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It's Your Oregon

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Testimony to the House Energy and Environment Committee on House Bill 2860

February 21, 2019

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Founded in 1968, the Oregon Environmental Council (OEC) is a nonprofit, nonpartisan, membership-based organization. We advance innovative, collaborative and equitable solutions to Oregon's environmental challenges for today and future generations.

Oregon Environmental Council **supports HB 2860** because all Oregonians deserve clean, safe drinking water.

70% of Oregonians get some of their water from groundwater, and approximately 23% of Oregonians use domestic wells as their primary source of drinking water. (Domestic wells are defined as wells that serve fewer than four connections or fewer than ten people.) Unfortunately, domestic well water can be contaminated by bacteria, nitrate, arsenic and other minerals like lead and mercury. These contaminants can cause serious health problems such as cancer, miscarriage and thyroid disorders. Pregnant women and small children are particularly at risk from nitrate exposure, especially infants because their digestive and enzyme systems are not fully developed. Infants can suffer from "Blue Baby Syndrome" which decreases the ability of blood to carry oxygen and can be fatal.

Statewide, Oregon has a fairly common problem with nitrate, arsenic and bacteria contamination of well water. Oregon Health Authority (OHA) has developed a "[Story Map](#)" on its website that displays where tests of private wells show arsenic and nitrate at concerning levels (see attached). And the Department of Environmental Quality (DEQ) has designated the Lower Umatilla Basin, Northern Malheur County, and Southern Willamette Valley as Groundwater Management Areas because of nitrate levels.

OHA recommends that all domestic well owners conduct a one-time arsenic test and annual nitrate and bacteria tests. Under current state law, property owners are required to test domestic wells at the time of a property sale. However, compliance with that requirement is low, and there is no enforcement mechanism. In reality most families that drink well water have never had their well tested. And renters, in particular, lack information on whether their well water is safe to drink even though landlords are legally required to provide safe drinking water.

Property owners can make their own choices about whether their well water is safe to drink. But under existing law, renters can go many years without knowing the status of their water. HB 2860 seeks to address this problem and ensure that landlords meet their legal mandate to provide safe drinking water to their renters.

The number of tenant-occupied properties where the source of water is a domestic well is not insignificant. At least 175,000 people live on rental properties in rural Oregon¹, and even if some of rural renters are hooked into a public water supply, we are still talking about tens of thousands of people.

HB 2860 has three primary components. The legislation:

- Requires landlords to test drinking water wells and inform tenants whether bacteria are present and whether the level of nitrate meets federal standards. Test results must be reported to the Department of Environmental Quality. Consistent with Oregon Health Authority's guidelines, the bill also requires landlords to test for arsenic once in the life of the well and yearly for total coliform bacteria and nitrate. If tests come back "clean" for three consecutive years showing no presence of nitrate or bacteria, the landlord can move to a testing schedule of every five years. [Sections 6-9]
- Directs Oregon Health Authority to analyze home sale well test data and provide public education in areas where contaminants are present. [Sections 1-2]
- Creates a new Safe Well Water Fund, which would provide grants and loans to help low-income property owners and landlords repair drinking water wells or install water quality treatment systems if necessary. There is currently no funding source available to help with treatment or repair. The Safe Well Water Fund would also be used to assist local health authorities and other educators (e.g., soil and water conservation districts, OSU Extension Service) in providing well water education and free or low-cost testing of wells. [Sections 3-5 + 12]

The cost of testing is roughly \$25-50 per chemical, so the average cost over the first three years would be approximately \$4.86-\$9.72 per month. This cost to the landlord is quite small when compared to the high price tag of the many negative health impacts associated with contaminated drinking water. We appreciate the willingness of the landlord-tenant coalition to help us craft fair legislation that protect renters and their families without undue burden on landlords.

We understand that this bill comes with a fiscal cost to the state. We are working with OHA and DEQ to figure out what needs further discussion and the best way to implement these important protections this session.

To summarize, HB 2860 will help the Oregon Health Authority and Department of Environmental Quality better understand where they should target well water education; will help low-income property owners and landlords ensure safe drinking water; and—the important end goal—improve public health. We hope you will support its passage.

¹ The counties with the lowest percentage of renters are Columbia, Grant, Wallowa and Crook Counties, where as few as 25% of homes are renter-occupied. Applying this minimum rate of renter-occupied rural homes to the estimated 700,000 rural Oregonians equals 175,000 people renting in rural Oregon.

Oregon Domestic Well Testing

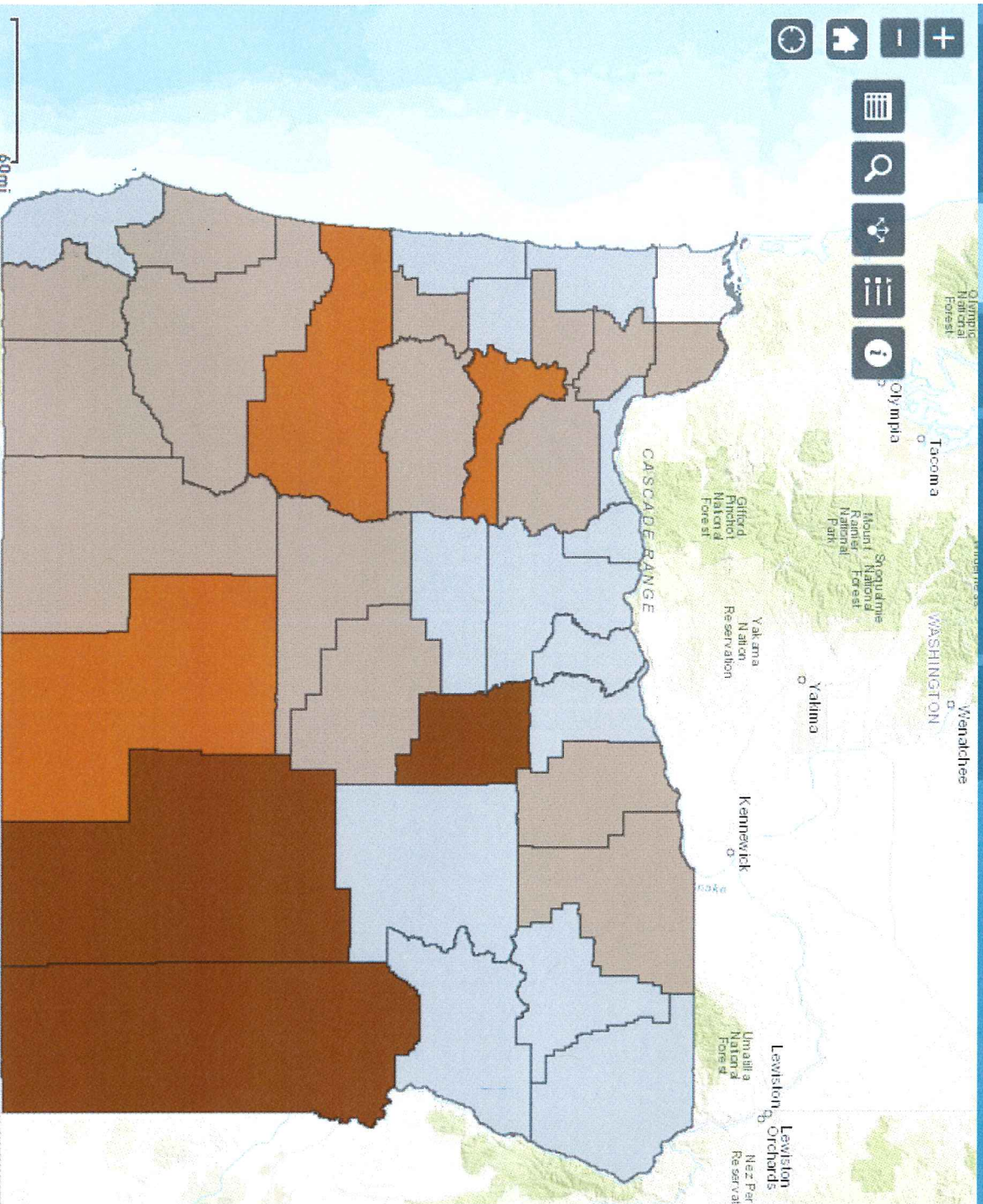
Domestic Wells

Arsenic

Nitrate

Nitrate: A Deeper Look

About Us



Interactive Map - Water Quality Results



Arsenic is a naturally occurring element found in the earth's crust. It has no color, smell or taste. As water flows through certain rock formations, arsenic can dissolve and be carried into underground aquifers and contaminate your well water.

Arsenic and your health

Long-term consumption of water with arsenic above the drinking water standard may increase the risk of health problems of the skin, circulatory system, nervous system, lungs and bladder. These health problems include some forms of cancer.

Arsenic and your well water: Testing Arsenic

Arsenic is measured in parts per billion (ppb). The safe drinking water standard (also called maximum contaminant level or MCL) for arsenic is 10 ppb. If your water has arsenic levels above 10 ppb (0.010 mg/L), you should switch to bottled water or another source of safe drinking water and seek treatment options.

The only way to know if you have arsenic in your well water is to test. Contact an accredited laboratory for specific instructions on how to collect, store and send the sample. The test will cost between \$30 and \$45.

To find accredited labs in Oregon, visit <http://www.healthoregon.org/wells>

Testing

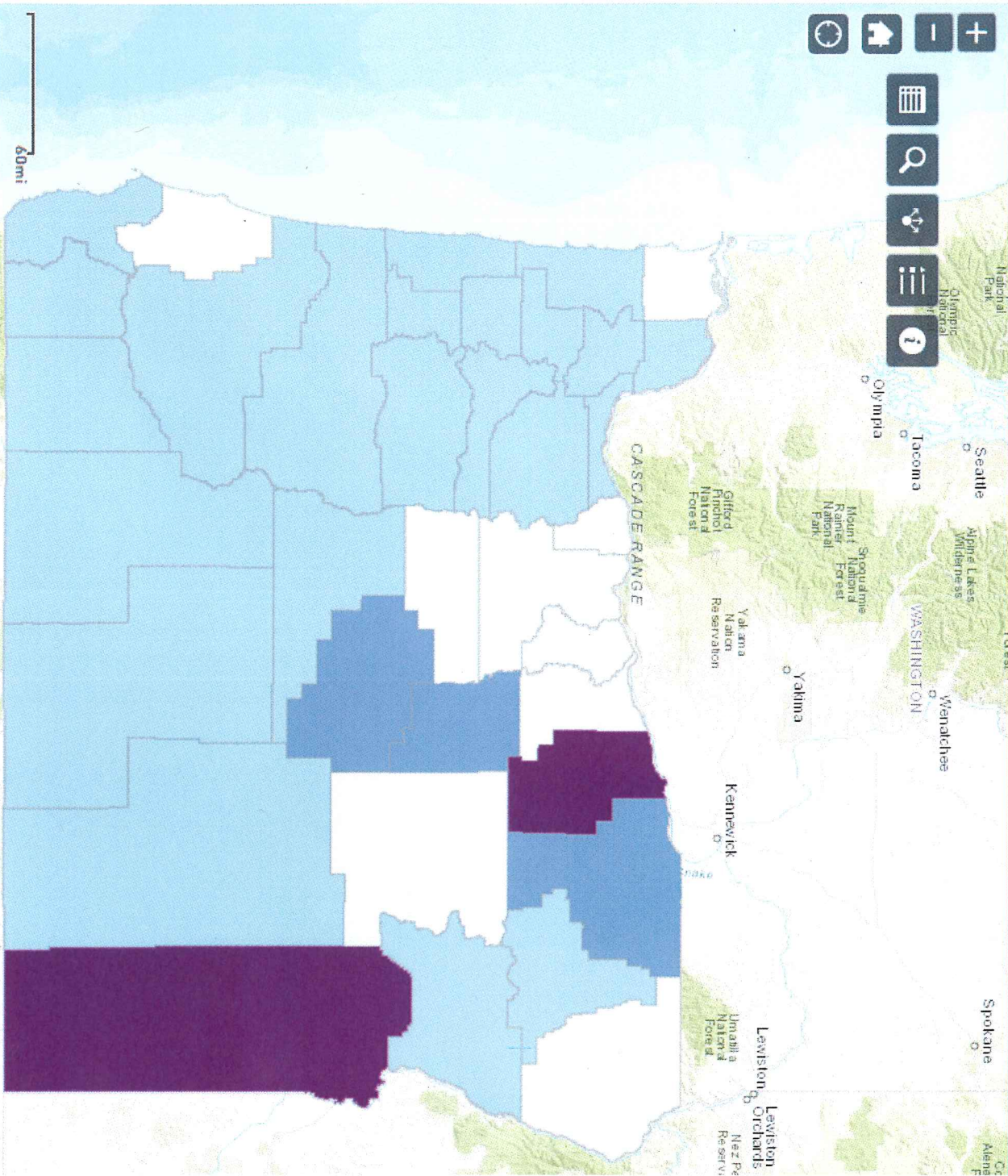
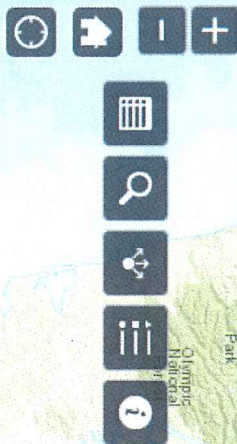
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Nitrate

Nitrate: A Deeper Look

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Nitrate is a naturally occurring form of nitrogen which has no color, smell or taste, and is an essential component of living things. Although nitrate can occur naturally in groundwater, high levels are often associated with human activities. Nitrate is a major part of animal manure, human sewage waste and commercial fertilizers.

The map displays the percentage of domestic well water real estate transactions that are over the safe drinking water standard of 10 ppm. It's important to note that some areas have very limited data from which to draw conclusions. Nitrate levels in groundwater may also change over time.

Nitrate and your health

Presence of nitrates in drinking water can cause a variety of long and short term health effects. Infants exposed to nitrate are at a high risk for blue baby syndrome, which can result in death.

For more information on short and long term health effects visit:
<https://www.atsdr.cdc.gov/toxfaqs/faq.asp?id=1186&tid=258>

Nitrate and your well water: Testing Nitrate

Oregon Domestic Well Testing

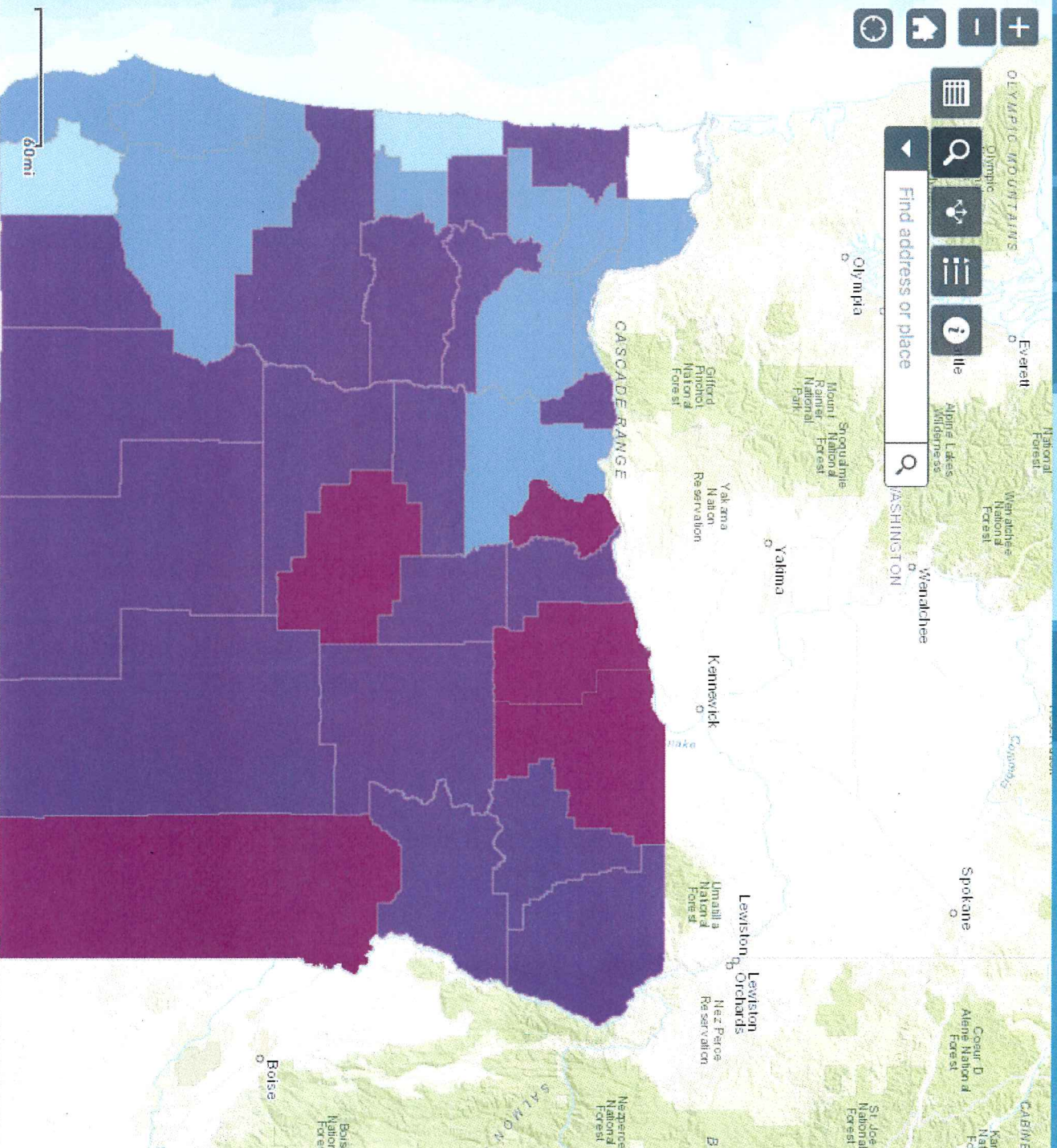
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Interactive Map - Water Quality Results



A Deeper Look at Nitrate in Oregon

The previous map displayed the percentage of test results over the safe drinking water standard of 10 ppm.

This map displays the percentage of test results over 3 ppm. Although nitrate levels below 10 ppm are not a health concern, levels of nitrate over 3 ppm are unlikely to occur naturally. These test results show elevated levels of nitrate, suggesting that human activities may be affecting the water quality.

How Can Climate Change Affect Water Quality?

Changes in our climate can affect water quality. The risk of contamination of drinking water could increase after a storm or flooding event. Lower water levels during drought conditions can also increase the likelihood of contaminants becoming more concentrated.

For more information on drought visit:
<https://www.oregon.gov/owrd/pages/wr/drought.aspx>

For more information on climate change visit:
<https://public.health.oregon.gov/HealthyEnvironments/ClimateChange/Pages/index.aspx>