



Research for Healthy Soils Act

Senate Sponsor: Senator Jeff Merkley

House Sponsors: Rep. Gluesenkamp Perez & Rep. Kim

Background

Biosolids are a valuable product of the wastewater treatment process that can be applied to agricultural land to add nutrients to the soil and improve soil structure. Applying biosolids to land saves money for farmers by reducing their need for phosphorus and synthetic fertilizers and keeps waste out of landfills. Biosolids used for agriculture must meet federal and state standards.

EPA data from 41 states found that in 2021, approximately 1.15 million dry metric tons of biosolids were applied to agricultural land. While research is limited, studies have shown that biosolids may contain microplastics, with a recent study estimating that land application of biosolids in the U.S. could annually release 785–1,080 trillion microplastics into the environment. Additional research is needed to understand the amount of microplastics in biosolids to better understand the potential impacts on soil health, crops, public health, and the environment.

Legislative Summary

H.R. 3871, the *Research for Health Soils Act*, would amend the Food, Agriculture, Conservation, and Trade Act of 1990 to include research on microplastics in land-applied biosolids on farmland as a “high-priority research and extension area”. This authorizes USDA to make competitive grants to support research and extension activities for the following research topics:

- conducting surveys and collecting data on microplastic concentration, particle size and chemical composition in land-applied biosolids on farmland;
- the development or analysis of wastewater treatment techniques to filter out or biodegrade microplastics from biosolids intended to be used for agricultural purposes;
- conducting an analysis of the impact on agricultural crops and soil health of microplastics in land-applied biosolids on farmland;
- conducting research to better understand how wastewater processing impacts microplastics; and
- conducting research to better understand fate, residence time, and transport of microplastics on farmland.

The bill also reauthorizes high-priority research and extension initiatives through 2028.

For more information, please feel free to reach out to Caitlin Yntema and Serena Baserman in Senator Merkley’s office.

