

The background of the slide features a stylized, layered graphic of green leaves. The leaves are rendered in various shades of green, creating a sense of depth and texture. They are arranged in a way that suggests a natural, organic environment.

Why Septic Systems Fail

Chatham County Public Health Department
Environmental Health Division



Why septic systems fail

- Hydraulic overloading (too much water)
- Solids migration to drainfield
 - Failure to pump septic tank
- Root intrusion into sewer lines
- Traffic damage to drainfield
- Garbage disposal use
- Old age



How to Fix a Leaky Faucet

Hydraulic Overload

- Too much water use from inside the house
- Too much surface water entering the drainfield from runoff, roof gutters, etc.

Conserve Water Inside the Home










Four Tips to Help Conserve Water Indoors

- Turn off faucet while brushing teeth.
- Take shorter showers.
- Fix leaks in faucets, showerheads and toilets.
- Only wash full loads.



You use about
5 gallons of water
if you leave the
water running
while brushing
your teeth.

Water Loss In Gallons					
Leak this Size	Loss Per Day	Loss Per Month	Leak this Size	Loss Per Day	Loss Per Month
.	120	3,600		6,640	199,520
•	300	10,800		6,964	209,520
•	693	20,790		8,424	252,720
•	1,200	36,000		9,585	296,640
•	1,920	57,600		11,324	339,720
•	3,095	92,880		12,750	361,600
•	4,295	128,880		14,952	448,560

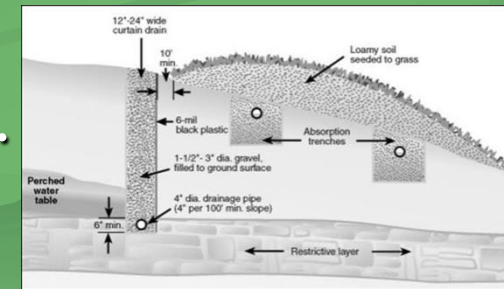
HOW TO TEST YOUR TOILET FOR LEAKS

IN 3 SIMPLE STEPS

- 1** Remove the tank lid and any in-tank toilet cleaners.
- 2** Put a few drops of food coloring in the tank (not in the bowl).
- 3** Let the toilet be idle for 15 minutes.

Hydraulic Overload Outside of Home

- Prevent external hydraulic overload by
 - Diverting all surface water around the septic tank/drainfield
 - Install roof gutters that are directed away from the septic tank
 - Do not create landscape features or conduct grading that encourages surface water to flow over septic tank/drainfield.



Solids Migration to the Drainfield

- Solids must be retained in the septic tank

PUMP THE SEPTIC TANK!!!

- Baffles should be inspected when tank is inspected or pumped
- Use of additives that “liquefy” sludge and scum can lead to drainfield failure

Septic System Additives

- Biological additives are harmless but of little use
- Chemical additives can damage the septic system and contaminate ground water
- Don't use if active ingredients are unspecified
- Annualized cost of additives is about the same as for tank pumping on recommended schedule



Other items not to put down the drain

Paints

Coffee grounds

Dental floss

Disposable diapers

Kitty litter

Sanitary napkins

Applicators

Cigarette Butts

Condoms

Paper towels

Plastics

Varnishes

Thinners

Waste oils

Photographic solutions

Pesticides





Root Intrusion into Sewer Lines



- Do not plant trees or shrubs near sewer lines





Traffic Damage

- No vehicle parking over drain field
- No vehicle traffic except lawn mowers
- No traffic at all if ground is saturated



Garbage Disposals NOT RECOMMENDED FOR SEPTIC SYSTEMS

- Add to hydraulic load (running water)
 - If you have garbage disposal, recommend adding another septic tank to system
- Add to solids
 - If you have garbage disposal, recommend pumping tank more frequently
- COMPOSTING is a good alternative to using the garbage disposal!!



Old Age



Water Softeners & Septic Systems



- Salt does not affect septic tank functioning

However

- Added hydraulic load (regeneration water)
 - Use water meter or sensor controlled regeneration rather than time clock alone
- Added sodium can affect marginal drain fields (dispersal of clay slows perc rate)



The background of the slide is a solid green color with a pattern of stylized, overlapping leaves. The leaves are rendered in various shades of green, creating a sense of depth and texture. They are scattered across the entire frame, with some leaves being more prominent than others.

Questions?