Pay Your Water Bill Online! *Customers can make payments online by accessing the City's website at https://arcata.merchanttransact.com/default.aspx. The online payment system provides convenient paperless statements via email, ability to view and pay bills online, obtain account usage information, 24/7 account access, reduced time paying bills, and saving on stamps. For questions regarding the online process, please contact the Finance Department at (707) 822-5951.*

City of Arcata Public Water System
2020 Consumer Confidence Report

April 2021

The City of Arcata (City) is responsible for providing safe, reliable, high quality drinking water to its customers. The Consumer Confidence Report, or CCR, is an annual water quality report that the City is required to provide to customers in accordance with requirements of the Safe Drinking Water Act. The purpose of the CCR is to raise customer awareness of the quality of their drinking water, where their drinking water comes from and the importance of protecting drinking water sources. Please take a moment to read this report to learn about the quality of your drinking water. This report shows the results of drinking water monitoring for the period of January 1 - December 31, 2020.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Ciudad de Arcata a (707) 822-5953 para asistirlo en español.

In 2020, results from our water quality monitoring and testing program indicated that our water quality is very good, as has consistently been the case in past years. No constituents were detected at a level higher than allowed by drinking water regulations. Water test results are presented in the Sampling Results section of this report.

Where Does My Drinking Water Come From?

The City has two sources of drinking water. The primary source of drinking water for the City is water purchased from Humboldt Bay Municipal Water District (HBMWD). HBMWD draws source water from wells below the bed of the Mad River northeast of Arcata. The water-bearing ground below the river is an aquifer. The wells, called Ranney Wells, draw water from the sands and gravel of the aquifer at depths of 60 to 90 feet, thereby providing a natural filtration process. During the summer, HBMWD disinfects naturally filtered water with chlorine and delivers treated water to the City via transmission lines. During the winter, HBMWD treats the water at a Turbidity Reduction Facility, prior to disinfection, which reduces the

occasional turbidity (cloudiness) in the source water. While turbidity itself is not a health concern, at elevated levels, turbidity could potentially interfere with the disinfection process. Prior to delivery to its distribution system, the City adds fluoride to an optimal level to prevent tooth decay. Information about fluoridation is available at http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml.

A secondary source of drinking water for the City is Heindon Well. Heindon Well was not in use in 2020. Water quality results for Heindon Well are reported in previous CCRs, which are available at http://www.cityofarcata.org/327/Water-Quality-Reports. The City will resume water quality testing at Heindon Well when the source of drinking water is back in use.

Summary Information for Operating Under a Variance or Exemption

The State Water Resources Control Board (SWRCB) classified HBMWD's source water as groundwater, not under the direct influence of surface water. This classification is important as to the regulations that 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 Public Health concurred and approved the requested exemption.

Source Assessment & Vulnerability Assessment

California Drinking Water Source Assessment and Protection Program completed a Drinking Water Source Assessment on HBMWD's source water in August 2002. The Drinking Water Source Assessment report is available by contacting the State Water Resources Control Board, Division of Drinking Water, District 01 at (530) 224-4800 or 364 Knollcrest Drive, Suite 101, Redding, CA 96002. The assessment found that the source water of the Ranney wells might be vulnerable to activities that contribute to the release of aluminum and barium. Aluminum is associated with some surface water treatment processes and erosion of natural deposits. Barium is associated with the discharges of oil drilling waste or metal refineries and erosion of natural deposits.

Additional Information about Drinking Water

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 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. Environmental Protection Agency (USEPA) 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. 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. For more information on bottled and vended water regulations and quality standards visit the California Department of Public Health at https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/Water.aspx.

Drinking Water and Your Health

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).

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. 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).

Sampling Results

Tables 1 through 6 list all of the drinking water contaminants detected during the most recent sampling for the constituent. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Drinking water regulations allow 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, were collected prior to 2020. Representative samples are collected at various points in the drinking water treatment and distribution systems.

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 (USEPA).

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.

N/A: Not applicable

ND: Not detectable at testing limit

NTU: Nephelometric Turbidity Units

ppb: Parts per billion or micrograms per liter (µg/L). One ppb is equivalent to one second in nearly 32 years.

ppm: Parts per million or milligrams per liter (mg/L). One ppm is equivalent to one second in 11.5 days.

Primary Drinking Water Standards (PDWS): MCLs, MRDLs and Treatment techniques (TTs) for contaminants that affect health along with their monitoring and reporting requirements.

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.

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

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

µS/cm: microSeimens per centimeter

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA IN 2020					
Microbiological Contaminants	**Highest No. of Detections**	**No. of Months in Violation**	**MCL**	**MCLG**	**Typical Source of Bacteria**
Total Coliform Bacteria (state Total Coliform Rule)	1	0	1 positive monthly sample	0	Naturally present in the environment.
E. coli (state Total Coliform Rule)	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)	0	0	See Footnote (a)	0	Human and animal fecal waste.
(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or the 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 FOR SODIUM AND HARDNESS							
Constituent (reporting units)	**Sample Source**	**Year Sampled**	**Average**	**Range**	**MCL**	**PHG**	**Typical Source of Contaminant**
Sodium (ppm)	Distribution System	2016	3.9	N/A	None	None	Salt present in the water and is generally naturally occurring.
Hardness (ppm as $CaCO_3$)	Distribution System	2016	100	N/A	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring.

Lead and copper monitoring is conducted throughout the water distribution system to determine whether there is any evidence of lead or copper in the tap water of our community. 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. The City 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 your exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/lead and at https://www.epa.gov/dwreginfo/lead-and-copper-rule. Lead and copper monitoring results are presented in Table 3.

TABLE 3 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER (testing conducted in 2019)

Constituent (reporting units)	**No. of Samples Collected**	**90th Percentile Level Detected**	**No. of Sites Exceeding the AL**	**AL**	**PHG**	**No. of Schools Requesting Lead Sampling in 2019**	**Typical Source of Contaminant**
Lead (ppb)	31	2.2	0	15	0.2	1	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)	31	1.1	0	1.3	0.3	N/A	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

In 2017 and 2018, the SWRCB Division of Drinking Water (DDW) issued new guidelines for lead testing in K-12 schools. Public schools served by a public water system were required to have their drinking water sampled for lead. Private schools served by a public water system could request to have their drinking water sampled for lead. The City was responsible for conducting drinking water sampling and providing technical assistance if sample results indicated an elevated lead level at a tested school. Mandatory and voluntary school drinking water lead testing concluded on July 1, 2019. The City sampled for lead at twelve schools in 2018 and conducted follow-up sampling at one school in 2019. For questions about any aspect of lead testing of drinking water in California schools, send an email to DDW-PLU@waterboards.ca.gov, call (916) 449-5646 or visit: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/leadsamplinginschools.html.

USEPA El plomo del agua potable en las escuelas y loscentros de cuidado infantile:
https://espanol.epa.gov/espanol/el-plomo-del-agua-potable-en-las-escuelas-y-los-centros-de-cuidado-infantil.

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD							
Constituent (reporting units)	**Sample Source**	**Year Sampled**	**Average**	**Range**	**MCL or MRDL**	**PHG or MRDLG**	**Typical Source of Contaminant**
Fluoride (ppm)	Distribution System	2020	0.51	ND – 0.76	2.0	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Chlorine (ppm)	Distribution System	2020	0.6	0.1 – 1.7	4.0 (as Cl_2)	4.0 (as Cl_2)	Drinking water disinfectant added for treatment.
TTHMs (ppb) Total Trihalomethanes	Distribution System	2020	14	8.9 - 19	80	N/A	By-product of drinking water chlorination.
HAA5 (ppb) Haloacetic Acids	Distribution System	2020	6.0	4.6 – 7.5	60	N/A	By-product of drinking water chlorination.

TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
Constituent (reporting units)	**Sample Source**	**Year Sampled**	**Average**	**Range**	**Secondary MCL**	**Typical Source of Contaminant**
Chloride (ppm)	Distribution System	2016	3.9	N/A	500	Runoff/leaching from natural deposits; seawater influence.
Color (color units)	HBMWD	2016	5.0	N/A	15	Naturally-occurring organic materials.
Specific Conductance (µS/cm)	HBMWD	2018	130	N/A	1,600	Substances that form ions when in water; seawater influence.
Sulfate (ppm)	Distribution System	2016	10.0	N/A	500	Runoff/leaching from natural deposits; industrial wastes.
Total Dissolved Solids (ppm)	Distribution System	2016	90	N/A	1,000	Runoff/leaching from natural deposits.
Turbidity (NTU)	Distribution System	2020	0.12	0.06 – 1.6	5	Soil runoff. See Footnote (b).

(b) Turbidity is a measure of the cloudiness of the water and is a good indicator of water quality. Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms.

Additional Sampling

TABLE 6 - SAMPLE RESULTS OF NON-REGULATED TESTING					
Constituent (reporting units)	**Sample Source/Location**	**Year Sampled**	**Average**	**Range**	**Additional Information**
Alkalinity (ppm as $CaCO_3$)	Distribution System	2016	79	N/A	Alkalinity is a measure of the buffering capacity of water or its ability to resist change in pH.
Corrosivity (Langlier Units)	Distribution System	2016	-0.50	N/A	Corrosivity values in this range indicate that the water is slightly corrosive on the Langlier Index.

Unregulated Contaminant Monitoring Rule (UCMR)

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 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 UCMR4 (2018-2020). UCMR1 through UCMR3 tested for 65 constituents. UCMR4 consisted of testing for 10 cyanotoxins, 20 additional contaminants, and 2 indicator constituents. Table 7 summarizes constituents detected during UCMR4 monitoring.

TABLE 7 - SAMPLE RESULTS OF UCMR4 - DETECTED CHEMICALS					
Constituent (reporting units)	**Sample Source/Location**	**Year Sampled**	**Average**	**Range**	**Health Effect Language**
HAA6 (µg/L) [sum of 6 Haloacetic Acids]	Distribution System	2020	4.21	2.36 - 6.25	Some people who drink water containing haloacetic acids in excess over many years may have an increased risk of getting cancer.
HAA9 (µg/L) [sum of 9 Haloacetic Acids]	Distribution System	2020	6.80	2.87 - 10.1	Some people who drink water containing haloacetic acids in excess over many years may have an increased risk of getting cancer.
Total Organic Carbon (ppb)	HBMWD	2019	600	100 - 1100	Indicator of the potential to form haloacetic acids during water treatment. Total Organic Carbon has no know health effect.

Additional Information

The City strives to provide excellent quality water and service to our customers. If you have any questions about your drinking water or this report call Rachel Hernandez, Environmental Compliance Officer at (707) 822-8184. You may also attend a regularly scheduled Arcata City Council meeting held the first and third Wednesday of each month at 6 p.m. in the Council Chamber, 736 F Street, Arcata, CA, to hear, discuss, or deliberate upon any item or subject within the City's jurisdiction.

Landlords. Tenants may not receive this report since they may not be direct customers of the City. You should make this report available to such people by posting it in a conspicuous place, distributing copies to all tenants or by directing tenants to http://www.cityofarcata.org/327/Water-Quality-Reports.

Save Our Water