Testimony of Gail L. Carlson, Ph.D.

In Support of
LD 493 *An Act to Expand Testing for Perfluoroalkyl and Polyfluoroalkyl Substances to Private Drinking Water Wells*
LD 500 *An Act to Ensure Access to Safe Drinking Water from Household Wells in Rural Areas by Expanding Testing*
LD 1326 *An Act to Protect the Drinking Water for Consumers of Certain Water Systems by Establishing Maximum Contaminant Levels for Certain Perfluoroalkyl and Polyfluoroalkyl Substances*

Before the Committee on Health and Human Services
April 22, 2025

Senator Ingwersen, Representative Meyer, and members of the Committee, thank you for hearing my testimony. My name is Gail Carlson, I have a Ph.D. in biochemistry, and I live in Waterville. I teach public health courses at Colby College, and I have conducted research on local environmental contamination by PFAS, including in drinking water. I have had the pleasure of speaking to you before on PFAS, and I appreciate your close attention to this issue.

As you no doubt have heard by now, contaminated drinking water is one of the major routes of human exposure to PFAS. No regulatory step to protect our drinking water is too much. We have to act, because these chemicals are so persistent and won't just "go away" in our surface and groundwaters, and because they are so toxic.

One major drinking water contaminant, PFOA, for which LD 1326 includes a standard level, is one of the most toxic chemicals in our environment. In 2022, the EPA announced a new PFOA health advisory, which is the "concentration of chemicals in drinking water at or below which adverse health effects are not anticipated to occur," of 4 parts per *quadrillion*. In all my years of studying chemical pollution, I've never heard of an advisory that low. That is below the level that we can detect in water and far below any level we could hope to achieve by water filtration. In essence, EPA is saying there is no safe level of exposure to PFOA in drinking water. And they set a parts per *quadrillion* health advisory for PFOS, as well. We simply must do all we can to remove these chemicals from our drinking water, and setting binding standards as low as EPA's new standards, will help us get there. The water I drink in Waterville will benefit, as our PFOA level

exceeds[1] the new 4 ppt EPA standard but not the current Maine standard of 20 ppt for a combined 6 PFAS.
PFOA, PFOS and other PFAS increase the risk of a large number of human illnesses, including several types of cancer, liver and heart conditions, adverse pregnancy outcomes, hormone disruption in children, metabolic conditions like high cholesterol and ulcerative colitis, and suppression of the immune system, which on its own leads not only to more infectious diseases but also cancers. In addition, there is enormous mental health stress associated with wondering if your drinking water is making you sick.

Many of us in this room know people who have been impacted by PFAS contamination, including in their own bodies, and their health has suffered. In my case, one of my close colleagues at Colby, biology instructor Tim Christensen, owned one of the highly contaminated farms in Unity with very high PFAS levels in the well water, and we lost him to an aggressive cancer in 2015.

Regulating contaminants in drinking water is expensive, to be sure, but there is no price too high to save human lives and to prevent human suffering. And please remember that on the other side of the equation are the enormous health care costs, and economic costs, of illness and death. One recent analysis[2] that monetized the cost burden of PFAS-related health effects in the U.S. put the value at well over $20 billion per year, and that was for just a subset of diseases and a subset of specific PFAS chemicals.

Because of these enormous risks, Mainers have the right to know what they are being exposed to in their drinking water. This is why the bills to require landlords and sellers of properties with private wells to test and disclose PFAS levels, and to provide funds for low-income Mainers to access water testing, are essential.

PFAS exposure shatters health, shatters lives, and costs us untold billions of dollars per year. We have a chance to reduce these tragic costs by taking the steps proposed today to reduce PFAS levels permitted in drinking water and help more Mainers identify the risks in their own drinking water.

Please vote *ought to pass* on LD 493, LD 500 and LD 1326. Thank you.

[1] https://kennebecwater.org/water-quality/water-quality-reports/
[2] https://doi.org/10.1210/jendso/bvad163