

# SUMMER *Social* SUMMIT

Thursday, June 22, 2023  
Tigard, Oregon

Hosted and sponsored by:



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# Reuse Summer Summit Itinerary

<b>11:00 am</b>	Networking Opportunity	Durham Conference Center 16060 SW 85th Ave, Tigard, OR 97224
<b>11:30 am</b>	Lunch	
<b>12:00 pm</b>	Welcome	Kathryn Harrington Chair, Clean Water Services Board of Directors/Washington County Board of Commissioners
<b>12:05 pm</b>	Icebreaker Activity	Shelly Parini Co-Chair, WaterReuse PNW Oregon Committee
<b>12:20 pm</b>	Keynote Comments	Diane Taniguchi-Dennis Chief Executive Officer, Clean Water Services
<b>12:30 pm</b>	National Perspective	Patricia Sinicropi Executive Director, WaterReuse Association
<b>12:50 pm</b>	Regional Perspective	Matt Shroll Past-President, WaterReuse Association Pacific Northwest Section Board of Directors
<b>1:00 pm</b>	State Perspective	Representative Ken Helm Oregon House District 27  Pat Heins Oregon Dept. of Environmental Quality - State Coordinator for Biosolids & Recycled Water  Susie Smith Executive Director, Oregon Association of Clean Water Agencies
<b>1:20 pm</b>	Local Perspective	Jared Kinnear Reuse Program Manager, Clean Water Services
<b>1:30 pm</b>	Break into Assigned Tour Groups	
<b>1:45 pm</b>	Tour Group 1	Group A – Water Resource Recovery Facility Group B – Thomas Dairy Site
<b>2:45 pm</b>	Tour Group 2	Group A – Thomas Dairy Site Group B – Water Resource Recovery Facility
<b>3:45 pm</b>	Return to Conference Center for Closing Comments & Afternoon Refreshments	
<b>4:15 pm</b>	Social Event at Brix Tavern	Brix Tavern – Tualatin Location 8187 SW Tualatin-Sherwood Rd, Tualatin OR 97062
<b>6:30 pm</b>	End of Social Event	

# WaterReuse Association

The WaterReuse Association is the nation's only trade association solely dedicated to advancing laws, policy, funding, and public acceptance of recycled water. WaterReuse represents a coalition of utilities that recycle water, businesses that support the development of recycled water projects, and consumers of recycled water. Established in California in 1990, WaterReuse now has members in 38 states and 11 countries.

The WaterReuse Pacific Northwest Section advances water recycling in Washington, Oregon, and Idaho by addressing challenges unique to our local communities. Engaging stakeholders and community leaders through events such as the Summer Summit and Social is just one of the many ways we are working to advance water reuse in the Pacific Northwest.



The fundamental principle of water reuse is using the right water for the right purpose, everywhere and all the time. That means aiding and accelerating the natural process of cleaning the water to make it suitable for its intended purpose, from irrigation to industrial uses to drinking.

The WaterReuse Association's efforts touch on every aspect of promoting water reuse to make it fit for purpose. Since its founding, WaterReuse has advocated for policies, laws, and funding at the state and federal levels to increase the practice of recycling water. Our national office leads the advocacy efforts with the U.S. Congress and federal agencies, including the Bureau of Reclamation and the U.S. Environmental Protection Agency.

While the science is clear that recycling water is safe, we must proactively inform and educate our communities about the safety and benefits for water reuse projects, especially as it relates to managing climate change impacts and protecting the environment.

To address that challenge, WaterReuse is expanding its efforts to support members in communicating to their customers and constituencies. WaterReuse engages the industry through programs including webcasts, committees, and an annual WaterReuse Symposium.

To learn more about our efforts to advance water reuse we invite you to visit our website at [www.watereuse.org](http://www.watereuse.org).

# Clean Water Services

## Working for the River Since 1970

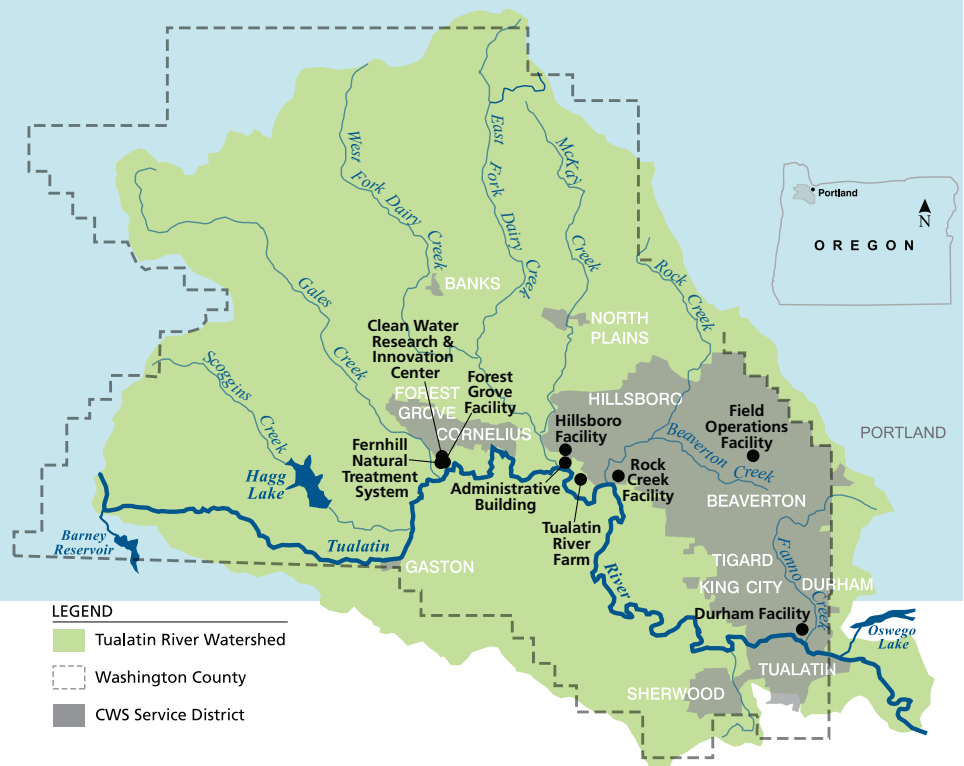
In the late 1960s the Tualatin River's flow was so inadequate, you could stand across it. Water quality was poor. It was a crisis for public health, the economy, and the environment. In 1970, Washington County voters went to the polls and resoundingly affirmed their commitment to clean water, public health, and the environment by a more than a 2-to-1 margin in favor of creating a regional sewer utility — then known as the Unified Sewerage Agency.

Since that vote more than 50 years ago, our core business has continually evolved. In 1990, for example, the region formed a stormwater management utility – and put us in charge. In 2001, we changed our name to Clean Water Services to better reflect our broader role in water resources management. In 2004, we received the nation's first watershed-based NPDES permit. That same year, with the launch of Tree for All, we ramped up our involvement in ecological enhancement and began to take restoration to scale. In 2010, we established the Clean Water Institute, a nonprofit partner that shares expertise to benefit watersheds

around the world. These are just a few milestones in our rich history, and we know that others lie ahead. For example, we're building a new research and innovation center less than a mile from our Fernhill/Forest Grove facility.

We have become industry leaders recognized for pioneering smart, practical solutions for the sustainability of the precious gift that is water. We are public servants, working around the clock to protect public health and the natural environment. Together with our 12 cities in our service area, Washington County, and dozens of partners, we're working together for the river.

**Everything we do at Clean Water Services aims to protect public health, while enhancing the natural environment of the Tualatin River Watershed. Combining science and nature, we work in partnership with others to safeguard the river's health and vitality, ensure the economic success of our region, and protect public health for more than 600,000 people in urban Washington County.**





# Clean Water Services



## Our MISSION

We provide cost-effective services and environmentally sensitive management of water resources for the Tualatin River Watershed.

## Our VISION

Enhance the environment and quality of life in the Tualatin River Watershed through visionary and collaborative management of water resources in partnership with others.

## Our PROMISE

Beautiful clean water for today and tomorrow.

## Our VALUES

- **A Long Range, Comprehensive Basin-Wide Perspective** on water resources issues, challenges and opportunities.
- **A Supportive, Collaborative Team-Based Work Environment** utilizing timely communication and diverse backgrounds, skills and aspirations of all Clean Water Services employees.
- **Active Public Awareness and Involvement** in Clean Water Services affairs and regional water resources issues.
- **Decision-Making and Performance Management** Based on Up-to-Date, Scientific and Technical Information.
- **Financially Sound, Fiscally Responsible Management** maximizing value for Clean Water Services rate payers and investors.
- **Our Employee Team** as Clean Water Services' greatest and most trusted resource and asset.
- **Protection of the Public Health and Enhancement of the Environment** through the development and delivery of Clean Water Services programs and services.
- **Quality, Cost Effective Customer Service** supported by friendly, service-oriented personnel.
- **Strong, Visionary and Principle-Based Leadership** providing direction and purpose in the achievement of the Clean Water Services mission.
- **Technical Excellence and Innovation** in the management of Clean Water Services' water resource facilities.
- **Timely, Efficient Decision-Making at the Appropriate Level of the Organization** enabling Clean Water Services to act swiftly, responsibly, and effectively.

# Durham Water Resource Recovery Facility



AERIAL VIEW OF DURHAM WATER RESOURCE RECOVERY FACILITY IN TIGARD, OREGON.

Durham Water Resource Recovery Facility is a nationally acclaimed, state-of-the-art facility, serving Washington County residents in the cities of Beaverton, Durham, King City, Sherwood, Tigard, and Tualatin, and small portions of southwest Portland and Lake Oswego.

The facility, located in Tigard near Cook Park and Tigard High School, cleans an average of 22 million gallons of wastewater per day to among the highest safety and quality standards in the nation. Through innovative, advanced technology and processes, wastewater collected from homes and industry is cleaned and returned to Washington County's only river – the Tualatin – actually enhancing the health of the river. Cleaned wastewater is also used for local irrigation, and natural byproducts of the treatment process are converted to electricity, heat, and used as soil amendments at local sites and throughout the state.

The Durham facility provides advanced wastewater treatment, also known as tertiary treatment, exceeding the treatment level of 98% of wastewater facilities in the United States. In 2009, the first commercial nutrient recovery facility in the nation was built at Durham through a partnership with Ostara Nutrient Recovery Technologies in Canada. The facility captures 80% of the phosphorus from the wastewater stream and converts it into a premium, slow-release fertilizer used on turfs and nurseries throughout the northwest and elsewhere.

The Durham Facility began operations in 1976 to reverse decades of severe water pollution in the Tualatin River and its tributaries, and to meet the demands of a growing population. The facility centralized a scattered system of 14 inefficient wastewater treatment plants, creating one of the most efficient and advanced facilities in the world.

## DURHAM FACTS

- Provides a higher level of treatment than 98% of the facilities in the nation.
- Must meet over 1,000 strict permit conditions, including monthly, weekly and daily limits established to protect the Tualatin River.
- Cleans an average of 22 million gallons of wastewater per day.
- Recycles more than 85 million gallons a year of cleaned wastewater for local irrigation.
- Recycles more than 12 dry tons of biosolids daily for use as a soil amendment.
- Produces nearly 300 tons of Crystal Green®, a commercial, high value fertilizer.
- Cleans wastewater for nearly 250,000 residents of Beaverton, Tigard, Sherwood, Tualatin, Durham, King City, and portions of Clackamas and Multnomah counties.
- Cogeneration system and solar panels provide 60% of the plant's electricity needs.





# Thomas Dairy



AERIAL VIEW OF THOMAS DAIRY WITH THE DURHAM WATER RESOURCE RECOVERY FACILITY IN THE TOP RIGHT CORNER.

## THOMAS DAIRY FACTS

- 26-acre site of former dairy operations
- Purchased by CWS in 2006
- Regional trail system connecting Tualatin and Tigard
- Diverse habitat types, including emergent wetland, wet prairie, oak savanna
- Adjacent to Cook Park, Durham City Park, and Clean Water Services WRRF

## CURRENT RESEARCH PROJECTS

- Agronomic rate monitoring
- Biogeochemistry study of soil organisms
- Greenhouse gas emission study
- Carbon sequestration study
- Evapotranspiration study
- Antibacterial resistant microbes study
- Molecular biology (RNA/DNA) study
- Nitrogen cycle study
- PFAS
- Soil moisture
- Groundwater monitoring

## PARTNERS

- Department of Environmental Quality
- Tualatin Riverkeepers
- City of Tigard
- Tualatin Rivershed Council
- Tualatin Valley Water District
- Natural Resources Conservation Service/ Washington County/USDA
- City of Durham
- Oregon Association of Clean Water Agencies
- PNW WaterReuse Association
- National WaterReuse Association
- Portland State University
- Pacific University
- Oregon State University

