

CAMBRIDGE WATER BOARD

MEETING MINUTES

January 9, 2024

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

This meeting was called to order at 5:04 p.m. Those in attendance via *Zoom* were:

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

Cambridge Water Department (CWD): Mark Gallagher, Fred Centanni, Julie Greenwood-Torelli, Dave Kaplan, Emily Maynard, Jamie O’Connell, and Linda Vierboom.

A. MINUTES OF DECEMBER 12, 2023, MEETING

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

B. MANAGING DIRECTOR’S REPORT

The water board welcomed Emily Maynard in her new role as watershed management assistant.

2023 Transmission and Distribution Year in Review: Presented in slide format by Mark Gallagher. A link to this presentation may be found at:

<https://www.cambridgema.gov/-/media/Files/waterdepartment/waterboardminutes/transmissionanddistributionpresentation124.pdf>

Questions/Comments: What causes pipes to rupture?

Mr. Gallagher replied that it’s often hard to identify the reason. Weakness in pipes often develop over time. Old Cast Iron Main failures often start as a small crack. These cracks leave pipes vulnerable when there is a flow event, vibration, or pressure surge due to hydrants being opened.

Questions/Comments: Can empty space/voids under our mains cause sidewalk collapse?

Some areas can be undermined when pipes rupture and soil is washed away. To prevent sidewalk collapse in such events, the areas affected will be backfilled or “flowable fill” will be used if an excavator can’t reach the area. This type of fill is poured into the hole and will fill all the voids that the backfill can’t reach.

Questions/Comments: Stray currents sometimes can cause pipe corrosion in old cast iron pipe.

Questions/Comments: Back in the day when they started realizing the limits of cast iron, graphite began to be added to the iron which gave it that ductile elasticity. Ductile comes with a corrosion resistant coating on the outside.

The life expectancy of cast iron is estimated to be one hundred years. Mr. Gallagher has seen that it can go a lot further with the addition of the graphite protective coating. Some of our cast iron is over 140 years old. Our oldest active main was installed in 1864 during the time of the civil war.

Key Topics: 2023 Transmission & Distribution Year in Review and PFAS

Questions/Comments: Our aggressive water main replacement program has reduced the amount of leaks each year. 2023 had the lowest number of leaks on record.

Questions/Comments: Occasional spikes in leaks can be caused by lengthy deep cold (below zero degrees) and construction activity (gas, electrical, sewer separation, underground structures).



CWD CREW WORK 2023													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Leaks	5	5	0	2	4	3	7	0	1	0	2	2	31
Lead renewals	2	2	3	2	3	1	1	0	0	0	7	4	25
Hydrants	5	2	1	1	14	6	4	7	0	1	9	6	56
Valves	2	1	2	0	2	3	5	1	0	0	0	0	16
Gatebox	1	1	0	1	1	1	1	0	2	0	3	3	14
Standpipe	1	2	0	0	1	1	1	1	1	0	2	0	10
Mains(Repair/Replace)	2	2	0	1	1	1	3	0	0	1	1	3	15
Service Reconnects	0	0	0	0	0	0	0	0	0	0	6	2	8
Corp clean	0	0	1	0	0	0	1	0	0	0	1	0	3
Testpit	0	0	1	0	0	1	0	0	1	0	0	0	3

Lead Service Replacements: We began with over 11,000 lead services. There are approximately 2,400 to 2,500 lead services remaining.

CWD IN HOUSE CREWS	25	
PRIVATE DEVELOPMENT	50	TOTAL 112
DPW CONTRACTORS	37	

Key Topics: 2023 Transmission & Distribution Year in Review and PFAS

CWD Crew Other/Miscellaneous Duties: Meter and backflow installations in April and removals in October. Snow operations for the City.

Questions/Comments: How closely is the placement/location of water pipe known?
Mr. Gallagher said we know exactly for most locations. We have our GIS Maps and use GPS for confirmation. Valve placements also identify pipe locations. We electronically coordinate all water service work and track that requirements are being met.

Questions/Comments: Gas company street projects are out ahead of DPW chapter 90 sewer separation work. If DPW is going to be paving, CWD would notify residents that we are “working in your area” and notify/flyer the neighborhood. We also post online. We have a list of all lead services that we would give those residences. If people aren’t sure if they have a lead service and want us to check to make sure, we can verify what’s on the property.

Questions/Comments: Back in the early 1900’s lead was considered the “gold standard” for water service pipe. Not all, but a lot of galvanized steel was lined with a thin coating of lead to prevent corrosion. Those services are now included in the list of properties with lead services.

PFAS Update: The fourth quarter PFAS results came in at 6.3ppt. We had a meeting with CDM Smith yesterday to go over some scenarios. Our carbon outperformed better than we expected but we are learning that we are beyond the life of the carbon in filters 5 & 6 as shown by the upward trending PFAS numbers. The new carbon is ready and will be scheduled for installation at the beginning of February. We have to think about how we operate the filters. Using timers, we have a filter run time on each carbon. We are utilizing the new PFAS testing equipment to make operational changes. We measure each individual filter to collect data which gives us indicators of what is going on with the media and the water quality in those filters individually.

Questions/Comments: Are we collecting raw water samples? Ms. Greenwood-Torelli said we are testing both finished and raw water samples.

Questions/Comments: Is there more PFAS in the winter?
Yes. We have seen that PFAS is higher in the winter. We don’t have enough data yet, but our numbers do seem to go up in the winter. We have seen that PFAS moves very quickly in water. We surmise that snowmelt is picking up PFAS that isn’t normally picked up during the warmer months.

C. OPERATIONS

Transmission and Distribution:

Questions/Comments: It was asked if we were providing water for the Harvard Square Kiosk and what the water would be used for.

Mr. Gallagher said we are providing water. Finding a spot for the water meter was the most difficult part. The reason for their anticipated water usage is to be determined.

Watershed:

Questions/Comments: RE: Decommissioned BP Multi Site.

This was one of our old multi-counter sensors located along the Greenway. CDD (Community Development Department) may host the site in the future if they wish to continue collecting data.

Key Topics: 2023 Transmission & Distribution Year in Review and PFAS

Questions/Comments: The 1342 Main Street, Waltham Redevelopment Project is slated for commercial sites and one residential.

Questions/Comments: Re: Enbridge request to cut 55 trees on CWD land for utility work. Ms. Kelly is extremely concerned about the tree removal request and asked what kind of trees are in place. If this looks like a place with good, mature native trees, Ms. Kelly would like to keep it that way. She is also concerned about restoration follow through, or lack of, by Enbridge. Mr. Kaplan thanked Ms. Kelley for her comments. Mr. Kaplan said surveys have been conducted. If this project advances a robust habitat assessment will be done.

Questions/Comments: The Tracer Lane Solar Field was approved, with conditions, by the Lexington Planning Board. This is still in litigation and CWD is working through the process.

Questions/Comments: The water supply capacity is great. Storage looks great.

Water Operations:

Questions/Comments: Ms. Roosevelt commented positively on the water usage figures.

Engineering:

Questions/Comments: River Street Streetscape Project: Because of the way its funded, watermain costs will come out of DPW sewer separation funds. This is a full-depth DPW street restoration project which will address some of the climate change flooding predictions. 8,000 linear feet of watermain will be replaced as part of the project. CWD will provide oversight only.

The Lead Service Report is on our website.

Business:

Questions/Comments: The water fund balance is down a bit at 5.08 million dollars. Part of the fund was taken for the unanticipated skyrocketing costs of materials and for the SCADA Project. FY2025 Water Rates are being looked at now.

D. ACTION ITEMS

None

E. MISCELLANEOUS CORRESPONDENCE AND ITEMS OF INTEREST

None

F. NEW BUSINESS

None

G. NEXT MEETING DATES/AGENDA – Meetings via Zoom

- February 13, 2024: TBA/TBD
- March 12, 2024: TBA/TBD

January 31, 2024, Fresh Pond Stewardship awards at 8:30 pm.

Mr. Kelly moved, and Ms. Lendorff seconded to adjourn the meeting at 6:13 pm. All were in favor of the motion.