Appendix J. Water Quality Reports from 2012 to 2016

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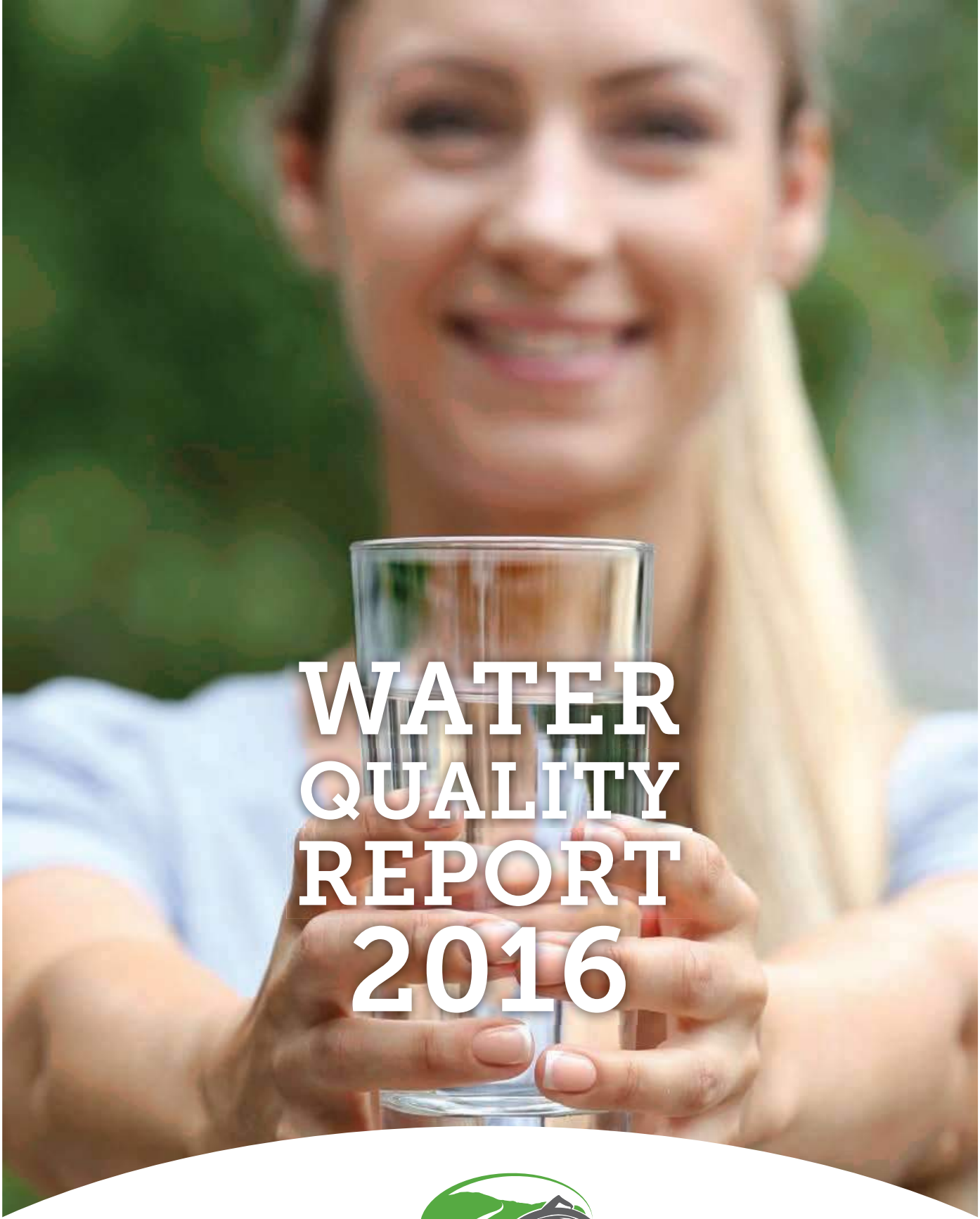


WATER QUALITY REPORT 2016

CITY OF
ISSAQUAH
WASHINGTON

Issaquah's Commitment: Safe Drinking Water

Each year, we publish a water-quality report to educate you — our valued customers — about where your water comes from, how it's delivered and how to conserve it.

Our top priority is simple: Providing you the highest-quality water possible.

Once again, as you'll see in this report, we have met all water quality requirements.

Meanwhile, our dedication to conservation will help ensure our region's water remains safe, clean and reliable for generations to come.

Questions? Please Ask!

If you have any questions, please call us at 425-837-3470, visit issaquahwa.gov/water or connect with us via social media.

Would you like to get involved? Share your opinions on the City's drinking water! The Issaquah City Council meets at 7 p.m. the first and third Monday of each month at City Hall South, 135 E. Sunset Way.

The Council Infrastructure Committee also meets at 6:30 p.m. the third Thursday of each month in the Council Chambers, 135 E. Sunset Way.

City Starts Well 4 Water Filtration

Issaquah is now pumping from Well 4, thanks to a new filtration system that removes perfluorochemicals, or PFCs, from the water before it enters the City's distribution system.

Monthly test results show the system is working – there are no detections of PFCs from Well 4.

Issaquah participates in the Environmental Protection Agency's (EPA) unregulated monitoring program by performing additional tests on our drinking water.

During that testing, detections of PFCs were found in Well 4, the City's smallest well. In the winter of 2016, the City stopped running Well 4 until the filtration system was installed and tested.

Issaquah meets all standards set for safe drinking water.

Based on the latest science, the EPA recently released drinking water health advisories (which are not enforceable or regulated) on two PFCs, called PFOA and PFOS. Issaquah meets these advisories.

Meanwhile, more stringent testing has been conducted – even below levels defined by EPA as an actual detection – to better understand the potential sources of PFCs. All of Issaquah's wells have tested below EPA's detection threshold for PFCs.

Learn more at issaquahwa.gov/PFCs.

Resource-Efficient Water Management

Water conservation protects our local and regional streams, and helps Issaquah use our infrastructure wisely. As warmer, drier summers become more frequent, it is even more important to conserve.

Water use is tracked as a Sustainable City Indicator to help gauge progress toward our long-term goals. Together with the community, the City works to reduce the amount of water used in Issaquah.

In 2016, the City focused on reducing peak-season demand from commercial irrigation. Customers received reminders to adjust their irrigation settings, and they heard more about best practices to use water efficiently, while also saving money.

In addition, the City helps to reduce water leakage with investments in water mains, reservoirs and other infrastructure. Ongoing operational improvements, meter testing, and other programs continue to keep this figure below the state-required 10 percent.

2016 Water Production and System Leakage

Water production and purchases	871.59 million gallons
Authorized consumption	808.42 million gallons
Distribution system leakage	63.17 million gallons
2016 leakage	7.25%
3-year average	8.15%

The City is a member of the Cascade Water Alliance, and has adopted regional water use efficiency goals. The following regional goal was adopted for 2014 – 2019: Cascade will dedicate resources necessary to achieve a cumulative drinking water savings of 0.6 million gallons per day on an annual basis and 1 million gallons per day on a peak season (June – September) basis by 2020.

Both the City and Cascade provide water efficiency programs and services for water customers in Issaquah and in the region. In 2016, Cascade programs and services resulted in approximately 20,000 direct customer interactions promoting water efficiency and a savings of an estimated 257,728 gallons of water per day, or 43% of Cascade's 2014-19 goal.

For more information about the water conservation programs, go to issaquahwa.gov/sustainability or call 425-837-3400.

Where Does Our Water Come From?

In 2016, the City of Issaquah provided 871 million gallons of high-quality drinking water to about 29,900 customers through more than 12,800 water connections. Most of Issaquah's water is produced from four groundwater wells, which range in depth from 100 to 400 feet. Chlorine is added at the well sites to disinfect the drinking water, which is then conveyed through 112 miles of water main and 13 water booster stations before it's stored in one of 21 reservoirs, which hold a total of 12 million gallons.

Along with well water, Issaquah also purchases regional water from Cascade Water Alliance (CWA). Talus and South Cove-area residents currently receive this regional water, while Issaquah Highlands receives a blend of regional and well water. CWA also includes the cities of Bellevue, Kirkland, Redmond and Tukwila, as well as the Sammamish Plateau and Skyway water and sewer districts.

The alliance currently gets its water from the City of Seattle water system, which sources from the Tolt and Cedar river watersheds.

With the exception of Issaquah Highlands, the City's well water and CWA water are not mixed, as the distribution systems are separated. Water purchased from the CWA is fluoridated, while Issaquah well water is not.

Several years ago, CWA also purchased Lake Tapps in eastern Pierce County as the region's newest water supply in decades. As a result of customers' wise use of water, responsible plumbing codes and water-efficient appliances, CWA will have enough water for the future and likely won't develop Lake Tapps until it is needed. Planning for water takes time. That's why we are planning now for that future!

HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791 or water.epa.gov/drink/hotline.

SUBSTANCES THAT COULD BE IN WATER

In order to ensure that tap water is safe to drink, the U.S. EPA and/or the Washington state board of health prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The 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 the land or through the ground, it dissolves naturally occurring minerals, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria (which may come from sewage treatment plants); septic systems; agricultural livestock operations; or wildlife.
- Inorganic contaminants, such as salts and metals (which can be naturally occurring or may result from urban stormwater runoff), industrial or domestic wastewater discharges; oil and gas production; mining; or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture; urban stormwater runoff; and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals (which are by-products of industrial processes and petroleum production), and may also come from gas stations; urban stormwater runoff; and septic systems.
- Radioactive contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at 800-426-4791.

CRYPTOSPORIDIUM

Cryptosporidium is a microbial parasite found in surface water throughout the United States. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Symptoms of infection include nausea, diarrhea and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immune-compromised people are at greater risk of developing life-threatening illness. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Since the Lower Issaquah Valley Aquifer is a groundwater source, it is not required to be tested for cryptosporidium. The CWA water sources (the Cedar and Tolt supplies), were tested for cryptosporidium in 2016 with no detections from the Tolt supply (12 samples). It was detected in 2 of 12 samples from the Cedar supply. This monitoring is not required for the wells. Ozone disinfection, which is used at the Cedar and Tolt treatment plants, is very effective at destroying cryptosporidium and other microbes. The U.S. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791 or water.epa.gov/drink/hotline.

LEAD IN HOME PLUMBING

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. Issaquah 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 two 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 epa.gov/safewater/lead.

HELP KEEP OUR WATER SAFE

If you have a water connection to an irrigation or fire sprinkler system, boiler, pool/spa, water feature or photo development equipment, state law requires that you install a backflow prevention assembly and have it tested annually.

A backflow prevention assembly will prevent contaminated water from flowing back into your drinking water or into the City's water system. Most residences and businesses with backflow prevention assemblies are registered with the City of Issaquah.

If you haven't been testing your backflow assembly, call 425-837-3470 for assistance in finding a tester to help protect the water you drink. Please also call us if you know of a potential threat to our drinking water.

ARSENIC IN WATER

While your drinking water meets U.S. EPA's standard for arsenic, it does contain low levels of arsenic. U.S. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. U.S. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Water Quality Results 2016 (PWSID#: 363505)

During the past year, we have taken hundreds of water samples in order to determine the presence of any herbicides, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state requires us to monitor for certain

Finished Water				Lower Issaquah Valley Aquifer (Wells 1,2,4,5-Talus-Issaquah Highlands)		CWA-Cedar Supply (Montreux, Lakemont, Issaquah Highlands, Talus)	
Substance	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Range Low-High	Average Amount Detected	Range Low-High	Average Amount Detected
Arsenic (ppb)	2016	10	0	2 to 9	4	0.4 to 0.6	0.5
Barium (ppb)	2016	2000	2000	3 to 13	6	1.5 to 1.8	1.6
Bromate ^ (ppb)	2016	10	0	NA	NA	ND	ND
Chloride (ppm)	2016	250	NA	3.8 to 5.73	4.6	NA	NA
Chlorine (ppm)	2016	[4]	[4]	0.03 to 1.35	0.44	0.02 to 1.61	0.68
Chromium (ppb)	2016	100	100	NA	NA	0.25 to 0.33	0.27
Color (Color Units)	2016	15	NA	5 to 6	5.75	NA	NA
Copper (ppm)	2016	1.3	1.3	ND to .005	0.001	NA	NA
Electrical Conductivity (µS/cm)	2016	700	NA	158 to 293	215	NA	NA
Hardness as Calcium Carbonate (ppm)	2016	NA	NA	52.6 to 100.2	74	NA	NA
Fluoride (ppm)	2016	4	4	NA	NA	0.6 to 0.9	0.7
Halaocetic Acids [HAA]- Stage 2 (ppb)	2016	60	NA	NA	NA	17.5 to 56.6	36.9
Manganese (ppm)	2016	0.05	NA	ND to 0.062	0.02	NA	NA
Nitrate-N (ppm)	2016	10	10	ND to .54	0.32	(one sample)	0.02
Sodium (ppm)	2016	NA	NA	8.1 to 23.3	12.25	NA	NA
Sulfate (ppm)	2016	250	NA	6 to 30	12.9	NA	NA
Total Trihalomethanes [TTHMs]- Stage 2 (ppb)	2016	80	NA	NA	NA	30.7 to 51.5	47.4
Turbidity (NTU)	2016	TT	NA	ND to 0.16	0.04	0.2 to 2.3	0.3

^ Note from Seattle Public Utilities - We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During June 2016, we did not collect the monthly sample for bromate for the Tolt supply, and therefore cannot be sure of the quality of your

Raw Water				Lower Issaquah Valley Aquifer (Wells 1,2,4,5-Talus-Issaquah Highlands)		CWA-Cedar Supply (Montreux, Lakemont, Issaquah Highlands, Talus)	
Total Organic Carbon (ppm)	2016	NA	NA	NA	NA	0.3 to 2.1	0.8
Cryptosporidium (#/100L)	2016	NA	NA	NA	NA	ND to 2	0.3

Lead and Copper	Year Sampled	AL	MCLG	Amount Detected 90th Percentile	Sites above AL/Total sites	Violation	Typical Source
Copper (ppm)	2015	1.3	1.3	0.364	0/51	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2015	15	0	0.001	0/51	No	

substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent data are included, along with the year in which the sample was taken.

CWA-Tolt Supply: (Montreux,Lakemont, Issaquah Highlands, Talus)			
Range Low-High	Average Amount Detected	Violation	Typical Source
0.4 to 0.6	0.5	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics waste
1.0 to 1.6	1.3	No	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
ND to 1	0.1	No	By-product of drinking water disinfection
NA	NA	No	Erosion of natural deposits
0.02 to 1.61	0.68	No	Water additive used to control microbes
ND to 0.24	0.2	No	Erosion of natural deposits
NA	NA	No	Erosion of natural deposits
NA	NA	No	Corrosion of household plumbing systems; Erosion of natural deposits.
NA	NA	No	Erosion of natural deposits
NA	NA	No	Erosion of natural deposits
0.6 to 0.9	0.7	No	Water additive, which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
17.5 to 56.6	36.9	No	By-product of drinking water chlorination
NA	NA	No	Erosion of natural deposits
(one sample)	0.09	No	Runoff from Fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
NA	NA	No	Erosion of natural deposits
NA	NA	No	Erosion of natural deposits
30.7 to 51.5	47.4	No	By-product of drinking water chlorination
0.01 to 0.2	0.07	No	Soil runoff

drinking water during that time. Based on historical data, most bromate results for the Tolt supply are non-detect.

CWA-Tolt Supply: (Montreux, Lakemont, Issaquah Highlands, Talus)			
1.2 to 1.7	1.4	No	Naturally present in the environment
ND	ND	No	Naturally present in the environment

Definitions

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

MCL: Maximum Contaminant Level - 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.

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.

MRDL: Maximum Residual Disinfectant Level - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG: Maximum Residual Disinfectant Level Goal - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not Applicable

ND: Not Detected - Indicates that the substance was not found by laboratory analysis.

NTU: Nephelometric Turbidity Unit - Turbidity is a measure of how clear the water looks. The turbidity MCL that applied to the Cedar supply in 2015 is 5 NTU, and for the Tolt it was 0.3 NTU for at least 95% of the samples in a month. 99.96% of the samples from the Tolt in December 2015 were below 0.3 NTU. 100% of the samples for the remainder of the year were below 0.3 NTU.

pCi/L: Picocuries per liter

ppb: 1 part per billion = 1 ug/L = 1 microgram per liter

ppm: 1 part per million = 1 mg/L = 1 milligram per liter

1 ppm: 1000 ppb

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

Be Water Smart!

Play a role in using water wisely, and you can save money at the same time! Here are a few simple tips that conserve a lot of water:

Take a five minute shower! Every time you shave minutes off your use of hot water, you also save energy and keep dollars in your pocket.

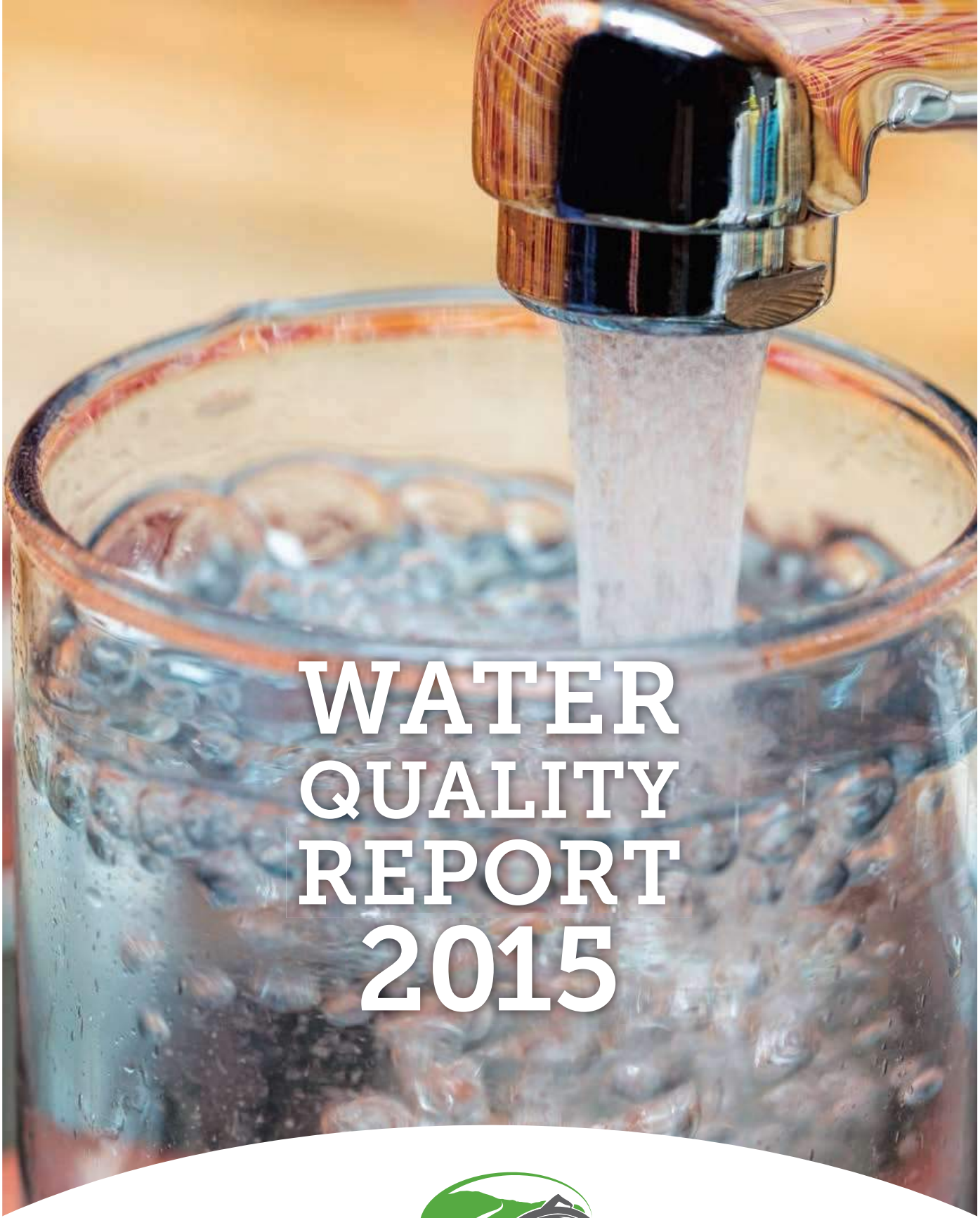
Adjust settings for your clothes washer. Nearly 22% of indoor home water use comes from doing laundry. Save water by making sure to adjust the settings on your machine to the proper load size.

Pay attention to outdoor water use. Water your lawn in the early morning or evening to reduce evaporation and avoid big water bills. Or consider allowing your lawn to go dormant for the summer, it will come back in the fall.

Turn off the tap! This is an easy way to save water when brushing your teeth, shaving or washing dishes.

Shop for WaterSense labeled faucets, toilets and showerheads – they've been tested to reduce water use and provide exceptional performance.

Contact the Office of Sustainability if you have questions or to order a free shower timer. Learn more at issaquahwa.gov/sustainability.



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The Council Infrastructure Committee also meets at 5:30 p.m. the third Thursday of each month in the Pickering Room of City Hall Northwest, 1175 12th Ave. N.W.

Update: PFCs in Well Water

Issaquah participates in the Environmental Protection Agency's (EPA) unregulated monitoring program by performing additional tests on our drinking water. During that testing, detections of "perfluorochemicals," or PFCs, were found in the smallest of Issaquah's four wells, called Well 4.

Issaquah meets all standards set for safe drinking water. Based on the latest science, the EPA recently released drinking water health advisories (which are not enforceable or regulated) on two PFCs, called PFOA and PFOS. Issaquah meets these advisories. In the winter of 2016, the City stopped running Well 4, and recently installed a filtration system that will be used to remove PFCs from Well 4's water starting this summer.

In addition, Issaquah's other wells have tested below EPA's detection threshold for PFCs. These chemicals can have an impact on the development of fetuses and breastfed or formula-fed infants. If you are concerned about potential health effects from exposure to PFCs, contact your doctor or health care professional. For more information, go to issaquahwa.gov/waterquality.

PFC Test Results

Substance (units of measurement)	At Well 4 (2013)	At Well 4 (2014)[1]	At Well 4 (2015)	At the Tap Maximum Level (Nov. 2015)	At the Tap Maximum Level (Feb. 2016)[2]	EPA Provisional Health Advisory (issued 2009)	At the Tap Maximum Level (May 2016)[3]	EPA Lifetime Health Advisory (issued May 2016)
PFBS (ppb)	ND	ND	0.0695	ND	ND	None	ND	None
PFHpA (ppb)	0.0258	0.0234	0.0207	0.00531	ND	None	ND	None
PFHxS (ppb)	0.241	0.201	0.194	0.0473	0.0375	None	ND	None
PFNA (ppb)	0.0280	0.0266	0.0221	ND	ND	None	ND	None
PFOA (ppb)	0.0215	0.0200	0.0181	ND	ND	0.4	ND	0.07 (combined PFOA and PFOS levels)
PFOS (ppb)	0.600	0.514	0.472	0.106	0.0772	0.2	ND	0.07 (combined PFOA and PFOS levels)

Notes: ND — Not detected. For the test results taken "At Well 4," this water was then blended with at least one other well before it was distributed. (1) After publication of its 2014 Water Quality Report, the City of Issaquah received the following corrected information from the testing lab. (2) This test was conducted after the City reduced the amount of water pumped from Well 4. (3) This test was conducted after the City stopped pumping from Well 4 in the winter of 2016.

Resource-Efficient Water Management

Water conservation protects our local and regional streams, and helps Issaquah use our infrastructure wisely. For decades, the City has worked with the community to help ensure efficient use of water. Total water use has declined significantly during the last decade, thanks to changes in land-use patterns, increased efficiency and your efforts to use water wisely. Thank you! The City also supports water-efficient homes and commercial buildings, and provides rate incentives for lower water use. In addition, Issaquah reduces water leakage with investments in water mains, reservoirs and other infrastructure. For more information, visit issaquahwa.gov/sustainability or call 425-837-3400.

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If you haven't been testing your backflow assembly, call 425-837-3470 for assistance in finding a tester to help protect the water you drink. Please also call us if you know of a potential threat to our drinking water.

ARSENIC IN WATER

While your drinking water meets U.S. EPA's standard for arsenic, it does contain low levels of arsenic. U.S. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. U.S. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Water Quality Results 2015 (PWSID#: 363505)

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state requires us to monitor for certain

REGULATED SUBSTANCES

Finished Water

Substance	Year sampled	MCL [MRDL]	MCLG [MRDLG]	Lower Issaquah Valley Aquifer-(Wells 1,2,4,5-Talus-Issaquah Highlands) Amount Detected	Lower Issaquah Valley Aquifer-(Wells 1,2,4,5-Talus-Issaquah Highlands) Range Low-High	CWA-Cedar Supply (Montreux, Lakemont, Issaquah Highlands, Talus) Amount Detected	CWA-Cedar Supply (Montreux, Lakemont, Issaquah Highlands, Talus) Range Low-High
Arsenic (ppb)	2015	10	0	9 [1]	One sample [1]	0.5	0.4 - 0.7
Barium (ppb)	2015	2000	2000	NA	NA	1.6	One sample
Bromate (ppb)	2015	10	0	NA	NA	ND	ND
Chlorine (ppm)	2015	[4]	[4]	0.44	0.03 - 1.30	0.69	0.01 - 1.69
Chromium (ppb)	2015	100	100	NA	NA	0.27	0.25 - 0.33
Fluoride (ppm)	2015	4	4	0.8 [2]	0.6 - 1.0 [2]	0.8	0.7 - 0.9
Haloacetic Acids [HAA] (ppb)	2015	60	NA	NA	NA	31.43	12 - 39.9
Manganese [3] (ppm)	2015	0.05 [1]	NA	0.079	One sample	NA	NA
Nitrate-N (ppm)	2015	10	10	0.31	ND -0.49	0.01	One sample
Radium 228 (pCi/L)	2015	5	NA	0.22	ND - 1.10	NA	NA
Selenium (ppb)	2015	50	50	NA	NA	ND	ND
Total Trihalomethanes [TTHMs] (ppb)	2015	80	NA	NA	NA	56.1	33.5 - 67.2
Turbidity [4] (NTU)	2015	TT	NA	NA	NA	0.4	.1 - 1.2
Uranium (ppb)	2015	30	0	NA	NA	ND	ND

Footnote 1 Sampled one well that historically has these substances. This well water is then blended with other water to further dilute it (a Washington State Department of Health-recommended practice). **Footnote 2** Talus Urban Village and the Issaquah Highlands areas only. **Footnote 3** Manganese is a secondary standard. Secondary standards are standards based on factors other than health effects. **Footnote 4** Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of water quality and the effectiveness of disinfectants. ^On December 29, 2015, turbidity for the Tolt supply exceeded 1.0 NTU for about 17 minutes. Turbidity has no health effects, however, it can interfere with disinfection and provide a medium of 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, cramps, diarrhea, and associated headaches. Customers did not need to take any action at the time, as Issaquah was not using any water from Seattle during this time.

Raw Water

Substance	Year sampled	MCL [MRDL]	MCLG [MRDLG]	Lower Issaquah Valley Aquifer-(Wells 1,2,4,5-Talus-Issaquah Highlands) Amount Detected	Lower Issaquah Valley Aquifer-(Wells 1,2,4,5-Talus-Issaquah Highlands) Range Low-High	CWA-Cedar Supply (Montreux, Lakemont, Issaquah Highlands, Talus) Amount Detected	CWA-Cedar Supply (Montreux, Lakemont, Issaquah Highlands, Talus) Range Low-High
Total Organic Carbon (ppm)	2015	TT	NA	NA	NA	0.7	0.5 -1.5
Cryptosporidium (#/100L)	2015	NA	NA	NA	NA	1	ND - 8

Lead and Copper	Year sampled	AL	MCLG	Amount Detected 90th Percentile	Sites above AL/Total sites	Violation	Typical Source
Copper (ppm)	2015	1.3	1.3	0.364	0/51	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2015	15	0	0.001	0/51	No	

substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent data are included, along with the year in which the sample was taken.

CWA-Tolt Supply: (Montreux, Lakemont, Issaquah Highlands, Talus)		CWA-Levels in Seattle Well Water [5]			
Amount Detected	Range Low-High	Amount Detected	Range Low-High	Violation	Typical Source
0.6	0.4 - 0.7	3.9	1.7 -7.9	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics waste
1.3	One sample	3	2.2 - 4.6	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
0.4	ND - 2	NA	NA	No	By-product of drinking water disinfection
0.69	0.01 - 1.69	NA	NA	No	Water additive used to control microbes
0.2	ND - 0.24	0.7	0.3 - 1.3	No	Erosion of natural deposits
0.8	0.7 - 0.9	0.7	0.5 - 1.0	No	Water additive, which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
31.43	12 - 39.9	NA	NA	No	By-product of drinking water chlorination
NA	NA	NA	NA	No	Erosion of natural deposits
0.1	One sample	ND	ND	No	Runoff from Fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
NA	NA	NA	NA	No	Erosion of natural deposits
ND	ND	0.7	0.1 - 1.1	No	Erosion of natural deposits
56.1	33.5 - 67.2	NA	NA	No	By-product of drinking water chlorination
0.07	.04 to 1.4^	0.2	0.1 - 0.3	No	Soil runoff
ND	ND	0.4	ND - 0.7	No	Erosion of natural deposits

Your water was and continues to be safe to drink. **Footnote 5** Values presented represent 100% Seattle well water. All Seattle well water was blended with Cedar supply water before delivery to customers. The Seattle wells operated from July to November 2015.
Additional information for Seattle water quality data for non-regulated parameters, such as pH, alkalinity, hardness, and conductivity, are provided at: seattle.gov/util/MyServices/Water/Water_Quality/WaterQualityAnalyses/index.htm (once you get to this web page, click on 2015 2nd Quarter Analysis).

CWA-Tolt Supply: (Montreux, Lakemont, Issaquah Highlands, Talus)		CWA-Levels in Seattle Well Water		
Amount Detected	Range Low-High	Amount Detected	Range Low-High	Typical Source
1.5	1.2 - 1.8	NA	NA	Naturally present in the environment
ND	ND	NA	NA	Naturally present in the environment

Definitions

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

MCL: Maximum Contaminant Level - 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.

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.

MRDL: Maximum Residual Disinfectant Level - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG: Maximum Residual Disinfectant Level Goal - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not Applicable

ND: Not Detected - Indicates that the substance was not found by laboratory analysis.

NTU: Nephelometric Turbidity Unit - Turbidity is a measure of how clear the water looks. The turbidity MCL that applied to the Cedar supply in 2015 is 5 NTU, and for the Tolt it was 0.3 NTU for at least 95% of the samples in a month. 99.96% of the samples from the Tolt in December 2015 were below 0.3 NTU. 100% of the samples for the remainder of the year were below 0.3 NTU.

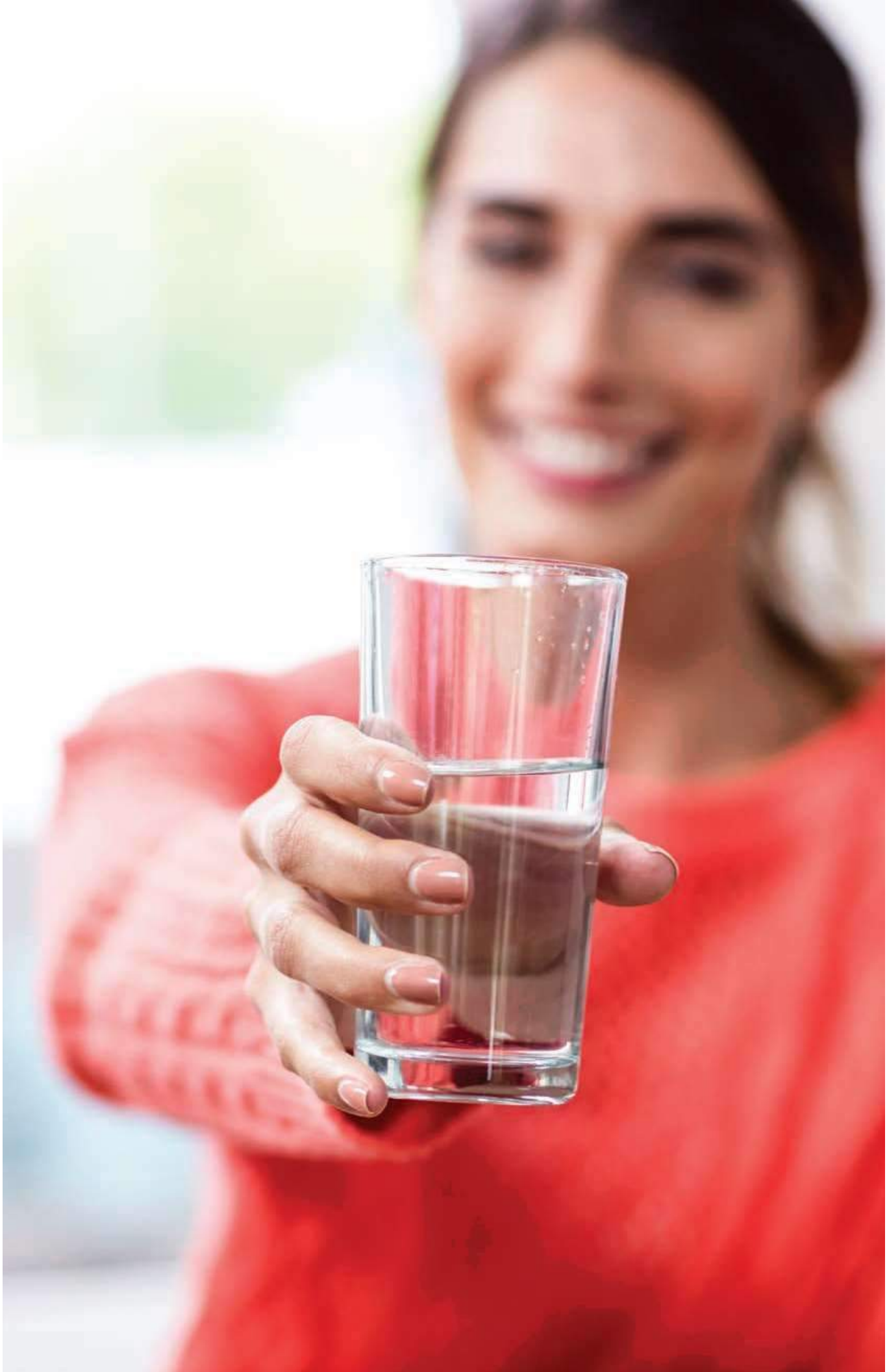
pCi/L: Picocuries per liter

ppb: 1 part per billion = 1 ug/L = 1 microgram per liter

ppm: 1 part per million = 1 mg/L = 1 milligram per liter

1 ppm: 1000 ppb

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



Be Water Smart!

Play a role in using water wisely, and you can save money at the same time! Here are a few simple tips that conserve a lot of water:

Take a five minute shower! Every time you shave minutes off your use of hot water, you also save energy and keep dollars in your pocket.

Adjust settings for your clothes washer. Nearly 22% of indoor home water use comes from doing laundry. Save water by making sure to adjust the settings on your machine to the proper load size.

Pay attention to outdoor water use. Water your lawn in the early morning or evening to reduce evaporation and avoid big water bills. Or consider allowing your lawn to go dormant for the summer, it will come back in the fall.

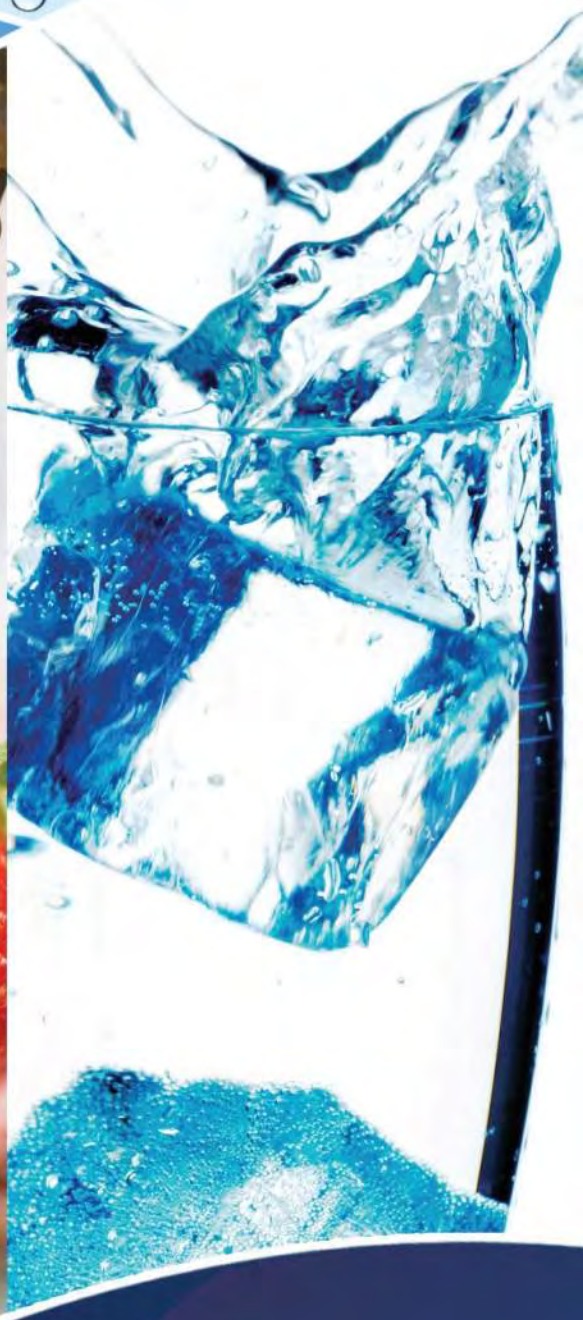
Turn off the tap! This is an easy way to save water when brushing your teeth, shaving or washing dishes.

Shop for WaterSense labeled faucets, toilets and showerheads – they've been tested to reduce water use and provide exceptional performance.

Contact the Office of Sustainability if you have questions or to order a free shower timer. Visit us online at: Issaquahwa.gov/sustainability.

ANNUAL WATER QUALITY REPORT

Water Testing
Performed
in 2014



Presented By

CITY OF
ISSAQUAH
WASHINGTON

PWS ID#: 363505

A Clean Report

By Mayor Fred Butler

Each year, we issue this water-quality report to educate you, our valued customers, about where your water comes from, how it's delivered and how to conserve it.

The City of Issaquah is committed to providing you the highest-quality water possible.

And once again, as you'll see in this report, we have met all safety guidelines and water quality requirements.

Meanwhile, our dedication to environmental sustainability will help ensure our region's water remains safe, clean, and reliable for generations to come.

If you have any questions about this report, please call us at 425-837-3470 or visit issaquahwa.gov/water.

Thank you.

Be Water Smart!

You play a role in using water wisely and can save money in the process. Be conscious of the amount of water your household uses and look for ways to avoid waste. Here are a few tips:

1. Turn off the tap! This is an easy way to save water when brushing your teeth, shaving, or washing dishes.
2. Wash only full loads. Dishwashers and most clothes washers use the same amount of water with every cycle.
3. Take a 5-minute shower! You'll find it's plenty of time: Try it and see! Get a free shower timer for you and your kids.
4. Check toilets for leaks every year. Put a few drops of food coloring in the tank and wait 10 minutes. If color shows in the bowl, you have a leak. Many leaks are silent and waste hundreds of gallons a day.
5. Pay attention to outdoor water use. Water your lawn in the early morning or evening to reduce evaporation and avoid big water bills. Use timers or irrigation controllers (but be sure to adjust weekly as plant needs change dramatically from spring to summer and fall).
6. Shop for WaterSense-labeled faucets, toilets, and shower heads; they've been tested to reduce water use and provide exceptional performance.

Contact the Office of Sustainability for a free shower timer. Visit us online at issaquahwa.gov/sustainability.

Community Participation

Would you like to get involved? Share your opinions on the City's drinking water! The Issaquah City Council meets at 7 p.m. the first and third Mondays of each month at City Hall South, 135 E. Sunset Way.

The Council Infrastructure Committee meets at 5:30 p.m. the third Thursday of each month in the Pickering Room of City Hall Northwest, 1175 12th Ave. N.W. Find a full calendar at issaquahwa.gov.

Substances That Could Be in Water

In order to ensure that tap water is safe to drink, the U.S. EPA and/or the Washington State board of health prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The 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 the land or through the ground, it dissolves naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include: microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife; inorganic contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems; radioactive contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at 800-426-4791.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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.

Preventing Backflow Contamination

If you have a water connection to an irrigation or fire sprinkler system, boiler, pool/spa, water feature, or photo development equipment, State law requires that you install a backflow prevention assembly and have it tested annually.

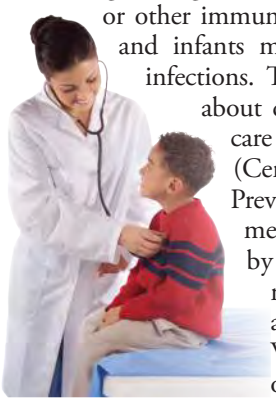
A backflow prevention assembly will prevent contaminated water from flowing back into your drinking water or into the City's water system. Most residences and businesses with backflow prevention assemblies are registered with the City of Issaquah.

If you haven't been testing your backflow assembly, call 425-837-3470 for assistance in finding a tester to help protect the water you drink. Please also call us if you know of a potential threat to our drinking water.

Important Health Information

While your drinking water meets the U.S. EPA's standard for arsenic, it does contain low levels of arsenic. The EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory 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, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791 or water.epa.gov/drink/hotline.



Cryptosporidium

Cryptosporidium is a microbial parasite found in surface water throughout the United States. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immune-compromised people are at greater risk of developing life-threatening illness. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

The Lower Issaquah Valley Aquifer water source is a groundwater source, and therefore is not required to be tested for *Cryptosporidium*.

The CWA water sources, the Cedar and Tolt supplies, were tested for *Cryptosporidium* in 2014 with no detections. Although chlorination is not effective against *Cryptosporidium*, ozone disinfection, which is used at the Cedar and Tolt treatment plants, is very effective at destroying *Cryptosporidium* and other microbes.

The U.S. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791 or from water.epa.gov/drink/hotline.

QUESTIONS?

For more information about this report or your drinking water, call Gregory P. Keith, the City's Water Operations Manager, at 425-837-3470. You can also connect with us on Facebook, Twitter, and more at issaquahwa.gov/social.

Where Does My Water Come From?

In 2014, the City of Issaquah provided 787 million gallons of high-quality drinking water to about 23,000 customers through more than 10,700 water connections.

Most of Issaquah's water is produced from four groundwater wells, which range in depth from 100 to 400 feet.

Chlorine is added at the well sites to disinfect the drinking water. The water is then conveyed through 110 miles of water main and 12 water booster stations before it's stored in one of 19 reservoirs, which hold a total of 12 million gallons.

Issaquah is a member of the Cascade Water Alliance (CWA), which also includes the cities of Bellevue, Kirkland, Redmond, and Tukwila and the Sammamish Plateau and Skyway water and sewer districts.

Currently, CWA gets its water from the City of Seattle water system originating in the Tolt and Cedar river watersheds.

Locally, the CWA water is delivered to the Montreux and Lakemont neighborhoods. It is also delivered to Issaquah Highlands where it's blended with well water.

With the exception of Issaquah Highlands, the City's well water and CWA water are not mixed, as the distribution systems are separated. Water purchased from the CWA is fluoridated, while Issaquah well water is not (with the exception of the Issaquah Highlands and Talus neighborhoods). See a map of the fluoridated areas at issaquahwa.gov/water.

Several years ago, CWA also purchased Lake Tapps in east Pierce County as the region's newest water supply in decades. As a result of customers' wise use of water, responsible plumbing codes, and water-efficient appliances, CWA will have enough water for the future and likely won't develop Lake Tapps until it is needed.

Planning for water takes time. That's why we are planning now for that future!

Resource-Efficient Water Management

Conservation and efficient use of water are important strategies for protecting our local and regional streams as well as using our infrastructure wisely. For decades, the City of Issaquah has worked with the community to help ensure efficient use of water.

Water use is tracked as a Sustainable City Indicator to help gauge progress toward long-term community goals. Total water use has declined significantly over the last decade due to changes in land use patterns, increased efficiency, changing water use, and your efforts to use water wisely.

The City is a member of the Cascade Water Alliance, and has adopted regional water use efficiency goals. The following regional goal was adopted for 2014 – 2019:

Cascade will dedicate resources necessary to achieve a cumulative drinking water savings of 0.6 million gallons per day on an annual basis and 1.0 million gallons per day on a peak season (June – September) basis by 2020.

Both the City and Cascade provide water efficiency programs and services for water customers in Issaquah and in the region. In 2014, Cascade programs have resulted in work with over 12,000 customers with estimated water savings of 178,459 gallons of water per day, or 29.7% of Cascade's 2014 – 2019 goal.

The City also supports water-efficient, green-certified homes and commercial buildings and provides rate incentives for lower water use. In addition, City public works professionals help to reduce water leakage with investments in water mains, reservoirs, and other infrastructure. In 2014, water system leakage was estimated at 7.92%. Ongoing operational improvements, meter testing, and other programs seek to continue to keep this figure below the State-required 10 percent limit.

For more information about the water conservation programs offered by the City of Issaquah, visit issaquahwa.gov/sustainability or call 425-837-3400.

2014 Water Production and System Leakage

Water production and purchases	787.6 million gallons
Authorized consumption	725.2 million gallons
Distribution system leakage	62.4 million gallons
2014 leakage	7.9%
3-year average	7.5%

Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. The State requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent data are included, along with the year in which the sample was taken.

We participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Regulation (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Any UCMR3 detections are shown in the data tables in this report. More information on UCMR3 can be found at water.epa.gov.

REGULATED SUBSTANCES

				Lower Issaquah Valley Aquifer: (Wells 1,2,4,5–Talus–Issaquah Highlands)		CWA-Cedar Supply: (Montreux, Lakemont, Issaquah Highlands)		CWA-Tolt Supply: (Montreux, Lakemont, Issaquah Highlands)			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2007	10	0	9.9[1]	ND–9.9[1]	NA	NA	NA	NA	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2014	2	2	NA	NA	0.0014	One Sample	0.0012	One Sample	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Bromate (ppb)	2014	10	0	NA	NA	NA	NA	0.2	ND–1.5	No	By-product of drinking water disinfection
Chlorine (ppm)	2014	[4]	[4]	0.47	0.03–0.97	0.70	ND–1.48	0.70	ND–1.48	No	Water additive used to control microbes
Fluoride (ppm)	2014	4	4	0.80[2]	0.66–0.94[2]	0.8	0.70–0.85	0.8	0.7–0.9	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2014	60	NA	NA	NA	27.43	12.5–36.4	27.43	12.5–36.4	No	By-product of drinking water disinfection
Nitrate (ppm)	2014	10	10	0.32	ND–0.51	0.02	One Sample	0.11	One Sample	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes]–Stage 2 (ppb)	2014	80	NA	NA	NA	40.85	19.4–48.1	40.85	19.4–48.1	No	By-product of drinking water disinfection
Total Organic Carbon (ppm)	2014	TT	NA	NA	NA	0.9	0.4–1.9	1.3	1.1–1.7	No	Naturally present in the environment
Turbidity[3] (NTU)	2014	TT	NA	NA	NA	1.6	0.2–1.6	0.28	0.05–0.28	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2014	TT=95% of samples <0.3 NTU	NA	NA	NA	NA	NA	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2012	1.3	1.3	0.342	0/49	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2012	15	0	1	0/49	No	Corrosion of household plumbing systems; Erosion of natural deposits

UNREGULATED CONTAMINANT MONITORING REGULATION 3 (UCMR3) LOWER ISSAQUAH VALLEY AQUIFER

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
Chromium (ppb)	2014	0.13	ND–0.3
Hexavalent Chromium (ppb)	2014	0.083	ND–0.164
Molybdenum (ppb)	2014	0.13	ND–1
Strontium (ppb)	2014	74.88	55–104
Vanadium (ppb)	2014	0.29	ND–0.4

[1] This represents the highest reading, which was found only in one well. This well water is then blended with other water to further dilute it (a Washington State Department of Health-recommended practice).

[2] Talus Urban Village and the Issaquah Highlands areas only.

[3] Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of water quality and the effectiveness of disinfectants.

Definitions

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

MCL (Maximum Contaminant Level): 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.

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.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

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

Annual

WATER QUALITY REPORT

Reporting Year 2013

Presented By

CITY OF ISSAQUAH WASHINGTON

PWS ID#: 363505

A Clean Report

By Mayor Fred Butler

This report will help you – our valued customer – understand Issaquah's commitment to providing you the highest quality water possible.

Rest assured – Issaquah has met all safety guidelines and water quality requirements once again.

Meanwhile, we are also a dedicated steward of this region's water, both for today and the future.

Using this report, learn more about where your water comes from, how it's delivered, and how to conserve it. If you have any questions, please call us at 425-837-3470 or visit issaquahwa.gov/water.

Thank you.

Resource-Efficient Water Management

Conservation – as well as using our infrastructure wisely – are important strategies for protecting our local and regional streams and lakes. For more than 18 years, the City of Issaquah has worked with the community to help conserve and protect our water resources.

One of our Sustainable City Indicators – total water use – has declined significantly over the past decade, thanks to changes in land use patterns, increased efficiency, operational improvements, and your efforts to use water wisely. Issaquah's water use per person is among the lowest in the region!

The City's water system exceeded its goals of saving 51,000 gallons of water per day on an annual average basis by 2013. Issaquah reached a cumulative annual average of 84,150 gallons of water per day over the past five years, or more than 30.7 million gallons of water – the equivalent of water use by 400 homes.

Investments in water mains, reservoirs, and other infrastructure reduce system leakage. In 2013, the City water system's unaccounted-for water is estimated at 8.3%. Ongoing operations and maintenance investments such as meter testing, replacement of aging water mains, reservoir management, and other programs have reduced losses, which continues performance better than the state-required 10 percent limit.

For more information about our water conservation programs, go to issaquahwa.gov/sustainability or call 425-837-3400.

Substances That Could Be in Water

In order to ensure that tap water is safe to drink, the U.S. EPA and/or the Washington State Board of Health prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The 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 the land or through the ground, it dissolves naturally occurring minerals, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include: **Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations or wildlife; **Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming; **Pesticides and Herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses; **Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff and septic systems; **Radioactive Contaminants**, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at 800-426-4791.

QUESTIONS?

For more information about this report or your drinking water, call Gregory P. Keith, the City's Water Operations Manager, at 425-837-3470. You can also connect with us on Facebook, Twitter, and more at issaquahwa.gov/social.

Lead in Home Plumbing

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. We are 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 800-426-4791 or at epa.gov/safewater/lead.

Community Participation

Would you like to get involved? Share your opinions on the City's drinking water! The Issaquah City Council meets at 7 p.m. the first and third Mondays of each month at City Hall South, 135 E. Sunset Way.

The Council Infrastructure Committee meets at 5:30 p.m. the third Thursday of each month in the Pickering Room of City Hall Northwest, 1175 12th Ave. N.W. Find a full calendar at issaquahwa.gov.

Seek WaterSense

Shop for WaterSense labeled products for your home, yard, and businesses. Whether faucets, toilets, shower heads, irrigation supplies, or even homes, these products have been tested to reduce water use and provide exceptional performance.

Take simple steps to use water wisely and save every day:

- Turn off the tap. This step is easy when brushing your teeth, shaving or washing dishes.
- Take five-minute showers. You'll find it's plenty of time! Get a free shower timer for you and your kids.
- Wash full loads. Dishwashers and most clothes washers use the same amount of water with every cycle.
- Check for leaks every year. Check your toilets, irrigation, and at your meter. Look for tips online. Get a free toilet leak detection kit.
- Pay attention to outdoor water use. Summer irrigation water use is more expensive - water your lawn and garden wisely to avoid big water bills. Use timers, irrigation controllers (be sure to adjust them every week) and rain sensors. The amount of water needed changes throughout the season – use less in the spring and fall.
- Contact us for a free shower timer or toilet leak detection kit at issaquahwa.gov/sustainability.

Cryptosporidium

Cryptosporidium is a microbial parasite found in surface water throughout the United States. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immune-compromised people are at greater risk of developing life-threatening illness. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

The Lower Issaquah Valley Aquifer water source is a groundwater source, and therefore is not required to be tested for Cryptosporidium.

The CWA water sources were tested for Cryptosporidium in 2013. Cryptosporidium was not detected in any of the three samples from the Cedar raw water supply. The Tolt had one detection out of four samples taken. Although chlorination is not effective against Cryptosporidium, ozone disinfection, which is used at the Cedar and Tolt treatment plants, is very effective at destroying Cryptosporidium and other microbes.

The U.S. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791 or water.epa.gov/drink/hotline.

2013 Water Production and System Leakage

Water production and purchases	768.0 million gallons
Authorized consumption	704.3 million gallons
Distribution system leakage	63.7 million gallons (8.3%)
Three-year average of distribution system leakage	8.2%

Preventing Backflow Contamination

If you have a water connection to an irrigation or fire sprinkler system, boiler, pool/spa, water feature or photo development equipment, state law requires that you install a backflow prevention assembly and have it tested annually.

A backflow prevention assembly will prevent contaminated water from flowing back into your drinking water or into the City's water system. Most residences and businesses with backflow prevention assemblies are registered with the City of Issaquah.

If you haven't been testing your backflow assembly, call 425-837-3470 for assistance in finding a tester to help protect the water you drink. Please also call us if you know of a potential threat to our drinking water.

Important Health Information

While your drinking water meets U.S. EPA's standard for arsenic, it does contain low levels of arsenic. U.S. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. U.S. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791 or water.epa.gov/drink/hotline.

Where Does My Water Come From?

In 2013, the City of Issaquah provided 768 million gallons of high-quality drinking water to about 23,000 (2013 DOH calculation) customers through more than 10,700 (2013 DOH calculation) water connections.

Most of Issaquah's water is produced from four groundwater wells, which range in depth from 100 to 400 feet.

Chlorine is added at the well sites to prevent any harmful microorganisms. The water is then conveyed through 110 miles of water main and 12 water booster stations before it's stored in one of 19 reservoirs, which hold a total of 12 million gallons.

Issaquah also purchases drinking water from the Cascade Water Alliance (CWA) and delivers it to the Montreux and Lakemont neighborhoods. Purchased water is also delivered to Issaquah Highlands, where it's blended with well water. The Issaquah Highlands and Talus neighborhoods both have the capability to receive 100% well water, 100% purchased water, or a blend of the two sources.

With the exception of Issaquah Highlands, the City's well water and purchased water are not mixed, as the distribution systems are separated. Water purchased from the CWA is fluoridated, while Issaquah well water is not (with the exception of the Issaquah Highlands and Talus neighborhoods).

The members of CWA include the cities of Issaquah, Bellevue, Kirkland, Redmond, and Tukwila as well as the Sammamish Plateau and Skyway water and sewer districts.

Currently, CWA gets its water from the City of Seattle water system originating in the Tolt and Cedar river watersheds.

Several years ago, CWA also purchased Lake Tapps in east Pierce County as the region's newest water supply in decades. As a result of customers' wise use of water, responsible plumbing codes and water-efficient appliances, CWA will have enough water for the future and likely won't develop Lake Tapps until it is needed.

Planning for water takes time. That's why we are planning now for that future!

Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent data are included, along with the year in which the sample was taken.

We participated in the third stage of the EPA's Unregulated Contaminant Monitoring Regulation (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if EPA needs to introduce new regulatory standards to improve drinking water quality. Any UCMR3 detections are shown in the data tables in this report. More information on UCMR3 can be found

REGULATED SUBSTANCES

				Lower Issaquah Valley Aquifer: (Wells 1,2,4,5–Talus–Issaquah Highlands)		CWA-Cedar Supply: (Montreux, Lakemont, Issaquah Highlands)		CWA-Tolt Supply: (Montreux, Lakemont, Issaquah Highlands)			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2007	10	0	9.9[1]	ND–9.9	NA	NA	NA	NA	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2013	2	2	NA	NA	0.0018	NA	0.0019	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Bromate (ppb)	2013	10	0	NA	NA	0.08	ND–2	NA	NA	No	By-product of drinking water disinfection
Chlorine (ppm)	2013	[4]	[4]	0.34	0.08–0.60	0.62	ND–1.29	0.62	ND–1.29	No	Water additive used to control microbes
Fluoride (ppm)	2013	4	4	0.78[2]	0.64–0.97[2]	0.8	0.7–0.8	0.8	0.7–0.9	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA]–Stage 2 (ppb)	2013	60	NA	NA	NA	23.55	12.7–30.5	23.55	12.7–30.5	No	By-product of drinking water disinfection
Nitrate (ppm)	2013	10	10	0.31	ND–0.5	NA	NA	NA	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes]–Stage 2 (ppb)	2013	80	NA	NA	NA	42.975	21.3–47.3	42.975	21.3–47.3	No	By-product of drinking water disinfection
Total Organic Carbon (ppm)	2013	TT	NA	NA	NA	0.8	0.4–1.4	1.3	1.2–1.4	No	Naturally present in the environment
Turbidity[3] (NTU)	2013	TT	NA	NA	NA	2.7	0.2–2.7	0.14	0.04–0.14	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2013	TT=95% of samples <0.3 NTU	NA	NA	NA	NA	NA	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2012	1.3	1.3	0.342	0/49	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2012	15	0	1	0/49	No	Corrosion of household plumbing systems; Erosion of natural deposits

OTHER SUBSTANCES (LOWER ISSAQUAH VALLEY AQUIFER: (WELLS 1,2,4,5 - TALUS - ISSAQUAH HIGHLANDS))		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	RANGE LOW-HIGH
1,3-Butadiene (ppb)	2013	<0.1–<0.1
1,1-Dichloroethane (ppb)	2013	<0.03–<0.03
1,4-Dioxane (ppb)	2013	<0.07–<0.07
1,2,3-Trichloropropane (ppb)	2013	<0.03–<0.03
Bromochloromethane (ppb)	2013	<0.06–<0.06
Bromomethane (ppb)	2013	<0.2–<0.2
Chlorate (ppb)	2013	22–49
Chlorodifluoromethane (ppb)	2013	<0.08–<0.08
Chloromethane (ppb)	2013	<0.2–<0.2
Chromium [Total] (ppb)	2013	<0.2–0.25
Chromium-6 (ppb)	2013	<0.03–0.157
Cobalt (ppb)	2013	<1–<1
Molybdenum (ppb)	2013	<1–1.05
PFBS (ppb)	2013	<0.09–<0.09
PFHpA (ppb)	2013	<0.01–0.0258
PFHxS (ppb)	2013	<0.03–0.241
PFNA (ppb)	2013	<0.02–0.028
PFOA (ppb)	2013	<0.02–0.0215
PFOS (ppb)	2013	<0.04–0.6
Strontium (ppb)	2013	69.3–137
Vanadium (ppb)	2013	<0.2–0.62

[1] This represents the highest reading, which was only found in one well. This well is then blended with other water to further dilute it (a Washington State Department of Health - recommended practice).

[2] Talus Urban Village and the Issaquah Highlands areas only

[3] Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of water quality, the effectiveness of disinfectants and the filtration system.

Definitions

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

MCL (Maximum Contaminant Level): 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.

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.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable

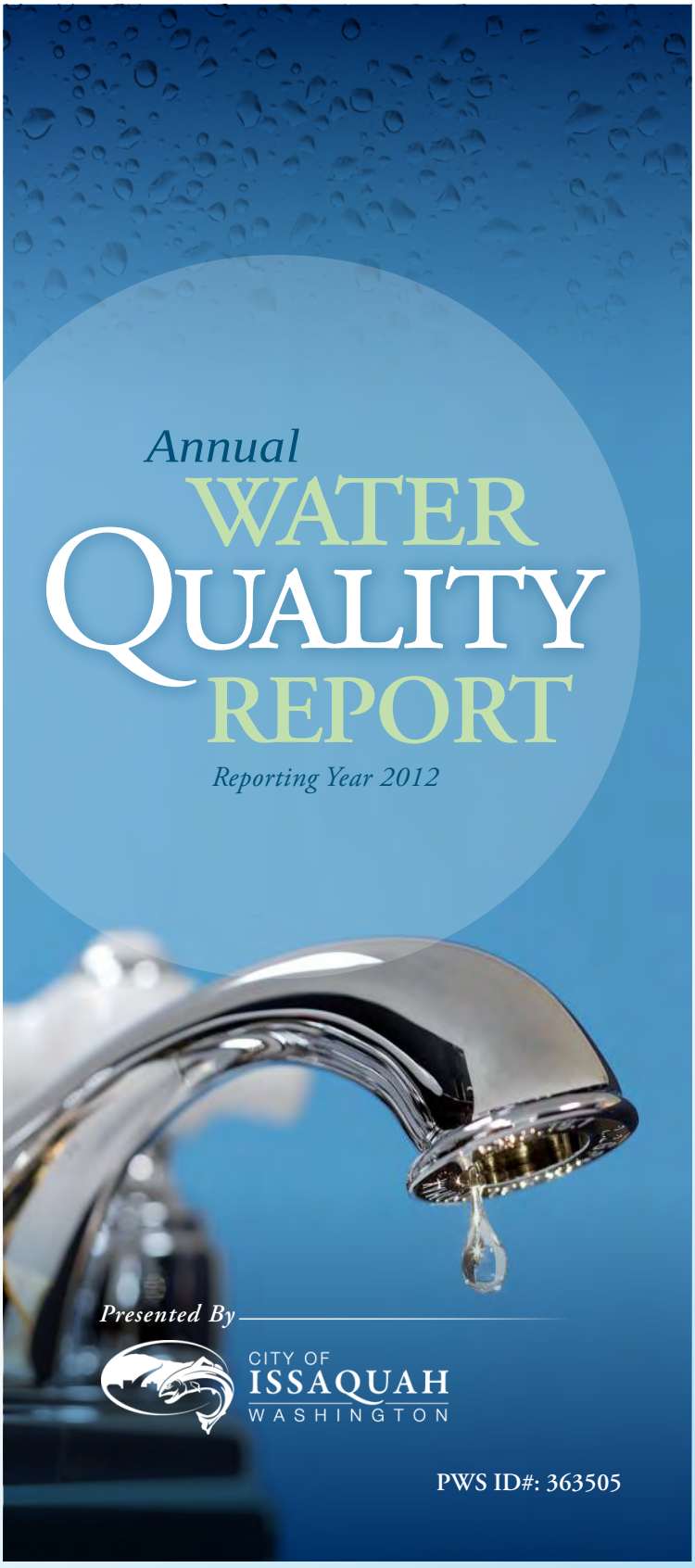
ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

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


Annual
WATER
QUALITY
REPORT
Reporting Year 2012
Presented By
CITY OF
ISSAQUAH
WASHINGTON
PWS ID#: 363505

A Clean Report

By Mayor Ava Frisinger

Water is the lifeblood of Issaquah, from your kitchen tap to the streams that bring our iconic salmon home.

Lately, the loud voices of a few have twisted the facts. This water quality report, which covers 2012, sets the record straight.

It shows that we've, once again, met all safety guidelines and water quality requirements.

As you'll see from the information in this report, the City of Issaquah is a responsible steward of water, today and for the future.

Rest assured – we are focused on conserving this precious natural resource, while delivering the highest-quality product possible to you, our customer.

More information is available at issaquahwa.gov/ourwater.

Be Water Smart

Using water wisely can save you money! Here are a few tips:

- Turn off the tap when brushing your teeth.
- Take a five-minute shower. You'll find it's plenty of time! Get a free shower timer for you and your kids.
- Dishwashers and most clothes washers use the same amount of water with every cycle. Get more for your money and wash only full loads!
- Check toilets for leaks every year. Put a few drops of food coloring in the tank and wait 10 minutes. If color shows in the bowl, you have a leak. Many leaks are silent and waste hundreds of gallons a day. Fix it and save more than 30,000 gallons a year!
- Pay attention to outdoor water use. Water your lawn and garden wisely to avoid big water bills. Use timers or irrigation controllers (but be sure to adjust them every week). Plants' needs change dramatically, depending on the weather.
- Shop for WaterSense labeled faucets, toilets, and shower heads. They've been tested to reduce water use and provide exceptional performance.

Contact us for a free shower timer or toilet leak detection kit at issaquahwa.gov/sustainability.

Substances That Could Be in Water

In order to ensure that tap water is safe to drink, the U.S. EPA and/or the Washington State Department of Health prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The 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 the land or through the ground, it dissolves naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at 800-426-4791.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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.

Know Your Water Footprint

Saving water is easy, once you know where you can save. Check out a home-water calculator at home-water-works.org.

Resource-Efficient Water Management

Conservation and efficient use of water -– as well as using our infrastructure wisely –– are important strategies for protecting our local and regional streams. Since 1996, the City of Issaquah has worked with the community to help ensure efficient use of water.

Water use is tracked as a Sustainable City Indicator to help gauge progress toward long-term community goals. Total water use has declined significantly over the last decade, dropping to below 60 gallons per capita per day, thanks to changes in land use patterns, increased efficiency, changing water use, and your efforts to use water wisely. Issaquah's water use per person is among the lowest in the region!

The water system exceeded its goals of saving 51,000 gallons of water per day on an annual average basis by 2013. In total, more than 36 million gallons of water have been saved during the last five years.

Issaquah also reduces water leaks with investments in water mains, reservoirs, and other infrastructure. In 2012, the City's water system's unaccounted-for water is estimated at 6.17 percent. Ongoing operational improvements, meter testing, replacement of aging water mains, and other programs aim to keep this figure below the state-required 10 percent limit.

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Cryptosporidium

Cryptosporidium is a microbial parasite found in surface water throughout the United States. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immune-compromised people are at greater risk of developing life-threatening illness. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

The Lower Issaquah Valley Aquifer water source is a groundwater source, and therefore is not required to be tested for *Cryptosporidium*.

The CWA water sources were tested for *Cryptosporidium* in 2012. *Cryptosporidium* was not detected in samples from either the Tolt or Cedar raw water supplies. Although chlorination is not effective against *Cryptosporidium*, ozone disinfection, which is used at the Cedar and Tolt treatment plants, is very effective at destroying *Cryptosporidium* and other microbes.

The U.S. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791 or water.epa.gov/drink/hotline.

2012 Water Production and Purchases

Water production and purchases -	732.56 million gallons
Accounted-for water -	687.35 million gallons
2012 unaccounted-for water -	45.21 million gallons
2012 unaccounted-for water -	6.17 percent
3-year average -	8.62 percent

Where Does My Water Come From?

In 2012, the City of Issaquah provided 732 million gallons of high-quality drinking water to about 21,000 customers through more than 6,500 water connections.

Most of Issaquah's water is produced from four groundwater wells, which range in depth from 100 to 400 feet.

Chlorine is added at the well sites to prevent any harmful microorganisms. The water is then conveyed though 110 miles of water main and 12 water booster stations before it's stored in one of 19 reservoirs, which hold a total of 12 million gallons.

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With the exception of Issaquah Highlands and Talus, the City's well water and purchased water are not mixed, as the distribution systems are separated. Water purchased from the CWA is fluoridated, while Issaquah well water is not (with the exception of the Issaquah Highlands and Talus neighborhoods).

CWA, which was formed in 1999, includes the cities of Issaquah, Bellevue, Kirkland, Redmond, and Tukwila, as well as the Sammamish Plateau and Skyway water and sewer districts.

Currently, CWA gets its water from the City of Seattle water system originating in the Tolt and Cedar River watersheds. In 2009, CWA purchased Lake Tapps in east Pierce County as the region's newest water supply in decades. As a result of customers' wise use of water, responsible plumbing codes, and water-efficient appliances, CWA will have enough water for the future and likely won't develop Lake Tapps for decades.

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During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. The state requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

				Lower Issaquah Valley Aquifer: (Wells 1,2,4,5–Talus–Issaquah Highlands)		CWA-Cedar Supply: (Montreux, Lakemont, Issaquah Highlands)		CWA-Tolt Supply: (Montreux, Lakemont, Issaquah Highlands)			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
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Barium (ppm)	2012	2	2	NA	NA	0.0018	NA	0.0019	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Cadmium (ppb)	2012	5	5	NA	NA	ND	NA	0.35	NA	No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints
Chlorine (ppm)	2012	[4]	[4]	0.38	0.1–0.63	0.72	0.05–1.19	0.72	0.05–1.19	No	Water additive used to control microbes
Fluoride (ppm)	2012	4	4	0.79[2]	0.72–0.83[2]	0.8	0.7–0.9	0.8	0.7–0.9	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2012	60	NA	1.08	ND–2.7	29.55	14.4–36.3	29.55	14.4–36.3	No	By-product of drinking water disinfection
Nitrate (ppm)	2012	10	10	0.31	ND–0.51	0.02	NA	0.13	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes]–Stage 2 (ppb)	2012	80	NA	4.83	ND–9.0	36.9	15.5–49.6	36.9	15.5–49.6	No	By-product of drinking water disinfection
Total Organic Carbon (ppm)	2012	TT	NA	NA	NA	0.7	0.4–1.1	1.2	1.1–1.4	No	Naturally present in the environment
Turbidity[3] (NTU)	2012	TT	NA	NA	NA	2.3	0.2–2.3	0.38	0.04–0.38	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2012	TT	NA	NA	NA	NA	NA	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2012	1.3	1.3	0.342	0/49	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2012	15	0	1	0/49	No	Corrosion of household plumbing systems; Erosion of natural deposits

[1] This represents the highest reading, which was only found in one well. This well is then blended with other water to further dilute it (a Washington State Department of Health-recommended practice).
[2] Talus Urban Village area only
[3] Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of water quality and the effectiveness of disinfectants.

Definitions

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

MCL (Maximum Contaminant Level): 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.

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.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

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