Groups claim ‘alarming levels’ of ‘forever chemicals’ found in Brunswick

By C. Thacher Carter

January 10, 2022

In addition to the PFAS test, Ed Friedman measures specific conductivity for a general measure of water quality. Photo courtesy of Pat Elder.

Three groups claim they found “alarming levels” of PFAS – also known as “forever chemicals” – in water at two Brunswick locations.

Military Poisons, Friends of Merrymeeting Bay and Earth Democracy Committee of Women’s International League for Peace and Freedom released a report earlier this month after testing for PFAS at a wastewater treatment outfall into the Androscoggin River in Brunswick and at a creek neighboring the former naval air station.

Results reported by the local groups showed total PFAS concentrations of 183.1 parts per trillion in the wastewater treatment outfall and 1661.2 parts per trillion for the creek. The group detected 36 and 29 different compounds in the two locations, respectively.

The Maine Department for Environmental Protection does not have PFAS guidelines for surface water. For drinking water, although not an apples-to-apples comparison to surface water, the agency denotes six PFAS compounds to be limited to 20 parts per trillion.

Brunswick does not use the Androscoggin River for drinking water.

PFAS are a classification of long-lasting human-made chemicals, and according to the Maine DEP, thousands of variations exist. Beginning in the 1940s the chemicals were used in household products and for industrial purposes. The chemicals are cancerous and known for
impacting human fertility, cholesterol, immune system and hormones. PFAS can also be built up in animals over time, posing a potential danger in eating seafood that may have been living in a contaminated environment.

**Related**

**Department of Environmental Protection investigating potential PFAS contamination in Bowdoinham**

The report attributes the detected contaminants, in part, to firefighting foams containing PFAS, particularly the compound PFOS, that were first used at the former base beginning in the 1970s.

“The state understands the correlation between PFOS levels in surface water and the propensity of this chemical to bioaccumulate in aquatic life,” said Pat Elder of Military Poisons. “I’d like to see them launch a robust testing regime and set advisory levels that are protective of human health. At a minimum, women who are pregnant or may become pregnant ought to be warned of the dangers to their unborn children inherent in eating seafood taken from these contaminated waters.”

The groups used a testing kit manufactured by a company called Cyclopure. The $79 kit can be purchased online, and users send collected samples to the company’s lab. Cyclopure uses a method of analysis validated by the Environmental Protection Agency, but its lab is not certified, and results are not accepted by government agencies. The testing kit can detect up to 54 PFAS compounds.

Maine DEP Project Manager Iver McLeod said that while the results should not be dismissed, the Cyclopure testing kit does not align with state standards.

“When we collect samples for PFAS, whether it’s surface water, or soil, or cow milk, whatever, it’s done under very, very, very strict sampling protocols because it is very easy to contaminate samples – PFAS is everywhere,” McLeod said. “So, if you’re wearing the wrong kind of clothing you can get it into your sample. I have no idea how they collected these samples, there is no reference to a sampling plan that I can look at. They may have done it perfectly well. I don’t know.”

One line of evidence supporting the results, McLeod said, was a comparison to a 2018 study by the Navy and DEP in the same creek the local groups tested. The 2018 sampling reported figures for three different compounds in the creek, and the local organizations’ results for those compounds were similar.

All drinking water on Brunswick Landing is provided by the Brunswick-Topsham water district, McLeod said, and new businesses are prohibited from using groundwater.
The Navy, alongside the Maine DEP and EPA, has been collecting samples of PFAS at the base for about ten years, McLeod said. Mitigation techniques designed to protect construction workers have been implemented and some groundwater cleanup systems are already in place at the base. McLeod said he hopes a new sampling plan will launch in the late spring 2022.

In a statement, Midcoast Regional Redevelopment Authority Executive Director Kristine Logan said that the agency appreciates the public's interest in the safety of the stormwater leaving the former base.

“MRRA is aware of the PFOS/PFOA compounds that exist from the historical use of the property and can assure the public that the Navy is working to mitigate the amount of those compounds that exist in the groundwater,” said Logan. “Along with the Navy’s efforts, MRRA is actively managing all possible pollutants in partnership with the Maine DEP and EPA. All parties will continue to work toward mitigation that leads to the best possible outcomes for all.”

There are two hangars at the base today that still have the original firefighting foam systems installed by the Navy, MRRA’s Manager of Real Estate and Marketing Ben Sturtevant said in an email, adding that MRRA has implemented a stormwater pollution prevention plan for its property.

© 2022