

## ***Do You Have A Problem With Your Septic System?***

The following are indicators of system failure provided by the Oakland County Health Department:

- Black water with a foul odor backs up in drains or the toilet.
- Toilets drain slowly, not due to clogging.
- Surface water ponds on top of the drainfield. This signifies that either the system is not properly oxygenated or the system is saturated with water and cannot accept any more.
- Weeds or algae buildup in nearby lakes and streams. This may indicate waste water rich in nutrients is entering the waterbody.
- Distinctly greener grass growing over the drainfield, even during dry weather. The grass is absorbing excess water and nutrients which are not moving properly downward through the soil.

## ***What To Do If You Think Your System Is Failing***

If your system exhibits one or more of the failure indicators, contact your county health official for assistance in assessing the situation. Often times the system may be able to be repaired without complete replacement. Keep pets and children away from the failure until repairs can be made. If a new system or repairs are needed, a permit is required from your county health department.

For additional information about your septic system and its condition, contact:

Macomb County Health Department  
43525 Elizabeth Road  
Mount Clemens, MI 48043  
810.469.5236

Oakland County Health Division  
1200 N. Telegraph Road  
Pontiac, MI 48053  
810.858.1312

Or your county MSU Extension office.

For information on what you can do to protect your local stream or lake, contact:

Clinton River Watershed Council  
1970 E. Auburn Road  
Rochester Hills, MI 48307  
810.853.9580



This brochure was prepared by the Clinton River Watershed Council with funding by the Michigan Department of Environmental Quality. Material for this brochure was obtained from Oakland County Health Division, MSU Extension and other sources. Printed on recycled paper

## ***Maintaining Your Septic System To Protect Our Rivers and Lakes***

During the summer of 1994, "seaweed" globs blew on to the U.S. Lake St. Clair shoreline closing beaches due to high bacteria counts. This affected the economy and denied people access to beautiful Lake St. Clair.

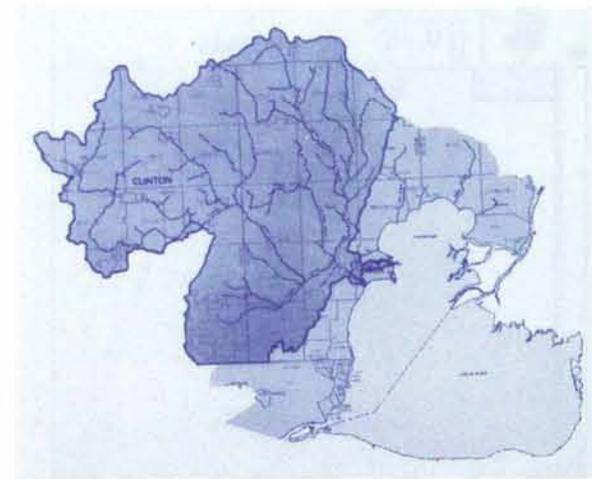
Again in 1995 beaches were closed because of bacteria contamination. This time beaches on inland lakes were most impacted. Recent studies indicate that malfunctioning septic systems are playing a role in contaminating our waterways with harmful bacteria.

Bacteria contamination of our rivers and lakes from waste from humans and other warm blooded animals is a significant concern for human health. Many disease causing organisms are associated with untreated wastes. Coming in contact with contaminated river and lake water can cause serious human health problems.

In addition to health and environmental concerns, replacing a septic system or extending city sewers are very costly alternatives to proper maintenance.

By understanding how your system works, how to maintain it, and how to determine if it is failing, you will be able to protect the health of your family and pets, your neighbors' families, and your local rivers and lakes.

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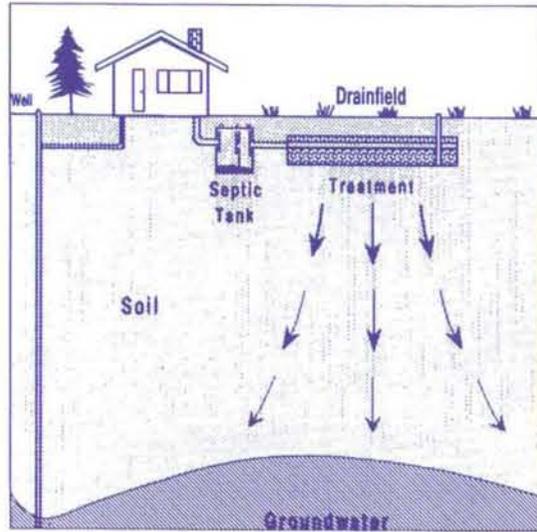


## How Your Septic System Works

According to Michigan State University Extension, when a septic system is correctly located, adequately designed, carefully installed, and properly managed, you will have a waste disposal system that is simple, economical, effective, safe, and environmentally sensitive.

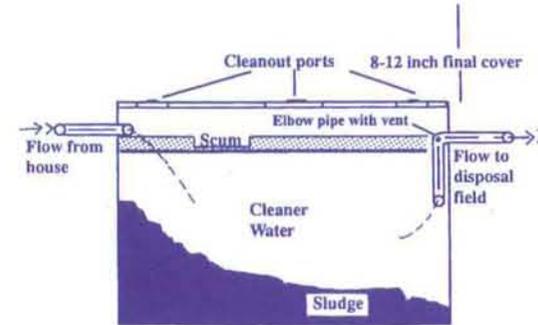
Although even the best designed and installed system will eventually fail, proper maintenance will ensure a longer lasting waste disposal system.

A basic septic system is made up of two parts: a septic tank and a drain field.



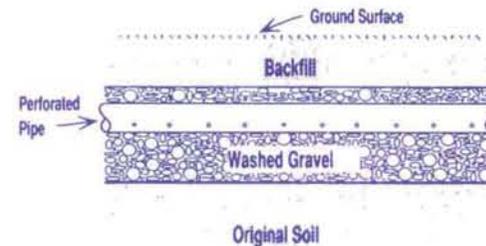
Properly functioning septic system  
Source: MSU Extension, WQ-39

The septic tank is a water tight container made of concrete, fiberglass, or polyethylene that receives the untreated waste from your toilet, bath, kitchen, laundry, etc. Heavier solids settle to the bottom of the tank where bacteria partially decomposes them. Lighter wastes like grease and oils rise and form a scum layer on top of the water. The cleaner water in between these layers flows to a soil absorption field or drainfield.



Septic Tank  
Source: Oakland County Health Division

The soil absorption field consists of a series of underground perforated pipes. These pipes provide a conduit to evenly distribute septic tank effluent over gravel filled trenches. The effluent passes through the trenches into the soil below. The soil provides the final filtering of the effluent where physical and biological processes treat the effluent before it reaches groundwater.



Disposal Field Trenches  
Source: MSU Extension, WQ-39

## Preserving The Life Of Your System

Prolong the life of your septic system and minimize maintenance costs with the following recommendations by MSU Extension:

### Do

- Inspect for scum and sludge depth once each year and never allow sludge or scum to escape from septic tank into the drainfield.
- Pump tank at proper intervals (usually every three to five years).
- Limit water entering your tank:
  - use water-saving faucets, showers, and toilets
  - prevent basement sump pump connection to tank
  - drain appliances one at a time
  - spread clothes-washing over the entire week and avoid half-loads
  - prevent roof, foundation, driveway and basement drainage from entering tank or drainfield area
  - minimize amount of water used for bathing and dishwashing
  - fix all faucet and toilet float valve leaks.
- Keep soil over your system slightly mounded to help surface water run off.
- Landscape your system properly. Dense grass cover and other shallow-rooted plants are beneficial over a drainfield.
- Keep automobiles, all heavy vehicles and livestock off the drainfield.
- Mark the boundaries of your drainfield as a reminder.
- Allow one side of your system to "rest" at one-year intervals if your system is equipped with a diverter valve between the septic tank and soil absorption field.

### Do Not

- Use chemicals to clean or "sweeten" your system except on the advice of your local health department.
- Overuse a kitchen garbage disposal unit. Heavy use adds large quantities of solids and shortens the time between pumpings.
- Put harmful materials in the tank. Avoid putting fats, solvents, oils, disinfectants, paints, chemicals, pesticides, poisons, coffee grounds, paper towels, disposable diapers, sanitary napkins and tampons into the system.
- Fertilize the soil above a drainfield.
- Place impermeable materials over your drainfield. Materials such as concrete or plastic reduce evaporation and the supply of oxygen to the soil for proper effluent treatment. They can also hinder access to the system for pumping, inspection, or repair.
- Stockpile snow or soil on your drainfield.
- Allow downspouts to drain onto or into your drain field.