

ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2020

Presented By



*Proudly providing water from an ancient
sourcewell into the future.*



Quality First

Once again, we are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2020. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies.



Community Participation

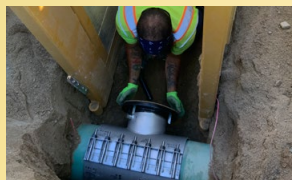
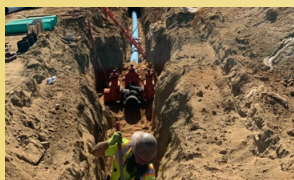
To learn more about Joshua Basin Water District, please log onto our website at www.jbwd.com or attend any of our regularly scheduled meetings of the Board of Directors which convene on the first and third Wednesday of each month at 5:30 p.m. Due to COVID restrictions, meetings are currently being held via Zoom but will return to in-person meetings once it is deemed safe to do so. In person meetings are held at 61750 Chollita Rd. Joshua Tree, CA. 92252. Zoom meeting information can be found on our website at the top of the provided meeting agenda. For additional assistance, or for more information about other District meetings, please contact (760)974-0072 or email bwszak@jbwd.com.

Where Does My Water Come From?

Our water source comes from District-owned wells located throughout the community that draw groundwater from underground aquifers. The two aquifers that supply our water are the Joshua Tree groundwater basin and the Copper Mountain groundwater basin.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer undergoing chemotherapy, those 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>.



QUESTIONS? For more information about this report, or for any questions relating to your drinking water, please call Mark Ban, General Manager, at (760) 366-8438.

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 State Water Resources Control Board (State 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. 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:

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 can 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 by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants, that can be naturally occurring or can 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.

Source Water Assessment

A Source Water Assessment has been completed for our system. The purpose of the assessment is to determine the susceptibility of each drinking water source to potential contaminant sources. The report includes background information and a relative susceptibility rating of Higher, Moderate or Lower. It is important to understand that a susceptibility rating of Higher does not imply poor water quality, only the system's potential to become contaminated within the assessment area. The assessment findings are summarized in the information below:

Drinking Water Source Assessments

The State Water Resource Control Board completed two drinking water source assessments for Joshua Basin Water District on August 24, 2001. These assessments examined the District's Well 10 and Well 14 and determined these sources are most vulnerable to high-density residential septic systems.

The District completed a drinking water source assessment for Well 15 in August 2007. This assessment determined that Well 15 is most vulnerable to low-density septic systems.

A drinking water source assessment for Well 17 completed in August 2007 determined that Well 17 is most vulnerable to National Pollutant Discharge Elimination System/Water Discharge Regulation permitted discharges.

A drinking water source assessment for Well 16 completed in September 2010 determined that Well 16 is most vulnerable to both high- and low-density septic systems and airports-maintenance/fueling areas.

Additional copies of this report are available by contacting the District. Please contact Randy Little, Water Production Supervisor, at (760) 366-8438 for more information. A summary of the assessment may be requested by contacting the District's sanitary engineer from the State Water Resource Control Board at (909) 383-4308 or (909) 383-4745 (fax). A copy of each source's complete assessment may be viewed at the Joshua Basin Water District office or at: SWRCB San Bernardino District Office, Government Center 4th Floor, 464 West Fourth Street, Suite 437, San Bernardino, CA 92401.

If you would like a copy of our assessment, please feel free to contact our office during regular business hours at the number provided in this report.



Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. Also, the water we deliver must meet specific health standards. Here, we show only those substances that were detected in our water. (A complete list of all our analytical results is available upon request.) Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detectable substances below their respective maximum contaminant level (MCL).

The state recommends monitoring for certain substances less often 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.

We participated in the 4th stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 sampling benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are listed in our test results. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2020	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	0.77	0.31–1.10	No	Drinking water disinfectant added for treatment
Chromium [Total] (ppb)	2019	50	(100)	28.5	24–33	No	Erosion of natural deposits
Fluoride (ppm)	2020	2.0	1	0.63	0.46–0.80	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2018	15	(0)	5.8	NA	No	Erosion of natural deposits
Heterotrophic Plate Count Bacteria (ppb)	2020	Surface water treatment=TT	HPC=NA; Others = (0)	2.7	ND–40	No	Naturally present in the environment
Nitrate [as nitrogen] (ppm)	2020	10	10	4.0	2.0–6.0	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2020	80	NA	9.3	2.7–16	No	By-product of drinking water disinfection
Total Coliform Bacteria [state Total Coliform Rule] ¹ (# positive samples)	2020	1 positive monthly sample	(0)	1	NA	No	Naturally present in the environment

Tap water samples were collected for lead and copper analyses from sample sites throughout the community.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2019	1.3	0.3	0.068	0/22	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2019	15	0.2	ND	0/22	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2019	500	NS	13.8	6.0–17	No	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (µS/cm)	2020	1,600	NS	355	250–480	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2020	500	NS	48.7	7.2–120	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2020	1,000	NS	191	110–300	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2020	5	NS	0.14	0.1–0.68	No	Soil runoff

¹ In the month of September 2020, one water sample tested positive for total coliform. As per state regulation, the District immediately resampled. The laboratory results showed an absence of coliform bacteria; all subsequent tests for this reporting year showed absence as well.

² Unregulated contaminant monitoring helps the U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

UNREGULATED AND OTHER SUBSTANCES ²

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
Bromide (ppb)	2019	81.5	43–120
Bromoform (ppb)	2020	3.4	0.87–6.1
Chloroform (ppb)	2020	1.3	ND–1.3
Dibromoacetic Acid (ppb)	2019	0.6	ND–1.2
Dibromochloromethane (ppb)	2020	3.6	1.2–6.1
HAA6Br (ppb)	2019	1.65	1.58–1.73
HAA9 (ppb)	2019	2.05	1.82–2.28
Hardness, Total [as CaCO₃] (ppm)	2020	71	41–100
Sodium (ppm)	2020	46	37–61
Vanadium (ppb)	2019	18.5	15–22



Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Regulatory Action Level): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that 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 (SMCLs) 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 the U.S. EPA.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

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.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

TT (Treatment Technique): 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.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.

