PFAS and Your Water

PFAS – short for perfluoroalkyl and polyfluoroalkyl substances – are a large group of man-made/synthetic chemicals that do not break down naturally.

PFAS began appearing in everyday products in the 1950s—from non-stick cookware and stain-resistant carpets, to firefighting foam—and have been building up in our environment ever since. Today PFAS are found in the bloodstreams of people and animals, in a variety of food products, and in the environment.

In 2021, the Washington State Department of Health (DOH) enacted legislation that requires Washington's more than 2,430 public water systems to test for PFAS in drinking water by December 2025.

In 2024, the United States Environmental Protection Agency (EPA) announced a final federal rule to regulate six PFAS in drinking water.

How Does Your Water Compare?

North City Water District sources all of our drinking water from Seattle Public Utilities (SPU). Although PFAS were not previously regulated and routine testing was not required prior to 2023, SPU conducted testing in 2015, 2018, and 2023.

In 2015, SPU tested its Tolt and Cedar River surface water sources for six types of PFAS with no detection.

In October 2018, SPU tested the Tolt and Cedar water supplies using a more sensitive sampling method for 14 types of PFAS. Test results again showed no detection of PFAS.

In March 2023, samples collected from the Cedar and Tolt treatment facilities finished waters in June, July, October, and December 2023 continued to show no detections for 29 PFAS compounds.

To learn more about PFAS testing and drinking water regulations, as well as the measures that Washington state is taking to restrict PFAS in products, visit the DOH website:
https://doh.wa.gov/community-and-environment/contaminants/pfas

You can also learn more about PFAS from the EPA's website:
https://www.epa.gov/pfas/pfas-explained

Tune Up Your Irrigation System for Summer

Next to a leaky toilet, your home (or business, or school)'s irrigation system is often the #1 culprit in high water bills. With summer approaching, take a moment to tune up your system:

Spray-Type Sprinklers:

1. Remove the nozzle from each head and clean the screen with an old toothbrush.
2. Turn on the sprinklers and look for partially blocked nozzles. If the fan-shaped spray of water is not even and uniform, a grain of sand is likely stuck in the nozzle. Use a plastic or wood tool (like a toothpick) rather than a metal knife blade, because nozzles are easy to scratch, and scratches can ruin the spray pattern. Even better, replace the nozzle.
3. Using the adjustment screw on top of each nozzle, adjust the water direction. If the heads are creating a lot of mist, turn the screw clockwise. After adjusting, make sure the spray still goes all the way to the next sprinkler.

Rotor / Rotator-Type Sprinklers:

1. Turn on each valve, one at a time, and carefully inspect your irrigation system. Look for wet spots that could indicate a leaking irrigation pipe. Repair any leaks.
2. Replace the controller battery.
3. Straighten any sprinkler heads that are leaning to the side (leaning heads create dry spots and waste water).
4. Replace any broken or malfunctioning sprinklers with the same brand and model as the other sprinklers on the same valve circuit; note: most manufacturers use different flow rates in their sprinkler heads so it's important to get the same brand and model.

For an in-depth explanation of all irrigation systems and their proper tune-up steps, visit this website:

www.irrigationtutorials.com/faq/tune-up.htm

About Your Water Quality

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 and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. In Seattle's surface water supplies, the potential sources of contamination include:

- Microbial contaminants, such as viruses, bacteria, and protozoa from wildlife;
- Inorganic contaminants, such as salts and metals, which are naturally occurring; and
- Organic contaminants, which result from chlorine combining with the naturally occurring organic matter.

In order to ensure tap water is safe to drink, the Environmental Protection Agency and/or the Washington state board of health prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration and/or the Washington state department of agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

How to Learn More

We at North City Water District encourage public interest and participation in the decisions that affect our drinking water. To learn more about our water supply, its quality, and what you can do to help keep our water clean, safe and abundant, please don't hesitate to contact us at 206.362.8100.

You are also welcome to attend our Board of Commissioners meetings, which take place at 3:00 pm on the first and third Tuesday of each month. View our schedule and agendas at:
www.northcitywater.org/resources/meeting-schedule-agendas-and-minutes-2/

Additional information about your water can be obtained from:

Seattle Public Utilities: 206.684.3000
www.seattle.gov/util/MyServices/Water/Water_Quality

Washington State Dep't. of Health (DOH): 800.521.0323
www.doh.wa.gov/community-and-environment/drinking-water

Environmental Protection Agency (EPA) Water Hotline: 800.426.4791
www.epa.gov/safewater - and - www.epa.gov/sdwa

Centers for Disease Control and Prevention:
https://www.cdc.gov/healthywater/drinking/public/understanding_ccr.html

Conserving Water Together

Water Use Efficiency Report

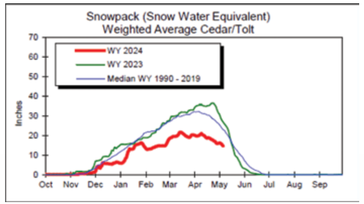
During 2023, NCWD purchased 575 million gallons of water with a distribution system leakage rate of 2.9%—significantly below the state standard of no more than 10% water loss.

Conservation Program Goals

As one of the 19 members of the Saving Water Partnership, North City Water District participates in a ten-year goal to keep our region's total average annual retail water use under 110 mgd, despite population growth. During 2023, we exceeded this goal by achieving 96.3 mgd. Key to meeting this goal were the following programs:

- Over 2000 people visited our Water Education Booths at the Lake Forest Park Garden Tour and Market, Celebrate Shoreline Festival, and Lake Forest Park Picnic in the Park.
- 110 people learned about water-wise gardening at our free Savvy Gardener classes.
- 33 classroom presentations about water reached 701 students (we love promoting early water awareness!).
- 1 single family household received a new toilet rebate.

Proactive Conservation for the Year Ahead



As shown in the above graph from our water supplier (Seattle Public Utilities), this year's snow pack is noticeably less than previous years. Conserving water is important—not only to save money on your water bill, but to help protect our region's salmon population and ecosystems:

1. Check your Toilet for leaks: an old flapper can unknowingly add hundreds of dollars to your bill.
2. Replace your shower head with a WaterSense model and take shorter showers: every minute = roughly 2.5 gallons.
3. Check irrigation systems for leaks and avoid watering the sidewalk. Water at night or in the early morning.
4. Wash full loads of laundry, and full loads in the dishwasher.

The North City Waves Newsletter is brought to you by North City Water District, and its Board of Commissioners:
Patty Hale (President), Ron Ricker (Vice President), and Charlotte Haines (Secretary).
Feel free to contact us at PO Box 55367, or 1519 NE 177th Street, Shoreline, WA 98155.
206.362.8100 • www.northcitywater.org • NorthCityWaterDistrict

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North City WATER DISTRICT

2023 ANNUAL REPORT of DRINKING WATER QUALITY

Issue 2: April • May • June 2024

A newsletter for water-related issues and info
Serving the communities of Shoreline and Lake Forest Park since 1931

From Our Board...

by Patty Hale, President

Last Month, the Washington State Department of Ecology declared a statewide drought due to low snowpack and dry forecast for most of the state. Excluded from the drought declaration are those communities that get their water from Seattle, Tacoma and Everett. Utilities in these cities have reservoir storage and water management strategies that make them more resilient to drought than other systems. What can we in our community do to help the rest of the state? Unfortunately, saving water in our area won't help our neighbors in drought-stricken parts of the state, but it will ensure our local salmon populations (and wildlife) have adequate water for a healthy ecosystem. We encourage all of our ratepayers to continue to use water wisely, and learn as much as possible about ways to conserve through our youth program, community education booths, and free gardening classes.

Free Savvy Gardener classes are a great way to learn about everything from water-wise gardening, first-time gardening, designing with native plants, and more. Learn more on our website or at www.savingwater.org/lawn-garden/gardening-classes/

Inside This Issue

Three Ways to Stay in Touch

1) Join www.nextdoor.com for neighborhood news and notices
2) Follow us on www.facebook.com/NorthCityWaterDistrict
3) Sign up for news, alerts, free classes and more on our website at www.northcitywater.org

North City Waves Newsletter ~ a publication by North City Water District

PO Box 55367 • 1519 NE 177th Street
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North City Water District

April 2024 photo of the Chester Morse Masonry Pool, located in the upper region of the Cedar River Watershed; photo courtesy of Seattle Public Utilities

Annual Water Quality Report for 2023

North City Water District is proud to report water quality test results that are within state and federal guidelines, and significantly below EPA maximum levels.

All About Your Water

Where Is Your Water From? Tolt and Cedar River Watersheds.

Who Tests Your Water? Your drinking water is regulated by the Environmental Protection Agency (EPA), who sets drinking water quality standards, establishes testing methods and monitoring requirements for water utilities, sets maximum levels for water contaminants, and requires utilities to give public notice whenever a violation occurs. Your drinking water is tested frequently both by North City Water District and Seattle Public Utilities, our supplier, to ensure that high quality water is delivered to your home and business.

How Safe is Your Water? Your water falls safely within state and federal guidelines for each and every contaminant, significantly below the EPA's levels.

What is Your Water Being Tested For? 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 that water poses a health risk. More information about contaminants and potential health effects is available by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline 800.426.4791.

When is Your Water Tested? Out of roughly 100 EPA-regulated contaminants, some parameters are tested continuously, some are tested daily, some are tested weekly, some monthly, some quarterly, and some annually—all in accordance with federal and state regulations. Others, such as UCMR (Unregulated Contaminants) monitoring or herbicides, are only required to be tested once every 6 years.

How is Your Water Tested? Over 200 compounds are tested and not detected; most of this monitoring occurs once every several years. Tests are done before and after treatment and while your water is in the distribution system. The Tables presented on the following page list all of the contaminants detected in the most recent required water testing and compare them to the limits and goals set by the EPA and the State of Washington to ensure your tap water is safe. Not shown are more than 200 additional contaminants that were tested for, but not detected, in your drinking water. If you would like to see a list of these other compounds or if you have other water quality questions, do not hesitate to contact us (number below). Note: asbestos monitoring is not required for our District because all asbestos pipe in our distribution system was replaced prior to 1991.

Lead and Copper Monitoring Results

Our regional water supply does not contain lead or copper. However it is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's 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. North City 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 1.800.426.4791 or at http://www.epa.gov/safewater/lead.

People With Special Concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by microbial contaminants are available from the Safe Drinking Water Hotline at 1.800.426.4791. If you would like to learn more, or have questions about water quality, just give us a call at 206.362.8100.

Table 1: Water Quality Testing Results for 2023

Compounds that were not detected in 2023 are not included in these charts.

Types of Detected Compounds	Units	Primary Source	Ideal Goal (MCLG)	Max. Allowed (MCL)	Levels in the Cedar River Watershed Average	Levels in the Cedar River Watershed Range	Levels in the Tolt Watershed Average	Levels in the Tolt Watershed Range	Meets EPA Stds.?
RAW WATER									
Total Organic Carbon	ppm	Naturally present in the environment	NA	TT	0.76	0.42 to 1.12	1.26	0.99 to 2.49	Yes
FINISHED WATER SOURCE									
Turbidity	NTU	Soil runoff	NA	TT	0.38	0.19 to 3.5	0.04	0.02 to 0.12	Yes
Arsenic	ppb	Erosion of natural deposits	0	10	0.4	0.3 to 0.6	0.3	0.2 to 0.4	Yes
Barium	ppb	Erosion of natural deposits	2000	2000	1.5	1.3 to 1.7	1.2	1.4 to 1.4	Yes
Bromate*	ppb	Byproduct of drinking water disinfection	0	10	0.7	ND to 11	0.1	ND to 2.0	Yes
Fluoride	ppm	Water additive to promote strong teeth	4	4	0.7	0.5 to 0.8	0.7	0.6 to 0.8	Yes
Nitrate	ppm	Erosion of natural deposits	10	10	0.1	One sample	0.1	One sample	Yes
SPECIFIC SAMPLES FROM NORTH CITY WATER DISTRICT'S DISTRIBUTION SYSTEM									
Total Trihalomethanes	ppb	Byproduct of drinking water disinfection	NA	80	Average: 39 Range: 22 to 60				Yes
Haloacetic Acids (5)	ppb	Byproduct of drinking water disinfection	NA	60	Average: 32 Range: 18 to 38				Yes
Chlorine	ppm	Water additive to control microbes	MRDLG =4	MRDL =4	Highest Monthly Average: 0.95 Range: 0.00 to 1.5				Yes

*Seattle Public Utilities is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not 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 non-detect.

Table 2: Lead and Copper Monitoring Results for the Tolt Watershed in 2023

Samples are taken every three years; the next samples will be taken in 2026. Five of the 51 samples in the Tolt Watershed were taken in NCWD's service area. None of the samples for the Cedar River Watershed were from NCWD's service area.

Lead and Copper Sampling Program and Units	Ideal Goal MCLG	Action Level [1]	Results of 2023 Samplings [2]	# Homes Exceeding Action Level	Typical Sources in Drinking Water
Lead, ppb	0	15	3.0	0 of 55	Corrosion of household plumbing systems. Samples collected in homes within the Tolt water service area.
Copper, ppm	1.3	1.3	0.18	0 of 55	

[1] The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. [2] 90th percentile: 90 percent of the samples were less than the values shown.

Table 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 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 2023 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 2023 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.

Flying Colors on Two Audits

During the fall of each year, our Financial Statements are audited by the Washington State Auditors Office to ensure the District's compliance with certain laws, regulations, contracts, and our own internal policies.

North City Water District recently completed our annual financial audit with Washington State, followed by a second audit for 2021-2022 accountability.

We are pleased to report that the District has continued to pass with flying colors for both of these audits.

We invite you to review all of our Financial Statements and audit results on our website at:

www.northcitywater.org/resources/financial-statements-and-audits

Update on Lead Service Line Inspections

Staff has been hard at work doing lead service line inspections within the District—which often includes cleaning out dirt from inside meter boxes where moles have been visiting.

Meter box, before and after mole dirt clean-out

From our initial customer survey effort, and compiling a database of known details and documents on our services, to inspecting services that were randomly selected from properties that had unknown materials on the Customer Side of the water meter, we are finally nearing completion for 2024 of this important national public safety effort.

We look forward to submitting the results of our data to the Washington State Department of Health later this year, at which time we will make the same information available to everyone on our website.

New Hours: Effective June 1 2024, North City Water District will be adjusting our office hours on a trial basis for the rest of this year. New hours will be 7:30 am to 5:00 pm on Monday, Tuesday and Thursday; 8:30 to 5:00 pm on Wednesday; closed on Fridays. As always, we will respond to water main breaks as soon as we are notified, day or night, every day of the week. New hours will be reflected on the home page of our website at www.northcitywater.org

Before and after the repair of a water main after soils shifted underground.

the savvy gardener

FREE SAVVY GARDENER CLASSES!

We had a great turn out for the first of four FREE Savvy Gardener classes held on April 10. Ea Murphy talked about water-friendly gardens (a topic that is going to be especially applicable this year), and answered attendees' questions about ways to improve their soils. Interested in joining us for future classes? Mark your calendars, and watch our website and Facebook for more information and registration!

First-Time Gardeners: ***proven tips and techniques***
Tuesday, May 14, 6:30 – 8:00 pm • by Peggy Campbell

Container Gardening Do's and Don'ts
Wednesday, June 12, 6:30 – 8:00 pm • by Marianne Binetti

Designing the Northwest Garden
Wednesday, September 18, 6:30 – 8:00 pm • by Greg Rabourn