HUMBOLDT COMMUNITY SERVICES DISTRICT

2018 Consumer Confidence Report

Water System Name: **Humboldt Community Services District (HCSD)** Report Date: April 30, 2019

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, 2018 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Humboldt Community Services District a (707) 443-4550 para asistirlo en español.

Type of water source(s) in use: Groundwater

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

1/3 from two deep wells, and 2/3 purchased from Humboldt Bay Municipal Water District (HBMWD) originating in Ranney Wells within the bed of the Mad River. For additional information about HBMWD Water Quality please visit their website at: https://www.hbmwd.com/

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).

Drinking Water Source Assessment information: An assessment of the drinking water sources for HCSD was completed in January 2002. The drinking water sources are two wells: The Princeton Well and the Spruce Point Well and a treated water supply from the HBMWD. The recharge area for the well sources are generally residential and rural, with the Highway 101 corridor within the recharge areas. As stated in the results from the Assessment Vulnerability Summaries, the sources are considered most vulnerable to the following activities not associated with any detected contaminants: Sewage Collection Systems and Grazing.

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 and State 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 report 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, and 5 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 the 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.

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

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.

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.

Treatment Technique (TT): 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.

Variances and Exemptions: Permissions from the State Water Resources Control Board (State Board) 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**	**(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 *E. coli ((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 *E. coli* positive	0	Human and animal fecal waste
E. Coli (federal Revised Total Coliform Rule) HBMWD HCSD	(in the year) None None	 -0- -0-	(a)	0	Human and animal fecal waste
(a) Routine and repeat samples are total coliform-positive and either is E. coli-positive or system fails to take repeat samples following E. coli positive routine sample or system fails to analyze total coliform positive repeat sample for E. coli.					

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER								
Lead and Copper (complete if lead or copper detected in the last sample set)	**Sample Date**	**No. of Samples Collected**	**90th Percentile Level Detected**	**No. Sites Exceeding AL**	**AL**	**PHG**	**No. of Schools Requesting Lead Sampling**	**Typical Source of Contaminant**
Lead (ppb) HBMWD HCSD	 2017 2016	 5 30	 0 3.3	 None None	15	0.2	8	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm) HBMWD HCSD	 2017 2016	 5 30	 1.1 0.860	 None None	1.3	0.3	Not Applicable	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

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 (ppm) HBMWD HCSD	2016 2015	3.7 9.25 avg	N/A	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm) HBMWD HCSD	 2016 2015	 87 58.5 avg	 N/A 58-59	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
pH HCSD	 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**
INORGANIC CONTAMINANTS						
Aluminum (mg/L) HBMWD (ppm) HCSD	 2015 2018	 0.011 ND	 ND	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes
Antimony (ppb) HCSD	2018	ND	ND	6	1	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb) HCSD	2018	2.50 avg	ND-5.0	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm) HCSD	2018	0.0045 avg	0.0018-0.0073	1	2	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chromium (ppb) HCSD	2018	0.55 avg	ND-1.10	50	(100)	Discharge from steel and pulp mills and chrome plating ; erosion of natural deposits
DISINFECTION BYPRODUCTS, DISINFECTION BYPRODUCT PRECURSORS, AND DISINFECTANT RESIDUALS						
Total trihalomethanes (TTHM) (ug/L) HBMWD (ppb) HCSD	 2018 2018	 9.4 12.75 avg	 N/A 4.0-21	80	N/A	Byproduct of drinking water disinfection
Haloacetic acids (five) (HAA5) (ug/L) HBMWD (ppb) HCSD	 2017 2018	 5.1 9.50 avg	 2.0-5.1 ND-19	60	N/A	Byproduct of drinking water disinfection
Chlorine (mg/L) HBMWD (ppm) HCSD	 2017 2018	 0.66 avg. 0.60 avg	 0.39-1.36 0.2-1.0	4	4	Drinking water disinfectant added for treatment.

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**
Color (units) HBMWD HCSD	2016 2016	5.0 ND	N/A N/A	15	N/A	Naturally occurring organic materials
Iron HCSD	2016	ND	ND	300	N/A	Leaching from natural deposits; industrial wastes
Manganese (ppb) HCSD	2018	5.2 avg	0.41-10	500	N/A	Leaching from natural deposits
Turbidity (NTU) HBMWD HCSD	 2018 2016	 0.13 avg 0.07 avg	 0.03-1.03 0.06-0.08	5	N/A	Soil runoff
Total dissolved solids (TDS) (mg/L) HBMWD (ppm) HCSD	 2016 2016	 90 105 avg	 100-110	1,000	N/A	Runoff/leaching from natural deposits
Specific Conductance (uS/cm) HBMWD HCSD	 2018 2014	 130 165 avg	 N/A 160-170	1,600	N/A	Substances that form ions when in water; seawater influence
Chloride (mg/L) HBMWD (ppm) HCSD	 2016 2016	 3.9 17 avg	 15-19	500	N/A	Runoff/leaching from natural deposits; seawater influence
Sulfate (mg/L) HBMWD (ppm) HCSD	 2016 2016	 10.0 4.5 avg	 4.1-4.9	500	N/A	Runoff/leaching from natural deposits; industrial wastes

UNREGULATED CONTAMINANT MONITORING RULE (UCMR)

There are four (4) cycles of monitoring of unregulated contaminants: UCMR 1 (2001-2003), UCMR 2 (2008-2010), UCMR 3 (2013-2015), and UCMR 4 (2018-2020 not yet complete). HCSD participated in UCMR 1 through UCMR3, which tested for a total of 65 constituents and were reported on previous CCRs. The UCMR 4 consists of testing for 10 cyanotoxins, 20 additional contaminants, and 2 indicators. Neither HCSD nor HBMWD have started cyanotoxin testing.

The table below reflects HCSD's one contaminant with test results indicating a level above the minimum reporting level (MRL), but well below the notification level.

TABLE 6 – HCSD DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Manganese (ppb)	2018	5.2 Avg	0.41-10	500 ppb	Manganese exposures result in neurological effects. High levels of manganese in people have been shown to result in adverse effects to the nervous system.

The table below reflects HBMWD's four contaminants with test results above the minimum reporting levels (MRL) and the test results for the 2 indicators. For additional information about HBMWD Water Quality please visit their website at: https://www.hbmwd.com/

TABLE 6 – HBMWD DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Manganese (ug/L)	2018	2.1	N/A	500 ug/L	Manganese exposures result in neurological effects. High levels of manganese in people have been shown to result in adverse effects to the nervous system.
HAA5 (Sum of 5 Haloacetic Acids) (ug/L)	2018	5.1	2.0-5.1	60 ug/L	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
HAA6Br (Sum of 6 Haloacetic Acids) (ug/L)	2018	2.28	N/A	N/A	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
HAA9 (Sum of 9 Haloacetic Acids) (ug/L)	2018	4.28	N/A	N/A	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Bromide (ug/L)	2018	18	11-18	N/A	Indicator of the potential to form haloacetic acids during water treatment. Bromide itself has low human toxicity.
Total Organic Carbon (ug/L)	2018	18	0.53-0.57	N/A	Indicator of the potential to form haloacetic acids during water treatment. Total Organic Carbon has no known health effect.

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 U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

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).

Lead-Specific Language: 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 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 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 (1-800-426-4791) 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 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.