Safe Water Advisory Group (SWAG)
A City Council Advisory Committee
Portsmouth, New Hampshire
Wednesday, March 5, 2024

MINUTES

City Hall Conference Rm. A
The Zoom recording is posted to the
City's YouTube channel:
https://www.youtube.com/watch?v=HVbd6zsDWwc

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

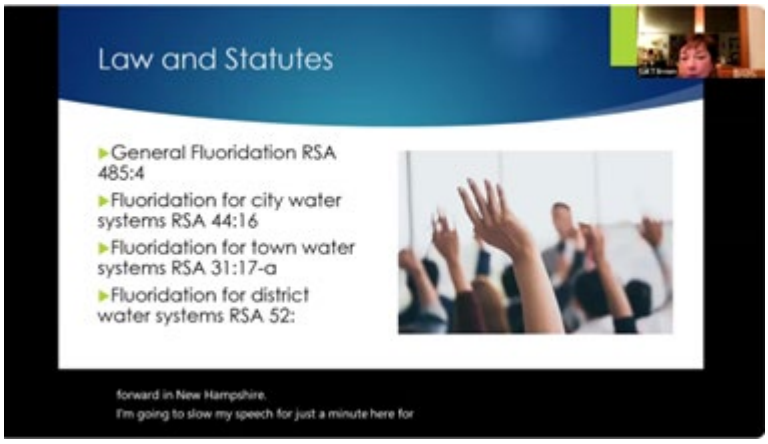
Attending: co-chairs Andrea Amico and Al Pratt, Councilor Lombardi, Chief McQuillen, Rich DiPentima, Kim McNamara. Zoom: Laurel Shaider. Staff: Mason Caceres. Absent: Rep. Meuse, James Hewitt, Councilor Rich Blalock, Katrie Hillman, Elizabeth Barrett.
Guests: Gail Brown, MSW, Executive Director, NH Oral Health Coalition; Alia Hayes, MPH, NH Department of Health and Human Services; Jennifer Mates, P.E., Engineer, NH Department of Environmental Services (NHDES); Brandon Kernen, Administrator of Drinking Water & Groundwater Bureau, NHDES

Link to presentations:https://files.portsmouthnh.gov/minutes/SWAG Meeting Slides 3-5-2025.pdf

Minutes: On a motion by Chief McQuillen, seconded by Councilor Lombardi, voted to approve the Dec 5, 2024 meeting minutes.

2. **Fluoride Presentation and Discussion - NHDES, NHDHHS and NHOHC**

a. Al Pratt, Water Division Manager explained that since approval by voters in 1975, the City of Portsmouth has added fluoride to the City's water system to meet the 0.7 mg/liter CDC standard (in the range of between 0.6 and 0.8 mg/liter). The City adds fluoride in two forms: Fluorosilicic Acid (H_2SiF_6) which must be handled extremely carefully and Sodium Fluoride (NaF) which is easier to handle but difficult to add in the sufficient quantities needed. In answer to a question about the corrosive nature of fluorosilicic acid, the City's ongoing testing/monitoring program and ph balancing mitigate the effect.
b. Gail Brown, MSW, Executive Director, NH Oral Health Coalition gave a presentation on 'why add fluoride?': to prevent dental decay and gum infection by countering the problem-causing bacteria present in saliva. Bacteria – not sugary foods – are the main cause of decay. Fluoride strengthens tooth enamel. For the past 70 years, community water fluoridation (CWF) has been demonstrated the most effective and cost effective ($20 saved for every $1 spent) solution. When CWF stops, tooth decay rates increase. Currently 12 of 2500 community water systems in NH (covering a population of 250,000) add fluoride. The halo effect from drinking water from those and MA border communities benefits a wider proportion. Portsmouth is one of those and has earned the CDC Fluoridation Optimization Award. Regulations covering CWF:

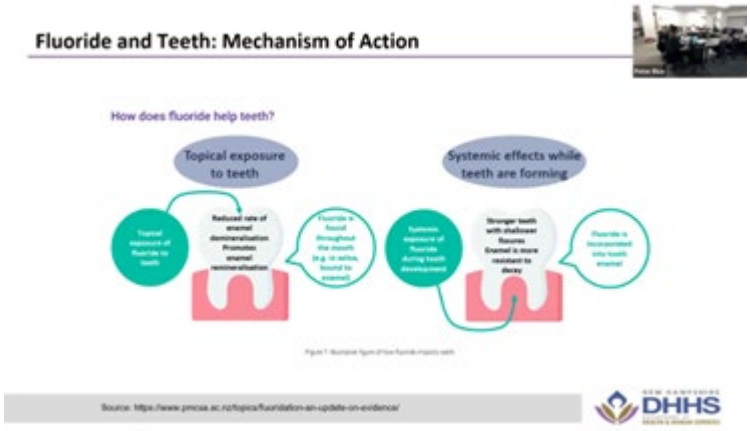


NH has one of the lowest fluoridation records in the nation (#46 of 50 states) as only 54 percent of NH households receive public water; 46 percent have private wells. But there are pockets of naturally occurring fluoride in the state, some with levels over 4 mg/liter which should be mitigated but are often unrecognized.

Fluoridation initiatives require signatures from 10 percent of the registered voters and then must pass by majority vote. Some water systems cover multiple municipalities and would require 10 percent signatures and majority votes in each town. The same process is true to remove legislation.

Question: Do carbon filters remove fluoride?
No. Requires activated alumina filtering.

c. Alia Hayes, MPH, NH Department of Health and Human Services discussed the topical and systemic benefits of CWF.



Topical application of fluoride to remineralize enamel can be done professionally with a varnish treatment, by self-application or through water systems which is more cost-effective ($32/person/yr) and covers all residents on public water.

Concerns being monitored:

- Higher levels (2-3 times the CDC 0.7 mg/liter may need mitigation).
- Reported IQ reduction is correlated with presence in urinary fluoride not exposure.
- Fluoride is regulated under EPA “maximum contaminant level” definitions while ongoing evaluation has reduced recommended levels to ensure safety.

Communities benefit from fluoridation: MassHealth reports communities without fluoridation have 50 percent higher dental claims.

d. Jennifer Mates, P.E., Engineer, NH Department of Environmental Services (NHDES) NHDES receives monthly operating reports from all 12 CWF systems, monitoring for any deviation from the 0.7 mg/liter level and forwards reporting to CDC. Outreach to residents on private wells to discuss fluoride with their dentists as those in areas with high levels would not want/need fluoride application.

Contacts:
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NH DES, Jason Smith, Jason.m.smith@des,nh,gov
NH DES, Cindy Klevens, Cynthia.m.klevens.@des.nh.gov
NH DES, Tom Willis, Thomas.h.willis@des.nh.gov

Notes:
Bottled water does not have added fluoride and is treated with reverse osmosis which would eliminate fluoride.
No evidence of any interactions between fluorosilicic acid and chlorine or leached lead.
City Water System includes fluoride data in annual water report and must control for corrosion and ph levels in all water.

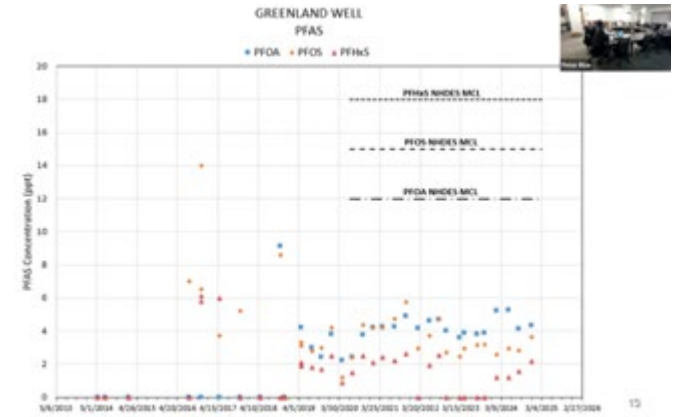
3. **NHDES Regulatory Update – Brandon Kernen, Administrator of Drinking Water & Groundwater Bureau, NHDES**
    a. EPA Lead and Copper Rule compliance – all service lines must be identified by 2027. This is the most complicated, longest and most complicated initiates.
    b. EPA PFAS 4 mcl regulation issued in April 2024.
    c. Caveats on the prospects of both rules under the new Administration. PFAS rule challenged in court by American Water Works Association and Metropolitan Water Agency resulting in no action for 60 days (to early April) while administration

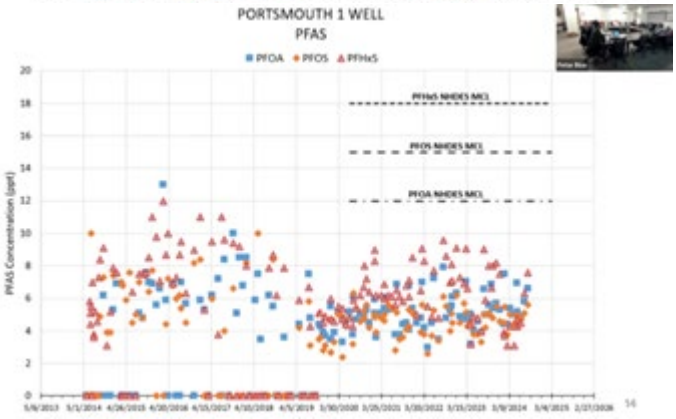
assesses. Lead & Copper Rule also impacted while there are tight timelines for compliance and limited 2 yr EPA temporary funding opportunities.

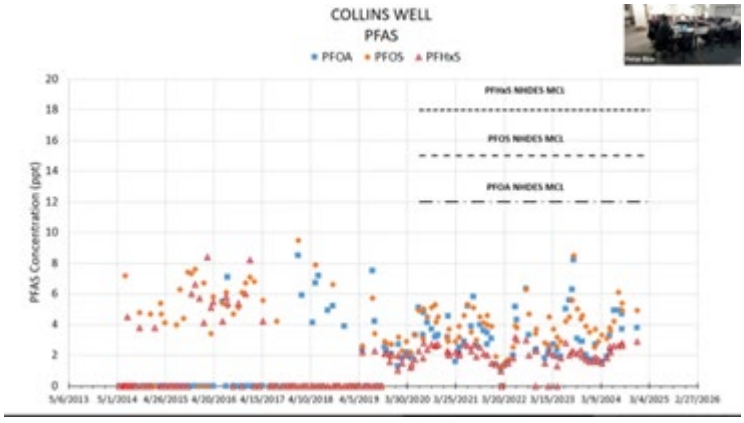
d. NH Department of Justice has secured a settlement from 3M, TYCO and BASF to reimburse water systems that have implemented mitigation measures for PFAS or are in the process. 300 water sources have PFAS > 4 mcl and the highest level 100 are addressed first. If the EPA PFAS rule is rejected NH will revert to its 12 mcl level. NH opted in on the $7 billion/US settlement and did the work for water systems, NH received 100 percent of its claims. The PFAS rebate is still running for anyone with higher than 4 mcl on a private well.
e. NH DES Federal funding is on hold but drinking water and wastewater treatment facility access grants are already awarded.
f. CDC agency for toxic substances 3-person team continuing for now.

4. PFAS Update –

a. Laurel Shaider -- If the EPA rule is undone the Safe Drinking Water Act is law so should prevent backsliding. If overturned, NH reverts to 12 mcl but technical questions remain for annual review recommendations to get to 4 mcl. Continue to look at the latest science as required by law. PFAS and PFOA superfund – new NH legacy sites.
b. Al Pratt -- DOD policy was defined as addressing sites with 3x mcl first. Portsmouth and Collins well. City has draft 5 yr agreement with the Air Force for continued Pease mitigation but no news on the Greenland well $586k project. Must be completed by 2028 which means it needs FY26 funding. If EPA pulls back the project's stuck in limbo.







c. Laurel Shaider Cancer correlation study released in January 2025. (https://www.nature.com/articles/s41370-024-00742-2) Ecological community study of half the US population comparing PFAS exposure and disease outcomes. Looking at county-level incidence based on 2013-15 UCMR 3 and then UCMR 5 which has more sensitivity. Found some association between some PFAS and some cancers but county level filter may be underestimating the results for a small county with many water systems (e.g. Barnstable County, Cape Cod with 15 towns and 18 water systems.) Study is statistically significant but varying confidence levels.

5. **Lead Discussion - Rich DiPentima, SWAG member**. Testified in favor of HB 724 introduced in the face of the increase in lead detection in NH children: 1,142 in 2023 (with only 30 percent of children receiving the required blood test.) Legislation would lower the blood level limit for lead and require inspections of all apartments in a building where a child is lead-poisoned. Ruled 'inexpedient to legislate' and not expected to pass. Increased testing for lead paint contamination needs political and community will. Perhaps municipalities could offer a property tax incentive for demonstrated lead mitigation. Kim reported that the Portsmouth Building Inspector would like to implement the rental unit inspection ordinance that is on the books and add lead paint to the inspection profile – believes the inspection fees would cover the cost of the additional inspector who would be needed. Andrea suggested keeping lead hazards as an agenda item for future SWAG meetings.

6. **Quarterly Water Supply Update** - Al Pratt, Water Resource Manager. See presentation: https://www.portsmouthnh.gov/sites/default/files/2025-03/SWAG%20Meeting%20Slides%203-5-2025.pdf

7. **Letter of Support for Greenland Well Treatment Funding** – SWAG letter to Sen. Shaheen in support of Congressionally directed funds to assist with the construction of a water

treatment facility to remove PFAS from the drinking water in the Greenland Well. Motion was offered by Rich DiPentima, seconded by Kim McNamara and approved unanimously.

8. **Mission Update** – Revised text for discussion at next meeting:
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.

9. **UNH Foam Sampling Project, Andrea Amico** – Foam noticed in Great Bay and Berry's Brook after heavy rain/wind. UNH Sea Grant project collected 4 dual-samples of foam and surface water and detected higher levels of PFAS in the foam than in its surface water. Public should be advised to avoid the foam. UNH seeking grant to do more sampling.

10. Community Education– Discussion at next meeting on what topics would SWAG like to see made public through quarterly meetings or other forums the group might present?

11. Public Comment – None.

Meeting adjourned at 8:10 pm