HUMBOLDT COMMUNITY SERVICES DISTRICT

2021 Consumer Confidence Report

Water System Name: **Humboldt Community Services District** Report Date: April 21, 2022

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 to December 31, 2021 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 5055 Walnut Drive, Eureka, CA 95503 telephone (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 three deep wells, and 2/3 purchased from Humboldt Bay Municipal Water District (HBMWD) originating in Ranney Wells within the bed of the Mad River.

Drinking Water Source Assessment information: An assessment of the drinking water sources for HCSD was completed in January 2002. The drinking water sources are a treated water supply from the HBMWD and three wells: The South Bay Well, Princeton Well, and the Spruce Point Well. The recharge area for the well sources is 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.

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 5055 Walnut Drive in Cutten (Eureka).

For more information, contact: Terrence Williams, General Manager Phone: (707) 443-4550

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

NTU: nephelometric turbidity unit (a measure of turbidity)

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)

µS/cm: microsiemens per centimeter (a measure of electrical conductivity)

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 byproducts 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 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 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.

Tables 1-6 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 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.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria (state Total Coliform Rule)	(In a month) 0	0	1 positive monthly sample[(a)]	0	Naturally present in the environment
Fecal Coliform or *E. coli* (state Total Coliform Rule)	(In the year) 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 or animal fecal waste
E. coli (federal Revised Total Coliform Rule)	(In the year) 0	0	(b)	0	Human or animal fecal waste

(a) Two or more positive monthly samples is a violation of the MCL
(b) 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	2020	10	0.12	0	15	0.2		Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
HCSD	2019	31	0.0033	0			10 of 10	
Copper (ppm) HBMWD	2020	10	0.96	0	1.3	0.3	Not applicable	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
HCSD	2019	31	0.86	0				

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 South Bay Well	 2016 2015 2019	 3.7 9.25 avg 9.9	 N/A 8.7-9.8	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm) HBMWD HCSD South Bay Well	 2016 2015 2019	 87 58.5 avg 62	 N/A 58-59	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

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						
Arsenic (ppb) – HCSD South Bay Well Only	2018 2019	2.5 avg ND	ND-5.0 ND	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Nitrate AS (N) – HCSD So. Bay Well Only	2021 2021	0.38 0.54	0.15-0.59	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
DISINFECTION BYPRODUCTS, DISINFECTION BYPRODUCT PRECURSORS, AND DISINFECTANT RESIDUALS						
TTHM (ug/L) – (Total Trihalomethanes HBMWD HCSD	 2021 2021	 7.3 9.0 avg	 N/A ND-18	80	N/A	Byproduct of drinking water disinfection
HAA5 (ug/L) – (Haloacetic Acids) HBMWD HCSD	 2021 2021	 2.9 2.35 avg	 0-1.2 ND-4.7	60	N/A	Byproduct of drinking water disinfection
Chlorine (mg/L) HBMWD HCSD	 2021 2021	 Avg=0.44 0.60 avg	 0.15-1.33 0.2-1.0	[MRDL = 4.0 (as Cl_2)]	[MRDL = 4.0 (as Cl_2)]	Drinking water disinfectant added for treatment
Turbidity (NTU) HBMWD HCSD So. Bay Well Only	 2021 2016 2019	 -0.45 0.07 avg 0.29	 -0.01-0.45 0.06-0.08	TT = 5.0	N/A	Soil runoff. High turbidity can hinder the effectiveness of disinfectants. During the winter season, it is a good indicator of the effectiveness of the filtration system.

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**SMCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Chloride HBMWD (mg/L) HCSD (ppm) South Bay Well Only	 2016 2016 2019	 3.90 17 avg 19	 N/A 15-19	500	N/A	Runoff/leaching from natural deposits; seawater influence
Color (units) HBMWD HCSD South Bay Well Only	 2016 2016 2019	 5.0 ND 3.0	 N/A N/A	15	N/A	Naturally-occurring organic materials
Manganese (ppb) HCSD	 2019	 5	 ND-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.
Odor (ton) HCSD So Bay Well Only	 2019	 1	 -	3		Naturally-occurring organic materials
Specific Conductance HBMWD (uS/cm) HCSD (uS/cm) South Bay Well Only	 2018 2017 2019	 130 180 avg 190	 N/A 170-190	1,600	N/A	Substances that form ions when in water
Sulfate HBMWD (mg/L) HCSD (ppm) South Bay Well Only	 2016 2016 2019	 10.0 4.5 avg 6.2	 N/A 4.1-4.9	500	N/A	Runoff/leaching from natural deposits; industrial waste
Total Dissolved Solids HBMWD (mg/L) HCSD (ppm) South Bay Well Only	 2016 2019 2019	 90 115 avg 110	 N/A 110-120	1,000	N/A	Runoff/leaching from natural deposits
Turbidity (NTU) HBMWD HCSD	 2021 2016	 0.45 0.07 avg	 0.01-.45 0.06-0.08	5	N/A	Soil runoff. High turbidity can hinder the effectiveness of disinfectants. During the winter season, it is a good indicator of the effectiveness of the filtration system.

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS					
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**Notification Level**	**Health Effects Language**
Total Alkalinity (mg/L) HBMWD	 2016	 65	 N/A	N/A	There are no health concerns related to alkalinity

Unregulated Contaminant Monitoring Rule (UCMR) – 2020 Testing Results

As part of the federal drinking water program, USEPA issues a list of currently unregulated contaminants to be tested by Public Water Systems throughout the nation. This process occurs every five years pursuant to the Unregulated Contaminant Monitoring Rule (UCMR). The purpose of the UCMR program is to determine the prevalence of unregulated contaminants in drinking water. Results of this testing help USEPA determine whether or not to regulate new contaminants for protection of public health.

There have been four cycles of monitoring: UCMR 1 (2001-2003, UCMR 2 (2008-2010), UCMR 3 (2013-2015), and UCMR 4 (2018-2020). UCMR 1 through UCMR 3 tested for a total of 65 constituents. The UCMR 4 consists of testing for 10 cyanotoxins, 20 additional contaminants, and 2 indicators.

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS					
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**Notification Level**	**Health Effects Language**
The table below reflects both HCSD and HBMWD detected contaminants with test results above the minimum reporting levels (MRL) but well below the notification level and, the test results for 2 indicators. For additional information about HBMWD Water Quality, please visit their website at https://www.hbmwd.com					
HAA5 (ug/L) [Sum of 5 Haloacetic Acids] HBMWD HCSD	2019 2021	6.7 2.35 avg	0-1.2 ND-4.7	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
HAA6 (ug/L) [Sum of 6 Haloacetic Acids] HBMWD HCSD	2019 2019	1.91 1.55 avg	0-1.2 1.3-1.8	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 (ug/L) [Sum of 9 Haloacetic Acids) HBMWD HCSD	2019 2019	13.11 5.4 avg	0-1.2 2.2-8.6	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) HCSD	2019	56 avg	46-66	N/A	Indicator of the potential to form haloacetic acids during water treatment. Bromide itself has low human toxicity.
Total Organic Carbon (ug/L) HBMWD	2019	1100	1100-100	N/A	Indicator of the potential to form haloacetic acids during water treatment. Total Organic Carbon has no known health effect.

Summary Information for Operating Under a Variance or Exemption – HBMWD

HBMWD's source water has been classified by the State Water Resource Control Board (SWRCB) as groundwater, not under the direct influence of surface water. The classification is important as to the regulations that a water system must follow to ensure water quality. In 2009, HBMWD requested the water system be exempt from triggered source groundwater monitoring under the Groundwater Rule because the system consistently achieves 4-log virus inactivation prior to their first service connection. The California Department of Health concurred and approved the requested exemption.

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 Community Services District 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 minutes 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 https://www.epa.gov/watersense for more information.