



2019 Consumer Confidence Report for San Joaquin County Water Systems

What is this report?

This report, prepared in cooperation with the State Water Resources Control Board, provides important information about San Joaquin County water systems and water quality. Test results for your water system's 2019 Water Quality Monitoring Program are summarized starting on Page 4 of this report. Before reviewing this water quality information, it is helpful to read the messages from the United States Environmental Protection Agency (USEPA) and from the San Joaquin County Department of Public Works Utilities Maintenance Division.

Where does drinking water come from?

Drinking water (both tap and bottled) can come from a variety of sources like 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.

What is drinking water quality?

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 (800-426-4791) or by emailing safewater@epa.gov. You can also visit their website at www.epa.gov/sdwa

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 healthcare 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 (800-426-4791)

How is safe and affordable water delivered?

The San Joaquin County Department of Public Works Utility Maintenance Division is committed to the delivery of safe and affordable drinking water to approximately 6,000 service connections within San Joaquin County. This essential service is critically important to the current and future prosperity of our region. To meet customer needs, the County largely depends on groundwater for its water supply, which is pumped by domestic water wells.

The County operates and maintains the following:

- ✓ 52 domestic water wells with appurtenances
- ✓ 66 miles of water distribution systems
- ✓ 30 independent water systems

What are Drinking Water Standards?

The United States Environmental Protection Agency (USEPA) and the State Water Resources Control Board (SWRCB) are charged with the responsibility of setting and implementing safe drinking water standards. Well over one hundred compounds are now regulated. In order to ensure that tap water is safe to drink, the USEPA and the SWRCB prescribe certain regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

What about Lead in drinking water?

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. San Joaquin County Utility Maintenance 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: 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 (800-426-4701) or at www.epa.gov/lead.

Below are the current watering guidelines for County districts.
These have not changed since July 3, 2017

If your house number ends in:	Then you may water on:
an EVEN number (0, 2, 4, 6, 8)	Wednesday and/or Friday and/or Sunday
an ODD number (1, 3, 5, 7, 9)	Tuesday and/or Thursday and/or Saturday
Watering is prohibited between the hours of 11:00 AM and 6:00 PM Watering is not permitted on Mondays	

COUNTY MAINTENANCE WORKERS ALWAYS WEAR TAN SHIRTS WITH THE COUNTY LOGO, DRIVE COUNTY VEHICLES, AND CARRY COUNTY I.D.

If you have questions about anything contained in this document, want a hard copy of this document mailed to you, or want to report a water leak or sewer stoppage, please call (209) 468-3090

TERMS USED IN THE FOLLOWING REPORT	
AL	Regulatory Action Level
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MFL	Million fibers per liter
MRDL	Maximum Residual Disinfectant Level
MRDLG	Maximum Residual Disinfectant Level Goal
Mrem/year	Millirems per year (a measure of radiation absorbed by the body)
N/A	Not applicable
NTU	Nephelometric Turbidity Units
pCi/L	Picocuries per liter (a measure of radioactivity)
PHG	Public Health Goal
Ppb	Parts per billion, or micrograms per liter (µg/L)
Ppm	Parts per million, or milligrams per liter (mg/L)
Ppt	Parts per trillion, or nanograms per liter (ng/L)
Ppq	Parts per quadrillion, or pictograms per liter (pg/L)
TT	Treatment Technique

Water System Name: Flag City Water System CSA 31

Report Date:

Type of Water Source(s) in Use: **Groundwater wells**

6/2020

Name of Source(s) in Use: **Wells #1, #2 and #3**

Table #1: Sampling Results Showing Detection of Coliform Bacteria

MICROBIOLOGICAL CONTAMINANTS	HIGHEST NO. OF DETECTIONS	NO. of MOS. In VIOLATION	MCL	MCLG	TYPICAL SOURCE OF BACTERIA
Tot. Coliform Bacteria	0	0	>1	0	Naturally present in environment.
Fecal Coliform and <i>E. coli</i>	0	0	>1	0	Human and animal fecal waste.

Table #2: Sampling Results Showing Detection of Lead and Copper

LEAD and COPPER	SAMPLE DATE	NO. of SAMPLES	90TH Percentile LEVEL	NO. SITES >AL	AL	MCLG	TYPICAL SOURCE OF CONTAMINANT
Lead (ppb)	2017	5	0	0	15	2	Internal corrosion of household water plumbing systems; discharge from industrial manufacturers; erosion of natural deposits
Copper (ppb)	2017	5	248.5	0	1300	170	Internal corrosion of household water plumbing systems; discharge from industrial manufacturers; erosion of natural deposits; leaching from wood preservatives

Table #3: Sampling Results Showing Detection of Sodium and Hardness

CHEMICAL OR CONSTITUENT	SAMPLE DATE	LEVEL DETECTED	RANGE OF DETECTIONS	MCL	PHG (MCLG)	TYPICAL SOURCE OF CONTAMINANT
Sodium (ppm)	2019	58		NONE	NONE	Generally found in ground and surface water
Hardness (ppm)	2019	280		NONE	NONE	Generally found in ground and surface water
Calcium (ppm)	2019	66		NONE	NONE	Generally found in ground and surface water
Magnesium (ppm)	2019	28		NONE	NONE	Generally found in ground and surface water
Potassium (ppm)	2019	3		NONE	NONE	Generally found in ground and surface water
Total Alkalinity (ppm)	2019	320	320	NONE	NONE	Generally found in ground and surface water

Table #4: Detection of Contaminants with a PRIMARY Drinking Water Standard

CHEMICAL OR CONSTITUENT	SAMPLE DATE	LEVEL DETECTED	RANGE OF DETECTIONS	MCL	PHG (MCLG)	TYPICAL SOURCE OF CONTAMINANT
Gross Alpha Activity (pCi/L)	2019	*19.49	.846 - 29.2	15	N/A	Erosion of natural deposits.
Uranium (pCi/L)	2019	13.54	.457 - 20.9	20	1	Erosion of natural deposits.
Arsenic	2019	5*	5	10	0.004	Erosion of natural deposits; run-off from orchards; glass and electronics production wastes.
Barium (ppb)	2019	201	201	1000	2	Oil drilling and metal refinery waste discharge; erosion of natural deposits.
Chromium (ppb)	2017	14		50	2.5	Discharge from steel & pulp mills & chrome plating; erosion of natural deposits.
Fluoride (ppm)	2019	0.1	.1	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as N (ppm)	2019	7.02*	ND - 12.3	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
TTH(ppb) Total Trihalomethanes	2017	2		80	N/A	By-product of drinking water chlorination.
HAA5 (ppb)	2017	2		60		By-product of drinking water chlorination.
Chlorine as Cl2 (ppm)	2019	0.41	0.1 - 1.0	4.0	4.0	Drinking water disinfectant added for treatment.

Table #5: Detection of Contaminants with a SECONDARY Drinking Water Standard

CHEMICAL OR CONSTITUENT	SAMPLE DATE	LEVEL DETECTED	RANGE OF DETECTIONS	MCL	PHG (MCLG)	TYPICAL SOURCE OF CONTAMINANT
Copper (ppm)	2016	20		1000	N/A	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Corrosivity	2018	0.4		Non-corrosive	N/A	Natural or industrially influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors.
Total Dissolved Solids (TDS)	2019	460		1000	N/A	Run-off /leaching from natural deposits.
Specific Conductance	2019	927.54	809 - 1070	1600	N/A	Substances that form ions when in water, seawater influence.
Chloride (ppm)	2019	35		500	N/A	Substances that form ions when in water, seawater influence.
Sulfate (ppm)	2019	28		500	N/A	Leaching from natural deposits; industrial wastes.

Table #6: Detection of UNREGULATED Contaminants

CHEMICAL OR CONSTITUENT	SAMPLE DATE	RANGE OF DETECTIONS	NOTIFICATION LEVEL	HEALTH EFFECTS LANGUAGE
Vanadium (ppb)	2019	15	50	The babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increased risk of developmental defects (based on studies in laboratory animals).

Drinking water is tested for quality for many constituents as required by State and Federal regulations. This report shows the results of our monitoring for the period of Jan. 1 thru Dec. 31, 2019, or for the period as noted.

* Any violation of an MCL or AL is asterisked. Additional information concerning the violation is provided below.

Summary Information for Contaminants Exceeding an AL

Arsenic levels above 5 (ppb), the Action Level (AL), requires that you be notified by the following statement:*

While your drinking water meets the current standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The California Department of Health Services 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 other circulatory problems.

Nitrate levels above 5 (ppm), the Action Level (AL), requires that you be notified by the following statement:*

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 a 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 certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

***Gross Alpha:**

Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Drinking Water Source Assessment Information: A source water assessment for the wells of the Flag City CSA 31 PWS water system was completed in July 2002. The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply: Known contaminant plumes. The source is considered most vulnerable to the following activities not associated with any detected contaminants: Automobile (gas stations), Historic gas stations, Underground storage tanks (confirmed leaking tanks), and Wastewater treatment plants.

A copy of the complete assessment is available at:

San Joaquin County, Environmental Health Department
1868 East Hazelton Avenue, Stockton, CA 95202

You may request a summary of the assessment be sent to you by contacting:

Small Public Water Systems, San Joaquin County Environmental Health Department, (209) 468-3420