



# 2019 CONSUMER CONFIDENCE REPORT

## Important Drinking Water Quality Information for the Citizens of Sacramento

### YOUR WATER MEETS OR EXCEEDS ALL FEDERAL AND STATE DRINKING WATER STANDARDS

This report is presented to enhance your understanding of where your water comes from and what it contains.

Seventy percent of the City of Sacramento's water supply comes from the American and Sacramento Rivers, with the remainder supplied by groundwater wells. The City of Sacramento takes many steps to ensure high quality drinking water, including source water protection, water treatment, distribution system operation, maintenance of potable water facilities, and water quality testing.

The city water supply is routinely tested for more than 100 substances; a complete list of detections can be found in the *Water Quality Analysis Results for 2019* tables on pages 4–6.

### SOURCE WATER ASSESSMENT

A watershed sanitary survey (WSS) focuses on evaluating source water quality and potential watershed contaminant sources

to provide key information to aid in understanding how to maintain and possibly improve source water protection, the first barrier in protecting public health. An evaluation of water treatment plant capabilities and treated water quality provides an assessment of the ability of a water utility to treat their source water.

Initial WSS reports for the City's Sacramento River and American River water sources were completed in 2000 and 2001. These reports indicated that both rivers are most vulnerable to contaminants from recreational activities and that the Sacramento River is also most susceptible to agricultural contaminants. The City of Sacramento, in partnership with several other water utilities, complete WSS updates of the river water sources every five years. The WSS updates were most recently completed in 2015 and 2018 for the Sacramento and American Rivers, respectively. Currently, the 2020 update for the Sacramento River WSS is in process.

An assessment of the City's groundwater wells was completed in January 2001. Due to the proximity to potential contaminant sources, the wells north of the American River are considered most vulnerable to sewage collection systems, leaking underground storage tanks, known contaminant plumes, agricultural drainage, gas stations, dry cleaners, metal

plating and chemical processing storage facilities, electrical/electronic manufacturing, and automobile repair and body shops. Wells south of the American River are considered vulnerable to leaking underground storage tanks and sewage collection systems.

**Despite these potential vulnerabilities, your water continues to meet or exceed all state and federal drinking water standards.** Copies of the complete assessments are available for review at the City of Sacramento, Department of Utilities, 1395 35<sup>th</sup> Avenue, or call 916-808-5454 to request a summary of the assessments.



## WATER EFFICIENCY

Water-use efficiency is a California way of life, and the City of Sacramento continues to encourage water conservation. Find tips to save water and available rebates at [SacWaterWise.com](http://SacWaterWise.com)

# What You Should Know About...

## LEAD

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with customer service lines and home plumbing. The City of Sacramento is responsible for providing high quality drinking water, but cannot control the variety of materials used in customer plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline or at <http://www.epa.gov/lead>.

## LEAD IN SCHOOLS

The City of Sacramento responded proactively to State requirements enacted in 2017 to test for lead in schools; through the end of 2019 the City has tested over 600 samples from 132 schools, representing all public schools served by City water, as well as many private schools that opted to participate.

## PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

PFAS are human-made substances that are an emerging concern in drinking water. Two of these substances, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) have been extensively produced and studied in the United States.

During 2019, the City of Sacramento confirmed the presence of these substances in some of its ground water sources at levels which do not approach the response levels established by the State Water Resources Control Board. The City of Sacramento is committed to continuing to monitor this emerging situation. For more information, visit: <https://www.cityofsacramento.org/Utilities/Water/Water-Quality/PFAS>

## ALGAL TOXINS

Microcystins and cylindrospermopsin are algal toxins produced by naturally occurring cyanobacteria in surface water sources (such as the American and Sacramento Rivers). These compounds are subject to a U.S. EPA Health Advisory and due to their potential presence in our source waters, the City of Sacramento voluntarily monitors for these compounds during vulnerable seasons, typically summer through late fall. There were no detections of microcystins or cylindrospermopsin during routine 2019 monitoring.

## EARTHY OR MUSTY TASTE AND ODOR

In late summer, some customers may notice an earthy or musty taste in City water. This is due to the presence of Geosmin and 2-Methylisoborneol (MIB), odor compounds which are not removed through conventional water treatment. Although these compounds do not impact the safety of the City's drinking water, some customers find the taste and odor to be objectional. Chilling the water or adding lemon can help diminish the taste.



## REQUIRED DISCLOSURES FOR DRINKING WATER CONSUMERS

This information is presented to further educate consumers about drinking water contaminants.

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. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Water Board regulations 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. 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 U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).



# WATER QUALITY ANALYSIS RESULTS FOR 2019

Your water meets or exceeds all federal and state drinking water standards.

The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. While the City of Sacramento tests for more than 100 substances, this report only lists those detected at or above the federal or state level for reporting.

## 1 Regulated for Public Health - Primary MCL

Constituent	Unit	Year Sampled	State or Federal Goal PHG	Highest Amount Allowed MCL	Surface Water		Groundwater		Typical Sources
					Range	Average	Range	Average	
Arsenic	µg/L	2017 - 2019	0.004	10	ND	ND	ND - 4.2	2.5	Erosion of natural deposits
Barium	mg/L	2017 - 2019	2	1	ND	ND	ND - 0.2	ND	Erosion of natural deposits
Fluoride in source water <sup>A</sup>	mg/L	2019	1	2.0	ND	ND	ND - 0.2	0.1	Erosion of natural deposits
Nitrate (as Nitrogen)	mg/L	2017 - 2019	10	10	ND	ND	ND - 3.6	1.6	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium	µg/L	2017 - 2019	30	50	ND	ND	ND - 8.8	ND	Erosion of natural deposits
TOC / Control of DBP Precursors	mg/L	2019	NA	[TT] 2.0 <sup>B</sup>	1.98		NA		Various natural and man-made sources
Turbidity <sup>C</sup>	NTU	2019	NA	[TT] 1 NTU	0.13 <sup>D</sup>		NA	NA	Soil runoff
				[TT] 95% of samples ≤0.3 NTU	100% <sup>E</sup>		NA	NA	

Constituent	Unit	Year Sampled	State or Federal Goal PHG	Highest Amount Allowed MCL	Distribution System		Typical Sources
					Range	Average	
Chlorine	mg/L	2019	[MRDLG] 4.0 (as Cl <sub>2</sub> )	[MRDL] 4.0 (as Cl <sub>2</sub> )	NDF - 1.6	0.7	Drinking water disinfectant added for treatment
Fluoride <sup>A</sup>	mg/L	2019	1	2.0	ND - 0.9	0.7	Water additive that promotes strong teeth
Haloacetic Acids	µg/L	2019	NA	60	ND - 42 <sup>G</sup>	38 <sup>H</sup>	By-product of drinking water disinfection
Total Coliform Bacteria	% samples positive	2019	[MCLG] 0	5.0%	0.0% <sup>I</sup>		Naturally present in the environment
Trihalomethanes	µg/L	2019	NA	80	1.9 - 74 <sup>G</sup>	60 <sup>H</sup>	By-product of drinking water disinfection

Constituent	Unit	Year Sampled	State or Federal Goal PHG	Action Level	# of Samples Collected	90 <sup>th</sup> Percentile Level	# of Sites Exceeding AL	Typical Sources
Lead	µg/L	2017	0.2	15	62	ND	0	Internal corrosion of household water plumbing systems
Copper	mg/L	2017	0.3	1.3	62	0.11	0	Internal corrosion of household water plumbing systems

**NOTES:** (A) In accordance with State law, the City of Sacramento adjusts the natural levels of fluoride in our water supplies to the optimal level determined by the Centers for Disease Control. More information about fluoridation is available at: [http://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/Fluoridation.shtml](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml)  
(B) Source water TOC less than 2.0 mg/L used as alternative criteria to exempt from removal ratio requirements. Value given represents maximum running annual average of any quarter during 2019. (C) Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration

system. (D) Value given is the highest individual value measured during 2019. (E) 100% of turbidity measurements were in compliance during 2019. (F) Distribution samples with no detectable chlorine residual undergo further analysis to ensure compliance with microbiological water quality regulations. (G) Range is based on all individual sample values from 2019. (H) Average given is maximum of all locational running annual averages calculated during 2019. (I) Value given is the maximum percent positive of any month during 2019.

2 Regulated for Drinking Water Aesthetics - Secondary MCL

Constituent	Unit	Year Sampled	Highest Amount Allowed MCL	Surface Water		Groundwater		Typical Sources
				Range	Average	Range	Average	
Chloride	mg/L	2017 - 2019	500	ND	ND	14 - 76	38	Erosion or leaching of natural deposits
Manganese	µg/L	2017 - 2019	50	ND	ND	ND - 22	ND	Leaching from natural deposits
Specific Conductance	µS/cm	2017 - 2019	1600	89 - 139	114	310 - 740	409	Substances that form ions when in water
Sulfate	mg/L	2017 - 2019	500	5.6 - 15	10	3.3 - 34	10	Erosion or leaching of natural deposits
Total Dissolved Solids	mg/L	2017 - 2019	1000	45 - 83	64	226 - 466	290	Erosion or leaching of natural deposits

Constituent	Unit	Year Sampled	MCL	Distribution System		Typical Sources
				Range	Average	
Color	color units	2019	15	ND - 3	ND	Naturally occurring organic materials
Odor	TON	2019	3	ND - 2	ND	Naturally occurring organic materials
Turbidity	NTU	2019	5	ND - 1.0	0.1	Soil runoff

3 Constituents With No Established MCL

Unregulated constituent monitoring helps determine where certain water constituents occur and whether they should be regulated

Constituent	Unit	Year Sampled	PHG	Surface Water		Groundwater		Distribution System	
				Range	Average	Range	Average	Range	Average
Androstene	µg/L	2014	NA	ND-0.00034	ND	ND	ND	NA	NA
Chlorate	µg/L	2014	NA	ND	ND	ND	ND	ND - 61	ND
1,4-Dioxane	µg/L	2014	NA	ND	ND	ND - 0.2	ND	NA	NA
Germanium	µg/L	2019	NA	ND	ND	ND - 100	8.3	NA	NA
Hexavalent Chromium	µg/L	2016 - 2019	0.02 <sup>J</sup>	ND	ND	ND - 7.7	4.8	NA	NA
Manganese	µg/L	2019	NA	1.3	1.3	ND - 21	3.9	NA	NA
Molybdenum	µg/L	2014 - 2015	NA	ND	ND	ND	ND	ND - 1	ND
Strontium	µg/L	2014 - 2015	NA	48 - 130	76	190 - 380	265	48 - 370	181
Testosterone	µg/L	2014	NA	ND-0.00026	ND	ND	ND	NA	NA
Total HAASK	µg/L	2019	NA	NA	NA	NA	NA	4.2 - 28	22
Total HAA6BrK	µg/L	2019	NA	NA	NA	NA	NA	1.0 - 3.6	2.1
Total HAA9K	µg/L	2019	NA	NA	NA	NA	NA	5.0 - 30	24
Vanadium	µg/L	2014 - 2015	NA	0.4 - 3	1.4	15 - 41	25	0.4 - 38	14

(J) There is currently no MCL for hexavalent chromium. The previous MCL of 10 µg/L was withdrawn on September 11, 2017.

(K) While five Haloacetic Acids (HAA5) are included in Table 1 due to routine distribution monitoring to protect public health, the Fourth Unregulated Contaminant Monitoring Rule requires monitoring for several unregulated Haloacetic Acid compounds in addition to HAA5.

4 Other Parameters of Interest to Customers

Constituent	Unit	Year Sampled	Surface Water		Groundwater	Groundwater
			Range	Average	Range	Average
Total Alkalinity	mg/L	2017 - 2019	19 - 40	30	97 - 226	140
Calcium	mg/L	2017 - 2019	8 - 14	11	16 - 53	27
Hardness	mg/L	2017 - 2019	27 - 52	40	92 - 304	156
Magnesium	mg/L	2017 - 2019	1 - 4	3	10 - 37	19
Sodium	mg/L	2017 - 2019	2 - 5	3	19 - 42	28

Key Terms and Abbreviations

µS/cm	Microsiemens per centimeter; measure of electrical conductivity.
90 <sup>th</sup> Percentile	The value for which 90 percent of samples had a lower result.
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Constituent	A chemical or parameter measured in the water supply
DBP	Disinfection By-Products: Substances that can form during a reaction of a disinfectant with naturally present organic matter in the water.
Cl <sub>2</sub>	Free Chlorine: Chlorine available for disinfection.
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHG (or MCLGs) as is economically and technologically feasible. Secondary MCLs 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. Environmental Protection Agency.
mg/L	Milligrams per liter: Equivalent to 1 second in 11.5 years.
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 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
ND	Not Detected
NTU	Nephelometric Turbidity Units: Measures cloudiness of water.
pCi/L	Picocuries per liter: Measures radiation.
PDWS	Primary Drinking Water Standards: MCLs, MRDLs and treatment techniques (TTs) for contaminants that affect health, along with their monitoring and reporting 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 Office of Environmental Health Hazard Assessment (OEHHA).
TOC	Total Organic Carbon: A measurement of the potential of water to form DBPs.
TON	Theshold Odor Number: The greatest dilution of a sample with odor-free water that yields a detectable odor.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
µg/L	Micrograms per liter: Equivalent to 1 second in nearly 32 years.

## TO REPORT A CONCERN

City of Sacramento, Department of Utilities  
311 or 916-264-5011  
(24 hours a day, 7 days a week)  
[www.cityofsacramento.org/utilities](http://www.cityofsacramento.org/utilities)

## FOR QUESTIONS ABOUT THIS REPORT CONTACT

Rory Hartkemeyer  
916-808-3737

## ADDITIONAL WATER QUALITY INFORMATION IS AVAILABLE

U.S. EPA Safe Drinking Water Hotline  
1-800-426-4791  
<http://epa.gov/ground-water-and-drinking-water>

## NOTICE OF OPPORTUNITY FOR PUBLIC PARTICIPATION

The Sacramento City Council generally holds public meetings the 1<sup>st</sup> and 4<sup>th</sup> Tuesday of the month at 5 p.m., and 2<sup>nd</sup> Tuesday of the month at 2 p.m. in the City Council Chambers at 915 I Street, Sacramento. You can access Council agendas at [www.cityofsacramento.org/clerk](http://www.cityofsacramento.org/clerk).



916-264-5011

我們講中文 · Hablamos Español

Мы говорим по-русски · ພວກເຮົາເວົ້າພາສາລາວໄດ້  
Peb hais lus Hmoob · Chúng tôi nói tiếng Việt

## This report contains important information translations.

”هذا التقرير يحتوي على معلومات مهمة تتعلق بمياه الشفة (أو الشرب).  
ترجم التقرير، أو تكلم مع شخص يستطيع أن يفهم التقرير.“

Այս զեկույցը պարունակում է կարևոր տեղեկատվություն Ձեր խմելու  
ջրով: Թարգմանել այն, կամ խոսել մեկի հետ, ով հասկանում է այն:

此份有關你的食水報告,內有重要資料和訊息,請找  
他人為你翻譯及解釋清楚。

此份有关你的食水报告,內有重要资料和讯息,請找  
他人為你翻譯及解釋清楚。

این اطلاعیه شامل اطلاعات مهمی راجع به آب آشامیدنی است. اگر نمیتوانید این اطلاعات را  
به خوانایی خود ترجمه کنید، لطفاً از کسی که میتواند برای شما ترجمه کند، بخواهید.

यह सूचना महत्वपूर्ण है ।  
कृपा करके किसी से :सका अनुवाद करायें ।

Daimntawv tshaj tawm no muaj lus tseemceeb txog koj cov dej haus.  
Tshab txhais nws, los yog tham nrog tej tug neeg uas totaub txog nws.

この報告書には上水道に関する重要な情報が記されて  
おります。翻訳を御依頼なされるか、内容をご理解なさつ  
ておられる方にお尋ね下さい。

របាយការណ៍នេះមានព័ត៌មានសំខាន់ៗ  
សម្រាប់អ្នកប្រើប្រាស់ ។ សូមបកប្រែ  
ឬពិគ្រោះជាមួយអ្នកដែលមើលយល់  
របាយការណ៍នេះ ។

이 안내는 매우 중요합니다.  
본인을 위해 번역인을 사용하십시오.

ລາຍງານນີ້ມີຂໍ້ມູນສຳຄັນກ່ຽວກັບນ້ຳປະປາຂອງທ່ານ. ຈົ່ງໃຫ້ຄົນອື່ນຮູ້ເລື່ອງນີ້  
ຫລືໃຫ້ມື້ສາກົນຄົນໃດຄົນໜຶ່ງທີ່ເຂົາເຈົ້າເຂົ້າໃຈ.

Naaiv norm sou maaiah jienv nyei fienx gornv taux meih nyei wuom  
hopv. Faan fai gornv bun mienh hiuv duqv.

ਇਹ ਸੂਚਨਾ ਮਹੱਤਵਪੂਰਣ ਹੈ ।  
ਕ੍ਰਿਪਾ ਕਰਕੇ ਕਿਸੀ ਤੋਂ ਇਸ ਦਾ ਅਨੁਵਾਦ ਕਰਾਉ ।

Acest raport conține informații importante despre apa de băut.  
Traduceți-o sau discutați cu cineva care o înțelege.

Этот отчет содержит важную информацию о вашей питьевой  
воды. Переведите его или поговорите с тем, кто это понимает.

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

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

Цей звіт містить важливу інформацію про вашу питну воду.  
Перекласти його, або поговорити з кимось, хто його розуміє.

Chi tiết này thật quan trọng.  
Xin nhờ người dịch cho quý vị.

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