



CITY OF BONNEY LAKE  
 19306 Bonney Lake Blvd.  
 P.O. Box 7380  
 Bonney Lake, WA 98391-0944



*"The City of Bonney Lake's mission is to protect the community's livable identity and scenic beauty through responsible growth planning and by providing accountable, accessible and efficient local government services."*

### HOW TO SAVE MORE MONEY ON WATER AND SEWER BILLS:

Both Water and Sewer charges are based on how much water you use. To save money on both, the following water conservation suggestions are offered for residential customers. It is important to minimize both daily water consumption quantity and to minimize water use during peak hour periods. You can find additional conservation tips at [www.waterwise.com](http://www.waterwise.com).

#### INSIDE YOUR HOME

- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Shorten your shower by a minute or two and you'll save up to 150 gallons per month.
- Install an instant water heater near your kitchen sink so you don't have to run the water while it heats up. This also reduces energy costs.
- Turn dish washers on when going to bed instead of during peak water use times, when dinners are being prepared or yards are being watered.
- Put food coloring in your toilet tank. If color seeps into the toilet bowl without flushing, you have a leak. Replacing the flapper valve can save up to 1,000 gallons a month.
- Know where your master water shut-off valve is located, just in case you have a water leak issue. Try it once a year to make sure it works. This could save water and prevent damage to your home.

#### OUTSIDE YOUR HOME

- Use a hose nozzle or turn off the water while you wash your car. You'll save up to 100 gallons every time.
- Limit grass watering to no more than three times a week with 30-minutes per sprinkler zone.
- Spreading a layer of organic mulch around plants retains moisture and saves water, time and money.
- Use drip irrigation for shrubs and trees to apply water directly to the roots where it's needed.
- The City's customer peak demand for water is just before and after sunrise. We encourage customers to do the following: avoid watering grass and gardens during the day when the most evaporation occurs; automated sprinkler systems should be set to use water in the late evening or very early in the morning hours.

The City of Bonney Lake is committed to providing residents with a safe, reliable supply of high-quality drinking water. The quality of our water meets, and in most cases exceeds, state and federal standards for both appearance and safety. This "Consumer Confidence Report" is required to be sent to all our customers each year by the U.S. Environmental Protection Agency (EPA), through the Safe Drinking Water Act (SDWA). The City of Bonney Lake is proud to share our results with you. Please contact the Public Works Department at (253) 447-4320 with any questions you may have.

Water Quality is of the utmost importance to your Mayor, City Council and Public Works staff, many of whom live in our water service area and drink the same water you do. Since they are also purchasers of the water, you can be assured they will do their best to keep the costs as low as possible without sacrificing quality.

### A MESSAGE FROM MAYOR JOHNSON

The City of Bonney Lake continues to maintain quality drinking water which is fundamental to our way of life. As we have pointed out many times in the past, our water is some of the best drinking water in the state and your city staff is committed to continuing to provide you with the most efficient delivery of quality drinking water.

As you read this report, it clearly shows that your drinking water meets and exceeds the required standards set by the U.S. Environmental Protection Agency. The goal of this report is to help you understand what is in your water – and what isn't. Included are details describing where your water comes from, what it contains, and how it compares to stringent federal water quality standards. It also outlines the process used to protect your water from its source to you. We are committed to keeping you informed about water issues, including our recent agreement with Cascade Water Alliance. This agreement will allow us to procure additional supply over the next 30 years.

Although this report is of a technical nature, it contains important information. Please stay tuned throughout the spring and summer for updates regarding availability of this limited resource. Other sources of information include the city newsletter placed in the Courier Herald each month, my weekly newsletter and within your utility bill where we frequently put information on your statement to keep you informed.

Should you have any questions or comments, we encourage you to call, write or e-mail our staff. Please contact City staff with any questions as follows: phone: (253) 447-4320. Address: PO Box 7380, Bonney Lake, WA 98391-0944; e-mail: [webert@ci.bonney-lake.wa.us](mailto:webert@ci.bonney-lake.wa.us).

Don't forget, the city will also have a booth at Bonney Lake Days August 20.

Thank you,

### PUBLIC IMPROVEMENT

The City of Bonney Lake maintains nearly 200 miles of water mains and 1,400 fire hydrants in the Bonney Lake water service area. The Public Works Operations Division provided safe, quality water to approximately 12,000 households, 169 commercial accounts and approximately 32,500 water consumers with a high degree of reliability. Approximately 1.2 billion gallons of water were produced by the City of Bonney Lake's wells and springs (this is equivalent to 36,923 gallons per person per year or 101 gallons per person per day). The month of August was the highest use month for the City with a production of 175 million gallons and the lowest production month being December with production of 69 million gallons.

### 2011 WATER CONSUMPTION CHARGES

Water consumption is recorded by water meters in cubic feet (7.48 gallons = 1 cubic foot). Water meters are read in hundreds of cubic feet (ccf). 100 ccf = 748 gallons

#### Consumption Rates for Customers Inside City Limits:

<i>Winter</i>		
0 -10 CCF per month	\$1.11	= \$0.15 per 100 gallons
Over 10 CCF per month	\$2.21	= \$0.30 per 100 gallons
Winter rates will be reflected on bills covering October 1st through May 31st		

<i>Summer</i>		
0 -10 CCF per month	\$1.11	= \$0.15 per 100 gallons
Over 10 CCF per month	\$3.78	= \$0.51 per 100 gallons
Summer rates will be reflected on bills covering June 1st through September 30th		

#### Consumption Rates for Customers Outside City Limits:

<i>Winter</i>		
0 -10 CCF per month	\$1.61	= \$0.22 per 100 gallons
Over 10 CCF per month	\$3.20	= \$0.43 per 100 gallons
Winter rates will be reflected on bills covering November 1st through June 30th		

<i>Summer</i>		
0 -10 CCF per month	\$1.61	= \$0.22 per 100 gallons
Over 10 CCF per month	\$5.48	= \$0.73 per 100 gallons
Summer rates will be reflected on bills covering July 1st through October 31st		

Note: Current City of Bonney Lake utility rates can be found at: [http://www.citybonneylake.org/section\\_government/departments/executive/finance\\_utility\\_billing.shtml](http://www.citybonneylake.org/section_government/departments/executive/finance_utility_billing.shtml)

# 2010 WATER QUALITY REPORT

## BONNEY LAKE'S WATER SOURCE

Nine million gallons per day (MGD) of the City of Bonney Lake's drinking water is supplied by groundwater pumped from springs at Victor Falls and Grainger Springs, and well water from our Tacoma Point and Ball Park sites. Additionally, we have water supply agreements to receive another four MGD from Tacoma Public Utility (TPU). Throughout our water system, we have over 20 million gallons of water in reservoirs.

A Source Water Assessment has been performed for our area to provide baseline data about the quality of water before it is treated and distributed to customers. This is important because it identifies the origins of contaminants within our area and indicates the susceptibility of our water system to such contaminants.

To ensure that the tap water is safe to drink, the U.S. Environmental Protection Agency, through the Safe Drinking Water Act (SDWA), prescribes limits with the substantial safety factors on the amount of certain contaminants in water provided by public water systems.

To ensure safe, high quality water, the Public Works Operations Division (PW-OPS) continually monitors and samples the water quality. During the 2010 calendar year, PW-OPS took 384 routine bacteria samples, 24 bacteria samples to test new connections, and 69 engineering samples. Operators also took 13 sets of Disinfectant By-Products samples, and 4 samples for full inorganic chemical analysis. An independent certified laboratory tests these samples to ensure the safety of your 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safety Drinking Water Hotline (800-426-4791) or visit their on line website at [www.epa.gov/safewater/sdwa/index.html](http://www.epa.gov/safewater/sdwa/index.html).

As water travels over the surface of the 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 may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

- **Pesticides and herbicides (synthetic organic chemicals)**, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses. Of the 93 synthetic organic chemicals tested, no contaminants were detected.

- **Organic chemicals**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum products, and can also come from gas stations, urban storm water runoff and septic systems. We test for volatile organic chemicals every three years.

- **Radioactive contaminants**, while unlikely, can be naturally occurring or be the result of oil and gas productions and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water system. No radioactive materials were detected in Bonney Lake's water.

## LEAD IN DRINKING WATER

"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 Bonney Lake 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>."

## SPECIAL HEALTH CONCERNS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons include, but are not limited, to persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, persons with HIV/AIDS or other immune system disorders, and some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. The EPA/Center 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 Drinking Water Hotline (800-426-4791).

The primary sources of disease causing organisms will be from pets, food, general household cleanliness and personal hygiene. The risks of infection by Cryptosporidium or Giardia in your water supply are remote, as these organisms are not typically found in ground water sources such as those that supply the City of Bonney Lake system.

## CHLORINE DISINFECTION

Chlorine is added to Bonney Lake's water as a disinfectant to protect consumers from possible disease causing microorganisms.

- **Chlorine Residuals.** The state mandates a minimum chlorine residual level of 0.2 parts per million (ppm) throughout the water distribution system. This residual for Bonney Lake water sources typically range from 0.2 up to 0.6 ppm. The 2010 monitoring results ranged from 0.2 mg/l up to 1.07 mg/l.

- **Chlorine Disinfection By-Products.** When chlorine combines with organic material, it will form chlorine by-products known as Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5) that are regulated by the Washington State Department of Health (DOH). The maximum level permitted for TTHM is 80 parts per billion (ppb) and for HAA5 the maximum level is 60 ppb. The results of testing conducted in 2010 ranged from non-detected to 9.2 ppb for TTHM and no HAA5's were detected.

On occasion, there may be a chlorine odor or temporary milky to the water (the milky appearance is caused by nitrogen in the water supply source). This is not a health hazard. However, if noticed on a regular basis, you can contact the Public Works Operations office at (253) 447-3101 for more information.

## CROSS CONNECTION CONTROL

The City of Bonney Lake has implemented a cross connection control program to prevent backflow of contaminated water from a customer's water system into the public water system. A Backflow Prevention Device is required on all commercial properties and on residential properties with irrigation systems, booster systems, fire suppression systems or purposes other than drinking water. The City requires customers with their water line connected to these other uses to submit, on an annual basis, a report that their device has been tested by a state certified Backflow Assembly Tester (BAT) professional. If you have any questions, please contact 253 447-4313.

# 2010 TEST RESULTS

The items listed below are the results of an inorganic chemical analysis for the Bonney Lake system. These test results are from the Bonney Lake water sources after treatment. In July of 2005, the City placed the new Ballpark Treatment Plant into service. This facility uses chlorine and filtration to remove iron and manganese down to levels typically less than 0.03 parts per million (ppm) for iron, and less than 0.225 ppm of manganese.

CITY OF BONNEY LAKE INORGANICS	MCL	UNITS	BALL PARK WELL	TACOMA POINT WELL	GRAINGER SPRING	VICTOR FALLS SPRING
Arsenic	0.01	mg/l	< 0.002	< 0.002	< 0.002	< 0.002
Barium	2	mg/l	< 0.1	< 0.1	< 0.1	< 0.1
Cadmium	0.005	mg/l	< 0.002	< 0.002	< 0.002	< 0.002
Chromium	0.1	mg/l	< 0.01	< 0.01	< 0.01	< 0.01
Mercury	0.002	mg/l	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Selenium	0.05	mg/l	< 0.005	< 0.005	< 0.005	< 0.005
Beryllium	0.004	mg/l	< 0.003	< 0.003	< 0.003	< 0.003
Nickel	0.1	mg/l	< 0.04	< 0.04	< 0.04	< 0.04
Antimony	0.006	mg/l	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	0.002	mg/l	< 0.002	< 0.002	< 0.002	< 0.002
Cyanide	0.2	mg/l	< 0.05	< 0.05	< 0.05	< 0.05
Fluoride	4	mg/l	< 0.2	< 0.2	< 0.2	< 0.2
Nitrite - N	1	mg/l	< 0.2	< 0.2	< 0.2	< 0.2
Nitrate - N	10	mg/l	< 0.2	0.4	2.9	4.1
Total Nitrate/Nitrite	10	mg/l	< 0.4	0.5	2.9	4.1
Iron	0.3	mg/l	0.05	< 0.1	< 0.1	< 0.1
Manganese	0.05	mg/l	0.036	< 0.01	< 0.01	< 0.01
Silver	0.1	mg/l	< 0.01	< 0.01	< 0.01	< 0.01
Chloride	250	mg/l	14	3	7	8
Sulfate	250	mg/l	8	6	9	7
Zinc	5	mg/l	< 0.2	< 0.2	< 0.2	< 0.2
Sodium		mg/l	12	10	18	7
Hardness		mg/l	119	64	104	116
Conductivity	700	umhos/cm	264	137	264	236
Turbidity		NTU	0.3	0.2	1.7	0.2
Color	15	color units	< 5.0	< 5.0	< 5.0	< 5.0
Lead		mg/l	< 0.001	< 0.001	< 0.001	< 0.001
Copper		mg/l	< 0.02	< 0.02	< 0.02	< 0.02

## Key to Table

MCL – Maximum (allowable) Contaminant Level set by the federal government  
 Mg/l = milligrams per liter or parts per million  
 umhos/cm = micromhos per centimeter  
 NTU = Nephelometric Turbidity Unit (Water Clarity)  
 < = Less than minimal Lab Test

## CITY OF BONNEY LAKE WATER AVAILABILITY

Victor Falls .....1,100 gpm (gallons per minute)  
 Grainger Springs.....1,500 gpm  
 Ball Park #1 .....1,000 gpm  
 Ball Park #2 .....270 gpm  
 Tacoma Point. #2, #4, #6.....2,300 gpm

Total Owned by City.....6,170 gpm = 8,884,800 gpd (gallons per day)

Tacoma Water/Cascade Water Alliance Agreement.....2,178 gpm = 4,000,000 gpd

Total Water Available.....8,348 gpm = 12,884,800 gpd