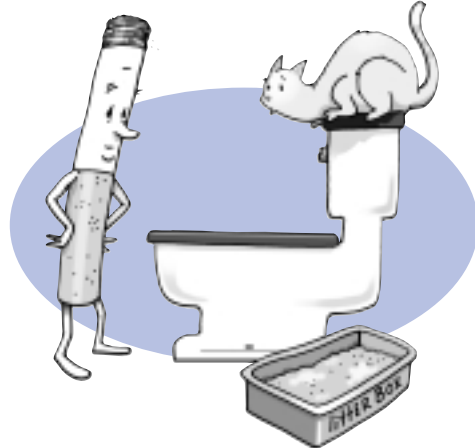


### 5. Household Practices

Many household chemicals can harm the helpful bacteria in your septic system. Without these important bacteria, the system may malfunction. Chemicals do not decompose easily and can contaminate the groundwater once in the drainfield.

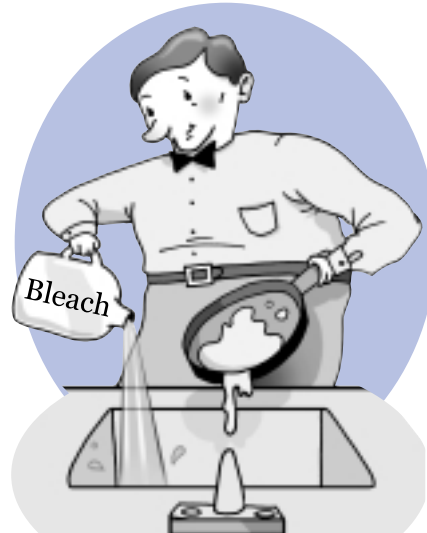


#### DO NOT FLUSH...

- |                  |                 |
|------------------|-----------------|
| Diapers          | Baby wipes      |
| Sanitary napkins | Tampons         |
| Condoms          | Cigarette butts |
| Kitty litter     | Grease          |
| Fats             | Coffee grinds   |

These materials do not decompose in the septic tank and will clog the system.

Try to limit the use of your garbage disposal. It can add excess material to the septic system that takes a long time to decompose. Try composting your food waste instead.



#### DO NOT POUR DOWN THE DRAIN...

- |                            |                |
|----------------------------|----------------|
| Paints                     | Solvents       |
| Acids                      | Drain cleaners |
| Oils                       | Pesticides     |
| Bleach (in large quantity) |                |

Reducing the amount of wastewater generated can extend the life of your septic system. Less water in the septic tank provides more storage area for the raw wastes. Also, less water in the drainfield means that the soil will have a better means to decompose the wastes.

Some water conservation methods include:

- Installing low-flow toilets.
- Taking shorter showers.
- Repairing leaky faucets and toilets immediately.



### 6. Signs of Trouble

Some warning signs that a septic system is not working properly include:

- Foul odors in your home or yard.
- Wet, spongy ground or lush-plant growth that appears near a leaky septic tank or drainfield.
- Fixtures that drain slowly because of a clog in the house pipes, septic system, or drainfield.



Respond quickly to any problems you observe.

Contact a professional to address the problem. If you need to expand or modify the septic system, keep in mind that the cost is worth it to protect your family's health and the coastal waterways.



# Protecting Your Water and Septic System

## The Georgia HOME\*A\*SYST Program

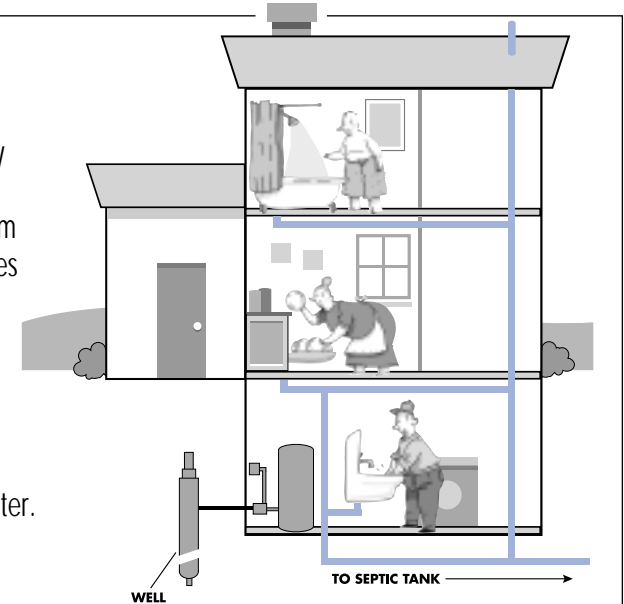
Tina Pagan, Biological and Agricultural Engineering, University of Georgia  
Jorge H. Atiles, Housing and Consumer Economics, University of Georgia

### Your Home's Septic System: A Great Investment.

If your home has a septic system, it requires regular maintenance to prevent costly damage and repairs. Septic systems are designed to safely use natural processes to treat and dispose of the wastewater generated in your home. If a septic system is not maintained, untreated human waste may contaminate drinking water supplies and negatively impact the environment. Keeping your septic system working properly is a wise investment for economic, human health, and environmental reasons.

By completing the risk assessment on the next page, you will be able to:

- Protect your investment and increase the value of your home.
- Protect the health of your family and neighbors by protecting your drinking water.
- Avoid costly repairs through proper maintenance.
- Protect Georgia's coastal wildlife and seafood industry.



### Do I have a Septic System?

Homes with a septic system have a tank buried in the yard with an access pipe located at the surface of the ground. Also, a drainfield will be buried beyond the septic tank. If your water is not supplied by a city or county drinking water system, chances are you have a septic tank.

### How Does It Work?

Wastewater flows out of your home and into a septic tank buried in the yard. Bacteria in the tank break down wastes. The liquid inside the tank flows into a series of underground pipes -- called a drainfield -- that release treated wastewater into the soil beneath your yard. The liquid waste is decomposed and absorbed by the soil. If a septic system is not maintained, raw waste may appear at the surface of the drainfield or contaminate the water supply. In coastal areas, it is important that the water table is deep enough to allow the soil to filter and treat the wastewater.

### Before Buying a Home...

Prior to purchasing a previously-owned home, ask the previous homeowner about the septic system. Also, ask the homeowner for a copy of any maps and/or records that he/she may have regarding the septic system.

**Note:** If information is not available from the previous owner, have your septic system inspected by a county health inspector and pumped by a professional. If you are buying a new home, the builder should provide you information on the construction of the septic system, location of the septic tank and drainfield, and size of the septic tank.

### Smart Questions to Ask Prior to Purchasing Your Home:

- How big is the septic tank?
- How old is the septic system?
- Where is the septic tank and drainfield located?
- How long ago was the septic tank last pumped?
- Have you ever had to repair the septic system?
- Do any of your sinks drain slowly?
- Have your sinks or toilets "backed-up"?
- Have stinky puddles appeared near the drainfield?

**FOR MORE INFORMATION: Call you Local Cooperative Extension Service office. Also, check our website: [www.fcs.uga.edu/housing](http://www.fcs.uga.edu/housing)**

This publication incorporates information from the National *Home\*A\*SYST: An Environmental Risk-Assessment Guide for the Home*, David J. Eagen, editor, publication number NRAES-87; *South Carolina Coast\*A\*SYST: An Environmental Risk-Assessment Guide for Protecting Coastal Water Quality*, publication number WQL22, September 2000; *Improving Household Wastewater Treatment*, Anthony Tyson, author, bulletin number 1152-4; and EPA Office of Water, *When it rains, it drains*, publication number WH-547.

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Gale A. Buchanan, Dean and Director

## Importance Of Maintenance

Maintaining your septic system protects your investment, drinking water, and nearby streams. Pumping the septic system regularly every 3 to 5 years will prevent the system from overflowing. If a septic tank overflows, the wastewater will mix with solid waste in the tank and could clog the drainfield causing sinks and toilets to "back up." Also, the raw waste may flow into drinking water wells or runoff into streams that lead to the ocean and estuaries. Raw waste in coastal waters may contaminate shellfish and result in waters that are not fit to swim in.

**Risk Assessment** This table will help you to determine your risk for unexpected costly repairs on your septic system and actions that may pollute your drinking water.

**For each statement on the left, read across to the right and check the box that best describes the conditions of your septic system. Your risk ranking is listed at the top of each column.**

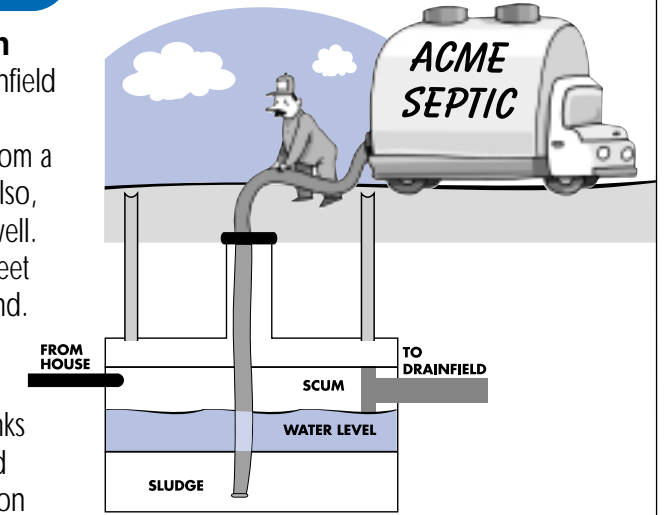
ISSUE	LOW RISK	MEDIUM RISK	HIGH RISK	YOUR RISK
<b>Septic System Location &amp; Maintenance</b>				
<b>Septic system age: _____ Year installed</b>	System is 5 years old or less.	System is between 6 to 20 years old.	System is more than 20 years old.	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High
<b>Septic system and drainfield location</b>	Septic tank is more than 50 feet and drainfield is more than 100 feet down slope from the well.	Septic tank is less than 50 feet or drainfield is less than 100 feet away and down slope from the well.	Septic tank is less than 50 feet or drainfield is less than 100 feet away and up slope from the well.	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High
<b>Capacity of Septic Tank TANK SIZE: _____ Gallons</b>	Tank is designed to handle more wastewater than required. (Table 1)	Capacity just meets requirements, but homeowner watches for any problems. (Table 1) when rain is expected.	Capacity does not meet the requirements of the home. (Table 1)	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High
<b>Tank Pumping (See Table 2)</b>	The septic tank is pumped on a regular basis as determined by an annual inspection or every 3 to 5 years.	The septic tank is pumped, but not regularly.	The septic tank is not pumped. The holding tank overflows or leaks between pumpings.	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High
<b>Drainfield Protection</b>	Vehicles are never allowed over drainfield.	Occasionally, vehicles are allowed over the drainfield.	Vehicles are routinely allowed over the drainfield.	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High
<b>Diverting surface water</b>	All surface water is diverted away from the drainfield.	Some surface water flows into the drainfield.	Runoff from rooftops, land, and/or driveways flows into the drainfield.	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High
<b>Trees and shrubs over the drainfield</b>	No trees and shrubs within 50 feet of the drainfield.	Trees and shrubs are within 25 to 50 feet of the drainfield.	Trees and shrubs are within 25 feet of the drainfield.	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High
<b>Household Practices</b>				
<b>Garbage Disposal</b>	Do not use a garbage disposal.	Minimum use of a garbage disposal (1-2 times per week.)	Garbage disposal is used more than 1-2 times per week.	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High
<b>Disposal of wastes in sink and toilet (See page 4)</b>	No grease, fats, or coffee grinds are put down the drain. Only toilet tissue is flushed down the toilet.	On occasion, coffee grinds are put down the drain and/or diapers, sanitary napkins, tampons, cigarette butts, and kitty litter are flushed down the toilet.	Often coffee grinds and grease are put down the drain. Many paper products and/or plastics are flushed down the toilet.	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High
<b>Household Chemicals</b>	Do not put paints, solvents, and/or pesticides down the drain or toilet.	_____	Put paints, solvents, and pesticides down the drain or toilet.	<input type="checkbox"/> Low <input type="checkbox"/> High
<b>Water use (See page 4)</b>	Use water-saving fixtures and practices; leaks are quickly fixed.	Use some water-saving fixtures and practices; leaks are quickly fixed.	No effort is made to conserve water and leaks are fixed when convenient.	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High
<b>Signs of Trouble</b>				
<b>Fixtures drain slowly</b>	Never.	Sometimes - 1 to 3 times per year.	Frequently – more than 3 times per year.	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High
<b>Surfacing of sewage</b>	Never notice.	Notice more than 1 time a year.	Green grass, septic smell, and wet soil exist around drainfield.	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High
<b>Roots plugging the drainfield lines.</b>	Never had a problem with roots in system lines.	Have occasional experiences with roots plugging lines.	Have frequent experiences with roots plugging the lines.	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High

\*In the table above, low risks are the goal. Medium and High-Risk situations need to be addressed.

## Here's What You Can Do:

### 1. Septic System Location

To keep wastewater in the drainfield from contaminating water, a drainfield should be 100 feet from a well, shoreline, or wetland. Also, it should be down hill from a well. The septic tank should be 50 feet from a well, shoreline, or wetland.



### 2. Septic Tank Capacity

Each day, you use about 75 gallons of water. Septic tanks should be large enough to hold two days worth of wastewater on the heaviest use days. Use the chart below to determine if your tank is the right size.

TABLE 1.

#### Septic Tank Capacity

Fill in the following:

\_\_\_\_\_ people in home X 150 gallons = \_\_\_\_\_ gallons.

What size is your septic tank? \_\_\_\_\_ gallons.

Is your septic tank the right size? Yes \_\_\_\_\_ No \_\_\_\_\_

Source: "Home\*A\*Syst: An Environmental Risk-Assessment Guide for the Home," Publication NRAES-87, National Farm\*A\*Syst/Home\*A\*Syst Program, April 1997.

### 3. Septic Tank Maintenance and Pumping

Septic systems should last 20 to 30 years or even longer when pumped regularly. Have your septic system pumped out every 3 to 5 years. If you know when your septic system was last pumped, the following chart (Table 2) can help determine the recommended years between pumping.

TABLE 2.

#### Recommended Years Between Septic Tank Pumping

Tank Size (gallons)	Number of People in the Home					
	1	2	3	4	5	6
500	5.8	2.6	1.5	1.0	0.7	0.4
1,000	12.4	5.9	3.7	2.6	2.0	1.5
1,500	18.9	9.1	5.9	4.2	3.3	2.6

Source: Karen Mancini, "Septic Tank Maintenance," Publication AEX-740, Ohio Cooperative Extension Service, 1988.

### 4. Drainfield Maintenance

The weight of vehicles or heavy equipment can damage a drainfield if driven or parked on top of the system. These vehicles compact the soil and prevent water from flowing away from the drainfield.

Trees and shrubs closer than 50 feet to the drainfield can clog the system with roots. Planting grass above a drainfield will not cause damage. Water flowing from gutters needs to be diverted away from the drainfield. Hoses can be attached at the downspout to direct the water to another part of the lawn (not the driveway). Prevent rainwater from forming puddles near the system.