2019 TULALIP UTILITIES WATER QUALITY REPORT



CONTACT INFORMATION:

Please contact the numbers listed below if you would like more information about this report or for any questions related to your drinking water:

EPA's Hotline: 1 - 800 - 426 - 4791 Tulalip Utilities (360) 716 - 4840 TUA Fax: (360) 716 - 0700

Gus Taylor (360) 716 - 4011 Mike Leslie (360) 716 - 4840

Is my water safe?

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 you water comes from, what it contains and how it compare to standards set by regulatory agencies. This report is a snapshot of last years water quality. We are committed to providing you with information because informed customers are our best allies.

How can I get involved?

At this time we do not hold public meetings on a regular basis. You may contact our office at 360-716-4840 for any inquiries questions or concerns that you may have.

Is it ok to drink water from a garden hose?

Many hoses are made of PVC, a material that uses lead as a stabilizer. When water settles in these lead based hoses the concentration of lead increase 10 to 100 times the allowable limit set by the environmental health agency. However, you can purchase lead free hoses from your local store. Make sure that they state, "drink-safe", or, "safe for potable water" or "lead-free". This indicates that they are plated with nickel as opposed to lead.

*Lead poisoning interferes with a variety of body processes and is very toxic to many of our organs and tissues. It interferes with the development of Our nervous system, thus is very harmful to the developmental process of our children so be sure to purchase hoses that will be safe for them play in and drink water from.

Why are there contaminants in my drinking 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 Environmental Protection Agency (EPA) Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap 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 dissolves naturally occurring and, in some cases radioactive material and substances resulting from the presence of animals or from human activity: microbial contaminants such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; inorganic contaminants such as salts and metals which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas productions, mining, or farming; pesticides and herbicides which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses; 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 stormwater run-off and septic systems.

In order to ensure that tap water is safe to drink the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems (PWS). Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

How can I help conserve water?

The average U.S household uses approximately 400 gallons of water per day or 100 gallons per person per day. There are many low-cost and no-cost ways to conserve water. Small changes can make a big difference! There are many ways in which you can help to conserve water:

- Take short showers— a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month
- Use a water-efficient showerhead. They are inexpensive, easy to install and can save up to 750 gallons a month
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month
- Water plants only when necessary
- The average car wash uses over 30 gallons of water
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing you have a leak. Fixing it or replacing with a new model can save up to 1.000 gallons a month
- Adjust sprinklers so only your lawn and flowers are watered. Apply water only as fast as the soil can absorb it and only water during the
 coolest parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure future generations use water wisely. Make it a family effort to reduce your water bill!
- Visit www.epa.gov/watersense for more information



ADDITIONAL INFORMATION FOR I FAD:

If present elevated lead levels 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. Tulalip Utilities Authority 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 your 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 availa-



Do I need to take special precautions?

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 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 or http://water.epa.gov/drink/hotline

How is my water treated?

Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

How much water is used in a typical shower?

The Federal Energy Policy Act (FENPA) set a nationwide regulation that limits shower-heads to a maximum flow of 2.5 gallons per minute (GPM). Shower-heads made before 1980 are rated at 5 GPM. Since the average shower is estimated to last 8.2 minutes, the old shower-heads use 41 gallons of water while the newer, low-flow shower-heads use only about 21 gallons.

How many contaminants are regulated in drinking water?

The U.S. EPA regulates over 80 contaminants in drinking water. Some states may choose to regulate additional contaminants or to set stricter standards, but all states must have standards at least as stringent as the U.S. EPA's. Each well site has there own set of standards and regulations that are imposed and carefully supervised year round.

Where can I find source water assessment and its availability?

You may contact Tulalip Utilities at 360-716-4840 to inquire about this information.

How can I help protect our valuable source water?

Protection of drinking water is everyone's responsibility. There are a number of ways in which you can help to protect your communities water source:

- 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 sewer system
- Dispose of chemicals properly; take used motor oil to a recycling center
- Volunteer in your community. Find a watershed or wellhead protection organization in your community or visit the Watershed Information Networks How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to street drains 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.

Why do I get this report every year?

Community water system operators are required by Federal law to provide their customers an annual water quality report. The report helps people make informed choices about the water they drink. It lets people know what contaminants, if any, are in their drinking water and how these contaminants may affect their health. It also gives the system operators a chance to tell customers what it takes to deliver safe drinking water.

"It is our goal to provide adequate safe drinking water for everyone in our community."

	DELIA JIMICUM #105300135										
CONTAMINANT	DATE	RESULTS	MCL	VIOLATION	CONTAMNINAT DESCRIPTION						
TTHM (mg/L)	2019	2.5	80	NO	By-product of drinking water disinfection						
**Arsenic (mg/L)	2019	.0055	10	NO	Erosion; Run-off from orchards and glass and electronics production wastes						
Barium (mg/L)	2019	.0078	2	NO	Discharge of drilling wastes and metal refineries; Erosion						
Chromium (mg/L)	2019	.0034	0.1	NO	Discharge from steel and pulp mills; erosion of natural deposits.						
Nitrate (mg/L)	2019	1.86	10	NO	Run-off from fertilizer use; Septic tanks/sewage leaching; Erosion						
Sodium (mg/L)	2019	7.6	N/A	NO	Naturally occurring metal; can increase blood pressure in doses over recommended daily intake						
Sulfate (mg/L)	2019	8.1	N/A	NO	Naturally occurring mineral in rocks; Not harmful but may cause water to smell unpleasant						
CONTAMINANT	DATE	RESULTS	AL	VIOLATION	CONTAMNINAT DESCRIPTION						
Copper (mg/L)	2019	.0496	0	NO	Erosion: Leaching from wood preservatives: Corrosion of household plumbing						

DELIA JIMICUM

The Delia Jimicum system consists of 12 residential connections serving approximately 42 persons. The water is supplied by one ground water well, with a 2000 gallon capacity storage tank. Water production is estimated at 4,200 gals/day. Disinfection is accomplished by injecting dilute sodium hypochlorite solution when the well pump is pumping to the reservoir.

Violations:

- Lead consumer notice (01/01/2019) We failed to provide timely lead tap water results to consumers where it was tested. All results were under the AL. VIOLATION WAS CORRECTED 06/17/2019
- 2. Nitrates monitoring (01/01/2019 12/31/2019)- Test was completed on time, however, the results were reported late to the EPA. VIOLATION WAS CORRECTED 01/17/2020

MADISON ESTATES #105300144								
CONTAMINANTS	DATE	RESULTS	MCL	VIOLATION	CONTAMNINAT DESCRIPTION			
Zinc (Mg/L)	2019	0.0749	2	NO	Naturally occurring mineral that is essential for human health			
**Arsenic (Mg/L)	2019	0.0046	0.010	NO	Erosion of natural deposits; Run-off from orchards and glass/electronics production wastes.			
Barium (Mg/L)	2019	0.0099	2	NO	Discharge of drilling waste/metal refineries; Erosion. Can increase blood pressure			
Chromium (Mg/L)	2019	0.0027	0.1	NO	Discharge from steel and pulp mills; erosion of natural deposits.			
Nitrate (Mg/L)	2019	0.68	10	NO	Runoff from fertilizer; Septic tank/sewage leaching; erosion			
Sulfate (Mg/L)	2019	12.2	N/A	NO	A naturally occurring mineral in rocks. It is not harmful for you but may cause water to smell unpleasant.			
Sodium (Mg/L)	2019	10.3	N/A	NO	Naturally occurring metal that can increase blood pressure in doses over the recommended daily intake.			
Iron (Mg/L)	2019	0.08	N/A	No	Naturally occurring mineral that is essential for the body. Can cause water to appear brownish red and stain sinks and toilets.			

MADISON ESTATES

The Madison estates water system consists of 25 water connections serving approximately 86 persons. The water is supplied by one ground water well with an above ground concrete storage tank with a capacity of 29,000 gallons. Average production is estimated at 9,636 gals/day. Disinfection is accomplished by injecting dilute sodium hypochlorite solution when the well pump is pumping to the reservoir.

Violations:

- 1. Lead consumer notice (01/01/2019)- We failed to provide timely lead tap water results to consumers where it was tested. VIOLATION WAS CORRECTED 06/17/2019.
- 2. Nitrates Monitoring (01/01/2019 12/31/2019) We did do this test during the required period, however the lab that conducts these tests lost the sample therefore we are unsure of your drinking water quality during that time. All previous and subsequent samples have returned with good results
- 3. Radionuclide Sampling (01/01/2017 12/31/2019) Test was completed on time, however, samples results were submitted late to EPA; VIOLATION CORRECTED
- 4. VOC (01/01/2017 12/31/2019) Tests were completed on time, however, the sample results were submitted late to the EPA; VIOLATION CORRECTED

TULARE ESTATES #105300155									
CONTAMINANT	DATE	RESULTS	MCL	VIOLATION	CONTAMNINAT DESCRIPTION				
HAA5 (ug/L)	2019	6.5	60	NO	By-product of drinking water disinfection				
TTHM (ug/L)	2019	18.7	80	NO	By-product of drinking water disinfection				
Zinc (Mg/L)	2019	0.0244	N/A	NO	Naturally occurring mineral. Essential for human health				
Manganese (Mg/L)	2019	0.0382	N/A	NO	Naturally occurring mineral. Essential for the body. Can cause water to appear brownish red.				
Iron (Mg/L)	2019	0.12	N/A	NO	Naturally occurring mineral. Essential for the body. Can cause water to appear brownish red.				
Sulfate (Mg/L)	2019	3.5	N/A	NO	Naturally occurring mineral in rocks. May cause water to smell unpleasant, it is not harmful to you.				
Sodium (Mg/L)	2019	12	N/A	No	Naturally occurring metal that can increase blood pressure in doses over the recommended daily intake.				
Arsenic (Mg/L)	2019	0.002	0.010	NO	Erosion; Run-off from orchards; glass/electronic production wastes				
Barium (Mg/L)	2019	0.0068	2	NO	Discharge of drilling wastes/metal refineries; Erosion of natural deposits. Can increase blood pressure				
Fluoride (Mg/L)	2019	.14	4	NO	Naturally occurring mineral essential for bone and teeth health. Can be harmful in high levels over MCL				

TULARE

The Tulare system consists of 12 connections serving approximately 35 persons. Water is supplied by one groundwater well with an above ground concrete storage tank with a capacity of 15,000 gallons. Typical water production is estimated to be approximately 3,800 gal/day. Disinfection is accomplished by injecting dilute sodium hypochlorite solution when the well pump is pumping to the reservoir.

Violations:

- 1. Nitrates monitoring (01/01/17 12/31/19) Sample data was submitted late to EPA. VIOLATION WAS CORRECTED
- 2. IOC's (01/01/19 12/31/17) Sample data was submitted late to EPA. VIOLATION WAS CORRECTED
- 3. VOC's (01/01/19 12/31/17) Sample data was submitted late to EPA. VIOLATION WAS CORRECTED
- 4. SOC's (01/01/19 12/31/17) Sample data was submitted late to EPA. VIOLATION WAS CORRECTED
- 5. Radionuclide Sampling (01/01/17 12/31/19) Sample data was submitted late to EPA. VIOLATION WAS CORRECTED

JOHN SAM LAKE #105300098								
CONTAMINANTS	DATE	RESULTS	MCL	VIOLATION	CONTAMNINAT DESCRIPTION			
Nitrate (Mg/L)	2019	3.91	10	NO	Run-off from fertilizer use; Septic tanks/sewage leaching; Erosion			
Arsenic (Mg/L)	2019	.0015	0.010	NO	Erosion; Runoff from orchards and from glass and electronics production wastes.			
Barium (Mg/L)	2019	0.0024	2	NO	Discharge of drilling waste and metal refineries; erosion of natural deposits			
Chromium (Mg/L)	2019	0.0038	0.1	NO	Discharge from steel and pulp mills; erosion of natural deposits.			
Zinc (Mg/L)	2019	0.0165	N/A	NO	Naturally occurring mineral that is essential for human health			
Sulfate (Mg/L)	2019	3	N/A	NO	Naturally occurring mineral in rocks. Not harmful but may cause water to smell unpleasant			
Sodium (Mg/L)	2019	5.8	N/A	NO	A naturally occurring metal that can increase blood pressure in doses over the recommended daily intake			

Violations:

1. Lead consumer notice (01/01/2019)- We failed to provide timely lead tap water results to consumers where it was tested. VIOLATION WAS CORRECTED 06/17/2019.

JOHN SAM LAKE

The John Sam Lake system consists

of approximately 48 residential connections serving approximately 168 persons. The water is supplied by one groundwater well with an above ground concrete storage tank with a capacity of 39,000 gallons of water. Water Production is estimated at approximately 11,400 gals/day. Disinfection is accomplished by injecting dilute sodium hypochlorite solution when the well pump is pumping to the reservoir.

ASPEN ESTATES #105300140									
		RANGE							
CONTAMINANTS	DATE	LOW	HIGH	MCL	VIOLATION	CONTAMNINAT DESCRIPTION			
Chlorine (ppm)	2018	0.4	0.5	MRDL = 4	NO	Water additive used to control microbes			
HAA5 (ppb)	2018	18	32.7	60	NO	By-product of drinking water disinfection			
TTHM (ppb)	2018	52.4	66.7	80	NO	By-product of drinking water disinfection			
Nitrate (ppm)	2017	0.14	0.14	10	NO	Runoff from fertilizers; Septic tanks/sewage leaching; Erosion			
CONTAMINANTS	DATE	MCLG	AL	# OVER AL	VIOLATION	CONTAMNINAT DESCRIPTION			
Copper (ppm)	2018	1.3	1.3	0	NO	Erosion; Leaching from wood preservatives; corrosion of household plumbing.			
Lead (ppb)	2015	0	15	0	NO	Corrosion of household plumbing; Erosion of Natural deposits			

^{*}Source water testing results can be obtained from the City of Everett's water quality report at: https://everettwa.gov/325/Public-Works

TULALIP BAY #105300003									
CONTAMINANTS	DATE	RESULTS	MCL	VIOLATION	CONTAMNINAT DESCRIPTION				
HAA5 (ug/L)	2019	33 - 66.4	60	NO	By-product of drinking water disinfection				
TTHM (ug/L)	2019	15.3 - 48.6	80	NO	By-product of drinking water disinfection				

*Source water testing results can be obtained from the City of Everett's water quality report at: https://everettwa.gov/325/Public-Works

Violations:

1. Nitrates monitoring (01/01/2019 - 12/31/2019) - Nitrate Sampling was completed on time, however, the testing results were submitted late to the EPA. Violation was corrected



ASPEN

The Aspen system consists of 189 connections serving approximately 600 persons. Water Storage is provided by a 119,000 gallon above ground concrete tank. Water is purchased from the City of Everett; It is surface water that comes from the Spada Lake reservoir which is located 30 miles east in the Cascade Mountains. Disinfection is provided by the City of Everett. The City of Everett maintains a 1.0 mg/l fluoride concentration in water supplied to the Aspen system.

TULALIP BAY

Water for the Tulalip Bay water system is supplied by surface water from the City of Everett. The water source is Spada Lake, 30 miles east in the Cascade Mountains. Tulalip Bay water system serves approximately 5440 persons and has approximately 1546 residential and 97 non residential connections. Typical demand is 0.6 MGD and peak demand is approximately 1.0 MGD. Disinfection is supplied by the city of Everett. Everett maintains a 1.0 mg/l fluoride concentration in the water supplied to the Tulalip Bay system.

IMPORTANT DRINKING WATER TERMS & DEFINTIONS

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards.

TREATMENT TECHNIQUE (TT): A required process intended to reduce the level of contaminant in drinking water.

ACTION LEVEL (AL) - The concentration of a contaminant that, if exceeded triggers treatment or other requirements that a system must follow.

Total Trihalomethanes TTHM: SOC: Synthetic Organic Chemical Haloacetic Acid HAA5 VOC: Volatile Organic Chemical WQMP: Water Quality Monitoring Plan IOC: Inorganic Chemical

N/A:

Not Applicable

UNIT DESCRIPTIONS TERMS AND DEFINITIONS:

Mg/L - Milligrams per liter

Ug/L - Micrograms per liter

PPM - Parts per million

PPB - Parts per billion



^{**} While your drinking water meets EPA's standard for arsenic, 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. (40 CFR§141.155)