Westside Water Association

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Year 2016 Westside Water Association Water Quality Report

This "Consumer Confidence Report" is being sent to you to inform you about the quality of your drinking water.

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. In 2016, in addition to the monthly bacteriological test, we conducted the following tests: (no standards were exceeded, see results in table),

- Nitrate: annual test
- Arsenic: monthly samples up until July (when the 2nd Anderson well went into production) and quarterly thereafter to establish a "rolling annual average".
- Lead and copper test, tri-annual test
- Radionuclide:
- Disinfectant By-Products (DBP). Annual with 2 sample sites in 2016

If you wish to see test results on-line, feel free to use this web address: http://www4.doh.wa.gov/SentryInternet/Intro.aspx You will be taken to a web site that requires you to agree to conditions in order to view information. Click "I Accept" and enter Westside's public water system ID is: 94950. When you arrive at the WWA water system page click on "samples". For some reason you have to hit the "Collect Date" tab twice to bring up all the tests in a chronological order. We are also happy to provide you with laboratory documentation of water quality test results upon request

Special Note to vulnerable populations:

This notice pertains to anyone who is wanting more guidance about water quality and health.

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 people, 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 Water Drinking Hotline (800-426-4791).

A Monitoring Violation: In 2015 WWA took our required test for "disinfection by products" (see chart, below). This single test is what the system has been required to do for some years but the rules changed in 2015 and 2 samples were required starting in that year. Technically, this omission is a "Monitoring Violation". The notice required to be delivered to members based on this violation follows:

NOTICE TO WATER SYSTEM USERS

DISINFECTION BYPRODUCTS MONITORING VIOLATION

Westside Water Association (ID # 949500,) located in King County is required to monitor your drinking water for specific contaminants on a defined basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. In 2015 we did only 1 of 2 required tests for Total Trihalomethanes & Haloacetic Acids. The results of that test indicated compliance with Safe Drinking Water standards (see results in chart, below) but Westside is technically in violation of a monitoring requirement and thus, this notice.

At this time:

- No action is required by the users.
- Sample frequency has been adjusted since 2015 as required.

For more information, contact Doug Dolstad at (206) 715-3805
Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses.) You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is sent to you by Westside Water Association.

Summary of Water Quality (Table)

The addition of the 2nd Anderson Well ("A2") on July 1st 2016 has resulted in even higher quality water for system users to enjoy. This source has become the "workhorse" of the system with the well points and spring in a supplemental role and with the "Canyon Well" relegated to emergency use only. The average for arsenic concentration dropped from 3 parts per billion (ppb) (Jan – May, with a short duration high of 7ppb in June's "grab sample") to 2 ppb in each of the 3rd and 4th quarters of the year. As required by reporting policy, results of the 2013 Lead and Copper samples are also presented. This is a tri-annual test and we expect to conduct this test in 2016. [?? Either we did or didn't]

Water Quality Table

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Haloacetic Acids (HAA5) (ppb)	NA	60	2.1	NA		2015	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	9.1	NA		2015	No	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	NA	60	3.3	3.0	3.3	**2016**	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	12.5	9.4	15.5	**2016**	No	By-product of drinking water disinfection
Inorganic Contaminants								
Arsenic (ppb)	0	10	2.7 (annual average)	2.4	7.0	**2016**	NO	Erosion of natural deposits. In Puget Sound the arsenic in Westside Water's well is from ancient volcanic activity.
Nitrate [measured as Nitrogen] (ppm)	10	10	.61	.2	.61	**2016**	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Radioactive Contaminants								
Radium (combined 226/228) (pCi/L)	0	5	0.55	NA		**2016**	No	Erosion of natural deposits

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	.23	2016	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Inorganic Contaminants							
Lead - action level at consumer taps (ppb)	0	15	.001	2016	0	No	Corrosion of household plumbing systems; Erosion

Report by: Douglas P Dolstad IWM Inc./ WWA Manager iwm.1@juno.com 206-715-3805

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
							of natural deposits

Special Note
Arsenic Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. Westside's arsenic concentration was reduced because of the new Anderson well (A2) put on line July 1st, 2016

Important Drinking Water Definitions	
Term	**Definition**
MCL	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	MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or epected risk to health. MCLGs allow for a margin of safety.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

About contaminants

It is important to realize that drinking water, including bottled water, may reasonably be expected and legally allowed to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. Some people though, 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, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791). If you have any questions or concerns about your drinking water, please do not hesitate to contact the Westside Water Association at 567-4568 [duplicated above]

Sources of Water

The sources of water Westside draws from are varied in location but all of them are considered by the Dept of Health to be "ground water". The newly drilled Anderson Well (A2) provides very high water quality water to Westside users all year long. A2 is supplemented by the originally acquired Anderson Well (A1) as needed with the well points and spring in Shinglemill Canyon being added during high use periods (mostly summer).

DOH requires water purveyors using emergency sources to inform users that such a source is being used and to recommend boiling of the water as a precaution. If Shinglemill Creek (an emergency surface water source) is ever used, users would be notified that the source is on-line as per DOH requirements.

Similarly, if the Canyon well is being used, users are informed about the concentration of arsenic in the blended water. In 2016, the Canyon well was only used in May and June and the MCL for arsenic was never exceeded.

Westside is fortunate to own 40 acres of the watershed that provides its water. This ownership confers a level of protection some systems just don't have. It is still very important that the rest of the watershed be handled in an ecologically responsible way. If you see any activity that you believe might compromise the quality of the water and thus, you or your loved one's health, please call Island Water Management or a Westside Water Board member (who will get hold of IWM) and we will investigate the situation. Truly, the watershed's health is our own.

Update on Anderson Well 2

We were very pleased to bring this source on line July of 2016. The use of this source significantly reduced the annual concentration of arsenic delivered to consumers and is otherwise of high water quality. We are monitoring the production of this well to better predict what is a sustainable withdrawal rate.

Potential sources of chemical contamination

Because some of our water comes from springs, the hydrology of which is largely unknown, there is good reason to be vigilant about the environmental health of our watershed. Contaminants that may be present in source water before we treat it include:

Microbial contaminants such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife. Westside uses chlorine as a disinfectant. The chlorine level is monitored every week day and a bacteriological test is taken monthly. There were no positive bacteriological samples in 2016.

Inorganic contaminants such as salts and metals, which can be naturally occurring or result from urban storm water runoff, saltwater intrusion, industrial or domestic wastewater discharges, and, mining or farming. Inorganic chemicals include arsenic, barium, selenium, nickel, cyanide, fluoride, iron, manganese, silver, etc.

Radioactive contaminants, which are naturally occurring. This is more of a problem in places that have bedrock at the level of their water source and not so much an issue for this hill of a mound of till we call Vashon.

Pesticides and herbicides, may come from sources such as agriculture and residential uses.
Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Westside Water treats our water according to

EPA's regulations and/or the standards of the Washington State Department of Health – whichever are more stringent. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. If you are using a filter for your household please pay attention to the manufacturer's recommended maintenance schedule.

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; e.g. take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Additional Information for Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Westside Water Association is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Additional Information for Arsenic

While your drinking water meets EPA's standard for arsenic on a Rolling Annual Average, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. 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.

Management and Board Information

The Westside Water system is managed by Island Water Management, a company owned by WWA member Doug Dolstad. A five member Board serves as the governing body of the Association. The Board meets on a regular bi-monthly schedule (3rd Thursday of the odd month at 7 pm)

Meetings are held at a board member's home so call the WWA office if you'd like to attend and I'll tell you where that month's meeting will be held.

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WWA Board Members (2016):

Amy Cole, Secretary	Judy Olson, Treasurer	Bob Jones/Pat Call President	Theo Eicher	Jennifer Pratt Vice-President