

Backflow Prevention

Frequently Asked Questions

Where is this being enforced?

OWRD is actively checking for compliance on backflow devices in the Umatilla and Walla Walla basins as the elevated nitrate levels are a health concern for the community, especially those dependent on well water. Additionally, the Governor's office has directed state agencies to reduce nitrate contamination in the region's groundwater.

What is being asked?

OWRD requires groundwater controls (also referred to as chem checks, backflow, or back-siphoning devices) to be installed on all irrigation systems that utilize chemicals. Please note that the terms chemical or chemigation, include fertilizers and fertigation as well as all added contaminants. These devices help ensure that contaminants do not flow into the groundwater aquifer through the irrigation system.

Who is required to comply?

All groundwater right holders that use chemicals in their irrigations system(s) are required to install these devices. Domestic wells do not fall under the same irrigation requirements overseen by OWRD. Municipal wells are not included in this effort as they fall under different reporting systems.

What if I only chemigate with surface water?

The Oregon Department of Agriculture (ODA) regulates agricultural practices, including chemical use, to prevent pollution of surface waters. Please refer to ODA's Agricultural Water Quality Programs to learn more about the area specific rules.

What if my surface water is connected to my ground water?

If any part of your groundwater is connected to chemicals, it must have an OWRD approved backflow prevention device. This includes cases where chemicals are added to the surface water infrastructure. Regardless of where on the system chemicals are injected, approved backflow systems must be accurately placed to ensure there is no groundwater contamination.

Why is OWRD requiring this?

Unsafe nitrate contamination is a serious health concern for the community and the Department is actively checking for compliance and enforcing when there is non-compliance with this rule. It is the tool the state can utilize to help reduce point source contamination and work towards improving the resource.

When will this begin?

Inspections and regulation will begin in 2026, all sites that utilize chemicals in their irrigation system(s) are required to have an approved backflow system installed prior to any chemigation.

Do you have to install a backflow device if you are not using fertilizers and/or chemicals?

No, these are only required if chemicals are being applied through your irrigation system.

Where does this authority come from?

These devices are required under the Oregon Administrative Rules:

OAR 690-215- 0017 (4)

Back-siphon prevention devices shall be installed on any irrigation system connected to a groundwater source when chemicals or fertilizers are applied through the system.

OAR 690-215-0005:

The landowner is ultimately responsible for the maintenance and use of the water supply well.

What if I do not have a “common” system or the elevation/distance serves as my backflow?

If there is uncertainty in the compliance of your system, please ask for assistance and/or schedule a site inspection by OWRD staff prior to purchase of a device or use of your current system with fertilizers/chemicals. Additionally, you can reference the rules outlined in OAR 690-215-0017 to confirm your system meets the requirements.

What does regulation entail?

If the irrigation site has been tagged and/or the operators have been notified of backflow requirements and there is chemigation found attached to any portion of this system, then a Notice of Violation (NOV), will be sent from the Enforcement Section. If chemigation continues after this warning, then a Notice of Assessment (NOA) will be sent from the Enforcement Section which could result in civil penalties and/or damages.

Is there funding or reimbursement for irrigators/farmers?

No, OWRD does not have funding or reimbursement for these devices.

Where can I purchase these items?

Backflow devices can be purchased locally through irrigation supply companies and/or online. Please ensure that your system meets the requirements prior to purchasing and installation. There are handouts available, information on the OWRD website and if in doubt please reach out to OWRD staff for consultation.

How much do they cost?

There are many factors that may impact the price of a device, but generally the device costs between \$400 - \$1200.