



WATER RESOURCES ADVISORY COMMITTEE

Meeting Minutes
September 15, 2022
7:00 PM
Virtual Meeting

Present: Barry Rosen, Ron Parenti, Joe Robb, Matt Mostoller, and Mike Geis

Chairperson: Mike Geis

Clerk: Ron Parenti

Others in Attendance: Himaja Nagireddy (Select Board Liaison), Kim Kastens, Terra Friedrichs, and Richard Doherty.

1. Opening

WRAC chair Mike Geis opened the meeting at 7:05 PM.

2. Regular Business

- A. Review Minutes – An email request to amend the 1 September, 2022 draft minutes was submitted by Barry Rosen prior to this meeting, and those changes were implemented. A motion to approve the minutes was made by Mike Geis and seconded by Barry Rosen. The minutes were approved by a unanimous roll call vote of the members in attendance at the 1 September meeting; Matt Mostoller did not attend that meeting and abstained.
- B. Public Remarks/Comments – Kim Kastens informed the Committee about several topics relating to her work with Green Acton. She has investigated the methods used by the State’s Drought Management Task Force (DMTF) to establish regions of drought and drought severity. Kastens noted that the methods used to make these determinations are complicated, and that she is working on a report that will discuss the history of drought in Acton. She also informed the Committee about an upcoming Green Acton Water Committee meeting that will be held at the Nashoba Brook Conservation Land, which will include a discussion of USGS stream flow data and OARS phosphorous data collected from Nashoba Brook. At the League of Women Voters book group meeting on 27 September the book Big Thirst by Charles Fishman will be discussed.
- C. Overview of Great Road Study Proposal – Ron Parenti served as the WRAC representative on the selection committee for the of the Great Road Corridor Project study, which was recently awarded to Wright-Pierce. The details of the proposal submitted by that company can now be openly discussed, and Parenti provided the following summary.
 - 1) The primary goal of the study is to perform a feasibility study of wastewater treatment alternatives within the Great Road corridor. This section of the study involves 4 specific tasks that have been defined by the Town.
 - 2) The Add Alternate No. 1 portion of the RFQ included 6 distinct tasks: a) clearly explain the roles in water resource management for the Acton community, b) address



stormwater management concerns within the Great Road corridor, c) address wastewater management concerns within the Great Road corridor, d) recommend strategies for potable water resource protection, e) use existing Town of Acton GIS data to create a series of water resource and infrastructure maps, and f) provide a water-related policy-decision matrix for the Great Road corridor. A chart showing the fractional study time allotted to each of these tasks was shown. Parenti stated that, in his opinion, more time should be spent on the issues directly related to potable water issues (items *b* through *e*) and less time on items *a* and *f*. The total study time allotted for these tasks is 298 hours, which is 27% of the total.

3) The approach proposed by Wright-Pierce is to begin the study by first making an assessment of the Town's goals for the Great Road corridor, and evaluate several options for wastewater treatment. These options would include at least two potential routes to connect a future sewer line to the Town's River Street Pump Station in South Acton. The company will also consider other alternatives, such as a connection to the Middle Fort Pond Brook wastewater treatment facility that is within the corridor.

4) The estimated timeline for the preliminary study is 4 months, and three progress report meetings are scheduled within that period. The proposal states that the Add Alternate portion of the study could be performed in parallel with the primary study or after the primary study, and a majority of WRAC members expressed their preference for the latter option. Barry Rosen noted that the Town is required to allocate sewer capacity for any properties that have frontage on a line that connects the Great Road corridor with the sewage treatment plant on Adams Street. Matt Mostoller answered a number of questions raised by Committee members and attendees regarding the potential impacts of the sewage treatment options that will be considered by Wright-Pierce on water quality and future demand.

5) The kickoff meeting will be held on 27 September; Chris Allen, Matt Mostoller, and Ron Parenti have been invited to attend that meeting as representatives of the Acton Water District and the WRAC.

D. Methodology Used to Compute PFAS Limits – Ron Parenti presented an overview of his investigation of the methods used by federal and state regulators to compute the PFAS drinking water advisory levels and regulations that the Acton Water District must respond to. The following points were included in this presentation.

1) Researchers became concerned about the hazards associated with PFAS chemicals about 15 years ago when it was discovered that trace levels of these contaminants were detected in bodies of water and in the soil throughout the world. The reason for these findings is that PFAS substances have been used to manufacture a wide variety of consumer goods for over 50 years, and the lifetime of these molecules in the environment is extremely long.

2) The first drinking water advisory was issued by the EPA in 2016. That advisory called for a limit of 70 parts-per-trillion (ppt). In 2020 the MassDEP issued an enforceable drinking water MCL that placed the limit at 20 ppt. These numbers are almost a factor of 1,000 lower than any previous drinking water regulation on



chemical contaminants. In 2022 the EPA reduced the advisory level on some PFAS chemicals to a few parts-per-quadrillion (ppq).

3) The endpoint for most drinking water regulations is a rodent study that identifies a contaminant dose that results in no measurable health effects. The conversion of this number to a drinking water contaminant limit involves a series of calculations in which the level in the rodent's blood is estimated and then converted to a concentration level in human blood. The drinking water regulation results from an estimate of the input that would maintain a blood concentration level that is below the number considered safe. All of these calculations involve the use of models and assumptions that are intended to be protective of the most sensitive human population segments.

4) One of the key assumptions made by the EPA and the MassDEP is that drinking water accounts for only 20% of the PFAS exposure in humans. The remaining 80% is attributed to sources that include food containers, cookware, clothing, rugs, and furniture. This means that irrespective of the amount spent on water treatment, the predicted exposure level will only be reduced by 20%.

5) The high cost of treatment to meet the new PFAS regulations may force the Acton Water District to abandon its efforts to treat water extracted from local wells and initiate the process of connecting to the supply maintained by the Massachusetts Water Resources Authority (MWRA). The financial impacts of such a change would be extreme, and would permanently redefine the role of the Acton Water District.

Following this presentation there was an extended discussion of related topics such as potential methods for destroying PFAS, non-drinking water sources of PFAS, and the possibility of passing local bylaws to prohibit the sale of products containing PFAS.

E. Any other new business –None.

3. **Adjournment**

The Committee members decided that the next meeting would be scheduled for 13 October, 2022. A motion to adjourn was made by Mike Geis and seconded by Matt Mostoller. Adjournment was approved by a unanimous roll call vote of the WRAC members, Joe Robb, Matt Mostoller, Barry Rosen, Ron Parenti, and Mike Geis, at 8:45 PM.