

City of Yuba City

WATER

2006 Consumer Confidence Report

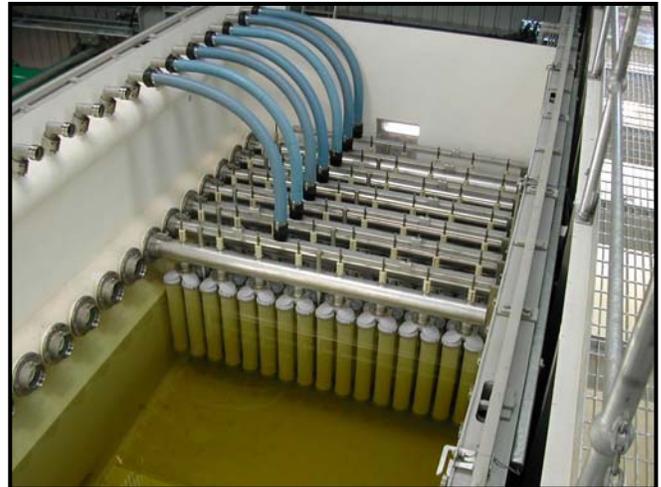
Each June, Yuba City provides a report of its water quality to its customers. Inside is a detailed account of your drinking water quality. This report includes water quality information for both surface water and groundwater (former Hillcrest) customers. A note on your bill indicates if you are a surface water or groundwater customer. Please see the details inside that outline how the surface water and groundwater regions complied with Federal and State Standards.

Yuba City Water Treatment Plant Expansion Nears Completion

The City of Yuba City's Utilities Department began an expansion project in 2004 to upgrade its Water Treatment Plant (WTP) to supply a reliable treatment capacity of 30 million gallons per day (MGD). The project is on track to be completed later this summer.

This expansion project includes the installation of 12 MGD of new membrane filtration system. The new membrane filters represent the most reliable filtering system, resulting in higher quality drinking water delivered to your home, which meets strict water quality standards.

Membrane filters provide a physical barrier that removes Giardia, Cryptosporidium and harmful bacteria. The holes in the membrane filters allow water to pass through, but are too small for bacteria to get through.



Membrane filters as shown in the picture above are being installed at the Water Treatment Plant in Yuba City.

Also included in this expansion to the Water Treatment Plant is a new four million gallon water storage tank. This tank was put into service late last year. It doubled the water storage capacity at the treatment plant and helps to ensure that the City has enough water to pump out to its customers on those hot summer days.

Keeping up with the growing water demands of the expanding city is one of the top priorities of the City. This project has added substantial capacity to the City's ability to treat and deliver water to our valuable customers.

Tours of the Water Treatment Plant may be arranged for your family, school or other group. If you are interested please contact John Westhouse, Treatment Plant Supervisor, by phone at 822-4637.

2006 Yuba City Water Quality Data - Surface Water and Groundwater

Where does my water come from?

Yuba City operates two water systems - a surface water system and a groundwater system - formerly Hillcrest Water Company. A note on your bill this month indicates if you are a surface or groundwater customer.

Surface Water Source - Feather River

Water is pumped from the Feather River to the water treatment plant located in North Yuba City.

Ground Water Sources - Wells

Yuba City Groundwater service area is divided into two regions. Both of these regions have distinct and separate water source wells. Both of the regions have separate water quality data reported to the right. Both Region 1 and Region 2/3 have emergency interconnections to the Surface Water System that could be opened in the event of a major mechanical or operational failure and thus allow surface water to be supplied to Region 1 and Region 2/3.

Where are the groundwater regions?

Groundwater Region 1

Region 1 includes all groundwater customers on the east side of Highway 99 and south of Highway 20.

Groundwater Region 2 / 3

Region 2 and 3 includes all groundwater customers on west side of Highway 99 and south of Highway 20.

Arsenic in groundwater:

The maximum allowable arsenic concentration in 2005 was 50 ppb. In 2006 the Federal Government lowered the limit to 10 ppb. California may reduce the maximum allowable concentration to 5 ppb or even lower. Yuba City is currently reviewing options to reduce arsenic levels in water provided to our groundwater customers. Public meetings will be held in the upcoming months to discuss the options for bringing Region 2/3 drinking water into compliance with this new regulation limit. These options include major modifications to the existing groundwater system or connection to the surface water system.

All Samples taken in 2006 unless noted in () below	Units	Maximum Contaminant Level	Public Health Goal	Yuba City Surface Water		*For Area/Region Description, See Left Column				Major Sources and Health Effects
						Groundwater (Hillcrest) Region 1		Groundwater (Hillcrest) Region 2/3		
						Average	Range	Average	Range	
INORGANIC CONTAMINANTS										
Primary Standards (Health Affects)										
Arsenic (See note below regarding arsenic limit)	ppb	50 in 2005 Decreased to 10 in 2006	0.004	1.2	1.2	6.9	6.5 - 15.1	14.6	7.9 - 24	Leaching from natural deposits; runoff from orchards. Some people who drink water containing arsenic between 10 and 50 ppb over many years could experience skin damage or problems with circulatory system and may have an increased risk of developing cancer. (See note in lower left-hand corner for more information.)
Barium	ppb	1000	1000	14	14	341	335 - 347	196	196 - 249	Discharge of oil drilling wastes and from metal refineries; Leaching from natural deposits
Lead - Measured in Homes (2004)	ppb	15	2	2.6* ¹	N.D. - 23* ⁴	3.5* ¹	N.D. - 5.5* ⁵	3.7* ¹	N.D. - 13* ⁶	Corrosion of household plumbing
Copper - Measured in Homes (2004)	ppb	1300	170	116* ¹	N.D. - 246	466* ¹	N.D. - 890	547* ¹	N.D. - 684	Corrosion of household plumbing
Fluoride	ppm	2	1	0.81	0.67 - 0.95	0.16* ²	0.16* ²	0.14* ²	0.13 - 0.17* ²	Water Additive to promote strong teeth
Chlorine	ppm	4	4*	1.6	1.2 - 2.2	1.3	0.2 - 3.0	1.3	0.2 - 2.4	Disinfectant added to water.
Nitrate	ppm as N	10	10	N.D.	N.D. - 0.5	N.D.	N.D.	2.2	N.D. - 7.0	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
Secondary Standards (Aesthetic Affects)										
Chloride	ppm	500	N/A	4	4	124	124	89	56 - 144	Leaching from natural deposits
Iron	ppb	300	N/A	N.D.	N.D.	91**	N.D. - 217	N.D.**	N.D.	Leaching from natural deposits
Manganese	ppb	50	N/A	N.D.	N.D.	24**	N.D. - 54	24**	N.D. - 92	Leaching from natural deposits. This is a secondary MCL violation, but it is not a health problem. The samples in excess of the MCL (50 ppb) were acute samples and since the annual average is below the MCL, no further action is required.
Sulfate	ppm	500	N/A	16	16	22	22	31	17 - 51	Runoff/leaching from natural deposits
Specific Conductance (2004)	Microhms	1600	N/A	89	79 - 100	930	860 - 1000	797	670 - 930	Substances that form ions when in water
Odor	Units	3	N/A	24	24	12	12	4	N.D. - 6	Chlorine odor
OTHER CONTAMINANTS										
Total Trihalomethanes	ppb	80	N/A	44	28 - 59	5.8	5.8	4.7	4.7	Byproduct of drinking water disinfection
Haloacetic Acids	ppb	60	N/A	42	40 - 46	N.D.	N.D.	14.7	14.7	Byproduct of drinking water disinfection.
MICROBIOLOGICAL CONTAMINANTS										
Total Coliform (For Water Systems with greater than 3300 people served)	Percent Positive Samples	Less than 5% per month	0%	0%	0 - 1%	N/A	N/A	N/A	N/A	Naturally present in the environment. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.
Total Coliform (less than 3300 people served)	Samples	1 Positive/month	0 Positive	N/A	N/A	0	0	0	0 - 1	Naturally present in the environment
Turbidity	NTU	1.0 NTU	0.3 NTU	0.07	0.05 - 0.09* ³	N/A	N/A	N/A	N/A	Soil runoff- Turbidity is a good indicator of the effectiveness of the filtration system
UNREGULATED CONTAMINANTS										
Sodium	ppm	N/A	N/A	3	3	60	60	56	47 - 70	Leaching from natural deposits
Hardness as CaCO3 See hardness table below	ppm grains/gal	N/A	N/A	58 3.4	46 - 66	277 16.2	140 - 350	227 13.3	85 - 340	Leaching from natural deposits. Yuba City Surface Water hardness is adjusted as part of the treatment process
Boron	ppb	N/A	1,000	N.D. (2003)	N.D.	411	411	347	273 - 454	Leaching from natural deposits
ppb - parts per billion ppm - parts per million N.D. - Not detected N/A -Not applicable or available						* Maximum Residual Disinfectant Level Goal (MRDLG)				
* ¹ 90 percent of homes were below this value.						* ² Fluoride occurs naturally in groundwater, but not adequate for dental protection.				
* ³ Turbidity required to be less than 0.3 NTU, 95% of the time. Less than 0.3 NTU met 100% of the time.						* ⁴ 1 sample out of 46 samples taken exceeded the Action Level of 15 ppb.				
* ⁵ 20 samples were taken.						* ⁶ 44 samples were taken				
Hardness Table (ppm)						The table above lists only organic and inorganic chemicals that were detected in your water. Your water is tested for nearly 100 other chemicals including the gas additive MTBE, mercury, pesticides, herbicides, and other non-regulated compounds that were not detected. The minimum detection level is typically in parts per billion or parts per trillion.				
Soft 0 - 60										
Semi-hard 61 - 120										
Hard 121 - 180										
Very Hard Over 180										
						For more information related to this report, plant tours or any water questions, contact John Westhouse, Water Treatment Plant Supervisor, at (530) 822-4637.				

Additional Information

Surface Water System: 1) Shallow groundwater dewatering wells were routed to the surface water treatment plant due to construction activities for 4 months. The flow was less than 10% of the total plant flow.

2) During the second calendar quarter, the required samples for Total Organic Carbon (TOC) and Disinfection By-Products (DBPs) were not collected.

3) Total Organic Carbon (TOC) removal requirements were not met for 2006. Removal may have met alternative criteria if additional sampling would have been taken.

Region 2/3 Groundwater System: 1) Arsenic exceeded the new Federal MCL. (See comments in left-hand column.)

2) During the month of September only 11 of the 12 required bacteriological samples were taken. All 11 samples met water quality standards.

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 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. USEPA/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. (1-800-426-4791)

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 before we treat it 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, USEPA and the California Department of Health Services (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.

ਇਸ ਰਿਪੋਰਟ ਵਿੱਚ ਤੁਹਾਡੇ ਪੀਣ ਵਾਲੇ ਪਾਣੀ ਸੰਬੰਧੀ ਬਹੁਤ ਮਹੱਤਵਪੂਰਨ ਜਾਣਕਾਰੀ ਦਿੱਤੀ ਗਈ ਹੈ। ਇਸਦਾ ਅਨੁਵਾਦ ਕਰੋ ਜਾਂ ਸਮਝ ਆਉਣ ਵਾਲੇ ਵਿਅਕਤੀ ਨਾਲ ਗੱਲ ਕਰੋ।

Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

For Your Information: Definitions

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

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.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs 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.

Secondary Drinking Water Standard: National Secondary Drinking Water Regulations, issued by the EPA, pertain to aesthetic characteristics of water, are advised but not enforceable by Federal Government.

Organic Chemical: Organic Chemicals typically are carbon based, man-made and molecularly complex. Pesticides and herbicides are a good example.

Inorganic Chemical: Inorganic chemicals are typically simple in structure, naturally present in nature and non man-made. Elements such as aluminum, lead and mercury are good examples.

Clarity (turbidity): Is a measurement of how clear the water is. The test for clarity is called a turbidimetric test. The turbidity is measured in nephelometric units or NTUs. The lower the NTU value, the clearer the water.

A source water assessment has been completed for the sources serving the Yuba City surface and groundwater systems. Copies of the assessment are available from CA Department of Health Services. The sources are considered most vulnerable to the following activities not associated with any detected contaminants:

Yuba City Surface Water – Airport maintenance/fueling areas, existing & historic gas stations, dry cleaners, landfills/dumps, metal plating/finishing/fabricating, active & historic mining operations, confirmed leaking underground storage tanks, irrigated crops, fertilizer, pesticide/herbicide application, railroad transportation corridors, illegal activities/unauthorized dumping, agricultural/irrigation wells. [Well at Water Treatment Plant](#) - NPDES/WDR permitted waste discharges.

Yuba City Groundwater Region 1 - Wells 2, 3, 5 & 8: high-density septic systems.

Yuba City Groundwater Region 2 & 3 – Wells 4, 7: automobile gas stations, high density septic systems; Wells 13 & 14: high density septic systems; Well 9: automobile gas stations, chemical/petroleum processing & storage, metal plating/finishing/fabricating.

Public participation opportunities to discuss drinking water issues are held during City Council meetings on the 1st and 3rd Tuesdays of each month at 7:00 p.m.