

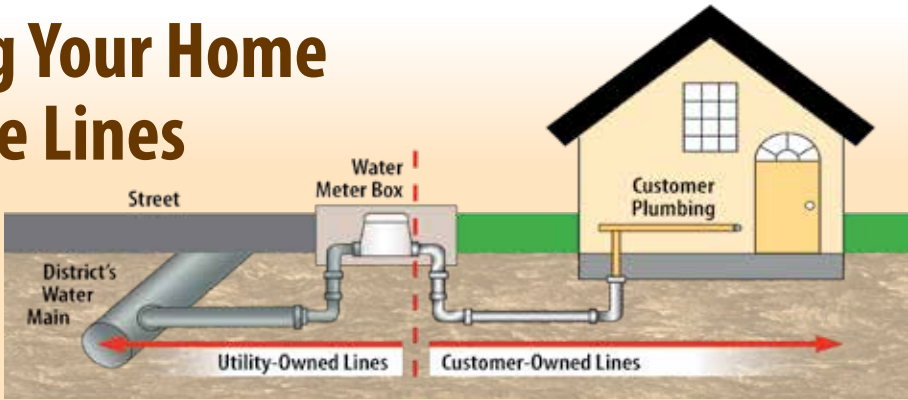
We May Be Inspecting Your Home for Lead Water Service Lines

As reported in our last three newsletters, the U.S. Environmental Protection Agency (EPA) and Washington State's Department of Health is requiring all public water suppliers to develop an inventory of water services and identify any that may contain lead.

Our staff are currently conducting physical inspections of water meter boxes at roughly 370 residences. Although we've been doing meter inspections as part of our routine maintenance practices since 1936, this inspection is specifically focused on gathering information for the national requirements stated above.

If you are one of the ~370 homes identified for inspection, here's what to expect:

We will send you a postcard prior to the inspection so you know what week we are coming. You do not need to be home, and no service outage will occur.



On the day of inspection, our crew will arrive in a white pick up truck with our North City Water District logo, and wear uniforms with the same logo. They will not disturb you by knocking on your door, but you are certainly welcome to talk to them and ask questions.

They will open up your meter box to inspect your water service line materials. If your meter box is full of dirt, they'll dig it out and take it away.

Should our inspection discover lead service lines at your property, you will be directly notified. However **we do not anticipate finding lead lines in our service area.** Once all inspections are complete, we will be posting our final water service inventory on our website.

We're proud to be part of this remarkable effort to help create a national "get the lead out" database, knowing it will help ensure safe drinking water for every customer, every state, and our country!

NORTH CITY WAVES

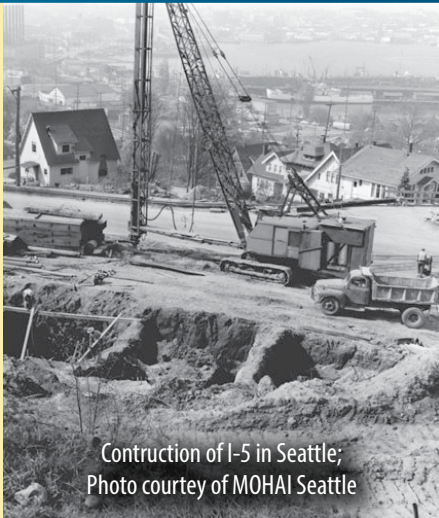
A newsletter for water-related issues and info
Serving the communities of Shoreline and Lake Forest Park since 1931

Issue 1: January • February • March 2024

From Our Board...

Patricia Hale, Board President

With all the news about elections lately—from Federal and State, to impending local elections—it puts us in mind of the types of decisions made by elected officials that impact water utilities. While on the surface they may seem like a positive thing, sometimes they impact us significantly... and sometimes for decades. For example, when I-5 was built in the 1960s, we all looked forward to an easier flow of traffic through the region. However its location cut off a number of water mains that had been designed to "loop" around neighborhoods (these loops helped ensure excellent water quality, system back-up / redundancy, and adequate fire flow for those neighborhoods). With the arrival of I-5, several of those water mains ended up with dead ends in the cul-de-sacs surrounding the freeway. Our District has met with the Fire Department and the City of Shoreline about getting those loops reconnected... just like we're doing in proactive preparation for the development near the Shoreline South Station. Working together with our cities as they look to improve roadways and infrastructure is always a "win" for our customers!



Construction of I-5 in Seattle;
Photo courtesy of MOHAI Seattle

FREE SAVVY GARDENER CLASSES!

We've scheduled this year's FREE Savvy Gardener classes to meet the majority of the feedback we received in our 2023 survey. Mark your calendars now; we'll post class descriptions and further details on our website roughly one month before the class. Or if you already know you want to attend one or more of these classes, feel free to email us at community@northcitywater.org to RSVP.

The Water-Friendly Garden: drought-proofing starts with soil
Wednesday, April 10, 6:30 – 8:00 pm • Presented by Ea Murphy

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

Container Gardening Do's and Don't
Wednesday, June 12, 6:30 – 8:00 pm • Presented by Marianne Binetti

Share Your Emergency Contact Info

In addition to regular maintenance and operations, our crews have been busy with the impacts of January's record low temperatures, a couple of water main breaks, and performing lead service line inspections. We always have a crew member on call 24 hours a day for emergencies, and we're grateful to be able to post alerts on Facebook and Nextdoor, but for those of you not on social media, feel free to tell us the best way to communicate with you. **Do we have your current email address or phone number so we can reach you in the event of an emergency?** Please email us at community@northcitywater.org and let us know how you would prefer to be contacted. Last but not least, a big thanks to all of you who remained patient in the neighborhood that was affected by the water main breaks, and to our staff for being out in the cold weather at night until water was restored to the affected customers.

Inside This Issue

- Providing Adequate Fire Flow and Water Pressure for Shoreline's Rapid Development
- Water System Plan Amendment #2
- Lead Service Line Inspections
- Free Savvy Gardener Classes
- Emergency Contact Info Needed

Three Ways to Stay in Touch:

- 1) Email customerservice@northcitywater.org to have your email address added to your account for alerts, news, free classes and more

- 2) NextDoor: <https://nextdoor.com/agency-detail/wa/shoreline/north-city-water-district/>

- 3) Facebook: www.facebook.com/NorthCityWaterDistrict

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

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.

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Providing Adequate Fire Flow and Water Pressure for Shoreline's Rapid Development

With all the new high-rise development in Shoreline, rumors have arisen that there's not enough consistent water pressure to adequately service fire hydrants in the city. Thankfully, this is not true in North City Water District's service area.

New high-rise developments, including single-family residential neighborhoods that are redeveloped with new, large multi-family structures, require larger water mains to meet their increased fire flow demands.

While North City Water District does not control or approve these developments, we are responsible for ensuring every new development permitted by the Cities of Shoreline and Lake Forest Park in our service area has adequate water pressure and fire flow, with water mains adequately sized to accommodate new structures.

Managing The Process

Before any development is approved for a City building permit, the developer, property owner, or homeowner must begin by identifying all existing and potential water "units" that are or will be associated with the proposed property—including sinks, washing machines, showers, etc.—using the Uniform Plumbing Code to know how much water flows through the various units.

We encourage they stop by the office or schedule a meeting with us so we can assist them in this process and discuss the potential project's impact on the water system.

They must also obtain a permit from the applicable Fire District.

Then the developer, property owner, or homeowner submits a request form and pays a fee to North City Water District to have us conduct a Fire Flow Analysis.

Conducting Fire Flow Analyses

A Fire Flow Analysis indicates how much water is currently available for the potential new development. We use a computerized hydraulic model to hypothetically assess the impacts on our water system in order to measure projected water flow to the new development. We analyze multiple factors—from the project's location within our system, and the distance from the project to nearby fire hydrants, to project size and current water main size and condition.

Example: if a contractor approached us wanting to build a very large wooden structure for a multi-family or office space, we would run a hydraulic model to identify the available fire flow rates at specific hydrant locations in the system.

Because a large multifamily or commercial structure built primarily of wood could require additional fire flow (as compared to the fire flow requirements of steel or concrete materials), we would then need to identify which water mains needed to be upsized to meet the fire flow demand required by the Uniform Fire Code.

Continuing with this example, a structure built primarily of wood could require a large amount of new water mains. We would then need to conduct further analysis to determine the right diameters of the new water mains, since the diameter of every pipe in our closed loop system affects the flow rate in every other pipe (much like a human circulatory system, which includes everything from large arteries to smaller veins and capillaries). Selecting the right water main diameters ensures proper water pressure as well maximum velocity in each fire flow location.



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Sharing all of this information with the developer and Fire Department early in the process allows them to reconsider the type of building material before the project is too far along. It also determines whether the developer, property owner, or homeowner will be required to make additional improvements to the water system in order to accommodate the impacts of their project.

If the results of the Fire Flow Analysis indicate the District's existing system can provide adequate fire flow to the proposed development, the District will issue a Certificate of Water Availability to the developer, property owner, or homeowner, and the developer can connect to our existing water system after they pay a connection charge.

When the results of the Fire Flow Analysis indicate the District's existing system can not provide adequate fire flow to the proposed development, the developer, property owner, or homeowner must enter into a Water System Extension Agreement (WSEA) with North City Water District to make the necessary system improvements that will achieve adequate fire flow before connecting to our water system.

Growth Pays for Growth

During the negotiation of Water System Extension Agreements, we ask developers to pay for upsizing the water mains that go to their structures, and also have them construct the actual improvements using the very same set of design and system standards that we follow on our own projects.

This ensures the cost of the new water connection is paid for by the developer, which helps keeps our water rates affordable for everyone, while improving the overall water system.



Examples of Water System Extension Agreements in which the developer will be upsizing the water mains:

- Sound Transit Lynnwood Link
- Sound Transit Bus Rapid Transit Project
- Shoreline South Station and Parking Garage
- ION 149th LLC Apartments
- WZL Enterprise LLC / Paramount Apartments
- Shoreline 155th Apartments

Should you have any additional questions about water pressure, fire flow, or your water system in general, feel free to give us a call at 206.362.8100.



Water System Plan Amendment #2

Last fall, the District prepared an update to our water system plan to add several new water main projects, which were identified after our Water System Plan was adopted in 2020. Once these new water mains have been installed later this year, we will also update our computerized hydraulic model.

We submitted this revised plan to 10 different local governments for review; the updated Water System Plan was officially approved by King County in November 2023, and by the Washington State Department of Health in January 2024.

This is just one of many benefits of being a Special Purpose District, singularly focused on providing high quality drinking water. We're able to respond to our customers' needs rapidly, get approval processes handled efficiently, all of which reinforces our customers' trust and protects their financial investment in the District.

When compared to other Government entities that have to juggle competing needs and priorities for funding, our mission and purpose are as crystal clear as the water we deliver to your homes and businesses every day.