



# Backflow Prevention, Irrigation & You

## What Is Backflow & How Is My Irrigation System Involved?

Backflow is the undesired reversal of water flow, most often caused by pressure changes inside your home or in the pipes which deliver water to your home. **When backflow occurs, water inside your irrigation system can flow back into your drinking water.** Chemicals, bacteria or stagnant water can enter into your drinking water when garden hoses and irrigation systems are not properly protected. As a residential customer, you may not (generally) pose a risk to the drinking water supply, but you still need to make sure the water inside your home is safe for you and your family.



## How Can I Protect My Drinking Water?

Just like conserving water is important, you also want to protect the water you have. Anytime you irrigate using a sprinkler system, a drip system, or even a garden hose, backflow prevention measures need to be taken. Here are a few ways you can protect yourself:

- **Sprinkler Irrigation Systems:** Aside from fertilizers, pesticides and fungicides, which can enter sprinkler lines, irrigation systems are also a home for bacteria. Whether from soil or animal waste (from your family pet), bacteria can enter sprinkler systems when water drains into sprinkler heads. Plumbing code usually requires that a Pressure Vacuum Breaker (PVB) be installed, but sometimes people install systems without PVBs or remove the PVB because it can leak. Having a functioning PVB is critical to protecting water.
- **Drip Irrigation Systems:** There are a number of drip irrigation systems ranging from true “drip” systems to soaker hoses. Although the pressure in these systems is reduced, there is still a potential for backflow to occur. Often a check device can be purchased in the sprinkler aisle of your local store, which can help prevent backflow. These checks can be installed on the drip system just after the connection to the spigot or hose bibb. Another option is to protect the entire hose bibb by installing a vacuum breaker on it.
- **Garden Hoses & Hose Bibbs:** Garden hoses are one of the most often reported sources of backflow. When garden hoses are connected to hose bibbs they often have no backflow prevention. When the opposite end of the garden hose is connected to hand-held fertilizers or left laying in a puddle of mud, backflow of contaminants is possible. Installing a vacuum breaker (as shown below) can help prevent backflow from occurring.



**Always remember to winterize your irrigation system, including the maintenance and/ or removal of backflow prevention assemblies and devices.**

For more information, please go to [Boulderwater.net](http://Boulderwater.net) and look for Backflow Prevention under the Water Quality heading.

### Spring Backflow Irrigation Checklist:



- Vacuum Breakers installed on hose bibbs
- PVB has been installed, tested & repaired
- Garden hoses are put away after use
- Drip systems have check valves

### Winter Backflow Irrigation Checklist:



- Vacuum Breakers drained or removed
- PVB removed or protected from freezing
- Garden hoses removed from hose bibbs
- Drip system removed from hose bibbs