

# Consumer Confidence Report

# 2011

*Each June the Utilities Department provides a report of its water quality to its customers.*

*Inside is a detailed account of your drinking water quality. Please see the details inside that outline how your drinking water complied with Federal and State Standards.*

**NEWS!**

*Starting this June, Yuba City will begin building a fish screen at the raw water intake on the Feather river. This will help protect the salmon, sturgeon and steelhead trout population.*



## Utilities Division: Water Conservation

The State of California Assembly Bill 1420 requires that overall water usage be reduced 20% by 2020. Although the Utilities Department does not have immediate plans for mandatory water rationing, water conservation is vital. All Yuba City residents are encouraged to use water wisely and make reductions in water usage where you can.

Although conservation is just one component of a more comprehensive solution that is necessary to overcome the state's water challenges, it is something we can all do today and it is easier than you might expect. Just little changes in our daily habits can make a big difference. See the table below for recommendations on more efficient ways to do everyday things...

ACTIVITY	INEFFICIENT USE	EFFICIENT USE
<b>Shower</b>	Older style shower heads use 5-7 gallons per minute. Average 8 minute shower = 48 – 56 gallons.	Low flow showerhead using 2 gallons per minute with a 5 minute shower = 10 gallons.
<b>Brushing Teeth</b>	Older style faucet, tap running 1 minute = 5 gallons	Low flow faucet aerator, Wet brush and rinse = 1/8 gallon
<b>Bath Tub</b>	Full Tub = 35 gallons	Minimal water level w/ less than half the tub filled = 10 gallons
<b>Shaving</b>	Older style faucet, tap running 3 minutes = 15 gallons	Low flow faucet aerator, plug water in sink basin = 1 gallon
<b>Washing Dishes</b>	Older style faucet, tap running 5 minutes = 25 gallons	Tap off while washing, sink ½ full with a rinse bowl = 5 gallons
<b>Lawn Sprinklers</b>	Watering an extra 30 minutes per week = up to 300 gallons	Water early mornings, only when needed, with minimal runoff
<b>Car Washing</b>	Hose running, 10 minutes = 100 gallons	Bucket, hose rinse w/ shut off nozzle = 10 gallons
<b>Washing Hands</b>	Older style faucet, tap running 1 minute = 5 gallons	Tap off while washing = ¼ gallon
<b>Toilet Flushing</b>	Older style tank (pre -1990) = 3-7 gallons	Low flush toilet = 1.6 gallons
<b>Washing Machine</b>	Older style = 40 gallons per load	Efficient model = 25 gallons
<b>Automatic Dishwasher</b>	Full cycle = 25 gallons	Short Cycle = 12 gallons
<b>Drinking Water</b>	Run older style faucet 1 minute until water cools = 5 gallons	Keep water in a container in the refrigerator = 1/8 gallon

**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.

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**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 (SDWS):** 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 source serving the Yuba City surface water system. Copies of the assessment are available from CA Department of Public Health. The source is 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.

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

**Contact Us:**

Water Treatment Plant 822-4636

Billing 822-4818

# 2011 Yuba City Water Quality Data

Where does my water come from?	All Samples taken in 2011 unless noted in ( )	Units	Maximum Contaminant Level (California)	Public Health Goal (California)	Yuba City Surface Water		Major Sources and Health Effects
Yuba City's water comes from the Feather River. The water is pumped from the river to the water treatment plant located in North Yuba City.	<b>INORGANIC CONTAMINANTS</b>						
	<b>Primary Standards (Health Effects)</b>						
<b>LEAD</b>	<b>Arsenic</b>	ppb	10	0.004	ND	ND	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.)
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. Yuba City 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a> .	<b>Barium (2009)</b>	ppb	1000	1000	ND	ND	Discharge of oil drilling wastes and from metal refineries; Leaching from natural deposits
	<b>Lead - Measured in Homes (2010)</b>	ppb	15 <sup>*3</sup>	2	3.6 <sup>*1</sup>	ND - 9.8	Corrosion of household plumbing
	<b>Copper - Measured in Homes (2010)</b>	ppb	1300 <sup>*3</sup>	170	137 <sup>*1</sup>	ND - 452	Corrosion of household plumbing
	<b>Fluoride</b>	ppm	2	1	0.8	0.3 - 1.3	Water Additive to promote strong teeth
	<b>Chlorine</b>	ppm	4	2*	1.2	0.5 - 1.8	Disinfectant added to water.
	<b>Nitrate (Nitrates as Nitrogen) (2010)</b>	ppm	10	10	ND	ND	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
	<b>Secondary Standards (Aesthetic Effects)</b>						
	<b>Chloride (2006)</b>	ppm	500	NA	4	4	Leaching from natural deposits
	<b>Iron (Surface Water 2008)</b>	ppb	300	NA	ND	ND	Leaching from natural deposits
	<b>Manganese (Surface Water 2008)</b>	ppb	50	NA	ND	ND	Leaching from natural deposits.
<b>Sulfate (2006)</b>	ppm	500	NA	16	NA	Runoff/leaching from natural deposits	
<b>Specific Conductance</b>	µs/cm	1600	NA	124	120 - 150	Substances that form ions when in water	
<b>Odor</b>	T.O.N	3	NA	2	ND - 2	Naturally occurring and or chlorine	
<b>OTHER CONTAMINANTS</b>							
<b>Total Trihalomethanes</b>	ppb	80 <sup>*6</sup>	NA	48.3 <sup>*6</sup>	27.0 - 87.0 <sup>*4</sup>	Byproduct of drinking water disinfection	
<b>Haloacetic Acids</b>	ppb	60 <sup>*6</sup>	NA	35.4 <sup>*6</sup>	21.0 - 68.0 <sup>*5</sup>	Byproduct of drinking water disinfection.	
<b>MICROBIOLOGICAL CONTAMINANTS</b>							
<b>Total Coliform (For Water Systems with greater than 3300 people served)</b>	Percent Positive Samples	Less than 5% per month	0%	0%	0%	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.	
<b>Total Coliform (less than 3300 people served)</b>	Samples	1 Positive/month	0 Positive	NA	NA	Naturally present in the environment	
<b>Turbidity (NTU) Treatment Technique (TT) Membranes</b>	TT = 1.0 NTU 95% ≤0.1, 100% ≤1.0		NA	0.05	0.02 - 0.09	Soil runoff- Turbidity is a measure of the cloudiness of the water. It is a good indicator of the effectiveness of our filtration system. High turbidity can hinder the effectiveness of disinfectants.	
<b>Turbidity (NTU) Treatment Technique (TT) Conventional</b>	TT = 1.0 NTU 95% ≤0.3, 100% ≤1.0		NA	0.07	0.04 - 0.16		
<b>UNREGULATED CONTAMINANTS &amp; OTHER CONSTITUENTS</b>							
<b>Sodium (2006)</b>	ppm	NA	NA	3	3	Leaching from natural deposits	
<b>Hardness as CaCO3 See hardness table below</b>	ppm grains/gal	NA	NA	50	35 - 73	Leaching from natural deposits. Yuba City Surface Water hardness is adjusted as part of the treatment process	
<b>Boron (2009)</b>	ppb	NA	1000 <sup>*2</sup>	2.9	2.0 - 4.3		
ppb - parts per billion   ppm - parts per million   ND - Not detected   NA -Not applicable or available * <sup>1</sup> 90 percent of homes were below this value.   * <sup>4</sup> One sample exceeded the MCL for the year. * <sup>2</sup> Notification level, not a Public Health Goal   * <sup>5</sup> One sample exceeded the MCL for the year. * <sup>3</sup> Action Level, not an MCL   * <sup>6</sup> Running Annual Average for all sample sites.							
<b>Hardness Table (ppm)</b>							
Soft	0 - 60		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.				
Semi-hard	61 - 120						
Hard	121 - 180						
Very Hard	Over 180						

