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 Jaime Velazquez. 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.

Consumer Confidence Report 2017

What's In Your Water?

This report contains important information about the quality of drinking water for the period of January 1, 2017 – December 31, 2017. 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.

The City of Hughson is committed to providing its residents with a reliable and safe supply of water for drinking, washing, irrigation, and other domestic uses. As part of this commitment, we regularly test the water from our wells and in the distribution system near your home. Last year we performed ***over 430 separate tests*** on the water to ensure it is meeting state and federal drinking water standards. ***With the exception of one mineral in one well, all of the test samples indicated that the water we provide to our customers meets all current state and federal standards.*** The mineral that was elevated in one well was only slightly elevated, and that well is used least for our water supply. Two (2) new wells planned for construction this year will address the elevated mineral content by including construction of a new water treatment facility.

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.

Consumer Confidence Report 2017

What's New?

The City of Hughson has been approved to move forward with construction of two new municipal water wells and a water treatment facility. The new wells will replace older wells that were removed from service due to contaminants found in those wells. The City was provided with a grant and low interest loan from the State of California to assist in the cost to build the facilities. Construction will begin this summer, and should be producing water for the community by 2019.

Is My Water Safe?

Government regulations mandate that public water systems test their drinking water for numerous contaminants, including bacteria, lead, arsenic, pesticides, and many other chemicals. Like the food we eat, all water (including bottled water) will have trace amounts of contaminants, but this does not necessarily mean it is a health risk if you drink it. Government regulations have established acceptable amounts of contaminants that water can have and still be safe to drink, called *maximum contaminant levels* (MCLs). Based on independent laboratory testing, last year the City of Hughson's water was found to be compliant with nearly all state and drinking water standards. (See "Arsenic" on the inside of this report). Some City of Hughson's wells contain detectable concentrations of the contaminant 1,2,3-trichloropropane (1,2,3-TCP) at levels in excess of the State's new MCL for 1,2,3-TCP. The City is currently studying treatment options and intends to comply with the MCL once it is adopted.

What is the City doing to protect public health?

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. From here, wells are used to pump it out of the ground, into the water system, and finally to your home or business. Along the way it can pick up contaminants. To protect public health, we regularly test it for naturally occurring and man-made contaminants. Water samples are taken weekly from various locations throughout the water distribution system to check for bacteria. The samples are tested by state certified laboratories to see that they meet all state and federal drinking water standards. Our active wells are operated and maintained by State licensed water treatment operators. *Source assessments* (evaluations of potential risk of contamination) have been conducted for each of the wells, and are available to the public upon request. Our drinking water sources include three wells:

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

Water Conservation Update

This spring, California adopted new statewide water policies toward its effort to make water conservation a way of life. The new legislation focuses on indoor use (i.e. showers, toilets, washing machines) by setting standards that apply in all years, not just during a drought. According to the drafters of the new legislation, this is an "effort to reengineer water policy away from crisis management and toward a 21st century approach". The concept is to integrate water use efficiency as an alternative to building expensive water facilities, which is often a more cost-effective way to achieve water reliability. Per the legislation, by 2022, all Californians will be required to use no more than 55 gallons per person per day for indoor uses. Typically, this goal is not be difficult to achieve if homes are retrofitted with water conserving toilets, shower heads, and washing machines. Visit: http://wateruseitwisely.com/ for water conservation tips.

Water Quality Report

Water quality data for the period of January 1 - December 31, 2017

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).

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California Water Resources Control Board 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.

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 USEPA's Safe Drinking Water Hotline.

Normal 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.

LEAD when present in elevated levels 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*.

NITRATE 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 a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate 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 certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

ARSENIC One (1) City well has arsenic concentrations slightly above the drinking water standard MCL (See Report). The City is in the process of constructing new wells that will be equipped with treatment systems to reduce arsenic levels to meet drinking water standards. The other wells meet the federal and state standard for arsenic, though they do contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs 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.

Definitions for abbreviations:

Maximum Contaminant Level (MCL) The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the Public Health Goal 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.

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.

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

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

NA: Not Applicable
ND: Non Detectable
ppb: parts per billion or micrograms per liter (ug/L)
ppm: parts per million or milligrams per liter (mg/L)
pCi/l: picocuries per liter (measurement of radiation)

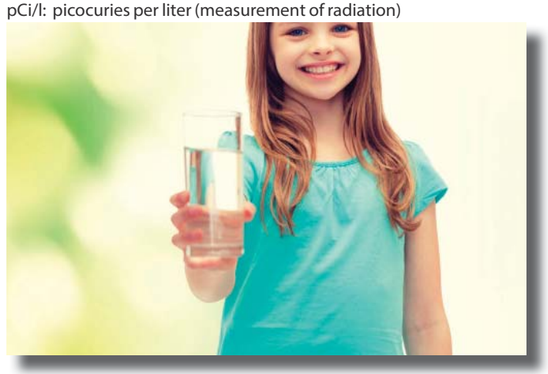

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants	Highest No. of Detections (Month)	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0	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 Sites Sampled 2016	90th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	20	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppb)	20	108	0	1300	300	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	Avg Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2015	74.8	62.5 - 81.6	None	None	Salt present in the water and is generally naturally occuring
Hardness (ppm)	2015	102	46 - 140	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occuring.

TABLE 4- DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituents	Sample Date	Avg Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG)	Typical Source of Contaminant
Arsenic (ppb)	2017	9.1	4.5 - 16.6	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppb)	2015	0.11	0.0 - 160	1000	2000	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm)	2015	0.14	0.12 - 0.19	2.0	1	Erosion of natural deposits; water additive which romotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as N, ppm)	2017	4.1	0.7 - 6.7	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Gross Alpha (pCi/L)	2010/2012/2016	2.5	0.5 - 4.5	15	0	Erosion of natural deposits
Hexavalent Chromium (ppb)	2014	1.0	0.5 - 1.4	NA *	0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, and textile manufacturing facilities; erosion
1,2-dibromo-3-chloropropane (DBCP) (ppt)	2017	48	0 - 120	200	(0)	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples and orchards
1,2,3 Trichloropropane (TCP) (ppt)	2017	28.8	7.4 - 48	5	0.7	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.

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

Chemical or Constituents	Sample Date	Avg Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	2015	46.2	17.8 - 67.7	500	N/A	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (uS/cm)	2015	572	377 - 684	1600	N/A	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2015	20.6	7.7 - 28.7	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Manganese (ppb)	2015	32.4	ND - 97.3	50	N/A	Naturally occurring mineral
Total Dissolved Solids (TDS) (ppm)	2015	361	240 - 423	1000	N/A	Runoff/leaching from natural deposits

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituents	Sample Date	Avg Level Detected	Range of Detections	Notification Level	Typical Source of Contaminant
Boron (ppb)	2012	130	ND - 300	1000	Naturally occuring mineral
Vanadium (ppb)	2012	16	6 - 21	50	Naturally occuring mineral

Note: Unregulated contaminants have no MCL, but help USEPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the cotaminants need to be regulated.

TABLE 7 - DETECTION OF FEDERAL DISINFECTANT/ DISINFECTANT BYPRODUCT RULE

Chemical or Constituents	Sample Date	Avg Level Detected	Range of Detections	MCL (MRDL)	PHG (MCLG)	Typical Source of Contaminant
TTHMs (Total Trihalomethanes) (ppb)	2017	ND	ND	80	N/A	By-product of drinking water disinfection

* There is currently no MCL for hexavalent chromium. The previous MCL of 0.010 mg/L was withdrawn on September 11, 2017.