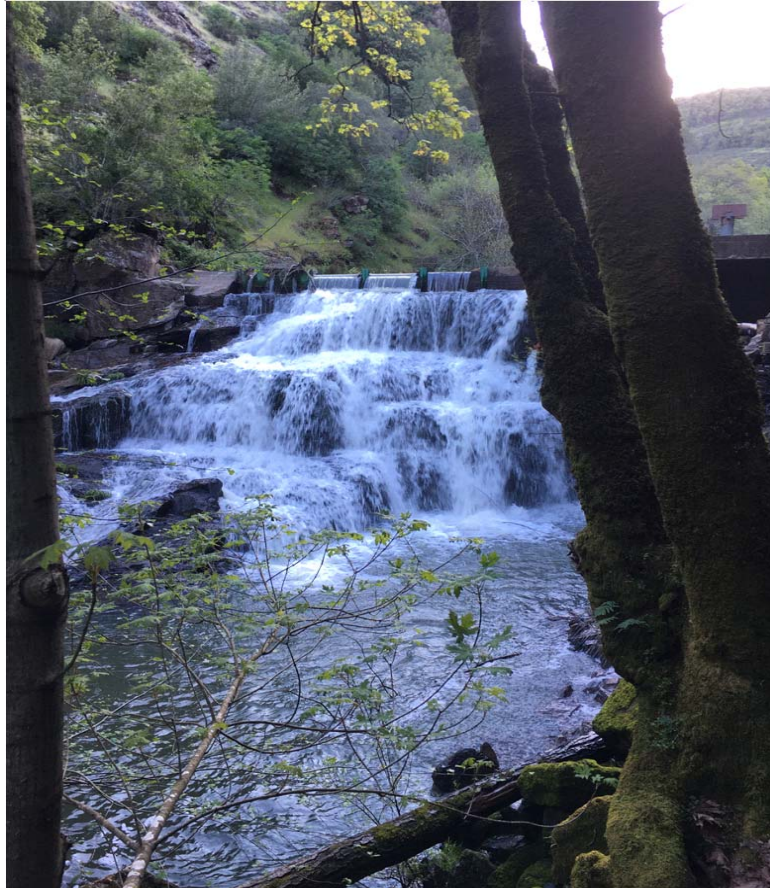


2016 DRINKING WATER QUALITY REPORT



CITY OF
NAPA

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien. Para recibir información en Español comuníquese con Bea Manriquez al (707) 257-9520 extensión 7743.



Milliken Diversion Dam

In order to ensure that tap water is safe to drink, the US Environmental Protection Agency (USEPA) and the State Water Resource Control Board (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by the public water systems.

Drinking Water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of some contaminants does not necessarily indicate that the water poses a

A primary purpose of this drinking water quality report is to provide Napa's water consumers with detailed information regarding where your water comes from, what it contains and how it compares to Federal and State standards for the period January 1, 2016 - December 31, 2016.

health risk. If the product is bottled in California, SWRCB regulations establish limits for contaminants in bottled water that must provide the same protection for public health. These limits may not be as stringent if bottled in other states.

More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water (SDW) Hotline at (800) 426-4791.

**This table below summarizes the drinking water contaminants that were detected in the period
January 1, 2016 - December 31, 2016.**

CONTAMINANT	UNITS	MCL (NL)	PHG (MCLG)	AVERAGE	RANGE	CONTAMINANT SOURCES	
SECONDARY INORGANIC CONTAMINANTS							
Total Dissolved Solids	ppm	1000	NA	233	150 - 611	Runoff/leaching from natural deposits	
Specific Conductance	uS/cm	1600	NA	423	244 - 749	Substances that form ions when in water; seawater influence	
Manganese	ppb	50	NA	16	ND - 32	Leaching from natural deposits	
Chloride	ppm	500	NA	17	13 - 72	Runoff/leaching from natural deposits; seawater influence	
Sulfate	ppm	500	NA	61	55 - 67	Runoff/leaching from natural deposits; industrial wastes	
UNREGULATED CONTAMINANTS							
Boron	ppm	(1)	NA	0.13	0.11 - 0.15	Unregulated contaminant monitoring helps EPA & the State determine where certain contaminants occur & whether they need to be regulated	
OTHER CONTAMINANTS							
Sodium	ppm	NA	NA	25	19 - 30	Naturally-occurring in ground and surface water	
Hardness	ppm	NA	NA	101	62 - 140		
MICROBIOLOGICAL CONTAMINANTS							
COLIFORM BACTERIA							
Minimum # of Monthly Samples Required: 92				Maximum % of Positive Samples Allowed(MCL): < 5.0%			
CONTAMINANT	TOTAL # OF SAMPLES TAKEN	HIGHEST MONTHLY % POSITIVE*	TOTAL % POSITIVE	CONTAMINANT SOURCES			
Total Coliform Bacteria	1341	11.45	1.49	Naturally present in the environment			
FILTER PERFORMANCE							
TURBIDITY (THE STANDARD MEASURE OF THE CLARITY IN WATER)							
CONTAMINANT	PERFORMANCE STANDARD (TT)	HIGHEST DETECTED MEASUREMENT (NTU)	LOWEST % OF SAMPLES < 0.3	CONTAMINANT SOURCES			
Turbidity	TT = 1.0; Minimum 95% of samples each month < 0.3	0.50	100.0	Soil runoff			
DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS and DISINFECTION BYPRODUCT PRECURSORS							
TRIHALOMETHANES (THMs)* AND HALOACETIC ACIDS (HAAs)							
CONTAMINANT	UNITS	MCL	PHG (MCLG)	HIGHEST LRAA (RAA)	RANGE	CONTAMINANT SOURCES	
THM	ppb	80	NA	72.1	24.8 - 78.3	Byproduct of drinking water disinfection via reaction between organic carbon and chlorine	
HAA	ppb	60	NA	21.4	ND - 29.0		
Bromate	ppb	10	0.1	(4)	2 - 5		
CHLORINE (Cl₂)							
CONTAMINANT	UNITS	MRDL	MRDLG	AVERAGE	RANGE	CONTAMINANT SOURCES	
Chlorine	ppm	4.0	4.0	0.53	ND - 1.42	Drinking water disinfectant added for treatment	
TOTAL ORGANIC CARBON (TOC)							
CONTAMINANT	COMPLIANCE RATIO	MCL	PHG	AVERAGE	RANGE	CONTAMINANT SOURCES	
TOC	> 1.00	TT	NA	2.04	1.58 - 2.68	Various natural and man-made sources	
DETECTION OF LEAD AND COPPER IN CUSTOMER TAPS (collected in July 2015)							
CONTAMINANT	UNITS	AL	PHG	90 TH PERCENTILE DETECTED	# SITES EXCEEDING AL	# SITES SAMPLED	CONTAMINANT SOURCES
Lead	ppb	15	0.2	ND	1	37	Plumbing corrosion; erosion of natural deposits
Copper	ppm	1.3	0.3	0.34	0	37	

*During May 2016, the City of Napa conducted a Level 1 Assessment and there were no corrective actions required

WATER QUALITY GLOSSARY

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

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system

LRAA - Locational Running Annual Average

MCL - Maximum Contaminant Level: The highest level of contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically & technologically feasible. Secondary MCLs are set to protect the odor, taste & appearance.

MCLG - Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

MRDL - Maximum Residual Disinfectant Level: 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.

MRDLG - Maximum Residual Disinfectant Level Goal: The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA - Not Applicable

ND - Not Detected

NL - Notification Level

NTU - Nephelometric Turbidity Units

PHG - Public Health Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the CA EPA.

ppb - parts per billion: micrograms per liter (ug/L)

ppm - parts per million: milligrams per liter (mg/L); 17.1 ppm = 1 grain/gal

PDWS - Primary Drinking Water Standard: MCLs & MRDLs for contaminants that affect health along with their monitoring and reporting requirement, & water treatment requirements.

TT - Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

uS/cm: microsiemens per centimeter

PROTECTING OUR WATERSHEDS

The City of Napa is devoted to protecting the land surrounding our local source waters in order to maintain the quality and purity of water used for Napa's drinking water consumers. In the long-term, protecting our watersheds is one of the least costly and most important actions we can take to reduce the risk of unwanted constituents in our drinking water. Algal growth due to the addition of nutrients is the number one cause of taste and odor affecting your tap water. Nutrients in the watershed are increased artificially by wastewater systems as well as fertilizers and runoff from agricultural practices. Every five years, the City of Napa conducts Source Water Assessments to evaluate the quality of the water used as drinking water supplies and to examine activities associated with the specific waterway and surrounding areas to determine their contribution to contamination.

These potential contributors are then compiled into a Vulnerability Summary. Results from the Vulnerability Summaries show the most significant potential sources of contaminants for the City of Napa's source waters are:

Lake Hennessey (completed December 2012): Pacific Union College WasteWater Treatment Plant, vineyards, fires, invasive species, potential hazardous material spills due to traffic accidents (on Highway 128 near lake), septic tank systems (in Angwin), and grazing and wild animals.

Lake Milliken (completed December 2012): Fires, vineyards, grazing and wild animals.

Sacramento Delta (updated June 2012): Recreational use, urban and agricultural runoff, grazing animals, herbicide application and seawater intrusion.

Copies of the complete assessments are available through the SWRCB DDW Santa Rosa District Office, 50 D Street, Suite 200, Santa Rosa, CA 95404 or Ms. Amy Little, Associate Sanitary Engineer, SWRCB at (707) 576-2145.

SOURCE WATER

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 human activity.

The City of Napa's source water, depending on which water treatment plant is in operation, comes from:

- 1) Barker Slough in the Sacramento Delta via the North Bay Aqueduct (treated by the Edward I. Barwick Jamieson Canyon Water Treatment Plant),
- 2) Lake Hennessey (treated by the Hennessey Water Treatment Plant), and
- 3) Lake Milliken (treated by the Milliken Water Treatment Plant).

Contaminants that may be present in 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.

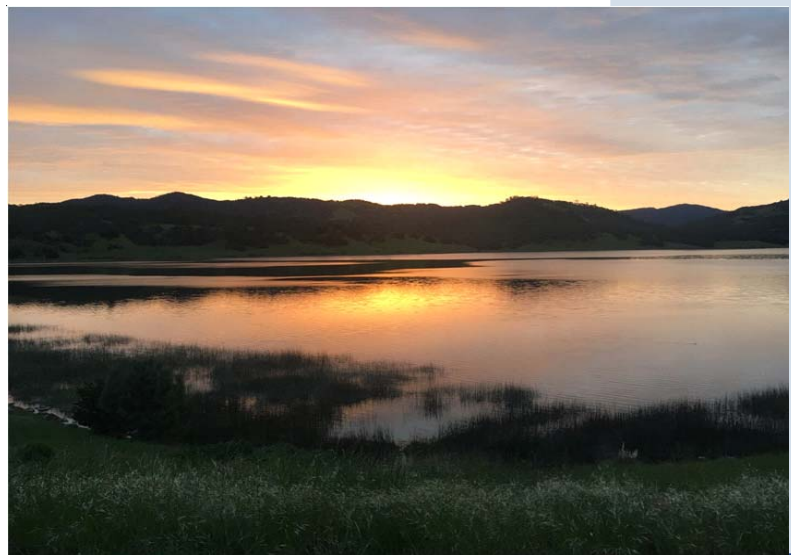
Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

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, agricultural application, and septic systems.

Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and

mining activities.

Watershed Protection



Lake Hennessey

The City of Napa encourages citizens to participate in our City Council meetings, which take place on the first and third Tuesday of each month at 3:30-5:00 pm and again at 6:30-9:00 pm, in our Council Chambers at City Hall, 955 School Street. For more information concerning City activities, please see our web site at <http://cityofnapa.org>.

COLIFORMS

This report reflects changes in drinking water regulatory requirements during 2016. All water systems are required to comply with the state Total Coliform Rule. Beginning April 1, 2016, all water systems are also required to comply with the federal Revised Total Coliform Rule. The new federal rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of coliforms. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that were found during these assessments. During the past year we were required to conduct a Level I assessment. There were no problems found nor corrective actions required.

SENSITIVE POPULATIONS

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 SDW Hotline at (800) 426-4791.

TRIHALOMETHANES & HALOACETIC ACIDS

Similar to *Sensitive Populations* above, scientists can not disprove that some people who drink water containing THMS and/or HAAs in excess of the MCL over many years (studies interpolate exposures to seventy years) may experience liver, kidney or central nervous system problems, and may have an increased risk of getting cancer. These diseases, however, are not only caused by chemicals in drinking water, but also by food, air and other environmental factors.

LEAD & COPPER

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. Unlike other regions of the US where lead was prevalent, it was not the predominant construction material used in the City of Napa for water service installations. Additionally, years of monitoring shows the existing

public system pipe network does not contribute lead to the drinking water. The City of Napa is responsible for providing high quality drinking water and can advise, but cannot control, the variety of materials used in private 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 SDW Hotline or at <http://www.epa.gov/lead>. To be in compliance with the Lead and Copper Rule, the level detected at the 90th percentile must be below the AL. The next round of lead and copper testing is in July 2018.

FOR MORE INFORMATION

If you have questions after reading this report regarding drinking water quality, please call Erin Kebbas at (707) 253-0822. For questions concerning the City of Napa Water Division, in general, please call (707) 257-9521. See our website for up to date information on programs: www.cityofnapa.org/water. For emergencies or customer use during weekends and holidays, please call (707) 253-4451.

Water is a Natural Resource.

