



Summer 2015 News

Weekly Watering Number

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The Regional Water Providers Consortium contracts with a weather forecasting service to provide a free weather forecast and Weekly Watering Number each Thursday (April - September). The Weekly Watering Number is based on historical data (evapotranspiration, rain fall, and other data points) from the previous week, but it is used to determine how much to water lawns and landscapes during the current week.

The Weekly Watering Number is the amount of water in inches that your lawn will need that week. You can also use the Weekly Watering Number for watering other types of plants, by using these general guidelines:

- **Shrubs:** 50% of the Weekly Watering Number
- **Perennials:** 50% of the Weekly Watering Number
- **Vegetables:** 75% of the Weekly Watering Number (new starts may require more water)
- **Trees:** Newly planted trees need regular watering for up to the first couple of years, while established trees may need a deep soak or two in summer.

Be sure to check with your local garden center or landscape professional for more specific information on how much water your plants needs. For more information about the Regional Water Providers Consortium and the current weekly watering number visit their website at www.conserveh2o.org.

Summer Gardening

Summer is here, and the garden is a perfect place to think about efficient water usage.

One of the most obvious ways to be water wise in the garden is to consider the method water is being delivered to the plants. Much of the water dispersed through sprinklers and hoses by enthusiastic gardeners evaporates before it ever reaches its intended source - thirsty roots. The two best ways to water a garden is by the use of drip irrigation and soaker hoses. These methods deliver water directly to the root zone of plants and minimize evaporation.

Drip irrigation is excellent for home use. This highly efficient watering method consists of a system of nozzles that deliver small quantities of water at low pressure directly to where it does the most good - the root zones of plants. Drip (or trickle) irrigation can save 30%-70% of the water used by overhead sprinkler systems.

A soaker hose is a canvas or rubber hose with perforations. It is most effective when it lies on top or slightly below soil level and mulch is placed over the soil and hose. You can install the hose in the spring and leave it in place all season.

Another important consideration is when to water. Heat and wind cause water to evaporate more quickly. By watering early in the morning, when the air is calm, evaporation is kept to a minimum, and results are the best. Watering in the evening is the next best.

Mulch and compost are two other components that can help conserve water. Mulch can serve as a ground cover that reduces water evaporation from the soil and reduces the number of weeds that would otherwise compete with the plant for available soil moisture. Peat moss, composted leaves (leaf mold), composted manure, composted kitchen vegetable scraps and grass clippings will all improve soil structure and enhance moisture-retaining capabilities.

Veggie Tips

Plant in blocks, rather than rows. This creates shade for roots and reduces evaporation. Control weeds that compete with vegetables for water. Group plants with similar water needs in the same section of the garden for easy irrigation. Cucumber, zucchini, and squash, for example, require similar water applications. Protect plants and soil from wind with windbreaks to reduce evaporation.

How to be a Watershed Steward

Each time it rains or snows, stormwater washes over streets, roofs, lawns, and parking lots. On its way, stormwater picks up soil, sediments, bacteria, grease and chemicals that flow untreated into nearby rivers, creeks, and wetlands. Because all water in a watershed is connected activities in one part of the watershed often affect other areas.

Human activities such as construction, timber harvesting, live stock management, fertilizer and pesticide use if not performed responsibly can degrade water quality. In addition impervious surfaces such as parking lots, roads, and roofs carry pollutants directly to our streams and natural water ways. Learn how you can be a watershed steward by following the tips below.

- **Don't put anything except water down storm drains.** Only rain belongs in stormdrains. Never dump anything down gutters, catch basins, or onto the street. These drains carry storm water to directly our local streams and rivers.



- **Properly dispose of or recycle ...** motor oil, antifreeze, paint, solvents and other toxic materials. For proper disposal information, call Metro Recycling Information at (503) 234-3000.
- **Never flush unwanted or out-of-date medicines down the toilet or the drain.** Flushing drugs down toilets or putting them into the garbage both have damaging effects on our environment and can contaminate our surface and groundwater supplies. Find a Clackamas County Drug Take Back Box so that you can properly dispose of unwanted pharmaceuticals and drugs.
- **Pick up after your pets.** Pet waste contains bacteria and parasitic organisms that, when washed into local waterways, can contaminate our water.
- **Reduce or eliminate your pesticide and fertilizer use ...** to prevent chemical runoff by practicing water efficient landscaping and/or naturoscaping.
- **Conserve water ...** especially in the summer months when river flows are at their lowest. The more water we save, the more water we can keep in the river for fish.
- **Spread the word and be a water advocate.** Talk to your neighbors about how they can help too, join our local watershed council, or attend a Clackamas River Water Providers, city council or water board meeting.

Summer Quiz:

Answers - Can be found on page 5.

1. During a normal summer day how much water a week does a healthy lawn need?

- A. 2 inches
- B. 1 inch
- C. 3 inches
- D. 5 inches

2. The best time to water out doors is in the morning and at night?

- A. True
- B. False

3. In the Western United States lawn irrigation can account for what percentage of household water consumption?

- A. 10%
- B. 30%
- C. 60%
- D. 80%

4. If you step on grass and the blades spring back up it doesn't need water.

- A. True
- B. False



Faces of Drinking Water

An Interview with Dan Bradley

The CRWP members work hard every day to bring their customers clean, safe, and reliable drinking water. Many different people holding various positions, coming from all walks of life work together to make this happen.

Recently we interviewed Dan Bradley:

Where do you work?

Dan: Oak Lodge Water District.

How long have you been working for "Oak Lodge Water District"?

Dan: 12 years this April.

What is your position?

Dan: I am the General Manager.

What is your background prior to public water?

Dan: I studied civil structural engineering, was a seasonal construction inspector and worked for ODOT.

What is your favorite part of your job?

Dan: The employees and staff that I work with and the ability to do some really interesting things.

Do you plan to retire from Oak Lodge Water District? **Dan:** Yes I do!!

What accomplishments are you most proud of in your career?

Dan: I'm very proud Oak Lodge Water District is debt free. When I came here in 2012, the district had no money. Today, we have spent 5 million on capital projects and don't carry any debt.

Those capital projects include seismic upgrading of our water tanks at View Acres and replacing undersized water lines with larger lines. And it was all paid for with cash.

What advice would you give to someone starting out in the field of drinking water?

Dan: I would have someone ask themselves whether they want to work inside or outside, if they want to be in management, if they are looking for a job or a career and if they are doing what they like.

How has the water industry changed since you started?

Dan: There have been many changes, I've been in the industry for decades!

Technology, specifically cell phones, have changed the way we do business and operate. There are more women who have entered the water field. I've also seen a change in what I call generational thinking. Nowadays there is more focus on environmental impacts, conservation and preserving our resources.

What would you like the public to know about their drinking water?

Dan: I wish that the public was more aware of where their drinking water comes from- to care where it comes from and the work it takes to get clean, safe drinking water to their homes.

What do you do for fun when you're not working?

Dan: I like to play golf, work in the yard, and I enjoy refreshing beverages. :)

What are the top priorities for your agency over the next few years?

Dan: We plan to continue with the seismic upgrading of our system. We also have plans to add a secondary main line connecting the east and west sides of the district. We will continue to work on our capital replacement program as well.

What is the biggest challenge facing your organization in the next couple of years? What are the opportunities?

Dan: In Oak Lodge we are facing a merging of the water and sanitary districts. The outcome of that decision will play a large role in how both districts operate and are managed in the future. There is also the continuing issue of possible annexation of parts of the district by cities- Milwaukie and Gladstone for example. An opportunity would be the development of interconnections with other public water systems.

What do you see as your agency's greatest accomplishments in the time you've been there?

Dan: The management of finances has been my greatest accomplishment with Oak Lodge. I'm very proud to have brought the district from debt and a lack of capital to the place it is today- debt free.

Many utilities are struggling with the need to increase rates for their services. How are you approaching this? What were the keys to your success?



Dan: We have a set 4% increase yearly. This amount is minimal but allows for us to continue being successful.

If you could change one thing about state or federal regulatory programs, what would it be?

Dan: I would like to see the Contaminant Candidate List the EPA puts out. I don't think it's helpful or necessary to what we do.

What's something people might be surprised to know about your agency?

Dan: I think they would be surprised to learn that we have only 16 employees. That includes me and the distribution, maintenance and administrative staff.

What's the one thing you can't live without at work?

Dan: My Computer!

What's on your to-do list?

Dan: The seismic upgrade at the Valley View reservoir and planning for retirement.

Oak Lodge Water District was formed in 1922. The Board of Directors is comprised of five residents of the District and is elected biennially on a staggered term basis.

The District serves approximately 27,183 with high quality water and a constant effort on customer satisfaction. Oak Lodge Water District supports and promotes the wise use of water and stewardship of the environment on a continuous basis.

The Mission of the District is to "Provide quality water at a reasonable cost while continuing to meet the customer's needs now and in the future."

Protecting Our Watershed

Pesticide Reduction Efforts

Did you know that Clackamas County is one of the leaders in both acreage and sales of Christmas trees in the nation as well as being ranked second in the country in nursery stock acreage? These agricultural uses bring huge economic benefits to Clackamas County. However, since 2000, water quality monitoring has detected low levels of pesticides in Clackamas River and its tributaries.

The CRWP has been working proactively with our Basin partners on a number of different Pesticide Reduction Efforts to help keep our farms green and our water clean. Keep reading to find out what we have been working on.

Pesticide Reduction Efforts with the Clackamas River Basin Council:

The Clackamas River Water Providers continue to work with Clackamas River Basin Council to support an outreach program for voluntary pesticide

reduction through the distribution of educational fact sheets, consultations with landowners, and developing outreach to residential property owners. This year's efforts have also included working with Metro to hold a second Neighborhood Household Hazardous Waste Collection event (July 2015) in the watershed, and developing an Urban Pesticide Reduction Pledge Program.

Pesticide Reduction Efforts with the Clackamas County Soil and Water Conservation District:

The CRWP is working with the CCSWCD to leverage funding for pesticide reduction workshops and two pesticide reduction programs. The Windssock Program is to help agricultural producers apply pesticides without losing chemicals to drift from wind. The Pesticide Sprayer Efficiency Cost Share Program provides cost share on the replacement of a limited number of parts for commercial pesticide spray equipment to increase sprayer efficiency and reduce the amount of pesticide used.

Pesticide Stewardship Partners

The CRWP is also an active participant of the Clackamas Pesticide Stewardship Partners. The Clackamas Basin Pesticide Stewardship

Partnership (Clackamas PSP) is a voluntary, collaborative process of monitoring, information sharing, and problem solving to protect the river and its tributaries. Our goal is to offer water quality monitoring data, resources and training for landowners and managers to enable more efficient and effective pesticide use that reduces drift and runoff.

Want to know more? Visit our website at www.clackamasproviders.org



Conservation

Simple Tips for Saving Water Outdoors

Homes with automatic sprinkler systems can use about 50 percent more water outdoors than those without them. Check your summertime water bill—how does your warmer weather water use compare to winter months? Here are some tips for keeping water use under control:

- **Timing is everything:** Know how much water your landscape actually needs before you set your sprinkler. Generally, it's best to water lawns and landscapes in the early morning and evening, after the sun goes down, because significant amounts of water can be lost due to evaporation during the heat of the day.
- **Look for the label:** If your system uses a clock timer, consider upgrading to a *WaterSense* labeled controller which acts like

a thermostat for your lawn, using local weather data to determine when and how much to water, reducing waste and improving plant health. Replacing a standard clock timer with a *WaterSense* labeled irrigation controller can save an average home nearly 8,800 gallons of water annually.

- **Go with a pro:** Contractors certified through a *WaterSense* labeled program can audit, install, or maintain home irrigation systems to ensure water isn't wasted. Make sure you ask for credentials.
- **Tune up your system:** Inspect irrigation systems and check for leaks and broken or clogged sprinkler heads. Fix sprinkler heads that are broken or spraying on the sidewalk, street, or driveway.
- **Play zone defense:** When planting, assign areas of your landscape different hydrozones depending on sun/shade exposure, soil and plant types, and type of sprinklers, and then adjust your irrigation system or watering schedule based on those zones' specific needs.

This helps you avoid over-watering some areas or under-watering others.

Even if your home doesn't have a sprinkler system, there are a number of simple steps you can take to promote a healthier lawn and garden with less water this summer:

- **Step on it:** Grass doesn't always need water just because it's hot out. Step on the lawn, and if the grass springs back, it doesn't need water. An inexpensive soil moisture sensor can also show the amount of moisture at the plant's roots and discourage over-watering.
- **Leave it long:** Raise your lawn mower blade. Longer grass promotes deeper root growth, resulting in a more drought-resistant lawn, reduced evaporation, and fewer weeds.
- **Give your hose a break:** Sweep driveways, sidewalks, and steps rather than hosing them off. And don't forget to check for leaks at your spigot connection and tighten as necessary.

Water Conservation Rebates

Participating water providers; City of Estacada, City of Gladstone, Oak Lodge Water District, South Fork Water Board (Oregon City & West Linn), and Sunrise Water Authority (Damascus & Happy Valley)

To help customers use water more efficiently and save money on water bills, the Clackamas River Water Providers is offering indoor and outdoor water use rebates up to \$285 in value. These rebates are available on a first-come first-served basis until the program funds are depleted. Applications are available on the CRWP website at www.clackamasproviders.org. Here you will find more information about the rebate program, list of eligibility requirements and the application.

TOILET REBATE: Apply for up to a \$100 rebate when you replace your current water-wasting toilet with a new EPA Watersense High Efficiency Toilet (HET). Replacing an old toilet with an EPA WaterSense HET could save as much as 4,000 gallons per person per year. Limit: 1 toilet per account, per year.

WASHING MACHINE REBATE: Apply for a \$75 rebate when you replace your current water-wasting washing machine with an Energy Star certified residential washing machine. Limit: 1 washing machine per account, per year.



LANDSCAPE REBATE (3 choices): Apply for up to a maximum combination landscape rebate of \$110 when you purchase a rain sensor, manual hose bib timer and/or take advantage of our spray nozzle rebate. Over-watering is the #1 cause of wasted water in the summer and the leading cause of plant disease and insect problems. Limit: 1 each rebate per account, spray nozzles limit 20 per account max \$3 per nozzle.

Visit our web-site at www.clackamasproviders.org or call 503-723-3511.



Summer Quiz:

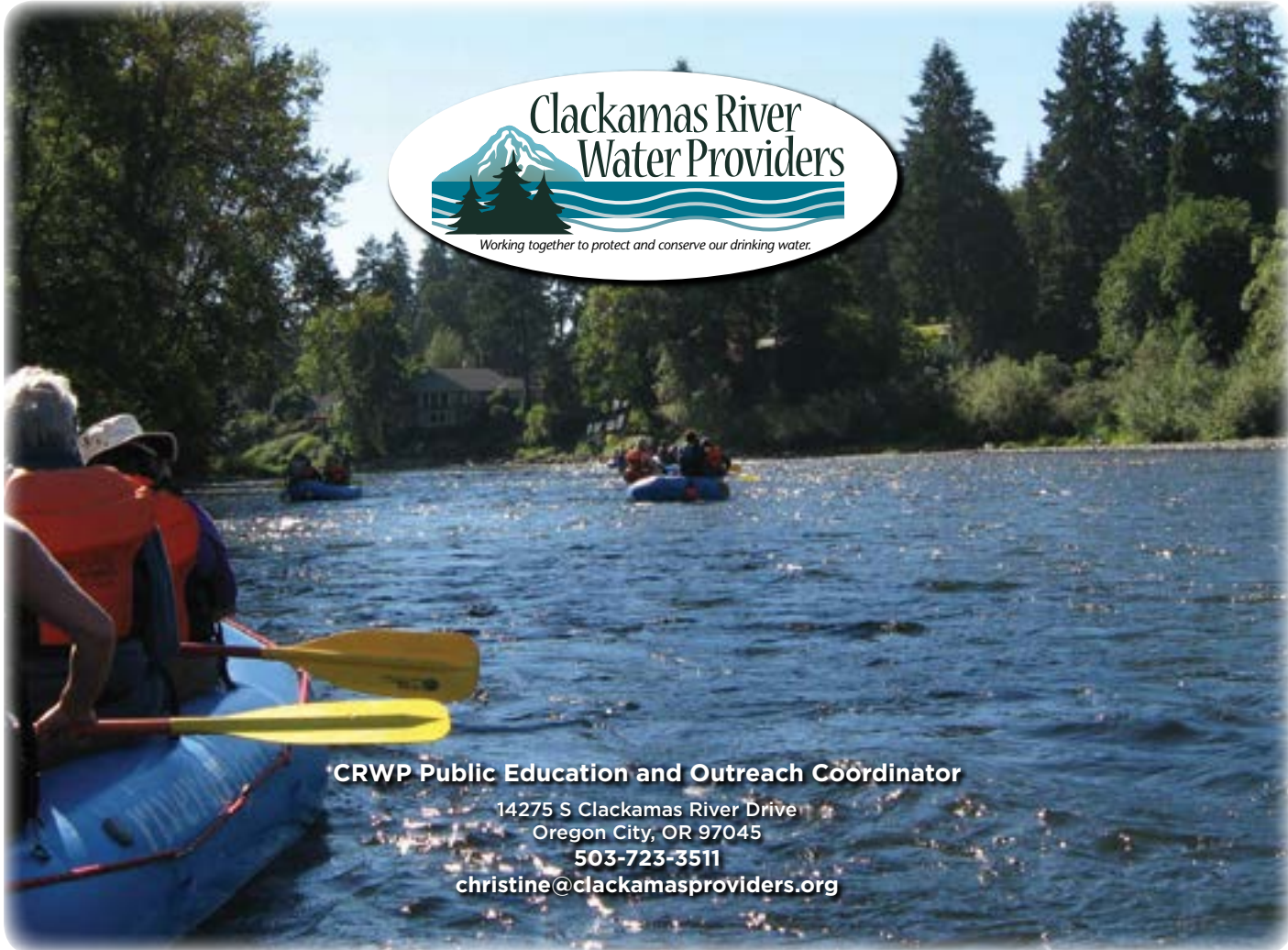
Answers

Question 1 - Answer is B

Question 2 - Answer is True

Question 3 - Answer is B

Question 4 - Answer is True



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