



794 Third Street, Corning, CA 96021 (530) 824-7029 Fax (530) 824-2489
2018 Water Quality Consumer Confidence Report

Water System Number: 5210001 Report Date: June 1, 2019

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 to December 31, 2018 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse 5210001 a (530) 824-7030 para asistirlo en español.

Type of water source(s) in use: Well Water

Name & general location of source(s): All Wells are located within City Limits

Drinking Water Source Assessment information: **California Department of Public Health completed a Drinking Water Source Assessment Program (DWSAP) in March of 2002 on seven (7) of the City wells. The Drinking Water Assessment for the eighth City well was completed during March of 2014. Copies can be obtained at City Hall or questions can be directed to the California Department of Public Health 530/224-4800, and the results are as follows:**

Source Name	Vulnerability Summary
Well 001	Well 001 is considered to be most vulnerable to contamination from the agricultural/irrigation wells located in the general vicinity around the well.
Well 002	Well 002 is considered to be most vulnerable to contamination from nearby airport activities, historic waste dumps and landfills, metal plating, finishing, or fabricating, and septic tank/leach field systems located in the general vicinity around the well.
Well 003	Well 003 is considered to be most vulnerable to contamination from the historic gas stations and metal plating, finishing, and fabricating facilities located in the general vicinity around the well.
Well 005	Well 005 is considered to be most vulnerable to contamination from the historic gas stations and metal plating, finishing, and fabricating facilities located in the general vicinity around the well.
Well 008	Well 008 is considered to be most vulnerable to contamination from injection wells or dry wells located in the general vicinity around the well.
Well 009	Well 009 is considered to be most vulnerable to contamination from the grazing activities located in the general vicinity around the well.
Well 010	Well 010 is considered to be most vulnerable to contamination from the high-density septic tank and leach field disposal systems in the vicinity around the well.
Well 019	Well 019 is considered most vulnerable to contamination from sewer collection and storm water drainage.

Time and place of regularly scheduled board meetings for public participation: **City Council Chambers: 794 Third St.** **Second and Fourth Tuesdays of the Month at 6:30 pm.**

For more information, contact: Angel Garman Phone: (530) 824-7029

TERMS USED IN THIS REPORT	
<p>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.</p> <p>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).</p> <p>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.</p> <p>Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is</p>	<p>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.</p> <p>Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.</p> <p>Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.</p> <p>Variations and Exemptions: Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.</p> <p>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.</p>

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.

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)

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.

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law 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	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria (state Total Coliform Rule)	2	1	1 positive monthly sample	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	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		Human and animal fecal waste
<i>E. coli</i> (federal Revised Total Coliform Rule)	0	0	(a)	0	Human and animal fecal waste
(a) Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> .					

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	2016	20	Nd	0	15	0.2	7	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	2016	20	.125	0	1.3	0.3	Not applicable	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	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2011		11.1-31.8	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2011		101-148	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

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
Gross Alpha (pCi/L)	2017	.75	.262-1.34	15	(0)	Erosion of natural deposits. Measure of Radioactivity.
Radium 228 (pCi/L)	2017	.34	.120 - .632	5	.019	Erosion of natural deposits.
Fluoride (Natural Source)	2018	.14	.14	2	1	Erosion of natural deposits, water additives, discharge from fertilizer and aluminum factories.
Perchlorate	2018	4	4	6		Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.
Barium (ppb)	2018	117	117	1000	1000	Erosion of natural deposits, discharges of oil drilling wastes, etc.
Arsenic (ppb)	2018	2.42	2.42	10	5	Erosion of natural deposits; runoff from orchards, etc.
Radium 228 (pCi/L)	2017	.34	.120 - .632	5	.019	Erosion of natural deposits.
Trihalomethanes (ppb)	2013	N/A	1.4	80	N/A	Byproduct of drinking water chlorination

Nitrate	2018	2.53	.92 – 4.57	10	45	Erosion of natural deposits, runoff and leaching from fertilizer use, septic tanks and sewers.
Chlorine Level (collected w/ bacteriological samples)	2018	.27	.03-38	4	.25	Drinking water disinfectant.

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Chromium Total (ug/L)	2010	1.84	ND – 12.9	50	N/A	N/A
Turbidity	2018	.65	.6 - .7	5	N/A	Soil runoff
Total Dissolved Solids	2018	211	211	1000		Runoff/leaching from natural deposits
Sulfate	2018	6.42	6.42	500	.5	Runoff/leaching from natural deposits; industrial wastes
Chloride	2018	4.8	4.8	500		Runoff/leaching from natural deposits; seawater influence
Specific Conductance	2018	356	356	1600		Substances that form ions when in water; seawater influence
Iron	2010	22.5	ND-180	300 (secondary)	None	Naturally occurring

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Tert-Butyl Alcohol (TBA)	2018	6.8		260	

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 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).

Lead-Specific Language: 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. The City of Corning 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. 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 (1-800-426-4791) or at <http://www.epa.gov/lead>.

Summary Information for Violation of Monitoring and Reporting Requirement

During the past year we failed to conduct all of the required assessment(s): Beginning January 2018, testing for 1,2,3-TCP was required quarterly. During this time, the City failed to test one well during the 1st quarter due to needed repairs. Additionally, the City was late testing for the 3rd quarter which put them in violation. To correct the Violation, the City is required to test the one well during the 1st quarter of 2019 and all the wells in the 3rd quarter of 2019. The main source of contamination is discharge from industrial and agricultural chemical factories; leaching from hazardous waste sites; used as cleaning and maintenance solvent, paint and varnish remover, and cleaning and degreasing agent; byproduct during the production of other compounds and pesticides. Some people who drink water containing 1,2,3-trichloropropane in excess of the MCL over many years may have an increased risk of getting cancer. There have been none detected in the tests that have been conducted.