CITY OF SPOKANE WATER DEPARTMENT

2010 WATER QUALITY REPORT

An Annual Report on the Source and Content of Spokane's Water *2010*

A Message from Mayor Mary B. Verner

The City of Spokane is proud to provide our citizens with clean drinking water. Our Water Department is committed to ensuring that our water service is reliable and safe.

Each year, we send out a Water Quality Report to meet statutory requirements and to provide our citizens with accurate information about the City's drinking water. We want you to have all the information you need to make decisions about the health and well-being of your family.

As a community, we are fortunate to get our drinking water from the Spokane Valley-Rathdrum Prairie Aquifer. But, our water supply is not endless. As a community, we need to conserve water to ensure we will have resources needed to support future growth.

For 2011, the City adopted new water rates. Under the new rate structure, large water users will pay more for their water; in some cases, considerably more.

Taking steps now to reduce your water use can help you avoid bigger bills, especially during the hot part of the summer. Refine your outdoor watering schedule, consider native plants that require less water, and equip your irrigation system with a smart controller that measures moisture content in your soil. The Water Department is offering incentives to add such smart controllers. Go to www.waterstewardship.org for information.

We have an on-line water calculator to help City residential water customers determine how the City's new water rates will impact them. Go to www.waterstewardship.org and click on the link for the calculator. You'll need a copy of your bill to help you answer the questions and get an accurate estimate of what to expect.

Now, more than ever, saving water means saving money.

Slow the Flow!

Mary B. Verner

North Five Mile Prairie Tank - put into service in the spring of 2010

Special Notice

for the elderly, infants, cancer patients, people with HIV/AIDS, or other immune problems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those with cancer undergoing chemotherapy, transplant recipients, persons with HIV/AIDS or other immune disorders, some elderly and infants can be particularly at risk for infection. These people should seek advice from their health care providers.

The U.S. EPA - Center for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline 1-800-426-4791.

City of Spokane Water Department
(509) 625-7800 (24 Hours a Day)
Spokanewater.org

City of Spokane
Environmental Programs
(509) 625-6570

The City of Spokane is proud to send you the 2010 Consumer Confidence Report (CCR).
As in previous years, your tap water met or surpassed all federal and state drinking **water standards.**

All drinking water may contain contaminants

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 water poses a health risk. More information about contaminants can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations which limit the amount of certain contaminants in the water provided by public water systems. U.S. Food and Drug Administration regulations establish the limits for contaminants in bottled water, which must provide the same protection for public health.

A word about some specific contaminants.....

Radon

Radon is a naturally occurring radioactive gas that is common in the Spokane area. During 2008, the City conducted 14 tests from seven source wells (two for each well) for Radon-222. The single highest result was 534 pCi/L and the lowest was 212 pCi/L. Exposure to excessive amounts of radon may increase cancer risk.
Compared to radon entering the home through soil, radon entering the home through tap water would, in most cases, typically be 1 – 2 % of the radon in indoor air. For local information concerning radon in your home, see the Washington Dept. of Health Radon Outreach webpage (http://www.doh.wa.gov/ehp/rp/environmental/radon.htm) or call EPA's Radon Hotline (800-SOS-RADON).

Arsenic

Your drinking water currently meets EPA's revised drinking water standard for arsenic. However, it does contain low levels of arsenic. There is a small chance that some people who drink water containing low levels of arsenic for many years could develop circulatory disease, cancer, or other health problems. Most types of cancer and circulatory diseases are due to factors other than exposure to arsenic.

Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Spokane 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 30 seconds to 2 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 or at www.epa.gov/safewater/lead.

Water Use Efficiency

The Water Use Efficiency Rule requires that each water system calculate the system loss to leakage. This calculation for Distribution System Leakage (DSL) determines the volume of water that cannot be attributed to delivery to a customer and is assumed to be lost to the ground. To comply with the Water Use Efficiency Rule standard for DSL, a water system must have a 3-year running average less than 10%. The DSL for the City of Spokane Water System for 2010 is 18.1% and the three year average is 14.4%, which means the City is not in compliance with the DSL standard *(see table right).*

	2010
Total Water-Produced & Purchased, gallons	20,608,800,000
DSL, percent	18.1 %
DSL, volume, gallons	3,739,318,000

GOALS

Spokane's City Council adopted these Water Use Goals at a public hearing on May 1, 2006. This includes seasonal Goals for reductions in water use, based on per capita use. It is our estimate that the City did not achieve its seasonal goals for July through September 2010, although the trend shows continuing reductions. In the results, the difference between the Goal and the Use is a percentage. A positive value equals an exceedance of the goal. *(see table below left)*

Water Year	2010 Pumpage (1,000 Gallons)		
Period	Total	Goal	Result
October (prev. yr.) through March	6,778,277	6,870,000	-1.3%
April through June	5,241,226	6,900,000	-24.0%
July through September	8,938,048	8,830,000	1.2%
Sum of seasonal totals	*22,170,556*		

The City of Spokane will continue working toward the adopted goals. For more information regarding the City of Spokane Water Stewardship Strategic Plan go to: WaterStewardship.org

Contaminants Found in Drinking Water Testing in 2010

Source Water Testing

Contaminant	Units	MCLG	MCL	Average	Range	Possible Source
Arsenic	ppb	0	10	(a)	2.8 to 5.1	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Nitrate	ppm	10	10	(a)	0.80 to 3.53	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Gross Alpha emitters	pCi/L	0	15	(a)	2.06 to 6.13	Erosion of natural deposits
Radium 226 and 228	pCi/L	0	5	(a)	0.5 to 4.71	Erosion of natural deposits

Unregulated Contaminant Monitoring

Contaminant	Units	MCLG / MCL	Average	Range	Possible Source
N-nitroso-dimethyl-amine (NDMA)	ppb	not regulated	(a)	0 - 0.00216	By-products in some industrial chemical synthesis; can form by reaction of precursor amines with nitrosing agents, or by action of nitrate-reducing bacteria. Foods such as bacon and malt beverages can contain them. May form in the upper GI tract.

End of Pipe Testing

Contaminant	Units	MCLG	MCL	2009results - 90th Percentile	Number of Sites Exceeding AL	Possible Source
Copper (c)	ppm	1.3	TT,AL= 1.3	0.10 (d)	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (c)	ppb	0	TT,AL= 15	5.70(d)	0	Corrosion of household plumbing systems; Erosion of natural deposits

Contaminant	MCL	MCLG	highest percent detected	Sample date	Violation	Possible Source
Total Coliform	5% of monthly samples are positive	0	0.6 %	one detection on July 20, 2010	No	Naturally present in the environment
E. coli bacteria		0	0		No	Human or animal fecal waste

Contaminant	Units	MCLG	MCL	Average	Range	Possible Source
Total Trihalomethanes	ppb	0	80	1.24	0.51 to 1.85	By-products of drinking water chlorination

(a) Compliance with the MCL is determined by single sample results, so no average is used
(b) Radium 228 was below the Federal detection Limit of 1 pCi/L and Gross Alpha results were used in lieu of Radium 226, except for Parkwater which was not detected.
(c) Faucet samples were from at risk homes (lead service lines and /or lead soldered pipes)
(d) 90% of at risk homes had this concentration or less of lead/copper

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

Maximum Contaminant Level (MCL) - The highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (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.

ppb - parts per billion (same as µg/L - micrograms per liter)

ppm - parts per million (mg/L - milligrams per liter)

TT - Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.

pCi/L - Picocuries per liter (a measure of radioactivity)

ND - None detected

Potential sources of water contamination

Across the nation, sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and radioactive material, and can pick up substances from the presence of animals or human activity.

City of Spokane
Water Department
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Spokane, Washington 99207

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SPOKANE WATER DEPARTMENT

Your Participation is Welcome

The Mayor recommends Water Department policy and rates to the Spokane City Council.
The Council meets every Monday at 6 p.m. in the City Council Chambers at City Hall (808 W Spokane Falls Blvd., Spokane, WA)

It is your aquifer. Help us protect it

Spokane's source of drinking water is the Spokane Valley - Rathdrum Prairie Aquifer. Water from the Aquifer is pure enough to be pumped from the ground and used without any form of treatment. The City of Spokane adds chlorine to the drinking water in order to maintain its purity throughout the distribution system. The quality of the aquifer is fragile. No matter where you live in the City of Spokane, any contaminant you handle could damage your drinking water. Please do not pour anything on the ground or in street drains that you would not want to drink. Follow the manufacturer's directions for weed sprays, fertilizer, and insecticides. Avoid over application of any yard chemical, and provide for proper disposal.

For more information on household hazardous waste, visit the Spokane Aquifer Joint Board's website www.spokanaquifer.org. You can also call the Spokane Regional Solid Waste Recycling Hotline at (509) 625-6800. If we are careful and follow good stewardship practices, we can continue enjoying excellent quality drinking water far into the future.

English:
This report contains important information about the drinking water supplied by the City of Spokane. Translate it, or speak with someone who understands it well.

Russian:
В этом отчете содержится важная информация относительно питьевой воды, поставляемой службой города Спокэн. Переведите этот отчет или поговорите с тем, кто его хорошо понимает.

Spanish:
Este reporte contiene información importante acerca del agua potable suministrada por la Ciudad de Spokane. Tradúzcalo, o hable con alguien que lo entiende bien.

Vietnamese:
Bản phúc trình này chứa đựng những thông tin quan trọng về nước uống được cung cấp bởi City of Spokane. Hãy phiên dịch, hay hỏi thăm người nào hiểu rõ về tài liệu này.