

\* Please note, the 2015 Water Quality Report will be posted on this website on or before June 30, 2016.



# Water Quality Report 2014

## THE CITY OF MARYSVILLE PROVIDES EXCEPTIONAL WATER FOR YOU

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2014. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking-water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

The City of Marysville wants to ensure there are abundant natural resources for a livable and sustainable community. Therefore, the City has adopted a conservation program comprised of regional and local measures. The measures are part of a regional conservation program called the Everett Water Utility Committee or EWUC program.

The measures specific to Marysville are implemented by Marysville staff in the City's service area. The specific goal of the City of Marysville's 2009-2014 conservation program was to reduce annual consumption by an average of 128,930 gallons per day by the end of 2014.

### CONGRATULATIONS MARYSVILLE!

Thanks to your continued efforts to conserve water, we have exceeded our 6-year Water Conservation Program goal. The City saved an average of 139,645 gallons per day during 2014. During the past 6 years, you saved 239 million gallons of water - enough water to fill more than 360 Olympic-sized swimming pools.

The next 6-year goal will be established during 2015. Please continue your good work in protecting our water supplies for future generations and help us to achieve our next goal, which we'll announce later in 2015.



### DISTRIBUTION LEAKAGE STANDARD

Water suppliers are required to maintain water loss in their distribution system to 10% or less, based on a rolling three year average.

### CITY OF MARYSVILLE DISTRIBUTION SYSTEM LEAKAGE FOR YEARS 2012-2014 (IN MILLION GALLONS)

Total Water Produced and Purchased	6,327
Authorized Consumption	6,509
Distribution Leakage Volume	0

### CUSTOMER VIEWS ARE ALWAYS WELCOME

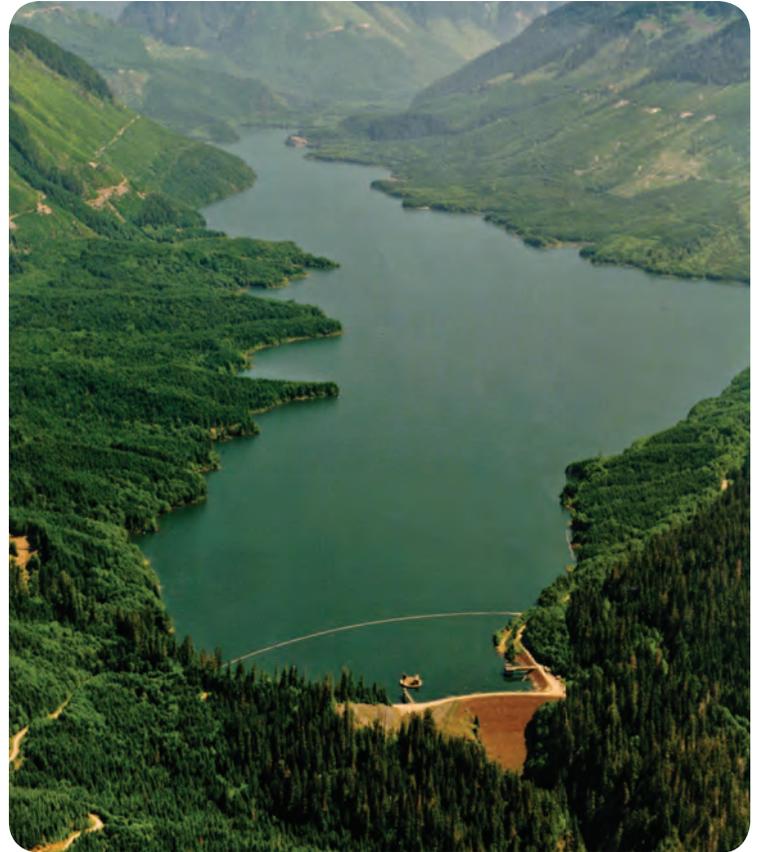
Call the City of Marysville Public Works Water Department at (360) 363-8100 for information about the next opportunity for public participation in decisions about our drinking water. You can also visit us at our office located at 80 Columbia Avenue, Marysville, WA.



## Where does our water come from? How is it treated?

**The Lake Goodwin well** is a high-quality source that pulls water from a deep aquifer. The water purity is well above regulatory standards and no treatment is necessary; however a small amount of sodium hypochlorite (chlorine) is added to the water as an additional safety measure.

**Edwards Springs** is Marysville's original water source, developed in 1920. The springs source does not require filtration due to its high-quality water and protected watershed. Instead, the spring water is disinfected by two methods to ensure that any contaminants naturally present in the environment are inactivated. The first method is to pass water through Ultra-Violet Reactors, commonly known as a UV disinfection system. The UV system inactivates larger organisms such as Cryptosporidium and Giardia. In addition to UV, sodium hypochlorite (chlorine) is added, which is the best method for disinfection of viruses and bacteria that might pass through the UV system.



Water purchased from the **City of Everett** comes from the Spada Lake Reservoir in the Cascade Mountains where rainwater and snowmelt is collected. At the Everett water treatment plant the water is filtered, disinfected, fluoridated, and the pH is adjusted to control corrosiveness.



**At the Stillaguamish Filtration Plant**, water is piped from a Ranney Well located on the Stillaguamish River to a state-of-the-art treatment system. Water is filtered by a new technology called an ultra-filtration membrane. This membrane filtration system removes 99.99% of microbiological contaminants.

After filtration, a small amount of sodium hypochlorite (chlorine) is injected into the system for disinfection of any remaining biological contaminants that might pass through the filters.

### REBATES AND FREE INDOOR AND OUTDOOR CONSERVATION KITS ARE AVAILABLE

Become part of our local and regional conservation solution by picking up your FREE conservation kits and receive a one-time rebate up to a maximum of \$50 for certain low-flow toilets, tumble-action washing machines, and other water saving devices. Call (360) 363-8100 for more information.

### Does our water have fluoride?

The City of Marysville's water system is comprised of multiple sources including water purchased from the City of Everett, as well as several city-owned wells and springs. The City of Everett adds fluoride to its drinking water as a means of promoting dental health. City of Marysville sources, consisting of Edward Springs, Stillaguamish Filtration Plant and Lake Goodwin Well, are not

fluoridated. As a result, Marysville residents may receive water that is fluoridated, non-fluoridated or only partially fluoridated depending on water system operating conditions. Residents concerned with the level of fluoride who are unsure of which source provides their water should contact our Water Quality Division at (360) 363-8100.

# YOU CAN HELP KEEP OUR WATER SAFE

Providing our customers with safe drinking water is our primary objective - but did you know that we also need your help in protecting this valuable resource? In some instances, water can unintentionally flow in the backwards direction (called backflow) and it can create a dangerous siphon effect within your household and irrigation plumbing - powerful enough to pull contaminants into your drinking water lines. The best way to avoid this potential contamination, called a cross-connection, is to make sure that your plumbing fixtures do not come in contact with anything that is considered non-potable. For instance, never leave a garden hose submerged in any type of container or tub, or connected to a chemical applicator. You should also have any required backflow prevention assemblies installed on your plumbing system tested annually. Some common applications for backflow preventers are underground irrigation systems, fire suppression systems, water softeners, boilers, and radiant floor heating systems. Please contact the City of Marysville Water Quality Division if you would like us to assist you in determining the best methods for protecting your drinking water.



## Health information about your water

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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

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/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 (1-800-426-4791).

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. The City of Marysville 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 drinking 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://water.epa.gov/drink/info/lead>.

### UNREGULATED CONTAMINANT MONITORING RULE 3 (UCMR3)\*

Substance	MRL	Your Water	Range
Chlorate	20	117	82 - 212
Chromium	0.2	0.62	0 - 2.7
Hexavalent Chromium	0.03	0.6	0.08 - 2.5
Strontium	0.3	41	15 - 78
Vanadium	0.2	0.68	0.21 - 4.2

\* The Safe Drinking Water Act requires that once every five years EPA issue a new list of no more than 30 unregulated contaminants to be monitored by public water systems, called the Unregulated Contaminant Monitoring Rule (UCMR). The City of Marysville has participated in the first 3 rounds of the UCMR. We are sharing the results of those substances that were detected in our water during the Round 3, which occurred in 2014. As these substances are not regulated, there is no current maximum contaminant level (MCL) associated with these sample results.

# WATER QUALITY RESULTS 2014 (PWSID# 51900C)

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 well below 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.

## REGULATED AT THE SOURCE

### CITY OF EVERETT

Substance	MCLG	MCL	Your Water	Range		Sample Date	Complies?	Typical Sources
				Low	High			
Arsenic (ppb)	0	10	0	N/A	0	2014	Yes	Erosion of natural deposits; Runoff from orchards
Nitrate (ppm)	10	10	0.05	0.01	0.09	2014	Yes	Erosion of natural deposits; Animal waste
Turbidity (ntu)	N/A	TT*	0.11	100% of samples met limits		2014	Yes	Soil run-off

### EDWARD SPRINGS TREATMENT PLANT

Substance	MCLG	MCL	Your Water	Range		Sample Date	Complies?	Typical Sources
				Low	High			
Arsenic (ppb)	0	10	3	N/A	3	2013	Yes	Erosion of natural deposits; Runoff from orchards
Nitrate (ppm)	10	10	1.67	N/A	1.67	2014	Yes	Erosion of natural deposits; Animal waste
Turbidity (ntu)	N/A	TT*	0.95	N/A	N/A	2014	Yes	Soil run-off

### LAKE GOODWIN WELL

Substance	MCLG	MCL	Your Water	Range		Sample Date	Complies?	Typical Sources
				Low	High			
Arsenic (ppb)	0	10	4	N/A	4	2010	Yes	Erosion of natural deposits; Runoff from orchards
Nitrate (ppm)	10	10	0	N/A	0	2014	Yes	Erosion of natural deposits; Animal waste

### STILLAGUAMISH FILTRATION PLANT

Substance	MCLG	MCL	Your Water	Range		Sample Date	Complies?	Typical Sources
				Low	High			
Arsenic (ppb)	0	10	0	N/A	0	2010	Yes	Erosion of natural deposits; Runoff from orchards
Nitrate (ppm)	10	10	0.26	N/A	0.26	2014	Yes	Erosion of natural deposits; Animal waste
Turbidity (ntu)	N/A	TT*	0.18	100% of samples met limits		2014	Yes	Soil run-off

## REGULATED IN THE DISTRIBUTION SYSTEM

Substance	MCLG	MCL	Your Water	Range		Sample Date	Complies?	Typical Sources
				Low	High			
Chlorine (ppm)	MRDLG* = 4	4	0.75	0.02	1.62	2014	Yes	Water additive used to control microbes
Fluoride (ppm) from Everett Source	MRDLG* = 2	4	0.8	0.2	0.9	2014	Yes	Dental Health Additive
TTHM (ppb)	N/A	80	34.7	7.0	37.4	2014	Yes	Byproduct of drinking water disinfection
HAA(5) (ppb)	N/A	60	40.1	6.5	48.5	2014	Yes	Byproduct of drinking water disinfection

## LEAD & COPPER RULE - REGULATED AT THE CONSUMER TAP

Substance	MCLG	Action Level	Your Water (90th %)	# of Samples Exceeding the AL	Complies?	Sample Date	Typical Sources
Lead (ppb)	0	15	3	0 out of 30	Yes	2012	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.45	0 out of 30	Yes	2012	Corrosion of household plumbing systems; Erosion of natural deposits

**UNIT DESCRIPTIONS:** ppm (parts per million), ppb (parts per billion), mg/L (milligrams per liter)

- AL** Action Level – concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.
- MCL** Maximum Contaminant Level – highest level of contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible.
- MCLG** Maximum Contaminant Level Goal – level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- MRDLG** Maximum Residual Disinfectant Level Goal – level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- 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.
- N/A** Not Applicable
- ND** Not Detected
- NTU** Nephelometric Turbidity Units
- TT** Treatment Technique – a required process intended to reduce a contaminant level in drinking water.