

# East Wenatchee Water District

## 2015 Annual Water Quality Report

*We are pleased to provide you with information about our region's most precious resource, drinking water. In 2015 your water, again, met or exceeded all state and federal drinking water standards. This annual water quality report is created in accordance with the Federal Safe Drinking Water Act. We are happy to comply as we want our customers to know their water is of the highest quality. This report is also available on our website [www.ewwd.org](http://www.ewwd.org)*



### WE APPRECIATE YOUR COMMENTS

The East Wenatchee Water District welcomes your questions, concerns and observations. Our Board of Commissioners, Terry Barnes, G. Brian Egan and Mike McCourt, meet on the first and third Wednesday of each month at 3:00 p.m. at the District Headquarters located at 692 Eastmont Avenue. Unless they are in executive session, any meeting of two or three commissioners is open to the public. Our District Manager, Vince Johnston can be reached by calling (509) 884-3569.

### Atención:

Este documento contiene información muy importante con relación a su agua potable. El propósito de este documento es proporcionarle información con respecto a la calidad del agua suministrada por el East Wenatchee Water District (Distrito de Agua). En 2015 el agua suministrada por el distrito cumplió y superó todos los estándares estatales y federales con respecto a la seguridad y la calidad. Si desea obtener más información con respecto a la calidad del agua u otros temas analizados en este documento, favor de llamar al (509) 884-3569.



## WHAT'S IN YOUR WATER AND WHAT ISN'T

The results of the most recent monitoring including that in 2015 are shown in the table below. Water was tested for the presence of potential contaminants, but only those required based on their detection are listed in this table.

Samples were also taken for the presence of Coliform 30 times from 8 different sample sights monthly in 2015. Coliform are naturally present in the environment and a test result showing their presence simply indicates the need for additional sampling. Last year we had one unsatisfactory samples for Coliform. Immediate repeat samples were satisfactory and it is believed the original sample may have been mishandled by the person taking the samples.

State and Federal regulations dictate which contaminants the District must test for and how often. Not all compounds are tested for every year. The results presented represent the most current data for the source and the water system.

ANALYTES	DETECTED LEVEL	UNIT	MCLG	MCL	COMPLY	LIKELY SOURCES
<b>EPA REGULATED</b>						
<b>Arsenic</b>	<0.002	ppb	0.002	0.01	<b>Yes</b>	Erosion of natural deposits and orchard run off
<b>Barium</b>	0.021	ppm	0.1	2	<b>Yes</b>	Erosion of natural deposits and drilling wastes
<b>Nitrite - N</b>	<0.07	ppm	0.5	1	<b>Yes</b>	Erosion of natural deposits, animal waste
<b>Nitrate - N</b>	0.2	ppm	0.5	10	<b>Yes</b>	Erosion of natural deposits, septic, fertilizer
<b>Total Nitrate/Nitrite</b>	0.2	ppm	0.5	10	<b>Yes</b>	Erosion of natural deposits, septic, fertilizer
<b>EPA REGULATED (Secondary)</b>						
<b>Iron</b>	<0.0097	ppm	0.1		<b>Yes</b>	Naturally occurring
<b>Manganese</b>	<0.0001	ppm	0.01		<b>Yes</b>	Naturally occurring
<b>Chloride</b>	1.15	ppm	20		<b>Yes</b>	Naturally occurring
<b>Sulfate</b>	9.96	ppm	10		<b>Yes</b>	Naturally occurring
<b>Sodium</b>	2.3	ppm	5		<b>Yes</b>	Naturally occurring
<b>Hardness</b>	68.0	ppm	10		<b>Yes</b>	Erosion of calcium and mineral deposits
<b>Turbidity</b>	<0.1	NTU	0.3		<b>Yes</b>	Soil erosion
<b>Total Dissolved Solids</b>	94.0	ppm	150		<b>Yes</b>	Erosion of solids
<b>Pesticides</b>						
Dimethoate	ND	ppm		0.70	<b>Yes</b>	
Terbufos Sulfone	ND	ppm		0.40	<b>Yes</b>	
PBDE47	ND	ppm		0.30	<b>Yes</b>	
PBDE 100	ND	ppm		0.50	<b>Yes</b>	
PBDE 99	ND	ppm		0.90	<b>Yes</b>	
2,2',4,4',5,5'-Hexabromobiphenyl	ND	ppm		0.70	<b>Yes</b>	
PBDE 153	ND	ppm		0.80	<b>Yes</b>	
<b>FROM THE TAP</b>	<b>RANGE</b>				<b>90th Percentile</b>	
<b>Lead</b>	<0.0005 to 0.00286	ppb	0	15	<b>0.0013</b>	Plumbing corrosion, erosion of natural deposits
<b>Copper</b>	0.016 to 0.959	ppm	1.3	1.3	<b>0.696</b>	Plumbing corrosion, erosion of natural deposits
<b>DISINFECTION BY-PRODUCTS (see below for description)</b>						
<b>Total Trihalomethane</b>	6.32 LRAA	ppb	N/A	N/A	<b>Yes</b>	By-product of drinking water chlorination
<b>Total Haloacetic Acid</b>	0.53 LRAA	ppb	48	60	<b>Yes</b>	By-product of drinking water chlorination
<b>Chlorine Residual</b>	0.33 Avg.	ppm	MRDL=4	MRDL=4	<b>Yes</b>	Measure of remaining disinfectants

## DEFINITIONS:

**LRAA** : Locational running annual average.

**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.

**Maximum Contaminant Level Goal or 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 Contaminant Level or MCL**: 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.

**Maximum Residual Disinfectant Level or 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.

**ND**: None Detected.

**N/A**: Not applicable

**NTU**: Nephelometric Turbidity Unit.

## THE PURPOSE OF DISINFECTION, AND THE RESULTING DISINFECTION BY-PRODUCTS

Drinking water is disinfected with chlorine to destroy bacteria, viruses and Giardia. Inadequate disinfection may lead to acute gastrointestinal illnesses. However, as the disinfectant reacts with naturally occurring organic matter in the water, disinfection by-products are formed. Disinfection by-products have been linked to increased cancer risks from drinking water containing high levels over many years. New drinking water regulations provide a balance between required levels of disinfection and the resulting disinfection by-products. We are pleased to announce that after five years of extensive monitoring for disinfection by-products throughout our District we have seen results well below any state or federal action levels. Chlorination is our only treatment required and we monitor its levels throughout our system daily.

## INFORMATION ON 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. Information on lead in drinking water is available from EPA's Safe Drinking Water Hotline at 1-800-426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## EDUCATIONAL INFORMATION

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. Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 website [www.epa.gov/safewater](http://www.epa.gov/safewater) or by contacting the EPA's Safe Drinking Water Hotline (1-800-426-4791).

## SOURCE PROTECTION INFORMATION

The Department of Health has Source Water Assessment Program (SWAP) data compiled for all community Public Water Systems in Washington. SWAP data for the East Wenatchee Water District is available online at <http://www.doh.wa.gov/ehp/dw/sw/assessment.htm>. Simply enter our system's name and I.D. #218005 and you will have access to the information. Currently the assessment shows no significant susceptibility to potential sources of contamination.

## WHERE OUR WATER COMES FROM

East Wenatchee Water District, System #218005-A. Your water comes from a groundwater source called the East Bank Aquifer. Located in Douglas County near Rocky Reach Dam, the aquifer is tapped by four wells drilled 200 feet in depth. The water from the East Bank Aquifer is of excellent quality and quantity and is capable of supplying an estimated 240 million gallons per day. The District also has two other seasonal groundwater sources that can be used if needed: Wells 4 & 5 located off Rock Island Road, and Well 7 located off of Cascade St. Water was not used from these sources in 2015.

## CUSTOMER INFORMATION

We have the Direct Payment Plan for your convenience. You may have your water bill withdrawn directly from your checking account at no additional cost. Also for your convenience we accept credit and debit cards for payment of your water bill. Bills may also be paid via our website [ewwd.org](http://ewwd.org)

## SENIOR CITIZEN & DISABLED PERSON DISCOUNT

We still adjust water service charges for low income senior citizens and disabled persons. The maximum annual income is \$40,000 and you must be exempt from a portion of your property tax through Douglas County. If you think you may qualify, please stop by the District office and complete the paperwork for your adjustment.

<b>Water Rates For 2016</b>	
<i>Meter Size</i>	<i>Bi-Monthly Rate</i>
<b>3/4 Inch</b>	<b>\$53.00</b>
<b>1 Inch</b>	<b>\$58.50</b>
<b>1 1/2 Inch</b>	<b>\$66.25</b>
<b>2 Inch</b>	<b>\$85.00</b>
<b>3 Inch</b>	<b>\$228.00</b>
<b>4 Inch</b>	<b>\$281.00</b>
<b>Additional Multi-Family Unit</b>	<b>\$42.00</b>
<b>Charge per 100 cubic feet in excess of 1200 = \$1.65</b>	
<b>Senior/Low income Discount for 2015</b>	
<b>Level 1</b>	<b>\$19.00</b>
<b>Level 2</b>	<b>\$15.00</b>
<b>Level 3</b>	<b>\$10.00</b>

## WATER USE EFFICIENCY

The East Wenatchee Water District adopted the following water savings goals through our Comprehensive Water System Plan in 2014. The new goal was first introduced via public forum Sept. 4, 2014 and includes:

- Reducing Distribution System Leakage (DSL) by 0.5 percent by 2020.
- Reducing per-capita water use by 1 percent to 2 percent by 2020; and
- Promote public education and awareness of water conservation issues.

We would like to thank and congratulate our customers for helping us meet and exceed our goals and for conserving this limited resource! Over the past 20 years the average household use has dropped by 30%, dramatically dropping from 428 gallons per day per ERU in 1994 to just over 130 gallons per day in 2015. That's an average consumption reduction of 1.8 percent per year. The District encourages customers to continue to find ways to conserve water and we assure you we are working aggressively to meet our new goals.

Our 3-year average for Distribution System Leakage is currently 8.2%, which is under the 10% standard allowed by the State. In 2015 we experienced a near-record number of leaks in our system due to aging steel pipes that are reaching the end of their expected useful life. Approximately 40% of our 200+ miles of pipe are old steel pipes, and over the past ten years the District has replaced approximately ten miles, or one mile per year.

To achieve significant reductions in water loss in the future, these old pipes must be replaced. The District is currently developing a long-term plan for prioritizing the replacement of mains that are past their useful life. We expect to implement this plan starting in 2016.

## WATER CONSERVATION TIPS

For the past few years we have noticed some dramatic changes in water use during the summer months.

Thank you for doing your part to conserve this precious resource!

- **Remember that 1" of water per week is all your lawn needs to stay healthy. To easily determine if your lawn needs to be watered, simply walk across it. If you leave footprints it's time to water. Don't waste by over-watering!**
- **Pick low-water plants. When you buy plants, choose plants for immediate beauty and future water savings. Group plants with similar water needs together. Explore Xeriscape for landscaping ideas.**
- **Mulch-mow your lawn. Set your mower height at 2-inches and leaving the clippings on the lawn. The clippings help retain moisture and you won't need to bag the clippings!**
- **Improve water penetration by aerating your lawn and dethatching.**
- **Water wisely. When you do water, water deeply, but infrequently. Water only during the cooler hours of the day, between 7:00 p.m. and 10:00 a.m. to avoid losing up to half of your water to evaporation.**
- **Improve your soil. Add compost throughout your planting areas.**
- **Use soaker hoses or drip irrigation. Repair leaks in faucets and hoses. Use water-saving nozzles.**
- **Adjust sprinklers to avoid watering the street, driveways and sidewalks. Choose sprinklers with spray patterns that match the shape of your lawn or garden area.**
- **Limit watering periods by setting a timer to remind you when it's time to turn the water off.**
- **Install a rain shut off device to prevent watering during rainy periods.**
- **Use a broom to clean the driveway or walkways, not the hose.**
- **Cover your spa or pool to reduce evaporation.**
  
- **Check Your Meter** - Turn off all water-using appliances and fixtures inside and outside your home. Locate the water meter (typically out at the property line in a concrete box. Call us if you're not sure!) Check and record the current meter reading. Wait 10 minutes, without using any water inside or outside the home. While you're waiting check and see if there's a leak detection dial on the meter. It is usually a small red or black triangle that spins if there is water being used and is an indication that there is a leak.

After the 10 minutes, check the meter again and compare readings. If the numbers don't match, you have a leak. The most common culprits are leaking toilets and dripping faucets. If you believe your consumption is due to a factor beyond your control, please call the office and we will send out a crew worker to re-read your meter and help you troubleshoot your abnormal water consumption.
  
- **Test Your Toilet** - Lift the lid off of your toilet and add 5 to 10 drops of food coloring, or a dye tablet (available at our office) into the tank. Wait 5 minutes and then check the toilet bowl. If you see coloring in the bowl, you have a leak. In most cases, replacing the toilet flapper and/or the filling mechanism will correct the problem.



# An Introduction to Cross-Connection Control

## **NEW REQUIREMENT FOR 2016**

**ALL ASSEMBLIES MUST BE TESTED BY AUGUST 1<sup>st</sup> TO AVOID PENALTIES.**

**QUESTION:** What is backflow?

**ANSWER:** Backflow is the undesirable reversal of flow of non-potable water or other substances through a cross-connection and into the piping of a public water system or consumer's potable water system.

**QUESTION:** What is a cross-connection?

**ANSWER:** A cross-connection is any temporary or permanent connection between a public water system and any source or system containing nonpotable water or other substances. An example is the piping between a public water system and an auxiliary water system, private well, cooling system, or irrigation system.

**QUESTION:** Why do water suppliers need to control cross-connections and protect their public water systems against backflow?

**ANSWER:** Backflow into a public water system can pollute or contaminate the water in that system (i.e., backflow into a public water system can make the water in that system unusable or unsafe to drink), and each water supplier has a responsibility to provide water that is usable and safe to drink. Consumers generally have absolute faith that water delivered to them through a public water system is always safe to drink. For these reasons, each water supplier must take reasonable precautions to protect its public water system against backflow.

**QUESTION:** What is a backflow preventer?

**ANSWER:** A backflow preventer is a means or mechanism to prevent backflow. The basic means of preventing backflow is an air gap, which either eliminates a cross-connection or provides a barrier to backflow. The basic mechanism for preventing backflow is a mechanical backflow preventer, which provides a physical barrier to backflow. The principal types of mechanical backflow preventer are the reduced-pressure principle assembly, the pressure vacuum breaker assembly, and the double check valve assembly.

**QUESTION:** Why do backflow preventers have to be tested periodically?

**ANSWER:** Mechanical backflow preventers have internal seals, springs, and moving parts that are subject to fouling, wear, or fatigue. Also, mechanical backflow preventers and air gaps can be bypassed. Therefore, all backflow preventers have to be tested annually at minimum to ensure that they are functioning properly.

**SUMMARY:** If you use the domestic water through an In-Ground sprinkler system, you are required to have a Backflow Prevention Assembly installed. If you connect your domestic water to the same piping system that carries your irrigation water you must have a Backflow Prevention Assembly installed. If you only use irrigation water from GWID or Wenatchee Reclamation, and it is NOT physically connected to your domestic water system in any way, you are not required to install a Backflow Prevention Assembly.