Supplying a safe and dependable water supply is our number one goal. We are pleased to present the 2020 Water Quality Report to assure you the District’s water has again met and exceeded the State’s water quality standards.

Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health & Environment (CDPHE) has completed a source water assessment of the potential for contaminants reaching any of Aurora Water’s terminal supplies, the last stop for the water before it is treated. The potential sources of contamination that may exist are:

- EPA areas of concern
- permitted wastewater discharge sites
- above ground, underground and leaking storage tank sites
- solid waste sites
- existing or abandoned mine sites
- other facilities
- commercial, industrial and transportation activities
- residential, urban recreational grasses
- quarries, strip mines and gravel pits
- agriculture
- forests
- septic systems
- oil and gas wells and roads

For more information on the report, contact the CDPHE by calling 303.692.2000 or visiting Colorado.gov/cdphe/CCR. The report is located under “Guidance: Source Water Assessment Reports.”

If you have any questions about this report or concerning your water or wastewater services, please call the District office at 303.979-7286.

The District’s Board of Directors meetings are held on the third Wednesday of every month at 8:00 am. Please feel free to attend these meetings, meeting format is currently virtual.

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.
### Additional Information

Nitrates in drinking water at levels above 10 ppm (10,000 ppb) is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue-baby syndrome. Infants may 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, which 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**, which 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 byproducts of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive Contaminants**, that can be naturally occurring or be the result of oil and gas production and mining activities.

Some people may be more vulnerable to contaminants in drinking water than the public in general. All 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. Immunocompromised persons, such as persons with cancer, who are 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 of infections. These people should seek advice from their health care provider about drinking water. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants call the EPA Safe Drinking Water Hotline at 1-800-426-4791.

In order to ensure that tap water is safe to drink, Colorado Department of Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### The Table of Detected Contaminants

The following definitions will help you understand the terms and abbreviations used in this report:

- **Maximum Contaminant Level (MCL)** - The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** - A required process intended to reduce the level of a contaminant in drinking water.
- **Action Level (AL)** - The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **Maximum Residual Disinfectant Level (MRDL)** - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Contaminant Level Goal (MCLG)** - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Residual Disinfectant Level Goal (MRDLG)** - The level of a drinking water disinfectant, below which there is no known or expected risk to health. MCLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Violation (No Abbreviation)** - Failure to meet a Colorado Primary Drinking Water Regulations.
- **Formal Enforcement Action (No Abbreviation)** - Fines to meet a Colorado Primary Drinking Water Regulations.

<table>
<thead>
<tr>
<th>Contaminants that were tested for, but not detected, include:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fecal coliforms</strong>, <strong>E.Coli</strong>, and all regulated &amp; unregulated volatile &amp; synthetic organic chemicals including pesticides &amp; herbicides.</td>
</tr>
</tbody>
</table>

The state grants waivers for some drinking water contaminants if the contaminants are not found in the public water system’s source water. The District has been granted waivers for the following contaminants:

- **Dioxin, glyphosate, cyanide, asbestos**

### Our Water Source

The District receives our source water from the City of Aurora. The water is diverted from the South Platte River at Strontia Springs Reservoir and then downstream to Chatfield for treatment by Centennial Water & Sanitation District prior to Roxborough’s system. Once it reaches the treatment facility, we utilize several treatment processes including coagulation, flocculation, sedimentation, filtration and disinfection.

The sources of drinking water (both tap water and bottled water) include lakes, rivers, 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, which can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

<table>
<thead>
<tr>
<th>Contaminants that may be present in source water include:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Microbial Contaminants</strong>, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.</td>
</tr>
<tr>
<td><strong>Inorganic Contaminants</strong>, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.</td>
</tr>
<tr>
<td><strong>Pesticides and Herbicides</strong>, which may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.</td>
</tr>
<tr>
<td><strong>Organic Chemical Contaminants</strong>, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff, and septic systems.</td>
</tr>
<tr>
<td><strong>Radioactive Contaminants</strong>, that can be naturally occurring or be the result of oil and gas production and mining activities.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variances and Exemptions (WE) Department permission not to meet a MCL or treatment technique under certain conditions.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gross Alpha (No Abbreviation)</strong> - Gross alpha particle activity compliance value. It includes radium-226, but excludes radon-222, and ura.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Precipitates per liter (pCi/L) - Measure of the radioactivity in water.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nephelometric Turbidity Unit (NTU)</strong> - Measure of the clarity or cloudiness of water. Water should have less than 5 NTU. An increase of 1 NTU is noticeable to the naked eye.</td>
</tr>
</tbody>
</table>

| Compliance Value (No Abbreviation)** - Single or calculated value used to determine if a regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th percentile, Running Annual Average (RAA) and (seasonal) Running Annual Average (RAA). |

<table>
<thead>
<tr>
<th>Average (for month) - Typical value.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Range (R)</strong> - Lowest value to the highest value.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample Size (n) - Number or count of values (i.e. number of water samples collected).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parts per million (ppm)</strong> - Measure of the concentration of an element or compound in water.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variance and Exemptions (WE) - Department permission not to meet a MCL or treatment technique under certain conditions.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gross Alpha (No Abbreviation)</strong> - Gross alpha particle activity compliance value. It includes radium-226, but excludes radon-222, and ura.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Precipitates per liter (pCi/L) - Measure of the radioactivity in water.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nephelometric Turbidity Unit (NTU)</strong> - Measure of the clarity or cloudiness of water. Water should have less than 5 NTU. An increase of 1 NTU is noticeable to the naked eye.</td>
</tr>
</tbody>
</table>

| Compliance Value (No Abbreviation)** - Single or calculated value used to determine if a regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th percentile, Running Annual Average (RAA) and (seasonal) Running Annual Average (RAA). |

<table>
<thead>
<tr>
<th>Average (for month) - Typical value.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Range (R)</strong> - Lowest value to the highest value.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample Size (n) - Number or count of values (i.e. number of water samples collected).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parts per million (ppm)</strong> - Measure of the concentration of an element or compound in water.</td>
</tr>
</tbody>
</table>
We routinely monitor for contaminants in your drinking water according to Federal and State laws. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Some of our data, though representative, may be more than one year old.

These tables show the results of our monitoring for the period of January 1 to December 31, 2020 unless otherwise noted.

### Total Organic Carbon **

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Compliance Factor (measurements should not be lower than this factor**)</th>
<th>Range of Individual Ratio Samples (Lowest: Highest)</th>
<th>Running Annual Average Range for the Year (compliance factor)</th>
<th>Violation (Yes or No)</th>
<th>Sample Size</th>
<th>Sample Date/Year</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Organic Carbon Ratio (TOC)</td>
<td>1.0</td>
<td>1.56 – 2.7</td>
<td>2.06</td>
<td>No</td>
<td>24</td>
<td>2020</td>
<td>Naturally present in the environment</td>
</tr>
</tbody>
</table>

### Entry Point to Distribution System

### Turbidity **

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>TT Requirement</th>
<th>Level Found</th>
<th>Violation (Yes or No)</th>
<th>Sample Date</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbidity (NTU)</td>
<td>Maximum 1 NTU for any single measurement</td>
<td>Highest single measurement: 0.1 NTU</td>
<td>No</td>
<td>September 2020</td>
<td>Soil Runoff</td>
</tr>
<tr>
<td>Turbidity (%)</td>
<td>In any month, at least 95% of samples must be less than 0.3 NTU</td>
<td>Lowest monthly percentage of samples meeting TT standard for our technology: 100%</td>
<td>No</td>
<td>December</td>
<td>Soil Runoff</td>
</tr>
</tbody>
</table>

### Inorganic Contaminants **

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>MCL</th>
<th>MCLG</th>
<th>Sample Size</th>
<th>Units</th>
<th>Range &amp; Average</th>
<th>Violation (Yes or No)</th>
<th>Sample Date</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>10</td>
<td>0</td>
<td>3</td>
<td>ppb</td>
<td>0 to 8</td>
<td>No</td>
<td>2020</td>
<td>Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes</td>
</tr>
<tr>
<td>Barium</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>ppm</td>
<td>0.06 to 0.07</td>
<td>No</td>
<td>2020</td>
<td>Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits</td>
</tr>
<tr>
<td>Chromium</td>
<td>100</td>
<td>100</td>
<td>3</td>
<td>ppb</td>
<td>2 to 3</td>
<td>No</td>
<td>2020</td>
<td>Discharge from steel and pulp mills; erosion of natural deposits</td>
</tr>
<tr>
<td>Fluoride</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>ppm</td>
<td>0.81 to 1.17</td>
<td>No</td>
<td>2020</td>
<td>Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories</td>
</tr>
<tr>
<td>Selenium</td>
<td>50</td>
<td>50</td>
<td>3</td>
<td>ppb</td>
<td>0 to 2</td>
<td>No</td>
<td>2020</td>
<td>Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines</td>
</tr>
</tbody>
</table>

### Radionuclides **

<table>
<thead>
<tr>
<th>Contaminant Name</th>
<th>Year</th>
<th>Average of Individual Samples</th>
<th>Range of Individual Samples (Lowest-Highest)</th>
<th>Sample Size</th>
<th>Unit of Measure</th>
<th>MCL</th>
<th>MCLG</th>
<th>MCL Violation?</th>
<th>Typical Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Radium</td>
<td>2020</td>
<td>1.97</td>
<td>0.5 to 3.7</td>
<td>3</td>
<td>pCi/L</td>
<td>5</td>
<td>0</td>
<td>No</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Combined Uranium</td>
<td>2020</td>
<td>0.67</td>
<td>0 to 1</td>
<td>3</td>
<td>pCi/L</td>
<td>30</td>
<td>0</td>
<td>No</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Gross Alpha</td>
<td>2020</td>
<td>1.62</td>
<td>0 to 3.7</td>
<td>3</td>
<td>pCi/L</td>
<td>15</td>
<td>0</td>
<td>No</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Gross Beta Particle Activity</td>
<td>2020</td>
<td>1.8</td>
<td>0 to 5.4</td>
<td>3</td>
<td>pCi/L</td>
<td>50</td>
<td>0</td>
<td>No</td>
<td>Decay of natural and man-made deposits</td>
</tr>
</tbody>
</table>

### Secondary Contaminants & Other Monitoring**

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>MCLG</th>
<th>Units</th>
<th>Range &amp; Average</th>
<th>Sample Size</th>
<th>Sample Year</th>
<th>Likely Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium (ppm)</td>
<td></td>
<td>ppm</td>
<td>69.4 – 68.7</td>
<td>3</td>
<td>2020</td>
<td>Naturally present in the environment</td>
</tr>
<tr>
<td>Total Dissolved Solids (ppm)</td>
<td></td>
<td>ppm</td>
<td>186 – 161</td>
<td>3</td>
<td>2020</td>
<td>Erosion of natural deposits</td>
</tr>
</tbody>
</table>

Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects or aesthetic effects in drinking water. EPA recommends these standards but does not require water systems to comply.

---

*RAA: Running Annual Average
**Information provided from Colorado Department of Public and Environment on behalf of Centennial Water and Sanitation District
### Microbiological Contaminants

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>MCL</th>
<th>MCLG</th>
<th>Units</th>
<th>Result</th>
<th>Violation</th>
<th>Sample</th>
<th>Sample</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Coliform Bacteria for Systems that collects &lt;40 samples per month</td>
<td>No more than 1 positive monthly sample</td>
<td>0</td>
<td>Absent or Present</td>
<td>Absent</td>
<td>No</td>
<td>1</td>
<td>NA</td>
<td>Naturally present in the environment</td>
</tr>
</tbody>
</table>

### Disinfectant Residuals

<table>
<thead>
<tr>
<th>Disinfectant Name</th>
<th>MRDL</th>
<th>MRDLG</th>
<th>Units</th>
<th>Range &amp; Average</th>
<th>Violation</th>
<th>Sample</th>
<th>Sample</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine/Chloramine</td>
<td>4</td>
<td>4</td>
<td>ppm</td>
<td>2.98 – 2.47 1.93</td>
<td>No</td>
<td>1</td>
<td>12/01/2020</td>
<td>Water additive used to control microbes</td>
</tr>
</tbody>
</table>

### Disinfection Byproducts

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>MRDL</th>
<th>MRDLG</th>
<th>Units</th>
<th>Average</th>
<th>Range</th>
<th>Violation</th>
<th>Sample</th>
<th>Sample</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haloacetic Acids (HAA5)</td>
<td>60</td>
<td>N/A</td>
<td>ppb</td>
<td>9.8</td>
<td>3.2 – 12.6</td>
<td>No</td>
<td>4</td>
<td>*RAA</td>
<td>Byproduct of drinking water disinfection</td>
</tr>
<tr>
<td>Total Trihalomethanes (TTHM)</td>
<td>80</td>
<td>N/A</td>
<td>ppb</td>
<td>29.5</td>
<td>9.3 – 43.3</td>
<td>No</td>
<td>4</td>
<td>*RAA</td>
<td>Byproduct of drinking water disinfection</td>
</tr>
</tbody>
</table>

### Lead and Copper

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>AL</th>
<th>ALG</th>
<th>Units</th>
<th>90th Percentile</th>
<th>Number of Sites over AL</th>
<th>Violation</th>
<th>Sample</th>
<th>Sample</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>1.3</td>
<td>1.3</td>
<td>ppm</td>
<td>0.32</td>
<td>0</td>
<td>No</td>
<td>10</td>
<td>06/29/2020-07/06/2020</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives</td>
</tr>
<tr>
<td>Lead</td>
<td>15</td>
<td>0</td>
<td>ppb</td>
<td>4</td>
<td>0</td>
<td>No</td>
<td>10</td>
<td>06/29/2020-07/06/2020</td>
<td>Corrosion of household plumbing systems, erosion of natural deposits</td>
</tr>
</tbody>
</table>

*RAA - Running Annual Average
**Information provided from Colorado Department of Public and Environment on behalf of Centennial Water and Sanitation District

---

**Violations, Significant Deficiencies, and Formal Enforcement**

No Violations or Formal Enforcement Actions