



Managing Your Household Septic System

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Your septic system is your responsibility!

By law in Arizona, homeowners are responsible for maintaining their septic systems. Maintaining a septic system protects an investment in a home. If properly designed, constructed, and maintained, a septic system can provide long-term effective treatment of household wastewater. A malfunctioning system can contaminate surface water and groundwater resources.

Both the septic tank and the drainfield (also known as a leach field or absorption field) must be properly maintained to protect human health and the environment. Managing a household septic system requires that you control the volume and quality of wastewater and maintain the septic tank and drainfield.

How does a septic system work?

A residential onsite wastewater treatment system is a system at or near the residence that collects, treats and disperses wastewater generated at the home. Specifically, the treatment train will include a wastewater source, collection and storage, a pretreatment component (typically a septic tank), and final treatment and dispersal (usually the soil). Microbes in the soil digest or remove most contaminants from wastewater before it eventually reaches groundwater.

A septic tank is a watertight container typically made of concrete, fiberglass, or polyethylene, and it is buried underground. It holds wastewater long enough to allow solids to settle out, forming a sludge layer, while oil and grease float to the surface forming a scum layer.

It also allows partial decomposition of the solid materials. Compartments and a tee-shaped outlet in the septic tank help prevent the sludge and scum from leaving the tank and traveling into the drainfield. Screens placed in the outlet tee also keep solids from entering the soil.

Maintenance

Inspect and pump regularly. Annual or biannual inspection of the septic tank is advisable to determine the thickness of the sludge and scum layers. A probe may be put into the tank from one of its access ports to make this determination. Always use caution when inspecting a system without professional assistance; septic tank gases can be lethal.

Slow accumulations of sludge and scum are normal. You should remove these materials through periodic pumping (at least once every three to five years) and appropriate disposal. This will protect the soil treatment area from materials that will damage its effectiveness.

A private contractor who specializes in septic system cleaning and pumping can be found in your telephone directory. This service will cost you some money, but it is less expensive than digging up a fouled drainfield.

Avoid overloading the system. Conserve water and repair leaky fixtures. Garbage disposals will cause rapid accumulation of sludge in a septic tank, and their use should be minimized or eliminated to keep the septic system functioning properly. Remember, except toilet paper, nothing should go into the septic tank that hasn't gone through your body first.

Additives that are marketed as septic tank cleaners, rejuvenators, or primers are not needed. Most of these additives won't harm your system, but they don't help them either. Some of these additives are strong chemicals that can harm a septic system.

Avoid damage to the drainfield. Keep a healthy grass cover over the system to prevent exposure of the soil and possible erosion around the drainfield. Do not drive over the system because it can compact the soil and possibly break drain lines. Try to position trees so that their roots will not enter the septic tank or drainfield and plug them.

Properly sited, designed, constructed, and maintained septic systems can provide an efficient and economical wastewater treatment alternative to public sewer systems. While septic systems are designed and installed by licensed professionals to meet the needs of individual sites, homeowners are responsible for the system's operation and maintenance. There is more information on household septic systems at the Arizona Cooperative Extension Onsite Wastewater Education Program website (<http://cals.arizona.edu/waterquality/onsite>) and at the Extension publications web page (<http://cals.arizona.edu/pubs>).

Critter Corner

Cottontail Rabbits

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Cottontail rabbits can be viewed in one of two ways: as friendly, observable backyard wildlife or as destructive garden and landscape pests. Rabbits will often eat succulent plants or gnaw on the bark of young trees. If rabbit damage reaches an intolerable level, population control may become necessary. There are several strategies that can be employed to minimize damage caused by cottontail rabbits. There is one rule to remember when evaluating any wildlife damage management strategy: damage prevention is long-term – population control is short-term.

Three species of cottontail occur in Arizona: the mountain cottontail, eastern cottontail, and desert cottontail. The smallest of these (22-30 ounces) is the relatively short-eared mountain cottontail, which is largely restricted to elevations above 7,500 feet from the Mogollon Rim



Jim Peaco, NPS

northward. The generally larger eastern cottontail (28-52 ounces) is found in the mountains of southeastern and central Arizona where it occupies many of the same habitats as the Coues white-tailed deer. The most abundant and important rabbit by far, however, is the desert cottontail (26.5-44 ounces), which is found in every county in the state up to elevations exceeding 7,000 feet.