

BACKFLOW PREVENTION – 1 0 1

WSA strives to protect the health and safety of Douglas County residents, and a backflow preventer is an important safety component in the water distribution system. According to the State of Georgia Rules for Safe Drinking Water, which became effective in 1977, all users connected directly to a public water system must have a backflow prevention device. This backflow device must be installed and should be maintained by the user. In most cases, this is installed at the time of the service line installation.

What is backflow?

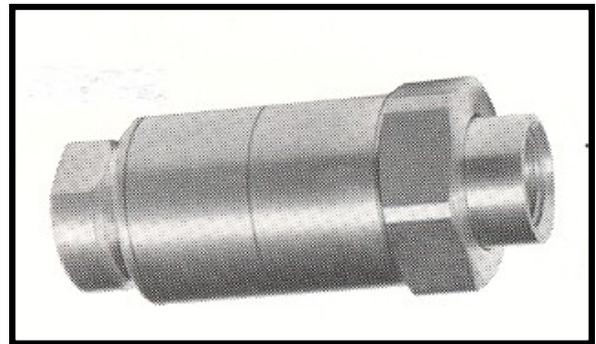
Backflow is when water flows backwards from a private source into the public water supply network. This is caused when water pressure drops in the public water distribution system causing water to flow from a residential or commercial premises back into the public water supply network.

Why is this backflow into the public water system dangerous?

Untreated water, contaminated water or chemicals which flow back into the public water supply can contaminate the water that people across the county are using to drink, cook, and bathe. Documented cases of backflow contamination in the United States have resulted in serious injuries and even death. There are two ways for water to get back into the public water supply: siphonage and back pressure.

What causes a backflow by siphonage?

It may occur due to a loss of pressure in the public water distribution system during a high withdrawal of water for fire protection, a water main break, or a shutdown of a main for repair. For example, if



a hose bib was open at a private home and a flowing hose was submerged in a bucket of water containing car-cleaning soap, the non-potable water in the bucket could be siphoned into the house plumbing then back into the public water system, if a backflow preventer was not installed.

What causes a backflow by back pressure?

It may be created when a source of pressure, such as a pump, creates a pressure greater than that supplied from the public distribution system. If a pump supplied from a non-potable source, such as a landscape pond, were accidentally connected to the plumbing system, the non-potable water could be pumped into the public water supply, if a backflow preventer was not installed.