Septic Systems

Out of sight and out of mind…until you smell them!

Developed by:
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What we’ll cover:

- Watersheds and water pollution
- Septic systems
- Keeping septic systems working properly
We all live in watersheds, which are the areas that drain to a common point in a river or lake. Our actions in areas that determine the quality of water downstream. We all live in watersheds, which are
Water cycle: one of the oldest “recycling” schemes in nature.

Water vapor condenses into clouds, and returns to earth as precipitation (snow or rain). Some of this precipitation runs off the land surface and some soaks into the ground.
Ground water accumulates when surface water soaks into the soil and moves downward.

The water table is the uppermost depth of the “zone of saturation”. Wells tap into the saturated zone, where all spaces between particles are filled with water.

Underground deposits of water in this saturated zone are called aquifers.
Where does the liquid effluent go?
Do you know???

- Where your tank is?
- How big it is?
- When it was last pumped?
- The location of your leachfield?

DNRC, Montana
Maintaining your septic system

- PUMP YOUR TANK!
- Keep your bacteria healthy and happy
## Suggested pumping interval (years)

<table>
<thead>
<tr>
<th>Tank Size (gallons)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>12</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1250</td>
<td>16</td>
<td>8</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>1500</td>
<td>19</td>
<td>9</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
To pump... or not to pump

- Pumping costs about $200 for the average 1250-gallon tank, every three years or so
- A new leachfield costs from $5,000 for an inground system to as much as $20,000 for an engineered field

Which would you choose?
### What can I plant on or near my leachfield?

<table>
<thead>
<tr>
<th>OK to Plant</th>
<th>Avoid Planting</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Grasses</td>
<td>- All trees</td>
</tr>
<tr>
<td>- Perennial and annual flowers</td>
<td>- Large shrubs</td>
</tr>
<tr>
<td>- Many perennial groundcovers</td>
<td></td>
</tr>
</tbody>
</table>
Other causes of septic failure

- Overloading. Use water sparingly. Do only full loads of wash at off-peak times, if possible, and try to limit the number of loads daily.
- Placement in poor drainage area
- Water leaks
- Driving over the drainfield
Other causes of septic failure

- Pouring kitchen grease into drains
- Failure to install according to septic codes
- Flushing cigarette butts, sanitary napkins or other inorganic materials down the toilet
Other causes of septic failure

- Extensive use of garbage disposals
- Tree roots clogging pipes - contact a septic contractor for repairs
- Use of salts and chemicals from water softeners and washing machines
What about additives?

- Enough bacteria are present in the tank from normal bodily wastes.
- Additives cost $$$ and may actually increase the solid material in the tank by producing inert ingredients.
- There is no substitute for pumping!
Tips to keep your septic system working well

- Don’t water the leachfield
- Don’t flood the system with excessive water use
- Keep excess solids out of the system and avoid flushing toxins down the drain
Tips to keep your septic system working well

- Avoid using your garbage disposal to process large quantities of wastes
- Regularly pump out the septic tank and inspect the physical components of the system
- Don’t park or drive over the leachfield
These tips will keep your system working properly for generations.