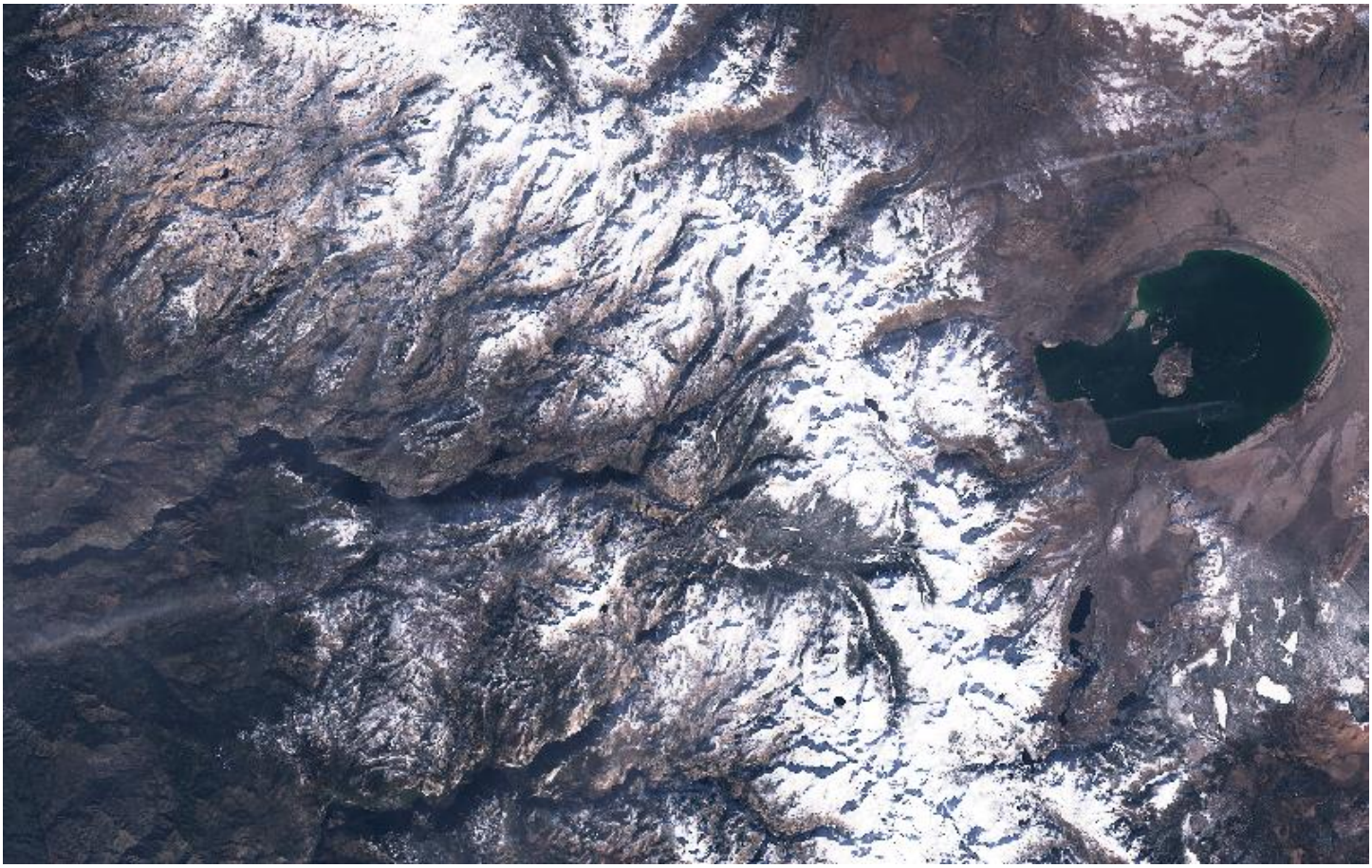
San Francisco Public Utilities Commission
Hydrological Conditions Report
November 2025

B. Barry, H. Forrester, L. Stewart, R. Walters

Prepared December 1, 2025



Sentinel-2 satellite image of the Upper Tuolumne River Watershed on December 1, 2025 (Copernicus, EUSPA). A series of storms in November generated above-normal precipitation and near-normal snowpack for the month.

System Storage

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

Table 1. Current System Storage as of December 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]	267,390		340,830		64,440		81%
Cherry Reservoir[2]	252,989		268,811		15,822		94%
Lake Eleanor[3]	20,683		23,355		2,672		89%
Water Bank	557,135		570,000		12,865		98%
Tuolumne Storage	1,107,197		1,202,996		95,799		92%
Local Bay Area Storage							
Calaveras Reservoir	68,952	22,468	96,670	31,500	27,718	9,032	71%
San Antonio Reservoir	49,182	16,026	52,506	17,109	3,324	1,083	94%
Crystal Springs Reservoir	52,530	17,117	68,743	22,400	16,213	5,283	76%
San Andreas Reservoir	15,615	5,088	18,898	6,158	3,284	1,070	83%
Pilarcitos Reservoir	1,746	569	3,118	1,016	1,372	447	56%
Total Local Storage	188,025	61,268	239,935	78,183	51,910	16,915	78%
Total System	1,295,222		1,442,932		147,709		90%

[1] Maximum Hetch Hetchy Reservoir storage with drum gates de-activated.
[2] Maximum Cherry Reservoir storage with flashboards removed.
[3] Maximum Lake Eleanor storage with two rows of flashboards in spillway log chute.

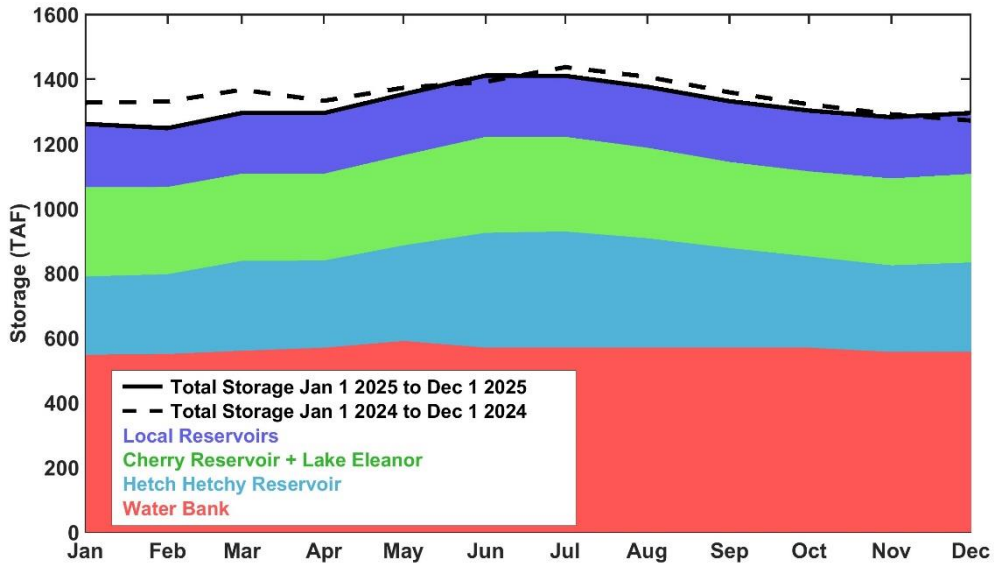


Figure 1: Local and Upcountry Reservoir storage. Color bands show contributions to total system storage. Solid black line shows total system storage for the past 12 months. Dashed black line shows total system storage for the previous 12 months.

Hetch Hetchy System Precipitation Index

Current Month: The November 2025 six-station precipitation index was 5.64 inches.

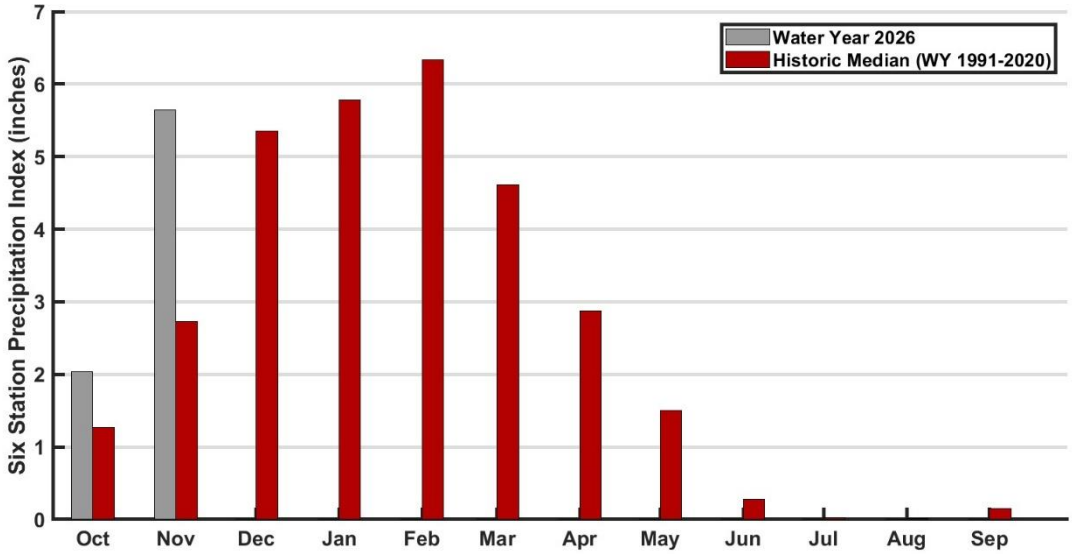


Figure 2: Monthly distribution of the six-station precipitation index relative to the monthly precipitation medians as of December 1. The precipitation index is computed as the average of six Sierra precipitation stations and is an indicator of the overall basin wetness.

Cumulative Precipitation to Date: The cumulative six-station precipitation index for Water Year (WY) 2026 is 7.68 inches, which is 192% of the median to-date. The Hetch Hetchy Weather Station received 5.00 inches of precipitation in October resulting in a total of 7.97 inches for WY 2026, or 162% of the WY median. The cumulative WY 2026 Hetch Hetchy Weather Station precipitation is shown in Figure 3 in red.

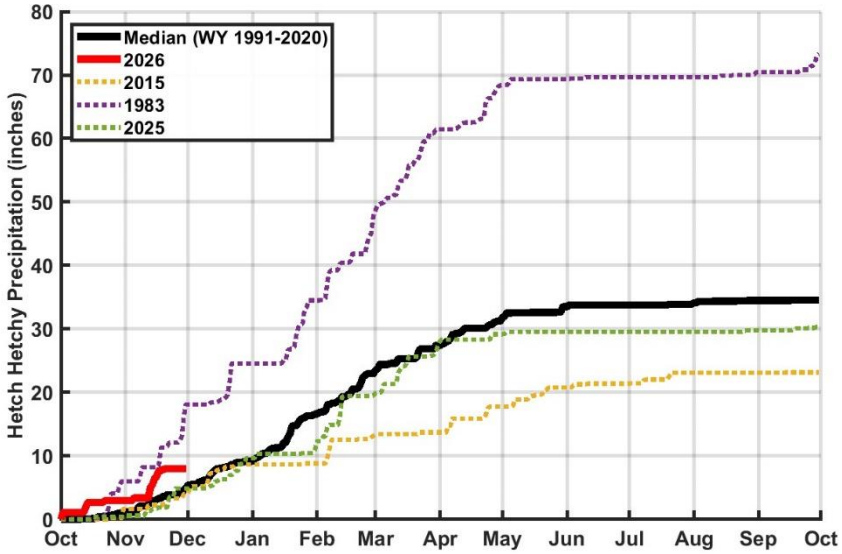


Figure 3: Water Year 2026 cumulative precipitation measured at Hetch Hetchy Weather Station as of December 1. Median cumulative precipitation measured at Hetch Hetchy Weather Station and example wet and dry years are included with Water Year 2025 for comparison purposes.

Tuolumne Basin Unimpaired Inflow

Unimpaired inflow to SFPUC reservoirs and the Tuolumne River at La Grange for November 2025 and Water Year 2026 is summarized below in Table 2.

Table 2. Calculated reservoir inflows and Water Available to City

All flows are in acre-feet[1]	November, 2025				October 1, 2025 through November 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	29,115	5,425	10,789	270%	40,346	8,245	17,893	225%
Inflow to Cherry Lake and Lake Eleanor	38,957	7,439	14,286	273%	45,784	13,413	21,953	209%
Tuolumne River at LaGrange	89,062	18,084	33,098	269%	117,164	40,749	53,985	217%
Water Available to City	27,520	0	5,488	501%	27,520	328	11,136	247%

[1]Hydrologic Record: 1991-2020

Hetch Hetchy System Operations

Water deliveries via the San Joaquin Pipeline (SJPL) increased from 145 MGD to 150 MGD on November 13, then decreased from 150 MGD to 140 MGD on November 20.

Hetch Hetchy Reservoir power draft and stream release totaled 20,380 acre-feet during the month of November. Required minimum instream release during November was 50 cfs (Year Type B). The required minimum instream release during December is 40 cfs (Year Type B).

Cherry Reservoir power draft and stream release totaled 33,661 acre-feet during the month of November. The required minimum instream release from October 1 to June 30 is 5 cfs.

Lake Eleanor stream release totaled 397 acre-feet during the month of November. 5,653 acre-feet of water was transferred to Cherry Reservoir via the Cherry-Eleanor pumping station. Required minimum instream release from November 1 to February 28 is 5 cfs.

Regional System Treatment Plant Production

The Harry Tracy Water Treatment Plant production rate for the month was 11 MGD. The Sunol Valley Water Treatment Plant production rate for the month was 31 MGD.

Regional System Water Delivery

The average November delivery rate was 169 MGD which is a 9.3% decrease compared to the October delivery rate of 186 MGD.

Local Precipitation

The rainfall summary for November 2025 and Water Year 2026 is presented in Table 3.

Table 3
Precipitation Totals at Three Local Area Reservoirs

Weather Station Location	November 2025		October 1, 2025 through November 30, 2025	
	Total (inches)	Percent of Mean for the Month	Total (inches)	Percent of Mean for the Year-To-Date
Pilarcitos Reservoir	5.62	161%	8.39	177%
Lower Crystal Springs Reservoir	4.22	184%	6.14	205%
Calaveras Reservoir	3.83	190%	6.75	270%

*Mean Period = WY 1991-2020

Snowpack, Water Supply and Planned Water Supply Management

Air temperatures in the Tuolumne River Basin were generally cooler than normal during November. A moderate strength atmospheric river (AR) during the middle of the month generated significant precipitation, particularly to the Cherry and Eleanor subbasins. The freezing level during the AR fluctuated from 10,000 feet to 6,000 feet, resulting in modest snow accumulation above 7,000 feet. The AR generated above-normal precipitation and inflows for the month; 27,520 acre-feet of Water Available to the City (WAC) was observed in November (Figure 4).

Hetch Hetchy Reservoir is drafting via SJPL deliveries, Moccasin Fish Hatchery flows and minimum instream releases. Cherry Reservoir is drafting via minimum instream releases and Holm Powerdraft. The Cherry-Eleanor Pumps were intermittently active during November. Lake Eleanor is drafting via minimum instream releases. Water Bank is expected to remain nearly full or debit slightly, depending on natural inflows.

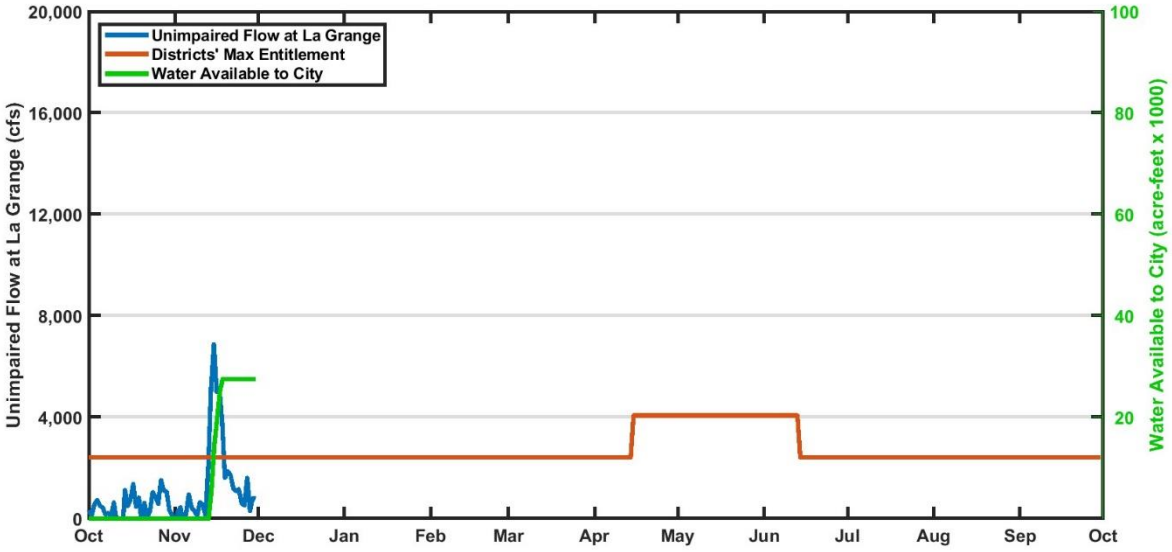


Figure 4: Calculated unimpaired flow at La Grange and the allocation of flows between the Districts and the City.

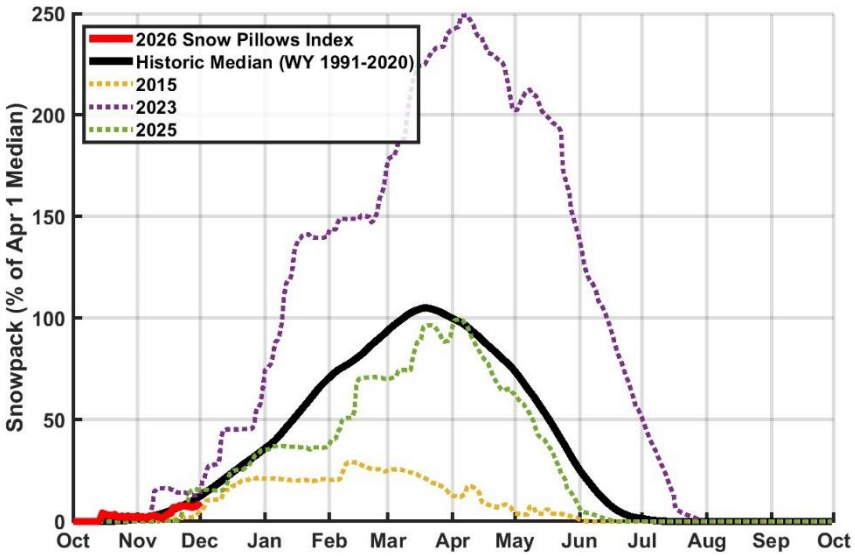


Figure 5: Current water year 10-Station Snow Pillows Index as of December 1 (red line), based on real-time snow water equivalent measurements in the Tuolumne Basin. Historic median, wet and dry years, and previous water year are included for comparison purposes.

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Hetch Hetchy Water and Power (HHWP) maintenance crews on top of O'Shaughnessy Dam, lowering a bulkhead into a slot through which water enters supply wells that feed valves on the downstream face of the dam. This temporary installation allowed for successful repair of a 100-year-old slide gate inside the dam. These bulkheads will allow for isolation and safe working conditions for future maintenance and repair projects within O'Shaughnessy Dam.

System Storage

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Tuolumne System							
Hetch Hetchy Reservoir[1]	298,100		340,830		42,730		87%
Cherry Reservoir[2]	235,448		268,811		33,363		88%
Lake Eleanor[3]	23,914		23,355		0		100%
Water Bank	562,967		570,000		7,033		99%
Tuolumne Storage	1,120,429		1,202,996		83,126		93%
Local Bay Area Storage							
Calaveras Reservoir	65,168	21,235	96,670	31,500	31,502	10,265	67%
San Antonio Reservoir	48,292	15,736	52,506	17,109	4,214	1,373	92%
Crystal Springs Reservoir	50,256	16,376	68,743	22,400	18,487	6,024	73%
San Andreas Reservoir	15,615	5,088	18,898	6,158	3,284	1,070	83%
Pilarcitos Reservoir	1,752	571	3,118	1,016	1,366	445	56%
Total Local Storage	181,084	59,006	239,935	78,183	58,852	19,177	75%
Total System	1,301,513		1,442,932		141,978		90%

[1] Maximum Hetch Hetchy Reservoir storage with drum gates de-activated.
[2] Maximum Cherry Reservoir storage with flashboards removed.
[3] Maximum Lake Eleanor storage with two rows of flashboards in spillway log chute.

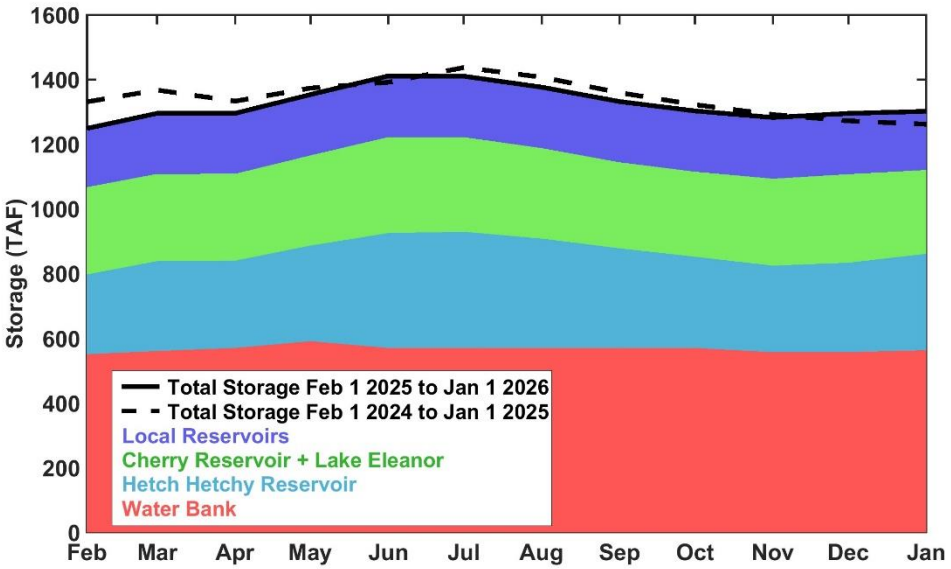

Figure 1: Local and Upcountry Reservoir storage. Color bands show contributions to total system storage. Solid black line shows total system storage for the past 12 months. Dashed black line shows total system storage for the previous 12 months.

Hetch Hetchy System Precipitation Index

Current Month: The December 2025 six-station precipitation index was 6.46 inches.

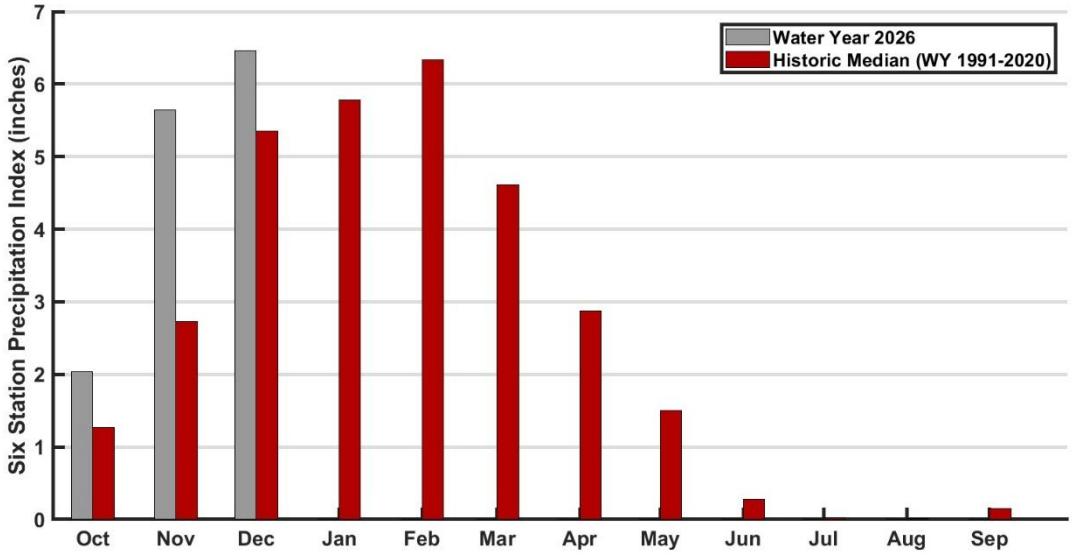

Figure 2: Monthly distribution of the six-station precipitation index relative to the monthly precipitation medians as of December 1. The precipitation index is computed as the average of six Sierra precipitation stations and is an indicator of the overall basin wetness.

Cumulative Precipitation to Date: The cumulative six-station precipitation index for Water Year (WY) 2026 is 14.14 inches, which is 151% of the median to-date. The Hetch Hetchy Weather Station received 7.18 inches of precipitation in December resulting in a total of 15.15 inches for WY 2026, or 165% of the WY median to-date. The cumulative WY 2026 Hetch Hetchy Weather Station precipitation is shown in Figure 3 in red.

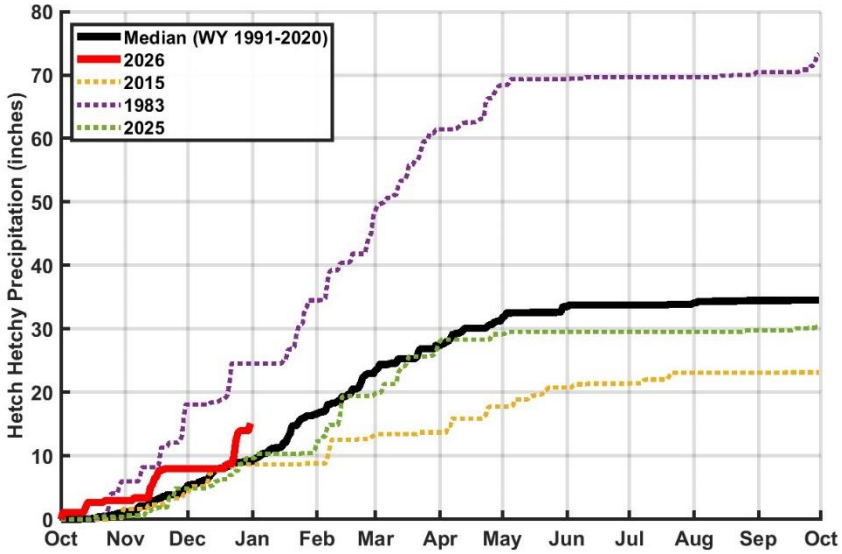

Figure 3: Water Year 2026 cumulative precipitation measured at Hetch Hetchy Weather Station as of January 1. Median cumulative precipitation measured at Hetch Hetchy Weather Station and example wet and dry years are included with Water Year 2025 for comparison purposes.

Tuolumne Basin Unimpaired Inflow

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	Observed Flow	Median[1]	Mean[1]	Percent of Mean	Observed Flow	Median[1]	Mean[1]	Percent of Mean
Inflow to Hetch Hetchy Reservoir	29,466	11,208	18,263	161%	69,812	24,564	36,157	193%
Inflow to Cherry Lake and Lake Eleanor	33,828	14,889	25,932	130%	79,613	35,976	47,885	166%
Tuolumne River at LaGrange	107,837	52,580	83,633	129%	224,999	93,357	137,618	163%
Water Available to City	36,591	325	31,109	118%	65,151	7,941	42,244	154%

[1]Hydrologic Record: 1991-2020

Hetch Hetchy System Operations

Water deliveries via the San Joaquin Pipeline (SJPL) decreased from 140 MGD to 120 MGD on December 3 and then decreased to 0 MGD on December 11.

Hetch Hetchy Reservoir power draft and stream release totaled 7,755 acre-feet during the month of December. Required minimum instream release during December was 40 cfs (Year Type B). The required minimum instream release during January is 50 cfs (Year Type A).

Cherry Reservoir power draft and stream release totaled 41,699 acre-feet during the month of December. The required minimum instream release from October 1 to June 30 is 5 cfs.

Lake Eleanor stream release totaled 6440 acre-feet during the month of December. 2,192 acre-feet of water was transferred to Cherry Reservoir via the Cherry-Eleanor pumping station. Required minimum instream release from November 1 to February 28 is 5 cfs.

Regional System Treatment Plant Production

The Harry Tracy Water Treatment Plant production rate for the month was 54 MGD. The Sunol Valley Water Treatment Plant production rate for the month was 69 MGD.

Regional System Water Delivery

The average December delivery rate was 155 MGD which is an 8.3% decrease compared to the November delivery rate of 169 MGD.

Local Precipitation

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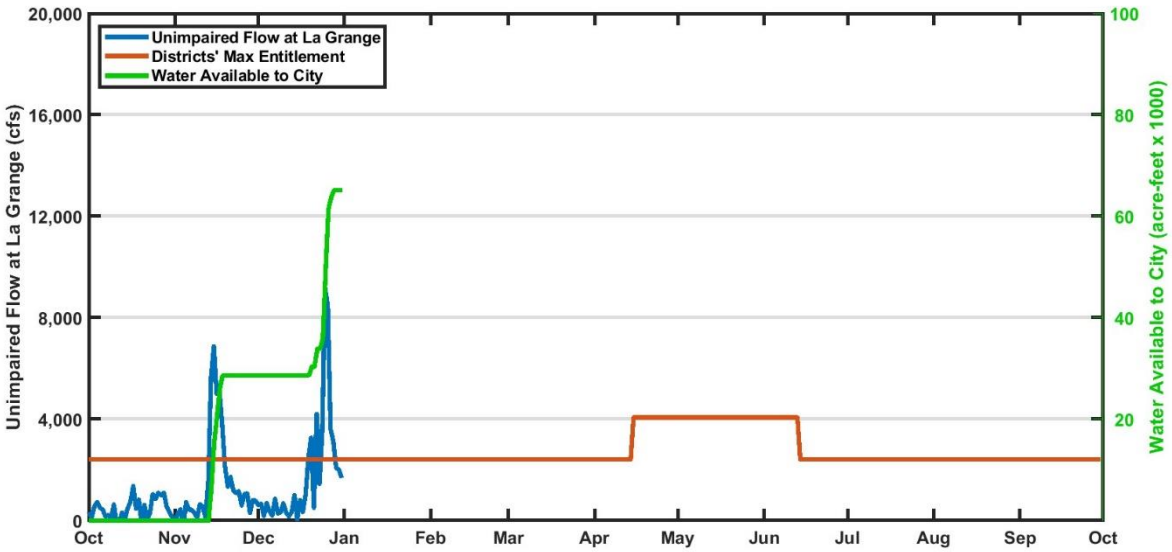
Pilarcitos Reservoir	7.06	103%	15.45	134%
Lower Crystal Springs Reservoir	5.18	116%	11.32	151%
Calaveras Reservoir	2.36	70%	9.11	155%

*Mean Period = WY 1991-2020

Snowpack, Water Supply and Planned Water Supply Management

Air temperatures in the Tuolumne River Basin were generally above normal during December, particularly during warm storm systems in the latter half of the month. Heavy forecasted rainfall from a warm atmospheric river (AR) near the middle of the month prompted flood control releases in anticipation of elevated inflows. The storm significantly underdelivered rainfall to the Tuolumne River Basin, instead traveling north centered on the Mokelumne and American River Basins. A second AR then generated significant precipitation throughout the Basin and snow accumulation above 6,000 feet. Lastly, a winter storm arriving New Year's Eve brought monthly total precipitation above normal and further augmented high-elevation snowpack. These storms resulted in elevated flows on the Tuolumne River and 36,591 acre-feet of Water Available to the City (WAC) in December (Figure 4).

Hetch Hetchy Reservoir is drafting only via minimum instream releases with discretionary Powerdraft at Kirkwood planned to begin in mid-January. Cherry Reservoir is drafting via minimum instream releases and Holm Powerdraft to manage toward seasonal targets. The Cherry-Eleanor Pumps were intermittently active during December and are expected to remain active through spring runoff season. Lake Eleanor is drafting via minimum instream releases and reservoir spill. Water Bank is expected to remain nearly full or debit slightly, depending on natural inflows.



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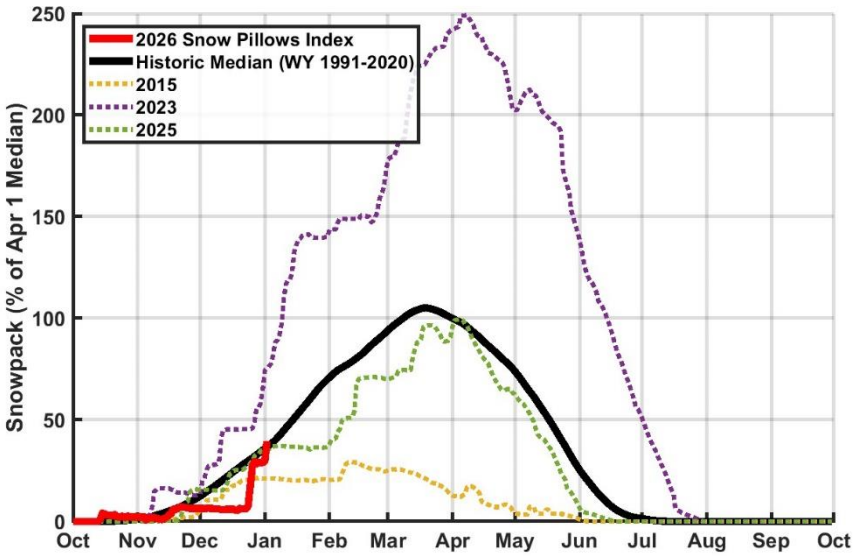

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