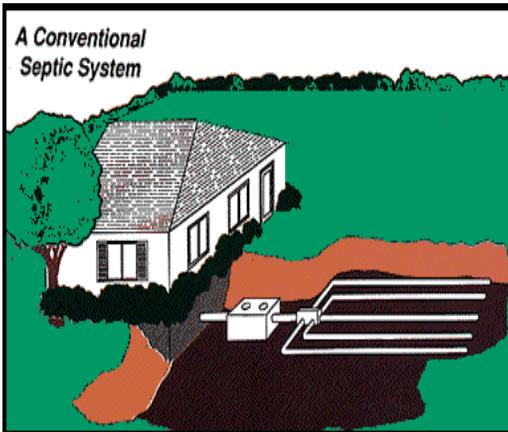


## Septic System Explained

Septic systems are individual wastewater treatment systems that use the soil to treat household wastewater. They are commonly used in rural or large lot settings where centralized wastewater treatment is not practical.

There are many types of septic systems in use today. While all septic systems are individually designed for each site, most septic systems are based on the same principles.



A typical septic system consists of a septic tank, a distribution box, and a drain field - all connected by pipes called conveyance lines.

Your septic system treats your household wastewater by temporarily holding it in the septic tank, where heavy solids and lighter scum are allowed to separate from the wastewater (a process known as *primary treatment*.) The solids stored in the tank are decomposed by bacteria and later removed, along with the lighter scum, by a licensed professional septic tank pumper.

After partially treated wastewater leaves the tank, it flows into a distribution box, which separates this flow evenly into a network of drainfield trenches. Drainage holes at the bottom of each line allow the wastewater to drain into gravel trenches for temporary storage. This effluent then slowly seeps into the subsurface soil where it is further treated and purified (*secondary treatment*). A properly functioning septic system does not pollute the groundwater.

## For More Information

For more information about maintenance or inspection of your septic system, contact:

**Merrimac Board of Health**  
Telephone: 978-346-4066  
[merrimacboh@adelphia.net](mailto:merrimacboh@adelphia.net)

A Public Outreach Bulletin of  
**Merrimac Stormwater Management  
Program**  
with assistance from  
Merrimack Valley Planning Commission

# Your Septic System

## A Guide for Merrimac Homeowners



### Did you know...

... almost 25% of the U.S. population treats its household wastewater on-site in individual septic systems?

Although a simple technology, the processes that treat the wastewater are actually quite complex and require periodic inspections and proper care.

Well-maintained septic systems can provide effective protection for human health and the environment.

This pamphlet describes how a typical septic system works, and offers a few simple tips on how to keep it working - *safely* and *effectively* - for years to come.

## Caring for Your Septic System

The accumulated solids in the bottom of the septic tank should be pumped out every **3 to 5 years** to prolong the life of your system. Septic systems must be maintained regularly to work properly.

Neglect or abuse of your septic system can cause it to fail. Failing septic systems can:

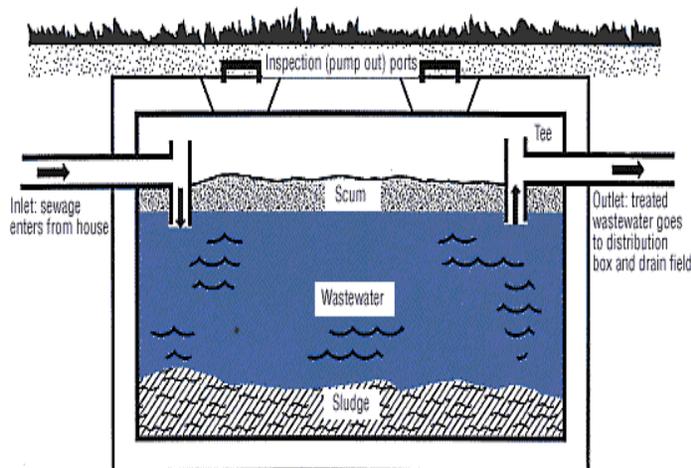
- ▶ pose a serious health threat to your family and neighbors;
- ▶ degrade the environment, especially ponds, streams, and groundwater;
- ▶ reduce the value of your property; and
- ▶ be very expensive to repair.

Be alert to these warning signs of a failing system:

- ▶ sewage surfacing over the drainfield (especially after storms);
- ▶ sewage back-ups in the house;
- ▶ lush, green growth over the drainfield;
- ▶ slow draining toilets or sinks;
- ▶ foul sewage odors.

### **Remember...**

**Your septic system is your responsibility! Follow a few simple rules and it can provide you with many years of safe and effective wastewater treatment.**



## Tips to Avoid Trouble

**DO** have your septic system inspected and have the tank pumped out every 3 to 5 years by a licensed septic contractor (listed in the yellow pages). Remember to keep a record of all inspections, pumpings, and other maintenance.

**DO** practice water conservation. Repair dripping faucets and leaking toilets, run washing machines and dishwashers only when full, avoid long showers, and use water-saving devices in faucets, showerheads, and toilets.

**DO** learn the location of your septic system and drainfield. Keep a sketch of it handy for service visits. If your system has a flow diversion valve, learn its location, and turn it once a year. Flow diverters can add many years to the life of your system.

**DO** divert roof drains and runoff from driveways and hillsides away from the septic system. Keep sump pumps and house footing drains away from the septic system as well.

**DO** take leftover hazardous household chemicals to your local Hazardous Waste Collection Day event for safe disposal. Use bleach, disinfectants, and drain and toilet bowl cleaners sparingly and in accordance with product labels.

**DON'T** allow anyone to drive or park over any part of the system. The area over the drainfield should be left undisturbed with only a mowed grass cover. Roots from nearby trees or shrubs can clog and damage your drain lines.

**DON'T** make or allow repairs to your septic system without obtaining the required local Board of Health permit. Use professional licensed septic contractors when needed.

**DON'T** use commercial septic tank additives. These products usually do not help and some may actually hurt your system in the long run.

**DON'T** use your toilet as a trash receptacle by dumping non-degradables down your toilet or drains. Also, don't poison your septic system and the groundwater by pouring harmful chemicals down the drain. They can kill the beneficial bacteria that treat your wastewater. Keep the following materials out of your septic system:

**NON-DEGRADABLES:**  
grease, disposable diapers, plastics, etc.

**POISONS:**  
gasoline, motor oil, paint, paint thinner, solvents, pesticides, antifreeze, etc.