

## WHAT ARE 'FOREVER CHEMICALS' (PFAS) AND ARE THEY IN OUR DRINKING WATER?

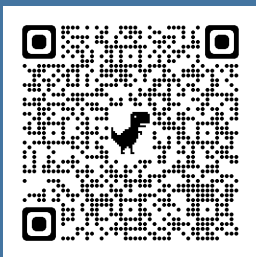
### PFAS are Human-Made Chemicals

PFAS (per- and polyfluoroalkyl substances) are a category of manufactured chemicals used in everyday products like waterproof jackets, food packaging, and nonstick pans, since the 1940s. PFAS are also found in firefighting foams, and their use at airports and military bases has been linked to the contamination of aquifers. PFOS and PFOA are types of PFAS. Because PFAS don't break down in the environment, they are sometimes called "forever chemicals." Scientific studies have shown that exposure to some PFAS in the environment may be linked to harmful health effects in humans and animals.

### Testing for PFAS in our drinking water

Routine testing has only recently been

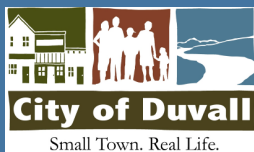
required. Duvall has completed the first round of testing in May 2023. Those results were not available at the time of publication for this report. SPU has conducted testing in 2015, 2018, and 2022 and there were no detections of PFAS in Seattle's water supply from the Cedar and Tolt watersheds. Those results can be found on SPU's website: <https://seattle.gov/utilities/your-services/water/water-quality/quality-concerns/pfas>.



## COMMUNITY PARTICIPATION

You are invited to participate in our public City Council meetings and voice any concerns or suggestions you have about your drinking water.

- Council meets the 1<sup>st</sup> and 3<sup>rd</sup> Tuesdays of each month at 7:00 p.m.
- City Council meetings are now being held hybrid. The public may attend in person at the Duvall Visitor Center, 15619 Main St NE, or online through Zoom.
- Please check the city [website](#) for current meeting location information and agenda.



Public Works Dept  
14525 Main St NE  
425.788.3434

## MAKING SURE THIS REPORT REACHES OUR CUSTOMERS

The EPA has informed water providers that having this report available on the City website meets delivery requirements as long as customers are notified of this option and those who would like a paper copy can request one. If you would like to provide feedback about the delivery method or request a copy be mailed to you, please email [sara.ruhland@duvallwa.gov](mailto:sara.ruhland@duvallwa.gov) or call Public Works at 425.939.8043.

# CITY OF DUVALL 2022 DRINKING WATER QUALITY REPORT

PW ID WA207508  
Prepared July 2023



### Mailing Address:

PO Box 1300  
Duvall, WA 98019

### City Hall:

15535 Main St NE  
425.788.1185

### Utility Billing Clerk:

425.788.1185 ext. 8068  
[utilitybilling@duvallwa.gov](mailto:utilitybilling@duvallwa.gov)

### Public Works:

14525 Main St NE  
425.788.3434

[www.duvallwa.gov](http://www.duvallwa.gov)

## HOW DOES DUVALL'S DRINKING WATER GET TO YOUR FAUCET?

Clean, reliable, and safe drinking water is important to our health, our future, and our entire community. We are proud to report that our water continues to meet or exceed the highest state and federal quality standards. We have maintained this record for decades now, ensuring the health and safety of you and your families for generations, and we will continue to make this a priority for the future of Duvall.

### Where your water comes from

The City purchases all of its water from Seattle Public Utilities (SPU). SPU provides water to many cities and water districts throughout the region.

SPU's water comes from natural sources within two very large, protected watersheds in the Cascade Mountains - the Cedar River and Tolt River watersheds. All of Duvall's water is from the Tolt watershed. SPU owns or manages more than 100,000 acres of land that is closed to unsupervised public access. SPU makes sure that these areas are free of agricultural, industrial, and recreational activities, and no one can live in the SPU-owned watersheds.

### Monitoring and Testing

SPU and Duvall monitor and test frequently to maintain high quality drinking water. There are eight sample stands throughout the city that are used for testing every day. Ongoing testing and infrastructure improvements to our system help ensure the quality of the City's water.

It takes much effort, care, and expertise to manage Duvall's water system. Maintaining clean and reliable drinking water is an essential priority for Duvall.

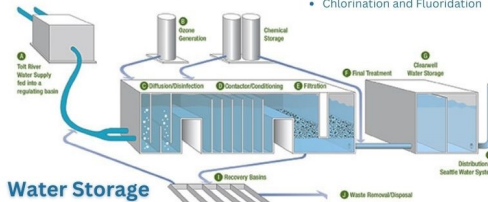
### Tolt Watershed

- 12,500 acres (includes 8,400 acres of land owned by SPU)
- Provides up to 100 million gallons of drinking water per day
- Ranges from 760 feet in elevation at the regulating basin to 5,535 feet at McLain Peak



### The Treatment Process

- Disinfected with Ozone,
- Water conditioning and filtration
- pH and Alkalinity Adjustment
- Chlorination and Fluoridation



### Water Storage

- 2 covered water reservoirs totaling 2.7 million gallons of water

### Sampling Stations

- 8 sampling stands throughout the city

### Maintaining Pipes

- Duvall's water system includes 43 miles of water mains
- 15 pressure reducing stations
- 1 pump station

### Continuous Testing and Monitoring

- Expert staff monitor water quality 24 hours a day, 365 days a year

### Customers Served

- 3,050 homes and businesses
- 8,434 Customers



### Fun Fact

The Tolt watershed receives between 90 and 160" of precipitation a year!

## WORKING TOGETHER TO CONSERVE

When you conserve water, you help our ecosystems thrive for generations to come. The mountain reservoirs that supply our tap water also provide water to rivers that are home to salmon, trout, and many other species.

The foundation for a healthy salmon run is a healthy habitat - including water flow and water quality. Your actions to conserve water, particularly in the summer and early fall when stream flows are naturally low, help provide the habitat necessary for a healthy salmon population. Conserving water helps adult salmon who are returning to rivers to spawn when stream flows are naturally low.

6 THINGS YOU CAN DO AT HOME TO

## CONSERVE WATER



Monitor your monthly water bill



Run the dishwasher only when it's full



Turn off the faucet when lathering hands



Do not leave water running while brushing your teeth



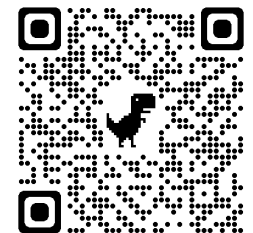
Water the garden early in the morning or late in the evening



Regularly check hoses and faucets for leaks

**The Saving Water Partnership (SWP)** – which is made up of the City of Duvall and 18 water utility partners – has set a ten-year conservation goal: keep the total average annual retail water use of SWP members under 110 mgd through 2028, despite forecasted population growth, by reducing per capita water use. For 2022, the Saving Water Partnership met the goal, using 94.3 mgd.

Get trusted information from the Saving Water Partnership on how to use water wisely, including tips, tools, and rebates at [savingwater.org](https://savingwater.org).



## 2022 WATER QUALITY MONITORING RESULTS

The results of monitoring in 2022 are shown in the following tables. These results are parameters regulated by federal and state agencies. For other water quality information please contact the Public Works Department. We can also send you a list of the more than 200 compounds for which we tested for but did not find in our drinking water supplies. Water quality data for non-regulated parameters are also provided on SPU's website: <https://seattle.gov/utilities/your-services/water/water-quality/analyses>.

Water quality monitoring data can be difficult to interpret. To make all the information fit into one table, we use many acronyms that are defined below the table.

### OTHER USEFUL DATA:

Alkalinity: 18.75mg/L

pH: 8.52 pH unit

Water Hardness: 1.39 grains/gallon

## OUR SOURCE WATER HAS NO DETECTABLE LEAD

Lead is an important topic when it comes to the safety of your drinking water. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Even though no lead was found in Duvall's source water (see table below), there is still some risk of exposure. Lead in drinking water is primarily from materials and components associated with service lines (the pipe that goes from your meter box to your home) and home plumbing. Where you live, when your plumbing was installed, and what type of plumbing you have all play a part in determining your potential exposure level.

### Lead and Copper Monitoring Results (Duvall)

Parameter and Units	MCLG	Action Level	2020 results *	Homes Exceeding Action	Source
Lead, ppb	0	15	3.8	0 of 55	Corrosion of household plumbing systems
Copper, ppm	1.3	1.3	0.19	0 of 55	

\* 90th Percentile: i.e. 90 percent of the samples were less than the values shown.  
 + The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

### Learn About Your Plumbing

While there are no known lead service lines in Duvall's water distribution system, there are a small number of homes and buildings that may have lead connections. In addition, individual homes and businesses may have other plumbing components that could corrode and introduce contaminants into the water. Duvall is responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components. SPU treats the water to minimize the tendency for lead to enter the water through corrosion, and results show that they have been very successful at this.

### Lower Your Risk, Don't Let it Sit

The risk of lead contamination in water increases when water sits

in pipes for longer than six hours. If you are concerned about lead and 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.

### Lead Testing is Available

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

Detected Compounds	Units	EPA's Allowable Limits		Levels in Tolt Water		Typical Sources
		MCLG	MCL	Average	Range	
<b>Raw Water</b>						
Total Organic Carbon	ppm	NA	TT	1.24	1.10 to 1.41	Naturally present in the environment
<b>Finished Water</b>						
Turbidity	NTU	NA	TT	0.04	0.02 to 0.24	Soil runoff
Arsenic	ppb	0	10	0.28	0.22 to 0.38	Erosion of natural deposits
Barium	ppb	2000	2000	1.21	1.14 to 1.30	Erosion of natural deposits
Bromate	ppb	0	10	ND	ND	By-product of drinking water disinfection
Fluoride	ppm	4	4	0.7	0.6 to 0.8	Water additive, which promotes strong teeth
Nitrate	ppm	10	10	0.1	One Sample	Erosion of natural deposits
Total Trihalomethanes	ppb	NA	80	23.96	18.40-32.00	By-products of drinking water chlorination
Haloacetic Acids(5)	ppb	NA	60	25.63	22.50-31.60	
Chlorine	ppm	MRDL G = 4	MRDL = 4	Average = 0.99 Range = 0.92-1.04		Water additive used to control microbes

### Definitions

**MCLG:** *Maximum Contaminant Level Goal* - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**MCL:** *Maximum Contaminant Level* - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MRDL:** *Maximum Residual Disinfectant Level* - The highest level of a disinfectant allowed in drinking water. There is convincing evidence

that addition of a disinfectant is necessary for control of microbial contaminants.

**MRDLG:** *Maximum Residual Disinfectant Level Goal* - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**TT:** *Treatment Technique* - A required process intended to reduce the level of a contaminant in drinking water.

**NTU:** *Nephelometric Turbidity Unit* - Turbidity is a measure of how clear

the water looks. The turbidity MCL that applied to the Cedar supply in 2022 is 5 NTU, and for the Tolt supply it was 0.3 NTU for at least 95% of the samples in a month. 100% of Tolt samples in 2022 were below 0.3 NTU.

**NA:** *Not Applicable*

**ND:** *Not Detected*

**ppm:** *1 part per million = 1 mg/L = 1 milligram per liter*

**ppb:** *1 part per billion = 1 ug/L = 1 microgram per liter*

**1 ppm = 1000 ppb**

available from the Safe Drinking Water Hotline, **1.800.426.4791**, or at <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>.

## Did you know Duvall's stormwater system has:

- 131 stormwater facilities - ponds, vaults, bioswales, detention vaults
- 2936 catch basins
- 36 private facilities also inspected annually
- 2 maintenance crew members and 1 technical support member to inspect, clean, and repair system to keep the drains flowing (with occasional help from goats for those hard to reach places)

### Fun Fact

most surface water in our storm system is not treated and drains directly to creeks, streams, rivers, and eventually to Puget Sound.



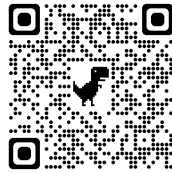
In 2021, the City began implementation of the *Adopt-a-Drain* program. This program was created by Hamline University and allows citizens to "adopt" storm drains and commit to picking up trash and debris from around the drains regularly.

Sign up and volunteer ten to fifteen minutes a month for cleaner waterways and healthier communities. Most storm drains flow directly to rivers, lakes, creeks, and the Puget Sound, acting as a conduit for trash and organic pollutants.

Total debris cleared and kept out of our waterways - **212.38 pounds!**

Total Adopters - **28**

Total Drains Adopted - **59**



Trash clogs drains and pipes causing flooding. Trash that enters storm drains flows to local waterways. Scoop it up and put it in the garbage.



Dog poop carries harmful bacteria. Pick it up, bag it, and put it in the garbage.



Oil, grease, and soap grime washes into storm drains which flow unfiltered to local waterways. Keep chemicals off streets and sidewalks.



Pollutants like fertilizers and pesticides can harm our lakes and rivers. Leaves, grass, and yard waste add to the problem.

## Let's get back to the basics of recycling.

Remember these three rules each time you recycle:

1



Recycle all empty plastic bottles, cans, paper and cardboard.

2



Keep food and liquids out of the recycling.

3



Place recyclables loose into your cart - NO bagged recyclables.



## Sewer System Safety Tips



### Please do not flush the following:

- Fats, Oils, and Grease
- Paints, Solvents, or other Chemicals
- Wrappers or Stickers
- Cleaning Wipes
- Band-aids and Bandage Wrappers
- Kitty Litter
- Dental Floss and Teeth Whitening Strips
- Disposable Diapers, Nursing Pads, and Baby Wipes
- Feminine Products including Tampons and Applicators
- Expired and Unused Medications - prescription or over the counter
- Condoms
- Facial Wipes
- Hair
- Cotton Balls, Swabs, and Pads



Remember Wipes Clog Pipes!

### WM Oil Recycling

**Used Motor Oil:** Seal uncontaminated oil (no large solids) in clean, clear, screw-top plastic jugs. Label jugs with name and address and place next to recycling cart. **LIMIT** three (3) gallons per pickup, ten (10) gallons per year. **Single Family Only.**

**Used Cooking Oil:** Seal uncontaminated oil (no large solids) in clean, clear screw-top plastic jugs. Label jugs with name and address and place next to recycling cart. **LIMIT:** Three (3) gallons per pick-up and ten (10) gallons per year. **Single Family Only.**



## DON'T FLUSH TROUBLE

Grease and ground up food product sticks to household sewage pipes. Over time, the greasy build-up will block the entire pipe and result in raw sewage backing up into your home or overflowing into the street or waterway. Follow these simple steps to keeping things running smoothly.

DO dispose of appropriate food waste in your Waste Management yard waste containers. It reduces the amount of garbage you haul to the curb, moves smelly food waste to the yard waste container, and is good for your plumbing and the environment. Visit: <http://www.wmnorthwest.com/duvall/index.html>

DO compost in your own back yard. It's an interesting experiment for kids.

DON'T put produce stickers down the drain.

DO use sink baskets or strainers in sink drains to catch food scraps and other solids and empty them into a container to dispose of in your yard waste. If you are not a yard waste subscriber, use the trash instead.

DON'T put grease, fats, or oil of any type down your drain or garbage disposal.

DO scrape grease and food scraps from cooking surfaces into a container and put in the trash.

### Sewer Blockage Formation



The start of a blocked pipe begins when grease and solids collect on the top and sides of the pipe interior.



The build-up increases over time when grease and other debris are washed down the drain.



Excessive accumulation will restrict the flow of wastewater and can result in a sanitary sewer overflow.