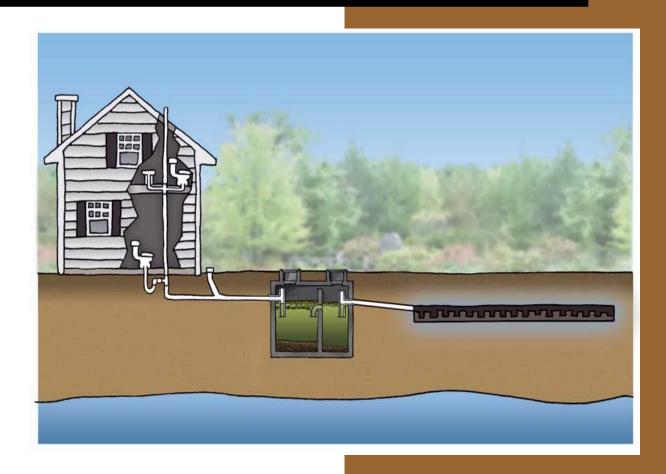
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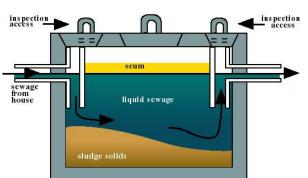
# Maintaining Your Septic System Watershed Newsletter Issue 3



Produced by: Zach Lee SWCD 4/20/2015 A septic system is an important piece of infrastructure for your home, but it is not a real concern for most homeowners. Most people know if they have one, but do not know how to maintain their septic tank or system. A faulty septic tank or system can pose many environmental problems. In this newsletter, we are going to discuss how a septic system works, the environmental impact a faulty septic system may have, and how to maintain or find out if you have a faulty or broken septic system.

# What is a septic system?

A septic system is an onsite water treatment facility that is mainly found in rural communities. When you flush the toilet, wash dishes, or take a shower, the wastewater from the house travels into a septic tank

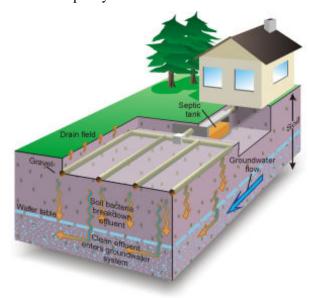


where the solids are consumed by microbes. The solids get deposited from the wastewater into another pipe, called the effluent that goes into a distribution box and evenly transfers water through the drain field pipes and drains through slits. The type of soil is an important component of the drain field because wastewater has to be out of sight and away from people. The soil should allow the wastewater to enter and pass through the soil profile rapidly enough to avoid backups that might saturate the surface soil with wastewater, but slowly enough to allow the soil to purify the wastewater

before it reaches the groundwater (Brooks and Peter,

191). The soil has to be well aerated to stimulate the microbial breakdown of the wastes and pathogens that are traveling through the soil (Brooks and Peter, 191).

The location of the drainage field is also a very important component of a septic system. A good location for a drainage field is an area where the water table is low to make sure that the wastewater goes through as much soil as it can before it reaches the water table. It should be buried in trenches about .6 m to 2 m (2 ft. to 6.5 ft.) under the soil surface and blanketed by gravel (Brooks and Peter, 190). It should be in a flat area because with a slope greater than 15% may allow considerable lateral movement of the percolating water such that, at some point downslope, the wastewater will seep to the surface and present a potential health hazard (Brooks and Peter, 191).



# Why maintain your septic system?

There are many important reasons for maintaining your septic system. One reason is money. It typically cost \$3,000 to \$10,000 to replace a failing septic system, compared to \$100 to \$300 per year to have a septic system routinely pumped or inspected ("Maintaining Your Septic System-A Guide for Homeowners," 1). Another reason is that a faulty septic tank can harm your family and the environment ("Maintaining Your Septic System-A Guide for Homeowners," 1). A faulty septic system can contaminate your drinking water and possibly other surface waters like rivers and lakes. Finally it can keep or maintain the value of your house ("Maintaining Your Septic System-A Guide for Homeowners," 1).

## What can you do to help your septic live a long healthy life?

- Know where your septic tank and drain field are located.
- Have your septic system inspected annually.
- Have your septic tank pumped out by a licensed contractor every three to five years, or any time you feel fit.
- Call a professional when you experience any problems.
- Conserve water to avoid loading the system.
- Never go down into a septic tank. The gasses in the septic tanks can kill you!
- Don't allow anybody to park or drive over any part of the system.
- Don't plant anything but grass over or near the drain field.



- Don't dig or put any hard surface such as concrete and asphalt over your drain field.
- Don't make or allow repairs to your septic system without obtaining the required health department permit.
- Don't use septic tank additives it may harm your septic system.
- Don't use your toilet as a trash can?
- Don't dump poison or other chemicals in your toilet it may kill the bacteria in your septic tank.
- Use limited amounts of antibacterial soaps it can kill the microbes in the septic tank.
- Don't allow backwash from home water softeners to enter the septic system.

## Evidence of a failing septic tank

- There will be odors or persistent wet spots over the drainage field.
- The plumbing becomes sluggish over a period of time or when it is used heavily, or during wet months.



- Problems persist even though the tank has been pumped recently.
- The septic tank is flooded.

If you are experiencing any of these warning sign or have any concerns with your septic system, please call a professional in your area or your County Health Department.

#### **Citations:**

Brooks, Kenneth N., and Peter F. Folliott. 2013. *Hydrology and the Management of Watersheds, Fourth Edition*. 4th ed. Ames, Iowa: Wiley-Blackwell, 190-191. Print.

"Maintaining Your Septic System-A Guide for Homeowners." *Pipeline Small Community Wastewater Issues Explained to the Public* 15.4 (2004): 1-7. National Environmental Service Center. Web.

"Red Alert!...System Failure - Chapter 6" *The Septic System Owner's Manual*. Web. 10 Apr. 2015. <a href="http://www.shelterpub.com/\_shelter/ssom-alert.html">http://www.shelterpub.com/\_shelter/ssom-alert.html</a>

