

**BOARD OF WATER & WASTEWATER COMMISSIONER'S  
MEETING AGENDA\***  
**Harwich Water Department, 196 Chatham Road, Harwich MA**  
*Thursday, January 4, 2024*  
*11:30 a.m.*

*\*As required by Open Meeting Law, you are hereby informed that the Town will be video and audio taping as well as broadcasting this public meeting. In addition, anyone in the audience who plans to video or audio tape this meeting must notify the Chairman prior to the start of the meeting.*

- I. CALL TO ORDER
- II. EXECUTIVE SESSION
- III. PUBLIC COMMENTS / ANNOUNCEMENTS
- IV. CONSENT AGENDA
  - A. Minutes
    - 1. November 2, 2023
    - 2. November 16, 2023
    - 3. December 7, 2023
- V. ABATEMENTS
- VI. OLD BUSINESS
  - A. Town Report
  - B. FY25 Water & Wastewater Operating Budget
- VII. NEW BUSINESS
  - A. New Source Exploration Update
  - B. RT28 Water & Sewer Project Update
  - C. FY25 Indirect Expenses
  - D. 2023 Campaign Finance Reporting
  - E. 2024 Draft Intended Use Plan
- VIII. SUPERINTENDENT'S REPORT
- IX. COMMISSIONER'S REPORT
- X. CORRESPONDENCE / ANY OTHER BUSINESS
- XI. NEXT MEETING: TBD
- 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](mailto:customerservice@harwichwater.com).*

Authorized Posting Officer:

Town Posting Date: \_\_\_\_\_

Tracey Alves | Board Secretary

\_\_\_\_\_ | Town Clerk

IV. CONSENT AGENDA

A. Minutes

1. November 2, 2023

**MINUTES  
HARWICH WATER DEPARTMENT  
BOARD OF WATER/WASTEWATER COMMISSIONERS  
MEETING**

Thursday, November 2, 2023  
11:30 a.m.

**WATER COMMISSIONER'S PRESENT:** Vice Chair Noreen Donahue, Clerk Allin Thompson, Commissioner John Gough, Commissioner Judith Underwood

**OTHERS PRESENT:** Superintendent Dan Pelletier, Administrative Assistant Tracey Alves, Comptroller Sandra Sieger

**CALL TO ORDER**

Vice Chair Donahue called the meeting to order at 11:30 a.m.

**CONSENT AGENDA**

**A. Minutes**

- A. Minutes
  - 1. August 25, 2023
  - 2. September 21, 2023
  - 3. October 5, 2023
  - 4. October 19, 2023

Vice Chair Donahue entertained a motion to approve the minutes of August 25, 2023, September 21, 2023 and October 5, 2023. The minutes of October 19, 2023 will be held until the next meeting.

Clerk Thompson motioned to approve the minutes of August 25, 2023, September 21, 2023 and October 5, 2023. Seconded by Commissioner Gough. Superintendent Pelletier wanted to note for anyone that may look at the agenda packet on-line that we did correct the contract amount that was listed in the August 25, 2023 minutes. The error was found and corrected. All in favor; 3-0-0.

**ABATEMENTS**

**A. FY24 Q1 Internal Account Adjustments**

Clerk Thompson motioned to approve the FY24 Q1 Internal Account Adjustments in the amount of \$8,479.22. The motion was approved by Commissioner Gough. All in favor; 3-0-0.

**B. FY24 Q1 Water Department Usage**

Clerk Thompson motioned to approve the FY24 Q1 Water Department Usage in the amount of \$3,194.06. The motion was approved by Commissioner Gough. All in favor; 3-0-0.

## **OLD BUSINESS**

### **A. Water & Wastewater Capital Plan**

Superintendent Pelletier informed the Board of a change in the submission date for the Capital plans. They were due on Monday instead of being due tomorrow. Superintendent Pelletier informed the Board of a couple of changes that were made to the Water Capital plan.

Superintendent Pelletier commented that we have not been able to get pricing from the Highway Department for the vehicles and the three figures listed are placeholders and could change as we get further through the Capital budget process.

Vice Chair Donahue announced as discussed at the last meeting, that the new chart is now the current Capital plan today for both Water & Wastewater and asked for a motion to accept this new chart as our new Capital plan.

Clerk Thompson moved to adopt the proposed Capital Outlay plan as presented as our new guideline going into the next fiscal year. Commissioner Gough seconded. All in favor; 3-0-0.

Commissioner Underwood joined the meeting at 11:45 a.m.

Superintendent Pelletier received notice that he was scheduled tomorrow morning at 10am to present to Capital Outlay. There was not time to post. Vice Chair Donahue and Commissioner Gough will attend with Superintendent Pelletier.

### **B. FY25 Water & Wastewater Operating Budget**

Superintendent Pelletier met with two people in Chatham. He met with Tom and the new DPW Director as a kick-off to try and get the IMA payments and everything worked out. Their Finance Director is starting in a couple of weeks and they are also starting their budget cycle. Superintendent Pelletier is optimistic that there will be better lines of communication this year going into the budget.

## **NEW BUSINESS**

### **A. FY24 Water Liens**

Comptroller Sieger provided an update to the Board on the FY24 water lien list of the over a year old delinquencies that will be liened.

Vice Chair Donahue entertained a motion, not to exceed the amount on the page, \$35,193.98. Clerk Thompson moved the motion with a second by Commissioner Underwood. All in favor; 4-0-0.

### **B. PFAS Class Action Settlement Participation**

Superintendent Pelletier has received two class action settlement notices for PFAS. He reached out to KP Law to see what the best course of action is. They have partnered with Napoli Shkolnik firm who is leading the class action settlement.

Superintendent Pelletier discussed this with the Board before pursuing it. He doesn't think there is any harm in Harwich joining in.

Vice Chair Donahue entertained a motion for Superintendent Pelletier to join in on the class action suit with PFAS. Clerk Thompson moved the motion as presented with a second by Commissioner Gough. All in favor; 4-0-0.

**C. Request to attend November 21, 2023 Board of Health meeting to discuss Sewer Connection Extension**

Superintendent Pelletier informed the Board that Carrie, the Health Director, would like to see if the Board would be able and interested in attending an upcoming BOH meeting on November 21, 2023 to discuss extension to the sewer connection timeline.

This is predominantly a Board of Health issue but the Sewer Regulations do also reference the two year timeline.

Vice Chair Donahue commented that she doesn't see why second homeowners are being excluded from the financial assistance that is being offered by Assessing. Second homeowners pay the full amount of taxes. Also, Assessing has decided to label its program, sewer tax credits, meanwhile the State has just increased its amount on its septic tax credit which is a huge amount, \$6,000-\$15,000 from the State, is going to cause some confusion.

Commissioner Underwood asked if there was any update on an actual "Wastewater Department" yet? Vice Chair Donahue commented that there are no updates on anything in terms of personnel or anything else.

The BOH meeting is separate from the meeting with Assessing.

The BOH meeting is at 6:30pm on November 21, 2023. The meeting will be posted and the Board will plan to attend.

**SUPERINTENDENT'S REPORT**

Superintendent Pelletier informed the Board that the SCADA system is partitioning the Water and Wastewater SCADA system. Water and Sewer are being separated. We also upgraded to a new alarm notification system. Half the system is on buried fiber networks and the rest is radio. When the SCADA system communicates it polls. As more wastewater stations are added, the polling delay is increasing from 5 minutes to 20 minutes. By separating the networks that will keep a smooth polling timeline that won't bog everything down.

The Zoning Board of Appeals applications for the 4 pump stations in Phase 3 requiring ZBA approval were submitted last Thursday and we have the ZBA hearings on November 29, 2023.

**NEXT MEETING**

The next meeting is scheduled to take place on Thursday, November 16, 2023 at 11:30 a.m. followed by the November 21, 2023 meeting with the BOH at 6:30 p.m.

The bid is out for Waterworks Supplies so the meeting of November 16, 2023 will be for the annual Waterworks Supplies between either Cape Cod Winwater, EJ Prescott or Ferguson.

**ADJOURN**

Vice Chair Donahue entertained a motion to adjourn at 12:23 p.m. Clerk Thompson moved the motion with a second by Commissioner Underwood. All in favor; 4-0-0.

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Gary Carreiro, Chairman

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Noreen Donahue, Vice Chair

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Allin Thompson, Clerk

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Judith Underwood, Commissioner

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John Gough, Commissioner

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Dan Pelletier, Superintendent

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Tracey Alves, Board Secretary

IV. CONSENT AGENDA

A. Minutes

2. November 16, 2023

**MINUTES**  
**HARWICH WATER DEPARTMENT**  
**BOARD OF WATER/WASTEWATER COMMISSIONERS**  
**MEETING**  
Thursday, November 16, 2023  
11:30 a.m.

**WATER COMMISSIONER'S PRESENT:** Chair Gary Carreiro, Vice Chair Noreen Donahue, Clerk Allin Thompson, Commissioner Judith Underwood, Commissioner John Gough

**OTHERS PRESENT:** Superintendent Dan Pelletier, Administrative Assistant Tracey Alves

**CALL TO ORDER**

Chair Carreiro called the meeting to order at 11:31 a.m.

**CONSENT AGENDA**

**A. Minutes**

- A. Minutes
  - 1. October 19, 2023

Chair Carreiro entertained a motion for the consent agenda to adopt for the minutes of October 19, 2023. Clerk Thompson moved to adopt the minutes of October 19, 2023 with a second by Commissioner Underwood. All in favor; 5-0-0.

**OLD BUSINESS**

**A. Water & Wastewater Capital Plan**

Superintendent Pelletier left this on as a standalone topic in case the Board wanted to revisit or discuss it.

**B. FY25 Water & Wastewater Operating Budget**

Superintendent Pelletier would like to bring this topic back to the next meeting. There is a Department head meeting occurring right now that Superintendent Pelletier was unable to attend and they were going to be discussing FY25 budget development. Superintendent Pelletier will get an update from a fellow Department head and discuss at the next meeting.

**NEW BUSINESS**

**A. General Waterworks Supply Bid**

The vendors have all agreed that they would be able to hold some prices. Before the Board is a request to approve unit pricing for the bid for FY24 waterworks materials. The bids were opened yesterday and after tabulating them, Cape Cod Winwater had the best pricing. Superintendent Pelletier requested the Board's approval of the acceptance of the Cape Cod Winwater bid.

Clerk Thompson moved to adopt the General Waterworks Supply Bid as presented by Cape Cod Winwater. Commissioner Underwood seconded the motion. All in favor; 5-0-0.



## **SUPERINTENDENT'S REPORT**

The SCADA system upgrade is 98% done. Water and wastewater are completely partitioned now. We are just working through some minor bugs.

We did get our second truck that was ordered two town meetings ago. It is currently being fitted with lights.

## **COMMISSIONER'S REPORT**

Chair Carreiro has a memo from Carol about the annual Town report.

Chair Carreiro received a formal letter from the Board of Selectmen that they will not approve or accept the step and grade increase for Superintendent Pelletier.

Vice Chair Donahue asked for an update on the Assistant Wastewater Superintendent position that was approved last May. As of right now, per Chair Carreiro, the Town and the Union are working on it. Superintendent Pelletier commented that there is not an anticipated posting date. Commissioner Underwood asked if that was true for any Wastewater support office staff? Chair Carreiro relayed, no, not at this time. Superintendent Pelletier commented that there was discussion to potentially add an Admin. request for FY25 onto the Wastewater budget but that he had also read conflicting information in the budget message as well as posted in the Chronicle about not wanting to hire new staff so he's not sure how it will all shake out. Clerk Thompson asked to be brought up to date on what Town Hall is planning to do? Superintendent Pelletier doesn't know if Town Hall has a plan or milestones.

Superintendent Pelletier commented on the Azalea Dr bridge replacement project by DOT. Two dual mains were installed underneath the bridge with insertion valves. When the cutover takes place, where they will reroute it through the piping under the bridge, we are going to have to shut off water to Azalea Dr. We are flushing Headwaters now to try and minimize any disturbances when they do the switch over.

Chair Carreiro discussed getting Dunkin Donuts cards for the staff for the holidays.

## **NEXT MEETING**

The next meeting is scheduled to take place on Thursday, December 7, 2023 at 11:30 a.m.

## **ADJOURN**

Chair Carreiro entertained a motion to adjourn at 11:50 a.m. Clerk Thompson moved the motion with a second by Commissioner Underwood, All in favor; 5-0-0.

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Gary Carreiro, Chairman

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Dan Pelletier, Superintendent

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Noreen Donahue, Vice Chair

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Tracey Alves, Board Secretary

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Allin Thompson, Clerk

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Judith Underwood, Commissioner

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John Gough, Commissioner

IV. CONSENT AGENDA

A. Minutes

3. December 7, 2023

**MINUTES**  
**HARWICH WATER DEPARTMENT**  
**BOARD OF WATER/WASTEWATER COMMISSIONERS**  
**MEETING**  
**REGULAR SESSION**  
Thursday, December 7, 2023  
11:30 a.m.

**WATER COMMISSIONER'S PRESENT:** Chair Gary Carreiro, Vice Chair Noreen Donahue, Clerk Allin Thompson, Commissioner Judith Underwood, Commissioner John Gough

**OTHERS PRESENT:** Superintendent Dan Pelletier, Billing Administrator Wellesley Marsh, Robin Kelley

**CALL TO ORDER**

Chair Carreiro called the meeting to order at 11:30 a.m.

**CONSENT AGENDA**

**A. Minutes**

1. **November 2, 2023**
2. **November 16, 2023**

The minutes of November 2, 2023 and November 16, 2023 will be added to the next agenda.

**ABATEMENTS**

**A. 732 Main St- Town Hall- Cemetery Department**

Robin Kelley of the Cemetery Department presented the Board with an abatement for the Cemetery Department. Clerk Thompson motioned to approve the abatement. The abatement amount was amended from \$1,389.96 to \$1,223.12. Commissioner Underwood seconded the motion and \$1,223.12 will be abated. All in favor; 5-0-0.

**EXECUTIVE SESSION**

At 11:43 a.m. Chair Carreiro motioned to go into Executive Session.

Pursuant to G.L. c. 30A, Sec. 21(a)(3) To discuss strategy with respect to collective bargaining or litigation if any open meeting may have a detrimental effect on the bargaining or litigating position of the public body and the chair so declares for the Assistant Wastewater Superintendent position.

Commissioner Underwood seconded the motion and a roll call vote was taken with all of the Board members in favor; 5-0-0.

The Board reconvened in Open Session after Executive Session.

## **OLD BUSINESS**

### **A. FY25 Water & Wastewater Operating Budget**

#### **Water Budget**

A detailed expense worksheet for the FY25 budget was distributed. The budget document was in the packet. The most up-to-date indirect expense figure has not been put in yet. Superintendent Pelletier provided an overview of the water budget to the Board.

#### **Wastewater Budget**

The Board reviewed a revised Wastewater budget. The biggest change is that the Town isn't going to charge Indirects on Wastewater. The idea is good but the tracking will be lost and it should be tracked. Vice Chair Donahue remembers that there are some pretty strict rules regarding Indirects and Enterprise Funds. Vice Chair Donahue relayed that we should research the Enterprise rules because it's the Board's responsibility to oversee the fund.

Another big change is taking the Wastewater debt out of our budget. The Board doesn't know if they agree with this or not because we are changing every two years.

The draft budgets are due in Munis tomorrow.

### **B. New Source Exploration Update**

Drillers have been out and working out in East Harwich. Also, the engineers have been out to install some gauges on the Herring River and they are proceeding with drilling. The project is underway.

### **C. Rt 28 Water Main Replacement Project**

With this project pending, one of the things we are looking to purchase is an insertion valve machine. It takes 27 gate valves to shut the main off on Route 28 so the intent is for us to go out and drop insertion valves in so when the Contractor comes we can get a good water shut down. Superintendent Pelletier is working with Finance to figure out funding for an estimated \$200,000.

## **NEW BUSINESS**

### **A. Town Report**

The Town Report is due by January 5<sup>th</sup> and a draft will be in the packet sometime this month.

### **B. Barnstable County Water Utility Association Holiday Luncheon**

Chair Carreiro motioned to allow the employees to go to attend the Barnstable County Water Utility Association Holiday Luncheon as we have in the past. Clerk Thompson seconded the motion. All in favor; 4-0-0. The luncheon is on Thursday, December 21, 2023.

## **COMMISSIONER'S REPORT**

Vice Chair Donahue asked if they were eliminating the annual report? The answer is unknown.

## **NEXT MEETING**

The Board will attend a joint meeting with the BOS on Wednesday, December 18, 2023 at 6:00 p.m.

The Board will meet with the BOH on January 17, 2024 at 6:30 p.m. The time will be confirmed.

The next Board meeting is scheduled to take place on Thursday, January 4, 2024 at 11:30 a.m.

**ADJOURN**

Chair Carreiro entertained a motion to adjourn at 12:40 p.m. Vice Chair Donahue moved the motion with a second by Clerk Thompson. All in favor; 4-0-0.

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Gary Carreiro, Chairman

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Dan Pelletier, Superintendent

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Noreen Donahue, Vice Chair

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Tracey Alves, Board Secretary

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Allin Thompson, Clerk

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Judith Underwood, Commissioner

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John Gough, Commissioner

VI. OLD BUSINESS

A. Town Report

## **2023 Town Report Water & Wastewater Department**

The Harwich Board of Water/Wastewater Commissioners and Water Department respectfully submit our Annual Report to the Honorable Select Board and to the citizens of the Town of Harwich for the year 2023.

### **Board of Water and Wastewater Commissioners**

The Board of Water & Wastewater Commissioners is comprised of an elected 5-member board and responsible to the Town of Harwich for the administration, maintenance, and operation of the water and sewer system.

### **2023 Public Water Systems Awards**

The Harwich Water Department received the 2023 Public Water Systems Award from the Massachusetts Department of Environmental Protection for Outstanding Performance and Achievement in the Medium and Large Community Water System Category. Through the hard work and dedication of department staff, 2023 marks the ninth consecutive year Harwich has been selected to receive the PWS Award.

### **Water Operations**

The Water Department offers a wide variety of services from seasonal water turn on/off, new and renewal water service installation, utility mark outs, final readings for property transfers, backflow inspection and much more. Below is a summary of 1,445 services performed in 2023:

### **Projects & Accomplishments**

The Department remained very active throughout 2023, please find some of the more notable projects & accomplishments below:

- Replaced failed submersible pump/motor with a vertical turbine pump/motor and installed a new 80kW emergency standby generator at Station 7
- Renewed 42 water services in East Harwich in preparation for the Phase 3 Sewer Project
- Completed upgrades to the Water & Sewer SCADA Systems
- Abandoned water main used to feed the old Brooks Park Water Storage Tank
- Abandoned 2" water main on Wyndemere Rd
- Replaced 3 gate valves at the Bay Road Wellfield
- Replaced the pump, motor, and drop pipe at Well 1
- Replaced the motor at Well M-2
- Relined well casing & replaced the pump at Well 4
- Azalea Drive Bridge Water Main Improvements – Installed dual 12" water mains across the new bridge improving redundancy in the Headwaters Drive neighborhood.
- Bruce Cahoon Water Treatment Plant Backwash Lagoon Media Replacement – This project included the excavation of water treatment plant residuals from 2 backwash filter beds and re-installation of clean sand filter media.
- New Source Exploration – Ongoing site investigation occurred throughout 2023 around Well #10 in North Harwich. Highlights to date include installation of an 8" diameter test production well, installation of 2" observation wells, and the installation of surface water gauges.



**2023 Town Report  
Water & Wastewater Department**

- Route 28 Water main Replacement Project– Design of the Route 28 Water Main Replacement Project is nearly complete; the project is anticipated to be bid in the spring of 2024. This project includes the replacement of an old 1930-1940s era 8” cast iron water main with a new 12” Ductile Iron water main from Division Street to Lower County Road. Also included is a horizontally directional drilled water main beneath the Herring River improving the resiliency and redundancy of the West Harwich service area.
- Route 28 Dry Sewer Pipe Project – Design of the Route 28 Dry Sewer Pipe Project nearly complete and construction, in connection with the MassDOT repaving project, is expected to begin late 2024. This project includes the installation of a low-pressure sewer main along Route 28 from Division Street to the Herring River.
- Phase 3 Wastewater Collections System - Design of the Phase 3 Wastewater Collections System in East Harwich was approved and is nearly complete. The project will be advertised for bids in early spring of 2024 with construction to commence shortly thereafter. The Phase 3 collections system is intended to address nitrogen impacting the Round Cove and Pleasant Bay sub-watersheds.

**Water/Sewer Rates and Financial Overview**

The Department is pleased to announce that there is no rate increase scheduled for our current fiscal year, FY24. That said, with the department taking on larger capital improvement projects like the Route 28 Water Main Replacement Project, it is anticipated that water rates will need to be increased in FY25 to support the increased debt service payments. Sewer Rates are anticipated to remain unchanged in FY25.

The stance of the Board of Water/Wastewater Commissioners, with support of the Department, is to keep rates fair and equitable. Rate increases become necessary when revenues are unable to keep up with inflation, increases to operational and maintenance expenses and/or when a new capital project must be funded. To see what’s on the horizon for capital projects for the next five (5) years, please refer to the Capital Planning section in our report.

In addition to water rates and services, the Department continues to look for other revenue sources as well as ways to run more efficiently and economically.

**FY23 Water Financial Summary**

**Expenses**

Salary and Wages	1,253,150
Operational Expenses	1,390,598
OPEB Contribution	50,000
Debt	542,586
Indirect Expenses; Insurance & Employee Benefits	<u>759,278</u>
<b>Total Expenses</b>	<b>3,995,612</b>

**Revenues**

**2023 Town Report**  
**Water & Wastewater Department**

Water Rates & Recurring Services	4,014,723
Service Repairs & Site Visits	67,231
Markouts & Final Reads	22,557
Service Tight Protection Plan	93,097
Solar Revenue	361,965
Backflow Inspection	12,474
Water Service Installation and Renewals	257,705
Late Fees, Interest, Lien Collection & Penalties	55,904
Wireless Communications Lease	139,548
Investment Revenue	<u>160</u>
<b>Total Revenues</b>	<b>5,025,364</b>

**Water Enterprise Fund Balance Summary**

FY23 Fund Balance	<b>2,199,380</b>
FY23 Abatements & Adjustments	<b>20,069</b>

**Capital Planning**

The Board of Water/Wastewater Commissioners and Department staff continues to evaluate the aging infrastructure, water consumption forecasts, revenue projections, and the current debt schedule to identify and plan for the future capital needs of the Department.

**5-Year Capital Plan:**

- Fiscal Year 2025
  - Well Rehabilitation (WTR)
  - Equipment Replacement – Purchase Loader (WTR)
  - Vehicle Replacement (3x) (WTR)
  - Paint Pleasant Lake Tank (WTR)
  - Collections System Improvements (WW)
- Fiscal Year 2026
  - Pipe Discontinuity Upgrades – Mill Rd & Harbor Rd (WTR)
  - Vehicle Replacement (WW)
- Fiscal Year 2027
  - New Well Construction & Water Treatment Plant Upgrades (WTR)
- Fiscal Year 2028
  - 196 Chatham Road Improvements – Space Building/Garage (WTR)
- Fiscal Year 2029
  - No Project Planned

**System Maintenance**

Regular distribution maintenance helps minimize the impact on residents and businesses during repairs. For this reason, the Department continues its standard maintenance/monitoring programs, which include:

## 2023 Town Report Water & Wastewater Department

- **Hydrant Maintenance-** Evaluate hydrant coatings & re-paint where necessary to prevent corrosion & remove and lubricate hydrant cups to maintain ease of access in the event the hydrant needs to be utilized for fire suppression
- **Valve Maintenance-** Vacuum valve boxes to guarantee access to the valves operating nut & exercise the valve by opening and closing to verify it is in working order
- **Well & Pumps-** Take manual drawdown readings to check the wells specific capacity, which is used to check the wells current capacity to historical data. This information is used to determine if the well needs cleaning & redevelopment, or to verify the pump is functioning in the capacity it was designed
- **Water Storage Tanks-** In addition to the daily site visits, monthly tank inspection reports are completed to document a more thorough evaluation of tank conditions. These monthly reports combined with our contracted annual inspection are used to predict future maintenance needs
- **Water Meter Replacement-** The Department upgrades & replaces all customer meters 15 years or older

### **Water System**

The original water system was established in 1936. Major expansion projects were undertaken in the 1950s, late 1960s and again in the late 1970s, these expansions made the water distribution system what it is today.

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 Greensand Water Treatment facilities which provide service to 10,187 metered accounts, 131 fire sprinkler accounts and 1,397 fire hydrants for fire protection.

### **Wastewater Collections System**

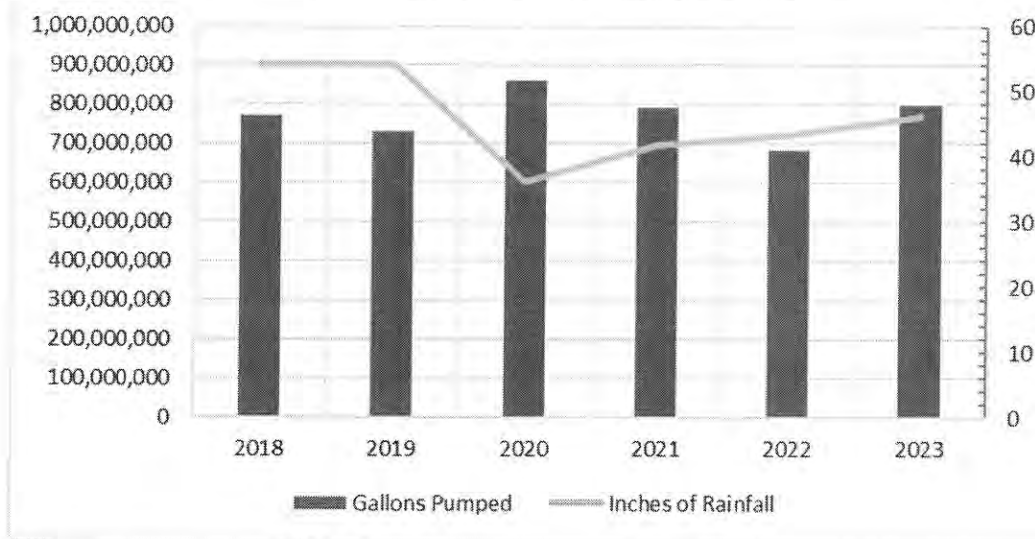
Construction of the wastewater collections system began in 2019 and received approval from MassDEP to initiate operation for the Contract 1 service area in October 2021, and April 2022 for the Contract 2 service area. The collections system includes sewer stubs for 472 parcels in the Upper & Lower Muddy Creek sub-watersheds and 5 wastewater pumping stations. There were 158 sewer services installed in 2023 bringing the total properties connected to 238.

### **Water Withdrawal**

The Water Department pumped 800,371,746 gallons of water from our wellfields during 2023. Most of the water pumped was withdrawn from Chatham Road and Depot Road wells.

## 2023 Town Report Water & Wastewater Department

2018-2023 Water Withdrawal and Rainfall



### Water Quality

The Harwich Water Department is constantly striving to provide its consumers with the best water possible. The water provided to the residents of Harwich is tested numerous times a month for a variety of contaminants. Harwich Water Department continues to provide water that meets or exceeds State and Federal standards. The results of this testing are located within the Annual Water Quality Report on the Department website. Iron and Manganese levels in the untreated source water have, in the past, caused unfavorable aesthetic qualities in the water. Sources containing these impurities were infrequently pumped. Since the addition of the Bruce Cahoon Greensand Water Treatment Facility and North Westgate Treatment Facility, these minerals are no longer affecting the water quality.

Nitrogen and Phosphorus in fertilizer are the greatest concern to water quality. 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.

### Service Tight Protection Plan

As property owner, you are responsible for the repair and maintenance of your water service, and until a problem occurs, you could incur thousands of dollars in repair costs. Harwich Water offers a Service Tight Protection Plan which covers the costs of repairs to your service in the event of a sudden leak. The cost is \$17 per quarter for an annual fee of \$68. You can enroll and learn more by visiting [harwichwater.com](http://harwichwater.com) or by calling the department for a brochure.

### Drought Management and Conservation

Groundwater levels within the Monomoy Lens saw a slight improvement in 2023, this in combination with an unseasonably wet summer mitigated the need to implement mandatory water restrictions. Regional drought declarations are made by the Massachusetts Drought Task Force who evaluates precipitation, streamflow, groundwater levels, reservoir levels, fire danger, and crop moisture. The Water Department has drought management signs throughout the

**2023 Town Report  
Water & Wastewater Department**

Harwich Community. Please refer to the signs around town as well as notices on our website for the most up to date information on drought notification and water restrictions.

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.

**High Consumption and Irrigation Systems**

Most of our high consumption calls come in after the October bill is received. When we receive these calls, the irrigation system usually has been shut down for the season and the seasonal home is vacant. We cannot stress enough the importance of becoming familiar with your irrigation systems to anticipate this expense. You may need the help of your irrigation company to determine the number of zones, number of heads in each zone, frequency of zones running, and how much water is used for a full cycle and/or each day, each week, each month, etc. Consumption should be monitored on a regular basis by checking your water meter reading so if an issue exists it can be corrected immediately. All water that passes through the meter is the responsibility of the homeowner, and who wants to pay for water that is lost?

We would also like to remind our customers who do have an irrigation system that a testable backflow device must be installed on the line that feeds your irrigation system. This device is put in place to protect contaminants from being pulled back into the public water supply.

**Conclusion**

As we begin 2024, the Board of Water/Wastewater Commissioners would like to thank the dedicated staff and further extend our appreciation to all Town Departments, Town Committees, Boards and Residents for their continued support.

Sincerely,

*Board of Water/Wastewater Commissioners*

Gary Carreiro, Chairman

Noreen Donahue, Vice Chairman

Allin Thompson, Clerk

Judith Underwood, Commissioner

John Gough, Commissioner

VI. OLD BUSINESS

B. FY25 Water & Wastewater Operating Budget

**2025 WATER ENTERPRISE FUND BUDGET**

<b>1320</b>	<b>WATER ENTERPRISE FUND</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
596000	OFUS / INDIRECTS	727,304	759,278	818,913	886,099
	<b>TOTAL INDIRECTS</b>	727,304	759,278	818,913	<b>886,099</b>
					7.58%
<b>13204501</b>	<b>SALARIES &amp; WAGES</b>				
511100	SALARIES ELECTED OFFICIALS	5,000	5,000	5,000	2,500
511900	SALARIES & WAGES	949,016	983,574	1,034,522	1,054,352
512000	SEASONAL S&W	4,141	0	35,654	24,730
512500	COMPENSATORY TIME	1,416	6,854	0	0
513000	OVERTIME	234,945	228,514	278,396	241,186
514000	LONGEVITY	25,536	27,858	33,665	37,163
515000	VACATION SALARIES & WAGES	11,753	0	0	0
515005	SICK LEAVE BY-BACK @ RETIREMENT	10,818	0	0	0
515007	SICK LEAVE BONUS PER CONTRACT	1,700	1,350	3,325	3,325
	<b>TOTAL SALARIES &amp; WAGES</b>	1,244,325	1,253,150	1,390,562	<b>1,363,256</b>
					-2.00%
<b>13204502</b>	<b>EXPENSES</b>				
517900	OTHER FRINGE BENEFITS	9,971	11,596	11,000	12,100
521100	ELECTRIC UTILITY	341,499	316,884	407,177	443,974
521200	GAS UTILITY	7,534	7,562	8,000	8,000
524140	VEHICLE/EQUIPMENT MAINTENANCE	51,637	56,830	52,000	57,000
524160	BUILDING & GROUNDS MAINTENANCE	51,735	31,077	52,000	52,000
525000	TECHNICAL SUPPORT AGREEMENTS	34,933	37,743	43,540	43,540
526000	BUILDING MAINT AGREEMENTS	4,137	14,487	22,750	15,000
530800	LABORATORY SERVICES	12,278	18,421	35,314	35,314
530820	PROFESSIONAL SERVICES	86,353	64,149	85,000	85,000
530875	PRINTING SERVICES & SUPPLIES	9,147	17,783	10,000	18,000
534100	ADVERTISING	2,491	1,784	2,500	2,500
534300	POSTAGE	18,094	11,585	18,500	18,500
534400	TELEPHONE	7,453	7,497	7,700	3,300
534430	COMMUNICATION SERVICES	16,430	20,489	19,000	21,000
541100	PROPANE UTILITY	16,067	18,370	16,100	18,500
542000	OFFICE SUPPLIES	4,582	7,358	6,300	7,500
542013	HARDWARE/SOFTWARE/OFFICE	6,042	12,557	25,924	35,000
548100	BULK FUEL	26,658	33,761	27,000	34,000
548200	TREATMENT SUPPLIES	14,380	25,399	18,000	25,000
548250	TREATMENT CHEMICALS	165,877	218,317	247,850	247,850
553000	PUBLIC WORKS SUPPLIES	14,751	27,220	27,800	92,800
553100	METERS/READ DEVICES & SUPPLIES	115,987	162,934	180,000	165,000
553200	SERVICE INSTALLATION SUPPLIES	77,125	52,280	77,000	77,000
553300	PIPES, VALVES & FITTINGS	110,394	55,638	110,500	100,000
553350	WATER MAIN REPLACEMENT	31,083	4,892	85,000	65,000
553500	POLICE DETAILS	27,413	19,874	27,500	35,000
553600	ROAD REPAIRS	16,401	18,384	16,500	35,000
553900	MECHANICAL TANK MAINT & INSP	12,495	25,410	13,000	13,000
554200	GENERATOR MAINT	29,634	18,984	29,700	19,000

**2025 WATER ENTERPRISE FUND BUDGET**

<b>1320</b>	<b>WATER ENTERPRISE FUND</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
554300	WELL REHAB	0	43,127	45,000	0
558100	UNIFORMS AND SAFETY SUPPLIES	3,819	11,189	10,000	10,000
573000	DUES/SUBSCRIPTIONS/TRAVEL	8,474	8,370	13,000	13,000
573200	WATER MGMT PERMIT	6,934	8,648	8,500	10,000
575070	OPEB	50,000	50,000	50,000	50,000
591000	MATURE PRINCIPAL LONGTERM DEBT	549,467	416,371	404,300	630,095
591500	INTEREST ON LONG TERM DEBT	152,510	124,123	127,941	935,776
591550	ADMIN FEE LT DEBT	2,219	2,092	1,963	1,830
	<b>TOTAL EXPENSES</b>	<b>2,096,003</b>	<b>1,983,184</b>	<b>2,343,359</b>	<b>3,435,579</b>
					<u>31.79%</u>
<b>13204504</b>	<b>REVENUE</b>				
414600	WATER LIENS COLLECTED	14,539	11,766	17,422	17,544
417008	PEN & INT WATER LIENS	1,641	1,346	2,457	2,034
421100	WATER RATES & SERVICES	4,298,718	4,014,723	4,419,575	4,431,393
421200	METERS	15,564	16,727	9,151	12,539
421300	SERVICE APPLICATION FEES	1,236	16,326	1,332	6,087
421400	SERVICE INSTALLATIONS	173,601	224,652	183,693	212,221
421450	MARKOUT SERVICES	13,734	7,035	20,181	15,799
421550	PROPERTY TRANSFER SERVICES	20,922	15,522	22,757	20,346
421600	WIRELESS COMMUNICATION LEASE	135,483	139,548	148,220	152,667
421650	SOLAR REVENUE WATER	169,592	361,965	132,022	208,670
431100	WATER SERVICE TIGHT PLAN	91,728	93,097	98,056	100,844
433007	LATE FEE	57,019	42,793	49,815	50,931
441100	ELECTRICAL SERVICES	1,200	2,600	0	0
451100	BACKFLOW INSPECTIONS	37,464	12,474	21,838	23,136
482001	INVESTMENT REVENUE	797	160	11,676	3,367
484099	WATER MISCELLANEOUS REVENUE	55,437	64,631	52,700	60,331
	<b>TOTAL REVENUE</b>	<b>5,088,676</b>	<b>5,025,364</b>	<b>5,190,895</b>	<b>5,317,908</b>
					<u>2.39%</u>
	<b>TOTAL REVENUE</b>	<b>5,088,676</b>	<b>5,025,364</b>	<b>5,190,895</b>	<b>5,317,908</b>
					<u>2.39%</u>
	<b>TOTAL EXPENSE</b>	<b>4,067,632</b>	<b>3,995,612</b>	<b>4,552,834</b>	<b>5,684,934</b>
					<u>19.91%</u>
	<b>DELTA</b>	<b>-1,021,044</b>	<b>-1,029,752</b>	<b>-638,061</b>	<b>367,027</b>



FY 2025 EXPENSE WORKSHEET

1320 WATER ENTERPRISE FUND								
596000 OFUS / INDIRECTS	2022	2023	2024	2025	+/-% FY 2024			COMMENTS
					\$	%	I/D	
A. TOWN ADMIN OFFICE	20,018	18,679	19,727	20,801	\$1,074	5.16%	I	
B. FINANCE/ACCOUNTING	20,851	21,125	20,755	25,518	\$4,763	22.95%	I	
C. TREASURER/COLLECTOR	38,864	39,406	41,017	53,762	\$12,745	31.07%	I	
D. HEALTH INSURANCE	219,589	228,552	249,322	264,281	\$14,959	6.00%		
E. LIFE INSURANCE	337	337	403	403	\$0	0.00%		
F. BARNSTABLE CTY RETIREMENT	223,730	223,730	239,363	251,331	\$11,968	5.00%	I	
G. RETIREE HEALTH INSURANCE	79,335	108,615	117,168	124,198	\$7,030	6.00%	I	
H. PROPERTY/LIABILITY INSURANCE	58,395	61,145	67,260	77,348	\$10,088	15.00%	I	
I. WORKERS' COMPENSATION	44,822	36,221	39,843	43,827	\$3,984	10.00%	I	
J. MEDICARE (S&W *1.45%)	17,289	17,468	19,155	19,730	\$575	3.00%	I	
K. AUDIT	4,000	4,000	4,900	4,900	\$0	0.00%		
<b>TOTAL INDIRECTS</b>	<b>727,229</b>	<b>759,278</b>	<b>818,913</b>	<b>886,099</b>	<b>\$67,186</b>	<b>8.20%</b>	<b>I</b>	

13204502 EXPENSES	2022	2023	2024	2025	+/-% FY 2024			COMMENTS
					\$	%	I/D	
517900 OTHER FRINGE BENEFITS	9,971	11,596	11,000	12,100	\$1,100	10.00%	I	Clothing/Boot Allowance 11x\$1,100
521100 ELECTRIC UTILITY	341,499	316,884	407,177	443,974	\$36,797	9.04%	I	FY23 to FY24 %
521200 GAS UTILITY	7,534	7,562	8,000	8,000	\$0	0.00%		Level
524140 VEHICLE/EQUIPMENT MAINTENANCE	51,637	56,830	52,000	57,000	\$5,000	9.62%	I	Based on FY23 actuals
524160 BUILDING & GROUNDS MAINTENANCE	51,735	31,077	52,000	52,000	\$0	0.00%		Level
525000 TECHNICAL SUPPORT AGREEMENTS	34,933	37,743	43,540	43,540	\$0	0.00%		Level
526000 BUILDING MAINT AGREEMENTS	4,137	14,487	22,750	15,000	-\$7,750	-34.07%	D	Based on FY23 actuals
530800 LABORATORY SERVICES	12,278	18,421	35,314	35,314	\$0	0.00%		Level
530820 PROFESSIONAL SERVICES	86,353	64,149	85,000	85,000	\$0	0.00%		Level
530875 PRINTING SERVICES & SUPPLIES	9,147	17,783	10,000	18,000	\$8,000	80.00%	I	Based on FY23 actuals
534100 ADVERTISING	2,491	1,784	2,500	2,500	\$0	0.00%		Level
534300 POSTAGE	18,094	11,585	18,500	18,500	\$0	0.00%		Level
534400 TELEPHONE	7,453	7,497	7,700	3,300	-\$4,400	-57.14%	D	Reduced/Town Phone Subscription

<b>13204502 EXPENSES</b>	2022	2023	2024	2025	\$	%	I/D	COMMENTS
534430 COMMUNICATION SERVICES	16,430	20,489	19,000	21,000	\$2,000	10.53%	I	Based on FY23 actuals
541100 PROPANE UTILITY	16,067	18,370	16,100	18,500	\$2,400	14.91%	I	Based on FY23 actuals
542000 OFFICE SUPPLIES	4,582	7,358	6,300	7,500	\$1,200	19.05%	I	Based on FY23 actuals
542013 HARDWARE/SOFTWARE/OFFICE	6,042	12,557	25,924	35,000	\$9,076	35.01%	I	Copy/scan/print machine purchase EST \$20K
548100 BULK FUEL	26,658	33,761	27,000	34,000	\$7,000	25.93%	I	Based on FY23 actuals
548200 TREATMENT SUPPLIES	14,380	25,399	18,000	25,000	\$7,000	38.89%	I	Based on FY23 actuals
548250 TREATMENT CHEMICALS	165,877	218,317	247,850	247,850	\$0	0.00%		Level / FY25 Bid prices unknown
553000 PUBLIC WORKS SUPPLIES	14,751	27,220	27,800	92,800	\$65,000	233.81%	I	Leak detection equipment purchase
553100 METERS/READ DEVICES & SUPPLIES	115,987	162,934	180,000	165,000	-\$15,000	-8.33%	D	Based on FY23 actuals
553200 SERVICE INSTALLATION SUPPLIES	77,125	52,280	77,000	77,000	\$0	0.00%		Level
553300 PIPES, VALVES & FITTINGS	110,394	55,638	110,500	100,000	-\$10,500	-9.50%	D	Based on FY23 actuals
553350 WATER MAIN REPLACEMENT	31,083	4,892	85,000	65,000	-\$20,000	-23.53%	D	Reduced by Azalea Bridge project
553500 POLICE DETAILS	27,413	19,874	27,500	35,000	\$7,500	27.27%	I	Side road projects
553600 ROAD REPAIRS	16,401	18,384	16,500	35,000	\$18,500	112.12%	I	Side road projects
553900 MECHANICAL TANK MAINT & INSP	12,495	25,410	13,000	13,000	\$0	0.00%		Level
554200 GENERATOR MAINT	29,634	18,984	29,700	19,000	-\$10,700	-36.03%	D	Based on FY23 actuals
554300 WELL REHAB	0	43,127	45,000	0	-\$45,000	-100.00%	D	Moved to Capital Article
558100 UNIFORMS AND SAFETY SUPPLIES	3,819	11,189	10,000	10,000	\$0	0.00%		Level
573000 DUES/SUBSCRIPTIONS/TRAVEL	8,474	8,370	13,000	13,000	\$0	0.00%		Level
573200 WATER MGMT PERMIT	6,934	8,648	8,500	10,000	\$1,500	17.65%	I	Based on FY23 actuals
575070 OPEB	50,000	50,000	50,000	50,000	\$0	0.00%		Level
591000 MATURE PRINCIPAL LONGTERM DEBT	549,467	416,371	404,300	630,095	\$225,795	55.85%	D	Per debt schedules
591500 INTEREST ON LONG TERM DEBT	152,510	124,123	127,941	935,776	\$807,835	631.41%	D	Per debt schedules
591550 ADMIN FEE LT DEBT	2,219	2,092	1,963	1,830	-\$133	-6.76%	D	Per debt schedules
<b>TOTAL EXPENSES</b>	<b>2,096,003</b>	<b>1,983,184</b>	<b>2,343,359</b>	<b>3,435,579</b>	<b>\$1,092,220</b>	<b>46.61%</b>	<b>I</b>	

**2025 WASTEWATER ENTERPRISE FUND BUDGET**

1330	WASTEWATER ENTERPRISE FUND	2022	2023	2024	2025
596000	OFUS / INDIRECTS	31,443	31,687	62,148	0
	<b>TOTAL INDIRECTS</b>	31,443	31,687	62,148	<b>0</b>
					#DIV/0!
13304401	SALARIES & WAGES				
511100	SALARIES ELECTED OFFICIALS	0	0	0	2,500
511900	SALARIES & WAGES	78,997	82,914	175,178	200,124
	<b>TOTAL SALARIES &amp; WAGES</b>	78,997	82,914	175,178	<b>202,624</b>
					13.55%
13304402	<b>EXPENSES</b>				
521100	ELECTRIC UTILITY	3,836	6,374	20,000	20,000
521200	GAS UTILITY	562	582	600	1,400
530820	PROFESSIONAL SERVICES	71,713	40,767	0	0
530825	PROF/ARCHITECT/ENG SERVICES	42,323	315,096	398,675	385,458
530875	PRINTING SERVICES & SUPPLIES	3,000	162	3,000	5,000
554200	GENERATOR MAINT	285	815	2,250	3,000
554210	COLLECTION MAINTENANCE	0	0	20,000	0
591000	MATURE PRINCIPAL LONGTERM DEBT	0	713,400	211,084	0
591500	INTEREST ON LONG TERM DEBT	0	248,978	216,076	0
591550	ADMIN FEE LT DEBT		0	26,217	0
	<b>TOTAL EXPENSES</b>	121,719	1,326,173	897,902	<b>414,858</b>
					-116.44%
13304404	REVENUE				
422200	USER FEES	305	23,742	15,000	50,000
482001	INVESTMENT REVENUE	288	144	0	0
484099	MISCELLANEOUS REVENUE	989	0	0	0
	<b>TOTAL REVENUE</b>	1,582	23,886	15,000	<b>50,000</b>
					70.00%
	<b>TOTAL REVENUE</b>	1,582	23,886	15,000	<b>50,000</b>
					70.00%
	<b>TOTAL EXPENSE</b>	232,159	1,440,774	1,135,228	<b>617,482</b>
					-83.85%
	<b>DELTA / EST General Fund Subsidy</b>	230,577	1,416,888	1,120,228	<b>567,482</b>

2025 EXPENSE WORKSHEET

1330 WASTEWATER ENTERPRISE FUND						+/-% FY 2024			
596000	OFUS / INDIRECTS	2022	2023	2024	2025	\$	%	I/D	COMMENTS
	Removed per Finance Director								No longer tracked as of FY 2025
	<b>TOTAL INDIRECTS</b>	31,443	31,687	62,148	0	-\$62,148	-100.00%		
13304402 EXPENSES						+/-% FY 2024			
		2022	2023	2024	2025	\$	%	I/D	COMMENTS
521100	ELECTRIC UTILITY	3,836	6,374	20,000	20,000	\$0	0.00%		Level
521200	GAS UTILITY	562	582	600	1,400	\$800	133.33%	I	Based on Actuals
530820	PROFESSIONAL SERVICES	71,713	40,767	0	0	\$0	0.00%		DUP Account - Remove
530825	PROF/ARCHITECT/ENG SERVICES	42,323	315,096	398,678	385,458	-\$13,220	-3.32%	D	See IMA Tab
530875	PRINTING SERVICES & SUPPLIES	3,000	162	3,000	5,000	\$2,000	66.67%	I	Phase 3 mailing
554200	GENERATOR MAINT	285	815	2,250	3,000	\$750	33.33%	I	Annual Service + \$750 for repairs
554210	COLLECTION MAINTENANCE	0	0	20,000	0	-\$20,000	-100.00%		Moved to Capital Article
591000	MATURE PRINCIPAL LONGTERM DEBT	0	713,400	211,084	0	-\$211,084	-100.00%	D	Moved to General Fund
591500	INTEREST ON LONG TERM DEBT	0	248,978	216,076	0	-\$216,076	-100.00%	D	Moved to General Fund
591550	ADMIN FEE LT DEBT	0	0	26,217	0	-\$26,217	-100.00%	D	Moved to General Fund
	<b>TOTAL EXPENSES</b>	121,719	1,326,173	897,905	414,858	-\$483,047	-53.80%	I	

## VII. NEW BUSINESS

### A. New Source Update

VII. NEW BUSINESS

B. Rt 28 Water & Sewer Project Update

**75% CONSTRUCTION COST ESTIMATE**

**Main Street (RTE 28)  
Harwich, Massachusetts  
December 21, 2023**

**MassDOT Project File No. 608742**

Item No	Description	Unit	Quantity	Unit Price	Total Amount
100.	SCHEDULE OF OPERATIONS - FIXED PRICE \$50,000	LS	1	\$ 50,000.00	\$ 50,000.00
101.	CLEARING AND GRUBBING	A	0.1	\$ 35,000.00	\$ 3,500.00
142.	CLASS B TRENCH EXCAVATION	CY	1848	\$ 50.00	\$ 92,400.00
156.3	CRUSHED STONE FOR BACKING	TON	7049	\$ 75.00	\$ 528,675.00
251.0125	1.25 INCH HDPE LOW PRESSURE SEWER SERVICE	FT	1087	\$ 54.00	\$ 58,698.00
251.03	3 INCH HDPE FORCEMAIN	FT	3950	\$ 56.00	\$ 221,200.00
256.	FORCEMAIN MANUAL AIR RELEASE VALVE - COMPLETE	EA	2	\$ 10,000.00	\$ 20,000.00
257.	FORCEMAIN FLUSHING ASSEMBLY - COMPLETE	EA	2	\$ 6,200.00	\$ 12,400.00
303.06	6 INCH DUCTILE IRON WATER PIPE (MECHANICAL JOINT)	FT	310	\$ 118.00	\$ 36,580.00
303.08	8 INCH DUCTILE IRON WATER PIPE (MECHANICAL JOINT)	FT	220	\$ 133.00	\$ 29,260.00
303.12	12 INCH DUCTILE IRON WATER PIPE (MECHANICAL JOINT)	FT	3502	\$ 156.00	\$ 546,312.00
309.	DUCTILE IRON FITTINGS FOR WATER PIPE	LB	5530	\$ 15.00	\$ 82,950.00
346.075	3/4 INCH SERVICE PIPE REMOVED AND REPLACED	FT	90	\$ 76.00	\$ 6,840.00
346.1	1 INCH SERVICE PIPE REMOVED AND REPLACED	FT	720	\$ 83.00	\$ 59,760.00
346.15	1-1/2 INCH SERVICE PIPE REMOVED AND REPLACED	FT	170	\$ 88.00	\$ 14,960.00
346.2	2 INCH SERVICE PIPE REMOVED AND REPLACED	FT	120	\$ 106.00	\$ 12,720.00
349.03	3 INCH GATE VALVE	EA	36	\$ 500.00	\$ 18,000.00
349.06	6 INCH GATE VALVE	EA	12	\$ 1,800.00	\$ 21,600.00
349.08	8 INCH GATE VALVE	EA	3	\$ 2,800.00	\$ 8,400.00
349.12	12 INCH GATE VALVE	EA	16	\$ 6,000.00	\$ 96,000.00
357.03	3 INCH GATE BOX	EA	36	\$ 450.00	\$ 16,200.00
357.06	6 INCH GATE BOX	EA	12	\$ 450.00	\$ 5,400.00
357.08	8 INCH GATE BOX	EA	3	\$ 450.00	\$ 1,350.00
357.12	12 INCH GATE BOX	EA	16	\$ 450.00	\$ 7,200.00
363.075	3/4 INCH CORPORATION COCK	EA	3	\$ 150.00	\$ 450.00
363.1	1 INCH CORPORATION COCK	EA	32	\$ 150.00	\$ 4,800.00
363.15	1-1/2 INCH CORPORATION COCK	EA	5	\$ 150.00	\$ 750.00
363.2	2 INCH CORPORATION COCK	EA	3	\$ 175.00	\$ 525.00
371.06	6-INCH COUPLING	EA	3	\$ 2,500.00	\$ 7,500.00
371.08	8-INCH COUPLING	EA	4	\$ 2,700.00	\$ 10,800.00
371.12	12-INCH COUPLING	EA	1	\$ 3,000.00	\$ 3,000.00
376.	HYDRANT	EA	8	\$ 7,000.00	\$ 56,000.00
381.	SERVICE BOX	EA	87	\$ 300.00	\$ 26,100.00
384.075	3/4 INCH CURB STOP	EA	3	\$ 325.00	\$ 975.00
384.1	1 INCH CURB STOP	EA	32	\$ 350.00	\$ 11,200.00
384.125	1.25 INCH CURB STOP	EA	44	\$ 400.00	\$ 17,600.00
384.15	1.5 INCH CURB STOP	EA	5	\$ 425.00	\$ 2,125.00
384.2	2 INCH CURB STOP	EA	3	\$ 500.00	\$ 1,500.00
451.	HMA FOR PATCHING	TON	720	\$ 250.00	\$ 180,000.00
903	3000 PSI, 1.5 INCH, 470 CEMENT CONCRETE	CY	31	\$ 300.00	\$ 9,300.00

Subtotal \$ 2,283,030.00

Contingency (10%) \$ 228,303.00

MassDOT Construction Engineering (5%) \$ 114,151.50

<b>TOTAL COST</b>	<b>\$ 2,630,000.00</b>
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VII. NEW BUSINESS  
C. FY25 Indirect Expenses



## Water Enterprise Fund Indirects History

	2020	2021	2022	2023	2024	2025
<b>Department</b>						
Town Administrator	19,972	20,934	20,018	18,679	19,727	20,801
Accounting	18,648	19,966	20,851	21,125	20,755	25,518
Treasurer & Collector	35,181	38,116	38,864	39,406	41,017	53,762
Board of Health	0					
Engineering	0					
<b>Total Departmental</b>	<b>73,801</b>	<b>79,016</b>	<b>79,732</b>	<b>79,210</b>	<b>81,499</b>	<b>100,081</b>
<b>Insurance &amp; Expenses</b>						
Health Insurance	242,629	241,742	219,589	228,552	249,322	264,281
Life Insurance	337	337	337	337	403	403
Retirement	215,497	231,697	223,730	223,730	239,363	251,331
Retiree Health & Life Ins.	61,491	50,885	79,335	108,615	117,168	124,198
Property & Vehicle Ins	60,051	59,579	58,395	61,145	67,260	77,348
Auto	0	0	44,822	36,221	39,843	43,827
Worker's Comp Insurance	47,720	43,641	17,289	17,468	19,155	19,730
Medicare	14,769	19,393	4,000	4,000	4,900	4,900
<b>Total Insurance &amp; Expenses</b>	<b>642,494</b>	<b>647,274</b>	<b>647,497</b>	<b>680,068</b>	<b>737,414</b>	<b>786,018</b>
<b>Other Expenses</b>						
Miscellaneous	0	0	0	0	0	0
Advertising	0	0	0	0	0	0
Bulk Fuel		0	0	0	0	0
Telephone	0	0	0	0	0	0
Postage	0	0	0	0	0	0
Unemployment	0	0	0	0	0	0
Citizen Self Service %	0	0	0	0	0	0
Audit	4,000	4,000	0	0	0	0
Town Report	0	0	0	0	0	0
<b>Total Miscellaneous</b>	<b>4,000</b>	<b>4,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Indirect Expenses</b>	<b>720,295</b>	<b>730,290</b>	<b>727,229</b>	<b>759,278</b>	<b>818,913</b>	<b>886,099</b>

### FY25 Notes

Methodology of Indirect charges adopted for FY2016. See Summary and Detail sheets provided by the Town.

1. Property and Vehicle Insurance- estimated increase of 15% from FY24 (new vehicles to be acquired in FY25)
2. Workers' Compensation - estimated increase of 10% from FY24
3. Medicare based on FY24 S&W \* 3% anticipated salaries increase from FY24
4. OPEB is a separate line item in the budget
5. Retirement - estimated increase of 5% from FY24
6. Audit = 10% of total cost
8. Health Insurance increase at 6% for FY 25
9. Employer cost for life ins = 2.49 pp per mo for active, 1.24 pp per mo retiree (12 active, 3 retired)

VII. NEW BUSINESS

D. 2023 Campaign Finance Reporting



Commonwealth of Massachusetts

# Form CPF M 102: Campaign Finance Report Municipal Form

Office of Campaign and Political Finance

File with: City or Town Clerk or Election Commission

Fill in Reporting Period dates: Beginning Date: \_\_\_\_\_ Ending Date: \_\_\_\_\_

Type of Report: (Check one)

- 8th day preceding preliminary   
  8th day preceding election   
  30 day after election   
  year-end report   
  dissolution

Candidate Full Name (if applicable) \_\_\_\_\_

Office Sought and District \_\_\_\_\_

Residential Address \_\_\_\_\_

E-mail: \_\_\_\_\_

Phone # (optional): \_\_\_\_\_

Committee Name \_\_\_\_\_

Name of Committee Treasurer \_\_\_\_\_

Committee Mailing Address \_\_\_\_\_

E-mail: \_\_\_\_\_

Phone # (optional): \_\_\_\_\_

### SUMMARY BALANCE INFORMATION:

<b>Line 1:</b> Ending Balance from previous report	_____
<b>Line 2:</b> Total receipts this period (page 3, line 11)	_____
<b>Line 3:</b> Subtotal (line 1 plus line 2)	_____
<b>Line 4:</b> Total expenditures this period (page 5, line 14)	_____
<b>Line 5:</b> Ending Balance (line 3 minus line 4)	_____
<b>Line 6:</b> Total in-kind contributions this period (page 6)	_____
<b>Line 7:</b> Total (all) outstanding liabilities (page 7)	_____
<b>Line 8:</b> Name of bank(s) used:	_____

#### Affidavit of Committee Treasurer:

I certify that I have examined this report including attached schedules and it is, to the best of my knowledge and belief, a true and complete statement of all campaign finance activity, including all contributions, loans, receipts, expenditures, disbursements, in-kind contributions and liabilities for this reporting period and represents the campaign finance activity of all persons acting under the authority or on behalf of this committee in accordance with the requirements of M.G.L. c. 55.

Signed under the penalties of perjury: \_\_\_\_\_ (Treasurer's signature) Date: \_\_\_\_\_

#### FOR CANDIDATE FILINGS ONLY: Affidavit of Candidate: (check 1 box only)

##### Candidate with Committee

I certify that I have examined this report including attached schedules and it is, to the best of my knowledge and belief, a true and complete statement of all campaign finance activity, of all persons acting under the authority or on behalf of this committee in accordance with the requirements of M.G.L. c. 55. I have not received any contributions, incurred any liabilities nor made any expenditures on my behalf during this reporting period that are not otherwise disclosed in this report.

##### Candidate without Committee

I certify that I have examined this report including attached schedules and it is, to the best of my knowledge and belief, a true and complete statement of all campaign finance activity, including contributions, loans, receipts, expenditures, disbursements, in-kind contributions and liabilities for this reporting period and represents the campaign finance activity of all persons acting under the authority or on behalf of this candidate in accordance with the requirements of M.G.L. c. 55.

Signed under the penalties of perjury: \_\_\_\_\_ (Candidate's signature) Date: \_\_\_\_\_

## SCHEDULE A: RECEIPTS

*M.G.L. c. 55 requires that the name and residential address be reported, in alphabetical order, for all receipts over \$50 in a calendar year. Committees must keep detailed accounts and records of all receipts, but need only itemize those receipts over \$50. In addition, the occupation and employer must be reported for all persons who contribute \$200 or more in a calendar year.*

**(A "Schedule A: Receipts" attachment is available to complete, print and attach to this report, if additional pages are required to report all receipts. Please include your committee name and a page number on each page.)**

Date Received	Name and Residential Address (alphabetical listing required)	Amount	Occupation & Employer (for contributions of \$200 or more)
Line 9: Total Receipts over \$50 (or listed above)			
Line 10: Total Receipts \$50 and under* (not listed above)			
<b>Line 11: TOTAL RECEIPTS IN THE PERIOD</b>			← Enter on page 1, line 2

\* If you have itemized receipts of \$50 and under, include them in line 9. Line 10 should include only those receipts not itemized above.

**SCHEDULE A: RECEIPTS (continued)**

Date Received	Name and Residential Address (alphabetical listing required)	Amount	Occupation & Employer (for contributions of \$200 or more)
Line 9: Total Receipts over \$50 (or listed above)			
Line 10: Total Receipts \$50 and under* (not listed above)			
<b>Line 11: TOTAL RECEIPTS IN THE PERIOD</b>			← Enter on page 1, line 2

\* If you have itemized receipts of \$50 and under, include them in line 9. Line 10 should include only those receipts not itemized above.

## SCHEDULE B: EXPENDITURES

*M.G.L. c. 55 requires committees to list, in alphabetical order, all expenditures over \$50 in a reporting period. Committees must keep detailed accounts and records of all expenditures, but need only itemize those over \$50. Expenditures \$50 and under may be added together, from committee records, and reported on line 13.*

**(A "Schedule B: Expenditures" attachment is available to complete, print and attach to this report, if additional pages are required to report all expenditures. Please include your committee name and a page number on each page.)**

Date Paid	To Whom Paid (alphabetical listing)	Address	Purpose of Expenditure	Amount

Line 12: Total Expenditures over \$50 (or listed above)	
---	--

Line 13: Total Expenditures \$50 and under* (not listed above)	
--	--

Enter on page 1, line 4 → <b>Line 14: TOTAL EXPENDITURES IN THE PERIOD</b>	
--	--

\* If you have itemized expenditures of \$50 and under, include them in line 12. Line 13 should include only those expenditures not itemized above.

### SCHEDULE B: EXPENDITURES (continued)

Date Paid	To Whom Paid (alphabetical listing)	Address	Purpose of Expenditure	Amount
Line 12: Expenditures over \$50 (or listed above)				
Line 13: Expenditures \$50 and under* (not listed above)				
<b>Line 14: TOTAL EXPENDITURES IN THE PERIOD</b>				

Enter on page 1, line 4 →

\* If you have itemized expenditures of \$50 and under, include them in line 12. Line 13 should include only those expenditures not itemized above.

## SCHEDULE C: "IN-KIND" CONTRIBUTIONS

Please itemize contributors who have made in-kind contributions of more than \$50. In-kind contributions \$50 and under may be added together from the committee's records and included in line 16 on page 1.

Date Received	From Whom Received*	Residential Address	Description of Contribution	Value
			Line 15: In-Kind Contributions over \$50 (or listed above)	
			Line 16: In-Kind Contributions \$50 & under (not listed above)	
Enter on page 1, line 6 →			<b>Line 17: TOTAL IN-KIND CONTRIBUTIONS</b>	

\* If an in-kind contribution is received from a person who contributes more than \$50 in a calendar year, you must report the name and address of the contributor; in addition, if the contribution is \$200 or more, you must also report the contributor's occupation and employer.



## SCHEDULE D: LIABILITIES

*M.G.L. c. 55 requires committees to report ALL liabilities which have been reported previously and are still outstanding, as well as those liabilities incurred during this reporting period.*

Date Incurred	To Whom Due	Address	Purpose	Amount
Enter on page 1, line 7 →	<b>Line 18: TOTAL OUTSTANDING LIABILITIES (ALL)</b>			

VII. NEW BUSINESS

E. 2024 Draft Intended Use Plan

**TABLE 3  
CLEAN WATER STATE REVOLVING FUND  
Calendar Year 2024 CWSRF Project Priority List**

**NEW PROJECTS**

Rating	Applicant	NPDES/PERMIT	SRF ID	Project	Project Cost
553	BARNSTABLE (PF)(SG)	Other	16677	Nitrogen Removal Improv. & New Headworks Facility	\$155,265,000
548	NEW BEDFORD (PF)#	MA0100781	16872	Wastewater Pumping Station Improvements	\$13,485,000
547	BARNSTABLE (H)(PF)	Storm Water	16683	Route 28 West Sewer Expansion Project	\$59,650,000
547	OAK BLUFFS (PF)(D)	Ground Water	16752	Oak Bluffs WWTF ENR Upgrade Project	\$0
547	ROCKLAND (PF)(BG)	MA0101923	16871	Wastewater Treatment Facility Upgrades	\$21,500,000
544	KINGSTON (PF)(D)	Ground Water	16725	Effluent Recharge Site No. 3 & Sewer Expansion	\$0
544	NEW BEDFORD (PF)#	Not Applicable	16873	Wastewater Collection System Improvements	\$74,965,000
543	BILLERICA (H)(PF)#	MA0101711	16802	Infiltration/Inflow Rehabilitation Project	\$1,586,500
542	NANTUCKET (H)#	Ground Water	16693	Phase 2 Surfside WWTF Improvements	\$13,118,000
541	HARWICH (PF)	Not Applicable	16674	Harwich Route 28 Sewer Project	\$6,500,000
540	FALL RIVER (PF)#	MA0100382	16710	Mothers Brook Sewer Replacement	\$24,280,000
540	FALL RIVER (PF)#	Not Applicable	16727	Stafford Square Flood Mitigation	\$29,385,400
540	REVERE (H)(PF)#	Not Applicable	16729	Phase 15 Construction - I/I, IDDE, P.S. & Drainage	\$12,000,000
540	BARNSTABLE (H)(PF)	Not Applicable	16754	Phinney's Lane Neighborhoods Sewer Expansion	\$38,766,000
540	MASHPEE (PF)(BG)	Ground Water	16791	Phase 2 Mashpee Treatment and Collection System	\$80,000,000
540	HAVERHILL (PF)#	MA0101621	16876	Haverhill Locke Street Phase 1	\$8,894,300
540	HAVERHILL (PF)#	MA0101621	16691	Locke Street Sewer Separation - Phase 2	\$14,040,000
539	SAUGUS (PF)#	Not Applicable	16762	Comprehensive Sewer System Rehabilitation - 2	\$2,480,495
539	GLOUCESTER (H)(PF)(SG)	MA0100625	16775	WPCF Secondary Treatment and Facility Upgrades	\$205,972,280
538	ACUSHNET (PF)	Storm Water	16709	CWMP Needs Area 2 Sewer Extension	\$15,000,000
538	LOWELL (H)(PF)(SG)	MA0100633	16760	Phase 1 Humphrey's Brook Area CSO Separation	\$23,000,000
537	SANDWICH (PF)	Ground Water	16718	Sandwich High School WWTF Upgrades	\$9,100,000
536	HAVERHILL (PF)#	MA0101621	16711	Sewer System Improvements - CIPP Lining	\$2,345,000
536	LAWRENCE (H)(PF)#	MA0100447	16712	Sewer and Drainage Improvements/ Contract 7	\$9,251,000
536	EASTON (H)	MA0101702	16851	Five Corners Needs Area - Secondary Pump Station	\$3,955,000
535	HAVERHILL (PF)	MA0101621	16761	WWTF and South Mill Street Pump Station Upgrades	\$54,710,000
535	QUINCY (H)(PF)#	Not Applicable	16753	FY25 Sewer & Drain Improvements	\$7,000,000
534	DENNIS (PF)	Ground Water	16676	Phase 1 - WRRF and Collection System	\$188,600,000
533	TYNGSBOROUGH (H)(PF)	MA0100633	16695	Phase 3 Sewer Extension & Sunset Park	\$22,165,374

532	BILLERICA (H)(PF)	MA0101711	16724 Sewer Contract 38	\$25,525,500
532	FALMOUTH (PF)	Ground Water	16728 Falmouth TASA Phase 1 Collection and Recharge	\$41,300,000
532	NEWTON (H)	Storm Water	16829 PCP Structural Stormwater Control Implementation	\$20,127,081
531	NAHANT	Storm Water	16706 Sewer Collection System Repair & Replacement 2024	\$24,471,000
531	NORTH READING (H)	Not Applicable	16801 North Reading Wastewater Collection System	\$113,600,000
528	SUDBURY (H)	Not Applicable	16697 WWTF & Collection System Project	\$58,711,600
528	SWANSEA (PF)	Not Applicable	16705 Route 6 Corridor Sewer Collection System	\$57,109,938
526	WELLFLEET (H)	Not Applicable	16854 95 Lawrence Wastewater Treatment and Collection	\$6,309,000
524	QUINCY (H)(PF)	Storm Water	16779 Wollaston Stormwater Capacity Improvements Phase 1	\$5,250,000
523	BOSTON WATER AND SEWER COMMISSION (H)#	MA0101192	16690 East Boston Sewer Separation Phase IV	\$143,936,993
510	ACTON (H)	Ground Water	16800 Acton Great Road Sewer Project	\$21,475,000
448	NEW BEDFORD (PF)	MA0100781	16864 WWTP Improvements	\$19,000,000
437	PROVINCETOWN (H)#	Ground Water	16758 I-I and Sewer Redirects	\$974,000
437	MARION	MA0100030	16785 Creek Road Pump Station Resiliency Improvements	\$3,350,000
434	HAVERHILL (PF)	Other	16799 Closure of Northern Mound of Haverhill Landfill	\$10,126,500
434	PROVINCETOWN (H)	Ground Water	16703 Provincetown Phase 6B Collection System Expansion	\$32,988,700
433	PROVINCETOWN (H)	Ground Water	16716 Jerome Smith Pump Station	\$848,000
433	BILLERICA (H)(PF)	MA0101711	16868 Brown Street Force Main Rehabilitation/Replacement	\$14,655,198
423	WELLFLEET (H)	Not Applicable	16780 Wellfleet Enhanced I&A Septic System Program	\$448,800
341	PLYMOUTH (H)(PF)	MA0100587	16688 Camelot Drive Sewer Extension Project	\$13,186,000
338	BILLERICA (H)(PF)	MA0101711	16720 Darby Avenue Pump Station	\$2,896,750
337	GREATER LAWRENCE SANITARY DISTRICT (H)(PF)#	MA0100447	16702 Disinfection System Upgrades at GLSD	\$8,133,000
332	WAREHAM (PF)	MA0101893	16769 WPCF Improvements - Phase 2	\$36,450,000
330	HUDSON (PF)	MA0101788	16877 Hudson Wastewater Pump Station Upgrades	\$4,548,000
330	WESTPORT (PF)	Not Applicable	16704 Route 6 Phase 1A Sewer	\$7,509,017
328	PROVINCETOWN (H)	Ground Water	16715 Motta Field Subsurface Effluent Disposal Bed	\$979,000
326	BROCKTON (H)(PF)	MA0101010	16743 Sewer System Rehabilitation Phase 4	\$2,500,000
325	MEDFIELD (H)	MA0100978	16846 Medfield Sewer Infrastructure Rehabilitation	\$932,000
323	TISBURY (PF)#	Not Applicable	16717 Tisbury Enhanced I&A Septic System Program	\$897,600
321	SALEM (H)(PF)	Storm Water	16687 Rosies Pond & Jefferson Avenue Flood Mitigation	\$3,999,000
321	TISBURY (PF)#	Other	16875 Lake Street Park Cluster Wastewater Project	\$2,090,000
320	SALEM (H)(PF)	Storm Water	16689 Ocean Avenue West Pump Station Improvements	\$9,800,000

308	AVON (PF)	Not Applicable	16763	Avon Industrial Park Localized Sewer District	\$13,545,800
239	BARNSTABLE (H)(PF)	Not Applicable	16839	2024 Wastewater Pump Station Improvements Project	\$1,200,000
235	BROCKTON (H)(PF)(RE)#	MA0101010	16742	AWRF Biosolids Management Improvements	\$35,000,000
224	MASSACHUSETTS WATER RESOURCES AUTHORITY	Not Applicable	16880	Cottage Farm CSO Facility PCB Abatement	\$11,660,000
224	TYNGSBOROUGH (H)(PF)#	MA0100633	16696	Phalanx Pump Station Upgrade	\$1,250,000
223	MASSACHUSETTS WATER RESOURCES AUTHORITY #	Other	16732	Interceptor Renewal No. 7: Malden-Melrose	\$10,340,000
219	WORCESTER (H)(PF)	MA0102997	16737	Holden Street Pump Station Rehabilitation Project	\$6,511,000
216	ACTON (H)	Ground Water	16811	Acton Pump Station Rehabilitation	\$2,650,000
216	CONCORD #	MA0100668	16853	Concord WWTP Upgrades - Phase 1	\$8,120,000
214	SHREWSBURY (H)	MA0100412	16694	Walnut St PS Upgrade & FM/Sewer Replacement	\$5,040,200
208	NEEDHAM (H)	Not Applicable	16847	I-95 Sewer Interceptor Improvements	\$12,054,000

**TOTAL OF NEW PROJECTS**

**\$1,898,513,026**

(Count: 72)

(Average Rating: 440.92)

(BG) - Base Capitalization Grant

(D) - Dropped by Applicant

(H) - Housing Choice Communities

(PF) - Affordability Criteria

(RE) - Potential Renewable Energy Projects

(SG) - BIL CWSRF General Supplemental Grant

# - Projects contains Energy Efficiency, Renewable Energy and/or meets EPA's definition of a Green Project (<https://www.epa.gov/greeningepa/energy-and-emissions-epa>)

## X. CORRESPONDENCE

Date December 2023  
 PWS No. 4126000

**Monthly Weather Report**  
**Harwich Water Department**

Day	Snow Fall (in.) (Gallons)	Rain Fall (in.)	Temperature High (°F)	Temperature Low (°F)	Temperature AVG (°F)	Weather Comments	Operator
1		0.05	54	44	49		
2		0.03	51	44	48		
3		0.54	48	43	46		
4		0.04	52	44	48		
5		0.00	44	38	41		
6		0.05	39	33	36		
7		0.00	36	27	32		
8		0.00	42	26	34		
9		0.00	48	31	39		
10		0.15	56	43	49		
11		1.26	57	39	48		
12		0.00	43	33	38		
13		0.00	48	36	42		
14		0.00	39	28	34		
15		0.00	52	30	41		
16		0.00	51	39	45		
17		0.12	53	43	48		
18		0.73	58	47	53		
19		0.00	50	39	44		
20		0.00	42	38	40		
21		0.00	40	33	37		
22		0.00	39	26	32		
23		0.00	41	25	33		
24		0.00	47	36	41		
25		0.00	53	42	48		
26		0.00	50	43	46		
27		0.11	52	40	46		
28		0.92	55	48	51		
29		0.04	48	45	47		
30		0.07	47	40	44		
31		0.00	40	37	39		
<b>Total</b>		<b>4.11</b>					
<b>Average</b>		<b>0.13</b>	<b>47.6</b>	<b>37.4</b>			
<b>Max</b>		<b>1.26</b>	<b>58.3</b>	<b>47.6</b>			
<b>Min</b>		<b>0.0</b>	<b>36.3</b>	<b>24.8</b>			

0.74 December

2022

**Monthly Weather Report  
Harwich Water Department**

PWS No.

**4126000**

Day	Snow Fall (in.) (Gallons)	Rain Fall (in.)	Temperature High (°F)	Temperature Low (°F)	Temperature AVG (°F)	Weather Comments	Operator
1		0.75	48	36	42		
2		0.00	46	31	39		
3		0.00	55	45	50		
4		0.25	47	31	39		
5		0.00	47	28	37		
6		0.00	53	38	45		
7		0.22	57	52	55		
8		1.41	57	44	51		
9		0.00	45	40	43		
10		0.00	43	39	41		
11		0.06	41	38	40		
12		0.07	40	33	37		
13		0.01	41	32	37		
14		0.03	39	28	34		
15		0.06	44	35	40		
16		1.00	49	44	47		
17		0.55	49	37	43		
18		0.03	43	32	37		
19		0.00	41	33	37		
20		0.00	40	35	38		
21		0.00	41	30	35		
22		0.03	48	28	38		
23		0.31	55	26	41		
24		0.00	27	17	22		
25		0.00	27	17	22		
26		0.21	32	20	26		
27		0.20	37	26	31		
28		0.00	41	24	33		
29		0.08	47	33	40		
30		0.00	51	37	44		
31		0.90	54	44	49		
<b>Total</b>		<b>6.17</b>					
<b>Average</b>		<b>0.20</b>	<b>44.7</b>	<b>33.3</b>			
<b>Max</b>		<b>1.41</b>	<b>57.0</b>	<b>52.0</b>			
<b>Min</b>		<b>0.0</b>	<b>26.7</b>	<b>17.4</b>			



Month/Year December 2023

PWS No. 4126000

## Monthly Pumpage Report Harwich Water Department

Date	T1				T2			T3		T10	T11			
	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	24,565	35,073	27,192	70,502	30,750	37,243	91,159	71,174	70,988	77,750	68,586	69,315	86,117	75,126
2	41,833	59,702	46,913	121,320	50,715	61,143	156,417	123,499	117,410	129,293	117,815	119,007	141,987	127,633
3	22,398	31,947	24,985	64,653	27,284	32,978	83,347	65,556	63,511	69,919	63,005	63,629	75,959	68,743
4	25,268	36,066	28,985	71,909	31,702	38,700	93,408	72,799	73,756	80,814	70,380	71,122	88,606	77,185
5	31,113	44,414	33,949	85,149	40,188	49,848	110,709	67,311	66,726	73,860	80,987	81,823	99,875	88,363
6	37,109	52,856	41,125	101,450	48,465	60,102	131,593	57,941	58,398	63,689	55,974	56,561	69,357	61,361
7	24,263	34,506	25,664	68,376	30,444	37,408	88,993	69,365	68,717	75,126	66,776	67,476	81,516	72,933
8	25,061	35,573	26,630	70,573	31,718	38,718	91,367	71,340	71,578	78,066	68,900	69,625	84,782	75,508
9	25,445	36,187	28,268	71,436	31,793	39,292	92,906	72,461	72,953	79,478	70,069	70,819	85,741	76,945
10	25,799	36,728	29,845	72,568	32,114	39,875	94,349	73,619	74,297	81,059	71,231	71,994	87,081	78,217
11	24,793	35,319	29,015	70,405	30,414	38,226	91,331	71,312	70,836	78,258	68,754	69,481	83,731	75,300
12	25,596	36,455	27,307	72,335	32,022	39,478	93,882	73,015	72,015	80,114	70,625	71,375	87,439	77,428
13	24,187	34,349	26,104	68,526	29,934	36,827	88,612	69,339	67,325	75,332	66,746	67,441	84,408	72,917
14	24,463	34,734	25,212	69,089	30,160	37,266	89,515	70,072	68,038	76,371	67,483	68,176	85,446	73,852
15	24,326	34,591	26,904	68,931	29,926	37,080	89,289	69,877	68,134	76,166	67,318	67,998	85,339	73,699
16	27,628	39,238	31,452	78,119	34,249	42,469	101,573	79,203	78,654	87,567	77,389	78,183	97,196	9,575
17	34,745	49,434	39,425	97,724	43,347	54,149	126,938	98,645	100,979	111,477	43,861	44,313	123,094	0
18	34,837	49,708	41,412	97,960	42,888	54,339	127,336	98,954	100,940	112,284	0	0	123,347	78,435
19	35,568	50,745	40,694	99,981	44,439	55,629	129,832	100,893	104,138	114,964	0	0	126,163	110,856
20	31,710	45,210	34,544	90,032	39,323	48,752	116,502	90,706	91,579	101,706	44,734	28,762	112,488	99,055
21	26,502	37,684	28,158	74,816	32,943	40,957	96,738	75,542	75,303	84,255	73,097	73,853	92,885	80,235
22	25,483	36,273	26,730	71,593	31,870	39,559	92,973	72,447	71,361	79,715	69,883	70,615	87,595	76,611
23	25,244	35,849	26,388	70,839	31,574	39,123	91,973	71,734	70,614	78,300	69,183	69,916	85,851	75,884
24	25,692	36,583	28,456	72,052	31,930	39,708	93,576	73,023	72,936	80,103	70,554	71,296	87,603	77,499
25	25,260	35,982	28,688	71,311	31,257	38,940	92,201	72,069	70,773	78,843	69,375	70,127	85,778	76,114
26	25,192	35,838	28,604	71,099	30,912	38,629	91,990	71,849	70,424	78,397	69,377	70,142	85,057	76,107
27	26,042	37,027	29,624	73,481	32,349	40,359	95,317	74,396	73,938	82,020	70,444	71,178	89,923	78,762
28	25,058	35,710	29,153	71,117	30,689	38,623	92,079	71,988	71,193	78,866	69,308	70,067	88,093	76,049
29	25,557	36,388	28,865	72,243	31,493	39,290	93,562	73,188	72,509	80,451	70,662	71,479	89,975	77,662
30	25,465	36,387	28,819	72,405	31,550	39,337	93,482	73,075	72,457	80,473	70,708	71,517	89,934	77,754
31	26,007	37,088	28,012	73,294	32,252	40,186	95,335	74,333	74,479	82,350	71,838	72,610	91,932	78,957
Pumps :	852,213	1,213,645	947,121	2,405,288	1,060,695	1,314,234	3,118,282	2,370,725	2,356,962	2,607,065	2,015,062	2,019,900	2,884,298	2,324,765
MIN :	22,398	31,947	24,985	64,653	27,284	32,978	83,347	57,941	58,398	63,689	0	0	69,357	0
MAX :	41,833	59,702	46,913	121,320	50,715	61,143	156,417	123,499	117,410	129,293	117,815	119,007	141,987	127,633
STATIONS :	10,911,478				7,334,751			4,034,962		2,884,298		2,324,765		
TOTAL :	27,490,254													

Month/Year December 2022

PWS No. 4126000

## Monthly Pumpage Report Harwich Water Department

Date	T1							T2			T3		T10	T11
	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	27,804	22	31,793	51,938	36,565	45,793	0	64,070	67,460	0	64,824	64,257	80,157	70,150
2	43,088		49,149	81,030	57,015	71,351	0	99,031	104,330	0	99,846	98,917	123,929	108,544
3	42,578		47,296	77,242	54,322	68,361	7,533	98,977	104,243	0	100,875	99,943	124,388	108,819
4	40,776		46,659	75,458	53,594	67,030	0	93,554	98,671	0	94,730	93,871	116,736	102,097
5	38,297		43,764	70,702	50,357	62,858	0	88,341	93,119	0	89,322	88,521	109,828	96,308
6	37,658		43,027	69,580	49,229	61,686	0	96,046	100,942	0	119,037	117,955	96,109	60,515
7	36,461		41,885	67,425	47,670	59,885	0	84,162	88,676	0	83,633	82,867	100,290	90,885
8	34,059		38,907	63,117	44,605	56,013	0	78,002	82,106	0	78,455	77,768	97,271	85,480
9	35,344		40,509	66,094	46,801	58,650	0	81,585	85,959	0	82,041	81,322	101,546	88,767
10	34,323		39,057	63,602	45,124	56,478	0	78,810	82,950	0	79,724	79,041	98,730	86,462
11	49,292	22	57,339	89,622	64,076	79,816	0	115,803	121,828	0	115,965	114,916	142,417	124,713
12	35,311	5,722	40,208	65,746	46,590	57,895	0	81,078	85,335	0	81,864	81,152	101,345	88,593
13	35,386	16	40,106	65,948	46,623	58,349	0	80,862	85,203	0	81,950	81,243	101,412	88,677
14	34,573	16,259	45,958	73,720	53,137	65,625	0	95,935	100,462	0	98,516	98,159	98,736	116,304
15	52,213	34	52,837	83,191	59,373	73,861	0	104,808	110,026	0	106,795	105,277	154,376	104,985
16	33,836	29	38,730	63,050	44,553	55,759	0	77,434	81,468	0	78,593	77,911	97,300	85,001
17	35,209	24	40,129	65,601	46,423	58,177	0	80,767	85,071	0	81,809	81,120	101,165	88,545
18	34,599	13	39,166	64,195	45,643	56,933	0	79,287	83,423	0	80,169	79,511	99,421	86,897
19	52,584	21	59,981	96,209	68,780	85,528	0	122,312	128,665	0	122,841	121,764	150,369	157,640
20	31,044	23	35,468	57,462	40,878	51,018	0	100,902	105,766	0	72,255	71,621	88,948	77,953
21	35,209	17	40,098	65,440	46,480	57,906	0	104,328	109,713	0	82,089	81,340	100,896	57,916
22	34,785	28	39,534	64,707	46,052	57,434	0	87,585	92,117	0	80,997	80,321	99,861	87,610
23	35,031	7,514	40,211	65,175	46,182	57,716	0	80,637	84,825	0	76,571	80,954	101,012	88,390
24	60,672	0	66,490	111,658	79,762	99,113	0	140,780	148,087	0	74,337	73,739	172,240	153,640
25	42,273	0	47,303	78,346	55,811	69,537	0	96,951	102,140	0	0	0	120,205	106,800
26	49,316	6	55,566	91,799	65,092	81,427	0	112,745	118,857	0	0	0	140,783	124,147
27	58,232	29	66,174	109,122	77,102	96,510	0	101,607	106,941	0	32,568	32,289	160,712	111,616
28	58,874	16	67,088	108,392	77,167	96,226	0	136,444	143,579	0	79,378	78,707	170,837	220,370
29	34,234	24	39,034	63,786	45,262	56,556	0	78,694	82,911	0	79,693	79,030	98,637	86,167
30	46,871	26	65,624	106,443	75,677	94,377	0	132,416	139,393	0	131,961	134,717	118,170	155,598
31	42,152	41	37,529	59,710	42,437	53,146	0	75,058	79,086	0	77,653	73,210	141,766	71,040
<b>Pumps :</b>	<b>1,262,085</b>	<b>29,884</b>	<b>1,436,822</b>	<b>2,335,510</b>	<b>1,658,380</b>	<b>2,071,015</b>	<b>7,533</b>	<b>2,949,010</b>	<b>3,103,353</b>	<b>0</b>	<b>2,528,491</b>	<b>2,511,443</b>	<b>3,809,592</b>	<b>3,180,629</b>
<b>MIN :</b>	<b>31,044</b>	<b>0</b>	<b>35,468</b>	<b>57,462</b>	<b>40,878</b>	<b>51,018</b>	<b>0</b>	<b>75,058</b>	<b>79,086</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>88,948</b>	<b>57,916</b>
<b>MAX :</b>	<b>60,672</b>	<b>16,259</b>	<b>87,088</b>	<b>111,658</b>	<b>79,762</b>	<b>99,113</b>	<b>7,533</b>	<b>140,780</b>	<b>148,087</b>	<b>0</b>	<b>131,961</b>	<b>134,717</b>	<b>172,240</b>	<b>220,370</b>
<b>STATIONS :</b>	<b>8,801,029</b>							<b>6,052,383</b>			<b>5,039,934</b>		<b>3,809,592</b>	<b>3,180,629</b>
<b>TOTAL :</b>	<b>26,683,646</b>													

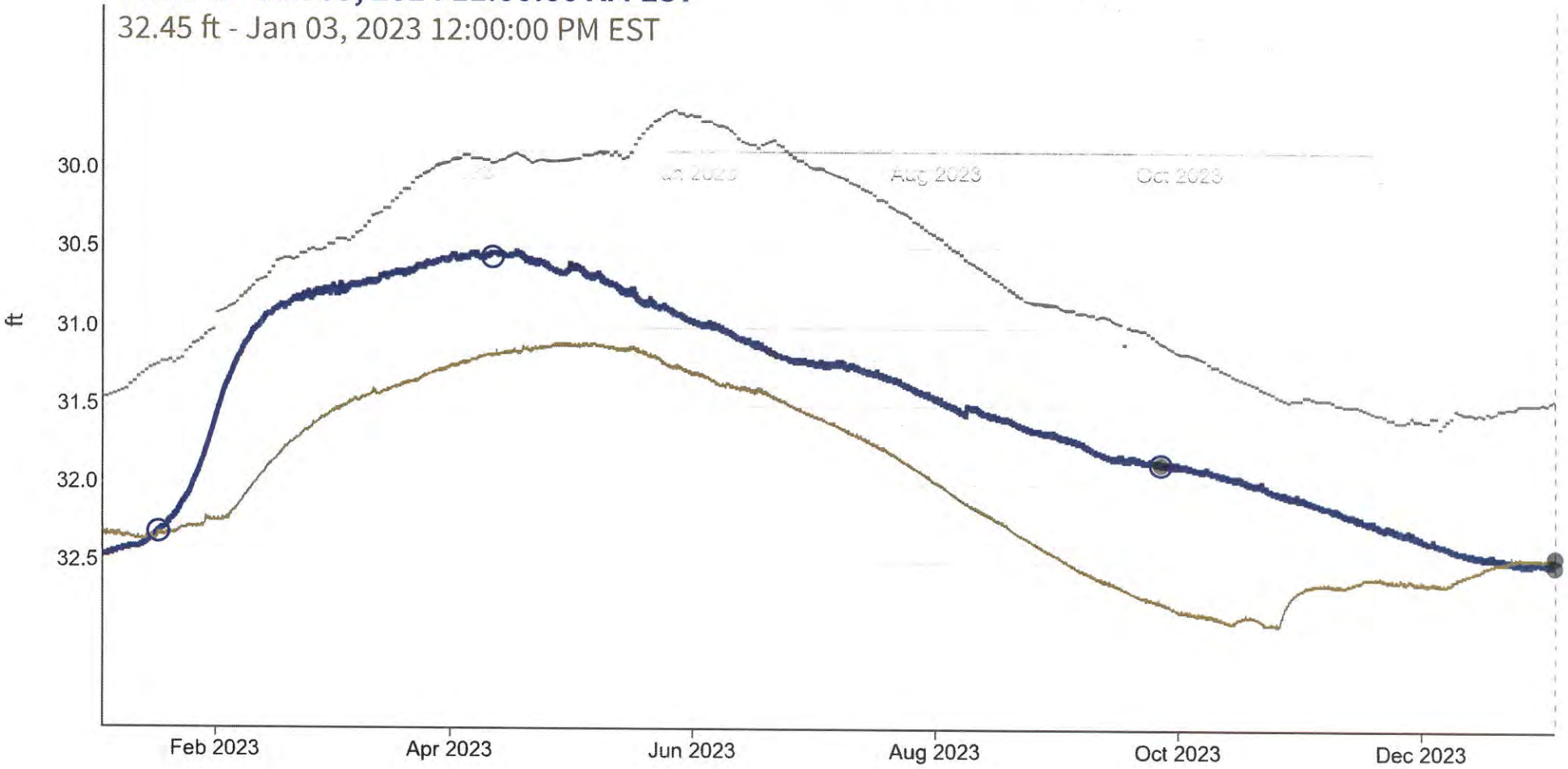
# Ma-Bmw 22R Brewster, MA - 414632070014901

January 3, 2023 - January 3, 2024

Depth to water level, feet below land surface

32.51 ft - Jan 03, 2024 11:00:00 AM EST

32.45 ft - Jan 03, 2023 12:00:00 PM EST



Ma-Bmw 22R Brewster, MA - 414632070014901

January 2002 – Present

### Depth to water level, ft below land surface, ft

