

Testimony in Support of House Bill 2404  
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Chair Helm and Members of the Committee:

I present this testimony in support of House Bill 2404.

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.

For many of Oregon's 660,000 rural residents, however, it is important to realize that if you are not paying attention to your water quality, no one is.

In 1989, the legislature attempted to assist new rural home buyers by requiring testing of drinking water wells for nitrate and bacteria at property transfer; arsenic was later added to the list of required tests. The database has allowed identification of areas of nitrate contamination (generally as a result of fertilizer, manure or septic system leaching) and where arsenic is present. Bacteria contamination is also common, but generally a result of a more localized source. Very little action takes place in response to that data.

In recent years, I have conducted 21 targeted public education presentations relating to water quality 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.

About 20% of the wells tested showed some level of nitrate contamination. And there are always a few wells (4-5%) that have nitrate above the drinking water standard set by the Environmental Protection Agency (EPA).

Our events are set up so that well owners drop off their samples and either watch an educational presentation or go about their business (at a garden fair, perhaps) and then retrieve their test results later. Last spring, one young family came up, babe in arms and another in a stroller, to pick up their results. When I looked at the test results, my face fell. Their results had tested off the charts – higher than our equipment could even register. And they had an infant – the most vulnerable population for high nitrate – susceptible even to death – since nitrate can decrease the ability of the blood to carry oxygen to tissues. I began by telling them that the nitrate concentrations in their well water were excessively high and that they should stop drinking and cooking with the water immediately. I warned them that the children were at greatest risk from nitrate ingestion and explained that this can cause

Methemoglobinemia, or blue-baby syndrome, in infants. The young father turned pale and asked, “is that why our baby’s fingertips and lips were turning blue this winter?”.

Yes. Those are exactly the symptoms I have always heard were a possible result of high nitrate ingestion. We talked some more and he explained that he had thought the baby was cold and covered him with blankets – but that wasn’t what he wanted. They were very lucky they didn’t lose the baby – probably because the mother nursed for his first 6 months and the effects of nitrate are reduced through that process. The symptoms had begun when the baby started on formula. Now, the parents are worried that the baby’s low growth rate may have been a side effect and hope that his brain has developed normally.

Frustratingly, this family, and several other families to whom I have had to pass on the bad news of high nitrate contamination of their water supply, are renting their homes. The landlords, have either not tested their tenant’s drinking water wells or not supplied them with information about the test results. The tenants had a right to expect they would be provided potable water when they rented a rural home. Some, located close to town, may not have even known that the house was on a well and not supplied by the city.

This issue is a social justice issue, a public health issue, and an environmental protection issue and this House Bill has the potential to address it.

Informing tenants at the start of the lease, preferably before lease signing, of drinking water quality is key. Targeted public education to help people understand that they need to ask questions about drinking water quality is fundamentally important to success of this effort. And assistance for low-income well owners to repair sources of contamination such as failing septic tanks or poor well seals will be beneficial. I recommend passage of this bill for the benefit of Oregon’s rural residents.