

2020 CITY OF RENTON



WATER QUALITY REPORT



LEARN ABOUT YOUR WATER SOURCE AND QUALITY



WATER SAVING TIPS

Where Does Your Water Come From?

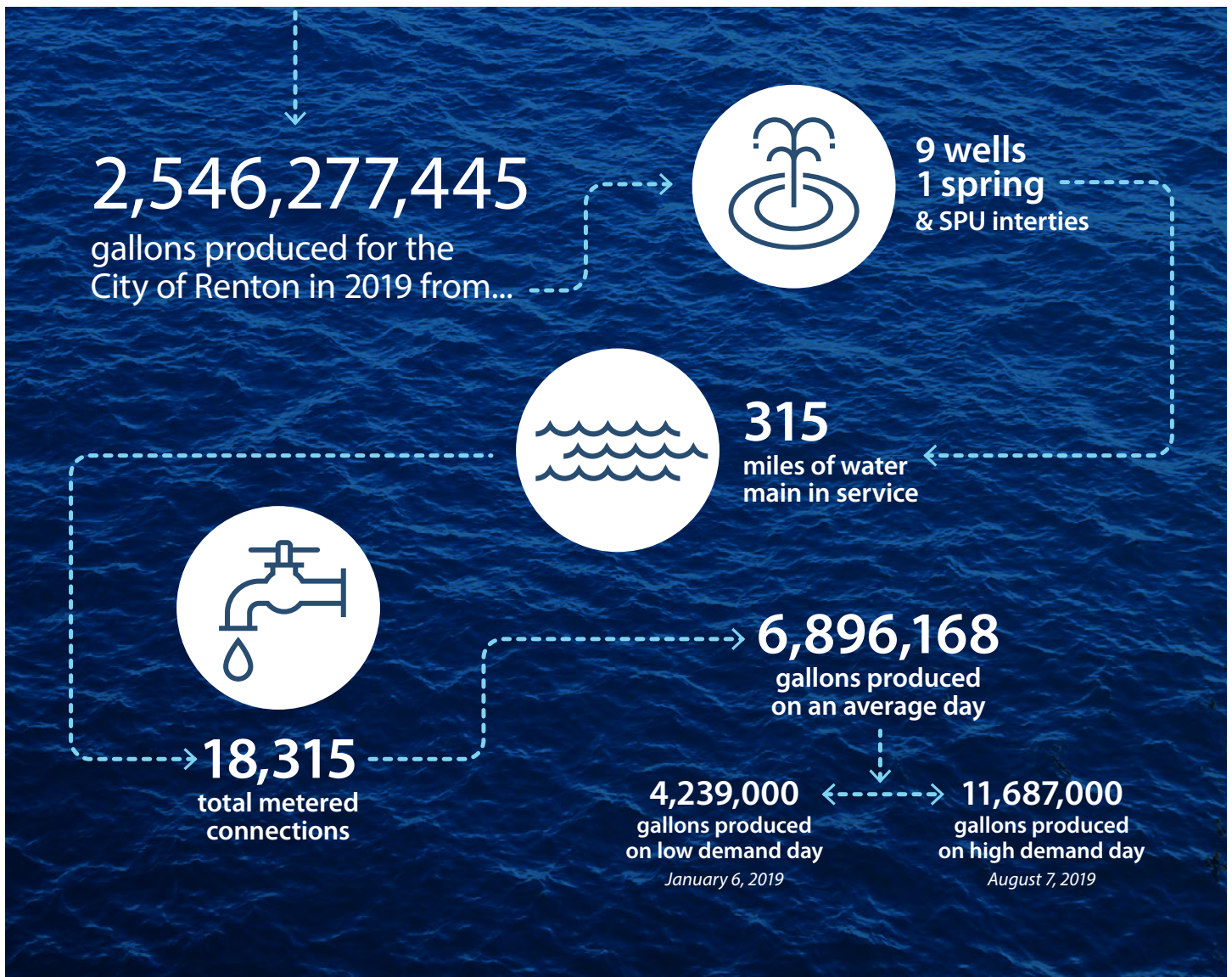
Renton's Water Sources

In 2019, the City of Renton obtained its drinking water from four sources:

1. Six downtown wells located in Liberty and Cedar River Parks, which draw water from the Cedar Valley Aquifer
2. Springbrook Springs, a small spring located in south Renton
3. The Maplewood wellfield located under the Maplewood Golf Course
4. An agreement to buy water from Seattle Public Utilities (SPU), who source water from the Cedar and Tolt rivers

Our agreement with SPU began in January 2012. During 2019, SPU provided approximately 29 million gallons (MG) of water that were used by the Renton Boeing plant. Water is purchased from SPU primarily as a backup supply during summer peak use periods. More information available at SPU: seattle.gov/util/waterqualityreport.

In 2019, the combined four water sources produced 2.55 billion gallons of water.



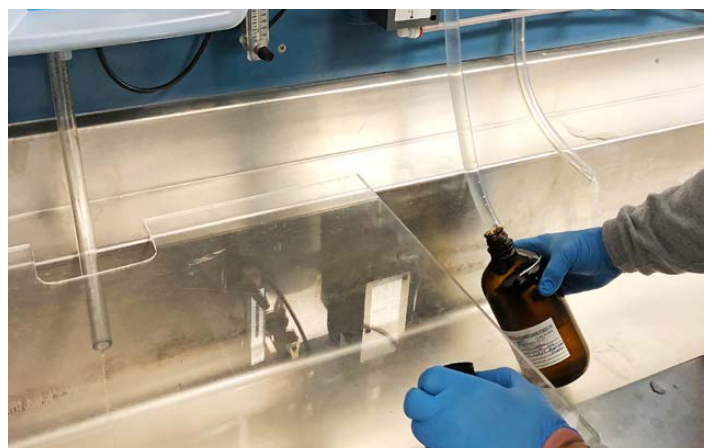


Water Treatment

Providing Safe, Clean Water

The water pumped from the downtown wells and Springbrook Springs is naturally very clean and needs minimal treatment. Chlorine is added to destroy bacteria, parasites, and viruses that could possibly enter our source water. Chlorine also protects water in the distribution system in case there is a contamination event like a water main break or backflow incident. Sodium hydroxide is added to slightly raise the pH of the water to help prevent the corrosion of household plumbing. Ortho-polyphosphates are added to reduce the internal corrosion of old cast iron water mains found in the neighborhoods of Kennydale and West Hill. Fluoride is added to prevent tooth decay. The downtown wellfield produced 62% of Renton's water in 2019. Springbrook Springs produced 15% of Renton's water in 2019.

Maplewood water is clean as well, but due to naturally occurring minerals, it must first be treated before it is pumped into the distribution system. The treatment process consists of removing manganese, hydrogen sulfide, and ammonia from the source water. Chlorine is added to protect the water in the distribution system and fluoride is added to prevent tooth decay. The Maplewood wellfield produced 23% of Renton's water in 2019.



Top: The pumping station at Rolling Hills reservoir.

Middle: Renton Water Treatment Operator collecting water samples at a dedicated sampling station.

Bottom: Collecting water samples from a sampling tap located inside the laboratory at the Maplewood Treatment Plant.

Reliable Water When You Need It Most

Our COVID-19 Response

Throughout the COVID-19 response, the City of Renton has been working diligently to ensure the delivery of safe drinking water to our customers and maintain adequate water supply for fire protection. For community resilience, one of our highest priorities is ensuring safe and reliable water comes out of the faucet for handwashing and cleaning. The City's Water Utility staff implemented continuity of operations planning in early March and took steps to reduce exposure for staff such that our water operations team could keep the system running and protected against pathogens. Our certified water treatment operators are mission critical as they continued collecting water quality samples from the system daily.

**Keep
washing
those
hands!**

Water Utility staff will continue using mitigation strategies, such as physical distancing and personal protective equipment.

According to the World Health Organization (WHO), COVID-19 has not been detected in drinking water supplies and the current risk to drinking water is low.

The U.S. Environmental Protection Agency (EPA) recommends that Americans continue to use and drink water from their tap as usual.



For more information, visit:

Environmental Protection Agency (EPA)

epa.gov/coronavirus/coronavirus-and-drinking-water-and-wastewater

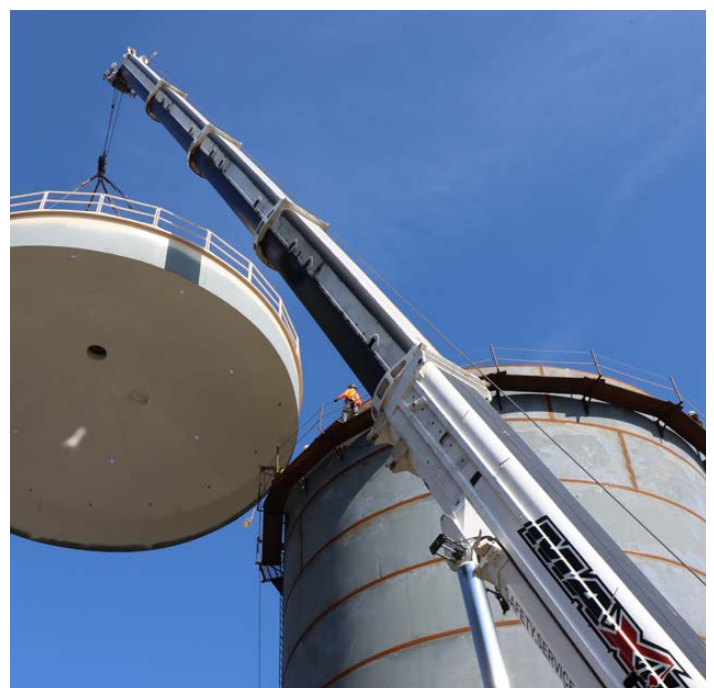
Centers for Disease Control and Prevention (CDC)

cdc.gov/coronavirus/2019-ncov/php/water.html

Planning for the Future: Kennydale Reservoir

The City of Renton Water Utility makes sure that customers have access to safe, clean water and plans for future water use too! Since the groundbreaking ceremony in June 2019, engineers and construction crews have been working diligently to develop a new, 1.3 million gallon water reservoir in the Kennydale neighborhood. Along with its offsite improvements, this massive project will provide the Kennydale Pressure Zone with added resiliency and important water system controls. Construction plans to wrap up in summer 2020.

Right: The lid being placed on the Kennydale Reservoir in March 2020 during construction.



Ensuring Water Safety

To ensure that tap water is safe to drink, the DOH and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

The Food and Drug Administration and the Washington Department of Agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Message From the EPA



Our drinking water comes from wells and springs. As our water travels through the ground to the wells, it can dissolve naturally occurring minerals as well as substances from human activity. 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 can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

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 healthcare providers. Environmental Protection Agency (EPA)/Centers 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 800-426-4791.

Water Conservation

Saving Water Indoors

- Avoid evaporation by watering early in the morning and late at night.
- Scrape, do not rinse, dishes before using a dishwasher.
- Turn off the tap while brushing your teeth or shaving.
- Choose five-minute showers instead of baths.
- Always run full laundry and dish loads.
- Use the garbage disposal sparingly. Compost instead.
- Thaw frozen food in the fridge, not by running water.
- Replace worn washers and gaskets in faucets and showerheads. Replace damaged toilet flappers.
- Use efficient showerheads, faucets, toilets, aerators, washing machines, and dishwashers. Look for WaterSense or Energy Star labels.
- Learn to fix leaks with videos at [savingwater.org](https://www.savingwater.org).

Better Habits Protect Salmon Too!

Summer is peak water use season—the time when rain stops and people use more water in their yards and gardens. It is especially important to conserve water in summer and fall when stream flows are lowest. Your actions can help to protect salmon and their freshwater habitat.

- Never dump oil or other chemicals down storm drains, and make sure no pollutants are leaking that could get washed into waterways (including pressure washing).
- Sweep sidewalks and driveways instead of hosing. Put sweepings in the garbage to prevent pollutants and debris from entering streams.
- Avoid fertilizers. If necessary, use an organic brand.
- Use automatic car washes that recycle water and perform proper disposal of detergents.



Water Conservation

Renton is a Member of the Saving Water Partnership

Renton signed an agreement to buy water from Seattle Public Utilities in January 2012. As part of this agreement, the City of Renton joined the Saving Water Partnership (SWP). The SWP, which is made up of the City of Renton and 17 water utility partners, set a regional conservation goal: Keep the total average annual retail water use of SWP members under 110 mgd through 2028, despite forecasted population growth, by reducing per capita water use. For 2019, the SWP met the goal, using 94.0 mgd.

Here's What We Accomplished This Year...

- In 2019, the SWP youth education program conducted 525 in-classroom presentations to over 12,500 K–8 students. Topics included the water cycle, the salmon life cycle, watershed ecosystems, and the water supply system. The program was a big hit among teachers and students.
- The SWP continued the sprinkler timer rebate program. Nearly 170 customers replaced inefficient sprinkler timers with new WaterSense timers.

Reuse Leftover Water

Water left in your glass? Pour the water you would usually toss down the drain into a watering can (or teapot)—you can use this to water your plants!

You can also put a bowl in the shower while your water heats up. Once the water cools, your plants will love a fresh drink of saved water!

- The SWP provided rebates for Premium toilets for residential and commercial customers. These fixtures use 1.1 gallons of water per flush (or less), at least 20% less water than a regular WaterSense fixture.
- The Single Family Toilet Rebate Program upgraded 523 toilets to Premium toilet models and the Multifamily Toilet Replacement Program upgraded nearly 2,500 toilets to Premium models.
- The SWP presented 12 Savvy Gardener classes in the spring and fall of 2019 with 455 attendees. These classes enable gardeners to create and maintain healthy landscapes that are good for families and the environment.

Water Conservation

We Strive to Improve Our Water Use Efficiency

In 2003, the Washington State Legislature passed the Municipal Water Law to address the increasing demand on the state's water resources. The law established that all municipal water suppliers must use water more efficiently in exchange for water right certainty and flexibility to help them meet future demand. The Water Use Efficiency Rule is part of this law and requires municipal water suppliers to report their goals and progress each year.

Water Consumption and Losses

Renton's total water produced and purchased in 2019 was 2,546,277,445 gallons. Distribution system leakage (DSL) is reported in the 2019 Water Use Efficiency report to the Washington State Department of Health (DOH) as a three-year rolling average, calculated to be 10.5%. Renton's DSL for the 2019 calendar year was 11.0%, or 280,399,584 gallons. While this is a 1% increase from 2018, our three-year rolling average decreased by 0.2%. DSL reflects the amount of water and potential revenue that has been lost due to water theft, water main breaks, meter inaccuracies, and other causes.

Water Loss Control Action Plan

Since the three-year (2017–2019) annual average of the city's distribution system leakage exceeds 10%, we are required by the state to develop and implement a Water Loss Control Action Plan. The city is taking the following actions, among others, to identify and reduce water loss in the distribution system:

- Continue the annual replacement of aging and leaky water mains.
- Conduct leak testing on old underground water reservoirs and repair leaky joints on concrete floors and walls.
- Continue using Advanced Metering Infrastructure (AMI) technology to detect leaks.

We Also Offer Rebates!

Is it time to upgrade your toilet to a new, water-efficient model in your home, business, or multi-family building? Not only will you save money and water, you may also qualify for a \$100 rebate towards Premium 1.1 gpf or less toilets. Rebates are also available for residential sprinkler timers, multifamily irrigation projects, and commercial buildings too!

For more info, visit: savingwater.org/rebates

Creating a Healthy, Water-Saving Garden This Summer

Watering Your Garden

- Avoid evaporation by watering early in the morning and late at night.
- Water deeply, but infrequently. This encourages deep roots.
- Water lawns with one inch of water per week. Or, let areas of your lawn go brown and dormant, but water enough to moisten root zone once a month.

Irrigating Correctly

- Inspect your irrigation system for leaks. An unusually green spot in the lawn may be a clue that there is a leak in the system.
- For automatic irrigation systems, install a rain shutoff device.

Selecting the Right Plant

- Pick plants that resist pests and require less water.
- Group plants by their needs. Place plants that need regular watering together so that you don't have to water the whole yard every day.
- Make space for wildlife by planting native species and avoiding invasive and exotic plants. You can also provide a small water source such as a birdbath and leave wild "buffers" of native plants along fencelines, ravines, streams, and shorelines.

Using Mulch

- Mulch your shrub and tree beds with wood chips, leaves, or bark once per year to conserve water, reduce weeds, and feed the soil. Mulch should be several inches deep and one inch away from the plant stems.

Water Quality Topics



Lead and Your Health

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 Renton Water Utility 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 Water Hotline at 800-426-4791 or epa.gov/safewater/lead.

You can use the flushed water for watering plants, washing dishes, or general cleaning. Only use water from the cold-water tap for drinking, cooking, and especially for making baby formula. Hot water is likely to contain higher levels of lead. Homes built before 1986 are more likely to have lead pipes, fixtures, and solder. The most common problem is brass or chrome-plated brass faucets and fixtures that can leach lead into the water, especially hot water. Until six years ago, the legal limit for “lead-free” pipes was up to 8% lead. As of January 1, 2014, all newly installed water faucets, fixtures, pipes, and fittings must meet new lead-free requirements, which reduce the amount of lead allowed to 0.25%. But these requirements do not apply to existing fixtures, such as those found in many older homes.

Lead Prevention

Renton works to prevent the corrosion of not only lead, but other metals such as copper and iron. First, the pH of the water is adjusted to prevent the corrosion of household plumbing—the major possible source of lead in our water. Second, in areas of the city with cast iron water mains (Kennydale and West Hill), ortho-polyphosphates are added to prevent corrosion. To make sure this treatment is working, water is periodically tested at residential taps. This testing is in compliance with the DOH’s Lead and Copper Rule. More information is available at doh.wa.gov/leadandcopperrule.

Fluoride

In 1985, the citizens of Renton voted to have fluoride added to the city’s drinking water. Fluoride levels were adjusted in 2016 to meet the DOH’s new recommended level of 0.7 ppm. More information on fluoride can be found at the CDC at cdc.gov/fluoridation/faqs.

Water Hardness

Renton’s water falls within the slightly hard range with about 2.9 grains per gallon of hardness. Hard water may cause scale buildup in cooking pans, sinks, and water heaters, and may require using more soap to form a lather. A water’s hardness is dependent upon the levels of two naturally occurring soluble minerals—calcium and magnesium. Renton’s slightly hard water would be classified as containing 17.1–60 mg/L of magnesium and calcium. This means that dish washing and clothes washing require relatively less soap than in other areas where the water is hard.

WATER HARDNESS SCALE

Grains/Gal	mg/L & ppm	Classification
Less than 1	Less than 17.1	Soft
1–3.5	17.1–60	Slightly Hard
3.5–7	60–120	Moderately Hard
7–10	120–180	Hard
Over 10	Over 180	Very Hard



Water Quality Topics

PFAS Chemicals

PFAS is an acronym for “per- and poly-fluorinated alkyl substances.” PFAS are synthetic chemicals used in many consumer products, including food wrappers, fabrics, and carpets, to make them resistant to water, oil, grease, stains, and heat. Certain types of firefighting foam may contain PFAS. Even though PFAS compounds aren’t manufactured in Washington State, there are known cases of PFAS contamination in drinking water linked to the use of firefighting foam.

The EPA has established a health advisory level (HAL) for perfluorooctanoic acid (PFOA) and perfluorooctyl sulfonate (PFOS) at 70 parts per trillion (ppt). This is not a regulatory standard, but in Washington state the DOH is currently considering setting a state standard for PFAS. The Renton Water Utility tested for perfluorinated compounds in 2014 and 2015 under an EPA rule for unregulated contaminants. Perfluorinated compounds were not detected in any of the drinking water samples.

For more information, please visit epa.gov/pfas and ecology.wa.gov/pfas.

How Can I Get Involved?

The City of Renton welcomes your interest in its water system. The Renton City Council is the city’s decision-making body and meets on the first four Mondays of each month at 7 p.m.

The Utilities Committee oversees Water Utility issues. They meet the third Monday of the month at 5 p.m.

At the time of publication, due to the COVID-19 pandemic, councilmembers will be attending meetings remotely through Zoom. Public testimony during public hearings and audience comments will be accommodated through Zoom and by telephone, but the public is requested to sign up for such testimony by emailing cityclerk@rentonwa.gov in advance.

Members of the Utilities Committee for 2020 are:

Valerie O’Halloran, Chair
Angelina Benedetti, Vice-Chair
Ryan McIrvine, Member

Call the City Clerk’s office at 425-430-6510 for meeting or agenda information, or check the City Council calendar at rentonwa.gov/council.

2019 Renton Water Quality Results

Downtown Wells, Springbrook Springs, and Maplewood Wellfield, sampled at the source after treatment

Detected Substance	Year Sampled	MCL	MCLG	Highest Amount (Range)	Possible Sources
Fluoride ¹ (ppm)	2019	4	4	0.8 (0.5–0.8)	Water additive to prevent tooth decay
Nitrate (ppm)	2019	10	10	2.1 (0.3–2.1)	Fertilizer runoff; leaching from septic tanks; erosion of natural deposits
Total Trihalomethanes (ppb)	2018*	80	Not Established	3.7 (ND–3.7)	Disinfection by-products
Arsenic (ppb)	2019	10	0	1.4 (ND–1.4)	Erosion of natural deposits
Sodium ² (ppm)	2019	Not Established	Not Established	18 (13–18)	Erosion of natural deposits; water treatment

*The water quality information presented is from the most recent testing within the last five years.

Sampling Points in the Water Distribution System

Detected Substance	Year Sampled	MCL or MRDL	MCLG or MRDLG	Average Amount (Range)	Possible Sources
Chlorine (ppm)	2019	4 (MRDL)	4 (MRDLG)	1 (0.3–1.6)	Additive to control microbes
Total Trihalomethanes** (ppb)	2019	80	Not Established	14 (7.3–20.6)	Disinfection by-products
Haloacetic Acids** (ppb)	2019	60	Not Established	6.2 (ND–6.2)	Disinfection by-products

** In 2016, Renton qualified for reduced monitoring for total trihalomethanes and haloacetic acids. Sampling occurs at two sites once per year.

Residential Water Taps

Detected Substance	Year Sampled	AL	MCLG	90th Percentile*** (Range)	Possible Sources
Lead ³ (ppb)	2019	15	0	1 (ND–2)	Corrosion of plumbing systems; erosion of natural deposits
Copper ³ (ppm)	2019	1.3	1.3	0.17 (0.03–0.23)	Corrosion of plumbing systems; erosion of natural deposits

*** 90th Percentile: i.e. 90 percent of the samples were less than the values shown.

Unregulated Contaminant Monitoring Rule 4 (UCMR4) Sampling Results

Includes sampling at the source before treatment, at the source after treatment, and in the distribution system

Detected Substance	Year Sampled	MRL ⁴	Average Amount (Range)	Possible Sources
Manganese (ppb)	2019	0.4	0.6 (0.5–0.7)	Erosion of natural deposits
Bromide (ppb)	2019	20	32 (ND–32)	Naturally present in the environment
HAA5 (ppb)	2019	0.2	5.5 (3.4–7.5)	Disinfection by-products
HAA6Br (ppb)	2019	0.3	3.3 (3.1–3.5)	Disinfection by-products
HAA9 (ppb)	2019	0.2	8.3 (5.9–10.6)	Disinfection by-products

1. Renton measures fluoride levels daily in the distribution system. Beginning in April 2016, Renton lowered the fluoride level to 0.7 ppm, which is the new level recommended by the Washington State Department of Health. Renton citizens voted to add fluoride to the drinking water in 1985.
2. The EPA recommends 20 ppm as a level of concern for people on a sodium-restricted diet. Renton adds sodium hydroxide to prevent corrosion of plumbing. Sodium hypochlorite is added to water from the Maplewood wells for disinfection and to remove naturally occurring ammonia.
3. There were 30 samples tested for lead and copper. All of the samples tested had levels far below the Action Levels for both lead and copper.
4. The EPA has established MRLs for UCMR4 based on the capability of the analytical method, and therefore states the lowest detection limit of the instrument. It is not based on a level established as "significant" or "harmful." The detection of a UCMR4 contaminant does not represent cause for concern in and of itself. The purpose of unregulated contaminant monitoring is to help EPA determine their occurrence in drinking water and potential need for future regulation.



Your Water is Safe
 Water from the City of Renton Water Utility and Seattle Public Utilities meet all regulatory standards, ensuring that your water is safe to drink.

2019 SPU Water Quality Results

Since 2012, the city has purchased water from Seattle Public Utilities (SPU) to serve the Renton Boeing plant and as a backup supply during summer peak use periods. Results of the 2019 water quality monitoring requirements performed by SPU for the Cedar River and Tolt River sources are shown below.

Seattle Public Utilities Water Quality Results

Detected Substance	EPA's Allowable Limits		Levels in Cedar Water		Levels in Tolt Water		Possible Sources
	MCL	MCLG	Average	Range	Average	Range	
RAW WATER							
Total Organic Carbon (ppm)	TT	NA	0.5	0.3–0.8	1.1	1.0–1.3	Naturally present in the environment
FINISHED WATER							
Turbidity (NTU)	TT	NA	0.3	0.2–1.8	0.03	0.01–0.17	Soil runoff
Arsenic (ppb)	10	0	0.4	0.4–0.6	0.4	0.3–0.4	Erosion of natural deposits
Barium (ppb)	2000	2000	1.6	1.4–1.9	1.3	1.1–1.5	Erosion of natural deposits
Bromate (ppb)	10	0	ND	ND	0.2	ND–2	Disinfection by-products
Nitrate (ppm)	10	10	ND	One Sample	0.11	One Sample	Erosion of natural deposits
Chromium (ppb)	100	100	0.27	0.25–0.33	0.2	ND–0.24	Erosion of natural deposits
Fluoride (ppm)	4	4	0.7	0.6–0.8	0.7	0.6–0.8	Water additive to prevent tooth decay

Definitions

AL: Action Level – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

MCL: Maximum Contaminant Level – 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 treatment technology.

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.

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.

MRL: Minimum Reporting Level

NA: Not Applicable

ND: Not Detected

NTU: Nephelometric Turbidity Unit – Turbidity is a measure of how clear the water looks. The turbidity MCL that applied to the Cedar supply in 2018 is 5 NTU, and for the Tolt supply it was 0.3 NTU for at least 95% of the samples in a month. For November 2018, 99.4% of the samples from the Tolt were below 0.3 NTU. All of the other months in 2018 had 100% of samples below 0.3 NTU for the Tolt.

ppb: 1 part per billion = 1 ug/L = 1 microgram per liter. 1 ppm = 1000 ppb.

ppm: 1 part per million = 1 mg/L = 1 milligram per liter. 1 ppm = 1000 ppb.

TT: Treatment Technique – A required process intended to reduce the level of a contaminant in drinking water.



Construction on the Kennydale Reservoir, March 2020.

How Can We Help You?

Questions about this report:

Water Utility Engineering at 425-430-7287

Water discoloration, taste, or odor:

Water Quality at 425-430-7400
(7 a.m.–3:30 p.m.) or 425-430-7500
after hours or weekends

EMERGENCIES: CALL 911

To report water pressure problems, water leaking in the streets, or water leaking at a meter:

Water Maintenance at 425-430-7400 (7 a.m.–3:30 p.m.)
or 425-430-7500 after hours or weekends

If you are moving and need to arrange for a change of water service, or for general billing questions:

Utility Billing at 425-430-6852

This report is written and distributed in compliance with the Federal Safe Drinking Water Act, which requires water utilities to provide annual “consumer confidence” reports to their customers. You will find in this report: where our drinking water comes from; what minerals or chemicals it contains; how it compares to stringent water quality standards; what Renton is doing to protect our water supply; and what we are doing to wisely use and conserve our regional water supply. Hopefully this report will help you better understand your drinking water. We assure you that providing high quality and safe drinking water is one of Renton’s highest priorities.

This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

Tài liệu này có tin tức quan trọng về nước uống của quý vị. Hãy nhờ người dịch cho quý vị, hoặc hỏi người nào hiểu tài liệu này.

此报告包含有关您的饮用水的重要信息。请人帮您翻译出来，或请看懂此报告的人将内容说给您听。

Warbixintan waxay wadataa macluumaad muhiim ah ee la xiriira biyaha aad cabtid. Cid ha kuu tarjunto ama la hadl cid fahmaysa.

Karkari biyaha inta aadan isticmaalin.



**WATER QUALITY REPORTS
CAN BE FOUND ONLINE AT:**

rentonwa.gov/waterquality