

2022 Consumer Confidence Report

Water System Information

Water System Name: Sonoma State University PWS # 4910027

Report Date: July 1, 2023

Type of Water Source in Use: Groundwater

Name/General Location of Sources: Three active wells (#02A, #03, #04) located in NW corner of SSU

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, email safety@sonoma.edu, or visit the department website at http://ehs.sonoma.edu/.

About This Report

The university tests the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of monitoring for the period of January 1 to December 31, 2022 and may include earlier monitoring data.

Importance of This Report Statement in Five Non-English Languages (Spanish, Mandarin, Tagalog, Vietnamese, and Hmong)

Language 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.

Language in Mandarin: 这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 Sonoma State University (707) 664-2880.



Language in Tagalog: Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa Sonoma State University o tumawag sa (707) 664-2880 para matulungan sa wikang Tagalog.

Language in Vietnamese: Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ Sonoma State University tại (707) 664-2880 để được hỗ trợ giúp bằng tiếng Việt.

Language in Hmong: Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau Sonoma State University ntawm (707) 664-2880 rau kev pab hauv lus Askiv.

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.
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 <i>E. coli</i> 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.



Term	Definition
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

Drinking Water Contaminants Detected

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

Complete if bacteria are detected.

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
E. coli	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

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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)	9/14/2021	30	6.1	1	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	9/14/2021	30	.74	0	1.3	0.3	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 (mg/L)	2/11/2021	19	19-20	None	None	Salt present in the water and is generally naturally occurring
Hardness as Calcium Carbonate (mg/L)	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 Detect ed	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Nitrate (mg/L)	1/26/22- 9/30/22	4.2	2.7-5.7	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Total Trihalomethanes (μg/L)	8/16/2022	11.26	1.56-11.26	80	N/A	Byproduct of drinking water disinfection
Haloacetic Acids (HAA5) (μg/L)	8/10/2021- 8/16/2022	3.2	ND - 5.0	60	N/A	Byproduct of drinking water disinfection
Arsenic (mg/L)	2/11/21	0.0033		0.010	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Xylenes (Total) (mg/L)	1/5/21 – 10/12/21	0.0012	0 – 0.0049	1.750	1.8	Storage Tank Adhesives
Gross Alpha particle activity (pCi/L)	1/7/2020	1.02	0.511-1.52	15	(0)	Erosion of natural deposits

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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 (mg/L)	2/11/21	21	21	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)	2/11/21	240	240	1000	1000	Runoff/Leaching from natural deposits
Turbidity (NTU)	1/7/2020	1.87	0.43-3.3	5	5	Soil runoff
Sulfate (mg/L)	2/11/21	10	10	500	500	Runoff/leaching from natural deposits; industrial wastes
Zinc (mg/L)	1/7/2020	0.02	0- 0.059	5	5	Runoff/leaching from natural deposits; industrial wastes

Table 6. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects
Bicarbonate	2/11/21	190	190	N/A	N/A
Calcium (mg/L)	2/11/21	38	38	N/A	N/A
Magnesium (mg/L)	2/11/21	21	21	N/A	N/A
Potassium (mg/L)	2/11/21	1.5	1.5	N/A	N/A
Bromide (µg/L)	2/20/2020, 9/21/2020	61.3	45.9-72. 1	N/A	N/A



(EPA UCMR4 monitoring program)					
Dibromoacetic Acid (µg/L)	2/20/2020- 8/16/2022	0.453	0-0.788	N/A	N/A
(EPA UCMR4 monitoring program)					
Bromochloroacetic acid (µg/L)	2/20/2020- 8/16/2022	0.208	0-0.514	N/A	N/A
(EPA UCMR4 monitoring program)					
Dichloroacetic Acid (µg/L)	2/20/2020- 8/16/2022	0.101	0-0.4 02	N/A	N/A
(EPA UCMR4 monitoring program)					

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. 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.

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. Nitrates were not detected in excess of the MCL.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

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				

For Water Systems Providing Groundwater as a Source of Drinking Water

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	1/5/2022- 12/27/2022	0	(0)	Human and animal fecal waste
Enterococci	0	1/5/2022- 12/27/2022	TT	N/A	Human and animal fecal waste
Coliphage	0	1/5/2022- 12/27/2022	TT	N/A	Human and animal fecal waste



Summary Information for Fecal Indicator-Positive Groundwater Source Samples, Uncorrected Significant Deficiencies, or Violation of a Groundwater TT

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				