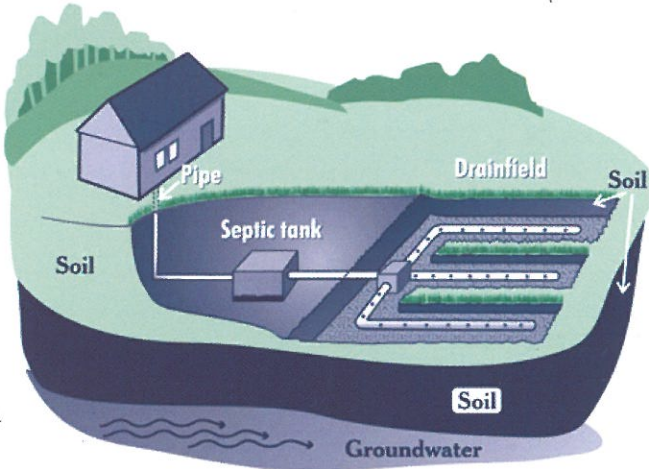


# Septic Systems: Out of Sight should not mean Out of Mind



Source: U.S. Environmental Protection Agency

Homes that are not hooked up to a municipal sewer line typically have a **septic system** that, when functioning properly, treats human waste. Conventional septic systems rely on simple principles and components to work effectively:

1. **Settling Tank:** solids settle out in the tank while floating grease and scum float to the top.
2. **Absorption/Leach Field:** piping from the tank transfers liquid waste to perforated pipes usually laid out like a fork over gravel beds. Liquid waste drains out of the pipes and into the underlying gravel and soil, where it is microbially degraded before reaching the groundwater table several feet below the system. A healthy community of microorganisms is key to cleaning this waste!



**In a situation where a septic system is failing, public and environmental health are at risk.** Dangerous bacteria, viruses and nitrogen can be discharged to the groundwater table, which may lead to the contamination of groundwater drinking wells down-gradient of the failing system. These same pollutants may be fed into nearby waterways by groundwater, resulting in pollution of streams and lakes used for fishing, swimming, shellfish harvesting and so on. Pollutants of this nature can lead to sickness, skin irritations, economic losses because of beach and shellfish bed closings and harmful impacts to aquatic life. **Proper care and maintenance of your septic system, the system treating your human and household waste, should not be taken lightly. Also, uncared-for systems can cost more money and shorten the lifespan of your investment in this wastewater treatment system.**

1. **Inspect and pump** (if deemed necessary by a professional) at least every 3 to 5 years.
2. **Reduce the amount of grease and solids down the drain** to extend the life of your system. This means that homes on septic should NOT have a garbage disposal.
3. **Know where your septic leach field is in your yard.** You should never park or drive over your leach field, which will compact the soils needed for the treatment of waste and possibly destroy components. Also, never plant a tree or deep-rooting plant on or near the leach field.
4. **Avoid water-intensive activities.** For instance, avoid running the washing machine and dishwasher at the same time. Too much water going into the tank at once can re-suspend solids, which can then clog your leach field.

What should **NOT** go down the drain when you have a septic system:

- kitchen scraps,
- condoms,
- diapers,
- cigarette butts,
- tampons,
- paper towels,
- cat litter,
- oil-based paints,
- strong chemical cleaners,
- excessive bleach and
- pharmaceutical products.

For additional information, visit us online at [www.clemson.edu/carolinaclear](http://www.clemson.edu/carolinaclear).