What is a Backflow Prevention Assembly?

Backflow prevention assemblies are mechanical devices installed on water service lines to help prevent the backflow of contaminated (unsafe to drink) water from entering the public drinking water system. Oregon administrative rules require backflow prevention assemblies to be installed on water services where cross connections cannot be eliminated. An approved, properly installed and maintained backflow assembly reduces the threat of backflow from entering the public drinking water system.

How Can I Help Protect my Drinking Water?

- Be aware of the possible hazards of cross connections and avoid them whenever possible.
- Protect all cross connections with appropriate backflow assemblies .
- Prior to installation of a backflow prevention assembly, contact Hood River County at 541-386-1306 to obtain a plumbing permit.
- Have all backflow assemblies tested annually by a certified tester.
- Submit backflow assembly test reports to the City of Hood River.

Be Aware of Thermal Expansion

- You may need to protect your water heater from thermal expansion when you install a backflow prevention assembly at the water meter.
- Protection may be provided by the installation of a thermal expansion tank and a temperature relief valve.
- Contact a licensed plumber for assistance.

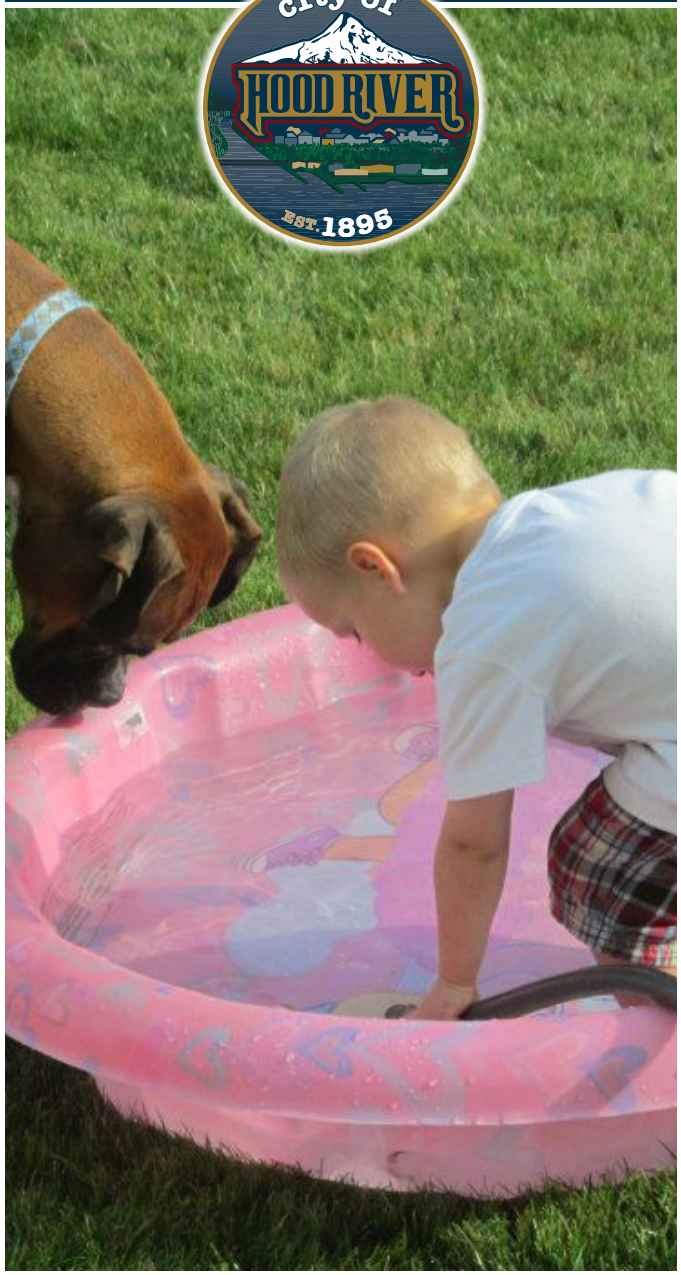
Did You Know?

- The Oregon Administrative Rules require backflow prevention assemblies to be installed on underground irrigation systems.
- Every park in the City of Hood River has at least one backflow prevention assembly.
- Backflow prevention assemblies use spring loaded check valves and rubber gaskets to help prevent water from flowing backwards.
- Backflow prevention assemblies and vacuum breakers are necessary to keep OUR public drinking water safe.
- Backflow prevention assemblies should be tested annually and after installation.
- A submerged garden hose is a very common cross connection.

CITY OF HOOD RIVER est. 1895

HOOD RIVER PUBLIC WORKS DEPARTMENT
1200 18th Street • Hood River, OR 97031
(541) 436-0040

How You Can Help Keep Your Water Safe With Backflow Prevention



Clean Water Is Essential To The Health And Well-being Of Our Community

What is Backflow?

Backflow is water flowing in the opposite of its intended direction. Backflow is especially concerning when potable (drinking) water is connected directly to non-potable (non-drinking) water.
This potentially dangerous yet common connection is called a **Cross Connection**.

A cross-connection is a point in a plumbing system where it is possible for a non-potable substance to come into contact with the potable drinking water supply. Most cross connections occur on the customers side of the water meter, within residential, commercial, or industrial plumbing systems.

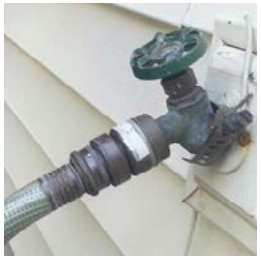
Customers are responsible for preventing contaminants from entering the public water system through their individual plumbing systems. Eliminate Cross Connection risks by installing, maintaining, and testing approved backflow assemblies and vacuum breakers.

Possible Cross Connection Risks

- Submerged hoses
- Lawn sprinkler systems
- Fire protection systems
- Swimming pools and hot tubs
- Water features and fountains
- Boilers
- Solar water heating systems
- Cooling towers
- Wells and auxiliary water supplies

Protection of our drinking water requires the efforts of everyone

Backflow Prevention Assemblies and Vacuum Breakers



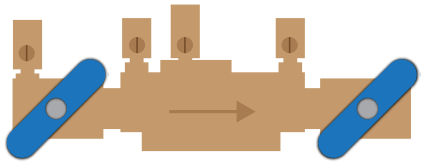
Hose Bib Vacuum Breaker (VB)

Common applications include: Hoses, swimming pools, wash tubs and utility sinks
- Easy to install
- No test requirements
- Limited backflow protection

VB

Double Check Backflow (DCVA)

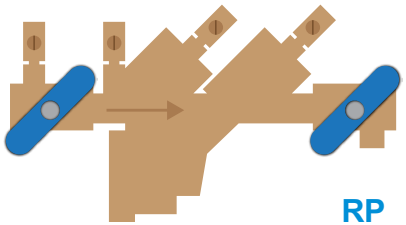
The most common residential assembly. Common applications include:
Lawn irrigation and fire sprinkler systems
- May be installed belowground
- Requires annual test
- Protects against many but not all hazardous conditions



DC

Reduced Pressure Principle Backflow (RP)

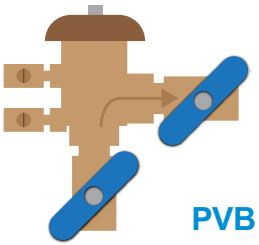
Common applications include: Swimming pool pump systems, chemical injection systems
- Must be installed above ground
- Requires annual test
- Highest protection
- Must protect from freezing



RP

Pressure Vacuum Breaker (PVB)

Common applications include: Lawn irrigation systems
- Must be installed minimum of 12” above the highest downstream piping
- More susceptible tofreezing than the DCVA
- Requires annual test
- Must protect from freezing



PVB