

## Backflow Prevention Resources

Addressing backflow prevention requirements requires technical expertise and familiarity with State and local codes and regulations. It is recommended that you consult a professional with training in backflow prevention as you design your irrigation system. You will find these professionals listed in the telephone directory under plumbers, contractors, or landscapers.

Tucson Water Cross-connection Control Specialists are also available to assist you.

### Tucson Water website:

[www.tucsonaz.gov/water/backflow](http://www.tucsonaz.gov/water/backflow)

The Tucson Water website includes:

- contact information for Tucson Water Cross-connection Control Specialists
- a list of backflow testers certified to test in the Tucson Water Service Area
- standard details for installation of backflow prevention assemblies
- frequently asked questions about backflow prevention
- tips for protecting your backflow prevention assembly



For more information call  
Backflow Prevention at (520) 791-2650



For accommodations; materials in accessible formats; foreign language interpreters; and/or materials in a language other than English, please contact Tucson Water at (520) 791-4331 or (520) 791-2639 for TDD.

## Irrigation Systems & Backflow Prevention Requirements



# Irrigation Systems & Backflow Prevention Requirements

Irrigation systems have the potential for contaminants or pollutants to be introduced into the potable supply through submerged sprinkler heads, injectors, or aspirators. Therefore, sites with irrigation systems are required by the Arizona Department of Environmental Quality (ADEQ), the Tucson Code, and the Uniform Plumbing Code to have backflow prevention devices installed to protect the public water supply and the potable water supply on the customer's site.

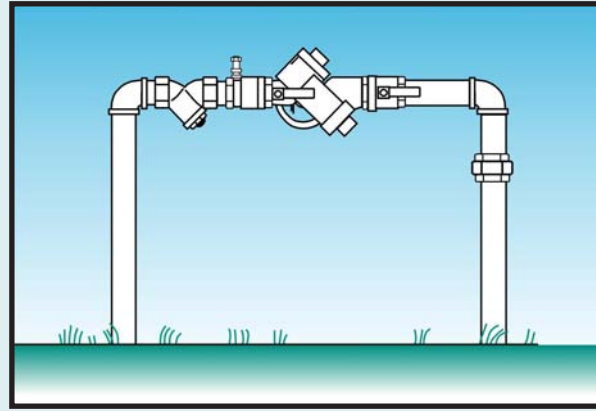
Different types of on-site uses have different backflow prevention requirements as described below.

## Commercial & Multi-family Irrigation Systems

Whether or not an irrigation system exists, all commercial sites are required by ADEQ and the Tucson Code to have a reduced pressure backflow assembly (RPA) installed on each potable service connection (service protection). The RPA protects the public water system from potential contamination originating in the irrigation system.

**NOTE:** When an RPA is installed on the potable water service, additional plumbing adjustments may be required to prevent thermal expansion damage to internal plumbing.

The Uniform Plumbing Code requires all commercial sites with irrigation systems to also have an atmospheric vacuum breaker (AVB) or pressure vacuum breaker (PVB) installed on the private irrigation system. These devices protect the on-site drinking water supply from contamination that may originate in the irrigation system.



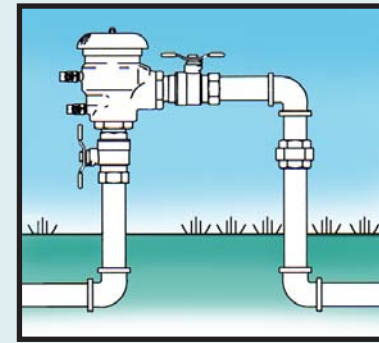
*Reduced pressure backflow prevention assembly required for service protection*

## Single Family Irrigation Systems

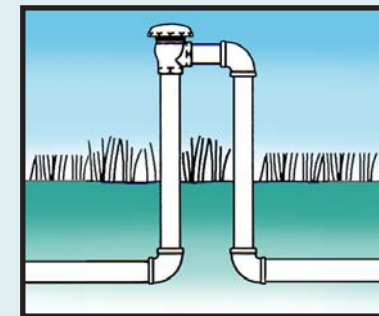
Single family homes are exempt from service protection backflow prevention (installation of an RPA) requirements unless:

- the site has an irrigation meter, in addition to the potable water meter
- the irrigation system is designed for chemigation, the injection of chemical pesticides and fertilizers through the irrigation system
- the site has a rain water or gray water system that includes any kind of pump
- the site has Tucson Water reclaimed water service and Tucson Water potable water service or a private well that is providing potable water

The Uniform Plumbing Code requires all single family residential irrigation systems to also have an atmospheric vacuum breaker (AVB) or pressure vacuum breaker (PVB) installed on the private irrigation system. These devices protect the on-site drinking water supply from contamination that may originate in the irrigation system.



*Pressure vacuum breaker used for the protection of internal plumbing*



*Atmospheric vacuum breaker used for the protection of internal plumbing*