



CITY OF GUSTINE

Consumer Confidence Report Calendar Year 2019

Created June 2020

*Este informe contiene información muy importante sobre su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

*Este informações importantes sobre a sua água potável. Traduza-lo, ou falar com alguém que understands-lo.

As a consumer you have right to know the quality of your drinking water. *In order to ensure that tap water is safe to drink the, U.S. Environmental Protection Agency (USEPA) 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.* This report is produced by the City providing information on sources and quality of water, regulations that protect your health, and the treatment of your water to ensure your drinking water meet or surpass all federal and state water quality standards.

Community Participation/ Questions

For more information about this report or for any questions relating to your drinking water, please call the Public Works Department at 209-854-6471. The City Council meets every first and third Tuesday of the month starting at 6:30 pm, located at 352 Fifth Street. The public is encouraged to attend Council meetings to express any comments.

About the Source

The sources of drinking water (both tap 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 presences of animals or from human activity.

City of Gustine's Sources

The City's water is supplied from four deep ground water wells located throughout the city. The system is maintained by State certified operators who have numerous years of experience with water systems.

A Source Water Assessment was completed in March 2003. The sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: animal feeding operations, lagoons/liquid waste, fertilizers/herbicides/pesticides applications, and sewer collection systems. In addition, the sources are considered most vulnerable to: automobile – gas stations, dry cleaners, known contaminated plumes, and leaking underground storage tanks. Copies of the complete assessment are available at the State Water Resources Control Board field office (559) 447-3300 or www.waterboards.ca.gov

The City's water supply is disinfected using chlorine in the form of sodium hypochlorite at an average chlorine residual of **.79 mg/L** (parts per million).

The City monitors current research and regulations on drinking water and enforces the Backflow Prevention and Cross-Connections Program to ensure safe drinking water.

How to Reduce your Bill?

There are many tricks to lowering your water consumption which can reduce your bill.

- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for about 15 minutes to see if the color shows up in the bowl. Fix it and you may be able to save 200 gallons a day or more.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter, after two (2) hours check it again. If it has moved then you have a leak.

<http://www.epa.gov/watersense/>

Lead & Nitrate Specific Information

** If lead is 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 City of Gustine 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 two (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 Water Drinking Water Hotline or at <http://www.wpa.gov/safewater/lead>*

** Nitrate in drinking water at levels above 45 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 45 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.*

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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. USEPA/Center 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)

What Could Be in Water?

- 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 storm water 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 storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum productions, and can also come from gas stations, urban storm water runoff, agriculture applications, and septic systems.
- Radioactive contaminants that can be naturally-occurring or be the result of oil and gas production and mining activities.

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at (1-800-426-4791).

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 Water 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.

Table 1 Sampling Results Showing The Detection of Coliform Bacteria

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Sources of Bacteria
Total Coliform Bacteria (State Total Coliform Rule)	(In a mo.) 0	0	1 positive monthly sample (a)	0	Naturally present in the environment
Fecal Coliform or E. coli (State Total Coliform Rule)	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or E. coli	0	Human and animal fecal waste
E. coli (Federal Revised Total Coliform Rule)	(In the year) 0	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 (and reporting units)	Sample Date	No of Samples Collected	90th % Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	2019	20	< 5	0	15	.2	0	Internal corrosion of household water plumbing systems; discharge from industrial manufactures; erosion of natural deposits
Copper (ppm)	2019	20	0.13	0	1.3	0.3	0	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservations

Table 3 – Sampling Results for Hardness and Sodium

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Hardness (ppm)	2017-2019	389	280-506	None	None	Hardness is the sum of polyvalent cations present in the water, generally magnesium and calcium.
Sodium (ppm)	2017-2019	126	73-240	None	None	Sodium refers to the salt present in the water and is generally naturally occurring

Table 4 Detection of Contaminants With A Primary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Nitrate NO3 (ppm)	2019	6	3 - 9	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Gross Alpha (pCi/L)	2014-2018	< 3	< 3 - 3	15	(0)	Erosion of natural deposits
Arsenic (ppb)	2017-2019	< 2	< 2 - 2	10	.004	Erosion of natural deposits; runoff from orchards; glass and electronics production waste
Chromium (ppb)	2017-2019	< 10	< 10 - 11	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Selenium (ppb)	2017-2019	< 5	< 5 - 6	50	30	Discharge from petroleum, glass and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Fluoride (ppm)	2017-2019	0.1	< 0.1 - 0.2	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilitics and aluminum factories

- *n/a indicates only one sample was taken so there is not range of detections
- ** There are no PHGs, MCLGs for these constituents.

Table 5 Detection of Contaminants With a Secondary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Range of Detection	Average Level Detected	SMCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	2017-2019	81 – 270	162	500	n/a**	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	2017-2019	127 – 200	156	500	n/a**	Runoff/leaching from natural deposits; industrial wastes
Specific Conductance (umho/cm)	2017-2019	940-1600	1221	1600	n/a**	Substance that form ions when in water; seawater influences
Total Dissolved Solids (ppm)	2017-2019	591-900	761	1000	n/a**	Runoff/leaching from natural deposits
Turbidity (Units)	2017-2019	0.1 – 0.4	0.3	5	n/a**	Soil Runoff; Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.
Color (Units)	2017-2019	< 5 - 5	< 5	15	n/a**	Naturally-occurring organic materials

Definitions/Abbreviations

- **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.
- **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.
- **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.
- **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.
- **Variations and Exemptions:** State Board permission 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:

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day?

Small changes can make a big difference-try one and soon it will become second nature.

Water plants only when necessary. Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.

A 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath. Use a water efficient showerhead. They can save you up to 750 gallons a month. Shut off water while brushing your teeth washing your hair and shaving can save up to 500 gallons a month.