



2017 Consumer Confidence Report

Issued June 2018

Helendale CSD is committed to providing our customers with high-quality safe drinking water. We are proud to announce that your tap water met all United States Environmental Protection Agency (U.S. EPA) and State drinking water health standards.

The District has approximately 2,816 service connections, which includes residential and business customers. In 2017, we provided 1,495 acre-feet of potable (drinkable) water to customers. Through our trained and certified water professionals, citizens have the security of knowing their drinking water has proper monitoring and oversight. We are committed to providing our customers with high-quality and safe drinking water.

Water in the Environment

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.

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 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, that can be naturally occurring or 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 (EPA) and the State Water Resources Control Board (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.



Questions

For questions about this report or concerning the water system, please contact Craig Carlson, Water Operations Manager at 760-951-0006 during our regular office hours: Monday-Friday 8:00 am – 5:30 pm.

Closed on Holidays.

En Español

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien, 760-951-0006.

FOR MORE INFORMATION

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 USEPA's Safe Drinking Water Hotline (1-800-426-4791). As the charts on the following pages show, very few substances were detected, and all were within

strict water quality standards established to protect customers.

How we protect water quality

Extensive Testing

Our certified water operators test the water at four locations weekly for bacteriological activity. We also perform bacteriological tests on each active well site monthly and quarterly. The samples are tested by an independent state certified lab.

Disinfect for Safety

A small amount of chlorine is added at each well on a continuous basis to ensure the water remains free of any bacteria.

Flush to Keep the System Clean

Staff periodically flushes water out of fire hydrants at a high velocity to remove small amounts of natural sand and minerals that can slowly build up in pipelines. This happens because our water comes from deep groundwater wells.



Results of our 2017 Drinking Water Quality Tests

This report includes results from several tests for various constituents. Helendale CSD routinely monitors for constituents in the District's drinking water in accordance with Federal and State laws. *Substances that are not detected are not listed.*

Inorganic Contaminants with Primary Drinking Water Standards							
Contaminant	Average	Sample Range	MCL	PHG (MCLG)	Sample Date	Violation	Major Sources in Drinking Water
Fluoride (mg/L) (Naturally Occurring)	0.28	0.25 - 0.31	2	1	2015/17	NO	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as N (NO ₃ -N) (mg/L)	0.63	0 - 0.63	10	10	2017	NO	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate + Nitrite (as N) (mg/L)	0.63	0 - 0.63	10	10	2017	NO	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Radioactive Contaminants							
Gross Alpha (pCi/L)	4.46	3.95 - 5.3	15	0	2012/16	NO	Erosion of natural deposits
Uranium (pCi/L)	4.53	2.78 - 6.4	20	0.43	2012/16	NO	Erosion of natural deposits
Disinfection Byproducts							
Haloacetic Acids (HAA5) (ug/L)	2.20	1.7 - 2.5	60	N/A	July 2017	NO	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM) (ug/L)	11.63	9.6 - 11.4	80	0.8	July 2017	NO	Byproduct of drinking water disinfection

Regulated Contaminants with Secondary Maximum Contaminant Levels							
Contaminant	Average	Sample Range	Secondary MCL	Sample Date	Violation	Major Sources in Drinking Water	
Chloride (mg/L)	61.50	57 - 66	500	2015/17	NO	Runoff/leaching from natural deposits; seawater influence	
Odor (units)	1	1	3	2015/17	NO	Naturally occurring organic materials	
Specific Conductance (µS/cm)	735	700 - 770	1600	2015/17	NO	Substances that form ions when in water; seawater influence	
Sulfate (mg/L)	110.5	130 - 91	500	2015/17	NO	Runoff/leaching from natural deposits; industrial wastes	
Total Dissolved Solids (mg/L)	480	470 - 490	1000	2015/17	NO	Runoff/leaching from natural deposits	

Unregulated Contaminants							
Constituent	Average	Sample Range	NL	MCL	PHG (MCLG)	Date	
Boron (ug/L)	230	190 - 270	1,000	None	None	2014/15	
Vanadium (ug/L)	4.40	3.2 - 5.6	50	None	None	2014/15	

Disinfectant Residuals							
Contaminant	Sample Date	Average	Range	MCL	PHG (MCLG)	Violation	Major Sources in Drinking Water
Chlorine (mg/L)	Weekly	0.38	0.10 - 0.68	4	4	NO	Drinking water disinfectant added for treatment

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. The tables in this report indicate which minerals and substances have been detected in the water provided by Helendale CSD. More information about contaminants and potential health effects can be obtained by calling the USEPA Safe Drinking Water Hotline at 1-800-426-4791. You can also go to the following websites for more information:

USEPA - www.epa.gov/safewater

CA State Water Resources Control Board - www.waterboards.ca.gov/drinking_water/programs/index.shtml

Sensitive Populations May Be More Vulnerable

Some people may be more vulnerable to contaminants in drinking water than the general population. Persons with compromised immune systems such as those 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. 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 (1-800-426-4791).

Are Special Precautions Needed

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 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. Helendale CSD 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 1-800-426-4791 or at <http://www.epa.gov/lead>.

Lead and Copper							
Contaminant	Sample Date	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG (MCLG)	Typical Source of Contaminant
Lead (ug/L)	Sept. 2015	26	0	0	15	0.2	Internal corrosion of household water plumbing systems discharges from industrial manufacturers; erosion of natural deposits
Copper (ug/L)	Sept. 2015	26	220	0	1300	300	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives

Samples were taken at 26 various taps throughout the District.

Source Water Protection Tips

Source water provides water for public drinking water supplies and private water wells. Protecting source water also reduces risks to public health from exposures to contaminated water. Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water sources 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.
- Dispose of chemicals properly; take used motor oil to a recycling center.



Source Water Assessment

Source water assessments were conducted for the Helendale Community Services District water System. Well 1A was assessed in June 2010, and Well 4A was assessed in June 2011. The assessments are summarized in the table below. A copy of the complete source water assessment and vulnerability assessment can be obtained by contacting the Helendale Community Services District at 26540 Vista Rd., Suite B; PO Box 359 Helendale, CA. 92342; or the State Water Resources Control Board (SWRCB), 464 West 4th Street, Suite 437, San Bernardino, CA 92401. You may request a summary of the assessments be mailed to you by contacting the SWRCB District Engineer at (909)383-4328.

Source Number	Source ID	Most Vulnerable Activities (PCA)
010	Well 1A	Recreational area - surface water source and sewer collection systems
012	Well 4A	Recreational area - surface water source and sewer collection systems

Definitions

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCL's are set as close to the PHG's (or MCLG's) as is economically and technologically feasible.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's are set by the U.S. Environmental Protection Agency (USEPA).

Maximum Residual Disinfectant Level (MRDL): 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 (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.

Notification Level (NL): The concentration of a contaminant which, if exceeded, triggers notification to local political jurisdictions and customers.

Primary Drinking Water Standard (PDWS): MCL's and MRDL's for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHG's are set by the California Environmental Protection Agency.

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

Secondary Drinking Water Standard: Requirements that ensure appearance, taste and smell of drinking water are acceptable.

Secondary MCL's (SMCL): Regulate contaminant levels based on aesthetics such as color and odor, which do not pose a risk to health. These secondary maximum contaminant levels (SMCLs) are guidelines, not enforceable limits.

Unregulated Contaminants: Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. For additional information call the Safe Drinking Water Hotline at (800) 426-4791.

NA: Not applicable

ND: Not detected.

NTU: Nephelometric Turbidity Units.

µS/cm: a measure of conductance.

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

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

ug/L = micrograms per liter or parts per billion (ppb).

< : Less than the detection limit.

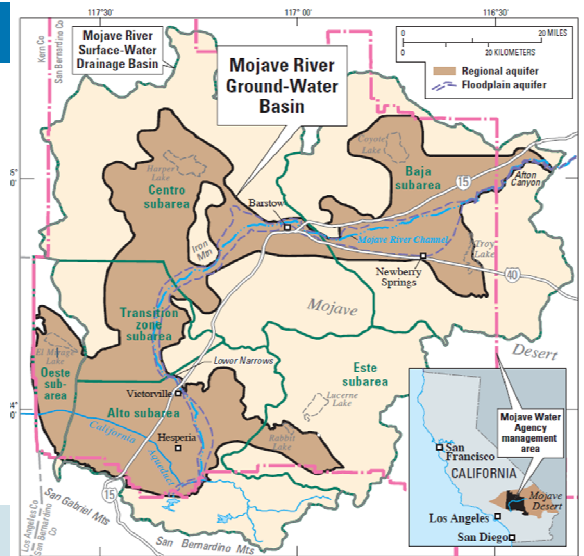
1 mg/L is equivalent to one second of time in approx. 11 1/2 days

1 ug/L is equivalent to one second of time in approx. 31.7 years

Water Supply

Helendale CSD's water supply is 100 percent groundwater. The District has 7 wells. In 2017, customers got their water from two of the District's wells, Well 1A and Well 4A. The District has five additional wells on emergency standby. There are 758 valves, 300 hydrants, and 37 miles of pipe in the distribution system. Helendale gets all of its water from the Upper Basin area, known as the Alto Subarea of the Upper Mojave River Basin.

To help monitor and keep your water safe, Staff uses a state of the art Supervisory Control and Data Acquisition (SCADA) system to monitor tank levels, chlorine levels, and well status. The SCADA system provides remote operation and monitoring capabilities, increased security, and advanced notification. This is just one of the ways the District provides you with safe, reliable drinking water.



On February 15, 2017, the District received a Notice of Violation for secondary maximum contaminant level (SMCL) violations of Iron and Manganese at Well 2. Secondary standards regulate contaminant levels based on aesthetics and identify acceptable concentrations of contaminants which cause unpleasant tastes, odors, or colors in the water which do not pose a risk to health. These SMCLs are guidelines, not enforceable limits. Iron and manganese were sampled for four consecutive quarters, and the running annual average (RAA) exceeded the SMCL. The last time Well 2 was used for drinking water was July 31, 2012. As of May 9, 2017, Well 2 was reclassified from "active source" to "stand-by". This table above shows all consecutive samples.

	11/28/16	7/9/16	5/24/16	2/17/16	RAA	SMCL
Iron (ug/L)	1,100	830	870	790	897.5	300
Manganese (ug/L)	130	120	120	110	120	50

Constituents that may be of interest to consumers

Constituent	Average	Range	Date
Bicarbonate (mg/L)	210	200 - 220	2015/17
Calcium (mg/L)	72	70 - 74	2015/17
Magnesium (mg/L)	9.3	8.6 - 10	2015/17
pH (Lab)	7.35	7.3 - 7.4	2015/17
Potassium (mg/L)	2.65	3.0 - 2.3	2015/17
Sodium (mg/L)	75	65 - 85	2015/17
Total Alkalinity (as CaCO ₃) (mg/L)	170	160 - 180	2015/17
Total Hardness (as CaCO ₃) (mg/L)	220	220	2015/17

No PHG or MCL's available

Your Partner in Conservation

Mandatory Water Restrictions:

- Potable water may not be used to wash down sidewalks and driveways.
- Runoff caused by irrigation is prohibited.
- Vehicles must be washed using a hose with a shutoff nozzle.
- Decorative water features must use recirculated water.
- Outdoor irrigation is prohibited during and within 48 hours following measurable rainfall.

There are plenty of other things you can do to save water too!

- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Fix leaking toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.

The Helendale CSD is here to help. If you would like to schedule a complimentary water audit please contact the office at (760) 951-0006 ext. 230.



Board of Directors

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Board Meetings are held on the 1st and 3rd Thursday of the month at 6:30 p.m. in the District Board Room located at:
26540 Vista Rd. Suite C.

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Stay up to date with everything going on at the District by subscribing to our social media pages! Also, be sure to bookmark our website www.helendalecsd.org!

