Water Environment Services

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2019 Annual Report

photo courtesy of MtHoodTerritory.com

Letter from the Director of Water Environment Services

Dear valued customers,

The toilets, sewer systems and wastewater treatment plants we use every day protect the health of our community and support our fast-growing region's economic vitality. As the director of Water Environment Services, I'm proud to share with you some of the many projects and initiatives we are working on to provide our community with safe, reliable and effective wastewater treatment and watershed protection services.

As you read this report, I hope you will discover how we serve all of our 190,000 customers while remaining committed to sustainable practices that protect our natural resources and save money. Simply put, producing clean water and protecting water quality are at the heart of everything we do.

Over the past year our team took important steps to strengthen our ability to deliver these vital services to our community now and into the future. We are expanding and modernizing our wastewater treatment facilities, have completed construction of the Carli Creek Water Quality Facility, and are solidifying productive partnerships with the communities we serve.

I'm also pleased to tell you that it has been an award-winning year. Our team has been recognized on the national level as a "Utility of the Future Today" by the National Association of Clean Water Agencies and honored as the "Member Agency of the Year" by the Oregon Association of Clean Water Agencies. Honors such as these reflect our ongoing service commitment to you.

We value you as a customer, and look forward to providing dependable and affordable services for you in the coming year and far beyond.

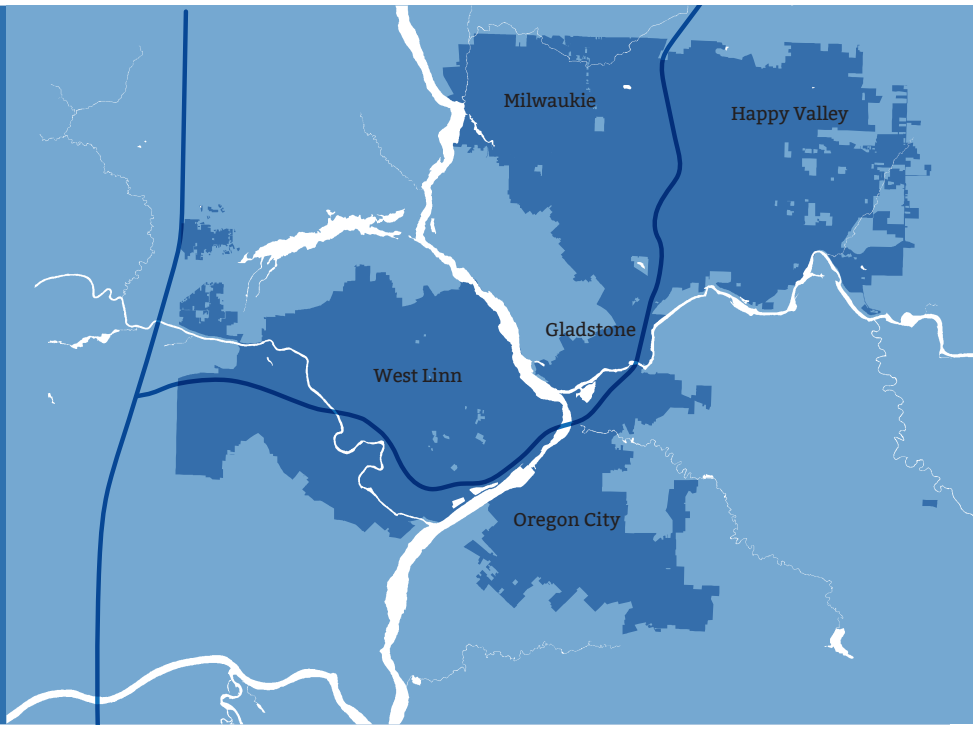
Thank you!

Greg Geist, *Director, Water Environment Services*

Water is valuable.
We *treat* it that way.

The WES Service Area Includes:

- Boring
- Fischer's Forest Park
- Gladstone
- Happy Valley
- Hoodland
- Johnson City
- Milwaukie
- Oregon City
- Rivergrove
- West Linn
- Communities in unincorporated northern Clackamas County



Protecting the Environment

Surface Water Management

Urban stormwater runoff is a leading source of water pollution in our state, carrying harmful surface chemicals and debris to our waterways.

We protect water quality through our surface water programs, reducing pollution in our rivers and streams.

photo courtesy of MtHoodTerritory.com

Carli Creek Water Quality Facility:

Partnering with Nature

Over the last year, our Carli Creek Water Quality Facility has been filtering pollutants carried by stormwater runoff from nearby industrial properties before it reaches the Clackamas River, the drinking water source for more than 360,000 people.

Our team restored creek habitat and installed pipes that funnel runoff through the wetland that clean the water before it reaches the creek and river.

Wood structures provide habitat for fish and other wildlife

Stormwater funneled to the site

Aerial view of the 15-acre Carli Creek Water Quality Facility

MEET THE EXPERTS

"Preventing pollution at the source is my job. I get to protect the environment I go hiking in, and protect the water I consume and serve the public in an important way."

*– **Chris Desiderati**, WES Source Control Specialist*

Creating Clean Water Ambassadors

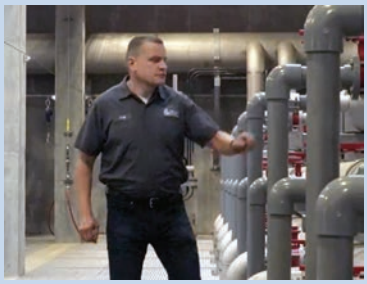
Education can change how people think, act and make decisions. We work with students in the classroom, offer field trips to our facilities, coordinate watershed cleanups, and participate in events. Our goal is to cultivate a community that cares about clean water and protecting the environment now and in the future. If your school or class is interested in watershed health education please contact Gail Shaloum at 503-742-4597.

Help Keep Baby Wipes Out of Pipes

Baby wipes are convenient and save time, until they cause inconvenient and costly plumbing issues in your home and community's sanitary sewer system. Wipes of all types can clog pipes and cause sewage backups.

Please remember to dispose of baby wipes in the trash along with surface cleaning wipes, paper towels, cotton balls and swabs.

MEET THE EXPERTS



"What I love about my job is that every day we take water that people flush down their toilets or goes down their drain, and we're able to clean that water and send it to the river."

- Greg Eyerly,
WES Operations Manager

Our Partners

Every year, we proudly provide grants to organizations wanting to improve the health of watersheds.

This year, $300,000 was awarded through our RiverHealth Stewardship Program to 14 organizations who work to restore habitat, manage invasive plants, organize volunteer events, support watershed science education, and remove trash.

We also partner with the non-profit SOLVE for Summer Waterway Cleanups. Last year, 1,248 volunteers removed 8,480 pounds of trash during 51 events.

The WES Watershed Protection Group works with many organizations to meet our shared goals of improving watershed health and complying with water quality permits.

By the Numbers

3,409

Students Participated in WES Sponsored Learning Opportunities

WES, SOLVE and volunteers team up to clean up the 3 Creeks Natural Area in the Milwaukie area

WES, Clackamas River Basin Council, Friends of Trees and volunteers plant trees

Building for the Future

We are dedicated to making sure that the best technology and equipment meet the needs of a population that has doubled since 1986, and continues to grow.

Our projects are designed to keep pace with growth. We are also replacing aging equipment with energy-efficient technology.

Our treatment facilities clean wastewater and return it to the rivers.

Building Capacity

At our Tri-City Water Resource Recovery Facility in Oregon City, we are building a new 1.3 million gallon facility, called an anaerobic digester, which is a part of our treatment process.

This new digester, like our two existing ones, will turn waste into methane gas that is converted to heat and power, which provides nearly half of the electricity used at the Tri-City facility. The digester process also converts the waste into a natural fertilizer.

VOICES

"The North Clackamas Chamber of Commerce is proud to partner with Water Environment Services on the Solids Handling Capacity Improvement Project. This project will give us the needed capacity for growth for our businesses and residential communities."

– Laura Edmonds
CEO, North Clackamas Chamber of Commerce

Construction on the new digester at our Tri-City Water Resource Recovery Facility in Oregon City

Our Kellogg Water Resource Recovery Facility in Milwaukie

Good Neighbors in Milwaukie

Just like your homes and cars, our facilities require regular maintenance to make sure they remain in good working order. At our Kellogg Water Resource Recovery Facility in Milwaukie, we are replacing aging equipment and improving odor control. We take pride in being a good neighbor.

The 82nd Drive Pedestrian Bridge gets a safety update

Building Resiliency

Our 82nd Drive Pedestrian Bridge, which carries key pipelines across the river, is popular with walkers and bicyclists who cross the Clackamas River between Gladstone and Oregon City.

We are upgrading the bridge to make it capable of withstanding a catastrophic earthquake. This project will allow the bridge to serve as passage across the river for emergency vehicles after such an event.

MEET THE EXPERTS

"I love my job because I get to help protect the public as well as the local watershed. Our team is one big family. We're all here for the same reason; to produce clean water."

*– **Blake Raines,** WES Wastewater Operator*

Preserving Our Shared Investment

Most people don't think about what happens after they flush their toilet. We do.

It takes a lot of science and expertise to make sure these important services are working every day of the year.

We operate and maintain five treatment facilities, 23 wastewater pumping stations and more than 340 miles of sewer pipes.

From time to time, you may see crew members in your neighborhood checking on pipes or other equipment to make sure everything is working properly.

Our crews are your front line of defense in making sure the wastewater gets to our treatment plants, where it can be cleaned.

Our team also works to ensure harmful pollutants carried in stormwater or surface water runoff are removed before it reaches the river or other waterways.

In a typical year, we will inspect and clean more than 2,500 storm structures that capture and treat polluted storm runoff.

VOICES

"When you flush the toilet, wash your hands, or run your dishwasher, all that water has to go someplace. It goes through a system of pipes and filters, and that's what WES manages. It takes the water, either from the sky or from those pipes, and makes sure that it is very clean - very, very clean - before it is released into the river."

– William Gifford
Small Business Owner and Member of the WES Advisory Committee

Tackling Challenges

We are always working to replace aging equipment and find potential leaks in the sewer pipe system.

Extra water can end up in the system due to leaks and overwhelm our water treatment facilities if not addressed.

Our staff is tackling these challenges head-on and working with experts from our partner cities to solve potential problems with the sewer system.

MEET THE EXPERTS

"I've worked for over 30 years in wastewater treatment, and I love what I do because it's making a difference for the environment."

– Lynne Chicoine,
WES Capital Program Manager

Keep Fats, Oils and Grease (FOG) out of your pipes!

If poured down the drain or into your garbage disposal, FOG can build up over time by sticking to the sides of sewer pipes. This can cause an expensive sewer backup into your home or the wastewater system. By following a few simple steps, you can help prevent sewer backups by:

- Pouring cooled fats, oils and grease into a covered, disposable container and tossing it into your garbage instead of down sink drains.
- Soaking up remaining FOG with paper towels and placing in the trash.
- Scraping food scraps into your compost or trash before washing dishes.
- Using sink strainers to catch any remaining food waste while washing dishes.

23
WES operates 23 pump stations capable of pumping more than 70 million gallons per day

2,500
WES crews inspect and clean more than 2,500 storm structures a year

Financial Stewardship

We take our responsibility as stewards of ratepayer dollars very seriously.

For 25 consecutive years, we have received Certificates of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association of the United States and Canada (GFOA).

The financial ratings service company Standard & Poors recently upgraded us to its highest credit rating of "AAA" which recognizes "excellent financial health and management."

For Each $1 of Monthly Service Charge Revenue

$.63

OPERATIONS AND MAINTENANCE, INCLUDING:

- All wastewater treatment services including waste removal, biosolids management and disinfection of water
- Day-to-day plant maintenance
- Regulatory compliance, including laboratory
- Day-to-day collection system maintenance, including pump stations

$.18

INFRASTRUCTURE FINANCING AND RESERVES, INCLUDING:

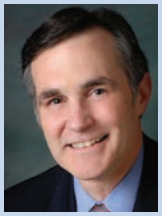
- Equipment replacement
- Reserves for future project needs
- Building treatment capacity for future growth
- Construction

$.19

OUTSTANDING BONDED DEBT PAYMENTS

- Financing capacity expansion projects

VOICES



"WES is also a public health agency. You don't think about that, but the fact is, in the early 1900s, the average life expectancy was 47 years. We owe much to our life expectancy now being 78 years because of clean wastewater treatment and clean, safe drinking water."

– Greg DiLoreto
Chair, American Society of Civil Engineers Committee on America's Infrastructure, Vice Chair, WES Advisory Committee

Science

Our chemists perform over 20,000 analyses per year to ensure high water quality.

WES Governing Body

The Clackamas County Board of Commissioners serves as our governing body. Commissioners ask for recommendations from the WES Advisory Committee on key decisions.

Commissioners Ken Humberston, Martha Schrader, Paul Savas, Sonya Fischer, and Chair Jim Bernard

WES Advisory Committee *Representing Our Customers*

The WES Advisory Committee includes ratepayers, environmental representatives, business owners, members of the development community and elected officials. Members have experience in wastewater management, watershed health and restoration, economic development and surface water. The committee provides input and makes recommendations to WES and the Board of County Commissioners.

VOICES

"WES does a great job of planning for the future. As a vibrant community, we are going to want businesses to move here, and WES is expanding capacity so that can happen. We could not live in a great community like Happy Valley without organizations like WES protecting the environment and public health."

– Michael Morrow
Happy Valley Resident & WES Advisory Committee Member

Tour Our Facilities:

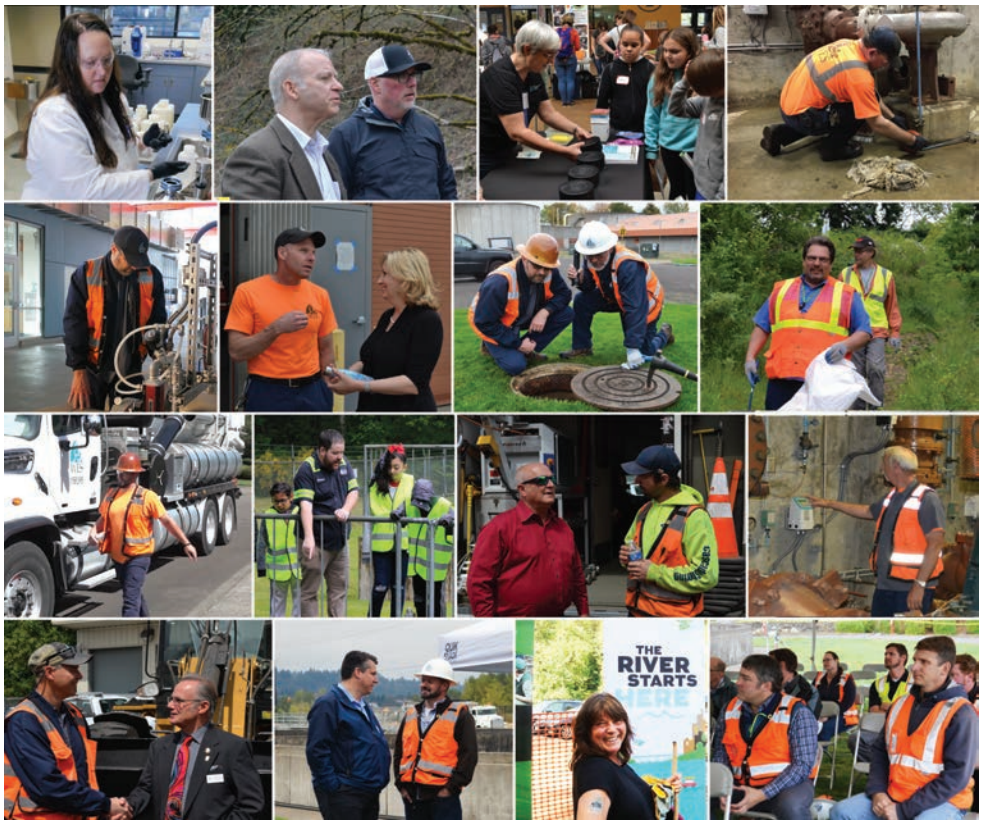
Join us for a unique tour of one of our facilities. Learn how our technology works to:

- protect the health of your family and the environment
- produce clean water, energy, and natural fertilizer
- support economic vitality

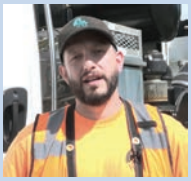
Ask questions and tell us about how we can keep you, our valued customer, informed and engaged.

Stay Connected!

www.clackamas.us/wes 503-742-4567 wescustomerservice@clackamas.us



MEET THE EXPERTS



"We are the front line of defense in getting sanitary sewer water back to the plant and surface water runoff to the rivers safely. When we have clean water, we have health, happiness and community."

– Matt Zak,
WES Sanitary and Stormwater Sewer Technician

WWW.CLACKAMAS.US/WES **503-742-4567**

WATER ENVIRONMENT SERVICES

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