Water District 19 Conservation Newsletter: Irrigation



Pacific Northwest summers are typically characterized by an extended period of limited rainfall from mid July to mid September. Outdoor summer water usage places the greatest strain on our yearly water demand. One of our long term strategies is to promote conservation driven irrigation practices. Effective watering then becomes a helpful means of alleviating excessive demand while allowing for a healthy garden. Conservation oriented watering is born out of habit. By understanding our climate and the watering needs of your plants you can directly contribute to the conservation of our islands water resources. There are many resources available to gain understanding to your particular needs. We will gladly assist you with questions relating to your specific situation and we can also guide you to the many organizations involved with water conservation in our area.

Most lawns in our area will turn brown during the summer and will recover with the onset of rain. Water District 19 encourages its customers to allow their lawns to turn brown. We also realize the aesthetic of a green lawn and recommend you to adopt appropriate watering strategies to minimize water use and promote a healthy environment.

Please Note:

In periods of severe water shortage Water District 19 may require **Mandatory Restrictions** on outdoor watering. In this situation it may be helpful to prioritize your landscape into three categories:

- 1. High value/must save
- 2. Moderate value/try to save
- 3. Low value/save if possible.

This exercise will help you prepare for a potential drought.

Watering Your Lawn: Of the many landscape enhancements we enjoy, a nice green lawn seems to be one of the more common elements to any home. During summer months the lawn area can be the highest water user for a household. From a water demand perspective we encourage you to consider letting your lawn go dormant (brown) naturally. Turf will recover and green up quickly when the rains return.

A few simple steps can help you save water if you plan to water your turf:

- Watering every day encourages shallow roots, water less often and deeper. One inch per week is recommended.
- Cut 1/3 of the grass length and leave the clippings (free fertilizer).
- Water in the evenings or early morning to reduce evaporation.
- De-thatch and aerate your lawn to allow water to penetrate to the soil.
- Select native grasses that will require minimal irrigation.
- New lawns require more water to establish. Plan such activities for April/May or September/October to limit the demand impact to the water system.
- Remember, the proper use of chemicals to encourage growth requires some skill. Ask someone for advice to maximize effectiveness and protect the environment.

Unless your irrigation system is weather based, disable automatic irrigation systems and manage your irrigation around available rainfall. Maintain your system to maximize its effectiveness and efficiency.



Smart Watering: Irrigation is the act of applying water to plants so that they may grow. Most of the problems encountered with irrigation systems stem from **over watering**. Whether it is by hand, hose, sprinkler or automated, employing some simple techniques will reduce your water needs.

General concepts: 1. Saturate the soil. **2.** Water less often and deeper to reach the root zone. **3.** Never water when the soil is wet, and manage your irrigation around available rainfall. **4.** Understand the water needs of your plant. Most plants have predictable water needs. **5.** If you irrigate with automatic irrigation, try cycling. Instead of programing 15 minutes of watering; employ three 4 min. water cycles with 30 minutes lag between. You save 3 minutes of watering (1.5 hrs./month) and you can insure all the water goes where you want it - in the ground. **6.** Run the irrigation system in the early morning or at night. **7.** Mulch around plants to retain moisture. **8.** Windy conditions promote evaporation.

Low Impact Development and the Conservation Mindset

These are viable low impact ways to develop your outdoor space. There is a wealth of information on these topics on the internet, click on the links below or give us a call for help implementing these options:

Web Resources:

General Water Conservation:

www.epa.gov/watersense www.h2ouse.org

Bright Action King County

King County Rain Wise

www.allianceforwaterefficiency.org

www.savingwater.org

Irrigation/Rain Gardens:

www.irrigationtutorials.com

https://groundwater.org/rain-gardens/

Rainwater Harvesting:

Texas Manual on Rainwater Harvesting

King County Rainwater Catchment FAQ's

Greywater:

King County Tier One Greywater Checklist King County Graywater Residential Plan Review Design Guidance

King County Graywater Commercial Plan Review Design Guidance Rain Water Gardens: A rain garden is a garden of native shrubs, perennials, and flowers planted in a small depression, which is generally formed on a natural slope. It is designed to temporarily hold and soak in rain water runoff that flows from roofs, driveways, patios or lawns. Rain gardens are effective in removing up to 90% of nutrients and chemicals and up to 80% of sediments from the rainwater runoff. Compared to a conventional lawn, rain gardens allow for 30% more water to soak into the ground.

Rainwater harvesting: Essentially capturing rain from your roof in a rain barrel or cistern. After May, there are limited opportunities to collect rainwater. This is the challenge of effective rainwater collection in our region. Systems involving cisterns or tanks are feasible, with cistern costing around \$1-\$2 per gallon of tank capacity.

Greywater : Greywater design involves redirecting water that has already been used for non-sewage purposes - baths, showers, washing machines and sinks. Washington State rules for outdoor reuse of greywater is for **subsurface** irrigation. *It is important to understand that greywater can contain harmful bacteria, viruses, and chemicals that pose a risk to public health and the environment if mishandled*. Greywater is not intended for drinking, food crops, sprinklers or washing.

