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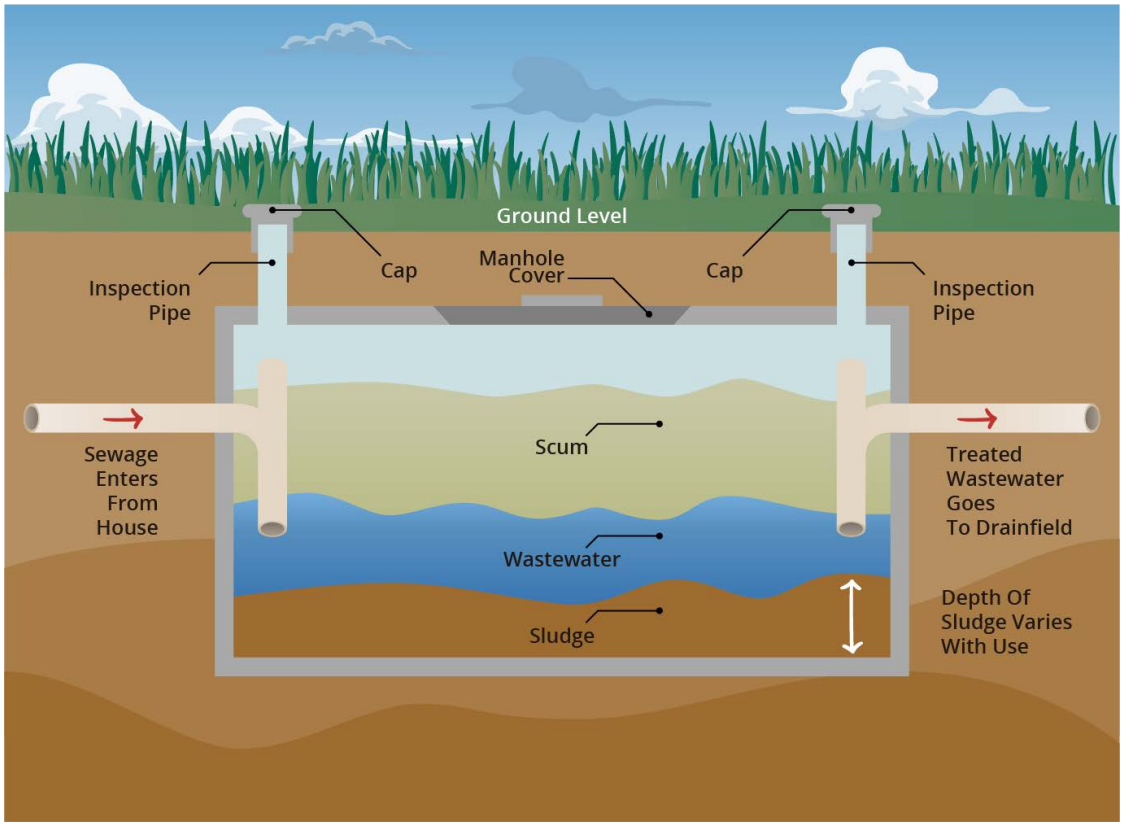
SEPTIC SYSTEMS

Why Do Septic Systems Need Maintenance?

Septic tank



A septic system is made up of a septic tank (a watertight container buried in the ground) and a drain field, or leach field. The septic tank's job is to separate out solids which settle on the bottom as sludge, from oils and grease which float to the top and form a scum layer. The liquid wastewater, which is in the middle layer of the tank, flows out through pipes into the drainfield where it percolates down through the ground.

Although bacteria continually work on breaking down the organic matter in your septic tank, sludge and scum can build up, which is why a system needs to be cleaned out periodically. If not, solid material from your tank can flow into the septic system drainfield clogging the pipes and wastewater can back up into your house.

Overloading the system with water also reduces its ability to work properly. Too much water coming into the system from the house may not leave enough time for the sludge and scum to separate out in the tank, and solids can flow into the drainfield pipes and clog them. Excess water in the drainfield (either from the tank or from heavy rains and flooding) can saturate soils, reducing their ability to filter out pathogens and nutrients. Wastewater can flow to the surface of your lawn and/or back up into your house.

When properly maintained and periodically pumped out, septic systems can last 25-30 years and costs are relatively low. It generally costs $250 to $400 to pump out a septic system depending on where you live in Florida. As a general rule of thumb, systems should be pumped every 3-5 years to keep functioning properly. But, timing between pumping does vary depending on the size of your household, the size of your septic tank and how much wastewater you produce. Pumping should always be done by a professional. If systems aren't maintained they can fail, and repairs or replacing a tank can

cost anywhere between $3000 to $10,000. It can definitely pay off to maintain your septic system.

It is important to remember that septic systems were designed from a public health perspective to treat pathogens in human waste. They were not designed to remove nutrients. Even a well-maintained system will be a source of nutrients, like nitrate, to the surrounding soil.

HOW CAN YOU TELL IF YOUR SEPTIC SYSTEM IS FAILING?

Failed septic systems not only result in soggy lawns and bad odors, but they can contaminate groundwater, private and public supply wells, and nearby waterbodies with excess nutrients and harmful pathogens like *E. coli*.

Signs that your septic system is failing or has failed include:

- foul odors from drains inside the house and/or around the septic tank and drainfield
- slow drainage from bathtubs, showers and sinks
- standing water or saturated soils (spongy ground) around the tank and drainfield

HOW CAN YOU PROPERLY CARE FOR YOUR SEPTIC SYSTEM?

Here are some basic tips to keep your system working properly so that you can reduce costs by avoiding system failure, and so that you can reduce your household's impact on water pollution in your area.

- **Don't flush trash down the toilet.** Only flush regular toilet paper. Toilet paper treated with lotion can form a layer of scum. Wet wipes do not degrade easily, although many brands are labelled as safe for septic systems. Avoid flushing cigarette butts, paper towels and facial tissues, which can take longer to break down than toilet paper.
- **Think at the sink.** Avoid pouring oil and fat down the kitchen drain. Avoid excessive use of harsh cleaning products and detergents, which can affect the microbes in your septic tank. Regular weekly or so cleaning is fine. Prescription drugs and antibiotics should never be flushed down the toilet.
- **Limit your use of the garbage disposal.** Disposals add organic matter to your septic system, which results in the need for more frequent pumping. Composting is a great way to dispose of your fruit and vegetable scraps instead.
- **Take care at the surface of your tank and drainfield.** To work well, a septic system drainfield should be surrounded by non-compacted soil. Do not drive vehicles or heavy equipment over the system. Avoid planting trees or shrubs with deeper roots that could disrupt the system or plug pipes. It is a good idea to grow grass or other shallow rooted plants over the drainfield to stabilize the soil and absorb liquid and nutrients.
- **Conserve water.** You can reduce the amount of water pumped into your septic tank by reducing the amount you and your family use. Water conservation practices include repairing leaky faucets, toilets and pipes, installing low cost, low-flow showerheads and faucet aerators, and only running the washing machine and dishwasher when full.
- **Keep rainwater drainage systems away from the septic drainfield.** Make sure that water from roof gutters and rain spouts doesn't drain into your septic system drainfield. This adds an additional source of water that the drainfield has to process.
- **Have your septic system pumped by a certified professional.** The general rule of thumb is every 3-5 years, but it will depend on household size, the size of your septic tank and how much wastewater you produce.

By following these guidelines, you can contribute to the health of your family, community and environment, as well as avoid costly repairs and septic system replacements.