

- To: House Committee on Agriculture, Land Use, Natural Resources, and Water Representative Ken Helm, Chair
- From: Abigail Tomasek, Assistant Professor Department of Crop and Soil Science
- Date: February 27, 2023
- Subject: Testimony in Favor of House Bill 3123-1—a Bill to Study the Fate and Transport of Perand Polyfluoroalkyl Substances (PFAS) Found in Biosolids that are Land Applied to Agricultural Fields Across the State.

Dear Chair Helm and Members of the Committee:

My name is Dr. Abigail Tomasek and I'm an Assistant Professor in the Department of Crop and Soil Science at Oregon State University (OSU) and the statewide Soil and Water Quality Specialist with OSU Extension. I am here today to testify in support of HB 3123. In my position, I collect, analyze, and interpret soil and water quality data and provide apolitical, unbiased interpretations of how land management activities can affect Oregon's natural resources. If HB3123 is funded, I will lead the OSU research efforts in collaboration with experts from other departments across OSU.

Per- and polyfluoroalkyl substances (PFAS) are used to create products that resist heat, oil, stains, grease, and water, such as nonstick cookware, water-repellent clothing, stain resistant fabrics, cosmetics, and firefighting foam. They have regularly been detected water, air, and soil across the globe. They're often referred to as "forever chemicals" due to their widespread use and resistance to environmental degradation. PFAS do not break down through current wastewater treatment technologies, so PFAS received by wastewater treatment plants are transported to discharged water and biosolids. Due to the concern over potential PFAS contamination from land-applied biosolids, some states have begun to initiate or discuss bans on biosolid application. As other states begin to take regulatory action, this bill would ensure that we have the resources to make science-based and data-based decisions that are appropriate for Oregon.

HB3123 proposes an extensive research study to investigate the relative contribution of landapplied biosolids on PFAS occurrence in Oregon's agricultural lands. PFAS are regularly found in environmental samples, and this study will help identify if PFAS are present in agricultural fields, and if so, to what extent biosolids are the cause. The research plan was developed in coordination with a diverse group of stakeholders including the Department of Environmental Quality, OR Association of Clean Water Agencies, local municipalities, and agricultural groups across the state. The research team will identify agriculturally important regions in Oregon and work collaboratively with local stakeholders to sample fields both with and without a history of biosolid application. Samples will be collected from soil, water, and crops from these fields and analyzed for a suite of PFAS following a standard EPA protocol at a PFAS-certified laboratory. Soil will be collected at multiple soil depths to determine the potential of PFAS to leach through the soil profile. Data generated from this analysis will provide a necessary step in identifying the risk of land application of biosolids in Oregon, will support data-based decisions as opposed to reactionary measures, and will help direct future research and response efforts.

The proposed funding for HB3123 is needed to generate data at a scale required to determine the effects of land-applied biosolids on PFAS occurrence across Oregon. This budget allows for fields to be sampled in several agriculturally important areas across the state, a comparison of fields with and without a history of biosolid application, and with a quality assurance plan necessary to avoid false positives due to the widespread occurrence of PFAS and the low concentrations at which they are typically present.

I urge you to support this bill and am available for any questions that you may have.

Respectfully submitted,

Alizail Tomarck

Abigail Tomasek Assistant Professor and Extension Soil Water Quality Specialist Department of Crop and Soil Science Oregon State University