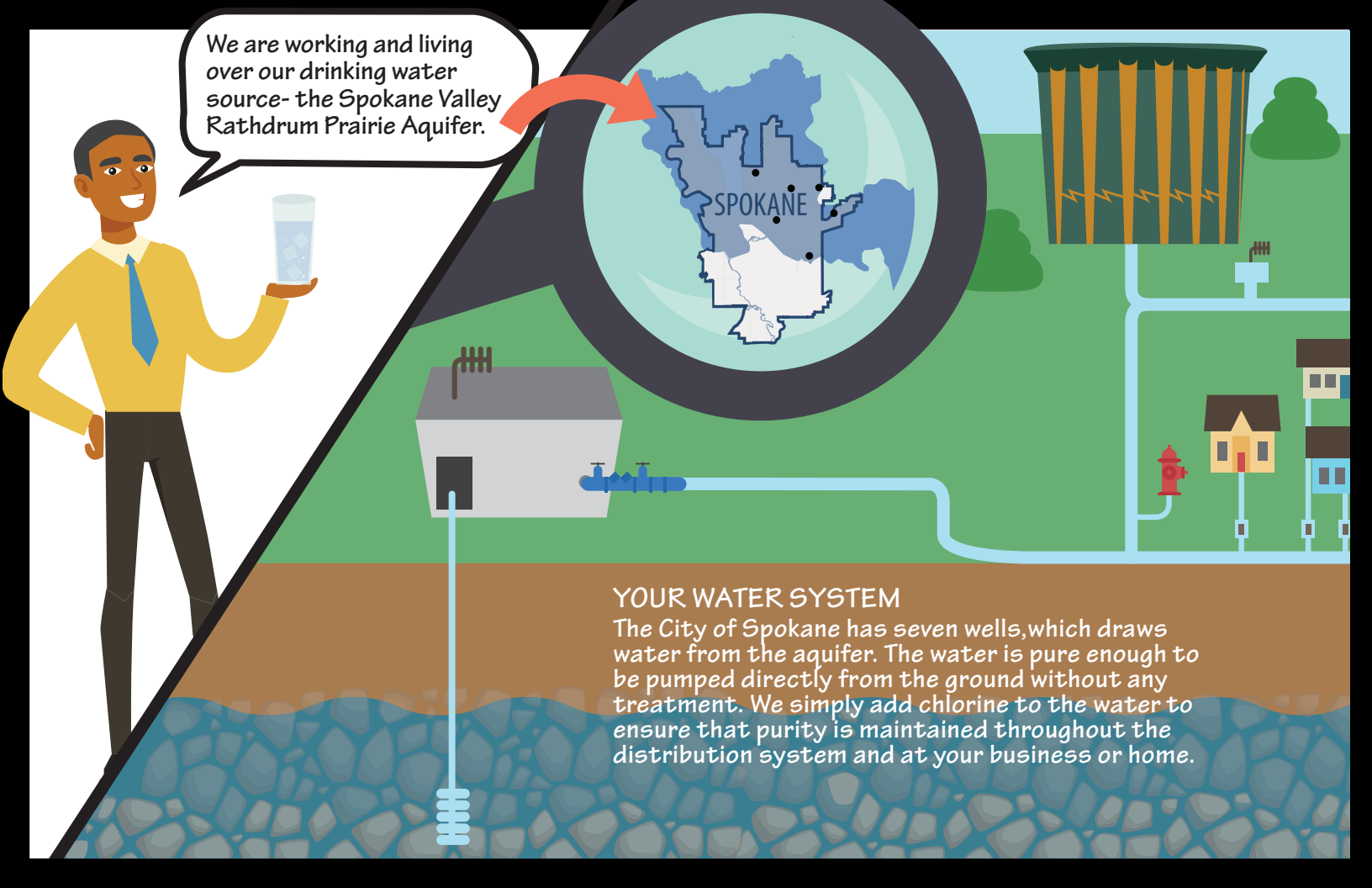


A stylized illustration of a grey water tap with a blue handle on the left. A large, light blue water drop is falling from the tap. Inside the drop, there is a scene with a blue sky, white clouds, and a cityscape featuring a factory with two brown smokestacks, a white apartment building, a yellow house, and a grey skyscraper. The bottom of the drop is a darker blue wavy shape representing water.

The City of Spokane  
Water Quality Report  
2016



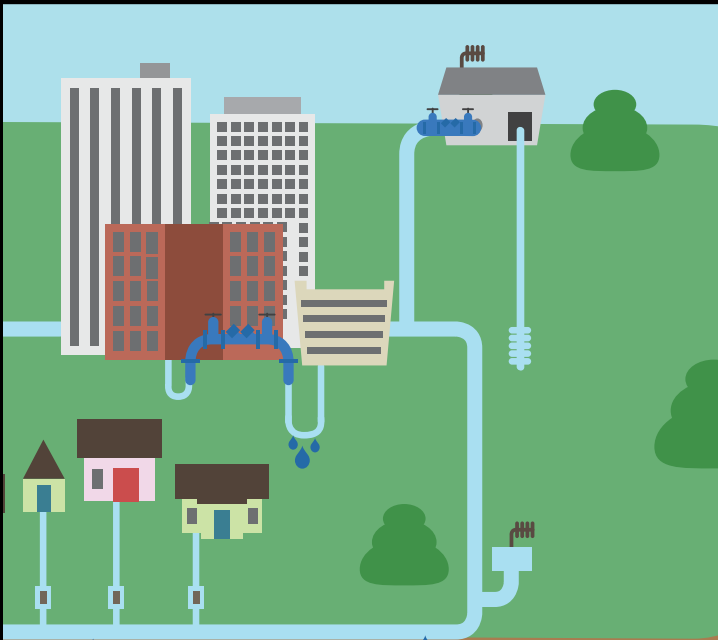


We are working and living over our drinking water source- the Spokane Valley Rathdrum Prairie Aquifer.



### YOUR WATER SYSTEM

The City of Spokane has seven wells, which draws water from the aquifer. The water is pure enough to be pumped directly from the ground without any treatment. We simply add chlorine to the water to ensure that purity is maintained throughout the distribution system and at your business or home.



## DISTRIBUTION SYSTEM LOSS

The State of Washington has a Water Use Efficiency Rule (WUE) that requires water systems like ours to calculate the loss of water as a result of leakage. The calculations determine the amount of water that can't be accounted for through water meters at homes and businesses. This water is assumed to be lost to the ground.

2016 DISTRIBUTION SYSTEM LOSS

	DSL %	DSL, Volume <small>(gallons x 1000)</small>
2014	17.8%	4,032,455
2015	13.4%	3,206,643
2016	11.7%	2,597,575
<b>Average</b>	<b>14.3%</b>	<b>3,278,891</b>

*To comply with the WUE rule, a water system must have a 3 year average of less than 10% distribution system loss. The City did not meet the DSL standard for 2016 but continues to make steady progress toward this goal.*



**WATER  
EFFICIENCY  
GOALS**

The City of Spokane has taken an active role to safeguard the quality and quantity of our water supply and additional steps to conserve water through educational programs, metering water use, repairing leaking pipes, and implementing a conservation-oriented rate structure.



**2016  
Results**

	Goal (gal/day)	Use (gal/day)
Indoor Residential	121	119
Outdoor Residential	492	564
Outdoor Commercial	4,147	3,975
Outdoor Government	4,726	5,822

The City is working to encourage our customers to use less water. We have goals to reduce water use indoors by residential customers by 0.5% annually and outdoor use by residential, commercial and government users by 2% annually. Two out of four goals were achieved in 2016. Help us meet this year's goals by using less water and save on your water bill at the same time!

**METERED USE**



**EDUCATION**



**REPAIRS &  
LEAK DETECTION**



**UPDATING INFRASTRUCTURE**





Your drinking water currently meets EPA's 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 disease are due to factors other than exposure to arsenic. EPA's standard balances the current understanding of arsenic's health effects against the cost of removing arsenic from drinking water. For more information, call the Safe Drinking Water Hotline at 1-800-426-4791.

## WATER QUALITY

Throughout the year, hundreds of tests are performed to ensure our drinking water meets or exceeds all water quality standards. And we do!

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 EPA's Safe Drinking hotline at 1-800-426-4791.

### Special Notice,

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 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.

Radon is a naturally occurring radioactive gas that is common in the Spokane area. During 2016, the City conducted tests from three source wells for Radon-222. The single highest result was 445pCi/L and the lowest was 434pCi/L. Compared to radon entering the home through air, radon entering the home through tap water would, in most cases, typically be 1-2 % of the radon in indoor air.

# DETECTED CONTAMINANTS

The results of testing in 2016 are shown in the table below. These results are for parameters regulated by federal and state agencies. For other water quality information, check out our website: [spokane.org/publicworks/vwater/quality](http://spokane.org/publicworks/vwater/quality) or call 509-625-7800.

Contaminant	Units	MCLG	MCL	Average	Range	Possible Source
<b>SOURCE WATER TESTING</b>						
Arsenic*	µg/L	0	10	(a)	3.5 to 5.1	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Nitrate	mg/L	10	10	(a)	0.76 to 3.19	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Gross Alpha	pCi/L	0	15	(a)	<1.0 to 1.6	Erosion of natural deposits
Combined Radium 226 & 228 (b)	pCi/L	0	5	(a)	<0.5 to 1.6	Erosion of natural deposits
<b>END OF PIPE TESTING</b>						
Total Trihalomethanes	µg/L	0	80	4.03	0.51 to 3.94	By-product of drinking water chlorination

## TERMS AND ABBREVIATIONS

Some of the terms and abbreviations contained in this report are unique to the water industry and might not be familiar to all customers. Terms used in the table are explained below.

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

**LRAA: Locational Running Annual Average**

**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:** same as µg/L, micrograms per liter, and parts per billion

**ppm:** same as mg/L, milligrams per liter, and parts per million

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

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

**ND:** None Detected

### NOTES

(a) Compliance with MCL is determined by single sample results, so no average is used

(b) Gross Alpha results were used in lieu of Radium 226, one half of the detection limit of 1.0 was used for the ND.

(c) Faucet samples were from 'at risk' homes (those with lead service lines and those with copper pipes with lead solder joints).

# A Word on Lead

Call the Water Department to find out if you have a lead service line at 625-7800

WATER MAIN

SERVICE LINE

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Water enters your home from a service line that connects to the water main. The City of Spokane is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.



In 2016, the City of Spokane Water Department replaced 166 lead lines and is working hard to replace the remaining lead service lines in our system over the next two to three years.

Lead is a naturally occurring metal that is all around us. It was used for many years in paints, plumbing and other products found in and around homes. If present, elevated lead levels can cause serious health problems, especially for pregnant women and young children.



If you have lead plumbing, flush your tap for 30 seconds to 2 minutes before using water for drinking or cooking.

Our tests do not show a problem with lead in our system

## 2015 LEAD & COPPER MONITORING RESULTS

During 2015, the City tested 58 at-risk residences for lead. The single highest result was 13.5 ppb. This result for lead is below the 15 ppb Action Level for lead.

Parameter	Units	MCLG	MCL	90th Percentile	Houses Exceeding AL	Possible Source
Copper(a)	mg/L	1.3	TT, AL=1.3	0.06 (b)	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead(a)	µg/L	0	TT, AL=15	5.00(b)	0	Corrosion of household plumbing systems; Erosion of natural deposits

(a) Faucet samples were from homes with lead service lines and those with copper pipes with lead solder joints.  
 (b) 90% of at risk homes had this concentration or less of lead/copper.

## YOUR PARTICIPATION IS WELCOME

The Mayor recommends Water Department policy and rates to the Spokane City Council. The Council meets most Mondays at 6 p.m. in the City Council Chambers in the lower level of City Hall, 808 W. Spokane Falls Blvd., Spokane, WA.

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) 625-6533

Spokane Regional Health District  
(509) 324-1560

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

In recent weeks, our community has once again been reminded of the immeasurable value of clean drinking water that arrives on demand at every home and business. Clearly, a safe, reliable water supply is critical to allow our communities to grow and prosper and to protect the health and welfare of our people. This report highlights some of the important investments we at the City of Spokane are making to continue to provide high-quality water at an affordable price. We have committed to a strict testing regime to ensure water quality. We have voluntarily decided to replace all the remaining lead service lines in our system. And we are replacing aging water mains to ensure our service remains dependable. If you ever have a concern about the quality of your water, we encourage you to reach out to us. We take our responsibility to you very seriously.

Word From  
the City



### 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. Para ver información adicional, visite al; [epa.gov/safewater/agua.html](http://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.