



**Testimony of Sharon Treat, Institute for Agriculture and Trade Policy
In Support of LD 1995,
An Act To Make Supplemental Appropriations and Allocations for the Expenditures
of State Government, General Fund and Other Funds
Joint Standing Committee on Appropriations and Financial Services
Joint Standing Committee on Agriculture, Conservation and Forestry
March 4, 2022**

Chairs Senator Breen and Representative Pierce and members of the Joint Standing Committee on Appropriations and Financial Services; and Chairs Senator Dill and Representative O'Brien and members of the Joint Standing Committee on Agriculture, Conservation and Forestry. My name is Sharon Treat and I live in Hallowell. I am Senior Attorney for the Institute for Agriculture and Trade Policy (IATP), on whose behalf I am testifying today in support of the provisions of LD 1995 funding the Department of Agriculture, Conservation and Forestry to address PFAS contamination.

IATP is a 501(c)(3) nonprofit headquartered in Minneapolis, Minnesota with offices in Hallowell, Maine and other locations. IATP works closely with farmers and seeks to promote local, sustainable and environmentally beneficial agriculture and trade policies.¹ We have been following PFAS issues across the country and especially in Maine, where we have taken a strong interest in how PFAS contamination has affected farmers and agriculture.²

THE SCOPE OF MAINE'S PFAS PROBLEM.

The problem of PFAS contamination in Maine cannot be overstated; it is not hyperbole to call it a crisis. Nothing can change the fact that past practices have poisoned prime farmland and drinking water across the state with toxic "forever chemicals." Hundreds of residential wells have been found with high levels of PFAS. At least 9 Maine farms have been tested and found to have high levels of contamination. Another 20-30 farms are likely to be found contaminated when soil testing resumes after the ground thaws, based DEP's best estimates and their location within "Tier 1" of its investigation of wastewater sludge-spreading across the state. Farmers have had their livelihoods destroyed or significantly impacted, their farm irreparably contaminated. PFAS are bio-accumulative as they move up the food chain and essentially last forever in soils. For example, soil contamination at a Unity farm was caused by biosolids spread [24 years before](#) the farm was purchased by the current owners; not an atypical situation.

Farmers, their families and their neighbors have been exposed to toxic PFAS in their water and food. Households have been watering their gardens with PFAS-contaminated water in the Fairfield area for

¹ IATP also has offices in Washington, D.C. and Berlin, Germany (IATP Europe). For over 30 years, IATP has provided research, analysis and advocacy on a wide range of agriculture-related issues including farm to school; climate; agroecology; soil health and water quality and access; farmworker health and economic security; and trade and market policies. For more information, see www.iatp.org.

² IATP's PFAS materials are posted here: <https://www.iatp.org/and-polyfluoroalkyl-substances-pfas>

decades. Meanwhile, even without added contamination from water, landscapers and gardeners apply soil amendments year after year to the same soils. Contaminated commercial fertilizer marketed to home gardeners is of concern both in Maine and nationally. A recent [report](#) found PFAS in each of nine fertilizer products tested and marketed as “eco” or “natural,” eight of which exceeded Maine’s current screening guidelines.³ Water and soil testing is just starting for the rest of the state, but given the large [number of past sludge-spreading sites](#), and the great distances highly mobile PFAS have traveled through ground and surface waters, we will likely see similar scenarios playing out across Maine.

THE FUNDING FOR DACF IN THE SUPPLEMENTAL BUDGET IS CRITICAL.

Maine’s reputation for clean, healthy and sustainably produced food is taking a beating, and the agriculture sector of the economy is threatened. IATP strongly supports funding to investigate, abate, and remediate agricultural contamination, to test food and address food safety concerns, and to assist farmers economically. Both the one-time infusion of funding and the six positions are critically needed. DACF staff are overwhelmed right now and can’t possibly address the PFAS crisis without additional personnel and added expertise, and funding for research and testing.

Unfortunately, the amount of funding in the LD 1995 is inadequate. The \$9.2M dollars that the Governor has asked for is not nearly enough to help the people of Maine address the poisoning of land, food, water and bodies with PFAS caused by a state-sanctioned and promoted biosolids spreading program. In testimony before legislative committees, DEP staff estimated \$20M would be needed annually just for site investigation. In a listening session for farmers held by the Maine Farmland Trust and Maine Organic Farmers and Gardeners Association last night, farmers across the state, including those not yet known to be affected, pleaded with DEP and DACF to speed up the pace of the investigation and testing, something these agencies cannot do without additional funding and staff far beyond what is allocated in LD 1995.

Farmers are in limbo, and the longer it takes to complete soil, water and food testing, the more uncertainty and turmoil will be felt across all of Maine agriculture. Even with the funding and staffing supplemented by LD 1995, DEP projects it cannot complete the testing of sludge sites for PFAS until sometime in 2025. Meanwhile, farmland can’t be sold while under the cloud of forever contamination, investments in high tunnels and farm equipment won’t be made, and consumer anxiety about the safety of local foods --whether justified or not--will only increase. As the farmers made clear in last night’s session, the stain of PFAS contamination is affecting not only those whose land and water is directly contaminated but also other farmers who purchase hay for feed or milk for cheese, and don’t know whether these inputs are free of PFAS. Ultimately all Maine agriculture is being affected and will be under a cloud until all possible PFAS hotspots are identified and tested and food production is moved away from contaminated soil and water.

³ The test products were purchased in Maine and nationally at national chains including Lowes, Home Depot and Ace Hardware, as well as locally owned garden centers. Scientific studies of compost made from sludge “biosolids” and from municipal waste confirm widespread PFAS contamination. See also Lazcano, Rooney Kim and Youn Jeong Choi, Michael L. Mashtare, and Linda S. Lee. “Characterizing and Comparing Per and Polyfluoroalkyl Substances in Commercially Available Biosolid and Organic Non-Biosolid-Based Products.” *Environmental Science & Technology* 54 (2020): 8640-8648. DOI: 10.1021/acs.est.9b07281; Choi, Youn Jeong and Rooney Kim Lazcano, Peyman Yousefi, Heather Trim, and Linda S. Lee. “Perfluoroalkyl Acid Characterization in U.S. Municipal Organic Solid Waste Composts.” *Environ. Sci. Technol. Lett.* 6 (May 2019): 372–377. <https://doi.org/10.1021/acs.estlett.9b00280>.

FUNDING IS ALSO NEEDED FOR MEDICAL MONITORING AND FARMER BUYOUTS.

Besides speeding up the pace of the investigation into sludge spreading sites and the turnaround time on test results, funding is necessary to address needs that currently are not part of the state's PFAS plan. These needs include (1) paying for medical monitoring of those exposed to high levels of PFAS; and (2) assisting farmers facing a catastrophic situation not of their own making, by replacing lost income, helping to pivot to alternative crops or alternative fields and, and for some, relocating their farms through a state buy-back program.

THE STATE SHOULD FUND A MEDICAL MONITORING PROGRAM.

In the DEP portion of the supplemental budget there's over \$4 million to stand up in-state PFAS testing capacity, to test drinking water and livestock, produce and soil samples. All critically important. But what about the people who have been exposed and have astronomically high PFAS blood levels? In the MFT/MOFGA listening session, we heard from farmers who pleaded for the state to pay for ongoing medical monitoring and the cost of blood tests. Even for those who have adequate insurance coverage, PFAS blood tests are unlikely to be covered by health insurance.

Drinking water with astronomical levels of PFAS. These farmers, and their neighbors, have contaminated wells they have been using for decades for drinking water and for irrigating crops. The PFAS levels measured in some of these wells are astronomical. In testimony before the legislature, PFAS in a well across the road from corn fields in Fairfield was measured at 14,832 parts per trillion (ppt), which is 742 times Maine's interim health standard for drinking water of 20 ppt for the sum of six PFAS chemicals.⁴ Farmers at the MFT/MOFGA listening session reported PFAS measurements of 9,000 ppt at an Albion farm; 1300 ppt in Jackson; 1690 ppt in another Albion farm; and 2,000 ppt on a farm in Knox.

PFAS in blood and breast milk. Many of those affected have young children, including nursing infants, who have been [exposed to PFAS through breast milk](#). One young couple who paid to have their blood tested found levels of 790 and 460 parts per billion (ppb) for PFOA and 2700 and 1800 ppb for PFOS. The difference between these measurements? The lower levels were measured for the nursing mother, who expelled some of the PFAS through breast milk – into their infant child. These are unsafe levels hundreds of times higher than background levels and significantly above that measured in industrial workers in PFAS manufacturing plants.

Exposure to PFAS causes health problems. According to the federal Environmental Protection Agency (EPA), "current peer-reviewed scientific studies have shown that exposure to certain levels of PFAS may lead to: reproductive effects such as decreased fertility or increased high blood pressure in pregnant women; developmental effects or delays in children, including low birth weight, accelerated puberty, bone variations, or behavioral changes; increased risk of some cancers, including prostate, kidney, and testicular cancers; reduced ability of the body's immune system to fight infections, including reduced vaccine response; interference with the body's natural hormones; increased cholesterol levels and/or risk of obesity."⁵ PFAS exposure can make people more susceptible to COVID-19 health consequences;

⁴ Testimony of Nathan Saunders before the Environment and Natural Resources Committee on LD 1911 and LD1875, January 24, 2022, https://legislature.maine.gov/legis/bills/display_ps.asp?PID=1456&num=130&paper=&paperId=I&Id=1875

⁵ Environmental Protection Agency, Our Current Understanding of the Human Health and Environmental Risks of PFAS, <https://www.epa.gov/pfas/our-current-understanding-human-health-and-environmental-risks-pfas> (Last accessed March 2, 2022)

indeed, recent research has found a strong association with PFAS exposure and COVID-19 severity, antibody response, and asthma.⁶

PFAS health problems often don't manifest until years later. Medical monitoring programs provide ongoing medical testing to detect the potential onset of disease or other adverse health effects from toxic chemical exposures, such as PFAS. PFAS, like many toxic chemicals, can cause latent diseases that only manifest years later, thus, it becomes more critical to monitor and prevent the development of disease or other adverse health effects over the long term.⁷ Medical monitoring is precisely attuned to exposure to hazardous substances such as PFAS. Someone exposed to toxic substances may not show symptoms of an illness, but they may experience subcellular or other physiological changes that warn trained medical professionals that the patient has an increased risk of developing a serious illness requiring medical monitoring.⁸ Early detection of disease and adverse health effects prevents more devastating, and more costly, consequences later.⁹ In *Ayers v. Township of Jackson*, the court described how medical monitoring furthers 'the public interest in early detection and treatment of disease.'¹⁰

Medical monitoring will help affected Mainers hold responsible parties liable. Medical monitoring will help affected Mainers collect the evidence they will need to hold manufacturers accountable for covering up data about health consequences, for example, and may enable them to bring a legal case without waiting for serious disease and death to manifest. Otherwise, the responsible party is more likely to escape liability by arguing that during the long latency period, other intervening forces could have caused the injury.¹¹

There is precedent for a government-funded and run medical monitoring program.

- Maine's **Childhood Lead Poisoning Prevention Program** is one model for such a program. In 2021, The State of Maine received \$350,000 through a cooperative agreement from the Centers for Disease Control and Prevention (CDC). The funds address childhood lead poisoning prevention and surveillance programmatic activities being conducted from September 30, 2021 to September 29, 2022. The activities focus on: ensuring blood lead testing and reporting; enhancing blood lead surveillance; and improving linkages to recommended services.¹²
- On the federal level, an example of a government medical monitoring program is the **World Trade Center Health Program**. The Zadroga Act created the WTC Health Program and reopened the September 11th Victim Compensation Fund (VCF). The Program provides monitoring and treatment

⁶ See, "Severity of COVID-19 at elevated exposure to perfluorinated alkylates," Philippe Grandjean, Clara Amalie Gade Timmermann, Marie Kruse, Flemming Nielsen, Pernille Just Vinholt, Lasse Boding, Carsten Heilmann, Kåre Mølbak (December 31, 2020), <https://doi.org/10.1371/journal.pone.0244815>

⁷ Megan Noonan, *THE DOCTOR CAN'T SEE YOU YET: OVERCOMING THE "INJURY" BARRIER TO MEDICAL MONITORING RECOVERY FOR PFAS EXPOSURE*, 45 VT. L. REV. 287, Available at: <https://lawreview.vermontlaw.edu/wp-content/uploads/2021/01/Noonan.pdf>

⁸ Id.; *Ayers v. Jackson Twp.*, 106 N.J. 557, 604, 525 A.2d 287, 311 (1987)

⁹ Bryce T. Hensley & David A. Neiman, *The Need for Medical Monitoring in Illinois*, July 30, 2021, Romanucci & Blandin, Available at: <https://www.rblaw.net/blog/the-need-for-medical-monitoring-in-illinois>

¹⁰ *Ayers v. Jackson Twp.*, 106 N.J. 557, 604, 525 A.2d 287, 311 (1987)

¹¹ Megan Noonan, *THE DOCTOR CAN'T SEE YOU YET*

¹² Maine, *Childhood Lead Poisoning Prevention*, Center for Disease Control and Prevention (Last Assessed March 2, 2022), Available at: <https://www.cdc.gov/nceh/lead/programs/me.htm>

for specific health conditions that have been determined to be 9/11-related. The VCF provides monetary compensation to individuals or surviving family members whose injuries, illnesses, or deaths were related to 9/11. The Program is housed under the U.S. Department of Health and Human Services and administered by the National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention.¹³

THE SUPPLEMENTAL BUDGET SHOULD INCLUDE FUNDING FOR FARM BUYOUTS AND RELOCATION.

DACF has proposed using some of the supplemental budget allocation in LD 1995 to replace a year or season of lost income for farmers who have been impacted by PFAS contamination. While this program is welcome, farmers need more. Given the significant revenue surplus Maine is experiencing, this is the time to set aside some of this one-time money for a program to help save Maine’s agricultural economy. We know that nine farms are already impacted including three dairies and 5 vegetable farms. Another 30 farms are, according to DEP, most likely to be found to be contaminated based on a review of sludge and septage permits. Income replacement for a year at 35 farms could top \$35M, and the cost of buying farmland and relocating heavily contaminated farms could be \$50M.

These are big numbers, but as we have pointed out, all of Maine’s farm economy is being harmed by PFAS either directly or indirectly. It is heartbreaking to see so many of Maine’s young, energetic, and committed farmers potentially driven off their farms and out of agriculture. They are our future and the future of the State’s agricultural economy. We have the resources right now to make this right, and we should do so.

¹³ U.S. Center for Disease Control and Prevention, History, World Trade Center Program, <https://www.cdc.gov/wtc/history.html>.