant Use Setup		100.00					

Hydrant Use Consumption	20.00	PER 1,000 GALLONS, AFTER 1ST 1,000 GALLONS
Private Hydrant Inspection		PER HOUR

Service Ta	p Installation DOES NOT INCLU	DE DDICE OF ME	TED AND VALVE					
Service Ta		Quote						
	newal -Existing Tap Only	Quote						
Larger Serv		Quote						
2" Residen	tial Fire Sprinkler Tap	350.00	EACH					
6" Comme	rcial Fire Sprinkler Tap	600.00	EACH					
RECEIPT FOR S	ERVICE INSTALLATION CHARGE MUS	T BE PRESENTED	TO BUILDING INSPECTO	OR FOR BUILDING PERMIT				
SERVICE TAP IN	ISTALLATION INCLUDES LABOR, EQU	IPMENT AND PA	RTS. METER AND VALVE	E ARE PRICED SEPERATELY				
Water Mai	n Tap or Tie In TRENCH PERMI	T NOT INCLUDED						
6" Tap	600.00	10" Tap	800.00	Trench Permit	25.00			
8" Tap	700.00	12" Tap	900.00					

Meters THRU	6/30/21				
5/8" _{E-}	408.06	1-1/2" E-CODER	1,222.06	3" E-CODER Compound	4,878.62
3/4" _{E-}	524.08	2" E-CODER	1,475.03	4" E-CODER Compound	6,142.25
1" E-CODER	689.50	2" E-CODER Compound	3,403.17		

<10 years	FULL PRICE	13 years	65%	17 years	85%
10 years	50%	14 years	70%	18 years	90%
11 years	55%	15 years	75%	19 years	95%
12 years	60%	16 years	80%	20 years	NO CHARGE

DISCOUNTS WIL NOT BE GIVE IF CUSTOMER OR REPRESENTATIVE IS NEGLIGENT OF METER TAMPERING
REPLACEMENT PRICING DOES NOT INCLUDE LABOR OR FOR SERVICE CALL

Special Services HYDRANT/EMERG	ENCIES, ETC.	STRAIGHT TIME	OVERTIME		
Labor	PER HOUR PER TECH	50.00	150.00		
One Man/One Truck	PER HOUR PER TECH	50.00	150.00	OVERTIME FEE FOR UP TO 4 HOURS	
Two Men/One Truck	PER HOUR PER TECH	100.00	300.00	10.001 10 4110010	
Compressor or Const. Trailer	PER HOUR PER TECH	70.00	N/A		
Dump Truck F-750	PER HOUR PER TECH	80.00	N/A		
Mini Excavator	PER HOUR PER TECH	80.00	N/A		
Backhoe	PER HOUR PER TECH	80.00	N/A		

DISCLOSURE: SERVICE CALLS AND LABOR FOR EMERGENCY CALLS ON A HOLIDAY IS ADDITIONAL AND APPROXIMATELY DOUBLE OVERTIME RATE PRICING.

Authentication

Upon due notice and hearing, we the undersigned, acting as Water/Wastewater Commissioners of the Town of Harwich, do this <<30th day of October 2015>> adopt the foregoing "Rules and Regulations of the Harwich Water Department".

Board of Water/Wastewater Commissioners:	
Gary Carreiro, Chairman	Date
Judith Underwood, Vice Chair	Date
Allin Thompson, Clerk	Date

Adopted: February 25, 1935 Revised: January 1, 1961 Revised: January 1, 2001 Revised: January 10, 2006 Revised: May 1, 2008 Revised: May 15, 2009 Revised: June 19, 2009 Revised: February 9, 2010 Rates/Fees: March 1, 2010 Revised: July 27, 2010 Revised: December 7, 2010 Rates/Fees: April 26, 2011 Rates/Fees: March 13, 2012 Rates/Fees: March 19, 2013 Rates/Fees: March 17, 2015 Revised: October 30, 2015 Fees: October 30, 2015 Fees: April 13, 2016 Fees: September 13, 2017 TBD July 1, 2021 Adopted:

V. NEW BUSINESS

- A. FY21 Q3 Water Budget Report & Commitment
- B. FY21 Q3 Wastewater Budget Report
- C. Waterworks Materials Bid- Vote to Award

FY21 Q3 WATER BUDGET REPORT

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TOWN OF HARWICH - LIVE DATA FY21 Q3 WATER BUDGET REPORT

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10K 2021 15							
ACCOUNTS FOR: 1320 WATER ENTERPRISE FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1320 WATER ENTERPRISE FUND							
1320 596000 OFUS	730,290	0	730,290	730,290.00	.00	.00	100.0%
TOTAL WATER ENTERPRISE FUND	730,290	0	730,290	730,290.00	.00	.00	100.0%
13204501 WATER ENTERP SALARIES & WAGES							
13204501 511100 S&WELECTED 13204501 511900 S&W 13204501 512000 SEAS S & W 13204501 512500 COMP TIME 13204501 513000 OVERTIME 13204501 513060 FLUSHING 13204501 514000 LONGEVITY 13204501 515005 SICK BY-BK 13204501 515007 SCKLVBONUS TOTAL WATER ENTERP SALARIES & WAGES	3,000 990,575 45,696 0 211,282 31,919 35,253 0 3,325 1,321,050	0 0 0 0 0 0 0	3,000 990,575 45,696 0 211,282 31,919 35,253 0 3,325 1,321,050	2,250.03 690,618.23 12,241.25 907.48 162,939.21 .00 21,627.62 7,993.29 1,675.00 900,252.11	.00 .00 .00 .00 .00 .00	749.97 299,956.84 33,454.75 -907.48 48,342.79 31,919.00 13,625.38 -7,993.29 1,650.00	75.0% 69.7% 26.8% 100.0%* 77.1% .0% 61.3% 100.0%* 50.4%
13204502 WATER ENTERPRISE FUND EXP 13204502 517200 UNEMPLOYPA 13204502 517900 OTHER FRIN 13204502 521100 ELECTRIC 13204502 521200 GAS 13204502 524140 V&EMAINT 13204502 525000 TECH SUP 13204502 525000 BLDG AGRMT 13204502 530800 LAB SVCS 13204502 530800 LAB SVCS 13204502 530820 PROFSVCS 13204502 530875 PRINT SVC 13204502 534100 ADV 13204502 534100 ADV 13204502 534400 TELEPHONE 13204502 534430 COMM SVCS 13204502 534430 COMM SVCS 13204502 534430 COMM SVCS	0 8,250 328,126 9,535 58,500 45,000 27,240 9,650 22,500 75,000 23,000 1,500 21,000 7,700 16,000 18,944	0 0 0 0 0 0 0 0	0 8,250 328,126 9,535 58,500 45,000 27,240 9,650 22,500 75,000 23,000 1,500 21,000 7,700 16,000 18,944	-684.00 5,843.85 269,466.59 3,675.42 53,511.22 18,360.23 22,953.76 8,677.92 9,382.00 66,806.50 6,624.97 1,604.40 12,592.74 4,868.01 11,679.24 7,848.46	.00 .00 .00 .00 .00 .00 .00 .00 .00	684.00 2,406.15 58,659.41 5,859.58 4,988.78 26,639.77 4,286.24 972.08 13,118.00 8,193.50 16,375.03 -104.40 8,407.26 2,831.99 4,320.76 11,095.54	100.0% 70.8% 82.1% 91.5% 40.8% 84.3% 41.7% 89.7% 89.7% 603.2% 41.4%



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TOWN OF HARWICH - LIVE DATA FY21 Q3 WATER BUDGET REPORT

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ACCOUNTS FOR: 1320 WATER	ENTERPRISE FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
12204500 540000								
13204502 542000	OFF SUPPLS	5,900	0	5,900	3,995.34	.00	1,904.66	67.7%
13204502 542013	HARD/SOFT	25,924	0	25,924	11,587.81	.00	14,336.19	44.7%
13204502 548100	BULK FUEL	28,371	0	28,371	7,576.83	.00	20,794.17	26.7%
13204502 548200	TREAT SUPP	27,500	0	27,500	40,105.39	0.0	-12,605.39	145.8%*
13204502 548250	TREAT CHEM	145,000	0	145,000	117,581.82	78,553.80	-51,135.62	135.3%*
13204502 553000	P.W. SUPPL	26,250	0	26,250	20,651.42	.00	5,598.58	78.7%
13204502 553100) METERS	180,000	0	180,000	73,527.24	120,932.46	-14,459.70	108.0%*
13204502 553200	INSTALLSUP	43,000	0	43,000	34,523.93	9,506.99	-1,030.92	102.4%*
13204502 553300	PIPESETC	90.000	0	90,000	36,952.35	39,952.62	12 005 02	85.4%
13204502 553350	MAINREPL	35.000	Ō	35,000	15,239.00	.00	13,095.03 19,761.00	
13204502 553500	DETAILS	60,000	ő	60,000	15,107.17	.00	19,761.00	43.5%
13204502 553600	RDREP	33,000	ő	33,000	28,144.34		44,892.83	25.2%
13204502 553900) MECHTANK	10,000	ő	10,000	1,980.00	.00	4,855.66	85.3%
13204502 554200	GENERMAINT	12 500	Ö	12,500	12,696.53	.00	8,020.00	19.8%
13204502 554300) WELLREHAB	45,000	0	45,000		.00	-196.53	101.6%*
13204502 558100	UNIFORMS	45,000	0		.00	.00	45,000.00	.0%
13204502 573000	DUE, SB, TRV	14 000	0	6,500	2,278.51		4,221.49	35.1%
13204502 573200	WATPERMIT	14,000	0	14,000	4,199.16	.00	9,800.84	30.0%
13204502 575070	OPEB	8,500	0	8,500	7,339.61	.00	1,160.39	86.3%
13204502 591000	MAT.LT.DBT	50,000	0	50,000	50,000.00	.00		100.0%
13204502 591500	INT LT DBT	547,800	0	547,800	563,289.17	.00	-15,489.17	102.8%*
13204502 591550	ADM FEE LT	1/1,199	0	171,199	145,949.96	.00	25,249.04	85.3%
13204302 391330	OFF SUPPLS HARD/SOFT BULK FUEL TREAT SUPP TREAT CHEM P.W. SUPPL METERS INSTALLSUP PIPESETC MAINREPL DETAILS RDREP MECHTANK GENERMAINT WELLREHAB UNIFORMS DUE, SB, TRV WATPERMIT OPEB MAT, LT, DBT INT LT DBT ADM FEE LT	2,346	0	2,346	2,342.76	.00	3.24	99.9%
TOTAL WATE	R ENTERPRISE FUND EXP	2,239,735	0	2,239,735	1,698,279.65	248,945.87	292,509.48	86.9%
						ENCUMB/PC	o'S 248,945.87	
13204504 WATER	REVENUE ENTERP FUND						541,455.35	75.8%
		0					041,400.00	7 3.0 70
13204504 414600	WATER LIEN P&I WATER WATER R&S METERS SVCAPPL SVINSTALL MKOUTSVC PROPTRAN WIRELESS SOLREV SVC TIGHT LATE FEE ELECT SVC BACKFLOW INVEST REV	-20.241	0	-20,241	-18,452.13	.00	-1,788.87	91.2%*
13204504 417008	P&I WATER	-2.211	Ō	-2,211	-2,383.05	.00		
13204504 421100	WATER R&S	-4,384,189		-4 384 189	-3,833,235.68	.00	1/2.05	107.8% 87.4%*
13204504 421200	METERS	-10.834	Õ	-10,834	-2,913.24		-550,953.32	
13204504 421300	SVCAPPL	-2 168	ŏ	-2,168	-700.00	.00	-7,920.76	26.9%*
13204504 421400	SVINSTALL	-168 982	Ö	-168,982	-159,648.74	.00	-1,468.00	32.3%*
13204504 421450	MKOUTSVC	-3 241	0	-3,241		.00	-9,333.26	94.5%*
13204504 421550	PROPTRAN	-10 002	0	-10,903	-24,998.55	.00	21,757.55	771.3%
13204504 421600	WIRELESS	120,303	0		-19,773.94	.00		181.4%
13204504 421650	SOLREV	-120,341	0	-128,341	-130,164.41	.00		101.4%
13204504 431100	SVC TIGHT	- 70,362	0	-70,562	-61,645.69	.00	-8,916.31	87.4%*
13204504 433100	LATE FFF	-82,076	0	-82,076	-66,360.01	.00	-15,715.99	80.9%*
13204504 441100	ELECT SVC	-48,//1	0		-41,790.15	.00	-6,980.85	85.7%*
13204504 451100	BACKFLOW	0	Õ	0	-2,200.00	.00	2,200.00	100.0%
13204504 482001	INVEST REV	-20,366	0	-20,366	-17,681.29	.00	-2,684.71	86.8%*
13204304 40200I	THAFOT KEA	-21,200	0	-21,200	-8,062.38	.00	-13,137.62	38.0%*



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TOWN OF HARWICH - LIVE DATA FY21 Q3 WATER BUDGET REPORT

040721

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ACCOUNTS FOR: 1320 WATER ENTERPRISE	FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
13204504 484099 WATER MISC		-54,331	0	-54,331	-47,766.41	.00	-6,564.59	87.9%*
TOTAL WATER REVENUE EN	TERP FUND	-5,028,416	0	-5,028,416	-4,437,775.67	.00	-590,640.33	88.3%
132045A2 WATER ENTERPRISE A	RTICLES EXP							
132045A2 619015 ATM 19 #15 132045A2 619016 ATM 19 #16 132045A2 619017 ATM 19 #17 132045A2 620039 PRIOR YEAR		0 0 0	27,047 300,000 65,000 3,750	27,047 300,000 65,000 3,750	.00 .00 .00 3,750.00	.00 .00 .00	27,047.00 300,000.00 65,000.00	.0% .0% .0% 100.0%
TOTAL WATER ENTERPRISE	ARTICLES EXP	0	395,797	395,797	3,750.00	.00	392,047.00	.9%
TOTAL WATER ENTERPRIS	E FUND	-737,341	395,797	-341,544	-1,105,203.91	248,945.87	514,714.11	250.7%
	TOTAL REVENUES TOTAL EXPENSES	-5,028,416 4,291,075	0 395,797	-5,028,416 4,686,872	-4,437,775.67 3,332,571.76	.00 248,945.87	-590,640.33 1,105,354.44	
	PRIOR FUND BALAN CHANGE IN FUND E REVISED FUND BAL	/EXPENSES	1,429,733.27 1,105,203.91 2,534,937.18					

FY21 Q3 COMMITMENT

wmarsh UB Char	ge Proment:	ZZZZZZ		ummary T/CHARGE CODE	Begin: Bill:	12/31/2020 04/02/2021 Int/Pen	End: 04/02/202 Due: 05/07/202 alty: 05/07/202	1 1	P 1 ubbproof
	Cat	Base/Flat	Usage\$/ Usage	Demand/ Usage	KVAR/ Usage	Rate Adj	Subject To	Net Total	Count
Summary by CHARGE CODE 1FSPRK FIRE SPRINKLER	60	6825.00	.00	.00	.00	.00		6825.00	105
1TOWNS TOWN USAGE	60	.00	.00 .00 390,000	.0000	.0000	.00		.00	1
1WATER WATER USAGE	60	350910.00	156480.30	.0000	.0000	.00	1	507390.30	
2RESFR RESIDENTIAL FIRE	s 60	1080.00	71,193,000	.0000	.0000	.00		1080.00	27
3SEASN SEASONAL	60	20350.00	.00	.0000	.0000	.00		20350.00	407
3STIP SERVICE TIGHT REN	EW 60	23001.00	.00	.0000	.0000	.00		23001.00	1353
Summary Totals	>	402166.00	0 156480.30	.0000	.0000	.00	.00	558646.30	
			71,583,000	.0000	.0000	.00	.00	330040.30	11939
Summary by DISTRICT									
1 CYCLE 1	60	402166.00	156480.30 71,583,000	.00	.00	.00		558646.30	11939
Summary Totals	>	402166.00	156480.30 71,583,000	.000	.0000	.00	.00	558646.30	11939
Summary by GROUP									
10	60	10024.00	6097.82 2,237,000	.00	.00	.00		16121.82	296
100	60	10162.00	4374.51 1,831,000	.0000	.0000	.00		14536.51	299
105	60	9212.00	1939.10	.0000	.0000	.00		11151.10	277
110	60	9186.00	1,184,000 6394.71	.0000	.0000	.00		15580.71	281
115	60	5346.00	2,530,000 3008.22	.0000	.0000	.00		8354.22	156
120	60	8729.00	1,169,000 3122.57	.0000	.0000	.00		11851.57	258
130	60	7206.00	1,161,000 937.40	.0000	.0000	.00		8143.40	205
135	60	10443.00	546,000 4652.65	.0000	.0000	.00			
140	60	6853.00	1,739,000 1109.44	.0000	.0000	.00		15095.65	308
145	60	4346.00	658,000 1643.25	.0000	.0000			7962.44	206
150	60	14358.00	725,000 4461.45	.0000	.0000	.00		5989.25	130
155	60	5281.00	2,346,000 1158.87	.0000	.0000	.00		18819.45	438
157	60	7674.00	691,000 2360.38	.0000	.0000	.00		6439.,87	161
160	60	14597.00	1,290,000	.000	.0000	.00		10034.38	234
170	60		7416.18 2,823,000	.000	.0000	.00		22013.18	439
2.0	00	8209.00	5279.44	.00	.00	.00		13488.44	249

03/30/202 wmarsh		e Pro ent: To:	ZZZZZZ		Summary JNT/CHARGE CODE	Bíll:	12/31/2020 04/02/2021 Int/Pen	End: 04/02/202 Due: 05/07/202 alty: 05/07/202	21 21	3 ubbproof
		Cat	Base/Flat	Usage\$/ Usage	Demand/ Usage	KVAR/ Usage	Rate Adj	Subject To	Net Total	Count
Summary b 8001		60	3445.00	.00	.00	.00	.00		3445.00	53
8002		60	3250.00	.00	.00	.00	.00		3250.00	50
90		60	8331.00	750.35 485,000	.00	.0000	.00		9081.35	234
9000		60	130.00	.00	.00	.00	.00		130.00	2
37777777777777777777777777777777777777	Summary Totals	>	402166.00	156480.30 71,583,000	.0000	.000	.00	.00	558646.30	11939
Summary b	y CHARGE TYPE/CODE									
	ice 1FSPRK FIRE SPRI	N 60	6825.00	.00	.00	.0000	.00		6825.00	105
Serv	ice 1TOWNS TOWN USAG	E 60	.00	.00 390,000	.00	.00	.00		.00	1
Serv	ice 1WATER WATER USA	G 60	350910.00	156480.30 71,193,000	.00	.00	.00		507390.30	10046
Serv	ice 2RESFR RESIDENTI	A 60	1080.00	.00	.00	.00	.00		1080.00	27
Serv	rice 3SEASN SEASONAL	60	20350.00	.00	.000	.00	.00		20350.00	407
Serv	rice 3STIP SERVICE TI	G 60	23001.00	.00	.000	.0000 .00 .0000	.00		23001.00	1353
No.	Summary Totals	>	402166.00	156480.30 71,583,000	.0000	.0000	.00	.00	558646.30	11939

Total Active Accounts: 10159

** END OF REPORT - Generated by Wellesley Marsh **

Board of Water/Wastewater Commissioners Chairman:

Gary Carreiro

Gary Carreiro (Mar 30, 2021 12:11 EDT)

Date: Mar 30, 2021

cc: BOWWC Meeting Packet Carol Coppola, Finance Director Amy Bullock, Treasurer/Collector

FY2021 Q3 PROJECTION vs ACTUAL

	PROJECTION											
			TIER USAGE	***************************************	***************************************		TIER REVENUE	***************************************				
	TIER %	LOW CONF	FORECAST	HI CONF	RATES	LOW CONF	FORECAST	HI CONF				
TIER / GALLONS	ALLOCATION				35	350,000.00	350,000.00	350,000.00				
1-8K	35.69%	41,763,030	44,771,282	47,779,533	1.29	53,874.31	57,754.95	61,635.60				
9-15K	23.56%	12,731,646	13,648,725	14,565,804	2.65	33,738.86	36,169.12	38,599.38				
16-40K	25.39%	7,784,354	8,345,073	8,905,791	3.95	30,748.20	32,963.04	35,177.87				
40+K	15.36%	7,668,984	8,221,392	8,773,800	5.72	43,866.59	47,026.36	50,186.14				
PROJECTION TOTA	LS>>	69,948,014	74,986,472	80,024,929		512,227.96	523,913.47	535,598.99				

		ACTUAL				
INCLUDES BASE RATE						
	TIER %	TIER USAGE	TIER REVENUE			
TIER / GALLON	S ALLOCATION	0	75,285.00			
1-8K	27.42%	19,521,000	193,810.80			
9-15K	33.93%	24,157,000	115,439.89			
16-40K	24.54%	17,469,000	72,758.61			
40+K	14.07%	10,015,000	49,939.82			
VARIABLE/CMP	PDS	31,000	156.18			
ACTUAL TOTALS>>		71,193,000	507,390.30			

			DELTA			
		TIER/USAGE		***************************************	TIER REVENUE	***************************************
	LOW CONF	FORECAST	HI CONF	LOW CONF	FORECAST	HI CONF
DELTA	1,244,986	-3,793,472	-8,831,929	-4,837.66	-16,523.17	-28,208.69

COMMITMENT SUMMARY					
	COMMITMENT				
USAGE	507,390.30				
FIRE SPRINKLER	7,905.00				
SERVICE TIGHT	23,001.00				
SEASONAL OFF	20,350.00				
COMMITMENT	558,646.30				

FY21 Q3 WASTEWATER BUDGET REPORT

munis a tyler erp solution

04/07/2021 09:14 scummings

TOWN OF HARWICH - LIVE DATA FY21 Q3 WASTEWATER BUDGET REPORT 040721

P 1 glytdbud

ACCOUNTS FOR: 1330 WASTEWATER ENTERPRISE	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1330 WASTEWATER FUND							
1330 497000 TRANSFR IN	-200,000	0	-200,000	-200,000.00	.00	.00	100.0%
TOTAL WASTEWATER FUND	-200,000	0	-200,000	-200,000.00	.00		100.0%
13304401 SEWER SALARIES & WAGES							
13304401 511900 S&W	80,489	0	80,489	45,015.03	.00	35,473.97	55.9%
TOTAL SEWER SALARIES & WAGES	80,489	0	80,489	45,015.03	.00	35,473.97	55.9%
13304402 WASTEWATER EXPENSES							
13304402 530820 PROFSVCS 13304402 530825 PROF SVCS	192,443	0 75,358	192,443 75,358	.00 23,394.34	51,008.00 67,640.34	141,435.00 -15,676.76	26.5% 120.8%*
TOTAL WASTEWATER EXPENSES	192,443	75,358	267,801	23,394.34	118,648.34	125,758.24	53.0%
13304404 WASTEWATER REVENUE							
13304404 482001 INVEST REV	0	0	0	-1,188.93	.00	1,188.93	100.0%
TOTAL WASTEWATER REVENUE	0	0	0	-1,188.93	.00	1,188.93	100.0%
TOTAL WASTEWATER ENTERPRISE	72,932	75,358	148,290	-132,779.56	118,648.34	162,421.14	-9.5%
TOTAL REVENUES TOTAL EXPENSES	-200,000 272,932	0 75,358	-200,000 348,290	-201,188.93 68,409.37	.00 118,648.34	1,188.93 161,232.21	
PRIOR FUND BALAN CHANGE IN FUND REVISED FUND BAI	BALANCE - NET	OF REVENUES/	EXPENSES	171,912.84 132,779.56 304,692.40			

VI. SUPERINTENDENT'S REPORT

- A. Annual Statistical Report
- B. Consumer Confidence Report



2020 Consumer Confidence Report

Harwich Water Department - Harwich, Massachusetts MassDEP Public Water System ID # 4126000

This report is a snapshot of the drinking water quality that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to state and federal standards. We are committed to providing you with this information because informed customers are our best allies.

PUBLIC WATER SYSTEM INFORMATION

Address: 196 Chatham Road, Harwich, Massachusetts 02645

Contact Person: Daniel Pelletier, Superintendent

Telephone #: 508-432-0304

Email: dpelletier@harwichwater.com

Internet Address: www.harwichwater.com

Water System Improvements

Our water system is routinely inspected by the Massachusetts Department of Environmental Protection.

MassDEP inspects our system for its technical, financial, and managerial capacity to provide safe drinking water to you. Your water system is operated by Massachusetts certified operators who oversee routine operations of our system. As part of our ongoing commitment, last year we made the following improvements to the system:

- Water Service Replacement Project along the National Grid Project Route began in 2019 and continued in to 2020. Eighty-seven old metal water services along the project route are being replaced with HDPE pipe from the water main to the curb stop. The project route includes Great Western, Queen Anne, Route 39, Main Street, Depot Street and Depot Road.
- Replaced 167 meters in 2020 as part of our ongoing meter replacement program. This was down from 402 meters in 2019 due to the pandemic and ensuring safety of our staff.
- Water Main Replacement on Harden Lane: 600 feet of 2"
- Pleasant Lake Tank Project to increase size of fill pipe began toward the end of 2020 and will continue into 2021

2020 Public Water Systems Awards

In December of 2020, the Harwich Water Department was recognized by the Senate, House of Representatives, and Massachusetts Department of Environmental Protection for Outstanding Performance and Achievement in the Medium and Large Community Water System Category in 2020.

Opportunities for Public Participation

If you would like to participate in discussions regarding your water quality, you may remotely attend (due to Covid-19) Board of Water/Wastewater Commissioners meetings on the first and third Thursday of each month at 1:00pm unless otherwise posted. Remote meeting Information can be found on harwichwater.com.

YOUR DRINKING WATER SOURCE

Where Does My Drinking Water Come From?

The large Monomoy ponds (Long, Seymour and Hinckley) receive groundwater discharge from the lens, which then feeds the Herring River so that groundwater ultimately discharges into Nantucket Sound. The Monomoy Lens is the second largest of the six mounds or cells of elevated groundwater that comprise the aquifer. The lens supplies generally excellent drinking water from its porous sand and gravel deposits. The water is considered "soft" due to the lack of calcium and magnesium. Municipal water supplies are treated to neutralize the pH. Naturally occurring iron and manganese can cause staining, odor and taste problems. Sodium chloride can be elevated in coastal areas due to salt spray or saltwater intrusion.

Harwich Water System

The Water Department operation consists of 14 pump stations, approximately 400 acres of well fields/watershed protection areas, 5 corrosion control facilities, 2 elevated and 1 ground-level water storage tanks and 2 new Greensand Water Treatment facilities which provide service to 10,034 metered accounts, 132 fire sprinkler accounts and 1,382 fire hydrants for fire protection. The original water system was established in 1936.

The drinking water supply for the Harwich comes from 14 gravel packed wells. Wellfields are in South, East and North Harwich, and draw water from the Monomoy Lens Aquifer. These 14 wells pumped 910 million gallons of water in 2020. The sand and gravel act as a huge underground reservoir, which is continually replenished by rainfall and snowmelt. The wells have a high susceptibility to contamination due to the absence of hydro geologic barriers (i.e. clay) that can prevent contaminant migration.

Source Name	MassDEP Source ID#	Source Type	Location of Source
Well 1	4126000-01G	Groundwater	off Chatham Road
Well 2	4126000-02G	Groundwater	off Chatham Road
Well 3	4126000-03G	Groundwater	off Chatham Road
Main Station Well 1	4126000-13G	Groundwater	off Chatham Road
Main Station Well 2	4126000-14G	Groundwater	off Chatham Road
Main Station Well 3	4126000-15G	Groundwater	off Chatham Road
Well 4	4126000-05G	Groundwater	off Chatham Road
Well 5	4126000-06G	Groundwater	off Depot Road
Well 6	4126000-07G	Groundwater	off Depot Road
Well 7	4126000-08G	Groundwater	off Depot Road
Well 8	4126000-09G	Groundwater	off Bay Road
Well 9	4126000-10G	Groundwater	off Bay Road

Is My Water Treated?

After the water is pumped from the ground, it is treated with the chemicals Potassium Hydroxide (KOH) and Sodium Hypochlorite (Chlorine). KOH is added at very low concentrations to increase the pH of the water and reduce its natural corrosivity. Low pH can stain plumbing fixtures and degrade the water quality by leaching copper and lead out of private services. The water treatment plants improve water quality by removing dissolved iron and manganese from the water supply.

What is My System's Ranking?

MassDEP has prepared a Source Water Assessment Program (SWAP) Report for the water supply source(s) serving Harwich. The SWAP Report assesses the susceptibility of public water supplies. Since there are a number of land uses and activities that are potential sources of contamination, Harwich has a high susceptibility ranking. SWAP notes the following key issues for our sources; inappropriate activities in Zone I areas, residential land uses and activities, storm water pollution, transmission line right-of-way, and transportation corridor within Zone IIs, and comprehensive wellhead protection planning for Zone IIs.

Where Can I See The SWAP Report?

The complete SWAP report is available at the Water Department and online at https://www.mass.gov/service-details/the-source-water-assessment-protection-swap-program. For more information, call 508-432-0304

What Can Be Done to Improve Protection?

Residents and business owners can help protect sources by:

- Practice good septic system maintenance
- Support water supply protection initiatives
- Take hazardous household chemicals to hazardous materials collection days
- Limiting pesticide and fertilizer use:

Nitrogen and Phosphorus in fertilizer are the greatest concern to water quality. Generally speaking, lawns need less fertilizer than advertised and there are multitudes of fertilizing alternatives available today. While water quality in Harwich is excellent, let's do our best to keep it that way and protect our precious resource.

SUBSTANCES FOUND IN TAP WATER

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals, and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, and farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) and MassDEP prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The FDA and Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Harwich Water is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

IMPORTANT DEFINITIONS

<u>Maximum Contaminant Level (MCL)</u>: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. <u>Maximum Contaminant Level Goal (MCLG)</u>: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. <u>Action Level (AL)</u>: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow. **90th Percentile:** Out of every 10 homes sampled, 9 were at or below this level. This number is compared to the action level to determine lead and copper compliance.

<u>Secondary Maximum Contaminant Level (SMCL):</u> These standards are developed to protect the aesthetic qualities of drinking water and are not health based.

<u>Unregulated Contaminants:</u> Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.

<u>Massachusetts Office of Research and Standards Guideline (ORSG)</u>: This is the concentration of a chemical in drinking water at or below which adverse health effects are unlikely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.

<u>Treatment Technique (TT)</u>: A required process intended to reduce the level of a contaminant in drinking water.

Running Annual Average (RAA): The average of four consecutive quarters of data.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: The highest level of a disinfectant (chlorine, chloramines, chlorine dioxide) allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

<u>Maximum Residual Disinfectant Level Goal (MRDLG)</u>: The level of a drinking water disinfectant (chlorine, chloramines, chlorine dioxide) below which there is no known expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

ppm = parts per million, or milligrams per liter (mg/L)
ppb = parts per billion, or micrograms per liter (µg/L)
ppt = parts per trillion, or nanograms per liter (ng/L)
pCi/l = picocuries per liter (a measure of radioactivity)

NTU = Nephelometric Turbidity Units

ND = Not Detected N/A = Not Applicable C.U. = Color Units

WATER QUALITY TESTING RESULTS

What Does This Data Represent?

The water quality information presented in the table is from the most recent round of testing done in accordance with the regulations. All data shown was collected during the last calendar year unless otherwise noted in the table.

		R	egulated C	ontamir	nants		
			Lead and	Coppe	r		
	Date(s) Collected	90 TH percentile	Action Level	MCLG	# of sites sampled	# of sites above Action Level	Possible Sources
Lead (ppb)	8/1/2018 8/8/2018 8/21/18	1.7	15	0	34	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	8/1/2018 8/8/2018 8/21/18	0.29	1.3	0	34	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
		In	organic Co	ntamin	ants		
Contaminant	Date(s) Collected	Highest Result	Range Detected	MCL	MCLG	Violation (Y/N)	Possible Sources
Barium (ppm)	3/12/2020	.0.12	ND-0.12	2	2	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits

	-						
Nitrate (ppm)	3/12/2020	2.8	ND – 2.8	10	10	N	Runoff from fertilizer use; leaching from septic tank sewage; erosion of natura deposits
Nitrite (ppm)	3/12/2020 3/23/2020	0.30	ND - 0.30	1	1	N	Runoff from fertilizer use; leaching from septic tanks sewage; erosion of natura deposits
Perchlorate (ppb)	8/17/2020	ND	ND	2	N/A	N	Rocket propellants, fireworks, munitions, flares, blasting agents
		Vola	tile Organi	c Cont	aminants		
Contaminant	Date(s) Collected	Highest Result	Range Detected	MCL	MCLG	Violation (Y/N)	Possible Sources
Xylenes (ppm)	3/12/2020 3/23/2020 6/10/2020 8/18/2020 11/4/2020	0.00058	ND - 0.00058	10	10	N	Discharge from petroleum factories; Discharge from chemical factories
Some people w system.	ho drink water contain	ning xylenes in ex	xcess of the M	ICL over i	many years c	ould experience	damage to their nervous
		Micr	obiologica	I Conta	minants		nem salakat katangan da
Bacteria	Date(s) Collected	Highest % positive in a month	Total # Positive	MCL/	MCLG	Violation (Y/N)	Possible Sources
Total Coliform Bacteria	Weekly	0%	0	5%	0	N	Human and animal fecal waste
Fecal Coliform or E.coli	Weekly	0%	0	*	0	N	Human and animal fecal waste
*Compliance wit	th fecal coliform/E.col	i MCL is determir	ned upon addi	tional rep	eat testing		, made
		Rad	dioactive C	ontam	inants		
Contaminant (Units)	Date	Highest Result	Range	MCL	MCLG	Violation	Possible Sources
Gross Alpha (pCi/l)	7/26/2012	1.4	0.13-1.4	15	0	N	Erosion of natural deposits
Radium 226 & 228 (pCi/L) (combined values)	7/26/2012	0.85	0.03-0.86	5	0	N	Erosion of natural deposits
If the results of the Because the res	hese samples had be ults were below 5 pCi	en above 5 pCi/L /L. no testing for	, our water sy: radium was re	stem wou	ld have been	required to do a	dditional testing for radium.
		Disinfectant			n By-Prod	ucts	
Contaminant (Units)	Date(s) Collected	Highest Quarterly Running Annual Average	Range Detected	MCL	MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Chlorine (Free) (ppm)	Monthly in 2020	0.31	0.02-0.90	4	4	N	Water additive used to control microbes
Total Trihalomethan es (TTHM) (ppb)	8/18/2020	4.92	0.76 – 6.7	80		N	Byproduct of drinking water chlorination
Total Haloacetic Acids (HAA5) ppb)	8/18/2020	0.80	0.00-2.2	60		N	Byproduct of drinking water disinfection

Unregulated contaminants are those for which there are no established drinking water standards. The purpose of unregulated contaminant monitoring is to assist regulatory agencies in determining their occurrence in drinking water and whether future regulation is warranted.

		Unreg	ulated Cor	ntamina	nts			
Unregulated Contaminants	Date(s) Collected	Result or Range Detected	Average Detected	SMC	L ORSG	Possible	a Source	
Chloroform (ppb)	3/12/2020	ND - 3.6	1.10	N/A	70 chlorin		duct of drinking water ation (In non-chlorinated s it may be naturally ng)	
Chlorodibromomethane (ppb)	3/23/2020 6/10/2020 8/18/2020	ND - 2.0	0.09	t	N/A		methane; by-product of g water chlorination	
Bromoform (ppb)	11/4/2020	ND - 0.78	0.03	t	_		methane; by- product of g water chlorination	
Bromodichloromthane		ND – 1.4	0.06	t	-		methane; by-product of g water chlorination	
Manganese (ppb)*	6/10/2020 8/17/2020	ND – 10	ND	50	300	Erosion	n of natural deposits	
* US EPA has established a li neurological effects, and a one						against c	oncerns of potential	
Methyl tertiary butyl ether* or MTBE (ppb)	3/12/2020 3/23/2020 6/10/2020 8/18/2020 11/4/2020	ND – 0.78	0.06		70		rge from use as a tion and extraction solvent	
*EPA has established a lifetim	ne Health Advis	ory (HA) of 0.3	mg/L and an	acute HA	at 1.0 mg/L			
Nickel (ppb)	3/8/2018 5/16/2018 8/15/2018 8/22/2018 12/10/2018 3/12/2020	ND - 1.1	0.22	N/A	100 wastew		arge from domestic water, landfills, and mining nelting operations	
Some people who drink water blood, liver, kidneys, immune	containing nick			many yea	rs could experier	nce effects	s on the lung, stomach,	
Sodium (ppm)	3/12/2020	22		N/A	improper st containing		rge from the use and er storage of sodium- ing de-icing compounds or r-softening agents	
	Per-	and polyflu	ıoroalkyl s	ubstan	ces (PFAS)*			
Unregulated Contaminant (CASRN)	Date Collected	Detect Result or Range	Average	ORSG	Possible Sou	urces	Health Effects	
Perfluorodecanoic acid (PFDA) 335-76-2 (ppt)	7/3/2019 10/15/2019	ND	ND	20	Discharges emissions	from		
Perfluoroheptanoic acid (PFHpA) 375-85-9 (ppt)	7/3/2019 10/15/2019	ND	ND	20	associated with the production or use of these PFAS, including production of moisture and oil resistant coatings on fabrics and		Some people who drink water containing these	
Perfluorohexanesulfonic acid (PFHxS) 355-46-4 (ppt)	7/3/2019 10/15/2019	ND	ND	20			ORSG may experience certain adverse effects.	
Perfluorononanoic acid (PFNA) 375-95-1 (ppt)	7/3/2019 10/15/2019	ND	ND	20			These could include effects on the liver, blood immune system, thyroid	
Perfluorooctanesulfonic acid	7/3/2019 10/15/2019	ND	ND	20	Additional so include the us	ources se and	and fetal development. These PFAS may also elevate the risk of certain	
(PFOS) 1763-23-1 (ppt)	10/10/2010	.1			include the use and disposal of products containing these PFAS, such as fire-fighting foams.			

table above.

Unregulated Contaminant (CASRN)	Date Collected	Detect Result or Range	Average	ORSG	Possible Sources	Health Effects
Perfluorobutanesulfonic acid (PFBS) 375-73-5 (ppt)	7/3/2019 10/15/2019	ND	ND	t	-	-
Perfluorohexanoic acid (PFHxA) 307-24-4 (ppt)	7/3/2019 10/15/2019	ND	ND	t	-	-
Perfluorododecanoic acid (PFDoA) 307-55-1 (ppt)	7/3/2019 10/15/2019	ND	ND	†	-	-
Perfluorotetradecanoic acid (PFTeDA) 376-06-7 (ppt)	7/3/2019 10/15/2019	ND	ND	†	Ħ	-
Perfluorotridecanoic acid (PFTrDA) 72629-94-8 (ppt)	7/3/2019 10/15/2019	ND	ND	t	-	-
Perfluoroundecanoic acid (PFUnA) 2058-94-8 (ppt)	7/3/2019 10/15/2019	ND	ND	†	- ,	-

^{*}In October 2020 PFAS6 was regulated with a maximum contaminant (MCL) of 20 parts per trillion(ppt). PFAS6 are comprised of six compounds: perfluorooctane sulfonic acid (PFOS), perfluorooctanoic acid (PFOA), perfluorohexane sulfonic acid (PFHxS), perfluorononanoic acid (PFNA), perfluoroheptanoic acid (PFHpA), and perfluorodecanoic acid (PFDA). Because PFAS samples in Harwich were collected before the regulation was established results are reflected in the Unregulated Contaminant section of this report.

†There is no ORS Guideline for this compound.

Unrequ	lated (Contami	inant Mon	itoring	Rule 4

Contaminant	Year Sampled	Highest Level Detected	Range Detected	
Bromide	2019	56.8	38.0-56.8	
HAA5 (ppb)	2019	6.074	3.902-6.074	UCMR4 Rule: Unregulated contaminants are those that don't
HAA6Br (ppb)	2019	4.416	1.917-4.416	yet have drinking water standard set by the US Environmental Protection Agency. The purpose of monitoring for these
HAA9 (ppb)	2019	8.51	4.829-8.51	contaminants is to help US EPA decide whether the contaminants should have a standard.
Manganese	2019	14.7	0.458-14.7	

As required by US Environmental Protection Agency (EPA), our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a public health protection standard.

What should I do?

You do not have to do anything but as our customers you have a right to know that these data are available. You may share this information with other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, food establishments, medical facilities and businesses).

For more information

For additional information on your water and the unregulated contaminants we sampled for, see your water department's Consumer Confidence Report (CCR), or called a water quality report, delivered by your water department by July 1 of each year. If you have any questions about your CCR, see the contact information below for your water department. For information on the Unregulated Contaminant Monitoring Program, visit the MassDEP website (http://www.mass.gov/eea/agencies/massdep/water/drinking/water-systems-ops.html) and navigate to Unregulated Contaminant Monitoring Program.

If you want to speak with someone at the water department about the results, please contact Dan Pelletier at (508) 432-0304 or <a href="mailto:department-

COMPLIANCE WITH DRINKING WATER REGS

Does My Drinking Water Meet Current Health Standards?

Harwich Water is committed to providing you with the best water quality available. We are proud to report that last year your drinking water met all required water quality standards regulated by the state and federal government.

EDUCATIONAL INFORMATION

Cross-Connection Control and Backflow Prevention

Harwich Water makes every effort to ensure that the water delivered to you is clean, safe and free of contamination. Our staff works very hard to protect the quality of the water delivered to our customers. But what happens when the water reaches your home or business? Is there still a need to protect the water quality from contamination caused by a cross-connection? If so, how?

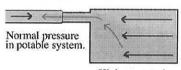
What is a cross-connection?

A cross-connection occurs whenever the drinking water supply is or could be in contact with potential sources of pollution or contamination. Cross-connections exist in piping arrangements or equipment that allows the drinking water to come in contact with non-potable liquids, solids, or gases (hazardous to humans) in event of a backflow.

What is a backflow?

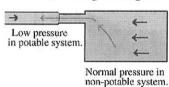
Backflow is the undesired reverse of the water flow in the drinking water distribution lines. This backward flow of water can occur when the pressure created by equipment or a system such as a boiler or air-conditioning is higher than the water pressure inside the water distribution line (back pressure), or when the pressure in the distribution line drops due to routine occurrences such as water main breaks or heavy water demand causing the water to flow backward inside the water distribution system (back siphonage). Backflow is a problem that many water consumers are unaware of, a problem that each and every water customer has a responsibility to help prevent.

Back Pressure:



High pressure in non-potable system.

Back Siphonage:



What can I do to help prevent a cross-connection?

Without the proper protection something as simple as a garden hose has the potential to contaminate or pollute the drinking water lines in your house. In fact, over half of the country's cross-connection incidents involve unprotected garden hoses. There are very simple steps that you as a drinking water user can take to prevent such hazards, they are:

- NEVER submerge a hose in soapy water buckets, pet watering containers, pool, tubs, sinks, drains, or chemicals.
- NEVER attach a hose to a garden sprayer without the proper backflow preventer.
- Buy and install a hose bib vacuum breaker in any threaded water fixture. The installation can be as easy
 as attaching a garden hose to a spigot. This inexpensive device is available at most hardware stores and
 home-improvement centers.
- Identify and be aware of potential cross-connections to your water line.
- Buy appliances and equipment with backflow preventers.
- Buy and install backflow prevention devices or assemblies for all high and moderate hazard connections.

If you are the owner or manager of a property that is being used as a commercial, industrial, or institutional facility you must have your property's plumbing system surveyed for cross-connection by your water purveyor. If your property has NOT been surveyed for cross-connection, contact your water department to schedule a cross-connection survey. For more information on our cross-connection program, visit www.harwichwater.com

Conservation and Leak Detection

Water conservation and leak detection reduces the need for developing new water sources and storage facilities and helps to save our precious resource. Here are suggestions that will help you to conserve water and save money:

Indoor

- Turn off the water while you shave or brush your teeth
- Check your toilets for leaks by placing a few drops of food coloring in the tank. If the color shows
- in the bowl after 30 minutes without flushing, it has a leak
- Fix leaking faucets, pipes, toilets, etc.; a slow drip can waste over 100 gallons a day
- Keep showers under 5 minutes
- Run your washing machine and dishwasher only when they are full
- · Consider installing low-flow faucets, toilets, and showerheads
- Replace old dishwashers and clothes washers with energy efficient machines that use less water

Outdoor

- Minimize evaporation by watering before 6 a.m. or after 6 p.m.
- Install a rain sensor shut-off device on your automatic sprinkler system.
- · Consider installing a rain barrel to water your garden plants
- Use a layer of organic mulch around trees and plants to reduce evaporation and weed growth.
- Consider planting drought resistant plants and grass to reduce the need of watering.
- Use a broom instead of a hose to clean your driveway or sidewalk.
- Adjust your mower to a higher setting. Longer grass improves root systems and holds soil moisture

Drought Management During Peak Season

The Water Department has drought management signs throughout the Harwich Community. During peak season please refer to the signs around town as well as notices on our website for drought notification. We continue to encourage our customers to be diligent in conserving water even if the supply is abundant. It is important to keep in mind that the average person uses 80-100 gallons of water per day on the following activities:

Bathing & Hygiene	15 gallons per day	Kitchen	7 gallons per day
Housekeeping	1 gallon per day	Laundry	8 gallons per day
Irrigation/Watering	70 gallons per day	Toilet	19 gallons per day

To review your metered water bill, divide your water usage by the number of days in the billing period (approximately 90 days) and by the number of residents of your household to determine your average.

Month/Year

PWS No.

March 4126000 2021

Monthly Pumpage Report Harwich Water Department

T1 T2 T3 T10 T11 Date Main 1 Main 2 Main 3 Well 1 Well 2 Well 3 Well 4 Well 5 Well 6 Well 7 Well 8 Well 9 Pump 10 Pump 11 1 64,259 58.744 48,177 107,484 75,273 93,341 145,722 49,294 51,900 49,408 51,406 48,371 161,021 52.941 2 25,000 22,939 19,195 40,919 28,998 35,716 57,599 53,575 56,421 53,674 56,164 53,017 63,791 58,594 3 37,827 34,660 28,884 61,262 43.632 53,398 87,115 116,690 122,706 117,180 79,303 74,343 97,604 81,086 25,981 23,758 19,816 42,704 30,236 37,077 59,509 87,046 91,866 87,281 91,338 88,104 65,999 95,821 10.849 9,954 5 8,065 18,236 12,643 15.657 23,885 121,287 127,865 121,570 127,340 121,703 27,196 132.834 26,486 24,277 20,106 43,710 30,892 38,035 60.761 86,903 91,580 87,004 90.931 87,867 67,317 95,587 28,357 26,005 21,883 45,806 32,641 39,960 65,020 114,919 121,140 115,147 120,190 114,787 73,109 125,966 72.343 66,108 54,470 120,524 84,563 104,512 164,543 9,210 9,568 9,186 9,750 9.509 181,317 10,233 29,876 27,362 9 22,182 50,007 34,852 43,338 66,438 111,363 117,368 111,628 88,705 84,090 43,571 95,437 10 46,555 42,391 34,871 78.039 54,561 67,711 105,422 55,241 58,024 55,458 57,915 54,864 115,975 60,280 11 68.223 62,421 51,781 112,539 79,494 97.818 156,332 19,559 20,498 19,553 20,773 19,931 172,603 21,568 12 31,716 29,067 24,352 51,479 36,633 44,793 73,067 84,028 88,500 84,114 88,087 85,160 81,787 92,890 13 16,327 14,874 12,312 26,997 18,918 23,423 36,729 118,198 124,517 118,295 123,787 118,563 41,215 129,370 14 72,261 65,988 55,723 116,398 83.511 101,850 167,740 30.744 32,305 30,751 32,448 30,852 184,926 33,700 15 26,999 24,679 20,959 43,403 31,142 37,920 63,165 90,680 95,592 90,868 94,922 91,744 70,028 99.825 16 38,251 35,129 29,141 62,023 43,806 53,967 85,555 74,346 77.693 74,601 76,045 71,991 97,815 79,052 17 26,561 24,245 20,048 44,241 31,044 38,521 60,419 95,255 100,510 95,434 99,944 97,358 128,647 48,096 18 34,352 31,381 26,018 57,183 39.948 49,678 77,506 72,203 76,073 72,335 75,555 72,813 86,878 79,223 19 45,661 41,693 34,855 75,075 53,063 65,500 104,426 81,769 86,209 81,972 85,608 82,612 116,014 89,777 20 16,710 15,246 12,276 28,415 19,563 24,624 36,738 120,296 126,726 120,409 125,950 108,885 40.951 131,749 21 62,930 57,407 46,764 105,862 73,781 92,042 141,131 34.555 36,298 34,692 36,369 35,337 156,865 38,223 22 27,796 25,350 20,990 45,988 32,407 40.194 63,199 93,341 98,400 93,519 97,764 94,602 70,067 102,605 23 27,703 25,260 20,845 45.899 32,322 40,080 63,103 84,244 88,784 84,368 88,460 85,428 69,793 92,743 24 28,243 25,752 21,345 46,680 32,923 40,784 64,512 96,287 101,558 96,399 100,922 97,614 71,423 96,745 25 0 0 0 0 0 151,244 159,313 151,484 164,213 157.688 0 171,892 26 34,524 31,481 26.018 57,211 40,097 49.718 78,062 70,999 74,811 71,236 74,560 72,166 87,734 79,859 27 26,011 23,716 19,865 42,755 30.307 37,460 59,868 125,794 132,504 126,131 131,537 125,352 66,270 137,086 28 27,412 24,990 20,807 45.274 31,887 39,347 62.655 96,622 101,912 96,906 101,249 98,219 69,470 106,426 29 27,733 25,291 21,031 45,674 32,292 39.979 63,596 93,518 98.648 93,693 97,890 94,877 70,381 102,887 30 35,186 32,128 26.732 58,169 40,982 50.798 80,232 68,014 71,624 68,159 71,229 68,583 109,731 74,840 31 37.776 34,516 29,014 61,641 43,762 53,876 86,907 94,354 99,199 94,304 98.745 94,444 96,994 94,152 Pumps 1,079,906 986,815 818,526 1,781,598 1,256,172 1,551,119 2,460,957 2,601,578 2,740,112 2,606,759 2,659,099 2,540,874 2,786,492 2,711,487 MIN 0 0 0 9,210 9,568 9,186 9,750 9,509 10,233 MAX 72,343 66,108 55,723 120,524 84,563 104,512 167,740 151,244 159,313 151,484 164,213 157,688 184,926 171,892 STATIONS 9,935,092 7,948,450 5,199,973 2,786,492 2,711,487 TOTAL: 28,581,494

Month/Year

PWS No.

March 4126000 2020

Monthly Pumpage Report Harwich Water Department

T1 T2 T3 T10 T11 Date Main 1 Main 2 Main 3 Well 1 Well 2 Well 3 Well 4 Well 5 Well 6 Well 7 Well 8 Well 9 Pump 10 Pump 11 74,597 75,019 54,017 133,104 89,123 109,590 163,866 0 180,123 0 2 0 0 0 167,584 176,868 167,796 175,659 0 184,708 3 5.090 5,194 3,862 8,708 5,752 7,161 10,719 157,591 166,312 157,691 164,564 0 0 173,265 4 78,956 79,107 57,412 140,273 94,015 115,355 173,238 0 0 0 0 0 207,794 5 0 0 0 0 0 0 169,914 179,296 170,038 178,137 0 0 187,147 6 65,050 64,974 47,295 115,218 77,126 94,388 142,761 25,056 26,332 25,106 26,562 0 157,561 27,819 7 0 0 0 161,709 170,597 161,809 169,348 0 0 177,960 8 81,220 81,690 59,147 144,384 96,682 117,874 178,695 0 0 0 196.034 0 9 47,900 47,931 34,714 85,466 57,108 69,928 104,860 70,048 73,777 70,102 73,012 0 115,706 76,970 10 0 0 0 0 0 177.819 187,757 178,012 186,594 0 0 195,755 11 75,762 75,815 54,712 135,775 90,594 115,005 166,203 0 0 0 0 182,758 0 12 23,207 23,547 16,950 41.577 27,756 35,504 50,671 111,286 117,256 111,288 115,972 0 56,955 121,993 13 72,298 72,304 52,271 129,899 86,312 109,327 158,870 0 0 0 47,462 0 174,569 0 14 0 0 0 0 0 0 164,803 174,031 164,980 172,800 0 0 181,395 15 82,428 82,540 59,748 147,953 98,851 124,062 181,404 0 0 0 0 0 198,991 0 16 0 0 0 0 0 191,511 202,055 191,714 173,335 11,700 0 210,852 17 0 0 0 0 0 0 0 132,781 139,937 132,919 139,453 143,769 37,708 146,092 70,730 18 70,988 51,356 126,593 84,938 104,529 154,974 0 0 170,502 34,815 19 44,140 44,370 31,972 78,722 52,504 63,904 96,923 84,477 89,102 84,661 112,783 116,180 140,782 93,038 20 74,720 74,872 54.241 133,396 89,324 110,717 164,162 0 0 0 0 180,343 0 21 28,739 28,834 21,052 51,338 34,300 42,822 62,848 100,582 106,105 100,742 105,131 108,834 69,961 110,561 22 58,304 57,147 41,426 100,930 67,561 82,190 124,428 96.915 102,128 96,690 102,018 104,733 134,451 106,734 23 16,571 18,512 13.353 32,229 21,494 26,192 39,980 117,381 123,581 117,525 146,230 151,194 39,648 108,839 24 60,912 60,988 44,285 108,541 72,688 89,233 134,027 0 0 0 0 147.375 25 0 0 0 0 0 0 132,350 139,585 132,473 138,561 143,582 65,736 145,764 26 55,133 55,101 39,728 98,776 65,840 81,985 120,531 35,416 37,274 35,462 66,575 68,843 175,290 39.063 27 0 0 0 0 0 0 153,413 161,905 153,564 166,333 161,079 7,362 168,671 28 109,814 110,208 79,720 196,675 131,022 163,434 240,732 1.246 1,047 1,115 14,352 14,679 264,855 29 0 0 0 118,149 124,550 118,302 117,196 121,432 0 122,196 30 82,823 83.290 60,059 148,752 99,039 124,772 181,843 0 0 0 0 199,564 31 0 0 0 0 0 148,951 157,123 149,118 156,002 161,929 0 163,979 1,208,395 **Pumps** 1,212,432 877,330 2,158,309 1,442,028 1,787,972 2,651,735 2,518,981 2,656,615 2,521,106 2,742,825 1,313,208 3,104,068 2,777,616 MIN 0 0 0 0 0 0 MAX 109,814 110,208 79,720 196,675 131,022 163,434 240,732 191,511 202,055 191,714 186,594 166,333 264,855 210,852 **STATIONS** 11,338,201 7,696,702 4,056,033 3,104,068 2,777,616 TOTAL: 28,972,620

Date PWS No. March

2021 **4126000**

Monthly Weather Report Harwich Water Department

Day Snow Fall (ii (Gallons)	Rain Fall (in.)	Temperature High (°F)	Temperature Low (°F)	Temperature AVG (°F)	Weather Comments	Operator
1	0.46	49	<u>34</u> .	<u>42</u>		
2	0.00	35	21	28		
3	0.00	45	<u>25</u>	<u>35</u>		
4	0.00	44	32	<u>38</u>		
5	0.00	38	<u>27</u>	<u>33</u>		
6	0.00	37	<u>26</u>	<u>31</u>		
7	0.00	34	23	<u>29</u>		
8	0.00	40	22	<u>31</u>		
9	0.00	54	34	44		
10	0.00	46	30	38		
11	0.00	51	38	<u>45</u>		
12	0.00	60	41	<u>50</u>		
13	0.00	47	35	41		
14	0.00	50	29	<u>40</u>		
15	0.00	30	<u>21</u>	<u>26</u>		
16	0.00	36	<u>23</u>	<u>29</u>		
17	0.00	<u>43</u>	<u>32</u>	<u>38</u>		
18	1.09	<u>45</u>	<u>39</u>	<u>42</u>		
19	0.27	<u>42</u>	<u>28</u>	<u>35</u>		
20	0.00	<u>45</u>	<u>27</u>	<u>36</u>		
21	0.00	<u>53</u>	<u>29</u>	41		
22	0.00	<u>52</u>	<u>30</u>	41		
23	0.00	<u>59</u>	<u>36</u>	<u>48</u>	The second secon	
24	<u>0.00</u>	<u>54</u>	<u>35</u>	44		
25	0.00	<u>58</u>	<u>46</u>	<u>52</u>		
26	0.00	<u>55</u>	<u>46</u>	<u>50</u>		
27	0.00	<u>56</u>	43	<u>50</u>		
28	<u>0.71</u>	<u>54</u>	42	<u>48</u>		
29	<u>0.12</u>	<u>55</u>	40	<u>47</u>		
30	0.00	<u>50</u>	32	41		
31	0.00	60	46	53		
Total	2.65					
verage	0.09	47.6	32.6		5	
Max	1.09	59.9	46.1			
Min	0.0	30.0	20.5			

Date PWS No. March

2020 **4126000**

Monthly Weather Report Harwich Water Department

	Transient Water Department							
Day	Snow Fall (in.) (Gallons)	Rain Fall (in.)	Temperature High (°F)	Temperature Low (°F)	Temperature AVG (°F)	Weather Comments	Operator	
1		<u>0.00</u>	36	27	32			
2		0.00	47	24	35			
3		0.00	54	44	49			
4		<u>0.12</u>	54	38	46			
5		0.00	<u>51</u>	37	44			
6		<u>0.00</u>	<u>48</u>	32	40			
7		<u>0.21</u>	<u>38</u>	29	33			
8		<u>0.00</u>	<u>47</u>	29	38			
9		<u>0.00</u>	<u>53</u>	<u>40</u>	47			
10		<u>0.00</u>	<u>54</u>	42	48			
11		<u>0.00</u>	<u>53</u>	<u>41</u>	47			
12		<u>0.00</u>	<u>47</u>	<u>33</u>	40			
13		<u>0.19</u>	<u>52</u>	<u>41</u>	47			
14		<u>0.00</u>	<u>54</u>	<u>39</u>	47			
15		<u>0.00</u>	<u>48</u>	<u>31</u>	39			
16		<u>0.00</u>	<u>39</u>	<u>29</u>	34			
17		<u>0.37</u>	<u>45</u>	<u>35</u>	40			
18		<u>0.00</u>	<u>50</u>	<u>34</u>	42			
19		<u>1.06</u>	<u>47</u>	<u>43</u>	<u>45</u>			
20		<u>0.00</u>	<u>51</u>	<u>43</u>	47			
21		<u>0.00</u>	<u>52</u>	32	42			
22		<u>0.00</u>	<u>39</u>	<u>29</u>	34			
23		<u>0.61</u>	<u>45</u>	<u>28</u>	37			
24		<u>0.42</u>	<u>46</u>	<u>37</u>	41			
25		<u>0.00</u>	<u>43</u>	<u>38</u>	41			
26		<u>0.00</u>	<u>49</u>	<u>36</u>	43			
27		<u>0.00</u>	<u>58</u>	<u>38</u>	<u>48</u>	the state of the s		
28		<u>0.11</u>	<u>51</u>	<u>33</u>	<u>42</u>			
29		0.39	<u>45</u>	<u>42</u>	44			
30		<u>0.04</u>	<u>45</u>	<u>39</u>	<u>42</u>			
31		0.00	42	34	38			
Total		3.52						
verage		0.11	47.8	35.4				
Max		1.06	58.4	43.7				
Min		0.0	36.2	24.3				