North City WATER DISTRICT

90 YEARS • 1931–2021

2021 ANNUAL REPORT of DRINKING WATER QUALITY

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

Issue 2: April • May • June 2022

From Our Board...

by Patricia Hale, President

The onset of sunny days and warm weather is an especially good feeling after having been isolated with another long COVID winter. Back when our community formed a Special Purpose Water District 90 years ago, who would have known we'd need to handle something as significant as COVID? Thankfully, years of proactive planning for addressing emergencies served us well: North City Water District staff remained safely active throughout the pandemic, providing ongoing system maintenance, installing new water services for all the ongoing development in our area, even taking care of several capital improvement projects. We also went through some staffing changes, including the retirement of our Operations Manager Denny Clouse, the arrival of our new Director of Operations and Engineering Max Woody, and the return of our former Director of Finance, Barb Shosten. As the story of North City Water District's 90 year history comes to a close in this newsletter, we feel much gratitude for those individuals who got together 90 years ago with the foresight to look ahead, and the determination to plan a system that would meet the needs of both existing and future residents. We hope you've enjoyed our monthly blog posts, discovering first-hand how serving our community has evolved and how technologies have improved to ensure you are drinking quality water at all times.

Ongoing water main repairs on 25th Avenue NE in Lake Forest Park

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

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

Inside This Issue

Rate reduction available for 150 eligible low income persons. Call us or visit www.northcitywater.org

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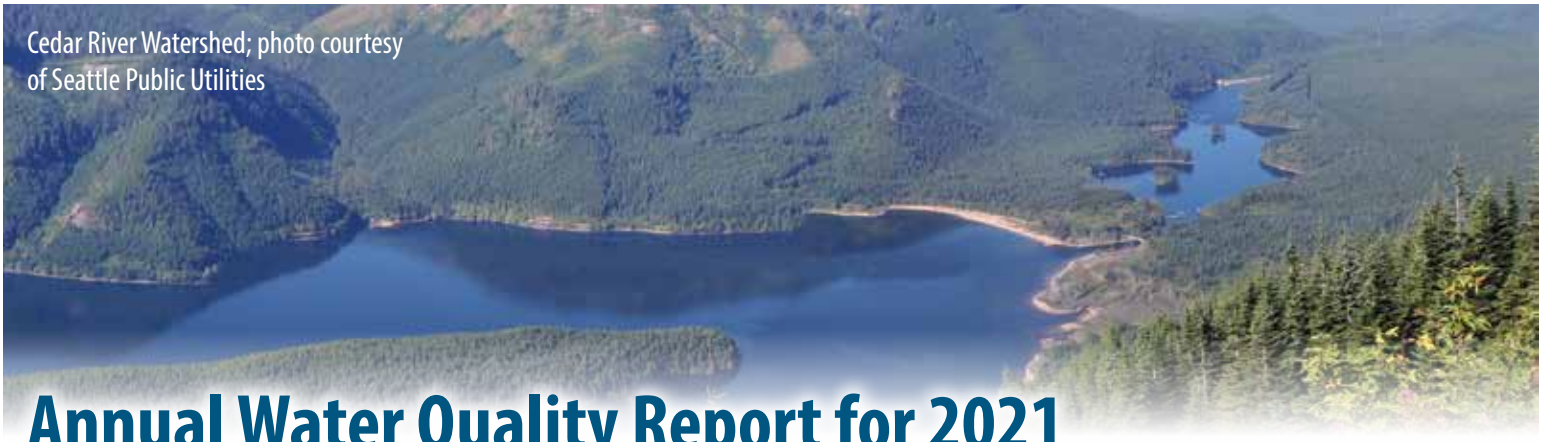


Cedar River Watershed; photo courtesy of Seattle Public Utilities

Annual Water Quality Report for 2021

North City Water District continues to maintain state and federal water quality guidelines that are 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 2021

Compounds that were not detected in 2021 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	0.62	0.35 to 0.96	1.09	0.94 to 1.4	Yes
FINISHED WATER SOURCE									
Turbidity	NTU	Soil runoff	NA	TT	0.29	0.17 to 1.97	0.03	0.02 to 0.24	Yes
Arsenic	ppb	Erosion of natural deposits	0	10	0.42	0.36 to 0.52	0.27	0.23 to 0.31	Yes
Barium	ppb	Erosion of natural deposits	2000	2000	1.52	1.49 to 1.54	1.22	1.17 to 1.32	Yes
Bromate	ppb	Byproduct of drinking water disinfection	0	10	0.7	ND to 8	ND	ND	Yes
Fluoride	ppm	Water additive to promote strong teeth	4	4	0.7	0.6 to 0.8	0.7	0.6 to 0.8	Yes
Radium 228*	pCi/L	Erosion of natural deposits	0	5	0.6	ND to 1.15	0.8	ND to 1.69	Yes
SPECIFIC SAMPLES FROM NORTH CITY WATER DISTRICT'S DISTRIBUTION SYSTEM									
Total Trihalomethanes	ppb	Byproduct of drinking water disinfection	NA	80	Average: 26 Range: 15.6 to 33.4				Yes
Haloacetic Acids (5)	ppb	Byproduct of drinking water disinfection	NA	60	Average: 32 Range: 16.1 to 51.5				Yes
Chlorine	ppm	Water additive to control microbes	MRDLG =4	MRDL =4	Highest Monthly Average: 1.01 Range: 0.19 to 1.83				Yes

* Initial samples showed a slight detection. Follow-up samples showed no detections.

Table 2: Lead and Copper Monitoring Results for the Tolt Watershed in 2021

Samples are taken every three years. 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 2020 Samplings [2]	# Homes Exceeding Action Level	Typical Sources in Drinking Water
Lead, ppb	0	15	3.8	0 of 55	Corrosion of household plumbing systems. Samples collected in homes within the Tolt water service area.
Copper, ppm	1.3	1.3	0.19	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 River Watershed supply in 2021 is 5 NTU.

NA: Not applicable.

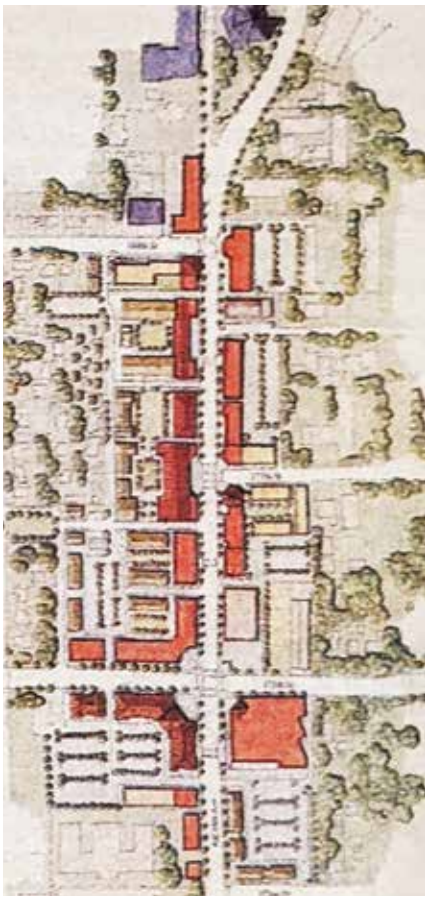
ND: Not detected.

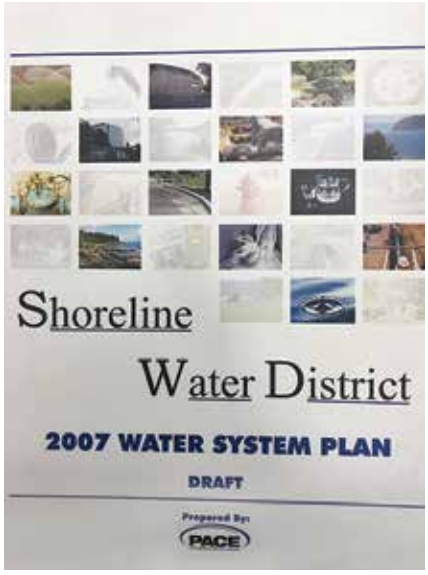
pCi/l: picocuries per liter.

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.





90 YEARS • 1931–2021

There was a significant drop in single family water use beginning in the early 1990s as a result of a new water conservation mindset

90 Years of Excellence

The Story of North City Water District, Part 4 of 4

After spending the last year reflecting and reporting on our 90 year history, a few themes have become apparent... and one common denominator.

Theme #1: Never-Ending Growth

From the moment Lago Vista residents realized they needed more than spring or well water to support their subdivision and surrounding business district, and formed a Special Purpose Utility District back in 1931, to the latest impacts of Sound Transit's light rail in this decade, North City Water District has been planning for, adjusting to, accommodating, and servicing non-stop growth.

Theme #2: Long-Term Perspective

Few government agenices would spend decades "making do" with a small, outdated shop facility until, after more than 30 years of planning and creative responses to various setbacks, they finally found the right combination of location, available space, and least cost to build something "just right." Our approach to building a new Maintenance Facility is just one example of how we continually analyze, compare, weigh pros and cons, explore alternatives, and make decisions based on long-term perspective.

Theme #3: Proactive Maintenance

The last thing any of us wants is a large, unexpected, costly repair project. Unlike many local and national utilities, whose approach is to address problems primarily after they occur, North City Water District recognizes the significant savings in terms of cost and frustration by performing smaller, regular, ongoing maintenance to our system. We are justifiably proud of the result: our water system is one of the best maintained in the nation, ranking well above average in operations and lowest in maintenance cost per customer.

Theme #4: Conservation is Here to Stay

What began as an unprecedented response to a water shortage in the early 1990s turned into a water conservation mindset that persists to this day. While this ongoing customer philosophy has enabled us to readily service new growth throughout our area, it also comes with its own challenges. Lower water consumption means lower costs to customers, which translates into lower incoming revenue for operations. Yet we believe our customer's diligent efforts at conserving water must be matched by our diligent efforts to manage costs creatively. This includes seeking out more public/private partnership agreements, getting developers to pay their fair share, and pursuing any and all opportunities for low-interest financing, whether from Washington state's Public Works Assistance Account, or through low-cost bonds made possible by our excellent bond rating.

continued on the following page

North City WATER DISTRICT

Admin Building


Pump Station, inside


Pump Station, exterior


Maintenance Building

90 Years of Excellence... *continued from inside*

Key Highlights of the Previous Three Decades

1992–2001: we made a number of system improvements to enhance water reliability and resiliency during adverse conditions and emergencies.

2002–2011: we conducted a number of long term analyses and studies to address rapid development, system improvements, and expanding operations.

2012: we added a new water connection with Seattle Public Utility to provide supply redundancy and reliability, and began design on a new pump station.

2013: we finished expanding and remodeling our existing Admin building to provide adequate space and support systems, well into the future.

2014: we changed our name to North City Water District, to clarify our role as a Special Purpose District operating independently from the City of Shoreline and serving customers outside of that City; we upgraded our 2.7 MG reservoir.

2017–2019: we completed our new North City / Denny Clouse Pump Station; began constructing a New Maintenance Facility; and welcomed Commissioner Patricia Hale, who took the place of retiring Commissioner Larry Schoonmaker.

2020–2021: despite the many impacts of COVID-19, we continued to ensure all of our customers and local businesses had good clean water. This included waiving all late fees and shut-offs due to delinquencies; developing financial assistance programs; making operational changes to ensure safety; and implementing various cost-cutting measures to avoid rate increases. By the end of this decade, our customer base had grown to well over 11,400 connections serving roughly 27,000 population.

Throughout these past nine decades, a few things haven't changed. Commissioners are still elected by local residents, and we continue to take a uniquely proactive approach to running a water system—albeit with newer technologies, materials, and regulations, which require more staff, training, equipment and vehicles to manage the ever-improving operations.

The common denominator: our sincere dedication to bringing you the best water possible, 365 days every year.

We have enjoyed sharing our history with you this past year, in both these newsletter articles and the more detailed blog posts on our website. We hope it has given you a first-hand look into the level of foresight, planning, and dedication that has gone into making your special purpose water utility one of the best in the nation. Sincere thanks to Victoria Stiles and Kenneth Doutt of the Shoreline Historical Museum for their assistance throughout this effort!


Backflow Assembly being tested

It's Time to Turn in the Test Report for Your Backflow Assembly!

North City Water District takes pride in providing safe, high quality drinking water to our community. However water safety is a two-way street: contamination can occur within your own piping system, wherever there is a "cross connection"—a point in a plumbing system where the drinking water supply is connected to a non-potable water source. Preventing this type of contamination from entering the public water system is where you come in...

Backflow prevention assembly devices (such as the one pictured above) prevent backflow from occuring. If you have any of the items listed below, if you are a business of (most) any kind, or if you raise farm animals, you are required to (1) have a mechanical backflow preventer in place; (2) have a state certified Backflow Assembly Test performed each year; and (3) send us a copy of your test result. If you need a list of certified testers, contact us at 206.362.8100.

Typical Backflow Hazards:

- Fire sprinkler system
- Lawn irrigation system
- Swimming pool
- Hot tub / jacuzzi tub
- Livestock watering system
- Decorative fountain
- Water lines to a boiler or hydronic heating
- Hydraulic boat lifts

The State Health Department has established rules that require water purveyors (including your District) to identify potential cross connection hazards within our water system, and take appropriate action to protect against these hazards.

If you recently purchased your home and are unaware of this device, or where it is located, we can help! Just give us a call at 206.362.8100.

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 phone in to our Board of Commissioners meetings. These meetings take place every first and third Tuesday of each month at 3:00 pm; the schedule and agendas (which include the phone-in number) can be found on our website at: **www.northcitywater.org/resources/meeting-schedule-agendas-and-minutes/**

Additional information about your water can be obtained from:

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

Environmental Protection Agency (EPA) Safe Drinking Water Hotline: 800.426.4791
www.epa.gov/safewater

Washington State Dep't. of Health (DOH): 800.521.0323
www.doh.wa.gov/ehp/dw/

Conserving Water Together

Water Use Efficiency Report

During 2021, North City Water District purchased 581.3 million gallons of water from Seattle Public Utilities, with a distribution leakage rate of only 2.4% throughout our system. This is 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 2021, we exceeded this goal by achieving 95.5 mgd. Key to meeting this goal were the following programs:

- 140 people learned water-wise gardening tips at our free Savvy Gardener classes (all held online): ***find out about upcoming classes at www.savingwater.org/lawn-garden/gardening-classes***
- 3 single family households received new toilet rebates; and
- 13 classroom presentations were made about water

See You in Person in 2022!

After missing out on community events in 2021 due to COVID, we are looking forward to seeing you all again in 2022 at Celebrate Shoreline and Lake Forest Park Farmers Market!

Conservation Starts at Home

During May and June, rain decreases and people use more water in their yards and gardens. This is when it's especially important to conserve water, because adult salmon are returning to spawn while stream flows are at their lowest. Conserving water not only saves money on your water bill, it helps protect salmon, which in turn enables our ecosystems to thrive for generations to come.

5 Ways to Help Protect Salmon

1. Wash your car at a car wash facility (where used water is routed to treatment facilities).
2. Avoid installing hard pavement; use permeable or porous pavement.
3. Avoid chemical weed killers to protect groundwater and backyard wildlife habitat.
4. Safely dispose of batteries, motor oil, and other hazardous wastes.
5. Plant a rain garden to filter stormwater runoff.

The North City Waves Newsletter is brought to you by North City Water District, and its Board of Commissioners:
Patricia 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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