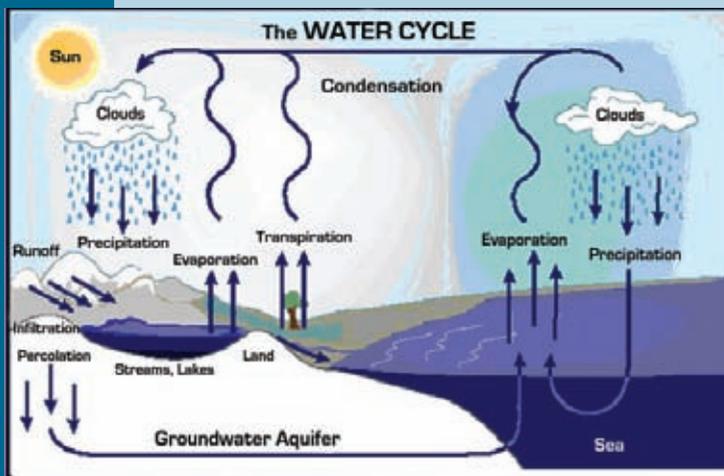


DRINKING WATER QUALITY REPORT

Water: A Finite Resource

T

here is no such thing as new water. Any third grader in Renton knows about the water cycle and how the water we use today has been on the earth since “forever”. What is the **Water Cycle** and how does it work?



The water cycle is an endless cycling of water between the atmosphere, land surfaces, and underground. Water on the earth and within the atmosphere is constantly moving. Surface water is warmed by the sun and **evaporates** into the atmosphere; **water vapor** rises, where it cools and **condenses** into clouds or other forms of **precipitation**. Once on the ground, water will again evaporate or travel on the earth as **runoff** into various water bodies, such as streams, lakes and the ocean. Some water also soaks into the ground where it is absorbed by plant roots and **transpired** as vapor through the leaves and back into the atmosphere. Some of the water that **infiltrates** into the ground **percolates** beyond the plant root zone and becomes part of the **groundwater**. Groundwater can feed directly into lakes, streams or the ocean, but it can also collect in porous

underground areas to form an **aquifer**. In Renton, our drinking water is pumped from an aquifer and a spring. This water is used to water lawns and gardens where it infiltrates back into the ground; is used by plants and returned to the water cycle through transpiration; or evaporates from the surface. It is also used for cooking, cleaning and toilets and then sent to be cleaned at the Metro sewage treatment plant. From there it is discharged into Puget Sound where it rejoins the water cycle through evaporation.

The water cycle reminds us that there is a finite supply of water on the earth. Renton’s water supply is also finite. Although we enjoy a reliable and adequate supply of high quality water, Renton is growing. Renton has a vigorous business economy and growing population, while our water production pumping capacity and water rights are limited. In short, our water supply, like that of the earth, is finite.

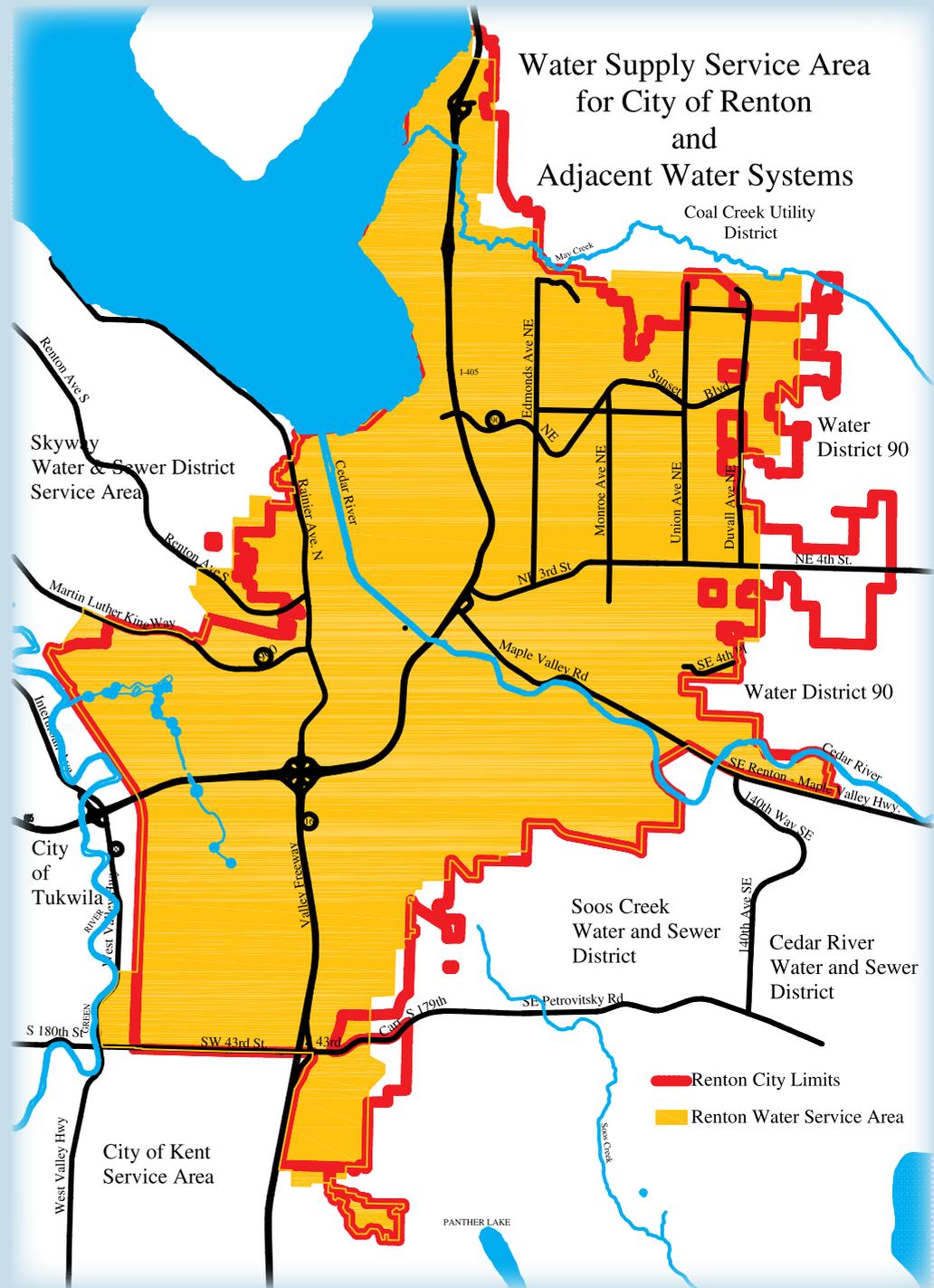
So what do we do? We learn how to take care of our finite water resource. Our aquifer lies under the downtown Renton area and is susceptible to contamination. By limiting or avoiding our use of fertilizers, pesticides or other hazardous chemicals, we can help protect our aquifer from contamination. But aquifers can also be damaged by overuse. The water in our aquifer is from the rain that falls on the surrounding lands. Through conservation we can make sure we don’t use our finite supply of water faster than the water cycle can replenish it. Check out Renton’s website at www.ci.renton.wa.us.com or the Water-Use It Wisely website at www.wateruseitwisely.com for ways you can help protect Renton’s water resources.



About This Report

The purpose of this report is to let our customers know that the City's water met or exceeded state and federal standards for drinking water quality during the 2003 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 which describe where our drinking water comes from, what it contains, how it compares to stringent water quality standards and what we are doing to protect our water supply.

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

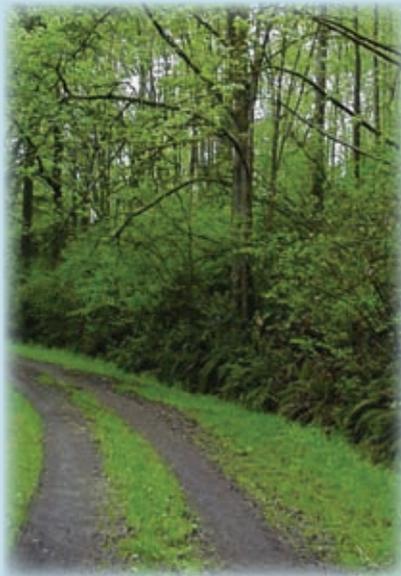


Did You Know?

- Water covers 70% of the earth's surface.
- A person can live without food for more than a month, but can only live without water for approximately one week.
- Your body is 2/3 water. One cubic foot of water is equal to 7.48 gallons and weighs 62.4 pounds.

Where Does Renton's Drinking Water Come From?

In 2003, Renton drew its drinking water from two sources: five downtown wells which draw water from the Cedar River Delta Aquifer and Springbrook Springs, a small springs located at the extreme southern city limit. In 2003, our combined water sources produced 2.76 billion gallons of water.



Springbrook Road

The downtown wells are our primary source of water. In 2003, these wells produced approximately 86 percent of Renton's water, while approximately 14 percent of Renton's drinking water was supplied by Springbrook Springs.



Downtown Wells Pump Station

Treatment of the water from these wells consists of the addition of chlorine for disinfection to destroy bacteria and viruses. Fluoride is added to prevent tooth decay. In the Renton Hill, Talbot Hill, and West Hill areas, orthophosphates are added to reduce corrosion of iron water pipes.

Did You Know?

- Don't wait until you're thirsty to drink water. By the time you feel thirsty, you have probably already lost two or more cups of your total body water consumption.
- 75% of Americans are chronically dehydrated.

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 (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 (1-800-426-4791).

Definitions For Reading Water Quality Table

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.

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.

The results of our 2003 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 compounds, 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 the Downtown Wells and Springbrook Springs meets or exceeds federal and state drinking water quality standards.



City of Renton 2003 Water Quality Data

Year 2003 Water Quality Data for Downtown Wells and Springbrook Springs

| Detected Compound | MCL | MCLG | Highest Amount And Range Detected | Possible Sources of Detected Compound |
|--|---------------------------------|----------------------------------|---|--|
| Regulated at the Groundwater Source Before Treatment | | | | |
| Maximum Total Trihalomethane Potential | No MCL established. AL=100 ppb | No MCLG established. | 20.7 ppb (13.2 - 20.7 ppb) | By-product of drinking water chlorination. |
| Regulated at the Groundwater Source After Treatment | | | | |
| Fluoride | 4 ppm (see note 1) | 4ppm (see note 1) | 1.3 ppm (0.8 - 1.3 ppm) | Water additive which promotes strong teeth |
| Nitrate | 10 ppm | 10 ppm | 2.1 ppm (0.3 - 2.1 ppm) | Runoff from fertilizer use; Leaching from septic tanks; Erosion of natural deposits. |
| Sodium | No MCL established (see note 2) | No MCLG established (see note 2) | 7 ppm (5 - 7 ppm) | Erosion of natural deposits. |
| Radon | No MCL established (see note 3) | No MCLG established. | 305 pCi/L (165 - 305 pCi/L, Sampled 11/08/02) | Decay of natural deposits |
| Coliform Bacteria | 5% of samples positive | 0% | 1.5% of samples positive. (0% - 1.5 %) | Naturally present in the environment |

Table Notes

1. The primary MCL and MCLG for fluoride is 4 ppm. The secondary MCL for fluoride is 2 ppm.
2. The EPA has established a recommended level of 20 ppm for sodium as a level of concern for those consumers that may be restricted for daily sodium intake in their diets.
3. The USEPA has proposed regulating radon beginning in 2005. The proposed MCL is 300 pCi/L.
4. Sixty-four (64) samples were tested. Ninety (90) percent of the samples tested had levels at or below this value (10 percent of the samples tested had levels above this value).

The EPA requires monitoring for the presence of lead and copper with the goal to minimize human exposure to lead and copper in drinking water.

However, our water is naturally corrosive which could cause lead and/or copper present in your home plumbing to leach into your drinking water. To reduce its potential to corrode household plumbing, we treat our water with sodium hydroxide to raise the pH. The City then tests for lead and copper at household taps to make sure that our Corrosion Control Treatment is working. The results of these tests are shown in the following table.



for the 2004 Consumer Confidence Report

Year 2003
 Lead and Copper Sampling at Residential Water Taps in Brook Springs
 (Sampling was not required in year 2003)

| Detected Compound | Action Level | Ideal Goal | 90th Percentile Value | Possible Sources of Detected Compound |
|-------------------|--------------|------------|--|---|
| Lead | 15 ppb | 0 ppb | 3 ppb (sampled in year 2002, (see note 4) | Corrosion of household plumbing systems |
| Copper | 1.3 ppm | 1.3 ppm | 0.9 ppm (sampled in year 2002, see note 4) | Corrosion of household plumbing systems |

Did You Know?

- Dehydration will slow down one's metabolism as much as 3%.
- Lack of water is the #1 trigger of daytime fatigue.

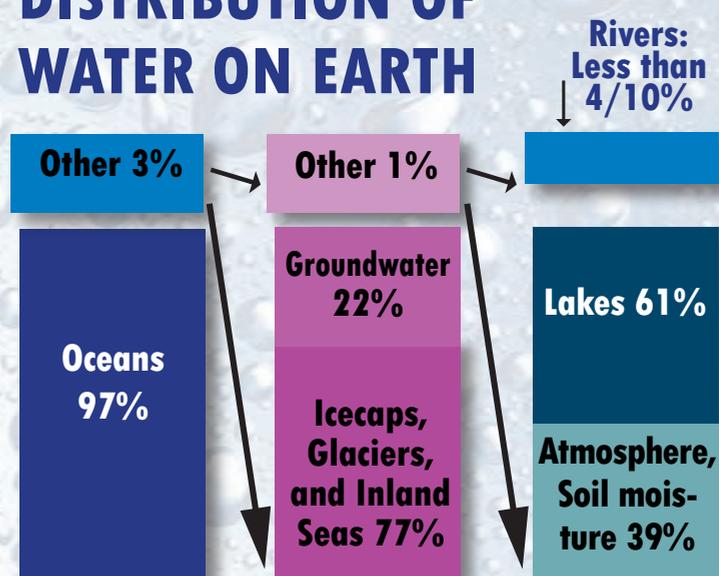
Where is Earth's water located and in what forms does it exist? You can see how water is distributed by viewing these bar charts.

The left-side bar shows where the water on Earth exists; about 97 percent of all water is in the oceans.

The middle bar represents the 3 percent of the "other" part of the left-side bar (that portion of all of Earth's water that IS NOT in the oceans). Most, 77 percent, is locked up in glaciers and icecaps mainly in Greenland and Antarctica, and in saline inland seas. Twenty-two percent of this portion of Earth's water is ground water.

The right-side bar shows the distribution of the "other" portion of the middle bar (the remaining one percent).

DISTRIBUTION OF WATER ON EARTH



Water Quality In The News

There has been a great deal in the news lately about lead in drinking water. The source of lead in drinking water is most often either corrosion of lead in pipes leading from the municipal water source to the house, or from a house's own plumbing. Homes with copper pipes may have lead in the solder used to join the pipes. Brass faucets and fittings can also contain lead. Lead contamination is most common in houses that are either very old or less than five years old.

What about Renton's water? No lead has been detected in our source water as it comes from the wells. We also have no lead water pipes in our system. However, our water is naturally corrosive, i.e. it has a relatively low pH. Because of this, the water goes through a Corrosion Control Treatment where sodium hydroxide is added to raise the pH. This treatment greatly reduces the possibility of leaching lead and copper from home plumbing.

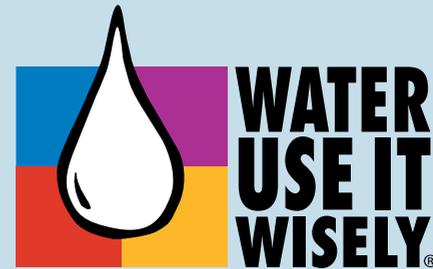
Is there anything to worry about? Renton Water Utility tests for both lead and copper at household taps. All of our samples are below the EPA's 'Action Level' of 15 ppb and most are at or below 3 ppb. With our Corrosion Control Treatment there should be little leaching of lead from older household solder. In newer homes, the EPA explains that over time natural minerals in water deposit and forms a coating on the inside of a house's pipes. This coating insulates the water from leaching the joint solder. This protective coating takes about five years to form.

2003 Water Facts

- In 2003, Renton's wells produced an average of 7.6 million gallons of water per day.
- The highest water demand day in 2003, occurred on July 28, when 14.1 million gallons of water were consumed.
- The lowest water demand day in 2003, occurred on January 24, when 3.9 million gallons of water were consumed.
- The total water produced by Renton Water Utility from all sources for 2003 was 2.76 billion gallons.

What to do? Renton's Corrosion Control Treatment effectively limits leaching from most lead sources. But if you have a newer home or a home built before 1930, you may want to observe the EPA's advice.

- If water has been sitting in the home's pipes for more than six hours, "flush" the cold water faucet by allowing the water to run until you can feel that the water has become as cold as it will get for each faucet as you use it. Catch the flushed water for non-consumptive uses like washing dishes or watering plants.
- Put some water in the fridge so you won't have to flush each time you want a drink.
- It is also possible to attach a cartridge filter to your tap that will reduce lead. Verify that the filter is certified to remove lead and make sure you replace it as specified by the manufacturer.



Keeping Your Water Safe & Moving

The City Water Quality and Water Maintenance staff regularly monitor the quality of our water supply. Field and laboratory analyses include tests for bacteria, as well as chemical, physical, and radiological indicators. We test for over 120 compounds to make sure our drinking water is safe.

The Water Distribution Maintenance team routinely monitors and maintains 9 reservoirs, 18 pump stations, 2 water treatment facilities, 278 miles of water mains, 3,000 fire hydrants, and 14,300 water meters. This team is ever ready to repair the more than 263 leaking services and 20 water main breaks that occur each year.

Q & A

Frequently Asked Questions

Q Does the City add fluoride to the water?

A 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.

Q Is Renton's water soft or hard?

A A water's hardness, is dependent upon the levels of two naturally occurring soluble minerals - calcium and magnesium. Renton's water falls within the soft range with about 3.0 grains per gallon of hardness. This means that dishwashing and clothes washing require relatively *less* soap than in other areas where the water is hard.

Q Why does my water sometimes smell or taste like chlorine?

A If you are sensitive to the smell or taste of chlorine, you can use one of the following techniques. Keep a pitcher of water in the refrigerator, the chlorine will dissipate within a few hours and you will conserve water by not having to run the tap to get a cool drink. You can speed the chlorine dissipation process up by pouring water back and forth between two pitchers. Many faucet filters will also remove chlorine taste and smell - make sure you maintain the filter, as an improperly maintained filter can actually make water less safe.

Q Is bottled water safer than tap water & do I need a home water treatment device?

A Not necessarily. The safety of bottled water depends on the source of water and the treatment it receives. Bottled water is regulated by the Food and Drug Administration, which has less rigorous testing and purity standards than tap water, which is regulated by the US Environmental Protection Agency. The use of bottled water or a home water treatment device is a personal choice, which may be based on taste preferences. If you use a treatment device, be sure to select a unit approved by the National Sanitation Foundation (NSF) and also be sure to properly maintain the device to avoid water quality problems.

Project Updates



Construction underway for the new Maplewood water treatment facility

Construction of the Maplewood Water Treatment Plant is underway with completion scheduled for June 2005. Initially the plant will treat 4.3 million gallons of water per day but may be expanded in the future to treat up to 7.9 million gallons of water per day. The treatment consists of removing ammonia, manganese and hydrogen sulfide from the Maplewood Wellfield water and includes disinfection, fluoridation and corrosion control.



Water main construction

The City is in the process of replacing water lines in Talbot Hill and the Highlands to improve fire protection and water quality.

The City has completed its water system Vulnerability Assessment. The Assessment will improve the security of, and deter threats to, the City's water system.

ECRWSS
Postal Customer

Planning/Building/Public Works
City of Renton
1055 South Grady Way
Renton, WA 98055



FRSRT STD
U.S. Postage
Paid
Renton, WA
Permit No. 137

Who Do I call?

Questions about this report?

Call: Water Utility Engineering at 425-430-7287.

Questions about water discoloration, taste or odor problems? Call: Water Quality at 425-430-7400 (7 am to 3:30 pm) or 425-430-7500 after hours.

To report water pressure problems, a broken water main, hydrant, water leak in streets or at a meter. Call: Water Maintenance: at 425-430-7400 (7 am to 3:30 pm) or 425-430-7500 after normal working hours or on weekends.

Moving? To arrange a change of water service billing, or for general billing questions, Call: Utility Billing at 425-430-6852

Emergencies after 3:30 p.m. or on weekends, Call 911.



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 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. If you are interested in getting involved with our Aquifer Protection education or Groundwater Guardian Team, you can call 425-430-7287.