# PREVENT LEAKS AND SAVE MONEY BY MAINTAINING IRRIGATION SYSTEMS

Irrigation systems help us control the timing, volume, and duration of water applied to our landscapes. When these systems are designed and maintained properly, they are key to creating beautiful, water-efficient, and easily-maintained landscapes.

When planning an irrigation system, important design requirements include:

- "Head-to-head" coverage for spray irrigation
- Using common irrigation zones/valves/circuits for plants with similar watering needs
- Placing emitters of the same type on the same irrigation zone (high or low volume, same manufacturer, same distribution rate)
- Situating heads two feet away from adjacent hardscapes to prevent run-off

Irrigation systems are designed to save time and money, as they operate automatically. However, they cannot maintain themselves! Regular monitoring and inspecting are key, since irrigation breaks are among the top three causes of water leaks. Here are some maintenance guidelines to keep in mind.

1. **Monitor your water bills and meter, and create a water budget**. These are the feedback tools that tell you if you're on track with efficient water use, or have leaks. A water budget requires you to know your plants' water needs for specific months of the year as well as the unique features of your landscape, such as sloped or shaded areas.
2. **Inspect your system while irrigation is running**. Do this at least monthly. Read your water meter before and after one complete cycle has run so you'll know how much water you're using on your landscape, and have a baseline of typical water usage.

   As you walk the landscape while irrigation is on, look for overspray onto hardscapes and other sources of runoff, broken heads or leaking seals, obstructed or misdirected heads, and dying or drowning plants. Adjust or replace faulty heads and consider the new efficient rotary style heads.

   Constant leaks can be occurring before each valve, while intermittent leaks can be happening only when the system is running and a leaking valve is activated.
3. **Know how to use your irrigation controller and consider purchasing a "smart" one** that automatically adjusts for recent rainfall and time of year. Some can be controlled and monitored from your smartphone. Also understand what your controller will do if there is a power outage - some revert back to basic factory settings that you may not want.
4. **Create a map of your yard** that indicates where each irrigation zone is located and the valve number that corresponds to that area. You may want to put that number on the actual valve, which can save lots of time when troubleshooting problems.
5. **Regulating and monitoring incoming pressure** is also important to prevent leaks from popping emitters and couplings, as well as misting of spray heads. If you live in a high-pressure area, you may need a regulator installed, adjusted, or replaced. Learn how to take static and active pressures in your system.

**Remember, it's a fact that most people overwater their landscaping**. If you see moss, mushrooms, or overgrowth, this may indicate that you have a leak or are overwatering.

**Mulching helps to hold moisture in the landscape and prevent erosion on slopes**.

**Irrigate when the sun is down**, but inspect your system when the sun is up.

**Many people do not adjust their irrigation schedule with the four seasons**. The old adage of "set it and forget it" does not work and can cost you hundreds of dollars in unnecessary leaks and wasted water.