

**State of Oregon**  
**Nitrate Reduction Plan for the**  
**Lower Umatilla Basin Groundwater Management Area**

Quarterly Report to U.S. EPA  
Dec. 3, 2024

This is a combined report from the Oregon Department of Agriculture (ODA), Oregon Department of Environmental Quality (DEQ), Oregon Water Resources Department (WRD), and Oregon Health Authority (OHA) to the U.S. Environmental Protection Agency (EPA) Region 10 describing State of Oregon actions to address nitrate groundwater contamination and protect public health in the Lower Umatilla Basin Groundwater Management Area (LUBGWMA) in northern Morrow County and northwestern Umatilla County.

The following report provides an update for each of the strategies contained within the [Nitrate Reduction Plan for the LUBGWMA](#). The state submits quarterly status reports to the U.S. EPA and beginning in 2025 will publish an annual report at the end of each calendar year.

## **Reporting Agencies**

Each strategy in the Nitrate Reduction Plan has a lead state agency responsible for implementation, monitoring, and reporting. The list below identifies the strategies associated with each lead agency.

### **Oregon Department of Agriculture (ODA)**

#### **4.2 Irrigated Agriculture**

- 4.2.3.1 Agricultural Water Quality Program
- 4.2.3.2 Strategic Implementation Area
- 4.2.3.3 Best Management Practices (BMP) for Nutrient and Irrigation Management
- 4.2.3.4 Fertilizer Registration Program

#### **4.3 Confined Animal Feeding Operations**

- 4.3.3.1 Confined Animal Feeding Operations Compliance

#### **4.4 Livestock Grazing**

- 4.4.3.1 Agricultural Water Quality Program
- 4.4.3.2 Inventory of Livestock Operations
- 4.4.3.3 SB 85 Rules: Manure Management

#### **4.6 Rural Residential**

- 4.6.3.1 Agricultural Water Quality Program

### **Oregon Department of Environmental Quality (DEQ)**

#### **4.5 Land Application of Industrial and Domestic Wastewater**

- 4.5.3.1 Wastewater Permitting and Compliance

#### **4.6 Rural Residential**

- 4.6.3.2 Onsite Septic System Permitting and Compliance

- 4.6.3.3 Onsite Septic System Repair and Replacement Funding
  - 4.6.3.4 Public Wastewater Treatment System and Irrigation Modernization Funding
- 5. Monitoring, Data, and Analysis
  - 5.1.1 Groundwater Quality Sampling and Monitoring
  - 5.1.2 Groundwater Quality Trends Analysis
  - 5.1.5 Nitrate Leaching Estimation Update
  - 5.2 Groundwater Data Coordination Effort and GIS Platform

## **Oregon Water Resources Department (OWRD)**

- 4.6 Rural Residential
  - 4.6.3.5 Domestic Well Construction and Compliance
- 5. Monitoring, Data, and Analysis
  - 5.1.3 Hydrogeology of the Lower Umatilla Basin - Update of Conceptual Model
  - 5.1.4 Ongoing Groundwater Levels Data Collection

## **Oregon Health Authority (OHA)**

- 6.1 Immediate Safe Drinking Water Services
  - 6.1.3.1 Community Education, Outreach and Engagement About Nitrate in Domestic Well Water
  - 6.1.3.2 Free Initial Domestic Well Water Testing
  - 6.1.3.3 Free Domestic Well Water Retesting
  - 6.1.3.4 Free Kitchen-Tap Treatment System Installation and Maintenance
  - 6.1.3.5 Free Water Delivery
  - 6.1.3.6 Longer Term Water Provisioning for Households Above 25 mg/L
  - 6.1.3.7 Data and Data Management
  - 6.1.3.8 Community Partner Relations
  - 6.1.3.9 Demographic Study
- 6.2 Intermediate Term Public Water Systems Solutions
  - 6.2.3.1 Technical and Funding Assistance for Public Water System Extension and Creation
  - 6.2.3.2 Identifying Public Water Systems Not Currently under OHA Oversight

## 4.2 Irrigated Agriculture

### 4.2.3.1 Agricultural Water Quality Program

4.2.3.1 Agriculture Water Quality Program	
OBJECTIVE: Prevent and control water pollution (including groundwater) from agricultural activities to achieve water quality standards. <i>[4.2 Irrigated Agriculture]</i>	
<b>Continuous</b>	<ul style="list-style-type: none"><li>- Investigate water quality complaints of agricultural activities with impacts to waters of the state. This includes irrigation and nutrient application practices that may be causing pollution to waters of the state.</li></ul>
<b>Short-Term 2023-2027</b>	<ul style="list-style-type: none"><li>- Investigate locations identified through the Strategic Implementation Area assessment with potential to impact groundwater, as described below in Section 4.1.3.2.</li><li>- Area Rules are reviewed every two years. The Willow Creek and Umatilla rules were last reviewed in Feb 2024. Rule changes may be done anytime the agency identifies a need.</li></ul>
<b>Medium-Term 2027-2031</b>	<ul style="list-style-type: none"><li>- Area Plans are reviewed on an alternating schedule of a full and light review of every 6 years for full and every 2 years for a light review. The Willow Creek and Umatilla area plans were last reviewed In February of 2024.</li><li>- Develop regulatory requirements aimed at addressing nitrate contamination from irrigated agriculture operations inside the LUBGWMA designation. Engage with stakeholders in 2025 to target implementation of the new rules in 2026 (resources needed).</li></ul>

#### Monitoring Progress:

The AGWQ program tracks and reports on the number and types of compliance actions taken and receives reports from SWCDs on the achievements made to implement area plans. This data will be used to track trends of enforcement activities and engagement of area agriculture producers on achieving nitrate reductions from ag activities.

- Annual AGWQ Compliance Program Report
  - Compliance cases investigated
  - Type of Issues
  - Pre-enforcement actions
  - Enforcement actions
- Ag Water Quality Management Area SWCD Biennial Review Reports.
  - Landowner participation in outreach events
  - Landowners provided technical assistance
  - Site visits

- Conservation plans written
- Funding applications submitted
- Funding applications awarded

## **Reporting Progress:**

### **Quarter 4:**

No Water Quality complaints were filed or investigated this quarter.

The Morrow SWCD hosted a Water Resilience for Small Scale Irrigators workshop by the American Farmland Trust on June 13, 2024. There were 13 landowners in attendance. ODA gave a presentation on the LUBGWMA SIA.

Five potential violations were observed during the LUBGWMA Strategic Implementation Area I field evaluation on July 29 and 30, 2024 (see SIA). Types of issues observed were Livestock impacts to irrigation ditches, manure piles near surface water, flood irrigation through heavy use areas, irrigating over open ditches, open manure piles, and livestock access to surface water. One of the potential violations was downgraded on October 23, 2024, based on communication with the landowner. Compliance cases will be initiated for the remaining 4 potential violations.

ODA staff have reviewed non-point source protection programs from multiple states, primarily from Maine, Minnesota, California, and Washington. Drawing from these structures, ODA is in the process of developing a framework for a regulatory structure for the Lower Umatilla Basin Groundwater Management Area (LUBGWMA).

ODA remains aligned with the goals outlined in the state's Nitrate Reduction Plan for stakeholder engagement and development through 2025, followed by rulemaking in 2026.

## 4.2.3.2 Strategic Implementation Area

### 4.2.3.2 Strategic Implementation Area

**OBJECTIVE:** The Strategic Implementation Area (SIA) initiative is a proactive effort to conduct outreach in the LUBGWMA regarding agricultural water quality rules, develop irrigated agriculture Best Management Practices (BMPs), and emphasize the utilization of irrigation and nutrient management plans to protect groundwater. Achieve 100% compliance with agricultural water quality rules within the SIA, therefore preventing pollution of waters of the state. Repeat the SIA process as needed for other areas of the LUBGWMA. *[4.2 Irrigated Agriculture]*

#### Continuous

- Outreach materials will be developed and distributed throughout the SIA effort as needs are identified; multiple SIA presentations have been made already, and more than ninety brochures of LUBGWMA SIA Activities and Rules have been distributed to date, both English and Spanish versions.
- Community outreach will be ongoing throughout the SIA effort.
- In field data collection for demonstration, modeling and verification of appropriate area BMPs will occur over the span of the project.

#### Short-Term 2023-2027

- The remote evaluation completed in Feb 2024.
- The field evaluation is scheduled for Jul 2024.
- Community open-house in Fall/Winter, 2024.
- After the open-house, the owners of tax lots with areas of concern will be first contacted by the Morrow SWCD within 1 year of the open house. All observed issues must be addressed within 1 year of the open house. It is then moved to ODA for compliance follow up.
- ODA anticipates that new BMP development is to be started in 2024.
- Model irrigation and nutrient management plan as a resource for grower implementation.
- Area plans were updated with basic principles of irrigation and nutrient management in Feb 2024.

#### Medium-Term 2027-2031

- Add an additional LUBGWMA SIA every 4-6 years to eventually cover all of the area.

#### Long-Term 2031 - Beyond

- The SIA will be implemented over an extended period of time and can last up to 10 years from inception (2023-2033).
- BMPs will continue to evolve through the life of the SIA as data strengthens the BMPs.
- Ongoing outreach, technical assistance and education for BMP implementations.

**Monitoring Progress:**

There are a number of data points that are collected through the SIA process to evaluate impacts and success of the SIA overall. This data will also be collected for the LUBGWMA SIA to track performance over time.

- Acres evaluated
- Types of issues identified
- Landowners contacted
- Landowners participating in outreach events
- Landowners provided information
- Technical assistance provided to landowners
- Grant Funding applications for landowners
- Compliance data, tax lots/fields that are:
  - Likely in Compliance (LC)
  - Restoration Opportunity (RO)
  - Compliance Opportunity (CO)
  - Potential Violation (PV)

**Reporting Progress:****Quarter 4:**

A partner meeting was held on October 8, 2024, to describe the 'remote' and 'field' assessment of the SIA area, looking for visual concerns of water quality impacts to groundwater. Attendance at the meeting included Morrow SWCD, NRCS, OSU and DEQ. Pasture/livestock areas were assessed by looking for likely manure contamination of groundwater. Including combinations of flood irrigation, standing water/wetlands, livestock access to water, bare ground, uncovered manure piles and heavy-use livestock areas.

Irrigated agriculture areas were assessed by looking for evidence of over-irrigation, as the driver of nutrients to groundwater; in most cases within the SIA, fertilizer is applied via the irrigation system. Assessment included looking for evidence of overland flow/water ponding, land scarring from water channelization, irrigation on top of surface water, heavy water application on a dry field, end gun heavy application, and irrigation outside of a crop area.

An open house was held on October 23, 2024, at the Sage Center in Boardman. Outreach letters and open house invitations along with SIA and LUBGWMA flyers were sent out in English and Spanish to 261 addresses within the SIA on October 4<sup>th</sup>, 2024. There were 20 landowners in attendance and Spanish translators were available at the event. OWRD and Morrow SWCD were in attendance as well. At the end of the open house, ODA staff met individually to go over the assessment and concerns.

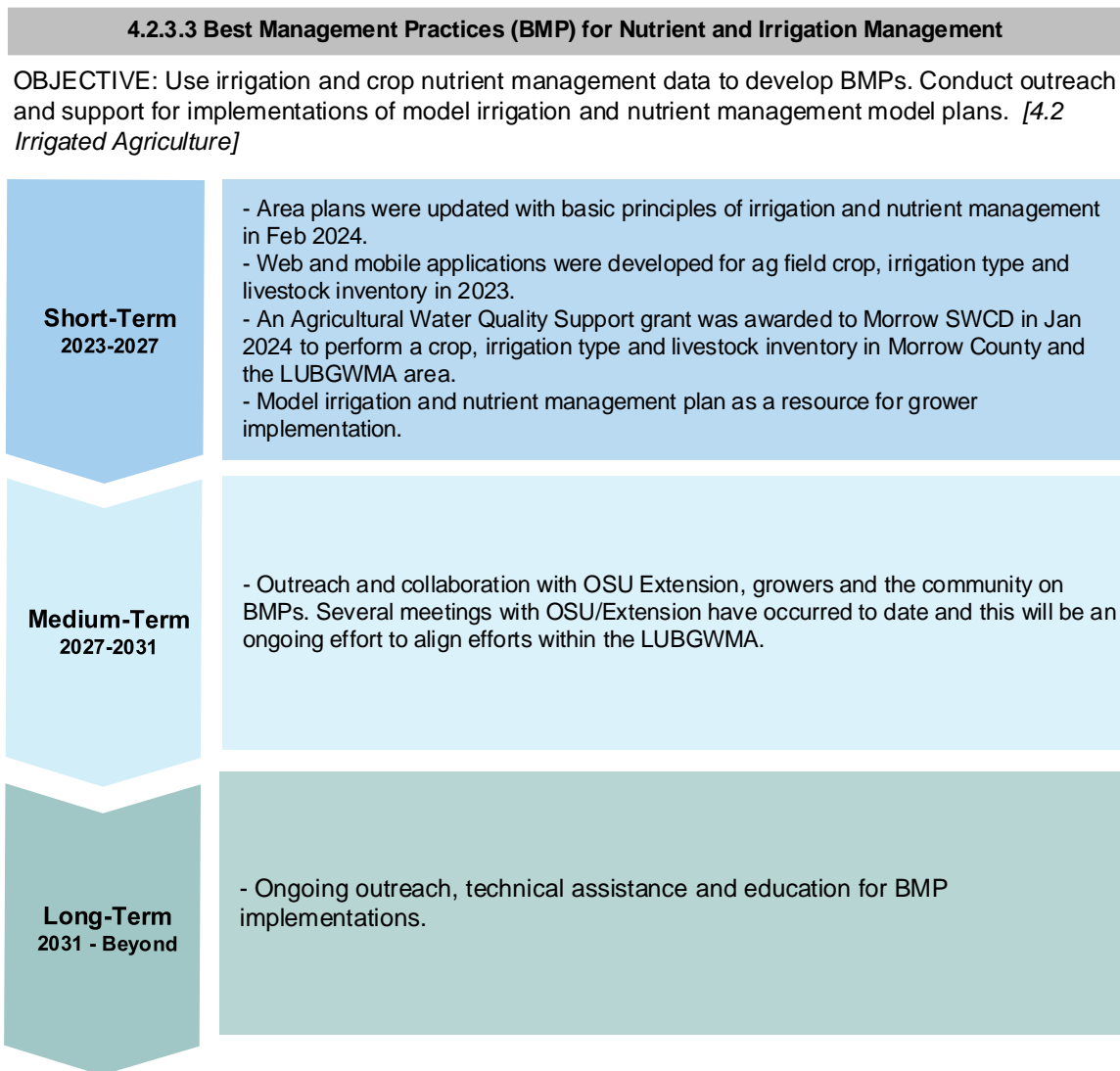
Voluntary improvements and efficient irrigation management practices were also observed and highlighted during the open house; including tiling and reuse of water in

low spots, and on-demand real-time soil moisture, flow, and irrigation application rate monitoring.

SIA Analysis Results by Tax Lots (over 900 fields were assessed in over 400 tax lots)

- Likely in Compliance (LC) – 377 Tax Lots
- Restoration Opportunity (RO) – 68 Tax Lots
- Compliance Opportunity (CO) – 35 Tax Lots
- Potential Violation (PV) – 4 Tax Lots

### 4.2.3.3 Best Management Practices (BMP) for Nutrient and Irrigation Management



#### Monitoring Progress:

- This is a collaborative project with partners, progress will be shown in the number of collaborative activities between parties. Additional resources needed.

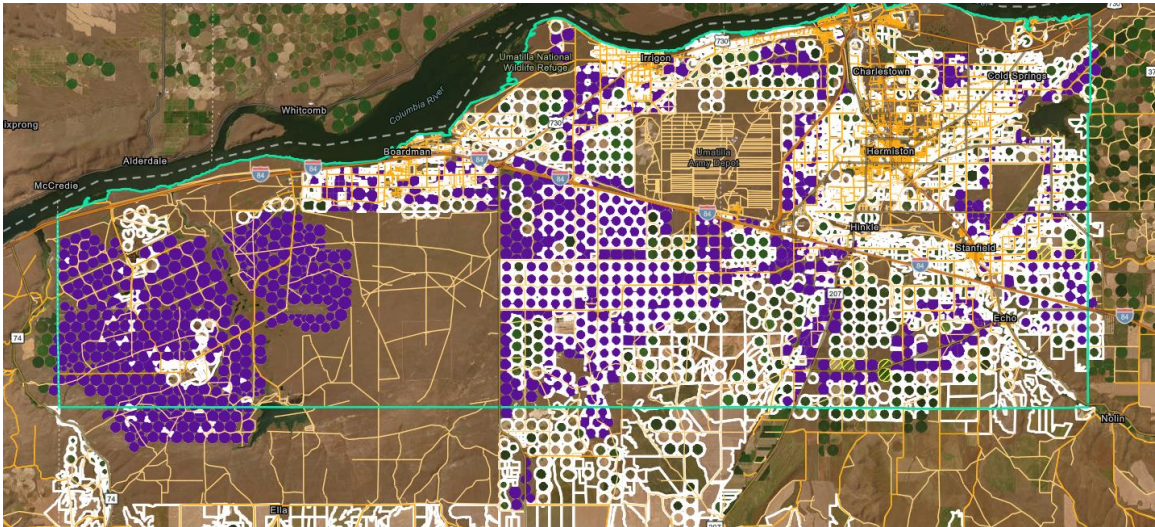
#### Reporting Progress:

##### Quarter 4:

- Three meetings were held with OSU (Salini Sasidharan) on narrowing down survey questions for getting current active practices information within the LUBGWMA.



- The Morrow SWCD continues to complete an ag inventory of the LUBGWMA including crop type and irrigation type to provide basis and prioritization of BMP development. In the graphic below, the purple color are fields that have already been inventoried.



Data inventoried includes crop type, rotation crop if known, crop stage, and irrigation type. This data along with number and size of fields, location and soils will help prioritize outreach and BMP efforts in the area.

#### 4.2.3.4 Fertilizer Registration Program

4.2.3.4 Fertilizer Registration Program	
OBJECTIVE: Provide consumer protection and ensure truth in labeling to ensure consumers are informed of the product contents and ensure all products that are sold in Oregon are registered according to requirements. <i>[4.2 Irrigated Agriculture]</i>	
Continuous	- The fertilizer registration and consumer protection market inspections are a well-established program. It will continue to ensure product registration meet state requirements.
Short-Term 2023-2027	- Fertilizer research and education grants are administered on an annual basis. The preferred scope of the grants was updated to give priority to projects focused on nitrate reductions in GWMA's.

#### Monitoring Progress:

- Refer to Section 4.2.3.1. for non-point source performance tracking related to fertilizer use.

#### Reporting Progress:

##### Quarter 4:

The Fertilizer Program has entered its renewal season for fertilizer product registrations. Each year, in mid-November, the program begins accepting applications for the renewal of fertilizer products for the upcoming calendar year. All fertilizer product registrations must be registered in order for them to be sold in Oregon. The Fertilizer Program registers approximately 12,126 products.

In 2024 the Fertilizer program issued two research grant awards. OSU was awarded a \$42,881 grant to identifying novel amendments to mitigate fertilizer leaching from bark substrates in nursery production systems. OSU was also awarded another grant for \$26,753 for engagement, data collection, and analysis for addressing nitrate contamination in the lower Umatilla basin. These grants will be completed in 2025.

## 4.3 Confined Animal Feeding Operations (CAFOs)

### 4.3.3.1 Confined Animal Feeding Operations Compliance

4.3.3.1 Confined Animal Feeding Operations Compliance	
OBJECTIVE: Continue to administer regulatory oversight of CAFOs in Oregon that exceed the federal standards, including the implementation of SB 85 provisions to ensure compliance and protection of groundwater. <i>[4.3 Confined Animal Feeding Operations (CAFOs)]</i>	
<b>Continuous</b>	<ul style="list-style-type: none"><li>- Implementation of the CAFO program is a continual ongoing effort. All operations that meet the definition requiring a permit are permitted and inspected at a minimum of every 10 months. This exceeds the current federal standard.</li></ul>
<b>Short-Term</b> 2023-2027	<ul style="list-style-type: none"><li>- Development of an updated General NPDES permit is anticipated to begin fall 2024. Due to an extensive public comment process, it is difficult to identify an estimated date of completion.</li><li>- Existing Individual NPDES permits in the LUBGWMA will be updated to incorporate SB85 provision following the adoption of the SB85 rules. Rules are anticipated to be adopted in Aug 2024.</li><li>- Rulemaking to fully implement SB85 is in process and anticipated to be completed in Aug 2024.</li></ul>
<b>Medium-Term</b> 2027-2031	<ul style="list-style-type: none"><li>- Once the New General NPDES permit is complete, ODA will prioritize updating CAFO permits in the LUBGWMA. From there all other General NPDES permits will be updated by region.</li><li>- Update existing Individual NPDES permits to be consistent with new general permit is dependent on the timeline for update of the general permit.</li></ul>

#### Monitoring Progress:

The CAFO program tracks program performance over time by the percent of permitted CAFOs found to be in compliance with their permit during annual inspections. This analysis is done based off data collected from Jan. 1 to Dec. 31. Additionally, we will track the status of updating permits in the LUBGWMA over time.

- Percentage of CAFOs in compliance with permit at annual inspection.
- Number of permits in LUBGWMA that have been updated.

#### Reporting Progress:

**Quarter 4:**

The CAFO program continues to inspect the permitted facilities on a 10 month rotational basis. All facilities have been inspected within that timeframe. Between January 1, 2024, and November 22, 2024, the following compliance actions have occurred:

- H3 Feeders-MA#1000116-NON/POC
  - 3/26/24 for manure leaving the production area and standing water by the area where horses are washed.
  - Required actions in POC have been completed.
- Meenderinck Dairy-MA#161636-WQA
  - 3/18/24 for storing manure outside of approved area.
  - Recommended actions in WQA have been completed.
- Beef Northwest Boardman-MA#1000032-NON/POC
  - 2/12/24-for animals on pasture that was void of vegetation.
  - Required actions in POC have been completed.
- Columbia River Dairy-MA#1000198-WQA
  - 3/18/24-Uncontained runoff from silage slab.
  - Recommended actions for WQA have been completed.

The CAFO program remains without a program manager. This along with implementation of new program rules in response to SB 85 has slowed the programs' ability to make progress on permit development to update the Individual NPDES permits within the LUBGWMA. To date there have not been any permits that have been updated. This work will be completed as time and resources allow.

## 4.4 Livestock Grazing

### 4.4.3.1 Agricultural Water Quality Program (AGWQ)

4.4.3.1 Agriculture Water Quality Program (AGWQ)	
OBJECTIVE: Prevent and control water pollution (including groundwater) from agricultural activities to achieve water quality standards. <i>[4.4 Livestock Grazing]</i>	
<b>Continuous</b>	- Investigate water quality complaints of agricultural activities with impacts to waters of the state. This includes irrigation and nutrient application practices that may be causing pollution to waters of the state.
<b>Short-Term 2023-2027</b>	<ul style="list-style-type: none"><li>- Investigate locations identified through the Strategic Implementation Area assessment with potential to impact groundwater, as described below in Section 4.1.3.2.</li><li>- Area Rules are reviewed every two years. The Willow Creek and Umatilla rules were last reviewed in Feb 2024. Rule changes may be done anytime the agency identifies a need.</li></ul>
<b>Medium-Term 2027-2031</b>	- Area Plans are reviewed on an alternating schedule of a full and light review of every 6 years for full and every 2 years for a light review. The Willow Creek and Umatilla area plans were last reviewed In February of 2024.

#### Monitoring Progress:

- See monitoring information listed in Section 4.2.3.1

#### Reporting Progress:

##### Quarter 4:

No water quality complaints were filed or investigated this quarter.

See SIA Assessment above for visual assessment guide.

Of the 5 potential violations observed during the LUBGWMA Strategic Implementation Area I field evaluation, 4 of them were livestock related. The one potential violation that was downgraded was not livestock related. Of the 35 compliance opportunities observed during the field evaluation, 11 were livestock related. ODA and the Morrow SWCD will be contacting all 15 landowners to investigate if their agricultural activities are impacting waters of the state and provide technical assistance.



### 4.4.3.2 Inventory of Livestock Operations

#### 4.4.3.2 Inventory of Livestock Operations

**OBJECTIVE:** Inventory all livestock operations that do not meet the definition of a CAFO and are not required to seek a permit and to do outreach and technical assistance to livestock owners to ensure compliance with groundwater protection requirements. [4.4 Livestock Grazing]

#### Continuous

- Outreach and technical assistance will start once the inventory is completed at the end of 2025 and will be ongoing.

#### Short-Term 2023-2027

- Conduct an inventory of livestock owners within the LUBGWMA, to be completed by the end of 2025.

- Input inventory data into a usable GIS layer, anticipated to be completed in 2025.

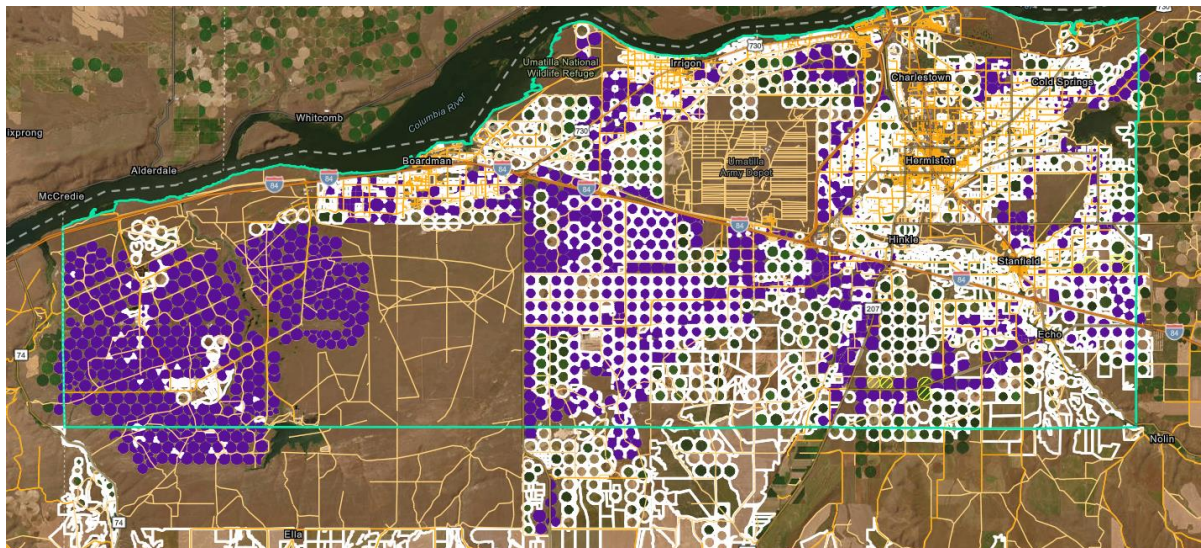
#### Monitoring Progress:

- It is estimated that the inventory project will be complete by August 2025. After completion the data will be completed to be used for outreach and technical assistance.

#### Reporting Progress:

#### Quarter 4:

- Morrow SWCD continues to complete ag inventory of the LUBGWMA. In the graphic below, the purple fields are those that have been inventoried.



- The livestock/land use assessment pieces of this project include:

- Livestock Land Use: None/Light/Heavy
- Number of: Beef Cattle, Dairy Cattle, Swine, Sheep, Horses, Chicken, Turkey, Other

Combined with the number and size of associated fields, as well as proximity to water, this data will be utilized for prioritization of efforts towards outreach and BMPs in the area.

#### 4.4.3.3 SB 85 Rules: Manure Management

##### 4.4.3.3 SB 85 Rules: Manure Management

OBJECTIVE: To extend permit coverage and compliance requirements to those receiving and land applying animal nutrient exported from permitted CAFOs and land applied within a Groundwater Management Area boundary to ensure groundwater protection. *[4.4 Livestock Grazing]*

##### Short-Term 2023-2027

- Establish a rules advisory committee (RAC) and complete the rulemaking process to develop rules governing the Nutrient Application Permit, anticipated to occur late 2024.
- Draft and implement a General Nutrient Application Permit. General Nutrient Application Permit will be developed post rulemaking process, this process is anticipated to take 6-8 months.
- Recruitment of the Permit Coordinator and CAFO Inspector positions is anticipated to begin late 2024.

#### Monitoring Progress:

It is anticipated that the performance tracking used for the nutrient application permits will be similar to that of CAFO permits in evaluating the number that are in compliance with the permit on an annual basis.

- Percentage of permits in compliance with permit during routine inspection.

#### Reporting Progress:

##### Quarter 4:

ODA adopted final rules incorporating changes related to SB85 on September 25<sup>th</sup>, 2024, amending [OAR 603-074](#).

ODA in partnership with the Department of Environmental Quality (DEQ) and the Oregon Water Resources Department (OWRD), has launched an educational outreach effort to inform Confined Animal Feeding Operation (CAFO) permittees about the updates stemming from Senate Bill 85.

The outreach, often referred to as the "SB 85 Roadshow," kicked off on October 23, 2024, with a hybrid event at the ODA headquarters in Salem. This initial session served as a statewide overview, with both in-person and virtual attendance options. Over 485 CAFO permittees were invited, alongside representatives from ODA, DEQ, and OWRD, setting the tone for the series of targeted regional meetings.

There are additional in person meetings being held around the state. To date there have been meetings in Willowcreek, The Malheur OSU Extension Office, Redmond, and Hermiston. Additional meetings will be held at the Oregon Cattleman Association convention on 12/6 in Pendleton, Klamath Falls OSU Extension Center 12/18, Coquille date TBD, and Tillamook date TBD.



The CAFO program remains without a program manager. This along with implementation of new program rules in response to SB 85 has slowed the programs' ability to make progress on the development of the Nutrient Application Permit. This work will begin as time and resources allow.

## 4.5 Land Application of Industrial and Domestic Wastewater

### 4.5.3.1 Wastewater Permitting and Compliance

#### 4.5.3.1 Wastewater Permitting and Compliance

**OBJECTIVE:** Continue regulating land application of industrial and domestic wastewater to protect groundwater under state authority in the absence of applicable federal regulations. *[4.5 Land Application of Industrial and Domestic Wastewater]*

#### Continuous

- Continue implementing and enforcing requirements of Water Pollution Control Facilities (WPCF) permits and National Pollutant Discharge Elimination System (NPDES) permits to ensure the collection, treatment, storage, and land application of wastewater is done in a manner that protects groundwater. Review facilities' required annual and monthly reports for compliance with permit conditions. Permits require facilities to continuously adapt operations to maintain compliance and minimize nitrate leaching potential.

#### Short-Term 2023-2027

- Prioritize modifications and renewals of wastewater permits in the LUBGWMA to be more protective of groundwater. WPCF permits can be issued for a term not to exceed 10 years. NPDES can be issued for a term not to exceed five years. DEQ may process permit modifications to further update conditions of permits in between renewals. Permit schedules are as follows:

\* Port of Morrow: Permit updated and renewal issued 12/1/2017; Permit modifications issued since renewal: 11/1/2022, 2/1/2024, and 6/3/2024.

Lamb Weston - Hermiston: Permit update and renewal is currently underway. Permit expired 1/31/2009 but permit requirements remain in effect under an administrative extension until DEQ takes renewal action. Administrative extensions are authorized by Oregon rule (OAR 340-045).

\* JR Simplot: Permit updated and renewal issued 11/1/2022. The facility has submitted a modification request to remove acreage from the land application program, which is under DEQ review as of July 2024.

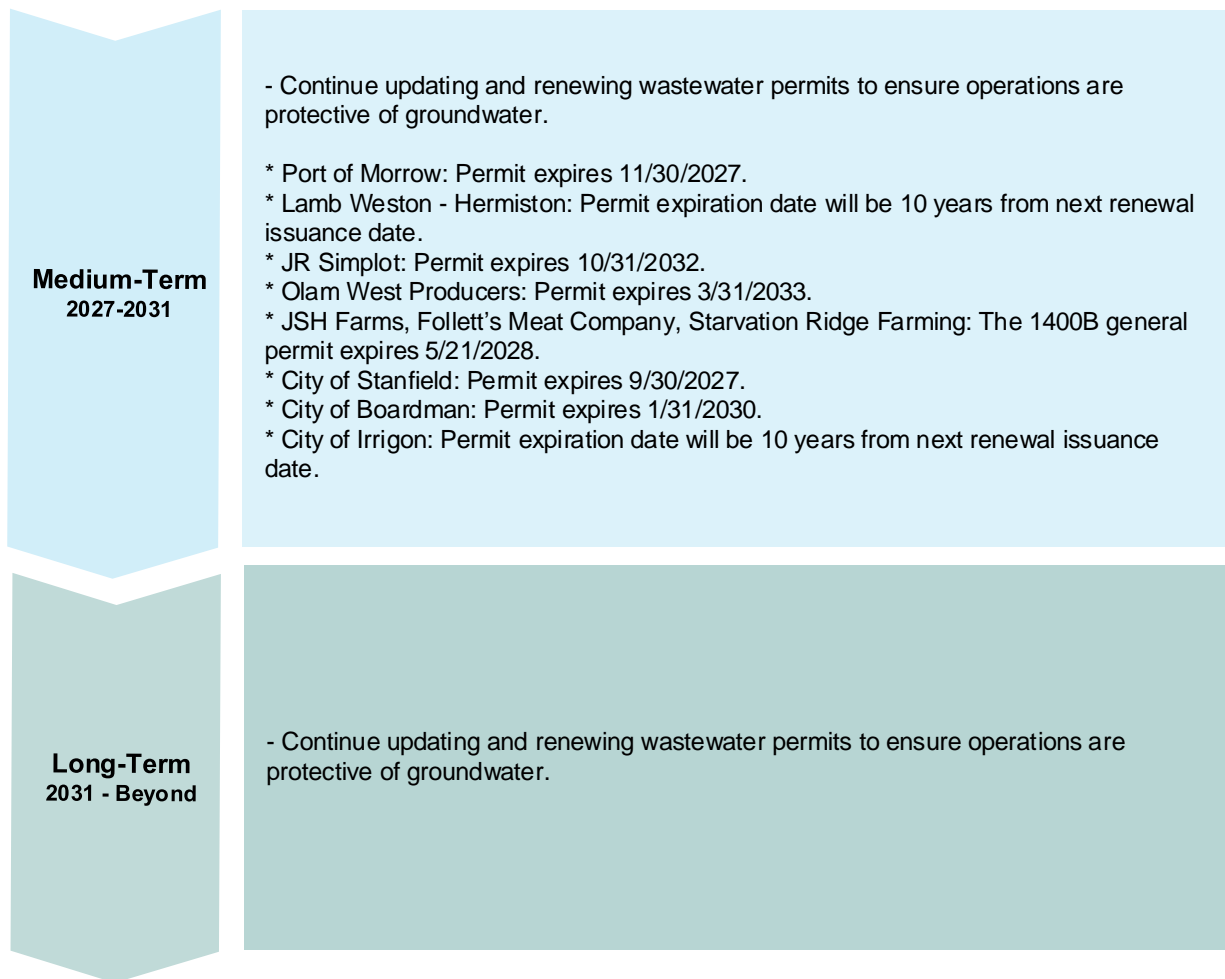
Olam West Producers: Permit updated and renewal issued 6/1/2023.

General permit holders: JSH Farms, Follett's Meat Company, Starvation Ridge Farming: These facilities are under the 1400B general permit that was updated and renewed 5/21/2018.

\* City of Stanfield: Permit updated and renewal issued 10/13/2022.

\* City of Boardman: Permit updated and renewal issued 2/13/2020.

\* City of Irrigon: Permit expired 4/30/2009 and is under administrative extension. The facility completed an MAO with DEQ in 2021 that required wastewater treatment improvements to discharge below 7 mg/L nitrate. Permit renewal is pending.



### Monitoring Progress:

- Number of permits that have been updated via renewal or modification.
- Ensure annual compliance reports are submitted to DEQ each year. Permits require that facilities monitor groundwater nitrate fluctuations and trends at their individual sites to monitor and remediate potential impacts.
- Number of facilities on track with completing compliance schedule and order milestones.
- Number of engineering reviews completed for wastewater infrastructure improvement projects.

### Reporting Progress:

#### Quarter 4:

- Four facilities in the LUGBWMA are under DEQ orders or compliance schedules (see below). All are currently on track to meet requirements and milestones in their permits and orders:

- **Port of Morrow:** DEQ issued WPCF permit modification #4 for the Port of Morrow on Oct. 25, 2024, after reviewing and responding to public comments. DEQ hosted an extended public comment period and held a hybrid public hearing on Oct. 9, 2024, at the Boardman Jr./Senior High School Library and virtually on Zoom. The permit modification moves up the timeline on ending winter application by requiring wastewater storage one year early, expands the area for land application to minimize potential leaching, and enhances soil moisture monitoring practices. The permit modification moves back the timeline for secondary treatment, to align with funding and construction feasibility. The Port has been on track with completing compliance schedule and order milestones.
- **Lamb Weston Hermiston:** DEQ continued work on a draft WPCF permit renewal for Lamb Weston Hermiston, which will require additional wastewater storage, treatment, monitoring and reporting to protect groundwater and restrict non-growing season irrigation with high nitrogen wastewater. On 11/12/24, DEQ's Office of Compliance and Enforcement sent communication to the facility requiring it institute winter irrigation management practices for soil moisture to align with the Port of Morrow as part of the enforcement order and compliance plan.
- **Olam West Coast, Inc:** On 8/16/2024, DEQ modified the WPCF permit to provide more time for the facility to provide interim deliverables required by its permit compliance schedule. The modification did not alter the final compliance date requiring winter storage increase to be constructed by November 1, 2026. DEQ engineering reviewed the draft design report for the lined lagoon expansion in June 2024.
- **J.R. Simplot Hermiston:** On 5/21/2024, the facility submitted a permit modification request to add some circles for reuse irrigation and requested removal of a farm area. DEQ is conducting a compliance review, hydrogeologist review of groundwater data and drafting the permit modification as a next action.

## 4.6 Rural Residential

### 4.6.3.1 Agricultural Water Quality Program

4.6.3.1 Agriculture Water Quality Program	
OBJECTIVE: Prevent and control water pollution (including groundwater) from agricultural activities to achieve water quality standards. <i>[4.6 Rural Residential Strategies Schedule]</i>	
<b>Continuous</b>	<ul style="list-style-type: none"><li>- Investigate water quality complaints of agricultural activities with impacts to waters of the state. This includes irrigation and nutrient application practices that may be causing pollution to waters of the state.</li></ul>
<b>Short-Term</b> 2023-2027	<ul style="list-style-type: none"><li>- Investigate locations identified through the Strategic Implementation Area assessment with potential to impact groundwater, as described below in Section 4.1.3.2.</li><li>- Area Rules are reviewed every two years. The Willow Creek and Umatilla rules were last reviewed in Feb 2024. Rule changes may be done anytime the agency identifies a need.</li></ul>
<b>Medium-Term</b> 2027-2031	<ul style="list-style-type: none"><li>- Area Plans are reviewed on an alternating schedule of a full and light review of every 6 years for full and every 2 years for a light review. The Willow Creek and Umatilla area plans were last reviewed in Feb 2024.</li></ul>

#### Monitoring Progress:

- See monitoring information listed in Section 4.2.3.1

#### Reporting Progress:

##### Quarter 4:

No water quality complaints were filed or investigated this quarter.

See SIA Assessment above for visual assessment guide.

Of the 5 potential violations observed during the LUBGWMA Strategic Implementation Area I field evaluation, none of them were in rural residential areas. Of the 35 compliance opportunities observed during the field evaluation, 6 were in rural residential areas. ODA and the Morrow SWCD will be contacting all 6 landowners to investigate if their agricultural activities are impacting waters of the state and provide technical assistance.

### 4.6.3.2 Onsite Septic System Permitting and Compliance

#### 4.6.3.2 Onsite Septic System Permitting and Compliance

OBJECTIVE: Continue regulating onsite septic systems to protect groundwater and public health. [4.6 Rural Residential Strategies Schedule]

#### Continuous

- Partner with Umatilla County Public Health Department to ensure implementation of rule requirements for the construction, alteration, repair, operation, and maintenance of residential onsite septic systems.
- Implement and enforce Water Pollution Control Facilities (WPCF) Onsite permits for large onsite septic systems, such as commercial or community systems, that receive over 2,500 gallons of wastewater per day or wastewater that is stronger than residential strength.

#### Monitoring Progress:

- Track residential onsite septic system applications submitted to Umatilla County Public Health Department.
- Track number of WPCF Onsite permits issued or renewed in Morrow and Umatilla counties.
- Ensure annual WPCF discharge monitoring reports are submitted to DEQ each year when required by permit. All new and renewed WPCF permits require annual submission of discharge monitoring reports.

#### Reporting Progress:

##### Quarter 4:

- Umatilla County Public Health continues to manage residential onsite septic system permits.
- DEQ will report number of residential onsite septic system applications submitted to Umatilla County Public Health in the annual report.
- DEQ will report the number of WPCF Onsite permits issued and annual discharge monitoring reports received in the annual report.

### 4.6.3.3 Onsite Septic System Repair and Replacement Funding

#### 4.6.3.3 Onsite Septic System Repair and Replacement Funding

OBJECTIVE: Continue providing homeowners with affordable financing options to repair or replace failing septic systems. *[4.6 Rural Residential Strategies Schedule]*

#### Continuous

- Partner with public agencies or qualified nonprofit lender(s) to offer affordable financing options for septic system repair and replacement when funding is available for this purpose.

#### Monitoring Progress:

- Assess if residents in the area received financing for repair or replacement of their septic systems through DEQ managed programs.

#### Reporting Progress:

#### Quarter 4:

- DEQ's nonprofit lending partner, Craft 3, did not receive any applications from Morrow or Umatilla counties for septic system repair or replacement funding. DEQ will continue to share information about this funding option and will seek opportunities to partner with other agencies doing drinking water outreach in the area.

#### 4.6.3.4 Public Wastewater Treatment System and Irrigation Modernization Funding

##### 4.6.3.4 Public Wastewater Treatment System and Irrigation Modernization Funding

OBJECTIVE: Continue providing public entities with low interest loans and additional subsidies to support public wastewater system upgrades or expansion and irrigation modernization. *[4.6 Rural Residential Strategies Schedule]*

##### Continuous

- Support public entities with funding and technical resources through DEQ's Clean Water State Revolving Fund program. Subsidies are dependent on funding availability.

#### Monitoring Progress:

- Assess how many communities in the area have applied for funding, are on the intended use plan, or have received financing from the Clean Water State Revolving Fund.
- For communities that have received financing, include the anticipated water quality benefits of the funded projects.

#### Reporting Progress:

##### Quarter 4:

- DEQ has signed two loan agreements: one with the City of Echo to upgrade its collection system and primary treatment operations and one with the City of Stanfield to develop a wastewater facility plan.
- The City of Irrigon has completed its CWSRF-funded project to convert its septic tank effluent gravity (STEG) sewer system to conventional sewer, and the loan has entered repayment.
- DEQ has received five loan applications: two from the City of Umatilla for sewer extension and primary treatment upgrades, one from the City of Hermiston for sewer extension, one from the Port of Morrow for secondary treatment upgrades, and one from Westland Irrigation District for floating solar panels. Further detailed project descriptions will be included in the annual report.



### 4.6.3.5 Domestic Well Construction and Compliance

#### 4.6.3.5 Domestic Well Construction and Compliance

**OBJECTIVE:** Protect groundwater resources through ensuring that new and modified wells are constructed properly, abandoned wells are providing education to the public and well drilling community, and utilizing enforcement actions when necessary. *[4.6 Rural Residential Strategies Schedule]*

**Continuous**

- Ensure wells are properly constructed, altered, maintained, and decommissioned so as to prevent contamination, loss of artesian pressure, and waste of Oregon's groundwater resources.

#### **Monitoring Progress:**

- Inspect 90% of new, altered, and abandoned wells in the LUBGWMA.
- Conduct in-depth well assessments at 10 wells per year (more if federal funds are secured).

#### **Reporting Progress:**

##### **Quarter 4:**

- OWRD staff have conducted 6 well inspections within the LUBGWMA during Q4. Of those inspected, all were domestic or exempt wells. Staff identified no deficiencies during inspection or review of the well log.
- Hosting booth at Farm Fair in Hermiston for public education and outreach.
- A contractor has been selected to work with OWRD staff on the well assessment project. Outreach is underway to determine locations and willing landowners. Assessments are expected to begin in early 2025.

## 5. Monitoring, Data, and Analysis

### 5.1.1 Groundwater Quality Sampling and Monitoring

#### 5.1.1 Groundwater Quality Sampling and Monitoring

OBJECTIVE: Monitor groundwater quality to understand current nitrate concentrations and track changes over time. *[5.1 Technical Work]*

##### Continuous

- Quarterly sampling of DEQ's long-term well network of about 30 wells; occasional larger-scale sampling events as resources allow.

#### Monitoring Progress:

- Confirm quarterly sampling occurred and report results from previous year.
- Report results of any additional DEQ sampling events.

#### Reporting Progress:

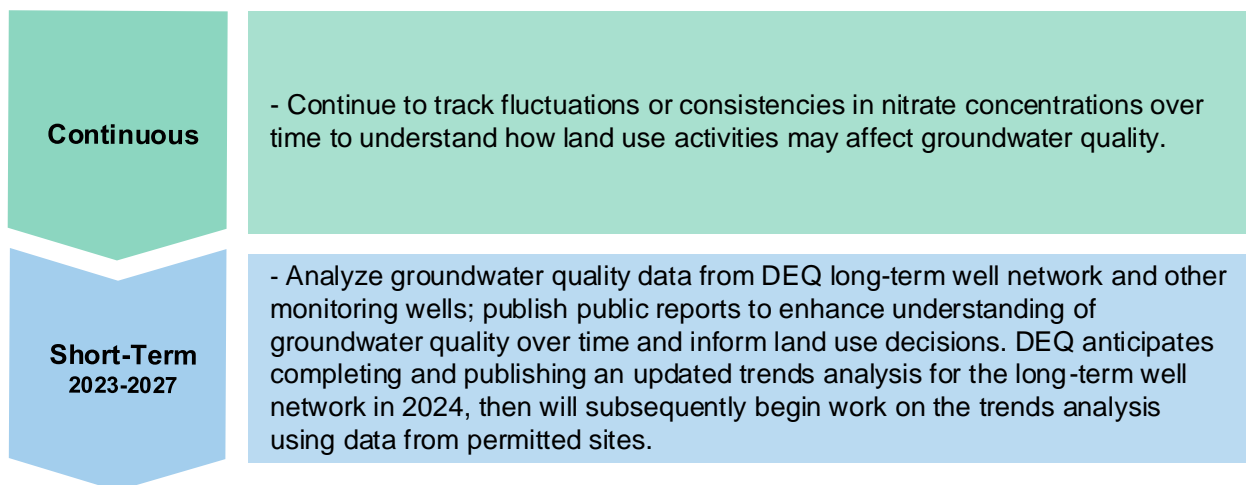
##### Quarter 4:

- DEQ sampled the LUBGWMA well network in March, June, September, and November 2024. Sample results are available through DEQ's Ambient Water Quality Monitoring System (AWQMS) and can be accessed here: <https://www.oregon.gov/deq/wq/Pages/WQdata.aspx>. Results are currently being processed for September and November, and a summary of 2024 sample results will be provided in the annual report.
- DEQ began isotope sampling in September and the EPA lab in Corvallis is performing the analysis. Isotope sampling will aid in identifying the sources of nitrate in the groundwater.
- DEQ hand delivers water quality results and related health information in both English and Spanish once a year to well users in our network.
- DEQ anticipates performing a large-scale (100-200 wells) synoptic sampling event in the LUBGWMA in 2025.

## 5.1.2 Groundwater Quality Trends Analysis

### 5.1.2 Groundwater Quality Trends Analysis

**OBJECTIVE:** To track fluctuations or consistencies in nitrate concentrations over time to understand how land use activities may affect groundwater quality. *[5.1 Technical Work]*



#### Monitoring Progress:

- Provide summary of any trends reports DEQ has published in the previous year.

#### Reporting Progress:

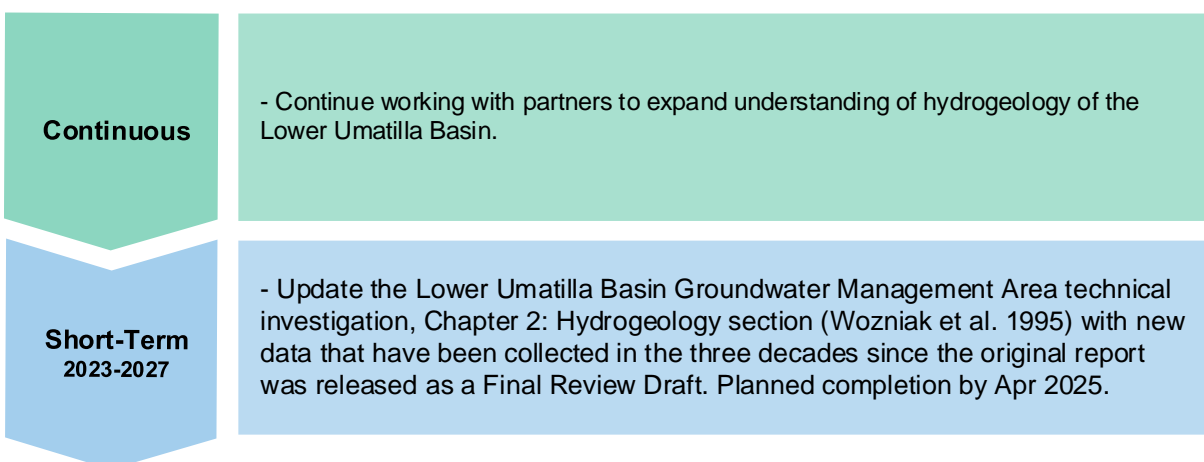
##### Quarter 4:

- DEQ is working with an Oregon State University statistician to review and finalize an updated trends analysis report for DEQ's long term-well network of about 30 wells. Comments from the statistician are currently being incorporated into the report, which is anticipated to be available soon.

### 5.1.3 Hydrogeology of the Lower Umatilla Basin - Update of Conceptual Model

#### 5.1.3 Hydrogeology of the Lower Umatilla Basin - Update of the Conceptual Model

**OBJECTIVE:** The objective of this project is to update the Lower Umatilla Basin Groundwater Management Area technical investigation, Chapter 2: Hydrogeology section (Wozniak et al. 1995) with new data that have been collected in the three decades since the original report was released as a Final Review Draft. *[5.1 Technical Work]*



#### Monitoring Progress:

- Complete update of the 1995 report by April 30, 2025.
- USGS completes peer review of updated report by October 31, 2025. If USGS is unable to complete the peer review, seek other qualified reviewers from state agencies, academic institutions, and/or other professionals as appropriate.

#### Reporting Progress:

##### Quarter 4:

- Expanded WRD's database to include location, well construction information, and lithology for 105 monitoring wells from DEQ-permitted facilities. Uploading of quarterly water level measurement data is in progress. This represents a significant expansion of WRD's well network.
- Newly added monitoring well data is available through WRD's Groundwater Information Service (GWIS)  
[https://apps.wrd.state.or.us/apps/gw/gw\\_info/gw\\_info\\_report/Default.aspx](https://apps.wrd.state.or.us/apps/gw/gw_info/gw_info_report/Default.aspx)

## 5.1.4 Ongoing Groundwater Levels Data Collection

### 5.1.4 Ongoing Groundwater Levels Data Collection

OBJECTIVE: Track groundwater levels over time to inform understanding of the aquifer system. *[5.1 Technical Work]*

#### Continuous

- Collect quarterly groundwater level data through OWRD's well monitoring network in the LUBGWMA.

#### Monitoring Progress:

- Continue to collect quarterly data from existing well network in the LUBGWMA.
- Conduct in-depth well assessments at 10 wells per year (more if federal funds are secured).
- Expand network to fill data gaps as funding is available.

#### Reporting Progress:

##### Quarter 4:

- Quarterly water level data at 47 wells has been collected and published to GWIS [https://apps.wrd.state.or.us/apps/gw/gw\\_info/gw\\_info\\_report/Default.aspx](https://apps.wrd.state.or.us/apps/gw/gw_info/gw_info_report/Default.aspx)
- A contractor has been selected to work with OWRD staff on the well assessment project. Outreach is underway to determine locations and willing landowners. Assessments are expected to begin in early 2025.

## 5.1.5 Nitrate Leaching Estimation Update

### 5.1.5 Nitrate Leaching Estimation Update

OBJECTIVE: Determine what additional data and resources would be needed to complete an updated nitrate leaching analysis. *[5.1 Technical Work]*

**Short-Term**  
2023-2027

- Develop a plan to identify what additional data and resources would be needed to update a nitrate leaching analysis.

#### Monitoring Progress:

- Provide status update about plan development.

#### Reporting Progress:

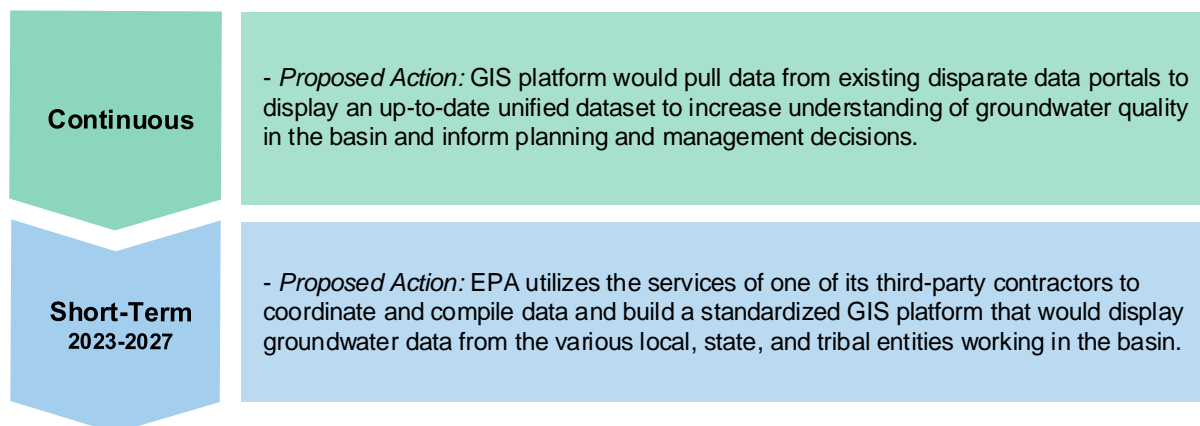
##### Quarter 4:

- Oregon agencies have not yet received updated nitrate application estimates from U.S. EPA's contractor.
- State agencies have contracted Oregon Consensus to provide facilitation and coordination support for the LUBGWMA Advisory Committee. As a first activity, Oregon Consensus has gathered a small group including state agency staff, CTUIR, Oregon Environmental Council, and H2OEO to help develop a process design for a research agenda development forum. This small group will lay the groundwork to engage in a joint research agenda development effort in late winter/early spring 2025. The group met initially in November and are working on purpose, framing and other process considerations intended to set the engagement up for collaborative success. Questions and priorities coming out of this research forum will be useful in determining potential data and resources that would be needed to update the nitrate leaching analysis. Until additional data becomes available on the nitrate application estimates and the amount of nitrate infiltrating below the root zone and into the groundwater, an updated nitrate leaching analysis will not be helpful. The research planning group will discuss how to get relevant data for a meaningful update to this analysis.

## 5.2 Groundwater Data Coordination Effort and GIS Platform

### 5.2 Groundwater Data Coordination Effort and GIS Platform

**OBJECTIVE:** Coordinate and compile data from local, state, and tribal partners to build a publicly accessible GIS platform that displays groundwater data with the goal of having a common, high quality data set for the region to improve understanding of the hydrogeology and groundwater quality and inform management and planning decisions.



#### Monitoring Progress:

- Provide update about status of GIS platform development.

#### Reporting Progress:

##### Quarter 4:

- LUB-Hub update: State agencies and local county entities are working with EPA to build a GIS-based hub for data relevant to the GWMA. EPA is leading the construction of this hub and there have been numerous meetings with technical and leadership staff to begin the gathering of data and work out technical issues. The next meeting is in early December.

## 6. Safe Drinking Water for Well-Dependent Households

### 6.1 Immediate Safe Drinking Water Services

#### 6.1.3.1 Community Education, Outreach and Engagement About Nitrate in Domestic Well Water

##### 6.1.3.1 Community Education, Outreach and Engagement About Nitrate in Domestic Well Water

**OBJECTIVE:** Ensure all residents who depend on a domestic well for drinking water understand there are potential health risks from elevated nitrates in their well water, that safe water services are available to them, and how and whom to contact to access needed services and support. *[6.1 Immediate Safe Drinking Water Services]*

##### Continuous

- Maintain and as needed, develop new outreach and education materials and pathways, including updates to the OHA website, fact sheets and outreach materials. Partner with LPHAs and CBOs to carry out community engagement and education.

##### Short-Term 2023-2027

- Executed grant awards running through June 30, 2025, to renew funding of three CBOs (Douglas Latinas, Eastern Oregon Center for Independent Living, and National Center for Alternatives to Pesticides).
- By September 30, 2024, finalize a scope of work for a client services agreement with the CBO Euvalcree and by October 30 execute the contract backdated to July 1, 2024.
- Completed July 1, 2024 annual funding agreements with Morrow and Umatilla County Public Health Departments through June 30, 2025.
- Posted by July 31, 2024 maps presenting household well test results in a format that protects privacy of individual households to [testmywell.oregon.gov](https://testmywell.oregon.gov) and [pruebadepozo.oregon.gov](https://pruebadepozo.oregon.gov).
- Added by July 31 an interested party email sign up to OHA LUBGWMA websites, and an archive of OHA press releases related to the domestic wells public health project.
- By September 15, 2024, finalize a scope of work with strategic communication consultants the Metropolitan Group to review and provide recommendations for improvements to OHA website and CBO engagement.
- By September 30, 2024, begin publishing a monthly bulletin for dissemination via email and on the website.

#### Monitoring Progress:

- OHA to receive quarterly work reports from funded community-based organizations.
- OHA to receive and provide update on outreach needs and activities at biweekly partner meetings.



## Reporting Progress:

### Quarter 4:

- **Coordinated Outreach Efforts:** OHA has formed an Outreach and Engagement workgroup specific to LUBGWMA in partnership with Morrow and Umatilla County Health Departments, as well as local CBOs in the region: Doulas Latinas International, Eastern Oregon Center for Independent Living (EOCIL), Euvalcree, National Center for Alternatives to Pesticides (NCAP), Oregon Rural Action (ORA), and Water for Eastern Oregon (H2OEO). During this reporting period, the workgroup convened three times.
- **Outreach and Education Resources:** OHA also created/updated the following resources for LUBGWMA residents:
  - **LUBGWMA FAQ:** This document was updated and converted from its previous PDF document format into a web page with linked questions, located [here](#) - the page is currently only available in English but is in the process of being translated to Spanish. The original PDF document is still available [in Spanish](#).
  - **Who Contacts Residents?** OHA developed a website that provides information on the variety of parties that may contact residents related to efforts being conducted in the region. The intent of this document is to reduce confusion and increase confidence of the public in the purpose of these contacts. It can be found here in [English](#) and [in Spanish](#).
  - **“Quick” User Guides for Reverse Osmosis Treatment Systems:** OHA developed “quick start” guides in English and Spanish for both treatment system brands (Culligan and Kinetico) models that are currently being distributed to qualifying households (i.e., households served by wells with 10-24.99mg/L nitrate for which systems certified to reduce nitrate up to 25 mg/L are available). These guides were created to increase accessibility of information about the use of the systems when the “owner’s manual” that is typically distributed may be a barrier or not be available in Spanish. These guides were distributed by hand during a canvassing effort in Morrow County, with more detail provided on that effort in a section below.
- **OHA Contract with Local CBO, Euvalcree:** As of this writing, a contract is in development with local CBO Euvalcree – to be executed on Jan 1, 2025. This CBO will join efforts to provide outreach and education in the LUBGWMA region and will serve as a community-specific drop off location for water samples taken by residents from their own well. In addition, Euvalcree will gather water samples from their own location and other drop off locations in Hermiston, providing courier services to OHA’s contracted lab in Pendleton. This will increase capacity for DHS field team resources. Euvalcree was previously resourced to do similar work as a sub-awardee of a separate grant-supported CBO.

- **Metropolitan Group Contract:** In September 2024, OHA's Healthy Waters team engaged Metropolitan Group to support efforts aimed at improving partnership with local public health authorities and community-based organizations. In addition, this consultant team will work with OHA to create a public-facing dashboard to improve understanding and engagement of the public with testing and treatment related data that is available on OHA's website.
- **211 Info contract ended:** In October 2024, OHA's service contract with 211 Info was mutually terminated. It was found that only a small minority of residents were utilizing the 211 service, typically only 2-3 calls per week at maximum. This contract has ended two months early, and outreach materials referencing 211 as an option for getting access to testing and treatment services have been updated to reference the more commonly accessed OHA dedicated phone number 541-952-9254; OHA websites in English ([testmywell.oregon.gov](https://testmywell.oregon.gov)) and Spanish ([pruebadepozo.oregon.gov](https://pruebadepozo.oregon.gov)) continue to be featured on all materials.

### 6.1.3.2 Free Initial Domestic Well Water Testing

#### 6.1.3.2 Free Initial Domestic Well Water Testing

OBJECTIVE: By Jun 30, 2025, complete testing of 30%, or 420 of the 1,400 domestic wells that remain untested as of Jul 1, 2024. [6.1 Immediate Safe Drinking Water Services]

#### Short-Term 2023-2027

- By Jun 30, 2024, completed a minimum of two mailings of at-home nitrate test strips to unreached households (no trespassing/guard dogs/not home households).
- By Nov 30, 2024, complete canvassing of unreached households that do not receive mail at their physical address.
- By Dec 31, 2024, complete a mailing to households whose residents refused testing in summer 2023 renewing the free testing offer and including an “opt out” return mailer to request no further communication.

#### Monitoring Progress:

- OHA will regularly (generally a weekly or biweekly basis) log new initial water quality test results from its contract laboratory to OR-Wells database.
- OHA will update tabular data for well water nitrate testing and mapped data for highest nitrate results monthly on the English and Spanish versions of its website (testmywell.oregon.gov and pruebadepozo.oregon.gov; click on “Data and News”/ “Datos y Noticias”)

#### Reporting Progress:

##### Quarter 4:

- **Current Well Testing Count:** As of this reporting, OHA, in collaboration with our partners at ODHHS, Morrow and Umatilla County Health Departments, and with the support of local CBOs, have provided nitrate testing for 1,957 households in LUBGWMA that receive their water from domestic wells.
- **Outreach efforts to residents that do not receive mail at their physical address in Morrow County:** In October and November 2024, OHA staff, alongside partners from Morrow County Health Department, Doulas Latinas, Eastern Oregon Center for Independent Living (EOCIL), Northwest Center for Alternatives to Pesticides (NCAP), and Oregon Rural Action canvassed 58 addresses in LUBGWMA that we believed rely on domestic wells and were previously unreached. Through that effort, we discovered the following:
  - 29 addresses were not found or could not located, despite a thorough search.
  - 19 addresses where the residents were not home or did not answer – our team left fliers to encourage residents to request free well testing.

- Five empty lots with no residence or dwelling present.
- Two households with residents that agreed to have their well water tested. Staff/volunteer teams were able to take a well sample on the spot and ensure it was delivered to a lab for testing.
- One household with residents who declined well testing services.
- One address that was believed to be associated with a nearby commercial farm, but address could not be located or verified.
- One address where the canvassing team made contact and will be following up with the residents to schedule a test.
- **Outreach efforts to residents that do not receive mail at their physical address in Umatilla County:** Umatilla County Health Department, working with its partners in Umatilla County Assessor's and Planning departments also made an effort to contact residents that were previously unreachable by our program. Of the 137 addresses that were previously not reached:
  - 46 of those addresses either do not exist, or are not dwellings, or are located on public water systems.
  - 23 addresses were matched to potential phone numbers through public records, and UCHD staff have attempted phone calls to schedule appointments to test.
  - 68 households, in addition to any who are unable to be reached via phone, will be sent postcards, asking them to contact UCHD for scheduling well testing. These postcards will also ask recipients if they would like to opt out of future outreach efforts.
- **“Opt Out” Mailer:** OHA is currently in the planning stages for a mailer to households that refused testing services during 2023 canvassing efforts and plans to have something in the mail to these households in December 2024.

### 6.1.3.3 Free Domestic Well Water Retesting

#### 6.1.3.3 Free Domestic Well Water Retesting

**OBJECTIVE:** Ensure households with initial nitrate test results below 10 mg/L are monitored and provided alternate water sources if nitrate in their domestic well water rises above the action level due to seasonal fluctuations and still-increasing nitrate concentrations in groundwater in the LUBGWMA. [6.1 Immediate Safe Drinking Water Services]

#### Continuous

- For these households at high risk of exceeding 10 mg/L range, implement a program of OHA direct mailings, followed by ODHS repeat phone calls to schedule and carry out water sample collection and deliver samples to the OHA contract laboratory for testing.
- For households with initial tests below 5 mg/L or above 25 mg/L, offer access to self-sampling by picking up and dropping off test kits at county public health department for ODHS to deliver to OHA contract laboratory, except that ODHS will provide sample collection assistance upon request.

#### Short-Term 2023-2027

- By June 30, 2024, completed a mailing to all households describing retesting protocols and pathways for retesting depending on their nitrate level.
- By June 30, 2024, mailed a second, individualized letter to households that completed their initial tests prior to June 2024. This letter provided the specific household's test results, corresponding testing schedule, and details about the sample collection scheduling.
- By June 30, 2024, incorporated retesting information into post-initial-test-results letter OHA mails to newly tested households.
- By December 31, 2024 develop a new reporting template to post to the OHA LUBGWMA websites with information about retesting progress.
- By June 30, 2025, complete quarterly well water re-testing of 75% of households identified as being at highest risk of exceeding 10 mg/L nitrate (i.e., households between 5mg/L - 9.99mg/L) and maintain this completion rate as new households are identified in this range.

#### Monitoring Progress:

- OHA will regularly (generally a weekly or biweekly basis) log new water quality retesting results from its contract laboratory to OR-Wells database.
- OHA will post tabular data for well water nitrate retesting on a monthly basis on the English and Spanish versions of its website ([testmywell.oregon.gov](https://testmywell.oregon.gov) and [pruebadepozo.oregon.gov](https://pruebadepozo.oregon.gov); click on "Data and News"/ "Datos y Noticias"). (Note: this monitoring action to be implemented once OHA adds a retesting report to the webpage.)

## Reporting Progress:

### Quarter 4:

- **LUBGWMA residents actively retesting their wells:** As of this writing, 511 households in LUBGWMA have had an initial test and at least one follow-up retest of their domestic well.
- **LUBGWMA residents declining retesting.** In advance of every quarter, OHA email and mails residents identified for retesting advising them that they will be contacted to schedule an appointment to have their well water collected by the state. A proportion of residents have declined to have follow up testing. OHA is currently modifying the program database to be able to flag and track such households and will be reporting on the number of these households in future reports.

### 6.1.3.4 Free Kitchen-Tap Treatment System Installation and Maintenance

#### 6.1.3.4 Free Kitchen-Tap Treatment System Installation and Maintenance

OBJECTIVE: Provide safe drinking water to households whose domestic well water test results are 10 mg/L to 25 mg/L nitrate. [6.1 Immediate Safe Drinking Water Services]

##### Continuous

- Newly tested households with levels between 10-25 mg/L nitrate are immediately started on bottled water delivery and added to the list for treatment system installation.
- Households with OHA-installed systems are provided 6 months worth of replacement filters which they can install themselves or call OHA's vendor to perform maintenance.
- OHA vendor conducts post-system-installation nitrate test to confirm nitrate reduction.

##### Short-Term 2023-2027

- By Dec 31, 2024, reduce by 50% the backlog of eligible households waiting for installation of treatment systems as of Jun 30, 2024.
- By Jun 30, 2025, reduce by 100% the backlog of eligible households waiting for installation of treatment systems as of Jun 30, 2024.

#### Monitoring Progress:

- OHA will regularly (generally a weekly or biweekly basis) update its tracking Smartsheet of new installations and post tabular data on a monthly basis on the English and Spanish versions of its website ([testmywell.oregon.gov](https://testmywell.oregon.gov) and [pruebadepozo.oregon.gov](https://pruebadepozo.oregon.gov); click on "Data and News"/ "Datos y Noticias").

#### Reporting Progress:

##### Quarter 4:

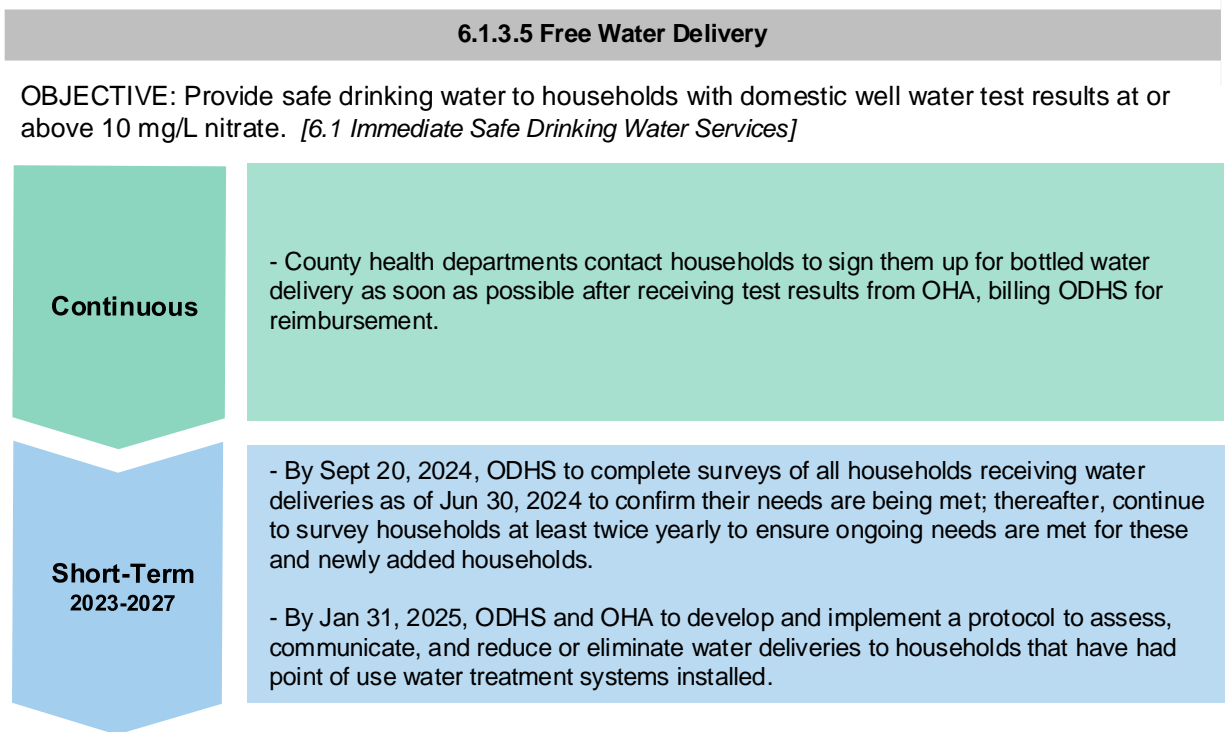
- **Report of LUBGWMA residents that have received Reverse Osmosis treatment systems:** As of this writing, there are 324 households whose well water was tested by OHA starting in 2023 with results between 10 mg/L and 24.99 mg/L nitrate, making them eligible for installation of a reverse osmosis treatment system certified to remove nitrate in this range. To date OHA has installed 95 treatment systems in Morrow County, and 104 systems in Umatilla County, for a total of 199 treatment systems currently installed by this project. Note: Among the 324 eligible households there are a number that have declined installation of a treatment system. OHA is modifying its database to create a

query for the number of these households and will be tracking and reporting out this information in future quarterly reports.

- **Streamlined treatment system data tables on OHA website:** OHA's [LUBGWMA Data and News website](#) recently streamlined some of our reporting tables by removing "percentage installed" metric from our "Water Treatment System Installations" data table, based on community feedback. Percentages in this category will fluctuate as new households qualify for treatment systems and new systems are installed, which has led to confusion when the numbers would go up or down from month to month. OHA is still reporting on total systems installed and revised some additional language in the data table which clarifies some inconsistencies in count that are present due to historical work on installing systems based on tests conducted in 2022 by Morrow County, prior to OHA taking on this work.
- **Treatment system demonstration for community partners:** On November 12<sup>th</sup>, 2024, OHA brought together its treatment system installation contractors Hellman Construction and Pure N Soft to demonstrate for CBO partners the two treatment system models currently being deployed. CBO staff were able to see what the models looked like, to hear more about their function, and to ask questions of the licensed plumbers and business owners responsible for installing the systems in the homes of LUBGWMA residents. Attendees reported having a much clearer understanding of system capabilities and that they would more easily be able to respond to questions and concerns of residents while performing outreach.
- **Nitrate test strip delivery to homes with treatment systems:** On November 13<sup>th</sup> and 14<sup>th</sup>, 2024, OHA staff, alongside staff from Morrow County Health Department and CBO partners from Doulas Latinas International, EOCIL, and Oregon Rural Action visited homes where treatment systems had been installed to provide nitrate test strips and the "RO system quick guide", which was mentioned in a section above. The aim of this effort was to increase confidence in the function of the RO systems by allowing residents to test their own post-treatment water for nitrate at least once per month. While visiting, staff and volunteers helped residents use their first test strip – some water samples did react for nitrate, leading to a water sample being collected and sent to the lab for testing. The results of those tests are available as of this writing.



### 6.1.3.5 Free Water Delivery



#### Monitoring Progress:

- ODHS will regularly log information about residents receiving water deliveries in its case management database, DLAN and Morrow and Umatilla Counties will maintain their spreadsheet tracking of residents signed up for water deliveries.
- OHA will post tabular data on residents receiving potable water deliveries on a monthly basis on the English and Spanish versions of its website ([testmywell.oregon.gov](https://testmywell.oregon.gov) and [pruebadepozo.oregon.gov](https://pruebadepozo.oregon.gov); click on “Data and News”/ “Datos y Noticias”).

#### Reporting Progress:

##### Quarter 4:

- In November, ODHS completed a water-delivery satisfaction survey via phone calls, text, email and door knocking for 218 of the 516 residents receiving delivered potable water. ODHS resolved the identified issues and documented outreach attempts in DLAN, including contact methods to improve service and resident satisfaction, existing water delivery and additional new water delivery as counties add to delivery services.

### 6.1.3.6 Longer Term Water Provisioning for Households Above 25 mg/L

#### 6.1.3.6 Longer Term Water Provisioning for Households Above 25 mg/L

OBJECTIVE: Provide an alternative to bottled water delivery to households with domestic well water test results above 25 mg/L nitrate. *[6.1 Immediate Safe Drinking Water Services]*

##### Short-Term 2023-2027

- By December 31, 2024, ODHS to issue a Request for Information to solicit public or private sector solutions for providing drinking water to households with well water over 25 mg/L nitrate where reverse osmosis filters are not certified to remove nitrate to safe drinking water levels.

#### Monitoring Progress:

- ODHS to report on progress issuing and results at biweekly LUBGWMA partner meetings.

#### Reporting Progress:

#### Quarter 4:

- In October, ODHS issued a request for information to explore alternatives to bottled water. In November, ODHS met with the Local Public Health Authority for Umatilla County and Industrial Service Solutions to discuss available solutions, including a product designed to reduce nitrate levels, and to gather feedback. A follow-up meeting to review additional options is scheduled for Spring 2025.

### 6.1.3.7 Data and Data Management

#### 6.1.3.7 Data and Data Management

OBJECTIVE: Maintain and as needed build out OHA and ODHS databases as the systems of record for all household data related to safe water services to support delivery of services and transparent communications about households served and awaiting service. *[6.1 Immediate Safe Drinking Water Services]*

#### Continuous

- Data systems are maintained on an ongoing basis.

#### Monitoring Progress:

- OHA will run routine database queries on a monthly basis and special queries to address non-routine information needs, and post updates to the OHA LUBGWMA websites and respond to public record requests.

#### Reporting Progress:

##### Quarter 4:

- **Database queries and monthly reporting:** OHA continues to provide monthly data reports to Morrow and Umatilla counties, as well as their subcontractors. In addition, we update our [LUBGWMA Data and Reporting website](#) on a monthly basis with new statistics related to testing and treatment, typically by the fifth of the following month.
- **OR Wells moved to cloud-based platform:** Our primary well testing and treatment data and reporting platform, OR Wells, is in the process of migrating from a server-based system to a cloud-based system by our partners in the Office of Information Services. This migration will enhance real-time data reporting and provide additional capabilities that were limited in its previous form, allowing OHA to perform more efficiently. This work began in October 2024.
- **Reporting on declined services.** As noted earlier in this report OHA is modifying OR-Wells to be able to flag and in the future report on households that decline testing and treatment services.
- **ODHS water delivery case management data.** ODHS has maintained records for 609 water delivery clients, 516 of which are currently active.

### 6.1.3.8 Community Partner Relations

#### 6.1.3.8 Community Partner Relations

OBJECTIVE: Maintain partnerships with local community-based organizations and local governments and fund these partners to: inform the design and implementation of OHA's LUBGWMA domestic well safety activities and perform community education and outreach regarding health risks and how residents can access safe water services. [6.1 Immediate Safe Drinking Water Services]

#### Continuous

- Meet biweekly or as partners agree to carry out the actions above.
- OHA to execute annual funding agreements with Morrow and Umatilla County LPHAs and CBOs noted in the "Description" below.

#### Monitoring Progress:

- OHA will provide and receive updates at biweekly LUBGWMA partner meetings.

#### Reporting Progress:

#### Quarter 4:

- **Changed cadence and purpose of LUBGWMA Leadership meeting:** In early September 2024, OHA team reorganized the way that we meet and work with our partners in the LUBGWMA. Workgroups were formed, creating weekly and later biweekly working meetings, with a separate workgroup for each key area: Outreach and Engagement, Testing, Treatment, Water Delivery, and Data/Reporting. A new system was developed to track and assign to the relevant workgroup household-based and systemic issues encountered in the course of program implementation. Our all-partner "Leadership" meeting changed cadence to once per month, held in person within the region, with an agenda focused on high priority, more complex issues that require a wider lens. The intent of this change was to enhance collaboration among the interested groups and provide more coordinated solutions.
- **Partnership and communications strategy refinement:** In September 2024, OHA contracted with The Metropolitan Group to support quality improvement efforts aimed at improving partnership with local public health authorities and community-based organizations. The MG consultant team will also work with OHA to create a public-facing dashboard to improve understanding and engagement of the public with testing and treatment related data that is available on OHA's website.
- **Water Insecurity Strategist position:** In October 2024, OHA onboarded a new Water Insecurity Strategist position, who is tasked to lead and improve all aspects of coordination of complex OHA domestic well safety initiatives, with a current priority on the Lower Umatilla Basin Groundwater Management Area (LUBGWMA) Domestic Wells Public Health Project.

### 6.1.3.9 Demographic Study

6.1.3.9 Demographic Study	
OBJECTIVE: Survey LUBGWMA residents receiving safe water services to assess whether the program is equitably serving the community and comply with the state requirements to ask individuals receiving health services about their race, ethnicity, language and disability status. [6.1 Immediate Safe Drinking Water Services]	
Continuous	- OHA will continue to survey newly added households.
Short-Term 2023-2027	<ul style="list-style-type: none"><li>- By Jun 30, 2024, OHA sent mass emailing to all households receiving services before that date.</li><li>- By Dec 31, 2024, OHA will complete a preliminary analysis of responses.</li></ul>

#### Monitoring Progress:

- OHA will track via project management tracking and demonstrate completion of initial analysis by publication on OHA's LUBGWMA websites, with periodic updates.

#### Reporting Progress:

##### Quarter 4:

- **OHA demographic survey:** In September 2024, OHA finalized a demographic survey of residents that have received LUBGWMA safe water services, satisfying statutory state requirements for Race, Ethnicity, Language, and Disability (REALD) and Sexual Orientation & Gender Identity (SOGI) surveys. Due to the departure of the program epidemiologist for other employment, we have paused on distribution until the vacancy is filled.
- **New Epidemiologist hiring:** OHA is in the final hiring clearance stages for a new limited duration Water Insecurity Epidemiologist. Assuming final employment checks are passed, we anticipate this role being filled by December 16<sup>th</sup>. This individual will take on the work of reviewing the previous survey for potential improvement, distributing the survey to LUBGWMA residents, and then collecting and analyzing the resulting data. OHA will report data when available.

## 6.2 Intermediate Term Public Water Systems Solutions

### 6.2.3.1 Technical and Funding Assistance for Public Water System Extension and Creation

#### 6.2.3.1. Technical and Funding Assistance for Public Water System Extension and Creation

OBJECTIVE: To provide technical and funding assistance to Counties and Public Water Systems so that public water system service lines are extended or new systems are created to provide safe drinking water to residents with high nitrate levels in their private domestic wells. [6.2 Intermediate Term Public Water Systems Solutions]

#### Continuous

- OHA entered into a data use agreement with the two counties to provide counties access to OHA's database of nitrate and other analyte results to inform the work of the counties' Drinking Water Investigation team.
- OHA's Drinking Water Services will reach out, encourage and guide counties and local PWSs to apply for DWSRF/BIL funding.

#### Short-Term 2023-2027

- Counties, with congressionally directed funding through EPA, carry out a Drinking Water Investigation to lay the groundwork for the design and planning of possible public water system solutions for areas currently relying on contaminated domestic wells.
- Counties, with an engineering consultant, conduct feasibility studies of public water system service area extensions or new public water systems.
- Counties or local PWS reach out to DWS for feasibility study grant (~\$20K) for line extension or PWS creation.
- Counties or local PWS submit Letters of Interest (LOI) to OHA-DWS by Q1 2025 or Q1 2026 to be considered for funding for service line extensions or creation of new PWS.

#### Monitoring Progress:

- OHA will reach out to county planners and engineering consultant to see if Letters of Interest (LOI) for funding for service line extensions or PWS creation are ready to be submitted by the deadline of February 15 each year. The deadline for the next round of funding will be February 15, 2025. OHA will also ask if any data or technical assistance are needed.

#### Reporting Progress:

##### Quarter 4:

In the past quarter OHA shared federal funding information with the county partners. OHA plans to reach out to county planners and engineering consultants to provide

information about federal funding availability for extending water lines to the existing PWSs or creating new PWSs with a deadline to submit LOIs.

## 6.2.3.2 Identifying Public Water Systems Not Currently under OHA Oversight

### 6.2.3.2 Identifying Public Water Systems Not Currently under OHA Oversight

OBJECTIVE: Ensure all Public Water Systems in the LUBGWMA are identified and meeting federal and state requirements for monitoring and treating nitrate. *[6.2 Intermediate Term Public Water Systems Solutions]*

**Continuous**

- By December 31, 2024, OHA to meet with county and state agency partners to strengthen outreach to identify PWS not under state oversight. Include criteria and requirements in annual trainings with local and state partners to identify new or previously unknown PWS.

#### Monitoring Progress:

- Reach out to local and state agency partners to identify previously new or unknown PWSs.
- Identified PWSs are listed in OHA-DWS online database and are complying with federal and state requirements.

#### Reporting Progress:

##### Quarter 4:

- EPA Region 10 staff and their contractor completed inspections and identified four PWSs that are not currently on OHA's inventory. These systems include:
  - [Columbia Basin Onion](#)
  - [Beef Northwest Feeders](#)
  - [Walchli Farms](#)
  - [Fewel Farms](#)
- OHA identified two additional systems through the private well testing program that meet the definition of state regulated public water systems (Oregon Very Small Systems). These systems include:
  - Columbia River Ranch
  - Four homes on a single well located on Dylan Drive outside City of Irrigon.
- OHA will add the newly identified six systems into the SDWIS inventory in January 2025.