

CAMBRIDGE WATER BOARD

MEETING MINUTES

March 9, 2021

As a result of the Walter J. Sullivan Water Purification Facility being closed to the public due to COVID-19, this meeting is available virtually on Zoom. This meeting is being recorded.

This meeting was called to order at 5:05 p.m. at 250 Fresh Pond Parkway, in Cambridge, Massachusetts. Those in attendance via *Zoom* were:

Cambridge Water Board (CWB): Ann Roosevelt, Jim Burruss, Kathleen Kelly, Mike McNeley and Jason Marshall

Cambridge Water Department (CWD): Sam Corda, Fred Centanni, Ed Dowling, Dave Kaplan, Jamie O'Connell, Anna Van Dresser, Mark Gallagher and Linda Vierboom

A. MINUTES OF FEBRUARY 9, 2020 MEETING

Mr. Marshall moved, and Mr. McNeley seconded the motion to approve the February 9, 2021 minutes as written. The vote was unanimous in favor of the motion.

B. MANAGING DIRECTOR'S REPORT

Watershed Land Acquisition Planning Summary: Land acquisition program progression since it was first developed in 2005; as presented by Watershed Manager, Dave Kaplan. Please see the link below to view the presentation.

https://www.cambridgema.gov/-/media/Files/waterdepartment/waterboardminutes/030921_LandAcqSummary.pdf

To protect the quality and quantity of the Cambridge Water supply in perpetuity is our goal and acquiring real estate is a step forward in our watershed protection strategy. Some of the benefits of acquiring land in our watershed are maintaining our water supply and improving raw water quality to help reduce the treatment needs.

The total watershed area equals 15,000 acres (24 square miles). Total Cambridge ownership is 1,400 acres (2.2 square miles) or about 9%.

Our land acquisition approach prioritizes land located in the Zone A water reservoir protection area as well as land in imminent risk of development. The approach helps in maintaining ecological integrity and the protection of rare species and historic sites.

In the last 20 years the City has acquired about 124 acres resulting in the protection of ~450 acres within our watershed. These acquisitions were: The Harrington Property (Lincoln/Weston 2005); The DeNormandie Property (Lincoln 2012); and The Jerodel Property (Lincoln 2015).

Moving forward our strategy will be to continue to monitor activities in our watershed to identify high protection value properties, as well as potential funding sources and partnerships to continue to take advantage of our watershed protection opportunities.

Key Topics: Watershed Land Acquisition Planning, Drought/Water Conservation Update, PFAS Update, and COVID-19 Update

Questions/Comments: What is the cost of ownership and who defines reasonable acquisition costs? Mr. Kaplan replied that there are many avenues to obtain funding for watershed protection land purchases such as: state grants, pay-as-you go capital, private partnerships, and the City CPA funds. Cost of ownership and/or maintenance will vary based on the parcel and future uses. Parcel variations such as: Is it a historic site, are there any dam structures, is the intent to be open to public use and/or does it or will it have trails for walking, will determine the cost of ownership.

Ms. Roosevelt asked about the feasibility of putting a line item in the water department budget every year for land acquisition. Mr. Corda said that it is possible although we currently have many projects such as Filter Media Replacement, SCADA System Upgrade, Reservation Restoration Projects and our Distribution System Water Main Rehabilitation Program. Once we get beyond the Scada upgrade in about 3 years we will consider this option. This should not prevent us from continuing to look at parcels, and if we have an opportunity, we will look at it and develop a strategy as we have very successfully done in the past.

Mr. McNeley asked if we have had 61A Parcel – Farming and Agriculture discussions. Mr. Kaplan is not familiar and will do some research.

Is there some system or approach to obtaining strategic land parcels? Mr. Kaplan said there is not an active outreach in Weston, Lexington and Waltham. Typically, the Land Trust in Lincoln approaches us. It's worth identifying a list of potential parcels for watershed protection and this could be used for proactive outreach.

Are there additional value assets, or site scoring criteria for parcels? We already have "criteria," established, said Mr. Kaplan. We can investigate this and see if makes sense to add to or change our existing criteria.

Drought/Water Conservation Update: The drought, which began June 2020, officially ended in January 2021. As of March, and based on prediction models, there are no droughts predicted. January and February of this calendar year have had average precipitation. Reservoirs are recharging. Things look good.

PFAS Update: The January 2021 sampling result of our finished water for PFAS6 is 12.2 ppt. The unofficial number for February is slightly less and we will post the official results when received.

We have talked with CDM Smith about the preliminary test results for the GAC PFAS6 removal. The GAC carbon that we use now is the best performer of the 3 carbons that have been tested. The results show about 80% efficacy for PFAS6 removal and indicate there is little to no PFAS in the backwash water. CDM has started testing the GAC to determine how long it continues to remove PFAS6 – we are 4 weeks into the process now and the GAC is still performing well.

Questions/Comments: Ms. Roosevelt asked: If we are using the same carbon, why don't we have the 80% efficacy rate for PFAS removal now? Mr. Corda said we have been using the filters simply as filters and the media has never been replaced and doesn't need to for filtering alone. The removal mechanism for PFAS6 with GAC is **adsorption**. Adsorption occurs on the surface of the carbon particles. Once the surface is "used" the adsorption stops occurring and

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thus the PFAS6 passes through the filters without being removed - before this happens the GAC needs to be replaced. Our existing filter media effectively stopped adsorbing about 17 years ago.

Ms. Roosevelt asked: If you replace the charcoal, will it filter and adsorb? "It will and would probably be good for about 3 years," replied Mr. Dowling. There will be a learning curve after we replace the GAC as we monitor each filter for PFAS6 removal. We will verify the duration that the filters can effectively remove the PFAS6 to less than 10ppt.

Mr. McNeley is happy about the backwash results. When transitioning to the new filter media, how fast does it respond to being full? Does PFAS creep up slowly? Mr. Dowling said the bench/pilot testing will tell us the expected duration for the effective removal of PFAS6. Once installed we will be monitoring the carbon performance to verify and/or establish the replacement interval.

COVID-19 Update: Two weeks ago, we had a couple more positive cases. These cases were unrelated to each other. Quarantine procedures followed. There have been approximately 5 total cases since the beginning of the pandemic a year ago.

Based on the current rollout, we meet the requirements to be fully staffed and will go back to Fridays in office starting the week of March 22nd. Building and vehicle disinfection continues each day. Masks are always required for all employees except in their own office with a door shut.

C. OPERATIONS

Transmission and Distribution:

Questions/Comments: Ms. Roosevelt commented that Northpoint is projected to use up to a million gallons of water per day. Is this bad? Do we want more development?

Mr. Corda said that despite the increasing population of the City the water consumption continues to drop. It is currently at 12 MGD and well below our withdrawal limit which is 16.16 MGD. The 2012 Demand Report, including the North Point full buildout, predicts that we will be at 15.3 MGD by 2041 with a very flat curve. If we ever reach our withdrawal limit, we could purchase MWRA water to supplement our supply.

Mr. Marshall said it's a good issue to flag and asked if the developer pays for the new pipes. Expansions and extensions are typically borne by the developer. All pipes were paid by the private developer at North Point.

Watershed:

Questions/Comments: It was commented that there are many construction projects in Waltham and Lincoln, and it sounds like we are on top of it. We are, said Mr. Corda and the law department works with us as well. Mr. Kaplan said he is working with our newly acquired mobile management tool that will help us to track development in the watershed. This customized application should be available for us to start using in about 3 or 4 months

Ms. O'Connell is noticing an increase in small septic system upgrades in private homes.

Water Operations:

Questions/Comments: How long will the Scada upgrade take?

From design to construction completion it will take about three years.

Engineering:

None

Business/Billing:

Questions/Comments: The water balance fund is certified once a year based on the balance as of the last day of the fiscal year – June 30th.

D. ACTION ITEMS

None

E. MISCELLANEOUS CORRESPONDENCE AND ITEMS OF INTEREST

“Great Wimbleton Circle Pump Site Letter,” commented Ms. Roosevelt. Is it required that they follow the suggestions?

Jamie attended the hearing and said they are happy to work with us. The recommendations are being incorporated.

F. NEW BUSINESS

None

G. NEXT MEETING DATES/AGENDA – Meetings via Zoom

- April 13, 2021: Approved/Little Fresh Pond Shoreline Restoration Concepts
- May 11, 2021: Approved/Distribution System
- June 8, 2021: Approved/TBD

Mr. Burruss moved, and Ms. Kelly seconded the motion to adjourn the Zoom meeting at 6:36pm. The vote was unanimous in favor of the motion.