

AUTOMATIC IRRIGATION SYSTEMS

Many automatic irrigation systems are installed to provide convenience to the homeowner. Automatic systems can provide peace of mind by allowing you to water your landscape while you are away on vacation or out of town. Yet many homeowners install irrigation systems to conserve water, only to find out that their water bills have doubled or tripled since their systems were installed!

Will your automatic irrigation system conserve water?

Only if the following conditions are met:

The system must be properly designed for maximum water efficiency, and the designer should ensure adequate system coverage.

The system must be properly installed according to the designer's standards.

The system must have a distribution uniformity (DU) of 70% or better. The distribution uniformity is a measure of how well the hardware in the ground applies water to the landscape. The DU percentage can be determined during an irrigation audit using catchment cups.



Michael Laurie conducts an irrigation audit. Photo: Janet Sailer



Point sprinkler heads away from buildings!
Photo provided by PNWS-AWWA

All leaks in sprinkler heads and lines must be repaired promptly and regularly. Homeowners should turn on their systems once a month and inspect all heads and lines for leaks. One leak can drive up your water bill in a hurry!

All sprinkler heads must be properly aligned and pointing in the right direction, towards the landscape material. Heads should not water pavement areas or buildings, where damage to structures can occur.

The system must be managed and operated to maintain a healthy and functional landscape with the minimum required amount of water. Homeowners should avoid irrigation schedules that include watering every day, watering during the heat of the day, or excessive run times.



Howard Stenn sets an irrigation controller. Proper scheduling can save you money each summer! Photo: Janet Sailer

How can I tell if my irrigation system is leaking?

Here are some signs that your irrigation system might be leaking. Be sure to repair all links soon after they are discovered to help you save water and money!



Leaks can be costly! Repair leaks promptly.
Photo: Janet Sailer

- **You discover broken sprinkler heads on your lawn.** Sprinkler heads can be damaged by lawn mowers or vandalism. The next time your system runs you will lose a great deal of water from the broken heads.
- **Your irrigation system has a weak output and you observe that you are not getting coverage from sprinkler head to sprinkler head.** Fixing a leak will make your system operate more effectively.
- **You notice brown spots on your lawn.** This may be occurring because you are not getting adequate coverage due to a leak in a sprinkler head or a water line.
- **The lowest sprinkler head in your system leaks constantly long after the system has turned off.** Some low head drainage occurs after your system has run, but you should not observe an ongoing problem. You can minimize low head drainage by installing check valves in your sprinkler heads and lines.
- **Your water meter has a continual slow spin.** If you have ruled out all possible leaks inside your home (such as toilet or faucet leaks) a slow spin may be due to a leak in your irrigation system.
- **You observe wet or soggy spots in your lawn.** This could be due to an underground break in your irrigation line. Sometimes the leak can be large enough to cause the turf to “float” on the surface. If you have ruled out surface water drainage issues, a leak could be your problem.
- **Your meter or valve boxes are continually filled with water.** Again, if drainage issues have been ruled out, a leak could be the issue at hand!
- **You have higher water bills than normal during the summer.** First, be sure that you are not overwatering your landscape by setting your controller to run the system too long or too often! If you notice that your bills are considerably higher than usual, you may want to do some leak detection.



Check your sprinklers if you notice anything out of the ordinary!
Photo provided by PNWS-AWWA

For more information about irrigation, visit the Irrigation Association website at www.irrigation.org.

Information in this fact sheet is provided by the Sammamish Plateau Water and Sewer District. Please call (425) 392-6256 for more information.