City of Rio Vista 2022 Consumer Confidence Report



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

- Drinking Water Source Assessments and Well Head Protection of the City's wells
- · Monitoring current research and regulations on drinking water
- Water quality tests
- Water conservation Information

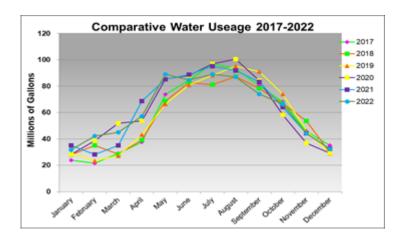
From the Source to the Tap

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. More than 500 samples are drawn from numerous wells and locations throughout the water distribution system. Samples are also taken from the wellhead prior to chlorination.

All sampling locations and requirements are determined and approved by the California Department of Water Resources. Results from the approved testing laboratory are sent electronically to the State. 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.

Total Water Pumped in 2022 – 742,646,000 Gallons



The City of Rio Vista Water Conservation Urgency Ordinance

This ordinance was adopted by the City Council on July 19, 2022. It states that:

- a. No lawn/garden watering, or other outdoor water use, will be allowed between 10 a.m. and 6 p.m. on any day.
- b. Subject to the limitations set forth in subsection (A)(1)(a), users with even-numbered street addresses shall use outdoor water only on Tuesdays and Saturdays.
- c. Subject to the limitations set forth in subsection (A)(1)(a), users with odd-numbered street addresses shall use outdoor water only on Sundays and Wednesdays.

2022 Water Confidence Report

Water System Name:_	City of Rio Vista	Report Date:	March 2023
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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, 2022.

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

Type of water source(s) in use: According to SWRCB records, Wells 09, 10, 11 and 13 are Groundwater. Please see the Drinking Water Source Assessment Information section located at the end of this report for more details.

Your water comes from 5 source(s): Well 10, Well 11, Well 13, Well 14 and Well 15 and from 2 treated location(s): Booster Station WELL 10 AS/MN TREATMENT FACILITY.

Opportunities for public participation in decisions that affect drinking water quality: Regularly scheduled Water and Wastewater Monitoring Committee 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 Greg Malcolm.

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 (or MCLGs) as is economically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.	Treatment Technique (TT): A required process intended to reduce the level of a contaminant in 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).	Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
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.	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.
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.	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 an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
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.	MD: not detectable at testing limit mg/L: milligrams per liter or parts per million (ppm)
Primary Drinking Water Standards (PDWS): MCLs and MRDLs for the contaminants that affect health along with their monitoring and reporting requirements,	ug/L: micrograms per liter or parts per billion (ppb) pCi/L: picocuries per liter (a measure of radiation)
and water treatment requirements. Secondary Drinking Water Standards (SDWS):	NTU: Nephelometric Turbidity Units
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.	umhos/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, 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 if 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 Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Water 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, 9, 10 and 11 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 Water 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 COLIFORM BACTERIA									
Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Sources of Contaminant				
Total Coliform Bacteria	l/year (2022)	0	no more than I positive monthly sample	0	Naturally present in the environment.				

Tab	Table 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER									
Lead and Copper (complete if lead or copper detected in last sample set)	Sample Date	No. of Samples	90th percentile level detected	No. Sites Exceeding AL	AL	PHG	Typical Sources of Contaminant			
Lead (ug/L)	(2022)	20	1.0	_	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers, erosion of natural deposits			
Copper (mg/L)	(2022)	20	0.05	0	1.3	.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 Sources of Contaminant				
Sodium (mg/L)	(2022)	143	126 - 153	none	none	Salt present in the water and is generally naturally occurring				
Hardness (mg/L)	(2022)	53.3	31.4 - 104	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring				

Table 4 - DE	TECTION OF	CONTAMI	NANTS WITH	I A <u>PRIM</u>	ARY DRINK	ING WATER STANDARD
Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Sources of Contaminant
*Arsenic (ug/L)	(2022)	10	5 - 15	10	0.004	Erosion of natural deposits; runoff from orchards, glass, and electronics production wastes
Fluoride (mg/L)	(2020 - 2022)	0.3	0.2 - 0.4	2	l	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 (mg/L)	(2022)	1.7	ND - 5.1	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 - 2022)	1.1	ND - 3.2	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ug/L)	(2018 - 2022)	ND	ND - 12	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 - 2022)	4.27	1.90 - 6.46	15	(0)	Erosion of natural deposits.
Bentazon (BASAGRAN) (ug/L)	(2018 - 2022)	ND	ND - 5	18	2	Runoff/leaching from herbicide used on beans, peppers, corn, peanuts, rice, and ornamental grasses
Dinoseb (DNBP) (ug/L)	(2018 - 2022)	ND	ND - 2	7	14	Runoff from herbicide used on soybeans, vegetables, and fruits
Pentachlorophenol (PCP) (ug/L)	(2018 - 2022)	ND	ND - 0.3	I	0.3	Discharge from wood preserving factories, cotton and other insecticidal/herbicidal uses
Picloram (ug/L)	(2018 - 2022)	ND	ND - I	500	166	Herbicide runoff
Uranium (pCi/L)	(2018)	1.826	1.206 - 3.082	20	0.43	Erosion of natural deposits

^{*}Pretreatment Results from Wells 10 and 14

Table 5 - TREATED DETECTION OF CONTAMINANTS WITH A <u>PRIMARY</u> DRINKING WATER STANDARD									
Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL [MRDL]		Typical Sources of Contaminant			
Arsenic (ug/L)	(2022)	8	5 - 13	10	0.004	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes			

Table 6 - DETECTION OF CONTAMINANTS WITH A <u>SECONDARY</u> DRINKING WATER STANDARD								
Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Sources of Contaminant		
Chloride (mg/L)	(2020 - 2022)	66	40 - 82	500	n/a	Runoff/leaching from natural deposits; seawater influence		

Iron (ug/L)	(2022)	0	ND - NP	300	n/a	Leaching from natural deposits; Industrial wastes
Manganese (ug/L)	(2020 - 2022)	6	ND - 30	50	n/a	Leaching from natural deposits
Odor Threshold at 60 °C (TON)	(2018 - 2022)	0	ND - NP	3	n/a	Naturally occurring organic materials.
Specific Conductance (umhos/cm)	(2018 - 2022)	764	651 - 878	1600	n/a	Substances that form ions when in water; seawater influence
Sulfate (mg/L)	(2020 - 2022)	44.3	26.8 - 62.4	500	n/a	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (mg/L)	(2018 - 2022)	462	420 - 510	1000	n/a	Runoff/leaching from natural deposits
Turbidity (NTU)	(2018 - 2022)	0.08	ND – 1.20	5	n/a	Soil runoff

**Table 6 A- DETECTION OF CONTAMINANTS WITH A <u>SECONDARY</u> DRINKING WATER STANDARD Well 9									
Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Sources of Contaminant			
Iron (ug/L)	(2022)	194	ND - 3310	300	n/a	Leaching from natural deposits; Industrial wastes			
Manganese (ug/L)	(2020 - 2022)	20	ND - 130	50	n/a	Leaching from natural deposits			
Odor Threshold at 60 °C (TON)	(2018 - 2022)	5	ND - 16	3	n/a	Naturally occurring organic materials.			
Turbidity (NTU)	(2018 - 2022)	I	ND - 6.2	5	n/a	Soil runoff			

^{**} Well 9 is standby for emergency use only, not for distribution

Table 7 - TREATED DETECTION OF CONTAMINANTS WITH A <u>SECONDARY</u> DRINKING WATER STANDARD									
Chemical or Constituent (and reporting units) Sample Date Average Level Detected Range of Detections MCL PHG (MCLG) Typical Sources of Contaminant									
Iron (ug/L) (2017 - 2022) 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			

	Table 8 - DETECTION OF UNREGULATED CONTAMINANTS										
Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	Notification Level	Typical Sources of Contaminant						
Boron (mg/L)	(2020 - 2022)	1.1	0.7 - 1.5	I	Boron exposures resulted in decreased fetal weight (developmental effects) in newborn rats.						
Vanadium (ug/L)	(2018 - 2022)	3.6	ND - 14	50	Vanadium exposures resulted in developmental and reproductive effects in rats.						
Manganese (ug/L)	(2022)	8.8	ND - 50	n/a	n/a						

Table 9 - ADDITIONAL DETECTIONS							
Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	Notification Level	Typical Sources of Contaminant		
Calcium (mg/L)	(2020 - 2022)	11	6 - 21	n/a	n/a		
Magnesium (mg/L)	(2020 - 2022)	9	4 - 31	n/a	n/a		
pH (units)	(2018 - 2022)	8.01	7.31 - 8.8	n/a	n/a		
Alkalinity (mg/L)	(2020 - 2022)	259	250 - 280	n/a	n/a		
Aggressiveness Index	(2018 - 2022)	11.8	10.9 - 12.5	n/a	n/a		
Langelier Index	(2018 - 2022)	-0.1	-1.0 - 0.7	n/a	n/a		

Table 10 - TREATED ADDITIONAL DETECTIONS						
Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	Notification Level	Typical Sources of Contaminant	
Alkalinity (mg/L)	(2022)	260	220 - 280	n/a	n/a	

Table 11 - DETECTION OF DISINFECTANT/DISINFECTANT BYPRODUCT RULE							
Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL (MRDL)	PHG (MCLG)	Violation	Typical Sources of Contaminant
Total Trihalomethanes (TTHMs) (ug/L)	(2022)	10	3.00 - 13.0	80	n/a	No	By-product of drinking water disinfection
Chlorine (mg/L)	(2022)	0.00	n/a	4.0	4.0	No	Drinking water disinfectant added for treatment.
Halo acetic Acids (five) (ug/L)	(2022)	3	ND - 3	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.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

About your Arsenic: For Arsenic detected above 5 ug/L (50% of the MCL) but below or equal to 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.

2022 Consumer Confidence Report

Drinking Water Assessment Information

Assessment Information

A source water assessment was conducted for WELL 09, WELL 10, and WELL 11 of the CITY OF RIO VISTA water system in December 2002. According to the Drinking Water Source Assessment and Protection Program's Source Water Assessments Public Access web page, the Public Water Sources WELL 13, WELL 14 and WELL 15 of the CITY OF RIO VISTA water system number 4810004, do not have a completed Source Water Assessment on file.

Discussion of Vulnerability

Wells 10, 11, 13, 14 and 15 in the City of Rio Vista water system are currently online. Assessment summaries are not available for some sources. Well 9 is standby only. 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 Assessmentsonly 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) 374-6740

For more info you may visit https://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.

City of Rio Vista 1 Main Street Rio Vista, CA 94571



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