MUKILTEO
WATER AND WASTEWATER DISTRICT

ANNUAL WATER QUALITY 2024 REPORT

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IMPORTANT TERMS AND ABBREVIATIONS

Turbidity – Turbidity is a measure of particulates suspended in water in nephelometric turbidity units (NTU) and is used to determine effectiveness of the treatment process. Particulates in water can include bacteria, viruses and protozoans that can cause disease.

Maximum contaminant level goal (MCLG) – 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.

Maximum contaminant level (MCL) – 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 water treatment technology.

Maximum residual disinfectant level (MRDL) – 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.

Maximum residual disinfectant level goal (MRDLG) – 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.

Treatment technique (TT) **–** A required process intended to reduce the level of a contaminant in drinking water.

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

Parts per million (ppm)/ Parts per billion (ppb) – A part per million means that one part of a particular contaminant is present for every million parts of water. Similarly, parts per billion indicate the amount of a contaminant per billion parts of water.

Not applicable (N/A) - Means EPA has not established MCLGs for these substances.

Required Treatment Polymer Statement:

During water treatment, organic polymer coagulants are added to improve the coagulation and filtration processes that remove particulates from water. The particulates that are removed can include viruses, bacteria and other disease-causing organisms. The USEPA sets limits on the type and amount of polymer that a water system can add to the water. In addition to the EPA limits, the State of Washington requires that all polymers used be certified safe for potable water use by an independent testing organization (NSF International). During treatment, Everett adds only NSF approved polymers and the levels used are far below the safe limits set by the USEPA.

BOARD OF COMMISSIONERS

Jeff Clarke
PRESIDENT

Mike Dixon
VICE PRESIDENT

Mike Johnson
SECRETARY

Dear Mukilteo Water and Wastewater District Customer,

Reliable access to safe water is Mukilteo Water and Wastewater District's (District) highest priority.

The District conducts extensive water quality tests throughout the year to deliver on that commitment. An independent laboratory analyzes the water samples collected to ensure we adhere to the Environment Protection Agency and Washington State Department of Health regulations.

On behalf of the District's Board of Commissioners, I am pleased to report:

Mukilteo Water and Wastewater District drinking water continues to meet all federal and state water quality standards and safety regulations.

This annual Consumer Confidence Report covers water quality testing for the 2024 calendar year, summarizing everything you need to know about your water. It includes detailed results of water quality tests as well as information about the required regulations for public drinking water purveyors.

The District takes great pride in providing you with safe, clean, and reliable drinking water.

Water is a life essential resource—yet, at less than a penny a gallon, it costs very little compared to its value. Your water rates pay for everything it takes to operate your water system, from storage and treatment to delivering the water to your tap.

Your water rates also help pay for water system improvements, ensuring we continue providing high-quality drinking water for generations. As this year's Consumer Confidence Report shows, this is an exceptional value for the clean, safe, excellent-tasting drinking water you receive.

Sincerely,

Dave Barnes

Dave Barnes
General Manager, Mukilteo Water and Wastewater District

FROM SPADA LAKE TO YOU

Clean and safe drinking water delivered to your tap

Your drinking water comes from Spada Lake Reservoir, located about 30 miles east of Everett at the headwaters of the Sultan River. This 50-billion-gallon storage facility is a collection point for rain and snowmelt from the Cascade Mountains. It was created in 1964 through a partnership between the City of Everett and the Snohomish County PUD as part of the Jackson Hydroelectric Project.

Spada Lake Reservoir is in the Upper Sultan River Watershed, encompassing more than 80 square miles. This is one of the wettest watersheds in the continental United States. The average annual rainfall is about 165 inches, roughly five times the rain in our area.

Water quality in the Sultan Basin is carefully monitored. The watershed is patrolled to protect the naturally pristine water in Spada Lake Reservoir, and human activities are limited to minimize the impact on water quality.

Precipitation and snowmelt from the Cascade Mountains are collected in Spada Lake Reservoir.

From Spada Lake water travels to Chaplain Reservoir to be treated at the City of Everett's Water Treatment Plant.

ENSURING AN ADEQUATE SUPPLY

Conservation helps meet the needs of people, industries, businesses, and farms while helping fish and other aquatic life

Water is a precious resource. The District has set conservation goals, which are reported through the Annual Water Use Efficiency Report (WUE). This report tracks our progress and accomplishments.

One of our conservation goals is met by participating in the City of Everett's Regional Water Conservation Program. This program is planned and developed in coordination with the water systems served with treated water from the City of Everett. Water system revenues fund this program. The WUE goal for 2020-2029 is to reduce regional water demand by approximately 2 million gallons per day (MGD) annually, while continuing to provide school education and conservation kits, along with ongoing support from large water users.

Since 2001, more than $ 9.1 million has been invested in regional water conservation activities. These activities include school education, indoor and outdoor water conservation kits, leak detection, business water audits, and school irrigation audits. In 2024, 396 workshops were conducted with school classes throughout Snohomish County, reaching a total of 10,200 students. Water systems purchased 1,950 indoor conservation kits, 1,025 kitchen aerators, and 5,330 outdoor conservation items. These activities saved an estimated 0.69 million gallons per day (MGD) regionally.

An additional conservation goal is to maintain a distribution leakage rate significantly lower than the 10% required by the WUE. In 2024, the District purchased over 622 million gallons of water. By calculating the difference between the water purchased and the water sold, the District can determine its leakage rate. The average leakage rate over the last five years indicates a distribution system leakage rate of 5.2%, which is well below the WUE requirement.

The District pursued an aggressive conservation approach before the WUE requirement, including annual customer leak surveys, distribution leak surveys, blow-off replacements, customer consumption databases, and irrigation management. The District continues to utilize this approach to achieve its conservation goals, currently estimating that it has achieved substantial savings and is on track to meet all stated goals.

Water transmission lines carry drinking water to Everett and is distributed to wholesale customers.

Treated water is delivered to about 640,000 businesses and households in Snohomish County.

2024 Water Quality Analysis Results

Detected Regulated Contaminants

Parameter	Major Source	Units	EPA Regulations		MWWD Water Results		
			Ideal Level/ Goal (MCLG)	Maximum Allowable (MCL)	Range or Other	Average Value or Highest Result	Comply?
Total Coliform Bacteria	Naturally present in the environment	% Positive	0	5% Positive per Month	None	0%	Yes
Total coliform bacteria monitoring tracks microbial quality in the water distribution system. MWWD collects 30 samples per month (360 per year). No total coliforms were detected in 2024.							
Fluoride	Dental health additive	ppm	2	4	0.5 - 0.8	0.7	Yes
Fluoride in carefully controlled levels is added to your water for dental health.							
Residual Disinfectant Level (free chlorine)	Added as a drinking water disinfectant	ppm	4.0 (MRDLG)	4.0 (MRDL)	0.17 - 1.12	0.66	Yes
Haloacetic Acids (5) (HAA5)	A by-product of drinking water chlorination	ppb	N/A	60	28.3 - 40.5[1]	35.3[2]	Yes
Total Trihalomethanes (TTHM)	A by-product of drinking water chlorination	ppb	N/A	80	28.7 - 66.7[1]	45.4[2]	Yes
Haloacetic acids and trihalomethanes form as by-products of the chlorination process that is used to kill or inactivate disease-causing microbes. The TTHM and HAA5 results are from four locations in Mukilteo/Everett, which are monitored to determine compliance with current regulations. [1]Range of results taken from all four locations. [2]Highest locational running annual average of the four sites that were monitored.							
Turbidity	Soil Erosion	NTU	N/A	TT	100%	0.05	Yes
Turbidity is a measure of particulates suspended in water in nephelometric turbidity units (NTU) and is used to determine the effectiveness of the treatment process. Particulates in water can include bacteria, viruses and protozoans that can cause disease. The values reported are the lowest monthly percentage of samples that met the EPA turbidity limit, and the highest four-hour combined water turbidity measurement obtained during the year. The EPA turbidity limit is 0.3 NTU. In 2024, no filtered water turbidity results exceeded 0.3 NTU so the lowest percentage that met the EPA limit was 100 percent. The plant targets production of filtered water turbidities of 0.10 NTU or less.							

USEPA required statement: 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 Everett Utilities Division 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 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

Your drinking water is tested 365 days a year.

Lead and Copper

Parameter	Major Source	Units	EPA Regulations		MWWD Water Results		
			Ideal Level/ Goal (MCLG)	Action Level (AL)	90th % Level	Homes Exceeding the AL	Comply?
Lead	Plumbing, erosion of natural deposits	ppb	0	15	0.0006	0 of 5 (0.0%)	Yes
Copper	Plumbing, erosion of natural deposits	ppm	1.3	1.3	0.0160	0 of 5 (0.0%)	Yes

USEPA and state regulations require water systems to monitor for the presence of lead and copper at household taps every three years. Lead and copper monitoring is conducted by MWWD and many of the water systems that Everett supplies in the combined service area as a regional group. The above data was collected in 2024. The next required round of sampling will be in 2027. The 90th percent level is the highest result obtained in 90 percent of the samples collected when the results are ranked in order from lowest to highest. In the past, the results for water tested before it enters household plumbing were even lower than the tap results. This indicates that there is virtually no lead or copper in the water, but household plumbing may contribute to lead and copper at the tap.

Parameter	Major Source	Units	EPA Regulations		MWWD Water Results		
			Ideal Level/ Goal (MCLG)	Action Level (AL)	90th % Level	Homes Exceeding the AL	Comply?
p^H	Soda ash is added to reduce water corrosivity by increasing pH and alkalinity	Standard Unit	Daily Average 7.6	Min Daily Average 7.3	Average 7.6	Minimum 7.2	Yes

The Washington State Department of Health requires Everett to operate corrosion control treatment at or above a minimum daily average pH of 7.4. Everett measures pH six times per day (once every four hours). The average daily pH cannot be below 7.4 for more than nine days every six months. In 2024, the average daily pH was below 7.4 for two nonconsecutive days from the east clearwell discharge point and one day from the west clearwell discharge point.

Detected Unregulated Contaminants

Parameter	Units	Ideal Level/ Goal (MCLG)	MWWD Water Results	
			Range Detected	Average Value
Bromodichloromethane	ppb	0	1.4 - 2.3	1.9
Chloroform (trichloromethane)	ppb	70	27.1 - 64.7	43.5
Dichloroacetic Acid	ppb	0	3.2 - 15.8	10.7
Trichloroacetic Acid	ppb	20	20.2 - 30	24.4

These substances are disinfection by-products for which no MCL standard has been set but which must be monitored to determine compliance with the EPA Stage 2 Disinfection By-products Rule MCLs for Total Trihalomethanes and Haloacetic Acids (5).

THE FOLLOWING STATEMENTS ARE REQUIRED BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY

Your Drinking Water Facts and Figures

All water sources (both tap water and bottled water) contain impurities. As water flows over the land's surface or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material. It can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, can naturally occur or result from urban surface water, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides may come from various sources, such as agriculture, urban surface water, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants can be naturally occurring or result from oil and gas production and mining activities.

To ensure that tap water is safe to drink, U.S. Environmental Protection Agency (EPA) prescribes regulations that limit the number of specific contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Drinking water, including bottled water, may contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants, can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. EPA and US Center for Disease Control (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 1-800-426-4791.

WATER SAMPLING STATION

Our water quality team uses sample stations throughout our service area to collect and send water samples to the laboratory for testing.

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