

City of Yuba City

WATER

2007 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 (formerly 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.



SURFACE WATER TREATMENT PLANT EXPANSION PROJECT COMPLETED!

In February 2008 the Utilities Department completed an expansion of the City's Surface Water Treatment Plant. The project began in 2004. In an effort to keep ahead of community growth, the surface water plant's capacity was expanded from 24 million gallons per day (MGD) to 30 MGD.

This project included the construction of 12 MGD of membrane filters and a new four million gallon water storage tank. One of the City's top priorities is providing its citizens with the highest quality drinking water; therefore, the City installed membrane filters that represent the most reliable filtration system available. Yuba City's Utilities Department now has one of the largest operating water treatment plants in Northern California utilizing this leading edge technology.

With peak summer demand in 2007 of 24 MGD, the new 30 MGD capacity will allow the City to keep up with the growing water demands for years to come.

The community is invited to stop by and see the improvements of the Surface Water Treatment Plant on Saturday, July 12th during the Utilities Department Open House Event. Tours will be provided throughout the event. Refreshments will be served and there will be fun activities for the kids. We look forward to seeing you there!

JOIN US FOR THE
**UTILITIES DEPARTMENT
OPEN HOUSE EVENT**

at the
SURFACE WATER TREATMENT PLANT
701 NORTHGATE DRIVE

**SATURDAY, JULY 12TH
10AM – 2PM**

2007 Yuba City Water Quality Data - Surface Water and Groundwater

Where does my water come from?

Yuba City operates three water systems - a surface water system and two groundwater systems - formerly called 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 systems are divided into two regions. Both of these regions have distinct and separate water source wells, and 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: In 2006 the Federal Government lowered the limit from 50 ppb to 10 ppb. California may reduce the maximum allowable concentration to 5 ppb or even lower. Both ground water systems currently meet arsenic standards through a temporary treatment process. This process has resulted in occasional brown water incidents. A permanent solution for arsenic compliance must be made. Public meetings have been held this last year to discuss the options for keeping Region 2/3 drinking water in compliance with this new regulation limit. These options include major modifications to the existing groundwater system or connection to the City's surface water system.

| All Samples taken in 2007 unless noted in () | Units | Maximum Contaminant Level | Public Health Goal | Yuba City Surface Water | | For Area/Region Description, See Left Column | | | | Major Sources and Health Effects |
|--|--------------------------|---------------------------|--------------------|-------------------------|-------------------------|--|--------------------|--------------------------------------|---------------------------|---|
| | | | | Average | Range | Groundwater (Hillcrest) Region 1** | | Groundwater (Hillcrest) Region 2/3** | | |
| INORGANIC CONTAMINANTS | | | | | | | | | | |
| Primary Standards (Health Effects) | | | | | | | | | | |
| Arsenic (See additional information below) | ppb | 10 | 0.004 | N/D | N/A | 7.8 ^{*5} | 3.8 - 6.7 | 15.7 ^{*5} | 3.3 - 14 | Leaching from natural deposits; runoff from orchards. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or circulatory system problems and may have an increased risk of developing cancer. (See note in lower left-hand corner for more information.) |
| Barium (2006) | ppb | 1000 | 1000 | 14 | N/A | 343 | 335 - 347 | 231 | 208 - 256 | Discharge of oil drilling wastes and from metal refineries; Leaching from natural deposits |
| Lead - Measured in Homes | ppb | 15 | 2 | 3.0 ^{*1} | ND - 16 ^{*4} | 5.7 ^{*1} | .78 - 13 | 2.2 ^{*1} | ND - 4.9 | Corrosion of household plumbing |
| Copper - Measured in Homes | ppb | 1300 | 170 | 62 ^{*1} | ND - 202 | 267 ^{*1} | ND - 603 | 520 ^{*1} | 14.5 - 668 | Corrosion of household plumbing |
| Fluoride (Groundwater 2006) | ppm | 2 | 1 | 0.88 | 0.79 - 1.1 | 0.16 ^{*2} | 0.16 ^{*2} | 0.14 ^{*2} | 0.13 - 0.17 ^{*2} | Water Additive to promote strong teeth |
| Chlorine | ppm | 4 | 4* | 1.1 | 0.82 - 1.34 | 0.76 | .55 - 1.36 | 1 | .38 - 1.4 | Disinfectant added to water. |
| Nitrate (Nitrates as Nitrogen) | ppm | 10 | 10 | N/D | N/A | N/D | N/A | 0.3 | 0.1 - 0.5 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits. |
| Secondary Standards (Aesthetic Effects) | | | | | | | | | | |
| Chloride (2006) | ppm | 500 | N/A | 4 | N/A | 124 | N/A | 89 | 56 - 144 | Leaching from natural deposits |
| Iron | ppb | 300 | N/A | ND (2006) | N/A | 109 | ND - 161 | 36.4 | ND - 175 | Leaching from natural deposits |
| Manganese | ppb | 50 | N/A | ND (2006) | N/A | 28.2 | 14.7 - 39.1 | 8.5 | ND - 38.6 | Leaching from natural deposits. |
| Sulfate (2006) | ppm | 500 | N/A | 16 | N/A | 22 | N/A | 31 | 17 - 51 | Runoff/leaching from natural deposits |
| Specific Conductance (Groundwater 2006) | µs/cm | 1600 | N/A | 92 | 82 - 100 | 985 | 970 - 1000 | 827 | 680 - 950 | Substances that form ions when in water |
| Odor | Units | 3 | N/A | 8 | 8 | 10 | 3 - 17 | 6 | 2 - 12 | Chlorine odor |
| OTHER CONTAMINANTS | | | | | | | | | | |
| Total Trihalomethanes | ppb | 80 | N/A | 43.5 ^{*6} | 9.2 - 46.6 | 5.8 (2006) | N/A | 4.7 (2006) | N/A | Byproduct of drinking water disinfection |
| Haloacetic Acids | ppb | 60 | N/A | 34.9 ^{*6} | 10.9 - 58.3 | ND (2006) | N/A | 14.7 (2006) | N/A | 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% | 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 | Naturally present in the environment |
| Turbidity | NTU | 1.0 NTU | 0.3 NTU | 0.07 | .06 - .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 (2006) | ppm | N/A | N/A | 3 | N/A | 60 | N/A | 56 | 47 - 70 | Leaching from natural deposits |
| Hardness as CaCO3 See hardness table below (2006) | 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 (2006) | ppb | N/A | 1,000 | ND (2003) | N/A | 411 | N/A | 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
^{*1} 90 percent of homes were below this value.
^{*3} Turbidity required to be less than 0.3 NTU, 95% of the time. Less than 0.3 NTU met 100% of the time.
^{*5} Highest Running Annual Average--(4 consecutive quarters, includes 2006 results)

^{*2} Fluoride occurs naturally in groundwater, but not adequate for dental protection.
^{*4} 1 sample out of 61 samples taken exceeded the Action Level of 15 ppb.

*** Maximum Residual Disinfectant Level Goal (MRDLG)**
**** Region 1 includes emergency backup wells that exceed the iron and manganese limits. Region 2/3 includes emergency backup wells that exceed the iron, manganese and arsenic limits. These wells operate less than 20 hours a year.**

| Hardness Table (ppm) | |
|----------------------|-----------|
| Soft | 0 - 60 |
| Semi-hard | 61 - 120 |
| Hard | 121 - 180 |
| Very Hard | Over 180 |

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.

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) This table does not include a positive total coliform and E. Coli test result for the surface water system in September because the circumstances surrounding the sample collection were suspect and warranted its removal from this table. This omission has been approved by the CA Dept. of Public Health.

Region 1 & 2/3 Groundwater Systems: 1) **Region 2/3:** Due to nitrate exceedance Well #14 has been taken out of service; 2) **Region 2/3:** This system exceeded the Arsenic MCL for the 1st and 2nd quarter due to required use of 2006 samples. All 2007 samples are in compliance. 3) Both groundwater systems exceeded the Odor MCL, this exceedance is due to Chlorine that is added to the water. When the sample is dechlorinated the odor result does not exceed the MCL

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 ਵਿਚ ਤੁਹਾਡੇ ਪੀਣ ਵਾਲੇ ਪਾਣੀ ਸਬੰਧੀ ਬਹੁਤ ਮਹਤਵਪੂਰਨ 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 Public Health. 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.