



Yucaipa Valley  
Water District



2019

# drinking water quality annual report

This report contains important information about your drinking water for January to December 2019. Please contact the Yucaipa Valley Water District at (909) 797-5117 or visit our website at [www.yvwd.us](http://www.yvwd.us).

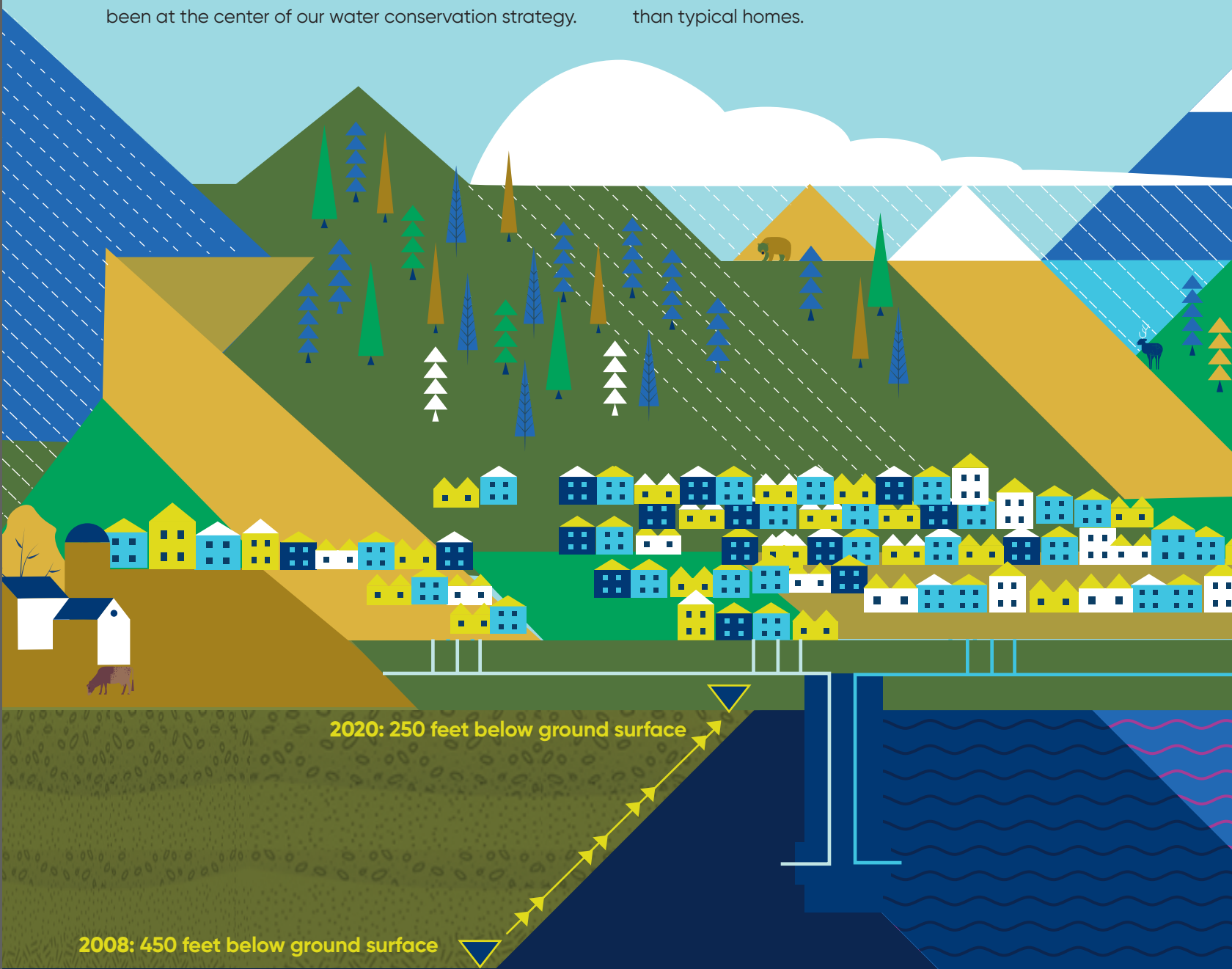
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# Water Conservation Initiatives Exceed Expectations

Yucaipa Valley Water District's mission is to provide high-quality water today and ensure a reliable water supply for our community in the future. We carefully manage a diversified water resource portfolio consisting of local groundwater, recycled water, and imported water supplies. For over three decades, recycled water has been at the center of our water conservation strategy.

Thanks to innovative programs and advanced technologies to treat, store, and deliver recycled water, we are experiencing greater-than-anticipated success in our efforts to reduce drinking water usage and increase groundwater levels. As a result, our groundwater levels have risen to some of their highest levels in two decades. Last year, the District began working with developers to supply new homes with separately plumbed, high-purity recycled water for irrigation of front and backyards. Irrigating exclusively with recycled water was expected to reduce drinking water use from these dual-plumbed homes by about two-thirds, compared to typical homes. In fact, first-year data shows an even greater reduction: dual-plumbed homes used nearly 75% less drinking water than typical homes.



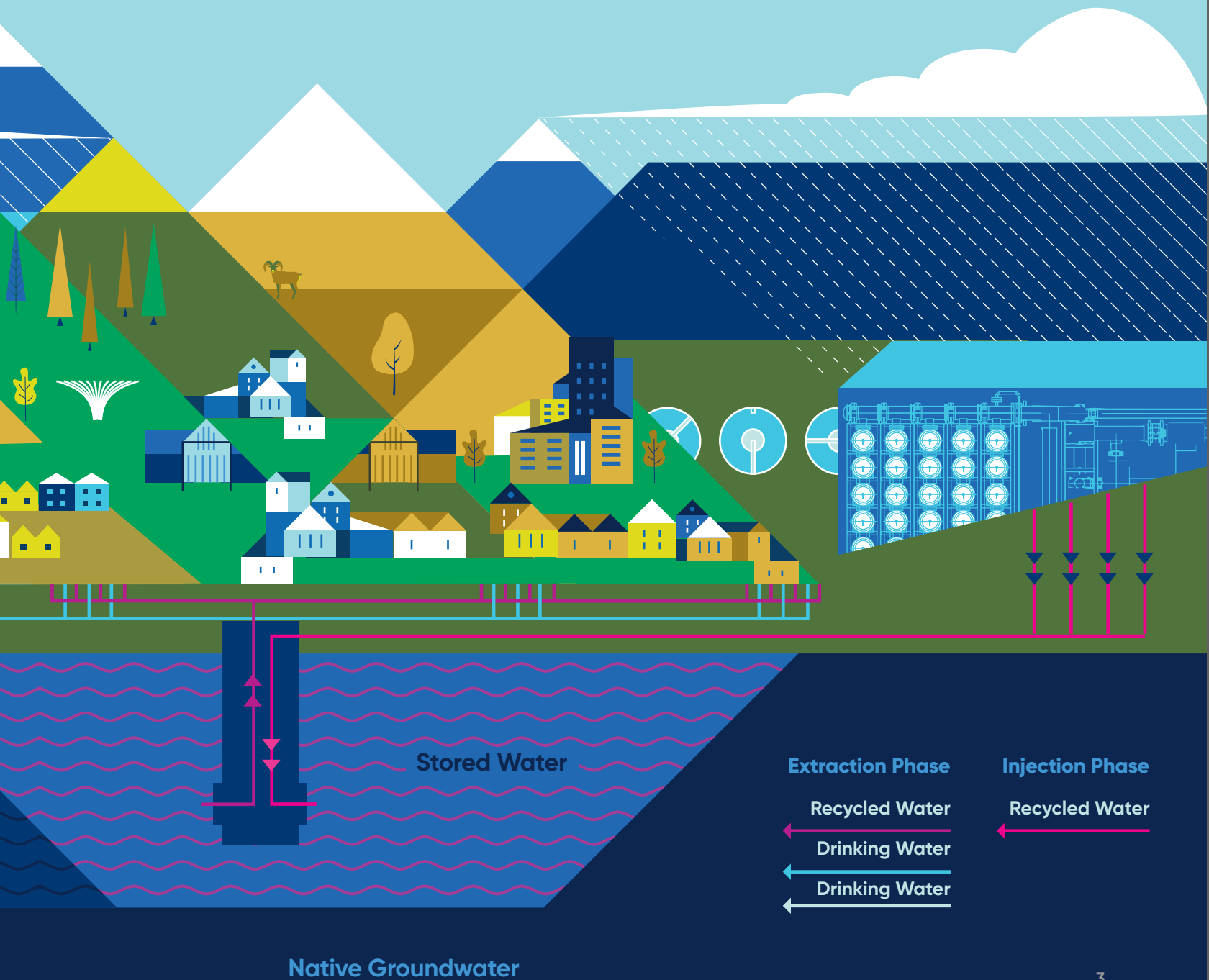
Yucaipa Valley Water District's groundwater levels have risen significantly, even while those of other Southern California districts continue to decline. The ultra-pure recycled water from the Wochholz Regional Water Recycling Facility irrigates parks, schools, golf courses, businesses, and the yards of dual-plumbed homes. Currently, we are piloting a new kind of well that will leverage this water resource even further, by allowing us to store excess recycled water below ground for later use during periods of high water demand.

Together, our infrastructure investments and pioneering recycled water programs are preparing us for future drought cycles and strengthening our community's overall water sustainability.

## A New Way to Store and Access Groundwater

For years, the District has actively recharged groundwater supplies through spreading basins that hold stormwater and imported water and allow it to passively filter into the ground.

Through New Aquifer Storage and Recovery (ASR) wells, we will be able to directly inject surplus water into the ground where it can be stored and easily retrieved for local use. The District's first ASRs are being tested in Calimesa and will eventually be installed at all regular wells as they need replacement and at new wells in the future.



# No “Forever Chemicals” Detected in Our Water

As part of our regular water monitoring regimen, the District tests for PFAS, the so-called “forever chemicals” that have contaminated some water supplies around the country.

Per- and polyfluoroalkyl substances (PFAS) are a large group of human-made substances that have been used extensively in surface coating and protectant formulations and are resistant to heat, water, and oil.

No PFAS have been detected in the District’s drinking water.

## 2019 Drinking Water Quality

All our drinking water comes from similar sources, either from sources we can see, such as rivers, lakes, and aqueducts, or from sources we can’t see, such as underground aquifers. Whether water travels through a pipe to your home or comes packaged in a bottle, its safety and quality are of paramount importance.

Water sources are highly regulated by government agencies, which set limits on the allowable amounts of certain contaminants. The U.S. Environmental Protection Agency (EPA) and the California State Water Resources Control Board, Division of Drinking Water set standards for public water suppliers such as Yucaipa Valley Water District. In contrast, standards for bottled water are set by the U.S. Food and Drug Administration (FDA).

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. As water travels over the surface of the land and through the ground, it dissolves naturally-occurring minerals and can pick up substances that occur as a result of animals or from human activity.

Contaminants that may be present in **untreated** water supplies may include:

**Microbial contaminants**, such as viruses and bacteria, which may come from septic systems, agricultural livestock operations, and wildlife.

**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.

**Pesticides and herbicides**, which 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, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

**Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

**The Yucaipa Valley Water District continuously works to provide new ways to ensure our residential and business customers have a reliable water supply at a reasonable price. We are firmly committed to maintaining high quality water for you, our customers.**

The presence of contaminants does not necessarily indicate that the drinking water poses a health risk. However, some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk to infections.

**In 2019, the Yucaipa Valley Water District met all drinking water quality standards based on over 1,500 water samples collected throughout the calendar year and reported by independent laboratories to the Division of Drinking and USEPA.**

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 at (800) 426-4791 or [www.epa.gov/safewater](http://www.epa.gov/safewater).

This report details the water quality of Yucaipa Valley Water District water. Information on bottled water's quality is rarely published, but you may be able to obtain it by contacting the producer. Yucaipa Valley Water District urges you to research and determine what is the best fit for you.

In 2019, the Yucaipa Valley Water District met all drinking water quality standards based on over 1,500 water samples collected throughout the calendar year and reported by independent laboratories to the Division

of Drinking Water and USEPA. The Division of Drinking Water allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some data is more than one year old and is representative of long-term water quality. The following tables list all of the drinking water contaminants that were detected in 2014–2019.

In this Annual Drinking Water Quality Report, we summarize the extensive certified third-party laboratory data and test results to inform our customers of the exceptionally high quality drinking water we provide. If you have any questions, or would like more information, please contact Mike Kostelecky, Operations Manager directly at (909) 790-9208, extension 2.

A source water assessment was completed by the San Bernardino Valley Conservation District and the Yucaipa Valley Water District in November 2002. A copy of the complete assessment may be viewed at the Yucaipa Valley Water District or the State Water Resource Control Board (SWRCB) Division of Drinking Water, San Bernardino District office, 464 West 4<sup>th</sup> Street, Suite 437, San Bernardino, California 92401. You may request a summary of the assessment by contacting the SWRCB District Engineer at (909) 383-4328.

As always, the public is invited and encouraged to participate at the workshops and board meetings. Regular board meetings are conducted on the first and third Tuesday of every month at 6:00 p.m. A complete schedule of all meetings and workshops is available on our website at [www.yvwd.dst.ca.us](http://www.yvwd.dst.ca.us).

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## DRINKING WATER STANDARDS FOR 2019

Chemical	MCL	PHG (MCLG)	Average Level Detected	Unit of Measure	Range of Detection	Violation Y/N	Likely Source of Contamination
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### INORGANIC CONTAMINANTS

Arsenic	10	0.004	1.16	ppb	ND-6.7	N	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium	1	2	0.29	ppm	ND-120	N	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Hexavalent Chromium (Cr+6)	50	0.02	1.34	ppb	ND-5.8	N	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
Fluoride	2	1	0.24	ppm	ND-0.8	N	Erosion of natural deposits, discharge from fertilizer and aluminum factories
Nickel	100	12	2.52	ppb	ND-19	N	Erosion of natural deposits; discharge from metal factories
Nitrate	10	10	1.85	ppm	ND-9.7	N	Runoff of leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrite	1	1	0.001	ppm	ND-1	N	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

### DISINFECTION BYPRODUCTS, DISINFECTION RESIDUALS, AND DISINFECTION BYPRODUCT PRECURSORS

Total Trihalomethanes* (TTHM)	80	N/A	45	ppb	13-87	N	By-product of drinking water disinfection
Haloacetic Acids* (HAA5)	60	N/A	8	ppb	ND-15	N	By-product of drinking water disinfection
Chlorine	MRDL= 4.0 mg/L	MRDL= 4.0 mg/L	1.15	ppm	0.95-1.68	N	Drinking water disinfectant

\* TTHM and HAA5 are sampled quarterly and results are calculated based on a locational running annual average per State Water Resources Control Board.

Chemical	MCL	PHG (MCLG)	Average Level Detected	Unit of Measure	Range of Detection	Violation Y/N	Likely Source of Contamination
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**RADIOACTIVE CONTAMINANTS**

Gross Alpha Particle Activity (when Gros Alpha particle activity exceeds 5.0 pCi/L, then analyze for Uranium.	15 pCi/L	N/A	6.28	pCi/l	ND-12	N	Decay of natural and man made deposits
Uranium‡	20 pCi/L	N/A	1.99	pCi/L	ND-3.9	N	Decay of natural and man made deposits

‡If Uranium exceeds 20 pCi/L, then monitor for four quarters. If the average of four quarters is <20, then you are in uranium compliance, but must calculate gross alpha minus uranium Counting Error (CE) pCi/L. If the result is less than 15 pCi/L, then you are in Gross Alpha MCL compliance.

**MICROBIOLOGICAL CONTAMINANTS SAMPLED IN 2019**

Total Coliform Bacteria (Total Coliform Rule)	<5% Positive Samples per Month	0	2	Present (P) or Absent (A)	Non-Detect	N	
Fecal Coliform and E. Coli	>1% Positive Samples per Month	0	0	Present (P) or Absent (A)	Non-Detect	N	Human/ animal waste

**VOLATILE AND SEMI-VOLATILE CONTAMINANTS**

Tetrachlorethylene	5	0.06	0.02	ppb	ND-0.5	N	Discharge from factories, dry cleaners, and auto shops
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**CONTAMINANTS BELOW WERE SAMPLED FOR AND NOT DETECTED**

Antimony; Beryllium; Cadmium; Total Chromium; Cyanide; Mercury; Perchlorate; Selenium; Silver; Thallium; Hydroxide; Vinyl Chloride; Trichlorofluoromethane (FREON11) ; 1,1-Dichloroethylene (1,1-DCE); 1,1,2-Trichloro-1,2,2-trifluoroethane; Dichloromethane (Methylene Chloride); trans-1,2-Dichloroethylene (t-1,2-DCE); Methyl tert-Butyl Ether; 1,1-Dichloroethane (1,1-DCA); cis-1,2-Dichloroethylene (c-1,2-DCE); Carbon Tetrachloride; 1,1,1-Trichloroethane (1,1,1-TCA); Benzene; 1,2-Dichloroethane

(1,2-DCA); Trichloroethylene (TCE); 1,2-Dichloropropane; Toluene; Monochlorobenzene (Chlorobenzene); Ethyle Benzene; m,p-Xylene; cis-1,3-Dichloropropene; o-Xylene; trans-1,3-Dichloropropene; Styrene; 1,1,2,2-Tetrachloroethane; 1,4-Dichlorobenzene (p-DCB); 1,2-Dichlorobenzene (o-DCB); 1,2,4-Trichlorobenzene; Total 1,3-Dichloropropene; Total Xylenes (m,p & o), 1,2,3, Trichloropropane, PFAS, PFOS

Chemical	Action Level	Sites Above Action Level	PHG (MCLG)	Units of Measure	Number of Samples taken	90th Percentile	Violation Y/N	Likely Source of Contamination
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**COPPER AND LEAD**

Copper	1300	0	0.3	ppb	35	<5	N	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits; leaching from wood preservatives
Lead	15	1	0.2	ppb	35	260	N	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

Chemical	Secondary MCL	DLR	Average Detection level	Units of Measure	Range of Detection	Violation Y/N	Likely Source of Contamination
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**SECONDARY CONTAMINANTS**

Chloride	500	1	23.36	ppm	6.8-69	N	Runoff/leaching from natural deposits
Color	15	3	4.99	units	ND-10	N	Naturally-occurring organic materials
Iron	300	100	4.43	ppb	ND-610	N	Leaching from natural deposits; industrial wastes
Sulfate	500	0.5	19.6	ppm	11-75	N	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids	1000	5	194.38	ppm	130-400	N	Runoff/leaching from natural deposits
Turbidity	5	0.1	0.48	NTU	ND-2.3	N	Soil runoff
Odor	3	1	0.96	TON	1-2	N	Naturally-occurring organic materials
Specific Conductance	1600	2	324.16	µS/cm	240-630	N	Substances that form ions when in water; seawater influence
Zinc	5000	50	10.1	ppb	ND-110	N	Runoff/leaching from natural deposits; industrial wastes
Copper	1000	50	ND	ppb	ND-130	N	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives



Analyte	MCL/PHG	Average Detection level	Units of Measure	Range of Detection	Violation Y/N	Likely Source of Contamination
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**UNREGULATED GENERAL MINERAL ANALYSIS**

Alkalinity	N/A	102.93	ppm	63-250	N	Runoff/leaching from natural deposits
Bicarbonate	N/A	128.82	ppm	8.1-310	N	Runoff/leaching from natural deposits
Boron	NL=1000	48.86	ppb	ND-100	N	Erosion of natural deposits
Calcium	N/A	29.85	ppm	11-83	N	Runoff/leaching from natural deposits
Carbonate	N/A	1.05	ppm	ND-21	N	Runoff/leaching from natural deposits
Chloroform	N/A	0.15	ppb	ND-1.6	N	Disinfection byproduct
Hardness (Total)	N/A	111.07	ppm	38-310	N	Runoff/leaching from natural deposits
Magnesium	N/A	8.63	ppm	2.8-28	N	Runoff/leaching from natural deposits
pH	6.5-8.5	7.69	pH Units	7.3-8.7	N	Physical property
Potassium	N/A	1.84	ppm	1.1-6.2	N	Runoff/leaching from natural deposits
Sodium	N/A	24.42	ppm	14-45	N	Runoff/leaching from natural deposits
Vanadium	NL=50	5.76	ppb	ND-90	N	Erosion of natural deposits

<b>Clarity</b>	<b>Oak Glen Surface Water Filtration Facility (Multi-Stage Media Filter)</b>	<b>Yucaipa Valley Regional Water Filtration Facility (Microfiltration and Nanofiltration)</b>
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**SURFACE WATER TURBIDITY**

Percentage of Total Drinking Water Supply Treated at Each Water Purification Facility <sup>6</sup>	2.10%	48.86%
Turbidity Performance Standards (b) (that must be met through the water treatment process)	Turbidity of filtered water must: <ol style="list-style-type: none"> <li>Be ≤ 0.3 NTU in 95% of measurements in a month</li> <li>Not exceed a combined 1 NTU for more that eight consecutive hours</li> <li>Not exceed 1 NTU at any time</li> </ol>	Turbidity of filtered water must: <ol style="list-style-type: none"> <li>Be ≤ 0.1 NTU in 95% of measurements in a month</li> <li>Not exceed a combined 1 NTU for more that eight consecutive hours</li> <li>Not exceed 1 NTU at any time</li> </ol>
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1	100%	100%
Highest single turbidity measurement during the year	0.098	0.053
Number of violations of any surface water treatment requirements	Zero	Zero

# Notes and Additional Information

## 1. About Aluminum

A secondary MCL for aluminum is 200 µg/L. This standard is based on aesthetics.

## 2. About Arsenic and Chromium

While your drinking water meets the current standard for arsenic and chromium, a small portion of our water does contain low levels. The standard balances the current understanding of arsenic's and chromium's possible health effects against the costs of removing them from drinking water. USEPA continues to research the health effects of low levels of arsenic, which is linked to cancer in humans at high concentrations as well as other health effects such as skin damage and circulatory problems; total chromium which is suspected of causing allergic dermatitis after many years of exposure; and hexavalent chromium which is also linked to cancer. The Environmental Protection Agency has adopted a revised MCL of 10 µg/L for arsenic and hexavalent chromium 50 µg/L and 50 µg/L for total chromium. The Ideal Public Health Goal for hexavalent chromium has been adopted at 0.02 µg/L; the PHG for total chromium was withdrawn and an MCLG of 100 µg/L has been adopted.

## 3. About Trihalomethanes

Compliance with the MCL for Total Trihalomethanes and Haloacetic Acids is based on an annual running average of four quarterly samples for each site. Results presented are for 2019 only. Both quarterly and annual running averages are below the MCLs.

## 4. About Nitrate

The District did not serve drinking water above 10 mg/L which has shown to be 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 pregnant, you should ask advice from your health care provider. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.

## 5. About Uranium

The District has some sources of drinking water that contain small amounts of Uranium. These levels are well below the MCL. Some people who drink water containing levels of radium and uranium in excess of the MCL over many years have an increased risk of getting cancer.

## 6. Water Source Percentages

The Yucaipa Valley Water District obtained 1.8% of our drinking water from local surface water sources, 41.1% from imported surface water sources, and 41.2% from local groundwater sources. The percentages illustrated on the back of this report are different from the percentages above due to the addition of recycled water as part of the District's total water resource portfolio.

## 7. Lead and Copper

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the USEPA Safe Drinking Water Hotline (1-800-426-4791).



# Terms Used In This Report

## 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.

## 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 Contaminant Level (MCL)

The highest level of a contaminant or chemical 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 Residual Disinfectant Level (MRDL)

The level of a disinfectant added for water treatment that may not be exceeded at a consumer's tap.

## Maximum Residual Disinfectant Level Goal (MRDLG)

The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the US Environmental Protection Agency.

## 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 the health at the MCLs.

## Treatment Technique

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.

## Non-Detected (ND)

A constituent that is not detected at a testing limit.

## Units of Measurement

- mg/L (ppm)** milligrams per liter, or parts per million
- µg/L (ppb)** micrograms per liter, or parts per billion
- ng/L (ppt)** nanograms per liter, or parts per trillion
- pCi/L** picocuries per liter, a measure of radiation
- NTU** Nephelometric Turbidity Units, a measure of the cloudiness of a liquid



Yucaipa Valley  
Water District

### 2019 Water Resource Portfolio

**41.2%**

Groundwater

**1.8%**

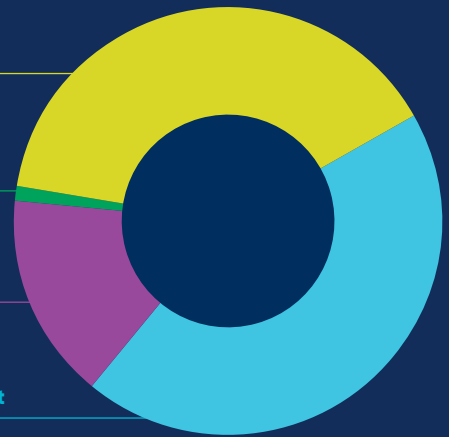
Surface Water

**16%**

Recycled Water

**41.1%**

State Water Project



## Join Us for a Facility Tour

Yucaipa Valley Water District is on the leading edge of water conservation and recycling to ensure you have high-quality water today and in the future. Come see how we make the most of every drop.

Our Wochholz Regional Water Recycling Facility is one of the few treatment plants in California equipped with reverse osmosis technology that removes salts and minerals from the recycled water supply to produce extraordinarily high-quality recycled water. Our Yucaipa Valley Regional Water Filtration Facility treats incoming State Water Project water with an advanced membrane technology and reverse osmosis.

If you or your organization, school group, or club would like to tour this or one of our other facilities, please call the District office at (909) 797-5117.

12770 Second Street, Yucaipa, California 92399

(909) 797-5117

[www.yvwd.us](http://www.yvwd.us)