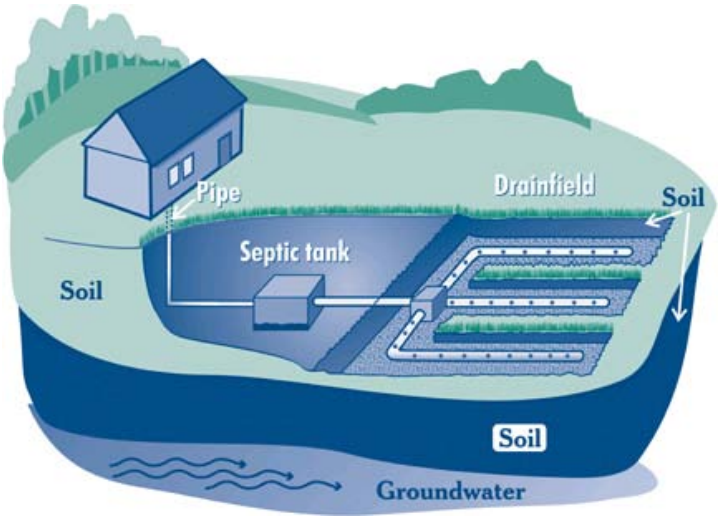
BACOG Homeowner's Guide to Well and Septic Systems

Easy and economical ways to protect and maintain your well & septic system



Barrington Area Council of Governments

Barrington Area Groundwater Resources

Tens of thousands of people in the Barrington area rely on private wells for their daily supply of potable water. This guide will provide you with some basic information about well and septic systems – how to implement a few preventive measures, maintain the system, and recognize problems. It will also provide you with some maintenance measures and tips to prolong the life of your system, avoid costly repairs, and ensure your daily water source is safe and clean. When in doubt, contact your county or village health board for more information about your system and usage.

Well Diagram

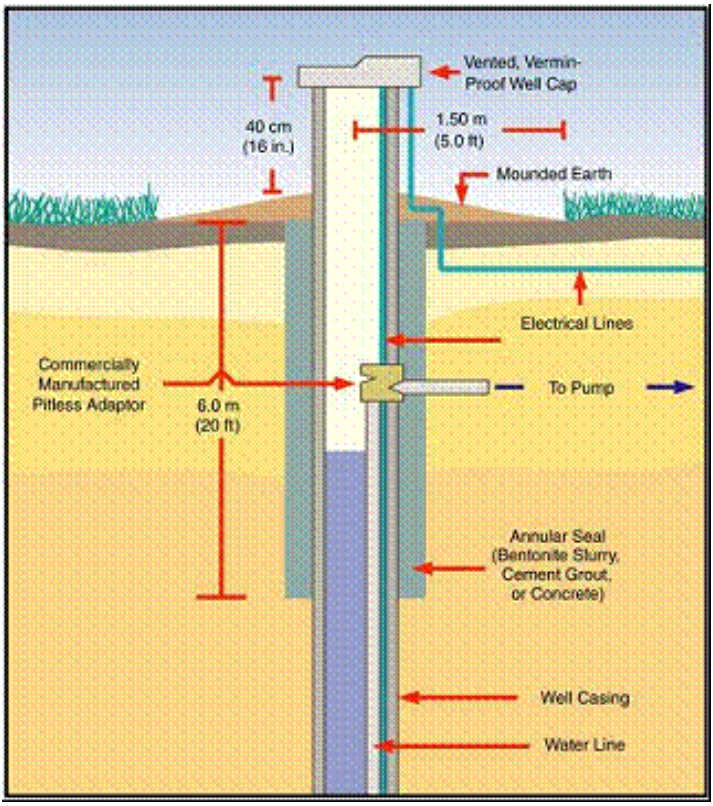


Image Source: Montana Water Quality Bureau

There are three types of wells: dug, driven, and drilled. Nearly all modern wells are drilled and the vast majority of private wells in this area are drilled.

Protecting the Well

The fastest way for contaminants to reach your drinking water is directly through the well cap. Use these tips to prevent contamination and corrosion from your well cap.

- Make sure ground slopes away from the well, rather than toward it
- Direct surface water (like downspouts or sump discharges) away from the well.
- Avoid putting mulch close to the well cap. The cap should ideally be 12" above the ground to prevent corrosion and limit exposure to bacteria.
- Periodically, check your well cap to make sure it is securely fastened, in good condition, and does not show signs of deterioration or infestation.
- Test your water quality each and every year for bacteria and nitrates.
- If you do not already have a 'sanitary' or 'Vermin-proof' well cap (required on all wells constructed after Jan. 31, 1991), consider installing one. Most wells with standard caps (bolted to the casing of the well) should be grouted, but in some cases a small airspace between the cap and casing of the well can allow for insects, small mammals, or surface water to enter and possibly contaminate the well. 'Sanitary' or 'Vermin-proof' caps have bolts on the top, include an airtight rubber gasket, and have a small, screened vent to allow air exchange. The cost is typically $40-50 compared to $20-30 for a regular cap.
- Do not try to service a well yourself – use a licensed or certified water well driller or pump installer to service your well.
- Keep all hazardous chemicals away from your well.

Well Caps:

Standard **Sanitary/Vermin-Proof**

A standard cap bolts directly to the well casing.

A vermin-proof or sanitary cap has vertical an airtight plastic gasket and vent.

Image Source: Penn State University

Additional tips from BACOG neighbors:

Clearly mark your well: "Our driveway is very close to where our well was drilled so we've marked it with a small red reflector. We also put a small barrier at the end of the driveway that will reduce the chance of someone accidently backing into it."

Keep vegetation and pets away from the well: "We make sure to trim back the bushes and vines in the area of the well so that nothing grows around that area or compromises the cap. That also deters ours dogs from digging over there."

Test your water quality each year or if you notice a change in quality: "We noticed some small black flecks coming from our water faucet and decided to get the well tested-- It turned out that our standard well cap was so old it was allowing ants to get into the well casing. We now do an annual test (for bacteria and nitrates) and a visual inspection of the well head to make sure our new vermin-proof cap is in good condition!"

About Septic Systems

Well maintained septic systems can provide many years of reliable, low-cost, hassle-free service to your home. A failed system is a source of groundwater pollution and a public health concern, causes property damage and is far more expensive than maintenance.

Clean your septic tank every 2-5 years: Scum and sludge build-up need to be removed. The scheduled cleaning should also help to ensure the structural integrity of the tank and identify any potential issues that would affect the life of the system.

Know what *not* to put into your system:

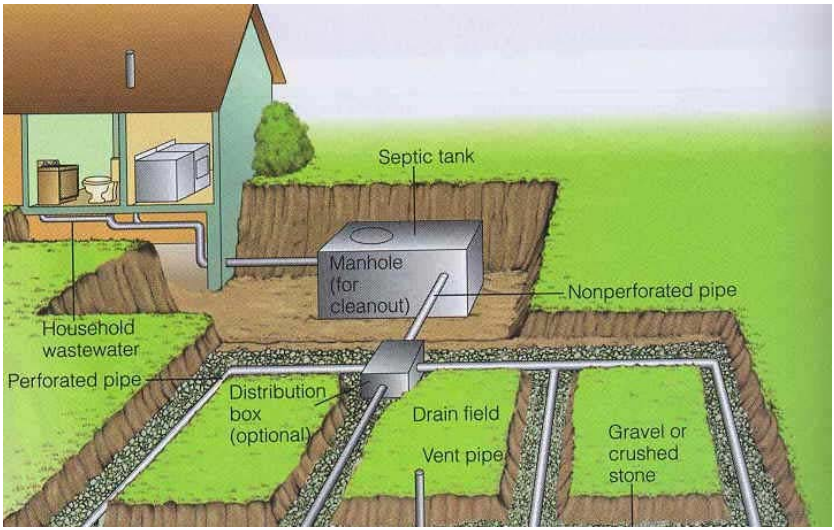
- Undigested food waste from garbage disposals, grease, oil, and coffee grounds all decompose slowly and can put undue strain on your system.
- Other items like paper towels, feminine hygiene products, cigarette butts, facial tissues, baby wipes and diapers are even slower to decompose and should not be flushed into the system.
- Toxic chemicals like drain openers, paints, pesticides, photographic chemicals, brake fluid, gasoline and motor oil and other toxic chemicals can kill off the bacteria that are necessary for your septic system to function properly and are harmful to the environment if the system fails and they leak into the surface water or groundwater supply.

Conserve water: Reducing the volume of waste discharged will extend the life of your system by reducing strain on the septic system from excess water. To do so, repair leaking faucets or valves, install reduced flow fixtures in shower or toilets, and/or opt for water saving appliances.

Know where your septic tank is located: Find out where the septic tank, pump tank, absorption area, and replacement absorption areas are located. Unintended damages from driving vehicles over these areas or from building sheds, pools, or decks over its parts can be very expensive to repair.

Click here for more comprehensive information on septic systems from the USEPA

Diagram of a Septic System



Thurston County (Washington State) Public Health & Social Services Department

Warning Signs of a Malfunctioning System

- Odors, sewage at the ground surface, wet spots or very lush vegetation in the drainage field area can indicate problems.
- Plumbing and septic tank backups with black liquid and odors.
- Slow drainage from sinks or bathtubs and gurgling noises from the plumbing system.
- Coliform bacteria or nitrates in your annual water quality test.

Fast Facts about Additives:

- Over 1,200 products are on the market claiming to improve performance of your septic system: claiming to counteract bleach / detergents, increase soil percolation, clear pipes, reduce odors, minimize solids, etc.
- Most engineers and sanitation professionals agree: you do not need to use additives and they are even potentially harmful. No known additives reduce solids enough to make pumping unnecessary
- Household waste water already contains the supply of bacteria to make your system function properly. Additives can potentially *plug* the drain field.

If you follow the best-practices guidance for your well and septic system and maintain it regularly, there is no need to use additives in your system.

Check your water quality annually:

If you have your own well, you should test your water annually for bacteria and nitrates with a certified laboratory. Contamination can be caused by improperly sealed well caps, ailing septic fields, or geological composition of the aquifer in which the water is located.

This test is low-cost and available through the BACOG Private Well Water Quality Testing program which provides local access to test kits semiannually in cooperation with county health departments. Opt-in for annual reminders and keep a record of your results along with your records of well maintenance and septic services.

The State also provides additional testing services for a wider range of contaminants. The State recommends that households test for a variety of water quality parameters like arsenic, fluoride, boron, radium and other human-made and naturally occurring contaminants. Homeowners should test if they notice a change in the appearance, taste, or odor of the water. Testing may also be appropriate with real estate transactions or every ten years. The test requires raw and softened water samples and is recommended for homeowners without water quality records for their home, during real estate transactions, or if there is any change in the taste, odor, color or other features of the water.

More information is available at BACOG's Private Well Water Quality test program held every 6 months. Visit www.bacog.org or call the BACOG office (847) 381-7871 to find out when the next program is scheduled.

If you have specific concerns or questions about your water quality and/or well and septic system, a number of population health service agencies may be able to help:

Illinois State Water Survey: Public Service Laboratory 217- 244-5459

Illinois State Department of Public Health.....217-782-4977
535 W Jefferson St. Springfield IL 62761

Cook County Health – **Well and Septic**.....847-818-2840
2121 Euclid Rd. Rolling Meadows, IL (3th District Courthouse), 60008

Lake County Environmental Laboratory.....847-377-8030
500 Winchester Rd. Libertyville IL 60048

McHenry County Environmental Health.....815-334-4585
2200 N Seminary Ave. Annex A-LL5 Woodstock, IL 60098

Kane County Environmental Health.....847-608-2850
113 S Grove Ave Ste 209, Elgin IL 60120

Barrington Hills Board of Health.....847-551-3000
112 Algonquin Road, Barrington Hills, IL 60010

More information on Water Resources:
The residents and businesses in the Barrington area rely on shallow groundwater aquifers. Planning regionally can help prevent and create response measures for changes in water supply and quality that are anticipated to affect this area in the next several decades. Find out more about BACOG's work in groundwater resources, its water resources committee, and water quality testing online at www.bacog.org.

USGS Ground Water and the Rural Homeowners

A guide that give an overview of the water cycle, water supply, wells, water, water quality and considerations for homeowners.

Abandoned Wells Fact Sheet

An Illinois Department of Health publication about how and why private water wells that are abandoned should be filled for public health and safety reasons.

Avoiding Drinking Water Scams

Tips from the Penn State Cooperative Extension about type of water treatment to avoid and how to identify scams.

Septic Tank Additives

An article from the Washington State Board of Health about research on the utility of additives.

BACOG Media:

Watch videos of the BACOG representative aquifer modeling project online: www.youtube.com/bacogoffice

Read BACOG Publications: http://bacog.org/waterresourceinitiative/publications.html

Follow BACOG's latest groundwater news on twitter: www.twitter.com/bacognews

View slideshows about Barrington area water and technology resources: http://www.slideshare.net/bagis

This guide is provided to residents on behalf of the Barrington Area Council of Governments (BACOG) and its members:

Barrington

Barrington Hills

Barrington Township

Cuba Township

Deer Park

Lake Barrington

North Barrington

South Barrington

Tower Lakes

For more information about this program and other BACOG initiatives or to get involved with the Water Resources Committee's Public Education and Outreach program, please contact BACOG: bacog@bacog.org

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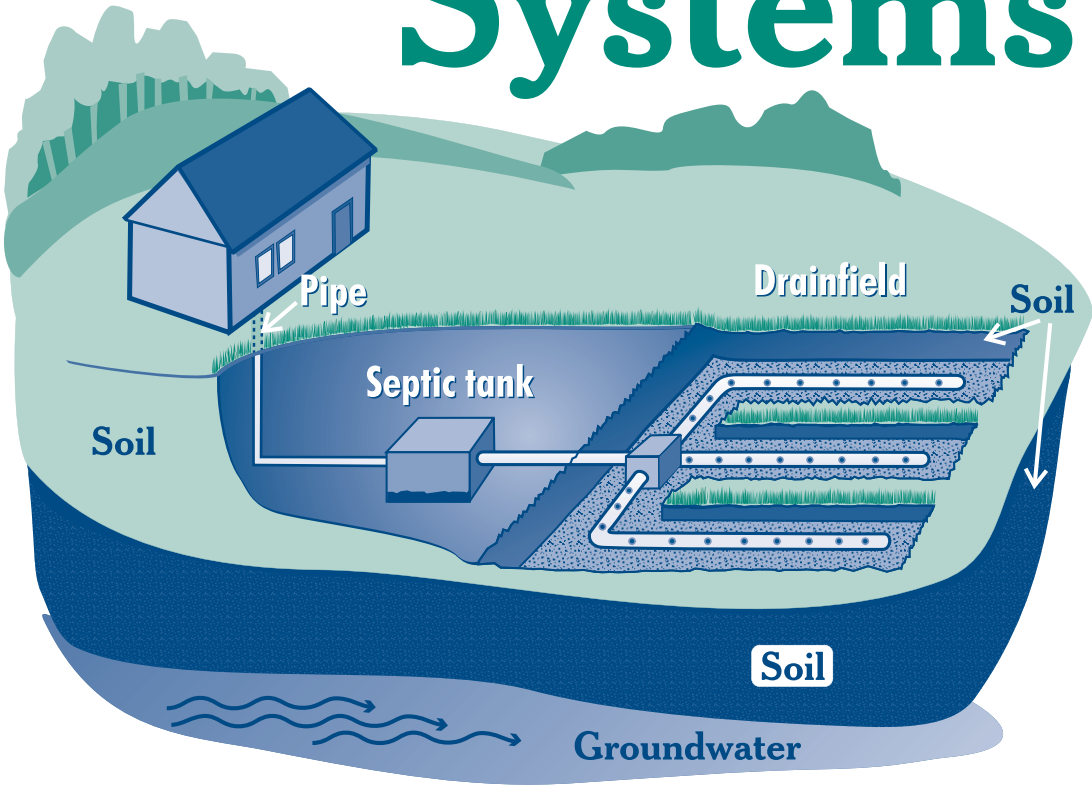
EPA
United States
Environmental Protection
Agency

A Homeowner's Guide to Septic Systems



What's Inside

Your Septic System is your responsibility!

Did you know that as a homeowner you're responsible for maintaining your septic system? Did you know that maintaining your septic system protects your investment in your home? Did you know that you should periodically inspect your system and pump out your septic tank?

If properly designed, constructed and maintained, your septic system can provide long-term, effective treatment of household wastewater. If your septic system isn't maintained, you might need to replace it, costing you thousands of dollars. A malfunctioning system can contaminate groundwater that might be a source of drinking water. And if you sell your home, your septic system must be in good working order.

Top Four Things You Can Do to Protect Your Septic System

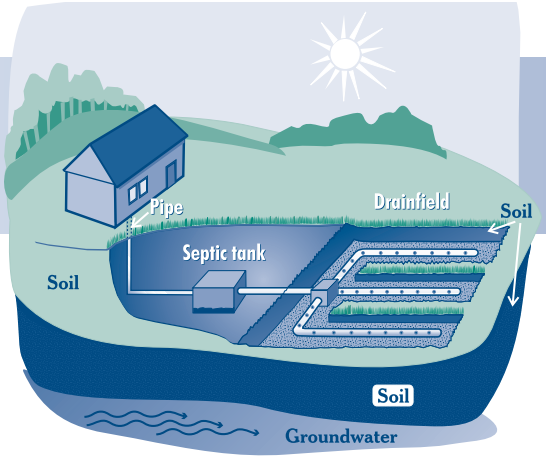
1. **Regularly inspect your system and pump your tank as necessary.**
2. **Use water efficiently.**
3. **Don't dispose of household hazardous wastes in sinks or toilets.**
4. **Care for your drainfield.**

This guide will help you care for your septic system. It will help you understand how your system works and what steps you can take as a homeowner to ensure your system will work properly. To help you learn more, consult the resources listed at the back of this booklet.

How does it work?

Components

A typical septic system has four main components: a pipe from the home, a septic tank, a drainfield, and the soil. Microbes in the soil digest or remove most contaminants from wastewater before it eventually reaches groundwater.



Typical septic system

Septic system aliases:

- **On-lot system**
- **Onsite system**
- **Individual sewage disposal system**
- **Onsite sewage disposal system**
- **Onsite wastewater treatment system**

Pipe from the home

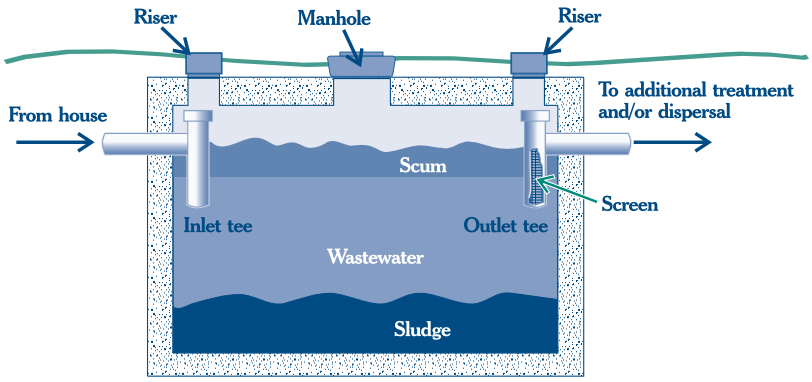
All of your household wastewater exits your home through a pipe to the septic tank.

Septic tank

The septic tank is a buried, watertight container typically made of concrete, fiberglass, or polyethylene. It holds the wastewater long enough to allow solids to settle out (forming sludge) and oil and grease to float to the surface (as scum). It also allows partial decomposition of the solid materials. Compartments and a T-shaped outlet in the septic tank prevent the sludge and scum from leaving the tank and traveling into the drainfield area. Screens are also recommended to keep solids from entering the drainfield.

Newer tanks generally have risers with lids at the ground surface to allow easy location, inspection, and pumping of the tank.

Typical single-compartment septic tank with ground-level inspection risers and screen

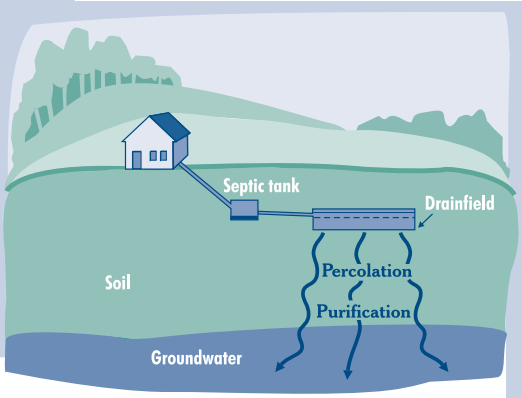


Tip

To prevent buildup, sludge and floating scum need to be removed through periodic pumping of the septic tank. Regular inspections and pumping are the best and cheapest way to keep your septic system in good working order.

Finding Your System

Your septic tank, drainfield, and reserve drainfield should be clearly designated on the "as-built" drawing for your home. (An "as-built" drawing is a line drawing that accurately portrays the buildings on your property and is usually filed in your local land records.) You might also see lids or manhole covers for your septic tank. Older tanks are often hard to find because there are no visible parts. An inspector/pumper can help you locate your septic system if your septic tank has no risers.



Drainfield

The wastewater exits the septic tank and is discharged into the drainfield for further treatment by the soil. The partially treated wastewater is pushed along into the drainfield for further treatment every time new wastewater enters the tank.

If the drainfield is overloaded with too much liquid, it will flood, causing sewage to flow to the ground surface or create backups in plumbing fixtures and prevent treatment of all wastewater.

A reserve drainfield, required by many states, is an area on your property suitable for a new drainfield system if your current drainfield fails. Treat this area with the same care as your septic system.

Soil

Septic tank wastewater flows to the drainfield, where it percolates into the soil, which provides final treatment by removing harmful bacteria, viruses, and nutrients. Suitable soil is necessary for successful wastewater treatment.

Alternative systems

Because many areas don't have soils suitable for typical septic systems, you might have or need an alternative system. You might also have or need an alternative system if there are too many typical septic systems in one area or the systems are too close to groundwater or surface waters. Alternative septic

systems use new technology to improve treatment processes and might need special care and maintenance. Some alternative systems use sand, peat, or plastic media instead of soil to promote wastewater treatment. Other systems might use wetlands, lagoons, aerators, or disinfection devices. Float switches, pumps, and other electrical or mechanical components are often used in alternative systems. Alternative systems should be inspected annually. Check with your local health department or installer for more information on operation and maintenance needs if you have or need an alternative system.

Why should I maintain my septic system?

When septic systems are properly designed, constructed, and maintained, they effectively reduce or eliminate most human health or environmental threats posed by pollutants in household wastewater. However, they require regular maintenance or they can fail. Septic systems need to be monitored to ensure that they work properly throughout their service lives.

Saving money

A key reason to maintain your septic system is to save money! Failing septic systems are expensive to repair or replace, and poor maintenance is often the culprit. Having your septic system inspected regularly is a bargain when you consider the cost of replacing the entire system. Your system will need pumping depending on how many people live in the house and the size of the system. An unusable septic system or one in disrepair will lower your property value and could pose a legal liability.

Protecting health and the environment

Other good reasons for safe treatment of sewage include preventing the spread of infection and disease and protecting water resources. Typical pollutants in household wastewater are nitrogen, phosphorus, and disease-

causing bacteria and viruses. If a septic system is working properly, it will effectively remove most of these pollutants.

With one-fourth of U.S. homes using septic systems, more than 4 billion gallons of wastewater per day is dispersed below the ground's surface. Inadequately treated sewage from septic systems can be a cause of groundwater contamination. It poses a significant threat to drinking water and human health because it can contaminate drinking water wells and cause diseases and infections in people and animals. Improperly treated sewage that contaminates nearby surface waters also increases the chance of swimmers contracting a variety of infectious diseases. These range from eye and ear infections to acute gastrointestinal illness and diseases like hepatitis.

How do I maintain my septic system?

Inspect and pump frequently

You should have a typical septic system inspected at least every 3 years by a professional and your tank pumped as recommended by the inspector (generally every 3 to 5 years). Alternative systems with electrical float switches, pumps, or mechanical components need to be inspected more often, generally once a year. Your service provider should inspect for leaks and look at the scum and sludge layers in your septic tank. If the bottom of the scum layer is within 6 inches of the bottom of the outlet tee or the top of the sludge layer is within 12 inches of the outlet tee, your tank needs to be pumped. Remember to note the sludge and scum levels determined by your service provider in your operation and maintenance records. This information will help you decide how often pumping is necessary.

What Does an Inspection Include?

- Locating the system.
- Uncovering access holes.
- Flushing the toilets.
- Checking for signs of back up.
- Measuring scum and sludge layers.
- Identifying any leaks.
- Inspecting mechanical components.
- Pumping the tank if necessary.

Four major factors influence the frequency of pumping: the number of people in your household, the amount of wastewater generated (based on the number of people in the household and the amount of water used), the volume of solids in the wastewater (for example, using a garbage disposal increases the amount of solids), and septic tank size.

Some makers of septic tank additives claim that their products break down the sludge in septic tanks so the tanks never need to be pumped. Not everyone agrees on the effectiveness of additives. In fact, septic tanks already contain the microbes they need for effective treatment. Periodic pumping is a much better way to ensure that septic systems work properly and provide many years of service. Regardless, every septic tank requires periodic pumping.

In the service report, the pumper should note any repairs completed and whether the tank is in good condition. If the pumper recommends additional repairs he or she can't perform, hire someone to make the repairs as soon as possible.

Use water efficiently

Average indoor water use in the typical single-family home is almost 70 gallons per person per day. Leaky toilets can waste as much as 200 gallons each day. The more water a household conserves, the less water enters the septic system. Efficient water use can improve the operation of the septic system and reduce the risk of failure.

High-efficiency toilets

Toilet use accounts for 25 to 30 percent of household water use. Do you know how many gallons of water your toilet uses to empty the bowl? Most older homes have toilets with 3.5- to 5-gallon reservoirs, while newer high-efficiency toilets use 1.6 gallons of water or less per flush. If you have problems with your septic system being flooded with household water, consider reducing the volume of water in the toilet tank if you don't have a high-efficiency model or replacing your existing toilets with high-efficiency models.

Faucet aerators and high-efficiency showerheads

Faucet aerators help reduce water use and the volume of water entering your septic system. High-efficiency showerheads or shower flow restrictors also reduce water use.

Water fixtures

Check to make sure your toilet's reservoir isn't leaking into the bowl. Add five drops of liquid food coloring to the reservoir before bed. If the dye is in the bowl the next morning, the reservoir is leaking and repairs are needed.

A small drip from a faucet adds many gallons of unnecessary water to your system every day. To see how much a leak adds to your water usage, place a cup under the drip for 10 minutes. Multiply the amount of water in the cup by 144 (the number of minutes in 24 hours, divided by 10). This is the total amount of clean water traveling to your septic system each day from that little leak.

Use Water Efficiently!

- **Install high-efficiency showerheads**
- **Fill the bathtub with only as much water as you need**
- **Turn off faucets while shaving or brushing your teeth**
- **Run the dishwasher and clothes washer only when they're full**
- **Use toilets to flush sanitary waste only (not kitty litter, diapers, or other trash)**
- **Make sure all faucets are completely turned off when not in use**
- **Maintain your plumbing to eliminate leaks**
- **Install aerators in the faucets in your kitchen and bathroom**
- **Replace old dishwashers, toilets, and clothes washers with new, high-efficiency models.**

For more information on water conservation, please visit www.epa.gov/owm/water-efficiency/index.htm

Watch your drains

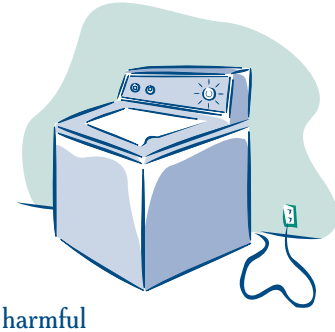
What goes down the drain can have a major impact on how well your septic system works.

Waste disposal

What shouldn't you flush down your toilet? Dental floss, feminine hygiene products, condoms, diapers, cotton swabs, cigarette butts, coffee grounds, cat litter, paper towels, and other kitchen and bathroom items that can clog and potentially damage septic system components if they become trapped. Flushing household chemicals, gasoline, oil, pesticides, antifreeze, and paint can stress or destroy the biological treatment taking place in the system or might contaminate surface waters and groundwater. If your septic tank pumper is concerned about quickly accumulating scum layers, reduce the flow of floatable materials like fats, oils, and grease into your tank or be prepared to pay for more frequent inspections and pumping.

Washing machines

By selecting the proper load size, you'll reduce water waste. Washing small loads of laundry on the large-load cycle wastes precious water and energy. If you can't select load size, run only full loads of laundry.



Doing all the household laundry in one day might seem like a time-saver, but it could be harmful to your septic system. Doing load after load does not allow your septic tank time to adequately treat wastes. You could be flooding your drainfield without allowing sufficient recovery time. Try to spread water usage throughout the week. A new Energy Star clothes washer uses 35 percent less energy and 50 percent less water than a standard model.

Care for your drainfield

Your drainfield is an important part of your septic system. Here are a few things you should do to maintain it:

- Plant only grass over and near your septic system. Roots from nearby trees or shrubs might clog and damage the drainfield.
- Don't drive or park vehicles on any part of your septic system. Doing so can compact the soil in your drainfield or damage the pipes, tank, or other septic system components.
- Keep roof drains, basement sump pump drains, and other rainwater or surface water drainage systems away from the drainfield. Flooding the drainfield with excessive water slows down or stops treatment processes and can cause plumbing fixtures to back up.

What can make my system fail?

If the amount of wastewater entering the system is more than the system can handle, the wastewater backs up into the house or yard and creates a health hazard.

You can suspect a system failure not only when a foul odor is emitted but also when partially treated wastewater flows up to the ground surface. By the time you can smell or see a problem, however, the damage might already be done.

By limiting your water use, you can reduce the amount of wastewater your system must treat. When you have your system inspected and pumped as needed, you reduce the chance of system failure.

A system installed in unsuitable soils can also fail. Other failure risks include tanks that are inaccessible for maintenance, drainfields that are paved or parked on, and tree roots or defective components that interfere with the treatment process.

Failure symptoms

The most obvious septic system failures are easy to spot. Check for pooling water or muddy soil around your septic system or in your basement. Notice whether your toilet or sink backs up when you flush or do laundry. You might also notice strips of bright green grass over the drainfield. Septic systems also fail when partially treated wastewater comes into contact with groundwater. This type of failure is not easy to detect, but it can result in the pollution of wells, nearby streams, or other bodies of water. Check with a septic system professional and the local health department if you suspect such a failure.

Stop, look, and smell!

Failure causes

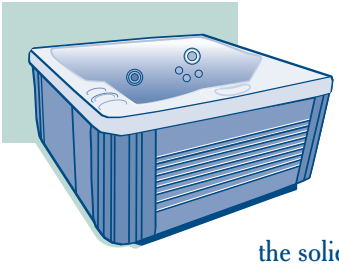
Household toxics

Does someone in your house use the utility sink to clean out paint rollers or flush toxic cleaners? Oil-based paints, solvents, and large volumes of toxic cleaners should not enter your septic system. Even latex paint cleanup waste should be minimized. Squeeze all excess paint and stain from brushes and rollers on several layers of newspaper before rinsing. Leftover paints and wood stains should be taken to your local household hazardous waste collection center. Remember that your septic system contains a living collection of organisms that digest and treat waste.

Household cleaners

For the most part, your septic system's bacteria should recover quickly after small amounts of household cleaning products have entered the system. Of course, some cleaning products are less toxic to your system than others. Labels can help key you into the potential toxicity of various products. The word "Danger" or "Poison" on a label indicates that the product is highly hazardous. "Warning" tells you the product is moderately hazardous. "Caution" means the product is slightly hazardous. ("Nontoxic" and "Septic Safe"

are terms created by advertisers to sell products.) Regardless of the type of product, use it only in the amounts shown on the label instructions and minimize the amount discharged into your septic system.



Hot tubs

Hot tubs are a great way to relax. Unfortunately, your septic system was not designed to handle large quantities of water from your hot tub. Emptying hot tub water into your septic system stirs the solids in the tank and pushes them out into the drainfield, causing it to clog and fail. Draining your hot tub into a septic system or over the drainfield can overload the system. Instead, drain cooled hot tub water onto turf or landscaped areas well away from the septic tank and drainfield, and in accordance with local regulations. Use the same caution when draining your swimming pool.

Water Purification Systems

Some freshwater purification systems, including water softeners, unnecessarily pump water into the septic system. This can contribute hundreds of gallons of water to the septic tank, causing agitation of solids and excess flow to the drainfield. Check with your licensed plumbing professional about alternative routing for such freshwater treatment systems.

Garbage disposals

Eliminating the use of a garbage disposal can reduce the amount of grease and solids entering the septic tank and possibly clogging the drainfield. A garbage disposal grinds up kitchen scraps, suspends them in water, and sends the mixture to the septic tank. Once in the septic tank, some of the materials are broken down by bacterial action, but most of the grindings have to be pumped out of the tank. Using a garbage disposal frequently can significantly increase the accumulation of sludge and scum in your septic tank, resulting in the need for more frequent pumping.

Improper design or installation

Some soils provide excellent wastewater treatment; others don't. For this reason, the design of the drainfield of a septic system is based on the results of soil analysis. Homeowners and system designers sometimes underestimate the significance of good soils or believe soils can handle any volume of wastewater applied to them. Many failures can be attributed to having an undersized drainfield or high seasonal groundwater table. Undersized septic tanks—another design failure—allow solids to clog the drainfield and result in system failure.

If a septic tank isn't watertight, water can leak into and out of the system. Usually, water from the environment leaking into the system causes hydraulic overloading, taxing the system beyond its capabilities and causing inadequate treatment and sometimes sewage to flow up to the ground surface. Water leaking out of the septic tank is a significant health hazard because the leaking wastewater has not yet been treated.

Even when systems are properly designed, failures due to poor installation practices can occur. If the drainfield is not properly leveled, wastewater can overload the system. Heavy equipment can damage the drainfield during installation which can lead to soil compaction and reduce the wastewater infiltration rate. And if surface drainage isn't diverted away from the field, it can flow into and saturate the drainfield.

For more information

Local Health Department

EPA Onsite/Decentralized Management Homepage

www.epa.gov/owm/septic

EPA developed this Web site to provide tools for communities investigating and implementing onsite/decentralized management programs. The Web site contains fact sheets, program summaries, case studies, links to design and other manuals, and a list of state health department contacts that can put you in touch with your local health department.

National Small Flows Clearinghouse

www.nesc.wvu.edu

Funded by grants from EPA, the NSFC helps America's small communities and individuals solve their wastewater problems. Its activities include a Web site, online discussion groups, a toll-free assistance line (800-624-8301), informative publications, and a free quarterly newsletter and magazine.

Rural Community Assistance Program

www.rcap.org

RCAP is a resource for community leaders and others looking for technical assistance services and training related to rural drinking water supply and wastewater treatment needs, rural solid waste programs, housing, economic development, comprehensive community assessment and planning, and environmental regulations.

National Onsite Wastewater Recycling Association, Inc.

www.nowra.org

NOWRA is a national professional organization to advance and promote the onsite wastewater industry. The association promotes the need for regular service and educates the public on the need for properly designed and maintained septic systems.

Septic Yellow Pages

www.septicyellowpages.com

The Septic Yellow Pages provides listings by state for professional septic pumpers, installers, inspectors, and tank manufacturers throughout the United States. This Web site is designed to answer simple septic system questions and put homeowners in contact with local septic system professionals.

National Association of Wastewater Transporters

www.nawt.org

NAWT offers a forum for the wastewater industry to exchange ideas and concerns. The NAWT Web site lists state associations and local inspectors and pumpers.

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Additional copies can be obtained from:
U.S. EPA Publications Clearinghouse
P.O. Box 42419
Cincinnati, OH 45241

Telephone: 800-490-9198
Fax: 513-489-8695

Office of Water
U.S. Environmental Protection Agency

Notice

Septic System Dos and Don'ts

(adapted from National Small Flows Clearinghouse)

Dos

- Check with the local regulatory agency or inspector/pumper if you have a garbage disposal unit to make sure that your septic system can handle this additional waste.
- Check with your local health department before using additives. Commercial septic tank additives do not eliminate the need for periodic pumping and can be harmful to the system.
- Use water efficiently to avoid overloading the septic system. Be sure to repair leaky faucets or toilets. Use high-efficiency fixtures.
- Use commercial bathroom cleaners and laundry detergents in moderation. Many people prefer to clean their toilets, sinks, showers, and tubs with a mild detergent or baking soda.
- Check with your local regulatory agency or inspector/pumper before allowing water softener backwash to enter your septic tank.
- Keep records of repairs, pumpings, inspections, permits issued, and other system maintenance activities.
- Learn the location of your septic system. Keep a sketch of it with your maintenance record for service visits.
- Have your septic system inspected and pumped as necessary by a licensed inspector/contractor.
- Plant only grass over and near your septic system. Roots from nearby trees or shrubs might clog and damage the drainfield.

Don'ts

- Your septic system is not a trash can. Don't put dental floss, feminine hygiene products, condoms, diapers, cotton swabs, cigarette butts, coffee grounds, cat litter, paper towels, latex paint, pesticides, or other hazardous chemicals into your system.
- Don't use caustic drain openers for a clogged drain. Instead, use boiling water or a drain snake to open clogs.
- Don't drive or park vehicles on any part of your septic system. Doing so can compact the soil in your drainfield or damage the pipes, tank, or other septic system components.

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