

DESIGN CONTEST FOR KIDS

Deadline extended to Oct. 31! North City Water District would like to invite all kids age 12 and under to participate in our “Design a Reusable Bag” contest, using the theme “We Use Water Wisely.”



Winning artwork will be printed on a large, reusable canvas bag used to distribute water conservation materials at local events (and re-used for groceries or other purposes throughout our community). More info and entry forms available at our office or at www.northcitywater.org

Using Reclaimed Water

Periodically, we receive questions about reclaimed water, and whether we will ever have it in our area. Allow us to provide the answer courtesy of Seattle Public Utilities, our wholesale water provider.

During the early 2000s, Seattle Public Utilities (SPU) studied the potential for, and possible uses of, reclaimed water in the greater Puget Sound area. When they added the new Brightwater Wastewater Treatment Plant in Woodinville, its design included the potential for utilizing reclaimed water in the area north and east of Seattle.

In September 2010, SPU published an economic analysis of the potential uses and cost effectiveness of developing a distribution system to supply water to the North Seattle / Shoreline area using reclaimed water from this treatment plant. At that time, the financial analysis indicated that reclaimed water had a limited number of potential users, would require a substantial amount of investment to install the required "purple pipe" infrastructure and pumping facilities, and had minimal supply and environmental benefits.

If the Puget Sound region decides that reclaimed water has a viable future potential, the region as a whole should conduct a similarly thorough study, as benefits would likely extend beyond each utility's service area.

In short, reclaimed water is not being incorporated into any current developments, including the upcoming Sound Transit stations.



Community Corner

Connecting with customers at community events is an invaluable way to learn more about our customers' needs and concerns. North City Water District did all that and more during the following events:

- North City Jazz Walk: your Water District once again served as a venue for live jazz, this year featuring northwest favorite Pearl Django.
- Ridgecrest Ice Cream Social: our staff and commissioners handed out conservation kits, gardening brochures and water cycle bracelets for the kids, as well as ice cold water in bottles to balance out all that ice cream.
- Celebrate Shoreline: kids enjoyed our Water Wise bean bag toss game while parents chatted with commissioners and staff about conservation, rebates, and other water-related questions.

Upcoming Events

Lake Forest Park's Picnic in the Park

at Animal Acres Park

Saturday September 8 – 10:00 am to 3:00 pm

Join with family and friends to celebrate Lake Forest Park Community with live music, food trucks, a petting zoo, bouncy house and other children's activities.

Savvy Gardener Class “Favorite Northwest Natives”

at North City Water District

Thursday, September 13, 2018 – 6:30 to 8:00 pm

Greg Rabourn, who restores habitat for King County and was the past co-host of KCTV's Yard Talk, will show you how beautiful, sustainable, and low-maintenance gardening can be with native plants in this FREE class presented in cooperation with the Saving Water Partnership. RSVP required: call 206.362.8100 or email theresah@northcitywater.org.



Issue 3: July • August • September 2018

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

From Our Board...

by Larry Schoonmaker, President

This summer our staff has been busier than usual—not only working on our water system, but attending local community events where they can share their passion for our good, clean water. In addition to educating our area's youth about water conservation during the school year (this calendar year, over 21 classroom lessons were given to nearly 525 students in North City Water District's service area), we love talking with families throughout the summer about everything from rebates to leaky toilets (the fastest way to conserve water and lower your water bill). We also enjoy meeting with our legislators to provide them with the information they need to support infrastructure throughout our state. Here at North City, we take a long term approach to education... but we also follow that approach in project development. Whether it involves waiting for the right moment to capture a low interest loan for our pump station project, seeking bonds to help spread out the costs of major capital improvements, or taking advantage of low interest loans through the Public Works Assistance Account, we're in this for the long term, solely focused on your water.

FREE CLASS



Favorite NW Natives
Thursday September 13



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

- 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

Three Ways to Stay in Touch

- Water System Planning, Part 3
- Project Update:
- New Maintenance Facility
- Design Contest for Kids
- Using Reclaimed Water
- Community Corner

Inside This Issue

PO Box 55367
1519 NE 177th Street
Shoreline, Washington 98155
206.362.8100



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

Larry Schoonmaker (President), Charlotte Haines (Vice President), and Ron Ricker (Secretary).

Feel free to contact us at PO Box 55367, or 1519 NE 177th Street, Shoreline, WA 98155.

206.362.8100 • www.northcitywater.org • [f](https://www.facebook.com/NorthCityWaterDistrict) / NorthCityWaterDistrict

Printed on 30%
post consumer paper.
Please recycle.



Water System Planning, part 3

As part of our ongoing theme for 2018: The Year of the Water System Plan



1 Overview

Purpose, Policies, Rules and Regulations, Conservation, Customer Service, and long term water supply contract with SPU



2 Basic Planning Data



3 Existing Water System

Supply, Emergency, Facilities, Equipment, System, and Water Treatment



4 Minimum Design Criteria

For All System Components



5 System Analysis

Source, Storage, Pumping, Distribution, and Monitoring



6 Capital Improvement Planning



7 Operations & Maintenance

Personnel, Processes, Records, Water Quality, Safety, Emergency, Public Notification, and Preventive Maintenance



8 Financials

Water Supply, Cost of Service, Connection Charges, Funding, Capital Improvement Financing, Developer Policies, Standard Details and Specs, and Multi-Year Rate Study

Basic Planning Data and Minimum Design Criteria

Section 2: Basic Planning Data

Our Water System Planning effort requires a comprehensive review of the following basic planning data:

1. History of the District: for current perspective and future benchmarks;
2. Service Boundaries: we currently provide service to several parcels outside of our corporate boundary that we are working to incorporate;
3. Topography: different ground elevations cannot be served at the same water pressure, and thus require seven unique “pressure zones;”
4. Land Use and Zoning;
5. Past and Future Population and Employment: information, trends, and projections; and
6. Associated Water Demands: how water is provided within each of the seven pressure zones.

Since our last Water System Plan in 2013, we have seen a decrease in water use, which we believe is due to regular communications about water conservation, and the resulting excellent response from our customers.

Meanwhile we’re beginning to see an uptick in growth in our area, which we believe will increase even more, once the light rail stations are completed.

Analyzing and predicting the ratio of projected growth versus water conservation will help us identify the best way to support our area’s growth and development with appropriate water system components—from reservoirs, pump stations, transmission and distribution systems (including water mains, valves, hydrants), to the buildings and vehicles that support system operations.

Section 4: Minimum Design Criteria

On August 1 2018, District staff met with representatives from the cities of Lake Forest Park and Shoreline, as well as representatives from the Northshore and Shoreline Fire Departments, to talk about our water system.

We began by providing a historical perspective of the system—how it was originally designed in 1931; how it was upgraded in 1966 to replace nearly 70% of the system with larger water mains for improved fire flow, and to build out land use needs at that time; then upgraded in subsequent years to increase fire flow to 1000 gpm (where it is today) in our primarily residential neighborhood service area.

Finally, we provided a summary of our current water system, its components, operations, and service area, and explained how the positive effects of early Water System Planning continues today: the majority of our system meets updated fire flow standards; areas with less flow (primarily in culdesacs or dead end streets in residential neighborhoods) will soon be upgraded to ensure our system is well-prepared.

However given the ongoing development in our area, another topic of our discussion was land use code changes that will require yet another increase in the size of our water mains—from 6” to 12” diameter—to accommodate fire flow requirements for new multi-family complexes.

Unfortunately, the old saying, “build it and they will come,” does not work for a water utility, because of another important design criteria: the speed or velocity of the water. Too fast, and it could impact the integrity of the pipes; too slow, and water quality becomes an issue.

For this reason, it is not prudent to simply upsize water mains in areas of future multi-family structures, as their water demands won’t be identified until each structure is planned for and constructed.



Project Update: New Maintenance Facility

Site work is progressing steadily at our new Maintenance Facility. As described in our previous newsletter, we chose to divide this project into two parts to better control costs. Much like you plan ahead to fit home repair and remodeling projects into your budget, we have been making plans for this project for many years. When we first identified the need for a new maintenance facility back in 1992, none of us had any idea that the Puget Sound region would be experiencing so much growth.

First Contract: Site Work

July – November 2018

In June of this year, the District awarded the site work portion of our maintenance facility project to New West Construction out of Everett. Following the removal of asbestos within the old buildings in July, August saw the

old structures, concrete, and asphalt removed from the site. The contractor will then move the earth around on site to achieve the required construction elevations, after which he’ll begin installing underground utilities.

Second Contract: Building Construction

January – September 2019

Given that the current construction environment is extremely busy and thus more costly, we are considering splitting this contract as well—over one, two, or three years—to get the most bang for our buck. We expect to submit our building plans to the city for permitting around the same time this newsletter goes to press.

To stay abreast of this project’s status, visit our website, look in the right margin, and click on the project site plan drawing.

Instead, North City Water District continuously monitors water demand throughout our system, adjusting water movement here, flushing a water main there, in order to maintain optimum water quality throughout the system.

Another purpose of this meeting with representatives from the cities and fire departments was to communicate our ongoing desire to coordinate projects together—both short term, and as far out as twenty years.

It is our belief that by working together to identify the location and timing of upcoming projects, and wherever possible, scheduling our projects simultaneously or immediately after each other, we can all minimize project costs as well as disruption to neighborhoods and commercial areas.

Finding ways to work together means we don’t have to tear up streets in front of a home or business more than once every decade or so.

Applying Design Criteria to Developments

Regular review of our Design Standards helps North City Water District remain current and proactive with our area’s ever-expanding development.

In the last two years, North City Water District has been working closely with a variety of public and private entities to ensure appropriately sized water mains for their development projects. These include our 2017 agreement with Sound Transit (not only for both light rail stations at NE 145th Street and NE 185th Street stations, but also all along the railway throughout the city); Shoreline School District (including North City Elementary School, Aldercrest Campus, and Kellogg Middle School); Shoreline Fire District; the developer at the old North City Post Office site; the Buddha Jewel Monastery; and the Arabella Apartments 2—all of these have entered into agreements with us for coordinated water utility work during redevelopment. The District has also been in communication with over a dozen other potential developments, although none of these have signed an agreement yet.

We will continue to regularly review and update our Design Criteria and Standards to ensure future development meets the newest standards at the time they enter into agreements with our District.

If you have any questions about our Water System Planning process, give us a call at 206.362.8100.