

Taking Care of Your SEPTIC SYSTEM

More than you ever wanted to know

West Almanor Community Services District

Here at Lake Almanor West ...

- There is no community sewer system
- Every home has an individual septic tank
- Almost all homes have an individual leach field
- What goes down the sink or the toilet stays on your property
- Maintaining the septic system is the homeowner's responsibility

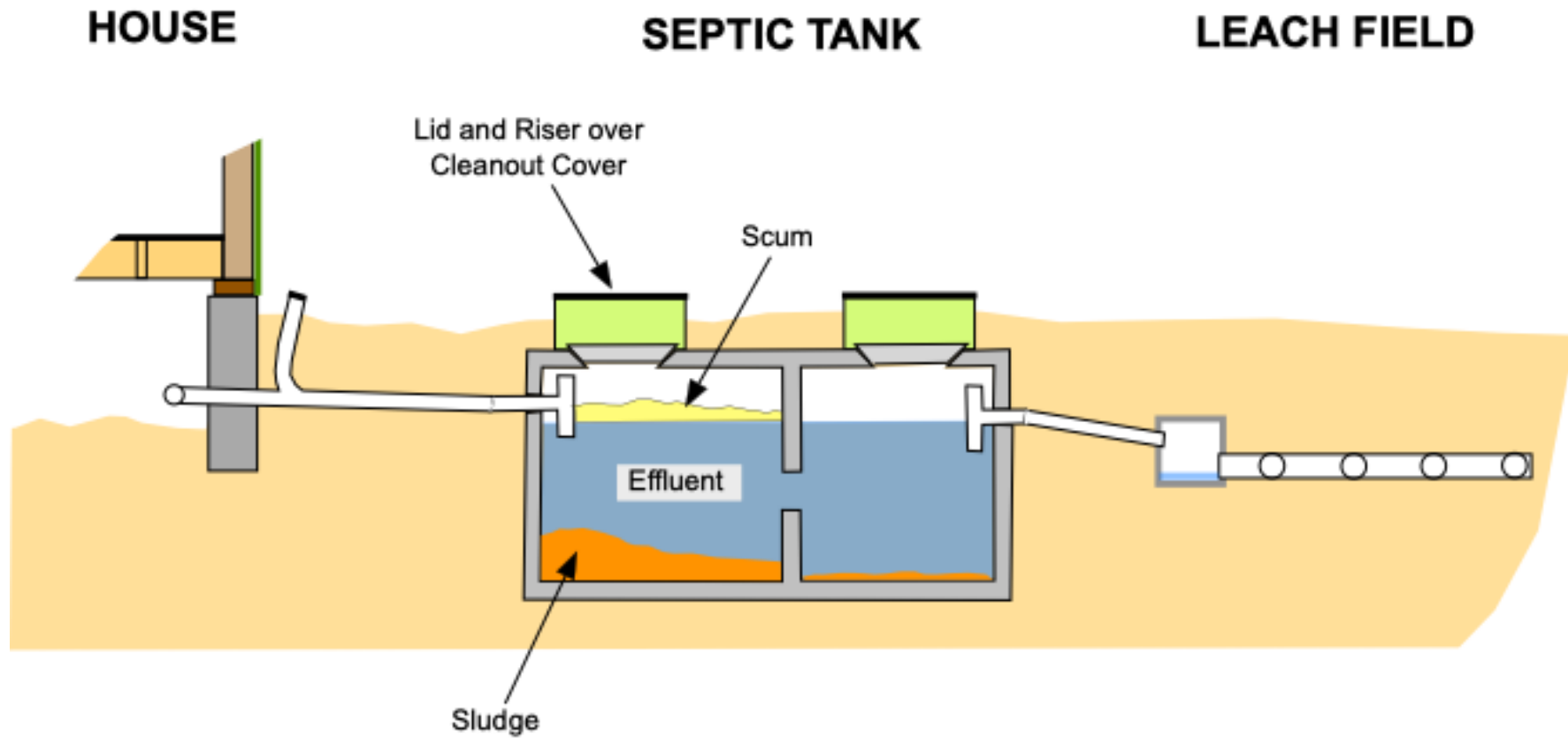
Today's Discussion

- What is a residential septic system?
- Good septic practices
- When things go bad

Septic System Basics

- Waste water leaves the house in a large pipe
- The waste enters the septic tank
 - Biological processes break down (“digest”) the materials
- The residual liquid (“effluent”) is piped to the leach field
 - Slow percolation down through the soil filters the remainder
- In most cases there are no pumps or valves involved
- System size depends on the number of bedrooms and the ability of the soil to percolate (absorb) the effluent

Typical System Diagram



Keeping the System Healthy

- Use the system regularly *(not necessarily constantly)*
 - Keeps the microbes active
 - Months of non-use could reduce effectiveness
- Minimize excess waste water
 - Avoid overloading the system
 - You don't want to rush things through a slow biological process
 - Don't let the sink or shower water run excessively
 - Fix leaks as they occur
- Use biodegradable toilet paper
- Use your garbage disposal sparingly

Some Things to Avoid

- NEVER put any of the following in the drain:
 - Oil, solvents, paint, insecticide, weed killer, coffee grounds, egg shells, hair clippings
- NEVER flush any of these:
 - Facial tissue (Kleenex), so-called “flushable wipes”, feminine hygiene products, paper towels, diapers, condoms, medications, cigarettes

Additional Tips

- If someone in the household is using antibiotics more than just briefly, consider using a dose of a septic “booster” such as *Rid-X* to maintain all those microbes
- Avoid extended stays of extra guests
 - A septic system sized for just a few people can become overwhelmed with all the extra showers and flushes

Routine Maintenance

- Have the septic tank inspected every 3 to 5 years
 - Checks the amount of sludge and scum accumulation
 - Also checks basic integrity, tree root intrusion in the tank, etc.
- Have the tank pumped whenever the inspection indicates a need
 - Pumping removes accumulated sludge and scum
- Advise West Almanor Community Services District of maintenance
 - Allows WACSD to maintain a record of actions taken, problems noted
 - Required by the State of California

By the way ... Do you know WHERE your septic tank is located?

What Can Possibly Go Wrong?

- Degraded microbe activity
 - Usually due to poisons being introduced into the system
- Compromised structural integrity
 - Broken components due to construction, seismic activity, etc.
- Clogged system
 - Non-digestible materials being flushed, tree root intrusion, etc.

Your septic system relies on smooth, unobstructed flow along with active microbes that aren't rushed.

How Will You Know There's a Problem?

- Regular inspections are a first line of defense
 - Abnormal observations during tank inspection may catch things early
 - Damp area around septic tank?
- Sluggish drainage is a strong clue
 - Obstructions in the line? Excess solids in the tank? Tree roots?
- System backup is a full stop
 - Immediate action needed

Repairs

- System repairs are not DIY projects
 - Get professional help
- Some repairs can be straightforward
 - Clearing a temporary obstruction in a drain pipe
 - Cracked pipe repair or replacement, removing roots from pipes, etc.
- Other repairs are major projects
 - Broken septic tank, failed leach field
 - These involve building code requirements, County inspections, etc.

Aging Leach Fields

- TREE ROOTS ... a special concern in our heavily forested area
 - They infiltrate any openings in septic system components
 - Obstruct flow, snag solids
 - Very fine roots can form a dense mat
- When perforated leach field pipes become totally blocked by tree roots, a full replacement field is required
 - A major and expensive project
 - Requires space, perc testing, engineering, construction, County approval

Modern Leach Field Options

- Traditional plastic perforated pipe in a gravel bed
 - Not the best choice where there are lots of nearby trees
 - Subject to tree root intrusion and gradual blockage



- “Chamber Leachbed” alternative
 - A more recent innovation
 - Creates open chambers using large plastic half-pipes
 - Tolerant of tree roots without creating blockages



Leach Field Space

- Leach field size depends on the number of bedrooms and the absorption capability of the soil (*percolation test required*)
- Example for a 3 bedroom home with excellent perc test results
 - 360 square feet of leach area required
 - Configuration can be tailored to the parcel; for example:
 - Square - 19 ft by 19 ft
 - Rectangle - 18 ft by 20 ft, 15 ft by 24 ft, 12 ft by 30 ft, etc.
 - Linear - 6 ft by 60 ft
 - Separated - Two interconnected fields, each 12 ft by 15 ft

Confused?

- Don't feel alone ... we're all in this together
- Take some positive steps starting today
 - Find and mark your septic tank cleanouts
 - Get on a regular septic tank inspection & pumping schedule
 - Follow the good practices mentioned earlier

Take Care of Your Septic System and It Will Take Care of You