The City of Redmond’s Cross Connection Control Program has been established to comply with the Cross Connection Control requirements specified by, the State of Washington’s Administrative Code (WAC 246-290-490) to protect our potable water supply from contamination via cross connections.

**WAC 246-290-490**

(e) Under chapter 19.27 RCW, the responsibility for cross-connection control within the consumer’s water system., i.e. within the property lines of the consumer’s premises, lies with the authority having jurisdiction.

The consumer has the responsibility of preventing pollutants and contaminants from entering his/her potable water system or the public potable water system. This responsibility starts at the point of delivery from the public potable water system and includes all of his/her water system. The consumer, at his/her own expense, shall install, operate, test and maintain approved backflow prevention assemblies including maintaining accurate records of tests and repairs made to backflow prevention assemblies and provide the administrative authority having jurisdiction with copies of such records. Following any repair, overhaul, re-piping or relocation of an assembly the consumer shall have it tested to insure that it is in good operating condition and will prevent backflow. Tests, maintenance and repairs of backflow prevention assemblies shall be made by a certified backflow prevention assembly tester at least annually.

E-mail: backflowtests@redmond.gov
Why is a backflow preventer required on lawn sprinkler and irrigation systems?

Lawn sprinklers and irrigation systems can backflow contaminated water into your drinking water. In order to prevent this, the Universal Plumbing Code requires that these systems be protected with a backflow preventer:

**Universal Plumbing Code**

**603.5.6 Protection from Lawn Sprinklers and Irrigation Systems.**

Potable water supplies to systems having no pumps or connections for pumping equipment, and no chemical injection or provisions for chemical injection, shall be protected from backflow by installing a Double Check Valve Assembly (DC).

**603.5.6.1 Systems with Pumps**

Where sprinkler and irrigation systems have pumps, connections for pumping equipment, or auxiliary air tanks, or are otherwise capable of creating backpressure, the potable water supply shall be protected by a Reduced-pressure Principle prevention assembly (RP).

**603.5.6.3 Systems with Chemical Injectors**

Where systems include a chemical injector or provisions for chemical injection, the potable water supply shall be protected by a Reduced pressure Principle prevention assembly (RP).

**603.5.6.7 Outlets with Hose Attachments**

Potable water outlets with hose attachments, other than water heater drains, boiler drains, and clothes washer connections, shall be protected by a non-removable hose bibb type backflow preventer, a nonremovable hose bibb type vacuum breaker, or by an atmospheric vacuum breaker.

Backflow events do occur. In the United States, there are documented cases of illness, injury and even death resulting from backflow of hazardous substances. Recognizing this risk, the Washington State Department of Health (Department) require public water systems to be protected from cross connections and backflow contamination.

Your lawn irrigation system is considered a hazardous cross connection so it requires protection from backflow. A backflow preventer is an assembly that prevents water from flowing in the reverse direction.

**What kind of backflow preventer is used on lawn sprinkler and irrigation systems?**

One type commonly found here in the City of Redmond is a Double-Check Valve Assembly (DCVA)

The Double Check Valve Assembly (DCVA) consists of two independently acting, spring loaded check valves, two resilient seated shut-off valves and four tests cocks completed the assembly. If at any time the pressure downstream of the assembly increases above the supply pressure, both check valves will close to prevent any backflow from occurring.