



BOARD OF WATER COMMISSIONERS

Cotuit Fire District

Water Department

4300 FALMOUTH ROAD, P. O. BOX 451
COTUIT, MASS. 02635

10/23/2024

The Board of Water Commissioners held a Sodium Workshop at Freedom Hall beginning at 3:00pm on 10/23/2024. Present at the meeting was Chairman David Churbuck, Commissioner Mark Robinson, Commissioner Scott Horsley, Superintendent Chris Wiseman, and Office Manager Jennifer Nash. Also in attendance was Bruce Young and John Tibbets from Mass. Rural Water Association, as well as Hans Keijser (Hyannis Water) and Mark Nelson (Horsley Whitten Group).

Commissioner Robinson opened the discussion by noting that a survey of water districts conducted earlier this year revealed rising sodium levels across Cape Cod. He expressed hope that the districts could collaborate to present this data to the town, advocating for changes in how road salt is applied during the winter season. Commissioner Robinson then presented charts and graphs prepared by Tom Cambareri of Sole Source Consulting, based on data collected this summer. He subsequently handed the discussion over to Bruce Young.

Bruce Young, from Mass. Rural Water Association (MRWA) has a background in environmental science, city planning and water resource planning. He noted that the issue is not just Cape-wide, but State-wide, and that the real culprit is Chlorides. Many areas have chloride impaired waters which automatically triggers Regulation and potential funding for a Salt Reduction Plan. (MS4 Stormwater Plan & Municipal Assistance Grants).

The Cotuit Water Department does test for Chlorides annually in the Secondary Contaminants testing. It is not required testing or regulated by MassDEP at this time. The SMCL for Chlorides is 250. Cotuit Water last received results for Chlorides in October of 2023, at which time the levels ranged from 30-64 at each well. These results are low as Mr. Young noted that results of 250 was "bad" and 500 was "detrimental". These results have been seen in areas such as the Quabbin and Wachusett reservoirs where salt reduction plans have been implemented.

There are several steps that the town can take when treating roads in the winter which include using a brine solution (anti-icing), pre-wetting the road so that road salt sticks and is more effective. There are better plow options available such as "live edge" plows that are more effective in clearing the roads down to bare pavement. Additionally, there are technology solutions, such as GPS systems used to reduce salt distributions on warmer pavement and at stop signs, and Vaisala MD30 devices which measure pavement temperature, dew points, and grip analysis to more effectively treat the roads.

Mr. Young noted a study done in the Town of Granby, MA who paid for their equipment in two years with the savings on the amount of salt that was being distributed on the roads.

The commissioners will review the information that Mr. Young presented, as well as the Salt Reduction plans that are in place at Quabbin and Wachusett, as well as the study for the Town of Granby. They would like to meet with town

officials such as Dan Santos, Director of Public Works and DPW Supervisor Sean Jones to see what they can implement to help reduce the use of road salt, that makes its way to the drinking water supply, increase both the sodium and chloride levels.

The Water Department staff will compile the historic results of Chloride tests and provide this information to the Board, as well as implement a more frequent testing schedule. The commissioners will continue to work with Mr. Young to possibly take a more regional approach to resolving this issue. Having no additional public comment, the meeting adjourned at 4:40 pm.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'D. Churbuck', written in a cursive style.

David Churbuck, Chairman
Board of Water Commissioners