2020 Consumer Confidence Report

Water System Information

Water System Name: Sonoma State University, PWS # 4910027

Report Date: June 11, 2021

Type of Water Source(s) in Use: Groundwater

Name and General Location of Source(s): There are three active wells (#2A, #3, and #4) that are located in the NW corner of the campus.

Drinking Water Source Assessment Information: A source water assessment was conducted in 2002. Wells #3 and #4 were identified as being vulnerable to contamination from sewage collection systems. Well #4 was identified as being vulnerable to photo processing and printing operations. While none of the contaminants previously mentioned were detected during the assessment, Well #2A was brought on line in response to these identified vulnerabilities. The robust monitoring program for the campus adheres to all State and Federal requirements. While a small number of contaminants have been detected, all detections fall below the Maximum Contaminant Level (MCL) established by the Environmental Protection Agency (EPA). EPA research has determined that drinking water is safe to consume where contaminant levels fall below the MCL.

For More Information, Contact: The Department of Environmental Health and Safety, (707) 664-2100, or visit the department website at http://ehs.sonoma.edu/.

About This Report

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, 2020 and may include earlier monitoring data.

Importance of This Report Statement in Spanish

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Sonoma State University a (707) 664-2880 para asistirlo en español.

Terms Used in This Report

Term	Definition
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.

Term	Definition
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.
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).
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.
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.
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.
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.
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)

Sources of Drinking Water and Contaminants that May Be Present in Source 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 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.

Regulation of Drinking Water and Bottled Water Quality

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.

About Your Drinking Water Quality

Tables 1, 2, 3, 4, 5, 6, and 8 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. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

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 (State Total Coliform Rule)	0	0	1 positive monthly sample [a]	0	Naturally present in the environment
Fecal Coliform or *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	None	Human and animal fecal waste
E. coli (Federal Revised Total Coliform Rule)	0	0	(b)	0	Human and 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	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)	6/19/2018	30	0	0	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	6/19/2018	30	.97	0	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)	1/9/2020	18	18-18	None	None	Salt present in the water and is generally naturally occurring
Hardness as Calcium Carbonate (ppm)	1/9/2020	204.7	189-219	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
Nitrate (as N) (ppm)	1/7/2020 – 10/13/2020	5.7	3.3-7.2	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Total Trihalomethanes (µg/L)	8/11/2020	2.1	1.21-2.96	80	N/A	Byproduct of drinking water disinfection
Haloacetic Acids (HAA5) (µg/L)	8/11/2020	1.1	0-2.1	60	N/A	Byproduct of drinking water disinfection
Gross Alpha particle activity (pCi/L)	1/7/2020	1.13	.511-1.52	15	(0)	Erosion of natural deposits

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
Aluminum (mg/L)	1/7/2020	.089	N/A	1	.6	Erosion of natural deposits; residue from some surface water treatment processes
Chloride (mg/L)	1/8/2020	22.7	20-24	500	500	Runoff/leaching from natural deposits; seawater influence
Odor Threshold (TON)	1/7/2020	1	1-1	3	3	Naturally-occurring organic materials
Specific Conductance (µS/cm)	1/7/2020	506.7	430-570	1,600	1,600	Substances that form ions when in water; seawater influence
Total Dissolved Solids (TDS) (mg/L)	1/16/2020	320	310-340	1000	1000	Runoff/Leaching from natural deposits
Turbidity (NTU)	1/7/2020	1.87	.43-3.3	5	5	Soil runoff
Sulfate (mg/L)	1/7/2020	15.3	12-18	500	500	Runoff/leaching from natural deposits; industrial wastes
Zinc (mg/L)	1/7/2020	.02	0-.059	5	5	Runoff/leaching from natural deposits; industrial wastes

Table 6. Detection of Unregulated Contaminants

Unregulated contaminant monitoring helps U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Bromide (µg/L) (EPA UCMR4 monitoring program)	2/20/2020, 9/21/2020	61.3	45.9-72.1	N/A	N/A

Dibromoacetic Acid (µg/L) (EPA UCMR4 monitoring program, HAA9)	2/20/2020, 9/21/2020	.453	0-.788	N/A	N/A
Bromochloroacetic acid (µg/L) (EPA UCMR4 monitoring program, HAA9)	2/20/2020, 9/21/2020	.208	0-.514	N/A	N/A
Dichloroacetic Acid (µg/L) (EPA UCMR4 monitoring program, HAA9)	2/20/2020, 9/21/2020	.101	0-.402	N/A	N/A

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).

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. Sonoma State University 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. [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 (1-800-426-4791) or at http://www.epa.gov/lead.

Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and

blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.

Table 7. Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
No Violations	N/A	N/A	N/A	N/A

Table 8. Sampling Results Showing Fecal Indicator-Positive Groundwater Source Samples

Microbiological Contaminants (complete if fecal-indicator detected)	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
E. coli	0	N/A	0	(0)	Human and animal fecal waste
Enterococci	0	N/A	TT	N/A	Human and animal fecal waste
Coliphage	0	N/A	TT	N/A	Human and animal fecal waste

Special Notice of Fecal Indicator-Positive Groundwater Source Sample: No Special Notices

Special Notice for Uncorrected Significant Deficiencies: No Special Notices

Table 9. Violation of Groundwater TT

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
No Violations	N/A	N/A	N/A	N/A