LANDSCAPING FOR WATER CONSERVATION

LAWN MAINTENANCE AND LAWN ALTERNATIVES

Why Should We Conserve Water?

Much of Jackson County has the fortune of clean, plentiful, and affordable water year round. Whether you live in one of our cities or in the country, you probably have access to dependable water for all your landscaping needs.

Figure 1: A well maintained lawn adds aesthetic beauty and value to your home. Source: Pixabay.

But the source of water for many of our communities varies from year to year depending upon our snowpack, or the amount of snow in our watershed. The size of our snowpack dictates how much water we will have the following summer for a variety of uses. In drought years where we have a very small snowpack, the use of water for landscaping can limit the water available for other purposes, such as agriculture and aquatic wildlife habitat. And climate predictions indicate that we may see smaller snowpack in the future. Therefore, we must carefully use this precious resource.

Water Sources by Community

- Central Point, Eagle Point, Jacksonville, Medford, Phoenix, Talent, and White City receive water through the Medford Water Commission primarily from Big Butte Springs and supplementary water from the Rogue River.
- Ashland receives water from Ashland Creek stored in Reeder Reservoir.
- Gold Hill, Rogue River, and Shady Cove receive water from the Rogue River.
- Butte Falls receives water from Ginger Springs.
- Unincorporated areas rely on groundwater or small surface water sources for domestic water.

Frequently asked questions:

Q. When should I irrigate?
A. Between 12am and 6am

Q. How often should I irrigate?
A. Two or three times a week.

Q. How long should I irrigate?
A. Depends on the weather and your soil type.

Figure 2: Source FCRN.

Lawn Irrigation

The timing and duration of your lawn irrigation schedule can make the biggest impact on how much water you use. Running sprinklers early in the morning, between 12am and 6pm, reduce water loss to evaporation. The length of your irrigation cycle can depend on many factors, such as your soil type, the health of your lawn, and the type of sprinklers you have. Lawns generally do not need water daily to stay healthy. How often you irrigate should depend on the weather conditions, with more frequent irrigation cycles during the hotter summer months.

An irrigation timer, when properly configured, can save water, labor, and money. Adjust irrigation timers weekly as weather and lawn conditions change to ensure that water application rates meet lawn needs without over application and waste.

The Medford Water Commission's weekly updated Lawn Watering Infoline, www.medfordwater.org, will tell you how much water the average lawn needs based on the current weather forecast and give you example watering schedules.

Soil Types & Sprinkler Heads

Among other factors, your soil type determines how much and how long the soil will hold water. To determine your soil type, dig up a ball of soil about the diameter of a half-dollar and add water until it feels like putty. Try and form a ribbon by continuously pushing the soil between your thumb and forefinger.

- Clay soils will feel smooth and will easily form a long ribbon. Irrigate in short cycles spaced a few hours apart.
- Sandy soils will feel gritty and coarse and will not form a ribbon. Irrigate in one or two long cycles.
- Silty soils will feel somewhere between smooth and gritty and may form a short ribbon. Irrigate in moderately long cycles spaced an hour or two apart.

The types of sprinkler heads you have also influence your irrigation schedule. They generally fall into the following categories:

- Standard spray heads apply water very quickly by spraying out of the entire spray head at the same time.
- Rotor sprinklers have a nozzle that water sprays from, and therefore applies water more slowly than standard spray heads.
- Rotating nozzle spray heads apply water slower than other heads by using multiple small streams to apply water at the same time.
- Impact sprinklers (usually supplied water with an above ground hose) have similar application rates to rotor sprinkler heads.

Figure 3: Sources: City of Richmond BC, lawncarema.com, Flickr

An Example Lawn Watering Schedule:
The Medford Water Commission web site says to water for 90 minutes this week. You have clay soils and sprinklers with rotor heads. Set your sprinkler timer to irrigate Monday, Wednesday and Friday, starting each cycle at 12am, 3am, and 6am, to run for 10 minutes each cycle.

Mowing Practices to Conserve Water

Your lawn mowing practices can also improve your efforts to conserve water. Mowing prompts grass plants to divert energy to growing leaves to collect sunlight instead of growing deeper roots. Deeper roots mean the plant can access more of the soil for water and nutrients. Roots also make up a significant amount of organic matter which increases a soils water holding capacity.

Most lawn mowers have adjustable cutting heights. Different grasses have different tolerable mowing heights, but in general take only the top 1/3 of the grass. This will encourage deeper root growth.

As an added benefit, a deeper lawn helps exclude weeds such as dandelions and clover. A thick lawn with leaves 2" or 3" tall will effectively shade out these weeds or dominate the soil resources for growth, reducing the need for herbicides or laborious weed pulling.

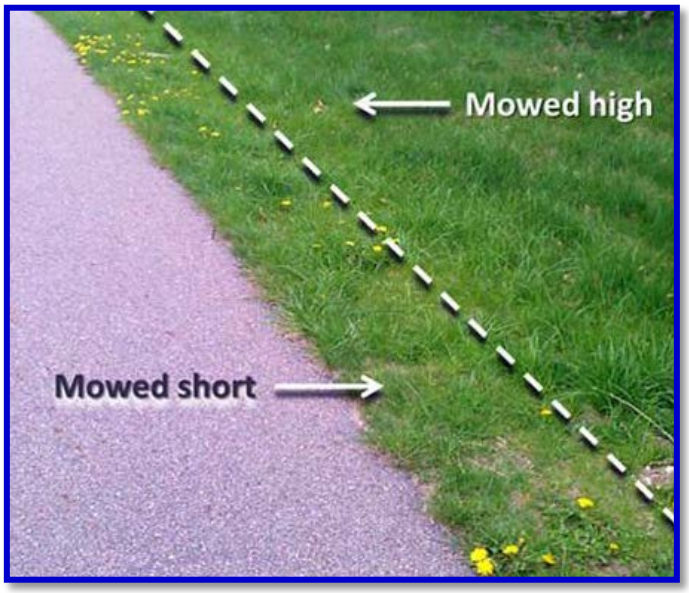

Figure 4: Mowing your lawn higher will prevent weed colonization. Source: Michigan State University.

What is Xeriscaping?

Also known as "water-wise landscaping", a xeriscaped yard strives to use less water than a traditional yard. A xeriscaped yard varies greatly, from drought-tolerant, desert-loving plants, to lush varieties. Xeriscape design varies greatly, and can be categorized into three main groups:

1. **Formal:** balanced and symmetrical design; comprised of straight paths, trimmed hedges, straight pathways and fence lines. Frequent maintenance is required.
2. **Informal:** less defined edges and asymmetrical designs, curving linear beds, curved pathways
3. **Natural:** plants grouped in a more natural manner (not in lines or rows), incorporates native plants, composting, and other features. Less maintenance is required.

Step 1: Plan and Design

☐ Make a skeleton map of the area to be landscaped.

☐ Consider how you use each area.

☐ Begin placing plants on your skeleton map, group plants according to their light needs, water requirements, and size.

☐ Remember to give each plant room to grow.

☐ Designs can be formal, informal, or natural.

Step 2: Create Practical Turf

Xeriscaping is about creating practical turf and being water-wise, not necessarily removing all lawn in one's yard.

For example…

☐ Replace lawn with shade-tolerant native plants in the shady areas of your yard

☐ Replace lawn with native plants helpful for erosion control along a hillside.

☐ Consider artificial turf alternatives if you desire a lawn aesthetic.

Step 3: Group Similar Plants

It is important to group plants together according to their micro-climate (sun exposure, water requirements, soil type).

For example…

☐ Put plants that have higher water needs next to down-spouts, in low-lying areas, or areas that don't drain as quickly (such as clay soils).

☐ Put plants that prefer sunlight and dry conditions on elevated areas or those with south or west exposures.

Step 4: Improve the Soil

Depending on soil type, amendments may be needed.

☐ Clay soils can be amended with compost and peat moss

☐ Sandy soils can be amended with humus, peat moss, manure

☐ Silt soils can be amended with compost, aged manure/straw

Step 5: Mulch

Mulch is essential for keeping soil and roots cool. Cool soil and roots reduces plant water loss through evapotranspiration. Mulch also helps prevent weeds and soil erosion.

Step 6: Efficient Irrigation

To minimize your water use:

☐ Water in the morning or evening when the wind is still and evaporation rates are lowest.

☐ Use drip, micro-sprays, bubblers, or emitters to deliver water. When sprinklers are necessary, use sprinklers that keep the water close to the ground, and use rotary (side-to-side) or stationary sprinkler heads.

☐ Inspect the irrigation system regularly for leaks, broken emitters

☐ Change your irrigation schedule with the weather. Generally, you should do this at least once a month. Turn off your irrigation if a storm moves in, and don't turn it back on until plants need to be watered

Local Resources

Medford Water Commission Website – sprinkler watering times based on seasonality.

- Watering Infoline
- Sprinkler Checkups
- Water-Wise Gardening In Medford

Web Soil Survey Website – determine soil type of your property