



HUMBOLDT COMMUNITY SERVICES DISTRICT

2017 Consumer Confidence Report

Water System Name: Humboldt Community Services District (CSD) Report Date: April 2, 2018

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2017 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use: Groundwater

Name & general location of source(s): Mad River & Humboldt Hill Wells

1/3 from 2 deep wells and 2/3 purchased from Humboldt Bay Municipal Water District originating in Ranney Wells within the bed of the Mad River.

Time and place of regularly scheduled board meetings for public participation: The Humboldt CSD Board of Directors meet on the second and fourth Tuesdays of each month at 5:00 p.m. at our offices located at 5055 Walnut Drive in Cutten (Eureka).

For more information, contact: David Hull, General Manager Phone: (707) 443-4550

Last year, as in years past, your tap water met all U.S. EPA (United States Environmental Protection Agency) and California State Water Resources Board drinking water health standards. Humboldt CSD vigilantly safeguards its water supplies and once again, we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard. This brochure is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards. We are committed to providing you with information because informed customers are our best allies.

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, which can be naturally-occurring or result from urban storm water 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 storm water runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban storm water runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the 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. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, and 6 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Results in line with HBMWD indicate detection within with municipal water system. Results in line with HCSD indicate level detected at the HCSD Well locations. Any violation of an AL, MCL, MRDL, or TT is asterisked with additional information regarding the violation provided later in this report.

It is important to note that the presence of contaminants does not necessarily indicate that the water poses a health risk.

TERMS USED IN THIS REPORT

Detection Limit for Purposes of Reporting (DLR): The DLR is a parameter that is set by state regulation for each reportable contaminant. The presence of these contaminants in the drinking water at its DLR does not necessarily indicate that the water poses a health risk and can be below its MCL.

Maximum Contaminant Level (MCL): 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 are set to protect the odor, taste, and appearance of drinking water.

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 U.S. Environmental Protection Agency (U.S. EPA).

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 Residual Disinfectant Level (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 (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.

Minimum Reporting Level (MRL): The MRL is defined by the USGS National Water Quality Laboratory as the smallest measured concentration of a substance that can be reliably measured by using a given analytical method.

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

Notification Level: Notification levels are health-based advisory levels established by SWRCB for chemical in drinking water that lack MCLs. When chemicals are found at concentrations greater than their notification levels, certain requirements recommendations apply.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

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 MCL levels.

Variations and Exemptions: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

ND: not detectable at testing limit

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

ppb: parts per billion or micrograms per liter (µg/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

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

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants	Highest No. of Detections	No. of months in violation	MCL	PHG (MCLG)	Typical Source of Bacteria
Total Coliform Bacteria HBMWD HCSD	(in a month) None None	-0- -0-	1 positive monthly sample	0 0	Naturally present in the environment
Fecal Coliform and <i>E. coli</i> (state Total Coliform Rule) HBMWD HCSD	(in the year) None None	-0- -0-	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive	0	Human and animal fecal waste
Fecal Indicator (<i>E. coli</i>) (Ground Water Rule) HCSD	(in the year) None	-0-	(a)	0	Human and animal fecal waste

(a) A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or *E. coli* positive

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER								
Lead and Copper	Sample Date	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant	
Lead (ppb)	HBMWD	2017	5	0	None	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
	HCS D	2016	30	3.3	None			
Copper (mg/L) (ppm)	HBMWD	2017	5	1.1	None	1.3	0.3	
	HCS D	2016	30	0.860	None			

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS							
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant	
Sodium (mg/L) (ppm)	HBMWD	2016	3.7	58-59	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
	HCS D	2015	9.25 avg				
Hardness (mg/L as CaCO ₃) (ppm)	HBMWD	2016	87 mg/L	none	none		
	HCS D	2015	58.5 avg				
pH	HCS D	2016	7.4 avg	7.3-7.5			

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD							
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant	
<i>INORGANIC CONTAMINANTS</i>							
Aluminum (mg/L) (ppm)	HBMWD	2015	0.011	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes	
	HCS D	2009	0.0042 avg				ND-0.0084
Antimony (ppb)	HCS D	2009	0.65 avg	6	1		Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	HCS D	2009	2.75 avg	10	0.004		Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	HCS D	2009	0.0079 avg	1	2	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits	
Chromium (ppb)	HCS D	2009	0.6 avg	50	(100)	Discharge from steel and pulp mills and chrome plating ; erosion of natural deposits	
<i>DISINFECTION BYPRODUCTS, DISINFECTION BYPRODUCT PRECURSORS, AND DISINFECTANT RESIDUALS</i>							
Total trihalomethanes (TTHM) (ug/L) (ppb)	HBMWD	2017	7.8	80	N/A	Byproduct of drinking water disinfection	
	HCS D	2016	9.75 avg				3.5-16
Haloacetic acids (five) (HAA5) (ug/L) (ppb)	HBMWD	2017	1.3	60	N/A		
	HCS D	2016	1.75 avg				ND-3.5
Chlorine (mg/L) (ppm)	HBMWD	2017	0.67 avg.	4	4	Drinking water disinfectant added for treatment.	
	HCS D	2016	0.60 avg				0.2-1.0

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Iron HCS D	2016	ND	ND	300	N/A	Leaching from natural deposits; industrial wastes
Manganese (ppb) HCS D	2016	3.7 avg	ND-7.4	50	N/A	Leaching from natural deposits
Turbidity (NTU) HBMWD HCS D	2017 2016	0.13 avg 0.07 avg	0.02-0.78 0.06-0.08	5	N/A	Soil runoff
Total dissolved solids (TDS) (mg/L) HBMWD (ppl) HCS D	2016 2016	90 105 avg	100-110	1,000	N/A	Runoff/leaching from natural deposits
Specific Conductance (uS/cm) HBMWD HCS D	2015 2014	160 165 avg	160-170	1,600	N/A	Substances that form ions when in water; seawater influence
Chloride (mg/L) HBMWD (ppm) HCS D	2016 2016	3.9 17 avg	15-19	500	N/A	Runoff/leaching from natural deposits; seawater influence
Sulfate (mg/L) HBMWD (ppm) HCS D	2016 2016	10.0 4.5 avg	4.1-4.9	500	N/A	Runoff/leaching from natural deposits; industrial wastes

There have been three cycles of monitoring of unregulated contaminants: UCMR 1 (2001-2003), UCMR 2 (2008-2010), and UCMR 3 (2013-2015). The table below reflects 2013 reports of five constituent results indicating levels above the minimum reporting levels, but well below notification level.

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Range of Detections	Notification Level	MCL	PHG	Health Effects Language
Chlorate (ppb) HCS D	2013/2014	23-230	800			None
Chromium (Total) (ug/L) HBMWD (ppb) HCS D	2013 2013/2014	0.20-0.39 1.5-2.0	N/A	50	N/A	Some people who use water containing chromium in excess of the MCL over many years may experience allergic dermatitis.
Hexavalent Chromium ⁽¹⁾ (Chromium 6+) (ug/L) HBMWD (ppb) HCS D Princeton Well	2013 2013/2014 2016		0.18-0.23 0.88-2.2 1.0	N/A	0.02	Some people who drink water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer.
Strontium (Total) (ug/L) HBMWD (ppb) HCS D	2013 2013/2014	0.18-0.23 36-130	N/A	N/A	N/A	Strontium is a silvery metal that rapidly turns yellowish in air. Strontium is found naturally as a non-radioactive element. Strontium has 16 known isotopes. Naturally occurring strontium is found as four stable isotopes Sr-84, -86, -87, and -88. Twelve other isotopes are radioactive.
Vanadium (Total) (ug/L) HBMWD (ppb) HCS D	2013 2013/2014	0.38-0.65 2.8-3.8	50	N/A	N/A	The babies of some pregnant women who drink water-containing vanadium in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.

⁽¹⁾ There is currently no MCL for hexavalent chromium. The previous MCL of 0.10 ppb was withdrawn on September 11, 2017. Additional information is available at the Water Board website: https://www.waterboards.ca.gov/drinking_water/certific/drinkingwater/documents/chromium6/chrome_6_faqs.pdf.

Additional General Information on 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 the 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) or visiting their website (<http://water.epa.gov/drink/index.cfm>).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. EPA/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) and website (<http://water.epa.gov/drink/index.cfm>).

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. Humboldt Community Services District is responsible for providing high quality drinking water, but cannot control the variety of materials used in non-District 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 (or until the water becomes noticeably cooler to the touch) 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 (1-800-426-4701) or at <http://www.epa.gov/lead>.

Water Conservation Tips for Consumers

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers – a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to 7 gallons a month.
- Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- 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.
- 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.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense or www.saveourwater.com for more information.