

CITY OF GRIDLEY
2010 CONSUMER CONFIDENCE REPORT
Public Water System Number 0410004

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, 2010.

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

WATER SUPPLY SOURCES. The City has seven wells, identified as Spruce Well, Wilson Well, Fairview Well, Parkside Well, Little Avenue Well, Liberty Well and Jay Drive Well that supply water to the system. The wells are distributed throughout the City, and range in depth from 240 feet to 450 feet. The wells produce between 500 and 1,500 gallons per minute each, and are automatically regulated by the water pressure in the distribution system.

A source water assessment has been completed for the seven wells serving the City of Gridley. The sources are considered most vulnerable to the following activities not associated with any detected contaminants:

Fairview Well: Historic and existing gasoline stations, known gasoline contaminant plumes, and confirmed leaking underground storage tanks.

Parkside Well: Historic gasoline stations and high density septic systems.

Spruce Well: Historic and existing gasoline stations, known gasoline contaminant plumes, and confirmed leaking underground storage tanks.

Wilson Well: Historic and existing gasoline stations, chemical/petroleum processing/storage, and confirmed leaking underground storage tanks.

Little Avenue Well: Agricultural drainage, farm machinery repair, septic systems, and sewer collection systems.

Liberty Well: Agricultural drainage, farm machinery repair, and sewer collection systems.

Jay Drive Well: Agricultural drainage, farm machinery repair, septic systems, and sewer collection systems.

A copy of the complete assessment may be viewed at:

CDPH Valley District Office
415 Knollcrest Drive, Suite 110
Redding, CA 96002
Attention: Richard Hinrichs
(530) 224-4867

or at

City of Gridley
685 Kentucky Street
Gridley, CA 95948
Attention: Alvin Davis
(530) 846-2298

The Gridley City Council meetings are held on the first and third Monday of each month at 7:00 p.m. in City Hall.

For additional water quality data contact the City Public Works Department at (530) 846-3631.

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.

CITY OF GRIDLEY
2010 CONSUMER CONFIDENCE REPORT
Public Water System Number 0410004

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 level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfection Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

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 which a water system must follow.

Variance and Exemption: Department 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)

pCi/L: picocuries per liter (a measure of radioactivity)

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 stormwater 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 stormwater runoff, and residential uses.

CITY OF GRIDLEY
2010 CONSUMER CONFIDENCE REPORT
Public Water System Number 0410004

- *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*, 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, the USEPA and the California Department of Health Services (Department) prescribe regulations which 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 protections for public health.

MICROBIOLOGICAL WATER QUALITY

Testing for bacteriological contaminants in the water distribution system is required by State regulations. This testing is done regularly to verify that the water distribution system is free of coliform bacteria. Two samples are taken weekly at dedicated locations in the distribution system for bacteriological testing. There were no positive tests for Total Coliform or Fecal Coliform in 2010.

Total Coliforms are common in the environment and are generally not harmful themselves. Coliform are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.

Fecal Coliform and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these waters can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

WATER TREATMENT

Fluoride is added to the water in the City system to help prevent tooth decay. Fluoride concentration is controlled between 0.7 and 1.3 mg/l. An optimum concentration of 0.8 mg/l is recommended by the American Dental Association for optimum preventative effectiveness. Chlorine is added to the water from all six of the wells as a preventative measure due to intermittent positive bacteriological tests of the wells and/or the distribution system.

DETECTED CONTAMINANTS IN OUR WATER

Tables 1, 2, 3, 4 and 5 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 Department 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.

CITY OF GRIDLEY
2010 CONSUMER CONFIDENCE REPORT
Public Water System Number 0410004

Lead and Copper (and reporting units)	Year Tested	Number of samples collected	90 th percentile level detected	Number of sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	2008	20	<2.0	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppb)	2008	20	123	0	1,300	170	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Chemical or Constituent (and reporting units)	Sample Year Range	Average Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2004-2010	15.2	10.4-20.2	none	none	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Hardness (ppm)	2004-2010	157	80-246	none	none	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Chemical or Constituent (and reporting units)	Sample Year Range	Average Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Arsenic (ppb)	2009-2010	8.1	6.6-10.8	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Chromium (ppb)	2004-2010	4.6	ND-20.3	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride (before treatment) (ppm)	2010	0.1	ND-0.3	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as NO ₃) (ppm)	2010	1.81	0.82-2.56	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

CITY OF GRIDLEY
2010 CONSUMER CONFIDENCE REPORT
Public Water System Number 0410004

TABLE 4 - DETECTION OF CONTAMINANTS WITH A <u>SECONDARY</u> DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample Year Range	Average Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Chloride (ppm)	2004-2005	6.6	1.8-13.9	500	none	Runoff/leaching from natural deposits: seawater influence
Sulfate (ppm)	2004-2009	7.7	2.9-16.3	500	none	Runoff/leaching from natural deposits: industrial wastes
Total Dissolved Solids (ppm)	2004-2009	222	161-312	1,000	none	Runoff/leaching from natural deposits

TABLE 5 - DETECTION OF UNREGULATED CONTAMINANTS						
Chemical or Constituent (and reporting units)	Sample Year Range	Average Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Vanadium (ppb)	2001-2005	27	20-34	50	none	Erosion of natural deposits
Chromium VI (Hexavalent Chromium) (ppb)	2003-2004	6.6	1.8-13.0	none	none	N/A

While your drinking water meets the EPA 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 cost 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.

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 individuals, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).