

Testimony of Christina Lucas, Education Program Assistant 2, Oregon State University Extension Service IN SUPPORT OF HB 4125, the Safe Well Water Bill Before the House Energy & Environment Committee February 8, 2016

For the last 9 years I have worked on Groundwater Protection Education efforts in the Southern Willamette Valley, including the counties of Linn, Benton, and Lane. In this region we have a Groundwater Management Area (GWMA). GWMA's are designated through efforts from the local communities with the help of the Oregon DEQ. Why a GWMA? In the late 90's and early 2000's groundwater samples showed widespread nitrate contamination at levels above 7ppm in many residential, irrigation, and groundwater monitoring wells. As a member of what is loosely referred to as GWMA staff, I was granted funding through the DEQ 319 program to provide outreach and education to the residents of the Southern Willamette Valley GWMA. During my time on the ground working with individual residents I was shocked at the lack of understanding of groundwater or the recognition of many residents that their well water could be hurting them.

Nitrate in high levels has been linked to several issues, including a condition Methemoglobinemia which is where in the body nitrate can interfere with the blood's ability to absorb Oxygen. During my first year educating in the GWMA, our office offered the first Rural Living Basics: Living with your Well and Septic System class in Harrisburg. I was fairly new to the subject and was conducting free nitrate screenings of samples while my co-worker was teaching the class. The day stands out for me as a young mom came in about 10 minutes late with 2 toddlers. She was pretty flustered about being late, apologetic about having her kids with her. Jennifer as I will call her handed over her water to be sampled, and found a seat in the last row. As I started her sample and listened to the class I was in shock to see how red her sample was turning. RED is NEVER GOOD. The sample was so dark I couldn't read it on our scale, so I halved it with some distilled water I use to rinse, and tried to see if I could get some level of a reading, again it was too red. As I sat there watching the sample I felt helpless – and knew that her water (which I desperately hoping she was drinking) had at least 25 ppm of nitrate. 10ppm is what the EPA has set for a public drinking water limit, and realistically very few public water supplies in Oregon will distribute water over 5ppm to their customers.

That night as luck would have the Oregon DEQ hydrogeologist was visiting and as we stepped into the hallway I showed her the test result, my heart sank. I knew it was up to me to tell this woman that her water had the highest contamination level I had seen, that she shouldn't let anyone in her family consume it, and hope that she would take that advice. As it turned out Jennifer and her family had just relocated to the area within the last year, was renting this home, and she had seen the flyer for the class and it was the first time she realized that they must be on a well because they hadn't gotten a water or sewer bill.

That week she had asked her landlord if the water was ever tested, and the landlord had assured her the water was great, tasted good – it could only be bad if it was looked or smelled bad. She decided to come to the class anyway. In that hallway that evening as the other participants left the class as a group of concerned educators we talked for almost an hour. Her children had been suffering from breathing

problems, seemed lethargic, and as we learned later after two successful pregnancies she had suffered 3 miscarriages since moving to their new home.

That night was the start of a long journey for Jennifer. She started using bottled water for everything and her husband bought a filter online that stated it would remove nitrate. As I traveled through the GWMA I did a home visit when her husband was home and did a filtered water and non-filter water side by side. There are no filters that remove nitrate! He was visibly upset that a company would lie like that. Their landlord also refused to any further testing or provide treatment, because it “wasn’t a problem.”

After all this time, I normally field 20-30 calls about wells/septics in the Linn, Benton, Lane county area in addition to managing a statewide educational website <http://wellwater.oregonstate.edu> I wish that stories like this were the exception, but they are not. I frequently hear about landlords that refuse to test, or refuse to provide water treatment once a renter has had testing done to identify a problem. Nitrate, Arsenic, Coliform Bacteria – all of these are tasteless, odorless, and cause health effects including the potential for death.

Jennifer came and volunteered at outreach booths over the years for the Southern Willamette Valley GWMA, telling her story to anyone who would listen, encouraging all well users to have regular screenings. Her family’s struggle with harmful contaminants wasn’t the exception it has become more and more common, and yet individuals are not aware of the dangers. This bill could help the 23% of Oregonians that get their water from domestic wells understand their water source, protect those sources, and themselves from potential contaminates.