

Alternative Septic Systems

Alternative systems use pumps or gravity to help septic tank effluent trickle through sand, organic matter (e.g., peat and sawdust), constructed wetlands, or other media to remove or neutralize pollutants like disease-causing pathogens, nitrogen, phosphorus, and other contaminants. Some alternative systems are designed to evaporate wastewater or disinfect it before it is discharged to the soil.



Septic system design and size can vary widely, from within your neighborhood to across the country, due to a combination of factors. These factors include household size, soil type, site slope, lot size, proximity to sensitive water bodies, weather conditions, or even local regulations.

Caring for Your Septic System

Septic system maintenance is not complicated, and it does not need to be expensive. Upkeep comes down to four key elements:

- Inspect and Pump Frequently
- Use Water Efficiently
- Properly Dispose of Waste
- Maintain Your Drainfield

The average household septic system should be inspected at least every three years by a septic service professional. Household septic tanks are typically pumped every three to five years. Alternative systems with electrical float switches, pumps, or mechanical components should be inspected more often, generally once a year.

The more water a household conserves, the less water enters the septic system. Efficient water use improves the operation of a septic system and reduces the risk of failure.

Whether you flush it down the toilet, grind it in the garbage disposal, or pour it down the sink, shower, or bath, everything that goes down your drains ends up in your septic system. What goes down the drain affects how well your septic system works.

Drain fields aren't pretty ... but they can be. In fact, it's a great idea to plant grass or even flowers on top of your drain field area. Grass absorbs water and nutrients from soil and prevents erosion!

Tips to Avoid Trouble

Do:

- Regularly inspect your system and any access covers and pump your tank as necessary. Unsecured or unsafe lids can be dangerous to children or pets; falling into a septic tank can be fatal.
- Use water efficiently and fix leaks quickly.
- Plant only grass or flowers (no vegetables), but don't fertilize, water, or burn them over and near your septic system. Deep roots from trees or shrubs can cause damage.
- Call a licensed professional if you experience problems with your system, or if there are any signs of system failure.
- Divert water sources such as roof drains, house footing drains, and sump pumps away from the septic system.
- Keep records of repairs, pumping, inspections, permits issued, and other

Don't:

- Don't dispose of household hazardous wastes in sinks and toilets.
- Don't drive over or park anything above the septic tank or drainfield. This can limit system life and cause damage.
- Don't dig in or build anything on top of your drainfield, particularly playgrounds.
- Don't make or allow repairs to your septic system without obtaining the required local permits and professional assistance.
- Don't enter your septic tank. Working in and around a septic tank is dangerous, and gases generated in the tank could be fatal.

Conventional Septic Systems

Septic systems are underground wastewater treatment structures, commonly used in rural areas without centralized sewer systems. They use a combination of nature and proven technology to treat wastewater from household plumbing produced by bathrooms, kitchen drains, and laundry.

A typical septic system consists of a septic tank and a drainfield, or soil absorption field.

The septic tank digests organic matter and separates floatable matter (e.g., oils and grease) and solids from the wastewater. Soil-based systems discharge the liquid (known as effluent) from the septic tank into a series of perforated pipes buried in a leach field, chambers, or other special units designed to slowly release the effluent into the soil.



Record of Service

Date	Work Done	Contractor

For More Information

Information for Massachusetts Title V rules regarding installation, use, and maintenance of these systems is available at <https://www.mass.gov/septic-systems-title-5>.

For additional information about the maintenance or inspection of your septic system, contact Needham Public Health.



Town of Needham

A Reference Guide

YOUR SEPTIC SYSTEM

for Homeowners



Septic systems are individual wastewater treatment systems (conventional septic systems, innovative/alternative (I/A) systems, or cesspools) that use the soil to treat small wastewater flows, usually from individual homes.