

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2020. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

*Follow us on:*



**IWV Water District**

#### **Community Participation**

You are invited to participate at our Board of Directors meetings and voice your concerns about your drinking water. We meet the second Monday of each month, beginning at 6 p.m., in our Board Room, 500 W. Ridgecrest Blvd., Ridgecrest, CA.

#### **Questions?**

For more information about this report, or for any questions relating to your drinking water, please call Renee Morquecho, Chief Engineer, at (760) 375-5086.

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

#### **Indian Wells Valley Water District**

PWS ID#1510017  
500 W. Ridgecrest Blvd.  
Ridgecrest, CA 93555

# Indian Wells Valley Water District

PWS ID#1510017

[www.iwvwd.com](http://www.iwvwd.com)



*Celebrating  
more than  
60 years of  
service*

# 2020 Annual Drinking Water Quality Report

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## Where Do We Get Our Drinking Water?

The Indian Wells Valley Water District serves approximately 30,000 people through approximately 12,000 connections in Ridgecrest and the surrounding areas. Our water supply comes from 10 wells that draw water from the Indian Wells Valley Aquifer. Water is pumped from these wells through transmission lines to eleven water storage reservoirs with a storage capacity of 17 million gallons. From there, water is delivered by gravity through the distribution lines to the customer.

## Source Water Assessment

The California State Water Resources Control Board (SWRCB) requires a Source Water Assessment for all drinking water sources across the state. The purpose of the assessments is to determine the susceptibility of each drinking water source to potential contamination and to establish a high, moderate or low relative susceptibility rating for each source. A high rating indicates the lowest susceptibility to contamination.

Assessments for Wells 10, 11, 13, 18, 30, 31 and 33 were conducted in 2001/2002 by the SWRCB. The assessment of Well 34 was conducted in 2008 and Wells 9A and 17 in 2018. All District wells received a susceptibility rating of “moderate”. The geology of the Indian Wells Valley does not make it possible to locate wells in confined aquifers, therefore our wells cannot receive the highest rating. Nevertheless, District wells conform to the highest standards and typically received the full amount of points possible on the assessment.

All water assessment reports are available by contacting Renee Morquecho, Chief Engineer, at (760) 375-5086.

## Substances that Could be in 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 substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the California State Water Resources Control Board (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. SWRCB regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. 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.

Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA’s Safe Drinking Water Hotline at (800) 426-4791.

## All Drinking Water May Contain Contaminants

In order to ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 Environmental Protection Agency’s Safe Drinking Water Hotline at 1-800-426-4791.

## Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.

## Lead and Drinking Water

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. Indian Wells Valley Water District 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/safewater/lead>.

## Groundwater Authority Fees

By now you have noticed new charges on your bill for “GA Fees”. These fees have been authorized by the Indian Wells Valley Groundwater Authority (GA) and the money collected is paid to the GA and not used by the District. The fees are for Groundwater Extraction and Basin Replenishment and are combined into one fee on your bill. You can determine how the new fees will affect your bill using our online bill calculator on the right side of the home page at [www.iwvwd.com](http://www.iwvwd.com). We encourage you to learn more about the local groundwater authority by visiting their website at [www.iwvga.org](http://www.iwvga.org).

## WaterSmart Program

Want to know more about your water usage? Sign up for the new WaterSmart program where you can monitor and manage your water usage in detail and receive notifications of excess usage and leaks. Sign up at [www.iwvwd.watersmart.com](http://www.iwvwd.watersmart.com) today!

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES							
Substance (Unit)	Year Sampled	Violation Yes/No	MCL [MRDL]	PHG (MCLG) [MRDLG]	Average Detected	Range	Typical Source
Arsenic (ppb)	2020	No	10	0.004	0.95	ND-8.4	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Chlorine (ppm)	2020	No	[4.0]	[4.0]	0.77	0.4-1.07	Drinking water disinfectant added for treatment
TTHM [Total Trihalomethanes] (ppb)	2020	No	80	N/A	2.2	ND-4.4	By-product of drinking water disinfection
Haloacetic Acids (ppb)	2020	No	60	N/A	ND	N/A	By-product of drinking water disinfection
Fluoride (ppm)	2020	No	2.0	1.0	0.70	0.6-1.3	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as NO3 (ppm)	2020	No	45	45	1.2	ND-2.7	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate + Nitrite as N (ppm)	2020	No	10	10	1.2	ND-2.1	
Gross Alpha Particle Activity (pCi/L)	2015 - 2020	No	15	(0)	3.0	ND-4.9	Erosion of natural deposits

TAP WATER SAMPLES							
Substance (Unit)	Year Sampled	Violation (Yes/No)	AL	PHG	Amount Detected (90th percentile)	Sites Above AL/Total Sites	Typical Source
Copper (ppm)	2018	No	1.3	0.3	0.083	0/30	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)*	2018	No	15	0.2	ND	0/30	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES							
Substance (Unit)	Year Sampled	Violation (Yes/No)	MCL	PHG	Average Detected	Range	Typical Source
Chloride (ppm)	2020	No	500	NA	66.9	15-220	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (micromhos) (µS/cm)	2020	No	1600	NA	511	300-1000	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2020	No	500	NA	36.9	23-60	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2020	No	1000	NA	312	190-580	Runoff/leaching from natural deposits

MICROBIOLOGICAL CONTAMINANTS						
Substance (Unit)	MCLG	Total Coliform MCL	Highest No. Positive	MCL	Violation	Source
Coliform Bacteria	0	5% of monthly samples are positive	3.45%	0	No	Naturally present in the environment

## UNREGULATED CONTAMINANTS (UCMR4)

Substance (Unit)	Year Sampled	SMCL	Average Detected	Range	Violation	Source
Germanium (ppb)	2019-20	NA	0.65	ND-1.9	No	Unregulated contaminants are those for which there are no established drinking water standards. The purpose of unregulated contaminant monitoring is to assist in regulatory agencies in determining their occurrence in drinking water and whether future regulation is warranted.
Manganese (ppb)	2019-20	NA	0.21	ND-0.92	No	
Bromide (ppb)	2019-20	NA	136	ND-480	No	
Bromochloroacetic acid (ppb)	2019-20	NA	0.93	ND-1.3	No	
Dibromoacetic acid (ppb)	2019-20	NA	0.69	ND-0.85	No	
Dichloroacetic acid (ppb)	2019-20	NA	0.82	ND-1.2	No	

## UNREGULATED SUBSTANCES

Substance (Unit)	Year Sampled	MCL	PHG	Average Detected	Range
Bicarbonate as HCO <sub>3</sub> (ppm)	2020	NA	NA	118.3	84-140
Boron <sup>1</sup> (ppb)	2020	NA	NA	746	200-2200
Calcium (ppm)	2020	NA	NA	20.3	3.1-37
Carbonate as CO <sub>3</sub> (ppm)	2020	NA	NA	6.5	ND-18
Chromium VI (ppb)	2020	NA	0.02	1.1	ND-5.3
Hardness (ppm)	2020	NA	NA	57.8	7.8-110
Magnesium (ppm)	2020	NA	NA	2.0	ND-5.4
pH (units)	2020	NA	NA	8.6	7.9-9.3
Potassium (ppm)	2020	NA	NA	1.6	ND-2.5
Sodium (ppm)	2020	NA	NA	86.2	42-200
Total Alkalinity as CO <sub>3</sub> (ppm)	2020	NA	NA	106.8	84-130
Vanadium <sup>2</sup> (ppb)	2020	NA	NA	13.6	ND-56

<sup>1</sup> District wells 9A, 10, 11 and 13 detected Boron concentrations of 1500, 1000, 2200, and 1100 ppb, respectively in 2020.

<sup>2</sup> District Well 17 detected a Vanadium concentration of 56 ppb in 2020.



## Definitions

In the table above, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

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

**Maximum Contaminant Level or MCL:** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal or MCLG:** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level or 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 or 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.

**NA:** not applicable

**Nephelometric Turbidity Unit (NTU):** measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**ND (Not Detected):** indicates that the substance was not found by laboratory analysis.

**NS:** no standard

**Parts Per Million (ppm) or Milligrams Per Liter (mg/l):** one part by weight of analyte to 1 million parts by weight of the water sample.

**Parts Per Billion (ppb) or Micrograms Per Liter (µg/l):** one part by weight of analyte to 1 billion parts by weight of the water sample.

**PDWS (Primary Drinking Water Standard):** MCLs and 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 risk to health. PHGs are set by the California EPA.

**Picocurie per liter (pCi/L):** measure of the radioactivity in water.

**Secondary Maximum Contaminant Level (SMCL):** unenforceable guidelines for the aesthetic quality of water.

**TON (Threshold Odor Number):** a measure of odor in water.

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

**µS/cm (microsiemens per centimeter):** a unit expressing the amount of electrical conductivity of a solution.