

Safe Water Advisory Group (SWAG)
A City Council Advisory Committee
Portsmouth, New Hampshire

AGENDA
Thursday, December 4, 2025
6:30-8:30 pm
City Hall Conference Room A & Zoom

Members of the public may attend in person or via Zoom. To attend via Zoom, you must register in advance. please click on the link below or copy and paste this into your web browser. Once registered you will receive a notice and passcode for signing in.

<https://us06web.zoom.us/join/DJND3w9yS9Oe71ACi6q3fQ>

1. Welcome, Introduction & Approval of minutes - Andrea Amico, SWAG co-chair
2. Lead update - Mason Caceres, Assistant Water Resource Manager
3. Quarterly Water Supply Update – Al Pratt, Water Resource Director & SWAG co-chair
4. Master Plan project updates - Al Pratt
5. PFAS update - Andrea Amico
6. SWAG end of year summary/recommendations to City Council - Andrea Amico
7. Public comment

MEETING PURPOSE

Founded by City Council action on October 5, 2020, the group's stated mission is: To review and communicate the latest science on the health and environmental effects of PFAS, to monitor federal and state level legislative changes, and to anticipate policy changes that could impact the City of Portsmouth.

Safe Water Advisory Group (SWAG)
A City Council Advisory Committee
Portsmouth, New Hampshire

MEETING MINUTES
Tuesday, October 7, 2025

For the zoom recording:
https://youtu.be/Aqs_3GeX82Q

Attending: Chair Andrea Amico, Chief Bill McQuillen, Katrie Hillman, Gennevie Becksted Muskie, Councilor Rich Blalock, Councilor Vince Lombardi, Rep. David Meuse, Laurel Schaidler (zoom). Staff: Al Pratt, Mason Caceres, Mariah Habersham, Stephanie Seacord (recording secretary via zoom). Absent: Rich DiPentima, Kim McNamara

1. Welcome, Introduction & Approval of minutes – Andrea Amico, SWAG co-chair

Andrea announced the resignation from the committee of Jim Hewitt, accepted with regret and thanks for his service. On a motion by Chief McQuillen, seconded by Councilor Lombardi the minutes for June 18, 2025 were approved unanimously.

2. Quarterly Water Supply Update – Al Pratt, Water Resource Manager & SWAG co-chair

The drought continues but the Portsmouth and Pease Water Systems are continuing to meet the demand. Because the surface water supply has sustained, there's been less dependence on groundwater supplies from wells but the levels of all sources are sustainable. The Water System plans to paint the interior of the Spinney Rd water tank in Spring 2026 and Newington Booster in Fall 2026 and will have to drain the tower – still determining how that water will be used.

Full report: [Water Supply Status Report](#)

3. Cyanobacteria Update – Mariah Habersham

The GZA plan reported at a prior meeting is now complete. NHDES and Harlan Swayer are now reviewing all 13 water supplies including Portsmouth which has good response in place. The dissolved air flotation diffusers and activated carbon continue to be effective in preventing any cyanobacteria or toxins from getting into the treatment plant. One bloom on July 28 prompted additional testing that came back 'non detect' for toxins.

4. Pease PFAS Health Studies Update - Dr Laurel Schaidler, Silent Spring Institute

The State of NH and EPA require that the City test and monitor results for 6 PFAS variants (though the City tests/monitors all 30) and reports the data on the City website: [PFAS Sampling | City of Portsmouth](#)

The Pease REACH Report in July noted that the PFAS levels are declining in adults and children in the Pease study after 8 years. Women have lower levels than men in that time due to cycling out from breastfeeding, menstruation. CDC ATSDR multi-state PFAS study (CA, CO, MA, MI, NH, NJ, NY, PA) cites Pease response as a model, with testing of 776 adults of 5826 total collected. Long term impacts are still being studied. For a blood testing fact sheet, visit pfas-exchange.org. See meeting presentation for full details: [SWAG Meeting Slides 10-07-25.pdf](#)

5. Seacoast Drinking Water Commission - NH State Representative David Meuse

NH water systems are balkanized with many different water systems serving different proportions of public/private water. In Portsmouth 90% of residents are on the City Water Systems; in Stratham 90% have private wells. Focus of the Commission is on testing the water quality in those wells. Also continued consideration of water interconnection but with reduced Federal funding and a doubling of cost estimate the Portsmouth-Dover interconnect is on hold. Another concern is the potential for salt water incursion in groundwater from sea level rise.

6. Lead update - Mason Caceres, Assistant Water Resource Manager

The City must report the inventory of water service lines again on November 1, 2025. A preliminary report was made at the first deadline of October 16, 2024. Of 8700 service line connections there are still 486 private lines to inspect. These are receiving notification letters, same as last year, explaining the purpose, the risk from old galvanized lines and/or lead solder connections in home plumbing and funds that might be available to help homeowners with those replacements, that must be made by 2037. For the 2000 unidentified City lines, potholing at the curbstop starts October 8-9 in the Maple Haven neighborhood (where a statistically valid sample can be selected due to the homes' common construction date).

7. Water Main Flushing Program - Al Pratt

Due to the drought the Water Department is currently conducting targeted flushing for 4 weeks rather than the usual 6 weeks. The spring/fall schedule addresses the City's 1,213 public and 555 private hydrants and the purpose is to flush out sediment/deposits and to check the hydrant functionality. Earlier this year a surge in water demand on one line prompted a high pressure release of water to support the system – and disturbed sediment in the line which caused a temporary water discoloration. There was no risk in the water, just color.

8. PFAS update - Andrea Amico

Briandon Kernan at NH DES has no definitive answer on which new compound limits will proceed as defined in April 2024. Compliance is now 2031. The Air Force has not confirmed is payment will continue for cleanup but has implemented a moratorium on burning PFAS. The EPA is upholding the classification of PFOA and PFOS as Hazardous Materials.

Additional note 9 October: Brandon Kernan at NH DES to ask about David Meuse's question re: if GenX X (one of the PFAS drinking water standards that EPA will not defend) is found in Merrimack. He replied: I believe GenX has only been found in Merrimack at the Saint Gobain site itself where PFAS levels are extremely high. I do not know if GenX is found at other waste sites where PFAS is very high. I have copied my colleague in the Waste Division – Jeff Marts – in case he can provide info on this. Based on thousands of sampling results from private wells and public water systems, it is not in the environment even when PFOA and PFOS exceed 4 ppt. 12/15 ppt or 70 ppt. We can download our results to show you if you want them. The only data showing a detection are data that have been flagged by the labs because laboratory contamination is evident by the fact GenX was also detected in lab blanks. My counterparts in the other NE states see the same thing relative to GenX and lab directors have confirmed that this is what they are seeing.

There's a hybrid meeting on PFAS Research in Great Bay on Tuesday, October 21, 2025, from 6-7:30pm, at Newington Town Hall and via Teams. Here is the meeting [flyer](#) and here is the [link to register](#) if attending virtually.

9. Mission Vote - Andrea Amico

On a motion by Councilor Blalock, seconded by Councilor Lombardi the committee approved the following new language to accompany its recommendation to the new Council to reappoint a SWAG: To review and communicate the latest science on the health and environmental effects of PFAS, to monitor federal and state level legislative changes, and to anticipate policy changes that could impact the city of Portsmouth. To discuss topics relevant to the City's drinking water quantity, quality, preservation and conservation efforts, and water infrastructure projects. To discuss public health aspects of water quality, support and provide public education about drinking water topics, and take proactive stances to protect and conserve water quality and quantity.

10. SWAG end of year summary/recommendations to City Council - Andrea Amico

Andrea and Al will prepare the draft report. SWAG members will review and are asked to send Andrea suggestions for inclusion. For examples of prior reports visit:

2023 SWAG Report to City Council: [Microsoft Word - SWAG City Council Report 2023](#)

2021 SWAG Report to City Council [SWAG City Council Report 2021_12152021.pdf](#)

11. Public comment – None.

Adjourned at 8:26 pm

Next meeting: Thursday, December 4, 2025 at 6:30 pm, City Hall Conference Room A

MEETING PURPOSE

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Safe Water Advisory Group

City Council Report 12/XX/2025

The Safe Water Advisory Group (SWAG) has prepared the following summary report highlighting the group's accomplishments over the past two years.

Specific items for consideration by City Council are as follows:

1. Reinstatement of the SWAG for a two-year term ending on December 31, 2027
2. Approval of the following revised mission statement. Additional information regarding this change is provided on page 6.

To review and communicate the latest science on the health and environmental effects of PFAS, to monitor federal and state level legislative changes, and to anticipate policy changes that could impact the City of Portsmouth. To discuss topics relevant to the City's drinking water quantity, water quality, preservation and conservation efforts, and water infrastructure projects. To discuss public health aspects of water quality, support and provide public education about drinking water topics, and take proactive stances to protect and conserve water quality and quantity.

3. Adjustment of the number of community members from three to five to allow increased community involvement.
4. Appointment of the following members to the SWAG.

City Councilors: **as assigned by the Mayor**

Community Members: **Andrea Amico, Katrie Hillman, Rich DiPentima**

City of Portsmouth Fire Department: **William McQuillen**

City of Portsmouth Water Department: **Al Pratt**

City of Portsmouth Health Department: **Kim McNamara**

City of Portsmouth School Board: **Genevieve Becksted-Muske**

Environmental Scientist: **Dr. Laurel Schaider**

NH State Representative: **David Meuse**

NH State Senator: **Rebecca Perkins Kwoka**

Background:

The City of Portsmouth Safe Water Advisory Group (SWAG) was approved by the Portsmouth City Council on October 5, 2020 “as an advisory group related to Safe Drinking Water”. The mission of the SWAG is to review and communicate the latest science on the health and environmental effects of drinking water contaminants (with a heavy focus on PFAS), to monitor federal and state level legislative changes, and to anticipate policy changes that could impact the city of Portsmouth. It is important to note that SWAG meetings have consistently covered topics on the City’s water quantity, quality, preservation and conservation efforts, and projects pertaining to the water master planning through the City’s annual Capital Improvement Plan process and other engineering studies.

The SWAG has two co-chairs, Al Pratt (City of Portsmouth Water Resource Director) and Andrea Amico (Portsmouth resident and PFAS community leader), leading the group in setting agendas, organizing meeting content and speakers, and facilitating the meetings. The City of Portsmouth maintains a website for the SWAG with reference documents, meeting minutes, meeting presentations, videos of meetings, membership, and more. Since the SWAG formed, they have met quarterly each year.

Membership:

The SWAG membership consists of representatives from the Portsmouth City Council, NH State Legislature, City of Portsmouth staff (DPW, Fire Department, and Health Department), Portsmouth School Board, Portsmouth residents, and an environmental scientist. The SWAG’s current membership consists of the following members:

City Councilors: **Richard Blalock, Vincent Lombardi**

Community Members: **Andrea Amico, Katrie Hillman, Rich DiPentima**

City of Portsmouth Fire Department: **William McQuillen**

City of Portsmouth Water Department: **Al Pratt**

City of Portsmouth Health Department: **Kim McNamara**

City of Portsmouth School Board: **Genevieve Becksted-Muske**

Environmental Scientist: **Dr. Laurel Schaider**

NH State Representative: **David Meuse**

NH State Senator: **Rebecca Perkins Kwoka**

The SWAG had three changes in membership in 2024-2025:

Deputy DPW Director and SWAG co-chair Brian Goetz resigned from the SWAG in September 2024 after resigning from the City of Portsmouth. City of Portsmouth Water Resource Manager, Al Pratt, replaced Brian's position on the SWAG as co-chair.

School Board member Elizabeth Barrett resigned from the SWAG in May 2025. School Board member Genevieve Becksted Muske joined the SWAG to represent the Portsmouth School Board.

City of Portsmouth resident Jim Hewitt resigned from the SWAG in September 2025. The vacancy for a Portsmouth resident on the SWAG has not been replaced. However, a Portsmouth resident with a career in hydrogeology has expressed interest in joining the SWAG and has been given the link to an application.

City staff, Mason Caceres, Assistant Water Resource Manager, and Stephanie Seacord, Public Information Officer, attended meetings regularly and provided water quality data and information to the group.

SWAG Meetings:

The SWAG met four times in 2024, four times in 2025, and covered a variety of topics, received quarterly updates from the City water department, received legislative updates from elected officials, and hosted several guest speakers. SWAG members attended a tour of the Madbury Reservoir (the city's largest drinking water source) on September 10, 2025.

Below are the meeting dates, agendas, and guest speakers who presented at SWAG meetings in 2024-2025:

2024 – 4 meetings total:

March 24, 2024:

- Water Supply & Master Plan Update - Brian Goetz, co-chair
- Lead update
 - Portsmouth Water - Mason Caceres, Water Quality Specialist II
 - Portsmouth Schools - Dr Zach McLaughlin, Superintendent of Schools.
Ken Linchey, Director of Buildings & Grounds/Maintenance
- Legislative update - David Meuse, NH State Rep
- Seacoast well testing update - Brian Goetz, Portsmouth DPW
- Mission update discussion - Andrea Amico, SWAG co-chair
- Q&A
- Public comment

June 27, 2024:

- Introduction & Approval of minutes – Andrea Amico, co-chair
- Water Supply & Master Plan Update - Brian Goetz, co-chair
- EPA PFAS MCL Update - Brian
- Pease Water System Contamination 10 year recap - Brian & Andrea
- National PFAS Conference update - Andrea
- Service Line Inventory for Lead Regulations update – Mason Caceres
- Katrie Hillman's new role (Great Bay Changemaker) – Katrie Hillman, SWAG member
- Mission update - Andrea
- Future field trip - Brian
- Q&A
- Public comment

September 10, 2024:

- 6:00 pm – Meet at Madbury Water Treatment Facility, 60 Freshet Road, Madbury, NH 03823 - Carpool to Bellamy Reservoir
- 6:15 – Madbury Reservoir Tour - City of Portsmouth Mason Caceres, Mariah Habershaw, Al Pratt
- 6:45 – Return to Water Treatment Facility
- 7:00 – In-person and Zoom portion of meeting
- Reservoir Watershed Overview – Al Pratt
- Cyanobacteria Overview – Mariah
- City Water Supply & Master Plan Update - Al

- Lead inventory and sampling update - Mason
- PFAS update – AI
- Q&A
- Public comment

December 5, 2024:

- Welcome, Introduction & Approval of minutes – Andrea Amico, co-chair
- SWAG Co-chair update
- Mission Update - Andrea
- Quarterly Water Supply Update – AI Pratt, Water Resource Manager
- City Water Project Update
- Service Line Inventory for Lead Regulations update – Mason Caceres
- DoD Policy Update on EPA PFAS MCLs
- Legislative Update – Rep. David Meuse
- Public comment

March 5, 2025:

- Welcome, Introduction & Approval of minutes – Andrea Amico, co-chair
- Fluoride Presentation and Discussion - NHDES, NHDHHS and NHOHC
- NHDES Regulatory Update – NHDES
- PFAS Update
- Lead Discussion - Rich DiPentima, SWAG member
- Quarterly Water Supply Update - AI Pratt, Water Resource Manager
- Letter of Support for Greenland Well Treatment Funding
- Mission Update
- UNH Foam Sampling Project, Andrea Amico
- Community Education Discussion
- Public Comment

June 18, 2025:

- Welcome, Introduction & Approval of minutes - Andrea Amico, SWAG co-chair.
- Membership update - Andrea Amico
- EPA PFAS Announcement re: MCLs - Brandon Kernan, NH DES Administrator of the Drinking Water and Groundwater Bureau
- Cyber Security Presentation - Brandon Kernan & AI Pratt, City of Portsmouth Water Resource Manager & SWAG co-chair
- Quarterly Water Supply Update - AI Pratt
- Dover Municipal Landfill Update - Dean Peschel, Peschel Consulting LLC & Christene Binger, Verdantas LLC

- Legislative Update – Rep. David Meuse
- Mission discussion - Andrea Amico
- Public comment

October 7, 2025:

- Welcome, Introduction & Approval of minutes – Andrea Amico, SWAG co-chair
- Quarterly Water Supply Update – Al Pratt, Water Resource Manager & SWAG co-chair
- Pease PFAS Health Studies Update - Dr Laurel Schaider, Silent Spring Institute
- Seacoast Drinking Water Commission - NH State Representative David Meuse
- Lead update - Mason Caceres, Assistant Water Resource Manager
- Water Main Flushing Program - Al Pratt
- PFAS update - Andrea Amico
- Mission Vote - Andrea Amico
- SWAG end of year summary/recommendations to City Council - Andrea Amico
- Public comment

December 4, 2025:

TBD

Notable Updates from 2024-2025:

Mission Update:

The SWAG's initial mission statement drafted in October of 2020 is outdated and not reflective of the work and topics the SWAG routinely covers. The initial mission was heavily focused on PFAS and while the SWAG regularly discusses PFAS at every meeting, the SWAG also discusses other pertinent drinking water topics. The SWAG discussed many times about revising our mission to be consistent with the work we are doing. SWAG members provided feedback at several meetings on the language of a new mission. At the October 7, 2025, SWAG meeting, SWAG members unanimously voted to recommend a revised mission to the Portsmouth City Council in our end of year summary for consideration of the next SWAG term to commence in 2026.

Current mission (established October 2020):

To review and communicate the latest science on the health and environmental effects of PFAS, to monitor federal and state level legislative changes, and to anticipate policy changes that could impact the city of Portsmouth.

Revised mission (proposed) (approved by the SWAG October 2025):

To review and communicate the latest science on the health and environmental effects of PFAS, to monitor federal and state level legislative changes, and to anticipate policy changes that could impact the City of Portsmouth. To discuss topics relevant to the City's drinking water quantity, water quality, preservation and conservation efforts, and water infrastructure projects. To discuss public health aspects of water quality, support and provide public education about drinking water topics, and take proactive stances to protect and conserve water quality and quantity.

Changes in federal PFAS regulations:

There have been multiple updates to federal PFAS regulations in 2024-2025 that are notable and directly impact the City of Portsmouth:

- On April 10, 2024, the United States Environmental Agency (US EPA) finalized drinking water Maximum Contaminant Levels (MCLs) for 6 PFAS (PFOA, PFOS, PFNA, PFHxS, and HFPO-DA (also known as "GenX Chemicals"). Water systems were required to come into compliance with the PFAS MCLs by 2029. EPA stated in their press release that "The final rule will reduce PFAS exposure for approximately 100 million people, prevent thousands of deaths, and reduce tens of thousands of serious illnesses." The press release also says: "EPA estimates that between about 6% and 10% of the 66,000 public drinking water systems subject to this rule may have to take action to reduce PFAS to meet these new standards. All public water systems have three years to complete their initial monitoring for these chemicals. They must inform the public of the level of PFAS measured in their drinking water. Where PFAS is found at levels that exceed these standards, systems must implement solutions to reduce PFAS in their drinking water within five years."
- In June 2024, these 6 PFAS standards were challenged in court and the EPA was sued by the American Chemistry Council, the National Association of Manufacturers, the American Water Works Association along with public water utility associations citing "serious questions about EPA's process for developing the final rule, and whether it is consistent with the statutory requirements of the Safe Drinking Water Act."
- On September 3, 2024, the Department of Defense issued a policy in response to the EPA PFAS MCLs stating "to ensure cleanup begins as quickly as possible, the DoD Components will initiate removal actions to address private drinking water wells impacted by PFAS from DoD activities where concentrations are known to be at or above three times the MCL values".
- On September 11, 2025, the EPA filed a motion in court that it would only defend two of the six PFAS standards (PFOS & PFOA). Also, EPA announced that it will seek to extend the compliance deadline for PFOA and PFOS standards by two years from 2029 to 2031.

These new federal PFAS regulations impact the Greenland well of the City water supply where known PFAS have been detected. Knowing these federal PFAS regulations were imminent, the City of Portsmouth was proactive in obtaining funding for the design and treatment of the Greenland well to address PFAS. The SWAG has received frequent updates on this project at their meetings. The status of the City's efforts to address PFAS in the Greenland well is:

- Preliminary design near completion
- Granular Activated Carbon
- New building needed
- Road and power upgrades required
- Proceeding with final design

The Portsmouth and the Collins well are City of Portsmouth groundwater wells that supply drinking water to the City. These wells are located in the Southern well field close to the Pease Tradeport/former Pease Air Force Base where there has been significant PFAS contamination. The Portsmouth and Collins wells have detectable levels of PFAS in them that exceed the new EPA PFAS MCLs. The Air Force has acknowledged the PFAS in the Portsmouth and Collins well came from Pease and they are responsible for the remediation of these wells. In response to the EPA MCLs being finalized in April 2024, the DoD issued a policy on September 4, 2024, that it would address wells that were 3 times above the PFAS MCLs first (taking a "worst first" approach). The Portsmouth and Collins wells exceed the EPA MCLs for PFAS, but they are not three times above the MCLs at this time. Therefore, no formal action has been taken by the Air Force to address these wells. The City of Portsmouth has routine discussions with the Air Force re: the plan for implementing treatment of these wells. The status of the City's efforts to address PFAS in the Portsmouth and Collins wells are:

- Preliminary design near completion
- Water from wells be combined for treatment at one facility
- Granular Activated Carbon will be the media used to filter PFAS
- Provisions for additional treatment incorporated in design
- Submit Preliminary Design and cost estimate to Air Force

In addition to federal drinking water standards for PFOA and PFOS, the state of New Hampshire also has PFAS MCLs for 4 PFAS (PFOA, PFOS, PFNA, and PFHxS). The federal standards for PFOA (4 parts per trillion or ppt) and PFOS (4 ppt) are lower than the NH PFAS MCLs for PFOA (12 ppt) and PFOS (15 ppt), therefore the federal standards apply to the City drinking water for these two PFAS. However, having NH PFAS MCLs for 2 additional PFAS that do not have federal regulations (PFNA 11 ppt, PFHxS 18 ppt), the NH MCLs applies to the City. The NH PFAS MCLs have been in place since 2020 and the City of Portsmouth has been in compliance with those standards since that time.

City obtains conservation easement near Bellamy Reservoir:

On June 4, 2025, the City of Portsmouth partnered with Southeast Land Trust of NH (SELT) to purchase a conservation easement on 44.6 acres adjacent to the Bellamy Reservoir. This is significant because the Bellamy Reservoir is the largest water supply for the City of Portsmouth water system. It is critical to protect the land around the Bellamy Reservoir from development to prevent contamination or potential threats to the water supply. The City has purchased other easements adjacent to the Bellamy Reservoir, including 72 acres secured in 2018 and 107 acres secured in 2020. All of these easements were obtained through the combined efforts of the city, SELT, and the Town of Madbury. The combined efforts allowed the city to apply for and receive a \$739,000 grant from the New Hampshire Drinking Water and Groundwater Trust Fund and \$25,000 from the NH Department of Environmental Services Local Source Water Protection program. The city also received \$714,000 in Congressionally Directed Spending thanks to a request from Senator Shaheen which is being administered through the US Environmental Protection Agency.

Cyanobacteria:

At the September 10, 2024, SWAG meeting, City of Portsmouth Water Quality Specialist, Mariah Habershaw, provided an update on the City's efforts to test for and monitor Cyanobacteria.

In 2023, a small bloom accumulated near the dam of the Bellamy Reservoir. The City notified NHDES and collected samples for enumeration and cyanotoxin testing on the day of sighting. Identified species as Dolichiospermum (formerly Anabaena). Results: 22,000 cells/mL of cyanobacteria in raw water (>70,000cells/mL is the recreational advisory limit). Cyanotoxins= non-detect in raw water.

In 2024, the City observed "pea-soup" in the Bellamy Reservoir that began to accumulate near the intake but never directly in front of it. Testing identified species again as Dolichiospermum (Anabaena). Samples collected from intake at 6ft. depth, raw water intake at plant, and finish water for cyanotoxin testing (overnight) at accredited lab. Results: Cyanotoxins: non-detect.

In 2025, the City observed small, scattered blooms observed in June through late August with minimal accumulation and very low phycocyanin concentrations, as well as cell counts. There was a more noticeable, dense bloom on July 28th that triggered cyanotoxin testing in the raw water. Identified species: Dolichiospermum and Woronichinia, Phycocyanin: 30.78 ug/L, Cell count: 25,675 cells/mL. Cyanotoxins: non detect.

The City has developed an Operational Response to Cyanobacteria Blooms:

1. Deploy diffusers at intake location to physically push cyanobacteria away from the intake screen
2. Reduce plant flow and increase blend with well water
3. Introduce Powdered Activated Carbon (PAC) to head of the plant
4. Increase filter backwash frequency
5. Continue to test for phycocyanin at the start of the treatment facility, DAF basins, and finished water taps
6. Continue sampling for cyanotoxins in Raw water and Finished water until no longer present (every 24 hours)
7. Daily visual observations of reservoir and daily collections for identification, enumeration, and fluorometer readings

The City is collaborating with NHDES and Hazen & Sawyer to assist NH water systems with water treatment optimization. Thirteen water systems throughout NH have experienced reoccurring cyanobacteria blooms in their surface water supplies. The team is using historical data to learn more about the Bellamy Reservoir to develop the best approach to cyanobacteria and cyanotoxin removal.

Tolend Road Landfill/Dover Municipal Landfill:

On June 18, 2025, representatives from Dover presented an update to the SWAG on the Former Tolend Road Landfill/Dover Municipal Landfill. This landfill is a Superfund site located close to the Bellamy Reservoir (the City of Portsmouth's largest drinking water supply) and has known contamination that has been managed by the Dover Group, NH DES, and US EPA. Representatives from Dover previously presented at a SWAG meeting on March 7, 2023 to educate SWAG members re: a general history of the landfill, identified responsible parties, different focus areas on the landfill site, overview of assessment and remediation activities, information about Southern Plume area, and identified USEPA 2022 – Five Year Review Items.

On June 18, 2025, the representatives from Dover provided an update to the SWAG re: an overview of the Southern Plume, assessment activities, remedial design status, conservation easement. They shared recent sampling at five sample locations showed:

- 1,4-Dioxane Sampling – October 2023 to March 2025 Not Detected (one duplicate at 0.32 ug/L)
- PFAS Sampling - October 2023 to March 2025 not detected or low single digit ng/L. Compounds similar to two tributary background samples.

Dover is in the process of implementing treatment of the Southern Plume. They provided an update that the design is consistent with the Landfill GWE system. It will have 12 extraction well stations, three wells per station (36 total SPEWs) with conveyance to the storage tank near Tolend Road and off-site treatment at POTW.

Drought:

In the Summer and Fall of 2025, New Hampshire experienced moderate to severe drought conditions due to below average precipitation rates. The City of Portsmouth monitored this closely and in August of 2025, the City asked residents to voluntarily limit their outdoor water usage because of ongoing hot and dry conditions. No mandatory restrictions were issued. Groundwater levels were lower than normal, but remained within levels considered adequate to maintain their safe yields. Due to decreased demands for water in the system through early fall and rising water levels in the Bellamy Reservoir, additional water use restrictions were not requested.

Water Master Plan:

Updates on water infrastructure projects were provided during SWAG meetings in 2024 and 2025. These projects included:

- Little Bay Transmission Main - Valve Replacement Project
- Collins Well 2 Testing and Permitting
- Water Storage Tank Painting – Design
- Greenland Well PFAS Treatment Facility – Design
- Hydraulic Model Update
- Smith and Harrison Well Cleaning & Rehabilitation
- Service Line Inventory
- Bellamy Dam Rehabilitation
- Seacoast Reliability Study
- Lafayette Tank & Pressure Study

Lead:

City Council approved \$2,500 to offer free lead testing for Portsmouth water customers in the FY 2024 budget. Of the 69 customers that expressed interest in this program, 35 samples were collected. There were 22 samples with no lead detected, and the remaining levels were all below 5 parts per billion and the EPA action level of 15 ppb.

EPA revised the Lead and Copper Rule for public water systems in 2021 and 2023. One of the new requirements in these revisions includes the requirement for water systems to inventory all of the materials used for the system's service lines, including portions of service lines that are privately owned. The initial inventory was submitted in October 2024, and annual submittals are required until there are no unknown materials in the system and there are no lead or galvanized lines remaining in the system.

Approximately 490 service lines remain in the inventory with unknown material type on the customer side; and there are 2,068 services with an unknown material type on the City-owned portion of the line. Inventory efforts are on-going and a program to assist owners of galvanized service lines is being developed.

The NHDES developed a sampling program where water suppliers can assist customers with sampling for lead from their taps for free. Portsmouth received requests from 205 customers for these tests. Portsmouth Water Division delivered sample bottles to all of these customers, and 129 collected samples. Of these samples, lead was not detected in 113, 15 had detected levels below 1 ppb, and one had 8 ppb.

For the annual lead and copper compliance sampling in 2025, 31 homes served by the Portsmouth Water System were sampled for lead and copper analysis. Of these, 29 samples had no-detection of lead above the laboratory detection limit of 1 part per billion (ppb or ug/L), and only two samples had detected lead concentrations of 1 and 3-ppb. No samples exceeded the 15-ppb action level. The average concentration of copper found across the same sample set was 0.12 parts per million (ppm or mg/L) and the state-regulated action level for copper in drinking water is 1.3 ppm.

In 2023, lead testing done at the Portsmouth school departments revealed lead detected above the new state standard of 5 parts per billion (ppb) in 41 water outlets throughout the school buildings. Superintendent of the Portsmouth School Department Dr McLaughlin and Ken Linchey (Director of Buildings & Grounds/Maintenance) presented to the SWAG on March 24, 2024 providing an update:

Signage has been posted at all school outlets where lead was detected in 2023 saying "Do Not Drink, Hand-Washing Only". Follow up lead testing was done in the schools on December 16, 2023 to better understand the reliability of the August 2023 samples. Even though the follow-up testing showed lower numbers, it still showed that lead levels were present. Over Christmas break of 2023, two different types of filtration systems were installed to address lead in the Portsmouth schools. One filtration system was installed in a classroom and one filtration system was installed in a kitchen. Both filtration systems yielded great results based on their application. New fixtures and filtration systems have been purchased and installed at all outlets that registered above 5ppb based on the August 9, 2023 test results. Water bubblers that registered above 5ppb were removed from service. New water bubblers have arrived and will be installed soon and round 3 lead sampling will be conducted in the next couple of weeks.

The School Department was invited back to the SWAG for the December 4, 2025, meeting to provide an update:

TBD

Pease Million Air Fuel Farm Project:

Questions and concerns were raised by State Representative David Meuse at the June 7, 2023 SWAG meeting regarding the potential plan of a fuel farm being installed at Pease by the company Million Air. The Newington Selectman also wrote a letter addressed to the PDA and to the Newington residents in June 2023 expressing concerns about the project. It was not an agenda item for that meeting therefore the discussion was brief. A follow up meeting was scheduled on June 27, 2023, with Andrea Amico, Brian Goetz, Al Pratt, Suzanne Woodland, NH State Representative David Meuse, and NH State Representative Robin Vogt at Portsmouth City Hall. The community concerns about the fuel farm project, the impacts to nearby wetlands, and the close proximity of the fuel farm to the Haven well (a primary drinking water source for the Pease Tradeport that is already significantly impacted by PFAS contamination) was discussed. The plan formulated in the meeting was the City of Portsmouth would request that the Pease Development Authority (PDA) host a meeting to share more information about the project and to hear from the community regarding their concerns. Suzanne Woodland emailed the PDA Executive Director Paul Brean on July 14, 2023 requesting PDA host a meeting. Andrea Amico followed up to the initial email to Mr. Brean clarifying the request for a community meeting and with questions from the community. There has been no apparent movement on the project since 2023 when the Federal Aviation Administration requested a new environmental impact study for the development..

Community Engagement:

On November 14, 2025, SWAG co-chairs Andrea Amico and Al Pratt, and Assistant Water Resource Manager Mason Caceres, spoke to Portsmouth High School Global Leadership students on PFAS, City water supply, water quality, and water quantity.

Water legislation summary:

Andrea emailed David Meuse asking him to please send a summary.

The summary below has been provided by NH State Representative and SWAG member David Meuse:

**Update on the SWAG Recommendations to Portsmouth City Council in 2021 –
UPDATES IN BLUE:**

- City of Portsmouth needs to improve community education on PFAS and other contaminants of concern (e.g., lead) and on safe disposal of PFAS-containing items (e.g., water filters at their end life, Teflon pans, etc). **Partially completed with the Community Drinking Water forum in May 2022 and outreach on lead awareness and testing done by SWAG members in 2023. Still need to research opportunities for safe disposal of PFAS containing items for City residents.**

Though not directly related to the City's drinking water system's water quality, some members of the committee had the following recommendations:

- The SWAG should discuss the potential impacts on drinking water from Coakley Landfill in more depth at future meetings. **Not completed but included as part of the Coakley Landfill Group's work. Information on the ongoing work and meetings is located on the City's website at:**

<https://www.cityofportsmouth.com/legal/coakley-landfill>

- City of Portsmouth should conduct additional and more comprehensive PFAS testing of the new artificial turf at Community Campus. If PFAS are detected in the turf, additional PFAS testing of water running off the turf should be routinely tested for PFAS to monitor for leaching into the surrounding wetlands and storm water. **Partially completed in 2022 when the City paid for additional PFAS testing of the Community Campus artificial turf and PFAS was detected in the turf. No additional PFAS testing of water runoff from the turf, surrounding wetlands, or storm water drainage system has been conducted and the environmental impacts of the turf to the surrounding area, including wetlands, are currently unknown.**

SWAG Recommendations to Portsmouth City Council in 2023:

UPDATES IN BLUE:

- The SWAG to be reinstated in 2024 by the City Council - plan for quarterly meetings, scheduled in advance. DPW will continue to provide quarterly updates on water quantity, water quality, ongoing City projects pertaining to drinking water and water conservation, and updates and progress on master planning to the SWAG as well as keep that information on their website, in the annual drinking water quality report, and other documents. **Completed 2024-2025.**
- The SWAG will continue to monitor developments regarding contaminants of emerging concern and discuss advanced PFAS testing opportunities to get ahead of additional PFAS that may be in the water that is not currently tested for by EPA methods. **Ongoing**
- The SWAG will continue to monitor for legislation at the State & Federal level that will help address water quality issues in the City. City staff and SWAG members should testify at State hearings on water contamination legislation that is pertinent to the City and community. **Ongoing**
- The City will continue with design and construction of the Greenland Well treatment system and preliminary designs of PFAS treatment for the Collins, and Portsmouth wells in preparation of pending EPA MCLs for PFAS with those updates being provided to the SWAG. **Ongoing**
- The SWAG will continue to monitor developments and advancing of the science related to PFPrA and other emerging PFAS chemicals detected in the City drinking water. **Ongoing (no new updates this term).**
- The SWAG will continue to monitor the lead testing and remediation efforts at the Portsmouth School Department. **Ongoing**
- City of Portsmouth to consider providing alternative disposal options of PFAS-containing items (e.g., water filters at their end life, Teflon pans, etc). **Not completed**
- City of Portsmouth should continue to stay engaged on the Million Air project at Pease and encourage the PDA to host a community meeting on the status of the project, the impact to wetlands, the protections put in place to prevent water contamination, the protocols to address potential spills or leaks, and allow community Q&A with PDA and key project stakeholders. **No longer applicable.**
- City Council should consider funding additional free lead water testing to residents once the initial \$2500 is exhausted as this is a valuable service to our

residents in a city with old housing stock and documented exposure to some residents in the City. **Completed in 2024.**

- City of Portsmouth should be willing to participate in testing opportunities for emerging contaminants and contaminants of concern - especially when no cost to the City - to better understand what contaminants may be in the water supply. **Ongoing, no free testing options offered in 2024-2025.**

Though not directly related to the City's drinking water system's water quality, some members of the committee had the following recommendations:

- The SWAG should discuss the potential impacts on drinking water from Coakley Landfill in more depth at future meetings. **Not completed but included as part of the Coakley Landfill Group's work. Information on the ongoing work and meetings is located on the City's website at:**

<https://www.cityofportsmouth.com/legal/coakley-landfill>

- City of Portsmouth should conduct routine PFAS testing of water running off the artificial turf fields to determine if there are environmental impacts to the surrounding wetlands and storm water drainage system. **Not conducted. Testing was not recommended by the City due to the complexity of collecting representative samples, concerns of cross-contamination, and costs.**

SWAG Recommendations to Portsmouth City Council in 2025:

- The SWAG should be reinstated in 2026 by the City Council. SWAG meetings should be conducted quarterly. DPW will continue to provide quarterly updates on water quantity, water quality, ongoing City projects pertaining to drinking water

and water conservation, and provide updates and progress on infrastructure projects to the SWAG.

- The SWAG's mission should be revised as: :

To review and communicate the latest science on the health and environmental effects of PFAS, to monitor federal and state level legislative changes, and to anticipate policy changes that could impact the City of Portsmouth. To discuss topics relevant to the City's drinking water quantity, water quality, preservation and conservation efforts, and water infrastructure projects. To discuss public health aspects of water quality, support and provide public education about drinking water topics, and take proactive stances to protect and conserve water quality and quantity.

- The SWAG will continue to monitor and report on developments regarding contaminants of emerging concern and discuss advanced PFAS testing opportunities to get ahead of additional PFAS that may be in the water that is not currently tested for by EPA methods.
- The SWAG will continue to monitor legislation at State & Federal levels that will help address water quality issues in the City and support with testimony on legislation that is pertinent to the City and community, as may be requested.
- The SWAG will continue to monitor developments and advances in the science related to PFPrA and other emerging PFAS chemicals detected in the City drinking water.
- The SWAG will continue to monitor the lead testing and remediation efforts at the Portsmouth School Department.
- The SWAG will continue to endorse the City's design and construction of the Greenland Well treatment system and preliminary designs of PFAS treatment for the Collins and Portsmouth wells to comply with EPA MCLs for PFAS.
- The SWAG will continue to support the City's ongoing discussions with the Air Force to pursue reimbursement for PFAS related treatment for the Portsmouth and Collins wells as they are the responsible party.
- The SWAG continues to recommend that the City consider providing alternative disposal options of PFAS-containing items (e.g., water filters at their end life, Teflon pans, etc).

- The SWAG encourages the City to continue to be engaged on developments at the Pease Tradeport that could potentially have impacts to wetlands and the drinking water.
- The SWAG continues to support funding for free lead water testing to residents as this is a valuable service to our residents in a city with old housing stock and documented exposure to some residents in the City.
- The SWAG strongly recommends the City participate in testing opportunities for emerging contaminants and contaminants of concern - especially when no cost to the City - to better understand what contaminants may be in the water supply.
- The SWAG supports the City's efforts to identify and purchase conservation easements on land around the Bellamy Reservoir and within its watershed to ensure long term protection of the City's largest drinking water supply.
- The SWAG promotes City's Cyanobacteria monitoring at the Bellamy Reservoir and the collaboration with NHDES and their consultants to develop the best approach to cyanobacteria and cyanotoxin management.
- The SWAG recommends the City continue to request routine updates from the City of Dover regarding their monitoring and remediation efforts of the Southern Plume of the Tolend Road Landfill/Dover Municipal Landfill to ensure contamination from the landfill does not negatively affect the Bellamy Reservoir water quality.

Though not directly related to the City's drinking water system's water quality, some members of the committee had the following recommendations:

- The SWAG should discuss the potential impacts on drinking water from Coakley Landfill in more depth at future meetings.
- The SWAG should advocate for PFAS testing of water running off the artificial turf fields to determine if there are environmental impacts to the surrounding wetlands and storm water drainage system.

References:

City of Portsmouth SWAG webpage meeting and presentation information:

<https://www.cityofportsmouth.com/citycouncil/safe-water-advisory-group>

EPA Press Release on PFAS MCLs April 10, 2024:

<https://www.epa.gov/newsreleases/biden-harris-administration-finalizes-first-ever-national-drinking-water-standard>

DoD Policy on PFAS MCLs September 3, 2024:

<https://static1.squarespace.com/static/565b6fe8e4b0f0c1a028adc4/t/674631ed03e3ea47ef63c9bb/1732653550006/EPA+MCL+Implementation+Memo.pdf>

Seacoast Online Article: *“Portsmouth secures 44-acre easement to protect city water at Bellamy Reservoir”* June 9, 2025

<https://www.seacoastonline.com/story/news/2025/06/09/portsmouth-secures-44-acre-easement-to-protect-bellamy-reservoir-water/84049177007/>

Seacoast Online Article: *“Portsmouth asks residents to voluntarily restrict outdoor water use due to lack of rain”* August 15, 2025:

<https://www.seacoastonline.com/story/news/local/2025/08/15/portsmouth-asks-residents-to-voluntarily-restrict-outdoor-water-use/85675582007/>