

Consumer Confidence Report

Calendar Year 2014

Created May 2015

***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 contaminates 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 **.56 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/*

City of Gustine

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

**\*Este informações importantes sobre a sua água potável. Traduzi-lo, ou falar com alguém que understans-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.

***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.

***What Could Be in Water?***

***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 minimized 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 minimized 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)*

* 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).*

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| **Primary Drinking Water Standard** |
| **Constituent** | **Year** | **Range of Detection** | **Average** | **MCL** | **PHG (MCLG)** | **Typical Source of Contaminant** |
| Fluoride (ppm) | 2013 | n/a | .1 | 2 | 1 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilities and aluminum factories |
|  Nickel (ppb) | 2007-2008 | <5-5 | 5 | 100 | 12 | Erosion of natural deposits; discharge from metal factories |
| Nitrate (ppm) | 2014 | 8.0-34.3 | 23.94 | 45 | 45 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |
| Gross Alpha (pCi/L) | 2014 | n/a\* | 4.42 | 15 | (0) | Erosion of natural deposits |
| Aluminum(ppm) | 2011 | n/a \* | .05 | 1 | 0.6 | Erosion of natural deposits |
| Arsenic (ppb) | 2011 | n/a\* | 2 | 10 | .004 | Erosion of natural deposits; runoff from orchards; glass ad electronics production waste |
| Total Chromium (ppb) | 2011 | n/a\* | 18 | 50 | (100) | Discharge from steel and pulp mills and chrome plating; erosion of natural deposits |
| Chromium, Hexavalent (ppb) | 2014 | 1.8-9.7 | 7.35 | 10 | .02 | Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits |
| TTHMs (Total Trihalomethanes) (ppb) | 2014 | 1.3-2.7 | 2.0 | 80 | n/a\*\* | By-product of drinking water disinfection |
| HAA5 (Haloacetic Acids) (ppb) | 2014 | <2.0-2.1 | 1.0 | 60 | n/a\*\* | By-product of drinking water disinfection |
| Chlorine(ppm) | 2014 | .16-1.3 | .56 | 4 | 4 | Drinking water disinfectant added for treatment |

* \*n/a indicates only one sample was taken so there is not range of detections

***The following tables list all the drinking water contaminants that were detected during the most recent sampling for the constituents. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department of Public Health requires us to monitor for certain contaminants less than once a year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old.***

* \*\* There is no Public Health Goal

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| **Secondary Drinking Water Standard** |
| **Constituent** | **Year** | **Range of Detection** | **Average** | **MCL** | **PHG (MCLG)** | **Typical Source of Contaminant** |
| Chloride (mg/L) | 2014 |  134-273 | 228 | 500  | n/a | Runoff/leaching from natural deposits; seawater influence |
| Iron (ug/L) | 2014 | <100-270 | 175 | 300  | n/a | Leaching form natural deposits; industrial waste |
| Sulfate (ppm) | 2014 | 125-262 | 181 | 500  | n/a | Runoff/leaching from natural deposits; industrial wastes |
| Specific Conductance (µS/cm) | 2014 | 1248-1405 |  1350 | 1600  | n/a | Substance that form ions when in water; seawater influences |
| Total Dissolved Solids (ppm) | 2011 | 876-1170 | 1023 | 1000  | n/a | Runoff/leaching from natural deposits |
| Turbidity (Units) | 2014 | .34-2.6 | 1.47 | 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) | 2011 | n/a | 10 | 15 | n/a | Naturally-occurring organic materials |

* \*n/a indicates only one sample was taken so there is not range of detections

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* \*\* There are no PHGs, MCLGs for these constituents.

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.

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| **Microbiological Contaminates** |
| **Contaminants** | **Number of Detections** | **Months in Violation** | **MCL** | **MCLG** | **Typical Source of Contaminant** |
|  Total Coliform bacteria | 0 | 0 | More than one (1) sample in a month with a detection | 0 | We are required to monitor your drinking water for specific contaminants on a regular basis.  Results of regular monitoring are an indicator of whether or not our drinking water meets health standards.  Naturally present in the environment |
| Fecal Coliform or E. Coli | 0 | 0 | A routine sample and a repeat sample detected total coliform and either resample also detects fecal coliform or *E. Coli* | 0 | Human and animal fecal waste |
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| **Results for Lead and Copper 2012** |
| **Constituents** | **No of samples collected** | **90th Percentile Level Detected** | **Sites exceeding AL** | **Al** | **PHG** | **Typical Source of Contaminant** |
| Lead (ppm) | 20 | <.005 | 0 | 15 | 2 | Internal corrosion of household water plumbing systems; discharge from industrial manufactures; erosion of natural deposits |
| Copper (ppm) | 21 | 0.19 | 0 | 1 | 0.2 | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservations |
|  **Hardness and Sodium**  |
| **Constituents** | **Year** | **Level Detected** | **Range of detections** | **MCL** | **PHG** | **Typical Source of Contaminant** |
| Hardness (ppm) | 2014 | 419.2 | 343.7-556.8 | n/a | n/a | Hardness is the sum of polyvalent cations present in the water, generally magnesium and calcium. |
| Sodium (ppm) | 2014 | 146 | 81-260 | n/a | n/a | Sodium refers to the salt present in the water and is generally naturally occurring |

***Definitions/Abbreviations***

* **Maximum Contamination Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set at close to the PHGs (or MCLG) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.
* **Primary Drinking Water Standards (PDWS):** MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
* Secondary Drinking Water Standards (SWDS): MCLs for contaminants that effect taste, odor or appearance of the drinking water. Contaminants with SDWS do not affect the health at the MCL levels.
* **ND:** not detectable at testing limit
* **ppm:** part per million or milligrams per liter (mg/L)
* **ppb:** parts per billion or micrograms per liter (ug/L)
* **ppt:** parts per trillion or nanograms per liter (ng/L)
* **pCi/L:** Picocuries per liter ( a measure of radiation)
* **Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk health. PHGs are set by the California Environmental Protection Agency.
* **Maximum Contaminant Level goal (MCLG):** The level of a contaminant in drinking water below which there is known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).
* **Maximum Residual Disinfectant Level (MRDL):** The level of a disinfectant added for water treatment that may not be exceeded at the consumer’s tap.
* **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a disinfectant added for water treatment below which there is no know or expected risk to health. MRDLGs are set by the USEPA.
* **Regulatory Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.