San Francisco Public Utilities Commission
Hydrological Conditions Report
June 2025

B. Barry, C. Graham, R. Walters, H. Forrester

Prepared July 1, 2025

Suncups on a remnant snowfield in the Upper Tuolumne River Watershed (above). Sustained dry conditions and diminished snow cover resulted in below-normal inflow to Hetch Hetchy Reservoir in June.

System Storage

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

Table 1. Current System Storage as of July 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]	359,178		360,360		1,182		100%
Cherry Reservoir[2]	265,822		273,345		7,523		97%
Lake Eleanor[3]	26,726		27,100		374		99%
Water Bank	570,000		570,000		0		100%
Tuolumne Storage	1,221,726		1,230,805		9,079		99%
Local Bay Area Storage							
Calaveras Reservoir	77,484	25,248	96,670	31,500	19,186	6,252	80%
San Antonio Reservoir	49,345	16,079	52,506	17,109	3,161	1,030	94%
Crystal Springs Reservoir	43,486	14,170	68,743	22,400	25,257	8,230	63%
San Andreas Reservoir	16,173	5,270	18,898	6,158	2,725	888	86%
Pilarcitos Reservoir	1,912	623	3,118	1,016	1,206	393	61%
Total Local Storage	188,400	61,390	239,936	78,183	51,536	16,793	79%
Total System	1,410,126		1,470,741		60,615		96%

[1] Maximum Hetch Hetchy Reservoir storage with drum gates activated.
[2] Maximum Cherry Reservoir storage with flashboards installed.
[3] Maximum Lake Eleanor storage with flashboards installed.

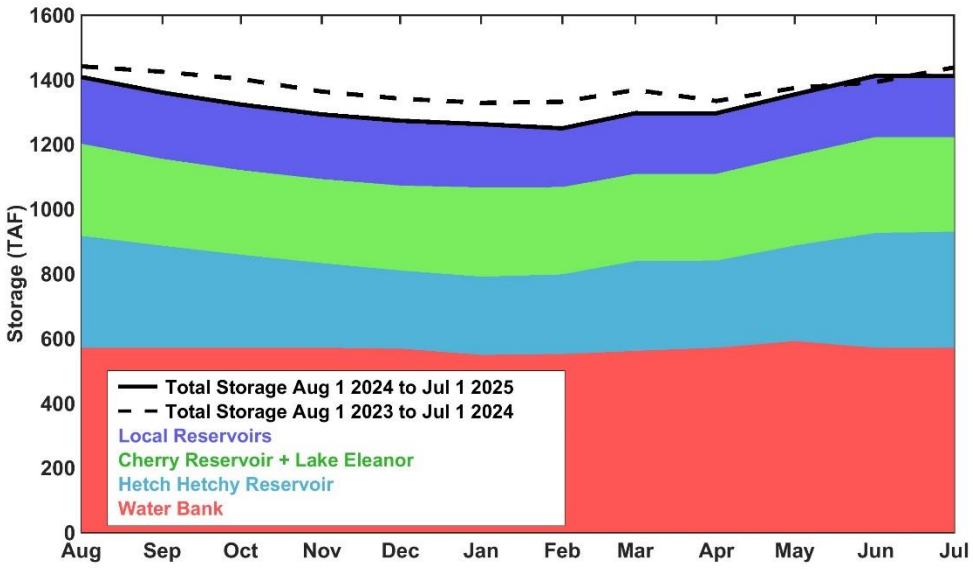

Figure: Local and Upcountry Reservoir storage. Color bands show contributions to total system storage. Solid black line shows total system storage for the past 12 months. Dashed black line shows total system storage the previous 12 months.

Hetch Hetchy System Precipitation Index

Current Month: The June 2025 six-station precipitation index was 0.02 inches, which is 8% of the 1991-2020 June median.

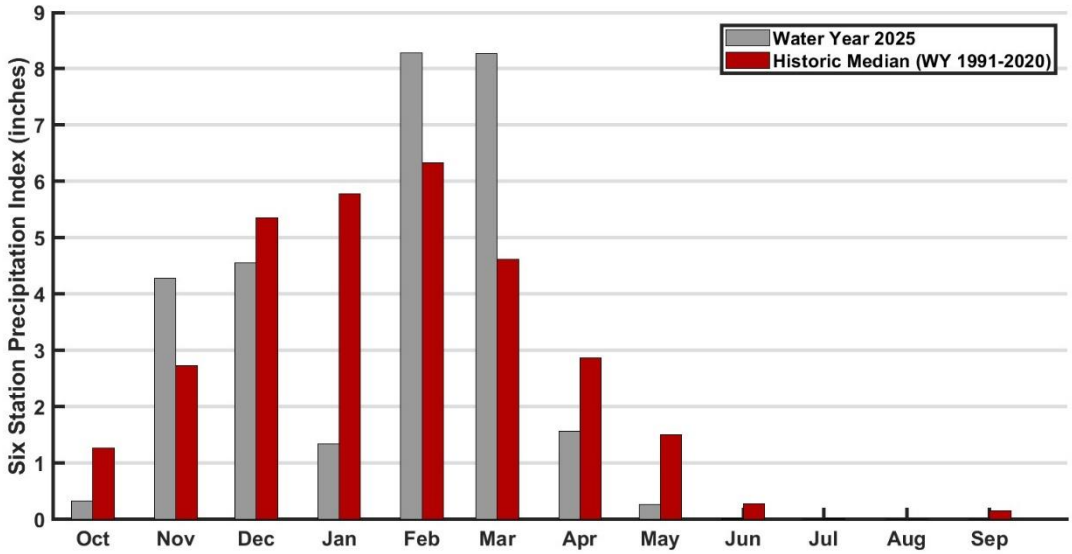

Figure 2: Monthly distribution of the six-station precipitation index relative to the monthly precipitation medians as of July 1. The precipitation index is computed as the average of six Sierra precipitation stations and is an indicator of the overall basin wetness.

Cumulative Precipitation to Date: The cumulative six-station precipitation index for Water Year (WY) 2025 is 28.75 inches, which is 94% of the median to-date. The Hetch Hetchy Weather Station received 0.0 inches of precipitation in June resulting in a total of 29.59 inches for WY 2025, or 88% of WY to-date median. The cumulative WY 2025 Hetch Hetchy Weather Station precipitation is shown in Figure 3 in red.

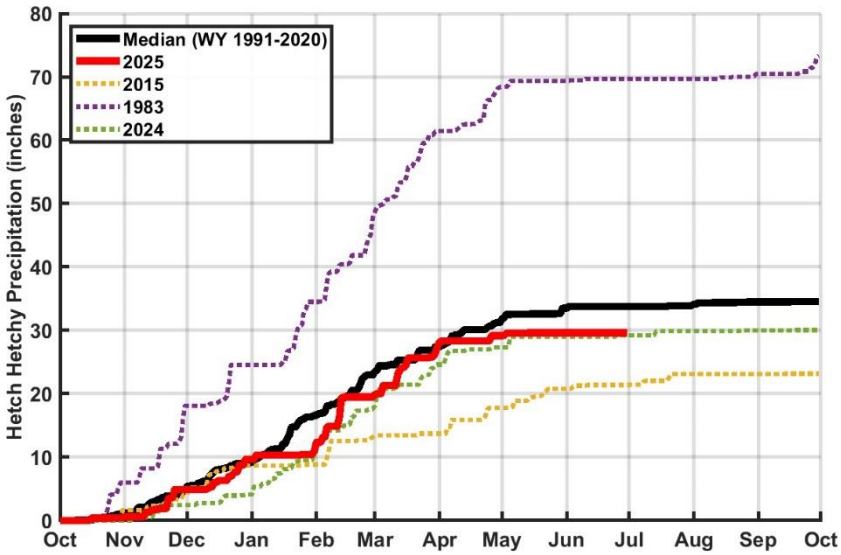

Figure 3: Water Year 2025 cumulative precipitation measured at Hetch Hetchy Weather Station as of July 1. Median cumulative precipitation measured at Hetch Hetchy Weather Station and example wet and dry years are included with Water Year 2025 for comparison purposes.

Tuolumne Basin Unimpaired Inflow

Unimpaired inflow to SFPUC reservoirs and the Tuolumne River at La Grange for June 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	June 2025				October 1, 2024 through June 30, 2025			
	Observed Flow	Median[1]	Mean[1]	Percent of Mean	Observed Flow	Median[1]	Mean[1]	Percent of Mean
Inflow to Hetch Hetchy Reservoir	107,143	181,026	202,116	53%	539,808	668,477	667,966	81%
Inflow to Cherry Reservoir and Lake Eleanor	33,901	68,110	87,914	39%	366,176	454,997	470,725	78%
Tuolumne River at La Grange	157,184	293,374	342,626	46%	1,300,268	1,590,856	1,770,381	73%
Water Available to City	19,551	110,484	196,319	10%	378,561	578,466	807,406	47%

[1]Hydrologic Record: 1991-2020

Hetch Hetchy System Operations

Water deliveries via the San Joaquin Pipeline (SJPL) were 245 MGD during June 1 – 26. A rate change to 248 MGD occurred on June 27.

Hetch Hetchy Reservoir power draft and stream releases totaled 103,210 acre-feet during the month of June. Required minimum instream release during June 1 – 14 was 189 cfs (Type A plus 64 cfs due to Canyon Tunnel flow being greater than 920 cfs); during June 15 – 30 it was 125 cfs (Type A). Required releases decrease to 110 cfs (Type B) in July.

Cherry Reservoir power draft and stream releases totaled 32,866 acre-feet during the month of June. Required minimum instream release was 5 cfs in June, increasing to 15 cfs in July.

Lake Eleanor stream releases totaled 5,189 acre-feet and Cherry-Eleanor pumping transfer totaled 4,106 acre-feet during the month of June. Required minimum instream release from April 15 through September 15 is 20 cfs.

Regional System Treatment Plant Production

The Harry Tracy Water Treatment Plant production rate for the month was 26 MGD. The Sunol Valley Water Treatment Plant production rate for the month was 6 MGD.

Regional System Water Delivery

The average June delivery rate was 225 MGD which is a 3.7% increase compared to the May delivery rate of 217 MGD.

Local Precipitation

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

Table 3
Precipitation Totals at Three Local Area Reservoirs

Weather Station Location	June 2025		October 1, 2024 through June 30, 2025	
	Total (inches)	Percent of Mean for the Month	Total (inches)	Percent of Mean for the Year-To-Date
Pilarcitos Reservoir	0.01	8%	35.07	105%
Lower Crystal Springs Reservoir	0.00	0%	22.02	100%
Calaveras Reservoir	0.00	0%	18.36	102%

*Mean Period = WY 1991-2020

Snowpack, Water Supply and Planned Water Supply Management

Persistent dry conditions and receding snowpack resulted in below-normal runoff during the month of June (Figure 2, 3, and 5). Cumulative Water Available to the City (WAC) for June was 19,551 AF; Cumulative WAC for WY 2025 was 378,561 AF (Table 2, Figure 4). Little to no additional WAC is expected in WY2025 (Figure 6).

Hetch Hetchy Reservoir is drafting via SJPL deliveries, Moccasin Fish Hatchery flows and minimum instream releases. Cherry Reservoir is drafting via scheduled recreational releases from Holm Powerhouse and minimum instream releases. The Cherry-Eleanor Pumps are currently deactivated and expected to remain out of service through Labor Day. Lake Eleanor is drafting via minimum instream releases. Water Bank is expected to remain full as upcountry reservoir instream releases and recreational releases from Holm Powerhouse exceed inflows until this Fall.

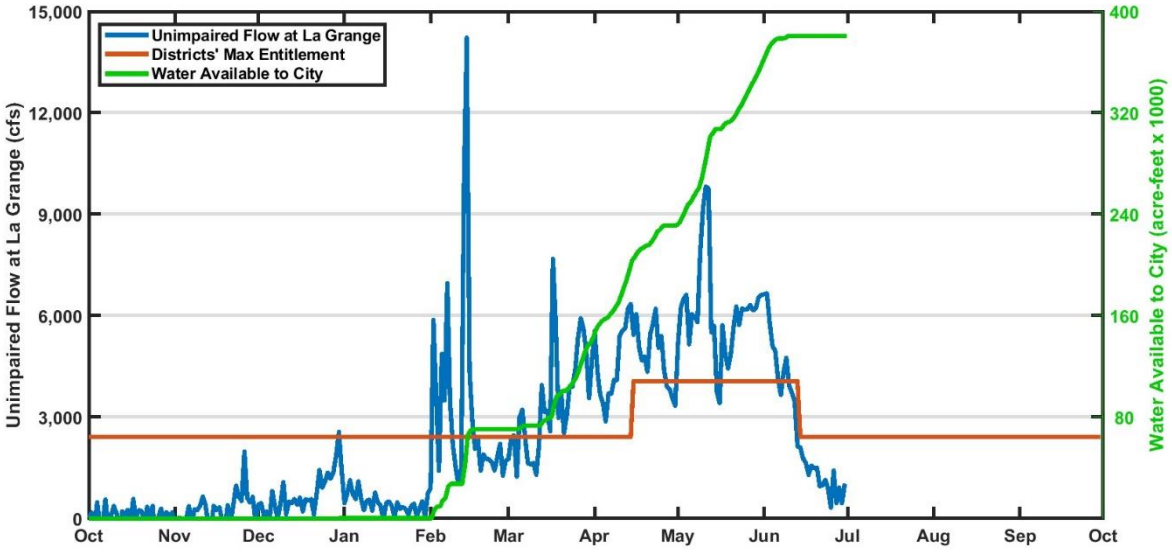

Figure 4: Calculated unimpaired flow at La Grange and the allocation of flows between the Districts and the City.

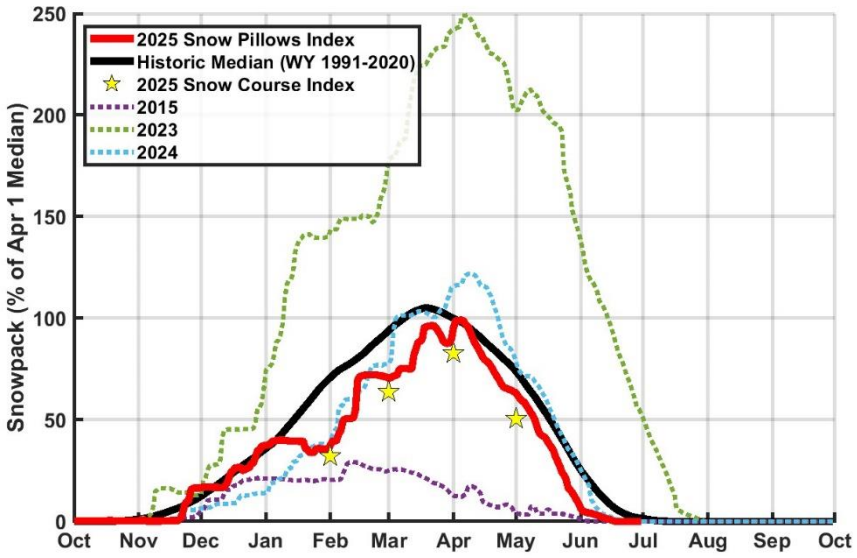

Figure 5: Current water year 10-Station Snow Pillows Index as of July 1 (red line), based on real-time snow water equivalent measurements in the Tuolumne Basin. Star indicates the average manual snow course measurements in the Tuolumne Watershed. Historic median, wet and dry years, and previous water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

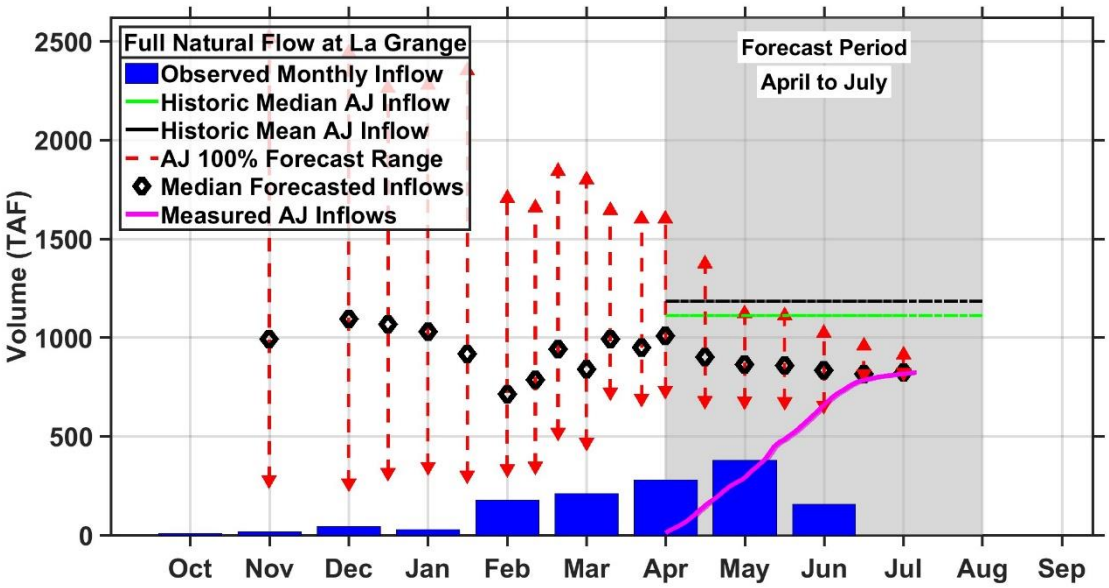

Figure 6: Water Supply Forecast Model of runoff (April to July) on the Tuolumne River at La Grange. This model is driven by precipitation from October to February, and by snow survey data from February through June. The forecast range decreases as time passes due to reduced potential future precipitation.

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Cascading waters of Cherry Creek just above the inlet to Cherry Reservoir. SFPUC maintains a stream gaging station in this reach for monitoring of real-time flow conditions.

System Storage

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Table 1. Current System Storage as of August 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]	337,356		360,360		23,004		94%
Cherry Reservoir[2]	254,044		273,345		19,301		93%
Lake Eleanor[3]	25,402		27,100		1,698		94%
Water Bank	570,000		570,000		0		100%
Tuolumne Storage	1,186,802		1,230,805		44,003		96%
Local Bay Area Storage							
Calaveras Reservoir	75,964	24,753	96,670	31,500	20,706	6,747	79%
San Antonio Reservoir	48,940	15,947	52,506	17,109	3,566	1,162	93%
Crystal Springs Reservoir	45,733	14,902	68,743	22,400	23,011	7,498	67%
San Andreas Reservoir	15,753	5,133	18,898	6,158	3,145	1,025	83%
Pilarcitos Reservoir	1,869	609	3,118	1,016	1,249	407	60%
Total Local Storage	188,259	61,344	239,935	78,183	51,676	16,839	78%
Total System	1,375,061		1,470,740		95,679		93%

[1] Maximum Hetch Hetchy Reservoir storage with drum gates activated.
[2] Maximum Cherry Reservoir storage with flashboards installed.
[3] Maximum Lake Eleanor storage with flashboards installed.

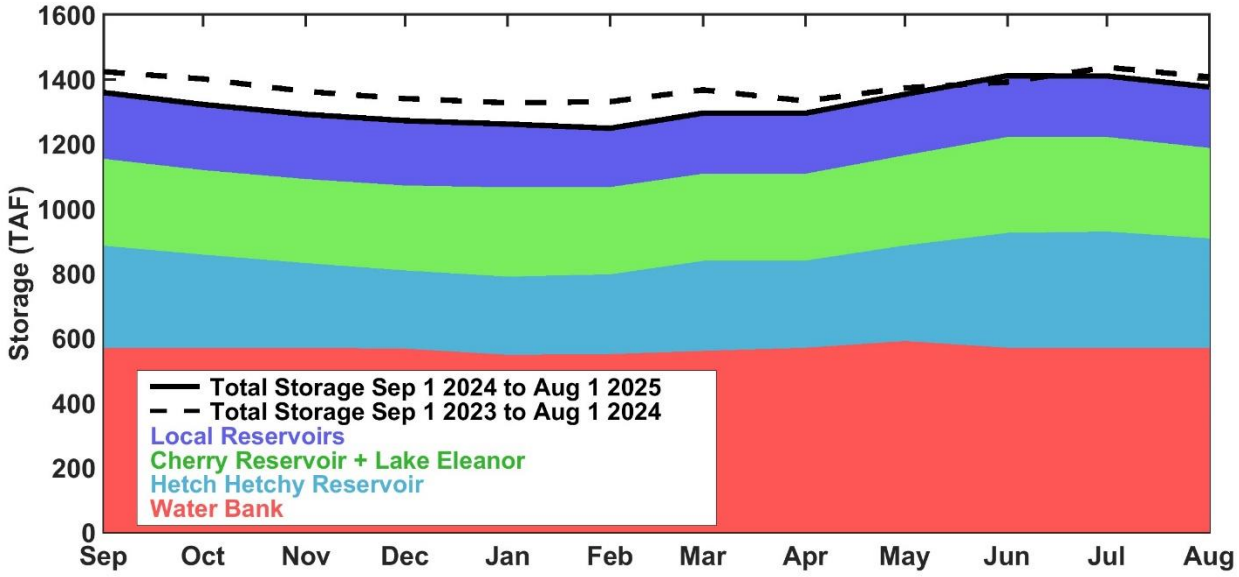


Figure 1: Local and Upcountry Reservoir storage. Color bands show contributions to total system storage. Solid black line shows total system storage for the past 12 months. Dashed black line shows total system storage the previous 12 months.

Hetch Hetchy System Precipitation Index

Current Month: The July 2025 six-station precipitation index was 0.00 inches.

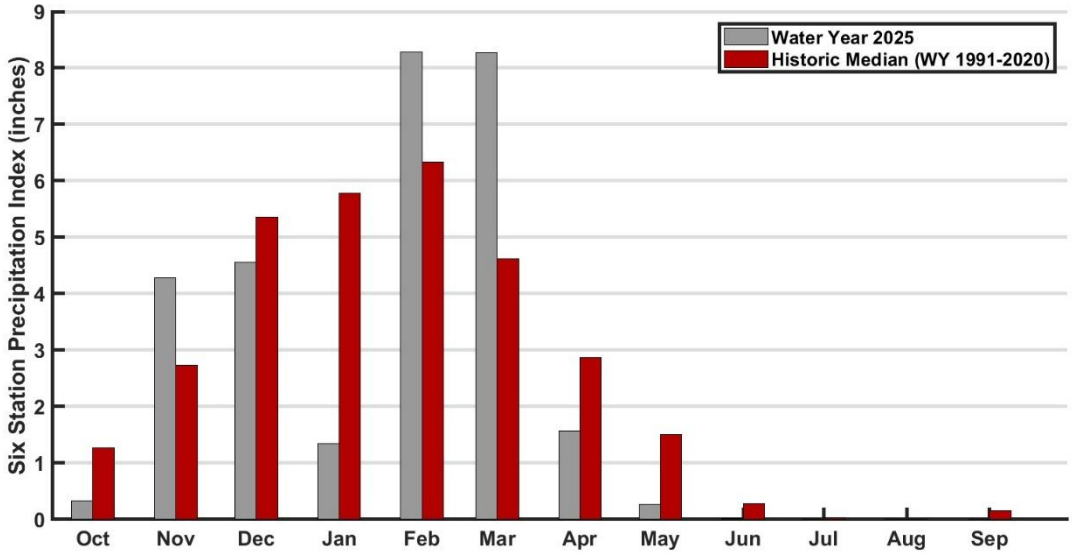
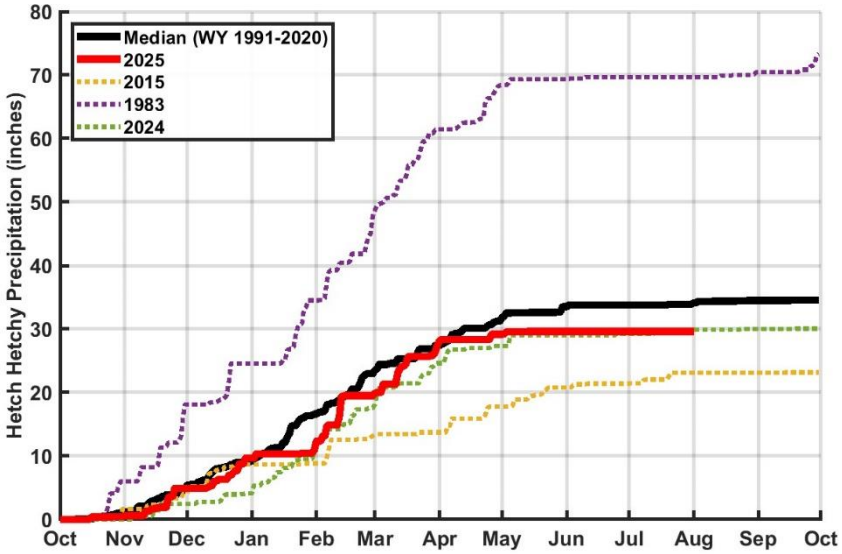


Figure 2: Monthly distribution of the six-station precipitation index relative to the monthly precipitation medians as of August 1. The precipitation index is computed as the average of six Sierra precipitation stations and is an indicator of the overall basin wetness.

Cumulative Precipitation to Date: The cumulative six-station precipitation index for Water Year (WY) 2025 is 28.87 inches, which is 83% of the median to-date. The Hetch Hetchy Weather Station received 0.0 inches of precipitation in July resulting in a total of 29.59 inches for WY 2025, or 87% of the WY to-date median. The cumulative WY 2025 Hetch Hetchy Weather Station precipitation is shown in Figure 3 in red.



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Tuolumne Basin Unimpaired Inflow

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Table 2. Calculated reservoir inflows and Water Available to City

* All flows are in acre-feet	July 2025				October 1, 2024 through July 31, 2025			
	Observed Flow	Median[1]	Mean[1]	Percent of Mean	Observed Flow	Median[1]	Mean[1]	Percent of Mean
Inflow to Hetch Hetchy Reservoir	9,102	29,426	78,013	12%	541,014	692,727	744,347	73%
Inflow to Cherry Reservoir and Lake Eleanor	1,587	10,474	31,067	5%	366,937	462,114	499,745	73%
Tuolumne River at La Grange	26,719	55,975	131,032	20%	1,326,988	1,636,705	1,900,776	70%
Water Available to City	0	653	61,127	0%	378,561	579,119	868,533	44%

[1]Hydrologic Record: 1991-2020

Hetch Hetchy System Operations

Water deliveries via the San Joaquin Pipeline (SJPL) were 248 MGD July.

Hetch Hetchy Reservoir power draft and stream releases totaled 30,147 acre-feet during the month of July. Required minimum instream release during July was 110 cfs (Year Type B). The required minimum instream releases during August is also 110 cfs.

Cherry Reservoir power draft and stream releases totaled 12,996 acre-feet during the month of July. The required minimum instream release from Cherry Reservoir from July 1 until September 30 is 15 cfs.

Lake Eleanor stream releases totaled 1,333 acre-feet during the month of August. No water was transferred to Cherry Reservoir via the Cherry-Eleanor pumping station. Required minimum instream release from April 15 through September 15 is 20 cfs.

Regional System Treatment Plant Production

The Harry Tracy Water Treatment Plant production rate for the month was 33 MGD. The Sunol Valley Water Treatment Plant was online for two days and produced 34 MG.

Regional System Water Delivery

The average July delivery rate was 219 MGD which is a 2.7% decrease compared to the June delivery rate of 225 MGD.

Local Precipitation

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

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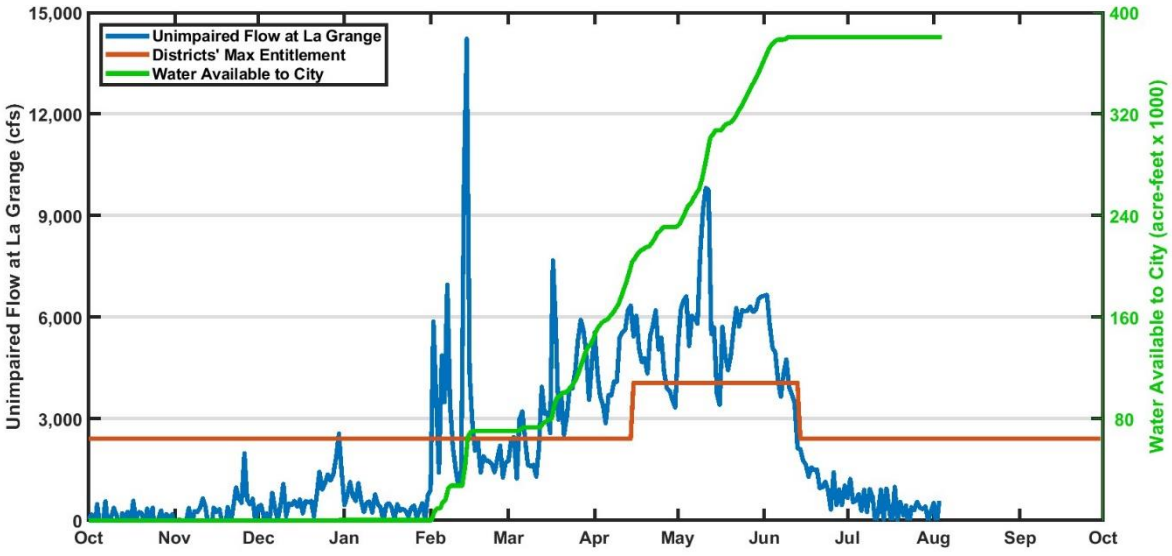
Pilarcitos Reservoir	0.09	900%	35.16	105%
Lower Crystal Springs Reservoir	0.03	300%	22.05	100%
Calaveras Reservoir	0.00	0%	18.36	102%

*Mean Period = WY 1991-2020

Snowpack, Water Supply and Planned Water Supply Management

Below-average air temperatures were present in the Tuolumne River Basin throughout much of July. Isolated mountain thunderstorm activity occurred at times, but none of the events produced measurable precipitation at HHWP weather stations. Seasonal snowpack has retreated from the mountains, with only patches remaining in very high, sheltered terrain. Inflows have receded to baseflow conditions at all upcountry reservoirs. Although 2025 snowpack was below normal, these relatively mild conditions have led to reservoir storages that are near normal for the time of year. No Water Available to the City (WAC) was observed in July (Figure 4), and no additional WAC is expected for the remainder of WY 2025.

Hetch Hetchy Reservoir is drafting via SJPL deliveries, Moccasin Fish Hatchery flows and minimum instream releases. Cherry Reservoir is drafting via scheduled recreational releases from Holm Powerhouse and minimum instream releases. Recreational releases will continue through Labor Day, after which Holm Powerhouse is expected to be scheduled offline due to a full Water Bank position. The Cherry-Eleanor Pumps are currently deactivated and expected to remain offline until the Fall. Lake Eleanor is drafting via minimum instream releases. Water Bank is expected to remain full until at least the beginning of Fall, as minimum stream releases and Holm power draft exceed Districts' Entitlements.



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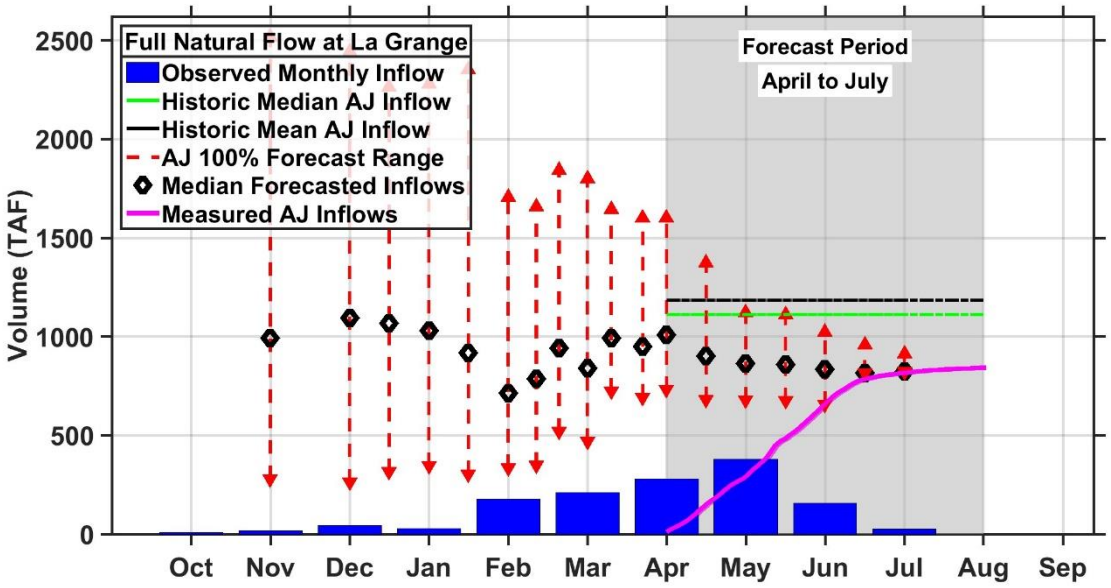

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