For More Information

Our Drinking Water Sources and Treatment

Supplied by the San Francisco Regional Water System (SFRRW), which is owned and operated by the San Francisco Public Utilities Commission (SFPUC), the major water source originates from snowfall in the Sierra Nevada and flows down the Tuolumne River to storage in Crystal Springs Reservoir. Water from Hetch Hetchy reservoir also supplies the following treatment processes:

- Disinfection byproducts and disinfection byproducts of regulated disinfection byproducts.
- pH adjustment for optimum corrosion control.
- Taste and odor removal.
- Protecting Our Watersheds

SFPUC’s comprehensive sanitary survey for the Hetch Hetchy system annually and local water sources every three years. The survey is conducted annually. The survey identifies issues with water sources.
<table>
<thead>
<tr>
<th>CONTAMINANTS</th>
<th>UNIT</th>
<th>N/A</th>
<th>ORL</th>
<th>ORG</th>
<th>MDL</th>
<th>MCL</th>
<th>PHG</th>
<th>RANGE</th>
<th>AVERAGE</th>
<th>SOURCE(S) IN DRINKING WATER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbidity</td>
<td>NTU</td>
<td>N/A</td>
<td>0.2-0.8</td>
<td>[1.6]</td>
<td>Soil runoff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
<td>ppm</td>
<td>80</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>98-100%</td>
<td>N/A</td>
</tr>
<tr>
<td>Total Coliform **</td>
<td>ppm</td>
<td>80</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>190%</td>
<td>N/A</td>
</tr>
<tr>
<td>Chloride</td>
<td>ppm</td>
<td>51</td>
<td>N/A</td>
<td>N/A</td>
<td>0.9</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>0.2-0.7</td>
<td>Naturally present in the environment</td>
</tr>
<tr>
<td>Phosphate (source water) **</td>
<td>ppm</td>
<td>2.0</td>
<td>1</td>
<td>ND</td>
<td>0.7</td>
<td>1.2-2.9</td>
<td>2.16-3.52</td>
<td>(2.38)</td>
<td>Membrane water source added for treatment</td>
<td></td>
</tr>
<tr>
<td>Chloroform</td>
<td>ppm</td>
<td>42</td>
<td>1</td>
<td>ND</td>
<td>0.1</td>
<td>1.2-2.9</td>
<td>2.16-3.52</td>
<td>(2.38)</td>
<td>Membrane water source added for treatment</td>
<td></td>
</tr>
<tr>
<td>Copper</td>
<td>ppm</td>
<td>1.58</td>
<td>0.8</td>
<td>ND</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Interception of household water plumbing systems</td>
</tr>
<tr>
<td>Lead</td>
<td>ppm</td>
<td>1.5</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Interception of household water plumbing systems</td>
</tr>
</tbody>
</table>

## Key Water Quality Terms

The following are definitions of key terms referring to water quality standards and goals noted on the above data tables.

**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 US EPA.

**MAXIMUM CONTAMINANT LEVEL (MCL):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLs are set by the US EPA.

**MAXIMUM CONTAMINANT LEVEL GOAL (MCLG):** The highest level of a contaminant that is allowed in drinking water. Primary MCLGs are set as close to the PHGs or MCLGs as is economically and technologically feasible. Secondary MCLGs (SMCLs) are set to protect the color, taste, and odor of drinking water.

**MAXIMUM RESIDUAL DISINFECTANT LEVEL (MRDL):** The highest level of a disinfectant water can achieve. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**DISINFECTION TRADEOFFS:** Any disinfectant treatment will remove (or inactivate) a significant number of microbial contaminants. The removal efficiency will decrease as the disinfectant concentration is increased. The removal efficiency of the disinfectant is always greater than the removal efficiency of the microbial contaminants. The disinfectant concentration is always greater than the removal efficiency of the microbial contaminants.

**TURBIDITY:** A water quality indicator that measures the turbidity of the water. High turbidity can hide the effectiveness of disinfected water. Cryptosporidium is a parasite that can be found in most surface water. The SPITAC regular tests for this waterborne pathogen, and found it at very low levels in source water and treated water in 2018. Current test methods approved by the US EPA do not distinguish Cryptosporidium and other pathogenic disease-causing organisms. Testing of Cryptosporidium may produce symptoms of nausea, abdominal cramps, diarrhea, and associated headaches. Cryptosporidium is a known cause of disease, and it may be spread through means other than drinking water.

### Contaminants and Regulations

Generally, the sources of drinking water (both tap water and bottled water) include rivers, lakes, oceans, 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. Such substances are called contaminants, and may be present in source water as:

**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 naturally occur or result from urban runoff/irrigation, industrial or domestic wastewater discharges, oil and gas production, mining or burning.

**PESTICIDES AND HERBICIDES:** that may come from a variety of sources such as agriculture, urban runoff, road salt and residential use.

**ORGANIC CHEMICALS:** natural and synthetic organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban runoff, agricultural application and septic systems.

**RADIOACTIVE CONTAMINANTS:** which can naturally occur or 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 US EPA Safe Drinking Water Hotline at (800) 426-6969, or at www.epa.gov/waterscience.

### Key

- **AL:** Action level
- **AR:** Action level
- **MRDL:** Maximum allowable concentration
- **NL:** Notification level
- **ND:** Non-detect
- **®:** Regulatory level
- **MDL:** Method detection limit
- **MCL:** Maximum contaminant level
- **PHG:** Public health goal
- **MRDLG:** Maximum contaminant level goal
- **ORL:** Other regulatory level
- **ORL:** Other regulatory level