

What's In Your Water?

This report contains important information about the quality of drinking water for the period of January 1, 2014 – December 31, 2014. Included are details about where your water comes from, data about what is in your water and how water tests on your drinking water compares to Federal and State drinking water standards.

Residents should be aware of recent water use prohibitions enacted by Governor Brown's Executive Order B-29-15, putting the State into an official state of emergency due to the drought. The following prohibitions are subject to heavy fines, without warning.

Prohibited for Everyone:

- Using potable water to wash sidewalks and driveways
- Runoff when irrigating with potable water
- Using hoses with no shutoff nozzles to wash cars
- Using potable water in decorative water features that do not recirculate the water
- Using outdoor irrigation during & within 48 hours of measurable rain fall



We encourage our non-English speaking residents to speak with someone who can assist them in reading this report.

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



City of Hughson
7018 Pine Street
Hughson, CA 95326

For more information on your water quality or questions about this report, please contact the City of Hughson Public Works Department at (209) 883-4054 and ask for Sam Rush. You are welcome to participate in the City Council meetings to voice any concerns regarding your drinking water. The City Council meets the second and fourth Monday of each month at 7:00pm at City Hall located at 7018 Pine Street, Hughson, CA.



What's New?

The City of Hughson is making progress toward construction of a new water treatment facility to replace wells that were recently shut down due to contaminants in the groundwater. The State of California has agreed to provide the City with a low interest loan to build the facility. The City is working to find ways to keep any potential increases to resident's monthly water bills as minimal as possible. The City hopes to start construction on the new facility within the next year.

What is the City doing to ensure my drinking water will stay safe?

The City of Hughson's water is supplied solely with groundwater wells. Groundwater is water that has soaked into the soils from rains, rivers, and irrigation, and continuing downward, filling openings in beds of gravel and sand called aquifers.

To make sure your water is safe to drink, we regularly test it for naturally occurring and man-made contaminants. Last year, the City conducted approximately 800 water tests looking for over 80 different contaminants. Water samples are taken weekly from various locations throughout the water distribution system. The samples are tested by State certified laboratories to see that they meet all state and federal drinking water standards. Of the contaminants tested, only arsenic was detected slightly above its drinking water standard in one well. In 2011, the City completed construction of the Well 8 Water Treatment Facility, which is equipped with a filter to remove arsenic. Most of the drinking water for the City comes from this well. Additional arsenic treatment is being proposed for the new treatment facility which the City will start constructing in the next year.

Our active wells are operated and maintained by State licensed water treatment operators. Our drinking water sources include:

- ◆ Well 3 - Starn Park
- ◆ Well 4 - Hughson Elementary School
- ◆ Well 8 – Euclid Avenue

Water Conservation

As you know, we are in a period of severe drought, so all communities in California should do their part by responsibly using water. This year, the State of California is mandating that we restrict our outdoor irrigation to two days a week in order to reduce our water usage by 25%. If we don't reduce our water use as required, we could be fined by the State, up to \$10,000 per day. Please help us reduce water use by following the new water restrictions and other common sense practices, like not running the hose without a nozzle, turning off the water when you brush your teeth, taking shorter showers, etc. Thank you for your participation during this state of emergency. For more tips on how to help, visit: <http://wateruseitwisely.com/>.



Water Quality Report

Water quality data for the period of January 1 - December 31, 2014

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 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. USEPA/Centers for Disease Control (CDC) guidelines on 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)**.

Sources of drinking 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, radio-active 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 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 stormwater runoff, agricultural application, and septic systems.
- ◆ Radioactive contaminants; naturally-occurring or the result of oil and gas production and mining activities.

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 Hughson 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>. In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California Department of Public Health (Department) 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.

Definitions

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.

Regulatory Action Level (AL):

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

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)

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

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants	Highest No. of Detections (In a Month)	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	1	(0)	More than one sample in a month with a detection	(0)	Naturally present in the environment

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

Lead and Copper (and reporting units)	No. of Samples Collected (Date)	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	20 (2013)	ND	(0)	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)	20 (2013)	<0.071	(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 Constituents	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2012	63	40-84	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2011	99	35-259	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 Constituents	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG)	Typical Source of Contaminant
Arsenic (As) ppb	2014	7.2	ND-15.4*	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (Ba) ppm	2012	0.12	0.04-0.258	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm)	2012	0.1	ND-0.4	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (NO3) ppm	2014	19.9	6.1-34.7	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Gross Alpha (pCi/L)	2012	2.13	1.7-2.6	15	(0)	Erosion of natural deposits
Hexavalent Chromium (ppb)	2014	1.84	1.84	10	0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, and textile manufacturing facilities; erosion
1,2-dibromo-3-chloropropane (DBCP) ppb	2014	0.07	0.05-0.09	0.2	(0.0017)	runoff/leaching from soil fumigant used on soybeans, cotton, pineapples and orchards
*Health Effects of Arsenic	Some people, who drink water containing arsenic in excess of the MCL over many years, may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.					
*Health Effects of DBCP	Health Effects of DBCP: Some people who use water containing DBCP in excess of the Public Health Goal over many years may experience reproductive difficulties and may have an increased risk of getting cancer.					

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

Chemical or Constituents	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	2012	26.5	10-68	500	N/A	Runoff/leaching from natural deposits; seawater influence
Odo - Threshold (TON)	2012	0.5	ND-2	3	N/A	Naturally-occurring organic materials
Turbidity	2012	0.12	ND-03	5	N/A	Soil Runoff
Specific Conductance (uS/cm)	2012	514	343-762	1600	N/A	Substances that form ions when in water; seawater influence
Sulfate (SO4) ppm	2012	18.6	4.0-57	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Iron (Fe) ppb	2013	ND	ND	300	N/A	Naturally occurring mineral
Manganese (Mn) ppb	2013	ND	ND	50	N/A	Naturally occurring mineral
Total Dissolved Solids (TDS) ppm	2012	340	260-490	1000	N/A	Runoff/leaching from natural deposits

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituents	Sample Date	Level Detected	Range of Detections	Notification Level	PHG (MCLG)
Boron (B) ppm	2012	0.13	ND-0.3	1	
1,2,3-Trichloropropane (TCP) ppb**	2013	0.015	0.009-0.019	0.005	0.0007
Vanadium (V) ppb	2012	16	6-21	50	

**Health Effects of TCP: Some people who use water containing TCP in excess of the Notification Level and/or Public Health Goal over many years may have an increased risk of getting cancer, based on studies in laboratory animals.

TABLE 7 - DETECTION OF FEDERAL DISINFECTANT/ DISINFECTANT BYPRODUCT RULE

Chemical or Constituents	Sample Date	Level Detected	Range of Detections	MCL (MRDL)	PHG (MCLG)	Typical Source of Contaminant
TTHMs (Total Trihalomethanes) ppb	2014	1.91	1.91	80	N/A	By-product of drinking water disinfection