

San Francisco Public Utilities Commission

Hydrological Conditions Report

February 2025

B. Barry, C. Graham, H. Forrester, N. Waelty
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Snow surveyors in the Upper Cherry Creek watershed during late February. March 1st manual snow surveys indicated SWE in the Tuolumne River watershed was 66% of normal to date or 57% of April 1 normal.

System Storage

Current Tuolumne System and Local Bay Area storage conditions are summarized in Table 1.

Table 1. Current System Storage as of March 1, 2025							
	Current Storage		Maximum Storage		Available Capacity		Percentage of Maximum Storage
	acre-feet	millions of gallons	acre-feet	millions of gallons	acre-feet	millions of gallons	
Tuolumne System							
Hetch Hetchy Reservoir ¹	278,010		340,830		62,820		82%
Cherry Reservoir ²	245,913		268,811		22,898		91%
Lake Eleanor ³	23,727		21,495		0		100%
Water Bank	560,472		570,000		9,528		98%
Tuolumne Storage	1,108,122		1,201,136		95,246		92%
Local Bay Area Storage							
Calaveras Reservoir	78,251	25,498	96,670	31,500	18,419	6,002	81%
San Antonio Reservoir	45,521	14,833	52,506	17,109	6,985	2,276	87%
Crystal Springs Reservoir	45,622	14,866	68,743	22,400	23,121	7,534	66%
San Andreas Reservoir	15,615	5,088	18,898	6,158	3,284	1,070	83%
Pilarcitos Reservoir	2,240	730	3,118	1,016	878	286	72%
Total Local Storage	187,249	61,015	239,936	78,183	52,687	17,168	78%
Total System	1,295,371		1,441,072		147,933		90%

¹ Maximum Hetch Hetchy Reservoir storage with drum gates deactivated.

² Maximum Cherry Reservoir storage with flashboards removed. Boards were removed September 12.

³ Maximum Lake Eleanor storage with flashboards removed. Boards were removed October 4.

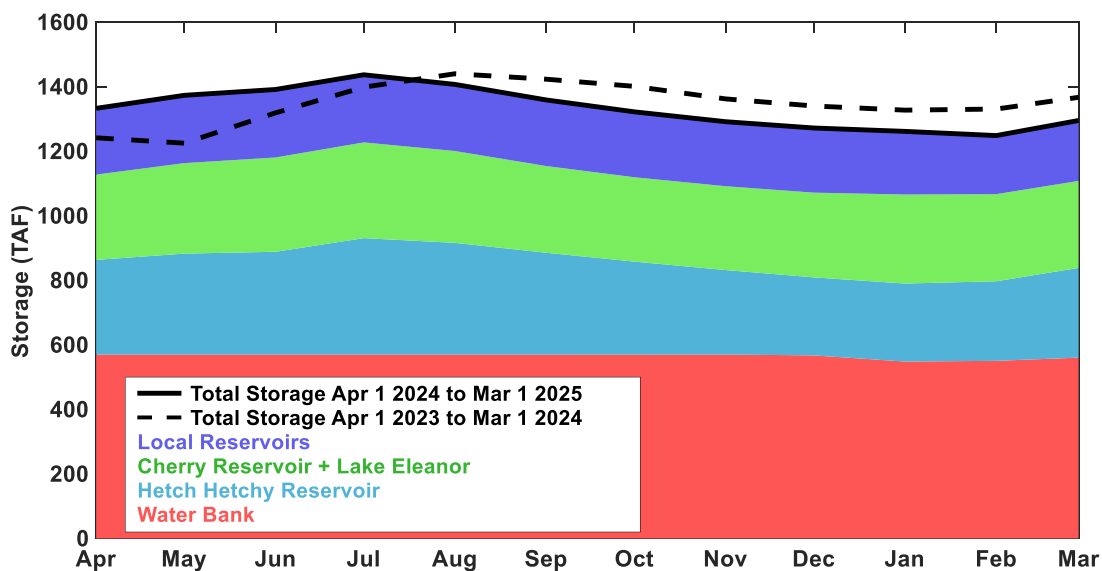


Figure 1: Local and Upcountry Reservoir storage. Color bands show contributions to total system storage. Solid black line shows total system storage for the past 12 months. Dashed black line shows total system storage the previous 12 months.

Hetch Hetchy System Precipitation Index

Current Month: The February 2025 six-station precipitation index was 8.28 inches, which is 131% of the 1991-2020 February median.

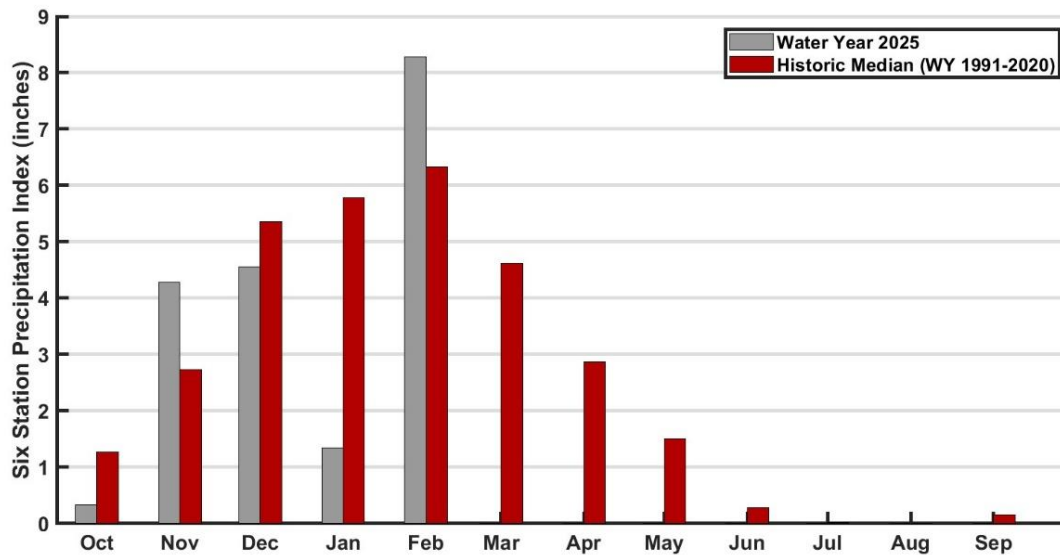


Figure 2: Monthly distribution of the six-station precipitation index relative to the monthly precipitation medians as of March 1. The precipitation index is computed as the average of six Sierra precipitation stations and is an indicator of the overall basin wetness.

Cumulative Precipitation to Date: The cumulative six-station precipitation index for Water Year (WY) 2025 is 18.76 inches, which is 87% of the median to-date. The Hetch Hetchy Weather Station received 8.49 inches of precipitation in February resulting in a total of 19.48 inches for WY 2025, or 85% of WY to-date median. The cumulative WY 2025 Hetch Hetchy Weather Station precipitation is shown in Figure 3 in red.

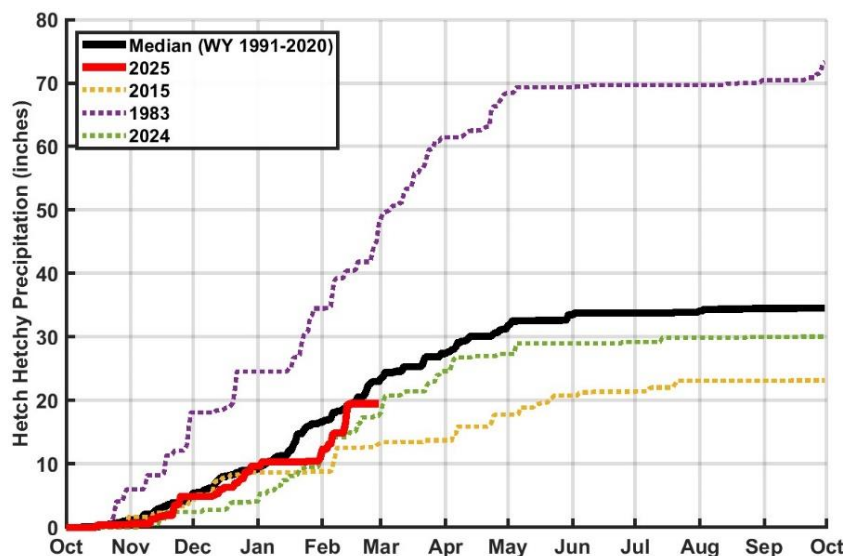


Figure 3: Water Year 2025 cumulative precipitation measured at Hetch Hetchy Weather Station as of March 1. Median cumulative precipitation measured at Hetch Hetchy Weather Station and example wet and dry years are included with Water Year 2025 for comparison purposes.

Tuolumne Basin Unimpaired Inflow

Unimpaired inflow to SFPUC reservoirs and the Tuolumne River at La Grange for February 2025 and Water Year 2025 is summarized below in Table 2.

Table 2. Calculated reservoir inflows and Water Available to City								
* All flows are in acre-feet	February 2025				October 1, 2024 through February 28, 2025			
	Observed Flow	Median ¹	Mean ¹	Percent of Mean	Observed Flow	Median ¹	Mean ¹	Percent of Mean
Inflow to Hetch Hetchy Reservoir	36,817	24,955	28,507	129%	58,580	80,560	94,642	62%
Inflow to Cherry Reservoir and Lake Eleanor	58,469	28,202	34,090	172%	86,254	105,331	117,924	73%
Tuolumne River at La Grange	177,425	110,828	157,781	112%	276,419	321,388	453,206	61%
Water Available to City	70,258	21,977	65,803	107%	70,554	57,889	187,922	38%

¹Hydrologic Record: 1991-2020

Hetch Hetchy System Operations

Water deliveries via the San Joaquin Pipeline (SJPL) decreased to 0 MGD on December 17 for the December 2024 - March 2025 Mountain Tunnel and Hetch Hetchy Aqueduct maintenance planned outage. Deliveries remained at 0 MGD for the month of February. A rate change to 150 MGD is scheduled for March 18/19.

Hetch Hetchy Reservoir power draft and stream releases totaled 5,389 acre-feet during the month of February. Required minimum instream release during February was 50 cfs (Type B), increasing to 60 cfs (Type A) in March.

Cherry Reservoir power draft and stream releases totaled 41,528 acre-feet during the month of February. Required minimum instream release is 5 cfs October through June.

Lake Eleanor stream releases totaled 17,282 acre-feet and Cherry-Eleanor pumping transfer totaled 6,149 acre-feet during the month of February. Required minimum instream release during February was 5 cfs, increasing to 10 cfs from March 1 through April 14.

Regional System Treatment Plant Production

The Harry Tracy Water Treatment Plant production rate for the month was 66 MGD. The Sunol Valley Water Treatment Plant production rate for the month was 93 MGD.

Regional System Water Delivery

The average February delivery rate was 157 MGD which is a 1.9% decrease compared to the January delivery rate of 160 MGD.

Local Precipitation

The rainfall summary for February 2025 and Water Year 2025 is presented in Table 3.

Table 3				
Precipitation Totals at Three Local Area Reservoirs				
Weather Station Location	February 2025		October 1, 2024 through February 28, 2025	
	Total (inches)	Percent of Mean for the Month	Total (inches)	Percent of Mean for the Year-To-Date
Pilarcitos Reservoir	10.24	143%	28.98	116%
Lower Crystal Springs Reservoir	5.73	119%	17.94	108%
Calaveras Reservoir	5.33	152%	13.38	104%

*Mean Period = WY 1991-2020

Snowpack, Water Supply and Planned Water Supply Management

Following sustained dry conditions in January, a series of relatively warm atmospheric river storms during the first half of February produced significant precipitation and high-elevation snow. These storms generated above-normal runoff for the month. Cumulative Water Available to the City (WAC) for February and WY2025 was 70,258 AF and 70,554 AF, respectively (Table 2, Figure 4). Dry conditions dominated the second half of the month and cumulative WY precipitation and snowpack ended the month near normal (Figure 2, 3, and 5).

Hetch Hetchy Reservoir is drafting via minimum instream releases. The 2024-2025 Mountain Tunnel and Hetch Hetchy Aqueduct maintenance outage began on December 17, precluding SJPL deliveries. SJPL deliveries are scheduled to resume on March 18/19. During the shutdown, Moccasin Fish Hatchery draft was reduced to 3 cfs and there was minimal power generation from Hetch Hetchy Reservoir.

Cherry Reservoir is expected to continue drafting via minimum instream releases and discretionary power generation through the end of Spring runoff. Lake Eleanor is full and spilling with Cherry-Eleanor Pumps running at full capacity. The Cherry-Eleanor Pumps are expected to remain on until the end of Spring runoff. Spill from Lake Eleanor is expected to occur intermittently over the next several months.

In all future weather scenarios, forecasted inflows are sufficient to fill Cherry Reservoir, Lake Eleanor, and Hetch Hetchy Reservoir (Figure 6), with additional water available for power generation and supplemental environmental releases. In the 75% and wetter scenarios, forecasted inflows will maintain a full Water Bank at the end of Spring runoff. In the driest scenarios, Water Bank does not refill at the end of runoff.

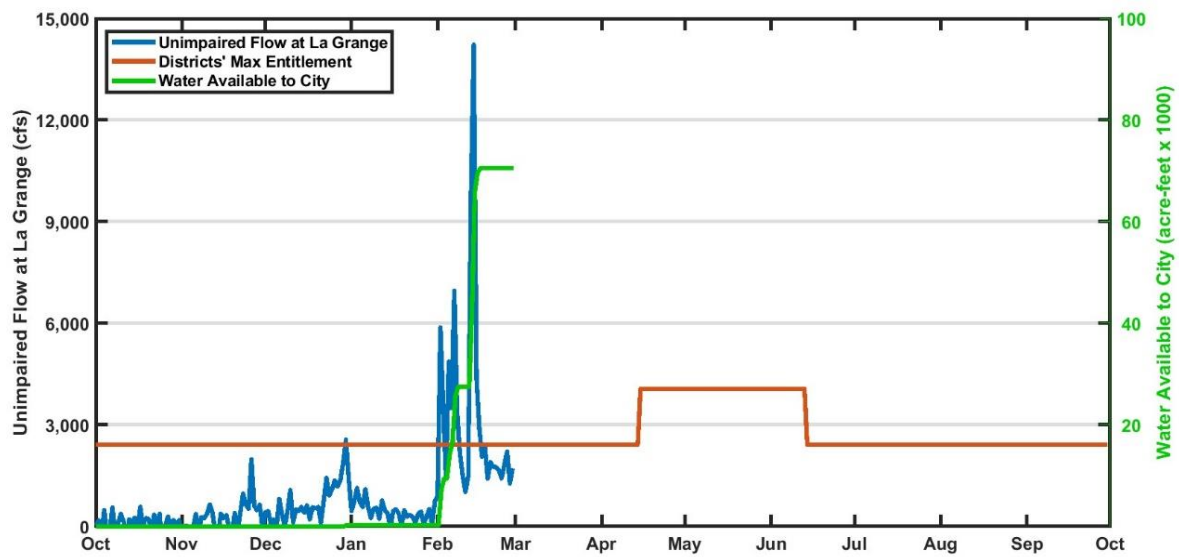


Figure 4: Calculated unimpaired flow at La Grange and the allocation of flows between the Districts and the City.

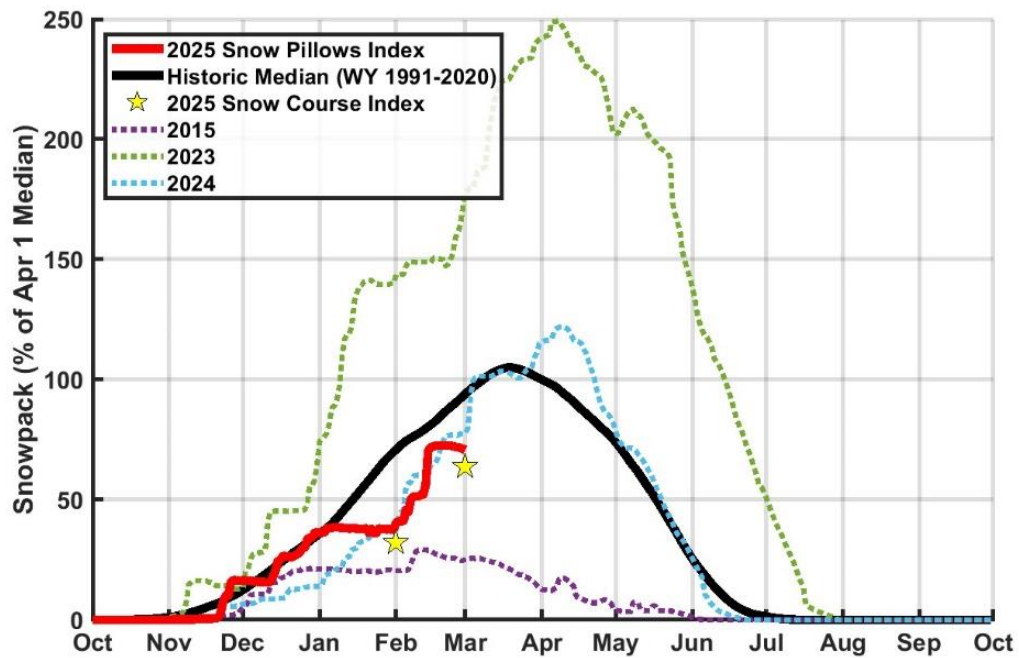


Figure 5: Current water year 10-Station Snow Pillows Index as of March 1 (red line), based on real-time snow water equivalent measurements in the Tuolumne Basin. Star indicates the average manual snow course measurements in the Tuolumne Watershed. Historic median, wet and dry years, and previous water year are included for comparison purposes.

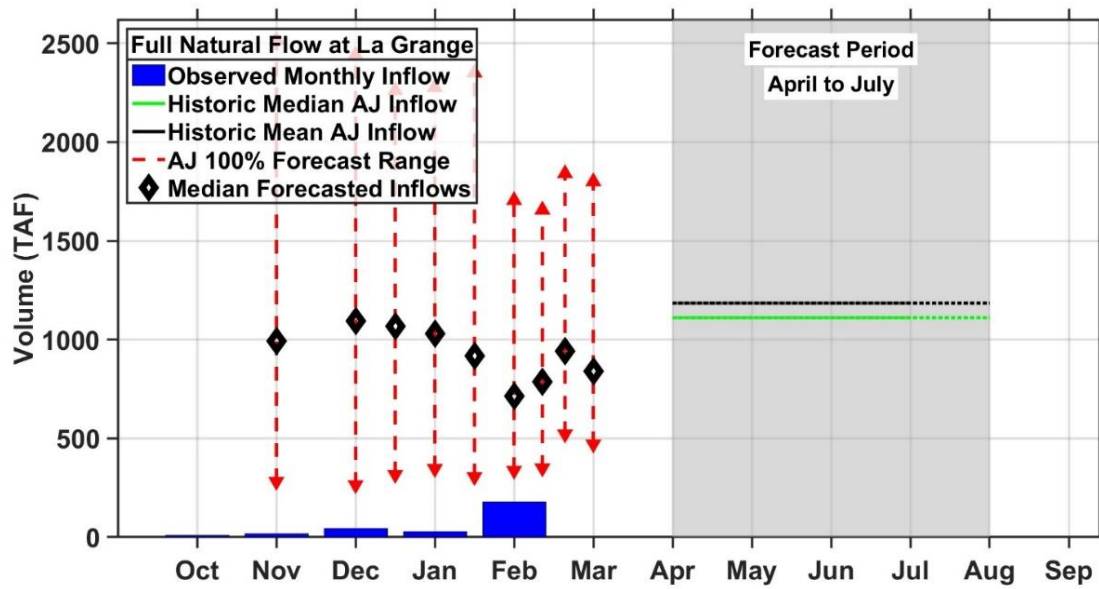


Figure 6: Water Supply Forecast Model of runoff (April to July) on the Tuolumne River at La Grange. This model is driven by precipitation from October to February, and by snow survey data from February through June. The forecast range decreases as time passes due to reduced potential future precipitation.