



Backflow and Cross-Connection Prevention

Due to requirements placed on purveyors by the Washington State department of Health Drinking Water Division (WAC #246-290-490) all establishments that have an actual or potential of a cross connection must install appropriate backflow assemblies determined by the purveyor.

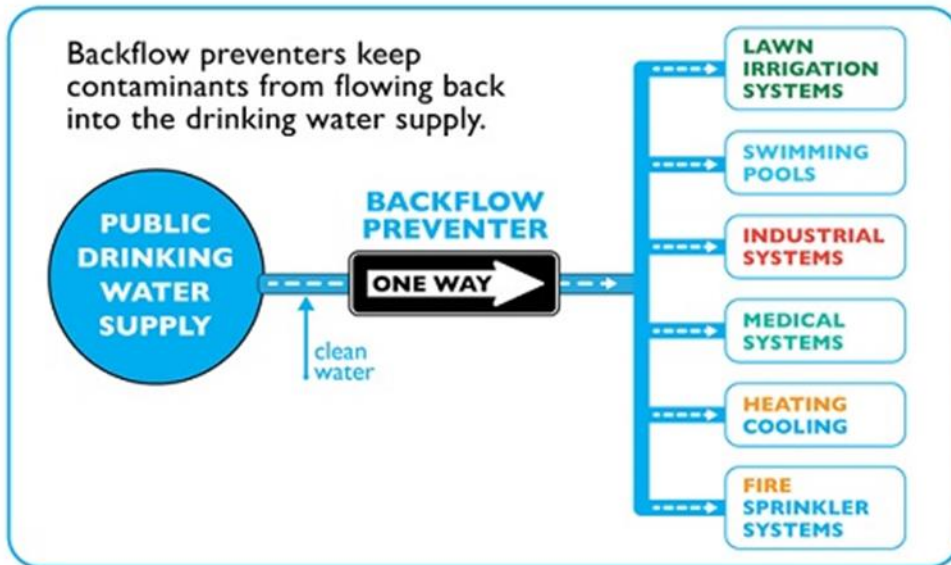
The City of Woodland requires all commercial properties to have backflow protection and that any actual or potential cross-connection be either eliminated or be properly protected. Backflow prevention may be required to be installed by the customer on the water service line outside the building, at one or more location within the building, or both. After the initial installation and testing of a new backflow preventer, the customer is required to have the backflow preventer tested on an annual basis to help ensure it is working to keep both the customer's water and the City of Woodland's water safe from contamination.

What is backflow?

Backflow is a flow in reverse from the normal direction of flow in a piping system. It occurs due to a differential pressure existing between two different points within a continuous fluid system; a fluid of higher pressures flowing to a fluid of lower pressure. Backflow may occur due to either "backsiphonage" or "backpressure."

What is a cross connection?

A cross connection is any actual or potential physical connection between a "potable water" line and any pipe, vessel, or machine containing a non-potable fluid, solid or gas, allowing possible entry to the water system by backflow. This would include, but is not limited to, sewers, drains, conduits, pools, storage reservoirs, plumbing fixtures, or any other device. The non-potable or unapproved water supply system may contain contaminated liquids, solids, or gases, of unknown or unsafe quality. Bypass arrangements such as jumper connections, removable sections, swivel or changeover devices are considered to be a cross connection.



Types of backflow prevention that may be required/approved:

- Air gaps (AG)
- Reduced Pressure Backflow Assemblies (RPBA) / Reduced Pressure Detector Assemblies (RPDA)
- Double Check Valve Assemblies (DCVA) / Double Check Detector Assemblies (DCDA)
- Spill-resistant Vacuum Breakers (SVBA)
- Pressure Vacuum Breaker Assemblies (PVBA)

Required Backflow Prevention

The backflow prevention required is determined by the hazard. The **City of Woodland's certified Cross-Connection Control Specialists will make the determination** of what type of protection is required for each specific installation. Below are the general guidelines.

High hazards: High Health Hazard facilities are required to have Premises Isolation, which is an approved backflow assembly installed just downstream of the water meter/city union, where the transfer of ownership happens. City of Woodland requires a Reduced Pressure Backflow Assembly (RPBA/RPDA) as Premises Isolation for high health hazards.

Examples of high health hazard facilities that may be found in Woodland include but are not limited to:

- Wastewater treatment plants
- Wastewater lift stations and pumping stations
- Morgues and mortuaries
- Hospitals, medical centers, nursing homes, veterinary, medical and dental clinics, and blood plasma centers
- Laboratories
- Metal plating industries
- Chemical plants
- Commercial laundries and dry cleaners
- Premises with separate irrigation systems using the purveyor's water supply with chemical addition
- Petroleum processing or storage plants
- Piers and docks
- Car washes
- Beverage bottling plants
- Premises where both reclaimed water and potable water are provided
- Film processing facilities
- Food processing plants
- Unapproved auxiliary water supply

Low hazards: The city of Woodland accepts Double Check Valve Assemblies (DCVA/DCDA), as types of protection for low hazards. Examples of low hazards are irrigation systems, fire systems, and buildings exceeding 3 stories or 30' in height.

Approved backflow prevention assembly: The backflow assembly installed must be approved for use in Washington State. The list can be found at [USC Foundation \(usclist.com\)](http://USC Foundation (usclist.com))

Any backflow assemblies not currently listed must have been listed at the time of original installation.

Inspection and Annual Testing

The City of Woodland requires that all backflow assemblies be inspected upon installation and may require periodic re-inspection of existing assemblies. New assemblies must be installed in an approved manner and be tested by a State of Washington certified Backflow Assembly Tester (BAT) prior to being put into service. The customer must ensure that a copy of these initial test reports are provided to the City of Woodland.

All installed backflow assemblies must then be tested annually by a State of Washington certified backflow assembly tester, as well as after any repair or replacement. A copy of the test report must be provided directly to the City of Woodland.

All backflow test reports must be submitted to Kathryn Myklebust

Questions regarding backflow tests contact Kathryn Myklebust 360 225 7999

E-mail: MyklebustK@ci.woodland.wa.us

Fax: 360-225-7336

Mail: P.O. Box 9 Woodland WA. 98674

In person at city hall located at 230 Davidson Ave Woodland WA. 98674

Questions regarding hazard assessment or installation contact the Water Treatment Plant:

360 225 6174

Todd Douglas