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 35th 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
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. 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 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.

## Regulated for Public Health - Primary MCL

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Unit</th>
<th>Year Sampled</th>
<th>State or Federal Goal PHG</th>
<th>Highest Amount Allowed MCL</th>
<th>Surface Water</th>
<th>Groundwater</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Range</td>
<td>Average</td>
</tr>
<tr>
<td>Arsenic</td>
<td>µg/L</td>
<td>2017 - 2019</td>
<td>0.004</td>
<td>10</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Barium</td>
<td>mg/L</td>
<td>2017 - 2019</td>
<td>2</td>
<td>2.0</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Fluoride in source water a</td>
<td>µg/L</td>
<td>2019</td>
<td>1</td>
<td>0.004</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Nitrate (as Nitrogen)</td>
<td>mg/L</td>
<td>2017 - 2019</td>
<td>10</td>
<td>10</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Selenium</td>
<td>µg/L</td>
<td>2017 - 2019</td>
<td>30</td>
<td>50</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>TOC / Control of DBP Precursors</td>
<td>mg/L</td>
<td>2019</td>
<td>NA</td>
<td>[TT] 2.0³</td>
<td>1.98</td>
<td>NA</td>
</tr>
<tr>
<td>Turbidity:</td>
<td>NTU</td>
<td>2019</td>
<td>NA</td>
<td>[TT] 1 NTU</td>
<td>0.13³</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[TT] 95% of samples ≤0.3 NTU</td>
<td>100%³</td>
<td>NA</td>
</tr>
</tbody>
</table>

## Distribution System

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Year Sampled</th>
<th>State or Federal Goal PHG</th>
<th>Highest Amount Allowed MCL</th>
<th>Distribution System</th>
<th># of Samples Collected</th>
<th>90th Percentile Level</th>
<th># of Sites Exceeding AL</th>
<th>Typical Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barium</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Fluoride in source water a</td>
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<tr>
<td>Nitrate (as Nitrogen)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Selenium</td>
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<td></td>
</tr>
<tr>
<td>TOC / Control of DBP Precursors</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Turbidity:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## 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.
- (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 location 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

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Unit</th>
<th>Year Sampled</th>
<th>MCL</th>
<th>Distribution System MCL</th>
<th>Range</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>color units</td>
<td>2019</td>
<td>15</td>
<td>NA</td>
<td>ND - 3</td>
<td>ND</td>
</tr>
<tr>
<td>Odor</td>
<td>TON</td>
<td>2019</td>
<td>3</td>
<td>ND</td>
<td>ND - 2</td>
<td>ND</td>
</tr>
<tr>
<td>Turbidity</td>
<td>NTU</td>
<td>2019</td>
<td>5</td>
<td>ND - 1.0</td>
<td>ND - 1.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Chloride</td>
<td>mg/L</td>
<td>2017 - 2019</td>
<td>500</td>
<td>14 - 76</td>
<td>38</td>
<td>Erosion or leaching of natural deposits</td>
</tr>
<tr>
<td>Manganese</td>
<td>µg/L</td>
<td>2017 - 2019</td>
<td>50</td>
<td>ND</td>
<td>ND - 22</td>
<td>ND</td>
</tr>
<tr>
<td>Specific Conductance</td>
<td>µS/cm</td>
<td>2017 - 2019</td>
<td>1600</td>
<td>114</td>
<td>409</td>
<td>Substances that form ions when in water</td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>2017 - 2019</td>
<td>500</td>
<td>10 - 37</td>
<td>19</td>
<td>Erosion or leaching of natural deposits</td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
<td>mg/L</td>
<td>2017 - 2019</td>
<td>1000</td>
<td>64</td>
<td>290</td>
<td>Erosion or leaching of natural deposits</td>
</tr>
</tbody>
</table>

Key Terms and Abbreviations:
- µS/cm: Microsiemens per centimeter; measure of electrical conductivity.
- P90 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.
- TT: Treatment Technique. A required process intended to reduce the level of a contaminant below the MCL.
- 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 U.S. Environmental Protection Agency.
- MRDLG: Maximum Residual Disinfectant Level Goal. The level of drinking water disinfectant below which there is no known or expected risk to health.
- 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 MRDLG) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.
- ND: Not Detected.
- NA: Not Applicable.

3 Constituents With No Established MCL

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

4 Other Parameters of Interest to Customers

Unregulated Contaminant Monitoring Rule requires monitoring for several unregulated Haloacetic Acid compounds in addition to HAA5.

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.
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

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 1st and 4th Tuesday of the month at 5 p.m., and 2nd 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.

This report contains important information translations.

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