



# 2021

CITY OF REDLANDS  
CONSUMER CONFIDENCE REPORT

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**Last year, as in years past, your tap water exceeded all U.S. EPA and State drinking water health standards. The City of Redlands vigilantly safeguards its water supplies and once again, we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard. This brochure is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards. We are committed to providing you with information because informed customers are our best allies.**

## **WATER SOURCE PROTECTION**

The City of Redlands is committed to protecting our water sources from possible contamination. Source water assessments were completed in 2002 for all of our drinking water supplies. You can view the source water assessments at our office (location listed on back page). The assessments help to identify the vulnerability of drinking water supplies. These assessments are intended to provide basic information necessary for us to develop programs to protect our drinking water supplies. Possible contaminants can originate from: agricultural drainage, urban runoff, septic systems, sewer collection systems, junk/scrap/salvage operations, crop irrigation, underground storage tanks at automobile gas stations and illegal dumping.

Anyone interested in receiving a copy of the source water assessment should contact the City's water system contact:

**Kevin Watson, Utilities Operations Manager**  
**(909) 798-7588 ext. 1**

## **IMPORTANT FACTS FROM THE U.S. EPA ABOUT DRINKING WATER**

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 contaminants 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 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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources 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.



# SOURCES OF WATER

The City of Redlands was incorporated in 1888 and has developed extensively from its origin as an agricultural area. More than 75,000 residents in Redlands, Mentone, parts of Crafton Hills and San Timoteo Canyon, and small parts of Loma Linda and San Bernardino depend on the Redlands Municipal Utilities & Engineering Department to provide water service to their homes and businesses.

The City of Redlands water system is supported by groundwater and surface water sources. Surface water sources include the Santa Ana River Watershed, Mill Creek Watershed and California State Water Project. Approximately 50% of the of the drinking water produced is treated surface water delivered by the Horace P. Hinckley and Henry Tate conventional surface water treatment plants. The remaining 50% is produced by 23 local groundwater wells located within the Bunker Hill Groundwater Basin.



Pictured: Mill Creek, looking northeast from Morton Peak. Mill Creek provides approximately 25% of the City's water supply.

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

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 California Department of Public Health's website at <https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/Water.aspx>

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. U.S. EPA/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).

For information on ground water and drinking water, please visit:

<https://www.epa.gov/ground-water-and-drinking-water>

# TERMS USED IN THIS REPORT

## 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 US Environmental Protection Agency (US EPA).

## MAXIMUM RESIDUAL DISINFECTANT LEVEL (MRDL):

The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

## N/A:

Not applicable

## ND:

Not detectable at testing limit.

## NS:

No standards

## NT:

Not tested

## 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.

## PRIMARY DRINKING WATER STANDARDS (PDWS):

MCLs and MRDLs for contaminants that affect health, along with their monitoring, reporting and water treatment requirements.

## REGULATORY ACTION LEVELS (AL):

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that water system must follow.

## NEPHELOMETRIC TURBIDITY UNIT (NTU):

Nephelometric Turbidity Unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

## TREATMENT TECHNIQUE (TT):

A required process intended to reduce the level of a contaminant in drinking water.

## IMPORTANT INFORMATION

This report contains important information about your drinking water. Please contact the City of Redlands at 35 Cajon Street, Suite 15A, Redlands CA 92373 or 909-798-7698 for assistance.

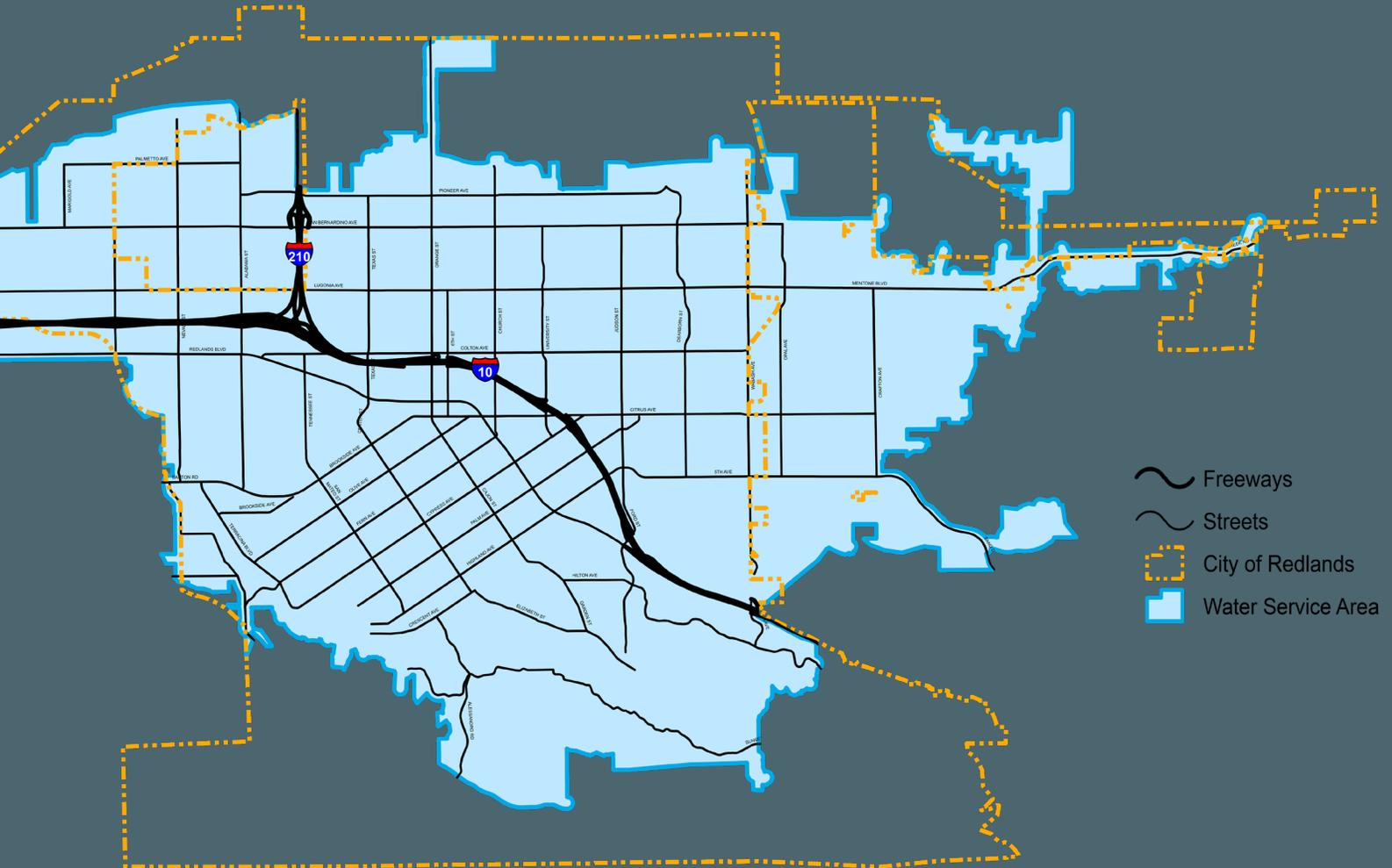
Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse City of Redlands a 909-798-7698 para asistirlo en español.

يحتوي هذا التقرير على معلومات مهمة حول مياه الشرب الخاصة بك. يرجى الاتصال بمدينة ريدلاندز على الرقم 7698-798-909 للحصول على المساعدة باللغة العربية.

Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa City of Redlands, 35 Cajon Street, Suite 15A, Redlands CA 92373 o tumawag sa 909-798-7698 para matulungan sa wikang Tagalog.

这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 City of Redlands 以获得中文的帮助 City of Redlands, 35 Cajon Street, Suite 15A, Redlands CA 92373 909-798-7698

# CITY OF REDLANDS WATER SERVICE AREA



## UNITS OF MEASURE

Parts per million (ppm) or milligrams per liter (mg/L).  
Parts per billion (ppb) or Micrograms per liter ( $\mu\text{g/L}$ ).  
Parts per Trillion (ppt) or nanograms per liter (ng/L).  
Picocuries per liter (pCi/L): a measurement of the radioactivity in water.  
Umhos/cm: A measure of conductivity in water.

## UNITS: A COMPARISON TO TIME

mg/L (milligrams per liter) OR ppm (parts per million) = 1 second in 11.5 days  
 $\mu\text{g/L}$  (micrograms per liter) OR ppb (parts per billion) = 1 second in nearly 32 years  
ng/L (nanograms per liter) OR ppt (parts per trillion) = 1 second in nearly 32,000 years  
pg/L (picograms per liter) OR ppq (parts per quadrillion) = 1 second in nearly 32,000,000 years

# MICROBIOLOGICAL CONTAMINANTS

**SAMPLING YEAR: 2020**

CONTAMINANT (CCR UNITS)	TRADITIONAL MCL	PHG	DISTRIBUTION SUPPLY	SURFACE WATER SUPPLY (TREATED)	VIOLATION	MAJOR SOURCES IN DRINKING WATER
Total Coliform Bacteria (state Total Coliform Rule)	MCL: Systems that collect $\geq 40$ samples/month: 5.0% of monthly samples are positive; Systems that collect $< 40$ samples/month: 1 positive monthly sample	0	1%	ND	No	Naturally present in the environment
Total Coliform Bacteria (federal Revised Total Coliform Rule)	TT	N/A	1%	ND	No	Naturally present in the environment
Turbidity [1]	TT	N/A	0.19 (average)	".03 (average)"	No	Soil runoff

[1] Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

## CONVENTIONAL SURFACE WATER TREATMENT PLANT FILTER PERFORMANCE

CONTAMINANT	MCL	PHG	LEVEL FOUND	RANGE	SAMPLE DATE	VIOLATION	TYPICAL SOURCE
Turbidity	TT = 1 NTU	N/A	0.25 NTU	.03 - .28	2020	No	Soil runoff
	TT = 95% of samples $\leq 0.3$ NTU		100%	.03 - .28			

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

## ABBREVIATIONS KEY

AL = Regulatory Action Level

MCL = Maximum Contaminant Level

MCLG = Maximum Contaminant Level Goal

MRDL = Maximum Residual Disinfectant Level

MRDLG = Maximum Residual Disinfectant Level Goal

PHG = Public Health Goal

TT = Treatment Technique

MFL = million fibers per liter

## HEALTH EFFECTS LANGUAGE

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2016. All water systems are required to comply with the state Total Coliform Rule. Effective April 1, 2016, all water systems are 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.

NTU = Nephelometric Turbidity Units

N/A = not applicable

pCi/L = picocuries per liter (a measure of radioactivity)

mrem/year = millirems per year (a measure of radiation absorbed by the body)

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

ppb = parts per billion, or micrograms per liter ( $\mu\text{g/L}$ )

ppt = parts per trillion, or nanograms per liter (ng/L)

ppq = parts per quadrillion, or picograms per liter (pg/L)

# INORGANIC CONTAMINANTS

CONTAMINANT (CCR UNITS)	YEAR	MCL IN CCR UNITS	PHG (MCLG) IN CCR UNITS	GROUNDWATER SUPPLY AVERAGE	GROUNDWATER SUPPLY RANGE	SURFACE WATER SUPPLY AVERAGE	SURFACE WATER SUPPLY RANGE
Aluminum (mg/L)	2019	1	0.6	0.01	.02 - .13	ND	ND
Barium (mg/L)	2019	1	2	0.02	.01 - .04	0.02	.01 - .02
Chromium [Total] (µg/L)	2019	50	(100)	1.5	ND - 7.1	0.32	ND - .63
Fluoride (naturally occurring) (mg/L)	2020	2	1	0.6	.3 - 1.6	0.5	.2 - .8
Nickel (µg/L)	2019	100	12	2.3	2.0 - 2.5	ND	ND
Nitrate (mg/L)	2020	"10 (as N)"	"10 (as N)"	3.1	ND-6.5	ND	ND - .7
Perchlorate (µg/L)	2020	6	1	ND	ND - 4.7	ND	ND

No violations occurred as a result of these contaminant testings in 2019 and 2020.



## PUBLIC PARTICIPATION OPPORTUNITIES

City Council meetings are held on the first and third Tuesdays of every month and the Municipal Utilities /Public Works Commission (MUPWC) meetings are held the first Monday of even numbered months. All items that are heard by the City Council or the MUPWC are placed on the required agendas and posted at City Hall located at 35 Cajon Street, Redlands, California.

**PLEASE NOTE:**

**THE STATE 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.**

MAJOR SOURCES IN DRINKING WATER	HEALTH EFFECTS LANGUAGE
Erosion of natural deposits; residue from some surface water treatment processes	Some people who drink water containing aluminum in excess of the MCL over many years may experience short-term gastrointestinal tract effects.
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.
Discharge from steel and pulp mills and chrome plating; erosion of natural deposits	Some people who use water containing chromium in excess of the MCL over many years may experience allergic dermatitis.
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.
Erosion of natural deposits; discharge from metal factories	Some people who drink water containing nickel in excess of the MCL over many years may experience liver and heart effects.
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.
Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.	Perchlorate has been shown to interfere with uptake of iodide by the thyroid gland, and to thereby reduce the production of thyroid hormones, leading to adverse effects associated with inadequate hormone levels. Thyroid hormones are needed for normal prenatal growth and development of the fetus, as well as for normal growth and development in the infant and child. In adults, thyroid hormones are needed for normal metabolism and mental function.

## A NOTE ABOUT NITRATE



Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate 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 certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

# REGULATED CONTAMINANTS WITH SECONDARY DRINKING WATER STANDARDS

Monitoring required by section 64449 of the California Code of Regulations, Title 22.

CONSTITUENT	YEAR	SECONDARY MCL (UNITS)	GROUNDWATER SUPPLY	GROUNDWATER RANGE	SURFACE WATER SUPPLY (TREATED)
Aluminum	2019	0.2 mg/L	11	ND - 130	ND
Foaming Agents [MBAS]	2019	0.5 mg/L	0.01	ND - .04	0.04
Iron	2019	0.3 mg/L	0.03	ND - .17	0.01
Turbidity	2020	5 Units	0.4	.1 - 1.6	0.03
Total Dissolved Solids [TDS]	2020	1,000 mg/L	237	180 - 400	230
Specific Conductance	2020	1,600 $\mu$ S/cm	396	280 - 660	375
Chloride	2020	500 mg/L	19	5 - 55	27
Sulfate	2020	500 mg/L	18	18 - 75	36

NOTE: There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetic concerns.

## SODIUM (mg/L)\*

**2020**

### GROUNDWATER

Supply: 25  
Range: 10-86

### SURFACE WATER SUPPLY (TREATED)

Supply: 27  
Range: 10-44

“Sodium” refers to the salt present in the water and is generally naturally occurring.

## HARDNESS (mg/L)\*

**2020**

### GROUNDWATER

Supply: 146  
Range: 98-200

### SURFACE WATER SUPPLY (TREATED)

Supply: 133  
Range: 95-170

“Hardness” is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.

\*Sodium and Hardness do not have a Maximum Contaminant Level, Public Health Goal

SURFACE WATER SUPPLY (TREATED) RANGE	TYPICAL SOURCE OF CONTAMINANT
ND	Erosion of natural deposits; residual from some surface water treatment processes
0.04	Municipal and industrial waste discharges
.01 - .02	Leaching from natural deposits; industrial wastes
.03 - .28	Soil runoff
230 - 230	Runoff/leaching from natural deposits
360 - 390	Substances that form ions when in water; seawater influence
6 - 47	Runoff/leaching from natural deposits; seawater influence
33 - 39	Runoff/leaching from natural deposits; industrial wastes



## HELP US PROTECT OUR WATER SOURCES!

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.

# UCMR 4

SAMPLING YEAR: 2019

CYANOTOXINS	MINIMUM REPORTING LEVEL	SYSTEM AVERAGE	SYSTEM RANGE	TYPICAL SOURCE OF CONTAMINANT
Manganese	0.4 µg/L	0.41	ND - 1.5	Leaching from natural deposits
Total Organic Carbon (TOC) *	N/A	1	0 - 3.7	Various natural and manmade sources
Bromide *	N/A	0.02	ND - 1.1	N/A

\* Raw surface water sources

Unregulated contaminant monitoring helps U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

# DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS, AND PRECURSORS

SAMPLING YEAR: 2020

CONTAMINANT (CCR UNITS)	MCL OR [MRDL] IN CCR UNITS	PHG, (MCLG) OR [MRDLG]	DISTRIBUTION SYSTEM AVERAGE	DISTRIBUTION SYSTEM RANGE	MAJOR SOURCES IN DRINKING WATER
TTHMs [Total Trihalomethanes] (µg/L)	80	N/A	31	ND - 70	Byproduct of drinking water disinfection
HAA5 [Sum of 5 Haloacetic Acids] (µg/L)	60	N/A	23	ND - 47	Byproduct of drinking water disinfection
Chlorine (mg/L)	[MRDL = 4.0 (as Cl <sub>2</sub> )]	[MRDLG = 4 (as Cl <sub>2</sub> )]	0.9	.3 - 1.7	Drinking water disinfectant added for treatment
Control of DBP Precursors (TOC)	TT	N/A	1.1	.5 - 2.3	Various natural and manmade sources

There were no violations in 2020 for the above listed contaminants.

## BACKGROUND

The 1996 Amendments to the SDWA required the U.S. EPA to establish criteria for a monitoring program for unregulated contaminants, and to publish, once every five years, a list of no more than 30 contaminants to be monitored by public water systems (PWS).

Section 64450 of the California Code of Regulations also required certain water systems to monitor a number of unregulated contaminants, with contaminant lists that were published or revised in 1990, 1996, 2000, and 2003. This section of the California Code of Regulations was repealed effective October 18, 2007. Water systems that continued to monitor for state unregulated contaminants are encouraged, but not required, to include the information regarding detected contaminants in the CCR.

Although Section 64450 of the California Code of Regulations was repealed, the State Water Board may request water systems to monitor for specific contaminants per HSC section 116375(b).

### HEALTH EFFECTS LANGUAGE

Manganese exposures resulted in neurological effects. High levels of manganese in people have been shown to result in adverse effects to the nervous system.

Total organic carbon (TOC) has no health effects. However, TOC provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver, or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

N/A

## DISINFECTION BYPRODUCT

### HEALTH EFFECTS LANGUAGE

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.

Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

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.

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of cancer.



# LEAD & COPPER

SAMPLE DATE: 2020

CONTAMINANT	MCL	PHG	AVERAGE	RANGE	NUMBER OF SCHOOLS REQUESTING LEAD SAMPLING
Lead (µg/L)	AL = 15	0.2	ND	34 sites sampled; 0 sites over AL	0
Copper (mg/L)	AL = 1.3	0.3	ND	34 sites sampled; 0 sites over AL	N/A

There were no violations in 2020 for the above listed contaminants.

# RADIOACTIVE CONTAMINANTS

SAMPLE DATE: 2019

CONTAMINANT (CCR UNITS)	MCL IN CCR UNITS	PHG	GROUNDWATER SUPPLY AVERAGE	GROUNDWATER SUPPLY RANGE	SURFACE WATER SUPPLY AVERAGE	SURFACE WATER SUPPLY RANGE	MAJOR SOURCES IN DRINKING WATER
Gross Beta Particle Activity (pCi/L)	50 [1]	0	4.8	1.05 - 13.3	1.54	1.49 - 1.58	Decay of natural and man-made deposits
Strontium-90 (pCi/L)	8	0.35	0.56	ND - 2.1	0.34	.2 - .48	Decay of natural and man-made deposits
Gross Alpha Particle Activity (pCi/L)	15	0	7	3 - 15	2	0 - 4	Erosion of natural deposits
Combined Radium (pCi/L)	5	(0) [2]	0.06	.04 - .08	ND	ND	Erosion of natural deposits
Uranium (pCi/L)	20	0.43	3	ND - 12	0.4	ND - 1	Erosion of natural deposits

[1] Effective June 11, 2006, the gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ. 50 pCi/L is used as a screening level.

[2] If reporting results for Ra-226 and Ra-228 as individual constituents, the PHG is 0.05 pCi/L for Ra-226 and 0.019 pCi/L for Ra-228.

"The State Water Resources Control Board considers 50 pCi/L to be the level of concern for beta particles."

There were no violations in 2019 for the above listed contaminants.

### TYPICAL SOURCE

Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

### HEALTH EFFECTS LANGUAGE

Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Some people who drink water containing strontium-90 in excess of the MCL over many years may have an increased risk of getting cancer.

Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Some people who drink water containing uranium in excess of the MCL over many years may have kidney problems or an increased risk of getting cancer.

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Pb

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 Redlands 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>.



## CONTACT US

CITY OF REDLANDS, MUNICIPAL UTILITIES & ENGINEERING DEPARTMENT

P.O. BOX 3005

35 CAJON STREET, SUITE 15A

REDLANDS, CA 92373

(909)798-7698

[CITYOFREDLANDS.ORG/MUED](http://CITYOFREDLANDS.ORG/MUED)

*City of*  
**REDLANDS**

PO BOX 3005

Redlands, CA 92373

**POSTAL CUSTOMER**