

**ENJOY
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DROP**



2020

WATER QUALITY REPORT

CITY OF SPOKANE WATER DEPARTMENT

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SPOKANE'S WATER SYSTEM

Devoted To Water Quality

The Spokane Water Department proudly serves high-quality water to more than 250,000 people in the City of Spokane and many surrounding suburbs. Since 1884, we have expertly planned, developed and operated a system that provides clean, safe, great-tasting water. We are one of Washington's oldest and the third largest water utility – with a total water service area of approximately 156 square miles.

The natural environment is our lifeline, and we help protect it by promoting wise water use. This year we are asking our customers to try a new irrigation method- watering their landscape on odd or even days of the week. Not only does this save water and money but it also improves the health of the vegetation. Watering deep and infrequently encourages plant roots to grow deeper in the soil profile and become more resilient to weather extremes- high winds, drought, and high temperatures.

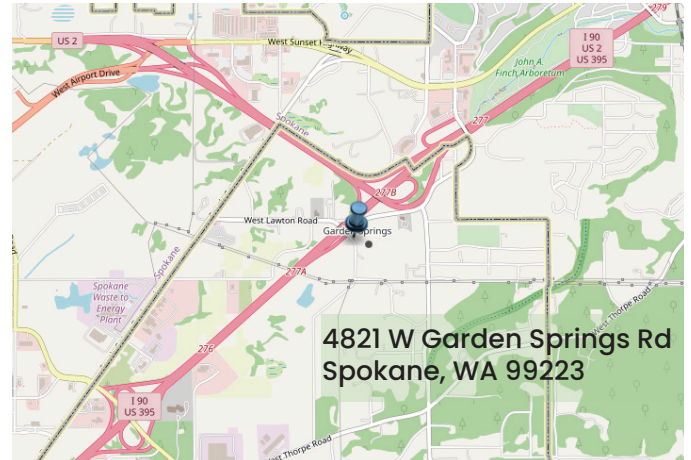
We take our water quality very seriously. Last year we collected more than 2,000 samples to ensure our water is as clean and safe as possible. In line with years past, your drinking water meets or exceeds all water quality standards. We are extremely proud to provide you reliable, high-quality drinking water. This couldn't happen without our essential employees who keep it flowing, 24 hours a day, 365 days a year.



Garden Springs Filling Station with overhead port for large tank trucks.

WATER FILLING STATION

This year, the City of Spokane has opened its very first filling station! Users can fill anything from a 55 gallon drum to a 5,000 gallon water truck with high quality Spokane water. To access the water in the fill station, you'll need a City of Spokane Utility account and assigned PIN from our Utility Billing Department. For questions or to set-up an account, please call: 3-1-1.



HYDRANT PERMIT PROGRAM



Did you know that anyone who opens a City hydrant is required to use an assembly cage? The use of this cage ensures that safe, reliable water is available for all customers and that nothing can enter our water system.

In July 2019 a commercial hydroseed vehicle using water illegally from a fire hydrant in Northeast Spokane allowed some contamination to backflow into the City's water system. A health advisory to not drink or cook with water in the isolated area was issued while Water Department staff were hard at work remedying the situation: distributing water bottles, testing water samples, replacing water meters, flushing and chlorinating the areas affected.

This costly contamination event prompted an updated hydrant permit program and policies to enhance hydrant security and protect Spokane's water supply. The program requires the use of City backflow devices and measured consumption by meter. Permits issued are assigned to specified hydrants and non-compliance can result in fines.



Cross Connection Control Specialists demonstrate proper use of a City hydrant.



A Hydrant Assemble Cage prevents water from reentering our system.

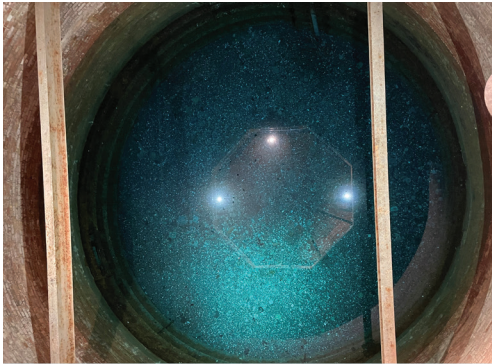
WE NEED YOUR HELP!

If you see someone using a City fire hydrant without an assembly cage, please call 625-7800 to report or take a photo and email to waterinfo@spokanecity.org.

WHERE DOES YOUR WATER COME FROM?

All of the water in Spokane comes from an underground aquifer—the Spokane Valley–Rathdrum Prairie (SVRP) aquifer, which was designated a sole source aquifer in 1978.

The Spokane Valley – Rathdrum Prairie Aquifer was created by Ice Age floods that deposited a thick layer of boulders and gravel. This rock and gravel layer is now filled with water and extends 370 square miles from Pend Oreille Lake in Idaho to just past the western edge of the City of Spokane. It ranges in surface depth from a few feet in some areas to as much as 500 feet in others.



The stunning view inside Spokane's first well.

We are working and living over our drinking water source. Since our water is beneath us, it is important that we follow good stewardship practices and not pour anything on the ground or in storm drains that we would not want to drink.



WORKING ON OUR WATER WISDOM

Conserving water just makes sense; why waste what you don't need? Saving water makes it possible to use our existing water supplies more efficiently, ensure enough water is available to meet your needs as well as the needs of our growing community without costly infrastructure additions.

The Washington State Department of Health requires municipal water suppliers to establish a water conservation goal and report on this annually. In 2020, the Spokane City Council passed the Conservation Master Plan and approved the following updated goals:

Water Wise Rebates now available!

WATER WISE REBATES
CITY OF SPOKANE

- TOILETS: \$100 rebate
- SMART IRRIGATION CONTROLLERS: \$100 rebate
- SPRINKLER NOZZLES: \$40 rebate
- And more!
- Other items: \$20 rebate

To learn more, visit: WaterWiseSpokane.org

Reduce seasonal peak demand (May–September) by 15% and lower the base (indoor water consumption) by 5% over the next ten years.

With these goals, we are focusing efforts on customer irrigation education, turf replacement and water efficient equipment upgrades.

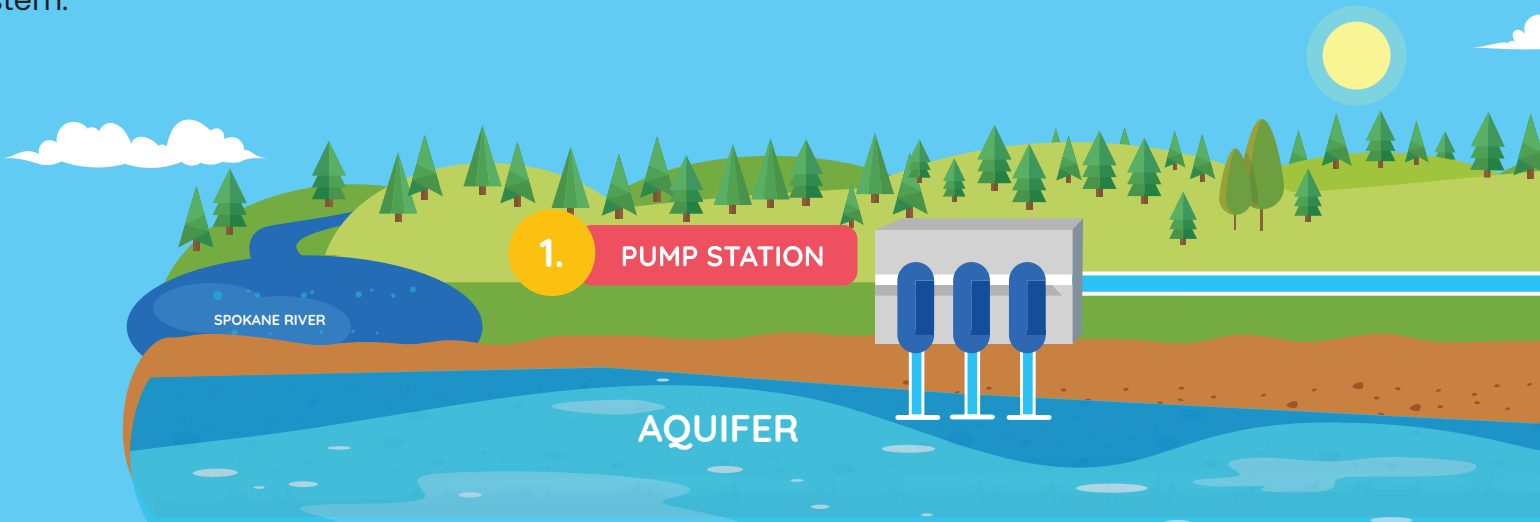
CUSTOMER REBATES

We are now offering rebates for residential, multi-family and commercial customers ranging from toilets to irrigation controllers. All you need to do is purchase the pre-approved device, then submit—

SPOKANE'S WATER SYSTEM

The City of Spokane has seven wells located throughout the City to draw drinking water directly from the aquifer. The water from the aquifer is pure enough to be pumped directly from the ground and sent to customers without any treatment. We simply add chlorine to the water to ensure that purity is maintained throughout the distribution system.

To pump the water up to storage tanks and reservoirs, booster stations are located throughout the city. These stations contain large pumps and motors to help move the well water from lower elevations to the tanks at higher elevations within the distribution system. Water at a higher elevation in a tank provides water pressure to the homes below it.



a receipt and photo of the installed product to receive credit back on your utility account.

REDUCING PEAK DEMAND

Outdoor watering of lawns and gardens makes up approximately 83% of average home water use in Spokane. You can dramatically reduce your outdoor water use by cutting back on irrigation and

planting more drought tolerant landscaping.

If you're used to running your sprinklers every day, a great way to save water and money is by following an odd & even watering schedule. This strategy encourages roots to grow deeply in the soil - the best way to keep your landscape healthy and green.



Repair crew uncovers water main break on 1963 cast-iron main at 45th & Crestline.

DISTRIBUTION SYSTEM LOSS

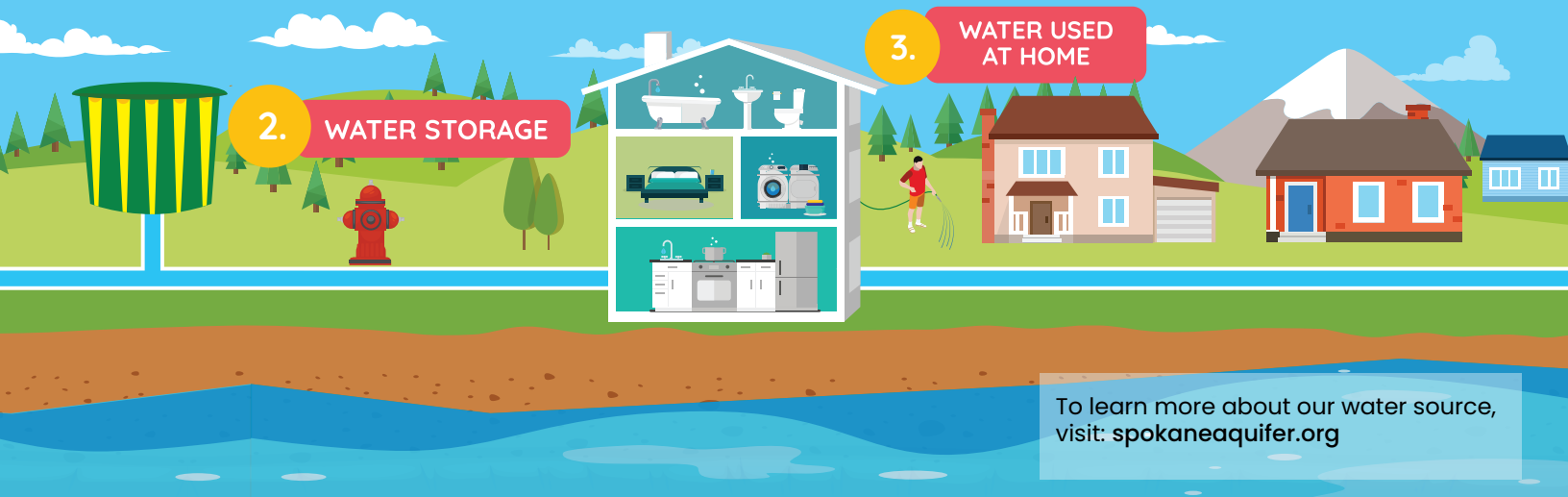
The Washington State Water Use Efficiency Rule (WUE) requires that each water system calculate the water system loss due to leakage. The calculations determine the volume of water that cannot be attributed to delivery to a customer and is assumed to be lost to the ground.

To comply with the WUE standard for Distribution System Loss (DSL), a water system must have a three-year running average of less than 10%. The DSL for the City of Spokane Water System for 2020 is 13% and the three-year average is 13%, which means the City has not met the DSL standard.

2018-2020 Distribution System Loss				
	2018	2019	2020	Average
DSL, percent	11.5%	14.46%	13.45%	13.13%
DSL, volume (gallons x 1,000)	2,731,378	3,321,717	3,104,976	3,052,690

More than 1,000 miles of water mains are located throughout the City. Water reaches your house directly from service lines running off smaller mains. To meet customers' needs; the City has over 100 million gallons of water stored in reservoirs. The amount of water stored in a given tank depends on both the water demand for that area as well as the fire protection requirements.

Throughout the year, hundreds of water quality tests are performed; water mains, valves and meters are repaired and replaced, and water department personnel continually search for leaks and problems to ensure you the highest quality drinking water possible. Expertly trained operators monitor the distribution system from a 24-hour control center.



To learn more about our water source, visit: spokaneaquifer.org



POTENTIAL SOURCES OF WATER CONTAMINATION

Sources of Water

Sources of drinking water (both tap water and bottled 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 from the presence of human activity.

Potential Contaminants

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.

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 visiting the EPA's Safe Drinking Water Website: epa.gov/safewater

People Who May be More at Risk

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 EPA's Safe Drinking Water Hotline (800-426-4791) and website: epa.gov/safewater

ARSENIC

City of Spokane drinking water currently meets EPA's revised drinking water standard for arsenic. However, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water.

EPA continues to research the health effects of low levels of arsenic, which

is known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. Information on arsenic in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline.

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. In 2018, the City of Spokane completed the removal of all known lead service lines in our water system. The City is responsible for providing high quality drinking water, but cannot control the variety of materials installed prior to regulatory changes in home 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 1-800-426-4791, or at epa.gov/safewater/lead.

RADON

Radon is a naturally occurring radioactive gas that is common in the Spokane area. During 2020, the City conducted tests from two source wells for Radon -222. The single highest result was 540 pCi/L and the lowest was 440 pCi/L. Exposure to excessive amounts of radon may increase cancer risk. The EPA has proposed a MCL of 300pCi/L, which has not been finalized.

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. Breathing air containing radon can lead to lung cancer and/or drinking water containing radon also may cause increased risk of stomach cancer. If you are concerned about radon in your home, you can purchase a test kit. Testing is inexpensive and easy, many radon test kits can be found online or in home improvement stores.

For more information concerning radon in your home, call the EPA's Radon Hotline (1-800-55-RADON) or visit epa.gov/radon/radon-hotlines-and-information-resources.



CITY OF SPOKANE WATER QUALITY RESULTS FOR 2020

Spokane’s drinking water meets or exceeds all State and Federal drinking water quality standards. In 2020, we tested for 35 inorganic parameters with detections in arsenic and nitrate. 64 organic compounds were tested for with none detected. We disinfect our drinking water with chlorine gas, resulting in the generation of low concentrations of disinfection byproducts as summarized below (total Trihalomethanes). Routine testing for microbiological contaminants produced no detections.

DETECTED CONTAMINANTS

The results of monitoring in 2020 are shown in the table below. These results are for parameters regulated by federal and state agencies. For other water quality information, check our website: spokanewater.org or call 509-742-8166.

Contaminant	Units	MCLG	MCL	Average	Range	Possible Source
SOURCE WATER TESTING						
Arsenic	µg/L	0	10	(a)	2.6 to 2.8	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	mg/L	2	2	(a)	0.02-0.02	Erosion of natural deposits; Discharge of drilling waste; Discharge from metal refineries
Nitrate	mg/L	10	10	(a)	0.65to 3.29	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Combined Radium 226 & 228 (b)	pCi/L	0	5	(a)	1.5 to 1.5	Erosion of natural deposits
END OF PIPE TESTING						
Total Trihalomethanes	µg/L	0	80	3.50	0.70 to 4.01	By-product of drinking water chlorination

LEAD & COPPER

During 2018, the City tested 56 at-risk residences for lead. The single highest result in 2018 was 3.58 ppb. This result for lead is below the 15 ppb Action Level for lead. In 2018, the City completed the removal of all known lead service lines in our water system. Source water is analyzed for lead concurrent with in-home testing; in 2018 the maximum concentration of all the wells was 0.16 ppb.

Contaminant	Units	MCLG	MCL	90th Percentile	Houses Exceeding AL	Possible Source
Household WATER TESTING						
Copper(c) -tested August 2018	mg/L	1.3	TT, AL=1.3	0.08 (d)	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead(c) -tested August 2018	µg/L	0	TT, AL=15	1.41(d)	0	Corrosion of household plumbing systems; Erosion of natural deposits

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 ug/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).

(d) 90% of at risk homes had this concentration or less of lead/copper



Customer Resources

Water Quality

Learn more about water quality online at: SpokaneWater.org or email waterinfo@spokanecity.org

Report urgent concerns, such as water outages, discolored water, leaks, hydrant misuse to the Water Department's 24-hour radio room at: **509-625-7800**

Ask questions about Spokane's water quality, such as chlorine or hardness at: **509-742-8166**

Ask general water quality questions:

Office of Drinking Water Washington DOH Eastern Regional Office: **509-329-2100**

Spokane Regional Health District: **509-324-1560**

Department of Ecology Eastern Regional Office: **509-329-3400**

Spokane County Water Resources: **509-477-3604**

EPA's Safe Drinking Water Hotline: **800-426-4791**

Conservation & Rebates

Explore tips, assistance, and rebates to help you save water at: WaterWiseSpokane.org or call **509-625-6293**

Billing

Manage your account at: MySpokane311.org
Speak with a representative, Monday-Friday (7 am-6 pm) at: **311 or 755-CITY** (for calls outside City limits)

Community Participation

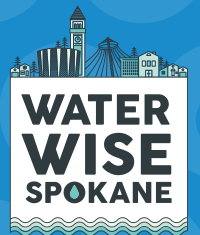
The Mayor recommends Water Department policy and rates to the Spokane City Council. The Council meets virtually every Monday, excluding holidays, at 6:00 pm. Due to COVID-19 restrictions, Council sessions are currently held virtually. Go to: my.spokanecity.org/citycouncil/meetings/ for more information.



Some of our skilled and dedicated workforce. Top: Tapping Inspector Foreman, Steve McGoldrick. Middle: Dave Reynolds, Meter Test Bench Operator. Bottom: Leon Hopkins, North Side Repair Crew Foreman.

WE'RE HERE FOR YOU.
Today. Tomorrow.
And Every Single Day After That.

509-625-7800 (24 Hours a Day)
Email: waterinfo@spokanecity.org
www.SpokaneWater.org



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.

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

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

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.