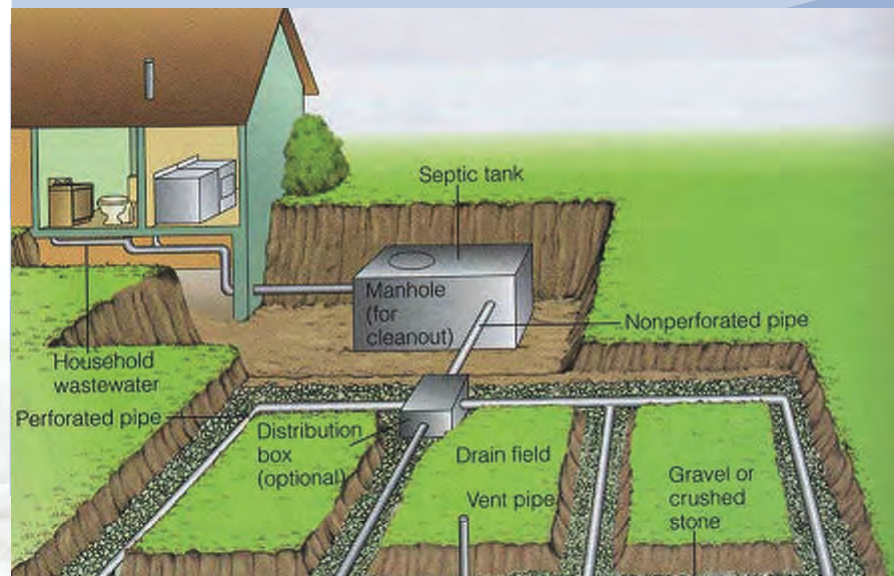


Everything  
you ever  
wanted to  
*know*  
but were  
afraid to  
*ask*  
about  
your  
*Septic System*

## How Your Septic System Works

Household wastewater flows to the septic tank where it stays for at least a day. Heavy solids settle to the bottom, forming a layer of sludge and grease. Light solids float to the top to form a layer of scum. Naturally occurring bacteria break down the sludge and scum. The bacteria can't break down all of it, so that's why septic tanks need to be pumped periodically. Wastewater separated from solids is pushed into the drainfield as more wastewater enters.



Drainfields treat wastewater by allowing it to trickle from a series of perforated pipes, through a layer of gravel, and down through the soil. The soil is a natural filter and contains organisms that help treat the waste. Solids can damage the drainfield by clogging small holes in pipes and the surrounding gravel. Excess water strains the system unnecessarily.


Photo courtesy of Thurston County (Washington State)  
Public Health & Social Services Department


## How to Properly Maintain Your System


**1. Pump your septic tank regularly.** This is the single most important thing you can do to protect your system. If solids build up too much and are forced to the drainfield, this could completely clog the drainfield.

How often your tank needs to be pumped depends on tank size, the number of people in your home, and your household habits. Hot tubs or garbage disposals may increase the pumping frequency. Generally speaking, a family of four with a 1,000-gallon septic tank should have it pumped every 2.5 years.


**2. Conserve water.** If too much water is flushed into the septic tank in a short time, wastewater flows out of the tank before it has time to separate. This can happen on high water use days, such as doing several loads of laundry. Continual saturation of drainfield soil can affect soil quality and its ability to remove toxins, bacteria, viruses and pollutants from wastewater.

 Immediately repair any leaking faucets or running toilets.

 Run washing machines and dishwashers with only full loads.

 Purchase water saving appliances when it's time to replace old ones.

 Install low-flow showerheads and faucets.

 Space out heavy water use activities, such as laundry, over several days.

 Divert roof drains, surface water and sump pump drains away from drainfield.



**Protecting Our Water Quality  
and Quality of Life**

## What Communities Can Do

Local governments are responsible for ensuring proper wastewater management to protect public health. If a community relies on septic systems for long-term wastewater infrastructure, regular maintenance is critical. Proper management involves more than initial location and design, which are often handled by health departments.

State and federal agencies suggest community septic system management programs that include public education, maintenance and inspections. There are several approaches to community-level septic system maintenance.

**1. Voluntary maintenance supported by local government contract:** Local government gives educational materials and reminders to homeowners at a set interval, such as every 5 years. Homeowners voluntarily sign up to have their tank pumped. Local government contracts with a hauler, which usually lowers homeowner cost. The same approach can be used for inspections.



The Watershed Center advocates for clean water in Grand Traverse Bay and protects and preserves its watershed.  
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**2. Required maintenance:** Local government ordinance requires inspection and pumping at a set interval, such as every 5 years. Contractors send a form to local government upon completing service. Local government tracks compliance and mails a letter 90 days before the homeowner's next 5-year service period expires if a completion of service form wasn't received.

**3. Point-of-sale ordinance:** Local government ordinance requires homeowners to have the system pumped and inspected before a transfer of the property.

The ordinance outlines what must be included in the evaluation, the criteria to be used, and the definition of failure. This has been used to register systems for operating permit programs.

**4. On-site septic sewer districts:** A board-run septic system district has authority to levy taxes, pass ordinances and establish user fees. Most such districts are in lakeshore areas with wastewater and water quality problems. Districts pump tanks, conduct inspections, and monitor systems and water quality. Districts maintain records for all users and provide educational materials.



Truck by David Callan

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**3. Know what *not* to flush.** Remember that your system is not designed to be a garbage disposal. Solids build up in the septic tank and eventually need to be pumped out. Garbage disposals can increase solids up to 50 percent and are not recommended for use with septic systems.



Avoid washing food scraps, coffee grounds, grease and cooking oils down the drain.



Never flush diapers, paper towels, feminine hygiene products, condoms, cigarette butts, kitty litter, food or other items down the toilet.



Never put hazardous wastes such as motor oil, automotive fluids, paints, solvents, cleaners or unused medicines down the drain.

*The only things that should be flushed down the toilet are bodily wastes and toilet paper.*

**4. Protect the septic system area.** Don't plant anything with deep roots over the septic system; tree and shrub roots can damage it. Don't drive heavy machinery over any part of the system or build anything on the drainfield.

