



# WATER QUALITY REPORT

For the year 2004

**BOARD OF COMMISSIONERS:** *Stanley E. Stone, President; W.F. Stevlingson, Vice President; Thomas C. Harman, Secretary; Mary Shustov, Commissioner; Lloyd J. Warren, Commissioner*

## For More Information on Water Quality Issues:

*If you would like more information on water quality issues, please feel free to contact one of the following agencies:*

### Sammamish Plateau Water and Sewer District

1510 - 228th Ave. SE  
Sammamish, WA 98075

(425) 392-6256

[www.sammplat.wa.org](http://www.sammplat.wa.org)

*Ron Little, General Manager*

*John Anderson, Water Operations  
Team Leader*

*Janet Sailer, Conservation and  
Public Information Specialist*

### Washington State Department of Health Division of Drinking Water

(360) 236-3100

[www.doh.wa.gov/ehp/dw](http://www.doh.wa.gov/ehp/dw)

**United States  
Environmental Protection  
Agency (EPA)**

**Safe Drinking Water Hotline:  
1-800-426-4791**

[www.epa.gov/safewater](http://www.epa.gov/safewater)

The Sammamish Plateau Water and Sewer District is pleased to provide you with our annual Water Quality Report. In this report, we will provide you with information about your water source, the results of our water quality testing from 2004, and where we stand with federal and state drinking water regulations. We will be sending this report annually to update you on your drinking water quality.

Many changes are on the horizon for the District in 2005. The District will be obtaining additional water supply from Seattle Public Utilities through the Cascade Water Alliance. Seattle Public Utilities utilizes water from the Tolt and Cedar Rivers, and currently supplies water to 22 regional water purveyors. The Cascade Water Alliance (CWA) is a consortium of eight eastside municipalities and districts that have joined together to provide water supply for current and future demands. The members of CWA include the Cities of Bellevue, Kirkland, Redmond, Issaquah and Tukwila, Covington Water District, Skyway Water and Sewer District, and the Sammamish Plateau Water and Sewer District.

The District completed connections to the regional water supply in the north, through Redmond Ridge to the Cascade View Zone; and to the south, at the Issaquah Regional Pipeline. The District has installed water treatment facilities to add chlorine to the water system in areas that will be receiving blended water supplies. This treatment addition will also meet the District's policy of chlorinating the water to provide a higher level of public health protection. In addition to chlorine, the regional water supply also contains fluoride. The District began fluoridating its water supply in December 2004 in the Cascade View Zone to levels that match the fluoride levels in the supply from the regional sources. Information from a 2003 survey of District customers indicated that approximately 65 percent of those surveyed supported the addition of fluoride to the drinking water. The District added fluoride in the Cascade View Zone in December 2004, and fluoridated the majority of the rest of the system in February 2005. The only area that does not receive fluoride is the area served by the District that shares a joint tank with the Northeast Sammamish Sewer and Water District.



*Tolt River Watershed  
Photo Copyright Seattle Public Utilities*

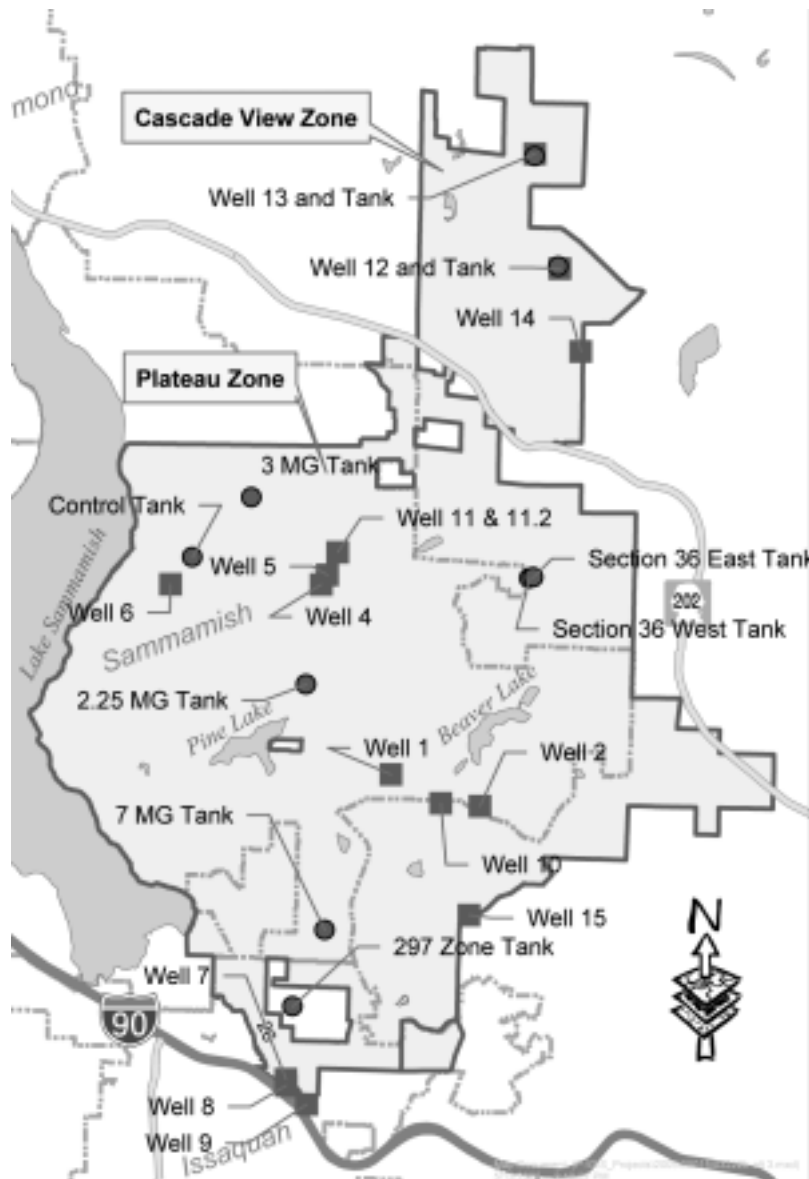
The District will continue to inform customers on the progress of the regional water connection and water treatment facilities. Please check our website at [www.sammplat.wa.org](http://www.sammplat.wa.org) for the most current information about your water supply. We encourage public interest and participation in our community's decisions regarding drinking water. Regular meetings of the Board of Commissioners occur on the first three Mondays of each month, at 3:00 p.m. in the Commissioner's Room at the District office.

## Where Does Your Drinking Water Come From?

In 2004, your drinking water came from groundwater pumped from wells. The District consists of the Plateau Zone and the Cascade View Zone. These two zones are not connected to each other by pipelines and most likely do not share the same groundwater aquifer sources.

The Plateau Zone is supplied by groundwater pumped from wells in two separate aquifer systems, the Plateau Aquifer and the Issaquah Valley Aquifer. Five of the wells draw from the Plateau Aquifer, and three wells pull from the Issaquah Valley Aquifer. The Plateau Zone shares a joint tank with the Northeast Sammamish Sewer and Water District. As a result, some customers in the Plateau Zone who live north of NE 8th Street may receive water from Northeast Sammamish Sewer and Water District's sources. Please contact Northeast Sammamish at (425) 868-1144 for a copy of their water quality report.

The Cascade View Zone is supplied by water pumped from three wells in three different aquifer zones. Space for water treatment facilities has also been provided at the Well 12 area. The District protects its water by establishing wellhead protection areas, which are surface and subsurface areas surrounding wells and wellfields that supply public water. Protection areas reduce the possibility that contaminants are able to reach the aquifers and wells and affect water quality.



### LEAD AND COPPER SAMPLING

SUBSTANCE	SAMPLE DATE	UNIT	MCLG	ACTION LEVEL (AL)	DETECTED LEVEL	RANGE OF DETECTIONS	LIKELY SOURCES
Lead	7/21/04	ppb	0	15	0.4	0.2 - 0.4	Corrosion of household plumbing systems
Copper	7/21/04	ppm	1.3	1.3	0.5	0.02 - 0.5	Corrosion of household plumbing systems

**Lead and Copper:** There are no detectable levels of lead or copper in our source water. However, lead and copper can occasionally leach into residential water from home plumbing systems. Running the cold water tap for 30 seconds in the morning flushes most of the lead and copper from the tap water. The District conducted residential lead and copper monitoring in January and July 2004 from selected "high risk" homes (pre 1985 construction). No lead was detected in 46 out of 54 homes during the July testing. The lead action level is exceeded if the concentration of lead in more than 10 percent of the tap water samples is greater than the lead action level of 15 ppb. No homes exceeded the action level for lead. Although copper was detected in 50 out of 54 homes during the July testing, the level for all homes was below the action level for copper. The copper action level is exceeded if the concentration of copper in more than 10 percent of the tap water samples is greater than 1.3 ppm. No homes exceeded the copper action level. The District has installed corrosion control facilities on a number of its wells to comply with the requirements of the Lead and Copper Rule. This treatment approach has successfully reduced corrosion in the distribution system so that the District is in compliance with the action levels of the Lead and Copper Rule. The EPA has set an **action level** instead of a maximum contaminant level for lead and copper. The action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

## Key to Terms and Definitions

In accordance with state regulations, the water in each of our wells throughout the distribution system is tested once every three years. Over 400 samples were taken, and we detected levels of the regulated contaminants listed below. The first column lists each substance we found in your drinking water supply. The second column is the unit of measure. The third column is the highest detected level found at our wells. The fourth column is the range of detections of samples from the wells throughout the system. The fifth column is the Maximum Contaminant Level. The sixth column is the Maximum Contaminant Level Goal. The seventh column refers to the major sources of the substance in the environment.

**Maximum Contaminant Level or MCL:** 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.

**Maximum Contaminant Level Goal or MCLG:** 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.

**ppm:** parts per million, or milligrams per liter (mg/l) . Compare with one cent in \$10,000.

**ppb:** parts per billion, or micrograms per liter (µg/l). Compare with one cent in \$10 million.

**TTHM:** (Total Trihalomethanes) disinfection by-products

**HAA5:** (Haloacetic Acid) disinfection by-products

<b>WATER QUALITY TEST RESULTS - EPA REGULATED (PRIMARY)</b>						
This is what's in your tap water:				This much is allowed	This level or less is ideal	Where did this substance come from?
SUBSTANCE	UNIT	DETECTED LEVEL	RANGE OF DETECTIONS	MCL	MCLG	LIKELY SOURCES
Arsenic	ppb	13	2 - 13	10	0	Erosion of natural deposits
Nitrate	ppm	3	0.02 - 3	10	10	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits
Fluoride	ppm	0.3	0.2 - 0.3	4	4	Water additive which promotes strong teeth
TTHM	ppb	5.6	0 - 5.6	80	0	By-product of drinking water disinfection
Haloacetic Acids (HAA5)	ppb	0.6	0 - 0.6	60	n/a	By-product of drinking water disinfection
Ethylbenzene	ppb	1.1 (in well 12 only)	0 - 1.1	700	700	Use of petroleum products
Total Xylenes	ppm	0.0049 (in well 12 only)	0 - 0.0049	10	10	Use of petroleum products
Coliform bacteria	n/a	more than 5.0% of monthly samples test positive for coliform bacteria	n/a	n/a	0	Naturally present in the environment

**Arsenic:** The United States Environmental Protection Agency published the final **Arsenic Rule** in the Federal Register on January 22, 2001, following over 10 years of development. The rule lowered the current MCL from 50 ppb to 10 ppb. The final rule also established a MCLG of zero for arsenic. The rule became effective February 22, 2002. Water systems have until January 23, 2006 to meet the new standard of 10 ppb. The District is already undertaking steps in order to assure compliance with the new arsenic rule. The District has increased testing for arsenic in all wells from once every three years, as currently required by state law, to once every two years. The District is currently investigating available treatment technologies for arsenic removal. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

**Coliform:** The Sammamish Plateau Water and Sewer District submits drinking water samples monthly to test for coliform bacteria, as required by state regulations. On January 17, 2004, during routine water testing, coliform bacteria was found to be present in some of the samples taken in the Plateau Zone of the District. Water quality tests measure very small amounts of bacteria, and any detections are taken seriously. This incident was a non-acute violation of the maximum contaminant level for total coliform bacteria. The District conducted follow-up tests and took additional samples to verify improvement of the water quality. All follow-up test samples were found to be free of the bacteria. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. The samples that showed the presence of coliform were further tested to see if other bacteria of greater concern, such as fecal coliform or E. coli were present. **None of these bacteria were found.** The District chlorinated the water system in order to eliminate any remaining bacteria, and continues to permanently chlorinate the majority of the District's water system to enhance protection of the health of our customers.



**Health Related Issues and More Information...**

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 persons, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The Environmental Protection Agency and Center for Disease Control's guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791). The guidelines are also on the EPA's website.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the land surface or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791). To ensure that tap water is safe to drink, the United States Environmental Protection Agency adopts regulations setting the water quality standards for public water systems. The federal Food and Drug Administration regulates contaminants in bottled water and is responsible for providing the same level of public health protection.

此份有關你的食水報告,內有重要資料和訊息,請找  
他人為你翻譯及解釋清楚。

Esta información contiene información muy importante sobre su agua potable. Tradúzcala o hable con alguien que lo entienda bien.

**ANNUAL WATER QUALITY REPORT INSIDE!**



PRRST STD  
U.S. POSTAGE  
PAID  
PERMIT NO. 106  
BLAINE WA

1570 - 222th Ave. S.E. • Sammamish, Washington 98075  
(425) 332-4226 • Fax (425) 307-4285 • www.sammamishwa.org

**WATER AND SEWER DISTRICT**

**SAMMAMISH PLATEAU**