MEMORANDUM

TO: Interested Parties

FROM: Gabriela Goldfarb

Environmental Public Health Section Manager, Oregon Health Authority

LUBGWMA Public Health Project Manager, Governor's Office

DATE: April 23, 2024

SUBJECT: LUBGWMA Public Health Project Data Review and Update

The purpose of this memo is to share updated information about the domestic well water public health project in the Lower Umatilla Basing Groundwater Management Area (LUBGWMA) spanning northern Morrow and northwestern Umatilla Counties.

What is the LUBGWMA Public Health Project?

Recent years have seen a renewed focus on elevated nitrate in the groundwater of the LUBGWMA. The State of Oregon designated the LUBGWMA in 1990 because of high levels of nitrate in the groundwater, raising the risk of high nitrate in the well water of LUBGWMA residents who rely on domestic wells for drinking and cooking. Exposure to high levels of nitrate in drinking water poses risks to formula-fed babies and pregnant women from short term exposure, and long-term exposure can increase health risks to all people. OHA is using the US Environmental Protection Agency's maximum contaminant level of 10 milligrams nitrate per liter of water (10 mg/L) as the level for access to alternative safe water. Beginning in late 2022 the Oregon Health Authority (OHA) was tasked by the Governor's Office and the Oregon Legislature to work with partners to alert residents to the potential health risks of nitrates and offer access to safe water. Services include outreach and education to alert residents to the health risk, water sample collection and laboratory testing, delivery of bottled water and installation of kitchen-tap water treatment systems. Partners included Morrow and Umatilla County Health Departments, Oregon Department of Human Services (ODHS) and a number of local community-based organizations.

What information was collected and why is OHA releasing it now?

To do this work, OHA had to identify all households at risk for elevated nitrate levels and seek to test, or meaningfully offer to test, their domestic well water. This required OHA and partners to carry out an intensive campaign of outreach and testing over the summer of 2023. In addition to sending three mailings to all available addresses, and a broad campaign of mass communications (radio, newspapers, social media), the partners went door-to-door canvassing to offer to collect well water samples. We identified approximately 3,300 households in the area, a previously unknown number. Together we collected a large amount of information on well-dependent households, water test results, communications to households, bottled water delivery, treatment system installation, and more. OHA and ODHS created temporary databases to hold and organize the information while waiting for a permanent database to be built to hold the new information records. OHA and ODHS were able to import records to OHA's permanent database, called "OR-Wells" in late 2023 and began a painstaking process to review the data for accuracy. As expected, we found inadvertent errors, such as laboratory test results for the same household submitted more than once, or incorrectly entered addresses and testing voucher numbers. While we do anticipate finding some additional errors that need correcting, at this time we believe the majority of data is accurate and ready to share.

Why is OHA releasing summary data?

People who live in the affected area have different reasons for wanting information about nitrate levels in their groundwater to remain private. These include concerns about possible impacts to property values or accessing government services. People who applied to have their well water tested could indicate on the application if they wanted OHA to keep their results confidential to the extent allowed by law, and nearly all said yes. There are hundreds of households we attempted to reach during the door-to-door canvassing in 2023 but could not because of "no trespassing" signs or people not at home. OHA is concerned that releasing detailed information about individual households tested could discourage untested households from accessing safe water services. For this reason, OHA is providing here, and will provide on our websites testmywell.oregon.gov and pruebadepozo.oregon.gov summary water testing, treatment and delivery information.

How many households have not been tested and what are OHA and partners doing about that?

Of the approximately 3,300 domestic well-dependent households we were able to identify, about 500 residents were not home, even after visiting three times. About 700 residents were behind no-trespassing signs, which we respected. Those two groups combined are the residents we will continue to reach out to with targeted mailings, outreach through community partners, and continued mass communications to offer testing and water provisioning or treatment. About 500 residents told us directly during the door-to-door canvassing that they did not want testing. Testing is voluntary, and we will continue to advertise through mass media the availability of services that residents can access when ready.

Summary information on nitrate testing, treatment and water delivery

Below are tables presenting the best available summary information. We do anticipate continued updates and improvements to data quality over time.

Household Nitrate Test Results Through March 31, 2024					
Nitrate Range	Morrow	Umatilla	Total		
0 to 4.99 mg/L	202	796	998		
5 to 9.99 mg/L	130	299	429		
10 to 25 mg/L	89	178	267		
Above 25 mg/L	84	60	144		
TOTALS	505	1333	1838		

Households with Nitrate Test Results Above 10 mg/L Through March 31, 2024					
Nitrate Range	Morrow	Umatilla	Total		
10 to 25 mg/L	89	178	267		
Above 25 mg/L	84	60	144		
TOTALS	173	238	411		
Total high results as percent of all samples	34%	18%	22%		

Water Treatment Installations Through March 31, 2024				
Morrow	Umatilla	Total		
52	24	76		
58% of eligible*	13% of eligible*	28% of total eligible*		

^{*} Reverse osmosis water treatment systems are certified to remove nitrate only up to approximately 25 mg/L, so are only effective in households testing between 10 to 25 mg/L nitrate. Households with water testing

above 25 mg/L must rely on bottled water delivery. Plumber workforce constraints have limited the pace of installations.

Households Receiving Water Delivery Through March 31, 2024				
Morrow	Umatilla	Total		
269	191	460		

How often and where will OHA update these figures?

Going forward, OHA will update these figures monthly on our websites, testmywell.oregon.gov and pruebadepozo.oregon.gov.

Note about vouchers: OHA used to report number of vouchers distributed but will not do so going forward. Vouchers are documents OHA issues so our contracted testing laboratories and water treatment companies can charge OHA for the services they provide. OHA used to report the number of vouchers distributed because at the beginning of our work we didn't have information about the number and location of well-dependent households in the LUBGWMA. It was the best way to track the approximate number of households needing services at the time but is not helpful now. For example, in 2023 many households that applied for vouchers, but didn't collect and turn in water samples on their own, were visited during the door-to-door canvasing and were issued a new youcher number.