

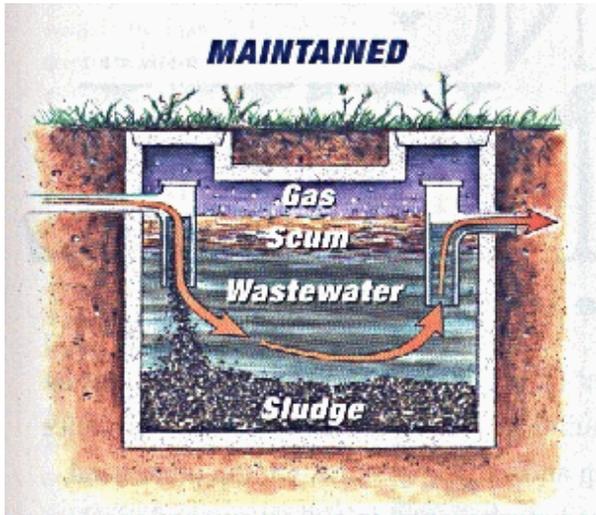
# Marion County

## Public Works

- Understanding the Septic Tank
- How does the septic tank work?
- Why and when do you need to pump the septic tank?

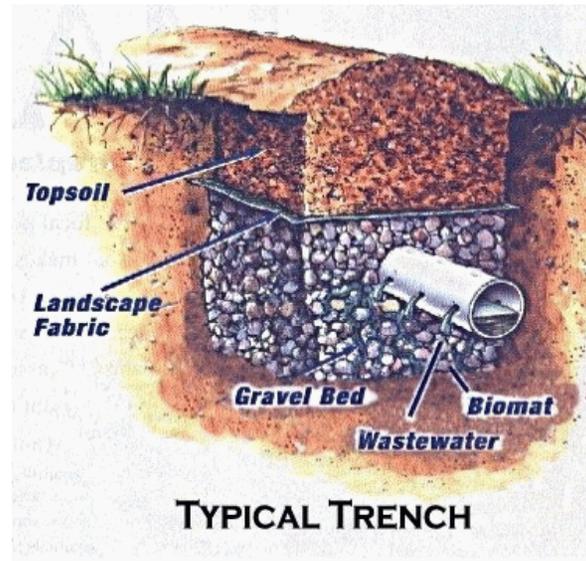
*Read further to discover the mysteries of a septic system*

The septic tank is a large buried container usually made of concrete. It receives the wastewater from the home.



Heavy solids settle to the bottom where bacteria partially digest and decompose these solids to sludge and gases, which are vented away. Most of the lighter solids such as fats and greases rise to the top of the liquid to form a scum layer. Over time, the scum and sludge

layers get thicker and thicker until very little retention time is allowed for the digestion of the waste. The water going to the drainfield becomes heavy with suspended solids and the drainfield soil pores begin to plug. Plugging of the drainfield will cause the water to drain slowly from the house and eventually backup into the house. The drainfield begins to fail, often causing sewage to pond on the ground surface.

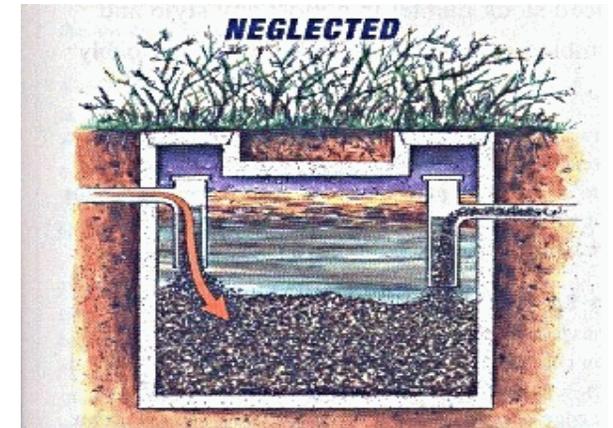


Septic systems are a simple efficient method of sewage disposal. Septic systems are very forgiving but cannot be simply ignored. If you ignore your septic system you will eventually pay the price.

No septic drainfield will last forever but there are ways to extend the life of your septic system and to postpone problems.

**The following are 7 points to consider in keeping the septic system functioning well:**

1. Check or *pump the septic tank* on a regular basis to prevent excess solids from building up in the tank. Pumping the tank every four years or so is very cheap preventive maintenance!!
2. Be sure there are *no leaking faucets or fixtures* in the house. A leaking toilet can easily double the flow into the system and the work it must do to process the waste.



3. Use *garbage disposals* with common sense. Throw the majority of the material into the garbage or compost. Only use the disposal for cleanup.

4. Convert to *using water saving devices* such as low flush toilets and flow reducers in the showerhead. Using a small or short load cycle in the washing machine and dishwasher can save a lot of water. A slow draining septic system can often be made to work better by reducing the water load.

5. **Never flush harmful material** such as grease, cooking fats, coffee grounds, cigarettes, sanitary napkins, etc. into the drains. These items cannot or will not easily decompose. Chemicals such as solvents, paint, pesticides, or heavy concentrations of household cleaning products such as chlorine can kill the bacteria that do the work in the septic tank (normal use of cleaning products is okay).

6. **Landscape the yard** with the drainfield in mind. Severe damage to the drainfield can be caused by lack of planning or knowledge where the system is located and the layout. Get an "As Built" drawing of the system from the County if one is available. This drawing may save a lot of time and money.

7. **Protect your system** from damage. Do not put a patio over the septic tank.....How can you pump it if you do? Accessory buildings over the septic system can cause severe damage and make maintenance difficult. Roads and excessive fill will compact and damage the soil and slow the air exchange necessary for the soil "bugs" to thrive and finish the work the septic tank started.

Table 1. ESTIMATED SEPTIC TANK PUMPING FREQUENCIES IN YEARS (FOR YEAR-ROUND RESIDENCE)

Tank Size (gal)	Household Size (Number of People)									
	1	2	3	4	5	6	7	8	9	10
500	5.8	2.6	1.5	1.0	0.7	0.4	0.3	0.2	0.1	—
750	9.1	4.2	2.6	1.8	1.3	1.0	0.7	0.6	0.4	0.3
1000	12.4	5.9	3.7	2.6	2.0	1.5	1.2	1.0	0.8	0.7
1250	15.6	7.5	4.8	3.4	2.6	2.0	1.7	1.4	1.2	1.0
1500	18.9	9.1	5.9	4.2	3.3	2.6	2.1	1.8	1.5	1.3
1750	22.1	10.7	6.9	5.0	3.9	3.1	2.6	2.2	1.9	1.6
2000	25.4	12.4	8.0	5.9	4.5	3.7	3.1	2.6	2.2	2.0
2250	28.6	14.0	9.1	6.7	5.2	4.2	3.5	3.0	2.6	2.3
2500	31.9	15.6	10.2	7.5	5.9	4.8	4.0	4.0	3.0	2.6

Note: More frequent pumping needed if garbage disposal is used.



OREGON STATE UNIVERSITY EXTENSION SERVICE

For further information please call  
Marion County at (503) 588-5147

*The septic tank solids can be checked as shown below...*

