2022 Consumer Confidence Report

Water System Information

Water System Name: ELK CREEK COMMUNITY SERVICES DISTRICT

Report Date: June 30, 2023

Type of Water Source in Use: Surface water

Name and General Location of Source: Stony Gorge Reservoir

Drinking Water Source Assessment Information:
The ECCSD 2021 Watershed Sanitary Survey included the following potential sources of contamination to our source water in the Stony Gorge Reservoir:

1. Agricultural activities and livestock: contaminants resulting from farming and grazing in the Upper Stony Creek watershed could potentially run-off into Stony Creek and into the Stony Gorge Reservoir.

2. Recreational activities: Camping, boating, and other recreational activities on and around the Stony Gorge Reservoir, along with the vault toilets along the shore, are of concern and could potentially release contaminants into our water source.

3. Forest Fire: The long-term effects of the August Complex fire are yet to be determined. Fortunately, most of the burned area is downstream from the Stony Gorge Reservoir.

4. Sedimentation: Erosion caused by off-road use and dirt roads along the Stony Gorge Reservoir and in the Upper Stony Creek watershed could enter run-off into the streams and reservoir, thereby increasing sedimentation and/or potential sources of contamination.

5. Mine runoff: There are twelve mines within the Stony Creek Watershed, five of which are permanently closed. Of the seven active mines, only one is located upstream of the ECCSD and primarily focuses on sand and gravel production. There has been no reported influence on downstream surface water quality.

6. Landfill runoff: The Stonyford Disposal Site Landfill is the only disposal site within our watershed. The facility is unlined, permitted, inspected and monitored by CalRecycle. Colusa County Environmental Health Dept monitors wells for contaminants. The wells have revealed no indication of leaching or methane that could be of risk to our water quality.

7. Timber harvesting within our watershed has not occurred since 2012 and there is little current threat to water quality from past activities.

Time and Place of Regularly Scheduled Board Meetings for Public Participation:

Regular meetings are held on the second Thursday of every month at 6:00 pm at the Elk Creek Fire Hall, 2740 County Road 306, Elk Creek, CA 95939.

For More Information, Contact: Sharon Green, Board President, (530) 519-7631

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, 2022, and may include earlier monitoring data.

Availability of This Report Statement in Spanish

Language in Spanish: Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse [Enter Water System's Name] a [Enter Water System's Address or Phone Number] 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.
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

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
Total Coliform Bacteria (State Total Coliform Rule)	1 Detection in 2022	0	1 postive monthly sample(a)	(0)	Naturally present in the environment
Fecal Coliform or *E. coli* (State Total Coliform Rule)	No Detections in 2022	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 (State Revised Total Coliform Rule)	No Detections in 2022	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.

During the year, our system reported no coliform of E. coli violations.

Table 2. Sampling Results Showing the Detection of Lead and Copper

Complete if lead or copper is detected in the last sample set.

Lead and Copper	Sample Date	No. of Samples Collected	90th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ug/L)	6/25/2021	5	0	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (mg/L)	6/25/2021	5	0	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)	2014	24		None	None	Salt present in the water and is generally naturally occurring
Hardness (mg/L)	2014	166		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
Aluminum (mg/L)	2014	0.27		1	0.6	Erosion of natural deposits; residue from some surface water treatment processes.
Arsenic (ug/L)	2014	8		10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.
Asbestos (MFL)	2020	1		7	7	Internal corrosion of asbestos cement water mains; erosion of natural deposits.
Barium (mg/L)	2014	0.1		1	2	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits.
Chromium [Total] (ug/L)	2014	2		50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Gross Alpha Particle Activity (pCi/L)	2015	0.22		15	(0)	Erosion of natural deposits.
Nickel (ug/L)	2014	3		100	12	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits.
Radium 228/Radium 228 MDA95 (pCi/L)	2020	0.446		5	0	Erosion of natural deposits.

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
TTHMs [Total Trihalomethanes] (µg/L) 211 Bidwell	11/10/22	79	24-76	80	N/A	Byproduct of drinking water disinfection.
TTHMs [Total Trihalomethanes] (µg/L) 300 San Hedron	11/10/22	79	28-92	80	N/A	Byproduct of drinking water disinfection.
HAA5 [Sum of 5 Haloacetic Acids] (µg/L) 211 Bidwell	11/10/22	25	10-33	60	N/A	Byproduct of drinking water disinfection.
HAA5 [Sum of 5 Haloacetic Acids] (µg/L) 300 San Hedron	11/10/22	26	9-28	60	NA/	Byproduct of drinking water disinfection.

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)	2014	27		500	N/A	Runoff/leaching from natural deposits; seawater influence.
Color (Units)	2018	5		15	N/A	Naturally occurring organic materials.
Iron (ug/L)**	2014	383*	60-1010	300	N/A	Leaching from natural deposits; industrial waste.
Manganese (ug/L)**	2022	169*	0-560	50	N/A	Leaching from natural deposits.
Specific Conductance (uS/cm)	2014	431		1600	N/A	Substances that form ions when in water; seawater influence.
Sulfate (mg/L)	2014	6.8		500	N/A	Runoff/leaching from natural deposits; industrial wastes.
Total Disolved Solids-Inorganic Metals (mg/L)	2019	210		1000	N/A	Runoff/leaching from natural deposits.

* See Table 7 for additional Secondary Violation information

** Primarily due to the drought, our system experienced high levels of manganese in our source water for much of 2022. Our district has been diligently monitoring the situation and has adjusted treatment processes to reduce this secondary contaminant. Our district is currently in the process of performing numerous upgrades to our system, which will improve our treatment processes. Iron has not been an issue lately.

There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetic concerns.

Table 6. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects
N/A					

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).

Additional Special Language for Nitrate, Arsenic, Lead, Radon, and Cryptosporidium:

Arsenic: While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Lead: 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 Elk Creek 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 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.

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
Iron Secondary MCL Violation	Our source water naturally contains high levels of iron.	July 2014	Treatment processes were adjusted.	Iron was found at levels that exceed the secondary MCL of 300 µg/L. The iron MCL was set to protect you against unpleasant aesthetic effects (e.g., color, taste, and odor) and the staining of plumbing fixtures (e.g., tubs and sinks) and clothing while washing. The high iron levels are due to leaching of natural deposits
Manganese Secondary MCL Violation	Primarily due to the drought, our system experienced high levels of manganese in our source water for much of 2022.	January, March, June, July, August, September, and October of 2022	Treatment processes were adjusted. The district is currently planning numerous treatment plant upgrades to address	Manganese exposure can result in neurological effects. High levels of manganese in people have been shown to result in adverse health effects to the nervous system.

For Water Systems Providing Groundwater as a Source of Drinking Water

Sections 8 & 9 have been omitted as they apply only to water systems that source their water from wells.

For Systems Providing Surface Water as a Source of Drinking Water

Table 10. Sampling Results Showing Treatment of Surface Water Sources

Treatment Technique [a] (Type of approved filtration technology used)	Adsorption clarifier/filtration with disinfection and metals removal.
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 to .3 NTU in 95% of measurements in a month. 2 – Not exceed N/A NTU for more than eight consecutive hours. 3 – Not exceed 1.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	0.525 NTU
Number of violations of any surface water treatment requirements	None

(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.

Summary Information for Violation of a Surface Water TT

Table 11. Violation of Surface Water TT

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
None				