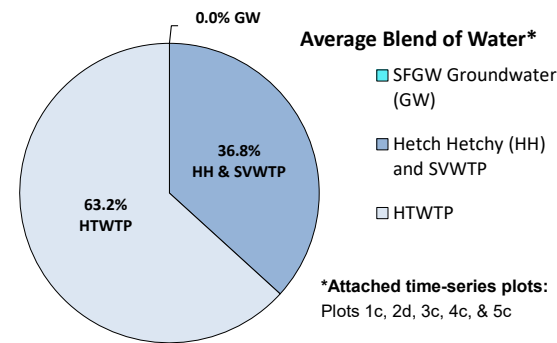


**San Francisco Groundwater Supply Project**  
**SFPUC Surface Water - Groundwater Blend Report [5/1/23 - 5/14/23]**  
 (Posted on 5/19/23)

During the period 5/1/2023 through 5/14/2023, 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**

Parameter	California Title 22 Regulatory Standard	Unit	2022 Maximum Value <sup>2</sup>	2022 Minimum Value <sup>2</sup>	Latest Data from Sunset Reservoir Outlet	Attached Time-Series Plots
Alkalinity	Other <sup>1</sup>	mg/L (as CaCO <sub>3</sub> )	166	7.1	33	Plot 1a
Chloride	250 <sup>1</sup>	mg/L	15	<3	8	Plot 2a
Hardness	Other <sup>1</sup>	mg/L (as CaCO <sub>3</sub> )	49	9.1	31	Plot 1b
Total Dissolved Solids	500 <sup>1</sup>	mg/L	104	<20	73	Plot 2b
Specific Conductance	900 <sup>1</sup>	µS/cm	210	37	134	Plot 2c



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

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

Parameter	California Title 22 Regulatory Standard	Unit	Current Sampling Frequency <sup>5</sup>	Water Quality Monitoring Results in Sunset Reservoir						Attached Time-Series Plots
				Number of Samples to Date	Date of Latest Sample	Blending Results				
						Latest <sup>6</sup>	High <sup>7</sup>	Low <sup>7</sup>	Average <sup>7</sup>	
Chromium VI	0.01 <sup>3</sup>	mg/L	Weekly	580	5/2/2023	0.00011	0.0012	0.000034	0.00026	Plot 3a
Manganese (Mn)	0.05 <sup>1</sup>	mg/L	Weekly	500	4/25/2023	<0.002	0.0084	<0.002	<0.002	Plot 4a
Nitrate	10 <sup>4</sup>	mg/L (as N)	Weekly	601	5/9/2023	0.10	0.53	<0.07	0.12	Plot 5a

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**

Parameter	California Title 22 Regulatory Standard	Unit	Current Sampling Frequency <sup>5</sup>	Water Quality Monitoring Results in Sutro Reservoir						Attached Time-Series Plots
				Number of Samples to Date	Date of Latest Sample	Blending Results				
						Latest <sup>6</sup>	High <sup>7</sup>	Low <sup>7</sup>	Average <sup>7</sup>	
Chromium VI	0.01 <sup>3</sup>	mg/L	Weekly	297	5/2/2023	0.00012	0.00058	<0.00002	0.00014	Plot 3b
Manganese (Mn)	0.05 <sup>1</sup>	mg/L	Weekly	308	4/25/2023	<0.002	0.050	<0.002	0.0030	Plot 4b
Nitrate	10 <sup>4</sup>	mg/L (as N)	Weekly	312	5/9/2023	0.10	0.44	<0.07	0.081	Plot 5b

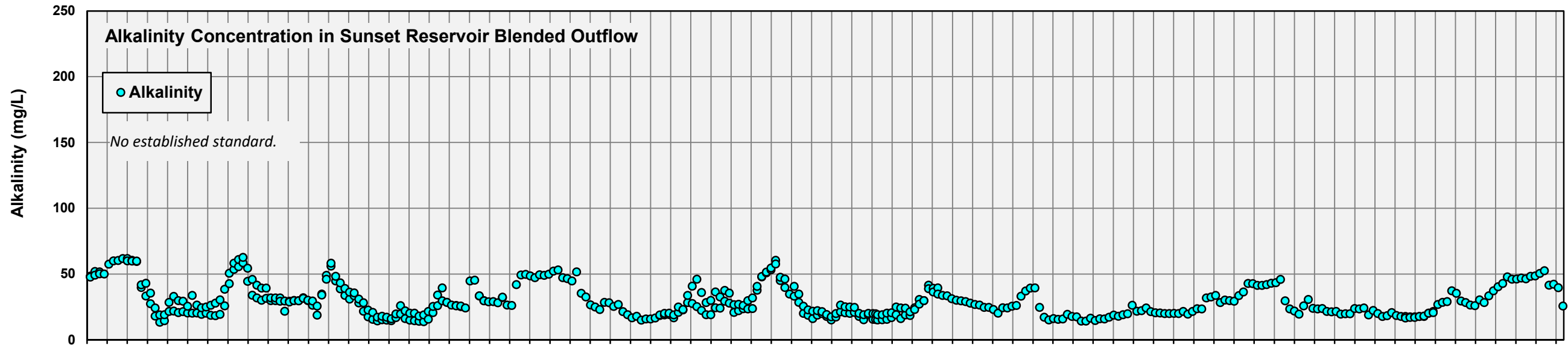
**Notes:**

- 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.

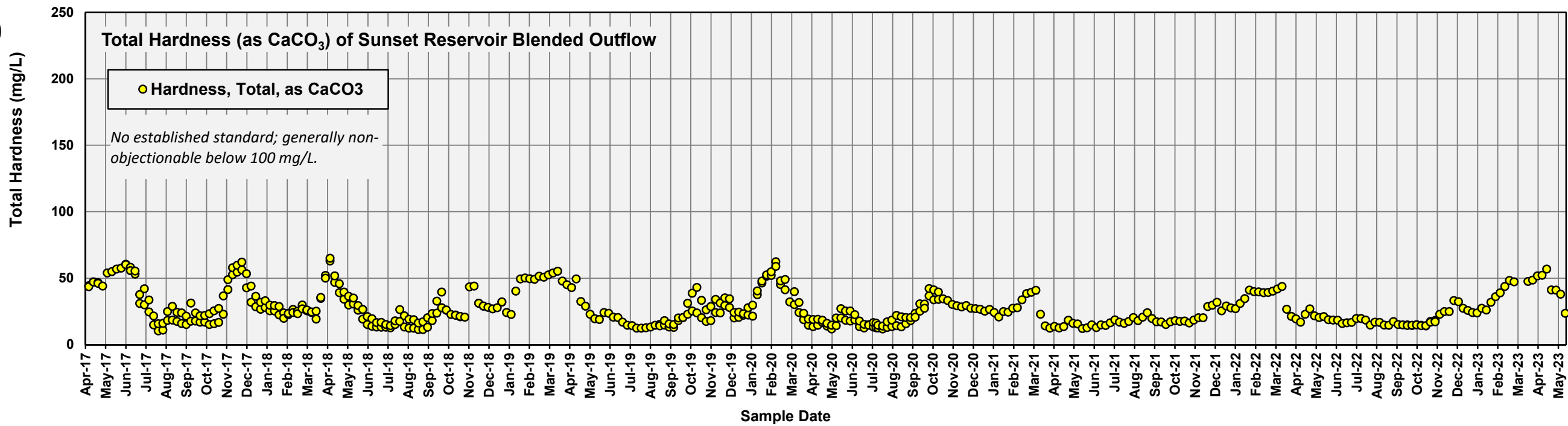
**Acronyms:**

- 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

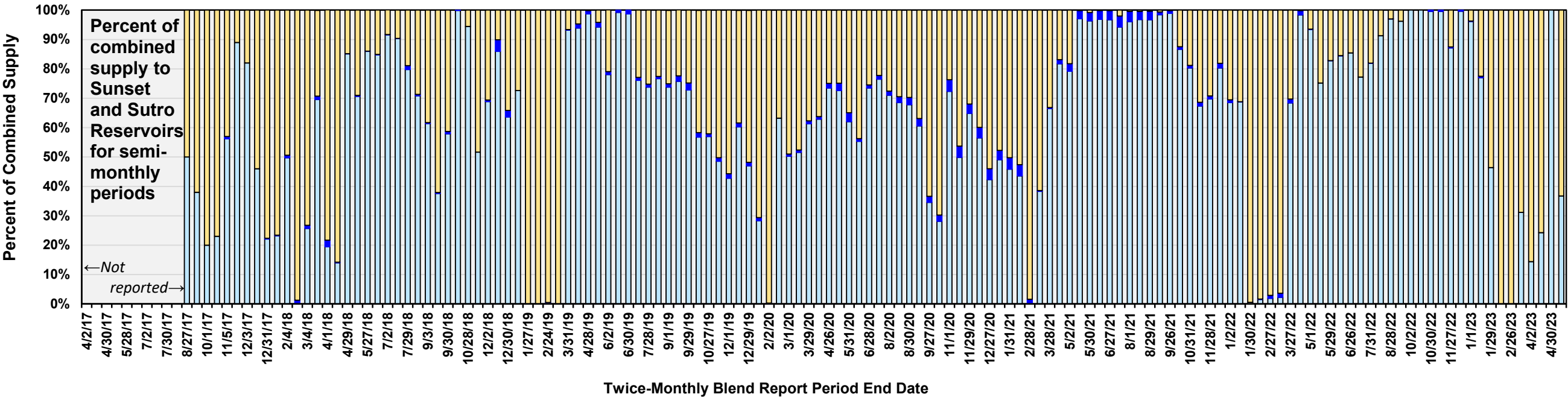
(a)



(b)



(c)



Acronyms and Abbreviations

CaCO<sub>3</sub> calcium carbonate

HTWTP Harry Tracy Water Treatment Plant

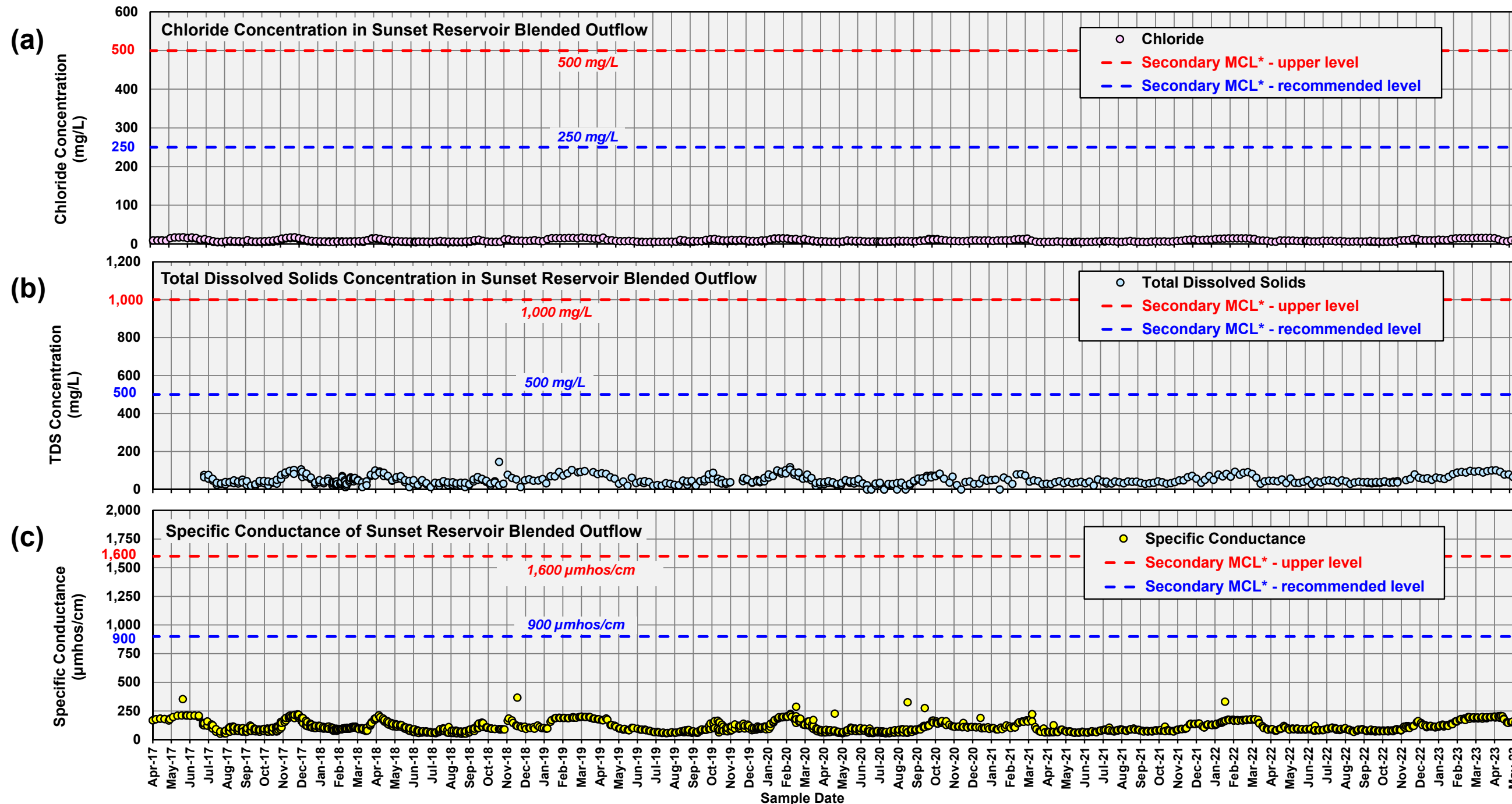
mg/L milligrams per liter

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.

**Plot 1**  
**Alkalinity and Hardness**  
**of Reservoir Blended**  
**Outflow, May 2017- April**  
**2023**

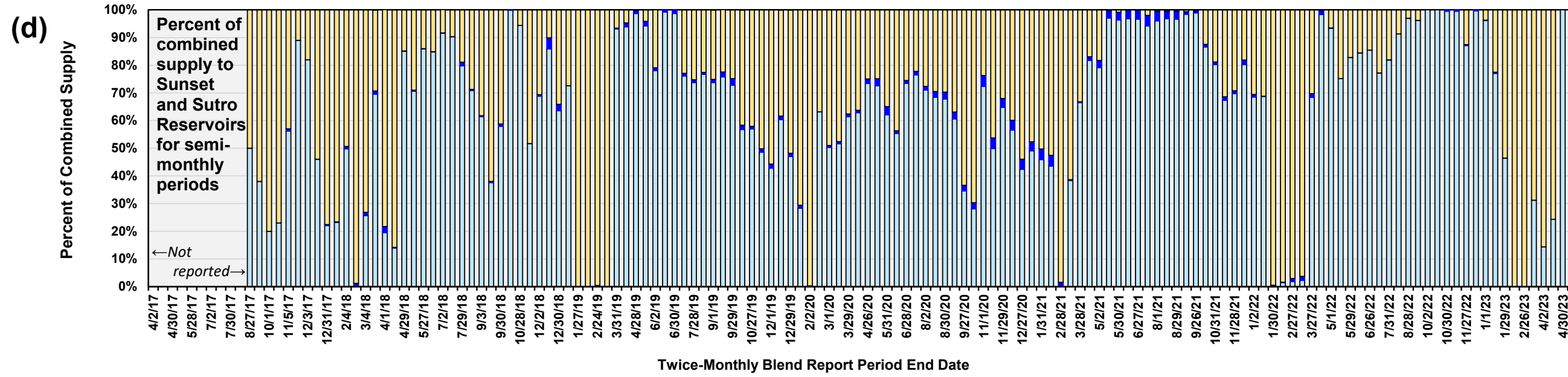


\* Consumer acceptance contaminant level: concentrations that may adversely affect drinking water taste, odor, or appearance.

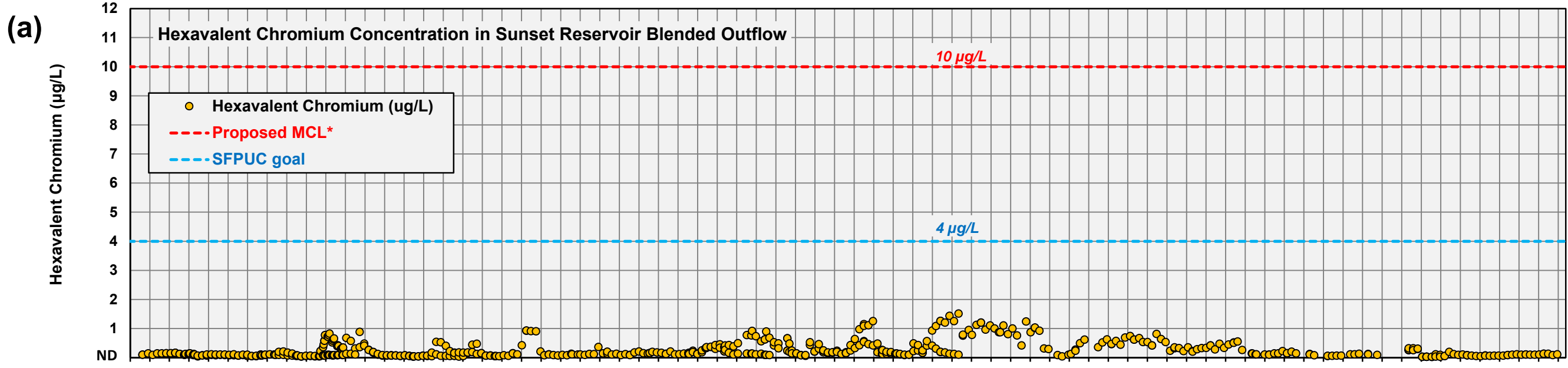
Acronyms and Abbreviations

- 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

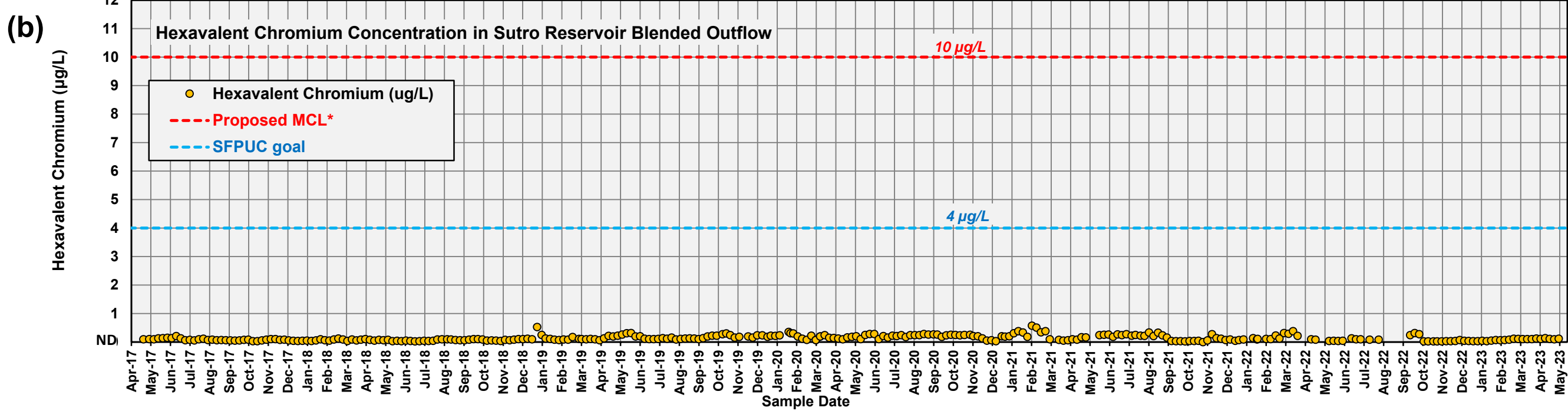
Source: SFPUC San Francisco Groundwater Supply Project semi-monthly surface water-groundwater blend reports.



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



\* 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.



Acronyms and Abbreviations

µg/L micrograms per liter

HTWTP Harry Tracy Water Treatment Plant

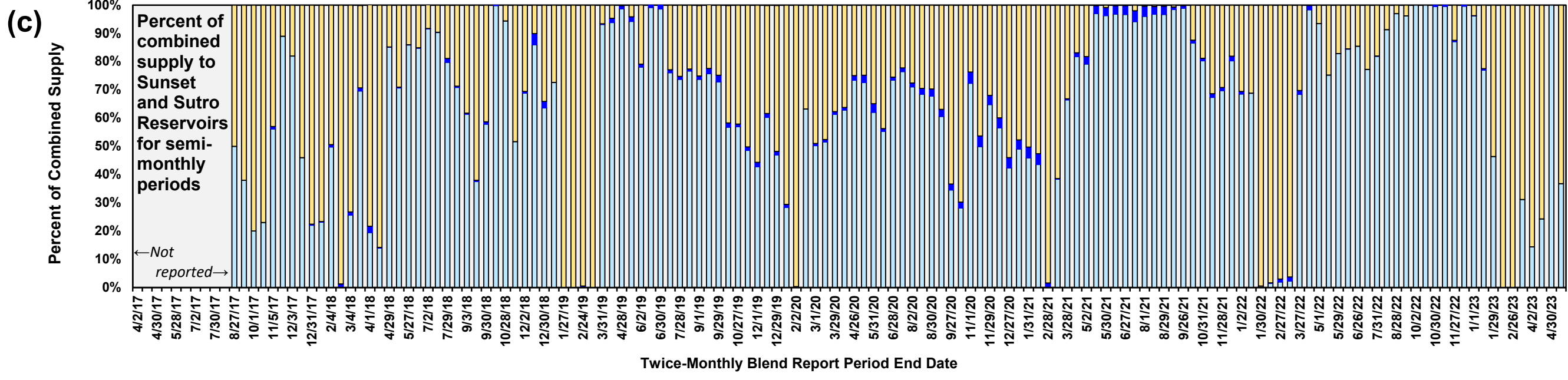
MCL maximum contaminant level

ND not detected

SFGW San Francisco Groundwater Supply Project

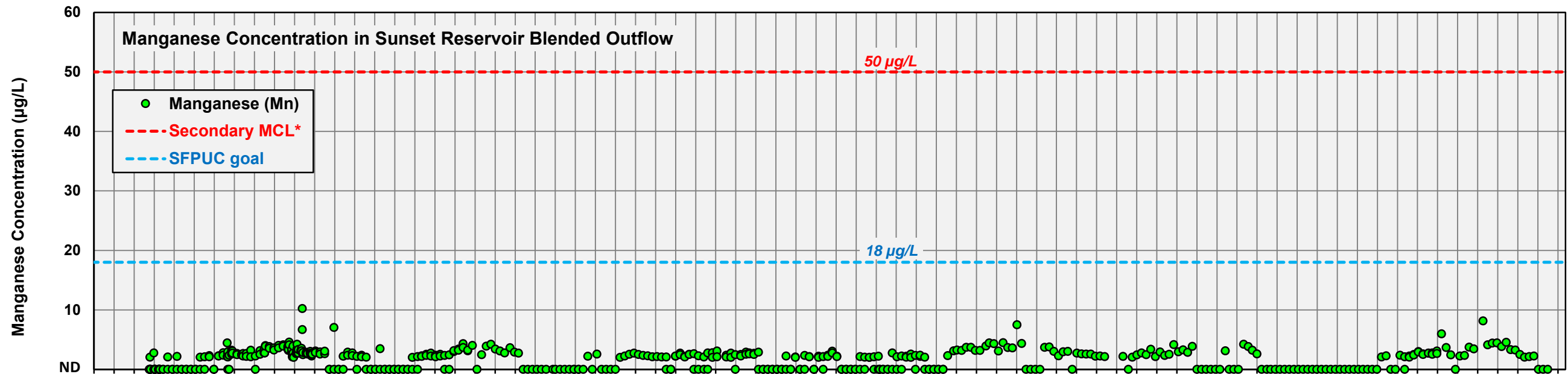
SVWTP Sunol Valley Water Treatment Plant

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



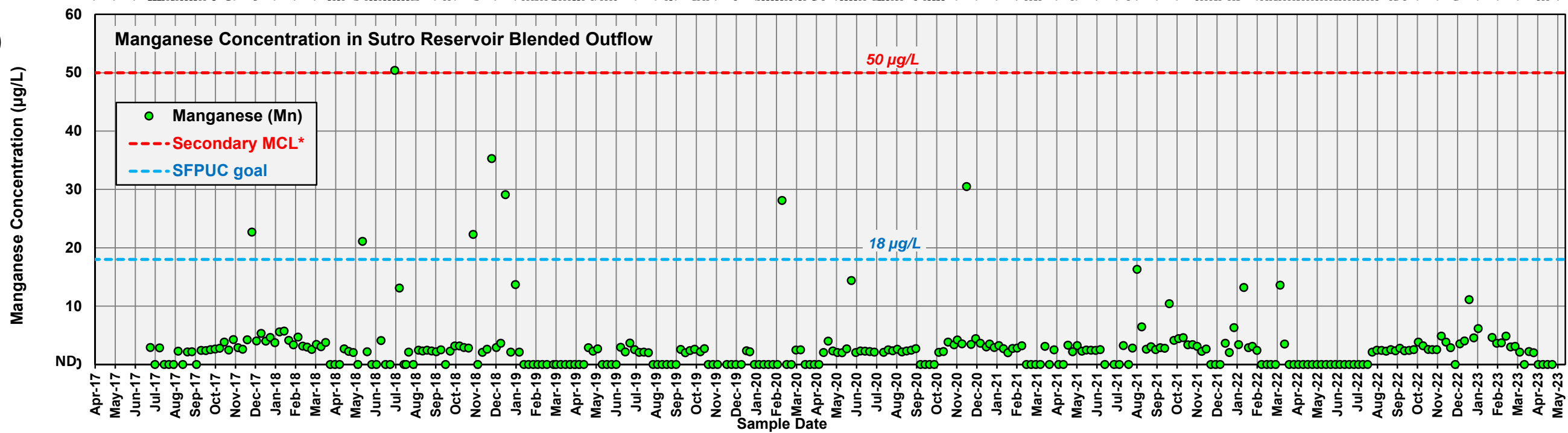
**Plot 3**  
**Hexavalent Chromium**  
**Concentration of Reservoir**  
**Blended Outflow,**  
**May 2017 - April 2023**

(a)



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

(b)

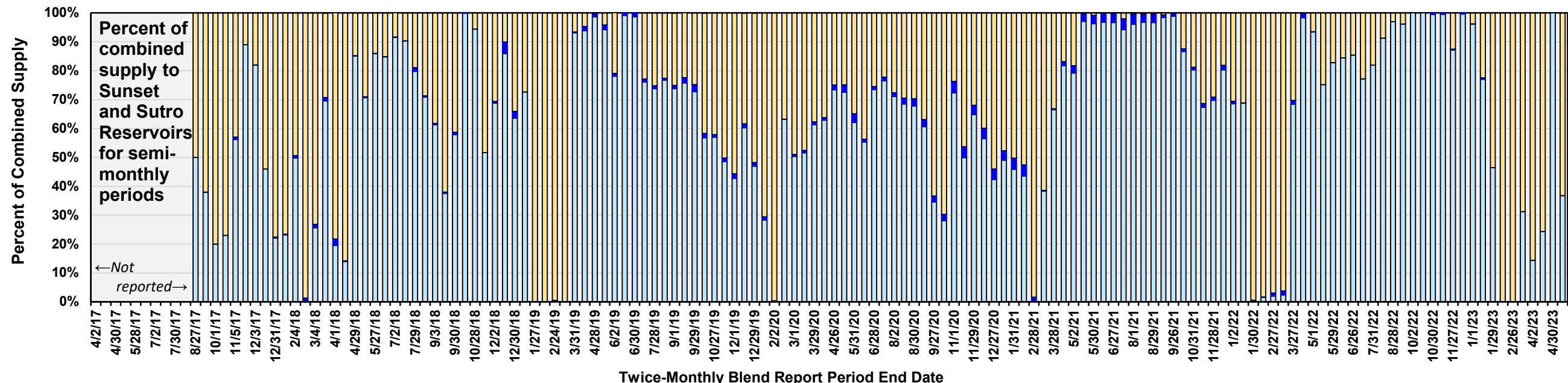


Acronyms and Abbreviations

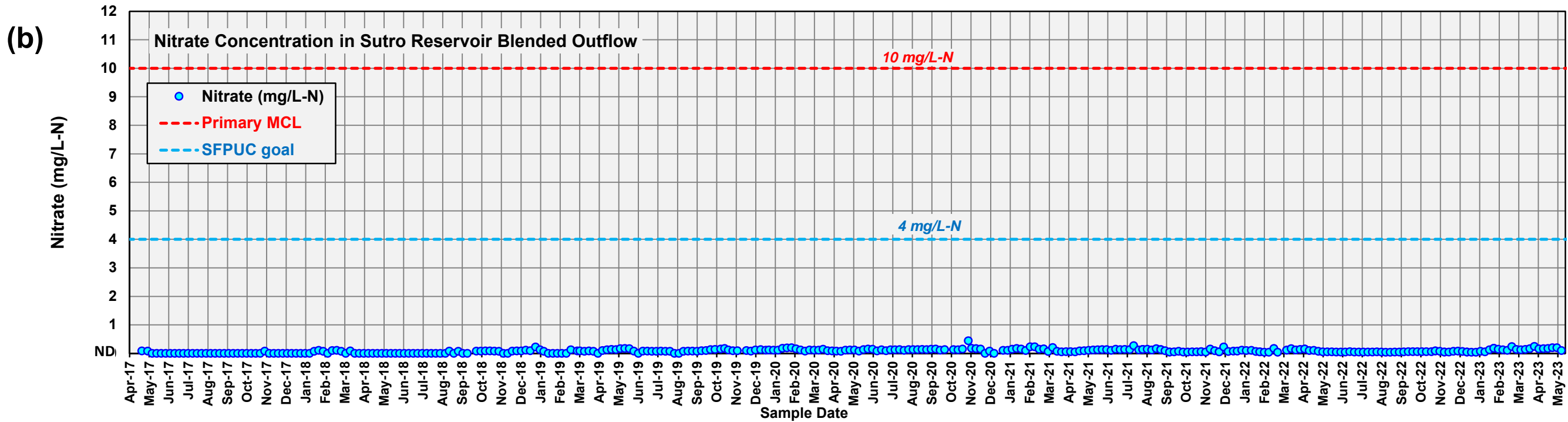
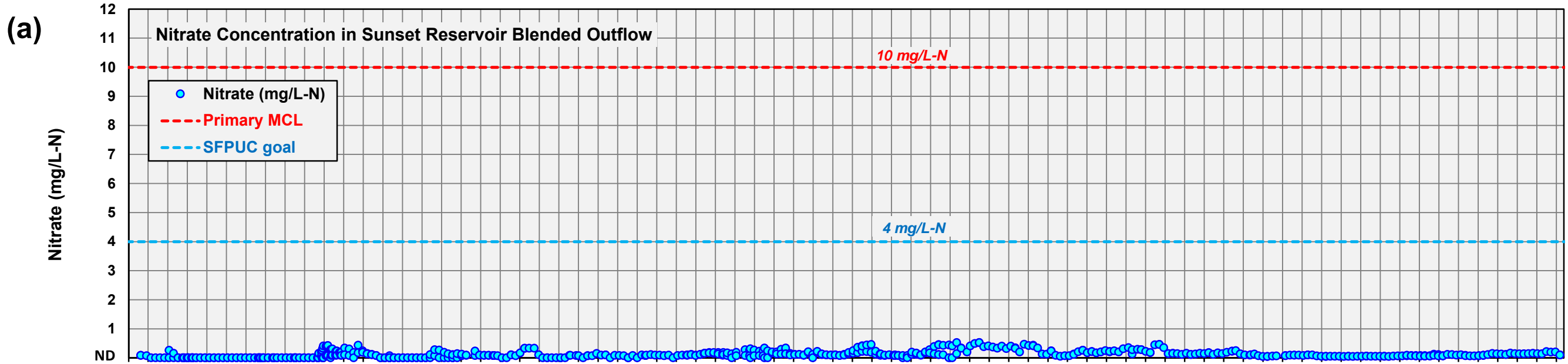
- µg/L micrograms per liter
- HTWTP Harry Tracy Water Treatment Plant
- MCL maximum contaminant level
- ND not detected
- SFGW San Francisco Groundwater Supply Project
- SVWTP Sunol Valley Water Treatment Plant

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

(c)



**Plot 4  
 Manganese  
 Concentration of  
 Reservoir Blended  
 Outflow, April 2017 - May  
 2023**



Acronyms and Abbreviations

HTWTP Harry Tracy Water Treatment Plant

mg/L-N milligrams per liter as nitrogen

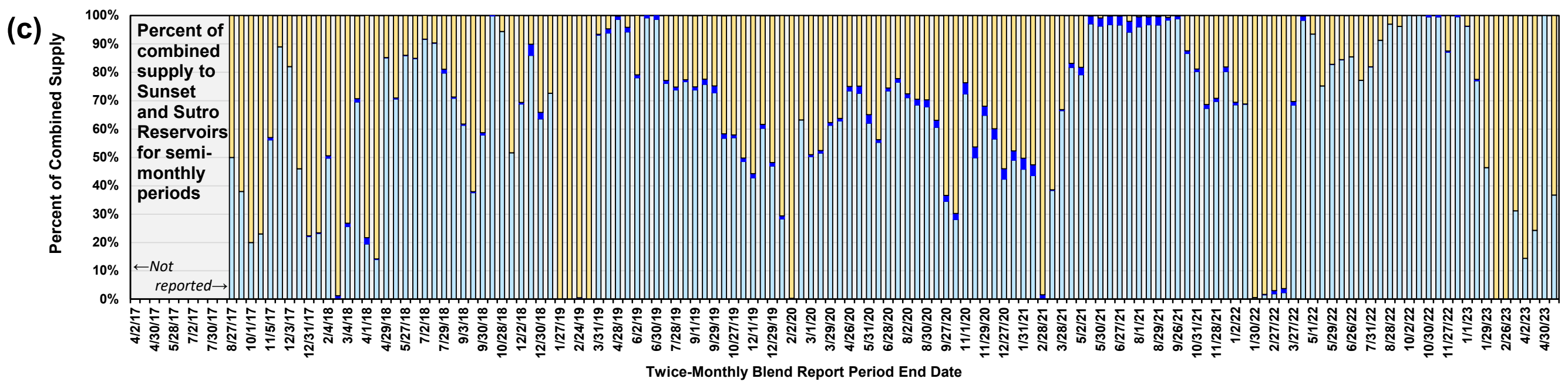
MCL maximum contaminant level

ND not detected

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.



**Plot 5**  
**Nitrate Concentration of Reservoir Blended Outflow, April 2017 - May 2023**