As temperatures hang below freezing at night, make certain your water pipes have been insulated and protected. When water freezes, it expands and puts pressure on the pipes that contain it. If pressure builds enough, pipes can burst. Exposed pipes are at the greatest risk, with freezing most likely to occur at outdoor hose bibs, in supply lines running through unheated interior spaces, or in under-insulated pipes run along exterior walls.

Start winterizing your plumbing system by securing outside fixtures. Remove any hoses attached to an outdoor bib. Drain the hose and store it away for the winter. Keeping hoses out of the elements will prolong their lives. Once hoses have been removed, close the inside valves that supply the outside hose bibs, then open the outside taps to allow them to drain. Keep the outside valve open, so that any remaining water can expand without breaking the pipe.

Any pipes running through unheated interior spaces or along exterior walls should also be protected during the winter. Start by insulating both hot and cold water pipes. Not only will this help prevent freezing, it will also help in reducing the cost of heating water, and will minimize the amount of water wasted while waiting for hot water to come out of the spigot.

Pipes can be insulated with products made specifically for that purpose. These products include insulated sleeves and heat tape. Insulated sleeves should be tightly butted up to one another, and taped to secure. When installing heat tape, be sure to follow manufacturer recommendations, as they can be a fire hazard if not properly installed.

If you are in a pinch to insulate your pipes and do not have access to a product made specifically for the purpose, use newspaper. If you have a protected space that is only occasionally subjected to freezing temperatures, try wrapping newspaper, a ¼" thick, around the pipes to keep them from freezing.

Additional precautionary measures, include keeping garages, basements, or crawlspaces closed tightly, and insulating them to maintain above freezing temperatures within these spaces.

In the evenings, open the cabinet doors below bathroom and kitchen sinks. This will allow warm air to circulate around the plumbing and prevent freezing pipes.

If temperatures are expected to dip quite low, do not turn down your thermostat at night. By maintaining a slightly higher than normal nighttime temperature in the house, you may prevent the freezing of pipes. If you will be out of the house for an extended period of time, do not turn off the heat, as this could cause pipe freezing. Simply turn the temperature down to no lower than 55 degrees.

Once all other efforts have be undertaken, if you still have pipes with a tendency to freeze, allow cold water to trickle from faucets that are served by those pipes.

Even a trickle of water will prevent pipes from freezing. This step should only be taken as a last resort, and only until a permanent solution can be devised, so that it does not become a wasteful use of water.

Sometimes despite best efforts, pipes will freeze. If you turn on your water faucet and nothing comes out, check first to see that the water valve is on. If it is, you may have a frozen pipe. Leave the faucet on, and look for the frozen section of pipe. Apply heat to this section using a hairdryer until water pressure is restored to the faucet. Use caution when defrosting pipes. You might hear people recommend the use of an open flame device for thawing the pipes, but this should be avoided, as they present a serious fire danger when used indoors. Additionally, they can heat the water to boiling and cause pipes to explode, or expose you to carbon monoxide, which can be lethal.

If you do not feel comfortable installing any insulation devices or thawing a frozen water line, contact a licensed plumber or contractor for assistance. While the plumber or contractor is in your home, have him check all your plumbing fixtures for leaks, and determine if water saving devices could be added to save you money and help conserve water.

Homes built prior to 1992, that have not had plumbing fixture upgrades, could benefit from water saving retrofit devices. To see if you qualify for free kitchen and bathroom aerators, low-flow showerheads and toilet displacement bags, city water users should contact Utility Billing at City Hall, county well users should contact the Albemarle County Department of Engineering and Public Works at 296-5861, and Albemarle County Service Authority customers should call 977-4511.