

2015 Consumer Confidence Report River Pines Public Utility District

We are pleased to present to you this year's annual Consumer Confidence Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is ground water from three wells located on the property. During the year 2015 Well 03R was put into operation and aligned with Well 02. Wells 03R and 02 were used as the primary drinking water source. Well 6R was in operation once a week to keep it maintained. Also, another source, the surface water from the south fork of the Consumnes River treated by slow sand filtration (SSF) still remains inactive.

If you have any questions about this report or concerning you water utility, please contact the Plant Operator, Greg Guina at (209) 245-6723.

The sources of drinking water (both tap water 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 minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and State Department of Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

All 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 USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

Contaminants that may be present in source water include:

- *Microbiological 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, that can be naturally-occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems.
- *Radioactive contaminants*, that can be naturally-occurring or be a result of oil and gas production and mining activities.

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. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

WATER QUALITY DATA

River Pines Public Utility District routinely monitors for constituents in your drinking water according to Federal and State Laws. Tables 1, 2, 3, 4, & 5 list all of the drinking water contaminants that were detected above the DLR during the most recent sampling for Well #2, Well #3 & Well #6. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The table does not include contaminants that were not detected by laboratory testing. Unless otherwise indicated, the data contained in this report are for the monitoring period of January 1st to December 31st, 2015. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the results in this report, though representative, may be more than a year old.

TERMS USED IN THIS REPORT:	
<p>Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.</p>	<p>Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk in health. PHGs are set by the California Environmental Protection Agency.</p>
<p>Primary Drinking Water Standards (PDWS): MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.</p>	<p>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 are set by the U.S. Environmental Protection Agency (USEPA).</p>
<p>Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.</p>	<p>Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.</p>
<p>ND: not detectable at testing limit ppm: parts per million or milligrams per liter (mg/L) ppb: parts per billion or micrograms per liter (ug/L) pCi/L: picocuries per liter (a measure of radiation)</p>	<p>Regulatory Action Level (AL): The concentration of a contaminant of which, if exceeded, triggers treatment or other requirements which a water system must follow.</p>
	<p>DLR: Detection Limit for purposes of Reporting. The DLR is set by state regulation for each reportable analyte.</p>

Table 1 – Sampling Results Showing the Detection of Coliform Bacteria from Distribution System

Microbiological Contaminants	Highest No. of Detections	No. of Months In violation	MCL	MCLG	Typical source Of Bacteria
Total Coliform Bacteria	(In a mo.) None	None	More than 1 sample in a month with a detection		Naturally present in the environment
Fecal coliform of E. coli	(In the yr.) None	None	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform of E. coli		Human and animal fecal waste

Water systems are required to meet a strict standard for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If the standard is exceeded, the water supplier must notify

WATER QUALITY DATA

the public. In 2015, River Pines PUD is pleased to inform you, no coliform bacteria were detected in any of the routine treated bi-monthly distribution system samples.

Lead and Copper (units)	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	MCLG	Typical Source of Contamination
Lead (ppb)	5	4.2	None	15	2	Internal corrosion of household plumbing systems, erosion of natural deposits.
Copper (ppm)	5	0.34	None	1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Note: 90th percentile level detected for 5 sites is the average of the 2 highest detections.

Lead – 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. River Pines PUD 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>.

Chemical or Constituent	Units	Well #6R 5/8/14	Well #3R 9/16/14	Well #2 5/19/15	PHG	MCL	Typical Source of Contamination
Sodium	ppm	6.7	ND	13	None	none	Generally, found in ground and surface water
Hardness	Ppm	202	274	193	none	none	Generally, found in ground and surface water

Chemical or Constituent	Units	Violation Y/N	Well #6R 5/19/15	Well #2 5/6/15	Well #3R 9/15/15	PHG	MCL	Typical Source of Contaminant
Inorganic Contaminants Raw Wells								
Nitrate (as nitrate, NO ₃)	Ppm	N	6	6	ND	45	45	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

ND = non detected.

WATER QUALITY DATA

Table 4 cont. – Detection of Contaminants with a Primary Drinking Water Standard							
Chemical or Constituent	Units	Violation Y/N	Average Level Detected	Range of Detections	PHG	MCL	Typical Source of Contaminant
Disinfection Byproducts (Treated distribution water – sampled quarterly 2015)							
Total trihalomethanes	Ppb	N	20.17 Highest Running Ave.	16.83-23.21	NA	80	By-product of drinking water chlorination
Haloacetic Acids	Ppb	N	14.14 Highest Running Ave.	10-19.8	NA	80	By-product of drinking water chlorination
Radioactive Contaminants (Well #6R – 9/14/15)							
Uranium	PCi/L	N	9.4		0.43	20	Erosion of natural deposits
Gross Alpha Particles	pCi/L	N	6.4			15	Erosion of natural deposits
Radioactive Contaminants (Well #2 – 5/05/15)							
Uranium	pCi/L	N	9.7		0.43	20	Erosion of natural deposits
Gross Alpha Particles	pCi/L	N	4.3			15	
Radioactive Contaminants (Well #3R – 12/07/15)							
Uranium	pCi/L	N	5.8		0.43	20	Erosion of natural deposits
Gross Alpha Particles	pCi/L	N	6.8			15	Erosion of natural deposits

Table 5 – Detection of Contaminants with a <u>Secondary</u> Drinking Water Standard (a)								
Chemical or Constituent	Units	Violation Y/N	Well #6R 5/08/14	Well #2 5/14/15	Well #3R 5/19/15	PHG	MCL	Typical Source of Contaminant
Chloride	ppm	N	5.9	6.4		NA	500	Runoff/leaching from natural deposits; sea water influence
Conductivity	umho/cm	N	400	390	440	NA	1600	Substances that form ions when in water; sea water influence
Odor – Threshold	Units	N	1.0	1.0		NA	3	Naturally-occurring organic compounds
Sulfate	ppm	N	6.0	7.2		NA	500	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	ppm	N	2687	220		NA	1000	Runoff/leaching from natural deposits
Turbidity	NTU	N	<0.10	.14		NA	5	Soil runoff

(a) There are no PHG's, MCLGs, or mandatory standard health effects language for constituents with secondary drinking water standards because secondary MCLs are set on the basis of aesthetics.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

River Pines PUD is please to inform you, there were no violations to report in

Tables 1, 2, 3, 4, or 5.

WATER QUALITY DATA

For Systems Providing Ground Water as a Source of Drinking Water

Table 7 – Sampling Results Showing Fecal Indicator-Positive Ground Water Source Samples					
Microbiological Contaminants	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG [MCLG] [MRDLG]	Typical Source of Contaminant
E. Coli	2.2	02/09/2015	0	(0)	Human and animal fecal waste

E. coli was detected in the raw well #6R sample taken in February 9, 2015. Monthly reports were sent to Public Health, Drinking Water Field Operations Branch, Stockton District Office, 31 E. Channel Street, Room 270, Stockton, California 95202. All treated water samples taken from Well 6R and distribution system were free from *E. coli*.

For Systems Providing Surface Water as a Source of Drinking Water:

(or Ground Water under the influence of Surface Water)

Table 8 – Sampling Results Showing Treatment of Surface Water Sources	
Treatment Technique (a) (Type of approved filtration technology used)	Rosedale Filtration System/Chlorination
Turbidity Performance Standards (b) (that must be met through the water treatment process)	<u>Turbidity of the filtered water must:</u> 1 – Be less than or equal to 0.2 NTU in 95% of measurements in a month. 2 – Not exceed 0.5 NTU at any time
Lowest monthly percentage of samples that met turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	.04 NTU
Number of violations of any surface water treatment requirements	0

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance.

Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

An assessment of the drinking water sources for River Pines' water system was completed in April 2001. The sources are considered most vulnerable to the following activities: recreational area surface water sources, historic gas stations, septic systems, and historic mining operations. A copy of the complete assessment is available at the Department of Public Health, Drinking Water Field Operations Branch, Stockton District Office, 31 E. Channel Street Room 270, Stockton, California 95202. You may request a summary of the assessment be sent to you by contacting Bhupinder Sahota, District Engineer, at [\(209\) 948-3881](tel:2099483881).

If you have any questions about this report or concerning your water utility, please contact Greg Guina at (209) 304-2691.

Report prepared 5/25/2016 River Pines Public Utility District, using *CCR Guidance for Water Suppliers* available at, <http://www.cdph.ca.gov/certlic/drinkingwater/Pages/CCR.aspx>, employing due diligence with instructions given. Data contained in this report are based on the analytical results generated by Alpha Analytical Laboratories.