

ANNUAL DRINKING WATER QUALITY REPORT

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our source water comes from 3 wells providing ground water from the 400 foot and 1 well from the 900 foot/deep aquifer.

A source water assessment was conducted for the CCSD System in December 2001. The source considered most vulnerable to the following activities associated with contaminants detected in the water supply is salt water intrusion. In addition, the source is considered most vulnerable to agriculture activities and sewer collection systems.

"While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency 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 circulatory problems."



INFORMATION



All 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 Environmental Protection Agency's Safe Drinking Water Hotline at 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 before we treat it 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 storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which 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, 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. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

CONTAMINANTS IN DRINKING WATER



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. EPA/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).

We invite you to attend any of our regular scheduled Board meetings, held on the third Tuesday of each month at 4:30 pm at the District office located at 11499 Geil Stret, Castroville, CA 95012 or contact General Manager Eric Tynan at (831) 633-2560. Website: CastrovilleCSD.org



Castroville Community Services District

2016 Annual Water Quality Report



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.

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

USEFUL TERMS & DEFINITIONS

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

- ◆ **Non-Detects (ND)** - laboratory analysis indicates that the constituent is not present.
- ◆ **Parts per million (ppm) or Milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000
- ◆ **Parts per billion (ppb) or Micrograms per liter (ug/L)** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- ◆ **Parts per trillion (ppt) or Nanograms per liter (nanograms/l)** - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- ◆ **Picocuries per liter (pCi/L)** - a measure of the radioactivity in water.
- ◆ **Millirems per year (mrem/yr)** - measure of radiation absorbed by the body.
- ◆ **Million Fibers per Liter (MFL)** - a measure of the presence of asbestos fibers that are no longer than 10 micrometers.
- ◆ **Nephelometric Turbidity Unit (NTU)** - a measure of the cloudiness of water.
- ◆ **Regulatory Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- ◆ **Maximum Contaminant Maximum Level—The "Maximum Allowed" (MCL)** is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology. Secondary MCLs are to protect the odor, taste, and appearance of drinking water.

- ◆ **Maximum Contaminant Level Goal — The "Goal" (MCLG)** is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- ◆ **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 Contaminant 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.
- ◆ **Primary Drinking Water Standard (PDWS)** - MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements
- ◆ **Public Health Goal (PHG)** - The level of a contaminant in drinking water below which there is no known or expected risk to health. PHG's are set by the California Environmental Protection Agency.

Castroville Community Services District routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of the 1st of January to the 31st of December, 2016. We sample for over 112 contaminants but only those that show any detection are listed on the table. All detections were below regulatory action levels.

WATER QUALITY DATA

Table 1 - sampling results showing the detection of coliform bacteria

| Microbiological Contaminants | Highest No. of detections | No. of months in violation | MCL | MCLG | Typical Source of Bacteria |
|------------------------------|---------------------------|----------------------------|---|------|--------------------------------------|
| Total Coliform Bacteria | 0 | 0 | More than 1 sample in a month with a detection | 0 | Naturally present in the environment |
| Fecal Coliform or E. coli | (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 |

Table 2 - sampling results showing the detection of Lead and copper

| Lead and Copper | No. of samples collected | 90th percentile | No. Sites exceeding AL | AL | MCLG | Typical Source of Contaminant |
|----------------------------------|--------------------------|-----------------|------------------------|-----|------|---|
| Lead (ppb)-Sample Date 2016 | 20 | ND | 0 | 15 | 2 | Corrosion of household plumbing; industrial manufacturers; erosion of natural deposits. |
| Copper (ppm) Sample Date 2016 | 20 | 0.298 | 0 | 1.3 | 1.3 | Corrosion of household plumbing; erosion of natural deposits; leaching from wood preservatives. |

Table 3 - sampling results for sodium and hardness

| Chemical or Constituent (and reporting units) | Sample Date | Average Level Detected | Range of Detections | MCL | PHG/(MCLG) | Typical Source of Contaminant |
|---|-------------|------------------------|---------------------|------|------------|---|
| Sodium (ppm) | Feb 2016 | 120 | 55-144 | none | none | Generally found in ground and surface water |
| Hardness (ppm) | Feb 2016 | 204 | 19-474 | none | none | Generally found in ground and surface water |

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 | PHG/(MCLG) | Typical Source of Contaminant |
|---|-------------|------------------------|---------------------|------|------------|---|
| Nitrate (as N03-N) , (ppm) | Feb 2016 | .45 | .1-.9 | 10 | 45/(N/A) | Fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Gross Alpha, (pCi/L) | Feb 2016 | 3.69 | 2.55-5.06 | 15 | N/A/(N/A) | Erosion of natural deposits |
| Chlorine (ppm) | Weekly | .21 | .18-.27 | 4 | MRDL | Disinfection |
| Aluminum, (ppm) | Feb 2016 | 14 | 10-27 | 1000 | .6 | Erosion of natural deposits, surface water treatment |
| Arsenic (ppb) | Feb 2016 | 6.4 | 2-7 | 10 | .0004 | Erosion of natural deposits |
| Fluoride (ppm) | Feb 2016 | 0.37 | .2-.9 | 2.0 | 1 | Erosion of natural deposits |
| Hexavalent Chromium (ppb) | July 2015 | 4.25 | ND-6.9 | 10 | 0.02 | Leaching from natural deposits |
| Haloacetic Acids (ppb) | Sept 2016 | 7 | 2-12 | 60 | NA | Byproduct drinking water disinfection |
| Total Trihalomethanes (ppb) | Sept 2016 | 24.5 | 6.1-42.9 | 80 | NA | Byproduct drinking water disinfection |

Table 5 - detection of contaminants with a Secondary Drinking Water Standard

| Chemical or Constituent (and reporting units) | Sample Date | Average Level Detected | Range of Detections | MCL | PHG/(MCLG) | Typical Source of Contaminant |
|---|-------------|------------------------|---------------------|------|------------|---|
| Color, units | Feb 2016 | 8.75 | 3-15 | 15 | N/A/(N/A) | Naturally occurring organic materials |
| Chloride, (ppm) | Feb 2016 | 195 | 63-444 | 250 | N/A/(N/A) | Runoff/leaching from natural deposits; seawater influence |
| Iron, (ppb) | Feb 2016 | 199 | 10-619 | 300 | N/A/(N/A) | Leaching from natural deposits; industrial wastes |
| Sulfate, (ppm) | Feb 2016 | 26.5 | 12-35 | 500 | N/A/(N/A) | Runoff/leaching from natural deposits industrial wastes |
| Total Dissolved Solid, (ppm) | Feb 2016 | 621 | 360-1143 | 1000 | N/A/(N/A) | Runoff/leaching |
| Odor. (TON) | Feb 2016 | 2.25 | 2-3 | 3 | N/A/(N/A) | Naturally occurring organic materials |
| Turbidity (NTU) | Feb 2016 | .5.7 | ND-18 | 5 | N/A/(N/A) | Soil runoff/Specific |
| Conductivity (uS/cm) | Feb 2016 | 1102 | 590-2200 | 1600 | N/A/(N/A) | Seawater Intrusion |