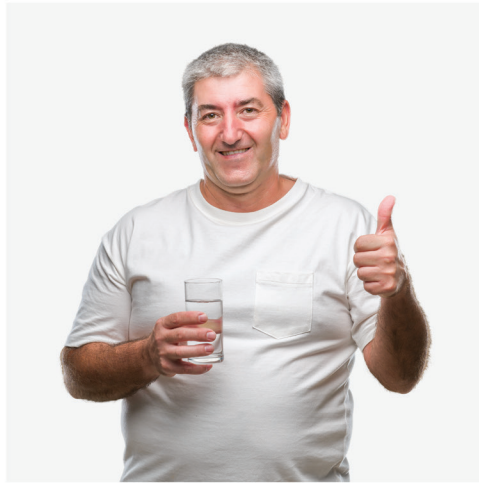
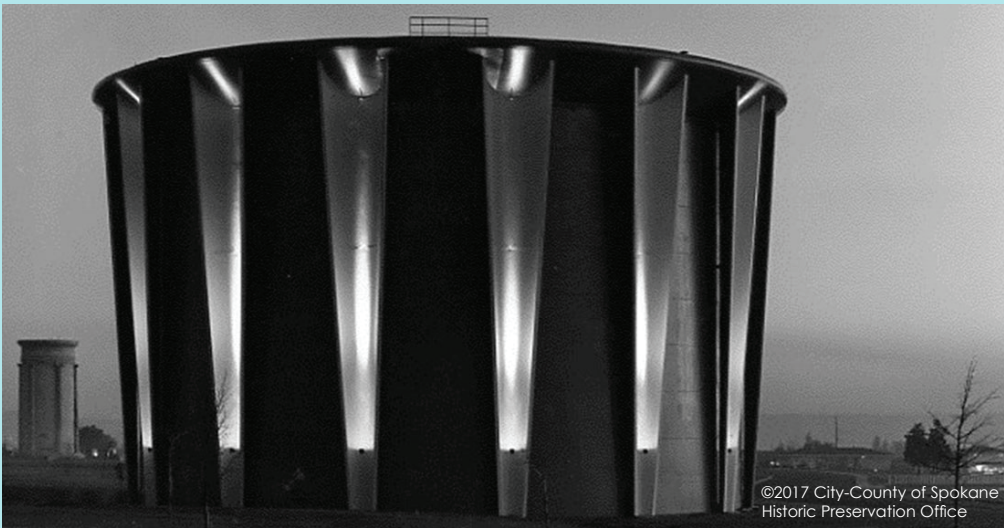


The City of Spokane's 2018 Water Quality Report





The Shadle Park Reservoir was built in 1965 and has since become an icon for Spokane. See page 3-4 for a picture of the Shadle tank and neighborhood now.

Delivering High Quality H₂O Since 1884

Your Water Department turned **135** years old this year. While we've gone through some major changes and advancements over the years, one thing will always stand true -our commitment to testing, protecting, and delivering high-quality drinking water to all of our customers.

This year's Consumer Confidence Report, better known as the Water Quality Report, covers calendar year 2018 drinking water quality testing and reporting. As in years past, we are pleased to report that the drinking water provided to your homes, schools, and businesses meets or exceeds the standards required by state and federal regulatory agencies.

If you have any questions or would like more information about the City's water quality testing or other programs, please see the contact information below.

- In This Issue:

News from your Water Department (pages 1-2)

Your Water Source (page 4)

Water Quality Testing Results (page 6)

Water Efficiency (page 7)



A Spokane couple drink water right from the tap, a marvel for the year 1919. © Northwest Museum of Arts & Culture/ Eastern Washington State Historical Society, Spokane, Washington

COMMUNITY PARTICIPATION

The Mayor recommends Water Department policy and rates to the Spokane City Council. The Council meets every Monday, excluding holidays, at 6:00 pm in the Council Chambers at City Hall (808 W Spokane Falls Blvd., Spokane, WA).

QUESTIONS ABOUT YOUR WATER?

Contact us for answers.
 509-625-7800 (24 Hours a Day)
 Email: waterinfo@spokanecity.org
www.spokanewater.org

For more information, you can also contact the following agencies:

- My Spokane 311

311 (7a.m. - 6 p.m.)

MySpokane311.org

Spokane County Water Resources

(Division of Utilities)

(509) 477-3604
- Department of Ecology

Eastern Regional Office

(509) 329-3400

Spokane Regional Health District

(509) 324-1560
- Office of Drinking Water

Washington Department of Health

Eastern Regional Office

(509) 329-210

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 entiende 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.

A Word From The City

It's been an exciting year for your Water Department. In May of 2019 the Washington State Department of Health honored the City of Spokane's Water Department with an award for two recent projects that demonstrate the Water Department's service-oriented culture and dedication to public health.

First, the award acknowledges the department's assistance to Airway Heights, which has faced a significant contamination issue in its water supply from chemicals found in firefighting foam.

With leadership from Water Director Dan Kegley and others, the department provided an immediate solution that allowed Airway Heights to flush the contaminated water from its system. Ultimately, they devised a long-term solution to continue to assist our neighbors until a permanent answer can be found. Second, the award recognizes the work to replace all of the remaining lead service lines in the City's water system.

The Department replaced 486 lead service lines in just over two years. This is a great outcome for

Some of the award winning water department staff: Back row: Seth McIntosh, Jeston Burnett, Ryan Penaluna, Mack Sherman, Robert VanBlaricom, Dave Frey, Aaron Eirls, Scott Sprecher, Gary Haynes, Ron Chevalier. Front row: Emerson Kaesemeyer, Ben Rosenthal, Tim Clinton, Adam Bromley, Leon Hopkins, Mike Cavanaugh, Quentin Arquette, Max Brown.



public health, and well ahead of the Governor's directive to replace such lines by 2031.

These are just a couple of examples of the innovation, creativity, and "commitment to excellence" that exists in the City's Water Department.

The department also is leading the region on water conservation and stewardship. Its SpokaneScape program is taking off, with many residents and businesses choosing to take out turf and replace it with native plants and low irrigation.

Water staff also have significantly reduced leakage in the City's expansive water system. The team has used many different techniques including satellite imagery to find leaks.

Work continues to upgrade water meters with smart metering technology that eventually will allow customers to get real-time information on their water use. Information allows people to change habits or identify problems, like leaks in their irrigation systems.

The Water Department may be more than 100 years old, but its work is focused on the future.



City of Spokane Water Department Lead Service Replacement Crews were recognized as Employee(s) of the Year by Mayor Condon.

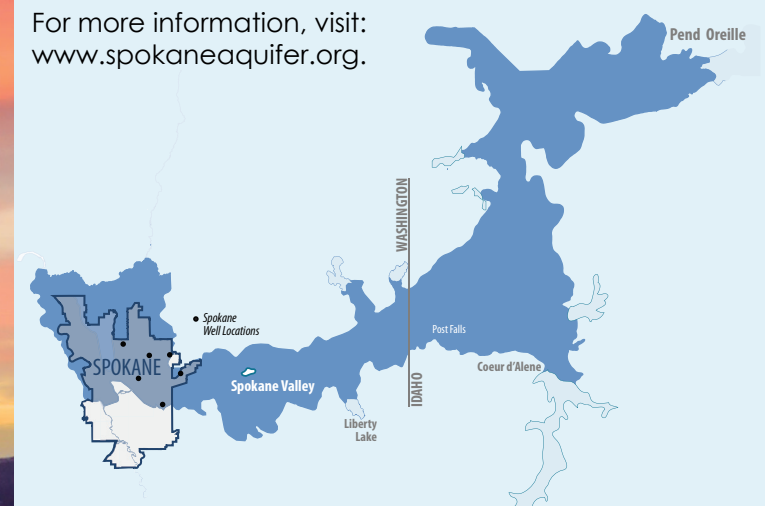


Your Water Supply Source

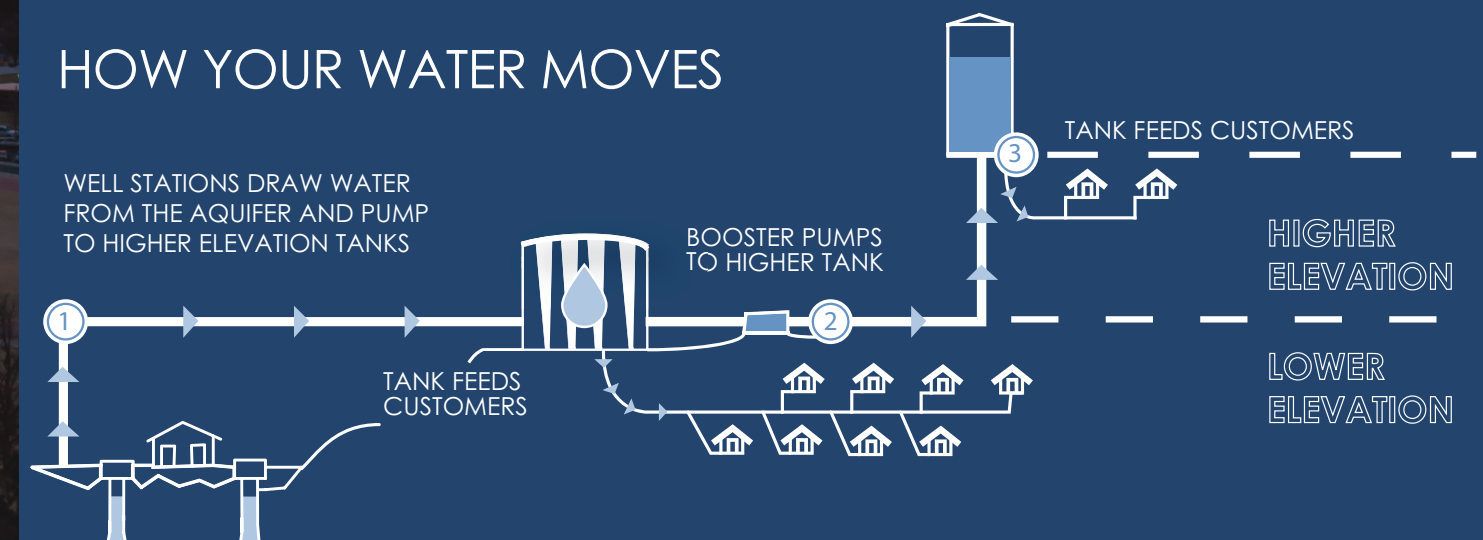
The Spokane Valley - Rathdrum Prairie Aquifer was created by Ice Age floods that deposited a thick layer of boulders and gravel. This rock and gravel layer is now filled with water and extends 135 square miles from Pend Oreille Lake in Idaho to just past the western edge of the City of Spokane. It ranges in surface depth from a few feet in some areas to as much as 500 feet in others.

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.

For more information, visit:
www.spokaneaquifer.org.



HOW YOUR WATER MOVES



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 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.

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 best drinking water possible. Highly trained operators monitor the distribution system from a 24-hour control center.



Potential Sources of Water Contamination

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.

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.

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 Web-page: epa.gov/safewater

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 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 Web-page: epa.gov/safewater

RADON

Radon is a naturally occurring radioactive gas that is common in the Spokane area. During 2018, the City conducted tests from two source wells for Radon-222. The single highest result was 510pCi/L and the lowest was 380pCi/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, call the EPA's Radon Hotline (800-SOS-RADON).

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.

CITY OF SPOKANE WATER QUALITY RESULTS FOR 2018

DETECTED CONTAMINANTS

The results of monitoring in 2018 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 509-625-7800.

| Contaminant | Units | MCLG | MCL | Average | Range | Possible Source |
|-------------------------------|-------|------|-----|---------|--------------|---|
| SOURCE WATER TESTING | | | | | | |
| Arsenic | µg/L | 0 | 10 | (a) | 2.8 to 3.9 | Erosion of natural deposits; Runoff from orchards; Run-off from glass and electronics production wastes |
| Nitrate | mg/L | 10 | 10 | (a) | 0.65 to 3.32 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Gross Alpha | pCi/L | 0 | 15 | (a) | <3.0 to 3.0 | 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 | 3.23 | 1.79 to 5.31 | By-product of drinking water chlorination |

UNREGULATED CONTAMINANTS

| Contaminant | Units | MCLG | MCL | Range |
|-------------------------------|-------|------|-----|-----------------|
| SOURCE WATER TESTING | | | | |
| Dichloroacetic acid (DCAA) | µg/L | N/A | N/A | <0.2 to 0.206 |
| Dibromoacetic acid (DBAA) | µg/L | N/A | N/A | 0.313 to 0.545 |
| Bromochloroacetic acid (BCAA) | µg/L | N/A | N/A | 0.329 to 0.380 |
| Bromide | µg/L | N/A | N/A | 44 to 52 |
| Total Organic Carbon (TOC) | µg/L | N/A | N/A | <1,000 to 1,144 |

2018 was the fourth round of Unregulated Contaminant Monitoring Rule (UCMR) testing. This federal program under the Safe Drinking Water Act requires large water systems such as the City to sample for contaminants that are unregulated but are a health concern. While not being regulated, these contaminants were detected.

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. Read more about this work on page 3.

| 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) - testedAugust 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

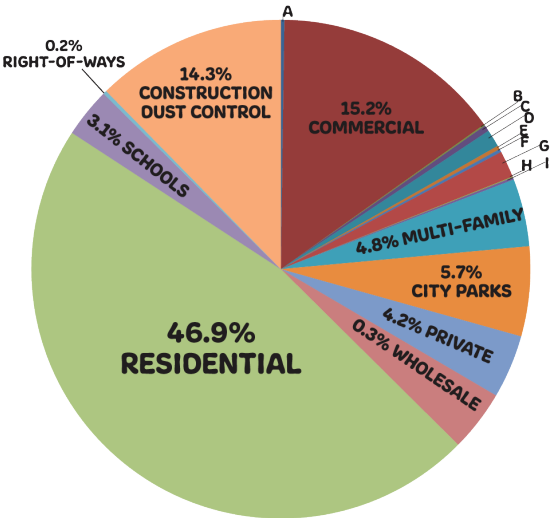
WATER EFFICIENCY

Saving water never goes out of style.



1962 Leak Detection Crew

2018 SUMMER OUTDOOR USE



KEY:

| | | | | | |
|---|------|-----------------------------|---|------|-----------------------|
| A | 0.7% | CITY GOV'T | E | 0.2% | FEDERAL GOV'T |
| B | 0.1% | COMMERCIAL/ MULTI-FAMILY | F | 0.3% | STATE GOV'T |
| C | 0.5% | COUNTY GOV'T | G | 1.7% | IRRIGATION, NOT PARKS |
| D | 1.2% | DUPLEX | H | 0.4% | MOBILE HOME PARK |
| | | | I | 0.1% | CITY LIBRARY |



2018 Award Winning Leak Defection Crew

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.

The City has adopted Water Use Efficiency Goals based on metered usage. The goals are a 0.5% annual residential indoor reduction and a 2% annual reduction in outdoor irrigation for residential, commercial/industrial, and government use.

2018 Water Use Efficiency Goals

| | Goal (gal/day) | Actual (gal/day) |
|------------------------------------|-------------------|---------------------|
| Indoor Residential Use | 119.6 | 115 |
| Outdoor Residential Use | 467 | 617 |
| Outdoor Commercial/ Industrial Use | 3,983 | 4,088 |
| Outdoor Government Use | 4,539 | 5,745 |

One of the four goals were achieved in 2018. Help us meet this year's goals this summer, and save money on your water bill at the same time - continue to find ways to use even less.

DISTRIBUTION SYSTEM LOSS

The Washington State Water Use Efficiency Rule (WUE) requires that each water system calculate the water 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.

2016 - 2018 Distribution System Loss

| | 2016 | 2017 | 2018 | Average |
|---------------------------------|-----------|-----------|-----------|-----------|
| DSL, percent | 11.7% | 12.6% | 11.5% | 11.9% |
| DSL, volume (gallons x 1000) | 3,206,643 | 2,901,465 | 2,731,378 | 2,946,495 |

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 2018 is 11.5% and the three-year average is 11.9 %, which means the City has not met the DSL standard.