



February 23, 2023

To Regional Administrator Sixkiller,

I am writing to formally invite you to visit and tour the Lower Umatilla Basin in Oregon on March 11th, 2023. As you know, the people of the LUB are facing a well water crisis due to decades of unmitigated nitrate pollution of the basin's groundwater. For nine months, affected community members have been coming together to push for safe drinking water for all and an end to the ongoing pollution.

Community leaders are eager to meet you and show you the on-the-ground, day-to-day reality of extreme nitrate pollution. They are eager to work with EPA to create both immediate and long-term solutions so that their neighbors, kids, and generations they will never meet can safely drink the water.

On March 11th, community members will be available to provide a tour around Boardman, one of the hardest hit areas. Testing to date has shown 70 percent of rural domestic wells test over the 10 mg/L Maximum Contaminant Level. About a quarter of wells are testing in the mid-20's and above, and we've seen readings in the 40's and 50's. In one neighborhood, West Glen, 34 of the 38 wells tested are twice the MCL for nitrate.

What's more is that some wells that tested low last summer are now testing high. One resident's well went from 9 mg/L in August to 28 mg/L in February. The effect is that in August this household wasn't eligible for County-provided water treatment or delivery. Six months later the available water treatment systems won't work because the nitrate level is too high—the filter system only works up to 27 mg/L. The situation for rural domestic well users is deteriorating and changing quickly.

While the community has worked in good faith with the local and state agencies for the last nine months, the state has made no progress in ameliorating their daily water emergency. The community is in agreement with the seven steps for an "adequate response" to the water crisis, as laid out July 2020 EPA letter to the state. The community urgently wants action to begin, but the state has not made any progress toward an "adequate response." To date the state has done no public outreach to warn our community of health risks or conducted a single water test to identify affected residences.

The community has come together across language and culture to gain safe drinking water. After nine months of waiting on the state and working at the local level, the community needs the support and the power of the EPA to bring action and attention to this decades old environmental injustice.

Sincerely,

Kristin Anderson Ostrom

Executive Director, Oregon Rural Action

Attachment: Background-Nitrate Pollution in the Lower Umatilla Basin

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This past spring, in partnership with Morrow County, Oregon Rural Action began going door-to-door to test domestic drinking water wells in rural Boardman and Irrigon. With a team of people who speak Spanish and English, we collected water samples, engaged in one-on-one conversations with people with domestic wells, and offered a basic nitrate fact sheet in English and Spanish with information available online from OHA, DEQ, and Lower Umatilla Basin Groundwater Management Area (LUBGWMA). Similar door-to-door outreach has begun in Umatilla County.

We have found the community is deeply concerned about nitrate pollution. Over 100 impacted community members in rural Boardman and Irrigon have been meeting since the summer to better understand the problem and work for access to safe water. Over 500 people who live in the LUB have signed a petition calling for “emergency water, well testing, and water treatment until we can become a Safe Rural Water Community.”

Impacted people of the Lower Umatilla Basin

Within the LUBGWMA, the Oregon Water Resources Department estimates there are about 4,500 domestic wells and DEQ has estimated 14,830 people outside of city limits rely on wells for drinking water (based on the 2010 census.) A majority of the community members directly impacted by nitrate pollution in Morrow County are Hispanic and low-income. The demographics of Morrow and Umatilla Counties are more ethnically diverse with a higher representation of Hispanic persons and a higher poverty rate as compared to the state. What’s more is a majority of people work in the fields and food processing plants of the region’s economic engine—industrial agriculture—which is a primary source of the nitrate pollution.

What we have learned about water use:

Based on our one-on-one conversations and community meetings in Morrow County, we’ve learned:

- Most people have lived in the area for decades and work in the area’s agricultural economy.
- While many people knew the water in the area was “not good,” most did not know why. They did not know the water had high concentrations of nitrates nor the health risks.
- Some people were drinking the water, and most people were cooking with the water.
- Many people believed that they could mitigate the risk by boiling the water and regularly did. While boiling works for killing microbes, it increases the concentrations of nitrates.
- Many people were buying bottled water or paying for water delivery despite having a well.
- Some people self reported and many commonly have health concerns associated with nitrate exposure including cancers, miscarriages, thyroid problems.
- There were a number of people who previously sought information about wells and filtration systems but had difficulty finding the information at all and especially information in Spanish.
- Some people previously purchased and installed filtration systems and/or dug new wells—and yet many still had recent test results above the 10 mg/L MCL level.

What we’ve learned about nitrate levels:

Since Morrow County declared a water emergency in June 2022, Morrow County and ORA have tested 508 households in Boardman and Irrigon.

- Nitrate levels vary across the lower Umatilla basin and by household and even differ between neighbors.
- Wells in Boardman are much more impacted by nitrate pollution.
 - About 50% have tested over 20 mg/L
 - About 23% have tested over 7-19 mg/L
 - About 27% have tested below 7 mg/L (safe)

- Fewer wells in Irrigon are impacted but unsafe water is still a problem.
 - About 7% have tested over 20 mg/L
 - About 27% have tested over 7-19 mg/L
 - About 66% have tested below 7 mg/L (safe)

Community members are extremely concerned about nitrate levels in their drinking water—historically, today and in the future. The known and the unknown adds to the current level of anxiety.

- They know nitrate levels can change over the season and over years. Even if people have low levels of nitrate now, they are concerned that levels will increase or spike during the winter and they won't know.
- Nitrate is invisible, odorless, and tasteless, so people are afraid.
- They don't have a way to test their water regularly and lab tests are expensive.
- People have lost confidence in the local water, state government, and industry because they haven't been informed about the nitrate issue over the last 30 years. In this time, they wonder how it has impacted their health and that of their children. They are asking a lot of “what if?” questions.

What we've learned about water treatment:

Since the water emergency declaration, Morrow County has installed or distributed point of use reverse osmosis (RO) filters to 136 affected households.

- Morrow County has done post treatment testing on less than half of these households due to limited staff capacity, so we don't know the effectiveness of all the systems. Where tested, filters have decreased nitrates below 10 mg/L in most cases, but many households with filters still have unsafe water.
- Many factors influence effective filtration and filter operation including water pressure, water hardness, initial nitrate levels, and well depth. Every household and every well is different.
- Some people with filters have had subsequent septic tank overflows, which may be caused by the RO wastewater stream. We still don't know if reverse osmosis systems are compatible with septic systems.
- Most people who have RO filters say they do not provide adequate or continuous water. Reports vary, but commonly people say the filters only provide two gallons of water every two hours. As one resident said, two gallons is not even enough to make a caldo (soup) this time of year.
- Many households are large or multigenerational and require much more than two gallons per hour.
- According to the EPA's July 2022 letter to the state, people need access to alternative water for drinking, cooking, oral hygiene, and dishwashing which the current filters don't provide. The World Health Organization estimates basic requirements are 50-100 liters (13-26 gal) of water per person per day.
- Many people want “whole house” treatment systems which are more expensive. We don't know if these systems' larger wastewater stream will overflow septic systems or create onsite nitrate pollution.
- In addition to human needs, rural people are concerned about how to water their pets and livestock. Many rely on livestock for personal consumption or their business. Even a whole house system will not solve the need for safe livestock water.
- Many people are interested in connection to a public water source because these systems are regulated by the Safe Drinking Water Act. Many people are blocks away from existing water lines, and for those who aren't, regional water systems should be considered. People want clean water but are also concerned about the economic impact on low-income households if connected to public systems.

Nitrate Pollution is Complex and Individual

We have learned that in the lower Umatilla basin nitrate pollution does not affect every well, community or household equally. Each family and each well is unique, and ensuring the human right to safe water will take an individualized approach. Sometimes a simple point-of-use RO system will be sufficient; sometimes treatment will be more complicated and expensive in order to reduce nitrates and meet the need for safe, adequate,

continuous water. Solutions must be flexible, community-based, and designed to decrease the burden of unsafe water on the people affected by 30 years of pollution they did not create and cannot control.

We have also learned that information does not flow equally across the community. Barriers of language, literacy, education level, geography, and social connection mean that reaching all the people affected by the pollution will take time and intentional outreach. Households with wells are rural and spread out across LUB. We must drive door-to-door, offer information in multiple languages, and build relationships one-on-one with people in order to build trust. The work takes many visits, calls, and texts to do education, testing, filter installation, filter troubleshooting, post-testing, filter maintenance, and follow up. In the last seven months it has required an average of six to ten interactions per household—and of these households, not everyone has safe water yet.

Nothing About Us Without Us

As we all work to address immediate needs and find long-term solutions, the community must be at the table. They are the experts on their lives and situations. They have shown deep concern and eagerness to learn, to find solutions, and to protect their neighbors. The community has expertise and ideas; the most to gain and the most to lose. No solution will work for them without them.

ORA urges state agencies to incorporate what we have learned from our direct work with the community and to talk with them directly. We all need to make space for the community to help design the path forward. This means meeting people where they are, holding evening meetings to accommodate work schedules, and listening sincerely to their concerns and needs. People already feel ignored, forgotten, and unvalued—left to drink polluted water for three decades with little recourse. What they deserve now is safe water and urgency.

Thank you for your public service and support to ensure safe drinking water for all in the Lower Umatilla Basin.

Sincerely,

Kristin Anderson Ostrom

Executive Director

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