



WATER QUALITY REPORT

2015 Consumer Confidence Report



AIRWAY HEIGHTS WATER SOURCES

We are pleased to present to you the 2015 Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water.

We want you to understand the efforts we make to continually improve and protect our water resources. We are committed to ensuring the quality of your water. Our water comes from several sources; the Wanapum and Grande Ronde aquifers, the Paleo Channel, wells and an intertie with the City of Spokane. Well #1(SO8) and Well #4 (SO8) are located east of Lawson and north of McFarlane. Well #8(S10) is located east of Garfield and north of 21st Avenue. We also now have Well #9(S11), a water source at Lundstrom Street and 21st Avenue. Parkwest Well (SO9) is located on Craig Road, but this well is only used in an emergency. All of our wells are groundwater wells.

This report is provided to all our customers. It describes your drinking water quality for the period of January 1 - December 31, 2015. Your water purveyor is committed to supplying safe water that meets or surpasses state and federal standards and achieves the highest standards of customer service. This institution is an equal opportunity provider and employer.

Did you know that over 30% of water used by the average American household is devoted to outdoor water use, such as watering lawns and gardens? Also, more than 50% of residential irrigation water is lost due to evaporation, runoff, over watering or improper system design/installation/maintenance.

- Raise your lawn mower cutting height—longer grass blades help shade each other, reduce evaporation and inhibit weed growth.
- Adjust sprinklers so only your lawn is watered and not the house, sidewalk, or street.

Below are some tips on reducing outdoor water use to ensure a sustainable and reliable water source for the future:

Remember, efficiency is more than conservation, it is smart water management. *Know what you need, know what you use, use only what you need.*

- Don't over water your lawn. Lawns only need 1 inch of water per week.
- Water lawn or garden early in the morning during the coolest part of the day, to minimize evaporation.
- Check sprinkler systems and timing devices regularly to ensure they operate properly.



WATER CONSERVATION KITS

Do Your Part, Be Water Smart

Indoor and Outdoor Water Conservation kits are available at City Hall, at no cost to you.



Outdoor water saver kits: fix leaks at garden hose ends; reseal hose connections; use less water with 4 position nozzle; reduce lawn watering and include:

Indoor water saver kits: reduce flow from showers; reduce flow from faucets; use less water per toilet flush; detect toilet tank leaks and include:

- Multi-position garden hose nozzle
- Garden hose repair ends
- Outdoor watering gauge
- Garden hose nozzle seal
- Screen washer

- Water saver showerhead
- Water faucet aerator
- Toilet tank bank
- Leak detection tablets

Last year we distributed several hundred kits to our residents. Here is the coupon for your free kit!

COUPON

Good for one

FREE

Indoor or
Outdoor

Conservation Kit

While Supplies Last

Present this coupon
at City Hall

1208 S Lundstrom

2015 TEST RESULTS CITY OF AIRWAY HEIGHTS

2015 TEST RESULTS

Microbiological Contaminants

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (8 samples per month)	N	ND	n/a	0	(Systems that collect 40 or more samples per month) 5% of monthly samples are positive; (Systems that collect fewer than 40 samples per month) 1 positive monthly sample	Naturally present in the environment
Fecal Coliform and <i>E. coli</i>	N	ND	n/a	0	A routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	Human and animal fecal waste
Turbidity Area S10	N	ND	n/a	n/a	TT	Soil runoff

2015 TEST RESULTS

Inorganic Contaminants

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Arsenic S08	N	0.0021	mg/L	n/a	.01	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Arsenic S11	N	0.00115	mg/L	n/a	.01	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium S08	N	.0423	mg/L	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Barium S11	N	0.0513	mg/L	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride S11	N	0.144	mg/L	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen) SO8	N	3.63	mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate (as Nitrogen) SO11	N	3.03	mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate (as Nitrogen) SO10	N	ND	mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Chloride S08	N	8.28	mg/L	n/a	250	Erosion of natural deposits
Chloride S11	N	22.4	mg/L	n/a	250	Erosion of natural deposits
Sulfate S08	N	8.44	mg/L	n/a	250	Erosion of natural deposits
Sulfate S11	N	10.0	mg/L	n/a	250	Erosion of natural deposits
Zinc S08	N	.0411	mg/L	n/a	5	Erosion of natural deposits
Zinc S11	N	ND	mg/L	n/a	5	Erosion of natural deposits

Contaminant	Units	Date Sampled	90 th Percentile (d)	Number of Sites exceeding AL	Number Positive Samples	Number of Samples	MCL	MCLG	MAJOR SOURCES
Copper (c)	mg/L	Aug-13	<0.2	0	20	20	TT, AL= 1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching
Lead (c)	µg/L	Aug-13	<0.002	0	20	20	TT, AL = 15	0	Corrosion of household plumbing systems; Erosion of natural deposits

TREATMENT TECHNIQUE (TT): A required process intended to reduce the level of a contaminant in drinking water.

VARIANCES & EXEMPTIONS (V&E): State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Microbiological Contaminants:

TOTAL COLIFORM: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. If coliforms are found in more samples than allowed, this is a warning of potential problems.

FECAL COLIFORMS/E COLI: Fecal coliforms and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches or other symptoms. They may pose a special health risk for infants, young children and people with severely compromised immune systems.

TURBIDITY: Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea.

Inorganic Contaminants:

NITRATE: Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

COPPER: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

LEAD: Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight defects in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

As you can see from the items listed in the Test Results table, our system had no violations. We are proud that your drinking water meets or exceeds all Federal and State requirements.

We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

To help you better understand the terms in this report, we provide the following definitions:

ACTION LEVEL (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

MAXIMUM CONTAMINANT LEVEL (MCL): The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment/technology.

MAXIMUM CONTAMINANT LEVEL GOAL (MCLG): The "Goal" (MCLG) is 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.

NON-DETECTS (ND): Laboratory analysis indicates that the constituent is not present.

PARTS PER MILLION (PPM) OR MILLIGRAMS PER LITER (MG/L): One part per million corresponds to one minute in two years, or a single penny in \$10,000.

PARTS PER BILLION (PPB) OR MICROGRAMS PER LITER: One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

PICOCURIES PER LITER (PCI/L): Picocuries per liter is a measure of the radioactivity in water.

SPOKANE WATER SOURCE

Note: This report provides a summary of the drinking water monitoring conducted during 2015 as well as a comprehensive overview of past monitoring. A complete copy of the City of Spokane's Water Quality Report can be found on our website, www.cawh.org

The City of Spokane's water is of very high quality. Many different tests are conducted at varying intervals to confirm that the City's drinking water meets Washington State and federal EPA drinking water quality standards. The City's drinking water supply, to date, has consistently met all state and federal standards. This report is meant to provide consumers and other interested parties with insight into what analytical tests have been conducted and, in some cases, substances that have been detected. The state and federal Maximum Contaminant Level (MCL) information is provided as a risk benchmark.

This report also summarizes the amount of water the City used in 2015, and documents some indicators to show the progress being made to meet conservation goals adopted by the City in its Water Stewardship Strategic Plan.

The final pages (appendices) of this report summarize the most recent analytical testing. Appendix II has a comprehensive list of substances tested in City water. Appendix III summarizes the testing completed during 2011 to 2015. Appendix IV through XI summarizes the analytical results for recent and historical testing. The following narrative and attachments summarize and explain recent results in more detail.

Appendix XIII and the last two pages of this narrative (General Information) contain information relevant to the annual Consumer Confidence Report. As such, the information may be redundant, relative to the main text of this report.

All of the City of Spokane's drinking water comes from the Spokane Valley-Rathdrum Prairie Aquifer - designated a sole source aquifer in 1978. The Spokane Valley-Rathdrum Prairie Aquifer slowly flows through two different states and a number of different counties and is the source water for a large number of water purveyors, including the City of Spokane. This water and any contaminants freely move across political boundaries. Many groups and/or private individuals may claim this water to be used for diverse purposes. Some of these competing interests include (but are not limited to) drinking water rights, irrigation, fisheries, hydroelectric power, and industrial processes. The Spokane Aquifer (that portion of the larger aquifer lying within Washington State) and the Spokane River exchange water. While the aquifer contains a large volume of water, many factors play into the volume of water in the Spokane River, complicating the management of these resources. Some of these factors include pumping for irrigation and potable water, hydroelectric dam operations, and the variations of weather and precipitation. The rates and locations of exchange between the aquifer and the Spokane River have been re-examined as part of the Bi-State Aquifer Study. In January 2008, the states of

Washington and Idaho announced signing a Memorandum of Agreement (www.idwr.idaho.gov/WaterInformation/projects/svrp/PDFs/svrp_MOA_10-26-07.pdf) concerning the "coordination involving the maintenance and improvement of the technical tools developed in a bi-state water study."

Discussions to agree on how to utilize these technical tools to manage this valuable resource will continue. The results of these studies and agreements will give the City information it needs to continue to supply high-quality water to the citizens of Spokane.

Due to the porous nature of the ground surface and the number of potential contaminant sources, the possibility of contaminating the aquifer exists if good housekeeping measures are not followed for all activity over and adjacent to the aquifer. The physical and economic health of our area depends on the quality of our drinking water. In order to safeguard water quality, the City continues its



efforts to make available to the community information about, and appropriate disposal mechanisms for, dangerous wastes that are generated in the Aquifer Sensitive Area. The City, in cooperation with other local governments and the Spokane Aquifer Joint Board, continues to work toward strengthening regulations for the storage and use of critical materials to safeguard the local water supply.

For additional information regarding the City of Spokane's drinking water or related issues:

City of Spokane Water Department
(509) 625-7800 | www.spokanewater.org

City of Spokane - Environmental Programs
(509) 625-6570 | www.greenspokane.org

Spokane County - Water Resources
(509) 477-3604 | www.spokanecounty.org/wqmp

Spokane Regional Health District - Environmental Health Div.
(509) 324-1560
www.srhhd.org/services/environment.asp

Washington State Department of Health - Eastern Regional Office (Drinking Water)
(509) 329-2100
www.doh.wa.gov/YouandYourFamily/HealthyHome/DrinkingWater

Washington State Department of Ecology - Eastern Regional Office
(509) 329-3400 | www.ecy.wa.gov

U.S. EPA Safe Drinking Water
(800) 426-4791 | www.epa.gov/your-drinking-water

CONTAMINANTS FOUND IN DRINKING WATER TESTING IN 2015 CITY OF SPOKANE, WATER & HYDROELECTRIC SERVICES									
Data presented, if not from 2015, is from the most recent testing done in accordance with the regulations.									
SOURCE WATER TESTING CONTAMINANT	Units	Highest Average	Detected Maximum	Detected min.	Number Positive Samples	Number of Samples	MCL	MCLG	MAJOR SOURCES
Arsenic	µg/L	(n)	4.4	2.5	3	3	10	0	Errosion of natural deposits; Runoff from landfills; Runoff from glass and electronic production wastes
Nitrate	mg/L	(n)	3.23	0.68	10	10	10	10	Runoff from fertilizer use; Leaching from septic tanks; seepage; Errosion of natural deposits
Gross Alpha	pCi/L	(n)	1.5	<1.0	1	2	15	0	Errosion of natural deposits
Combined Radium 226 and 228 (R)	pCi/L	(n)	1.5	<0.5	1	2	5	0	Errosion of natural deposits
Chromium	µg/L	(n)	1.3	0.238	10	13	100	100	Discharge from steel and pulp mills; erosion of natural deposits.
DISTRIBUTION SYSTEM TESTING									
CONTAMINANT	Units	LRAA	Detected Maximum	Detected min.	Number Positive Samples	Number of Samples	MCL	MCLG	MAJOR SOURCES
Trichloroethylene (TCE) - TTHMs (Total Trihalomethanes)	µg/L	3.94	5.02	2.06	6	8	30	0	By-product of urban water chlorination
Chromium	µg/L	(n)	0.296	0.208	5	6	100	100	Discharge from steel and pulp mills; erosion of natural deposits.
CONTAMINANT	Highest Percent Detected	Sample Date	Violation	MCL	MCLG				
Total Coliform Bacteria	0.6%	no detection on July 6, 2015	No	5% of monthly samples are positive	0	Naturally present in the environment and are used as an indicator; that other, potentially harmful, bacteria may be present			
CONTAMINANT	Units	99th Percentile (d)	Number of Sites exceeding AT	Number Positive Samples	Number of Samples	MCL	MCLG		
Copper (c)	mg/L	Aug-15	0.06	0	58	58	TT, AL= 1.3	1.3	Corrosion of household plumbing systems; Errosion of natural deposits; Leaching from road paving material
Lead (c)	µg/L	Aug-15	5.00	0	57	58	TT, AL= 15	0	Corrosion of household plumbing systems; Errosion of natural deposits
<p>Notes</p> <p>(a) Compliance with MCL is determined by single sample results, so no average is used.</p> <p>(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</p> <p>(c) Finest sampler runs from 1st risk houses (those with lead service lines) and those with copper pipes with lead solder joints).</p> <p>(d) 90% of at-risk homes had this concentration, or less, of lead pipe.</p>									
<p>Key to Table</p> <p>AL = Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.</p> <p>LRAA = Locational Running Annual Average</p> <p>MCL = Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology.</p> <p>MCLG = Maximum Contaminant Level Goal - 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.</p> <p>pCi/L = picocuries per liter (a measure of radioactivity)</p> <p>µg/L = micrograms per liter = parts per billion</p> <p>mg/L = milligrams per liter = parts per million</p> <p>TT = Treatment Technique = A required process intended to reduce the level of a contaminant in drinking water.</p> <p>ND = None Detected</p> <p>NA = Not Applicable</p> <p>c = less than</p>									



1208 S Lundstrom Street
Airway Heights, WA 99001
Phone: (509) 244-5578
Fax: (509) 244-3413
www.cawh.org

City of Airway Heights Municipal Code
13.04.181 Restrictions on Irrigation

Irrigation shall be prohibited between the hours of 10:00 a.m. and 6:00 p.m. during the months of June, July, August and September.

Please call our office at (509) 244-5429 if you have questions.

We work around the clock to provide top quality water to every tap. We ask that all of our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Our **Water**.
Our **Future**.
Our **Priority**.

2015 ANNUAL WATER QUALITY REPORT

WATER ... EVERY DROP COUNTS

Did you know that an average American home can waste more than 10,000 gallons of water every year due to running toilets, dripping faucets and other household leaks?

Nationwide, more than 1 trillion gallons of water leak from U.S. homes each year. That's why the City of Airway Heights reminds you to check your plumbing fixtures and irrigation systems every year to reduce the potential losses.

If you feel your usage appears higher than normal, we provide data logging services for water meter usage, as well as leak detection services. Please call City Hall at (509) 244-5578 to request these services.



Date Submitted: 5/16/2016

Water Use Efficiency Annual Performance Report - 2015

WS Name: AIRWAY HEIGHTS, CITY OF Water System ID#: 00650 WS County: SPOKANE

Report submitted by: Justin VanDyke

Meter Installation Information:

Estimate the percentage of metered connections: 100%
If not fully metered - Current status of meter installation:

Production, Authorized Consumption, and Distribution System Leakage Information:

12-Month WUE Reporting Period: 01/01/2015 To 12/31/2015
Incomplete or missing data for the year? No
If yes, explain:

Distribution System Leakage Summary:

Total Water Produced and Purchased (TP) - Annual Volume	537,942,000 gallons
Authorized Consumption (AC) - Annual Volume	487,586,400 gallons
Distribution System Leakage - Annual Volume TP - AC	50,355,600 gallons
Distribution System Leakage - Percent DSL = [(TP - AC) / TP] x 100	9.4 %
3-year annual average	8.4 %

Goal-Setting Information:

Date of Most Recent Public Forum: 04/18/2016 Has goal been changed since last performance report? Yes
Note: Customer goal must be re-established every 6 years through a public process

WUE Goals:

Customer Goal (Demand Side):
Reduce seasonal outdoor potable water use by 5% by 2021.

Describe Progress in Reaching Goals:

Customer (Demand Side) Goal Progress:

Established new 6-year goals this year and will begin working towards meeting this goal through the following: By 2018, transfer the irrigation systems at Traditions, Cleveland, and Aspen parks off of the City's potable water system by connecting them to the City's reclaimed water system. By 2020, obtain participation from large commercial and institutional users such as Spokans Rock and Department of Corrections to connect to reclaimed water for non-potable uses.

Additional Information Regarding Supply and Demand Side WUE Efforts

Include any other information that describes how you and your customers use water efficiently:
In conjunction to transferring large commercial, institutional, and municipality users off of the City's potable water and onto the reclaimed water system, our ongoing efforts to conserve water are as follows:

Encourage bulk tanker trucks to use reclaimed water for seasonal dust control through a reclaimed water fill station as opposed to using potable sources. Install another reclaimed water fill station on the north side of town to attract more customers during seasonal dust control, and construction efforts. Continue to provide leak detection services and consumption investigation to all customers. Implement and enforce irrigation restrictions citywide during drought conditions. Educate customers on irrigation conservation practices. Provide water conservation kits to customers interested in conserving water at no additional charge.

Do not mail, fax, or email this report to DOH