2015 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.

Lake Hennessey

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, 2015 - December 31, 2015.

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 health risk. If the product is bottled in California, SWRCB regulations also 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, 2015 - December 31, 2015.

CONTAMINANT	UNITS	MCL (NL)	PHG (MCLG)	AVERAGE	RANGE	CONTAMINANT SOURCES
SECONDARY INORGANIC CONTAMINANTS						
Total Dissolved Solids	ppm	1000	NA	180	110 - 220	Runoff/leaching from natural deposits
Specific Conductance	uS/cm	1600	NA	287	140 - 360	Substances that form ions when in water; seawater influence
Chloride	ppm	500	NA	19	8 - 50	Runoff/leaching from natural deposits; seawater influence
Sulfate	ppm	500	NA	40	16 - 54	Runoff/leaching from natural deposits; industrial wastes
UNREGULATED CONTAMINANTS						
Boron	ppm	(1)	NA	0.09	ND - 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	21	14 - 29	Naturally-occurring in ground and surface water
Hardness	ppm	NA	NA	90	33 - 150	

MICROBIOLOGICAL CONTAMINANTS

COLIFORM BACTERIA

Minimum # of Monthly Samples Required: 92			Maximum % of Postive Samples Allowed(MCL): < 5.0%	
CONTAMINANT	TOTAL # OF SAMPLES TAKEN	HIGHEST MONTHLY % POSITIVE	TOTAL % POSITIVE	CONTAMINANT SOURCES
Total Coliform Bacteria	1303	0.97	0.08	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	0.29	100.0	Soil runoff

DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS and DISINFECTION BYPRODUCT PRECURSORS

TRIHALOMETHANES (THMs)* AND HALOACETIC ACIDS (HAAs) *(*THM Violation Description on Back Page)*

CONTAMINANT	UNITS	MCL	PHG (MCLG)	HIGHEST LRAA (RAA)	RANGE	CONTAMINANT SOURCES
THM*	ppb	80	NA	96.9	50.0 - 106.6	Byproduct of drinking water disinfection
HAA	ppb	60	NA	30.4	ND - 59.0	
Bromate	ppb	10	0.1	(3.4)	ND - 5.5	

CHLORINE (Cl_2)

CONTAMINANT	UNITS	MRDL	MRDLG	AVERAGE	RANGE	CONTAMINANT SOURCES
Chlorine	ppm	4.0	4.0	0.56	ND - 1.53	Drinking water disinfectant added for treatment

TOTAL ORGANIC CARBON (TOC)

CONTAMINANT	COMPLIANCE RATIO	MCL	PHG	AVERAGE	RANGE	CONTAMINANT SOURCES
TOC	> 1	TT	NA	1.77	1.04 - 3.78	Various natural and man-made sources

DETECTION OF LEAD AND COPPER IN CUSTOMER TAPS *(collected in July 2015)*

CONTAMINANT	UNITS	AL	PHG	90TH 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	

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.

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 microbioal 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 relect 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 Milliken

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.

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**

In 2015, the City of Napa was unable to maintain LRAAs below the THM MCL of 80 ug/L at multiple locations in all four sampling sessions. In order to address these LRAA MCL exceedances, the City Of Napa installed aerator/blower systems in two distribution storage tanks as well as instituted unidirectional flushing after a two year hiatus due to perceptions associated with the drought in 2013 and the earthquake in 2014. THMs and HAAs, also referred to as disinfection byproducts, are formed by a reaction between dissolved organic carbon, that occurs naturally in surface water, and chlorine, an important agent that protects people from dangerous and potentially fatal diseases such as cholera, typhoid fever dysentery and hepatitus. 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 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. The City of Napa is responsbile 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 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.

Water is a Natural Resource.

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.