2021 Consumer Confidence Report

Water System Name: Stonyford	CSA 2 0600005	Report Date:	05/20/2022
We test the drinking water quality the results of our monitoring for the	for many constituents as required by period of January 1 - December 31		•
Este informe contiene informació entienda bien.	n muy importante sobre su agua	potable. Trad	úzcalo ó hable con alguien que lo
Type of water source(s) in use: G	roundwater (well#1, well#2)		
Name & general location of source(s): Colusa County CSA 2. Wells a Stony Creek ¼ mile west Co R		ant located ½ mile North of
Drinking Water Source Assessment	information: 11/16/2012 on file W	Vater Board Off	ice Redding Ca
Time and place of regularly schedule	ed board meetings for public particip	oation:	
For more information, contact: Columnia	usa County Dept. of Public Works	Phone: (530) 458-0466

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: State Board permission 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)

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 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, 5, and 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. 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 (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 mo.)	0	1 positive monthly sample ^(a)	0	Naturally present in the environment	
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	(In the year)	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive		Human and animal fecal waste	
E. coli (federal Revised Total Coliform Rule)	(In the year)	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 (complete if lead or copper detected in the last sample set)	Sample Date	No. of Sampl es Collec ted	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	06/17/2021	5	0.001	0	15	0.2	0	Internal corrosion of household water plumbing
								systems; discharges from
								industrial manufacturers;
								erosion of natural deposits
Copper (ppm)	06/17/2021	5	0.0675	0	1.3	0.3	0	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** Sample Level Range of **PHG MCL Typical Source of Contaminant Detected Detections** (and reporting units) Date (MCLG) 07/18/19 Sodium (ppm) 28 Salt present in the water and is none none generally naturally occurring 07/18/19 Hardness (ppm) 138 Sum of polyvalent cations present none none in the water, generally magnesium and calcium, and are usually naturally occurring TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD **PHG Chemical or Constituent** Level MCL Sample Range of (MCLG) **Typical Source of Contaminant** (and reporting units) Date Detected **Detections** [MRDL] [MRDLG] 07/18/19 Arsenic (ppb) ND 10 Naturally occurring 07/18/19 ND 1000 50 Aluminum (ppb) Leaching from rock and soil Barium (ppb) 07/18/19 ND 1000 100 Erosion of natural deposits 07/18/19 ND Fluoride (ppb) 1 Naturally occurring .1 Nitrate (mg/L) 7/16/20 0.6 10 10 Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD **Chemical or Constituent** Sample Level Range of PHG MCL **Typical Source of Contaminant Date Detected Detections** (MCLG) (and reporting units) Chloride (Cl) Mg/L 07/18/19 15 500 Run off leaching from natural n/a deposits 07/18/19 300 ND Leaching from natural deposits Iron (ppb n/a Manganese Mg/L 07/18/19 ND 50 n/a Leaching from natural deposits Specific Conductance US 07/18/19 1600 408 Negative and positively charged n/a Run off leaching from natural Sulfate Mg/L 07/18/19 8.3 500 n/a deposits Zinc (ppb) 07/18/19 ND 5000 n/a Erosion of rocks 7/18/19 Runoff/leaching from natural Total Dissolved Solids 240 1000 n/a [TDS] deposits TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS **Chemical or Constituent** Sample Level Range of **Notification Level Health Effects Language Date Detected Detections** (and reporting units)

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 for Community Water Systems: 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. Colusa County Dept. of Public Works 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 (1-800-426-4701) or at http://www.epa.gov/lead.

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

VIOLATION	N OF A MCL, MRDL, AL	, TT, OR MONITORING	AND REPORTING REQ	UIREMENT
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
No. 21-22C-002 Monitoring and Reporting Requirement	Failure to collect RAW water sample for Well #1	December 2021	Ensure lab personnel are able to take monthly samples or make other arrangement to get samples to lab.	No Health Effects. Raw water samples are taken before the water is treated.
No. 21-21N-012	Failure to Report a routine bacteriological sample in July 2021	July 2021	Ensure that new lab personnel are taking the correct lab samples	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful, bacteria may be present.

For Water Systems Providing Groundwater as a Source of Drinking Water

TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUNDWATER SOURCE SAMPLES					
Microbiological Contaminants (complete if fecal-indicator detected) Total No. of Detections Sample Dates MCL (MCLG) [MRDL] Typical Source of Contaminant Typical Source of Contaminant					
E. coli	(In the year)		0	(0)	Human and animal fecal waste

Enterococci	(In the year)	TT	n/a	Human and animal fecal waste
Coliphage	(In the year)	TT	n/a	Human and animal fecal waste

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

SPECIAL	NOTICE OF FECAL INI	DICATOR-POSITIVE GI	ROUNDWATER SOURCE	SAMPLE
<u> </u>				
	CDECIAL NOTICE FOR	LINICODDECTED CLOSU		
L.	SPECIAL NOTICE FOR	UNCORRECTED SIGN	IFICANT DEFICIENCIES)
I				
	VIOLA	TION OF GROUNDWA	TER TT	
			Actions Taken to Correct	Health Effects
TT Violation	Explanation	Duration	the Violation	
			the violation	Language

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES				
Treatment Technique ^(a) (Type of approved filtration technology used)				
Turbidity Performance Standards ^(b) (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to2 NTU in 95% of measurements in a month. 2 – Not exceed1_ NTU for more than eight consecutive hours. 3 – Not exceed5 NTU at any time.			
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%			
Highest single turbidity measurement during the year	.08			
Number of violations of any surface water treatment requirements				

Summary Information for Violation of a Surface Water TT

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

⁽b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

	VIOLAT	ION OF A SURFACE W	ATER TT	
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language

Summary Information for Operating Under a Variance or Exemption

Summary Information for Federal Revised Total Coliform Rule Level 1 and Level 2 Assessment Requirements

Level 1 or Level 2 Assessment Requirement not Due to an E. coli MCL Violation

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct 0 Level 1 assessment(s) 0 Level 1 assessment(s) were completed. In addition, we were required to take 0 corrective actions and we completed 0 of these actions.

During the past year 0 Level 2 assessments were required to be completed for our water system. 0 Level 2 assessments
were completed. In addition, we were required to take 0 corrective actions and we completed 0 of these actions.

Level 2 Assessment Requirement Due to an E. coli MCL Violation

E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely-compromised immune systems. We found *E. coli* bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) identify problems and to correct any problems that were found during these assessments.

We were required to complete a Level 2 assessment because we found *E. coli* in our water system. In addition, we were required to take 0 corrective actions and we completed 0 of these actions.