

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2017. 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



@IWVWaterDist

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. Ridgcrest Blvd., Ridgcrest, 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. Ridgcrest Blvd.
Ridgcrest, CA 93555

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www.iwvwd.com



*Celebrating
more than
60 years of
service*

2017 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>.

Payment Options

Click “Pay Bill Online” at our website at www.iwwvd.com to review your bill(s) and water usage online, pay your bill and sign up to receive an e-bill. A few other e-options are Auto Pay or using your bank's electronic bill payment service. The Auto Pay authorization form is on our website or in our office. Check with your bank for online bill payment information. You can still mail in your payment, pay by phone, drop off your payment in our box in the parking lot, or come in and see one of our friendly customer service representatives in person.

CUSTOMER CONTACT INFORMATION

Want to be notified quickly of outages or emergencies in your neighborhood? Visit our website at www.iwwvd.com and click on the Customer Contact Info button on the right side of the page to provide your e-mail and/or cell phone number.

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)	2017	No	10	0.004	0.93	ND-3.1	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Chlorine (ppm)	2017	No	[4.0]	[4.0]	0.69	0.47-1.54	Drinking water disinfectant added for treatment
TTHM [Total Trihalomethanes] (ppb)	2017	No	80	N/A	1.8	1.3-2.3	By-product of drinking water disinfection
Haloacetic Acids (ppb)	2017	No	60	N/A	ND	ND	By-product of drinking water disinfection
Fluoride (ppm)	2017	No	2.0	1.0	0.70	0.37-1.4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as NO3 (ppm)	2017	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)	2017	No	10	10	1.2	ND-2.1	
Gross Alpha Particle Activity (pCi/L)	2013-2017	No	15	(0)	4.3	ND-7.7	Erosion of natural deposits
Uranium (pCi/L)	2006	No	20	0.43	3.1	ND-6.1	Erosion of natural deposits
1,2,3-Trichloropropane (1,2,3-TCP) (ppb)	2017	No	0.005	0.0007	ND	ND	Erosion of natural deposits; discharges from industrial uses

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)	2015	No	1.3	0.3	0.079	0/30	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)*	2015	No	15	0.2	ND	0/30	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

*The Division of Drinking Water (DDW), in collaboration with the California Department of Education, has taken the initiative to begin testing for lead in drinking water at all public K-12 schools. In early 2017, DDW and Local Primacy Agencies issued amendments to the domestic water supply permits of approximately 1,200 community water systems so that schools that are served by a public water system could request assistance from their public water system to conduct water sampling for lead and receive technical assistance if an elevated lead sample is found. To further safeguard water quality in California's K-12 public schools, California Assembly Bill 746 published on October 12, 2017, effective January 1, 2018, requires community water system to test lead levels, by July 1, 2019, in drinking water at all California public, K-12 school sites that were constructed before January 1, 2010. **As of the time of publication, no schools have requested lead sampling. Indian Wells Valley Water District will be conducting testing over the next year.**

SECONDARY SUBSTANCES							
Substance (Unit)	Year Sampled	Violation (Yes/No)	MCL	PHG	Average Detected	Range	Typical Source
Chloride (ppm)	2017	No	500	NA	83	17-410	Runoff/leaching from natural deposits; seawater influence
Color (apparent)	2017	No	500	NA	0.5	ND-5	Runoff/leaching from natural deposits; seawater influence
Iron (ppb)	2017	No	300	NA	22	ND-250	Runoff/leaching from natural deposits; seawater influence
Manganese (ppb)	2017	No	50	NA	10.9	0-120	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (micromhos) (µS/cm)	2017	No	1600	NA	548	300-1500	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2017	No	500	NA	41	24-73	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2017	No	1000	NA	342	200-890	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 (UCMR3)

Substance (Unit)	Year Sampled	SMCL	PHG	Average Detected	Range	Violation	Source
Chlorate (ppb)	2015	NA	NA	313.5	69-2500	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.
Total Chromium(ppb)	2015	NA	NA	1.4	ND - 3.4	No	
Cobalt	2015	NA	NA	ND	ND	No	
Molybdenum	2015	NA	NA	7.3	2.9 - 19	No	
Strontium (ppb)	2015	NA	NA	362.3	54 - 760	No	
Vanadium (ppb)	2015	NA	NA	12	0.4 - 43	No	
Hexavalent Chromium (ppb)	2015	NA	NA	1.3	0.1 - 5	No	

UNREGULATED SUBSTANCES

Substance (Unit)	Year Sampled	MCL	PHG	Average Detected	Range
Bicarbonate as HCO3 (ppm)	2017	NA	NA	107	56-140
Boron ¹ (ppb)	2017	NA	NA	755	180-2200
Calcium (ppm)	2017	NA	NA	22.4	3.4-36
Carbonate as CO3 (ppm)	2017	NA	NA	8.3	ND-34
Chromium VI (ppb)	2017	NA	0.02	0.61	ND-2.5
Hardness (ppm)	2017	NA	NA	72.5	8.4-110
Magnesium (ppm)	2017	NA	NA	3.1	ND-5.8
pH (units)	2017	NA	NA	8.1	7.5-8.9
Potassium (ppm)	2017	NA	NA	2.2	ND-3.1
Sodium (ppm)	2017	NA	NA	90.1	42-300
Total Alkalinity as CO3 (ppm)	2017	NA	NA	102	82-130
Vanadium ² (ppb)	2017	NA	NA	15	ND-58

¹ The Notification Level for Boron is 1,000 ppb. District Wells 9A, 11, and 13 detected Boron concentrations of 1,600, 1,500 and 2,200 ppb, respectively in 2017.

² The Notification Level for Vanadium is 50 ppb. District Well 17 detected a Vanadium concentration of 58 ppb in 2017.



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.