



HB 4049 Tackling PFAS the Oregon Way—For Healthy Farmland and Safe, Sustainable Biosolids Management Practices in Oregon

HB 4049 will fund the Oregon State University (OSU) Extension/College of Agricultural Sciences of OSU to study the effects of per- and polyfluoroalkyl substances (PFAS) in land applied biosolids on soil, water, and agricultural crops at select sites across the state. Four to five agricultural sites in different regions of the state will be selected to represent different crop types, soils, climate, and other ecosystem conditions. HB 4049 will provide \$740,000 in general funds for this study. ***The study will be conducted based on strictly voluntary participation by interested agricultural producers and the wastewater treatment utilities that provide biosolids to the farms, and data collection and reporting will maintain the anonymity of the farmers, field locations, and contributing wastewater utilities to the extent allowed by law.***

Sustainable Biosolids Management Makes Healthy Soil, Fights Climate Change, and Benefits Farms

Biosolids are the solids by-products of municipal wastewater treatment processes. Treated to meet strict US EPA and OR Department of Environmental Quality (DEQ) standards, biosolids are nutrient-rich organic materials applied on land as fertilizers and soil conditioners for crops and land reclamation. Some utilities turn biosolids into compost that is beneficially used for a variety of agricultural, urban landscape, and restoration purposes. Biosolids have been proven to help improve soil health, retain soil moisture, and sequester carbon, which often makes them a preferred alternative to commercial fertilizers.¹ ***Land application of biosolids is a sustainable cost-effective practice that benefits agricultural producers by offsetting demands for commercial fertilizers, increasing crop productivity, improving soil conditions over time, and helping their economic bottom line.***

Why Study Biosolids/PFAS Impacts to Oregon Farms?

Growing scientific evidence shows that exposure to PFAS may lead to a range of human health problems. PFAS do not breakdown easily, they are difficult to treat, and they are found just about everywhere in the air, water, and on land. For these reasons, PFAS have been dubbed “forever chemicals.” They are found in thousands of common consumer products and are used in some commercial and industrial processes, which makes PFAS sources and concentrations highly variable geographically across the US. They are released directly to the air, land, and water in a variety of ways. Due to their strong chemical bonds, they do not break down with current wastewater treatment technologies, so PFAS received at treatment plants are passed through to water and biosolids. As businesses and industries work to phase out sources of PFAS in manufacturing and consumer products, PFAS concentrations found in biosolids are expected to decline. However, it is still vital that we understand how or if PFAS found at low levels in Oregon biosolids impact crops, soil, and water quality.

¹ [Long Term Biosolids Land Application Influences Soil Health; University of Colorado, USDA](#)

Why is the Proposed Study of PFAS in Biosolids Important to Oregonians?

The US EPA is assessing health and environmental risks and implementing methods and requirements for PFAS monitoring and source reduction actions that will be implemented by states and local governments. In the meantime, state and local agencies in Oregon have undertaken proactive efforts to identify sources and levels of PFAS in Oregon's drinking water sources, municipal wastewater, and waterways. Information produced from these efforts to date has indicated PFAS sources and concentrations are relatively low compared to states with significant industrial sources. This enables Oregon to take the time to move forward responsibly and strategically to generate sound science and data-based approaches to locating and reducing PFAS exposure at the source while preserving sustainable and economical agricultural practices and wastewater management services.

HB 4049 will fund OSU researchers to work in collaboration with DEQ, the Oregon Association of Clean Water Agencies (ACWA), local wastewater utilities, and participating agricultural producers, to conduct studies that will help inform local and state decisionmakers and farmers about biosolids land application safety and risks related to PFAS. Maintaining sustainable biosolids management practices as a partnership between wastewater utilities and agricultural communities has multiple environmental and economic benefits. ***While biosolids are regulated to meet standards that protect public health and the environment, the EPA and DEQ have not yet established standards for PFAS in biosolids. This study will deliver information needed for Oregon leaders, municipal wastewater utilities, and agricultural producers to make sound decisions about the future of these practices.***



81 E. 14th Ave.

Eugene, OR. 97401

Contact: Susie Smith, Oregon Association of Clean Water Agencies; 541-485-0165; smith@oracwa.org