

# 2011 WATER QUALITY REPORT

## CITY OF SPOKANE WATER DEPARTMENT

Vol. 1 No. 14 - 2011

An Annual Report on the Source and Content of Your Drinking Water



Main relocation for railroad grade separation near Division and Trent (now Spokane Falls Boulevard) in 1911.

### Maintaining our infrastructure

The City of Spokane Water Dept. has worked for its customers for over 100 years. As the photograph above illustrates, our infrastructure continues to age. It is estimated that nationwide, investment needs to replace drinking water infrastructure will exceed \$ 1 trillion over the next 25 years. Some of your water charges fund actual operating costs, but an increasing portion of your water charges will be needed to fund infrastructure replacement.

### Help us protect your aquifer

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.

### 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 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.

( Continue next column )

U.S. Food and Drug Administration regulations establish the limits for contaminants in bottled water, which must provide the same protection for public health.

### 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. Immunocompromised 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 US 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.

### Potential sources of water contamination

Across the nation, the 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. It also can pick up substances from the presence of animals or from the presence of human activity

The City of Spokane's Water Department is proud to send you the 2011 Consumer Confidence Report (CCR). Last year, as in previous years, your tap water met or surpassed all EPA and Washington State Department of Health drinking water standards. The Water Department is dedicated to maintaining this level of quality through careful monitoring, customer service, and efficiency in operations.

In addition, we operate our own state-accredited Water Quality Laboratory. The laboratory conducts tests in conformance with State and Federal regulations to ensure the quality of your drinking water.

### ~ Your Participation is Welcome ~

The Mayor recommends Water Department policy and rates to the Spokane City Council.

If you wish to participate in a public meeting, the Council meets every Monday at 6:00 pm in the Council Chambers at City Hall (located at 808 W Spokane Falls Blvd., Spokane, WA).

### ~ Water Use Efficiency ~

#### 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 2011, 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)

Water Year	2011 Pumpage (1,000 Gallons)			
	Period	Total	Goal	Result
October (prev. yr.) through March	6,454,442	6,920,000	-6.7%	
April through June	4,655,473	6,920,000	-32.7%	
July through September	9,450,578	8,750,000	8.0%	
Sum of seasonal totals	20,560,493			

The Water Use Efficiency Rule requires that each water system calculate the system loss to leakage. The calculations determine 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 Distribution System Leakage (DSL) a water system must have a 3-year running average less than 10%. The DSL for the City of Spokane Water System for 2011 is 20.5% and the three-year average is 17.9%, so we are not in compliance with the DSL standard. (See table below.)

	2011
Total Water-Produced & Purchased, gallons	20.8 billion
DSL, percent	20.5%
DSL, volume, gallons	4.26 billion

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 entienda bien. Para ver información adicional, visite al; <http://www.epa.gov/safewater/agua.html>.

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.

City of Spokane  
Water Department  
(509) 625-7800 (24 Hours a Day)  
[www.spokanewater.org](http://www.spokanewater.org)

City of Spokane  
Environmental Programs  
(509) 625-6570

Washington Department of  
Health-Drinking Water  
Eastern Regional Office  
(509) 329-2100

Spokane Regional  
Health District  
(509) 324-1560

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City of Spokane  
Water Department  
914 E North Foothills Drive  
Spokane, Washington 99207

**Radon**

Radon is a naturally occurring radioactive gas that is common in the Spokane area. During 2011, the City conducted 2 tests from two source wells for Radon-222. The results were 486 pCi/L and 475 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 percent of the radon in indoor air. For local information concerning radon in your home, contact the Spokane Regional Health District at (509) 324-1560 ext. 5 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. EPA's standard balances the current understanding of arsenic's health effects against the costs of removing arsenic from drinking water.

**Lead Notice**

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 drinking 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 [epa.gov/safewater/lead](http://epa.gov/safewater/lead).



ad circa 1916

**Do We Give Tours?**

If you are interested in a tour of the Upriver Dam and Well Complex, please call 742-8141 to schedule a time for your visit. We ask that all interested groups call ahead, and that small children are supervised.

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**Contaminants Found in  
Drinking Water Testing in 2011**

**Source Water Testing**

Contaminant	Units	MCLG	MCL	Average of Detections	Range of Detections	Possible Source
Arsenic	ppb	0	10	(a)	2.3 to 2.6	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Nitrate	ppm	10	10	(a)	0.77 to 3.33	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Gross Alpha emitters	pCi/L	0	15	(a)	< 1.0 to 1.8	Erosion of natural deposits
Radium 228 and 226 (b)	pCi/L	0	5	(a)	1.8 to 3.0	Erosion of natural deposits

**End of Pipe Testing**

Contaminant	Units	MCLG	MCL	90th Percentile	Number of Sites Exceeding AL	Possible Source
Copper (c) - tested Summer 2009	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) - tested Summer 2009	ppb	0	TT,AL= 15	5.70 (d)	0	Corrosion of household plumbing systems; Erosion of natural deposits

Contaminant	Units	MCLG	MCL	Average of Detections	Range of Detections	Possible Source
Total Trihalomethanes	ppb	0	80	2.78	1.26 to 4.29	By-products of drinking water chlorination

- (a) Compliance with the MCL is determined by single sample results, so no average is used
- (b) Gross Alpha results were used in lieu of Radium 226.
- (c) Faucet samples were from at risk homes (lead service lines and those with copper pipes with lead solder joints).
- (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)  
 < - less than