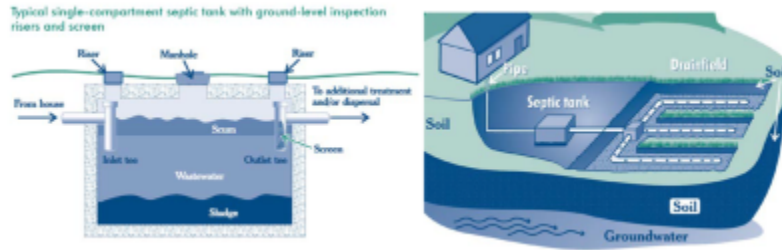


# Septic Systems



## Septic Systems

If you own property in Lewisboro, chances are you depend on an on-site septic system to treat and dispose of household wastewater, much like the one illustrated here. Rather than conveying liquid wastes through a sewer pipe to a central wastewater treatment facility, your septic system stores, distributes, and treats wastewater 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 performs this function effectively and economically. **Maintenance, however, is key to a lasting, properly functioning septic system.** The publication linked below—Cornell Cooperative Extension (CCE)’s Your Septic System—will help you learn how a septic system works, how to maintain it, how to prevent and recognize problems, what records you should keep, and where to go for more help.

<https://www.css.cornell.edu/cwmi/waterquality/septic/CCEWQ-YourSepticSystem-Print.pdf>

It is divided into the following sections:

1. Septic System Function
2. Maintaining Your Septic System
3. Daily Care of Your Septic System
4. Septic System Records
5. Buying or Selling a House with a Septic System
6. Building or Remodeling a Home with a Septic System
7. Alternative and Advanced On-site Wastewater Treatment Systems
8. Considerations for Shoreline Property Owners
9. Septic System Failure
10. Water Conservation

**While there is no substitute for reading this document in full, here are some of the highlights and little-known facts revealed:**

- Household wastewater carries water, solids, grease, and dissolved substances, including household chemicals. It also carries good bacteria that can decompose the waste and bad 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 adequately perform these tasks, putting human health and water resources at risk.
- Septic tanks should be pumped every three to five years, every two to three years if you are on a shoreline. Pumping costs a few hundred dollars; replacing even one component of a septic system costs thousands.
- Kitchen sink grinders/disposals greatly increase the solids entering the tank, in turn increasing the frequency of pumping.
- If you don't know where your septic system is located, contact the Westchester Board of Health (<https://health.westchestergov.com/septic-systems>), where records should have been filed when installed. Tanks are sometimes indicated on property survey maps. You can always locate the sewage pipe where it leaves the house and look for an area where the grass grows differently or snow has melted to locate the absorption fields. The tank will lie between the two.
- Do not fertilize absorption fields or plant anything other than grass above them. Do not build patios or drive heavy equipment over them, and make sure to direct any runoff from rain, downspouts or driveways away from the fields. Don't pour oil, paints, solvents, pesticides, medications, food scraps, even coffee grounds down the drain. Use household cleaners and bleach in moderation. Many of these materials are toxic and can pollute the groundwater.
- There is no scientific evidence that commercial septic system additives are effective. In fact, some can cause solids settled in the bottom of the tank to be re-suspended, clogging drainage lines and the absorption area.
- Spread laundry loads and program your water softener to recharge based on actual use rather than by the clock. Conserve water, in general, as large amounts of water entering the system in a short time can stir up solids and push wastewater into the absorption fields before sufficiently treated.
- When buying or selling a house, evaluate the septic system early in the process and make sure the evaluation is done when the system has been used normally for the previous 30 to 60 days. Inspections during the winter are more difficult.
- If you are planning to expand your home as your family grows, design the septic system to accommodate the future increased demand, and be sensitive during renovations to the location of the septic system so as not to damage it.

- Consider soil and site characteristics when installing or replacing a septic system. Regulations governing setbacks, soil, slope and other characteristics are more stringent now. You may need to consider alternative on-site wastewater treatment options.

<b>System Component</b>	<b>Well</b>	<b>Stream, Lake, or Wetland</b>	<b>Dwelling</b>	<b>Property Line</b>
Septic tank	50	50	10	10
Distribution box	100	100	20	10
Absorption area	100	100	20	10

Figure 2: Minimum Separation Distances from Wastewater System Components (in ft) per Table 2 of NYS Dept. of Health Appendix 75A, Wastewater Treatment Standards – Individual HH Systems

- New York State Department of Health regulations mandate minimum sizes and surface area for septic tanks (see table below).

<b>Bedrooms</b>	<b>Minimum Tank Capacity (gallons)</b>	<b>Minimum Liquid Surface Area (sq. ft.)</b>
1-3	1000	27
4	1250	34
5	1500	40
6	1750	47

Figure 3: Minimum Septic Tank Capacities per Table 3 of NYS Dept. of Health Appendix 75-A, Wastewater Treatment Standards - Individual HH Systems

- Septics on shorelines present unique challenges. Thin rocky soils, steep slopes, high water tables, and small lot sizes combine to make replacing an aging conventional septic system next to impossible. But there are now “alternative”, “advanced” or “enhanced” on-site wastewater systems that use new treatment technologies requiring less space. That said, they require more custom engineering and permitting, and, often, electricity and service contracts.

- Septic systems on shoreline property are often close to both groundwater and surface waters, and absorption fields can become saturated during high water periods, so that partially treated wastewater is likely to enter adjacent lakes and streams. Also as shorelines erode, the distance between the septic system and the shorelines decreases. Water pollution can occur even though your system appears to be working well.
- Nutrients (especially phosphorus) from inadequate septic systems play a major role in causing excessive weed and algae growth in lakes and ponds. Just a small amount of phosphorus in a lake can exponentially increase this growth. The overgrowth prompts the weeds and algae to die rapidly and decompose, which removes oxygen from the water, threatening fish and other aquatic animals, and making boating, fishing and swimming less enjoyable.
- Wastewater reaching adjacent surface waters also increases the chance that wildlife, swimmers, and downstream users are exposed to infectious bacteria and viruses associated with wastewater. This contamination can manifest as minor ear or eye infections but can also lead to major diseases, such as dysentery and hepatitis.
- FOR THESE REASONS, THE BASIC MAINTENANCE OF SEPTIC SYSTEMS (REGULAR PUMPING, WATER CONSERVATION, AND PROTECTING THE DRAINFIELD) IS EVEN MORE IMPORTANT NEAR SHORELINES.
- A septic system is considered to be “failing” when it does not treat and distribute wastewater effectively, resulting in the biological and nutrient contamination of your drinking water well and nearby lakes and streams. The system can fail when any part of the system is not operating properly, although it is most often the absorption area that stops functioning.
- What to do when your septic system fails?
- - **Immediate actions:**
    - Call the Board of Health
    - Fence the septic system area
    - Stay away from an opened septic tank
    - Have your tank pumped
    - Conserve water
- - **Long-Term options:**
    - Replace or increase the size of the drainfield
    - Install perimeter drains
    - Replace the entire system
    - Incorporate advanced or alternative treatment technologies
    - Conserve water by repairing leaks, running only full loads, using wastebaskets rather than toilets and flushing only when necessary, installing incinerating or composting toilets, taking showers versus baths, and using water-saving faucets

and features.

- Ideally, connect to a municipal sewer system, if available and feasible.
- Consult the Westchester Board of Health before undertaking any major repairs or replacements and for a list of licensed septic contractors and collectors.

<https://health.westchestergov.com/septic-systems>

### Westchester County Septic Grants (income qualified)

Please see supporting documents

NOTE: If your home has a failing septic system, or if your property abuts an existing sewer line, you may qualify for FREE repairs under the Westchester County Septic System Rehabilitation & Sewer Connection Program.

### **Pump out your septic system!**

It's a good idea to maintain your septic system regularly and now it's also the law.

To protect the quality of the area's drinking water, Westchester County and Lewisboro instituted a septic inspection requirement in 2011 that requires that septic system be pumped at least once during every 5 years. Failure to do so may result in significant fines - starting at \$200 and multiplying rapidly!

Have your septic system pumped out this season. Many lakeside systems, older systems, and systems on small lots likely require more frequent attention than the law requires. If your septic is pumped by a Westchester County authorized septic collector, your vendor will provide Westchester County with a record of that pumping. Keep your copy of the septic system inspection report in case of a dispute.

Good for your wallet. Good for your health. Good for the environment.

Below is a link to a map that shows where septic systems were pumped between 2017 and 2021. Septic pumping after that date doesn't show up. Look for your property-if the septic has been pumped, it should have a circle on it. This map is provided by the very helpful map wizards at Westchester County GIS.

## **Supporting Documents**

Septic Sewer Information Guide 201.34 KB

Septic Sewer Application 613.18 KB

Septic Pumpout 11/2022 2.58 MB