

Water Use Efficiency Rule Update

On November 19, 2007, Renton City Council adopted three water use efficiency goals, that had been developed through a public forum held on November 9, 2007. Efforts taken by the city to achieve the three water use efficiency goals are:

1 Reduce the distribution system leakage (DSL) to 10% or less by 2010.

In 2008, 2,704 million gallons (MG) of water were withdrawn from all water supply sources, while metered consumption was 2,195 MG. This difference reflects a 19% distribution system loss (DSL). The DSL includes: "real losses" such as leaking and broken pipes; and "apparent losses" such as meter inaccuracies, data and billing errors, tampering of meters and hydrants and the flushing and cleaning of mains and reservoirs.

- The city continues to take necessary steps to reduce all water losses. In 2008 we:
- Conducted an acoustic leak detection survey to pinpoint leaks on 30 miles of water mains.
 - Systematically replaced old, rusty and leaky water pipes to maintain water quality and provide adequate flow for fire protection.
 - Began evaluating the implementation of an automatic meter reading (AMR) system. Such a system will allow for quick detection and customer notification of leaks on the customer side of the city water meters.

2 Limit the peak day water demand to 16.5 million gallons per day or less through 2015.

On August 16, 2008, the city's water supply sources produced a total peak day water demand of 12.7 million gallons – below the 16.5 mgpd goal. This decrease was achieved through consumer education; voluntary reduction of lawn watering; and more efficient management of well pumping and reservoir storage and drawdown.

3 Continue reduction of the average annual water use per customer connection by one-half (0.5%) percent per year.

In 2008, the WashWise program provided financial rebates to 238 residential water customers who had purchased water saving clothes washers. This represents 3.05 million gallons of water saved. The average residential customer water use reduction in 2008 (compared to 2007 usage) was approximately 3.5% - exceeding our goal of 0.5%.

Heads Up This Summer

Landscape irrigation systems pose the greatest risk of cross connection to Renton's water system and to household drinking water plumbing.

To ensure that our drinking water system stays safe, homeowners must have their backflow prevention devices annually inspected and tested by a state certified backflow assembly tester in order to continue to receive water service from the city.

Contact Patrick Flaherty, Renton's cross-connection control specialist at pflaherty@rentonwa.gov if you have any questions or need a list of certified testers.

Project Update



In March 2009, the city began operation of the new 4.2-million-gallon Hazen reservoir. The reservoir provides water storage for fire protection and domestic use to the Renton Highlands and emergency storage for use in all other parts of the city.

An "H" was painted on the reservoir at the request of Hazen High School's student body. The City Council and Renton School District approved the concept and T. Bailey, Inc., the project contractor, donated the cost.



City of Renton
Public Works Department
1055 South Grady Way
Renton, WA 98057

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Who Do I Call?

Questions about this report call Water Utility Engineering 425-430-7287

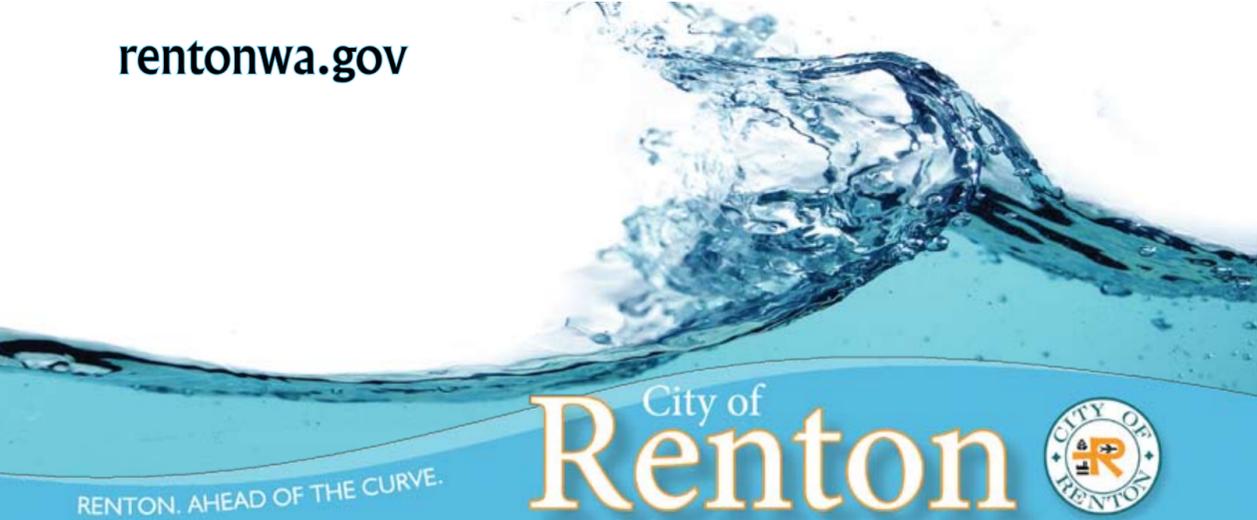
To report water pressure problems, water leaks, water discoloration, taste or odor call Water Quality at 425-430-7400 (7 a.m. to 3:30 p.m.) Or call 425-430-7500 after hours or weekends

Moving and need to arrange a change of water service, or for general billing questions call Utility Billing at 425-430-6852

In case of emergencies call 911

2009 City of Renton Drinking Water Quality Report

rentonwa.gov



Where Does Renton's Water Come From?

During 2008, Renton obtained its drinking water from three sources: five downtown wells, located in Liberty and Cedar River Parks, which draw water from the Cedar Valley Aquifer; Springbrook Springs, a small spring located in south Renton; and the Maplewood wellfield, located in the Maplewood Golf Course. In 2008, our combined water sources produced 2.7 billion gallons of water.

In 2008 the downtown wells supplied 72% of the city's water; Springbrook Springs produced 20%; and the Maplewood wells contributed 8%. The Maplewood wells are backup wells and started production in August, 2007.

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 in case they are present. Chlorine further protects water on its way to customers. Because our water is naturally soft, sodium hydroxide is added to stop corrosion of plumbing. Fluoride is also added to prevent tooth decay. In the areas of Renton Hill, Talbot Hill, and West Hill, ortho polyphosphates are added to the water to reduce corrosion of the iron water pipes found in these neighborhoods.

Water from the Maplewood wells is also very clean, but because of its natural mineral content and pH, it must first be treated before it can be co-mingled with the water from the other sources. This treatment process consists of the removal of manganese, hydrogen sulfide, and ammonia from the raw water. Chlorine is added for secondary disinfection and fluoride to prevent tooth decay.



About this Report

This report explains that Renton's water met or exceeded State and Federal standards for drinking water quality throughout 2008. The Federal Safe Drinking Water Act requires water utilities to provide annual "consumer confidence" reports to their customers. In this report you will learn: where our drinking water comes from; what substances it contains, how it compares to water quality standards, and what Renton is doing to protect our water supply. We hope this report will help you better understand our drinking water. We would also like to assure you that providing high quality and safe drinking water is one of Renton's highest priorities.

The results of our 2008 water quality monitoring requirements are shown in the following tables. These data are for substances regulated by federal and state agencies. Renton's 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. As you can see, the water from all three of our sources meets or exceeds federal and state drinking water quality standards.

DOWNTOWN WELLS, SPRINGBROOK SPRINGS AND MAPLEWOOD WELLS

SAMPLED AT THE SOURCE AFTER TREATMENT					
Detected Substance	Year	MCL	MCLG	Highest Amount (Range)	Possible Sources
Fluoride (see note 1)	2007	4 ppm	4 ppm	1.2 ppm (0.4 - 1.2 ppm)	Water additive to prevent tooth decay
Sodium (see note 2)	2007	Not established	Not established	32 ppm (15 - 32 ppm)	Erosion of natural deposits; Water treatment
Nitrate	2008	10 ppm	10 ppm	2.1 ppm (0.2 - 2.1 ppm)	Fertilizer runoff; Leaching from septic tanks; Erosion of natural deposits
Bromodichloromethane	2006	Not established	Not established	0.85 ppb (0.2 - 0.85 ppb)	Disinfection byproduct
Chlorodibromomethane	2006	Not established	Not established	0.69 ppb (0.28 - 0.69 ppb)	Disinfection byproduct
Chloroform	2006	Not established	Not established	1.2 ppb (one detection)	Disinfection byproduct

SAMPLED AT THE SOURCE BEFORE TREATMENT					
Detected Substance	Year	MCL	MCLG	Highest Amount (Range)	Possible Sources
Radon (see note 3)	2000	Not established	Not established	305 pCi/L (165 - 305pCi/L)	Decay of natural deposits

Notes:

- Fluoride results shown are from a required inorganic chemical analysis in 2007. Renton also measures fluoride levels daily in the distribution system to ensure that added fluoride levels are maintained in the therapeutic range to prevent tooth decay (0.8 to 1.3 ppm). Renton citizens voted to add fluoride to the drinking water in 1985. The average amount of fluoride measured in the distribution system in 2008 was 0.98 ppm (range 0.28 to 1.43 ppm)
- 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.
- The United States Environmental Protection Agency (EPA) has proposed regulating radon in drinking water and required initial monitoring in 2000. The proposed MCL is 300 picocuries per liter (pCi/L). A final rule is expected in 2009. Radon increases the risk of stomach cancer when ingested and the risk of lung cancer when inhaled. Radon may be released into the air from tap water during showering, dishwashing, etc. Radon entering the home through tap water is usually a small source of radon in indoor air compared to the potential for radon entering the home through soil. Western Washington does not appear to have significant radon levels in the soil, although exceptions have been found. For more information visit EPA's "A Citizen's Guide to Radon" at epa.gov/radon/pubs/citguide.html or call 1-800-SOS-RADON.
- Retesting is required when coliform tests are positive. Follow up samples were negative.
- Thirty-two (32) samples were tested for copper. Ninety percent of the samples (29 samples) had levels at or below the value shown. Ten percent of the samples tested (3 samples) had levels above this value.

SAMPLING POINTS IN THE WATER DISTRIBUTION SYSTEM

Detected Substance	Year	MCL or MRDL	MCLG or MRDLG	Highest or Average Amount (Range)	Possible Sources
Coliform Bacteria (see note 4)	2008	5% of samples positive per month (MCL)	0% (MCLG)	Highest 3.3% (0.0 - 3.3%)	Naturally present in the environment
Chlorine	2008	4 ppm (MRDL)	4 ppm (MRDLG)	Average 0.8 ppm (0.2 - 1.5 ppm)	Additives to control microbes
Total Trihalomethanes	2008	80 ppb	Not established	Average 8.1 ppb (3.5 - 16.9 ppb)	Disinfection byproduct
Haloacetic Acids	2008	60 ppb (MCL)	Not established	Average 2.7 ppb (1.1 - 4.7 ppb)	Disinfection byproduct

RESIDENTIAL WATER TAPS

Detected Substance	Year	Action Level	Ideal Goal	90% Percentile Value and Range	Possible Sources
Copper (see note 5)	2007	1.3 ppm	1.3 ppm	0.38 ppm (0.05 - 0.56 ppm)	Corrosion of plumbing systems

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 that, 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 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 1/4 of a dissolved aspirin tablet in a full bathtub of water (approximately 50 gallons)

pCi/L (picocuries per liter): A measure of radioactivity.

Notes from the EPA

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. For more information about contaminants and potential health effects call the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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 are available from the Safe Drinking Water Hotline at 1-800-426-4791.



Water Facts

Amount of water pumped from all sources on an average day in 2008 was 7.4 million gallons. Water pumped on the peak day, August 16, 2008, was 12.7 million gallons.

Saving Water this Summer

Water shortages aren't always caused by a lack of rain. During the summer, daily water use in Renton typically increases from 50 to 100 percent of the average used during the rest of the year. This increase in summer water usage is largely attributable to outdoor watering and is referred to as "peak demand." What you can do to help:

- Fill pools in the early morning or late evening to avoid daytime peak use hours.
- Wash vehicles at a facility that recycles its water (most commercial car washes).
- Water in the late evenings or early mornings; follow the Five Steps to Natural Yard Care: your.kingcounty.gov/solidwaste/naturalyardcare/ to build water savings into your garden from the soil up.



Everyday water conservation also helps to reduce summer peaks. Develop conservation habits:

- Turn off the water when you brush your teeth or shorten your shower by a minute and you'll save 150 gallons per month — do both and save 300 gallons per month!
- Let your lawn go dormant during the summer — dormant grass only needs to be watered every three to four weeks, or less if it rains.
- Teach your children to turn off faucets tightly after each use; keep a pitcher of water in the fridge to avoid letting the water run to get a cool drink.

The Water Use It Wisely website has more than 100 easy ideas for saving water and every one of them starts with YOU! Visit wateruseitwisely.com/100-ways-to- conserve.

Let Us Help You Save Water!

The average kitchen faucet flows at a rate of 2.2 gallons per minute (gpm). With a flow aerator the flow can be reduced to 1.5 gpm while increasing the power of the water stream. In practical terms, this means you get your rinsing done more quickly while using 32% less water - and if you're rinsing with hot water you save energy too. The aerator adjusts from spray to solid stream and swivels 360° to easily rinse awkwardly large pans and all four corners of the sink. Complete the coupon below, and bring it to the Utility Billing Office (first floor lobby) at City Hall (1055 S Grady Way) and we will give you a free kitchen sink swivel aerator.



While supplies last.

Free Aerator

First Name _____ Last Name _____

Water Service Address _____

Street: _____

City: _____ Zip: _____

WaterSense

If every home in the United States installed WaterSense labeled faucets or faucet aerators in their bathrooms, 60 billion gallons of water would be saved annually. It would save households more than \$350 million in water bills and about \$600 million in energy costs to heat their water. Additionally, water and waste water utilities would save 200 million kilowatt-hours of electricity normally used for supplying and treating that water. Visit the WaterSense website at epa.gov/watersense for a complete list of WaterSense labeled products.



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 7:00 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.

Get Loads of Savings

Save water *and* energy! Rebates of \$50, \$75 and \$100 for the purchase of qualified WashWise machines. The information is available at local appliance dealers, on Renton's website at rentonwa.gov or at washwiserebate.com.

