

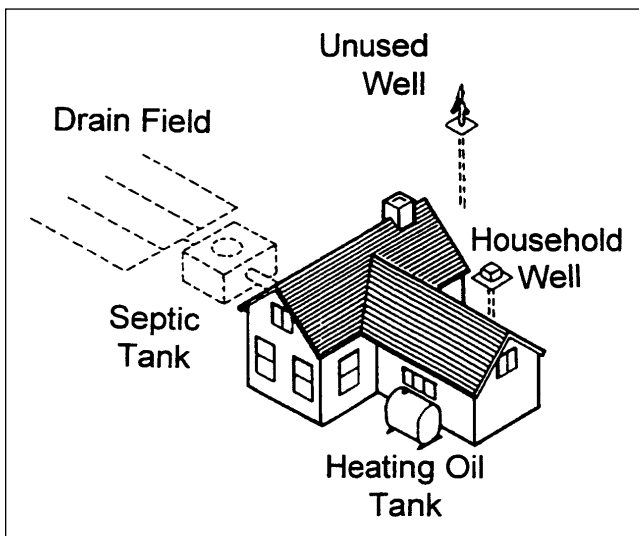
# Twelve Simple Things You Can Do to Protect Your Well Water

G. Glick

**1. Locate your well.** It may be somewhere other than where your pump or pressure tank is. Most wells have a 4 to 8" diameter metal pipe (the "casing") lining the hole. In some older wells, the casing doesn't reach the surface, and the wellhead is underground. If you have an underground wellhead, or one that isn't very high, you need to be especially sure that surface runoff is diverted away from the well area. Locate *all* wells around your home; inactive wells that haven't been properly sealed are very risky. For information on abandoning wells or to order well records (logs), contact the Oregon Water Resources Department at (503) 378-8455.

**2. Locate your septic tank.** Use the map of your property. Your county building or health department may be able to provide you a copy. If you can't locate a copy of the map, follow the discharge pipe from your house. Poke into the ground with a rod to determine the exact location.

**3. Locate your drain field.** This is a set of underground pipes that distribute waste water from



Locate and protect these structures around your home.

the septic tank through the soil. Drainfield replacement is very expensive. You must locate this area to avoid accidental damage. Protect your drain field from damage by excluding vehicles, heavy equipment, and large animals. Wet spots in this area indicate a failing system that needs professional attention. *Do not* add or remove surface soil in the drain field area. Only grass should be grown over a drain field.

**4. Have your water tested.** Water from household wells should be tested every year for coliform bacteria and nitrates. You can order additional tests if you suspect other contaminants. Check prices before ordering tests. A list of state-certified labs and information on water testing are available from your county health department, the OSU Extension Service, or the Oregon Health Division at (503) 731-4317.

**5. Have your septic tank pumped.** Check your yellow pages under "Septic Tanks and Systems—Cleaning" for pumping services. Frequency of pumping depends on your household and septic tank size. Typically, a four-person household needs to pump every 3 years. The OSU Extension Service or your pumping company can provide additional guidelines. Regardless of manufacturers' claims, septic system additives haven't been shown to eliminate the need for regular pumping, and some can contaminate your groundwater. Neglecting septic system maintenance can result in backed-up sewage, expensive repairs, and contaminated surface seepage that can pollute your well water.

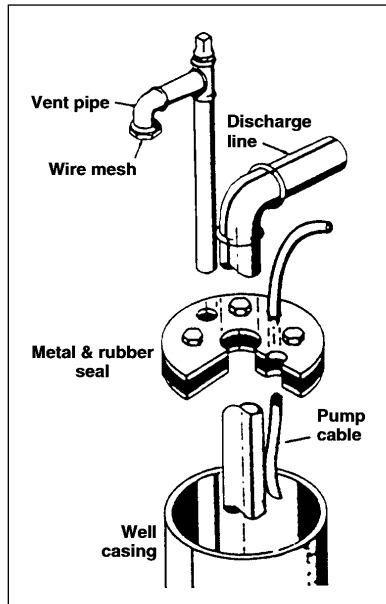
**6. Use less water.** Drawing water up your well can pull nearby groundwater pollution toward your home. The more groundwater you use, the greater the risk. Also, contrary to common assumptions, your septic system functions better if *less* water goes down your drain.



**7. Remove any chemicals stored in your well house.** Spilled chemicals can reach your well water by entering the top of the casing or by wicking through the soil down the outside of the casing.

**8. Ensure that a sanitary seal caps your well.** The seal prevents foreign objects from entering your well.

The vent should be screened to exclude insects, spiders, and mice. If the top of your well is not securely sealed, a pump or well professional can provide parts and advise you how to proceed. In some cases, the sanitary seal supports the weight of the well pipe and pump, and replacement can be technically difficult. If your well is sealed, do not disturb it.



*One type of sanitary well seal.*

**9. Install backflow protectors on all outdoor faucets.** In some cases, water can siphon backwards through a hose and down the well. This is especially serious if a chemical sprayer is attached to the hose or if the hose end is under water, such as in a bucket. If you don't have backflow protection in your water supply system, add an inexpensive, screw-on, brass atmospheric pressure breaker to each faucet. Make sure the device meets state plumbing code, as many models in stores do not.

**10. Limit your use of lawn and garden chemicals.** Excess fertilizer moves easily through the soil to the groundwater and contributes to high nitrate levels. Apply lawn fertilizer sparingly. Don't store or mix pesticides and fertilizers where spills can enter the soil and eventually reach the groundwater that supplies your drinking water.

**11. Protect the soil from contamination by oil, gasoline, and household chemicals.** Contact your local garbage collection company about oil recycling and hazardous waste disposal programs. Dispose of motor oil, gasoline, furniture polish, cleaning fluids, paint thinners, and other chemicals as advised. *Never* dump these items on your property and *never* pour them down the drain. Refuel equipment over a hard surface so spills will not reach the soil. Repair leaks. For information on removing underground fuel tanks, call the DEQ at 1-800-452-4011.

**12. Shield animal waste from rain.** Animal yards and piles of composting manure are sources of bacteria and nitrates which could contaminate your drinking water. Take steps to prevent runoff and soil seepage.

*The OSU Extension Service can provide additional information on the above topics. For a thorough evaluation of structures and practices that affect your drinking water, perform a "Home\*A\*Syst Homestead Assessment." Contact your county Extension office, the OSU office listed below, or visit <http://wellwater.oregonstate.edu>*

**Statewide well water phone contacts**

- OSU Extension Water Quality Education  
and Home\*A\*Syst Program ..... (541) 737-6294
- Oregon Department of Environmental  
Quality (DEQ) ..... 1-800-452-4011
- Oregon Health Division,  
Drinking Water Section ..... (503) 731-4010
- Oregon Water Resources Department,  
Groundwater Section ..... (503) 378-8455

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