During the period 6/12/2023 through 7/2/2023, Sunset and Sutro Reservoirs received surface water from Hetch Hetchy reservoir and Bay Area reservoirs, with no contribution from local groundwater. Table 1 below summarizes the water quality characteristics of the blended water in the reservoirs.

Table 1: Blended Water Characteristics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>California Title 22 Regulatory Standard</th>
<th>Unit</th>
<th>2022 Maximum Value</th>
<th>2022 Minimum Value</th>
<th>Latest Data from Sunset Reservoir Outlet</th>
<th>Attached Time-Series Plots</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkalinity</td>
<td>Other ²</td>
<td>mg/L (as CaCO₃)</td>
<td>166</td>
<td>7.1</td>
<td>19</td>
<td>Plot 1a</td>
</tr>
<tr>
<td>Chloride</td>
<td>250 ¹</td>
<td>mg/L</td>
<td>15</td>
<td>&lt;3</td>
<td>6</td>
<td>Plot 2a</td>
</tr>
<tr>
<td>Hardness</td>
<td>Other ³</td>
<td>mg/L (as CaCO₃)</td>
<td>49</td>
<td>9.1</td>
<td>15</td>
<td>Plot 1b</td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
<td>500 ¹</td>
<td>mg/L</td>
<td>104</td>
<td>&lt;20</td>
<td>37</td>
<td>Plot 2b</td>
</tr>
<tr>
<td>Specific Conductance</td>
<td>900 ¹</td>
<td>µS/cm</td>
<td>210</td>
<td>37</td>
<td>77</td>
<td>Plot 2c</td>
</tr>
</tbody>
</table>

The blended water is routinely sampled to ensure the quality of deliveries and safety of drinking water supplied to our customers. Over one hundred parameters are sampled, in accordance with the California Code of Regulations (CCR), Title 22 Drinking Water Regulations. Table 2 below summarizes water quality parameters for which blending is required. While the levels of these parameters may vary slightly from week to week, they will not exceed the drinking water standards set by the California State Water Resources Control Board (SWRCB) Division of Drinking Water and the United States Environmental Protection Agency (USEPA).

Table 2: Water Quality Data for Groundwater Parameters that Require Blending - Sunset Reservoir

<table>
<thead>
<tr>
<th>Parameter</th>
<th>California Title 22 Regulatory Standard</th>
<th>Unit</th>
<th>Current Sampling Frequency</th>
<th>Number of Samples to Date</th>
<th>Date of Latest Sample</th>
<th>Latest ²</th>
<th>High ²</th>
<th>Low ²</th>
<th>Average ²</th>
<th>Attached Time-Series Plots</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromium VI</td>
<td>0.01 ¹</td>
<td>mg/L</td>
<td>Weekly</td>
<td>594</td>
<td>6/20/2023</td>
<td>0.00013</td>
<td>0.0012</td>
<td>0.000034</td>
<td>0.000026</td>
<td>Plot 3a</td>
</tr>
<tr>
<td>Manganese (Mn)</td>
<td>0.05 ¹</td>
<td>mg/L</td>
<td>Weekly</td>
<td>515</td>
<td>6/27/2023</td>
<td>0.0023</td>
<td>0.0084</td>
<td>&lt;0.002</td>
<td>&lt;0.002</td>
<td>Plot 4a</td>
</tr>
<tr>
<td>Nitrate</td>
<td>10 ⁸</td>
<td>mg/L (as N)</td>
<td>Weekly</td>
<td>615</td>
<td>6/27/2023</td>
<td>&lt;0.07</td>
<td>0.53</td>
<td>&lt;0.07</td>
<td>0.12</td>
<td>Plot 5a</td>
</tr>
</tbody>
</table>

Groundwater serving the Sutro Reservoir only comes from the Lake Merced Well, which does not require blending. Table 3 provides the most recent data of blended water quality.

Table 3: Water Quality Data for Groundwater Parameters that Require Blending - Sutro Reservoir

<table>
<thead>
<tr>
<th>Parameter</th>
<th>California Title 22 Regulatory Standard</th>
<th>Unit</th>
<th>Current Sampling Frequency</th>
<th>Number of Samples to Date</th>
<th>Date of Latest Sample</th>
<th>Latest ²</th>
<th>High ²</th>
<th>Low ²</th>
<th>Average ²</th>
<th>Attached Time-Series Plots</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromium VI</td>
<td>0.01 ¹</td>
<td>mg/L</td>
<td>Weekly</td>
<td>304</td>
<td>6/20/2023</td>
<td>0.000074</td>
<td>0.00058</td>
<td>&lt;0.000002</td>
<td>0.000014</td>
<td>Plot 3b</td>
</tr>
<tr>
<td>Manganese (Mn)</td>
<td>0.05 ¹</td>
<td>mg/L</td>
<td>Weekly</td>
<td>316</td>
<td>6/20/2023</td>
<td>&lt;0.002</td>
<td>0.050</td>
<td>&lt;0.002</td>
<td>0.0029</td>
<td>Plot 4b</td>
</tr>
<tr>
<td>Nitrate</td>
<td>10 ⁸</td>
<td>mg/L (as N)</td>
<td>Weekly</td>
<td>319</td>
<td>6/20/2023</td>
<td>&lt;0.07</td>
<td>0.44</td>
<td>&lt;0.07</td>
<td>0.080</td>
<td>Plot 5b</td>
</tr>
</tbody>
</table>

Notes:
1) SMCL as discussed in Article 16, Section §64449 (b) of Title 22. Division 4. Chapter 15 of the CCR.
2) Values are obtained from SFPUC 2020 Consumer Confidence Report data table.
3) CA State Standard for Chromium VI was deleted from the CCR in August 2017. However, the SWRCB will implement a new standard as soon as possible. In the interim the SFPUC will continue to monitor for Chromium VI.
4) MCL as discussed in Article 16, Section §64449 (b) of Title 22. Division 4. Chapter 15 of the CCR.
5) Before each drinking water well goes into routine production, rigorous start-up testing is conducted for eight weeks, after which a long-term sampling schedule begins. The start-up and long-term sampling schedules are in accordance with a water quality compliance monitoring plan that was reviewed and approved by the SWRCB.
6) Single sample data point.
7) Historical high, low and average blend values based on data from 4/23/2017, after groundwater was first introduced to the water supply, through the latest sampling date for which laboratory results are available.

Acronyms:
- GW - groundwater
- HTWTP - Harry Tracy Water Treatment Plant
- HH - Hetch Hetchy Aqueduct
- MCL - Maximum Contaminant Level
- mg/L - milligrams per liter
- SFGW - San Francisco Groundwater Supply Project
- SMCL - Secondary Maximum Contaminant Level
- SVWTP - Sunol Valley Water Treatment Plant
- µS/cm - micro-Siemens per centimeter
**Acronyms and Abbreviations**

- HTWTP  Harry Tracy Water Treatment Plant
- mg/L  milligrams per liter
- SVWTP  Sunol Valley Water Treatment Plant
- CaCO₃  calcium carbonate
- SFGW  San Francisco Groundwater Supply Project

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**Alkalinity Concentration in Sunset Reservoir Blended Outflow**

- **No established standard.**

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**Total Hardness (as CaCO₃) of Sunset Reservoir Blended Outflow**

- **No established standard; generally non-objectionable below 100 mg/L.**

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**Percent of combined supply to Sunset and Sutro Reservoirs for semi-monthly periods**

- **Not reported**

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Source: SFPUC San Francisco Groundwater Supply Project semi-monthly surface water-groundwater blend reports.
A

Cronyms and Abbreviations

HTWTP   Harry Tracy Water Treatment Plant
mg/L   milligrams per liter
MCL   maximum contaminant level
SVWTP   Sunol Valley Water Treatment Plant
SFGW   San Francisco Groundwater Supply Project

Chloride Concentration in Sunset Reservoir Blended Outflow

- Chloride Concentration (mg/L)
- Secondary MCL* - upper level: 250 mg/L
- Secondary MCL* - recommended level: 250 mg/L

Total Dissolved Solids Concentration in Sunset Reservoir Blended Outflow

- Total Dissolved Solids Concentration (mg/L)
- Secondary MCL* - upper level: 1,000 mg/L
- Secondary MCL* - recommended level: 1,000 mg/L

Specific Conductance of Sunset Reservoir Blended Outflow

- Specific Conductance (μmhos/cm)
- Secondary MCL* - upper level: 1,600 μmhos/cm
- Secondary MCL* - recommended level: 1,600 μmhos/cm

Percent of combined supply to Sunset and Sutro Reservoirs for semi-monthly periods

Source: SFPUC San Francisco Groundwater Supply Project semi-monthly surface water-groundwater blend reports.

Plot 2
Chloride Concentration, Total Dissolved Solids, and Specific Conductance of Reservoir Blended Outflow, April 2017-July 2023

* Consumer acceptance contaminant level: concentrations that may adversely affect drinking water taste, odor, or appearance.

Anonyms and Abbreviations

HTWTP   Harry Tracy Water Treatment Plant
mg/L   milligrams per liter
MCL   maximum contaminant level
SFGW   San Francisco Groundwater Supply Project
SVWTP   Sunol Valley Water Treatment Plant

Source: SFPUC San Francisco Groundwater Supply Project semi-monthly surface water-groundwater blend reports.
Acronyms and Abbreviations

μg/L micrograms per liter

HTWTP Harry Tracy Water Treatment Plant
MCL maximum contaminant level
ND not detected
SFGW San Francisco Groundwater Supply Project
SVWTP Sunol Valley Water Treatment Plant

* The California SWRCB-DDW proposed a 10 μg/L MCL for hexavalent chromium in March 2022. Currently, all chromium is regulated under the 50 μg/L MCL for total chromium. SFPUC maintains a goal equal to 40 percent of the proposed MCL.

Source: SFPUC San Francisco Groundwater Supply Project semi-monthly surface water-groundwater blend reports.
Acronyms and Abbreviations

- pg/L: micrograms per liter
- HTWTP: Harry Tracy Water Treatment Plant
- MCL: maximum contaminant level
- ND: not detected
- SVWTP: Sunol Valley Water Treatment Plant
- SFGW: San Francisco Groundwater Supply Project

*Consumer acceptance contaminant level: concentrations that may adversely affect drinking water taste, odor, or appearance.

Source: SFPUC San Francisco Groundwater Supply Project semi-monthly surface water-groundwater blend reports.

Plot 4
Manganese Concentration of Reservoir Blended Outflow, April 2017 - July 2023
**Aronyms and Abbreviations**

- **HTWTP**: Harry Tracy Water Treatment Plant
- **mg/L-N**: milligrams per liter as nitrogen
- **MCL**: maximum contaminant level
- **ND**: not detected
- **SVWTP**: Sunol Valley Water Treatment Plant
- **SFGW**: San Francisco Groundwater Supply Project

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**Nitrate Concentration in Sunset Reservoir Blended Outflow**

Nitrate Concentration in Sunset Reservoir Blended Outflow, April 2017 - July 2023

Source: SFPUC San Francisco Groundwater Supply Project semi-monthly surface water-groundwater blend reports.

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**Percent of combined supply to Sunset and Sutro Reservoirs for semi-monthly periods**

Percent of combined supply to Sunset and Sutro Reservoirs for semi-monthly periods

Hetch Hetchy and SWTP
SFGW groundwater wells
HTWTP

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**Source:** SFPUC San Francisco Groundwater Supply Project semi-monthly surface water-groundwater blend reports.