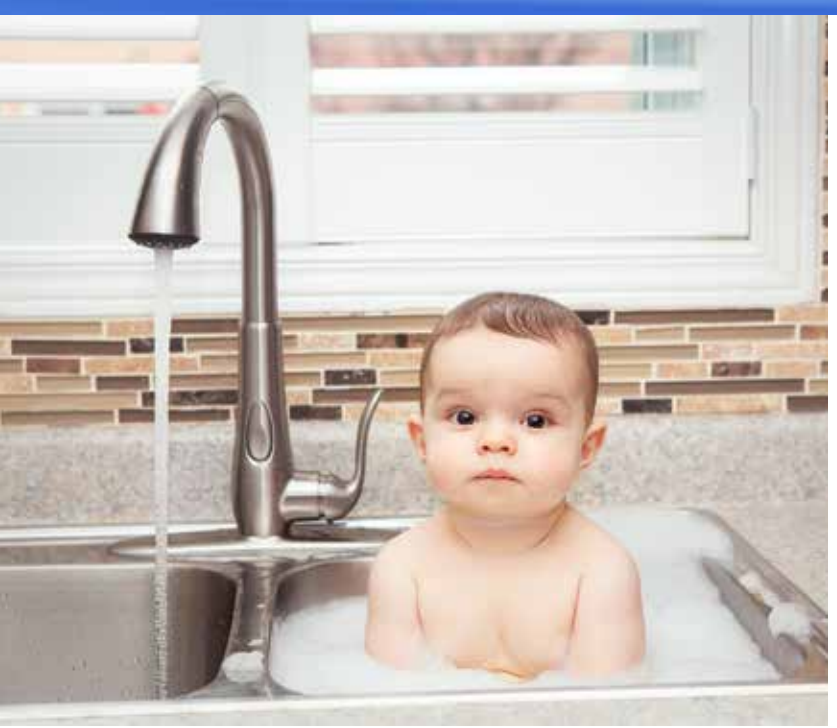
City of Arlington
Annual Water Quality Report

Water Testing Performed in 2015

PWS ID# 02950K



Continuing Our Commitment

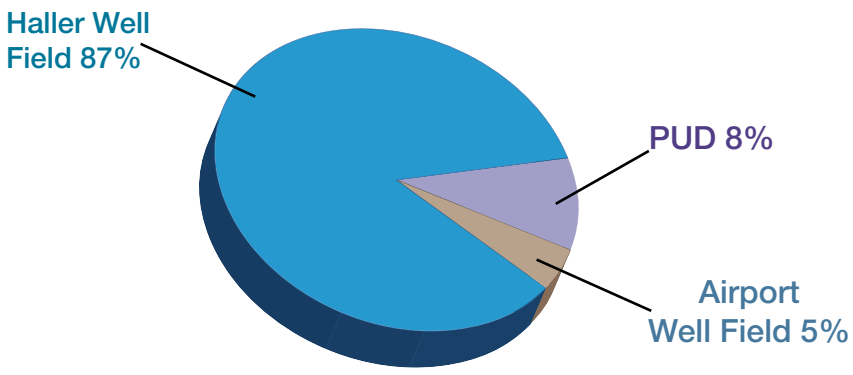
The City of Arlington is pleased to report that your drinking water is of high quality and compliant with all state and federal drinking water laws. We are committed to delivering the best quality drinking water, and to that end, we make more than 16,000 water quality observations and tests every year. This edition of our annual water quality report summarizes only the key findings of testing completed from January through December 2015. For more information about this report, or for any questions relating to your drinking water, please call the Water Department at (360) 403-3526.

Where Does Our Water Come From?

Three primary sources supply water to the Arlington service area. Arlington produces most of its water from the Haller and Airport well fields. The Haller well field naturally filters Stillaguamish River water by drawing it through the riverbank. The Airport well field draws groundwater from a deep aquifer. The origin of both these sources is precipitation that falls across the Stillaguamish Basin and infiltrates the ground surface.

The water we produce is blended with water the City purchases from its third source, Snohomish County Public Utility District (PUD). This water is obtained from the City of Everett's Spada Reservoir near the headwaters of the Sultan River.

The graph shows how each source contributed to our total water production of 1,762 acre-feet in 2015.



ARLINGTON WATER SUPPLY 2015

HOW IS MY WATER TREATED AND PURIFIED?

Haller Well Field

Groundwater drawn from our well field located near the Stillaguamish River is treated in several steps at Arlington's water treatment facility. First, raw (untreated) water is pumped from the well field to the treatment plant, where a primary treatment chemical is added that causes small particles to stick together and form bigger particles called floc. Next, polymer is added to aid the filtering process and the water is passed through a clarifying filter where 60% to 70% of the floc is removed. The water then passes through a finishing filter where the remaining floc is taken out, and chlorine is added for disinfection. Finally, we add sodium hydroxide to adjust the pH level, making the water less corrosive to your pipes and plumbing fixtures.

Airport Well Field

Water drawn from our well near the Arlington Airport does not require filtration, but we do add chlorine for disinfection.

PUD

Drinking water purchased from Snohomish County PUD is treated at the City of Everett water treatment plant using a treatment process similar to the process used by Arlington. Everett adds fluoride to the water for enhanced dental protection.

Working Hard to Bring You the Best Water in the State — Efficiently

Under the Safe Drinking Water Act (SDWA), the U.S. Environmental Protection Agency (EPA) is responsible for setting national limits for hundreds of substances in drinking water, and also specifies various treatments that water systems must use to remove these substances. Arlington Water Department continually monitors for these substances and reports our findings to the Washington Department of Health (DOH), who confirms you are receiving clean water. DOH records indicate ***we consistently provide you with clear, high quality water meeting stringent standards, and have done so for 15 consecutive years!***

For more information see:

www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/SourceWater/RapidRateFiltration

This report conforms to the regulation under SDWA requiring water utilities to provide detailed water quality information to each of their customers annually. We are committed to providing you with this information about your water supply because ***customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.***

SAMPLING RESULTS FOR 2015

In 2015, the City collected hundreds of water samples and made thousands of measurements to test for biological, inorganic, volatile organic, synthetic organic or radioactive contaminants. The table below lists only those contaminants that were detected. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. All of the results shown here are less than Maximum Contaminant Level Goals (MCLGs) which are established with a safety margin for the protection of consumer health.

Since we purchase some of our water from the PUD, the table also includes data for the City of Everett water supply. This information is particularly useful to those in our service area that receive PUD water before it is blended with water pumped from our wells. This includes any service connections along Burn Rd., 186th Street, and 89th Avenue.

Department of Health requires utilities to monitor for lead, copper and other contaminates less than once per year because the concentrations of these contaminants are low and do not change frequently.

Regulated Substances

Samples were collected in finished water at our sources and/or throughout the distribution system				Arlington Water Department		Snohomish County PUD		Definitions of these terms are found at the bottom of this page	
Substance (units)	**Year**	**MCL (MRDL)**	**MCLG (MRDLG)**	**Amount**	**Range**	**Amount**	**Range**	**Compliant?**	**Typical Sources**
Arsenic (ppb)	2015	10	0	1	ND – 1	2	2 - 2	Yes	Erosion of natural deposits
Barium (ppm)	2015	2	2	0.01	0.008 – 0.012	0.01	0.01- 0.01	Yes	Erosion of natural deposits, drilling fluids
Chlorine (ppm)	2015	(4)	(4)	0.78	0.08 – 1.70	0.63	0.28 – 1.10	Yes	Water additive used to control microbes
Chromium (ppb)	2015	100	100	4	ND - 4	ND	NA	Yes	Erosion of natural deposits
Fluoride (ppm)	2015	4	4	0.06	ND – 0.70	0.61	0.30 – 0.70	Yes	Water additive which promotes strong teeth; erosion of natural deposits
HAAs [Haloacetic Acids] (ppb)	2015	60	NA	12.7	5.9 – 27.2	36.1	22.9 – 37.3	Yes	By-product of drinking water disinfection
Nitrate (ppm)	2015	10	10	0.83	0.21 – 1.44	0	0	Yes	Runoff from fertilizer use; Leaching from septic tanks, and animal wastes; Erosion
TTHMs [Total Trihalomethanes] (ppb)	2015	80	NA	19.0	8.0 – 37.4	47.9	19.3 - 69.4	Yes	By-product of drinking water disinfection
Turbidity (NTU)[1]	2015	TT	NA	0.063	0.019 – 0.063	0.06	ND – 0.06	Yes	Soil runoff, sediment

Lead and Copper

Tap water samples were collected for lead and copper analyses from homes throughout the service areas				Arlington Water Department		Snohomish County PUD			
Substance (units)	**Year sampled** [2]	**AL**	**MCLG**	**90th Percentile**	**Homes Above AL/ Total Homes Sampled**	**90th Percentile**	**Homes Above AL/ Total Homes Sampled**	**Compliant?**	**Typical Sources**
Copper (ppm)	2015	1.3	1.3	0.648	0 / 32	0.766	0 / 32	Yes	Corrosion of household plumbing Erosion of natural deposits
Lead (ppb)	2015	15	0	3	2/ 32	4	1 / 32	Yes	Corrosion of household plumbing Erosion of natural deposits

Footnotes
1 Turbidity, a measure of the cloudiness of water, is monitored because it is a good indicator of the effectiveness of the filtration system.
2 Lead and copper samples are collected from area homes every 3 years. Both Arlington and PUD will sample again in 2018.

Table 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 (e.g. chlorine, chloramines, chlorine dioxide).

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.

NTU (Nephelometric Turbidity Units): A measure of the clarity, cloudiness, or turbidity, of water.

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.

90th Percentile: Out of every 10 homes sampled, 9 had lead and copper concentrations at or below this level.

Contaminants That May Be Present In Source Water

- ***Microbes*** — viruses, parasites and bacteria, from sewage treatment plants, septic systems, pets, livestock and wildlife
- ***Inorganic materials*** — salts and metals, naturally occurring or from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and farming
- ***Pesticides and herbicides*** — from agriculture, urban stormwater runoff, and residential uses
- ***Organic Compounds*** — synthetic and volatile organic compounds from industrial processes, petroleum production, gas stations, urban stormwater runoff, and septic systems
- ***Radioactive contaminants*** — naturally-occurring or the result of oil and gas production and mining activities

Just the Facts About Lead

While lead is a naturally occurring bluish-gray metal found in small amounts on the earth's mantle, lead rarely occurs naturally in water. Both the Federal Government and Washington state have strict regulations governing the presence of lead in drinking water. An "Action Level" is triggered if 10% of water samples have lead present at greater than 0.015 parts per million (ppm). If 10% of samples collected were at or above the "Action Level", special treatment would be required.

Due to very low levels of lead in Arlington's previous sampling events, the Washington State Department of Health (DOH) only requires Arlington to sample its water for the presence of lead every three years. The last lead sampling event was completed in June of 2015, the results are reported in the table on page 2. The City is very confident in saying all water delivered to our customers is well below the "Action Level" and within state and federal Clean Drinking Water requirements.

You may be wondering "If lead is a naturally occurring element, but rarely occurs naturally in water, then how does it get into the water". According to the US Environmental Protection Agency (USEPA) and DOH, service pipes and fixtures are the main contributor to high lead levels in tap water.

Lead can enter drinking water when service pipes and fixtures that contain lead corrode, especially where the water has high acidity (low pH). The most common problem is with brass or chrome-plated brass faucets and fixtures and with lead solder from which significant amounts of lead can enter into the water, especially through hot water. As part of the treatment process, the Arlington Water Treatment Plant adjusts the pH level in the finished water to make is less acidic which reduces leaching of lead from fixtures into the water.

The risk at your house depends on the plumbing parts available at the time of construction or at the time your house was remodeled or refurbished. Risks are greater in older homes that have not been remodeled and greatest in homes plumbed during the 1980s. Federal regulations such as the Safe Drinking Water Act of 1974, the Lead Pipe Fixture Rule of 1986, the Lead and Copper Rule of 1991, and the Lead-free Plumbing Rule of 2011 are designed to reduce risks of lead exposure from your plumbing.

The City of Arlington is proactive at making sure we only deliver high quality water to our customers. As indicated from years of testing for lead in our water, the City continues to produce and deliver water that exceeds state and federal lead standards. If you do have concerns about lead, please feel free to contact the Arlington Water Treatment Plant at 360-403-3541.

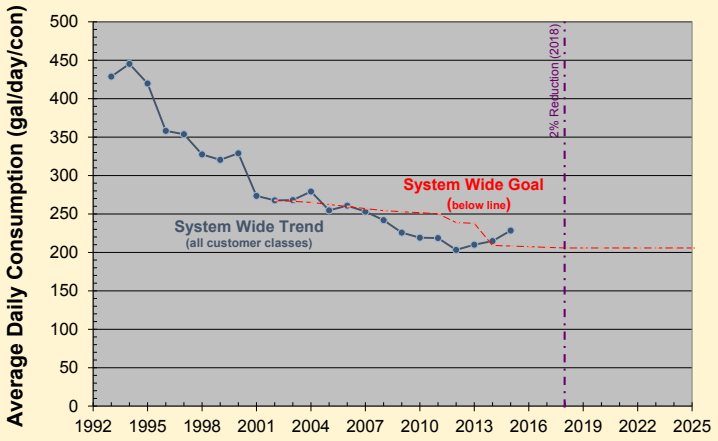
Water Use Efficiency Information

Arlington has made great progress toward Water Use Efficiency (WUE) goals first adopted by the City in 2008, and updated by Council in 2011 and 2016.

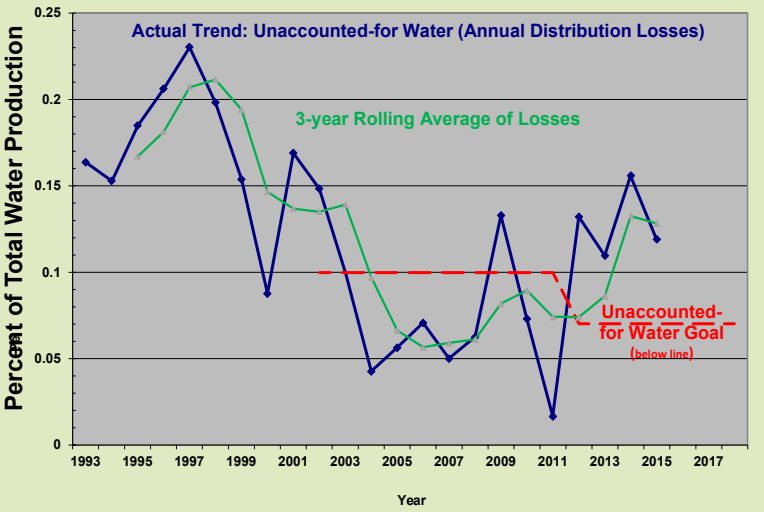
2015 Arlington Water Use Statistics

Total water into the system (gallons)	555,757,789
Total authorized, quantified uses (gallons)	489,563,932
Unauthorized and/or unquantified uses and leaks (gallons)	66,193,857
Unauthorized and/or unquantified uses and leaks (percent)	11.9%

Goal: Achieve additional system-wide average water use reduction of 2 percent by 2018, with 2013 as the base year.



This goal basically attempts to maintain gains in efficiency since 2002 at 2013 levels. However, results suggest that with economic recovery, all types of customers—including residents—are relaxing water efficient habits established during the recession. Water consumption per connection increased by 9% from 210 gallons/day/connection in 2013 to 228 gpdc in 2015. We can reverse the trend and meet our 2018 goal! In doing so, we'll be on track to saving the City the costs of producing more than 122 million gallons by 2025.



Goal: Reduce unaccounted for water to 7 percent or less.

State law requires that we account for at least 90% of the water we make, but we are holding ourselves to 93%—with unaccounted for "losses" from our distribution system at less than 7%. Unfortunately we have ranged from 11% to 15% over the last 4 years. We have prepared and are implementing a water loss control action plan to reverse this trend. Possible sources of losses include water main leaks, water theft, meter calibration, and accounting issues.

Substances That May Be in Your Drinking Water

To ensure that tap water is safe to drink, the Department of Health and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Washington Department of Agriculture 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 contaminants does not necessarily indicate that 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, and can pick up substances resulting from the presence of animals or from human activity. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (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 (800-426-4791).

Questions and Answers

I don't have any water.

If your water bill has not been paid: call Utility Billing at 360-403-3421.

Otherwise, call Public Works Administration at 360-403-3526. We'll need to know your name, phone number, address, how long have you been without water. A water service specialist will contact you to solve the problem.

I need my water shut off.

If you are stopping service: call Utility Billing at 360-403-3421.

If you are doing repairs: call Public Works Administration at 360-403-3526. We'll need your name, phone number, address and when you want the water shut off. A water service specialist will shut the water off, or call you to arrange a time to do so.

I need my water turned on.

If you are moving in: call Utility Billing at 360-403-3421.

If you are doing repairs: call Public Works Administration at 360-403-3526. We'll need your name, phone number, address, and when you want the water turned on. A water service specialist will turn the water on, or will call you to arrange a time to do so.

I need to report a leak.

Call Public Works Administration at 360-403-3526, or the emergency pager at 360-386-5926. Tell us your name, phone number, and the address of the leak.

If the leak is located:

In the house: you will need to call a plumber, but we will send a water service specialist to turn the water off if needed.

At the meter box: we will send a water service specialist out to investigate and repair the leak. They will call you with the results.

In the street: we will send a water service specialist out to investigate immediately. Let us know if it is gushing or trickling down the street, gushing up in the air, and/or associated with a hydrant break or construction accident.

Is there fluoride in my water?

Water we produce has low natural concentrations of fluoride, while water we purchase is "fully fluoridated" for dental protection by the City of Everett. While primarily distributed in distinct zones, these sources do blend to create a small area of moderate fluoride concentrations. Only services east of SR 9 and south of about 200th Street receive appreciable fluoride. The City's fluoride brochure compares this range of fluoride levels to the dental needs for children promoted by the ADA. Copies are available on-line, at Public Works Administration, or where utility bills are paid at City Hall.

Community Participation

You are invited to participate in our public city council meetings and voice your concerns about your drinking water. Arlington City Council meets the first and third Monday of each month beginning at 7 p.m. at the Council Chambers, 110 E. Third Street, Arlington, WA (enter off of Olympic Avenue near City Hall). For meeting information, call City Hall at (360) 403-3421, or visit our Web site at www.arlingtonwa.gov.

Pisciculturists, Craft Brewers, Cannabis Cultivators and Inquiring Minds, Take Note!

Some of our customers take their water quality quite seriously. The pleasure provided by an aquarium full of fish, the satisfaction provided while sipping a home brew, and getting established in Washington's newest industry have prompted many of the calls we get for water quality information. If that's you, you will also want to take note of the information at right.

Parameter (units)	Range Observed by Source	
	Haller	Airport
Alkalinity (mg/L CaCO3)	37 – 54	44 – 85
Chloramines	None	None
Chlorides (mg/L)	1.8 – 5.0	3.5 – 4.1
Electrical conductivity (µS/cm)	72 – 95	198 – 223
pH (s.u.)	6.9 – 7.6	7.0 - 8.3
Sulfates (mg/L)	3.1 – 4.6	11 – 13
Total Hardness (mg/L CaCO3)	26.6 – 33.9	86.9 –97.4

City of Arlington
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