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

TRADITION OF EXCELLENCE
Since its founding in 1849, the City of Sacramento has considered water quality of the utmost importance. This Consumer Confidence Report is presented to enhance your understanding of where your water comes from, what it contains, and to confirm that your drinking water continues to meet or exceed all state and federal drinking water standards.

The City of Sacramento, Department of Utilities is dedicated to providing our customers with dependable, high quality water, storm drainage and wastewater services in a fiscally and environmentally sustainable manner. In doing so, we work to conserve and preserve our water sources.

The City takes many steps to ensure high water quality including protecting our source waters, treating the water, operating our distribution system, maintaining facilities and addressing customer concerns. To actively protect water quality, management efforts on watershed, groundwater and water quality are performed.

TEAMWORK: TOGETHER WE CAN PROTECT OUR WATER RESOURCES
The City of Sacramento, Department of Utilities works hard to bring you quality drinking water. Please be careful as you live, work and play to limit what goes into the storm drains and rivers, so we can continue to preserve the quality of the water and our diverse river ecosystem.
The following tables show the measured amount of constituents detected in 2017 or in the most recent year sampling was required. Although 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.

### Key Terms and Abbreviations
- **pS/cm:** Microsiemens per centimeter; measure of electrical conductivity.
- **pC/L:** Picocuries per liter; measures radiation.
- **ppb:** Parts per billion; measure of water purity.
- **ppt:** Parts per trillion; measure of water purity.
- **NTU:** Nephelometric Turbidity Units; measure of cloudiness of water.
- **PDWS:** Public Drinking Water System.
- **TOC:** Total Organic Carbon; a measurement of the potential of water to form DBPs.
- **Turbidity:** NTU; measures cloudiness of water.

### WATER QUALITY ANALYSIS RESULTS FOR 2017

#### 1. Regulated for Public Health - Primary MCL

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Units</th>
<th>Year Sampled</th>
<th>State or Federal Goal (P&amp;G)</th>
<th>Highest Amount Allowed MCL</th>
<th>Action Level</th>
<th># of Samples Collected</th>
<th>Distribution System</th>
<th>Concentrations</th>
<th>Typical Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>ppm</td>
<td>2016 - 2017</td>
<td>0.6</td>
<td>1A</td>
<td>ND</td>
<td>ND</td>
<td>ND - 0.05</td>
<td>ND - 0.05</td>
<td>Erosion of natural deposits; water treatment chemicals</td>
</tr>
<tr>
<td>Arsenic</td>
<td>ppm</td>
<td>2016 - 2017</td>
<td>0.004</td>
<td>10</td>
<td>ND</td>
<td>ND</td>
<td>ND - 7.0</td>
<td>ND - 7.0</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Barium</td>
<td>ppm</td>
<td>2016 - 2017</td>
<td>1</td>
<td>1</td>
<td>ND</td>
<td>ND</td>
<td>ND - 0.2</td>
<td>ND - 0.2</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Fluoride in source water</td>
<td>ppm</td>
<td>2017</td>
<td>10</td>
<td>2.0</td>
<td>ND</td>
<td>ND</td>
<td>ND - 0.1</td>
<td>ND - 0.1</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Gross Alpha</td>
<td>µg/L</td>
<td>2012 - 2017</td>
<td>10</td>
<td>15</td>
<td>ND</td>
<td>ND</td>
<td>ND - 4.9</td>
<td>ND - 4.9</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Nitrate (as Nitrogen)</td>
<td>ppm</td>
<td>2017</td>
<td>10</td>
<td>10</td>
<td>ND</td>
<td>ND</td>
<td>ND - 4.3</td>
<td>ND - 4.3</td>
<td>Runoff and leaching from fertilizer use; leaching from septic tanks and sewer mains; nitrification of natural deposits</td>
</tr>
<tr>
<td>Selenium</td>
<td>ppm</td>
<td>2016 - 2017</td>
<td>30</td>
<td>50</td>
<td>ND</td>
<td>ND</td>
<td>ND - 6.8</td>
<td>ND - 6.8</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>TSC / Control of DBP Precursors</td>
<td>ppm</td>
<td>2017</td>
<td>2.0 (TT)</td>
<td>1.4</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Various natural and man-made sources</td>
</tr>
<tr>
<td>Selenium</td>
<td>ppb</td>
<td>2017</td>
<td>0.013</td>
<td>0.13C</td>
<td>NA</td>
<td>NA</td>
<td>ND - 7.0</td>
<td>ND - 7.0</td>
<td>Soil runoff</td>
</tr>
</tbody>
</table>

#### 2. Regulated for Drinking Water Aesthetics - Secondary MCL

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Units</th>
<th>Year Sampled</th>
<th>State or Federal Goal (P&amp;G)</th>
<th>Highest Amount Allowed MCL</th>
<th>Surface Water</th>
<th>Distribution System</th>
<th>Concentration</th>
<th>Typical Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine</td>
<td>ppm</td>
<td>2017</td>
<td>4 (MRDL)</td>
<td>4.0 (MRDL)</td>
<td>ND - 1.3</td>
<td>0.6</td>
<td>Drinking water disinfectant added for treatment</td>
<td></td>
</tr>
<tr>
<td>Fluoride</td>
<td>ppm</td>
<td>2017</td>
<td>1</td>
<td>2.0</td>
<td>ND - 0.3</td>
<td>0.7</td>
<td>Water additive that promotes strong tooth</td>
<td></td>
</tr>
<tr>
<td>Haloacetic Acids</td>
<td>ppm</td>
<td>2017</td>
<td>10</td>
<td>10</td>
<td>ND - 4.5</td>
<td>40</td>
<td>By-product of drinking water disinfection</td>
<td></td>
</tr>
<tr>
<td>Total Coliform Bacteria</td>
<td>% samples positive</td>
<td>2017</td>
<td>0 (MCLG)</td>
<td>5.0%</td>
<td>1.2%</td>
<td>Naturally present in the environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trihalomethanes</td>
<td>ppm</td>
<td>2017</td>
<td>80</td>
<td>80</td>
<td>ND - 7.0</td>
<td>7.0</td>
<td>By-product of drinking water disinfection</td>
<td></td>
</tr>
</tbody>
</table>

### Notes:
- (A) Aluminum is also regulated by a Secondary MCL of 0.2 ppm. 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
- (C) Value given is the highest individual value measured during 2017.
- (D) 100% of turbidity measurements were in compliance during 2017.
- (E) Distribution samples with no detectable chlorine residual undergo further analysis to ensure compliance with microbiological water quality regulations.
- (F) Range is based on all individual sample results.

### Typical Sources

- **Exceeding AL**
- **Not Detected**
- **Range**
- **Average**
- **Surface Water**
- **Groundwater**
- **Typical Sources**

### Treatment Technique

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

### Notes

- The following tables show the measured amount of constituents detected in 2017 or in the most recent year sampling was required. Although 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.
In order to ensure that tap water is safe to drink, the U.S. has established regulations that limit the amount of certain contaminants in drinking water. These contaminants are known to pose a risk to public health, and the regulations are designed to protect against these risks. The regulations are enforced by the State Water Resources Control Board (State Board) to ensure that public water systems comply with the requirements.

### Constituents With No Established MCL

Unregulated constituent monitoring helps determine where constitute contaminants exist and whether they should be regulated. The list below includes contaminants that are monitored but do not have established Maximum Contaminant Levels (MCLs).

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Year Sampled</th>
<th>PPM</th>
<th>Average</th>
<th>Range</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Androstanol</td>
<td>2014 NA</td>
<td>1.1</td>
<td>3.9</td>
<td>0.4</td>
<td>10.9</td>
</tr>
<tr>
<td>Androstanone</td>
<td>2014 NA</td>
<td>20</td>
<td>53</td>
<td>28</td>
<td>145</td>
</tr>
<tr>
<td>1.4-Diols</td>
<td>2014 NA</td>
<td>20</td>
<td>53</td>
<td>28</td>
<td>145</td>
</tr>
<tr>
<td>Hexavalent chromium</td>
<td>2016-2017</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Methylene dinitrobenzene</td>
<td>2014-2015</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Toluene</td>
<td>2014-2015</td>
<td>NA</td>
<td>5MA</td>
<td>10M</td>
<td>10M</td>
</tr>
<tr>
<td>Xylenes</td>
<td>2014-2015</td>
<td>NA</td>
<td>5MA</td>
<td>10M</td>
<td>10M</td>
</tr>
</tbody>
</table>

### WATER QUALITY REGULATIONS

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 underground aquifers, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and it 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 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 be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (U.S. EPA) and the California 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 guidelines 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 Safe Drinking Water Hotline at 1-800-426-4791.

**POPULATIONS WITH LOW RESISTANCE**

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 and some chemicals present in drinking water. Immuno-compromised persons, including patients receiving treatment for cancer, should ask their health care providers to recommend appropriate protective measures.

### SACRAMENTO’S WATER SOURCE ASSESSMENT

The City of Sacramento has two independent water sources. Our primary water source is surface water from the American and Sacramento Rivers, which provides 72 percent of our water supply. Groundwater provides the remaining 28 percent. Assessments of potential contaminant activities for the City’s Sacramento River and American River water sources were completed in 2000 and 2001, and most recently updated in 2015 and 2013 respectively. These reports indicate that both rivers are most vulnerable to contaminants from agricultural activities and that the Sacramento River is also most susceptible to agricultural contaminants. The City of Sacramento, along with several other water utilities, updates assessments of these water sources every five years.

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 contamination, leaking underground storage tanks, known contaminant plumes, agricultural drainage, gas stations, dry cleaners, metal plating and chemical processing storage, abandoned nuclear electric power stations, and automobile repair and body shops. Wells south of the American River are considered vulnerable to leaking underground storage 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.

### WHAT YOU SHOULD KNOW ABOUT ARSENIC

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic’s possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and other health effects such as skin damage and circulatory problems.

### 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 primarily comes from materials and components associated with service lines and home plumbing. The U.S. EPA’s Lead and Copper Rule requires utilities to assess their water and identify any materials and components that cause lead or copper to enter your water. If your water contains lead or copper, the utility must inform you and help you find a solution.

### LEAD TESTING IN SCHOOLS

Recent events in the United States have shown that lead in drinking water remains an ongoing public health concern, particularly for children. In 2017, the City of Sacramento responded proactively to a requirement from the California State Water Resources Control Board that public water systems provide assistance with testing water for lead for any local school that requests it. Through outreach efforts and coordinating with local school districts, 531 samples from 112 schools were tested by the end of 2017.

### CYANOBACTERIA

Cyanobacteria, common to freshwater ecosystems, can under certain conditions form scum or “blooms” at the surface of a water body. These blooms are capable of producing compounds, some of which can be harmful to human health and others which affect the taste and odor of drinking water. While none of these compounds are presently regulated in drinking water, the City of Sacramento did voluntarily monitor for several of them during 2017.

Microcystins and cylindrospermopsin, which are subject to U.S. EPA Health Advisories, were monitored in 2017 but were not detected. Geosmin and 2-Methylisoborneol (MIB) are considered an aesthetic issue; they can give water an earthy, musty taste, even at very low levels and are not removed by conventional treatment processes. Geosmin levels ranged between non-detect and 3.3 parts per trillion while MIB results ranged between non-detect and 7.9 parts per trillion in our source water.

### CYTROPORISPORIUM

Cytosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Monitoring performed between 2015 and 2017 indicated that these organisms were present in one of 24 samples from the Sacramento River and zero of 24 samples from the American River.

The City’s treatment process ensures that the 2-log removal treatment technique MCL required by regulation is met. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks; however, immune-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.
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 holds public meetings most Tuesdays at 5 p.m. in the City Council Chambers at 915 I Street, Sacramento. You can access Council agendas at www.cityofsacramento.org/clerk.

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 воде. 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.

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

Чтобы получить более подробную информацию, обратитесь к кому-нибудь, кто хорошо разбирается в этом вопросе.

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Cette rapport contient des informations importantes sur l'eau potable. Traduisez-le ou parlez-en à quelqu'un qui comprend.

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此份报告包含有关饮用水的重要信息。请翻译或与能够理解的人讨论。

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