

# 2022 ANNUAL WATER QUALITY REPORT

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Consumer Confidence Report for monitoring period  
January 1 - December 31, 2022



City of Banning  
Department of Public Works  
Water Department  
176 E. Lincoln Street  
Banning, CA 92220

# 2021 Water Quality Summary

The information contained in this report describes the City of Banning's drinking water sources and quality. This publication conforms to federal and state regulations requiring water utilities to provide detailed information about the water delivered to your home and business. Every effort is taken to present this detailed information in an understandable and transparent matter.

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

## Where Does My Water Come From?

100% of the City of Banning water comes from groundwater sources. Water is extracted from 19 potable wells throughout the City. The wells are located over the Beaumont, Banning, Banning Water Canyon, Banning Bench and Cabazon basin storage units. Additionally, the City may receive water supplies from three wells within the Beaumont storage unit operated jointly by Beaumont Cherry Valley Water District and the City of Banning. An assessment of the drinking water source(s) for the City was completed in April 2023. The source(s) are considered most vulnerable to these activities: sewer collection systems and groundwater wells. A copy of the complete assessment is available at 176 East Lincoln, Banning, CA 92220. You may request a summary of the assessment be sent to you by contacting the State Water Board Division of Drinking Water at [DDWRegUnit@waterboards.ca.gov](mailto:DDWRegUnit@waterboards.ca.gov).

## How Is My Water Tested?

The City's Water Division prides itself in delivering the highest quality of water possible. Certified operators regularly monitor and collect weekly, monthly, quarterly, and annual samples in the system to assure that the City's water system meets all regulations. The results of Banning's water analysis, as listed in this report, demonstrate the City's efforts in providing excellent water quality. This report shows the results of our monitoring for the period of January 1 - December 31, 2022.



# Drinking Water Assessment

## Your Tap Water Met All EPA and State Drinking Water Standards

Regulations require analysis for approximately 150 regulated and unregulated contaminants. All water supply contaminant data is from the most recent monitoring in compliance with regulations. In some cases, the California State Water Resources Control Board Division of Drinking Water has allowed the City to monitor less frequently for certain contaminants because the city's system is not vulnerable to these contaminants or levels are not expected to fluctuate significantly from year to year.

## Contaminants That May Be Present in Source Water

- ♦ **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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

Many contaminants that pose known human health risks are regulated by the U.S. Environmental Protection Agency (EPA). All water suppliers are required to meet EPA drinking water standards.

Tables 1 thru 6 on pages 4 & 5 list all of the drinking water contaminants detected during the monitoring period. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk.

Lead-Specific Information 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 service lines and home plumbing; the City of Banning 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, please contact the Water Division @ 951-922-3281 for more information.



**TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA**

Microbiological Contaminants (complete if bacteria detected)	Highest % of positive samples in a	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0	0	5% of monthly samples are positive	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	0	0	A routine sample and a repeat sample are total coliform positive, and one of these is fecal coliform or <i>E. coli</i> positive	0	Human and animal fecal waste

**TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER**

Lead and Copper (sample date July 2021)	No. of samples collected	90 <sup>th</sup> percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (mg/L)	33	N/D	0	0.015	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (mg/L)	33	0.098	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)	2020-2022	23	7.2—48	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2020-2022	128	46—180	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

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**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	PHG (MCLG)	Typical Source of Contaminant
Arsenic (ppb)	2020-2022	0.34	0-3.7	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Total Chromium (ppb)	2020-2022	5.4	0—16	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits.
Fluoride (mg/L)	2020-2022	0.41	0.20—1.2	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

\*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

**TABLE 4 (CONT.) – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Nitrate (as N) (ppm)	2022	1.33	0—2.3	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Gross Alpha Particle Activity (pCi/L)	2020-2022	1.33	0.0-2.58	15	(0)	Erosion of natural deposits
Combined Uranium (pCi/L)	2022	0.45	0.0-4.75	20	0.43	Erosion from natural deposits

**TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	Typical Source of Contaminant
Alkalinity, Bicarbonate (mg/L)	2020-2022	149	120-190	None	Throughout the report, some dashes are very long while others are short. I'd suggest just one way or the other and making it uniform
Calcium (mg/L)	2020-2022	34.7	10-45	None	
Chloride (mg/L)	2020-2022	8.0	1.5—18	500	Runoff/leaching from natural deposits; seawater influence
Iron (ppb)	2020-2022	5.8	0-110	300	Leaching from natural deposits: industrial wastes
Specific Conductance (µS/cm)	2020-2022	346.3	290—470	1600	Substances that form ions when in water; seawater influence
Sulfate (mg/L)	2020-2022	19.3	4.4-47	500	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) (ppm)	2020-2022	194.7	140—260	1000	Runoff/leaching from natural deposits
Turbidity (NTU)	2020-2022	0.2	0.0—54	5	Soil runoff
Magnesium (ppm)	2020-2022	10.3	2.4—19	None	NA

**TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG)	Typical Source of Contaminant
Hexavalent Chromium (ug/L)	2016-2017	7.5	0-16	N/A	N/A	Discharge from steel and pulp mills and chrome plating

**TABLE 7 – DISTRIBUTION SAMPLES**

Total Trihalomethanes (ppb)	2022	2.59	0—6.6	80	None	Byproduct of drinking water disinfection
Chlorine (mg/L)	2022	0.45	0.35—0.56	[4.0 As C12]	[4 As Cl2]	Drinking water disinfectant added for treatment

BCVWD—TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (complete if bacteria detected)	Highest % of positive samples in a	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0	0	5% of monthly samples are positive	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	0	0	A routine sample and a repeat sample are total coliform positive, and one of these is fecal coliform or <i>E. coli</i> positive	0	Human and animal fecal waste

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (sample date July 2021)	No. of samples collected	90 <sup>th</sup> percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (mg/L)	30	<0.005	0	0.015	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (mg/L)	30	0.14	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservative

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)	2020-2022	19.49	14.0—37.0	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2020-2022	194.2	150—250	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

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	PHG (MCLG)	Typical Source of Contaminant
Total Chromium (ppb)	2020-2022	5.24	4.50—5.98	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits.
Fluoride (mg/L)	2020-2022	0.39			1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer
Nitrate (as N) (ppm)	2022	3.33	0.69—5.70	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

\*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

BCVWD—TABLE 4 (CONT.) – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Gross Alpha Particle Activity (pCi/L)	2020- 2022	1.96	1.54-2.37	15	(0)	Erosion of natural deposits
Uranium (pCi/L)	2020- 2022	0.82	0.0-0.82	20	0.43	Erosion from natural deposits

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TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	Typical Source of Contaminant
Alkalinity, Bicarbonate (mg/ L)	2020-2022	176.30	170-210	None	N/A
Calcium (mg/L)	2020- 2022	49.95	38-54	None	N/A
Chloride (mg/L)	2020- 2022	13.85	6.40—34	500	Runoff/leaching from natural deposits; seawater influence
Iron (ppb)	2020- 2022	40.83	0-81.67	300	Leaching from natural deposits: industrial wastes
Specific Conductance (µS/ cm)	2020- 2022	433	310—510	1600	Substances that form ions when in water; seawater influence
Sulfate (mg/L)	2020- 2022	30.5	11.0-48	500	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) (ppm)	2020- 2022	249.45	200—330	1000	Runoff/leaching from natural deposits
Turbidity (NTU)	2020- 2022	0.36	0-1.90	5	Soil runoff
Magnesium (ppm)	2020- 2022	16.29	13—19	None	NAAlkalinity, Bicarbonate (mg/L)
PH (PH Units)	2020- 2022	7.97	7.70-8.0	None	NA

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at the beginning is  
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TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant

TABLE 7 – DISTRIBUTION SAMPLES

Total Trihalomethanes (ppb)	2022	2.54	0—5.5	80	None	Byproduct of drinking water dis- infection
Chlorine (mg/L)	2022	0.69	0.60—0.70	[4.0 As C12]	[4 As Cl2]	Drinking water disinfectant add- ed for treatment

C12 or Cl2?

# Water Quality Standards: Definitions, Acronyms & Abbrevia-

**Level Detected:** = Average of samples collected at the City's production wells, except for TTHM, HAA5, and Chlorine, which are sampled in the distribution system. For TTHM and HAA5 since the LRAA only applies to TTHM and HAA5. The chlorine residual "level detected" is the highest running annual average (RAA).

**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.

**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 contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

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

**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)

**ppt:** parts per trillion or nanograms per liter (ng/L)

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

**n/a:** not applicable

**< :** less than

**NTU:** Nephelometric Turbidity Units

**µS/cm:** microsiemens per centimeter (a measure of electric conductivity)

**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 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).



# Water Division News

## IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

## PROJECT UPDATE: ADVANCE METERING INFRASTRUCTURE (AMI) INSTALLATION

In October 2019, the City of Banning began installing “Advanced Meters” for our approximately 10,500 water service customers. All meters are on the AMI system as of December 2022. Advanced Meters substantially improve efficiency and reduce costs associated with water meter-reading by allowing the City to read meters remotely rather than manually. Once the project nears completion, customers will be able to access a customer portal. For more information, please visit the AMI Project page on the City’s website at <http://banning.ca.us/597/Advanced-Metering-Infrastructure-AMI>.

# Water Division News cont'd.

## Waterwise Landscape Irrigation Guidelines



Did you know that landscape irrigation is estimated to account for about 50% of annual residential water consumption statewide? Unfortunately, half the water used residentially finds its way into the gutter and storm drains due to runoff. In the West, drought and extreme heat have become commonplace; responsible irrigation and reductions in overall water consumption are a necessity in Southern California's inland areas.

- Use smart controllers and drip irrigation whenever possible.
- Consult Native Plant Guides such as [ie.watersavingplants.com](http://ie.watersavingplants.com) for ideas of what grows best in local climates.
- Water between 2 a.m. and 6 a.m. Watering within this window of time takes advantage of relatively low winds and less loss of water to evaporation.
- For more water conservation tips and ideas, visit <https://www.sgpwa.com/conservation/>

### *Seasonal Watering Guidelines*

**SUMMER**  
NO MORE THAN  
EVERY OTHER  
DAY

**FALL**  
NO MORE THAN  
3 TIMES PER  
WEEK

**SPRING**  
NO MORE THAN  
3 TIMES PER  
WEEK

**WINTER**  
NO MORE THAN  
1 TIME PER  
WEEK

## Public Participation Opportunities

The City of Banning is a non-profit public agency with a five-member council elected by the public. The City Council sets policy and represents customers (ratepayers). At the City Council's regular meetings, time is provided for the public to present its concerns and questions. Council meetings are held twice monthly on the second and fourth Tuesdays at 5:00 p.m. Meetings are held at the City Council Chambers at City Hall, 99 East Ramsey Street, Banning 92220. Please contact the City Clerk's office at [cpatton@banningca.gov](mailto:cpatton@banningca.gov) for more information about Council Meetings.

**For more information:** If you have any questions about this report, please contact Perry Gerdes, Water/Wastewater Superintendent at (951) 849-3273.

*Por Favor: Este informe contiene informacion importante sobre su agua potable. Traduzcalo o hable con algien que lo entienda bien. Perry Gerdes (951) 849-3273.*