

2016 Consumer Confidence Report

Water System Name: San Juan Bautista Water System Report Date: May 22, 2017

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 - December 31, 2016 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use: Groundwater

Name & general location of source(s): Wells 1, 2 and 3 are located near the southeast end of the City. In 2016, Wells 1 and 2 provided all of the water to the City. Well 3 is a standby water source and supplied no water to the City in 2016.

Drinking Water Source Assessment information: Source water assessments were completed by DDW in March 2002 for wells 2 and 3 and for well 1 by Bracewell Engineering in 2007. The wells are considered most vulnerable to the following activities associated with contaminants detected in the water supply: Wells – Agricultural/ Irrigation; Crops, irrigated; Fertilizer, Pesticide/ Herbicide Application; Grazing; Other animal operations; Septic systems – high density; Septic systems – low density; and Sewer collection systems. The wells are also considered vulnerable to the following activities associated with any detected contaminants: Automobile – repair shop; Farm machinery repair; Fleet/Truck/Bus terminals; Junk/Scrap/Salvage yards; Machine shops; Utility stations – maintenance areas; Underground storage tanks – confirmed leaking tanks. A copy of the complete assessment may be viewed at: Water Resources Control Board, Drinking Water Division Operations Branch, 1 Lower Ragsdale, Building 1, Suite120, Monterey, CA 93940 or at: San Juan Bautista City Hall, 311 Second Street, San Juan Bautista, CA 95045

Time and place of regularly scheduled board meetings for public participation: City Council Meetings are held the third Tuesday of each month.

For more information, contact: City Clerk Phone: (831) 623-4661

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 (USEPA).

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

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.

Variations 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

(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.

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)

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 by-products 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.

In order to ensure that tap water is safe to drink, the 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.

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 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

| Microbiological Contaminants (complete if bacteria detected) | Highest No. of Detections | No. of months in violation | MCL | MCLG | Typical Source of Bacteria |
|---|------------------------------|-------------------------------|--|------|--------------------------------------|
| Total Coliform Bacteria (state Total Coliform Rule) | (In a mo.) 0 | 0 | 1 positive monthly sample | 0 | Naturally present in the environment |
| Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule) | (In the year) 0 | 0 | A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive | 0 | Human and animal fecal waste |
| <i>E. coli</i> (federal Revised Total Coliform Rule) | (from 4/1/16-12/31/16) 0 | 0 | (a) | 0 | Human and animal fecal waste |

(a) 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 (complete if lead or copper detected in the last sample set) | Sample Date | No. of samples collected | 90 th percentile level detected | No. sites exceeding AL | AL | PHG | Typical Source of Contaminant |
|--|----------------|--------------------------------|---|---------------------------|-----|-----|---|
| Lead (ppb) | 2013 | 10 | ND | 0 | 15 | 0.2 | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm) | 2013 | 10 | 0.200 | 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 (ppm) | 2014 | 56.5 | 49-64 | none | none | Salt present in the water and is generally naturally occurring |
| Hardness (ppm) | 2014 | 411 | 353-469 | none | none | Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring |

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

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 |
|--|----------------|-------------------|---------------------|---------------|--------------------------|---|
| Fluoride (ppm) | 2014 | 0.43 | 0.39 - 0.46 | 2 | 1 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate (ppm as nitrogen, N) | 2016 | 3.2 | 1.84-7.32 | 10 | 10 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |

RADIOACTIVE CONTAMINANTS

| | | | | | | |
|---------------------|------|------|--|----|------|-----------------------------|
| Gross Alpha (pCi/L) | 2016 | 6.36 | | 15 | (0) | Erosion of natural deposits |
| Uranium (pCi/L) | 2016 | 1.80 | | 20 | 0.43 | Erosion of natural deposits |

DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BYPRODUCT PRECURSORS

| | | | | | | |
|------------------------------------|------|-------|-------------|----|-----|---|
| Haloacetic Acids (ppb) | 2016 | 5.47 | 4.8-6.14 | 60 | N/A | By-product of drinking water disinfection |
| TTHMs (Total Trihalomethanes)(ppb) | 2016 | 11.18 | 11.12-11.23 | 80 | N/A | By-product 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 | MCL | PHG (MCLG) | Typical Source of Contaminant |
|--|----------------|----------------|---------------------|-----|---------------|----------------------------------|
|--|----------------|----------------|---------------------|-----|---------------|----------------------------------|

| | | | | | | |
|---|------|------|---------------|------|-----|---|
| Chloride (ppm) | 2014 | 81 | 75 - 87 | 500 | N/A | Runoff/leaching from natural deposits; seawater influence |
| Sulfate (ppm) | 2014 | 105 | 80 - 130 | 500 | N/A | Runoff/leaching from natural deposits; industrial wastes |
| Specific Conductance ($\mu\text{mho/cm}$) | 2016 | 1050 | 1000-1100 | 1600 | N/A | Substances that form ions when in water; seawater influence |
| Total Dissolved Solids [TDS] (ppm) | 2014 | 510 | 620 – 800 | 1000 | N/A | Runoff/leaching from natural deposits |
| Turbidity (NTU) | 2014 | 0.36 | < 0.10 – 0.62 | 5 | N/A | Soil runoff |

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 USEPA'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. USEPA/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).

Lead-Specific Language for Community Water Systems: 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 Juan Bautista Water System 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 or at <http://www.epa.gov/lead>.

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