CAMBRIDGE WATER BOARD

MEETING MINUTES

December 15, 2020

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 5:10 p.m. at 250 Fresh Pond Parkway, in Cambridge, Massachusetts. Those in attendance via *Zoom* were:

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

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

A. MINUTES OF OCTOBER 13, 2020 MEETING

Mr. Marshall moved, and Mr. McNeley seconded the motion to approve the October 13, 2020 minutes as written. The vote was unanimous in favor of the motion.

A. MINUTES OF NOVEMBER 10, 2020 MEETING

Mr. Marshall moved, and Mr. McNeley seconded the motion to approve the November 10, 2020 minutes as amended. The vote was unanimous in favor of the motion.

B. MANAGING DIRECTOR'S REPORT

Drought/Water Conservation Update: Drought status has improved, and water has started to accumulate at Hobbs Brook. The State of Massachusetts Drought Condition is at Level One status (mild drought). We continue with our conservation efforts online, drought notifications, and the inclusion of water conservation pamphlet inserts with the water bills.

PFAS Update: As summarized by Ed Dowling – Beginning January 1st, the City will be required to measure monthly for PFAS compounds in our finished water. We have been updating the narrative on the website. We began finished water testing back in August 2019 and the testing lab lost certification in October 2020 and thus the data for October. We found another certified laboratory in Massachusetts which will perform PFAS testing going forward. Our November data is 15.6 parts per trillion (ppt) for the six compounds. Our running average is 16.8 ppt and is under the regulatory limit of 20 ppt as regulated by Massachusetts for the sum of six PFAS compounds. There are 3,500 known PFAS compounds; which were most prominently used in the 1950's, 60's and 70's. We have identified two other compounds that aren't regulated by the State, and in anticipation of future regulations, they are considered in our tallies for regulation. We anticipate that replacing the existing filter media will mitigate and minimize the regulated compounds in the water. Our goal is to be as low as possible but no greater than 10ppt for the six regulated compounds

Questions/Comments: The answer was "No" when asked if we were over 20 ppt on the regulated compounds. We are under 20 for the Massachusetts regulated compounds, with 16.8 as the running average.

Key Topics: Election of the President, Drought/Water Conservation Update, PFAS Update, Demand Study Projections and COVID-19 Update

We are four weeks into the pilot study. Pilot testing will show which granular activated carbons (GAC) are best for PFAS compound removal and how long the GAC will last to maintain the level of efficacy. Once the carbon filter surface has been used up, the carbon will need be replaced – our estimate is about 3 years. Every water is slightly different, and our configurations are slightly different than other waters – that is why we are bench scale pilot testing the various GAC's.

After 14 weeks we should have a pretty good handle on what works best and for how long. The state regulation mandates that for levels over 20 ppt, an action plan must be developed and carried out to remove the PFAS. Mark Gallagher was told by DEP that Cambridge is the first in the Northeast Region to perform pilot testing. When asked of the timeline for PFAS removal, Mr. Corda said it would depend on when the pilot testing is completed. After that, DEP must approve the carbon selected and the purchase and installation must go to through the bid process. (Anticipating the results by end of February, Bid/Response 4-6 weeks, Installation 3-6 months). Ideally, it would be great to start May/June of 2021, said Mr. Corda.

Mr. McNeley said the online transparency with data is great. One observation, he noted, was that there is a wide range in the results. Was this a seasonal effect? Mr. Dowling agreed and said PFAS is in the ground and as we draw down the reservoirs it gets drawn in the water and it could be temperature based, as well. Mr. McNeley asked, "Will the new materials (GAC) help tighten this range?" Mr. Dowling replied that we expect it to, but we will monitor the filter effluent water frequently once the new GAC is installed to better understand the filter performance in removing the various PFAS compounds. This additional monitoring will continue until we are confident on the performance of each filter. Mr. Dowling said everything will "stick" to the filter and eventually will get "plugged up" and the GAC will need to be replaced. The carbon filters will also remove other compounds, as well, and will affect the replacement cycle of the GAC. That's why we must monitor each filter and determine/confirm in practice the pilot test results. Ms. Roosevelt asked if there was a "sweet spot" to replace the filter carbon. "Yes," replied Mr. Dowling. "That's why we are having the study done."

Mr. McNeley asked if there was a plan to monitor the "raw" or untreated water. Mr. Dowling said there is a plan. We will test the finished/treated water monthly as required by DEP and the Reservoirs (raw water) quarterly to ensure that we know what is happening in our water system.

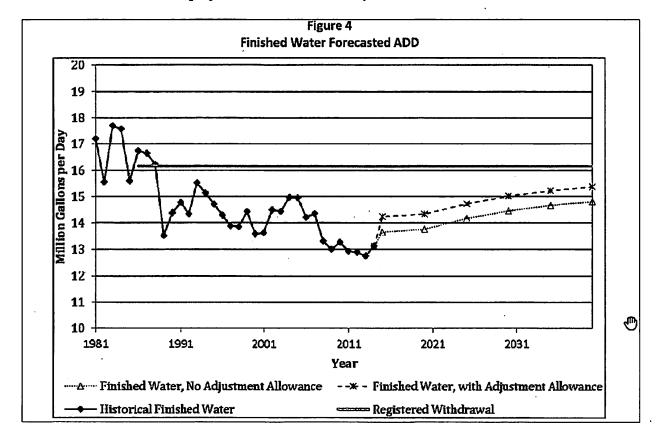
Demand Study Projections: A demand Study was completed in 2012 which included the zoning and re-zoning data from the Community Development Department (CDD). Zoning is used to project maximum development, in terms of population, and is used in demand projection studies. Water conservation has played a key role in the current level of demand/average daily water consumption, which was 12.2 million gallons per day (MGD) for fiscal year 2021. Future demand projections show a slight increase (about 2 MGD) in water demand through 2041 (See Figure 4). In general, the water demand has been going down since the early 80's and has been recently impacted by the Pandemic as well. We may want to update the demand forecast sometime next year.

Questions/Comments:

Mr. Marshall asked if the demand projection study presented different scenarios and even aggressive development scenarios. Mr. Corda believes it did and will review the report to confirm this. Ms. Roosevelt is concerned by development and the need for more water.

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Ms. Roosevelt would like to revisit this in the next year to make sure we are on track. The 2020 census will indicate any increase in population. Mr. Corda agrees with Ms. Roosevelt that we should revisit the demand projections within the next year or so.



COVID-19 Update: The City posts daily COVID updates online. The pandemic situation has been worsening and the State is rolling back the reopening. The City has also been rolling back slightly more than the state recommendations. In a letter dated today, the City manager has extended the working from home option for qualified employees through June 30, 2021. It should be noted that the City of Cambridge has done significantly better than any other similar cities or towns in Massachusetts.

C. OPERATIONS

Transmission and Distribution:

None

Watershed: A general question was asked if there was anything, we could do about stopping sub-divisions in Lexington, Waltham and Weston. Mr. Kaplan said redevelopment has been a good thing, because the watershed division requires developers to keep up with the current State Storm Water Standards and we request the reduction or better control of deicing practices. Ms. O'Connell does a good job to make sure what developers are doing matches up with the regulations and that they have the right mitigation in place. Mr. Kaplan said relationship building and advocacy are important aspects of his division. The parcels outside of buffer zones are the ones that the watershed division has proactively developed relationships with. Even areas that

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don't require meeting stormwater standards have been good neighbors with good storm water controls, which has and will help to maintain or improve water quality.

Questions/Comments: Should we be looking at priority tracts of land to be purchased for watershed protection?

Mr. Kaplan said we have done research and are in constant communication with land trusts in our watershed. If there is an opportunity, local groups in our watershed know to come to us. Usually it starts with a private landowner who is interested in conserving the land instead of developing it.

Ms. Kelley asked if we are making a mistake by not making this more of a priority. Ms. O'Connell said we identify parcels but making deals happen is not something we do proactively and it's a conversation worth revisiting. Mr. Kaplan has a list of undeveloped parcels and can update the list by distance to tributaries (priority) and how they are valued monetarily - this information can be shared with the Water Board. Ms. Roosevelt said there are potentially many funding options and that identifying key parcels to keeping water clean would be a priority. Ms. O'Connell said it makes sense to update and revisit the list periodically. Mr. Marshall said it would be helpful to set up a routine process. Mr. Marshall thanked Ms. Roosevelt for raising this question and suggests looking at this in a more systematic way and tabling it for a future meeting. Mr. Corda agreed and said we have had three opportunities, where we purchased land with others and own, or have conservation restrictions on them; which is about 140?? acres. This will be revisited sometime in the spring.

Water Operations:

None

Engineering:

Cambridge/Watertown Bike Project Status: Mr. Kaplan said the contractor has some work left to do in Watertown and most of the greenway has the first coat of asphalt. Most of the work within Cambridge is nearing completion. Mr. Gallagher said there are still some minor plantings or touch up work to be completed in Cambridge. The Greenway Project is on schedule to be completed in June of 2021.

Business/Billing:

None

D. ACTION ITEMS

Election of the President:

Ms. Roosevelt was nominated to be the President of the Cambridge Water Board for 2021.

Ms. Kelly moved, and Mr. Burruss seconded the motion to elect Ms. Roosevelt as President of the Cambridge Water Board for 2021. The vote was unanimous in favor of the motion.

E. MISCELLANEOUS CORRESPONDENCE AND ITEMS OF INTEREST No Comments

Key Topics: Election of the President, Drought/Water Conservation Update, PFAS Update, Demand Study Projections and COVID-19 Update

F. NEW BUSINESS

Glacken Field/Huron Avenue Project: Mr. Corda said there has been significant progress made to reduce the reservation property needed for the Huron Avenue sidewalk. Mr. Corda said that conceptual work with Mr. Kaplan, Ms. Watkins and Ms. Falise minimized the land needed for the Huron Avenue sidewalk to Glacken Field from ~9,000 to ~500 square feet. Mr. Corda said we are looking at other areas within the reservation to make up for the ~500 square feet of reservation land which is proposed to be used for the Glacken Field/Huron Avenue sidewalk. One example of a giveback are the three sidewalks in the Sozio rotary area within the reservation. If we can de-pave one of the sidewalks, we will bring back more greenspace and that would be a plus. There will be a formal presentation from DPW in January 2021 to discuss the specifics.

Ms. Kelley recommends that the proposal for Little Fresh Pond be reviewed by the Board before finalizing it.

G. NEXT MEETING DATES/AGENDA – Meetings via Zoom

- January 12, 2021: Approved/DPW Presentation on Huron Avenue sidewalk/Glacken Field
- February 9, 2021: Approved/TBD
- March 9, 2021: TBA/TBD

A motion was made to approve the February 9th meeting date. The vote was unanimous in favor of the motion.

Mr. Marshall moved, and Mr. McNeley seconded the motion to adjourn the Zoom meeting at 6:28 pm. The vote was unanimous in favor of the motion.

B. MANAGING DIRECTOR'S REPORT

- Huron Avenue Sidewalk Presentation

- PFAS Update
 Drought Update
 COVID-19 Update