

2018 Consumer Confidence Report

Water System Name: City of Calistoga

Report Date: June 18, 2019

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 to December 31, 2018 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse City of Calistoga a 1232 Washington St., Calistoga, CA. 94515(707)942-2828 para asistirlo en español.

Type of water source(s) in use: Reservoir, Surface Water

Name & general location of source(s): The City has two sources. The first, Kimball Reservoir, sends untreated water to the City operated Kimball Water Treatment plant. The second is the North Bay Aqueduct (NBA). NBA water is treated and distributed by any of three plants run by the City of Napa. Hennessey Water Treatment Plant treats and distributes water from Lake Hennessey. The Milliken Water Treatment Plant treats water from Lake Milliken. Jamieson Canyon Water Treatment Plant treats water sourced from Barker Slough in the Sacramento Delta, through the NBA.

Drinking Water Source Assessment information: Drinking water source assessments evaluate the quality of water used for drinking water supplies in local communities. The survey examines activities associated with the specific waterways and surrounding areas to determine possible contribution to contamination. These potential contributors are then compiled into a Watershed Sanitary Survey. The results from these reports show the most significant potential sources of contaminants for the City of Calistoga's source waters.

Kimball Reservoir (Lake Ghisolfo) (Assessment Updated June 2016): Wild animals, geological hazards and fires.

Lake Hennessey (completed April 2018): 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, grazing, and wild animals.

Lake Milliken (completed April 2018): Fires, vineyards, grazing, and wild animals.

Sacramento Delta (updated 2017): Recreational use, urban and agricultural runoff, grazing animals, herbicide application, and seawater intrusion.

Time and place of regularly scheduled board meetings for public participation: The City of Calistoga encourages citizens to participate in City Council meetings. The meetings are held on the first and third Tuesday of the month, 6:00 pm at the Community Center, 1307 Washington Street, Calistoga, CA.

For more information, contact: Michael Kirn Phone: (707) 942-2828

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JUN 27 2019

**SWRCB-DDW
Santa Rosa Office**

TERMS USED IN THIS REPORT

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 (U.S. EPA).

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.

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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

Variances and Exemptions: Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.

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.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (µg/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

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 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.

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, and 6 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria (state Total Coliform Rule)	(In a month)	0	1 positive monthly sample	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	(In the year)	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive		Human and animal fecal waste
<i>E. coli</i> (federal Revised Total Coliform Rule)	(In the year)	0	(a)	0	Human and animal fecal waste

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	7/28/16	29	4.3	0	15	0.2	3	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	7/28/16	29	.54	0	1.3	0.3	Not applicable	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2/13/18	5.2	n/a	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2/13/18	94	n/a	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Chlorine	Daily	1.4 mg/l	.8 – 2.6 mg/l	4.0 mg/l	4.0 mg/l	Drinking water disinfectant added for treatment
Control of DBP precursors (TOC)	Monthly	1.7 mg/l avg	1.1 – 2.6 mg/l	TT	N/A	Various natural and man-made sources
Haloacetic Acids (HAA5s)	Quarterly	42 µg/L	21 – 67 µg/L	60 µg/L	N/A	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHMs)	Quarterly	45 µg/L	18 – 64 µg/L	80 µg/L	N/A	Byproduct of drinking water disinfection
TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Color	Quarterly	ND	ND-ND	15	N/A	Naturally-occurring organic materials
Odor	Quarterly	9.3 T.O.N. avg	ND - 20	3	N/A	Naturally-occurring organic materials

Additional General Information on Drinking Water

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. 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. U.S. EPA/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).

Lead-Specific Language: 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 Calistoga 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. **[OPTIONAL:** If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] 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 (1-800-426-4791) or at <http://www.epa.gov/lead>.

**Summary Information for Violation of a MCL, MRDL, AL, TT,
or Monitoring and Reporting Requirement**

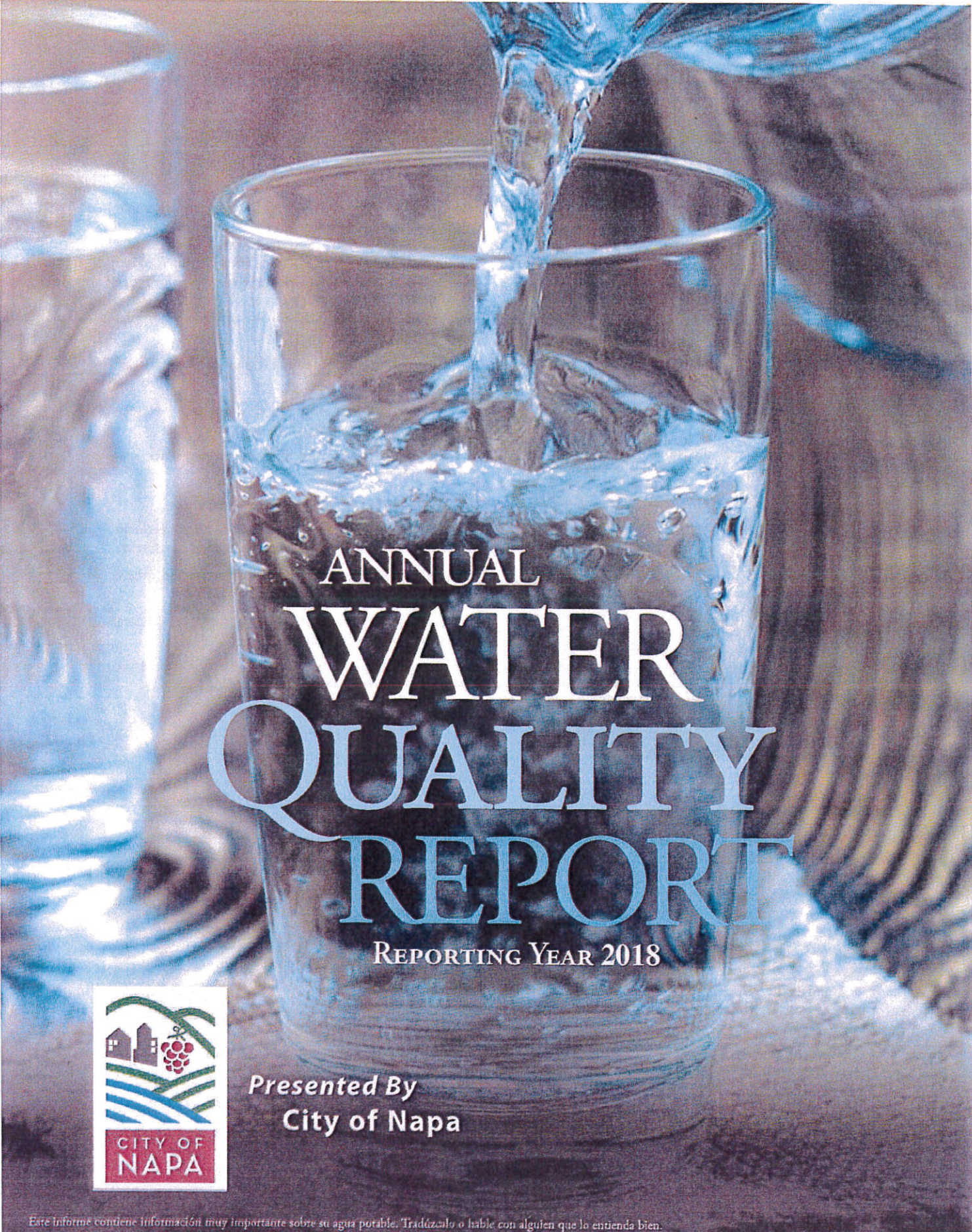
VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
NONE				

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES	
Treatment Technique ^(a) (Type of approved filtration technology used)	Pressure filters
Turbidity Performance Standards ^(b) (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to .3 NTU in 95% of measurements in a month. 2 – Not exceed 1.0 NTU for more than eight consecutive hours.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	.28
Number of violations of any surface water treatment requirements	0

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

A close-up photograph of water being poured from a glass pitcher into a clear glass. The water is captured mid-pour, creating a dynamic splash and bubbles. The background is a blurred wooden surface.

ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2018



Presented By
City of Napa

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

PWS ID#: 2810003

Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2018. Over the years, we have dedicated ourselves to producing drinking water that meets all State and Federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available should you ever have any questions or concerns about your water.

Where Does My Water Come From?

The City of Napa's customers are fortunate because we enjoy an abundant water supply from 3 sources. Depending on which water treatment plant is in operation, the source 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), or (3) Lake Milliken (treated by the Milliken Water Treatment Plant).

Count on Us

Delivering high-quality drinking water to our customers involves far more than just pushing water through pipes. Water treatment is a complex, time-consuming process. Because tap water is highly regulated by State and Federal laws, water treatment plant and system operators must be licensed and are required to commit to long-term, on-the-job training before becoming fully qualified. Our licensed water professionals' technical knowledge includes a wide range of subjects, including mathematics, biology, chemistry, and physics. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water;
- Monitoring and inspecting machinery, meters, gauges, and operating conditions;
- Conducting tests and inspections on water and evaluating the results;
- Maintaining optimal water chemistry;
- Applying data to formulas that determine treatment requirements, flow levels, and concentration levels;
- Documenting and reporting test results and system operations to regulatory agencies; and
- Serving our community through customer support, education, and outreach.

So the next time you turn on your faucet, think of the skilled professionals who stand behind each drop.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



Community Participation

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 p.m. and again at 6:30-9:00 p.m. 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>.

Substances That Could Be in 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 from human activity.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health. 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.

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 can 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 by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants, that can be naturally occurring or can be the result of oil and gas production and mining activities.

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

Lead in Home Plumbing

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 U.S. where lead was prevalent, it was not the predominant construction material used in the City of Napa for water service installations.

In addition, years of monitoring show that the existing public system pipe network does not contribute lead to our drinking water. Our next lead and copper collection is scheduled for July 2021. The City of Napa is responsible for providing

high-quality drinking water, but we 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 do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.) 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.

We remain vigilant in delivering the best-quality drinking water

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Erin Kebbas, Water Quality Manager, at (707) 253-0822. For questions concerning the City of Napa Water Division, in general, please call (707) 257-9521. See our Web site 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.



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 the drinking water supply 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 following as the most significant potential sources of contaminants for the City of Napa's source waters:

Lake Hennessey (completed April 2018): 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, grazing, and wild animals.

Lake Milliken (completed April 2018): Fires, vineyards, grazing, and wild animals.

Sacramento Delta (updated 2017): 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 from Ms. Amy Little, Associate Sanitary Engineer, SWRCB, at (707) 576-2145.



Benefits of Chlorination

Disinfection, a chemical process used to control disease-causing microorganisms by killing or inactivating them, is unquestionably the most important step in drinking water treatment. By far the most common method of disinfection in North America is chlorination.

Before communities began routinely treating drinking water with chlorine (starting with Chicago and Jersey City in 1908), cholera, typhoid fever, dysentery, and hepatitis A killed thousands of U.S. residents annually. Drinking water chlorination and filtration have helped to virtually eliminate these diseases in the U.S. Significant strides in public health are directly linked to the adoption of drinking water chlorination. In fact, the filtration of drinking water plus the use of chlorine is probably the most significant public health advancement in human history.

How chlorination works:

Potent Germicide Reduction in the level of many disease-causing microorganisms in drinking water to almost immeasurable levels.

Taste and Odor Reduction of many disagreeable tastes and odors like foul-smelling algae secretions, sulfides, and odors from decaying vegetation.

Biological Growth Elimination of slime bacteria, molds, and algae that commonly grow in water supply reservoirs, on the walls of water mains, and in storage tanks.

Chemical Removal of hydrogen sulfide (which has a rotten egg odor), ammonia, and other nitrogenous compounds that have unpleasant tastes and hinder disinfection. It also helps to remove iron and manganese from raw water.



Test Results

Our water is monitored for hundreds of different kinds of substances (including but not limited to metals or inorganic chemicals, volatile organic chemicals, man-made substances and disinfection by-products) on a very strict schedule and our goal is to keep any detections below their respective maximum allowed levels. Remember that detecting a substance does not mean the water is unsafe to drink. Here we show only those substances that were detected in our water in 2018. **Your water met all U.S. EPA and State standards in 2018.**

We participated in the 4th stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 sampling benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES						
SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED [LRAA] [RAA]	RANGE LOW-HIGH	IN COMPLIANCE	TYPICAL SOURCE
Bromate (ppb)	10	0.1	[2.0]	0.0–2.8	Yes	By-product of drinking water disinfection
Chlorine (ppm)	[4.0 (as Cl ₂)]	[4.0 (as Cl ₂)]	[0.78]	0.00–1.81	Yes	Drinking water disinfectant added for treatment
Control of DBP precursors [TOC] (removal ratio)	TT	NA	2.09	0.63–3.27	Yes	Various natural and man-made sources
Haloacetic Acids (ppb)	60	NA	(31.5)	0.0–37.2	Yes	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	80	NA	(55.6)	28.6–63.3	Yes	By-product of drinking water disinfection
Total Coliform Bacteria (positive samples)	Maximum % of positive samples: <5.0	NA	1/1328 [0.08%]	Highest monthly % positive = 0.97%	Yes	Naturally present in the environment
Filter Performance (Turbidity—the Standard Measure of Clarity in Water)						
SUBSTANCE (UNIT OF MEASURE)	MCL		PHG		AMOUNT DETECTED	TYPICAL SOURCE
Turbidity (NTU, highest detected measurement)	TT = 1.0		NA		0.18	Soil runoff
Turbidity (lowest % of samples <0.3)	TT = Minimum 95% of samples each month <0.3		NA		100	Soil runoff
Tap Water Samples Collected for Copper and Lead Analyses from Sample Sites throughout the Community						
SUBSTANCE (UNIT OF MEASURE)	PHG (MCLG)	AL	AMOUNT DETECTED (90TH %TILE)	SITES ABOVE AL/ TOTAL SITES	IN COMPLIANCE	TYPICAL SOURCE
Copper (ppm)	1.3	0.3	0.30	0/31	Yes	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	15	0.2	ND	0/31	Yes	Internal corrosion of household water plumbing systems; discharge from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	SMCL	PHG (MCLG)	AVERAGE	RANGE LOW-HIGH	IN COMPLIANCE	TYPICAL SOURCE
Chloride (ppm)	500	NS	22	10-46	Yes	Runoff/leaching from natural deposits; seawater influence
Specific Conductance ($\mu\text{S}/\text{cm}$)	1,600	NS	300	240-360	Yes	Substances that form ions when in water; seawater influence
Sulfate (ppm)	500	NS	54	38-69	Yes	Runoff/leaching from natural deposits; agricultural and industrial wastes
Total Dissolved Solids (ppm)	1,000	NS	302	120-396	Yes	Runoff/leaching from natural deposits
Turbidity (NTU)	5	NS	0.12	0.00-2.43	Yes	Soil runoff

UNREGULATED AND OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	MCL	PHG	AVERAGE	RANGE LOW-HIGH	TYPICAL SOURCE
Hardness, Total [as CaCO_3] (ppm)	NA	NA	118	63-154	Naturally occurring in ground and surface water
Sodium (ppm)	NA	NA	19	16-21	Naturally occurring in ground and source water

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

$\mu\text{S}/\text{cm}$ (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

DBP: Disinfection By Product

LRAA (Locational Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAAs.

MCL (Maximum Contaminant Level): 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 (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

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 U.S. EPA.

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 drinking water disinfectant 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

NS: No standard

NTU (Nephelometric Turbidity Units):

Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

PDWS (Primary Drinking Water Standard):

MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

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 California EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

removal ratio: A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

TOC: Total Organic Carbon

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

Informe de confianza del consumidor, 2018

Nombre del Sistema de Agua: Ciudad de Calistoga

Fecha del informe: 18 de junio de 2019

Hacemos monitores de la calidad del agua potable para muchos constituyentes, según lo exigen las regulaciones estatales y federales. Este informe muestra los resultados de nuestro monitoreo para el período del 1 de enero al 31 de diciembre de 2018 y puede incluir datos de monitoreo anteriores.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Tipo de fuente (s) de agua en uso: represa, agua de superficie

Nombre y ubicación general de la (s) fuente (s): La ciudad tiene dos fuentes. La primera, Kimball Reservoir, envía agua no tratada a la planta de tratamiento de agua de Kimball operada por la ciudad. La segunda es el North Bay Aqueduct (NBA). El agua de la NBA es tratada y distribuida por cualquiera de las tres plantas administradas por la Ciudad de Napa. La planta de tratamiento de agua de Hennessey trata y distribuye el agua del lago Hennessey. La planta de tratamiento de agua Milliken trata el agua del lago Milliken. La planta de tratamiento de agua de Jamieson Canyon trata el agua obtenida de Barker Slough en el Delta de Sacramento, a través de la NBA.

Información sobre la evaluación de la fuente de agua potable: Las evaluaciones de fuentes de agua potable evalúan la calidad del agua utilizada para el suministro de agua potable en las comunidades locales. El estudio examina las actividades asociadas con las vías fluviales específicas y las áreas circundantes para determinar la posible contribución a la contaminación. Estos contribuyentes potenciales son luego compilados en una Encuesta Sanitaria de Cuencas. Los resultados de estos informes muestran las fuentes potenciales de contaminantes más importantes para las aguas de origen de la Ciudad de Calistoga.

Represa de Kimball (Lago Ghisolfo) (Evaluación actualizada en junio de 2016): Animales salvajes, peligros geológicos e incendios.

Lago Hennessey (terminado en abril de 2018): planta de tratamiento de aguas residuales de Pacific Union College, viñedos, incendios, especies invasoras, posibles derrames de materiales peligrosos debido a accidentes de tránsito (en la carretera 128 cerca del lago), sistemas de tanques sépticos, pastoreo y animales salvajes.

Lago Milliken (completado en abril de 2018): incendios, viñedos, pastos y animales salvajes.

Delta de Sacramento (actualizado en 2017): uso recreativo, escorrentía urbana y agrícola, animales de pastoreo, aplicación de herbicida e intrusión de agua de mar .

Hora y lugar de las reuniones de la junta programadas regularmente para la participación pública: La Ciudad de Calistoga alienta a los ciudadanos a participar en las reuniones del Concejo Municipal. Las reuniones se llevan a cabo el primer y tercer martes del mes, a las 6:00 pm en el Centro Comunitario, 1307 Washington Street, Calistoga, CA.

Para mas información contacte: Michael Kirn

Teléfono: (707) 942-2828

TÉRMINOS UTILIZADOS EN ESTE INFORME

Nivel máximo de contaminante (MCL) : el nivel más alto de un contaminante permitido en el agua potable. Los MCL primarios se establecen tan cerca de los PHG (o MCLG) como sea económica y tecnológicamente posible. Los MCL secundarios se establecen para proteger el olor, el sabor y la apariencia del agua potable.

Meta de nivel máximo de contaminante (MCLG, por sus siglas en inglés) : el nivel de un contaminante en el agua potable por debajo del cual no hay riesgo conocido o esperado para la salud. Los MCLG son establecidos por la Agencia de Protección Ambiental de los Estados Unidos (US EPA).

Objetivo de salud pública (PHG) : el nivel de un contaminante en el agua potable por debajo del cual no existe ningún riesgo conocido o esperado para la salud. Los PHG son establecidos por la Agencia de Protección Ambiental de California.

Nivel máximo de desinfectante residual (MRDL): El nivel más alto de un desinfectante permitido en el agua potable. Existe evidencia convincente de que es necesario agregar un desinfectante para controlar los contaminantes microbianos.

Meta de nivel máximo de desinfectante residual (MRDLG) : El nivel de un desinfectante de agua potable por debajo del cual no existe ningún riesgo conocido o esperado para la salud. Los MRDLG no reflejan los beneficios del uso de desinfectantes para controlar los contaminantes microbianos.

Estándares primarios de agua potable (PDWS, por sus siglas en inglés) : MCL y MRDL para contaminantes que afectan la salud junto con sus requisitos de monitoreo e informe, y requisitos de tratamiento de agua.

Estándares secundarios de agua potable (SDWS): MCL para contaminantes que afectan el sabor, el olor o la apariencia del agua potable. Los contaminantes con SDWS no afectan la salud en los niveles de MCL.

Técnica de tratamiento (TT) : Un proceso requerido destinado a reducir el nivel de un contaminante en el agua potable.

Nivel de acción reglamentaria (AL) : la concentración de un contaminante que, si se excede, activa el tratamiento u otros requisitos que debe cumplir un sistema de agua.

Variaciones y exenciones : Permisos de la Junta de Control de los Recursos Hídricos del Estado (Junta Estatal) para exceder un MCL o no cumplir con una técnica de tratamiento bajo ciertas condiciones.

Evaluación de nivel 1 : una evaluación de nivel 1 es un estudio del sistema de agua para identificar problemas potenciales y determinar (si es posible) por qué se han encontrado bacterias coliformes totales en nuestro sistema de agua.

Evaluación de nivel 2 : una evaluación de nivel 2 es un estudio muy detallado del sistema de agua para identificar problemas potenciales y determinar (si es posible) por qué se ha producido una violación del MCL de *E. coli* y / o por qué se han encontrado bacterias coliformes totales en nuestro sistema de agua. En múltiples ocasiones .

ND : no detectable en el límite de prueba

ppm : partes por millón o miligramos por litro (mg / L)

ppb : partes por billón o microgramos por litro (µg / L)

ppt : partes por trillón o nanogramos por litro (ng / L)

ppq : partes por cuatrillón o picogramas por litro (pg / L)

pCi / L : picocuries por litro (una medida de radiación)

Las fuentes de agua potable (tanto el agua del grifo como el agua embotellada) incluyen ríos, lagos, arroyos, estanques, embalses, manantiales y pozos. A medida que el agua viaja sobre la superficie de la tierra o a través del suelo, disuelve los minerales naturales y, en algunos casos, el material radiactivo, y puede recoger sustancias resultantes de la presencia de animales o de la actividad humana.

Los contaminantes que pueden estar presentes en el agua de origen incluyen:

- *Contaminantes microbianos*, como virus y bacterias, que pueden provenir de plantas de tratamiento de aguas residuales, sistemas sépticos, operaciones ganaderas agrícolas y vida silvestre.
- *Contaminantes inorgánicos*, como sales y metales, que pueden ocurrir naturalmente o como resultado de la escorrentía de aguas pluviales urbanas, descargas de aguas residuales industriales o domésticas, producción de petróleo y gas, minería o agricultura.
- *Pesticidas y herbicidas*, que pueden provenir de una variedad de fuentes, como la agricultura, la escorrentía de aguas pluviales urbanas y los usos residenciales.
- *Contaminantes químicos orgánicos*, incluidos los químicos orgánicos sintéticos y volátiles, que son subproductos de procesos industriales y producción de petróleo, y también pueden provenir de estaciones de servicio, escorrentía de aguas pluviales urbanas, aplicaciones agrícolas y sistemas sépticos.
- *Contaminantes radioactivos*, que pueden ocurrir naturalmente o ser el resultado de la producción de petróleo y gas y las actividades mineras.

Para garantizar que el agua del grifo sea segura para beber, la EPA de los EE. UU. y la Junta Estatal prescriben regulaciones que limitan la cantidad de ciertos contaminantes en el agua que proporcionan los sistemas públicos de agua. Las regulaciones de la Administración de Drogas y Alimentos de los Estados Unidos y la ley de California también establecen límites para los contaminantes en el agua embotellada que brindan la misma protección para la salud pública.

Las tablas 1, 2, 3, 4, 5 y 6 enumeran todos los contaminantes del agua potable que se detectaron durante el muestreo más reciente para el constituyente. La presencia de estos contaminantes en el agua no necesariamente indica que el agua representa un riesgo para la salud. La Junta Estatal nos permite monitorear ciertos contaminantes menos de una vez al año porque las concentraciones de estos contaminantes no cambian con frecuencia. Algunos de los datos, aunque son representativos de la calidad del agua, tienen más de un año de antigüedad. Cualquier violación de un AL, MCL, MRDL o TT tiene un asterisco. La información adicional sobre la violación se proporciona más adelante en este informe.

TABLA 1 - MUESTREO DE RESULTADOS QUE MUESTRA LA DETECCIÓN DE BACTERIAS COLIFORMES

Contaminantes microbiológicos (complete si se detectan bacterias)	Número máximo de detecciones	Núm. de meses en violación	MCL	MCLG	Fuente típica de bacterias
Bacterias coliformes totales (Estado de la regla de coliformes totales)	(En un mes)	0	1 muestra mensual positiva	0	Naturalmente presente en el medio ambiente.
Coliformes fecales o <i>E. coli</i> (Estado de la regla de coliformes totales)	(En el año)	0	Una muestra de rutina y una muestra de repetición son coliformes totales positivos, y uno de ellos también es coliformes fecales o <i>E. coli</i> positivo		Residuos fecales humanos y animales.
<i>E. coli</i> (Regla federal de coliformes totales revisada)	(En el año)	0*	(a)	0	Residuos fecales humanos y animales.
(a) muestras de rutina y la repetición son positivos coliformes totales y, o bien es <i>E. coli</i> -positivo o sistema falla para tomar muestras de la repetición siguiente de <i>E. coli</i> muestra de rutina -positivo o sistema falla para analizar repetición de la muestra coliforme total positivo para <i>E. coli</i> .					

TABLA 2 - MUESTREO DE RESULTADOS QUE MUESTRAN LA DETECCIÓN DE PLOMO Y COBRE

Plomo y cobre (complete si se detectó plomo o cobre en el último conjunto de muestras)	Fecha de muestra	Núm. de muestras recogidas	Percentil 90 .Nivel detectado	Núm. Sitios que exceden AL	AL	PHG	Número de escuelas que solicitan muestras de plomo	Fuente típica de contaminantes
Plomo (ppb)	28/7/16	29	4.3	0	15	0.2	3	Corrosión interna de los sistemas de tuberías de agua del hogar; descargas de fabricantes industriales; erosión de depósitos naturales
Cobre (ppm)	28/7/16	29	.54	0	1.3	0.3	No aplica	Corrosión interna de los sistemas de plomería del hogar; erosión de depósitos naturales; lixiviación de conservantes de madera

TABLA 3 - RESULTADOS DE MUESTREO DE SODIO Y DUREZA

Sustancias químicas o constituyentes (y unidades de informes)	Fecha de muestra	Nivel Detectado	Rango de detecciones	MCL	PHG (MCLG)	Fuente típica de contaminantes
Sodio (ppm)	13/2/18	5.2	n / A	Ninguna	Ninguna	Sal presente en el agua y es generalmente natural.
Dureza (ppm)	13/2/18	94	n / A	Ninguna	Ninguna	Suma de cationes polivalentes presentes en el agua, generalmente magnesio y calcio, y generalmente ocurren de manera natural.

TABLA 4: DETECCIÓN DE CONTAMINANTES CON UN ESTÁNDAR DE AGUA POTABLE PRIMARIA

Químico o constituyente (y unidades de informes)	Fecha de muestra	Nivel Detectado	Rango de detecciones	MCL [MRDL]	PHG (MCLG) [MRDLG]	Fuente típica de contaminantes
Cloro	Diario	1.4 mg / l	.8 - 2.6 mg / l	4,0 mg / l	4,0 mg / l	Desinfectante de agua potable añadido para el tratamiento.
Control de precursores DBP (TOC)	Mensual	1.7 mg / l promedio	1.1 - 2.6 mg / l	TT	N / A	Diversas fuentes naturales y artificiales .
Ácidos Haloacéticos(HAA5s)	Trimestral	42 µg / L	21 - 67 µg / L	60 µg / L	N / A	Subproducto de la desinfección del agua potable.
Trihalometanos totales(TTHMs)	Trimestral	45 µg / L	18 - 64 µg / L	80 µg / L	N / A	Subproducto de la desinfección del agua potable.

TABLA 5: DETECCIÓN DE CONTAMINANTES CON UN ESTÁNDAR SECUNDARIO DE AGUA POTABLE

Químico o constituyente (y unidades de informes)	Fecha de muestra	Nivel detectado	Rango de detecciones	SMCL	PHG (MCLG)	Fuente típica de contaminantes
Color	Trimestral	ND	ND-ND	15	N / A	Materiales orgánicos naturales
Olor	Trimestral	9.3 toneladas promedio	ND - 20	3	N / A	Materiales orgánicos naturales

Información general adicional sobre el agua potable

Se puede esperar que el agua potable, incluida el agua embotellada, contenga al menos pequeñas cantidades de algunos contaminantes. La presencia de contaminantes no necesariamente indica que el agua representa un riesgo para la salud. Puede obtener más información sobre los contaminantes y los posibles efectos en la salud llamando a la Línea Directa de Agua Potable Segura de la EPA de los EE. UU. (1-800-426-4791).

Algunas personas pueden ser más vulnerables a los contaminantes en el agua potable que la población general. Las personas inmunocomprometidas, como las personas con cáncer que se someten a quimioterapia, personas que se han sometido a trasplantes de órganos, personas con VIH / SIDA u otros trastornos del sistema inmunológico, algunos ancianos y bebés, pueden correr un riesgo especial de contraer infecciones. Estas personas deben buscar asesoramiento sobre el agua potable con sus proveedores de atención médica. Las directrices de la EPA de EE. UU. / Centros para el Control de Enfermedades (CDC) sobre los medios adecuados para disminuir el riesgo de infección por *Cryptosporidium* y otros contaminantes microbianos están disponibles en la línea directa de Agua Potable (1-800-426-4791).

Lenguaje específico del plomo: en caso de estar presente, los niveles elevados de plomo pueden causar serios problemas de salud, especialmente en mujeres embarazadas y niños pequeños. El plomo en el agua potable proviene principalmente de materiales y componentes asociados con las líneas de servicio y la plomería del hogar. La Ciudad de Calistoga es responsable de proporcionar agua potable de alta calidad, pero no puede controlar la variedad de materiales utilizados en los componentes de plomería. Cuando su agua ha estado en el agua por varias horas, puede minimizar la posibilidad de exposición al plomo al abrir el grifo durante 30 segundos a 2 Minutos antes de usar agua para beber o cocinar. [**OPCIONAL** : Si lo hace, es posible que desee recoger el agua de lavado y reutilizarla para otro propósito útil, como regar las plantas.] Si le preocupa el plomo en su agua, es posible que desee que se analice su agua. La información sobre el plomo en el agua potable, los métodos de prueba y los pasos que puede tomar para minimizar la exposición están disponibles en la línea directa de agua potable segura (1-800- 426-4791) o en <http://www.epa.gov/lead> .

Información resumida para la violación de un MCL, MRDL, AL, TT, o Requisito de Monitoreo y Reporte

VIOLACIÓN DE UN MCL, MRDL , AL , TT, O REQUISITO DE MONITOREO E INFORMES				
Violación	Explicación	Duración	Acciones tomadas para corregir la violación	Lenguaje de efectos de salud
NINGUNA				

Para sistemas que proporcionan agua de superficie como fuente de agua potable

TABLA 8: RESULTADOS DE ANÁLISIS QUE MUESTRAN EL TRATAMIENTO DE FUENTES DE AGUA SUPERFICIALES	
Técnica de tratamiento ^(a) (Tipo de tecnología de filtración aprobada utilizada)	Filtros de presión
Estándares de rendimiento de turbidez ^(b) (que debe cumplirse a través del proceso de tratamiento de agua)	La turbidez del agua filtrada debe: 1 - Ser menor o igual a .3 NTU en el 95% de las mediciones en un mes. 2 - No exceder 1.0 NTU por más de ocho horas consecutivas.
El porcentaje mensual más bajo de muestras que cumplieron con el Estándar de desempeño de turbidez No. 1.	100%
Medición de turbidez única más alta durante el año.	.28
Número de violaciones de cualquier requisito de tratamiento de aguas superficiales	0

(a) Un proceso requerido destinado a reducir el nivel de un contaminante en el agua potable.

(b) La turbidez (medida en NTU) es una medida de la nubosidad del agua y es un buen indicador de la calidad del agua y el rendimiento de la filtración. Se considera que los resultados de turbidez que cumplen con los estándares de rendimiento cumplen con los requisitos de filtración.