

Key Topics: “Mysterious Creatures” Unraveling the mystery of the “Loch Fresh Monster”,
Water Board Vacancy, PFAS, Lab Presentation/New PFAS lab equipment update

CAMBRIDGE WATER BOARD

MEETING MINUTES

October 10, 2023

This meeting is available virtually on Zoom. This meeting is being recorded.

This meeting was called to order at 5:06 p.m., those in attendance via *Zoom* were:

Cambridge Water Board (CWB): Ann Roosevelt, Kathleen Kelly, James Burruss, and Benjamas Lendorff.

Cambridge Water Department (CWD): Mark Gallagher, Fred Centanni, Krystyna McNally Julie Greenwood-Torelli, Jamie O’Connell, Katie Orciuch, Rich Lagerholm, Dave Kaplan, and Linda Vierboom.

A. MINUTES OF SEPTEMBER 12, 2023, MEETING

Mr. Burruss moved, and Ms. Lendorff seconded the motion to approve the September 12, 2023, minutes as written. The vote was unanimous in favor of the motion.

B. MANAGING DIRECTOR’S REPORT

“Mysterious Creatures” Unraveling the mystery of the “Loch Fresh Monster”: A long, knotty, and twisted limb which bumped into the aeration tube bubbles in the Fresh Pond, caused quite a sensation, and the perfect illusion. There were numerous sightings of the log which would briefly pop into view before quickly disappearing, leaving only bubbles in its wake. It even prompted someone to hang homemade flyers on our perimeter fences with a crudely drawn image of the supposed beast. This piqued quite a bit of interest on social media. Mr. Gallagher was interviewed by several large Boston TV outlets, WBZ radio and the Boston Globe newspaper featured the Loch Fresh Monster story on the front page. CWD staff think it would be a great idea to make T-shirts for staff with our new temporary Loch Fresh Monster logo as drawn by hand by one of our talented distribution workers.

Water Board Vacancy: Four candidates have applied for the vacant waterboard position. We are currently reviewing resumes which we will bring to the city manager, and we are hoping to have a recommendation at the next meeting.

Questions/Comments: Ms. Roosevelt will be participating in the process of selecting a new member.

Questions/Comments: Ms. Lendorff asked for a status update on 10 Newell Terrace. Mr. Gallagher said we started replacement of the lead service line and thinks it will be done by the end of this week.

PFAS Update: Ms. Greenwood-Torelli said not much has changed since our last meeting. July PFAS results are 2.1. We are in the process of quarterly monitoring and will be collecting the last week of October/early November for the compliance sample. For our own in-house records, we continue monthly monitoring using combined effluent samples. We are also looking at each individual filter and sample at each one.

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Now that the new PFAS analyzer machine is up and running, Katie and Rich have the ability to run our samples in the laboratory with the new machinery. We will also send them out but now we will be able to compare our results with our third-party laboratory results. We will determine how well the testing is going and the machine is running for accuracy, and we will determine our timeframe for getting certified. The turnaround time for third party lab results is about 20 plus days.

Questions/Comments: Are we thinking of replacing the GAC filters next spring?

Ms. Greenwood Torelli said the new carbon in the first two filters that were changed out are performing better than expected. We are in a position where we don't have to change out the media. To be on the cautious side, we are going to do a change out in the spring. The carbon will be regenerated, and we can use it again. We are learning as we go, and it's been interesting to see how everything is coming together.

Lab Presentation- New PFAS lab equipment update: Via slide presentation by CWD Water Quality Supervisors Katie Orcuich and Rich Lagerholm. To view the presentation, please follow this link: pfastestingincambridgepresentation1023.pdf (cambridgema.gov)

Onsite training has been completed on the new PFAS instrument and we spent several weeks developing our PFAS testing method. It took a few weeks to solve the contamination method (which all labs have experienced). Another lab switched out the pipet tips and the contamination was eliminated. This worked for us, also. We ran a finished water lab sample. It's been going well. We will discuss the next steps with DEP to start the certification process leading us to our eventual goal of DEP certification.

Questions/Comments: Branch vs Linear? After running our first sample we discovered something interesting. The chromatogram showed branched isomers of PFAS. It's only recently that a testing instrument can detect a "branch". They (branch & linear) are the same weight and same chemical makeup, but they have a different shape, and they are hard to separate but with this new technology we can. We ordered standards and we can calibrate our instruments with the standards. For now, we are allowed to report the total and the linear and the branch as one number, but the industry has speculated that the industry will want these reported separately in the future. It could act differently in the environment.

Questions/Comments: Is the "branch" a different form of PFAS?

Ms. Orcuich said it was a different form. It's included in the 6 chemicals for PFAS. In the future, we speculate they will have to be separated. Now we have the ability to separate them for testing purposes. MWRA and Cambridge are the only publicly owned water utilities in Massachusetts that have this instrument. It's a good investment for the future. It's going to be a great tool for us going forward.

Questions/Comments: Right now, we have 6 PFAS compounds. Will this machine be able to detect other PFAS chemicals?

The instrument can see all of those compounds but there is no certified method to report them. Ms. Orcuich said our instrument is set up to quantify. Once someone else has explored and found a new PFAS they will add it to the "Mass Spec Library". Once the instrument can access that and

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see what it's supposed to look for, and a standard is commercially available, we will be able to look for those.

Lead and Copper Rule: We are finished for compliance and uploaded everything to DEP. We are not sure when the new rule will begin. The current schedule indicates the next sampling to be done in 2026. (This is dependent upon whether they change their rule.).

C. OPERATIONS

Transmission and Distribution:

Questions/Comments: How do you choose between on-call contractor, private developer contractor, Chapter 90 contractor or in house crew and how do you choose what project to do with a contractor?

Mr. Gallagher said we try to work with DPW street reconstruction contracts. They mobilize and we piggyback with their contracts (chapter 90, for example). Their contractor does the work. As part of the Fulkerson Street agreement the private development contractor agreed to support their project and replace the water main. We work with these private development contractors on these types of projects. We upgrade utilities to meet their needs and to our specifications. We have two inspectors and an assistant manager of distribution, and we work with them. We have a unit price contract with our On-Call contractors. They are on call for when we need them at the fixed price.

Watershed:

Questions/Comments: Kudos to Dave Kaplan for getting the million dollars (grant) for the Hobbs Brook Gatehouse and Winter Street Dam and Outfall, and \$250,000 from CPA funds to restore the Stony Brook Gatehouse. Mr. Kaplan said the nature of the work is different for both projects, hence the project cost differential.

Questions/Comments: Ms. Roosevelt commented on the large number of projects going on in the Watershed.

Water Operations:

Questions/Comments: The daily maximum of 19.70 MG occurred on September 8th. The average monthly calculation was 14.78 MGD. Max days can also occur if there is a big fire and quite a lot of water is used.

Ms. Roosevelt is concerned about demand and commented that eventually, more residents will have some reckoning at some point. Mr. Gallagher said our water consumption has dropped continually since the 70's. Back then our daily consumption was over 20 MGD. Our monitoring lets us catch leaks. Consumers are using low flow products. We met with CDM a few weeks ago and the demand study is in the works. In the future new developments will be required to provide anticipated water usage so we can track that more clearly.

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Engineering:

Questions/Comments: We consistently have two co-ops, and they rotate every 6 months.

Business:

Questions/Comments: Re: Water fund balance- \$8.7 million. Is part of the water fund balance set aside for capital costs such as SCADA?

Mr. Centanni answered "No". SCADA has already been encumbered. It's, for lack of a better description, our savings account. At the next water board meeting we will have the 6/30/2023 latest water fund amount. We expect it to increase.

Questions/Comments: Water Hobbs Brook Reservation Storage- Ms. Roosevelt asked why there was an increased swing in storage after September 18th. Ms. O'Connell said it was because of the rain. It lines up with the precipitation map. Hobbs Brook is larger than Stoney Brook and takes more of a storm/more water to show a storage increase. Stoney Brook storage is determined by how we manage it.

Questions/Comments: Ms. Roosevelt commented positively on the graphs.

Questions/Comments: Ms. Roosevelt appreciates the vigilance of the watershed staff.

D. ACTION ITEMS

None

E. MISCELLANEOUS CORRESPONDENCE AND ITEMS OF INTEREST

None

F. NEW BUSINESS

None

G. NEXT MEETING DATES/AGENDA – Meetings via Zoom

- November 14, 2023: Approved/TBD

The meeting ended at 6:19 pm.