LUBGWMA Advisory Committee Meeting

November 9, 2026



State of Oregon Department of Environmental Quality

OREGON DEPARTMENT OF AGRICULTURE

OREGON WATER RESOURCES DEPARTMENT

Agenda

- 1:00pm - Welcome, intros, review agenda
- 1:10pm - LUBGWMA Advisory Committee member updates
- 1:20pm - Nitrate Reduction Plan implementation updates
- 1:45pm - Monitoring well placement
- 2:00pm - U.S. EPA preliminary isotope analysis presentation
- 2:50pm - Wrap up and adjourn

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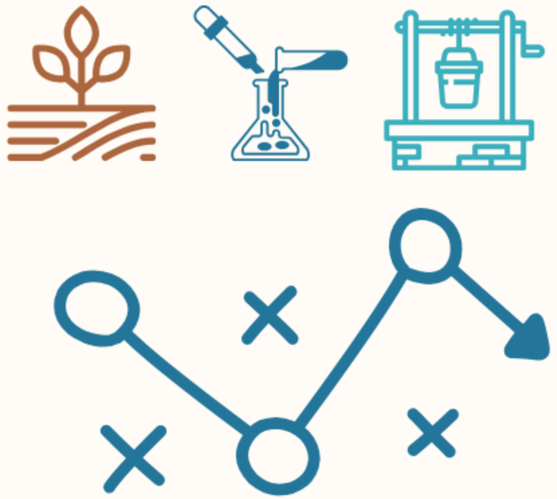
LUBGWMA Committee and Agency Roles





State Agencies: Oregon Nitrate Reduction Plan for LUBGWMA





Committee members represent a constituency. They bring information about what agencies are doing to that constituency and bring that constituency's questions and ideas to agencies.

State agencies provide updates about Nitrate Reduction Plan and consider questions and feedback from committee members. Meetings are also a space for local and Tribal governments to share relevant updates.

State agencies, with feedback from committee members, implement and continuously refine strategies to reduce nitrate in groundwater.

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Nitrate Reduction Plan Implementation Updates

- Backflow Program and Funding (OWRD)
- Hydro Conceptual Model Update (OWRD)
- Water Quality Groundwater Rules (ODA)
- Compliance Activities (ODA)
- Strategic Implementation Areas Remote Evaluation (ODA)
- Small Block Grant on Crop Utilization Update (ODA)
- Groundwater Data Dashboard (DEQ, ODA, OWRD)

OWRD Backflow Prevention

- ✓ Program initiated in the LUBGWMA in 2025 in conjunction with the Nitrate Reduction Plan.
- ✓ The goal is to ensure all ground water irrigation systems that use chemicals have approved backflow prevention.
- ✓ Backflow prevention devices are designed to help eliminate chemicals from entering groundwater sources



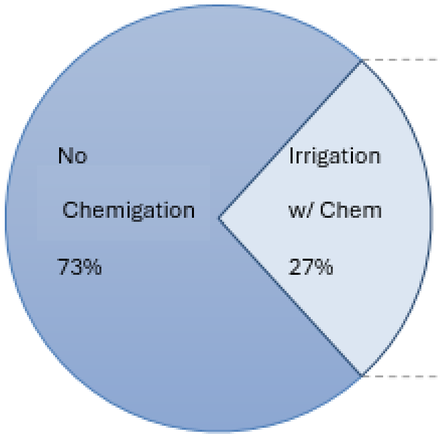
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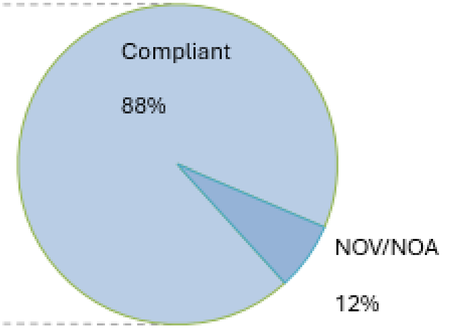
2025 DATA REVIEW

- SITES: 660
- INSPECTIONS: 965
- Notice of Violations (NOVS): 21
- Notice of Assessments (NOAS): 6

0% in compliance January

99% in compliance October





* Referencing the 660 sites visited with chemigation and/or potential chemigation

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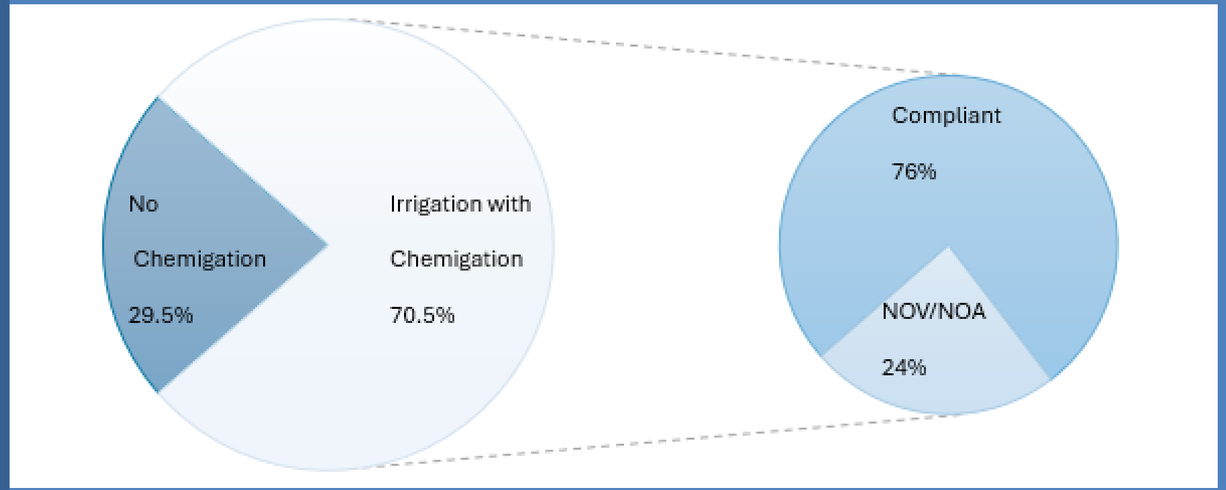
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2026 DATA

- Sites: 244
- Inspections: 320
- Notice of Violations (NOVS): 17
- Notice of Assessments (NOAS):3

~80% of violations came into compliance immediately following communication with the Department

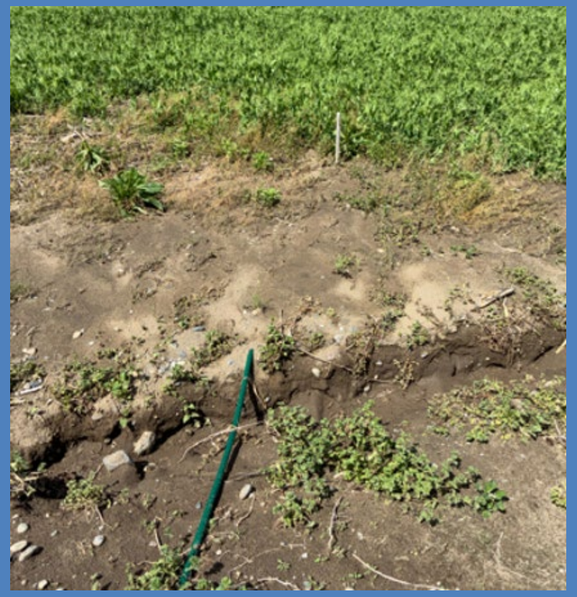


*Referencing the 244 sites visited for chemigation and/or potential chemigation

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2026 Non-Compliance

LEADING NON-COMPLIANCE ISSUE



Missing Air Gap

hoses buried or fallen

COMMON NON- COMPLIANCE ISSUE



Hoses were removed or broken off

NOT A COMPLIANCE ISSUE



Active chemigation without *any* backflow device

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2026 DATA

SITES OUT OF COMPLIANCE IN 2025

- ✓ **THE 21 SITES** that received NOVS and came into compliance in 2025 maintained compliance in 2026
- ✓ **THE 6 NOA SITES** in 2025 did not incur any further penalties for non-compliance in 2026

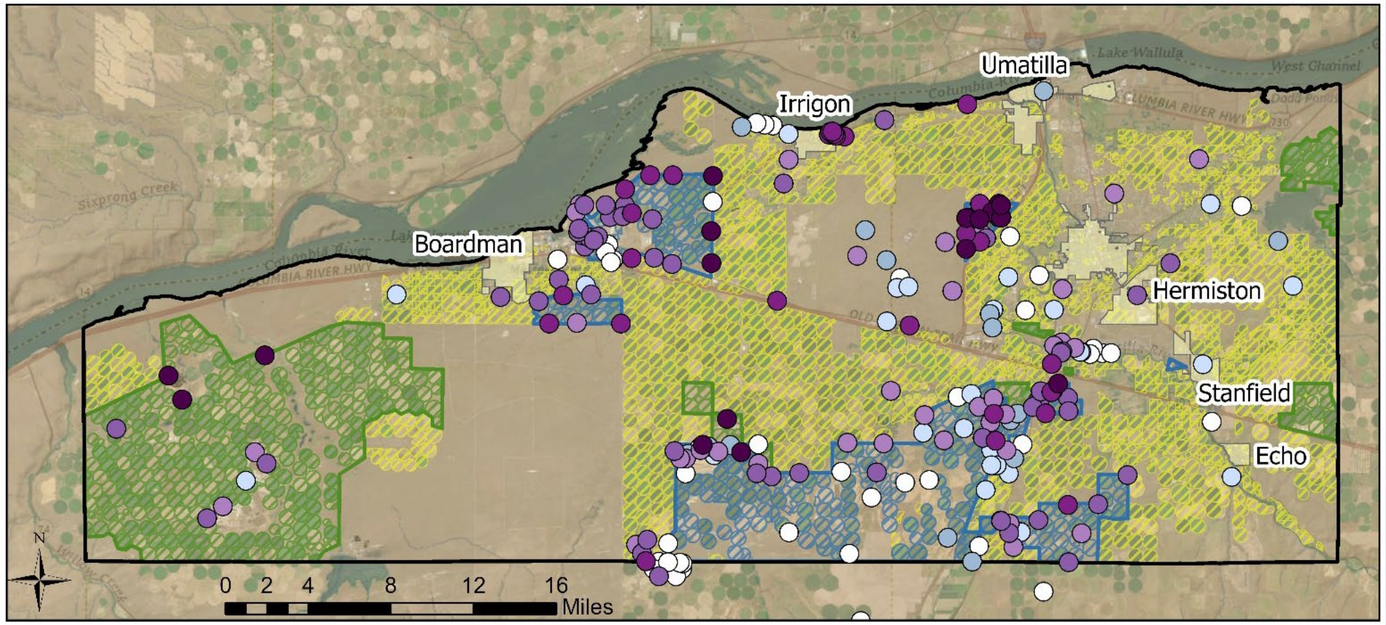
SITES OUT OF COMPLIANCE IN 2026

- ✓ **17 SITES** that were previously compliant in 2025, were found out of compliance in 2026 and received NOVS
- ✓ **3 OF THE 17 NOV SITES** received NOAS after *continued* non-compliance

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Monitoring Well Expansion Funding (OWRD)

2025 Groundwater Nitrate Concentrations
Lower Umatilla Basin Groundwater Management Area



Groundwater Nitrate Concentration

- up to 3 mg/L (43 wells; 18%)
- 3 to 7 mg/L (27 wells; 11%)
- 7 to 10 mg/L; (22 wells; 9%)
- 10 to 20 (37 wells; 16%)
- 20 to 40 mg/L (52 wells; 22%)
- 40 to 60 mg/L (39 wells; 17%)
- more than 60 mg/L (17 wells; 7%)

This map contains nitrate concentrations from 237 wells (193 monitoring wells, 6 irrigation wells, 31 domestic wells, and raw water samples from 7 public water systems) sampled between 8/12/24 and 12/3/25 with 90% sampled between 3/18/25 and 6/4/25.

61% exceed 10 mg/L Drinking Water Standard
70% exceed 7 mg/L GWMA Trigger Level

- LUBGWMA Boundary
- Cities
- ODA compliance oversight
- CAFO permit area
- DEQ permit area

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U.S. EPA preliminary isotope analysis for LUBGWMA



Jana E. Compton is a research ecologist and biogeochemist with the U.S. EPA's Office of Applied Science and Environmental Solutions. Her research focuses on the sources, fate, and impacts of nitrogen and phosphorus in the environment, and translating that science into policy-relevant frameworks.



J. Renée Brooks is a plant physiologist, isotope ecologist, and ecohydrologist known for her work on soil-plant-atmosphere processes, forest ecology, and stable isotope applications in environmental research. She retired from U.S. EPA in 2025 and currently is affiliated with Oregon State University.



Lisandra Santiago-Delgado Trine is a chemist with the U.S. EPA, specializing in stable isotope analysis and environmental contamination research. She manages EPA's Integrated Stable Isotope Research Facility (ISIRF) in Corvallis, Oregon.



Thank you!

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