

# Winterizing Irrigation Systems

**Objective:** to provide an understanding of why and how to winterize an automatic irrigation system.

**Training Materials:** air compressor, irrigation system, operator manual for pump, backflow prevention device.

**Personal Protective Equipment:** work boots, hard hat, gloves, long pants.

**Lesson:** *In our climate, irrigation systems must be winterized to prevent damage caused by water freezing in the pipes, valves and heads. Taking care in the late fall to shut the system down properly will avoid expensive repairs the following spring.*

The key factor in winterization is to remove all the water from the system. The most effective way to do this is to blow it out with an air compressor.

1. Turn off the water supply with the master shut-off valve. Make sure the backflow prevention device is isolated, so you are not blowing compressed air through it. The backflow prevention device should be winterized in accordance with the manufacturer's recommendations. Generally it is best to leave the ball or valve on the backflow preventer half-open. Wire tie the shut-off valve in an off position so it is not tampered with throughout the winter.

2. Turn off the irrigation controller. Do not unplug it for the winter.

3. Manually open the highest, or furthest valve from the point of connection, and leave it open throughout this process so the mainline does not become overcharged.

4. Using an air compressor that is sized according to the largest pipeline in the irrigation system, manually attach the air hose to the irrigation system and slowly introduce air to the system. 75 – 90 psi is ideal pressure.

5. It is best to manually open each control valves in sequence so you know each zone is clear of water. Open the next valve first before closing the valve that has just been blown clear of water.

6. When only a fine mist is coming from the system, it is free of water. Disconnect the compressor air hose and close any manually opened valves.

7. Remove the top of the rain sensor and store it inside the controller cabinet until the following spring.

8. If a pump is connected to the system it should be winterized according to manufacturer's recommendations. Pumps should be stored where they will not freeze over the winter.

- *In our climate, irrigation systems must be winterized in the late fall to prevent damage caused by water freezing in the pipes, valves and heads.*

- *Do not stand over irrigation heads while the system is pressurized with air.*

