

Water normally flows in one direction...



But under certain conditions, **water can flow in the reverse direction.**

Backsiphonage can occur when high volumes of water are used for **fire protection** or during a **water main break**; or when a **power outage** occurs and the water pressure drops in the water system.

Backpressure can occur when a **pump**, perhaps from a landscape pond or a private well, overpowers the water pressure; or when the pressure in **elevated or heated water pipes** becomes greater than the water system pressure.

WHY DOES IT MATTER? Because each of these events means there is a chance that **potentially unsafe water** is being pushed or pulled **back into the water system** and into people's homes.

Each of these everyday activities has the potential to put unsafe water back into your water system.



IRRIGATION



FIRE SPRINKLER SYSTEMS



HOSES IN BUCKETS, OR TUBS, OR PONDS



WHAT IS YOUR WATER PROVIDER DOING? Surfside has adopted a **CROSS-CONNECTION CONTROL PROGRAM**. The program actively looks for and reduces CROSS-CONNECTIONS where unsafe water can flow back into the water system. All members have had a double-check valve installed with their meter, this provides SOME protection. Some members have voluntarily removed hazards. Thank you! Other members are required to install a device that prevents backflow from their property. All members are being asked to be aware of the hazards and take steps to protect themselves. NOTE: A double check valve and a backflow assembly installed at the meter protects the public water system, it does not protect the member's personal plumbing system.

Thermal Expansion Danger Water expands as its temperature rises. The extra volume must go somewhere. If not, the heated water creates more pressure.

This increase in pressure sometimes causes water to flow back into the public water system. However, **when a check valve, pressure-reducing valve or backflow preventer is installed a "closed system" is created.** The thermostat of the water heater normally maintains the water temperature at about 130 degrees. However, if the thermostat fails, the temperature of the water will continue to increase. If the water temperature increases to more than 212 degrees, the water within the tank becomes "superheated". When a faucet is opened, this superheated water instantly turns to steam. As the pressure within the tank continues to build up, the tank could explode. **What the Homeowner Should Do** The homeowner should check to see that an **expansion tank and temperature and pressure relief valve (T & P Valve)** are in place. The T & P Valve should be periodically inspected to ensure that it is properly operating. The above work can best be done by a licensed plumber.

