

How To Maintain Your Irrigation System

- Turn your system on in the daytime so you can determine if it is operating properly.
- Check for broken and misaligned sprinkler heads. These can easily be replaced or adjusted. Check with your local lawn and garden store or your irrigation maintenance contractor for specific repair instructions.
- Make sure any pop-up sprinkler heads rise far enough to avoid spraying directly into the grass and disturbing the overall spray pattern. Pop-up heads can be raised in the ground if they have settled, or moved if there is a permanent obstruction, such as a bush, in the way. If necessary, new pop-up heads may be purchased that rise higher than the existing ones.
- Replace any back-up battery in your irrigation controller so your system will maintain its memory in the event of a power failure.
- Clogged heads often can be remedied by cleaning the in-line screen designed to block large particles from reaching the nozzle. Check with your local professional or supply store for specific cleaning instructions.
- Repair any leaky valves or pipes in a timely manner.
- When installing an irrigation system and landscape, keep plants with similar water requirements within the same irrigation system zone. Mixing plants with different water requirements will cause some to be watered too much while others will not be watered enough.
- Use sprinklers that emit large drops of water to minimize evaporation or drifting of water where you don't want it.

Proper Operation of an Irrigation System

- Irrigate only in the late evening, night or early morning hours, generally between 6pm and 10am. Watering in the heat of the day is very inefficient. Much of the water is lost to evaporation before it hits the ground. Early morning is often the best time to irrigate, as winds are generally lower then as well.
- Don't water when the winds are high. High winds not only increase evaporation, but the water rarely ends up where it would do your landscape any good.
- Apply water only to landscaped surfaces. Adjust your sprinkler heads so that water is not applied to hard surfaces such as pavement or sidewalk areas. Sprinkler heads are available in a wide range of spray patterns and coverage areas.
- If the irrigated area becomes saturated and water pools or runs off into the street, you are applying too much water at one time. Sloping landscapes or clay soils can make this problem worse. Consider more frequent, shorter-duration irrigation cycles that will allow the water to be absorbed.

- Apply only the amount of water needed due to weather conditions. Irrigation requirements are not constant throughout the season. Requirements begin low and increase to a maximum before returning to lower levels. If you apply at the same rate for the whole season, you are probably applying too much water most of the time. Adjust your controller at least monthly to reflect changes in weather conditions. ET (evapotranspiration) is the amount of water needed for healthy plants due to weather conditions. ET information and measurements can be obtained at www.coloradoet.org.
- If you have an irrigation controller that has the capability of adjusting irrigation on a percentage basis, set the schedule for the water needed in July (see "Scheduling Your Irrigation Timer/Controller") and use the following monthly percentages:

April 46%, May 64%, June 90%, July 100%, August 85%, September 57%, October 42%

- Keep grass height to 3". Increasing grass height results in increased root growth. The longer the roots, the more deep water is available to the plants and the easier plants will adapt to lower water and high heat conditions.
- For a more precise irrigation scheduling tool that uses your own irrigation system to develop a watering schedule, refer to the City of Westminster fact sheet *How to design a schedule for your irrigation timer*.

Irrigation System Options

- Consider installing a new irrigation controller or accessory that offers more flexibility. Features may
 include controllers that automatically adjust watering frequency for local weather conditions, or water
 budget adjustments that allow you to adjust the amount of water applied without complicated
 programming changes. Soil moisture sensors will only allow the system to operate according to the
 actual soil moisture levels, while rain sensors will not allow your system to operate if recent sufficient
 rainfall has occurred. In certain situations, spray heads may be replaced with drip emitters or soaker
 hoses designed to water only the plants roots.
- New types of sprinkler nozzles continue to be developed which apply water evenly and consistently. New watering methods such as "cycle and soak" where water is applied in multiple short cycles instead of one long cycle can save water while minimizing runoff.
- Proper soil preparation is key to minimizing water requirements and ensuring plant health. Adding organic matter when installing a new planting area or in existing beds will often help alleviate the problems associated with the clay soils common to this area.
- For more information on irrigation systems, plants, Xeriscape, lawns and many other related topics, visit www.ext.colostate.edu/ptlk (sponsored by the extension service of Colorado State University).