Public Service Reminder

Protection of your Backflow Preventer

Regarding backflow preventers installed on irrigation systems, the following preventative measures should be considered to ensure the backflow preventer is protected.

The Backflow preventer is the customer's property and it is their responsibility to protect the Backflow Preventer from freezing, accidental damage, vandalism and theft etc. Below are some suggestions to assist you in protecting your Backflow Preventer.

Accidental damage from machinery, livestock, vandalism and theft

In order to prevent accidental damage to exposed backflow preventers, consider constructing an adequate enclosure around it to secure and to prevent any damage that might occur to this device. This advice is not intended to be an order to comply, but rather a suggestion to protect the backflow preventer from accidental damage, vandalism or theft. If constructing an enclosure, be sure to take the time to insulate the enclosure to protect the assembly from the winter elements as well.

Winterizing testable backflow assemblies

If your backflow preventer is exposed to freezing temperatures, the best way to winterize it is to drain it and then remove it from the line, and store in a secure area.

Blowing out or draining irrigation systems.

a) **Compressed Air Blow Out:** DO NOT blow high pressure air through a backflow preventer as this could damage the assembly. Close the outlet or downstream ball valve of the backflow preventer. Then connect the blow out arrangement after the backflow preventer and blow out the irrigation system.

b) **Gravity Drain:** Ensure the two main ball valves on the backflow preventer are open. Then open all four test cocks. This should allow air in to drain system.

Follow directions below to remove or drain the backflow assembly.

Directions for removal (Recommended):

1. Turn off the main isolation valve on the irrigation system that is located ahead of the backflow preventer (not the two shut off valves on the backflow preventer, they are for testing and repair only).

2. Open the four test cocks on the assembly, if present, to relieve pressure. Close the four test cocks once the water pressure has been relieved.
3. Unthread the two bolts that are connecting the backflow preventer to the meter. Retain the gasket and store with backflow device.
4. Unthread the backflow preventer using the union / flange located ahead of the incoming shut off valve on the backflow preventer and after the main isolation valve that was turned off at step 1. Please use caution as the device is quite heavy.
5. Partially open all shut off valves and test cocks on the assembly and leave in that position. Drain the backflow assembly and store in a location to prevent any damage during storage.

Direction for draining while in line for winter:

1. After the irrigation system has been turned off and drained for the season, ensure the four test ports on the assembly are in the partially closed / partially open position.
2. Ensure both shut-off valves on the backflow assembly are partially open to prevent damage or splitting.
3. If using low pressure air, use only 12 psi [80 kPa] or less to blow carefully though the valve.
4. Once all drainage has been completed, the assembly can be wrapped in adequate insulating material.
5. Insulation applied directly to a backflow preventer must be removable to allow for testing and maintenance.
6. The best protection from the winter elements would be to remove from the line, construct an insulated enclosure, or place in an insulated underground pit.

We offer this information to assist in the protection of your backflow preventers and prevent any damages that might occur as a result of the many different situations or weather related issues that might occur.

If you have any questions or concerns in regards to the protection of the backflow assemblies, please contact Greater Vernon Water – Regional District of North Okanagan at 250 550-3654, at your convenience.