



Water Supply District of Acton

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Board of Water Commissioners and Finance Committee Meeting Agenda

Monday, June 26, 2023 @ 7:00 PM

Due to the COVID-19 Pandemic, meetings are being held virtually via Zoom

Please click the link below to join the webinar:

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Webinar ID: 822 6081 8149

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- **Comments from the public**
- **Introduction to Capital Strategic Solutions**
- **Approve minutes from the meetings of 6/5 and 6/13**
- **Appoint one Commissioner to sign warrants while conducting meetings virtually**

OLD BUSINESS:

- Per- and Polyfluoroalkyl Substances (PFAS)
 - Current sample data, if available
 - Discussion of Additional PFAS Upgrades
 - PFAS MDL Settlement Discussions
 - Bottled Water Rebate Update
- Rate Increase to Support Approved FY24 Budget
- Borrowing for PFAS Design, Kelley's Corner, BALDCO
- Update on BALDCO Acquisition
- Update on 549 Main Street

NEW BUSINESS:

- End of Fiscal Year Transfer to Lights, Power, and Fuel
- Proposed Scope of Work for Rate Study from Finance Committee
- Consumer Confidence Report for Calendar Year 2022
- Meeting Schedule July-December 2023

Any agenda item(s) which did not come to the attention of the Board of Water Commissioners 48 hours prior to this meeting and were not reasonably anticipated.

EXECUTIVE SESSION: -- To consider the purchase, exchange, lease of real property as an open meeting may have a detrimental effect on the negotiating position of the District

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Board of Water Commissioners
Meeting Minutes
Acton Water District
693 Massachusetts Avenue, Acton, MA
Monday, June 05, 2023

AGENDA

A. Comments from the public

B. Approve minutes from the meeting of 5/23

C. Appoint one Commissioner to sign warrants while conducting meetings virtually

D. OLD BUSINESS:

1. Per- and Polyfluoroalkyl Substances (PFAS)
 - Current sample data, if available
 - Discussion of Additional PFAS Upgrades
 - Comments on proposed USEPA Standards
2. Discussion of Outdoor Water Use Restrictions for 2023
3. Update on Baldco Acquisition
4. Kelley's Corner Project Update

E. NEW BUSINESS:

1. Low Income Household Water Assistance Program (LIHWAP)

Any agenda item(s) which did not come to the attention of the Water Commissioners 48 hours prior to this meeting and were not reasonably anticipated.

F. Executive Session-

To consider the purchase, exchange, lease of real property as an open meeting may have a detrimental effect on the negotiating position of the District.

Due to the Covid-19 stay-at-home order by Governor Charles Baker, the Board of Water Commissioners meeting was not held at the Acton Water District Office; instead, the meeting was held via Zoom Webinar and was recorded. The meeting was called to order at 7:00 PM on Monday, June 5, 2023, by Ms. Amir-Lin.

Present at Tonight's Meeting:

Commissioners: Erika Amir-Lin (Chair), Barry Rosen, and Stephen Stuntz

District Manager: Matthew Mostoller

District Treasurer: Christine McCarthy

District Counsel: Mary Bassett

Finance Committee: Ron Parenti

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Public Present:

Kim Kastens

Comments from the Public.

No comments this evening.

Approve Minutes from the meeting of 5/23.

Mr. Rosen moved to approve the meeting minutes of 5/23/2023. Ms. Amir-Lin seconded, and it was approved by a roll call vote:

Mr. Rosen- yes, Ms. Amir-Lin- yes, Mr. Stuntz- abstain

Appoint One Commissioner to Sign Warrants While Conducting Meetings Virtually.

Mr. Rosen moved to appoint Stephen Stuntz as the Commissioner to approve warrants while conducting meetings virtually until the next meeting of the Commissioners. Ms. Amir-Lin seconded, and it was unanimously approved by a roll call vote:

Mr. Rosen, Ms. Amir-Lin, Mr. Stuntz

OLD BUSINESS:1. Per- and Polyfluoroalkyl Substances (PFAS).

- Current sample data, if available
 - Discussion of Additional PFAS Upgrades
 - Comments on proposed USEPA Standards
-
- Current sample data, if available:

There is no new sample data available at this time.

However, Matt informed the Board that a tentative settlement has been reached in the multi-district lawsuit the District is part of. The settlement is \$1.8 billion and it is presumed that we will receive some sort of compensation from this settlement. Additional settlements may follow from other defendants. Mary stated it is key to have good records of what has been spent to date on PFAS treatment and what we are committed to. Barry asked how many litigants there are, and Matt said there were approximately 4,500 litigants at the last known count.

- Discussion of Additional PFAS Upgrades:

Matt informed the Board that he followed up with Jim Cray from Wright-Pierce last Friday. We are working with a tight timeline, however, he let Jim know that we do want to keep moving ahead with these projects. Jim should be sending Matt some information that was requested shortly. Christine is working on obtaining the financing for the design work for these projects.

- Comments on proposed USEPA Standards:

The District submitted a letter to the EPA expressing our comments and concerns regarding the proposed national PFAS standards. Erika apologized for not circulating a draft letter as she

intended due to work obligations and confusion over the deadline. She thanked staff for providing a good draft to begin with and that the submitted letter was a joint effort. A copy of the letter was provided in tonight's meeting packet. The MassDEP and others have also submitted comments to the EPA.

2. Discussion of Outdoor Water Use Restrictions for 2023

Matt informed the board that last week was a challenging week for us with large amounts of water being used in the evening hours and on the weekends. We are not seeing the level of compliance this season that we had seen the prior two seasons and it is still early on. On a local level, groundwater monitoring that takes place in Littleton shows that our local groundwater levels are showing stress. The Executive Office of Energy and Environmental Affairs is activating the Drought Task Force for a meeting this Thursday to assess conditions.

3. Update on Baldco Acquisition

Matt provided an update. The survey work is now complete. Three areas of apparent encroachments from abutters were identified. As part of the due diligence process we must provide the Seller a Title Notice- this was forwarded to Jason Wolfe on May 31st. The Sellers are not bound to correct the encroachments, rather both parties would need to come to an agreement on resolving them.

Steve asked if we are worried about any of the encroachments? Matt stated that one was previously known, the second one appears to be a minimal issue, and the third is in an area that is not typically accessed so we have not seen the extent. It appears that the area has been used to fill in the land and for equipment storage.

The phase II work for the environmental site assessment is the next task to be completed.

Matt also informed the Board that we have forwarded a draft lease agreement to Baldco. Erika noted that there are a lot of things in process and hopefully things will keep moving forward. Matt indicated that we have a tentative deadline for the closing of July 20th.

Since we have not received a response from Baldco on the Title Notice, we will not need to hold an executive session this evening.

4. Kelley's Corner Project Update

Matt informed the Board that the water main portion of the Kelley's Corner Project is progressing. We do not have a set project schedule as the water main work is being completed whenever possible within the larger project scope. District staff have remained in close contact with the contractor and report that other than the mishaps that occurred a couple of weeks ago, the contractor is being very conscientious.

Christine informed the Board that \$477,991.93 has been spent on the project this fiscal year to date. Additionally, we have applied for and received the \$235k ARPA fund reimbursement from

the Town of Acton. Christine is working with the District's Financial Advisor at UniBank Fiscal Advisory Services to borrow the \$1 million previously approved by voters at the 2022 Annual District meeting. The borrowing will take place in mid-July. Barry asked if this would be a short-term borrowing. Christine confirmed that yes, this borrowing will be a Bond Anticipation Note (likely a 3-month note, but ultimately dependent on the closing date) that we will convert to a Bond when we purchase the property at 549 Main Street later this year.

NEW BUSINESS:

1. Low Income Household Water Assistance Program (LIHWAP)

Christine provided the board with an update on the Low Income Household Water Assistance Program. We had 20 applicants in our vendor portal, 19 of whom are customers. Six applicants had outstanding balances on their water accounts and we have received a check for those balances which has been applied to the customer accounts. All 19 applicants are also eligible for a rate reduction payment which is currently \$200. This funding will be issued at a later date. The rate reduction funding was originally \$450 per applicant, however, due to the number of applicants that were anticipated, the benefit was reduced to \$200. There is a possibility that a second rate reduction payment will be issued if funds are available.

Erika asked about the applicant who is not a customer. Christine responded that we do not supply water to the property.

Matt mentioned to the board that the draft meeting schedule for the months of July to December has been circulated. He would like to finalize this, so he asked the board to send him their comments if they haven't already.

Mr. Rosen moved to adjourn the meeting at 7:44 PM. Mr. Stuntz seconded, and it was unanimously approved by a roll call vote:

Mr. Rosen, Ms. Amir-Lin, Mr. Stuntz

Next meeting: June 26, 2023

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Board of Water Commissioners
Meeting Minutes
Acton Water District
693 Massachusetts Avenue, Acton, MA
Tuesday, June 13, 2023

AGENDA

Comments from the public

NEW BUSINESS:

A. Approve Reserve Fund Transfer to Lights, Power and Fuel

Due to the Covid-19 stay-at-home order by Governor Charles Baker, the Board of Water Commissioners meeting was not held at the Acton Water District Office; instead, the meeting was held via Zoom Webinar and was recorded. The meeting was called to order at 08:06 AM on Tuesday, June 13, 2023, by Ms. Amir-Lin.

Present at Today's Meeting:

Commissioners: Erika Amir-Lin (Chair), Barry Rosen, and Stephen Stuntz

District Manager: Matthew Mostoller

District Treasurer: Christine McCarthy

District Counsel: Mary Bassett

Public Present:

Alissa Nicol

Comments from the Public

No comments this morning.

NEW BUSINESS:

A. Approve Reserve Fund Transfer to Lights, Power and Fuel

Mr. Mostoller explained the ongoing higher than expected energy costs during the current fiscal year. The Finance Committee unanimously supported this transfer during a recent meeting. This transfer will deplete the budgeted Reserve Fund line item. Mr. Rosen made a motion to transfer \$25,000 from the Reserve Fund budget line item to the Lights, Power and Fuel budget line item (all within the General Fund). Mr. Stuntz seconded, and it was unanimously approved by a roll call vote:

Mr. Rosen, Ms. Amir-Lin, Mr. Stuntz

Other new business:

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Atty. Mary Bassett informed the Board that she has been in contact with the Napoli Shkolnik Law Firm which is representing the District in the litigation regarding the perfluorinated chemicals contamination of the District's real property and groundwater supply. She has amended the retainer which results in lower fees to the District. A copy of the amended retainer will need to be signed by the Board.

Mr. Stuntz made a motion to accept the terms of the new retainer. Mr. Rosen seconded, and it was approved by a roll call vote:

Mr. Rosen, Ms. Amir-Lin, Mr. Stuntz

Mr. Stuntz moved to adjourn the meeting at 8:14 AM. Mr. Rosen seconded, and it was unanimously approved by a roll call vote:

Mr. Rosen, Ms. Amir-Lin, Mr. Stuntz

Next meeting: June 26, 2023

FY 2024 Budget and Estimated Revenue

EXPENSES	Actual FY 21				1st QTR		% Increase/decrease
	Actual FY 21	Actual FY 22	Budget FY 23	FY 23 Actual	Projected FY 23	FY 24 Proposed	
Audit/Accounting	17,500	17,800	22,000	1,000	20,000.00	20,000.00	-9%
Auto Maint & Fuel	46,943	50,000	52,000	8,176	52,000.00	52,000.00	0%
Short Term Debt	508,223	505,000	326,550	215,986	215,987.00	-	-100%
Long Term Debt	1,480,767	1,459,219	1,922,298	360,759	1,922,298.00	2,752,416.00	43%
Chemicals	75,000	91,772	120,000	35,267	130,000.00	160,000.00	33%
DEP Withdrawal	5,100	4,958	5,600	-	5,200.00	5,000.00	-11%
Employee Education	11,759	11,695	17,500	1,573	13,000.00	17,500.00	0%
Engineering	54,948	50,000	50,000	15,103	50,000.00	60,000.00	20%
Health/Life Insurance Active	314,660	281,469	320,000	60,061	285,318.00	287,896.48	9%
Health/Life Insurance Retiree				19,915	84,325.00	108,899.14	9%
Information Reports	29,430	31,897	45,000	25,028	32,000.00	50,000.00	11%
Insurance	86,718	93,478	110,000	97,667	100,000.00	118,800.00	8%
Laboratory Analysis	60,000	80,000	100,000	10,756	100,000.00	100,000.00	0%
Legal	54,060	58,247	75,000	11,181	50,000.00	75,000.00	0%
Lights/Power/Fuel	390,000	390,000	350,000	167,581	647,017.00	600,000.00	71%
Maintenance & Operations	460,239	347,667	471,000	59,080	350,000.00	420,000.00	-11%
Middlesex Retirement	256,971	268,502	293,362	288,240	288,240.00	330,838.00	13%
Meters	59,304	46,035	75,000	73,456	75,000.00	125,000.00	67%
Office Supplies	76,361	72,747	92,000	19,368	88,000.00	96,000.00	4%
Reserve Fund		30,000	100,000	-	100,000.00	100,000.00	0%
Salaries & Wages	1,401,658	1,462,763	1,677,658	356,599	1,521,884.00	1,727,988.00	3%
Total	5,389,641	5,353,247	6,224,968	1,826,806	6,130,269.00	7,187,337.62	15%

REVENUE							
Water Revenue	2,748,837	2,697,721	2,619,178	2,154,727	2,877,878	3,084,794.51	
Service Fee	544,500	528,960	528,960	205,425	538,200	544,500.00	
Debt Fee	2,178,000	2,115,840	2,115,840	821,700	2,152,800	2,752,629.00	
Total Water Revenue	5,471,337	5,342,521	5,263,978	3,181,852	5,568,878	6,381,924	
Fire Protection Sprinklers	40,420	41,643	40,420	36,012	41,500	41,000	
Rent/Lease	149,500	122,354	446,570	209,453	668,375	493,570	
Repairs/Installation	79,353	64,623	50,000	10,873	50,000	50,000	
Cross Connection	21,341	23,634	24,000	8,733	21,060	21,000	
Demand Fees	145,360	563,300	300,000	70,000	300,000	300,000	
Mitigation Fees	25,514	125,000	100,000	28,523	100,000	100,000	
Total Other Revenue	461,488	940,564	960,990	363,594	1,180,875	1,005,570	
Total	5,932,825	6,283,085	6,224,968	3,545,446	6,749,753	7,387,494	200,155.89

2023 Proposed Warrant Articles:

Borrow for W. Acton ACO	955,000
Borrow for SAWTP PFAS	8,700,000
Borrow for CAWTP PFAS	5,420,000
Borrow to construct Bedrock Wells- 549 Main Street	2,400,000
Borrow to purchase 104 Powder Mill Road Rear	180,000
Borrow to purchase 549 Main Street	4,900,000
Total	\$ 22,555,000

from OPEB Trust Fund	Retirees Health Ins	84,325 (FY 23 Amount)
from Mitigation Fund:	Annual Approp	100,000
from Grace Fund:	Filter M&O	125,000
from Free Cash:	Clean & Rehab Wells	100,000
	Emergency Main Breaks	30,000
	Media Replacement	100,000
	New Service Meter Installations RF	25,000
	Replace Old Mains	30,000
	Article 97 Stabilization Fund	25,104
	Lights, Power & Fuel	150,000
	Water Mains	400,000
Total		\$ 860,104

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Revenue Estimate FY 23	July billing	1,481,203	
	October billing	1,700,649	
	January billing	1,285,478	
	April billing	1,187,028	Projected
	Fire Protection	41,500	
	Repairs/Misc	50,000	
	Cross Conn	21,000	
	Rent	668,375	
	Mitigation	100,000	
	Demand	300,000	
	Projected Income	6,835,231	604,962 Surplus FY 23
	Units	9,075	
	Services	6,838	← as of 10/28/22
6/30/2022 Free Cash		994,800	
	Appropriations	660,104	
	Free Cash Balance	334,696	Balance after appropriations
6/30/2022 Grace Unappropriated		584,292	
	Filter M&O	125,000	
	Grace Balance	459,292	Balance after appropriations
Total		3,000,956	← 3,085,794.51



Water Supply District of Acton

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June 26, 2023

TO: Finance Committee & Board of Water Commissioners
FROM: Matthew Mostoller, District Manager
CC: Christine M. McCarthy, District Treasurer/Collector

RE: Request for FY '23 End-of-Year Budget Transfer

We respectfully request your recommendation for approval of the following appropriation transfer from the Debt, Interest and Fees line item to the Lights, Power & Fuel line item- \$150,000.

Background: The approved FY '23 Budget appropriated \$350,000 to the Lights, Power, and Fuel line item. The escalating cost of electricity and natural gas has been a challenge this entire fiscal year. To date, the following additional appropriations have been made to Lights, Power, and Fuel:

- February 2023: \$75,000 from the Reserve Fund
- Annual Meeting: \$150,000 appropriated from Certified Free Cash (Surplus Revenue)
- June 2023: \$25,000 from the Reserve Fund

The original budget appropriation of \$350,000 plus the two transfers from the Reserve Fund and the annual meeting appropriation total \$600,000. As of June 1, 2023, \$561,396.30 had been spent on utility costs, and the balance for the Lights, Power and Fuel line item was \$38,603.70. The invoices received in June for the May 2023 readings totaled \$95,445.09, which put the District over budget by \$56,841.39.

Staff have reviewed the electric and gas invoices that have been received for the past five years to obtain an average and we are estimating that an additional \$150,000 will be needed to cover the shortfall for the May 2023 invoices and the estimated amount needed for the June 2023 invoices. We anticipate receiving the invoices for the June 2023 readings during the first two weeks of July 2023.

The Reserve Fund, which the Water Supply District of Acton established and funded as a line item in the annual budget, has been fully expended for FY 23. However, the alternative-year-end budget transfer procedure under G.L. c. 44, §33B, states “during May and June, and the first 15 days of July of the new fiscal year, the selectboard, with the agreement of the finance committee, may transfer any amount from a departmental or other appropriation to any other appropriation...An end-of-year transfer using this alternative procedure requires a majority vote of the selectboard and a majority vote of the finance committee.” (Bureau of Municipal Finance Law Informational Guideline Release (IGR) No. 17-13, May 2017, <https://www.mass.gov/files/documents/2017/09/11/igr17-13.pdf>)

As a District, the end-of-year transfer using this alternative procedure requires a majority vote of the Board of Commissioners and a majority vote of the finance committee.

Thank you for your consideration.

DRAFT 6/17/23
WATER RATE STUDY

BACKGROUND

At the 2023 AWD Annual Meeting a non-binding resolution was passed recommending that AWD commission an expert to advise the AWD in structuring future water rates. At a subsequent Commissioner's meeting the Finance Committee was asked to draft a Scope of Work for a water study.

Over the last several years the Commissioners, Finance Committee, and interested parties such as Green Acton have discussed the water rate model used by AWD to set water rates. The current model has a fixed service fee (\$15 per quarter), essentially a per meter charge, a debt service fee (\$60 per quarter) also essentially a per meter charge, and a volume rate which varies by season (winter/summer) and by volume (an increasing block rate structure). The winter rate starts at \$0.04 per cubic foot (\$0.005 per gallon) for the first 1,500 ft³ and increases in 1,500 ft³ increments to \$0.087 per cubic foot (\$0.012 per gallon) at 6,000 ft³. The summer rate starts at \$0.048 per cubic foot (\$0.006 per gallon) and peaks at \$0.095 ft³ (\$0.013 per gallon) at the same block volumes.

In recent years the debt service fee component has increased substantially as AWD has built and financed treatment plants to address water quality issues. AWD is currently incurring debt to build treatment plants to address PFAS contamination. As of today, there is an unusual amount of uncertainty about regulatory limits and therefore the level of future capital spending to meet those regulations. It seems likely that additional spending will be required.

There is a strong consensus among interested parties for AWD to deliver high quality water as needed by its customers and to fairly charge customers for its (growing) cost. However, there is disagreement in the community about what is a fair or optimal pricing method. Therefore, the principal objective for this project's Scope of Work is to obtain an independent expert opinion about the optimal structure of AWD's water rates which takes into account the various considerations.

SCOPE OF WORK

The consultant will recommend a water pricing policy for AWD and develop a rate model which optimizes around the consultant's proposed pricing policy. The consultant will (a) provide an assessment of the benefits and drawbacks of volume rates, fixed fees, seasonal rates, and an increasing block rate structure and (b) will provide guidance on the Related Questions listed below. The project's "deliverables" will include a written report with the consultant's conclusions and supporting research and analysis of the topics mentioned in the previous sentence. After its final report is issued the consultant will make a public presentation at a Commissioners' Meeting to report and explain its conclusions.

The consultant will perform research and analysis as is typically conducted in a municipal water rate study. This will include seeking community input about what AWD's pricing policy objectives should be. This process should include interviews with the AWD Commissioners, AWD Finance Committee, key AWD staff, the Acton Water Resources Advisory Committee, Green Acton and other interested parties; b) holding a public forum about water rates; and c) conducting a survey of AWD customers.

This project is expected to be completed in 90 days from the date the consultant is retained. The consultant will communicate with the Commissioners and Finance Committee at least monthly on the progress of this project.

RELATED QUESTIONS

The following are questions which have arisen in discussions about AWD's water rates.

- 1) What is the effect of the current block-rate structure on water demand?
 - a. Customer price sensitivity to water rates that increase with water usage
 - b. Effectiveness of current block rates to encourage water conservation
- 2) What are the financial impacts of the current fixed-fee approach to offset debt service costs?
 - a. Survey of fixed-fee billing strategies in other Massachusetts towns ~~delete~~ nationally
 - b. Cost ratios for the volume block-rate and fixed-fee water bill components as a function of water usage
 - c. Safety from financial stress caused by revenue fluctuations, examples of volume-based rates causing material issues
 - d. Financial burden of large debt-service fees on low-income customers
- 3) Would an alternative rate structure be more effective and more equitable?
 - a. Use of a more aggressive block rate structure to promote water conservation
 - b. Use of separate summer and winter rates to reduce outdoor water usage during the summer and to better allocate the higher cost to summer water users
 - c. Replacement of the current billing structure with a 100% volume-based rate structure
 - d. Desirability of a stabilization fund, does it change if fixed rates are eliminated
 - e. Alternative cost mitigation strategies for low-income customers
- 4) How would the pricing model change if future water quality regulations are more restrictive and lead to
 - a. Continuing long-range capital and M&O cost increases to maintain treatment facilities
 - b. Transition to the MWRA system with substantial capital costs and eventually excess land and equipment
- 5) Would the following debt service recovery model be feasible? For each billing period, once the total actual volume of water sold by AWD is known, the debt service rate per cubic foot is calculated and charged to customers based on volume purchased

POSSIBLE VENDORS

An internet search identified several consulting firms which provide water rate studies. Only one, Raftelis Financial Consultants, Inc. located in Natick, MA serves New England. The following is from the Raftellis website <https://www.raftelis.com/capabilities/finance/rate-charge-fee-studies/>

Identification of Pricing Objectives

Raftelis works with you to develop pricing objectives that deliver the rate structure that best meets your strategic and operational goals. These objectives range from promoting water conservation to addressing affordability concerns to promoting economic development and more.

Customized Rate/Fee Structures

We have developed thousands of customized rate structures and fees to meet the specific needs and goals of our clients and their stakeholders. There is no one-size-fits-all solution, and we use our experience to help you determine the optimal rate structure for your agency.

Development of a Comprehensive Financial Plan

Utility rates and municipal fees are set based on revenue requirements and the number of accounts from which these costs must be recovered. We have a proven, data-driven method of forecasting costs and customer data to inform the rate-setting process. We work with you to execute this within a comprehensive, reliable, and flexible financial plan. Our financial plans forecast system operations and maintenance (O&M) costs, capital needs, and customer use, and monitor your overall financial performance.

Model Development and Rate/Fee Alternatives

Developing utility rates and municipal fees requires sophisticated models to project your organization's revenue requirements and customer data, allocate costs appropriately, and allow for the evaluation of multiple rate structure alternatives. We develop customized, non-proprietary financial models that are user-friendly and flexible so you can use them for future financial planning and rate setting.

Gaining Buy-In and Adoption

Your rate or fee structure must be approved by your governing body, so we don't just design a sound rate, we bring you communication and outreach experts to help you build understanding and support for new rates and fees. We help you "show not tell" and demonstrate the true value of the services and the comprehensive analysis behind our recommended rates, to ensure broad stakeholder buy-in and adoption.

Acton Water District

SUMMER 2023

Water Words Notice

Greetings and thank you for your interest in the Acton Water District. This newsletter contains a variety of important information regarding your drinking water, the system that supplies it, and the people who manage it. Most notably, it serves as our annual Consumer Confidence Report, which contains a summary of water quality results for the previous year. Please read it carefully and contact us with any questions you may have regarding water quality or the District's operation. Our staff is ready and willing to speak with you!

After more than 13 years of service as the Environmental Manager, I am pleased to now serve the community as District Manager. My hope is to build on the planning work we have done around Per- and Polyfluoroalkyl Substances (PFAS), continue to build our staff in the face of retirements, and provide a sustainable water supply for the community. In revisiting my "Welcome to the District" article in the 2009 summer *WaterWords*, <https://tinyurl.com/bdyv37cv>, my desire to utilize my interests and abilities to better the community remain strong even though I no longer live in Acton!

With my promotion, I would like to recognize the former District Manager, Chris Allen, who came to the District on July 30, 2007 and is retiring after 16 years of service. Prior to coming to Acton, Chris worked for the public water systems in Littleton and Worcester; he served in the Navy before joining the water works industry. Chris was tasked with implementing an ambitious capital improvement plan, resulting in three major treatment plants, numerous distribution systems improvements, and a framework for ensuring adequate water supply for the community. I appreciated my time working with Chris and want to thank him for the opportunities he provided me and recognize his commitment to the District as an organization and the community at large.

Efforts to address PFAS in our water supply continue with regular updates provided on our dedicated PFAS webpage, <https://www.actonwater.com/pfas>. The Assabet 3 well was activated in February, increasing the available volume of water we can produce while also helping to dilute the PFAS concentrations at our South Acton Water Treatment Plant (SAWTP). The



The Massachusetts Department of Environmental Protection (MassDEP) recently awarded the District for its water conservation efforts. Pictured left to right are State Senator Jamie Eldridge; State Representative Dan Sena; EPA Region 1 Associate Director of Drinking Water Jane Downing; MassDEP Commissioner Bonnie Heiple; District officials Matthew Mostoller, Steven Stuntz, Christine McCarthy and Alexandra Wahlstrom; MassDEP official Paula Caron; and MWWA President Mark Warren.

contract for installing PFAS filtration via Granular Activated Carbon (GAC) at the North Acton Water Treatment plant (NAWTP) has been awarded; the contractor expects to mobilize in July. Most importantly, voters approved articles at our Annual Meeting in March to construct PFAS upgrades at the Central Acton Water Treatment Plant (CAWTP) and SAWTP. District staff are working with consulting engineers towards the design of these upgrades with anticipated bidding of the construction contracts in 2024.

In the meantime, we continue to manage our sources to reduce exposure to PFAS via drinking water; however, this results in a reduced quantity of water that is available for customer use. Your continued efforts to reduce non-essential water use are appreciated and play a critical role in our ability to meet customer demand. As a result of the impressive work in the community to use water efficiently, the Massachusetts Department of Environmental Protection (MassDEP) recognized the District at Drinking Water Awards Day on May 11th at the State House for outstanding performance in Water Conservation for 2022. Staff and elected officials from the District were on hand, along with Senator Jamie Eldridge and Representative

continued on page 2

Greetings

continued from page 1

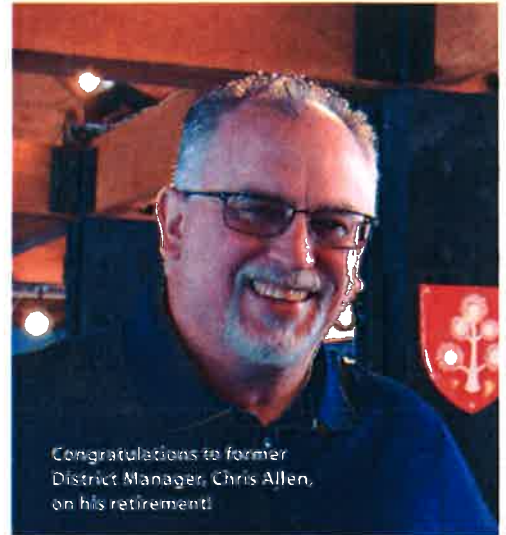
Dan Sena. Ongoing recognition of our conservation and efficiency programs is a testament to the partnership we have with you, our water users, and we are thankful for your support and cooperation.

Our work is made better by your feedback, participation in our proceedings, and general engagement around water. Please contact us via phone, email, Twitter, web inquiry, or, if you subscribe, our WaterSmart program, with any questions or comments you may have, or suggestions you may wish to make. Thank you!

Respectfully submitted,



Matthew Mostoller
District Manager



Congratulations to former District Manager, Chris Allen, on his retirement!



Congratulations to our raffle winners who took home more than just some knowledge after our Open House!

Celebrating our Water Resources on Earth Day

In honor of the importance of our local water resources, the District celebrated Earth Day by hosting an open house at our recently completed Central Acton Water Treatment Plant (CAWTP) on April 22nd. This facility, which can treat up to one million gallons of water per day, is designed to remove the naturally occurring iron and manganese from our Conant I and II sources and helps ensure the reliability of the District's water supply.

More than 60 attendees joined us for treatment facility tours, land tours of 549 Main Street, educational displays, and giveaways. All three of the treatment facility tours were led by Jim Cray of Wright-Pierce, the engineering firm that designed and oversaw construction of the CAWTP. Participants were able to get a behind-the-scenes look at the inner workings of this facility and got to see first-hand much of the equipment and instrumentation involved in the processes utilized to ensure clean, healthy water makes its way to our consumer's taps from the CAWTP. Meanwhile, two

walking tours of 549 Main Street were given jointly by Dr. Brewster Conant, Jr. and District Manager, Matthew Mostoller. Attendees were able to see several of the natural, water supply, and historical resources this property affords while learning more about its future value as it relates to open space and recreation.

For those in between tours, materials relating to water conservation and efficiency, water quality, and water system components were displayed throughout the facility with District staff available to field questions. We even gave a demonstration of our groundwater model to some young scientists! Additionally, the District raffled off a rain barrel, a WaterSense-labeled dual flush toilet, and a WaterSense-labeled rain showerhead to three lucky open house attendees. A big congratulations to our winners, Martha Morrison, Sharon Gruet, and Paul Moryka! Thank you to our partner organizations and all who attended to make this open house a success.

Outdoor Water Use Reminder

With the growing season in full swing and the official start of summer on the horizon, we'd like to remind our customers that seasonal outdoor water use restrictions are in effect until further notice. Most notably, the one day per week lawn watering restriction that was first implemented in April 2021 remains in place. As ongoing impacts from PFAS necessitate operating some sources of supply at a reduced capacity, we appreciate all customers abiding by these guidelines to help ensure a safe, sufficient, and reliable supply of water for the community.

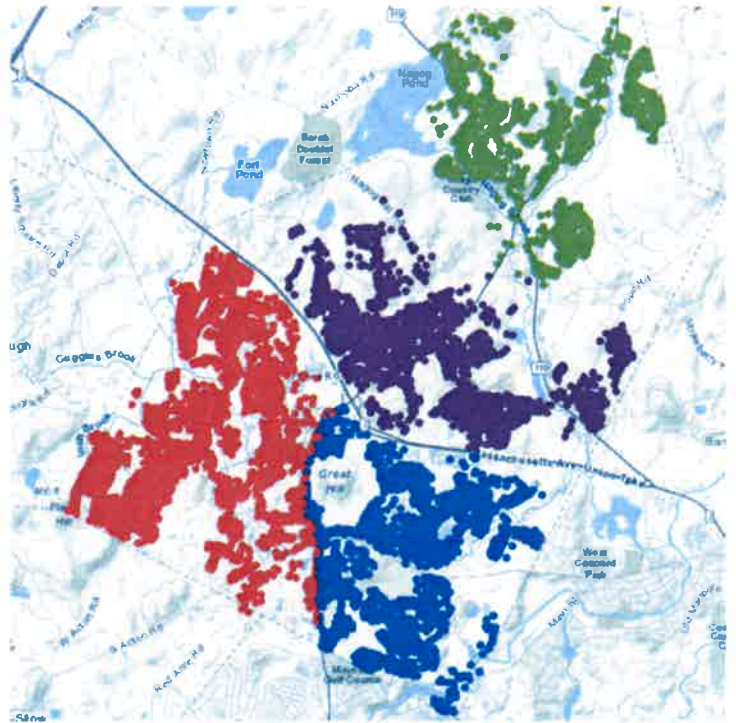
Lawn watering via above ground sprinklers and automated inground irrigation systems is limited to one day per week before 7am and after 7pm based on

Lawn Watering, one day per week, before 7am and after 7pm

- Tuesday:** North Acton—North of Brook Street including Great Road from Brook Street to Littleton line
- Wednesday:** Acton Center/East Acton—North of Route 2 to South of Brook Street (562 Main Street follows this schedule) including Pope Road and Great Road to Concord line
- Thursday:** West Acton—South of Route 2 and West of Main Street (even side of Main Street follows this schedule)
- Friday:** South Acton—South of Route 2 and East of Main Street (odd side of Main Street follows this schedule)

address. All other outdoor water uses are limited to odd/even days by street number. **No outdoor water use is permitted on Mondays.** Any violations will be subject to a fine of up to \$200 per incident.

We thank you for your cooperation and any water conservation efforts that you make. Updates on the status of our outdoor water use restrictions will be communicated on our website, through our WaterSmart program, and via Twitter [@ActonWater](#). Read on for answers to some of the most frequently asked questions about our outdoor water use restriction program.



Water Use Restriction FAQ's

Q: Are there any exceptions for watering new lawns?

A: No. The one day per week lawn watering restriction applies equally to both new and established lawns. The District does not have a waiver program; however, hand watering can be done on your odd/even days to keep the new installation moist in between your designated lawn irrigation day.

Q: How do I determine my lawn watering day?

A: To find your lawn watering day, please visit our website at <https://www.actonwater.com/conservation/outdoor-water-restrictions>.

Q: Can I water my garden/fill my pool/wash my vehicle?

A: All other outdoor water uses including watering gardens, filling or topping off pools, power washing, vehicle washing, and recreation are permitted on odd/even days by street number. Even addresses may use water outdoors on Tuesday, Thursday, and Saturday while odd addresses may use water outdoors Wednesday, Friday, and Sunday. No outdoor water use is permitted on Mondays.

Q: I've seen others not abiding by the outdoor water use restrictions. How can I report them?

A: You may report suspected water use restriction violations by calling our office at 978-263-9107, emailing alex@actonwater.com, or using our non-emergency online reporting form at <https://actonwater.com/customer-service/reporting-form>. District staff will follow up on all reports.

Beyond the Classroom

For the first time in four years, we had the pleasure of once again hosting an intern from the Acton-Boxborough Regional High School through the Senior Internship Program administered by Genevieve Hammond, the Senior Career Activities Coordinator. This year, Kara McEnery was paired with our Environmental Analyst for three weeks in May before she heads off to Arizona State University in Tempe, Arizona this fall. Kara plans on majoring in chemistry and minoring in forensics at ASU and her love of chemistry is what drew her to interning with the District.

During her time with us, Kara gained experience with water quality sampling, laboratory analyses, and data management. She participated in some of our public education and outreach efforts when she joined us for presentations to 5th grade students at the Gates School (where she was once a student!) and helped facilitate our spring lead and copper customer sampling program. According to Kara, her favorite part of the internship was “being in the lab, testing different water samples for minerals. I didn’t know how much chemistry was involved in water treatment, but I am very grateful I have gotten the chance to learn about it.” We thank Kara for all her assistance and wish her the very best as she takes on new challenges and opportunities at ASU!



Senior intern, Kara McEnery analyzing water quality samples and assisting in sludge sampling!

A Finance Committee Farewell

The Finance Committee is an advisory committee to the Board of Water Commissioners, made up of three appointed members.



During our annual reorganization on May 8th following Town elections, the District Moderator appointed a new Finance Committee member, John Petersen. This was a position previously held by Charles “Chuck” Bradley. Chuck began his tenure on the committee in 1990 and has provided 33 years of dedicated service! Thank you to Chuck for your time and financial acumen over the years and welcome to the team, John.

FY24 Rate Increase

The District has made tremendous progress in providing the Town of Acton with a resilient and sustainable water system. Much work remains as it relates to PFAS and addressing aging underground infrastructure. The staff and elected officials responsible for this work are ever mindful of the impact this has on our water users and rate payers. To that end, we try to implement cost effective solutions and pursue opportunities to offset or recoup the cost of the service we provide outside of water rates and fees. This can be done through low or zero interest loans, grants, legislative earmarks, lease arrangements, legal actions, and making strategic improvements to the water system. Nonetheless, supplying an essential service like drinking water entails a variety of goods and services. Due to the rising costs that we incur, no matter the global circumstances, periodic rate increases are necessary for sustainability of the water supply. The approved budget for the 2024 fiscal year, which begins on July 1st, calls for a 2.5% rate increase. The District remains committed to helping our customers use water efficiently and reducing the financial burden. If you have questions about your water bill or ways to reduce your water use, please contact our office during normal working hours. Monday-Friday, 7:30am–4pm or check our website. If you haven’t already, you can also subscribe to WaterSmart to track your historical usage and billing and receive alerts for leaks and other abnormalities. Many District announcements are sent via electronic mail through WaterSmart’s customer portal, and the program facilitates paperless bill pay. Visit <https://www.actonwater.com/customer-service/watersmart> for more information or to enroll in the program free of charge.

Developing a Comprehensive Service Line Inventory: We Need Your Help!

On December 22, 2020, the U.S. Environmental Protection Agency (EPA) finalized the first major update to the Lead and Copper Rule (LCR) in nearly 30 years. One key component of this update is the requirement for public water systems to develop an initial service line inventory by October 16, 2024. Establishing an inventory of service line materials and identifying the location of any lead components is a necessary foundation for removing lead and protecting public health.

A service line is the pipe that brings water from the water main in the street into a building, and generally consists of two parts; the “public” side, which runs from the main to the curb stop and the “private” side, which runs from the curb stop into the building. District staff began proactively developing our initial service line inventory in early 2022 by reviewing available records, consulting with current and former staff, and conducting field identifications during meter appointments. Based on this review, copper and plastic are the most common service line materials. Galvanized iron was used historically but represents a small percentage of the more than 6,400 service lines in our community. *There are no lead service lines in our distribution system.*

While we have made progress in developing our initial inventory, data gaps remain. To help fill in some of these gaps and make our inventory more robust, the District invites our customers to use the Mass Lead Service Line Identification (MA-LSLI) Web App. This web-based application was developed by the Massachusetts Department of Environmental Protection (MassDEP) for consumers to submit information on their service line material to their public water supplier. You can access the MA-LSLI Web App by scanning the QR code to the left or visiting the following link—<https://app.smartsheet.com/b/form/19ee39b7972f-443ca63e8b936cd7f92b>. The app may be accessed on any mobile device, tablet or computer with internet access and does not require you to download anything. All you need to do is take a photo of your service line, upload it to the app’s website and answer a few basic questions. Be sure to select *Acton* as the City/Town and *Acton Water Supply District* as Your Water Supplier to ensure your submission is received.

If you are having difficulty identifying your service line material or navigating MassDEP’s web app, you can schedule a service line identification appointment with District staff instead. To do so, please send an email to alex@actonwater.com with “Service Line ID Appointment” in the subject line



From this MA-LSLI submission, we were able to identify the private side of this customer’s service line as plastic.

and include your name and address in the body of the email. We look forward to your interest and participation in this important water system inventory project!

How to Self-Identify Your Service Line



Galvanized: A dull, silver-gray color. Strong magnets will typically cling to galvanized pipes.



Copper: The color of a copper penny.



Plastic: Usually blue or black rigid pipe.

1. Find your water meter, which is typically located in the basement.
2. Look for the pipe that comes through the outside wall of your home and connects to your water meter. (Note: You may need to wipe this pipe with a rag to remove dust, etc.)
3. Evaluate the color of this pipe. Does it appear to be plastic or metal?
4. If the pipe appears to be metal and you cannot determine the material by color alone, place a strong magnet on the pipe.
 - a. If the magnet sticks, your pipe is likely *galvanized steel*.
 - b. If the magnet does not stick, your pipe is likely *copper*.

Note: Please do not attempt to scratch your service line for identification purposes. Depending on the material, this may damage the pipe and result in a leak.



Water Words Notice is published twice a year for all customers of the Acton Water District

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Welcome Aboard!

This spring, we were able to welcome a new employee to our operations group to help meet our current staffing needs. Joel Gilbert joined the District in April 2023 as a Treatment Systems Operator. After graduating from UMass Amherst with a degree in Business Administration, Joel later went on to work for the Town of Pepperell for a decade. His six years there as a Laborer in the Sewer Division followed by four years as an Operator in the Water Division make him a well-rounded employee and ready to hit the ground running in Acton. His outgoing personality and helpful nature are added assets. If you see Joel in your neighborhood or at our office, please say hello!



What is it?

Please email your answers to webgeek@ActonWater.com. Winners (and the correct answer) will be posted in the next *Water Words Notice*. Customers with a correct answer, as determined by AWD staff, may receive a prize—in addition to the fame of having your name published in this space!



Jump Into Pool Efficiency

While your pool may be your favorite place to relax and keep cool during the warmer months, it could be sending water and money down the drain if not managed with water efficiency in mind. Pools can consume water through evaporation, leaks, splashing, and filter backwashing. Luckily, EPA's WaterSense program recently released their Jump Into Pool Water Efficiency guide (<https://www.epa.gov/system/files/documents/2022-09/ws-outdoor-pool-guide.pdf>) to help residential pool owners and maintenance professionals understand and minimize pool water use by implementing water-efficient practices. Check out this resource to learn more, including how certain pool covers can reduce evaporation by more than 90 percent, how filter selection can impact your backwash frequency and reduce the risk of leaks, and how to conduct a DIY leak test on your pool!



Report on Water Quality

SUMMER 2023 PWS 2002000

Acton Water District

Testing for Your Drinking Water

To ensure that tap water is safe to drink, the United States Environmental Protection Agency (EPA) prescribes regulations that limit the amounts of certain contaminants in water provided by public water systems.

In 2022, water supplied by the Acton Water District (AWD) met most EPA, state, and our own local drinking water health standards for chemicals regulated under the Safe Drinking Water Act (SDWA). Of note was the exceedance of the recently adopted Massachusetts maximum contaminant level for per- and polyfluoroalkyl substances (PFAS). This report is a snapshot of water quality in 2022. Included are details about where your water comes from, what it contains, how it is treated and distributed, and how it compares to standards set by the EPA.

The AWD works diligently to safeguard your water supplies by employing multiple barriers for protection, including source water protection, distribution system protection, ongoing monitoring, and treatment. Last year, we collected more than 650 samples and tested them for more than 100 different potential drinking water contaminants.

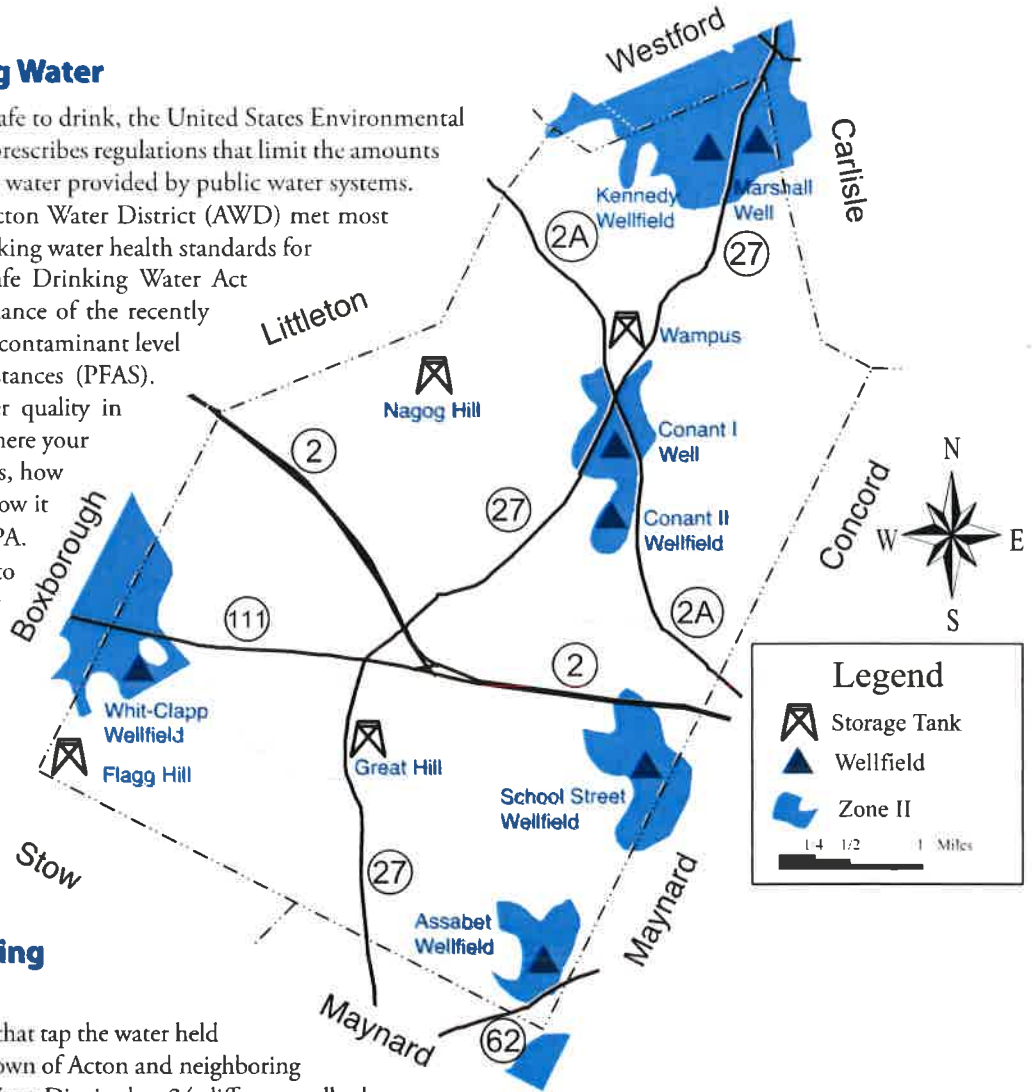
The Source of Your Drinking Water

Your water comes from wells that tap the water held in the ground beneath the town of Acton and neighboring communities. The Acton Water District has 24 different wells that withdraw water from seven wellfields located in various parts of town. Water from each well is pumped to treatment facilities located in each of the various wellfields, and then into the distribution system (a network of over 135 miles of water mains, four storage tanks, and more than 1,100 fire hydrants), where it blends together and is delivered to homes, businesses, schools, and other public users. The map on this page shows the various storage tanks, wellfields, and the critical protective radius (called the Zone II) around each wellfield.

Protection for Your Drinking Water

The Acton Water District employs three important “barriers” to maintain the highest possible quality of drinking water:

- A protective area called the Zone II surrounds each of Acton’s wells. Land use activities that could adversely affect water quality are restricted within the Zone II area.
- Each of Acton’s wells is treated in order to remove impurities and improve the taste of the water. Water treatment specifics are listed on page 9.
- The system of pipes that delivers water to your home is protected by a program that works to minimize “cross connections” between potable (intended for human consumption) and non-potable water. An example of a cross connection is a point where a drinking water pipe might connect to a fire suppression system or to an outside irrigation system.



Water Quality Data Table

The data presented in the table below are from calendar year 2022 unless otherwise noted. Only compounds that were detected in the water delivered to customers are reported in this table. Because water from all wellfields is blended within the distribution system, these data represent the range of water quality across all wellfields.

Substance (units)	Range of Detects	Level Allowed (MCL)	Goal (MCLG)	Typical Source	Exceeds MCL?
Regulated Substances (MCL has been established)					
Alpha Emitters (pCi/L)	0.7	15	0	Erosion of natural deposits	No
Barium (ppm)	0.01–0.05	2	2	Erosion of natural deposits	No
Chlorine (ppm)	0.01 - 1.64 Highest RAA: 0.19	4 (MRDL)	4 (MRDLG)	Water additive used to control microbes	No
Combined Radium (pCi/L)	0.2	5	0	Erosion of natural deposits	No
Fluoride (ppm) *	0–1.0	4	4	Water additive which promotes strong teeth	No
Haloacetic Acids (ppb)	2.3–18 LRAA: 11	60	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant	No
Nitrate (ppm)	0.29–1.81	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	No
Perchlorate (ppb)	0–0.41	2	No MCLG	Rocket propellants, fireworks, munitions, flares, blasting agents	No
PFAS6 (ppt)	5.6–28.6 Highest quarterly average: 27.4	20	No MCLG	Discharges and emissions from industrial and manufacturing sources associated with the production or use of these PFAS, including production of moisture and oil resistant coatings on fabrics and other materials. Additional sources include the use and disposal of products containing these PFAS, such as fire-fighting foams.	Yes
Trihalomethanes (ppb)	17–54 LRAA: 45	80	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant	No
Turbidity (Nephelometric Turbidity Unit)	0.01–0.57 Lowest Monthly % Samples: 95	Maximum Day 1 NTU (TT)	95% of samples <0.3 NTU Monthly (TT)	A measure of the cloudiness of water. It is a good indicator of the effectiveness of our treatment processes.	No
Unregulated Substances (MCL has not been established)					
1,4-dioxane (ppb)	0–0.22	No MCL	No MCLG	Chemical solvent, lab reagent, stabilizer, adhesive, may be found in cosmetics, detergents, and shampoo.	Unregulated contaminants have no established MCL
Aluminum (ppb)	0–58	No MCL	No MCLG	Residue from water treatment process: erosion of natural deposits.	
Chloride (ppm)	46.9–212	No MCL	No MCLG	Runoff and leaching from natural deposits	
Chloroform (ppb)	0.6–12	No MCL	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant.	
Chlorodibromomethane (ppb)	2.2–4.8	No MCL	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant.	
Bromodichloromethane (ppb)	1.7–6.8	No MCL	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant.	
Bromoform (ppb)	0–1.3	No MCL	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant.	
Iron (ppm)	0–0.01	No MCL	No MCLG	Erosion of natural deposits.	
Perfluorobutanesulfonic acid (PFBS) (ppt)	0–6.6 Average: 3.5	No MCL	No MCLG	Discharges and emissions from industrial and manufacturing sources associated with the production or use of these PFAS, including production of moisture and oil resistant coatings on fabrics and other materials. Additional sources include the use and disposal of products containing these PFAS, such as fire-fighting foams.	
Perfluorohexanoic acid (PFHxA) (ppt)	0–9.6 Average: 5.2	No MCL	No MCLG		
Sodium (ppm)	38.3–107	No MCL	No MCLG	Erosion of natural deposits, road salting.	
Sulfate (ppm)	12.4–23.2	No MCL	No MCLG	Natural Sources.	
Substance (units)	90th percentile	Action Level	# sites (# sites above Action Level)	Typical Source	
Lead (ppb)	6.0	15	60 (3)	Corrosion of household plumbing systems; Erosion of natural deposits	No
Copper (ppm)	0.272	1.3	60 (0)	Erosion of natural deposits; Leaching; Corrosion of household plumbing systems; from wood preservatives	No

For terms and abbreviations, see page 9.

* Fluoride has a secondary contaminant level (SMCL) of 2 ppm to better protect human health.

Why Are Impurities in Your Drinking Water?

As water travels through the ground it dissolves naturally occurring minerals. It can also pick up substances resulting from animal or human activity. Contaminants that may be present in source water include:

- **microbiological** contaminants (such as viruses and bacteria) that may come from septic systems, agriculture, and wildlife
- **inorganic** contaminants (such as salts and metals) that may be naturally occurring or result from stormwater runoff, wastewater discharge, mining, or farming
- **pesticides and herbicides**, which may come from a variety of sources, such as agriculture, stormwater runoff, and residential uses
- **organic chemical** contaminants, which are byproducts of industrial processes, and can also come from gas stations, urban stormwater runoff, and septic systems
- **radioactive** contaminants, which can occur naturally or be the result of oil and gas production or mining activities

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some impurities. The presence of an impurity does not necessarily indicate that the water poses a health risk. The Acton Water District has compiled information on drinking water and potential health effects in its drinking water resource center. Please feel free to visit or call us for information, or call the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Treatment for Your Water

To meet local, state, and federal requirements, and to improve taste and appearance, the Acton Water District treats all of its water before it is supplied to customers. The table below shows the treatment provided at each wellfield.

Treatment	Conant I Well	Conant II Wellfield	Marshall Wellfield	School Street Wellfield	Assabet Wellfield	Kennedy Wellfield	Clapp/Whitcomb Wellfield
Aeration VOC removal		•	•	•	•	•	•
Chlorination disinfection	•	•	•	•	•	•	•
Fluoridation tooth decay prevention	•	•	•	•	•	•	•
pH Adjustment corrosion control	•	•	•	•	•	•	•
Carbon Filtration taste/color control							•
Membrane Filtration mineral/color removal			•	•	•	•	
GreensandPlus™ Pressure Filtration iron/manganese removal	•	•					

TERMS AND ABBREVIATIONS

AL (Action Level): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

LRAA (Locational Running Annual Average): The highest level of contaminant as determined by a running annual average of all the samples taken from a sampling point.

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NTU: Nephelometric Turbidity Units

ppm: parts per million by volume

ppb: parts per billion by volume

pCi/L: picocuries per liter (a measure of radioactivity)

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

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

90th Percentile: Out of every 10 homes sampled, nine were at or below this level.

Discussion of Data Table Detections

COLIFORM: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify any problems that were found during these assessments.

During the past year, we were required to conduct one Level 1 assessment. A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system. One Level 1 assessment was completed. In addition, we were required to take three corrective actions and we completed all three of these actions.

1,4-DIOXANE: During 2022 we collected samples for this compound in the raw and treated waters of the Assabet and School Street wells. This sampling was conducted due to the presence of this compound at the WR Grace and Nuclear Metals, Inc. Superfund sites near our South Acton wells. 1,4-dioxane is not a regulated contaminant, and the MassDEP has not established an MCL. The AWD is following the potential regulation of this contaminant and the effect it may have on our water system. Some people who drink water containing 1,4-dioxane at high concentrations for many years could experience chronic kidney and liver effects and liver cancer. More information is available at www.actonwater.com/water-quality/14-dioxane

FLUORIDE: The Acton Board of Health voted in 1970 to adjust the fluoride level in drinking water to prevent tooth decay/cavities. On June 8, 2015, the Acton BOH voted to adopt the Centers for Disease Control's recommended adjusted fluoride dose to 0.7 mg/L. We implemented the new adjusted dose at all our treatment plants in 2015.

LEAD AND COPPER: 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. The AWD 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

PFAS6: Some people who drink water containing these PFAS in excess of the MCL may experience certain adverse effects. These could include effects on the liver, blood, immune system, thyroid, and fetal development. These PFAS may also elevate the risk of certain cancers. The AWD began monitoring for PFAS in January 2020, before MassDEP required it. Results presented in the regulated table on page 8 are accepted samples from our treated water during the 2022 calendar year. Additional PFAS detects were reported in the unregulated table on page 8. More information is available at www.actonwater.com/pfas

SODIUM: Although sodium does not have an MCL, MassDEP has a guideline of 20 parts per million (ppm) for sensitive individuals, such as those on very salt-restricted diets. The AWD notifies the Acton Board of Health of sodium results, and results of the most recent sodium tests are posted at various locations in town. Sodium levels in drinking water vary considerably from well to well and month to month. For the most accurate data on sodium levels at your home, an individual tap sample would be necessary.

VOLUNTARY MONITORING: In addition to the monitoring required by the Safe Drinking Water Act, the AWD voluntarily conducts hundreds of additional tests each year to ensure high-quality water is provided to our customers. For more information on our voluntary monitoring, please contact us.

VULNERABILITY: Some people may be particularly vulnerable to impurities in drinking water. 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 persons, and infants can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (1-800-426-4791).

Source Water Assessment and Protection Report Available

The Source Water Assessment and Protection (SWAP) program requires states to assess the susceptibility of public water supplies to potential contamination. The Massachusetts Department of Environmental Protection (MassDEP) has completed its assessment on each of the Zone II areas for the Acton Water District's wells. A susceptibility ranking of "high" was assigned to each Zone II using the information compiled by MassDEP. Copies of the SWAP

report are available at the Acton Water District office or on the website: www.ActonWater.com.

The AWD has long recognized the susceptibility of its sources and has worked closely with the town and state to maximize the protection of all of its Zone IIs. For more information, please call Matthew Mostoller, AWD District Manager, at 978-263-9107.

Required Non-Compliance Information

In September 2022, the District was issued an Administrative Consent Order with Penalty (ACOP) by MassDEP. This ACOP is regarding the Clapp Whitcomb Water Treatment Plant backwash water. This is not a drinking water violation, but a violation of wastewater regulations, therefore public health was not immediately at risk. Although the treatment plant is operated in accordance with its original design, MassDEP's expectations for managing waste from facilities such as this have changed over the past 35 years. Our immediate response was to relegate this facility to emergency use only and provide a bag filter to remove some of the solids contained in the backwash water. Due to the age of the treatment equipment and declining water quality from the wells in West Acton, this facility should be replaced in the coming years; however, those plans have been deferred so we can focus on PFAS treatment upgrades at our newer facilities. By entering into the ACOP with MassDEP, the District is able to work with the regulators and our

continued on page 12

Do You Want to Get Involved?

The Board of Water Commissioners meetings are typically scheduled on the second and fourth Mondays of each month at 7:00 pm; meetings are open to the public. The beginning of each meeting is set aside for public comments that may not be on the agenda for discussion. If you wish to attend, please visit our website (<https://actonwater.com/meeting-schedules>) to confirm the next meeting date. The Acton Water District Annual Meeting is held on the third Wednesday of March. All interested persons are welcome to attend.

Do You Know About Cross Connections?

A cross connection is any actual or potential connection between a potable drinking water pipe and any potential sources of pollution or contamination, such as a waste, soil, or sewer pipe; a drain; or any other unapproved source. If not properly protected or eliminated, a cross connection can cause health problems and spread disease if a backflow event were to occur.

There are two types of backflow conditions by which contamination can enter the drinking water: backpressure and backsiphonage. Backpressure occurs when the pressure in the property exceeds that of the drinking water distribution system. This can be caused by air conditioning units, boiler systems, and other pressure-building devices connected to the distribution system. Backsiphonage occurs when the drinking water pressure drops off and the resulting vacuum sucks the water from the building, causing it to flow backward into the distribution system. This can be caused by routine occurrences such as a fire department's use of water for fire suppression, water main breaks, and other heavy water demand.

Most cross connections are addressed by installing a backflow prevention device. A hose bibb vacuum breaker, sold at any hardware store, prevents the typical garden hose cross connection. Backflow devices come in all different types to protect even the most dangerous liquids from being able to contaminate the drinking water supply. To our knowledge, there has never been a cross connection incident in Acton, but there have been several in the state of Massachusetts and even more nationally.

Everyone should be aware of and do their part to prevent drinking water from becoming contaminated by cross connections. By surveying all industrial, commercial, and institutional facilities for cross connections, the District ensures that the water supplied down to the last free-flowing tap in every home and facility is of the highest quality. All residential homes with irrigation systems are required to have backflow protection. You can learn more about cross connections by contacting Bob Murch, our Cross Connection Coordinator, at bobm@actonwater.com.

Irrigation systems that are connected to the distribution system are required to be equipped with a backflow prevention device, such as the one shown here, to protect against cross connections.



Good to the Last Drop!

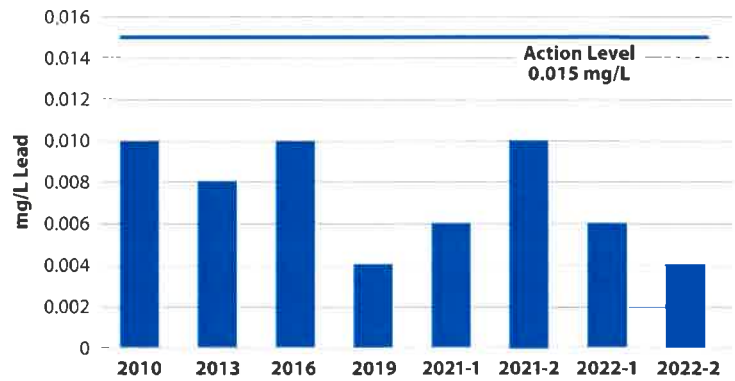
Since the early 2000's, the District has qualified for reduced lead and copper monitoring. Samples have historically been collected from 30 homes and two schools/childcare facilities in town once every three years to confirm the effectiveness of our corrosion control efforts. Aeration, primarily used for VOC removal, is often sufficient in raising the pH of our naturally corrosive water supplies from slightly acidic to neutral. As needed, further upward pH adjustment is achieved by adding potassium hydroxide. Upwardly adjusting the pH reduces the potential for metals like lead and copper to leach from building pipes and plumbing fixtures into the water carried through them.

Because several system improvements were initiated in 2020, including breaking ground on the recently onstructed Central Acton Water Treatment Plant and reactivating the Assabet 2 Well, the District returned to semi-annual lead and copper monitoring at 60 homes and two schools/childcare facilities beginning in 2021. We anticipate semi-annual monitoring will continue through 2024 and beyond as the District pursues additional water quality and capacity improvements.

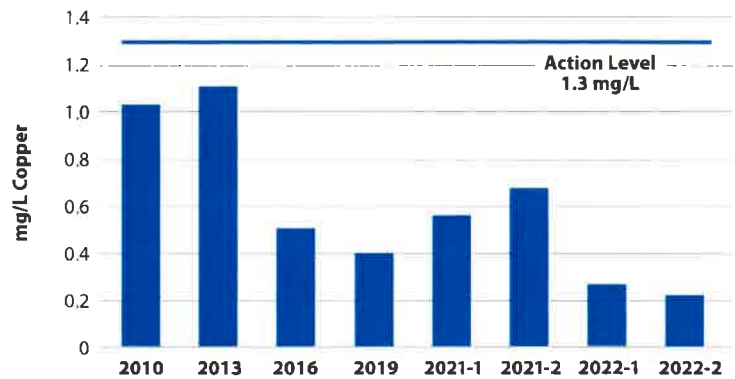
Lead levels in more than 96% of the residential samples collected in 2022 were below the Action Level (AL). All AL exceedances were reported to homeowners immediately and follow-up sampling was offered; when conducted, repeat sampling indicated low lead levels. Often, replacing old household plumbing fixtures that contained lead results in improved water quality. There were no AL exceedances for any of the samples collected in schools/childcare facilities as part of the 2022 program.

When your water has been sitting for several hours, like first thing in the morning or upon returning home from work, you can minimize your lead exposure by flushing your tap for up to two minutes or until the water becomes noticeably colder before using it for drinking, cooking, or preparing baby formula. Always use cold water for these activities, as lead dissolves faster in hot water than it does in cold. It's also important to note that boiling water does not decrease the level of lead; rather, it increases it. Additionally, the aerators on the end of your faucets should be removed at least every six months to rinse out any debris that may include particulate lead.

Lead Levels



Copper Levels



Lead and copper compliance data demonstrate effective corrosion control practices at our treatment plants, which reduce leaching of metals from building pipes and plumbing fixtures.

Non-Compliance

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engineers to implement more permanent solutions that fit into our capital planning and improvement plans.

Additionally, we are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the third week of November 2022, we did not monitor or test for Haloacetic Acids and Trihalomethanes and therefore cannot be sure of the quality of our drinking water during that time. Soon after this oversight was discovered, sampling occurred during the third week of December 2022; results were well within the allowable levels, and steps have been taken to ensure future sampling occurs during the scheduled week. Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information, additional copies, or to comment on this report, please contact:

Acton Water District

Attn: Alexandra Wahlstrom PO Box 953, 693 Massachusetts Ave., Acton, MA 01720
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Water Supply District of Acton

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DRAFT

TELEPHONE (978) 263-9107

FAX (978) 264-0148

To: Board of Water Commissioners, Finance Committee, Moderator & Clerk
From: Matthew Mostoller, District Manager
Re: Meeting schedule for July 1 – Dec 31, 2023

***Board of Water Commissioners meeting schedule
July 1, 2023-December 31, 2023
All meetings begin at 7:00 PM***

<u>DATE</u>	<u>Finance Committee Member</u>
July 17	John Peterson
August 14	Ron Parenti
August 28	Bill Guthlein
September 11	John Peterson
October 2	Ron Parenti
October 23	Bill Guthlein
November 6	John Peterson
November 20	Ron Parenti
December 4	Bill Guthlein
December 18	John Peterson