

2019 Consumer Confidence Report

Water System Name: City of Calistoga

Report Date: June 25, 2020

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, 2019 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 City of Napa. Depending on which water treatment plant is in operation, the source is Barker Slough in the Sacramento Delta via the North Bay Aqueduct (treated by the Edward I. Barwick Jamieson Canyon Water Treatment Plant), Lake Hennessey (treated by the Hennessey Water Treatment Plant), or Lake Milliken (treated by the Milliken Water Treatment Plant).

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 (in Angwin), 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: Derek Rayner Phone: (707) 942-2828

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.	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.
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).	Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
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.	Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
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.	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.
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.	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.
Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.	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 <i>E. coli</i> 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	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	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	0	(a)	0	Human and animal fecal waste

(a) Two or more positive monthly samples is a violation of the MCL
(b) 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)	9/10/19	30	5.2 ppb	0	15 ppb	.2		Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	9/10/19	30	.66 ppm	0	1.3 ppm	.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)	4/16/19	4.5	N/A	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	4/16/19	77	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	1.0 mg/L avg	0.03 – 1.9 mg/L	4.0 mg/l	4.0 mg/l	Drinking water disinfectant added for treatment
Control of DBP precursors (TOC)	Monthly	1.9 mg/L avg	1.0 – 3.4 mg/L	TT	None	Various natural and man-made sources
Haloacetic Acids (HAA5s)	Quarterly	59.63 µg/L	27.1 – 80.3 µg/L	60 µg/L	None	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHMs)	Quarterly	49.91 µg/L	19.5 – 66.52 µg/L	80 µg/L	1.06 µg/L	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
Chloride (ppm)	4/16/19	13	N/A	500	None	Runoff/leaching from natural deposits; seawater influence
Color	Quarterly	0	0-0	15	None	Naturally-occurring organic materials
Odor	Quarterly	22 T.O.N. avg*	0-63*	3	None	Naturally-occurring organic materials
Total Dissolved Solids (ppm)	4/16/19	110	N/A	1000	None	Runoff/leaching from natural deposits
Specific Conductance (µS/cm)	4/16/19	190	N/A	1600	None	Substances that form ions when in water; seawater influence
Sulfate (ppm)	4/16/19	12	N/A	500	None	Runoff/leaching from natural deposits; industrial wastes

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
Odor	High source water TOC content	One quarterly sample	Optimized treatment	

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	.3
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.

Informe de confianza del consumidor 2019

Nombre del sistema de agua: Ciudad de Calistoga

Fecha de Reporte: Junio 25, 2020

Evaluamos la calidad del agua potable para muchos componentes, tal como lo exigen las reglamentaciones estatales y federales. Este informe muestra los resultados de nuestro monitoreo para el período comprendido entre el 1 de enero y el 31 de diciembre de 2019 y puede incluir datos de monitoreo anteriores.

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

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

Nombre y ubicación general de la (s) fuente (s): La Ciudad tiene dos fuentes. La primera, la reserva Kimball, que envía agua no tratada a la planta de tratamiento de agua Kimball operada por la Ciudad. La segunda es la Ciudad de Napa.

Dependiendo de cuál planta de tratamiento de agua está en operación, la fuente de agua es Barker Slough en el Delta de Sacramento, vía el Acueducto de la Bahía Norte (tratada por la Planta de Tratamiento Edward I. Barbwick Jamieson Canyon Water), Lago Hennessey (tratada por la Planta de Tratamiento de Agua Hennessey), o el lago Milliken (tratada por la Planta de Tratamiento de Agua de Milliken).

Información sobre la evaluación de la fuente de agua potable: Las evaluaciones de la fuente de agua potable examinan la calidad del agua utilizada para el suministro de agua potable en comunidades locales. El estudio examina las actividades asociadas con los cursos de agua específicos y las áreas circundantes, para determinar la posible contribución a la contaminación. Estos posibles contribuyentes son luego reunidos en un Estudio Sanitario de Cuencas Hidrográficas. Los resultados de estos informes muestran las fuentes potenciales más importantes de contaminantes en el agua de manantial de la Ciudad de Calistoga.

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

Lago Hennessey (finalizado en diciembre de 2018): Planta de Tratamiento de aguas residuales Pacific Union College, viñedos, incendios, especies invasoras, posibles derrames de materiales peligrosos, debido a accidentes de tráfico (en la carretera Highway 128 cerca del lago), sistemas de tanques sépticos (en Angwin) y pastoreo y animales salvajes.

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

Delta del Sacramento (actualizado en 2017): uso recreativo, escurrimientos urbanos y agrícolas, animales de pastoreo, aplicación de herbicidas e intrusión de agua de mar.

Hora y lugar de las reuniones de la junta programadas regularmente para la participación del público: la Ciudad de Calistoga invita 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 p.m. en el Centro Comunitario, 1307 Washington Street, Calistoga, CA.

Para obtener más información, comuníquese con: Derek Rayner Teléfono: (707) 942-2828.

TÉRMINOS USADOS EN ESTE REPORTE	
Nivel Máximo de Contaminante (MCL): El nivel más alto de un contaminante permitido en el agua potable. Los MCL principales se establecen tan cerca de los PHGs (o MCLGs) como sea económica y tecnológicamente factible. Los MCL secundarios están configurados para proteger el olor, el sabor y la apariencia del agua potable.	Estándares secundarios para el agua potable (SDWS): Los 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.
Objetivo del nivel máximo de contaminante (MCLG): el nivel de un contaminante en el agua potable por debajo del cual no se conoce ni se espera un riesgo para la salud. Los MCLG son establecidos por la Agencia de Protección Ambiental de EE. UU. (EPA de EE. UU.).	Técnica de tratamiento (TT): un proceso requerido para reducir el nivel de un contaminante en el agua potable.
Objetivo de salud pública (PHG): el nivel de un contaminante en el agua potable por debajo del cual no se conoce ni se espera un riesgo para la salud. Los PHG son establecidos por la Agencia de Protección Ambiental de California.	Nivel de acción reglamentario (AL): la concentración de un contaminante que, si se excede, desencadena el tratamiento u otros requisitos que debe seguir un sistema de agua.
Nivel máximo de desinfectante residual (MRDL): el nivel más alto de desinfectante permitido en el agua potable. Existe evidencia convincente de que la adición de un desinfectante es necesaria para controlar los contaminantes microbianos.	Desviaciones y excepciones: Permiso de la Junta Estatal para exceder un MCL o no cumplir con una técnica de tratamiento bajo ciertas condiciones.
Meta de nivel máximo de desinfectante residual (MRDLG): el nivel de un desinfectante de agua potable por debajo del cual no se conoce ni se espera un riesgo para la salud. Los MRDLG no reflejan los beneficios del uso de desinfectantes para controlar los contaminantes microbianos.	Evaluación de Nivel 1: Una evaluación de Nivel 1 es un estudio del sistema de agua para identificar problemas potenciales y determinar (de ser posible) por qué se han encontrado bacterias coliformes totales en nuestro sistema de agua.
Estándares primarios para el agua potable (PDWS): MCL y MRDL para contaminantes que afectan la salud junto con sus requisitos de monitoreo e informes, y los requisitos de tratamiento del agua.	Evaluación de Nivel 2: Una evaluación de Nivel 2 es un estudio muy detallado del sistema de agua para identificar posibles problemas y determinar (si es posible) por qué ha ocurrido una violación de 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 (μ g / L) ppt: partes por trillón o nanogramos por litro (ng / L) ppq: partes por cuatrillón o picogramos por litro (pg / L) pCi / L: picocurries por litro (una medida de radiación)

Las fuentes de agua potable (tanto agua del grifo como 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 minerales naturales y, en algunos casos, material radioactivo, 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 manantial 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 escurrimiento 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 tales como agricultura, escurrimiento de aguas pluviales urbanas y usos residenciales.
- *Contaminantes químicos orgánicos*, incluidos químicos orgánicos sintéticos y volátiles, que son productos derivados de los procesos industriales y la producción de petróleo, y también pueden provenir de estaciones de servicio, escurrimiento 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 actividades mineras.

A fin de garantizar que el agua del grifo sea segura para beber, la EPA de EE. UU. y la Junta Estatal de Control de Recursos Hídricos (Junta Estatal) prescriben regulaciones que limitan la cantidad de ciertos contaminantes en el agua suministrada por los sistemas de agua públicos. Las regulaciones de la Junta Estatal 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 represente un riesgo para la salud. La Junta Estatal nos permite controlar 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. Cualquier violación de AL, MCL, MRDL o TT tiene un asterisco. Se proporciona información adicional sobre la violación, más adelante en este informe.

TABLA 1 - RESULTADOS DE MUESTRA QUE MUESTRAN LA DETECCIÓN DE BACTERIAS COLIFORMES					
Contaminantes microbiológicos (Completa si se detectaron bacterias)	Número máximo de Detecciones	Número de meses en violación	MCL	MCLG	Fuente típica de bacterias
Bacterias coliformes totales (Regla de coliformes totales estatal)	(en un mes) 0	0	1 muestra mensual positiva	0	Naturalmente presente en el medio ambiente
Coliformes fecales o E. coli (Regla de coliformes totales estatal)	(en el año) 0	0	Una muestra de rutina y una muestra repetida son coliformes totales positivos, y uno de estos también es coliforme fecal o E. coli positivo		Desechos fecales humanos y animales
E. coli (Norma federal revisada de coliformes totales)	(en el año) 0	0	(a)	0	Desechos fecales humanos y animales

(a) Dos o más muestras positivas por mes son una violación del MCL
 (b) Las muestras de rutina y repetidas son positivas para coliformes totales y puede ser positivo para E. coli o el sistema no toma muestras repetidas, después de que la muestra de rutina positiva para E. coli o el sistema no analiza la muestra repetitiva coliforme positiva total para E. coli.

TABLA 2 - RESULTADOS DEL MUESTREO QUE MUESTRAN LA DETECCIÓN DE PLOMO Y COBRE								
Plomo y Cobre (completar si se detectó plomo o cobre en el último conjunto de muestras)	Fecha de Muestra	Número de muestras recogida	Se detectó el 90 ° percentil de nivel	No. Sitios que exceden a AL	AL	PHG	Número de escuelas que solicitan muestreo de plomo	Fuente típica de contaminante
Plomo (ppb)	9/10/19	30	5.2 ppb	0	15 ppb	.2		La corrosión interna de los sistemas de plomería de agua en el hogar; descargas de fabricantes industriales; erosión de depósitos naturales
Cobre (ppm)	9/10/19	30	.66 ppm	0	1.3 ppm	.3	No Aplica	Corrosión interna de los sistemas de plomerías del hogar; erosión de depósitos naturales; lixiviación de conservantes de madera

TABLA 3 - RESULTADOS DEL MUESTREO PARA EL SODIO Y LA DUREZA						
Producto químico o constituyente (y unidades informantes)	Fecha de Muestra	Nivel detectado	Rango de Detecciones	MCL	PHG (MCLG)	Fuente típica de contaminante
Sodio (ppm)	4/16/19	4.5	No Aplica	Ninguno	Ninguno	Sal presente en el agua y generalmente se produce naturalmente
Dureza(ppm)	4/16/19	77	No Aplica	Ninguno	Ninguno	Suma de cationes polivalentes presentes en el agua, generalmente magnesio y calcio, y generalmente son de origen natural

TABLA 4 - DETECCIÓN DE CONTAMINANTES CON UN ESTÁNDAR PRIMARIO DE AGUA POTABLE						
Producto químico o constituyente (y unidades informantes)	Fecha de Muestra	Nivel Detectado	Rango de Detecciones	MCL [MRDL]	PHG (MCLG) [MRDLG]	Fuente típica de contaminante
Cloro	Diaria	1.0 mg/L avg	0.03 – 1.9 mg/L	4.0 mg/l	4.0 mg/l	Desinfectante de agua potable agregado para el tratamiento
Control de precursores de DBP (TOC)	Mensual	1.9 mg/L avg	1.0 – 3.4 mg/L	TT	Ninguno	Varias fuentes naturales y artificiales
Ácidos haloacéticos (HAA5)	Trimestral	59.63 µg/L	27.1 – 80.3 µg/L	60 µg/L	Ninguno	Subproducto de la desinfección del agua potable
Trihalometanos totales (TTHM)	Trimestral	49.91 µg/L	19.5 – 66.52 µg/L	80 µg/L	1.06 µg/L	Subproducto de la desinfección del agua potable

TABLA 5 - DETECCIÓN DE CONTAMINANTES CON UN ESTÁNDAR SECUNDARIO DE AGUA POTABLE						
Producto químico o constituyente (y unidades informantes)	Fecha de Muestra	Nivel Detectado	Rango de Detecciones	SMCL	PHG (MCLG)	Fuente típica de contaminante
Cloro (ppm)	4/16/19	13	No Aplica	500	Ninguno	Correntía/lixiviación de depósitos naturales; influencia de agua marina.
Color	Trimestral	0	0-0	15	Ninguno	Materiales orgánicos naturales
Olor	Trimestral	22 T.O.N. avg*	0-63*	3	Ninguno	Materiales orgánicos naturales
Total de sólidos disueltos (ppm)	4/16/19	110	No Aplica	1000	Ninguno	Correntía/lixiviación de depósitos naturales.
Conductancia Específica (µS/cm)	4/16/19	190	No Aplica	1600	Ninguno	Substancias que forman iones en presencia de agua; influencia de agua marina
Sulfato (ppm)	4/16/19	12	No Aplica	500	Ninguno	Correntía/lixiviación de depósitos naturales; desechos industriales.

Información General Adicional Sobre El Agua Potable

Es razonable 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. Se puede obtener más información sobre contaminantes y posibles efectos sobre la salud llamando a la línea directa de agua potable segura de EE. UU. (1-800-426-4791).

Algunas personas pueden ser más vulnerables a los contaminantes en el agua potable que la población en general. Las personas inmuno-comprometidas, como las personas con cáncer sometidas a quimioterapia, las personas que se han sometido a trasplantes de órganos, las personas con VIH / SIDA u otros trastornos del sistema inmunológico, algunos ancianos y bebés pueden estar particularmente en riesgo de infecciones. Estas personas deben buscar consejos sobre el agua potable de sus proveedores de atención médica. Las pautas de los EE.UU. EPA / Centros para el Control y la Prevención de Enfermedades (CDC) sobre los medios apropiados para disminuir el riesgo de infección por *Cryptosporidium* y otros contaminantes microbianos están disponibles en la Línea Directa de Agua Potable Segura (1-800-426-4791).

Lenguaje específico sobre el plomo: si están presente, elevados niveles elevados de plomo pueden causar serios problemas de salud, especialmente para las mujeres embarazadas y los niños pequeños. El plomo en el agua potable proviene principalmente de los materiales y componentes asociados con las líneas de servicio 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 sin moverse durante varias horas, puede minimizar la posibilidad de exposición al plomo enjuagando el grifo durante 30 segundos ó 2 minutos antes de usar agua para beber o cocinar.

[Opcional: si lo hace, tal vez desee recolectar el agua enjuagada y reutilizarla para otro propósito beneficioso, como regar las plantas.] Si le preocupa el plomo en el agua, es posible que desee analizar su agua. Puede obtener información sobre el plomo en el agua potable, los métodos de prueba y los pasos que puede seguir para minimizar la exposición en la Línea directa de agua potable segura (1-800-426-4701) o en <http://www.epa.gov/lead>.

Información resumida para la violación de un MCL, MRDL, AL, TT, o el requerimiento para monitorear y reportar

VIOLACIÓN DE UN REQUERIMIENTO DE MCL, MRDL, AL, TT, O MONITOREO Y NOTIFICACIÓN				
Violación	Explicación	Duración	Acciones tomadas para corregir la violación	Lenguaje de Efectos de Salud
Olor	Alto contenido de TOC en el agua	Una muestra Trimestral	Se optimizó el tratamiento	

Para Sistemas Que Proporcionan Agua De Superficie Como Fuente De Agua Potable

TABLA 8 – RESULTADOS DE MUESTREO QUE MUESTRAN EL TRATAMIENTO DE LAS FUENTES DE AGUA DE SUPERFICIE	
Técnica de tratamiento (a) (Tipo de tecnología de filtración aprobada utilizada)	Filtros de Presión
Estándares de rendimiento de turbidez (b) (eso debe cumplirse a través del proceso de tratamiento de agua)	La turbidez del agua filtrada debe: 1 - Ser inferior o igual a .3 NTU en el 95% de las mediciones en un mes. 2 - No exceda 1.0 NTU por más de ocho horas consecutivas.
El menor porcentaje mensual de muestras que cumplió con el Estándar de Desempeño de Turbidez No. 1.	100%
La medición de turbidez única más alta durante el año	.3
Número de violaciones de los requisitos 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

ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2019



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, 2019. We dedicate 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.

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.

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 from 3:30 to 5:00 p.m. and again from 6:30 to 9:00 p.m. in Council Chambers at City Hall, 955 School Street. For more information concerning city activities and Covid-19 requirements, please see our website at www.cityofnapa.org.

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 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.

Protecting Your Water

Bacteria are a natural and important part of our world. There are around 40 trillion bacteria living in each of us; without them, we would not be able to live healthy lives. Coliform bacteria are common in the environment and are generally not harmful themselves. However, the presence of this bacterial form in drinking water is a concern because it indicates the water may be contaminated with other organisms that can cause disease.

In 2016 the U.S. EPA passed a regulation called the Revised Total Coliform Rule, which requires additional steps that water systems must take in order to ensure the integrity of the drinking water distribution system by monitoring for the presence of bacteria like total coliform and *E. coli*. The rule requires more stringent standards than the previous regulation, and it requires water systems that may be vulnerable to contamination to have in place procedures that will minimize the incidence of contamination. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment of their system and correct any problems quickly. The U.S. EPA anticipates greater public health protection under this regulation due to its more preventive approach to identifying and fixing problems that may affect public health.

Though we have been fortunate to have the highest-quality drinking water, our goal is to eliminate all potential pathways of contamination into our distribution system, and this requirement helps us to accomplish that goal.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population.

Immunocompromised 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 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>.

QUESTIONS?

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 a source water assessment to evaluate the quality of the water used as drinking water supply and 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 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 (in Angwin), 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 by calling Amy Little, Associate Sanitary Engineer, SWRCB, at (707) 576-2145.

Ensuring Reliability of Your Water During the COVID-19 Pandemic

Our existing disinfection process that protects your drinking water is effective against the novel coronavirus. During this pandemic we have taken many precautionary steps to ensure we are able to keep clean, safe water flowing to you. Highlights of precautions we enacted in early March 2020 and continue through the ongoing pandemic include:

- Securing redundancy in key supply chains such as chemicals for water treatment process, repair parts and inventory for our pipe network
- Transitioning engineering and admin staff to work remotely
- Limiting physical interaction with water treatment operators, by restricting entrance to the control room
- Modifying operations to keep water treatment plant operators isolated at the Hennessey Treatment Plant through the end of April after routine maintenance on our State Water Project facilities was completed
- Staggering shift hours to minimize overlap of staff in shared facilities
- Performing essential maintenance as usual wearing masks, social distancing, wearing PPE, increasing handwashing and use of hand sanitizer
- Increasing cleaning and disinfecting all surfaces in control room and all touch points in facilities and vehicles
- Avoiding planned service interruptions to customers while construction was restricted under County Order

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.

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 (SWRCB or 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, which are by-products of industrial processes and petroleum production, and which 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.

Where Does My Water Come From?

The City of Napa's customers are fortunate because we enjoy an abundant water supply from three sources. Depending on which water treatment plant is in operation, the source is Barker Slough in the Sacramento Delta via the North Bay Aqueduct (treated by the Edward I. Barwick Jamieson Canyon Water Treatment Plant), Lake Hennessey (treated by the Hennessey Water Treatment Plant), or Lake Milliken (treated by the Milliken Water Treatment Plant).

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, in this report, we show only those substances that were detected in our water in 2019. **Your water met all U.S. EPA and SWRCB standards in 2019.**

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	[ND]	ND–2.8	Yes	By-product of drinking water disinfection
Chlorine (ppm)	[4.0 (as Cl ₂)]	[4.0 (as Cl ₂)]	[0.80]	0.02–1.77	Yes	Drinking water disinfectant added for treatment
Control of DBP precursors [TOC] (removal ratio)	TT	NA	2.04	1.55–3.46	Yes	Various natural and man-made sources
Haloacetic Acids (ppb)	60	NA	(35.1)	ND–39.6	Yes	By-product of drinking water disinfection
Total Coliform Bacteria [federal Revised Total Coliform Rule] (Positive samples)	TT	NA	3	NA	Yes	Naturally present in the environment
TTHMs [Total Trihalomethanes] (ppb)	80	NA	(71.1)	29.5–72.9	Yes	By-product of drinking water disinfection

Filter Performance (Turbidity—the Standard Measure of Clarity in Water)							
SUBSTANCE (UNIT OF MEASURE)	MCL			PHG	AMOUNT DETECTED	IN COMPLIANCE	TYPICAL SOURCE
Turbidity (NTU, highest detected measurement)	TT = 1.0			NA	0.28	Yes	Soil runoff
Turbidity (lowest % of samples <0.3)	TT = Minimum 95% of samples each month <0.3			NA	100.0	Yes	Soil runoff

Tap Water Samples Collected for Copper and Lead Analyses from Sample Sites throughout the Community in 2018						
SUBSTANCE (UNIT OF MEASURE)	AL	PHG (MCLG)	AMOUNT DETECTED (90TH%ILE)	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 plumbing systems; erosion of natural deposits; leaching from wood preservatives

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	SMCL	PHG (MCLG)	AVERAGE	RANGE LOW-HIGH	IN COMPLIANCE	TYPICAL SOURCE
Chloride (ppm)	500	NS	22.1	7.8–65.9	Yes	Runoff/leaching from natural deposits; seawater influence
Specific Conductance ($\mu\text{S}/\text{cm}$)	1,600	NS	290	260–320	Yes	Substances that form ions when in water; seawater influence
Sulfate (ppm)	500	NS	49.5	41.0–58.0	Yes	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	1,000	NS	300	186–550	Yes	Runoff/leaching from natural deposits
Turbidity (NTU)	5	NS	0.14	0.02–3.12	Yes	Soil runoff

UNREGULATED SUBSTANCES¹

SUBSTANCE (UNIT OF MEASURE)	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Hardness, Total [as CaCO_3] (ppm)	96	71–120	Naturally occurring in ground- and surface water
Sodium (ppm)	19	15–22	Naturally occurring in ground- and source water

¹ Unregulated contaminant monitoring helps U.S. EPA and the State Water Resources Control Board determine where certain contaminants occur and whether the contaminants need to be regulated.

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 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.

