

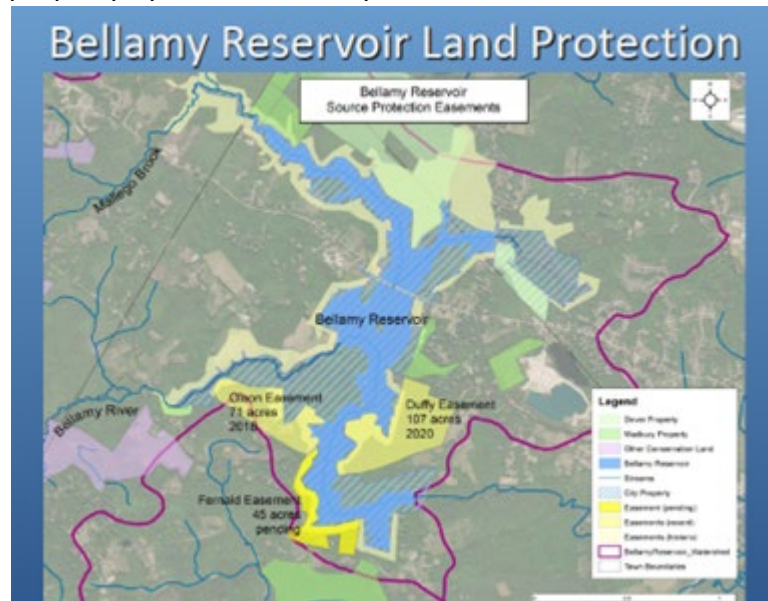
**Safe Water Advisory Group (SWAG)**  
**A City Council Advisory Committee**  
**Meeting Minutes Tuesday, September 10, 2024**  
**Madbury Water Treatment Plant**

Attending in person: Andrea Amico, co-chair, Elizabeth Barrett, James Hewitt, Councilor Rich Blalock, Councilor Vince Lombardi, Rich DiPentima. Excused: Katrie Hillman, Rep. David Meuse, Chief Bill McQuillen, Brian Goetz, co-chair; Laurel Schaidler, Kim McNamara. Staff: Al Pratt, Mason Caceres, Mariah Habershaw, Stephanie Seacord PIO, recording secretary Public: Shan Zuidema (Portsmouth resident and research scientist at UNH who models watershed scale hydrology; invited to attend by co-chairs Amico and Goetz).

Full SWAG meeting recording: <https://youtu.be/4zs1l5WeoRc>

Meeting presentation slides: [Reference Documents | City of Portsmouth](#)

1. Tour of Bellamy Reservoir.
2. Formal meeting resumed at Madbury Water Treatment Plant at 7 pm.
3. Introductions & Approval of minutes – Andrea Amico, co-chair  
Meeting called to order at 7:15 pm. Minutes for the June 26, 2024 meeting approved on a motion by Rich DiPentima, seconded Councilor Lombardi.
4. Reservoir Watershed Overview – Al
  - i. The City of Portsmouth owns and pays taxes on the reservoir.
  - ii. 22 sq. mile watershed drains to 440 acre Bellamy Reservoir. Most of the land in the watershed is rural with low development and the Bellamy River flows through wetlands. But the City continues to work to protect land surrounding the reservoir from development using a priority protection methodology based on size, shoreline, wetlands, proximity to intakes and development potential. Anticipate securing the Fernald property by the end of the year.



- iii. The City, NH Fish & Game and Madbury Police Department enforce the state restrictions on recreational and abutters' use of the reservoir. The Water Division conducts an annual perimeter survey and clean-up efforts at the launch sites and Rte. 9 causeway (usually coinciding with Earth Day).
5. Cyanobacteria Overview – Mariah Habershaw
  - i. City Water Division is monitoring cyanobacteria, a potential emerging contaminant in the watershed. Blooms increase under prime ecological conditions in the summer: direct sunlight, still

water and excess nutrients especially nitrogen and phosphorus from runoff fertilizer and pesticides. Portsmouth water sampling reported 22,000 cells/mL of cyanobacteria in raw water while >70,000 cells/mL is the recreational advisory limit. Cyanobacteria are characterized by their blue-green color and a fishy/gasoline smell.

- ii. Not all cyanobacteria contain cyanotoxins but the EPA has health advisories for 4 strains, two of which have been found in the Portsmouth system since monitoring began in 2019. Neither the 2023 or 2024 samples contained cyanotoxins but monitoring by GZA continues with sampling every two weeks. GZA was selected by NHDES and EPA for an \$89k grant to conduct a case study to address cyanobacteria in drinking water and to develop future monitoring and response plan. Q. In the event of cyanotoxin discovery, when would the public be notified? A. Immediately on detection.
  - iii. The City added air flotation platforms to keep the reservoir water from stagnating. Water continues to flow at the lower, colder levels of the reservoir and the entire system flushes itself 9 times a year (as compared to twice a year in most reservoirs).
  - iv. Rich Dipentima noted the correlation between cyanotoxins and ALS “Lou Gehrig’s Disease.” New Hampshire does not collect ALS data but Rep. Rosemarie Rung (Merrimack) is working to include monitoring under RSA 141.1 Health Reporting Act as this issue has growing public health significance.
  - v. There’s also a 2016 UNH study of loon behavior that might be affected by cyanotoxins.
6. City Water Supply & Master Plan Update – AI
- i. Good precipitation through July but “abnormally dry” conditions began in August. No water restrictions as typical fall-winter precipitation is expected.
  - ii. Water production on track. Q. Lonza is expanding. They now use 60% of the Pease water supply. Does the City expect that to increase? A. Actual use by Lonza is going down and they have a policy to cut back while using a new production process.
  - iii. Little Bay Water Transmission line – valves were replaced, pipes were found to be in good shape and City is confident that they could rely on 1 line if the second needed to be shutdown. Still preparing documents for rebidding the third redundant line as part of long-term sustainability and resilience planning. Q. What is the timeline for that? A. Waiting for NHDES wetlands feedback. Hoping to bid this fall for winter 2025-26 construction but not anticipating much change in the expense due to EPA construction restrictions.
  - iv. City has prioritized an air relief valve replacement project after one in Madbury failed in August. Now using that replacement model for the other 26 valves. Q. Will the City inspect and assess the pipes while replacing the valves? A. Yes.
  - v. Evaluating water storage tank refurbish-or-replace program
  - vi. Evaluating PFAS treatment plan for Greenland well, requiring a new building, road and power upgrade as well as the activated carbon treatment. Preparing package on the Portsmouth and Collins wells to submit to the Air Force. Q. Has the AF committed to funding? A. Not yet, but these two wells were also impacted by the Pease fire-fighting foam contamination.
  - vii. Anticipating a free NH DES water system energy audit.
7. Lead Testing & Service Line Inventory for Lead Regulations update – Mason Caceres, Assistant Water Resources Manager
- i. Free Lead Testing: Funded for 100 kits. 55 residents have responded; 27 have provided samples.
  - ii. Service Line inventory continues: 622 unknowns remain out of the 8,382 total services. No lead found to date. 92% of lines are copper. The 139 galvanized lines found so far must be replaced in 10 years. City will conduct outreach on replacement guidelines. City is required to report inventory on October 16, 2024 including any unknowns and must have a 100% inventory by 2037. Q. Is the City planning to knock on doors for those who haven’t replied? A. In process. The water meter replacement crews make 4 attempts while on their meter rounds.
  - iii. Lead & Copper rule compliance – City started required Q3 sampling at 60 sites on July 1.
8. PFAS update – AI

9. Public Comment – None.

Meeting adjourned at 8:13 pm. Next meeting: December 2024 (TBD)