

City of  
**Renton**



# WATER

## City of Renton 2014 Water Quality Report

The Federal Safe Drinking Water Act requires water utilities to provide an annual “consumer confidence” report to their customers.

### In this report you will find:

- The source of your drinking water
- What minerals or chemicals it contains
- How it compares to stringent water quality standards
- What Renton is doing to protect our water supply
- Update on our Water Use Efficiency goals

[rentonwa.gov/CCR2014](http://rentonwa.gov/CCR2014)

# Where Does Renton's Drinking Water Come From?

## 2013 Water Facts

**Total number of metered connections in Renton:**  
17,422

**Population within retail service area:**  
62,100

**Total population:**  
93,910

**Number of supply sources:**  
9 wells, 1 spring

**Water produced from all sources in operation:**  
2,392,003,300 gallons

**Water produced on average day:**  
6,553,434

**Water produced on highest demand day August 9, 2013:**  
12,360,998 gallons

**Water produced on lowest demand day April 26, 2013:**  
4,352,000 gallons

**Total miles of water main in service:**  
308 miles



During the year 2013, Renton obtained its drinking water from four sources: five downtown wells, located in Liberty and Cedar River Parks, which draw water from the Cedar Valley Aquifer; Springbrook Springs, a small springs located in the south of Renton; and from the Maplewood wellfield, located in the Maplewood Golf Course. In 2013, our combined water sources produced 2.39 billion gallons of water.

The fourth water source is the agreement to buy water from Seattle Public Utilities (SPU) which gets its supply from the Cedar and Tolt rivers. This source became available January 2012. During 2013, SPU provided approximately 32.7 million gallons of water that was used by the Renton Boeing plant. The SPU water is primarily a backup supply to be used during summer peak use periods. More info on this source can be found at: [www.seattle.gov/util/myservices/water/water\\_quality/waterqualityannualreport/](http://www.seattle.gov/util/myservices/water/water_quality/waterqualityannualreport/)

The water pumped from the downtown wells and Springbrook Springs sources is very clean and needs minimal treatment. Chlorine is added to destroy bacteria 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. Because the water from our downtown wells and Springbrook Springs is naturally soft, sodium hydroxide is added to help prevent the corrosion of household plumbing. Fluoride is also added to prevent tooth decay and, in the areas of Renton Hill, Highlands and West Hill, ortho polyphosphates are added to reduce the internal corrosion of old cast iron water mains that are found in these neighborhoods. The six downtown wells produced 62.9% of our water in 2013. Springbrook Springs produced 18.0% of Renton's water in 2013.

Water from the Maplewood wells is also very clean, but because of its naturally occurring substances, it must first be treated before it is pumped into the distribution system. The treatment process consists of the removal of 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. Maplewood wellfield's two wells produced 19.1% of our water in 2013.

## Frequently Asked Questions

### Is our water hard or soft?

Renton's water falls within the slightly hard range with about 3.0 grains per gallon of hardness. A water's hardness is dependent upon the levels of two naturally occurring soluble minerals - calcium and magnesium. This means that dishwashing and clothes washing require relatively less soap than in other areas where the water is hard. Sometimes hardness is also referred to as mg/L of CaCO<sub>3</sub> or calcium carbonate. The table above shows the equivalent measurements for water hardness.

Water Hardness Scale		
Grains Per Gallon	Milligrams Per Liter (mg/L) or Parts Per Million (ppm)	Classification
less than 1.0	less than 17.1	Soft
1.0 - 3.5	17.1 - 60	Slightly Hard
3.5 - 7.0	60 - 120	Moderately Hard
7.0 - 10.5	120 - 180	Hard
over 10.5	over 180	Very Hard

## Health Information

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.

## Special Information Available

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/CDC guidelines on appropriate means to lessen the risk of infection by microbial contaminants as well as more information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.



## Lead Info

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. 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 thirty 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 1-800-426-4791, or visit [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## Does the City add fluoride to the water?

Yes, in 1985, the citizens of Renton voted to have fluoride added to the City's drinking water. Fluoride levels were adjusted in 2011 to meet the Washington State Department of Health's new recommended level of 0.8 ppm. More info on fluoridation can be found at the CDC website, [www.cdc.gov/fluoridation/faqs/](http://www.cdc.gov/fluoridation/faqs/).

## Can I use tap water in my aquarium?

Chlorine, Cl, is used to treat drinking water and is toxic to fish. Chlorine may dissipate if you let the water sit for a day or two. Use a water conditioner that removes chlorine to be on the safe side. Aquarium water conditioners are available at your pet store.



## Who Do I Call?

### Questions about this report:

- Call Water Utility Engineering at 425-430-7287

### Water discoloration, taste or odor:

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

### To report water pressure problems, water leak in the street or at a meter:

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

### Moving and need to arrange a change of water service, or for general billing questions:

- Call Utility Billing at 425-430-6852

### Emergencies: Call 9-1-1

The results of our 2013 water quality monitoring requirements are shown in the following tables. These data are for substances regulated by federal and state agencies. The Water Quality staff regularly monitors for over 100 substances, to make sure our drinking water is safe. *The substances listed in the tables below are the only ones that were detected above the Washington Department of Health reporting levels.*

**DOWNTOWN WELLS, SPRINGBROOK SPRINGS, AND MAPLEWOOD WELLFIELD  
SAMPLED AT THE SOURCE AFTER TREATMENT**

Detected Substance	Year	MCL	MCLG	Highest Amount (Range)	Possible Sources
Fluoride (see note 1)	2013	4 ppm	4 ppm	1.1 ppm (0.7 – 1.1 ppm)	Water additive to prevent tooth decay
Sodium (see note 2)	2010	Not established	Not established	20 ppm (8 – 20 ppm)	Erosion of natural deposits; Water treatment
Nitrate	2013	10 ppm	10 ppm	2.1 ppm (0.3 – 2.1 ppm)	Fertilizer runoff; Leaching from septic tanks, Erosion of natural deposits
Copper	2010	AL = 1.3 ppm	AL = 1.3 ppm	0.1 ppm (ND – 0.1 ppm)	Erosion of natural deposits; Leaching from wood preservatives
Total Trihalomethanes	2012	80 ppb	Not established	2.7 ppb (ND – 2.7)	Disinfection byproduct

**SAMPLING POINTS IN THE WATER DISTRIBUTION SYSTEM**

Detected Substance	Year	MCL or MRDL	MCLG or MRDLG	Average Amount (Range)	Possible Sources
Coliform Bacteria	2013	5% of samples positive/month	0%	0% (no samples positive)	Naturally present in the environment
Chlorine	2013	4 ppm	4 ppm	0.95 ppm (0.22 - 1.74 ppm)	Additive to control microbes
Total Trihalomethanes	2013	80 ppb	Not established	15.83 ppb (0.5 – 21.4 ppb)	Disinfection byproduct
Haloacetic Acids	2013	60 ppb	Not established	6.9 ppb (ND – 7.7 ppb)	Disinfection byproduct

**RESIDENTIAL WATER TAPS**

Detected Substance	Year	Action Level	MCLG	90th Percentile Value and Range	Possible Sources
Copper (see note 3)	2013	1.3 ppm	1.3 ppm	0.42 ppm (0.05 – 0.59 ppm)	Corrosion of plumbing systems; Erosion of natural deposits
Lead (see note 3)	2013	15 ppb	0	1 ppb (ND – 3 ppb)	Corrosion of plumbing systems; Erosion of natural deposits

**Notes:**

1. Renton also measures fluoride levels daily in the distribution system. Beginning in year 2011, Renton attempted to maintain fluoride at a level of 0.8 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. Forty-four (44) samples were tested for copper and lead. Ninety percent of the samples tested (40 samples) had levels at or below the value shown. Ten percent of the samples tested (4 samples) had levels above this value.



In January 2012, the City of Renton began a 50-year (2012-2062) water supply contract with Seattle Public Utilities (SPU) to provide the City of Renton with long-term water to meet the City's future needs. Total of 1.4% of the City's water was supplied by the SPU source to the Renton Boeing plant in 2013. The results of the 2013 water quality monitoring requirements conducted for water provided by SPU from the Cedar River and Tolt River sources are shown in the following table.

SEATTLE PUBLIC UTILITIES 2013 WATER QUALITY MONITORING RESULTS								
Detected Compounds	Units	EPA's Allowable Limits		Levels in Cedar Water		Levels in Tolt Water		Typical Sources
		MCLG	MCL	Average	Range	Average	Range	
<b>RAW WATER</b>								
Total Organic Carbon	ppm	NA	TT	0.8	0.4 to 1.4	1.3	1.2 to 1.4	Naturally present in the environment
Cryptosporidium*	#/100L	NA	NA	ND	ND	<1	ND-2	Naturally present in the environment
<b>FINISHED WATER</b>								
Turbidity	NTU	NA	TT	0.4	0.2 to 2.7	0.06	0.04 to 0.14	Soil runoff
Barium	ppb	2000	2000	1.8	(one sample)	1.9	(one sample)	Erosion of natural deposits
Fluoride	ppm	4	4	0.8	0.7 to 0.8	0.8	0.7 to 0.9	Water additive, which promotes strong teeth

\* *Cryptosporidium* was not detected in any samples from the Cedar or Tolt (3 samples each supply)

## 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 that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.

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

**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.

**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.

**ppb (parts per billion):** One part per billion is equivalent to  $\frac{1}{4}$  of a dissolved aspirin tablet in 1000 full bathtubs of water (approximately 50,000 gallons of water).

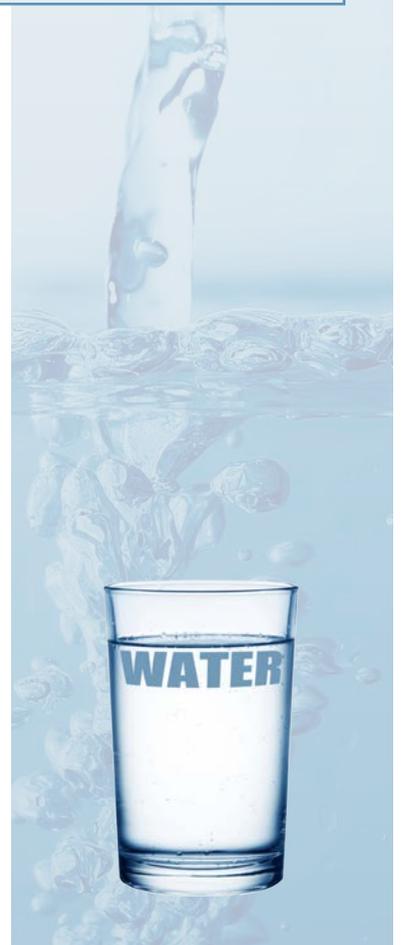
**ppm (parts per million):** One part per million is equivalent to  $\frac{1}{4}$  of a dissolved aspirin tablet in a full bathtub of water (approximately 50 gallons)

**ND (Not Detected)**

**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 2013 is 5 NTU, and for the Tolt it was 0.3 NTU for at least 95% of the samples in a month. 100% of the samples from the Tolt in 2013 were below 0.3 NTU.

**NA (Not Applicable)**



**Typical  
Single-Family  
Home Water  
Use**



*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.*

**Water Use Efficiency Rule Update for 2013**

In January 2012, Renton signed an agreement to buy water from Seattle Public Utilities. As part of this agreement, the City of Renton joined the Saving Water Partnership (SWP), a collaboration of 19 local water utilities who provide water conservation programs in Seattle and King County. On October 21, 2013 in a public forum, Renton City Council adopted the SWP’s regional goal.

The Saving Water Partnership has set a six-year goal: reduce per capita use from current levels so that the SWP’s total average annual retail water use is less than 105 mgd from 2013 through 2018 despite forecasted population growth. In order to meet the goal, the amount of water used per person will need to decrease to offset growth. For 2013, the Saving Water Partnership met the goal, using 93.1 mgd.

**2013 Highlights of the regional conservation program**

- The SWP focused on youth education in 2013, developing new curriculum and conducting 50 in-classroom presentations for nearly 1,300 K-12 grade students. Topics included water conservation, the water cycle, the salmon life cycle, waterwise gardening and the water supply system. Additionally, 5,200 students from 12 schools participated in this year’s Fix A Leak Week challenge, searching for leaks at home.
- The SWP introduced rebates for Premium WaterSense toilets for residential and commercial customers in June. These fixtures use 1.06 gallons of water per flush, at least 20% less water than a regular WaterSense fixture.
- The Single-Family Toilet Rebate Program processed nearly 60 Premium WaterSense and nearly 1,000 regular WaterSense rebates.
- The Multifamily Toilet Replacement Program upgraded nearly 1,600 toilets to Premium WaterSense models, and nearly 1,300 toilets to regular WaterSense models.
- The SWP completed water conservation financial incentive projects with 81 businesses in 2013. Two projects replaced a total of 382 toilets with Premium WaterSense models.
- The commercial program introduced “Cool Tunes,” a pilot incentive program to upgrade equipment and monitor efficiency for cooling towers.
- The SWP offered 17 Savvy Gardener classes across the SWP service area in spring and fall 2013 with 300 attendees. These classes were designed to inspire, create, and maintain healthy, water-efficient landscapes.
- The SWP sponsored a new local gardening TV show, Seattle Dig In, and produced four videos with Marianne Binetti, celebrity garden writer and radio show host. The 3-5 minute videos - Plant in Fall for a Stronger Garden; Mulch Your Soil; Go Natural with Your Lawn; How to Use a Soaker Hose. These videos and more information on rebates, conservation tips, etc., can be found at [www.savingwater.org/LawnGarden/index.htm](http://www.savingwater.org/LawnGarden/index.htm).

# NEW Water Usage Online Tool

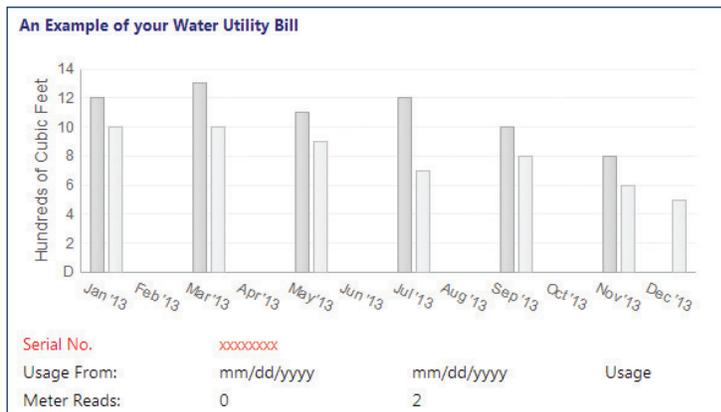
We have a new website designed to allow City of Renton drinking water customers to view their water usage data. If your meter is read using the new wireless reading system, you will be able to see hourly consumption.



All City of Renton water customers will be able to view their monthly/bi-monthly consumption. Year-to-year comparisons of consumption for a month can be viewed side by side.

The City's new Advanced Metering Infrastructure (AMI) makes this possible. This system is currently being deployed with a completion target in the summer of 2015. Water consumption will be available through the water usage history online dashboard. This new tool will help you to manage your water consumption as well as detect any irregular patterns that could indicate a leak.

To use the new water usage history dashboard go to [rentonwa.gov](http://rentonwa.gov) and click on Utility Billing, lower right column, then click on Water Usage History, upper right. Enter the 8 digit Serial Number as it appears on your water utility bill - an example of where to find this is provided at right.



## Want To Get Involved?

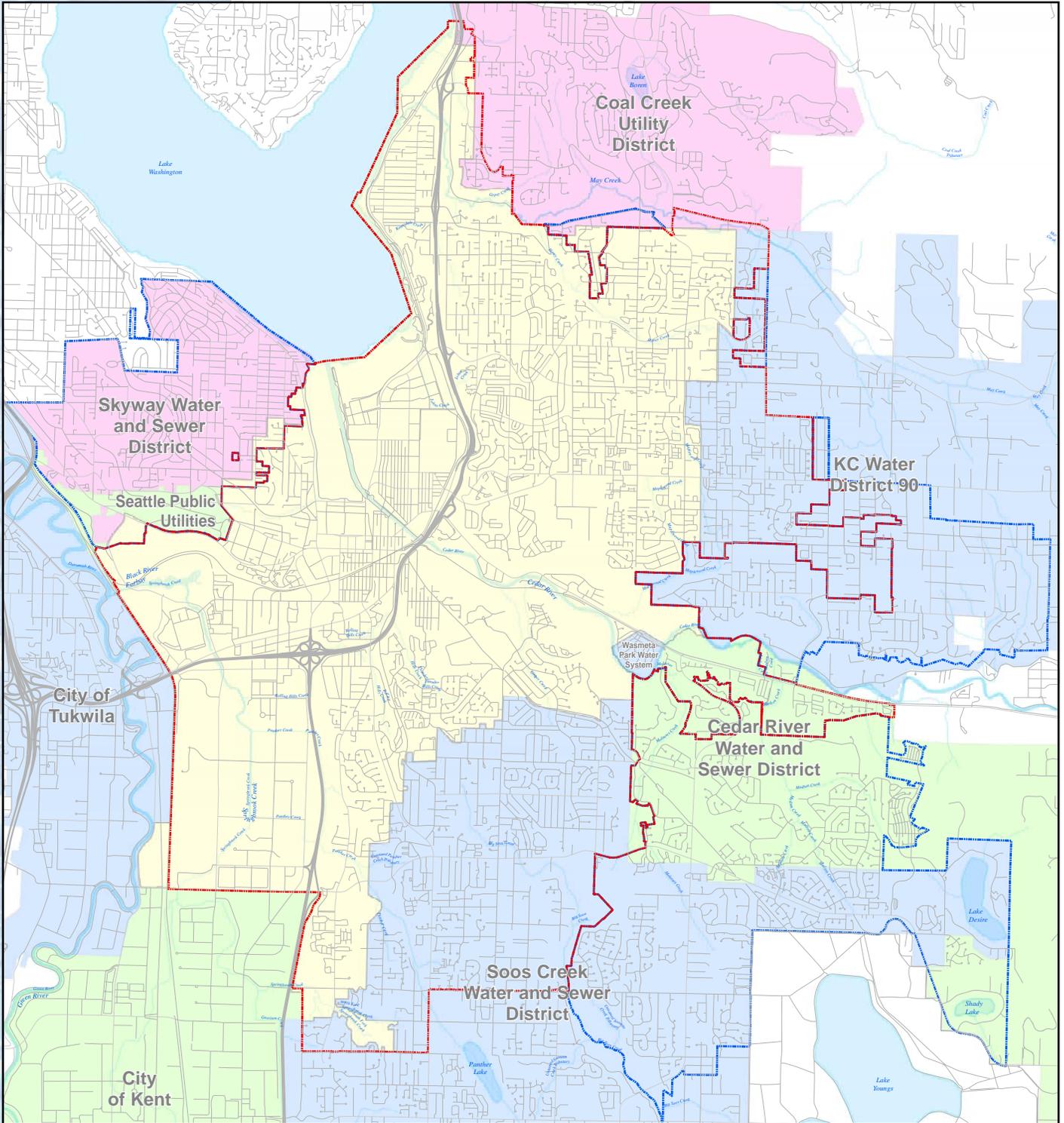
The City of Renton welcomes your interest in its water system. The Renton City Council is the City's decision-making body. The Council meets on the first four Mondays of each month at 7 p.m. in the Council Chambers on the seventh floor of City Hall. Call the City Clerk's office at 425-430-6510 for meeting or agenda information or check the City Council calendar at [rentonwa.gov/government](http://rentonwa.gov/government).

## Saving Water Helps People and Salmon

There are five species of salmon in the Pacific Northwest. All of them return to fresh water to spawn and complete their life cycle. The less water you consume in your house and yard, means more water in the rivers that will help guarantee salmon's survival. Here is a mnemonic device to help you remember the five PW Northwest salmon species.



# City of Renton Water Utility Service Area/Adjacent Districts



 Renton City Limits

 Renton Water Service Area



Your 2014 water quality report is easily accessible online at:

[rentonwa.gov/CCR2014](http://rentonwa.gov/CCR2014)

Or, if you would prefer, call 425-430-7287 or email [hweagraff@rentonwa.gov](mailto:hweagraff@rentonwa.gov) and we will print and mail a copy to you.