

Extension Impacts Environmental Stewardship

COOPERATIVE EXTENSION

 University of
Kentucky
College of Agriculture,
Food and Environment



Extension Educates Homeowners on Septic System Management for Water Quality Protection

Department of Plant and Soil Sciences
105 Plant Science Building
Lexington, KY 40546-0312
859-257-5020
<http://pss.ca.uky.edu/>



extension.ca.uky.edu
It starts with us



Organic staining (black color) below, along-side and above a failed soil absorption field trench. Vents of plastic chamber are visible.

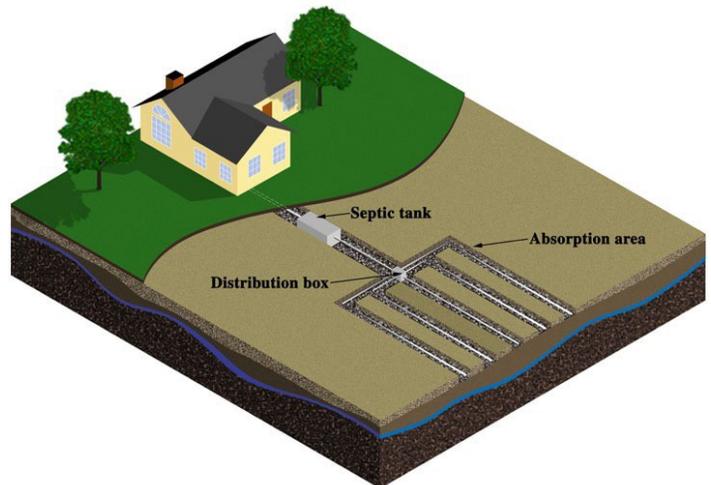
Failing septic systems release partially treated household waste. Untreated human waste is a health and environmental risk. It can contaminate nearby wells, ground water, as well as pollute rivers, lakes, and shores. Although improved septic system designs and oversight that is more stringent have resulted in fewer failures, homeowners may mistakenly believe their septic systems are working properly so long as the toilets flush and there is no foul odor in the yard.

Common causes of septic system failures include improper design, poor system use, mismanagement, and lack of maintenance. In 2018, urban and rural Kentucky counties experienced severe flooding. When soils are saturated for extended periods, such as the severely flooded conditions of 2018, septic systems cannot function properly. Flooding can cause the sewage to back up in the home, contaminate drinking water and pollute nearby

water bodies.

Extension Water Quality Specialist and county Extension agents work with local and state agencies to increase awareness of water quality issues. Best management practices are recommended so residents can make informed decisions in their daily activities that affect water quality. The Environmental Quality Advisory Board in Campbell County requested programming on septic care. Extension responded by providing residents with research-based publications on routine maintenance, landscaping, soil science, to “how to” information before, during and after a flood. Those attending the program acquired information they used to address problems they were facing in their homes.

Over 40% of Kentucky homes have a septic system. National estimates indicate that up to 20% fail each year. During 2017, 4,000 individuals reported making informed decisions that affect water quality and 588 implemented best management practices on their property with information provided by Extension (Kentucky Extension Reporting System).



The most common septic system in the nation includes a septic tank, distribution box and a series of gravel-lined trenches within the soil absorption field.

“We thought we had a clog in our septic system until we attended the Extension program. We learned that the septic system needs to be pumped every three years or so. It had been 10 years since our system was pumped. It was not a clog, it was full.”
Campbell County Resident