

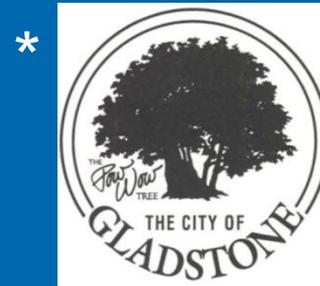
The Clackamas River Water Providers (CRWP)

*Working together to protect and conserve
our drinking water*

The Clackamas River Water Providers is a coalition of eight municipal water providers that get their drinking water from the Clackamas River.

Clackamas River Water Provider Members

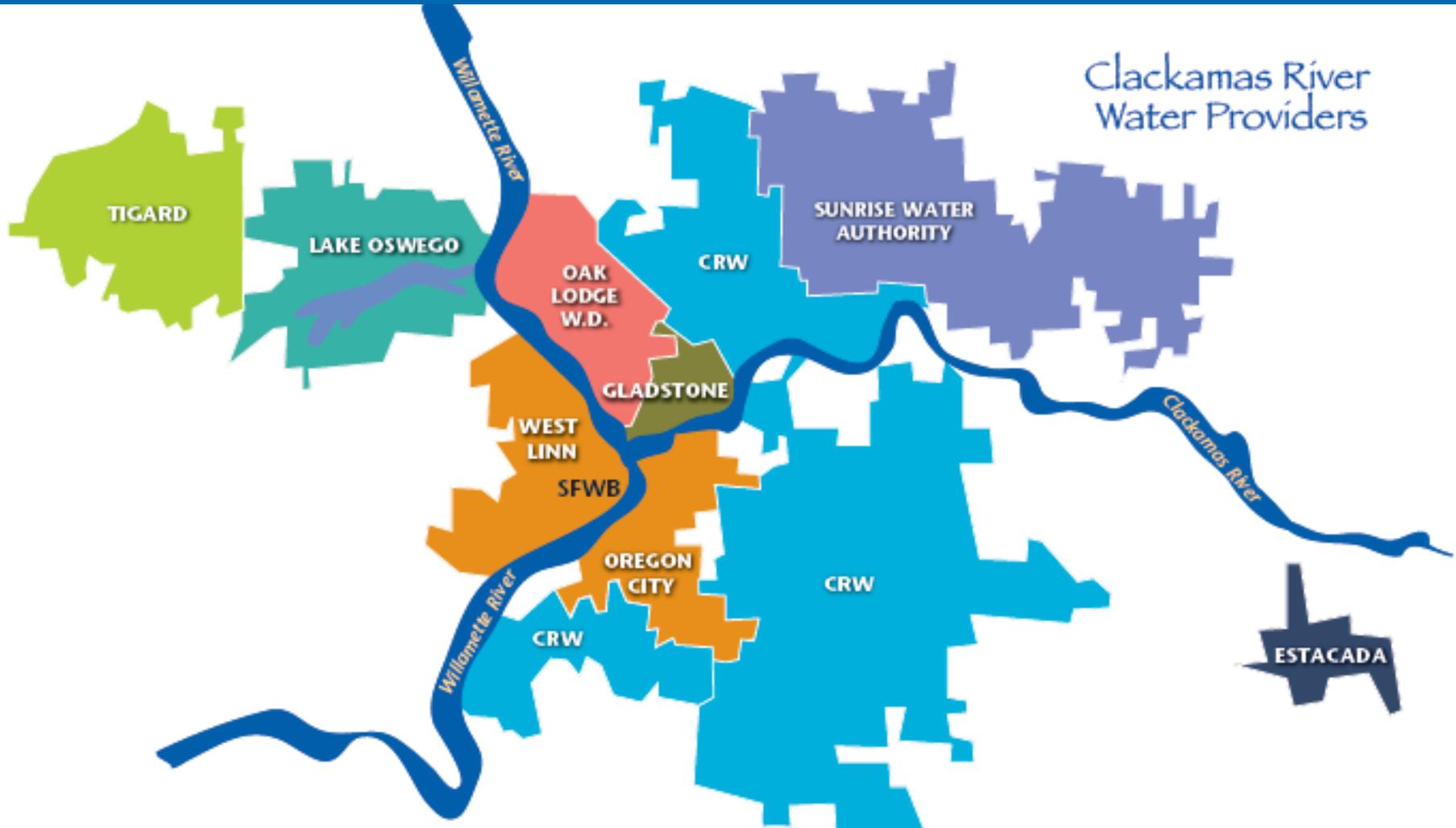
*Public Outreach & Conservation programs and services are provided to these members.



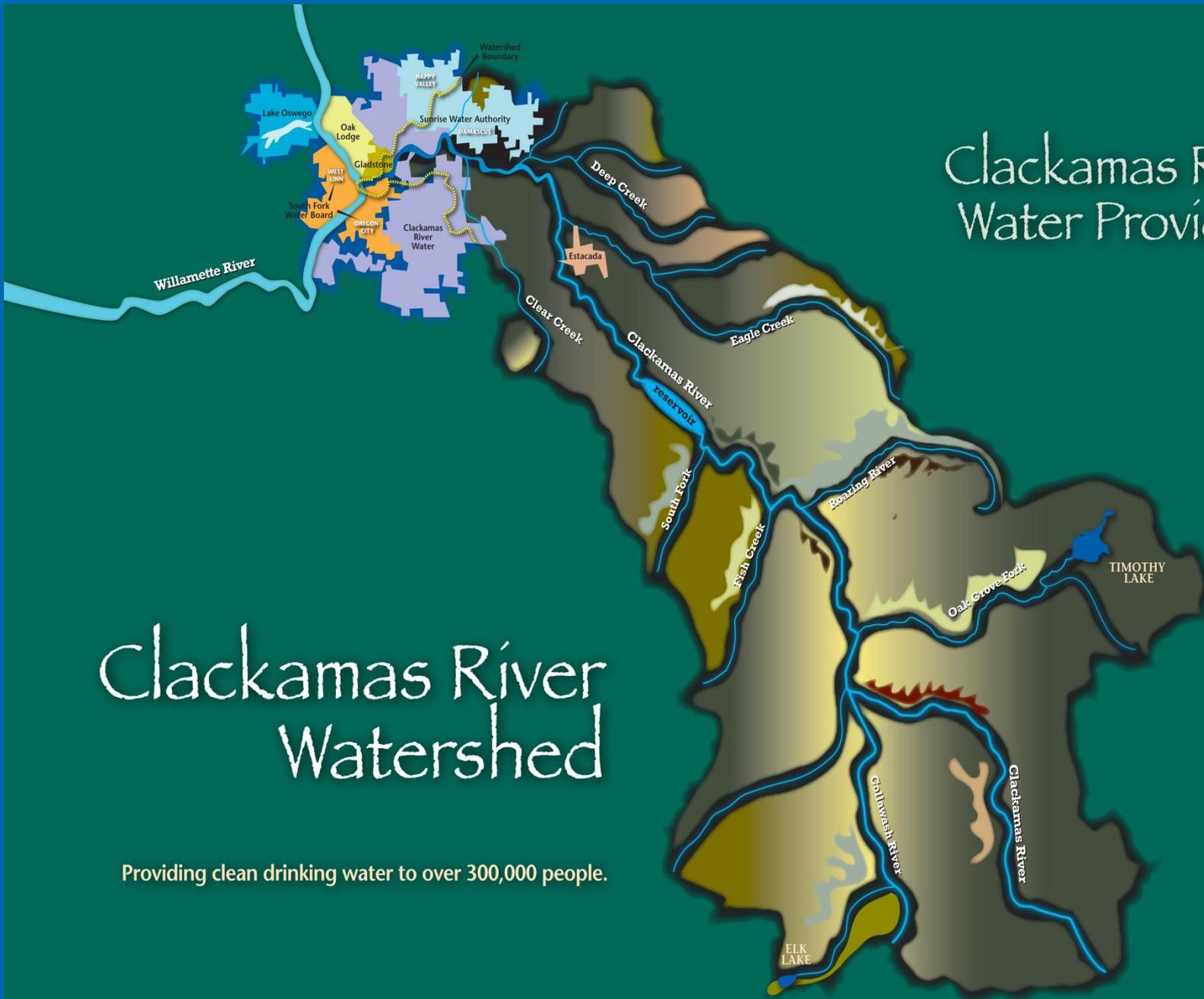
Participation in the CRWP is voluntary and is funded through membership dues.

While through the CRWP projects and staff are jointly funded, each individual organization retains their own individual autonomy.

Clackamas River Water Providers



Clackamas River Water Providers



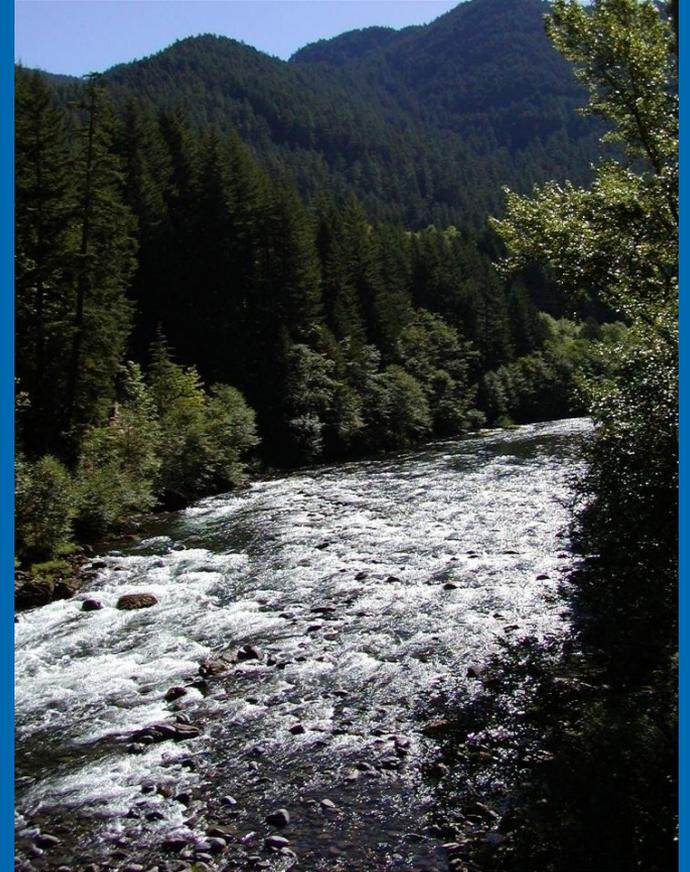
Clackamas River Watershed

Providing clean drinking water to over 300,000 people.

CRWP Mission

- To foster closer relationships with each other
- To collectively fund and coordinate efforts regarding source water protection, public outreach and water conservation
- To realize economies of scale and save money by sharing in costs
- To speak in one voice regarding water resource issues

Watershed Characteristics

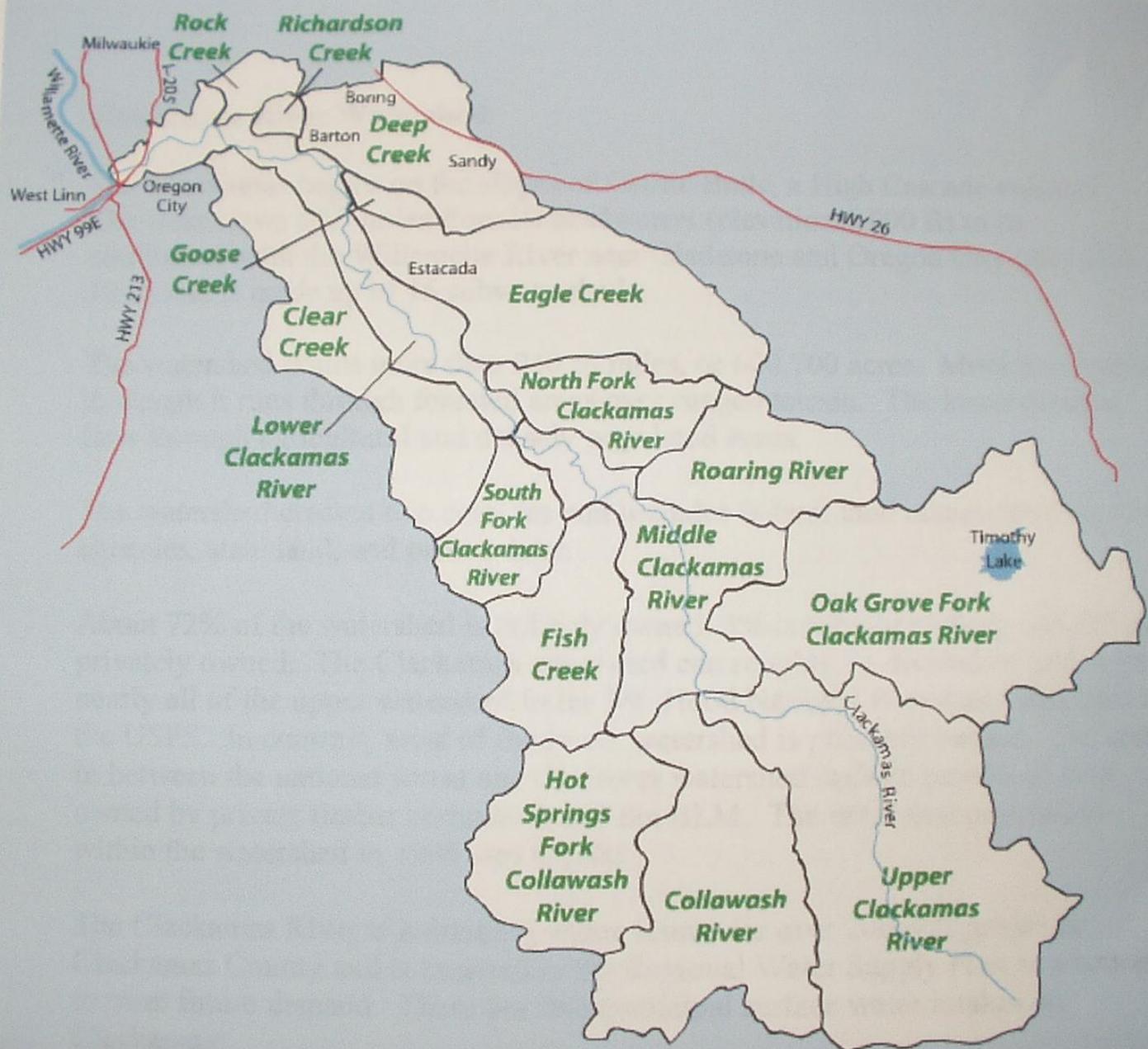


Characteristics of the Watershed

From the slopes of Olallie Butte the river flows 82.7 miles, and drains more than 940 sq miles.

The Clackamas has 16 sub-watersheds.





Characteristics of the Watershed

The upper half of the watershed runs through forested areas and over rugged terrain. The lower reaches flow through agricultural and densely populated areas.

It is a multi-use watershed and is not protected like the Bull Run.

Characteristics of the Watershed

The watershed crosses two counties and includes federal land administered by two agencies, state land, and private land.

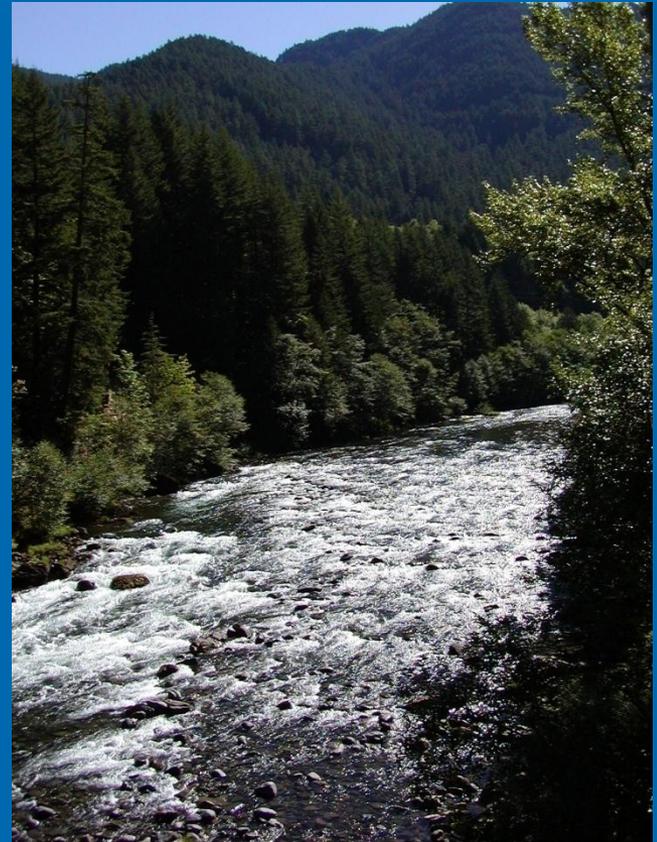
72% of the watershed is publicly owned, 25% is privately owned, and 3% is tribally owned.

Watershed Stakeholders



Clackamas River Stakeholders

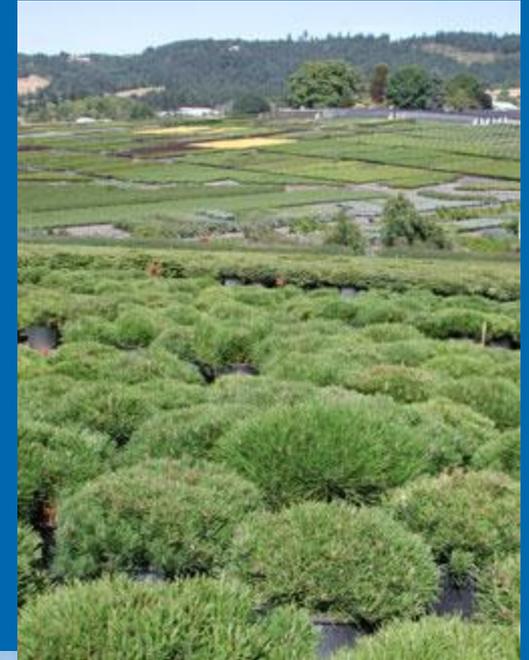
- Agriculture
- Forestry
- Fisheries
- Recreation
- Federal and State Wild and Scenic designations
- PGE electricity generation
- Drinking water



Agriculture in the Basin

Clackamas County is the US leader in both acreage and sales of Christmas trees.

Clackamas County is the nation's second ranked county in nursery stock acreage.



Timber Harvesting



- Timber harvest in the watershed dates back to the early 1800's continues to be one of the most important industries in the area. Today, harvest practices have improved. Current harvest and regeneration techniques are designed to reduce impacts on the watershed.

The Clackamas River supports Steelhead, Chinook, and Coho

- **"...probably no tributary of the Columbia has abounded so profusely with Salmon in the past as the Clackamas"**
- Livingston Stone,
US Fish Commission
1877



Recreation

The Clackamas supports fishing, hunting, hiking, camping, white water rafting, and kayaking.



Federal and State Wild and Scenic designations

Over 50 miles of the Clackamas River are protected under the Federal Wild and Scenic River System, and the State Scenic Waterways.

The purpose of these designations is to manage designated segments by protecting their outstandingly remarkable values and maintaining and enhancing the natural integrity of river related values.

PGE's Hydroelectric project



Dams and Fish Ladders on the Clackamas



Drinking Water

The Clackamas River is a drinking water source for over 300,000 people in Clackamas County. The Clackamas River Water Providers have five municipal surface water intakes on Clackamas.

Key Concerns in the Clackamas

- Water quality - WQ standards are violated for summer water temperatures, ecoli, and for habitat modifications.
- Naturally spawning anadromous salmonids
- Land use impacts (agricultural, timber harvesting and urban uses)

Key Concerns in the Clackamas

- Urban growth - increased growth in the watershed can have negative water quality impacts.
- Water supply – Water withdrawals must be balanced with maintaining sufficient instream flows to support fish and other beneficial uses.

CRWP Programs

- Source Water Protection Program
- Public Outreach & Education Program

Source Water Protection Program Goals

- Identify, prevent, minimize and mitigate activities that have known or potentially harmful impacts on drinking water quality.
- Promote public awareness and stewardship of healthy watershed ecology in collaboration with other stakeholders.

Drinking Water Protection Plan

In 2010 the CRWP adopted a Drinking Water Protection Plan. The purpose of this Plan was to provide the CRWP with a road map of potential strategies and programs to implement over the next decade to preserve the Clackamas River as a high quality drinking water source and to minimize future drinking water treatment costs.

Elements of Plan

1. Basin Analysis: Studies, GIS, Modeling and Water Quality Monitoring Sub-program
2. Education and Research Assistance Sub-program
3. Point Source/Permit Evaluation and Mitigation Sub-program
4. Nonpoint Source Evaluation and Mitigation Sub-program
5. Disaster Preparedness and Response Sub-program
6. Public Outreach and Information Sharing Sub-program
7. Watershed Land Use Tracking and Management Sub-program
8. Land Acquisition Sub-program

Basin Analysis: Studies, GIS, Modeling and Water Quality Monitoring Sub-program

To better understand the Clackamas River watershed and the potential drinking water threats, the CRWP has been using GIS to map land use and potential threats, pollutant load modeling, and developing a comprehensive water quality monitoring program.

Monitoring Contract with USGS

The CRWP jointly funds 3 USGS monitors on the Clackamas River at Carter Bridge, Estacada, Oregon City.

They test for WQ parameters such as (pH, DO, water temp) and flow.

<http://or.water.usgs.gov/clackamas/monitors/>

Macroinvertebrate Sampling

- The CRWP has been conducting macroinvertebrate sampling on five sites in the lower Clackamas River in order to produce a robust dataset necessary to identify changes in biological conditions and water quality in the River.

Cyanobacteria (BGA) Toxic Testing

In response to blue green algae blooms in North Fork Reservoir the CRWP has been conducting toxin testing at the City of Estacada and the City of Lake Oswego drinking water intakes to for toxins.

Education and Research Assistance

CRWP continue to work with the Clackamas Community College's Water & Environmental Technology Program and Portland State University to provide internship opportunities for students to support CRWP related studies and projects.



Nonpoint Source Evaluation and Mitigation

- The CRWP works with basin stakeholders to reduce non-point source pollution by tracking, evaluating, monitoring and developing programs to mitigate for nonpoint sources of pollution.

Eco Biz Certification Support

- The CRWP continues to work with the Pollution Prevention Outreach Team to conduct targeted outreach to landscaping businesses operating within the industrial area of the watershed using the EcoBiz Certification model to help them reduce pollution and save water on their managed properties

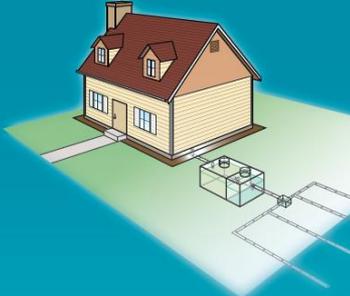


Septic System Program

The CRWP has been conducting Septic System Workshops and outreach on how septic systems work.

The CRWP has financial assistance for septic system inspections and repairs for septic system owners that live within the Clackamas River.

Financial Assistance
For Septic System
Owners
in the Clackamas River Watershed



A properly functioning
septic system can save you
money and help protect our
water quality.

**Clackamas River
Water Providers**



Working together to protect and conserve our drinking water

Down the River Clean Up Sponsorship

- The CRWP is one of the main sponsors of this event which cleans up nearly 2 TONS (3,800 lbs.) of trash out of the Clackamas River each year.



Interpretative Signs

- Installed signs in parks and public access points in the watershed.



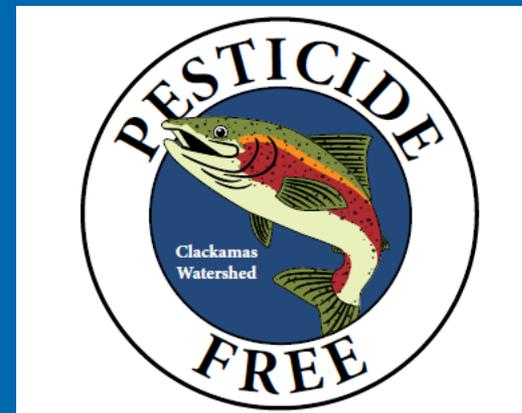
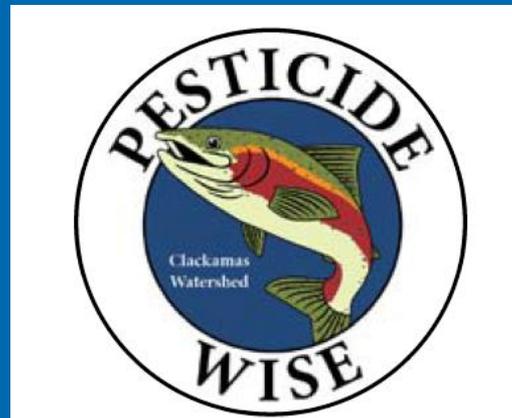
Pesticide Reduction Efforts

The CRWP is working with the Clackamas County Soil and Water Conservation District on hosting Pesticide Reduction Workshops, a Wind Sock Program, and the Sprayer Efficiency Cost-Share Program.



Pesticide Reduction Efforts

The CRWP is working with the Clackamas River Basin Council on the continued distribution of Pesticide Reduction fact sheets as well as the kick off of the Urban Pesticide Reduction Pledge Program.



Disaster Preparedness and Response

The CRWP conducts emergency preparedness table top exercise for its members, and is working with local first responders to be prepared for events that may have a low probability of occurring, but if they happen may cause extensive problems for the CRWP member's drinking water source.

Clackamas Spill Committee

- The CRWP has been working with its local first responders to develop Geographic Response Plan(s) to help reduce decision-making time after a hazardous material spill so that response strategies can be implemented immediately.

Public Education & Outreach Program Goals

- To educate our public regarding source water protection and watershed issues, drinking water treatment and distribution, indoor and outdoor water use, and water conservation.
- This allows us to provide a holistic view of how our water resources are connected and why it is important to protect and conserve the water we get from the Clackamas River.

Public Education & Outreach

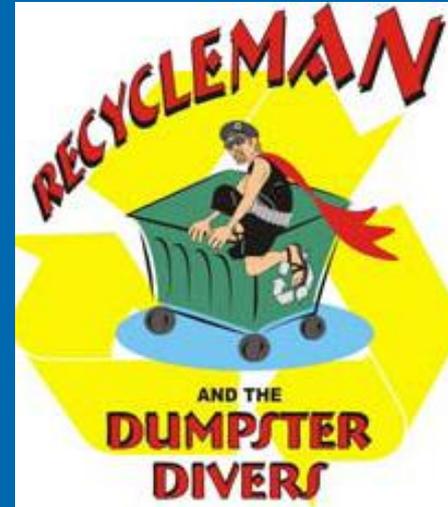
Youth Education

The CRWP offers classroom presentations, assembly programs, water treatment plant tours, mini water education grants, and conducts an annual water conservation calendar project for CRWP member teachers and schools.

Assembly Programs



What do you know about H₂O?
&
Where's The Water Watson?



Rockin' Water Road Show

**Living Streams: *Stories for Healthy Watersheds*
With Master Storyteller Will Hornyak**

Water Treatment Plant Tours



Annual Calendar Coloring Contest

Why WATER is IMPORTANT TO ME

Congratulations to our winning artist! Addie Nevett, 3rd Grade, John McLoughlin Elementary Teacher: Mrs Berry



Clackamas River Water Providers 2017 Calendar

Public Education & Outreach Partnerships

The CRWP partners with other water related agencies and organizations throughout the County. This is an important way to expand public outreach and education programs by leveraging funding, resources, and marketing opportunities.

11th Annual Celebrating Water Event

The CRWP works with other Water Resource Agencies to put on this festival which is host over 500 4th & 5th grade students from Clackamas County each year.



Mobile Garden

CRWP works water resource partners on the maintenance and care of the mobile garden, which is taken to various events throughout the spring and summer to educate the public about native and water efficient gardening.



Public Education & Outreach Community Events

The CRWP participates in a variety of community events throughout the year providing conservation, source water protection, drinking water information, and promotional items at these events.

Community Events



Happy Valley 4th of July Festival



Clackamas County Fair



Day in Damascus

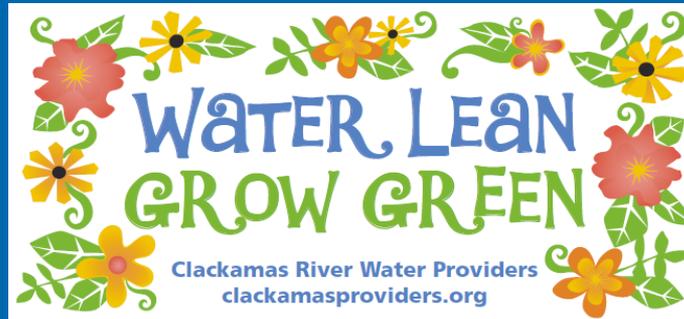


Public Education & Outreach

Outreach Materials

The CRWP continues to develop outreach materials and use at events, and to pass out at member offices and city halls, through the school programs, and mailed to customers upon request.

Outreach Materials



July 2016 News

Water Supply Update Summer 2016

During the summer months we think about water. Lots of water... like, swimming in pools, washing our cars, watering our gardens and running our sprinklers. But, did you ever stop to think that summer is a time when our region's water supply is most strained and resources are limited? This winter, snow packs reached their peak in April but early warm temperatures resulted in early snow melt and warmer than usual temperatures are expected to continue through September. Though it has been a bit cooler and we've had some rain, let's not forget conditions can change. As much as we all love summer, it's important that we use water wisely during these warm, dry months.

Conserving our precious water source, the Clackamas River is a big job, but easily accomplished when we all help. Visit the CRWP website at www.clackamasproviders.org and find helpful outdoor and indoor water saving tips and take advantage of our rebate program and receive up to \$485 in rebates.

What's Inside:

Water Supply	P1
Landscapes	P1
Quality/Lead	P2
Water Smart Rebates	P3
Summer Quiz	P3
Interview	P4
Water Protection	P5

Water Efficient Landscaping

Planning a low water use, low maintenance landscape begins with an analysis of your landscape conditions. This can be done by you or a landscape professional that can provide advice and/or do the entire landscape plan for you. There are also a number of books on how to develop a landscape plan.

Site Analysis. To begin a site analysis start by creating a base map of your property using graph paper to position your house, property lines, walks, patios, trees, fences, etc. Highlight everything that could affect privacy, view, outdoor activities, sun, shade etc. Look at solar patterns, wind patterns, topography and orientation, existing vegetation, soil types, precipitation, water data, landscape purpose, and irrigation needs.

With tracing paper over the base map, take into consideration all the needs you determined earlier (play area, patio) and show positive and negative factors that play a role in the existing landscape. This will help you select and group plants in the right place.

Getting into the Zone. Use of landscape and watering zones are important because different plants have different watering needs and yards have

different micro-climates. Zoning your landscape: low-water use zones: irrigation is only used here when new plants are added so they can get established. Moderate water use zone: plants in this area require a little more water than nature can provide. High water use zones: are where thirsty plants such as turf, vegetable gardens, and annuals are planted.

Evaluate your turf area. How much turf do you want in your yard and what is its function? A) Choose the new turf grass carefully; there are many new water-efficient varieties. B) Place the turf areas where they will be the most useful, such as play and picnic areas. C) Avoid planting trees or shrubs inside turf areas. D) Keep the physical layout of the turf in easy to irrigate shapes such as circles or rounded edges. E) Don't put turf areas on steep slopes. F) Consider placing thirsty plants near turf areas where they can get more water. G) Consider alternatives to turf—ground covers and hardscapes.

CRWP is offering Landscape Audits. CRWP is offering free Landscape Audits to help customers find ways to conserve water. During a visit to your home or business, CRWP staff will assess your yard and irrigation system identifying areas where water can be used more efficiently and provide a summary to help get you started. Email Christine at christine@clackamasproviders.org or call 503-723-3511 for more information.

SUMMER WATER CONSERVATION TIPS

Visit our website www.clackamasproviders.org for more information.

IRRIGATION TIPS

- Check your system each spring. Because automatic irrigation systems often come on during the early morning hours, leaks and other problems can go unnoticed for long periods of time.
- Take time to check your system periodically throughout the summer to ensure the system is operating properly and efficiently.
- Replace your old irrigation controller with a new Watersense® weather based controller or adjust your current controller to the weather throughout the summer so you're not depriving plants or watering unnecessarily.
- Correctly program your irrigation controller.
- Consider drip irrigation—this reduces evaporation and applies water directly to the roots.

- Install a rain sensor switch to temporarily shut off your system when it rains.
- Prevent run-off by splitting watering times into two or more applications with breaks in between. This will promote deeper root growth and foster a healthy landscape that is more resistant to dry weather.
- Water early in the morning when the air is cool and calm and evaporation is at a minimum. Watering in the evening is second best.



Consider switching your old spray nozzles for more efficient multi-stream rotating nozzles.

OUTDOOR WATER EFFICIENT TIPS

- Wash your car on the lawn.
- Take your car to a car wash that recycles and reuses the wash water.
- Fix all dripping hose bibs.
- Cover the pool when you're not using it to prevent unnecessary evaporation.
- Check for undetected leaks in your pool throughout the summer.
- Use a bucket of soapy water and a shut-off spray nozzle on the end of your hose when you wash your car.
- Sweep your driveways and patios instead of cleaning them off with water.

LAWN CARE TIPS

- A healthy lawn needs less water, pesticides, and fertilizers. Typical Willamette Valley lawns need only one inch of water a week, unless it's really hot.
- Aerate lawns in the early summer to allow water and air to reach the roots.
- Mow high to shade roots, keep soil cool and retain soil moisture.
- Much grass clippings to naturally green up your lawn.
- Water one inch a week, unless it's really hot. Visit our website for the weekly watering number.
- Fertilizer organically to protect kids, pets, and the environment.
- Skip the weed and feed products. Many of these can damage soil as well as pollute our waterways.

BUILD HEALTHY SOILS

- Healthy soil holds water like a sponge, slowly releasing moisture when lawns and plants need it most.
- Avoid using man-made fertilizers and pesticides. They can harm worms and other beneficial organisms found in healthy soil.
- Healthy soil will reduce runoff—and less runoff means less pollution and sediment in our streams and rivers.
- Adding soil amendments like compost or mulch cools and feeds the soil, improves water holding capacity, encourages deeper root growth and reduces the need for water and fertilizers.



Conservation Rebates

117 CRWP customers participated in the program last year

Clackamas River Water Providers REBATE APPLICATION

CUSTOMER INFORMATION

Name _____

Installation Address _____

City _____ State ____ Zip _____

Mailing Address (if different) _____

City _____ State ____ Zip _____

Home Phone _____ Daytime Phone _____

Email _____

PLEASE PROVIDE YOUR ACCOUNT # _____
AND CIRCLE YOUR WATER PROVIDER BELOW

City of Estacada	City of Gladstone	Oak Lodge Water District
South Fork Water Board (Oregon City and West Linn)	Sunrise Water Authority (Happy Valley and Damascus)	

I certify the information I have provided is true and correct, and I have purchased the goods for use at the location indicated. I grant permission to Clackamas River Water Providers, with notification, to enter upon the property to inspect the installation of rebate goods to assure program requirements are met. I understand rebates are distributed on a first-come first-served basis until funds are exhausted.

MAKE EVERY DROP COUNT!

The Clackamas River Water Providers (CRWP) are a coalition of the municipal water providers on the Clackamas River that are working together on water resource issues. The purpose of the organization is to collectively fund and coordinate efforts regarding water resource planning and management, water conservation and the development of the Clackamas River on a sustainable basis. For more information regarding individual CRWP members and their water service areas go to www.clackamasproviders.org and at the top of the page click on "About Us."



Working Together to Protect and Conserve our Drinking Water

14275 S. Clackamas River Drive
Oregon City, OR 97045

For More Information
www.clackamasproviders.org
E-mail: Christine@clackamasproviders.org
Phone: (503) 723-3511

6/2016

UP TO \$485 IN REBATES!

Clackamas river water providers

are offering 6 water conservation rebates*

* Up to \$485 in rebates available!

REBATE INFORMATION

Customers can take advantage of each rebate one time per account per fiscal year per account.

<h3>INDOOR REBATES</h3> <p><input type="checkbox"/> Toilet Rebate – up to \$85 + \$15 additional for recycling your old toilet Manufacturer and Model # _____</p> <p><input type="checkbox"/> Washing Machine Rebate – up to \$75 maximum Manufacturer and Model # _____</p>	<h3>OUTDOOR REBATES</h3> <p><input type="checkbox"/> Rain Sensor/Switch – up to \$25 maximum</p> <p><input type="checkbox"/> Irrigation Controller – up to \$200 maximum</p> <p><input type="checkbox"/> Multi-stream Rotating Nozzles – up to \$60 (or 20 nozzles at \$3 each)</p> <p><input type="checkbox"/> Manual Hose Bib Timer – up to \$25 maximum</p>
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Customer Signature _____ Date _____

The following are required, please check all that apply. Do not send until application is complete. Incomplete and unsigned application may be returned.

<input type="checkbox"/> Water provider account number	<input type="checkbox"/> Manufacturer and or model number (if required)
<input type="checkbox"/> Name and address	<input type="checkbox"/> Toilet recycling receipt for additional \$15
<input type="checkbox"/> Proof of purchase	<input type="checkbox"/> Signed and dated application

Visit us at www.clackamasproviders.org

Clackamas River Water Providers

Working together to protect and conserve our drinking water.

Home About Watershed Protection Water Conservation Current Events Contact

What's New?

Cultivating a Culture of Preparedness

Thank you for your interest in the program.

We've reached the maximum number of water bottles. We're no longer accepting new orders.

If you would like to be notified next time we implement the Emergency Bottle Water Program please send an email to Kim Swan at kims@clackamasproviders.org.

Water Conservation

Except for the air we breath, water is the single most important element of our lives. It is too precious to waste. Regardless of the availability of water now and in the future, we must get the most for our current supply

Our Programs

The Clackamas River Water Providers are implementing a variety of programs to protect and conserve our water resources. These include water conservation programs, watershed programs, and water quality programs.

Watershed Protection

Sustaining a precious resource a top priority. By preserving the Clackamas River as a high quality drinking water source we can help minimize future drinking water treatment costs, while being good stewards of the river.

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Home
About Us
Watershed Protection
Water Conservation
Current Events
Contact Us

Newsletter Signup
Newsletter
Annual Report

How Water Systems Work

Search

Kimberly Swan

Water Resource Manager

Clackamas River Water Providers

14275 S. Clackamas River Rd.

Oregon City, OR 97045

(503) 723-3510

(503) 723-3508 (fax)

kims@clackamasproviders.org

Christine Hollenbeck

**Public Education & Outreach
Coordinator**

Clackamas River Water Providers

14275 S. Clackamas River Rd.

Oregon City, OR 97045

(503) 723-3511

(503) 723-3508 (fax)

christine@clackamasproviders.org