

ANNUAL WATER QUALITY REPORT

Reporting Year 2023



Presented By
City of Mercer Island



Our Commitment

The City of Mercer Island is pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2023. Included are details about your sources of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

Where Does My Water Come From?

The City of Mercer Island receives a surface water supply from Seattle Public Utilities (SPU). Our primary water source from SPU is the Cedar River watershed; the Tolt River's South Fork provides an alternative supply. SPU's uninhabited watersheds are supplied by the melting snowpack in the Cascade Mountains and supplemented from our annual rainfall.

Each watershed is closed to unauthorized access and carefully managed to supply clean, pristine drinking water to more than 1.4 million people in the greater Seattle area. The rainfall and snowmelt collected in the Cedar and Tolt Rivers meet or surpass all federal standards for drinking water. Water samples are tested every day for a wide variety of substances. To learn more about its watersheds, treatment facilities, and water quality analysis, visit SPU at seattle.gov/utilities/services/water/water-quality.

Variations and Exemptions

As a consumer, you are entitled to know what variations and waivers are in force with your water utility. The City of Mercer Island currently has one waiver with the DOH, and it concerns asbestos-cement (AC) water main piping. DOH does not require any water supplier to report on systems with less than 10 percent total AC piping. Our waiver simply acknowledges that a very small amount of AC pipe exists in our system. The water distribution system on Mercer Island is composed of 96 percent cast iron, ductile iron, or steel, and the remaining 4 percent is AC pipe. AC is an old material that is no longer used in construction, and the small amounts of AC piping in our system pose no threat to drinking water quality. SPU has not detected any naturally occurring asbestos in its watersheds.

Lead in Home Plumbing

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. The City of Mercer Island is responsible for providing high-quality drinking water, but we 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 two 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 or epa.gov/safewater/lead.

Community Participation

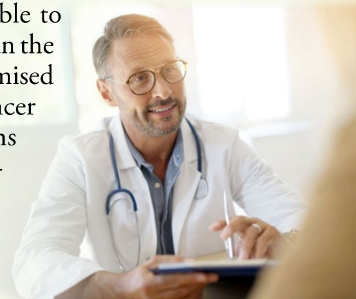
You are invited to participate in our public forum and share your comments about your drinking water. The Utility Board meets, as needed, on the second Tuesday of the month at 5:00 p.m. Board meetings are held in a hybrid format. The public is welcome to join meetings in-person at Mercer Island Community and Event Center, 8236 SE 24th Street, or remotely using Zoom. You can find upcoming meeting and contact information at mercerisland.gov/bc-utilityboard. Comments are always welcome at publicworks@mercerisland.gov.

Source Water Assessment

Washington's Source Water Assessment Plan is now available from the DOH at fortress.wa.gov/doh/swap. This plan is conducted by DOH, Office of Drinking Water, and is an assessment of the delineated area around listed sources through which contaminants, if present, could migrate and reach our source water. By default the DOH assigns a high susceptibility rating for all surface water sources.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or water.epa.gov/drink/hotline.



QUESTIONS? For more information about this report, or for any questions related to your drinking water, please contact the City of Mercer Island Public Works Department at (206) 275-7608. This report, covering water testing done in 2023, is also available at mercerisland.gov/2023WaterQualityReport.

Substances That Could Be in Water

In order to ensure that tap water is safe to drink, the U.S. EPA and the Department of Health (DOH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration and Washington Department of Agriculture regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.



The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

What Are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

Some products that may contain PFAS include:

- Some grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit bit.ly/3Z5AMm8.

Testing Violation

SPU is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether your drinking water meets health standards. In October 2023, a bromate sample was not analyzed for the Tolt supply, and therefore SPU cannot be sure of the quality of your drinking water during that time. However, based on historical data and results since October 2023, Tolt bromate levels are generally below the laboratory detection level.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.



The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

We participated in the fifth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR5) program by performing additional tests on our drinking water. UCMR5 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water to determine if it needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data is available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES									
				Cedar		Tolt			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2023	10	0	0.4	0.3–0.6	0.3	0.2–0.4	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2023	2	2	0.0015	0.0013–0.0017	0.0012	0.0011–0.0014	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Bromate (ppb)	2023	10	0	0.7	ND–11	0.1	ND–2	No	By-product of drinking water disinfection
Chlorine (ppm)	2023	[4]	[4]	0.96	0.30–1.56	0.96	0.30–1.56	No	Water additive used to control microbes
Fluoride (ppm)	2023	4	4	0.7	0.5–0.8	0.7	0.6–0.8	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2023	60	NA	20	17.1–26.0	20	17.1–26.0	No	By-product of drinking water disinfection
Nitrate (ppm)	2023	10	10	0.1	1 Sample	0.1	1 Sample	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Coliform Bacteria (positive samples)	2023	TT	NA	1	NA	0	NA	No	Naturally present in the environment
TTHMs [total trihalomethanes] (ppb)	2023	80	NA	31	25.0–39.6	31	25.0–39.6	No	By-product of drinking water disinfection
Turbidity¹ (NTU)	2023	TT	NA	3.5	0.19–3.5	0.12	0.02–0.12	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2023	TT = 95% of samples meet the limit	NA	95	NA	100	NA	No	Soil runoff
Tap water samples were collected for lead and copper analyses from sample sites throughout the community									
				Cedar		Tolt			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2023	1.3	1.3	0.05	0/50	0.18	0/55	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2023	15	0	2.2	0/50	3.0	0/55	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Cedar		Tolt		TYPICAL SOURCE
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	
11-Chloroicosafuoro-3-Oxaundecane-1-Sulfonic Acid [11Cl-PF3OUdS] (ppt)	2023	ND	NA	ND	NA	NA
1H,1H,2H,2H-Perfluorodecanesulfonic Acid [8:2FTS] (ppt)	2023	ND	NA	ND	NA	NA
1H,1H,2H,2H-Perfluorohexanesulfonic Acid [4:2FTS] (ppt)	2023	ND	NA	ND	NA	NA
1H,1H,2H,2H-Perfluorooctanesulfonic Acid [6:2FTS] (ppt)	2023	ND	NA	ND	NA	NA
4,8-Dioxa-3H-Perfluorononanoic Acid [ADONA] (ppt)	2023	ND	NA	ND	NA	NA
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid [9Cl-PF3ONS] (ppt)	2023	ND	NA	ND	NA	NA
Hexafluoropropylene Oxide Dimer Acid [HFPO-DA; GenX] (ppt)	2023	ND	NA	ND	NA	NA
Lithium (ppt)	2023	ND	NA	ND	NA	NA
N-Ethyl Perfluorooctanesulfonamidoacetic Acid [NEtFOSAA] (ppt)	2023	ND	NA	ND	NA	NA
N-Methyl Perfluorooctanesulfonamidoacetic Acid [NMeFOSAA] (ppt)	2023	ND	NA	ND	NA	NA
Nonafluoro-3,6-Dioxaheptanoic Acid [NFDHA] (ppt)	2023	ND	NA	ND	NA	NA
Perfluoro(2-ethoxyethane)sulfonic Acid [PFEEESA] (ppt)	2023	ND	NA	ND	NA	NA
Perfluoro-3-Methoxypropanoic Acid [PFMPA] (ppt)	2023	ND	NA	ND	NA	NA
Perfluoro-4-Methoxybutanoic Acid [PFMBA] (ppt)	2023	ND	NA	ND	NA	NA
Perfluorobutanesulfonic Acid [PFBS] (ppt)	2023	ND	NA	ND	NA	NA
Perfluorobutanoic Acid [PFBA] (ppt)	2023	ND	NA	ND	NA	NA
Perfluorodecanoic Acid [PFDA] (ppt)	2023	ND	NA	ND	NA	NA
Perfluorododecanoic Acid [PFDoA] (ppt)	2023	ND	NA	ND	NA	NA
Perfluoroheptanesulfonic Acid [PFHpS] (ppt)	2023	ND	NA	ND	NA	NA
Perfluoroheptanoic Acid [PFHpA] (ppt)	2023	ND	NA	ND	NA	NA
Perfluorohexanesulfonic Acid [PFHxS] (ppt)	2023	ND	NA	ND	NA	NA
Perfluorohexanoic Acid [PFHxA] (ppt)	2023	ND	NA	ND	NA	NA
Perfluorononanoic Acid [PFNA] (ppt)	2023	ND	NA	ND	NA	NA
Perfluorooctanesulfonic Acid [PFOS] (ppt)	2023	ND	NA	ND	NA	NA
Perfluorooctanoic Acid [PFOA] (ppt)	2023	ND	NA	ND	NA	NA
Perfluoropentanesulfonic Acid [PFPeS] (ppt)	2023	ND	NA	ND	NA	NA
Perfluoropentanoic Acid [PFPeA] (ppt)	2023	ND	NA	ND	NA	NA
Perfluorotetradecanoic Acid [PFTA] (ppt)	2023	ND	NA	ND	NA	NA
Perfluorotridecanoic Acid [PFTTrDA] (ppt)	2023	ND	NA	ND	NA	NA
Perfluoroundecanoic Acid [PFUnA] (ppt)	2023	ND	NA	ND	NA	NA

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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.

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.

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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

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

¹ Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.