



**City of Rio Vista**  
 One Main Street, Rio Vista CA 94571

## CITY OF RIO VISTA 2019 CONSUMER CONFIDENCE REPORT

The City of Rio Vista is committed to infrastructure upgrades on the water distribution system yearly by:

- Drinking Water Source Assessment and Well Head Protection of the City 's wells.
- Monitoring current research and regulations on drinking water.
- Enforcing our Backflow Prevention and Cross-Connections program.



### From the source to the tap

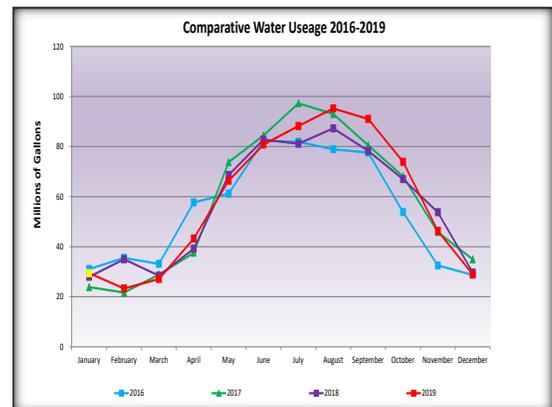
The City of Rio Vista's water is supplied from six ground water wells. The wells, tanks, treatment facilities and over 40 miles of distribution pipelines are operated and maintained by certified operators. The City's water supply is disinfected using chlorine in the form of Sodium Hypochlorite at an average chlorine residual of 0.5-1.5 mg/l (parts per million). These wells are the only source of supply available at the present time. To make sure your water is consistently safe, water drawn from numerous locations throughout the water distribution system and also, directly from the wellhead prior to chlorination.

Our State Certified operators, and FGL Laboratories, a contract state certified water quality laboratory, test samples from in-house and in the lab. These tests verify that our water supply continues to meet water quality standards established by State and Federal regulatory agencies.

This report, produced by the City, conforms to the federal regulation that requires each community water system to provide customers with annual information about the quality of the drinking water. This includes details about sources and quality; regulations that protect public health; programs that protect the water quality of our supply sources; and the treatment that assures our drinking water meets all Federal and State standards. We hope the information presented here enhances your understanding and gains your confidence in the quality and gains your confidence in the quality of the water you drink and use every day.

**Monthly Water Totals in Gallons**

Month	2016	2017	2018	2019
January	31,073,000	23,860,000	27,939,000	29,393,000
February	35,507,000	21,657,000	34,977,000	23,287,000
March	33,148,000	28,855,000	28,403,000	27,096,000
April	57,690,000	37,555,000	39,182,000	43,272,000
May	61,188,000	73,746,000	68,643,000	66,376,000
June	82,256,000	84,469,000	82,787,000	80,822,000
July	81,914,000	97,281,000	81,125,000	88,203,000
August	78,906,000	93,036,000	87,255,000	95,236,000
September	77,599,000	80,496,000	78,302,000	91,530,000
October	53,801,000	68,096,000	66,980,000	73,937,000
November	32,503,000	45,837,000	53,751,000	46,266,000
December	28,720,000	34,954,000	29,667,000	28,933,000



# 2019 Consumer Confidence Report

Water System Name: CITY OF RIO VISTA

Report Date: April 2020

*We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2019.*

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

**Your water comes from 6 ground water source(s):** Well 09, Well 10, Well 11, Well 13, Well 14 and Well 15 **and from 2 treated location(s):** As-Booster Station, and WELL 10 AS/MN TREATMENT FACILITY

**Opportunities for public participation in decisions that affect drinking water quality:** Regularly scheduled water board meetings are held quarterly at Rio Vista City Hall council chambers.

For more information about this report, or any questions relating to your drinking water, please call (707) 374-6451 and ask for Robin Borre or visit our website at [www.riovistacity.com](http://www.riovistacity.com).

## TERMS USED IN THIS REPORT

**Maximum Contaminant Level (MCL):** The highest level of contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (MCLGs) as is economically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

**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).

**Public Health Goal (PHG):** 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.

**Maximum Residual Disinfectant Level (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.

**Maximum Residual Disinfectant Level Goal (MRDLG):** 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.

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

**Secondary Drinking Water Standards (SDWS):** MCLs for the contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

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

**Level 1 Assessment:** A Level 1 Assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A Level 2 Assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why and E. Coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**ND:** Not detectable at testing limit

**Mg/L:** Milligrams per liter or parts per million (ppm)

**Ug/L:** Micrograms per liter or parts per billion (ppb)

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

**NTU:** Nephelometric Turbidity Units

**Umhas/cm:** Micro mhos per centimeter

**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.

**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 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 application, and septic systems.
- *Radioactive contaminants*, that can be naturally occurring or be the result of oil and gas production and mining activities.

**In order to ensure that tap water is safe to drink**, the USEPA and the State Water Resource Control Board (State Board) 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.

**Tables 1, 2, 3, 4, 5, 6, 7, 8 and 9 list all 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.

Any violation of MCL, AL or MRDL is highlighted. Additional information regarding the violation is provided later in this report.

Table 1 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER						
Lead and Copper (complete if lead or copper detected in last sample set)	Sample Date	90th percentile level detected	No. Sites Exceeding AL	AL	PHG	Typical Sources of Contaminant
Copper (mg/L)	20 (2019)	0.06	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Table 2 - SAMPLING RESULTS FOR SODIUM AND HARDNESS						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Sources of Contaminant
Sodium (mg/L)	(2018 - 2019)	143	123 - 173	none	none	Salt present in the water and is generally naturally occurring
Hardness (mg/L)	(2018 - 2019)	53.8	20.7 – 104	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

**Table 3 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

<b>Chemical or Constituent</b> (and reporting units)	<b>Sample Date</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>MCL (MRDL)</b>	<b>PHG (MCLG) (MRDLG)</b>	<b>Typical Sources of Contaminant</b>
Aluminum (mg/L)	(2018 - 2019)	ND	ND - 0.29	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic ug/L	(2019)	9	2-15**	10	0.004	Erosion of natural deposits; runoff from orchards, glass, and electronics production wastes
Fluoride (mg/L)	(2018 - 2019)	0.3	0.2 - 0.4	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Hexavalent Chromium (ug/L)	(2014)	1.52	ND – 2.99		0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits.
Nitrate as N	(201 - 2019)	0.9	ND-2.3	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate + Nitrite as N (mg/L)	(2018 - 2019)	0.9	ND -2.3	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ug/L)	(2018 - 2019)	ND	ND -10	50	30	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Gross Alpha (pCi/L)	(2018)	4.78	3.27 - 6.46	15	(0)	Erosion of natural deposits.
Total Radium 228 (pCi/L)	(2010)	ND	ND - 0.859	5	n/a	Erosion of natural deposits
Uranium (pCi/L)	(2018)	1.826	1.206 - 3.082	20	0.43	Erosion of natural deposits

**\*\* Pre-treatment result Well 10**

**Table 4 - TREATED DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

<b>Chemical or Constituent</b> (and reporting units)	<b>Sample Date</b>	<b>Average Level Detected</b>	<b>Range of Detections</b>	<b>MCL (MRDL)</b>	<b>PHG(MCLG) (MRDLG)</b>	<b>Typical Sources of Contaminant</b>
Arsenic (ug/L)	(2019)	6	ND-10	10	0.004	Erosion of natural deposits; runoff from orchards, glass, and electronics production wastes
Hexavalent Chromium (ug/L)	(2014)	1.51	1.45 - 1.59	10	0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits.

<b>Table 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD</b>						
<b>Chemical or Constituent</b> (and reporting units)	<b>Sample Date</b>	<b>Average Level Detected</b>	<b>Range of Detections</b>	<b>MCL</b>	<b>PHG (MCLG)</b>	<b>Typical Sources of Contaminant</b>
Chloride (mg/L)	(2018 - 2019)	60	34- 84	500	n/a	Runoff/leaching from natural deposits; seawater influence
Color (Units)	(2018 - 2019)	1	ND-5	15	n/a	Naturally occurring organic materials
Iron (ug/L)	(2018 - 2019)	60	ND – 360 (7660 <sup>***</sup> )	300	n/a	Leaching from natural deposits; Industrial wastes
Manganese (ug/L)	(2018 - 2019)	ND	ND - 30	50	n/a	Leaching from natural deposits
Odor Threshold at 60° C (TON)	(2018 - 2019)	(5 <sup>***</sup> )	ND (16 <sup>***</sup> )	3	n/a	Naturally occurring organic materials.
Specific Conductance (umhos/cm)	(2018 - 2019)	744	653 - 878	1600	n/a	Substances that form ions when in water; seawater influence
Sulfate (mg/L)	(2018 – 2019)	47.6	39.6 – 58.2	500	n/a	Runoff/leaching from natural deposits, industrial wastes
Total Dissolved Solids (mg/L)	(2018 - 2019)	440	400 - 500	1000	n/a	Runoff/leaching from natural deposits
Turbidity (NTU) <sup>***</sup>	(2018 - 2019)	1.1	ND – 1.1 (6.2 <sup>***</sup> )	5	n/a	Soil runoff

<sup>\*\*\*</sup> Well 9 sample testing for water pumped to waste facility only, results not for water distribution purposes.

<b>Table 6 -TREATED DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD</b>						
<b>Chemical or Constituent</b> (and reporting units)	<b>Sample Date</b>	<b>Average Level Detected</b>	<b>Range of Detections</b>	<b>MCL</b>	<b>PHG(MCLG)</b>	<b>Typical Sources of Contaminant</b>
Iron (ug/L)	(2017)	ND	ND -200	300	n/a	Leaching from natural deposits; Industrial wastes
Manganese (ug/L)	(2017)	ND	ND-30	50	n/a	Leaching from natural deposits

<b>Table 7 - DETECTION OF UNREGULATED CONTAMINANTS</b>					
<b>Chemical or Constituent</b> (and reporting units)	<b>Sample Date</b>	<b>Average Level Detected</b>	<b>Range of Detections</b>	<b>Notification Level</b>	<b>Typical Sources of Contaminant</b>
Boron (mg/L)	(2018 - 2019)	1.1	0.9 – 1.4	1	Boron exposures resulted in decreased fetal weight (developmental effects) in newborn rats.
Vanadium (mg/L)	(2018 - 2019)	0.004	ND - 0.007	0.05	Vanadium exposures resulted in developmental and reproductive effects in rats.

Chemical or Constituent (and reporting units)	Date	Average Level Detected	Range of Detections	Notification Level	Typical Sources of Contaminant
Calcium (mg/L)	(2018 - 2019)	10	5 - 17	n/a	n/a
Magnesium (mg/L)	(2018 - 2019)	7	2 - 15	n/a	n/a
pH (units)	(2018 - 2019)	8.5	8.2 - 8.8	n/a	n/a
Alkalinity (mg/L)	(2018 - 2019)	241	220 - 250	n/a	n/a
Aggressiveness Index	(2018 - 2019)	12.3	11.9 - 12.5	n/a	n/a
Langelier Index	(2018 - 2019)	0.433	0.0006 - 0.7	n/a	n/a

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL (MRDL)	PHG (MCLG)	Violation	Typical Sources of Contaminant
Total Trihalomethanes (TTHMs) (ug/L)	(2017 - 2019)	8.875	ND-13	80	n/a	No	By-product of drinking water disinfection
Haloacetic Acids (five) (ug/L)	(2017 - 2019)	6.25	ND-25	60	n/a	No	By-product of drinking water disinfection

## **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 Safe Drinking Water Hotline (1-800-426-4791).

**Lead Specific Language for Community Water Systems:** 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 the service lines and home plumbing. *City of Rio Vista* 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/lead>.

### **About our Arsenic:**

For Arsenic detected above 5 ug/L (50% of the MCL) but below 10 ug/L: while your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency 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.

### **Discussion of Vulnerability**

All wells in the City of Rio Vista water system are currently online. Assessment summaries are not available for some sources. This is because:

- The Assessment has not been completed. Contact the local Department of Health Services (DHS) Drinking Water field office or the water system to find out when the Assessment is scheduled to be done.
- The source is not active. It may be out of service, or new and not yet in service.
- The Assessment was not submitted electronically. The site used to obtain Assessments only provides access to Assessment summaries submitted electronically.

### **Acquiring Information**

A copy of the complete assessment may be viewed at:  
City of Rio Vista, Department of Public Works  
789 St. Francis Way  
Rio Vista, Ca 94571

You may request a summary of the assessment be sent to you by contacting:  
Robin Borre  
Director of Public Works (707) 374-6451 ext. 1116

For more info you may visit [http://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/DWSAP.html](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/DWSAP.html) or contact the health department in the county to which the water system belongs as indicated on this following link: [https://www.waterboards.ca.gov/drinking\\_water/programs/documents/ddwem/DDWdistrictofficesmap.pdf](https://www.waterboards.ca.gov/drinking_water/programs/documents/ddwem/DDWdistrictofficesmap.pdf)