2014 Consumer Confidence Report

Water System Name: **Planada CSD** Report Date: 03/23/15

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, 2014.

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:	Deep Groundwater Wells		
Name & location of source(s):	Well #3-A (Hupp & Childs), Well #4 (Stanford & Broadway), Well #5 (Kraft), Well #6 (Benicia), and Well #7 (Plainsburg)		
Drinking Water Assessment:	Performed in 2002 and 2010 - see last page		
Time and place of regularly scheduled meetings for public participation:		Third Tuesday of each month at 7:00pm at 103 Live Oak St.,	
For more information, contact:	Frank Verduzco	Phone#:	(209) 382-0213

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.

Primary Drinking Water Standards (PDWS): MCLs 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.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

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 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).

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.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

NTU: nephelometric turbidity unit

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*, which 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, 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 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 must provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 6, and 7 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
Total Coliform Bacteria	(In a mo.) 1	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 (and reporting units)	No. of Samples Collected (Date)	90th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	20 (08/05/14)	< 5	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)	20 (08/05/14)	< 0.05	0	1.3	0.3	Internal corrosion of household water 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)	01/24/12	26	23 - 29	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	01/24/12	155	134 - 179	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.*

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.

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**	**PHG (MCLG)**	**Typical Source of Contaminant**
Nitrate as NO3 (ppm)	2014	12	10 - 18	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Gross Alpha (pCi/l)	12/02/14	< 3	< 3 - 4	15	0	Erosion of natural deposits
Radium 228 (pCi/L)	2007	< 1	< 1 - 1	5	0.02	Decay of natural and man-made deposits
Fluoride (ppm)	01/24/12	< 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)	01/24/12	3	< 2 - 6	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	01/24/12	0.2	0.2 - 0.2	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Hexavalent Chromium (ppb)	2014	1	< 1 - 2	10	0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, and textile manufacturing facilities; erosion of natural deposits

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**
Total Dissolved Solids (ppm)	01/24/12	262	226 - 288	1000	N/A	Runoff/leaching from natural deposits
Specific Conductance (uS)	2012 - 2014	417	332 - 478	1600	N/A	Substances that form ions when in water; seawater influence
Chloride (ppm)	01/24/12	15	12 - 18	500	N/A	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	01/24/12	16	12 - 18	500	N/A	Runoff/leaching from natural deposits' industrial wastes
Iron (ppb)	01/24/12	270	< 100 - **1100***	300	N/A	Leaching from natural deposits; industrial wastes
Manganese (ppb)	01/24/12	< 20	< 20 - 43	50	N/A	Leaching from natural deposits
Turbidity (NTU)	01/24/12	1	< 0.1 - 3	5	N/A	Soil runoff
Color (unit)	01/24/12	< 3	< 3 - 10	15	N/A	Naturally-occurring organic materials

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS				
Chemical or Constituent (and reporting units)	**Sample Date**	**Range of Detections**	**Action Level**	**Health Effects Language**
Vanadium (ppb)	2011	9 - 21	50	The babies of some pregnant women who drink water containing vanadium in excess of the action level may have an increased risk of developmental effects.

TABLE 7 - DETECTION OF ADDITIONAL DISTRIBUTION CONTAMINANTS				
Chemical or Constituent (and reporting units)	**Sample Date**	**Range of Detections**	**MCL (MRDL)**	**Health Effects Language**
Residual Chlorine (ppm)	2014	0.3 - 1.0	(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 or AL is asterisked. Additional information regarding the violation is provided below.*

Additional General Information On Drinking Water

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 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.

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 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. 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/safewater/lead.

While your drinking water meets the current 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 other circulatory problems.

Summary Information for Contaminants Exceeding an MCL or AL, or a Violation of any Treatment or Monitoring and Reporting Requirements

In January of 2012, iron was detected at well #3A above the maximum allowable level (MCL). The iron secondary MCL is 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 this MCL does not pose a risk to public health.