

2018 CONSUMER CONFIDENCE REPORT

Message from the General Manager

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

This report is intended to assure you that your drinking water is of the highest quality, meeting all federal and state water quality standards as required by the implementation of the U.S. Environmental Protection Agency (USEPA) Safe Drinking Water Act passed in 1974.

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.

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.

For more information

If you have 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 to 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.



President	Vice President	Secretary	Director	Director
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Board meetings are held at 6:30 pm on the first and third Thursday of each month . Meetings are open to the public and agenda materials may be found on the District website at <u>www.helendalecsd.org</u>

Protecting 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 to ensure that the water you receive at your tap meets stringent state and federal standards. The samples are tested by an independent state certified lab.

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.

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.



Vulnerable Populations

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 microbial and other contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Constituents that may be of interest to consumers

Constituent	Average	Range	Date	
Bicarbonate (mg/L)	210	200 - 220	2017/18	
Calcium (mg/L)	65	60 - 70	2017/18	
Magnesium (mg/L)	8.5	7.1 - 10	2017/18	
pH (Lab)	7.5	7.4 – 7.7	2017/18	
Potassium (mg/L)	2.45	2.3 – 2.6	2017/18	
Sodium (mg/L)	70.5	65 - 76	2017/18	
Total Alkalinity (as CaCO3) (mg/L)	170	160 - 180	2017/18	
Total Hardness (as CaCO3) (mg/L)	200	180 - 220	2017/18	
		No PHG or MC	CL's available	

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. No contaminants have been detected above the Maximum Contaminant Levels (MCL) set by the State Water Resources Control Board. To view completed source water assessments, you may visit our District office located at: Helendale Community Services District at 26540 Vista Rd., Suite B, Helendale, CA. 92342.

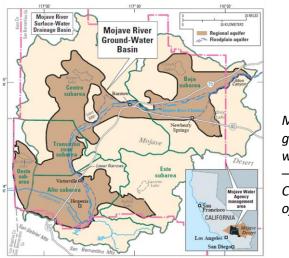
Source water provides water for public drinking water supplies and private water wells. Protecting source water also reduces risks to public health from exposures to contaminated water. Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water sources 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.

Water Supply

Helendale gets all of its water from the Upper Basin area, known as the Alto Subarea of the Mojave River Basin. The District's water supply is 100 percent groundwater.

In 2018, the District delivered 1,495 acre-feet of water to our approximately 2,820 service connections from Well 1A and 4A. The District has a total of 7 wells, however, five are on emergency standby. Helendale CSD's distribution system includes 758 valves, 300 hydrants, and 37 miles of pipe.



Map of ground water basin – Helendale CSD's source of water

SCADA

To help monitor and keep your water safe, our highly trained and certified Staff use 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.

New Well

The District is in the process of drilling a new well. By June 2020, it is anticipated that a new well will be online to help augment existing pumping and provide redundancy for the wells we already have in service.

New Meters

The Helendale CSD has received several grants that enabled us to begin a meter rotation program. Over the next several years Staff will exchange all of the Districts old meters, that have exceeded their useful life, with new Advanced Metering Infrastructure (AMI) "Smart Meters." These new meters will allow our Staff to detect leaks and unusual water usage more quickly and in turn help customers identify leaks and repair them right away. This program will help the District with our water conservation goals and help continue our dedication to excellent customer service.



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.

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

Residential Water Audits

The Helendale CSD is here to help you reduce your water usage. If you think your water usage is high or would like to find out what you can do to save more, our trained water conservation staff can visit your home and review your water usage, evaluate your indoor fixtures, and your irrigation system. Our staff will also look for leaks and provide suggestions on ways you can save water each month. If you would like to schedule a complimentary water audit please contact the office at (760) 951-0006 ext. 230.

Your Partner in Conservation

Helendale residents have made great strides in conserving water and embracing conservation as a way of life. From the smallest every day changes like taking shorter showers to transforming landscapes with California friendly plants, the community has shown that conservation matters and that even the smallest changes can have a big impact.



INSTALL A HIGH-EFFICIENCY TOILET Can save 19 gallons per person/day.



WASH FULL LOADS Washer: saves 15–45 gallons/load. Dishwasher: saves 5–15 gallons /load.





SHOWER FOR ONLY 5 MINUTES

Saves 12.5 gallons with a water efficient showerhead.



USE MULCH Saves 20–30 gallons per 1000 sq. ft. each time you water.

SET MOWERBLADES TO 3"

Encourages deep roots & saves 16–50 gallons per day.



FIX LEAKY SPRINKLERS Saves 12–15 gallons each time you water & a leak about as small as the tip of a pen can waste about 6,300 gallons of water per month!

WATER QUALITY RESULTS

CONTAMINANTS EXPECTED IN DRINKING WATER

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



www.waterboards.ca.gov/drinking water/programs/index.shtml

Inorganic Contan	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 Occuring)	0.28	0.24 - 0.31	2	1	2017/18	NO	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories				
Nitrate as N (NO3- N) (mg/L)	0.60	0 - 0.60	10	10	2018	NO	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits				
Nitrate + Nitrite (as N) (mg/L)	0.32	0 - 0.63	10	10	2018	NO	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits				

Regulated Contaminants with Secondary Maximum Contaminant Levels										
Contaminant	Average	Sample Range	Secondary MCL	Sample Date	Violation	Major Sources in Drinking Water				
Chloride (mg/L)	60.5	55 - 66	500	2017/18	NO	Runoff/leaching from natural deposits; seawater influence				
Odor (units)	1	1	3	2017/18	NO	Naturally occurring organic materials				
Specific Conductance (µS/cm)	715	700 - 730	1600	2017/18		Substances that form ions when in water; seawater influence				
Sulfate (mg/L)	105.5	91 -120	500	2017/18	NO	Runoff/leaching from natural deposits; industrial wastes				
Total Dissolved Solids (mg/L)	495	490 - 500	1000	2017/18	NO	Runoff/leaching from natural deposits				

Radioactive Contaminants										
Contaminant	Average	Sample Range	MCL	PHG (MCLG)	Sample Date	Violation	Major Sources in Drinking Water			
Gross Alpha (pCi/L)	7.76	3.95 - 11	15	0	2016/18	NO	Erosion of natural deposits			
Uranium (pCi/L)	6.48	2.78 – 8.9	20	0.43	2016/18	NO	Erosion of natural deposits			



WATER QUALITY RESULTS

Unregulated Contaminants										
Constituent	Average	Sample Range	NL	MCL	PHG (MCLG)	Date				
Boron (ug/L)	250	190 - 310	1,000	None	None	2017/18				
Vanadium (ug/L)	5.30	5.0 - 5.6	50	None	None	2017/18				

Disinfection Byproducts										
Contaminant	Average	Range	MCL	PHG (MCLG)	Sample Date	Violation	Major Sources in Drinking Water			
Haloacetic Acids (HAA5) (ug/L)	3.2	0 – 5.2	60	N/A	July 2017	NO	Byproduct of drinking water disinfection			
Total Trihalomethanes (TTHM) (ug/L)	16.27	2.9 – 25.7	80	0.8	July 2017	NO	Byproduct of drinking water disinfection			

Disinfectant Residuals										
Contaminant	Average	Range	MCL	PHG (MCLG)	Sample Date	Violation	Major Sources in Drinking Water			
Chlorine (mg/L)	0.33	0.27 – 0.44	4	4	Weekly	NO	Drinking water disinfectant added for treatment			

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 (mg/L)	Sept. 2018	21	0	0	15	0.015	Internal corrosion of household water plumbing systems discharges from industrial manufacturers; erosion of natural deposits			
Copper (mg/L)	Sept. 2018	21	.22	0	1300	300	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives			

Samples were taken at 21 various taps throughout the District.

LEAD

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 tap for 30 seconds to 2 minutes before using water for drinking or cooking. [Optional: 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 or at http://www.epa.gov/lead.

Additional Contacts: Environmental Protection Agency Safe Drinking Water Hotline (800) 426-4791.