City of Wheatland 2020 Water Quality Consumer Confidence Report

2020 WATER QUALITY CONSUMER CONFIDENCE REPORT

Public Water System Number 5810004

2020 CALIDAD DEL AGUA INFORME DE CONFIANZA DEL CONSUMIDOR Número de sistema público de agua 5810004

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Ciudad de Wheatland at 111 C Street, teléfono 530-633-2761 paras asistirlo en español.

The City of Wheatland is pleased to present our 2020 annual water quality report to our customers. This edition covers all testing completed from Jan 1, 2020 through Dec 31, 2020. Last year, as in years past, your tap water met all United States Environmental Protection Agency (USEPA) and State Water Resources Control Board (SWRCB) -Division of Drinking Water health standards. City of Wheatland Water System vigilantly safeguards its water supplies and once again, we are proud to report that our system has never violated a maximum contaminant level. This brochure is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards. We are committed to providing you with information because informed customers are our best allies. For additional information concerning your drinking water, contact Dale Klever, Public works Director, at 530-633-8192 or email at dklever@wheatland.ca.gov. If you wish to publicly participate in decisions affecting your drinking water quality, you may attend regularly scheduled City Council meetings on the 2nd and 4th Tues of each month. These meetings start at 6:00 pm and are located at 111 C Street, Wheatland (or by Zoom meeting). If you wish more info, you may call City Hall at 530-633-2761.

Where Does My Water Come From?

Water for the City of Wheatland originates from six groundwater sources known as Wells #3, #4, #5, #6, #7 and # 8 ranging in depth of 159 to 280 feet below ground level. The system has one ground level storage tank which holds 660,000 gals and one elevated tank that holds 72,000 gals. The elevated tank is used primarily to keep a constant pressure of approximately 48-50 psi throughout the water system. The average water consumption in the summer is approximately 1,300,000 gals per day with a peak demand of 1,740,000 gals per day. Sodium hypochlorite solution (bleach) is added at each well to disinfect and kill any possible disease-causing bacteria. The amount of bleach injected into the water is closely monitored by operators and a computer **Supervisory Control And Data Acquisition** (SCADA) system. The SCADA system monitors and controls the system continuously and an operator is alerted in the event of a problem, including after hours or weekends. The SCADA alarm system dials a 24-hr. standby operator on duty, so the operator may work from home to fix the problem or quickly respond if needed. The Wheatland Water System is inspected by the State Water Board -Division of Drinking Water to ensure compliance with all regulations set forth by USEPA and California Drinking Water Division, including a strict monitoring schedule. A copy of inspection reports are available upon request and shows your water meets or exceeds all state and federal standards.

Detected Contaminants in the water: These tables give a list of detected chemicals in our water as set by USEPA and the SWRCB Drinking Water Division testing schedule. Please note that not all sampling is required annually so in some cases results are more than one year old or longer. The following tables list only organic, inorganic, and secondary chemicals that were detected in your water. Your water is tested for nearly 100 other chemicals that if not listed, were not detected. The minimum detection level is typically in parts per million, parts per billion, or parts per trillion. Test results are then compared to state and federal standards to confirm your water meets all drinking water health standards. Secondary Standards contaminants are not considered to present a risk to human health

Contaminates That May Be present In Source Water Include:

Microbial contaminants are viruses and bacteria that may come from sewage treatment plants, septic tanks, agricultural livestock operations, and wildlife.

Inorganic contaminants, Such as salts and metals, that can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, that may come from 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 storm water runoff, agricultural application, and septic systems.

Radioactive contaminants can be naturally-occurring or be that result of oil and gas production and mining activities.

Important Health Information: In order to ensure that tap water is safe to drink, USEPA and the SWRCB Drinking Water Division prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. 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-comprised 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 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 appropriate means to lessen the risk of infection by Cryptosporidium and more information about contaminates and potential health effects are available from the USEPA's Safe Drinking and Water Hotline at (800) 426-4791or go online to *www.epa.gov/safewater*.

Lead & Copper Testing Results: Since 1986 in the U.S. the use of lead in plumbing pipes, fixtures, and solder has been restricted by law, when the federal Safe Drinking Water Act was first amended to require a rule regulating lead and copper at the drinking water consumers tap. Posing certain health risks to most people if consumed in excess, lead and copper enter drinking water mainly as a result of corrosion of plumbing material. As a result, the federal "lead and copper rule" was issued in 1991 by the EPA to limit the concentration of those two metals in public water. October 2007, the rule was revised; requiring water suppliers to reduce water corrosiveness in attempt to protect public water systems consumers from excessive exposure to lead and copper even further. If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels in your home may be higher than in other homes as a result of materials in your house plumbing. The City is responsible for providing high-quality drinking water, but it cannot control the variety of materials used in household plumbing pipes and fixtures. So, when your water has been sitting for several hours, minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using the water for drinking or cooking. If you are concerned about lead in your water, call at 530-633-2785, about its testing. For information on lead in drinking water, call the Safe Drinking Water Hotline (1-800-426-4791) or go to *http://www.epa.gov/safewater/lead*. Wheatland's main water distribution system piping material is almost exclusively C-900 PVC (polymerized vinyl chloride plastic) piping and is resistant to corrosion. The other piping material used is asbestos cement (AC) which is also highly resistant to corrosion.

Nitrates: Nitrate in drinking water at levels above 45 ppm 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 levels above 45 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 you should ask advice from your health care provider.

To find out how well they are doing this, water suppliers are required to sample a representative number of consumer's household taps, with the frequency of sampling depending upon the size of the system and the system's lead and copper results.
The City of Wheatland, for instance, is required to sample for lead and copper at 40 consumers taps, every three years. The City of Wheatland last lead and copper testing was required and performed in 2017 and those results are reported below. Next round of sampling will take place in 2020. The table below summarizes the most recent monitoring for these constituents. No samples collected in 2017 were found to be above the action level of 15 ppb for lead and 1300 ppb for copper. In 2018 samples was taken from all Wheatland schools and tested for lead. All schools samples were well below the action level of 15ppb.

	Year Tested	# of samples collected	# above action level	90th Percentile Result (ppb)	Action Level (ppb)
Lead	2020	40	0	1.9	15
Copper	2020	40	0	423	1300

Arsenic: While your drinking water meets and is well below the federal and state standard of MCL 10ppb for arsenic, it does contain very 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.

Disinfectant Added to Water						
12.5 % Sodium Hypochlorite Solution (Bleach)	All 15 Sample Points	Year 2019	Avg. (ppm) 0.65	Range (ppm) 0.31 – 0.99	MRDL 4.0	MRDLG 4.0

Bleach in Water: Why do we put bleach in the water? Bleach is an oxidizing agent used as a disinfectant that, when added to water, kills microorganisms such as bacteria and viruses. The State of California requires that we maintain a minimum free residual of 0.2 parts per million (ppm) of chlorine in our water at all times to kill any potential microorganisms. Five alternating samples are collected daily by the water operators to ensure the 0.2 ppm minimum is meant and maintained. The City's target chlorine ppm range is 0.50-0.80.

Microbiological Water Quality: The simple fact is bacteria and other micro-organisms are naturally present in the environment and can be found all around us: in our food; on our skin; in our bodies; and, in the air, soil and water. Some are harmful to us and some are not. Testing for these bacteriological contaminates in the distribution system is required by State regulations. The testing is done regularly to verify that the water system is free from coliform bacteria which are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. The minimum number of tests required by SWRCB Drinking Water Division per month is four (4). The City collects five (5) per month with a total of 60 samples collected annually. From those 60 samples, the highest number of samples found to contain coliform bacteria during any one month was one (1). Retest sample passed.

DETECTION OF UNREGULATED CONTAMINANTS					
Chemical	Sample Date	Level Detected	Range of Detections	PHG	Health Effects
Hexavalent Chromium	8-Mar-17	2.8 ppb	1.2-7.4 ppb	* 0.02 ppb	Some people who drink water containing hexavalent chromium in excess of the MCL over many years have an increased risk of getting cancer.

* There is currently no MCL for hexavalent chromium. The previous MCL of 10 ppb was withdrawn on Sept 11, 2017

Source water Assessment:

Source water assessments were completed for the City of Wheatland Wells 3 – 8 below between 2002 – 2003. These sources are considered most vulnerable to the following activities not associated with any detected contaminants:

Well 3: Above ground storage tanks, construction /demolition staging areas, equipment storage areas, water supply wells, chemical/petroleum pipelines, gas stations.
Well 4: Gas stations, sewer collection systems.
Well 5: Chemical/petroleum pipelines, sewer collection systems.
Well 6: Auto & machine shops, bus terminals, grazing, septic systems, and gas stations.
Well 7: Grazing, home manufacturing, sewer collection systems.
Well 8: Sewer collection systems.

A copy of the complete assessment may be viewed at:

State Water Resource Control Board,
Division of Drinking Water
415 Knollcrest Drive
Suite 110, Redding, CA 96002
Reese Crenshaw at 530-224-4867

or at

City of Wheatland
208 4th Street
Wheatland, CA 95692

COVID-19 Water Information

There is no higher priority for EPA and the city than protecting the health and safety of our customers. EPA is providing this important information about COVID-19 as it relates to drinking water to provide clarity to the public. The COVID-19 virus has not been detected in drinking-water supplies. Based on current evidence, the risk to water supplies is low. **Americans can continue to use and drink water from their tap as usual.**

It is important to remember that water conservation is not just for drought or times of water shortage, but should be practice all the time. The City of Wheatland encourages comprehensive water-use practices that reduce the amount of stress that we place on our city resources and limits workloads from our wells, reducing wear and tear on major infrastructure such as wells and pumps, our wastewater treatment plant pumps and equipment, and the distribution systems that deliver water to our customers. Water conservation can postpone or eliminate the need for making major investments in new infrastructure. Water is not an endless resource and must be used efficiency and not be wasted. We all must do our part to learn and teach the importance of water and the wise use of it. This will ensure an adequate supply of water for us and future generations. The following tips will get you started and get you saving.

Top 10 Water Conservation Tips:

1. ***Don't water during daylight periods or over-water your lawn.***
2. ***Fix all water leaks quickly, especially a "running" toilet.***
3. ***Turn off the faucet while brushing your teeth or shaving.***
4. ***Only run the washing machine and dishwasher when you have a full load.***
5. ***Use a low flow shower head and faucet aerators.***
6. ***Take a shorter shower.***
7. **Place a displacement device in the toilet tank to reduce the amount of water used per flush.**
8. ***Install a rain barrel for outdoor watering.***
9. ***Monitor and keep track of your water usage on your water bill.***
10. ***Share water saving knowledge about conservation and efficiency with your neighbors.***

Chemical Detected	Source	Year Tested	Level Detected	MCLG	PHG	Major Source
INORGANIC CONTAMINANTS						
Fluoride (Natural Source)	Well 3 Well 4 Well 5 Well 6 Well 7 Well 8	2013 2004 2014 2014 2013 2018	177 ppb 151 ppb 204 ppb 113 ppb 151 ppb 310 ppb	2000 ppb	1000	Erosion of natural deposits; water additive which promotes strong teeth
Chromium (Total)	Well 4 Well 5 Well 6 Well 8	2020 2020 2020 2018	2.4 ppb 3.2 ppb 2.4 ppb 2.7 ppb	50 ppb	100	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Nickel	Well 4 Well 5 Well 8	2020 2020 2018	0.79 ppb 0.005 ppm 0.001 ppm	0.05 ppm	None	Leaching from natural deposits
Selenium	Well 4 Well 5 Well 6 Well 8	2020 2020 2020 2018	1.2 ppb 1.6 ppb 1.3 ppb 0.78 ppb	50 ppb	None	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Barium	Well 3 Well 4 Well 5 Well 6 Well 7 Well 8	2013 2020 2020 2020 2017 2018	54 ppb 94 ppb 75 ppb 93 ppm 110 ppb 34 ppb	1000 ppb	None	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Aluminum	Well 4 Well 6 Well 8	2020 2020 2018	2.2 ppb 2.6 0.015 ppb	1 ppb	0.6	Erosion of natural deposits; residue from some surface water treatment processes
Nitrite	Well 7	2009	0.25 ppb	1000 ppb	None	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate (as N)	Well 3 Well 4 Well 5 Well 6 Well 7 Well 8	2020	2.4 ppm 4.5 ppm 3.0 ppm 4.8 ppm 2.3 ppm 0.74 ppm	10 ppm	10	
Arsenic	Well 3 Well 4 Well 5 Well 6 Well 7 Well 8	2019 2019 2019 2019 2019 2020	1.8 ppb 0.72 ppb 1.2 ppb 0.65 ppb 1.2 ppb 3.1 ppb	10 ppb	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
UNREGULATED CONTAMINANTS						
Boron	Well 6 Well 7 Well 8	2003 2003 2006	340 ppb 100 ppb 360 ppb	UCMR	1000	Erosion/ Leaching of natural deposits
Vanadium	Well 3 Well 4 Well 5 Well 6 Well 7 Well 8	2003 2002 2002 2002 2003 2004	8.6 ppb 6.7 ppb 9.2 ppb 6.4 ppb 5 ppb 21 ppb	UCMR	None	

Chemical Detected	Source	Year Tested	Level Detected	SMCL	PHG	Major Source
SECONDARY STANDARDS (Aesthetic Effects Only-Do Not Pose a Health Hazard)						
Color	Well 3 Well 4 Well 5 Well 6 Well 7 Well 6	2018 2020 2018 2018 2018 2018	1 Unit ND 1 Unit 2 Units 1 Unit 6 Units	15 Color Units	None	Erosion/ Leaching of natural deposits
Turbidity	Well 3 Well 4 Well 5 Well 6 Well 7 Well 8	2018 2013 2018 2018 2018 2018	0.10 NTU 0.50 NTU 0.10 NTU 0.10 NTU 0.10 NTU 0.15 NTU	5 NTU	None	Erosion/ Leaching of natural deposits
Total Dissolved Solids	Well 3 Well 4 Well 5 Well 6 Well 7 Well 8	2013 2014 2017 2017 2008 2018	270 ppm 370 ppm 310 ppm 320 ppm 440 ppm 240 ppm	1000 ppm	None	Erosion/ Leaching of natural deposits
Iron	Well 4 Well 6 Well 7 Well 8	2013 2012 2017 2018	320 ppb 355 ppb 71 ppb 95 ppb	300 ppm	None	Erosion/ Leaching of natural deposits
Manganese	Well 6 Well 8	2020 2018	0.0011 0.0071	0.05 ppm	None	Leaching from natural deposits
Copper	Well 3 Well 4 Well 5 Well 6 Well 7 Well 8	2016 2020 2015 2018 2018 2018	0.0019 ppm 0.0013 ppm 0.0061 ppm 0.0022 ppm 0.0031 ppm 0.0019 ppm	1 ppm	None	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Zinc	Well 4 Well 5 Well 6 Well 7 Well 8	2020 2016 2015 2018 2018	0.003 ppm 0.0076 ppm 0.029 ppm 0.0041 ppm 0.0027 ppm	5 ppm	None	Runoff/leaching from natural deposits; industrial wastes
Chloride	Well 3 Well 4 Well 5 Well 6 Well 7 Well 8	2013 2014 2017 2020 2013 2018	26.5 ppm 34.1 ppm 57.8 ppm 24.0 ppm 215 ppm 37 ppm	600 ppm	None	Runoff/leaching from natural deposits; seawater influence
Sulfate	Well 3 Well 4 Well 5 Well 6	2014 2014 2017 2020	42.2 ppm 52.4 ppm 28.1 ppm 72 ppm	600 ppm	None	Runoff/leaching from natural deposits; industrial wastes