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

North Perris Water System Water Quality 2020 Consumer Confidence Report

ABOUT THIS REPORT

The City of Perris is proud to provide this 2020 Water Quality Report, which contains valuable information about the quality of your drinking water and the efforts made to continue providing the highest quality water to the community it serves.

In 2020 your drinking water met all drinking water health standards of the United States Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Water Board) Division of Drinking Water.

The City of Perris encourages public participation in decisions that may affect the quality of the water supply. The City Council meets every second Tuesday and the last Tuesday of each month. Questions for the City Council can be presented to the City Administrative Department. Call (951) 943-6100.

Este informe contiene informacion importante con respecto a su calidad del agua. Si usted desea obtener informacion en espanol, visitenos en www.cityofperris.org o llame (951) 956-2120.

If you have specific questions about the quality of the drinking water supplied to you, please contact:

Bryant K. Hill, Director of Public Works
951-657-3280

The USEPA, the State Water Resources Control Board (State Water Board)), and the California Public Utilities Commission (CPUC) are the agencies responsible for establishing drinking water quality standards. The drinking water delivered to your homes and businesses meets standards established by all three agencies. The City of Perris uses independent, state-certified water quality laboratories for testing. In some cases, the City goes beyond what is required to monitor for constituents (elements) that have known health risks. Unregulated contaminant monitoring helps USEPA determine where certain contaminants occur and whether it needs to regulate those contaminants.

This year's report, which contains water quality and supply information for 2020 complies with the regulations of the 1996 Safe Drinking Water Act reauthorization that charges USEPA with updating and strengthening the tap water regulatory program.

SOURCES OF WATER SUPPLY

Water supplied by the North Perris Water System to the Villages of Avalon comes from four ground water wells located within your community.

The water quality and any contaminant levels found to be present are also listed in this report for contaminants which are of the most health risk.

In general, sources of drinking water (both tap 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 storm water 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 storm water runoff, and septic systems.
- *Radioactive contaminants* that can be naturally occurring or the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, USEPA and the State Water Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health. Additional information on bottled water is available on the California Department of Public Health website (https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/Water.aspx).

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 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).

SOURCE WATER ASSESSMENTS

In 2003, The McCanna Ranch Water Company completed a source water assessment of its potable production wells for its water supplies. Groundwater supplies are considered vulnerable to various urban and agricultural land uses.

Urban land uses that can create contaminants include automobile gas stations and repair shops, transportation corridors, furniture manufacturing and repair facilities, sewer collection systems, and sand and gravel mining operations. Agricultural land uses include irrigated truck crops with application of pesticides and herbicides.

WATER QUALITY MONITORING

The City of Perris routinely monitors for contaminants in its drinking water in accordance with Federal and State laws. To minimize the presence of harmful bacteria or other pathogens, the City of Perris is also required to continuously monitor the disinfection levels in the water system. The disinfection levels of the water system are checked daily to ensure the quality of the water. Bacteria, which may indicate potential health risks, are monitored weekly. **Over 150 bacteria tests were conducted during 2020, with NO exceeded limits found.**

Results of monitoring for the period of January 1 to December 31, 2020, are identified in the tables located on the following pages. These tables contain chemicals and constituents that have both primary and secondary MCLs. The following definitions are provided for terms and abbreviations contained in the tables that might be unfamiliar.

ACRONYMS AND ABREVIATIONS

- ***AL = Regulatory Action Level:*** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- ***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 USEPA.
- ***MRDL = Maximum Residual Disinfection Level:*** The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.
- ***MRDLG = Maximum Residual Disinfection Level Goal:*** The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by USEPA.
- ***N/A = Not Applicable:*** Monitoring requirements may vary between sources.
- ***ND = Not Detected:*** Laboratory analysis indicates that the constituent is not present at detectable levels.
- ***NM = Not Monitored:*** The source was not monitored for the constituent.
- ***NS = No Standard:*** No existing federal or state drinking water standard has been established.
- ***NTU = Nephelometric Turbidity Units***
- ***PDWS = Primary Drinking Water Standard***: MCLs or MRDLs for contaminants that affect health, along with their monitoring and reporting requirements and water treatment requirements.
- ***PHG*** = Public Health Goal- The level of a contaminant in drinking water below which there is no known or expected health risk
- **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 an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

pCi/L = picocuries per liter (a measure of radioactivity)
ppb = parts per billion, or micrograms per liter (µg/L)
ppm = parts per million, or milligrams per liter (mg/L)
ppq = parts per quadrillion, or picograms per liter
ppt = parts per trillion, or nanograms per liter
LRAA = locational running annual average
TT = Treatment Technique.
NL = Notification Level

ADDITIONAL EDUCATIONAL INFORMATION.

Fluoride

All drinking water naturally contains some fluoride.
Fluoride levels in drinking water are limited under California state regulations at a maximum level of 2.0 parts per million (ppm).
The City of Perris flouride levels are below the regulation limit and are within the range of 0.4 to 0.5 ppm.

Federal Revised Total Coliform Rule

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2020. All water systems are required to comply with the state Total Coliform Rule. Beginning April 1, 2016, all water systems were also required to comply with the federal Revised Total Coliform Rule. The new federal rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and E. coli bacteria). The U.S. EPA anticipates greater public health protection as the new rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system.

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. The City of Perris 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. *[Optional: If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.]* 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

WATER QUALITY TABLES

The first column of each water quality table that follows lists the chemical/constituent detected in the water. The next columns list the average concentration and range of concentrations of the detected chemical. All chemicals and constituents were monitored from the water distribution system during 2020.

Also listed is the PHG (or MCLG, if applicable) established for each chemical/constituent. The last column describes the likely source(s) of each contaminant detected in the drinking water.

The State Water Board allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

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Bryant K. Hill Public Works Director

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LEAD IN DRINKING WATER.

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Primary Standards – Mandatory Health Related Standards – Regulated Contaminants

Table 1.

Microbiological Contaminants

Chemical or Constituent (reporting units)	MCL (AL)	PHG (MCLG)	Distribution System Highest number of Positives	Major Sources in Drinking Water	Health Effects Language
Total Coliform Bacteria (highest # of positive samples in any one month) (State Total Coliform Rule)	No more than 1 positive sample in a month	(0)	0	Naturally present in the environment	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.
Fecal Coliform and *E. coli* (number of positive samples during the year) (State Total Coliform Rule)	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E. coli positive	(0)	0	Human and animal fecal waste	Fecal coliforms and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.
E. coli (Federal Revised Total Coliform Rule)	(a)	0	0 (from 1/1/20-12/31/20)	Human and animal fecal waste	E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.

(a) Routine and repeat samples are total coliform-positive, and either is E. coli-positive, or system fails to take repeat samples following E. coli-positive routine sample or system fails to analyze total coliform-positive repeat sample for E. coli.

Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproducts Precursors

Chemical or Constituent (reporting units)	MCL (AL) [MRDL]	PHG (MCLG) [MRDLG]	Distribution System Range	Distribution System Highest LRAA	Major Sources in Drinking Water	Health Effects Language
Total Trihalomethanes (TTHMs) (ppb) (2020)	80	N/A	3.9-4.0	4.0	By-product of drinking water chlorination	Some people who drink water containing Trihalomethanes in excess of the MCL over

						many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.
Haloacetic Acids (HAA5s) (ppb) (2020)	60	N/A	2.3-2.4	2.4	By-product of drinking water chlorination	Some people who drink water containing halo acetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Chlorine Residual (ppm) (2020)	**[MRDL]** 4.0 as Cl2]	**[MRDLG]** 4.0 as Cl2]	0.67-0.89	0.78	Drinking water disinfectant added for treatment	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Inorganic Chemicals

Chemical or Constituent (reporting units)	**MCL (AL)**	**PHG (MCLG)**	**At Source Groundwater**		**Major Sources in Drinking Water**	**Health Effects Language**
			Range	Average		
Fluoride (ppm)	2.0	1	0.36-0.53	0.5	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories	Some people who drink water containing fluoride in excess of the federal MCL of 4 mg/L over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the state MCL of 2 mg/L may get mottled teeth.
Nitrate (as N) (ppm)	10	10	ND-1.1	1.0	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.
Barium (ppb)	1000	200	130-160	150	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits	Some people who drink water containing Barium in excess of the MCL over many years may experience an increase in blood pressure.
Arsenic (ppb)	10	0.004	ND-2.2	1.0	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes	Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems and may have an increased risk of getting cancer.

Table 2. Lead and Copper Sampled at Customers Tap

Chemical or Constituent (reporting units)	**MCL (AL)**	**PHG (MCLG)**	**Taken from consumers taps**		**Major Sources in Drinking Water**	**Health Effects Language**
			90th Percentile	# of samples >AL		
Lead (ppb) September 2020 Sampling.	(15)	2	ND	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits	Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development.

Lead Sampling Information						Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.
Copper (ppm) September 2020 Sampling.	(1.3)	0.3	0.24	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Table 3 Regulated Contaminants with Secondary MCL's Sodium, Hardness, and Other Parameters

Chemical or Constituent (reporting units)	**MCL (Secondary MCL)**	**PHG (MCLG)**	**At Source**		**Major Sources in Drinking Water**	**Health Effects Language** There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.
			Range	Average		
Sodium (ppm)	NS	NS	57-61	59	Runoff/ leaching from natural deposits; seawater influence	N/A
Hardness (as CaCO3) (ppm) ()	NS	NS	190-210	195	Erosion of natural deposits	N/A
Chloride (ppm)	NS		93-103	96	Runoff/leaching from natural deposits; seawater influence	N/A
Odor (TON)	NS		1	1	Naturally occurring organic materials	N/A
Sulfate (ppm))	500		24-31	27	Runoff/leaching from natural deposits; Industrial wastes	N/A
Total Dissolved Solids (ppm)	1000		394-416	408	Runoff/leaching from natural deposits	N/A
Specific Conductance (µS/cm) (	1600		617-644	633	Substances that form ions when in water; seawater influence	N/A
Boron (ppb)	NL=1000		160-210	170	N/A	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.
Vanadium (ppb)	NL=50		21-38	30	N/A	The babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.

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