Testimony to the House Energy and Environment Committee on House Bill 2860
February 21, 2019

Chair Helm and Members of the Committee:

I present this testimony in support of House Bill 2860.

GOAL: To ensure clean drinking water for the most vulnerable rural residents – tenants, and low income residents - and to provide public education and assistance to rural well users.

WHY THIS IS IMPORTANT: In the United States, we expect that when we turn on our tap at home, clean potable water will come out – water that we can drink, cook with, and bathe in without consequence. This is mostly a reasonable expectation – if you are supplied by a public water system that is regularly tested and overseen by the health department. However, if you are one of Oregon's almost 670,000 rural residents, the safety of your water is up to you.

In recent years, I have conducted 21 targeted public education presentations relating to drinking water protection for over 850 rural residents in Jackson and Josephine Counties. With the help of agency partners and volunteers, over 750 wells were tested for nitrate, many for the first time. Over the course of these education and testing events, it has become clear to me that many rural residents are not aware of the quality of their well water or even what questions to ask. In particular, *renters* of rural property seemed the most vulnerable – as they assumed they were being provided with clean drinking water and sometimes discovered that was not the case.

FINDINGS - NITRATE AND ARSENIC IN PRIVATE WELL WATER in OREGON:

- 34% of wells in Northern Malheur County had nitrate over 10 parts per million (ppm). The EPA drinking water standard is 10 ppm (Source: DEQ-Groundwater Quality Protection in Oregon Report to the Legislature, January 2019).
- Some of these wells also had detections of the pesticide Dacthal (DEQ 2019).
- 33% of wells in the Lower Umatilla Basin had nitrate over 10 ppm (DEQ 2019).
- 20% of wells in the Southern Willamette Valley had nitrate above 7 ppm. Pesticides were also present in some wells (DEQ 2019).
- 31% of wells tested in Benton County had nitrate concentrations present (Benton Co Health Department – Environmental Health Testimony 2019).
- 3% of wells in Benton County had nitrate over 10 ppm (BC 2019).
- 18% of wells in Benton County had arsenic concentrations (BC 2019). (The EPA Maximum Contaminant Level Goal for arsenic is 0 ppm since arsenic is a carcinogen).
- 35% of wells in Jackson and Josephine Counties had elevated nitrate (DEQ 2013 – Rogue Basin Groundwater Investigation).
- 17% of wells in Jackson and Josephine Counties had arsenic concentrations (DEQ 2013).

- 10% of wells in Southern Deschutes County/North Klamath Counties had nitrate concentrations approaching unsafe levels (DEQ 2019).
- 20% or more of wells in the North Coast Groundwater Study had nitrate between 5 and 10 ppm or any well had an organic compound detected (DEQ 2019).
- 20% or more of wells in the Walla Walla Groundwater Study had nitrate between 5 and 10 ppm or any well had an organic compound detected (DEQ 2019).

Stories:

In 2017, one young mother submitted testimony (for then HB 2404) about her baby, who had textbook blue baby syndrome symptoms, and could have died from the oxygen-deprivation caused by high nitrate consumption. She wrote: "Our home was purchased by our landlord the month before we moved in. The water purity was tested ...per Oregon law...Our landlord did not supply us this information...I believe our landlord was not aware of the danger associated with the consumption of high nitrate drinking water. I also believe our pediatrician did not have the environmental impact education needed" (the pediatrician had continued to advise supplementing breastfeeding with formula at 4 months, despite the onset of blue baby syndrome symptoms at that time).

Other testimony has been presented about a woman in the Willamette Valley who had multiple miscarriages before she learned that her water was high in nitrate and she began drinking from another source.

How many more women have never learned why they have so many miscarriages? How many other rural families have never learned why their children are not thriving or the source of strange symptoms caused by arsenic consumption.

CURRENT PROGRAMS: There are some current programs that address the public education issues. They are not adequately funded. There is not a current requirement for landlords to inform their tenants of well water quality.

DEQ and other agencies have responsibilities for area-wide groundwater quality testing and public education under the 1989 Groundwater Protection Act. The program was well funded in 1989, but funding has dissipated greatly. A 2017 groundwater study conducted by the DEQ laboratory has not had a report completed due to lack of staffing. The Willamette Groundwater Management Area program is currently headed by a DEQ staffer in Medford whose primary job is to manage three surface water basins.

The Oregon Health Authority's Domestic Well Safety Program has 0.7 FTE of staff (divided among three people) and has provided good technical assistance and public education through two small ($5000-10,000) grants each year but that program is slated to sunset next year.

There are an estimated 350,000 private wells in Oregon. The current real estate transaction testing, while useful in identifying target areas, has provided data from less than 25,000 wells (DEQ 2019).

Additional support is needed to address rural drinking water safety. This bill provides a starting point and a basic framework to conduct public education, direct agency efforts in high need areas, and require landlords to inform tenants of drinking water quality.

This is the third session in which a similar bill has been proposed. I urge you not to kick this can down the road again because the *importance of ensuring clean drinking water from wells will only become more urgent with time.*

This bill will provide timely attention to this public health issue. I urge your strong support of this bill for the under-represented rural residents in Oregon.

Amy Patton, Tigard Oregon
Amy is a registered geologist in Oregon. She has 20 years of experience working on groundwater quality issues in eight states.