

2023 State Actions To-Date

Lower Umatilla Basin Groundwater Management Area (LUBGWMA)

OVERVIEW

Background: The Governor's office has engaged with EPA and state agencies on nitrate contamination of domestic wells in the Lower Umatilla Basin Groundwater Management Area (LUBGWMA) and resulting immediate and long term needs for safe drinking water in the area since the beginning of the administration.

Agency directive: Last spring, the Governor directed state agencies to coordinate an immediate public health inter-agency response to ensure that all households who rely on domestic well water for their drinking water in the LUBGWMA are alerted to health risks from potential exposure to high nitrate in domestic well water and offered a free well water test. For households whose well water tests over the EPA maximum contaminant level of 10 milligrams nitrate per liter of water (10 mg/L), the Governor directed agencies to provide water delivery and (where effective) in-home water treatment systems. The Governor also directed state agencies to develop a plan for the long-term remediation of groundwater in the LUBGWMA.

Legislative appropriation: At the Governor's request, the Legislature allocated \$3 million funding to the Oregon Health Authority (OHA) through June 2025 to support outreach and education, water testing, and treatment system installation and \$4 million to the Oregon Department of Human Services (ODHS) for water provisioning statewide for drought and for LUBGWMA support.

Supplemental funding: In October 2023 the Port of Morrow agreed to a Supplemental Environmental Project as part of a legal settlement with the Oregon Department of Environmental Quality over wastewater permit violations that will channel \$1.9 million to OHA between December 2023 and June 2026 for the public health response.

IMMEDIATE PUBLIC HEALTH RESPONSE (OHA, ODHS)

Ongoing Communication Campaign

- A fully bilingual, community-informed communications campaign by OHA has been live since May 2023 to encourage domestic well users in the LUBGWMA to get a free well water test. To date this includes: three pieces of direct mail (and more on the way); social media and digital advertising (East Oregonian, Hermiston Herald, online streaming services, and YouTube); print ads in local publications; two open houses in August and recurring tabling by state and local agencies and CBOs at community events; billboards; and outreach materials provided to partners (including posters, yard signs, tabling event banners, educational magnets, etc.). There are also dedicated websites in English and Spanish: testmywell.oregon.gov and pruebadepozo.oregon.gov.

- Through 2024 OHA is tailoring campaign messages bimonthly to freshen communications and focus on key populations (e.g., residents not reached by canvassing due to “no trespassing” signs, families with infants).

Summer 2023 | Door-to-Door Canvassing

- **Background:** Canvassing in the LUBGWMA served multiple purposes: to identify the households in the region rely on domestic wells for drinking water (previously unknown), to ensure that each of these household was meaningfully offered a free well test, and to overcome logistical, language and other barriers to collecting water samples and getting them to OHA-contracted labs for testing.
- Similar to COVID-19 response, OHA and the Oregon Department of Human Services (ODHS) brought complementary competencies together to deploy an intensive operation in the LUBGWMA to reach community members at risk of elevated nitrates in their well water. OHA’s small Domestic Well Safety Program and public health toxicologists had capacity to provide health risk information and develop public health interventions and partnerships with local (county) public health authorities and CBOs. ODHS’ Office of Resilience and Emergency Management had capacity to stand up and coordinate door-to-door canvassing at the pace and scale needed to meet the Governor’s expectation to complete a campaign by September 30, 2023. From mid-July through late September, up to 26 canvassers comprised of state agency staff, emergency health contractors and, when they had capacity, CBO staff, went out in two shifts, starting in the morning and canvassing through the evening. Canvassers went out in pairs for safety, and ensured that there was always a Spanish and English speaker on each team.
- **Results:** Canvassers made a total of 5,400 attempted contacts and were able to identify a total of 3,300 domestic well-using households; other properties were identified as vacant lots, abandoned houses, businesses or houses served by public water systems. Once canvassers made their first pass of the universe of households, the canvassers embarked on two additional passes for houses marked “not home.” Canvassers left health information at all attempted contacts. Door hangers with contact information left when residents were not home. Canvassers recorded for follow up by mail, but did not knock on homes with “no trespassing” signs, or homes that had dogs in the yard.

Water Testing, Provisioning and Treatment

- **Testing to date:** Between March 2 and December 31, 2023 OHA distributed 2,115 vouchers to people (528 in Morrow, 1,587 in Umatilla) and received 1,660 lab reports, with 370 households testing above 10 milligrams per liter.
- **Water provisioning to date:** As of December 31, 2023 there are 424 households receiving water deliveries through commercial vendors (Desert Springs and Blue Mountain water companies) contracted by the Counties with ODHS funding reimbursement. Note that this figure is higher than the number of OHA-tested households testing above 10 mg/L because some Morrow County residents started receiving ODHS-funded water deliveries in 2022 during a Morrow County-declared domestic well emergency.

- **Treatment system installation to date:** OHA must follow state rules that require a certified plumber install treatment systems. Due to severe workforce challenges, and despite multiple outreach efforts, OHA was able to find only one vendor willing to install systems in 2023, though a second is currently pursuing a contract. As of December 31, OHA’s water treatment contractor has been able to install 52 water treatment systems, which are effective when nitrate levels are between 10 mg/L and 25 mg/L. Point of use (e.g. kitchen tap) treatment systems are not certified to remove nitrate above 25 mg/L, so people whose wells test above that level have to rely on water delivery only.
- **Remaining households to test:** OHA has well water tests for 1660 households (50%) out of 3,291 well-dependent households identified in the LUBGWMA during the canvassing campaign. The canvassers heard from residents in 516 households (16%) that they did not want services. This leaves 571 (17%) “not at home” and 544 (16%) “no trespassing” households that were visited during the canvassing campaign that are yet to be tested (totaling 1,115 or 33% of well-dependent LUBGWMA households). Informal housing is found in many neighborhoods; with time, OHA and ODHS anticipate discovering a modest number of new households needing services. The state cannot require households to test, but will continue to seek innovative ways to encourage voluntary testing.

Sustained Program Establishment and Ongoing Community Partnerships

- **Background:** With the conclusion of the intensive 2023 testing campaign, in 2024 the public health intervention is shifting to a sustained program of continued initial well water testing and retesting, water provisioning and treatment system installation, as well as the continued outreach and education needed to support these activities.
- **Outreach and communications:** In addition to the continuation of mass communication efforts described above, OHA, ODHS, Morrow and Umatilla Counties and CBO partners will use existing touchpoints with community (in person at community events, through other programmatic activities) and OHA will use direct mailings to reach out to untested households and keep currently-supported households informed about services. Pathways and materials, all bilingual, include the websites testmywell.oregon.gov and pruebadepozo.oregon.gov, and an array of branded materials available at OHA’s [Resources for Community Partners webpage](#), including a dual language (English/Spanish) tri-fold brochure developed with CBO partners to comprehensively describe safe water services resources.
- **Community partnerships:** Starting late spring 2023 OHA funded or offered funding to community-based organizations for outreach and education about domestic well water safety to the communities they serve. OHA was able to supplement funding to existing OHA Public Health Equity Grant recipients Doulas Latinas International, Eastern Oregon Center for Independent Living, Euvalcree, and Northwest Center for Alternatives to Pesticides, and offered contract funding to Oregon Rural Action. OHA is also resourcing Morrow and Umatilla County Public Health Departments to staff and support safe water services.

- **2-1-1 Contract:** As another tool to reduce barriers to services, OHA contracted with 2-1-1 Info starting in August to make it as simple as possible to call to access services.
 - **Ongoing testing access:** Residents can call and schedule an appointment to have state staff or CBO staff resourced by the state come to their household to collect a well water sample and deliver it to an OHA-contracted laboratory. Once weather is more temperate, OHA plans to mail simple at-home nitrate test strips to the “no trespassing” and “not home” households in hopes that seeing a bright pink result will motivate them to call for a free laboratory test (they can’t be mailed when too-cold or too-hot temperatures might compromise test strip results).
 - **Repeat Testing:** Because nitrate levels can fluctuate seasonally, residents with results close to the safe cutoff (between 5 mg/L and 10 mg/L) will be offered free repeat nitrate testing of their private well water to ensure their water does not go over 10 mg/L.
 - **Continued water delivery:** ODHS will continue to pay for water delivery to households testing above 10 mg/L of nitrate that do not have or cannot be effectively served by an in-home treatment system. ODHS conducts surveys of recipients to ensure their needs are met in terms of quantity and dispenser needs.
 - **Water treatment installation:** OHA will continue outreach to solicit additional plumbers to install treatment systems.
 - **Data system development:** On November 17 OHA migrated data from a temporary database developed during the summer testing campaign to OHA’s permanent OR-Wells relational database that was built out to be able to receive the data and have functionalities needed for ongoing case management of LUBGWMA households. However, the intense pace of canvassing and shifting sets of state, contractor and CBO staff canvassers resulted in a significant amount of data cleanup needed due primarily to data entry errors (e.g. incorrect household names and addresses, well addresses, laboratory voucher numbers, duplicate test results). Data cleanup is expected to conclude in early January 2024. Accurate on household water test results and status treatment system installation and maintenance is essential to delivering ongoing support. ODHS has similarly built out an existing case management database to track water provisioning.
 - **Support for intermediate-term (public water system) solutions:** Water delivery and in-home treatment systems are immediate public health interventions, but a more durable solution for households impacted by high nitrate in domestic well water is to extend existing or establish new public water systems. Such actions must be led by local governments and districts, with technical and financial support available from the state. OHA is supporting Morrow and Umatilla Counties with well testing data and other assistance as they implement an initiative supported by an Environmental Protection Agency grant to research and assess the feasibility of public water system solutions in the LUBGWMA.
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LONG TERM SOLUTIONS (DEQ, ODA, OWRD)

Oregon Department of Agriculture

- **CAFO Permitting:** ODA and DEQ operate the Confined Animal Feeding Operations (CAFO) Permit Program through a MOU (7-2021) that describes each agency's roles and responsibilities. The agencies jointly issue all NPDES and WPCF permitted CAFOs have a zero-discharge limit in their permits, meaning that no amount of nutrients is allowed to impact waters of the state (includes groundwater). Any impact to waters of the state is a permit violation and results in enforcement actions. Legislation was passed in the 2023 session in Senate Bill 85 that made changes to the CAFO permitting, including provisions specific to the groundwater management areas. ODA is currently in the process of rulemaking for SB 85.
 - **LUBGWMA:** ODA currently lists 13 permitted CAFOs in the LUBGWMA. All 13 are registered to an NPDES CAFO Permit with five facilities on Individual CAFO NPDES Permits and eight facilities registered to the No. 1-2016 CAFO General NPDES Permit.
- **Agricultural Water Quality Program:** ODA is responsible for ensuring rule compliance to prevent and control water pollution from agricultural activities and soil erosion on rural lands. ODA is also responsible developing area plans and for ensuring that farmers and ranchers help achieve water quality standards and meet the agricultural pollutant load allocations assigned by the Department of Environmental Quality (DEQ) in its Total Maximum Daily Loads (TMDLs).
 - **LUBGWMA:** ODA made the decision to move up the review process for the two management areas that are within the GWMA boundary to be started in 2023. The two areas are the Umatilla Basin and Willow Creek area plan. In spring 2023, ODA began working closely with the Morrow Soil and Water Conservation District to establish a groundwater specific strategic implementation area (SIA) aimed at technical assistance to growers to implement management practices that prevent loss of nutrients from ag lands. That work is ongoing.

Oregon Department of Environmental Quality

- **Industrial Wastewater Permits:** DEQ continues to conduct compliance reviews and update wastewater permits with more stringent conditions for facilities in the basin, with particular emphasis on facilities that land apply nitrogen rich food processing wastewater. The mechanism for this is a permit under state law called a Water Pollution Control Facilities (WPCF) permit. Permits include limits on the amount of nitrogen and water that can be applied to the soil to protect groundwater from further degradation. There are eight industrial facilities and two city wastewater treatment facilities that are permitted to land apply, or beneficially reuse, wastewater in the LUBGWMA. The three largest land application permit holders are the Port of Morrow, Lamb Weston Hermiston, and JR Simplot. Combined, these sources are permitted to reuse wastewater on about 20,000 acres in the LUBGWMA, which is about 12% of the total irrigated agriculture land in the area. The remaining five permit holders are small operations that reuse water on a few hundred acres combined.

- **Permit Compliance:** In the last couple years, DEQ issued penalties to the Port of Morrow and Lamb Weston Hermiston for violating permit conditions. DEQ recently settled with the port—which included the port providing \$2 million for safe drinking water efforts in the area and additional operational restrictions to minimize risk to groundwater. DEQ remains in settlement negotiations with Lamb Weston Hermiston.
- **Permit Modifications:** DEQ issued a permit modification for the Port of Morrow in 2022 that included significant changes to ensure the port does not adversely affect groundwater. Changes include requirements for the port to reduce its nitrogen application to agricultural lands during the nongrowing season, additional wastewater treatment and monitoring, and assessment and cleanup of groundwater contamination from current operations. DEQ also reviewed and renewed the JR Simplot permit in 2022. The JR Simplot facility stopped food processing in 2004 but retains a permit for managing cooling water from a data center and energy facility at its industrial park. DEQ is also currently working on a more protective permit for Lamb Weston Hermiston.

Oregon Water Resource Department

- **Inspections:** OWRD will continue inspection of water wells to ensure compliance with well construction standards, and require repairs as needed to eliminate commingling of multiple aquifers. OWRD field staff evaluate wells for the need to have backflow prevention devices if chemical use (tanks, applicators) is observed onsite during well inspections or other site visits
- **Public Water Systems:** In the LUBGWMA, CDS provided funds to Morrow and Umatilla County to investigate longer-term options to provide safe drinking water to homes with contaminated wells in the LUBGWMA. OWRD is participating on Morrow County's Water Advisory Committee to provide input on proposed strategies. One initial effort will focus on connecting households with contaminated wells to existing municipal systems where achievable. Additional options will be evaluated for areas where connections to municipal systems are not currently possible; this could include the potential development of new public water systems.

Presented by:
The Office of Governor Kotek
Oregon Health Authority
Oregon Department of Human Services
Department of Environmental Quality
Oregon Department of Agriculture
Oregon Water Resources Department