

LAKESIDE LIVING:

CARING FOR YOUR SEPTIC SYSTEM

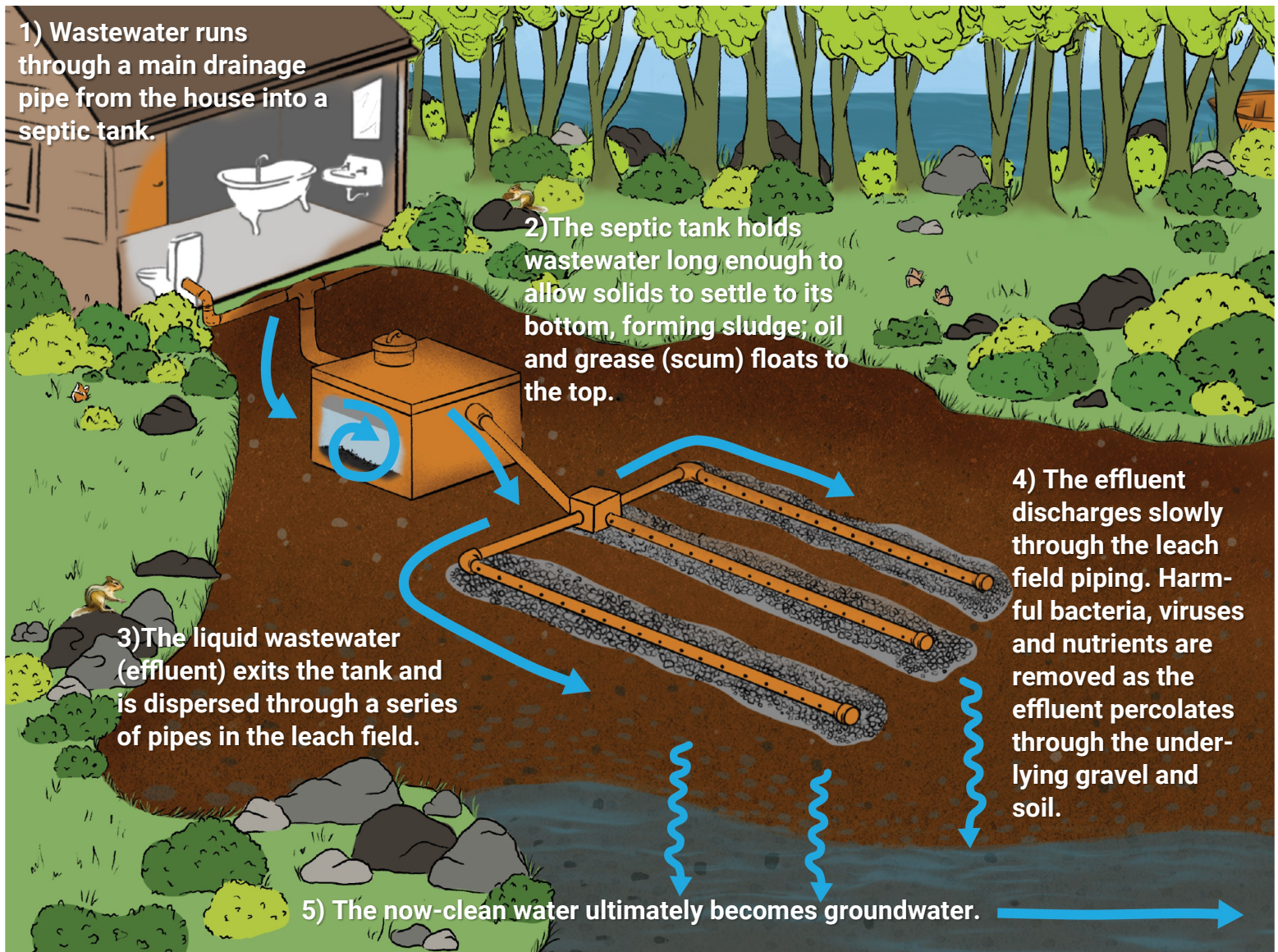
Septic systems are underground wastewater treatment structures that keep you, your neighbors and your lake safe from the chemicals, bacteria, viruses and nutrients in your household waste. Your septic system replaces the sewer system more commonly used in most urban areas.

Maintaining your septic system is relatively easy and inexpensive, and will help your system work properly for decades. Ignoring septic maintenance can lead to system failures, requiring costly replacement of either the tank, the leach field or both. Replacement costs will include consultants and contractors to design and install the new

system, local and state permit fees, and the actual system components. The aggregate costs for replacement can run from \$10,000 to \$25,000 or more, depending on circumstances.

Replacing septic systems beside lakes may have additional costs, as Maine's Shoreland Zoning laws require new septic systems be placed at least 100' from the water's edge. Many older camps have systems that are grandfathered and may be located much closer to the shoreline. To keep your lake clean, to protect your health and to save money, make septic maintenance and care a high priority at your lakeside home.

HOW DOES A SEPTIC SYSTEM WORK?



Your lake stays clean and healthy when it is in balance, when most of the nutrients that go into the water are used by the plants and animals that live there. But too many nutrient inputs into a lake will put it out of balance. Too much phosphorus, a key nutrient that feeds algae, can lead to too much algae growth, turning lake water green, cloudy and smelly. Some kinds of algal “blooms” can be dangerous for both people and pets.

While erosion from structures and roads is the biggest source of phosphorus into lakes, untreated effluent that escapes from a failing septic system is an important potential source of additional (and unwanted) phosphorus into your lake. Chemicals and other toxins from untreated effluent may also contaminate drinking water wells.

Following the guidance in this document will help you keep your system working for years to come, saving you money, protecting your property value, and ensuring no extra phosphorus or other harmful substances make it into your lake.

PUMP YOUR TANK



Pumping removes sludge and scum before it builds up and washes into the leach field, compromising or destroying the leach field’s capacity to distribute and treat effluent. Untreated effluent may break out of the system, running over the ground and into the lake or flowing directly into groundwater, carrying unwanted nutrients, bacteria and viruses with it. This is not good for you, your pets, your neighbors, your family or your lake.

The major factors affecting the frequency of pumping are the number of people using the system, the total wastewater volume entering the system and septic tank size (see table below). It’s a good idea to check with your service provider at the time of pumping to see if they think you are on a schedule that fits your tank capacity and volume. You should also ask them to inspect the tank for leaks, check the integrity of the baffles, and look at fluid levels.

Number of Residents in the Household					
Tank Size (gallons)	1	2	3	4	5
	Septic Tank Pumping Schedule (in years)				
500	5.8	2.6	1.5	1.0	0.7
750	9.1	4.2	2.6	1.8	1.3
1,000	12.4	5.9	3.7	2.6	2.0
1,500	18.9	9.1	5.9	4.2	3.3
1,750	22.1	10.7	6.9	5.0	3.9

For an expanded table, visit www.lakes.me/septic

Do-it-yourselfers can check to see if the tank needs pumping by opening the access port to the tank and inserting a long pole (think hockey stick or broom) to the bottom of the tank. The depth of the sludge will show on the pole when it’s withdrawn. If the sludge is more than a third of the tank depth, it is time to have the tank pumped. While you definitely want to keep tanks from overflowing, remember that you always want some solids in the tank to “feed” the enzymes that break down waste.

Note that all property transfers in the Shoreland Zone now require septic inspections. Even the most meticulously maintained septic systems will eventually age to the point where they no longer function. The typical lifespan of a septic system is between 15 and 40 years, though systems with larger tanks and lower occupancy households may last longer.

CONSERVE WATER

Septic tanks are limited in the amount of water they can hold at any one time. Excess water is a major cause of system failure. Too much water from laundry, dishwashers, toilets, baths and showers may not allow enough time for sludge and scum to separate. Some ways to reduce stress on the capacity of the tank:



- 💧 Only flush for solid reasons; toilets are the primary of water into the tank.
- 💧 Fix toilets that run; they can use 25 or more gallons per day or thousands per month.
- 💧 Use low flow faucets and shower heads.
- 💧 Limit number and length of showers per day.
- 💧 Space out loads of laundry; not more than one per day.

NOTHING BUT WASTE

Septic tanks require natural bacterial activity to breakdown wastes. Nothing but human waste and toilet paper should ever enter your septic system.

- 💧 Household chemicals such as bleach, caustic drain openers, paints, pesticides, gasoline and motor oil harm the bacteria needed for effective breakdown and should never be dumped into sinks or toilets.
- 💧 Anti-bacterial soaps should be avoided as they will interfere with the bacterial activity in the septic tank.
- 💧 Do not use powdered soaps or detergents as they contain emulsifiers, which prevent fats from coagulating in the septic tank; and fillers, which clog the pipes in the leach field.
- 💧 Do not add any septic tank additive or cleaner to your septic system that says it will improve function or prolong useful life. Rid-X and similar bacterial enzymes interfere with natural tank bacterial action, often causing accelerated breakdown of solids, turning sludge into a slurry which can then enter and plug up the leach field.
- 💧 Never flush menstrual products, diapers, paper towels, baby wipes (including those advertised as “flushable”), dental floss or medication down the toilet.



REMOVE THE ROOTS

Periodically clear deep-rooted vegetation (trees and large shrubs) off the leach field. The roots of trees and bushes will ultimately intrude into the leach field's piping and compromise its function, shortening its life. Grasses, ground cover and ferns are okay to leave growing over the field.

To the extent feasible, keep large trees away from the edges of your leach field. Tree roots extend laterally great distances so should be regarded as a threat to the leach field's integrity.

If you have concerns about intrusive tree or bush root systems, have your service provider open up and inspect the leach field.



SKIP THE DISPOSAL

Studies show that homes with garbage disposals or grinders average 30% more solids and grease generation than homes without them. Garbage grinders require additional septic tank capacity and/or a septic tank outlet filter and more frequent pumping.

If your system is not designed to accommodate a garbage grinder and you decide to install one, you should at a minimum have a filter installed in your septic tank and use the grinder sparingly. Composting is the preferred option for disposing of your food wastes.



SEPTIC FAILURE

Keep an eye out for signs of septic failure. Catching them early can save you money and will reduce potential pollution to your lake. Some of the more common signs that your system is failing:



- 💧 Wastewater is backing up into household drains.
- 💧 Vegetation over the leach field is noticeably greener and brighter.
- 💧 The area around the tank or leach field is wet and spongy, even during dry weather.
- 💧 Water pools near the system.
- 💧 You smell strong odors around your system, especially after rainy days.
- 💧 Bright green, spongy grass is growing on the leach field, especially noticeable during dry weather.

WHERE'S MY SEPTIC?



You can find your system's “as built” drawings at your town (contact the Code Enforcement Officer) or, if the system was installed after 1974, you can search for plans on the state's database. A link to the database can be found at www.lakes.me/septic. Search by town (you can narrow down by year). Then search the page by clicking Control-F and entering your address.

You can also check your yard for a tank or leach field venting pipe or tank lid. The lid may be buried. If so, once found make a record of its location. Septic system service providers can also help you locate your tank.

FOR MORE INFORMATION:

- 💧 Learn more about the Environmental Protection Agency (EPA) SepticSmart program, including advice and guidance on maintenance at www.epa.gov/septic. You can also find great SepticSmart graphics to include in your lake association newsletters or social media posts.
- 💧 To find licensed site evaluators and installers, visit the Subsurface Wastewater website at the Division of Environmental and Community Health: www.maine.gov/dhhs/mecdc/environmental-health/plumb/index.htm
- 💧 Check out the septic page at the Maine Lakes Library for many other links to resources and additional information: lakes.me/septic.

DO YOU RENT YOUR CAMP? OWN A BUSINESS?

EPA has created a number of helpful handouts and posters for businesses and homeowners about septic health to post for their renters and employees, including the kitchen and bathroom pieces shown here. FMI, and to download printable versions of these pieces and many more, visit their website:

www.epa.gov/septic/septic-systems-outreach-toolkit



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