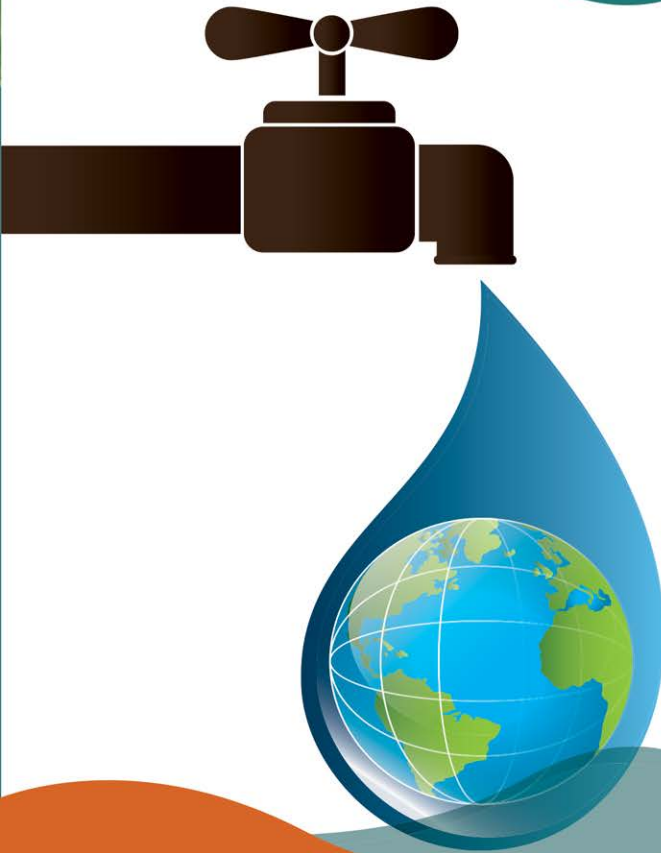


CITY OF RIVERBANK
**CONSUMER
CONFIDENCE
REPORT**
2018



Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

WATER CONSERVATION
IT'S FOR LIFE!



Turn off water while brushing your teeth or shaving



Schedule sprinklers to run in the early morning hours



**Adjust Sprinkler Heads and Fix Leaks
(Saves 12 - 15 gallons each time you water)**



**Set Lawn Mower Blades to 3" to Encourage Deeper Roots
(Saves 16-50 gallons per day)**

You are welcome to participate in the City Council Meetings to voice any concern regarding our drinking water. The Council meets the 2nd and 4th Tuesday of each month located at 6707 - 3rd Street, Riverbank, CA. 95361

GENERAL INFORMATION

This report contains important information about the quality of drinking water for the period of January 1, - December 31, 2018 and may include earlier data. We encourage our non-English speaking residents to speak with someone who can assist you in reading this report.

The water supplied to the City of Riverbank residents is comprised solely of groundwater. Groundwater is the water that soaks into the soils from rain or other precipitation and moves downward to fill cracks and other openings in beds of rocks and sand. The City has 9 active wells.

NAME & LOCATION OF SOURCE(S):	
WELL 2 (8th St.)	WELL 3 (Jackson)
WELL 4 (Pioneer)	WELL 6 (Whorton)
WELL 7 (Crossroads)	WELL 8 (Novi)
WELL 9 (Prospector)	WELL 10 (Heartland)
WELL 12 (Chief Tucker)	

WHAT IS IN OUR WATER?

In order to ensure that tap water is safe to drink, the USEPA and the State Water Resources Control Board (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Contaminants that may be present in source water include:

- 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 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 storm water runoff, and residential uses.

- Organic chemical contaminants, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.
- Radioactive contaminants, that can be naturally occurring, or be the result of oil and gas production and mining activities.

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.

ADDITIONAL GENERAL INFORMATION ON 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 USEPA'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. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline.

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 Riverbank 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>.

Nitrate as Nitrogen in drinking water at levels above 10 mg/L is a health risk for infants of less than six (6) months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate-N levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.



WATER QUALITY TABLES

Public Water System ID: CA5010018

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board 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 data, though representative of the water quality, are more than one-year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA					
Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 1	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste
<i>E. coli</i> (Federal Revised Total Coliform Rule)	(In the year) 0	0	(a)	0	Human and animal fecal waste
(a) Routine and repeat samples are total coliform-positive and is either <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> .					

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER							
Lead and Copper (and reporting units)	Sample Date	No. of Samples Collected	90th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	2017	30	< 5	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	2017	30	0.1	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS						
Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2016	21	15 - 30	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2016	262	151 - 353	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.						

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL (MRDL)	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Gross Alpha (pCi/L)	2016	7	5 – 10	15	0	Erosion of natural deposits
Uranium (pCi/L)	2016	6	2 – 8	20	0.4	Erosion of natural deposits
Nitrate as Nitrogen (ppm)	2018	4	2 – 8	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Fluoride (ppm)	2016	<0.1	< 0.1 – 0.1	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Arsenic (ppb)	2016	< 2	< 2 – 3	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2016	< 0.1	< 0.1 – 0.2	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
1,2,3-Trichloropropane [TCP] (µg/L)	2018	< 0.005	<0.005 – 0.019*	0.005	0.0007	Discharge from industrial and agricultural chemical factories; leaching from hazardous waste sites; used as cleaning and maintenance solvent, paint and varnish remover, and cleaning and degreasing agent; byproduct during the production of other compounds and pesticides

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	2016	14	7 – 22	500	N/A	Runoff / leaching from natural deposits; seawater influence
Sulfate (ppm)	2016	11	3 – 22	500	N/A	Runoff / leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2016	277	159 – 407	1000	N/A	Runoff / leaching from natural deposits
Specific Conductance (umho/cm)	2016	406	207 – 607	1600	N/A	Substances that form ions when in water; seawater influence
Iron (ppb)	2016	< 100	< 100 – 130	300	N/A	Leaching from natural deposits; industrial wastes
Turbidity (NTU)	2016	0.2	< 0.1 – 1.3	5	N/A	Soil runoff
*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.						

SUMMARY INFORMATION FOR CONTAMINANTS EXCEEDING AN MCL OR AL, OR A VIOLATION OF ANY TREATMENT OR MONITORING AND REPORTING REQUIREMENTS

In 2018, 1,2,3-Trichloropropane (1,2,3-TCP) was detected at Well #5 above the 0.005ug/L maximum contaminant (allowable) limit. All of the other wells were non-detected for 1,2,3-TCP. In response, Well #5 has been taken off-line and is no longer serving drinking water to the community. Some people who drink water containing 1,2,3-TCP in excess of the MCL over many years may have an increased risk of getting cancer.

VULNERABILITY ASSESSMENT SUMMARY

A source water assessment was conducted for the wells of the City of Riverbank’s water system in December of 2001. The sources are considered most vulnerable to the following activities not associated with any detected contaminants: gas stations, sewer collection systems, automotive repair/ body shops, high-density housing, and waste dumps/landfills. For more information regarding the assessment, contact Eric Tackett, Domestic Water Supervisor, at 209.869.7128.



DEFINITIONS OF TERMS USED IN THIS REPORT:

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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).

PHG (Public Health Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

PDWS (Primary Drinking Water Standards): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

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

Variances and Exemptions: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

NTU: Nephelometric Turbidity Unit

N/A: Not analyzed or non applicable

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (µg/L)

pCi/L: picocuries per liter (a measure of radiation)

µmho/cm: micro mho’s per centimeter