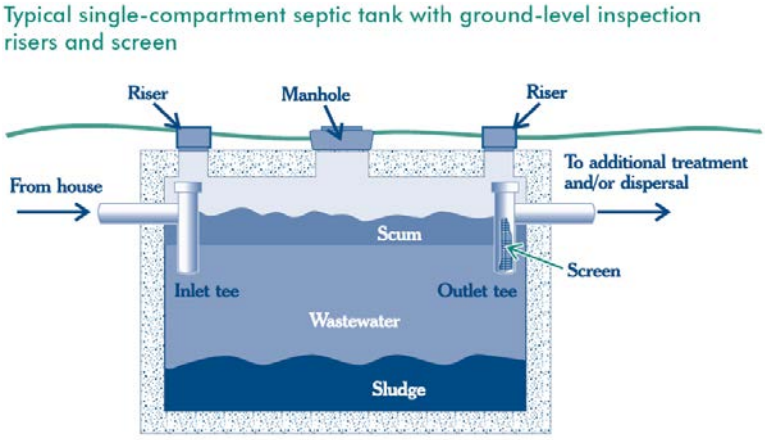
Your Septic System

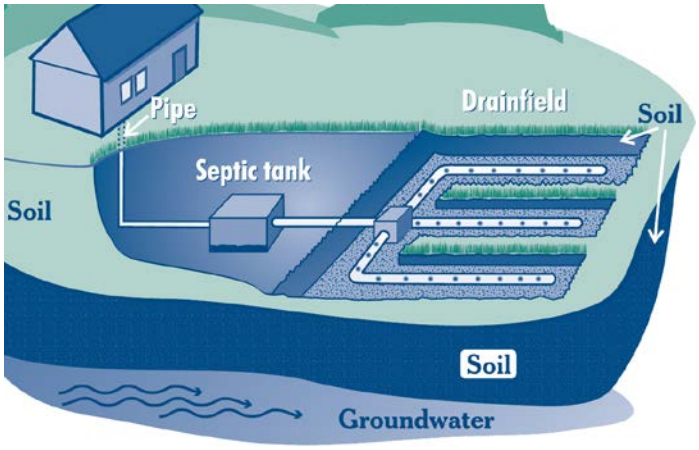
Millions of suburban and rural New York residents depend on septic systems to treat and dispose of household wastewater. The purpose of a septic system is to store, distribute, and treat liquid wastes from your home on your property while preventing contamination of groundwater, drinking water wells, and nearby lakes and streams. When a septic system is properly located, designed, installed, and maintained, it serves as an effective, economical, and safe on-site wastewater treatment system. **Maintenance is the key to a lasting, properly functioning septic system.** This publication will help you learn how a septic system works, how to maintain it, how to prevent and recognize problems, records you should keep, and where to go for more help.

Septic System Function and Maintenance

How Your Septic System Works

Household wastewater carries water, solids, grease, and dissolved substances, including household chemicals. It also carries bacteria that can decompose waste, and bacteria and viruses which can cause disease. A septic system treats wastewater in stages to manage these substances. A failing septic system is one that cannot perform these tasks, putting human health and water resources at risk.





The figures above show the basic parts of a septic system (from A Homeowner's Guide to Septic Systems, US EPA 2005). Wastewater flows from the house via a pipe into the **septic tank**. Bacteria decompose some of the waste materials. Heavy solids settle to the bottom of the tank, to form sludge. Oils and grease float to the top, forming a scum layer. Wastewater between those two layers can flow out through the exit pipe, which should have a screen or filter to block large particles. Note that two-compartment septic tanks or two septic tanks in series are recommended and sometimes required in New York State.

The partially treated wastewater is discharged from the septic tank to a **distribution box** and through perforated pipes into an **absorption area**, also called a **leachfield** or **drainfield**. Here, the water is further treated by filtration through gravel and soil, chemical reactions, and decomposition by soil microorganisms. The water itself is recycled back into the environment, making this a decentralized or **on-site wastewater treatment system (OWTS).**

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