

BOW DRINKING WATER PROTECTION COMMITTEE 2021 ANNUAL REPORT

The BDWPC was created by the Town Selectboard in 2005 to support drinking water protection and outreach on water quality. In 2021, committee membership was reduced from the original 8 to 5 public members, in addition to the 3 town appointees (DPW, Community Development and Contract Water Operator). Meetings are held on the first Monday of each month at the town Municipal Building as well as streamed online.

Bow well water has naturally occurring contaminants that have no taste, color or odor such as radon, arsenic and uranium, so the only way to detect their presence is by testing. Also, salt contamination from softener backwash and road salt increases water corrosivity, causing harmful lead and copper leaching from home plumbing fixtures.

This year the committee distributed 65 water testing kits in our annual well testing event held the first Saturday in June. Test results processed by the State Public Health Lab through 2021 (chart) show that 70% of Bow well samples exceed the radon guideline of 4,000 pCi/L, 56% exceed the new state arsenic standard of 5 ppb, and 17% are above the proposed manganese state health advisory for formula-fed infants of 0.1 mg/L. Stagnant lead leaching from home plumbing fixtures due to water corrosivity is also of concern in as many as one quarter (23%) of samples.

Studies have shown that the ingestion of arsenic or uranium can increase the risk of developing certain types of cancers and other diseases, and that radon exposure via air and water is the second leading cause of lung cancer after smoking. Formula-fed infants (up to 12 months old) should not drink manganese over 0.1 mg/L to prevent potential health risks including impaired motor function and learning, or harm to their nervous system.

Following the well testing event, the committee provides guidance on treatment options such as Point of Use (POU) filter cartridges for arsenic or uranium, as only the water used for drinking and cooking needs to be treated. Whole-house treatment is required for radon, corrosivity, and manganese, though non-salt treatment technologies are preferred to reduce salt contamination to groundwater and surface water.

To test your well, you can obtain a sample kit at the Town Clerk's office, from the State Public Health Lab at 603-271-3445, or online by searching for "NHDES Homeowner Sample Bottle Request". The recommended test package is the "Standard + Radon" which consists of 15 parameters including arsenic, uranium, manganese, stagnant and flushed lead, bacteria and others. Testing cost is \$105.00 due upon sample delivery. For questions or additional information, please contact bowdrinkingwater@bownh.gov and visit <https://bownh.gov/394/Private-Well-Owners>.

Cynthia Klevens, Chair

Madhumita Chatterjee, Jordan Vachon, Wendy Waskin, Tom O'Donovan - Volunteer members

Alvina Snegach, Matthew Taylor - Community Development Representatives

Steve Cheney - Whitewater Inc., Contract Water Operator