"Delivering on Customer Expectations since 1943"

2022

Lakewood Water District
Annual Water Quality & Business Report

Our Water
Our Community
Our Future

Dear Lakewood Water District Customers

It is a pleasure to bring to you our 2022 Annual Report. Every year brings new plans and plenty of ongoing operating activities to report and inform you on. This year is no different. We hope you find the information we present helpful, transparent, and consistent from year to year.

Our theme for 2023, "Minimizing PFAS Impact While Delivering on Customer Expectations," sets the stage for this year's report. Since 2016/2017, we have been sharing with you the impacts of Per- and polyfluoroalkyl (PFAS) substances linked to Joint Base Lewis-McChord. Our Lakewood Water District team members have spent their time and resources being proactive to achieve the desired results in working through these impacts in the past few years. These investments include research and applications for state and federal grant funding to offset future mitigation projects to eliminate PFAS from entering our water system. PFAS is increasing pressure on maintaining our capital projects, replacement and rehabilitation program, and schedule for annual maintenance and operating programs. The challenges with PFAS are also impacting our budget, cost controls, and operating costs.

To further acerbate the complexity of the situation is the recent information from the Environmental Protection Agency (EPA) on setting a Maximum Contaminant Level (MCL) for PFAS for all water purveyors in the country. EPA has proposed setting the MCL at 4.0 parts per trillion for six PFAS chemicals, two of which will affect some of the District wells. The EPA's new MCL-level regulations regarding PFAS will have a significant financial impact on the District. The District's priorities have increased, but our commitment to delivering safe, quality drinking water at the lowest rates remains on top.

In June, the District will celebrate its 80th year of serving our customers since 1943. We are extremely fortunate for the consistent performance of your water District. We have many strengths to lean on and feel secure with, including our personnel, financial position, wholesale partnerships, and long service history. In the following report, we hope you can sense the level of confidence and trust you have come to depend on to deliver a quality water system to your home, school, and business.

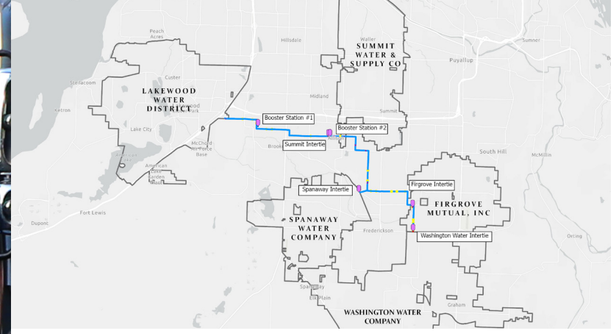
Sincerely,

Your Lakewood Water District Commissioners

John Korsmo
President

Greg Rediske
Vice President

Gary Barton
Secretary



The Water Connection to Spanaway Water is Now Completed

We are pleased to report that the final connection has been made to our wholesale customers in central Pierce County. This process started in 2009 with our connection to Summit Water; we celebrated the connections to Washington Water and Firgrove Mutual in 2019, expanding our contractual water take to 8 mgd. Finally, in December of 2022, we celebrated the final connection to the wholesale transmission main with our partner Spanaway Water, who has been a wholesale customer since 2009 when they began purchasing 1 mgd.

With Spanaway on board with purchasing the last 1 mgd from the District, we have allocated the total 10 mgd capacity of the pipeline and are on pace to provide the present 7.5 mgd water take over the next several years. The water take will slowly increase to meet our partners' demands, and within the next 20 years, the entire 10 mgd will be provided each day.

Since 2009, the revenue from our wholesale customers has helped the District to offset potential rate increases. This partnership will also help the continued growth in central Pierce County. We are excited to provide this option to our partners and to use the water responsibly.

No Tenant Sign-up Proposal Approval

On July 21, 2022, the Board of Commissioners approved the No Tenant Sign-up Proposal. On September 5, 2022, the District put the proposal into effect and no longer signs tenants up. Housing providers do have the option to have a copy of the bill sent to the "Resident" so the tenants can still pay the bill if so desired. Adopting this new procedure has been successful in saving the District ratepayers approximately $150,000.00 a year and allowed the District to reduce the office staff by one full-time employee through attrition.

(In order from left to right). **Michelle, Clark, Christian, Randy, Amber, Luke, Carrie, Kevin, Debbie, Ian, Tyler, Teri, Eric, Sam, Doreen, Jordan, Sandy, Bob, Lucas, Megan, Jake, Brent, Zac, Don, Shaun, Philip, Marshall, Bobby, Chris R., Jeri-Lynn, Kyle, Briana and Chris B.**

Lakewood Water District Projects

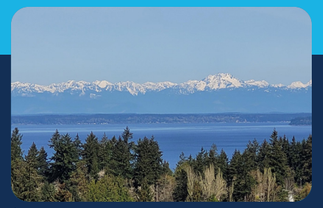
P-1R Well Rehabilitation at Steilacoom Blvd

GAC Filter Vessels for Scotts Well Treatment Project

Well Casing 112th St R-2 Well

The Water Connection to Spanaway Water

Drilling a Well on Hipkins Road, 1952



View from Farwest Tank

CAPITAL PROJECTS - COMPLETED IN 2022

- Rehabilitate & Expand & Angle Lane Well Capacity
- Rehabilitate & Expand & 104th & Bridgeport Well Capacity
- Drill 112th St R-2 Well
- Seismic Retrofit of Steilacoom Blvd Tank
- Install additional pump at Steilacoom Blvd Pump Station
- Rehabilitation & Equipping of Steilacoom Blvd P-1R Well
- Reliability Improvements at 88th & Pine Pump Station
- Spanaway Connection to Wholesale Transmission Main
- 39th Ave Water Main Replacement - Phase 4
- 112th St Water Main Replacement - Pacific Hwy to S Tacoma Way
- Gravelly Lk Dr Water Main Replacement - Nyanza to Washington
- Steel Building at District Office
- Scotts Wells & Treatment Facility
- Abitibi Well Evaluation
- FEMA Generators & Seismic Project
- Washington Blvd Water Main Replacement
- Naomilawn, Highland & Newgrove Water Main

CAPITAL PROJECTS
NEW PROJECTS STARTING IN 2023

- Oakbrook O-2 & O-3 Replacement Wells
- Hipkins Road I-3 Replacement Well
- New Lake Street K-3 Well
- New Scotts G-4 Well
- Rehabilitate Washington Blvd E-3 Well
- Cathodic Protection System at Nyanza Tank
- Seismic Improvement Design for Washington Blvd & 104th & Bridgeport Tanks
- Emergency Generator for Rehabilitated 104th & Bridgeport F-2 Well
- Site Security Improvements at Scotts Site
- Equip 112th St R-2 Well
- Lake Steilacoom Dr Water Main Replacement - Phase 2
- Front St & 96th St Water Main Replacement
- Hipkins Road Water Main Replacement
- Paving at District Office

Projects Designed In 2023 For Construction 2024

- Francis Folsom St Water Main Replacement
- 121st St Water Main Replacement
- Forest Glen, Loch Ln & Linwood Water Main Replacement

2023 Steilacoom Blvd Tank Retrofit

There have been some big changes at our Steilacoom Blvd. tank site. With help from the Department of the Military, your Lakewood Water District has been able to secure $1,200,000 in grant funds from FEMA to seismically retrofit and fortify the tank.

Along with a new eggshell blue paint job, we, with help from T Bailey Construction and RH2 Engineering, were able to make significant improvements to the tank. We incorporated a six-foot tall, 5.5 million-pound concrete ballast to the bottom of the tank to help weigh it down in the event of an earthquake. The exterior steel of the tank was outfitted with 42' tall shell stiffeners to help stop the twisting of the tank and the piping outside the foundation was fitted with earthquake knuckles to give the pipe a little flex during an earthquake. We also added a high security vent to the top of the tank to keep the weather and vandals out.

We were very happy to be able to achieve this retrofit using federal dollars to help keep rates down and help ensure water is available to the community during and after an earthquake.

Your Lakewood Water District Operations Crew

Another Clean Audit... Now 27 Years and Counting

The State Auditor's office (SAO) completed its annual audit of the District's accounts and again awarded the District a clean report. The SAO's official Accountability Audit and Financial Statement Audit Reports noted no deficiencies and, again, complimented the District on its strong financial policies, precise accounting internal controls, and competent and cooperative staff.

For more information on our audit history, please consult our website at **www.lakewoodwater.org.**

(Above from left to right): Michelle (Accounting Specialist), Carrie (Accounting Specialist) and Philip (Finance Manager) taking the best care of the District's financial affairs.

Your Lakewood Water District Pumping and Water Treatment Crew

Lakewood Water District Balance Sheet Year Ended December 31, 2022

Unaudited

Assets	($) Dollar amounts
Cash and Investments	11,184,885
Other Current Assets	4,085,534
Total Current Assets	15,270,419
Total Net Utility Plant	136,232,172
Deferred Outflows	1,087,527
TOTAL ASSETS	**153,665,776**

Liabilities	
Current Liabilities	4,443,593
Bonds Payable	57,422,604
Net Investment in Capital Assets	78,035,785
Deferred Inflows	1,163,541
TOTAL LIABILITIES & EQUITY	**153,665,776**

The Source of Your Water

The District's sole source of water is from underground aquifers which are water-bearing strata of permeable rock, sand, or gravel. No surface water, desalinated water, or recycled water is used. The District has a total of 31 active wells which together provide a maximum production capacity of 37 million gallons per day (mgd), with a total water right capacity to pump up to over 60 mgd.

The District's wells are in four aquifers: A, C, E, and G with A being the shallowest and G being the deepest. Aquifers are generally of glacial origin and tend to be coarse grained and highly permeable. There are three layers of soil that prevent water from passing between the four aquifers, called aquitards. Aquitards are strata of finer-grained and less-permeable layers and usually of interglacial origin. The District's aquitards are made up of sediments deposited by the ancestral Nisqually and Puyallup rivers. Historical sedimentation is not unlike the alluvium presently being deposited by these rivers today.

Recharge (replenishing) of the aquifers comes from local rainfall in the Clover/Chambers drainage basin. The District's deepest aquifers E and G will most likely receive some additional, deep underflow recharge from the south Puyallup/Graham area westward to the Puget Sound, including snowpack from Mt. Rainier.

Ryan records stream data

Water Use Efficiency Rule

The District is compliant with all facets of the Water Use Efficiency Rule; we have set a new goal for the next 6 years. This emphasizes responsible use and economic incentives to reduce uses that don't provide benefits to the user or the community. The District's lost water for last year was 8.4 percent with a three-year average of 7.5 percent, all well below the state's requirement of 10 percent. This speaks to the value of the Water Main Replacement and Rehabilitation (R&R) Program, the Leak Detection Program, and the long-term success of the new meters and the AMI System. The District is pleased to have shown such a significant reduction in this unaccounted for water (as high as 15 percent a number of years ago), and to have successfully maintained this reduction over this significant period of time.

For Your Health

IMPORTANT INFORMATION FROM THE ENVIRONMENTAL PROTECTION AGENCY (EPA)

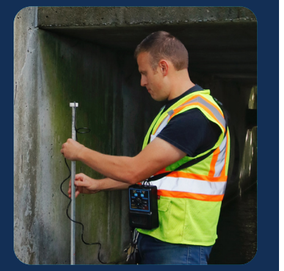
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate the water poses a health risk.

Some may be more vulnerable to contaminants in drinking water than the general population. The following can be particularly at risk of infection: **the immuno-compromised**, such as those with cancer undergoing chemotherapy; **those having had organ transplants**, HIV/AIDS, or other immune system disorders; and **some elderly and infants**. These should seek advice about drinking water from their healthcare providers.

More information about contaminants, potential health effects, and EPA/CDC guidelines on appropriate means to lessen the risk for infections by cryptosporidium and microbial contaminants is available from the **Safe Drinking Water Hotline at 1.800.426.4791.**

Monitoring Our Lakes and Streams

We consistently keep an eye on the levels of select lakes and streams in our service area.



The lake levels are indicators of the water table level in the Steilacoom Gravel, deposited by the receding Vashon Glacier. Water in the gravel also leaks through the Vashon till or springs out above the till, adding to the flows of the area's major springs such as Ponce de Leon, Chambers, Garrison, and Sequalichew. The District collects monthly data from gauges on Ponce de Leon and on five lakes (American, Gravelly, Hidden, Louise, and Waughop). This information, together with the data collected from the Pierce County Stream Team, is vital to the District's Aquifer Management Program as well as the Tacoma-Pierce County Health Department's long-term groundwater monitoring program.

PFAS Monitoring

While only required to take quarterly samples at our treatment facilities, the District takes hundreds of PFAS samples every year. Every well is tested at least annually, with many tested monthly or quarterly, to ensure we are tracking the impact of PFAS throughout the water system and taking action where needed.

2022 Water Quality Sampling/Monitoring Report

Your water meets all federal, state, and local quality standards, ensuring that you enjoy safe, clean, potable water. Not listed are 63 volatile organic chemicals for which we tested, all resulting in either Not Detected (ND) or well below the Maximum Contaminant Level (MCL). The number and frequency of non-bacteriological samples are determined by the Water Quality Monitoring Schedule (WQMS) issued by the Washington State Department of Health (DOH).

Sample Type	Samples Taken Per Year	Last Sample Year	Next Sample Year	EPA/DOH MCL (max level allowed)	LWD Highest Level Detected	LWD Lowest Level Detected	Number of Samples Over MCL	AL (action level)	Typical Sources
Arsenic[1]	DOH WQMS List	2019	TBD	10 ppb	5 ppb	<1 ppm	**0**		Erosion of natural deposits
Asbestos	1 every 9 yrs	2020	2028	7 mil	<0.16	--	**0**	7 mfl	Friable fiber
Copper	30 every 3 yrs	2020	2023	N/A	0.364 ppm	.032 ppm	**0**	1.3 ppm	Household plumbing
Fecal Coliform	840 per yr	2022	2023	0	ND	ND	**0**	0	Human and animal fecal waste
Total Coliform	840 per yr	2022	2023	<5% positive	ND	ND	**0**	0	Found throughout the environment
Haloacetic Acids	2 per yr	2022	2023	60 ppb	ND	ND	**0**	0	Disinfection by-product
Lead[2]	30 every 3 yrs	2020	2023	N/A	42.5 ppb[3]	<1 ppb	**0**	15 ppb	Household plumbing
Nitrates	18 per yr	2022	2023	10 ppm	1.86 ppm	<0.2 ppm	**0**	0	Erosion of natural deposits
Total Trihalomethanes	2 per yr	2022	2023	80 ppb	1.88 ppb	1.17 ppb	**0**	0	Disinfection by-product

Our Testing Resulted In No Violations

The chart above only reflects a portion of the testing the District performs. Complete Source Water Assessment (testing result information) is available at the District office.

Table Term Definitions:

AL: Federal Action Level. Must take action to minimize levels if concentrations exceed these numbers.
MCL: Maximum Contaminant Level. The highest level of a contaminant allowed in drinking water.
ND: Not Detected
ppb: parts per billion, or micrograms per liter (ug/L)
ppm: parts per million, or milligrams per liter (mg/L)
WQMS: Water Quality Monitoring Schedule
MFL: Million fibers/liter

One part per million corresponds to one minute in two years, or a single penny in $10,000.
One part per billion corresponds to one minute in 1,900 years, or a single penny in $10,000,000.
One part per tillion corresponds to one minute in 1,900,000 years, or a single penny in $10,000,000,000.

[1] Your drinking water currently meets the EPA's revised drinking water standard for arsenic; however, it does contain low levels of arsenic. There is a small chance that some people who drink water containing low levels of arsenic for many years could develop circulatory disease, cancer, or other health problems. Most types of cancer and circulatory diseases are due to factors other than exposure to arsenic. The EPI>s standard balances the current understanding of arsenic's health effects against the costs of removing arsenic from drinking water.

[2] If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Lakewood Water District is responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800.426.4797 or at www.epa.gov/safewater/lead.

[3] Due to customer sampling error, retested on 2/9/2027 and the result was 2.7 ppb.

PFAS Compliance Samples

Sample type	Samples taken 2022	Last sample year	Next sample year	SAL (State Action Level)	Highest level ppt	Lowest level ppt
PFBS	3	2022	2023	65 ppt	6 ppt	<2 ppt
PFHxS	3	2022	2023	65 ppt	<2 ppt	<2 ppt
PFNA	3	2022	2023	9 ppt	<2 ppt	<2 ppt
PFOS	3	2022	2023	15 ppt	<2 ppt	<2 ppt
PFOA	3	2022	2023	10 ppt	<2 ppt	<2 ppt

*ppt: parts per trillion, or nanograms per liter

If you would like to learn more about our water, have questions regarding water quality, or how you can help keep our water supply clean and safe. Please contact us at Lakewood Water District or any of the following:

Lakewood Water District
11900 Gravelly Lake Drive SW
Lakewood, WA 98499
www.lakewoodwater.org, 253.588.4423

Randall M. Black, General Manager
Email: rblack@lakewoodwater.org

Washington State Department of Health (WDOH)
www.doh.wa.gov/ehp/dw

Environmental Protection Agency (EPA)
www.epa.gov/safewater

Safe Drinking Water Hotline
800.426.4791, email: hotline-sdwa@epa.gov

To request additional copies of this year's Annual Water Quality & Business Report, please contact the District office at 253.588.4423 or csweb@lakewoodwater.org

You can also access this report on our website at www.lakewoodwater.org.

LAKEWOOD WATER DISTRICT

Lakewood Water District
11900 Gravelly Lake Drive SW
Lakewood, WA 98499

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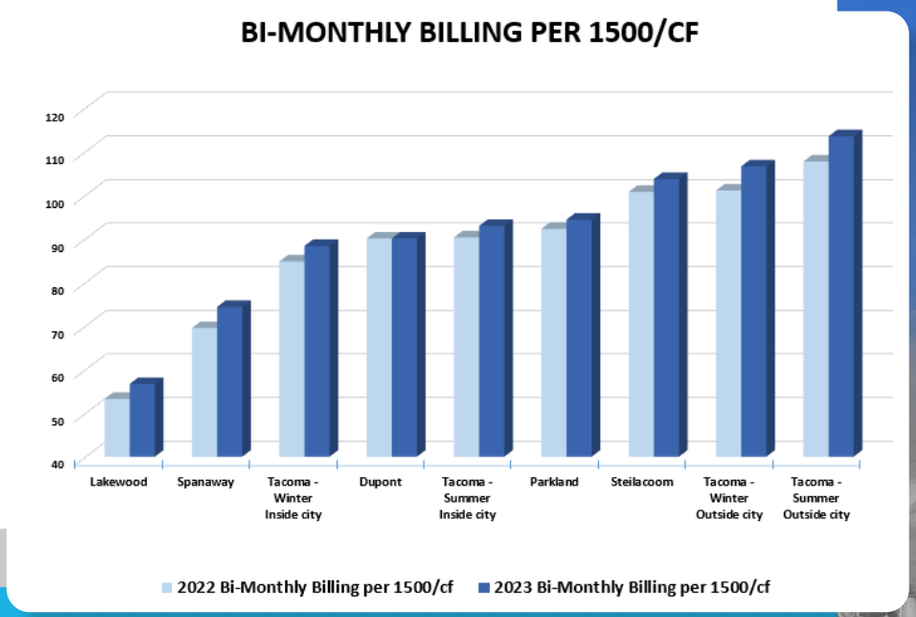
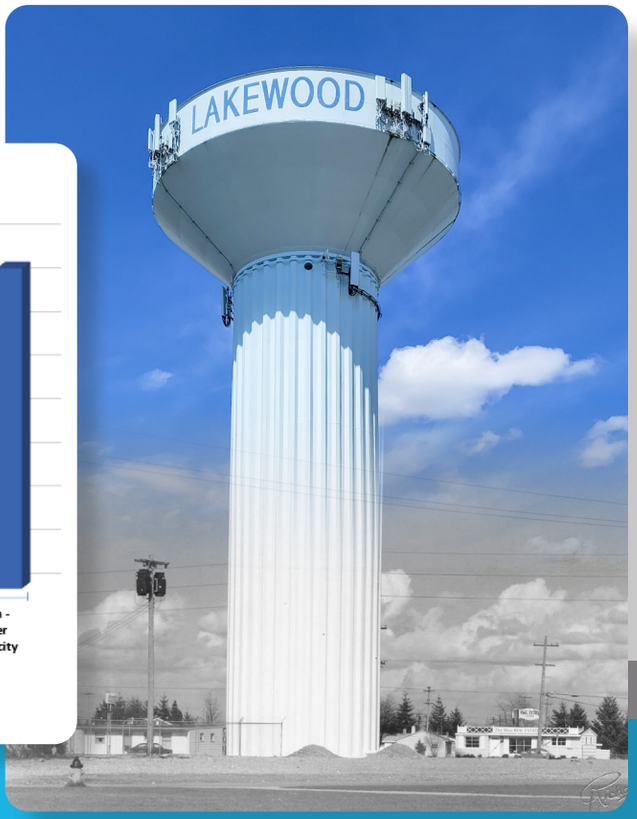
Comparisons of Lakewood Water District Rates with Surrounding





LAKEWOOD WATER DISTRICT 80 YEARS Serving you since 1943

"Delivering on Customer Expectations since 1943"

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