

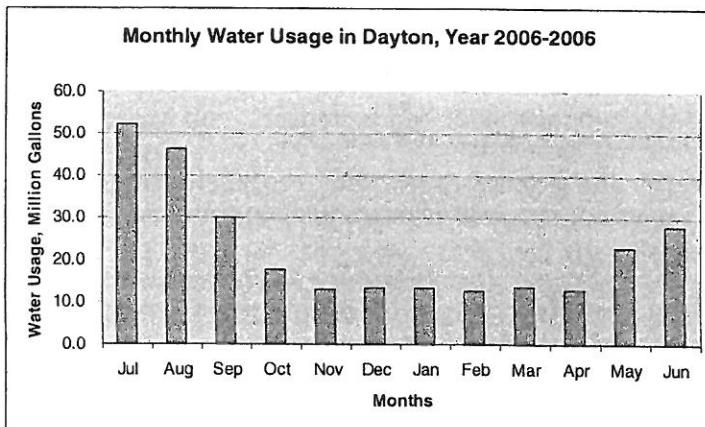
USING WATER EFFICIENTLY

GUIDE NO. 1

IDEAS FOR LAWN WATERING AND MAINTENANCE

Water efficiency plays an important role in conserving and protecting our region's water sources and improving water quality. By using water efficiently, you can save money and help protect the environment. This guide along with Guides 2 and 3 were developed to describe ways to use water efficiently.

Water efficiency simply means using less water to provide the same benefit. The amount of source water used by the City of Dayton's water customers in the summer months (June, July, and August) is approximately 3 to 4 times the amount of water used by customers in the winter months (December, January, February).



The increase in water demand during the summer months is due to outdoor use. For most residences, lawn turf utilizes most of the water used outside. In this guide, efficient water use ideas are presented for lawn watering and maintenance.

How to Water and Maintain Lawn Turf

The goal of water is to get the water to the plants' roots. Efficient watering of lawn turf maximizes the amount of water going to the turf's roots.

- **Water Deeply, Less Often** – Watering deeply but less often encourages deep roots and prevents disease (see table on page 3).
- **Place Sprinklers Appropriately** – Place or install sprinklers to match shape of lawn and avoid watering driveways, sidewalks, walls, or other landscaping.
- **Choose Watering Time** – Minimize evaporation by watering early in the morning or late in the evening, and when the wind is calm.
- **Use Timers to Limit Watering** – Use timers to limit watering and make early morning or late evening irrigation convenient.
- **Periodically Adjust Sprinklers** – Regularly monitor and adjust spray patterns to avoid spray on streets, driveways, fences, walkways, etc. Adjust sprinklers to prevent fine misting that just blows away.
- **Make Prompt Repairs** – Promptly repair leaky or broken sprinklers or sprinkler heads, faucets, and hoses.
- **Thatch and Aerate Turf** – Remove thatch and aerate turf to encourage water movement to the roots.
- **Maintain Proper Lawn Height** – Maintain lawn height of 2.5 to 3 inches to help protect the roots from heat stress and reduce moisture loss.
- **Avoid the “set it and forget it” sprinkler system mentality** – adjust the system irrigation frequency and duration according to temperature and rainfall.
- **Install Sensors** – install rain shutoff devices and/or moisture sensors on sprinkler systems.

When to Water Lawn Turf

Remember the goal of turf watering is to get the water to the roots of the turf. Just wetting the soil surface without penetrating the root zone does nothing for the turf. On the other hand, overwatering can drown the roots, which can lead to root rot and loss of nutrients. The following signs can be used to determine when the lawn needs watering.

- **Footprint Method** – Check footprints by walking on the lawn. If grass springs back, no water is needed. If blades stay bent, it is time to water.
- **Turf Color** – When the lawn has dull green color, it is time to water.
- **Screwdriver Test** – When it is difficult to push a screwdriver or trowel into the soil, it is time to water.

How Long to Water

Most lawns need approximately 1-inch of water each week to stay green during summer and half as much in the spring and fall. To determine how long your sprinklers take to supply this

Depth of Water in Can After 15 min.	Minutes of Watering Required to Place 1 inch on the Lawn
1/8"	120
1/4"	60
1/2"	30
3/4"	20
1"	15

amount, place several short, straight-edge cans (i.e. tuna or cat food cans) at various locations within your sprinkler spray pattern(s) (some on the edge, some near the middle). Turn the sprinklers on for 15 minutes and then measure the amount of water collected in each can and determine the average depth. The adjacent chart shows how long it takes your sprinkler to place 1-inch of water on the lawn. Please note that this chart should be used as a guide only and alter your irrigation practices accordingly with climate and lawn conditions.

How Long to Water (cont.)

For slow draining soils such as clay, the full amount of watering should happen in 1 session per week. For silt or loamy soils the watering should be split into two sessions per week with approximately half the amount applied each session. Lawn irrigation should be skipped or reduced for at least one scheduled watering after any substantial rainfall.

Resources

- ***Sprinkler catalog or brochure:***

Pick up a catalog or brochure from sprinkler irrigation equipment at a local gardening store, nursery, or home improvements store.

- ***Consult a reference book at the library or bookstore:***

- *Scotts Sprinklers & Water Systems, Complete Guide to Planning and Installing Landscape Irrigation*
- *Sunset Western Landscaping Book*

- ***For expert advice:***

Contact a nursery, landscape or irrigation professional, or visit the Department of Ecology's water conservation web page (<http://www.ecy.wa.gov/programs/wr/ws/wtrcnsv.html>) for additional links and tips, or contact Washington State University Cooperative Extension drought publications at (<http://drought.wsu.edu/pubs.html>).

This **USING WATER EFFICIENTLY GUIDE** was brought to you by the City of Dayton as part of its effort to use its water resources wisely and responsibly. Questions or comments on this guide or the City's other water efficiency efforts should be directed to the address and/or phone numbers below.

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