WINTERIZING YOUR SYSTEM

Every year, after the irrigation system is shut-off and before the first freeze, you should winterize your system. Even if you have drained some water out of the system, the remaining water can freeze, expand and crack the PVC piping (rigid, white pipe), usually from fitting to fitting. Freezing water left in your valves, meter and any backflow assembly will damage the internal components and could possibly crack the brass body.

The district uses a double valve irrigation delivery. The valve off the mainline is the district's valve and for emergency use only. It should be left open at all times (except during blow-out, see below). Every landowner should have their own shut-off valve with this one being their standard "on/off" valve and the one referred to below.

1. Shutting off system.
It is best to wait until the irrigation season is over, as the main pipeline or canal will drain itself and any water between your valve and the District's valve will drain back into the district's system. If you need to drain your irrigation lines before district shut-off, you will need to close your valve. Be sure to reopen it later, to keep water from collecting and freezing during the winter.

2. Take care of any automatic controls..
If you have an automatic system then you will need to "shut down" the controller (timer). Most controllers have a "rain-mode" which simply shuts off the signals to the valves. The controller continues to keep time, the programming information (start times, valve run times, etc,) isn't lost, and the clock continues to run. The only change is that the valves will not activate. An alternative to using the rain mode is simply to shut off the power to the controller. If you do, you'll need to reprogram the time and potentially all your other settings as well, in the spring.

3. Drain the system.
Now you need to remove the water from the pipes, meter and sprinklers so that it won't freeze and break. There are two main methods to drain your pipes: the manual drain method and the compressed air blow-out method.

Manual Drain Method
Use when manual valves are located at the end and low points of the irrigation piping. To drain, simply open all the manual drain valves. Don't forget to drain the filter and meter. If your sprinklers have check valves you'll need to pull up on the sprinklers to allow the water to drain out the bottom of the sprinkler body. You should leave all valves and drains open during the winter to allow any moisture to drain off and keep from expanding and freezing. You may want to insulate above-ground valves and meters or remove your meter and store during the winter.

"Blow Out" or Compressed Air Method
Extreme care must always be taken when blowing out the system with compressed air. Compressed air can cause serious injury, including serious eye injury, from flying debris. Always wear ANSI approved safety eye protection and do not stand over any irrigation components (pipes, sprinklers and valves) during air blow out. SERIOUS PERSONAL INJURY MAY RESULT IF YOU DO NOT PROCEED AS RECOMMENDED!

It is recommended that a qualified person perform this type of "Winterization" method. The blow out method utilizes an air compressor. The compressor can be rented at your local equipment rental yard. The compressor is attached to the mainline via a quick coupler, hose bib or other type connection. To start the "blow out", shut off your main valve and, with the compressor valve in the closed position, attach the air compressor hose to the fitting. Activate the station on the controller that is the zone or sprinklers highest in elevation and the furthest from the compressor. Close the backflow isolation valves. Then slowly open the valve on the compressor; this should gradually introduce air into the irrigation system. The blow out pressure should remain below the maximum operating pressure specification of the lowest pressure rated component on that zone and should NEVER exceed 80 PSI. Do this for each line on your system until they have all been drained.

4. Storing for Winter.
After the blow-out, open all drains and leave open for winter to keep moisture from collecting and freezing. You may want to insulate above-ground valves and meters or remove your meter and store during the winter.

5. Meters.
For those of you who have meters, they are your responsibility to care for including repair and maintenance. The most common failure is freezing during the winter. Please remove your meter, drain all water, let dry, then store for the winter in a dry place such as a shop or garage. Be sure to call your ending meter reading in to the office.