#### WHAT IS BACKFLOW?

Drinking water flows from the City's sources through pressurized water pipes and then to your tap. Typically, water moves in one direction through the pipes, towards your tap, however, under certain circumstances water can be forced backwards through the water pipes sucking in debris or contaminants. This is called backflow.



Anytime your drinking water supply has an opportunity to come in contact with a harmful substance, a cross connection exists. Backflow is especially of concern when clean water is connected directly to nonpotable water. For example, attaching a fertilizer sprayer to a

garden hose or even placing your hose in a soap bucket for car washing creates a cross connection and possible health hazard.

#### THERMAL EXPANSION



### **How to protect** against Thermal **Expansion**

The City of Bend recommends the installation of a thermal expansion tank on the cold water inlet at the top of the hot water tank along with a T&P valve, usually located on the side or top of the

tank. A homeowner may install their own thermal expansion tank, however we always recommend seeking the advice and expertise of a licenced plumber.

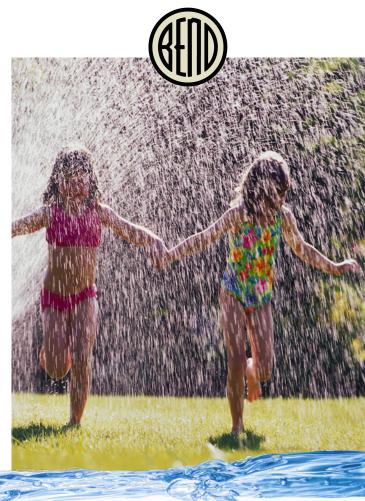


#### UTILITY DEPARTMENT

City of Bend 62975 Boyd Acres Rd., Bend, OR 97701 541-317-3000, Ext. 2 bendoregon.gov/crossconnection

# Safe Drinking Water **Our Priority**

Cross Connection and Backflow Testing



Possible cross connection risks:

- Submerged hoses
- Lawn sprinker systemsSwimming pools and hot tubs
- Water features and fountains
- · Boilers and HVAC systems
- Solar water heating systems

**Accommodation Information for People with Disabilities** 

To obtain this information in an alternate format such as Braille, large print or electronic formats please contact (541)317-3000, Ext. 2 or utilities@bendoregon.gov. What You Need to Know About **Cross Connection and Backflow Prevention** 

# SAFE DRINKING WATER PROGRAM

The Safe Drinking Water Program (Crossmonitors and enforces Connection), the rules and regulations surrounding a potential cross connection to the City of Bend public water system. The program adheres to the Oregon Administrative Rule (OAR) 333-061-070 and City of Bend Code (14.30.160), which requires approved backflow assemblies installed on the water line entering the property and additionally on irrigation systems. All assemblies are required to be maintained and pass annual testing by a certified backflow tester with documentation submitted to the City of Bend Utility Department.



The City of Bend Utility Department makes safe drinking water its highest priority. Our water service protects public health, fire protection, support of the economy, and the overall quality of life.

The water that reaches your home is of the highest quality and is safe, tested, and reliable. If contamination occurs, it usually is within the internal plumbing. Properly working backflow assemblies help prevent cross

# ANNUAL BACKFLOW TESTING

Backflow assemblies must be tested at the time of installation, annually after installation, after repairs and relocating. Testing in Oregon must be completed by an Oregon Health Authority certified backflow testers. For a list of active backflow testers in our area, visit bendoregon.gov/crossconnection.



### What to expect at your residence

Each City of Bend residential water meter is installed with a city-owned backflow assembly. These backflow assemblies are maintained and tested annually by a City of Bend contractor. Residential services without city-owned backflow assemblies are continually being upgraded to have city-owned and tested backflow assemblies.

Additionally, any property with an irrigation system is also required to have an additional backflow assembly attached to that specific line, which is also the property owner's responsibility to maintain and have tested annually.

# INSTALLATION AND REPAIRS

## Who can repair a backflow assembly?

(Remember to test after each repair)

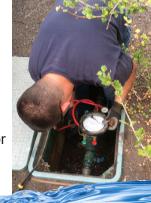
- Homeowner
- Plumber
- Landscape Contractor-with proper professional licensing on irrigation or water features only
- Anyone can repair stand-alone irrigation (non-potable piping does not fall within the scope of plumbers work)
- Employees of employers can repair assemblies within their premises (since legislation in 2006).

## What is a repair?

- Repair is accessing the internal components while the assembly body remains inline to clean, flush or replace parts
- · Replacing an assembly or moving

and reinstalling an assembly would not be considered as a "repair"

 Always check with the Permit Center when installing or performing major repairs on your system.



contamination and the backflow of water. The liability of cleaning contaminated water pipes is a health safety issue and costly.

### How much do tests cost?

 Backflow testers are independent contractors and their prices vary. We suggest calling several testers to compare cost and ask for references.



 Violations can have serious health consequences to you, your family and the entire City of Bend water system. Therefore, City code allows the water service to be shut off at properties that habitually disregard City code or cause an immediate health risk.