City of Wenatchee's

Drinking Water Quality Report

Enjoy a glass of the excellent water...
delivered to your home every day since 1912
by the City of Wenatchee.

City of Wenatchee
Environmental Division
P. O. Box 519
Wenatchee, WA 98807-0519

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Our Drinking Water Source

Located just north of Rocky Reach Dam, the Eastbank Aquifer is the primary source of drinking water for the City of Wenatchee, East Wenatchee Water District and the Chelan County PUD. Aquifers, such as the Eastbank Aquifer, act as a natural filter and underground storage for water. The Eastbank Aquifer is recharged by the Columbia River, and as indicated by the high quality water it produces, the aquifer is an excellent filter. The Aquifer currently supplies an average of 10.5 million gallons per day to Wenatchee Valley residents.

The city operates the water utility under regulations set forth by the Washington State Department of Health (DOH) and the Environmental Protection Agency under the Public Water Supply ID# 943507. To ensure that safe drinking water is delivered everyday to your home, the City of Wenatchee administers a number of programs required by the DOH including Cross Connection Control, Water-use Efficiency, and Wellhead Protection. While the Eastbank Aquifer has been rated as having low susceptibility to contamination, all of these programs work together to maintain the high quality water every day.

Our system consists of the Regional Supply system, four reservoirs, two booster pump stations and 104.2 miles of pipe that make up the distribution transmission network. The water service boundary predominately reflects the city limits existing in 1979.

To meet the needs of existing customers and future growth in the Wenatchee Valley for the next fifty years, the Regional Water Supply is looking for a second water source. The preferred location for this second source is on Chelan County PUD property near the west bank of Rock Island Dam. In 2016, a contractor will begin drilling test wells and installing pumps to predict the capacity of the aquifer. For more information please visit the Chelan County PUD's Regional Water webpage at: **www.chelanpud.org/learning-center/in-your-neighborhood/regional-water-supply**

Lead in Drinking Water

In Washington State, lead in drinking water comes primarily from materials and components used in household plumbing. The more time water has been sitting in pipes, the more dissolved metals, such as lead, it may contain. Elevated levels of lead can cause serious health problems, especially in pregnant women and young children.

To help reduce potential exposure to lead:

- For any drinking water tap that has not been used for 6 hours or more, flush water through the tap until the water is noticeably colder before using for drinking or cooking. You can use the flushed water for watering plants, washing dishes, or general cleaning.
- Only use water from the cold-water tap for drinking, cooking, and especially for making baby formula. Hot water is likely to contain higher levels of lead.

If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water is available from EPA's Safe Drinking Water Hotline at 1-800-426-4791 or online at www.epa.gov/safewater/lead.

The Washington State Department of Health has additional information on how to reduce your exposure to lead in drinking water on their web site. (www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/Contaminants/Lead)

- Clean the screens and aerators in faucets frequently to remove captured particles.
- Use only "lead free" piping and materials for plumbing when building or remodeling.
- If you live in older housing build before the mid-1940s, it is recommended that you run your tap at least 2 minutes after the water has sat in the pipes for 6 hours or more.

The City of Wenatchee monitors for lead and copper following the Department of Health requirements. The size of our system dictates that 30 homes are tested every 3 years. The homes selected are homes most vulnerable to lead and copper corrosion. All samples have been below the action level for both lead and copper. For the latest results please see the data table included in this report.

ATENCION: Este documento contiene información muy importante referente a su agua. Por lo tanto deseamos compartir los resultados. Fue aprobado por los Departamentos del Estado y Gobierno Federal, pasando todas las pruebas para el año 2015 y calificó como saludable y apta para nuestro consumo. Si necesita más información, por favor llamar a la ciudad, al teléfono 888-6200 y con mucho gusto contestaremos sus preguntas.

Legionella Bacteria

Legionnaires' disease is a very serious type of pneumonia (lung infection) caused by bacteria called *Legionella*. In nature, *Legionella* live in fresh water and rarely cause illness. In man-made settings, *Legionella* can grow if water is not properly maintained. These man-made water sources become a health problem when small droplets of water that contain the bacteria get into the air and people breath them.

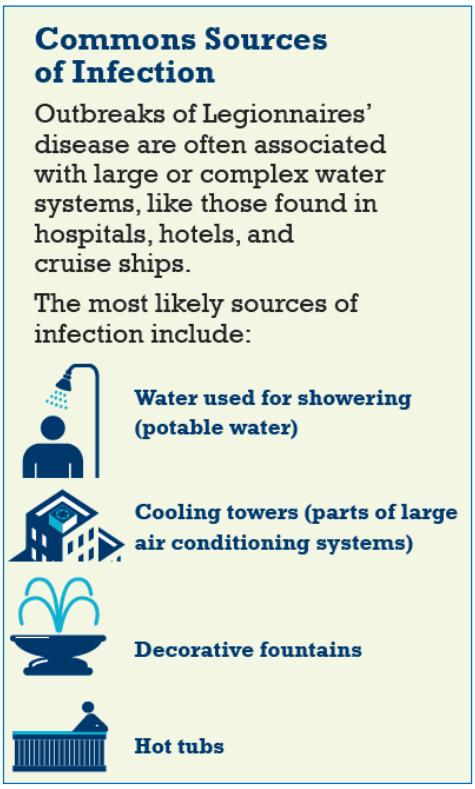
The Environmental Protection Agency (EPA) considered adding *Legionella* to the list of Unregulated Contaminant Monitoring for drinking water systems. After further study, they determined that the *Legionella* bacteria was found to be problematic in large or complex plumbing systems within buildings, not in the water system providing water to the building.

Buildings with an increased risk include:

- Health care facility where patients stay overnight or treat people who have chronic and acute medical problems or weakened immune systems
- Retirement homes or assisted-living facilities
- Buildings with centralized hot water systems, like hotels and high-rise apartment complexes
- Building that are more than 10 stories tall, including basement levels

If you own or manage a building with complex plumbing the Centers for Disease Control and Prevention (CDC) recently released the following guidance in regards to *Legionella* bacteria.

Website: http://www.cdc.gov/vitalsigns/



Graphic from www.cdc.gov/legionalla

Legionnaires' Disease

- If you develop pneumonia symptoms and may have been exposed to *Legionella*, see a doctor right away. Be sure to mention if you have used a hot tub, spent any nights away from home, or stayed in a hospital in the last two weeks.
- Signs and symptoms can include: cough, muscle aches, high fever, shortness of breath and headache
- Legionnaire's Disease is serious, but it can be treated with antibiotics. Most people who get sick need care in a hospital but make a full recovery.
- Most healthy people do not get Legionnaires' disease after being exposed to *Legionella*. Being 50 years or older or having certain risk factors can increase you changes of getting sick. The risk factors include: being a current or former smoker, having a chronic lung disease, having a weakened immune system from diseases like cancer, diabetes, or kidney failure, or taking medication that weakens your immune system.

The Centers for Disease Control and Prevention website is a good source of more information: **www.cdc.gov/legionella**

Water Quality Questions or Concerns 888-3235

Water Bill Questions 888-6200

Schedule to Have Your Water Shutoff for Repairs 888-6200

Chelan Douglas Health District..... 886-6400

City of Wenatchee Drinking Water Treatment

Chlorination is the only treatment required for the City of Wenatchee's drinking water. Chlorine is added at the source and acts as a disinfectant to protect against contamination from harmful bacteria. The chlorine levels are regularly monitored at the source and throughout the water system. During 2015 the average chlorine in the water system was 0.30 ppm. In 2015 the lowest value within the system was 0.07 ppm and the highest value was 0.53 ppm. If you are sensitive to the taste or odor of the chlorine, try placing a pitcher of tap water in your refrigerator overnight before drinking it.

The following table lists all of the drinking water contaminants that were detected during the 2015 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The table also lists contaminants that were not detected but may be of interest to the consumer.

Substance	MCL or MRDL	MCLG or MRDLG	Result	Violation	Sample Date	Likely Sources
At the Groundwater Source - EPA Regulated						
Fluoride (ppm)	4	4	**<0.2**	**No**	2011	Erosion of natural deposits
Turbidity (NTU)	1	N/A	**<0.2**	**No**	2015	Presence of suspended/colloidal materials
At the Groundwater Source - State Regulated						
Conductivity (umhos/cm)	700	700	**154**	**No**	2015	Erosion of natural deposits
Hardness (mg/L)	N/A	N/A	**68.0**	**No**	2015	Naturally occurring
In the Distribution System						
Total Coliform (# of positive samples)	1	0	**0**	**No**	2015	Naturally present in the environment
Fecal Coliform & E. coli (# of positive samples)	0	0	**0**	**No**	2015	Human and animal fecal waste
Chlorine (ppm)	4	4	**0.30**	**No**	2015	Water additive used to control microbes
In The Distribution System	**MCL**	**MCLG**	**Average Result/ Range**	**Violation**	**Sample Date**	**Likely Sources**
Total Trihalomethane (ppb)	80	N/A	4.85 2.6 – 6.3	**No**	2015	By-product of drinking water chlorination
Total Haloacetic Acids (ppb)	60	48	1.26 ND - 2.3	**No**	2015	By-product of drinking water chlorination
At the Customer's Tap	**Action Level**	**Number of sites sampled**	**90th percent value**	**Violation**	**Sample Date**	**Likely Sources**
Copper (ppm)	1.3	30	**0.574**	**No**	2014	Corrosion of household plumbing
Lead (ppb)	15	30	**2**	**No**	2014	Corrosion of household plumbing
Unregulated Contaminant Monitoring **	**MCL**	**MCLG**	**At the Groundwater Source**	**In The Distribution System**	**Sample Date**	**Likely Sources**
Hexavalent Chromium (ppb)	100	100	0.064	0.052	2015	Naturally occurring element
Unregulated Contaminant Monitoring **	**Health Reference Level ****	**At the Groundwater Source**	**In The Distribution System**		**Sample Date**	**Likely Sources**
Chlorate (ppb)	210	ND	42.4		2015	By-product of drinking water chlorination
Strontium (ppb)	1500	98.0	106		2015	Naturally occurring element
Vanadium (ppb)	21	1.1	1.1		2015	Naturally occurring elemental metal

** Unregulated contaminants are those for which the EPA has not established a drinking water standard. The purpose of unregulated contaminant monitoring is to help EPA determine their occurrence in drinking water and potential need for future regulation.

** Health reference levels refer to exposure levels that will not cause significant risks of non-cancer health effects. Long-term exposure to levels below these levels are assumed to produce no ill effects.

- Not all compounds are tested for every year. State and Federal regulations dictate which contaminants the City must test for and how often. The results presented above represent the most current data for the source and the water system. All testing was performed by state certified laboratories. The City meets or exceeds the testing frequency required.
- In 2015 the source water was tested for 43 synthetic organic contaminants which included herbicides, PCB's, pesticides, and many other chemicals and in 2014 the source water was tested for 60 volatile organic chemicals, such as solvents and petroleum products. None of these potential contaminants were detected in the drinking water.

Definitions for the Data Table

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

Lead and Copper 90th Percentile: Out of every 10 homes sampled, 9 were at or below this level.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Maximum Contaminant Levels are set as close to the Maximum Contaminant Level Goals as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): 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.

Maximum Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

N/A: Not applicable.

ND: Not Detected

NTU: Stands for **N**ephelometric **T**urbidity **U**nit which is the unit of measure for the clarity of water.

ppb: Parts of contaminant per billion parts of water, also the same as micrograms per liter.

ppm: Parts of contaminant per million parts of water, also the same as milligrams per liter.

Umhos/cm: micromhos per centimeter, the unit of measure for the ability of water to carry an electric current.

Tampering with a water meter chamber or the equipment inside is against the law!

This includes just opening the lid to look inside!

This applies to homeowners, contractors, plumbers and landscapers.

If you suspect a problem in the chamber or need the water shut off, please call 888-6200.

When planning on having the city shut off the water at the meter, please note that call out fees will be billed to your account if this is done outside regular business hours.

What You Pay For Your Water

2016 Water Service Charges For Single Family Residence, Duplex and Multi-Family		
Meter size	Monthly Minimum Charge	Consumption Rate (per 100 Cubic Feet*)
¾"	$11.01	$1.782
1"	$19.57	$1.782
1 ½"	$33.26	$1.782
2"	$51.12	$1.782

* 100 Cubic Feet is equal to 748 gallons

By comparison …

100 cubic feet of bottled water (at $0.99/ 20 oz.) would cost $4,739.33

Get involved …

The Wenatchee City Council meets on the second and fourth Thursday of every month at 5:15 pm in the Council Chambers, located at City Hall at 129 South Chelan Avenue in Wenatchee.

Water Use Efficiency – Annual Report Summary

The City of Wenatchee is required to submit an Annual Water Use Efficiency Report to the Washington State Department of Health every year by July 1st. This report provides information about the amount of water the city purchased from the Regional System, how much was sold to customers and how much was lost to leakage.

The City's goals are to reduce seasonal outdoor water use by 2-3% and to reduce distribution system leakage to 10% or less by December 31, 2016. The distribution system leakage for 2015 was calculated to be 19.8 % and the resulting 3-year average was 14.9 %. We are working to reach these goals by providing education to our customers and implementing a water loss control plan within our system.

The water use efficiency goals will be updated this fall. Please visit the website below for more information and to view the full 2015 Annual Water Use Efficiency Report.

www.wenatcheewa.gov/Water_Wise

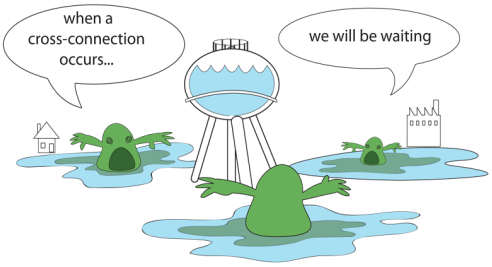
DANGER … HAZARDS AHEAD!

You may not think of your home or business as having hazards that might pollute the drinking water . However, even a garden hose submerged in a pool or a carwash bucket creates a cross connection which could potentially contaminant the drinking water. Once in the drinking water system, the contaminated water can spread quickly through the community, leading to disease outbreaks, chemical poisonings, physical injuries, and sometimes death.

The City of Wenatchee maintains a cross connection control program with the goal of eliminating hazards in the water system. When the cross connection cannot be removed, a backflow prevention valve can be installed to protect the drinking water. Lawn irrigation systems, fountains, and fire sprinkler systems are some of the most common cross connections that require a backflow prevention valve.

Steps to protect the drinking water are:

- Contact the Environmental Division at (509) 888-3235 to complete a survey of your residence or business.
- If hazards are identified that need to be protected by a backflow prevention valve:
  - Obtain a plumbing permit from the City of Wenatchee Building Department.
  - Install the backflow prevention valve upstream of the hazard.
  - Call the Building Inspection hotline at (509) 888-3263.
  - Have the backflow assembly tested by a Certified Backflow Assembly Tester upon installation and annually thereafter.



For more information about eliminating cross connections please call the Environmental Division at (509) 888-3235 or visit the website:

www.wenatcheewa.gov/government/public-works/water/cross-connection-control

Tips For Reducing Your Summer Water Bill

- Every spring check and fix leaking faucets and hoses.
- Adjust sprinklers to avoid watering the street, driveways and sidewalks.
- Throughout the season adjust your watering schedule to match the change in temperature.
- Aerating your lawn helps the water soak in rather than run-off.
- Sweep your sidewalk and driveway instead of hosing them off.
- Set a timer to remind you when it is time to turn the water off to avoid overwatering.
- Water your lawn during the cooler hours of the day to reduce the amount of water lost to evaporation.
- Choose sprinklers with spray patterns that match the shape of your lawn or garden area.
- Group plants with similar water needs together. Pick low-water plants and explore Xeriscaping for landscape ideas.

Educational Information from the Environmental Protection Agency

As water travels over the surface of 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. Contaminants that can occur in untreated water include: microbial contaminants such as viruses and bacteria; inorganic contaminants such as salts and metals; pesticides and herbicides; organic chemicals from industrial or petroleum use, and radioactive materials. In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. 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 contaminants does not necessarily indicate that the 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**) or on EPA's web site at www.epa.gov/safewater.