

Drinking Water Quality

Chapter 99 of Benton County's Development Code requires that properties proposed for some kinds of development have wells producing an adequate supply of potable (safe to drink) water.

Coliform Bacteria Water Testing

Applicants must submit a copy of a test performed within the past 12 months showing that coliform bacteria are absent. Coliform tests are used to indicate potential contamination by other bacteria and viruses.

If the test shows that coliforms are present, you will need to shock chlorinate the well. You will then need to resample after flushing residual chlorine from your water system. Directions on shock-chlorinating are part of the Environmental Health handout "Six Basics for a Safe Water System."

Nitrate Water Testing

Applicants must submit a copy of a test performed within the past 12 months showing a nitrate level of 10 parts per million (ppm) or less. Higher levels can negatively affect pregnant women, infants, and nursing mothers. Nitrates can be an indirect indicator of the presence of pesticides or chemical contaminants.

Well Testing for Real Estate Transactions

The seller of any home sold in Oregon must send a copy of the arsenic, coliform, and nitrate results to the purchaser and to the Oregon Drinking Water Program. For more information call 503-731-4010 or go to <http://oregon.gov/DHS/ph/dwp/index.shtml>.

Additional Water Testing

Benton County Environmental Health recommends testing for arsenic and lead.

Arsenic can cause skin damage, stomach pain, numbness in hands and feet, and blindness. Arsenic might also increase the risk of cancer.

Lead can contribute to slow growth, behavior and learning problems, kidney or liver damage, and lowered intelligence. Lead can enter drinking water from submersible pumps, brass plumbing fixtures, and soldered copper pipes.

Environmental Health also recommends testing for the presence of herbicides and pesticides if you think the groundwater might be contaminated with these chemicals.

If you are on a low sodium diet, you can consider testing for sodium.

Although they are not usually health concerns, for aesthetic reasons you can consider testing for iron (which can stain fixtures red), manganese (which can stain fixtures black), hardness (which can make soap foam less and leave a white deposit), and hydrogen sulfide (which has a rotten egg smell).

It is a good idea to test your water every year for coliform bacteria and nitrate, and any time that your water changes in color, odor, taste, etc.

For more information on contaminants, coliform disinfection, well water protection, a list of certified laboratories, and a well construction diagram, contact the Oregon Drinking Water Program at 503-731-4010 or <http://oregon.gov/DHS/ph/dwp/index.shtml>.

Well Water Protection

If wells are not constructed or maintained properly, they can allow pollutants to migrate down to the aquifer and contaminate water supplies.

How you can protect your drinking water:

- Have protective housing around your well.
- Do not allow animals near the well house.
- Make sure the well casing extends at least 12 inches above ground and is sealed with a cap on top.
- Make sure the ground slopes away from the well, so that runoff is directed away.
- Do not store chemicals near the well house, and avoid using pesticides and fertilizers near the well house.

Well Identification

All wells, no matter their use, must be physically tagged upon the sale of the property. This is required by Oregon Water Resources Department (OWRD) *Well Identification Program*.

If a well has no tag:

1. The owner can contact OWRD to obtain a form titled *Application for Well ID Number*. OWRD's website and phone number are on the back of this pamphlet.
2. The owner, well driller, or licensed pump installer then attaches the stainless steel tag to the well.

OWRD's website also has instructions on how to locate the well log for your property.

Required Flow Rates for New Dwellings and Places Open to the Public

Chapter 99 of the Benton County Development Code requires that wells serving new dwellings or new facilities open to the public produce a sustained yield of at least 5 gallons per minute (by pump test) with a static water level for 4 hours, otherwise an approved storage unit of up to 1,500 gallons must be installed. Also, a “low-yield well” covenant must be recorded.

A well producing less than 1 gallon per minute is not adequate to serve as a water supply for a new dwelling or a facility open to the public.

The sustained yield must be determined via a pump test performed within the last 12 months, preferably between July 15 and October 15.

Before scheduling a pump test, property owners should review the “Water Supply Requirements for Building Permits” informational handout. This is available at the Benton County Community Development Department office and website (listed on the front of this pamphlet).

Required Flow Rates for Land Divisions

Chapter 99 of the Development Code requires that a sufficient water supply is demonstrated prior to application for most land divisions. This may include the requirement of a pump test with a static water level for 4 hours to 72 hours, depending on factors specified in the Code. In many cases the applicant is required to send advance notification of the test to nearby property owners, to allow them to monitor their own wells for adverse impacts.

Before scheduling a pump test, property owners should review the “Water Supply Requirements for Partitions and Subdivisions” informational handout. This is

available at the Benton County Community Development Department office and website (listed on the front of this pamphlet).

Wells serving two homes must have a sustained yield of at least 10 gpm; three homes need at least 15 gpm. Meters are recommended to check the amount of use and maintain good neighborly relations. If a well serves four or more homes, it falls under the State Public Water System rules. Contact Environmental Health for more information.

Springs

Benton County Development Code 99.820 governs springs. More information can be obtained by calling Environmental Health.



Drinking Water Requirements for Development in Benton County

Publication by Benton County:

Community Development Department
www.co.benton.or.us/cd/
(541) 766-6819

Public Works Department
www.co.benton.or.us/pw/
(541) 766-6821

Health Department
www.co.benton.or.us/health/environmental/
(541) 766-6841

Government Agencies

Benton County Environmental Health
Small community drinking water systems and water-related disease investigations
www.co.benton.or.us/health/environmental/
(541) 766-6841

Oregon Dept. of Environmental Quality
Surface & ground water contamination
www.oregon.gov/DEQ/WQ/
(503) 229-5696
1-800-452-4011

Oregon Water Resources Department
Well logs, well construction, water rights, ground water contamination
www.wrd.state.or.us/OWRD/GW/index.shtml
(503) 986-0900

U.S. Environmental Protection Agency
Private drinking water wells and human health
www.epa.gov/safewater/privatewells/health.html
