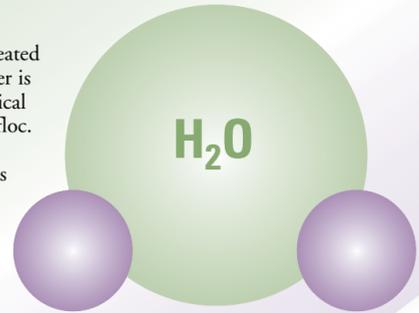


How Is My Water Treated and Purified?

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. After that, the water passes through a finishing filter where most of the remaining floc is taken out, and then chlorine is added for disinfection. When treated water is pumped to your home or business we add sodium hydroxide to adjust the pH level, making the water less corrosive to your pipes and plumbing fixtures. Water drawn from our well near the Arlington Airport does not require filtration, but we do add chlorine for disinfection. 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. The Island Crossing water system provided our customers with drinking water purchased from the City of Marysville. This water does not go through a filtration process, but chlorine is added for disinfection.



Source Water Assessment Program

Responding to contamination can be 200 times more costly than preventing contamination events in the first place. High quality raw water requires little if any treatment before it can be delivered to your tap, so it's to everyone's advantage to keep it that way. The Washington Department of Health has determined, however, that our airport well is moderately susceptible and the Haller well field is highly susceptible to contamination based on the location of the wells, the proximity of contaminant sources, the relative health risks of those contaminants, and the treatability of those contaminants should they enter the environment. More about the findings of their assessments can be found at www.doh.wa.gov/ehp/dw/our_main_pages/swap.htm.

In order to reduce risks, the City applies three levels of protection to each water source (based on distance to the source) consistent with Washington laws:

- Sanitary Control Areas (SCA)**
- Radius of 100 feet around each source
 - No contaminants whatsoever (construction, storage, disposal, application)



Watershed Control Program

- Haller well field is under the influence of the Stillaguamish River
- Track all major management proposals and activities in the basin upstream of the City.
- Inventory potential surface water contamination sources and activities
- Monitoring of water quality trends

Wellhead Protection Areas (WHPA)

- Four zones around each well defining how far water (and potential contaminants) would travel in 6 months, and in one, five, and ten years
- Maintain inventory of potential contaminants for each zone
- Work with the owners/operators to reduce the risk of contamination
- Develop contingency water supply plans
- Coordinate with emergency incident responders (police, fire, and health departments)



Recycled and Recyclable
 Copyright ©2006 Gemini Group LLC
 All rights reserved
 WA2342

Arlington Water Department
 154 W. Cox Avenue
 Arlington, WA 98223

Continuing Our Commitment

The City of Arlington is pleased to report that your drinking water is 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 2005. We intend to maintain these exemplary results, and will rise to meet the challenges of source water protection, water treatment, and prevention of cross-connections, while continuing to serve the needs of all of our water users.

For more information about this report, or for any questions relating to your drinking water, please call Michael Wolanek, Water Quality Specialist, at (360) 403-3541.

Where Does My Water Come From?

The City of Arlington provided drinking water to two service areas in 2005: Arlington and Island Crossing. Water in the Arlington service area comes from three separate sources: groundwater drawn from a well field located near the Stillaguamish River, groundwater drawn from a deep well located near the Arlington Airport, and treated water purchased from Snohomish County PUD that comes from the City of Everett's Spada Lake Reservoir. The Island Crossing service area was fully integrated into the Arlington Service Area on February 8, 2005, so it was a separate system only for the first five weeks of 2005. Drinking water in the Island Crossing service area during that period came from water we purchased from the City of Marysville. Sources of water in the north Marysville service area include Edward Springs, a Ranney Collector at the Stillaguamish River, and several public wells.



Working Hard for You

Under the Safe Drinking Water Act (SDWA), the U.S. Environmental Protection Agency (U.S. 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. Each system continually monitors for these substances and reports their findings to the U.S. EPA. The U.S. EPA uses the data to ensure that consumers are receiving clean water.

This publication 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.

Additional Fluoride Information Available

The City of Arlington's water is obtained from sources with very different fluoride levels that mix within the city's water mains. Consequently, the distribution of fluoride to individual service connections varies throughout the city. In some places, fluoride concentrations will be adequate for dental protection, and in others supplemental fluoride prescriptions may be needed. We have recently updated our brochure that provides fluoride information specific to your neighborhood. This brochure helps you and your dental or medical provider know what the fluoride levels mean to you, and your children in particular. Pick up a copy when you pay your water bill at City Hall, or contact the Water Department by calling (360) 403-3541 or (360) 403-3526.

Important 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.



Community Participation

You are invited to participate in your 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 the city clerk's office at (360) 403-3421, or visit our Web site at www.ci.arlington.wa.us.

Contamination from Cross-Connections

Cross-connections that could contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems) or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continually jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed all industrial, commercial, and institutional facilities in the service area to make sure that all potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test each backflow preventer to make sure that it is providing maximum protection.

For more information, visit the Web site of the American Backflow Prevention Association (www.abpa.org) for a discussion on current issues.



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 table below shows only those contaminants that were detected in the water. Although all of the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water. The state requires us to monitor for certain substances less 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	YEAR SAMPLED	MCL (MRDL)	MCLG (MRDLG)	Arlington Water Department		Island Crossing Service Area		Snohomish County PUD		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Arsenic (ppb)	2005	10 ¹	0 ¹	ND	NA	2.5	ND-5	ND	NA	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Chlorine (ppm)	2005	(4)	(4)	0.79	0.3-1.55	0.83	0.55-1.37	0.88	0.4-1.61	No	Water additive used to control microbes
Fluoride (ppm)	2005	4	4	0.35	ND-0.93	0.10	0.07-0.33	0.82	0.46-0.86	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
HAAs [Haloacetic Acids] (ppb)	2005	60	NA	16.3	4.2-32	21.0	4.3-25.1	26.9	7.9-35	No	By-product of drinking water disinfection
Nitrate (ppm)	2005	10	10	0.54	ND-0.54	1.37	0.51-2.22	0.097	0.049-0.125	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Coliform Bacteria (% positive samples)	2005	5% positive monthly samples ²	0	ND	NA	ND	NA	1.8	0-1.8	No	Naturally present in the environment
TTHMs [Total Trihalomethanes] (ppb)	2005	80	NA	20.2	4.7-35.3	21.4	3.1-27.7	37.5	29.9-46.7	No	By-product of drinking water disinfection
Turbidity (NTU) ³	2005	TT	NA	0.043	0.023-0.043	0.34	0.10-0.34	0.09	ND-0.09	No	Soil runoff

Tap water samples were collected for lead and copper analyses from homes throughout the service areas

SUBSTANCE (UNITS)	YEAR SAMPLED	Arlington Water Department		Island Crossing Service Area		Snohomish County PUD		VIOLATION	TYPICAL SOURCE		
		AL	MCLG	AMOUNT DETECTED (90th%TILE)	HOMES ABOVE AL/ TOTAL HOMES SAMPLED	AMOUNT DETECTED (90th%TILE)	HOMES ABOVE AL/ TOTAL HOMES SAMPLED			AMOUNT DETECTED (90th%TILE)	HOMES ABOVE AL/ TOTAL HOMES SAMPLED
Copper (ppm)	2005	1.3	1.3	1.00	0/30	0.392 ⁴	0/27	0.068 ⁵	0/178	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2005	15	0	6	0/30	3 ⁴	0/27	3 ⁵	3/178	No	Corrosion of household plumbing systems; Erosion of natural deposits

¹ These arsenic values were effective January 23, 2006; however, during 2005 the MCL was 50 ppb and there was no MCLG.

² Everett collects 100-105 samples per month. Not more than 5% of the monthly total can be positive for total coliforms.

³ Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system. During the reporting year, 100% of all samples taken to measure turbidity met water quality standards.

⁴ Sampled in 2002.

⁵ Lead and copper samples for PUD were collected in 2003, and will be sampled again in 2006.

Table 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 contamination.

NA: Not applicable

ND: Not detected

NTU (Nephelometric Turbidity Units): Measurement of the clarity, 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.

Substances That Might Be in Drinking Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting 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 can acquire 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 which 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.

Water Conservation Tips

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but can also save you money by reducing your water bill. Here are a few suggestions:

Inside your home:

- Fix leaking faucets, pipes, toilets, etc.
- Replace old fixtures; install water-saving devices in faucets, toilets and appliances.
- Wash only full loads of laundry.
- Do not use the toilet for trash disposal.
- Take shorter showers.
- Do not let the water run while shaving or brushing teeth.
- Soak dishes before washing.
- Run the dishwasher only when full.

Outdoors:

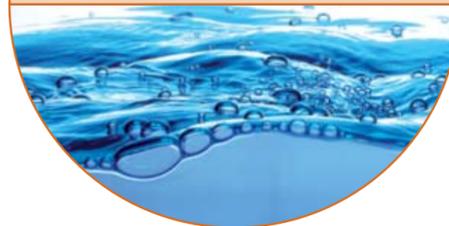
- Water the lawn and garden in the early morning or evening.
- Use mulch around plants and shrubs.
- Repair leaks in faucets and hoses.
- Use water-saving nozzles.
- Use water from a bucket to wash your car, and save the hose for rinsing.

Information on other ways that you can help conserve water can be found at www.epa.gov/safewater/publicoutreach/index.html.



What Makes Water "Hard"?

If substantial amounts of either calcium or magnesium, both nontoxic minerals, are present in drinking water, the water is said to be "hard." Hard water does not dissolve soap readily, so making lather for washing and cleaning is difficult (hard). It also contributes to scaling in hot water heaters and industrial equipment such as boilers. Although our airport well water is moderately hard, most of our customers receive "soft" water because we blend it with our other sources that contain little calcium or magnesium.



New Arsenic Regulation

Arsenic contamination of drinking water sources may result from either natural or human activities. Volcanic activity, erosion of rocks and minerals, and forest fires are natural sources that can release arsenic into the environment. Although about 90% of the arsenic used by industry is for wood preservatives, it is also used in paints, drugs, dyes, soaps, metals, and semiconductors. Agricultural applications, mining, and smelting also contribute to arsenic releases.

The U.S. EPA sets Maximum Contaminant Levels (MCLs) for drinking water to protect human health. In January 2001, EPA lowered the arsenic MCL from 50 to 10 ppb (that is parts of arsenic in one billion parts of water) in response to new and compelling research linking high arsenic levels in drinking water with certain forms of cancer. All water utilities are required to implement this new MCL starting January 6, 2006, but we have been comparing our arsenic data to this standard since 2002.

Some areas of the Stillaguamish basin can have high levels of naturally occurring arsenic. A 1997 U.S. Geological Survey report that has been instrumental in groundwater planning in western Snohomish County observed arsenic in 63% of the 297 groundwater samples analyzed. The median total arsenic concentration was 2 ppb, and the maximum was 280 ppb. Five samples (1.7%) exceeded the former MCL of 50 ppb, but 52 samples (nearly one in five) would exceed the new MCL of 10 ppb. However, water we supplied to the Arlington service area in recent years has had only up to 2 ppb of arsenic (a typical, low level for the county and much of the country). In 2005, no arsenic was detected in our source wells.

Removing arsenic from drinking water is a costly procedure, so prevention of contamination is the best policy. We encourage industry to implement best management practices, and monitor land use activities to ensure naturally occurring arsenic is not mobilized and conveyed toward our wells. For a more complete discussion, visit the U.S. EPA's arsenic Web site at www.epa.gov/safewater/arsenic.html.