



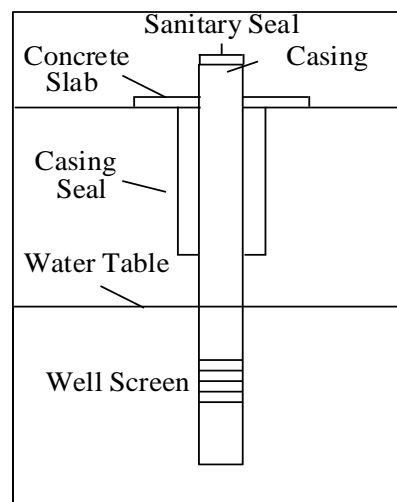
## Private Well Fact Sheet

Private (domestic) wells are an important source of drinking water in Oregon. A recent estimate by the U.S. Geological Survey indicates that approximately 1 million Oregonians obtain their drinking water from private wells. The vast majority of these wells are located within rural areas, as opposed to within city limits. Wells are drilled into aquifers to bring water to the surface. However, if they are not constructed or maintained properly, these same wells can serve as conduits for pollutants to migrate down to the aquifer and contaminate water supplies. Listed below are some important facts related to private wells.

Wells are drilled below the ground surface to a depth where all the open spaces in the subsurface geologic material (sand and gravel, fractured bedrock, etc.) are filled with water. At this level we have crossed the water table and are into the aquifer.

### Components of a Well

- **Well Casing:** The casing is the metal or plastic pipe that is placed in the hole to keep it from caving in. In bedrock wells, casing isn't always used. The casing does not provide adequate protection against contamination.
- **Casing Seal:** Oregon law requires that the initial hole be drilled a minimum of four inches greater than the diameter of the casing and that this open space be filled with cement or bentonite to seal out shallow water. The depth of the casing seal depends on the local geology.
- **Sanitary Seal:** The sanitary seal is a rubber gasket or other type of seal at the top of the casing to ensure that nothing can gain access to the well's interior.



- **Screens or Perforations:** Some wells have holes or slots in the casing or liner that provide direct access of groundwater to the well. They are generally placed at the same depth as the water-bearing zone.
- **Concrete Slab:** This is the concrete pad around the well at the surface, sloping away from the well. It prevents water and spills from gaining access to the well casing.

## **Protecting Your Drinking Water**

Even deep wells can become polluted if they are not constructed or maintained properly. Provide protective housing. Do not allow animals in the vicinity of the well house. Do not store chemicals in or near the well house. A leaking container or accidental spill could contaminate the drinking water for both you and your neighbor. Avoid applying pesticides and fertilizers near the well house.

## **Testing Your Well Water**

Testing your water frequently is good practice. Water quality can change over time and it may not be possible to detect that change without an analysis. Test annually for coliform bacteria and nitrate, or at any time that your water changes character, i.e., appearance, odor, taste, etc. Advice and analyses are available from a number of state-certified drinking water laboratories.

## **For More Information**

Well construction: Contact an Oregon-licensed well driller, your local county watermaster, or call the Oregon Water Resources Department at 503-986-0900 or see the OWRD website (see below).

Water quality or water testing: Contact your county health department or call Oregon Drinking Water Services at 971-673-0405.

Assessing private wells: Contact your local OSU Extension agent and ask for information on the [Home\\*A\\*Syst Program](#).

Useful Websites:

National Groundwater Association: [www.wellowner.org](http://www.wellowner.org)

Oregon Water Resources Department: [www.oregon.gov/owrd](http://www.oregon.gov/owrd)

U.S. Geological Survey: [www.usgs.org](http://www.usgs.org)

OHA-Drinking Water Services: [www.healthoregon.org/dws](http://www.healthoregon.org/dws)

OHA Domestic Well Safety:

<https://www.oregon.gov/oha/PH/HealthyEnvironments/DrinkingWater/SourceWater/DomesticWellSafety/Pages/index.aspx>

Domestic Well Testing Act and Real Estate Transactions:

<https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/DRINKINGWATER/SOURCEWATER/DOMESTICWELLSAFETY/Pages/Testing-Regulations.aspx>

Oregon Department of Environmental Quality: [www.oregon.gov/deq/wq](http://www.oregon.gov/deq/wq)

Oregon State University Well Water Program: <https://wellwater.oregonstate.edu>

Oregon State University Extension Service: <https://extension.oregonstate.edu/>

U.S. EPA: [www.epa.gov/privatewells](http://www.epa.gov/privatewells)