

2022 Consumer Confidence Report

Water System Name:	Planada CSD	Report Date:	02/23/23
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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, 2022 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber.

Favor de comunicarse Planada CSD a (209) 382-0213 para asistirlo en español.

Type of water source(s) in use:	Groundwater Wells
Name & general location of source(s):	Well #1A, Well #3, Well #4, Well #5, Well #6, and Well #7
Drinking Water Source Assessment information:	Completed in 2002 and 2010 - see last page
Time and place of regularly scheduled board meetings for public participation:	4 th . Thursday of each month at 6:00pm at 103 Live Oak St.,

For more information, contact:	Frank Verduzco	Phone:	(209) 382-0213
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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 (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.

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.

Variances and Exemptions: State Board 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)

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 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.

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
E. Coli	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 (and reporting units)	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	08/18/20	20	< 5	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	08/18/20	20	0.1	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)		Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	01/25/22	26	23 - 35	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	01/25/22	161	110 - 210	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, naturally occurring

*Any violation of an MCL, MRDL, AL, or TT 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
Nitrate as Nitrogen (ppm)	2022	5	3 - 8	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Fluoride (ppm)	01/25/22	< 0.1	< 0.1 - 0.1	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Arsenic (ppb)	01/25/22	4	2 - 8	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Tetrachloroethylene [PCE] (ppb)	2020-2022	< 0.5	< 0.5 - 0.5	5	0.06	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Barium (ppm)	01/25/22	0.3	0.2 - 0.5	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natur

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
Total Dissolved Solids (ppm)	01/25/22	253	200 - 370	1000	N/A	Runoff/leaching from natural deposits
Specific Conductance (umho/cm)	01/25/22	446	290 - 560	1600	N/A	Substances that form ions when in water; seawater influence
Chloride (ppm)	01/25/22	16	10 - 25	500	N/A	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	01/25/22	17	12 - 22	500	N/A	Runoff/leaching from natural deposits' industrial wastes
Manganese (ppb)	01/25/22	24	< 20 - 100*	50	NA	Leaching from natural deposits
Iron (ppb)	01/25/22	310*	100 - 720*	300	N/A	Leaching from natural deposits; industrial wastes
Turbidity (NTU)	01/25/22	1	< 0.1 - 3	5	NA	Soil runoff

TABLE 6 - DETECTION OF ADDITIONAL CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Range of Detections	MCL (MRDL)	Health Effects Language
Distribution System Chlorine Residual (ppm)	2022	0.4 - 0.9	(4)	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

**Any violation of an MCL, MRDL, AL, or TT is asterisked. Additional information regarding the violation is provided on the next page.*

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.

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. Planada CSD 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 or at <http://www.epa.gov/lead>.

Nitrate as Nitrogen 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-N 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.

While your drinking water meets the current 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.

Summary Information for Violation of an MCL, MRDL, AL, TT, or Monitoring and Reporting Requirements

In 2022, iron and manganese were detected in the drinking water at levels above the allowable limit. The overall average from all of the wells for iron and manganese was within acceptable limits. The State has established the maximum allowable limit for iron and manganese as secondary limits, not as primary limits. These secondary MCL's are set to protect you from unpleasant aesthetic affects such as color, taste, odor, and the staining of plumbing fixtures (e.g., tubs and sinks), and clothing while washing. A violation of these MCL's do not pose a risk to public health.

Vulnerability Assessment Summary

A source water assessment was conducted for wells # 3A, 4, 5, and 6 of the Planada CSD in January of 2002, and well #7 of the Planada CSD in January of 2010. The sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: agricultural drainage, drinking water treatment plants, schools, food processing, storm water discharge points, surface water - streams/lakes/rivers, lagoons/liquid wastes, housing - high density, crops - irrigated, fertilizer/pesticide/herbicide application, and parks.

The sources are considered most vulnerable to the following activities not associated with any detected contaminants: grazing, automobile gas stations, railroad yards/maintenance/fueling areas, grazing, NPDES/WDR permitted dischargers, known contaminant plumes, underground storage tanks - confirmed leaking tanks, and septic systems - low density.

For more information regarding the assessment summary, contact: Frank Verduzco at (209) 382-0213.