Written Testimony in Favor HB 2860
House Committee on Energy and Environment
Public Hearing and Work Session
February 21, 2019

Dear Chair Helm and members of the Committee,

I retired from the Oregon DEQ in June of 2014 after working for the Department for 38 years. Much of my work was done on groundwater. In the mid-1980s as an Environmental Monitoring Specialist I conducted the first statewide survey of groundwater quality in Oregon. In the late 1980s I was the Agency Groundwater Quality Coordinator and primary staff person for groundwater policy development. I worked with a diverse group of stakeholders including agricultural organizations, environmental organizations, well drillers, and many others as we developed consensus legislation; the Oregon Groundwater Protection Act was then adopted with broad support in 1989. During the 1990s I managed the DEQ Water Quality Monitoring Section and for the last 12 years before retirement I was the Administrator of the Laboratory and Environmental Assessment Division.

There is plenty of data that establishes that groundwater contamination is a significant public health threat in Oregon for our residents who depend on private domestic wells for their drinking water. Simply raising awareness of this issue and helping in taking appropriate measures can greatly reduce the risk posed by groundwater contaminants. House Bill 2860 is a reasonable and appropriate way to achieve that goal.

Here is what I would like you to know as you consider this Bill:

- Groundwater is critical to Oregonians
    - Groundwater makes up 99% of available freshwater resources
    - Drinking water source - over 70% of all Oregonians get their drinking water solely or in part from groundwater
    - 90% of public water supplies get their water from groundwater
    - Most importantly concerning this Bill, 700,000+ Oregonians are not on public water supplies and are almost completely dependent on groundwater
- Groundwater Contamination is common in private domestic wells in many parts of Oregon (data from DEQ groundwater monitoring reports)
    - Significant groundwater contamination detected in 35 out of 45 regional groundwater quality assessments
    - 17% of 1010 wells sampled for arsenic exceeded the drinking water standard (MCL) of 10 parts per billion
    - 16% of 3199 wells sampled for nitrate exceeded the MCL of 10 parts per million
    - 67% of wells sampled in Malheur County contained the pesticide Dacthal with concentrations up to 32 times the health advisory level
    - Random sampling in the Willamette Valley indicates 33% of rural drinking water wells in the Valley contain detectable pesticide contamination with up to 15 different pesticides detected

- Arsenic, nitrates and pesticides are the primary substances of concern and pose a real heath risk
    - Arsenic – Increased risk of several cancers, skin, peripheral nervous system, gastrointestinal, cardiovascular, and circulatory effect – Primarily naturally occurring
    - Nitrate – Methemoglobinemea (Blue Baby Syndrome), increased risk of insulin dependent diabetes, some epidemiological studies indicate increased risk of some cancers and birth defects
    - Pesticides – Increased risk of Parkinson's Disease, Cancer
- Many of the private domestic well users are unaware of the contaminants in their water
    - No testing other than real estate transfer required
    - Lack of effective communication and outreach in many of the vulnerable areas
    - Lack of public attention on groundwater issues - out of sight, out of mind
- There are effective and reasonably affordable treatment technologies that can treat and remove contaminants

You may be asking, if this is such a health threat, why isn't OHA or DEQ pushing more on this issue? There are several reasons:

- There is no state or federal program that ensures or requires private well water be safe to drink. It is not a delegated responsibility for those agencies. They struggle to fulfill their mandated responsibilities, so it is difficult for this issue to make it through agency prioritization based on mandated responsibilities.
- The health risks are usually chronic and not acute, therefore difficult to identify or document problems.
- The affected wells are often in isolated rural areas and well users are often unaware of risks making it difficult to raise enough public concern.

The science is clear on this issue, we have a substantial population, drinking water, that does not meet health-based drinking water standards and guidelines.

Recently, we have seen at the national and local level, concern and outrage over inadequate responses to environmental public health threats. Whether it is lead in drinking water in Flint Michigan, or unregulated toxics in Portland's air, government officials at all levels failed to take adequate steps to ensure all was done to reduce risk to public health. As you consider this bill, I would like you to put yourself in the position of a person who may be using an impacted well. I know I would want to know what contaminants might be in my water and what I could do to protect myself and my family.

Thank you for your consideration of my comments,

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