

# 2018 CONSUMER CONFIDENCE REPORT FOR SAN JOAQUIN COUNTY WATER SYSTEMS

## ***What is in this report?***

This Report, prepared in cooperation with the California Department of Health Services, provides important information about San Joaquin County water systems and water quality. Test results for your water system's 2018 Water Quality Monitoring Program are summarized on page 3 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.

## ***Delivering Safe and Affordable Water***

The San Joaquin County Department of Public Works Utilities 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***



## ***Drinking Water Quality in San Joaquin County***

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).

***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.

## ***About Drinking Water Standards***

The United States Environmental Protection Agency and the California Department of Health Services 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 CDHS 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.

## ***Lead In 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: 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>.

## 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)

Watering guidelines have not changed since July 3, 2017. The current watering days are listed below:

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

If you have any questions about anything mentioned in this document or if you would like a hard copy of your CCR mailed to your home address, you can call (209) 468-3090 or email [specialdistricts@sjgov.org](mailto:specialdistricts@sjgov.org) for assistance.



*Your maintenance workers wear tan shirts with the  
Public Works Logo on them and they all carry County ID.  
If you have questions about people working on water in your area  
or to report sewer stoppages or water leaks,  
Please call (209) 468-3090*

**Water System Name: Thornton Water System CSA 12****Report Date:****Type of Water Source(s) in Use: Groundwater wells****6/2019****Name of Source(s) in Use: Wells #1 and #2****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			>1	0	Naturally present in environment.
Fecal Coliform and <i>E. coli</i>			>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)	2018	10	0	0	15	2	Internal corrosion of household water plumbing systems; discharge from industrial manufacturers; erosion of natural deposits
Copper (ppb)	2018	10	79	0	1300	170	Internal corrosion of household water plumbing systems; discharge from industrial manufacturers; erosion of natural deposits; leeching 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)	2016	80.7	68 - 81	NONE	NONE	Generally found in ground and surface water
Hardness (ppm)	2016	95.9	88.5 - 96	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
Arsenic	2016	7.9		10	0.004	Erosion of natural deposits; run-off from orchards; glass and electronics production wastes.
Barium (ppb)	2016	119		1000	2	Oil drilling and metal refinery waste discharge; erosion of natural deposits.
Nickel (ppb)	2016	2.99		100	100	Erosion of natural deposits; discharge from metal factories.
TTH(ppb) Total Trihalomethanes	2018	12.5	12 - 13	80	N/A	By-product of drinking water chlorination.
HAA5 (ppb)	2018	3		60		By-product of drinking water chlorination.
Chlorine as Cl2 (ppm)	2018	0.95	0.5 - 1.5	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
Corrosivity	2016	0.199		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)	2016	299		1000	N/A	Run-off /leaching from natural deposits.
Specific Conductance	2016	547		1600	N/A	Substances that form ions when in water, seawater influence.
Chloride (ppm)	2016	34.9		500	N/A	Substances that form ions when in water, seawater influence.
Turbidity (units)	2016	0.4		N/A	N/A	Soil run-off.
Iron (ppb)	2016	140		300	N/A	Substances that form ions when in water; industrial wastes
Manganese (ppb)	2016	119*		50	N/A	Leaching from natural deposits.

**Table #6: Detection of UNREGULATED Contaminants**

CHEMICAL OR CONSTITUENT	SAMPLE DATE	RANGE OF DETECTIONS	NOTIFICATION LEVEL	HEALTH EFFECTS LANGUAGE
Boron (ppb)	2016	400 - 900	1000	The babies of some pregnant women who drink water containing boron 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, 2018, or for the period as noted.

\*Summary Information for Contaminants Exceeding an MCL

#### Manganese MCL violation

Manganese was found at levels that exceed the Secondary MCL of 50 ug/L. The manganese MCL was set to protect you against unpleasant aesthetic effects such as color, taste, odor and the staining of plumbing fixtures (e.g., tubs and sinks), and clothing while washing. The high manganese levels are due to leaching of natural deposits. The Thornton PWS water system currently treats the water with a sequestering agent (AQUAMAG) to reduce the unpleasant effects of high manganese.

**Drinking Water Source Assessment Information:** An assessment of the drinking water sources for San Joaquin County – Thornton water system was completed in March 2001. The sources are considered most vulnerable to the following activities: historic gas stations, known contaminant plumes, septic systems, and confirmed leaking underground tanks.

*A copy of the complete assessment is available at:*

Department of Health Services, Drinking Water Field Operations Branch

Stockton District Office, 31 E. Channel Street, Room 270, Stockton, California 95202,

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

Robert Lapp, at (209) 948-3816