### SIGNS OF A FAILING SYSTEM

The most obvious septic system failures are easy to spot. Check for pooling water or muddy soil around your septic system. Notice whether your toilet or sink backs up when you flush or do laundry. You might also notice strips of bright green grass over the drainfield.

When partially treated wastewater contaminates groundwater, it can result in the pollution of wells or nearby lakes, rivers and streams. This type of failure is not easy to detect. Check with a septic system professional or the local health department if you suspect such a failure.

### SPECIAL CONSIDERATIONS

### **Garbage Disposals**

Eliminating the use of a garbage disposal can reduce the amount of grease and solids from entering the system.

### **Private Hot Tubs & Swimming Pools**

Your septic system is not designed to handle large quantities of hot tub or pool water. Draining your hot tub or swimming pool into the septic system or over the drain field can overload the system.

### **Drains & Sump Pump Discharge**

Divert roof drains, house footing drains and sump pump discharge to lawn areas away from the septic system.

## WHY ARE WE CONCERNED ABOUT SEPTIC SYSTEMS?

Our community lies within the Rouge River Watershed. Currently, there are many homes served by private septic systems. Private septic systems must be maintained by the homeowner. Treatment and disposal of wastewater should be one of the primary concerns of any homeowner in an unsewered area.

Failing septic systems are suspected to be a significant contributing source of pollution in our watersheds. Unfortunately, septic systems are often neglected and not routinely maintained after the initial installation. A malfunctioning system can contaminate our waterways and groundwater supply.

### FOR MORE INFORMATION

For more information please visit the following websites or call your County Health Department:

National Small Flows Clearinghouse http://www.nesc.wvu.edu/nsfc/nsfc\_index.htm

EPA Website www.epa.gov/owm/septic/

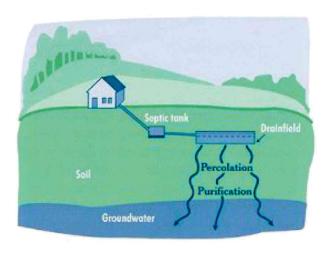
Rouge River Website www.rougeriver.com



# A homeowner's guide to:

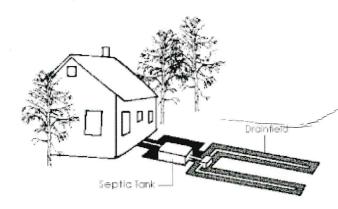
## SEPTIC SYSTEMS

### A SERIES FOR CLEAN WATER



### **OVERVIEW**

Septic systems collect and dispose of wastewater. When a septic system is properly managed, you will have a waste disposal system that is economical, effective, and environmentally safe.



Poorly maintained and failing septic systems can cause serious problems. Sewage from overloaded systems can pond on the ground near the drain field or back up into buildings. These systems can contaminate ditches, creeks and shallow drinking water supplies. Animals and people may become ill from contact with these polluted waters.

If you have further questions regarding your septic system please contact the County Health Department.

#### HOW SEPTIC SYSTEMS WORK

A septic system is made up of both a septic tank and a drain field. Untreated household waste (human waste and gray water) is collected into the tank and is distributed into the surrounding soil (drain field).

When waste enters the tank, active natural bacteria begin to break down the solid materials. The heavier solids settle to the bottom and form a sludge layer, which leaves a residue behind in the tank. The lighter wastes such as oil and grease rise to the top and form a scum layer. The center layer between the scum and sludge layers is commonly referred to as liquid wastewater.

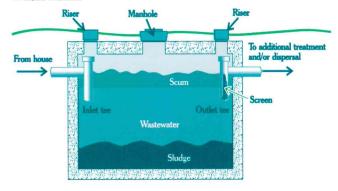


Fig 1. Cross section of a typical single compartment septic tank

The center liquid layer flows slowly from the tank into the drainage field. Perforated pipes allow the liquid to be equally distributed in a gravel-filled drain field. Once the liquid reaches the drain field, it soaks into the soil. The soil then acts as the final filter for treatment of waste received from the septic system.

As time passes, a residue builds up, and must be removed or pumped to prevent it from entering the drain field and clogging the system.

### DO'S & DON'TS

- Learn the location of your septic tank and drain field. Keep a sketch of it with your maintenance record for service visits.
- Have your septic tank pumped every 2-3
  years by a licensed operator. Have the
  operator verify that there is a tee or baffle

on the outlet of the septic tank. The baffle stops the scum from floating into the drain field.



- Do not use commercial septic tank additives. These products are not necessary and may harm to your system.
- Direct all wastewater from your home into the septic system. This includes all sinks, baths, showers, toilets, floor drains, washing machines & dishwashers.
- Your septic system is not a trash can. Do not put grease, disposable diapers, sanitary products, paint, toxic chemicals, paper towels or cat litter into your system.
- Plant only grass over or near your septic system, the roots from nearby trees or shrubs could cause damage.
- Do not drive or park over any part of the septic system, this can compact and crush the drain field.