

## Getting Started

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Whether you're installing a new landscape or trying to modify the one you have, you've probably found that there are many decisions to make.

Being an informed consumer can be helpful in evaluating options as you embark on a landscaping project. A poorly designed sprinkler system will frustrate the best of efforts toward a healthy landscape and water efficiency. Gain a basic understanding of irrigation design, rather than putting your entire trust in a salesperson or contractor. Your knowledge will help them provide you with the quality product you desire.

Though cost will likely be a factor, remember that what you install today will probably remain there for decades, so plan with long-term function, maintenance and water demand in mind. If you are considering hiring a contractor or simply someone to help you with your design, the following websites provide good consumer tips:

The Oregon Landscape Contractors Board:  
**(503) 967-6291** or [lcb.state.or.us](http://lcb.state.or.us)

Irrigation Association:  
[irrigation.org](http://irrigation.org)

## FREE Sprinkler Checkup

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If you are a Medford Water Commission Customer who would like to understand your sprinkler system better and maintain a healthy landscape, call us to schedule a free sprinkler checkup. With the checkup, you'll receive a complete walk-through of your existing sprinkler system, a written report, and a sample watering schedule.

**Schedule Now: 541-774-2436**

## ET TO THE RESCUE

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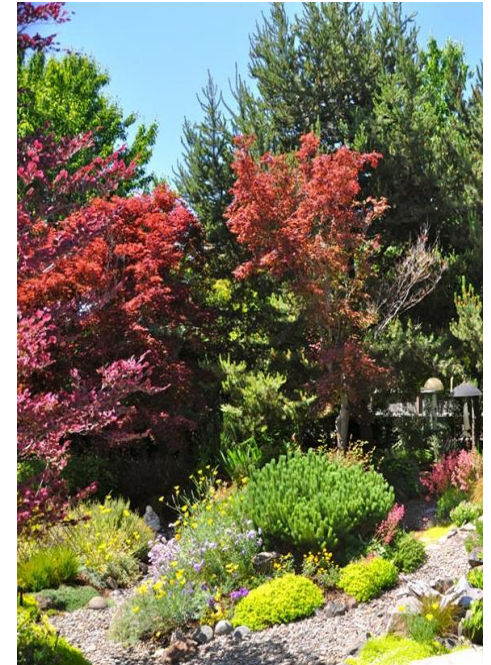
Evapotranspiration, also referred to as ET, is the term used to describe the amount of water that has been used by plants or lost by evaporation over a particular time period. It provides a good measure of how much sprinkling is needed. In our area, weekly lawn water needs tend to range from about  $\frac{3}{4}$  inch in late April to nearly 2 inches in July. Knowing scheduling based on ET can help save water and make developing a lawn watering schedule easier. Call our Lawn Watering Infoline for current sprinkling needs.

**Lawn Watering Infoline: 541-774-2460**



200 S. Ivy St. – Room 177  
Medford, Oregon 97501  
Phone: 541-774-2430  
[medfordwater.org](http://medfordwater.org)

# Sprinkler & Landscape Design



## Planting for the Future

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## Sprinkler Tips and Tricks

## PLAN AHEAD

- ◆ **Landscape:** Lawn areas serve a purpose, but have high water and maintenance demands. Remember that trees, shrubs and hardscape features such as decks and patios also serve visual and functional roles in landscape design.
- ◆ **Pressure:** Determine what the water pressure is at your property and understand its impact before designing your sprinkler system. Pressure can affect the number and size of zones you'll need and what components will be appropriate. Leave a little extra capacity in each zone to accommodate some pressure fluctuation and future modifications.
- ◆ **Design:** Start with a plan for the whole landscape and sprinkler system, even if you will need to install in phases. Keep the plan handy to reference *even after your project is complete*. If you wish, contact a professional or specialty store to help you with your design. Some key issues to consider are:
  - Sprinkler systems will work best if spray patterns overlap. Particularly in lawn areas, spray from one sprinkler should reach to the next sprinkler head (often referred to as head-to-head coverage).
  - Each sprinkler zone should cover plants with similar water needs. Avoid placing non-lawn areas in the same zone as lawn, as their water needs are quite different.
  - Avoid mixing sprinkler types within a sprinkler zone, as they may apply water at different rates and have different performance characteristics.
  - With drip systems, it is wise to use two or more smaller emitters per plant rather than a single larger volume emitter. This provides better root coverage and there is less likelihood for plant loss if a single emitter clogs.



## ITEMS TO CONSIDER

- ◆ **Timer Box:** This is the brain of the sprinkler system, but is often underestimated. Helpful features include 1) at least two separate programs, 2) ability to schedule more than one start time per day on each program, 3) a feature enabling sprinkler schedules to be modified by percent and 4) a rain delay button.
- ◆ **Shutoff Valve:** A master shutoff valve isolating your sprinkler system from the household plumbing will enable someone to easily turn off the water supply to the sprinklers without having to turn off the water to the entire house; inexpensive and worthwhile, but often forgotten.
- ◆ **Valve Box:** Plan for easier future maintenance by installing large enough valve boxes so that valves, etc. will not be crowded. If needed, install more than one valve box.
- ◆ **Pressure Regulator:** While rotor and impact sprinklers function better with higher pressure, 45 psi, spray heads operate best at 25-30 psi and drip systems below 30 psi. Operating sprinklers outside manufacturers' recommended pressure ranges can distort their spray patterns and shorten their life, as well as waste water. Add pressure regulators if the pressure exceeds levels recommended for the sprinklers selected. Reducing pressure from 70 psi to 30 psi in a zone with spray heads could provide water savings of more than 50%.
- ◆ **Backflow Prevention Device:** This is required by state health codes! Check your local water provider for installation information and models allowed in your community.

- ◆ **Check Valves:** If the property is sloped, utilize sprinklers with check valves built in so that water doesn't drain from low sprinklers after each watering cycle.
- ◆ **Drains:** While many people want to install drains at low spots within the sprinkler system to facilitate winterizing, we suggest considering manual drains rather than automatic drains. Auto drains cause the system to drain after every cycle, which is not necessary and a waste of water.

## OPTIONS

- ◆ **Spray Sprinklers:** These have smaller spray patterns, so they can be tailored to areas that are small or irregular in shape. They apply a lot of water very quickly though (often up to 2" per hour) so runoff and over watering can easily occur, especially in clay soils found locally. Avoid placing spray heads on slopes; terrace such areas first. Also, programming your timer to minimize runoff will be important with this sprinkler type; use multiple short cycles with an hour break in between, rather than long cycles.
- ◆ **Rotor Sprinklers:** Rotors apply water much more slowly (typically less than ¾" per hour) so they can be operated with longer watering cycles without significant runoff occurring. They have longer throw watering patterns, which work well for medium to large lawn areas, but will result in overspray if used in small or irregular spaces.
- ◆ **Drip (Low Volume) Irrigation:** Often underestimated, drip systems are ideal ways to water shrub and groundcover areas. They have extremely low application rates and provide watering directly to roots. There are also a variety of attachments, including low volume sprays for use in flower beds.