



**Beat the Peak** is not a race up Mt Rainier! 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 increased water usage is referred to as “peak demand”. The hotter and drier the day, the more water people use.* If thousands of people come home from work on that hot, dry day and water their lawn, take a shower, start the dishwasher, and fill the kiddie pool — we can have a peak hour. This can put huge demands not only on the volume of water needed, but on the infrastructure needed to move that water throughout the City. **This is the Peak we need to Beat!**

*Beyond the issue of infrastructure capacity, is the fact that we share our water resources.* Most of Renton’s water comes from an aquifer that influences, and is influenced by, the Cedar River which in turn is key to the plight of the Cedar’s struggling salmon. Our legal right to our water is tied not only to a volume, but also to a rate at which we can utilize that volume. It is important that we learn to use our water efficiently to ensure Renton’s continued growth and prosperity.

*Most peak demand volume and rate is attributable to outdoor watering.* Experts estimate that 50% or more of this water goes to waste, due to evaporation, runoff, or simply overwatering. Luckily this is something we can beat!

### Water Conservation Tips — Help Beat the Peak

#### Start from the ground up:

Healthy soils hold more water; mulching keeps the water in the soil.

#### Plant right for your site:

Survey your site and group plants by their needs for water, sun and soil.

#### Water Smart:

Water the whole root zone to encourage deep roots

- Water early in the day or late at night to reduce evaporative losses and to avoid peak water use hours.
- Use timers, soaker hoses or drip irrigation.
- If your soil is dry or compacted, stop watering for awhile to let water soak in then restart to avoid runoff.
- Protect plants with two inches of mulch or compost to reduce water loss from the soil.

#### If you have an irrigation system:

- Adjust your water schedule with the “Percent Adjust” or “Water Budgeting” feature on your sprinkler controller - for Renton/Seattle area adjustments visit: [iwms.org/seattle\\_area.asp](http://iwms.org/seattle_area.asp)
- Allow your lawn to “go gold” - the lawn will naturally return to its green, lush state when the fall rains arrive. Summer dormancy is a natural part of the grass life cycle.
- Adjust sprinklers so only the lawn is watered and not the house, sidewalk, or street. Do not water on windy days.

#### Use a commercial car-wash:

- Most car washes recycle their water

#### Delay tasks such as those below to off-peak hours, 8 p.m. and 6 a.m.:

- Fill pools, spas and fountains
- Run dishwasher
- Laundry
- Lawn and garden watering

For web sources see page 7



## WASHWISE

### Get Loads Of Savings



[www.washwiserebate.com](http://www.washwiserebate.com)

## Water Facts 2008:

Amount of water pumped from all water sources in Renton on an average day in 2007 was 8 million gallons.

The highest water demand (Peak Demand) day in 2007 occurred on July 11, when 14,750,000 gallons were consumed. The lowest water demand day in 2007 occurred on February 3 when a low of 3,883,000 gallons of water was consumed.

## Water Use Efficiency Rule Update

On November 19, 2007 Renton City Council approved the City's water use efficiency goals proposed at the November 9, 2007 public forum.

The purpose of the 2003 Municipal Water Supply-Efficiency Requirements Act, commonly called the Municipal Water Law, is to help conserve water for both the environment and future generations by requiring municipal water suppliers to use water more efficiently. It also supports the Washington Department of Health's mission of ensuring safe and reliable drinking water in the following ways:

- Contribute to long-term water supply reliability and public health protection.
- Promote good stewardship of the state's water resources.
- Ensure efficient operation and management of water systems.

Three goals were proposed and set at our public forum. The goals address both water demand and supply issues.

### GOALS

1 Reduce distribution system leakage to ten percent or less by 2010.

Progress: Implementation of the Water Loss Control Action Plan has begun.

2 Limit the peak day demand at 16.5 mgd or less through 2015.

Progress: Implementation of restructured water rates to encourage conservation.

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

Progress: Nearly 2.5 million gallons of water were saved last year as a result of customers buying WashWise washing machines.

The success of these goals depends on both the City government and Renton residents saving and using water more efficiently every day as well as beating the summer peak. Updates of our progress will be presented each year in this water quality report.

## Water Utility Rate Restructure

Beginning January 2008 Renton water utility rates were restructured.

The new rate structure is designed to encourage water conservation. For single family accounts, it consists of three tiers, i.e. the more water you use within a billing period the higher the rate.

### Renton Water Rates 2008

#### Single-Family

- Less than 600 cf/month ..... \$1.47/100 cf
- 600-1,400 cf/month ..... \$1.97/100 cf
- Over 1,400 cf/month ..... \$2.47/100 cf

Multi-family: ..... \$1.90/100 cf

Non-residential: ..... \$2.01/100 cf

Private Irrigation: ..... \$3.20/100 cf

Outside City Limits Rates for customers outside city limits are 1.5 times the above.

cf = cubic feet; 100 cf = 748 gallons

In past years, the Utility rates have been adjusted by an across the board percentage - in 2007, rates increased by five percent. This year, water wise single-family residential consumers may see no increase and may even pay less for their water. The base charge rate - or fixed charge - for the smallest service single-family and multi-family residential users has also decreased. This new rate structure will distribute the costs of service more fairly, with higher demand customers paying their fair share.



# Where Does Renton's Drinking Water Come From?

During the year 2007, 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 springs located in south Renton and from the Maplewood wellfield, located in the Maplewood Golf course. In 2007, our combined water sources produced 2.92 billion gallons of water.

*In 2007 the Downtown wells supplied 75% of the City's water; Springbrook Springs produced 20%; and the Maplewood wells contributed 5%. 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, which destroys bacteria and viruses, is added to

make sure the water stays clean on its way to the 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.

*The Maplewood wells water 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.



## 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. 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).

### 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 (800-426-4791).

The results of our 2007 water quality monitoring are shown in the following tables.

These data are for parameters 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. As you can see, water from the all three of our sources: Downtown wells, Springbrook Springs and Maplewood wells, meets or exceeds federal and state drinking water quality standards.

## About This Report

We are sending you this report to let you know that Renton's water met or exceeded State and Federal standards for drinking water quality during the 2007 calendar year. 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; and what Renton is doing to protect our water supply.

We hope that this Water Quality Report will help you, our customer, to better understand our drinking water and to heighten your awareness of the need to protect our water resources. We would also like to assure you that providing high quality and safe drinking water is Renton's highest priority.

## 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 7:30 pm 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 info at Renton's website, [rentonwa.gov/government](http://rentonwa.gov/government).

## Definitions For Reading Water Quality Tables

**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 the 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.

**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 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.

**ppb (parts per billion):** One part per billion is equivalent to 1/2 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 1/2 of a dissolved aspirin tablet in a full bathtub of water (approximately 50 gallons).

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

# 2007 Water Quality Data For All Water Sources

### SAMPLED AT THE SOURCE AFTER TREATMENT

Detected Substance	MCL	MCLG	Highest (Range)	Possible Sources
Fluoride (see note 1)	4 ppm	4 ppm	1.2 ppm (0.4 - 1.2ppm)	Additive to prevent tooth decay
Nitrate	10 ppm	10 ppm	2.1 ppm (0.2 - 2.1 ppm)	Fertilizer runoff; on-site sewage disposal; erosion of natural deposits
Sodium (see note 2)	No MCL established	No MCLG established	32 ppm (15-32 ppm)	Erosion of natural deposits; water treatment additives
Radium 228	5 pCi/L	0 pCi/L	2.4 pCi/L (one detection)	Erosion of natural deposits
Bromodichloromethane (see note 3)	No MCL established	No MCLG established	0.85 ppb (0.2 - 0.85 ppb)	Disinfection byproducts
Chlorodibromomethane (see note 3)			0.69 ppb (0.28 - 0.69 ppb)	
Chloroform (see note 3)			1.2 (one detection)	

### SAMPLED AT THE SOURCE PRIOR TO TREATMENT

Detected Substance	MCL	MCLG	Highest (Range)	Possible Sources
Radon (see note 4)	No MCL established	No MCLG established	305 pCi/L (165 - 305 pCi/L)	Decay of natural deposits

### NOTES:

- Fluoride results are from one day in 2007 and are for purposes of comparison to the MCL. Daily levels in the distribution system are also measured to ensure that fluoride levels are maintained in the proper range to prevent tooth decay. The distribution system range in 2007 was 0.22 to 1.51 ppm.
- Although there is no MCL or MCLG, the EPA recommends 20ppm as a level of concern for people on a restricted sodium diet. Another source of sodium is treatment at the Maplewood Wellfield with sodium hypochlorite to remove naturally occurring ammonia. Renton adds sodium hydroxide to prevent corrosion of plumbing. Sodium hypochlorite is added to water from the Maplewood wells for disinfection purposes and to remove naturally-occurring ammonia.

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### SAMPLED IN THE WATER DISTRIBUTION SYSTEM

Detected Substance	MRDL	MRDLG	Average (Range)	Possible Sources
Chlorine	4 ppm	4 ppm	0.8 (0.2 - 1.6 ppm)	Water additive used to control microbes
Detected Substance	MCL	MCLG	Average (Range)	Possible Sources
Trihalomethane -	80 ppb	No MCLG established	8.3 ppb (1.2 - 24.8 ppb)	Disinfection byproducts
Haloacetic Acids	60 ppbTotal		1.6 ppb (0.6 - 4.4 ppb)	
Detected Substance	MCL	MCLG	Highest (Range)	Possible Sources
Coliform Bacteria	5% positive samples/month	0%	1.6% positive samples (one positive sample)	Naturally present in the environment

### SAMPLED IN THE WATER DISTRIBUTION SYSTEM

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

### NOTES CONTINUED

- Samples taken in 2006. Monitoring was not required in 2007.
- The United States Environmental Protection Agency (EPA) has proposed regulating radon in drinking water and required initial monitoring in 2000. This sample was taken 11/08/2002. The proposed MCL is 300 picocuries per liter (pCi/L). A final rule is expected in 2009. Radon entering the home through tap water is usually a small source of radon in indoor air compared to radon entering the home through soil. For more visit EPA's "A Citizen's Guide to radon" [epa.gov/radon/pubs/citguide.html](http://epa.gov/radon/pubs/citguide.html) or call 800.SOS.RADON
- 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. Samples taken 2004.

## Watch Your Watering

And avoid higher water rates

If you have a hard time figuring out just how much water you are using to water your garden, the WaterWatch can help. The WaterWatch is attached to your hose and measures the amount of water being applied. Your lawn needs about one inch of water per week—that's 62 gallons for every 100 square feet.

If you would like a **free** WaterWatch, fill out the coupon and mail it to:

WaterWatch  
c/o H. Weagraff, Water Utility  
1055 S. Grady Way  
Renton, WA 98057



Or call 425.430.7287

## Reservoir News

Construction of the City's Hazen water reservoir began in November 2007 and is scheduled for completion in October 2008. The new 4.2 million-gallon reservoir will provide additional water storage for fire protection and for domestic uses to the Renton Highlands. As of May 2007, the contractor, T. Bailey, Inc., has installed the reservoir overflow and stormwater pond, and is currently constructing the steel tank, which will have a height of 120 feet and a diameter of 80 feet.



Placement of Reinforced Steel for Reservoir Foundation and Ringwall.



Reservoir Overflow and Stormwater Pond

✂ — **MAIL THIS COUPON** — ✂

First Name \_\_\_\_\_ Last Name \_\_\_\_\_

Water Service Address \_\_\_\_\_ Please print clearly

(street) \_\_\_\_\_

(city & zip) \_\_\_\_\_

— **FOR A FREE WATERWATCH** —

## Shower Power:

WaterSense Looks Ahead to Showerheads



Showering is one of the biggest uses of water in the home, representing ap-



proximately 17 percent of residential indoor water use, or more than 1.2 trillion gallons of water consumed in the United States each year. In the future, to raise consumer awareness and improve the water efficiency of showerheads, WaterSense intends to develop a specification for labeling water-efficient showerheads. Look for the WaterSense label.

# Frequently Asked Questions

## 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 is added at a rate of one part per million to help prevent tooth decay.



## Is Renton's water soft or hard?

Renton's water falls within the soft 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.

## Why is my water sometimes cloudy?

Cloudy water is usually caused by tiny air bubbles in the water similar to gas bubbles in carbonated beverages. These air bubbles

are either from dissolved oxygen being released or trapped air in the plumbing. Usually, this cloudiness occurs in the winter, when the drinking water is cold and can hold more oxygen.

## Does Renton sell rain barrels?

No, we do not participate in any of the regional rain barrel programs. Rain barrels and rain barrel spigot kits are usually available at local hardware stores at a reasonable price.

## BEAT THE PEAK WEB RESOURCES

### Smart Watering

- [metrokc.gov/dnrp/swd/naturallyardcare/watering.asp](http://metrokc.gov/dnrp/swd/naturallyardcare/watering.asp)
- [seattle.gov/util/services](http://seattle.gov/util/services)

### Landscape, Weather and Irrigation

- [iwms.org/seattle\\_area.asp](http://iwms.org/seattle_area.asp)
- [epa.gov/watersense/pp/irrprof.htm](http://epa.gov/watersense/pp/irrprof.htm)
- [envirostars.com](http://envirostars.com)

### Plant Selection

- [greatplantpicks.org](http://greatplantpicks.org)
- [gardening.wsu.edu/text/nwnative.htm](http://gardening.wsu.edu/text/nwnative.htm)
- [dnr.metrokc.gov/topics/yard-and-garden/index.htm](http://dnr.metrokc.gov/topics/yard-and-garden/index.htm)

### Natural Yard Care

- [metrokc.gov/dnrp/swd/naturallyardcare](http://metrokc.gov/dnrp/swd/naturallyardcare)
- [govlink.org/hazwaste/house/yard](http://govlink.org/hazwaste/house/yard)
- [rodsgarden.50megs.com/waterwise.htm](http://rodsgarden.50megs.com/waterwise.htm)
- [epa.gov/epaoswer/non-hw/green/owners.htm](http://epa.gov/epaoswer/non-hw/green/owners.htm)

### Water Audit

- [wateruseitwisely.com/familywater](http://wateruseitwisely.com/familywater)
- [h2ouse.org](http://h2ouse.org)

### Ways to Save Indoor

- [wateruseitwisely.com/100ways/NWindoor.shtml](http://wateruseitwisely.com/100ways/NWindoor.shtml)
- [dnr.metrokc.gov/wtd/waterconservation/tips.htm](http://dnr.metrokc.gov/wtd/waterconservation/tips.htm)



## Unwanted Medicine Return Program

Pharmaceuticals and personal care products, known as PPCPs, are a group of compounds consisting of human and veterinary drugs (prescription or over the counter) and consumer products, such as fragrance, lotions, sun-screens, house cleaning products, and others. These compounds have been detected in trace amounts in surface water, drinking water and wastewater effluent sampling conducted in both Europe and the U.S.

To date, scientists have found no evidence of adverse human health effects from PPCPs in the environment. However, the EPA is committed to investigating PPCPs and developing strategies to make sure the health of both the environment and the public is protected.

You can help keep pharmaceutical chemicals out of water by returning unwanted medicines, through a local pilot program, to any Group Health pharmacy location in Washington State.

If you have other questions about disposing of unwanted medicines visit the [MedicineReturn.com](http://MedicineReturn.com) website. For more information about PPCPs in water, the EPA website ([epa.gov/ppcp](http://epa.gov/ppcp)) has the basics and up-to-date information.

## Lead is rarely found in source water but enters tap water through corrosion of plumbing materials.

Homes built before 1986 are more likely to have lead pipes, fixtures and solder.

However, new homes are also at risk: even legally "lead-free" plumbing may contain up to 8 percent lead. The most common problem is with brass or chrome-plated brass faucets and fixtures which can leach significant amounts of lead into the water, especially hot water.

## WANT MORE INFO ABOUT LEAD?

The EPA Office of Groundwater and Drinking Water  
[www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead)