

2016

# Water Consumer Confidence Report

CITY OF YUBA CITY



## Highs & Lows: A Year of Change for Yuba City Water

In 2016, the City of Yuba City, like the rest of California, experienced a dramatic change in water outlook. Drought conditions persisted throughout much of the year, and Yuba City residents made valiant efforts to meet and exceed water conservation requirements. Abruptly, the multiyear drought gave way to near-record levels of precipitation, culminating in the potential flood event of early 2017. After witnessing both extremes of water conditions in one year, many are asking “Where do we go from here?”

The Public Works Department is working on a number of long-term projects to manage these difficult water conditions in order to protect the Water Distribution System from damage and ensure that the Water Treatment Plant can continue to provide safe, reliable water for our customers. Current projects to prepare for the future of the City’s water system include an update to the Water System Master Plan to evaluate conditions like those faced in 2016, the design of a Water Distribution System Surge Protection Facility to handle the water pressure swings created by extreme water conditions, and a water conservation program focused on identifying water loss throughout the system.

Drought and flood are two sides of the same coin. As valley residents in this robust river region, we must be prepared for both possible scenarios—visit [www.yubacity.net/flood](http://www.yubacity.net/flood) and [www.yubacity.net/water](http://www.yubacity.net/water) to learn how to practice perpetual water conservation and flood preparedness.

## WATER CONSERVATION: A CALIFORNIA WAY OF LIFE

Though the drought state of emergency officially ended for Yuba City in April 2017, long-term water supply remains a concern throughout California.

**Governor Brown’s Executive Order B-40-17 extended the following permanent restrictions to prohibit wasteful water practices:**

- Hosing off sidewalks, driveways, and other hardscapes;
- Washing automobiles with hoses not equipped with a shut-off nozzle;
- Using non-recirculated water in a fountain or other decorative water feature;
- Watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation; and
- Irrigating ornamental turf on public street medians.

For more information about water conservation and how you can make a difference, please visit [yubacity.net/water](http://yubacity.net/water) or call the Public Works Department at (530) 822-4626.

**Thank you  
for making water conservation  
a Yuba City Way of Life!**

**ABOUT THIS REPORT** *The annual Water Consumer Confidence Report is a service provided by the City of Yuba City Public Works Department, a leader in providing safe, high-quality drinking water and water-quality monitoring.*

# 2016 YUBA CITY WATER QUALITY DATA

All Samples taken in 2016 unless noted in ( )	Units	Maximum Contaminant Level (California)	Public Health Goal (California)	Yuba City Surface Water + Well <sup>7</sup>	
				Average	Range

## INORGANIC CONTAMINANTS

Primary Standards (Health Effects)					
Arsenic	ppb	10	0.004	0.6	0.5 - 0.6
Barium (2015)	ppb	1000	1000	14	14
Lead Measured in Homes	ppb	15 <sup>2</sup>	2	2.0 <sup>1</sup>	ND - 35
Copper Measured in Homes	ppb	1300 <sup>2</sup>	170	100 <sup>1</sup>	1.8 - 200
Fluoride	ppm	2	1	0.7	ND - 0.9
Chlorine	ppm	4	2	1.4	0.7 - 1.7
Nitrate (Nitrates as Nitrogen)	ppm	10	10	ND	ND

## Secondary Standards (Aesthetic Effects)

Chloride (2015)	ppm	500	NA	5	5
Iron	ppb	300	NA	ND	ND
Manganese	ppb	50	NA	1.4	ND - 3.2
Sulfate (2015)	ppm	500	NA	11	11
Specific Conductance	µs/cm	1600	NA	101	82 - 133
Odor	T.O.N	3	NA	1	ND - 2

## OTHER CONTAMINANTS

Total Trihalomethanes	ppb	80	NA	58 <sup>4</sup>	30 - 85 <sup>5</sup>
Haloacetic Acids	ppb	60	NA	48 <sup>4</sup>	25 - 89 <sup>5</sup>

## MICROBIOLOGICAL CONTAMINANTS

Total Coliform	Percent Positive Samples	Less than 5% per month	0%	0% <sup>6</sup>	0% <sup>6</sup>
				Level Found	Range
Turbidity (NTU) Treatment Technique (TT) Membranes	TT = 1.0 NTU		NA	0.03	0.01 - 0.09
	95% ≤ 0.1 NTU, 100% ≤ 1.0 NTU			100%	
Turbidity (NTU) Treatment Technique (TT) Conventional	TT = 1.0 NTU		NA	0.08	0.06 - 0.12
	95% ≤ 0.3 NTU, 100% ≤ 1.0 NTU			100%	

## UNREGULATED CONTAMINANTS & OTHER CONSTITUENTS

Sodium (2015)	ppm	NA	NA	5	5
Hardness as CaCO <sub>3</sub> See hardness table in lower left	ppm	NA	NA	54	30 - 84
	grains/gal	NA	NA	3.2	1.8 - 4.9
Boron (2009)	ppb	NA	1000 <sup>3</sup>	ND	ND

ppb - parts per billion ppm - parts per million ND - Not detected NA - Not applicable or available

<sup>1</sup> 97 sites were sampled with 90% below this value.

<sup>2</sup> Action level, not an MCL

<sup>3</sup> Notification level, not a Public Health Goal

<sup>4</sup> Highest locational running annual average

<sup>5</sup> Samples are collected quarterly from eight locations throughout the distribution system.

## Major Sources and Health Effects

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 to the right for more information.)

Discharge of oil drilling wastes and from metal refineries; leaching from natural deposits.

Corrosion of household plumbing.

Corrosion of household plumbing.

Water additive to promote strong healthy teeth.

Disinfectant added to water.

Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.

Leaching from natural deposits.

Leaching from natural deposits.

Leaching from natural deposits.

Runoff/leaching from natural deposits.

Substances that form ions when in water.

Naturally occurring and/or chlorine.

Byproduct of drinking water disinfection.

Byproduct of drinking water disinfection.

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.

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.

Leaching from natural deposits

Leaching from natural deposits. Yuba City surface water hardness is adjusted as part of the treatment process.

Leaching from natural deposits.

## WHERE DOES MY WATER COME FROM?

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. The plant also currently utilizes a well due to the drought.

## LEAD

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 <http://www.epa.gov/safewater/lead>.

## HARDNESS TABLE (PPM)

Soft	0 - 60
Semi-hard	61 - 120
Hard	121 - 180
Very Hard	Over 180

**The table to the left 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.**

\*6 Two samples out of 1,371 were positive for total coliform, repeats were negative.

\*7 3% of water produced came from a well while City surface water supply was curtailed.



# 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 (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**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 and are advised but not enforceable by the Federal Government.

**Regulatory Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking 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 the State Water Resources Control Board's Division of Drinking Water. 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.

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 healthcare 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. 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.

**Possible contaminants in pre-treated 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, 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 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.

**Public participation opportunities to discuss drinking water issues are held during City Council meetings on the 1st and 3rd Tuesdays of each month at 6:00 p.m.**

