WHEN MOTHER NATURE GIVES US THE COLD SHOULDER

If you've moved here from the Northern Tundra, most of this information is familiar – but not as complex as you're accustomed to. If you've moved from the tropical southern reaches of Florida, you have more to do than you've done.

We've all just experienced an uncharacteristic freeze in our sheltered Central Florida environment. Quite a few of our neighbors have blown back-flow valves and cracked pipes.

Mother Nature just isn't very nice. What ever did we do to deserve this? What has happened to "Global Warming"?

We need to defend ourselves! And our homes! Here's what to do.

(There are no warrantees here. If you do all this stuff and still get broken pipes, well, Mother Nature has taken a personal interest in you and your home. Sorry.)

There are quite a few water pipe areas in and around our homes that need defense against freezing. They include:

- Hose bibs and valves
- Anti-siphon valves in our sprinkler systems
- Externally exposed pipes feeding water to softeners
- Externally mounted "instant" water heaters

There may be more, but that'll do for starters. Here's what you can do.

HOSE BIBS AND VALVES

The risk here is that the pipes feeding the valve break inside the block wall. The risk is lower on walls that connect to heated living area, and higher on walls outside the unheated garage. This does NOT, however, guarantee that pipes won't break in any walls if they get cold.

First, it is extremely important to disconnect the hose from the valve. If the hose has a nozzle on it water remains in the hose and just makes things worse. In addition, there is a small button at the end of the faucet. You should push on the button to drain excess water from the faucet.

Then the next best thing you can do is to cover the valve with insulation materials. You can buy commercial products to cap the valves during freezes, or wrap them with some newspaper and a towel. Either will probably protect the valve against freezing.

Probably, not certainly.

Unfortunately, if the pipes break the fix can involve breaking into the concrete block wall and replacing broken pipe. Don't short-cut this insulation – it is important.

ANTI-SIPHON (BACKFLOW) VALVES

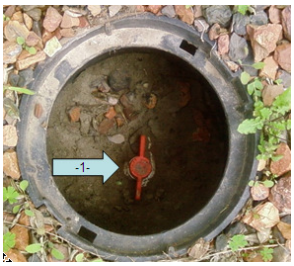
These things can crack open if the water inside them freezes. If they're filled with water and it gets really cold, the water will freeze inside the valve and POOF – the brass cannot deal with the water expansion and cracks. That'll be several hundred bucks please.

If a freeze is coming you need to drain the valve. Turns out that this is pretty easy.

There are six valves (look at the picture and arrows)

1. In the ground, feeding the stand-pipes coming out of the ground into the sprinkler system.
2. On the input side of the anti-siphon valve.
3. Above the input-side valve – a small petcock valve that drains water from the line.
4. The anti-siphon valve.
5. On the output side of the anti-siphon valve.
6. Just before the output-side valve, a small petcock valve that drains water from the anti-siphon valve.

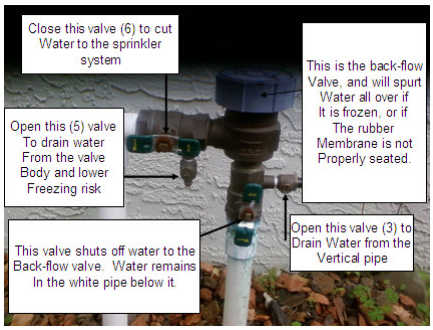
To drain the valve the best procedure is as follows:



1. Close the underground valve to shut off the water to the entire sprinkler system. (NOTE: If all the water to your house turns off you have shut the wrong valve. Go find the right one.)
2. Open the #3 petcock valve with a flat blade screwdriver by turning it ¼ turn, probably in either direction. This will result in a spurt of water shooting out of the pipe to relieve pressure in the system, but that will end quickly. Don't ask your wife to stand in front of the pipe, though.
3. Open the #6 petcock valve on the output side of the valve. This will drain slowly, for about 15-30 seconds to drain all the water out of the body of the pump.

If you've closed the valve underground, you can leave the other two flow valves open. You may want to insulate that valve in the ground by stuffing an old towel in the hole. That also applies to the main valve to the house which is usually under the closest hose bib to the main water valve.

If you've drained all the water out of the valve, there's nothing to freeze, so you're pretty safe. It still makes sense to wrap the pipes with a blanket, or a commercial insulation product, to keep the coldest of the air away from all the pipes.



There is still water in the plastic pipe rising from the ground to the anti-siphon valve, but Phil Hisey has assured us that OTOW has NEVER seen that pipe burst. When things have broken on these systems it has been the brass valve when water freezes inside the brass.

Once the freeze is gone you'll need to turn the water on again.

- Close the #3 petcock valve. This allows water to go up the pipe into the valve.
- When water flows out of the #6 valve close that valve and the system should be filled and active.

If the siphon-valve membrane (#4) doesn't seat well there'll be a bunch of water splashing out of the top of the siphon valve housing. If this happens, try turning off the #1 input valve and then turning it on again. The increase in water pressure should seat the valve.

If that doesn't work call a plumber.

EXTERNALLY EXPOSED PIPES

If you have any exposed pipes to get water to a water softener or a water heater, buy some insulation wrappers, wrap the pipes, then cover them with a blanket or towel during hard freezes. Do not cover the operating box on the units, especially the gas ones. Just cover the pipes. Covering the units may result in a fire.

EXTERNALLY MOUNTED WATER HEATERS… ET AL

Some of our neighbors have installed externally mounted "instant" water heaters. As you can imagine, exposure of very small brass pipes to very cold air doesn't work very well. It is important to also wrap the exposed pipe with a blanket or towel during hard freezes. Do not cover the operating box on the units, especially the gas ones. Just cover the pipes. Covering the units may result in a fire. If you

have these installed on the outside of your home, please contact the vendor for what to do in the case of freezing weather.