We've finished the March 1, 2026 Water Supply Index (WSI) and Bulletin 120 (B120) forecasts. These forecasts include observed hydrologic and meteorological conditions through the end of February and now incorporate 3 days of observed meteorological conditions since the first day of the month and up to 10 days of forecasted meteorological conditions from outside partners. After that 13-day period, forecasts assume median climatology for the remainder of the forecast period. The forecasts are posted here:

WSI:	https://cdec.water.ca.gov/reportapp/javareports?name=WSI
B120:	https://cdec.water.ca.gov/reportapp/javareports?name=B120
B120 WY Distribution:	https://cdec.water.ca.gov/reportapp/javareports?name=B120DIST
B120 Tributary:	https://cdec.water.ca.gov/reportapp/javareports?name=B120TRIB.pdf

B120 and WSI forecasts incorporate the 6-day forecasted precipitation from either the California-Nevada River Forecast Center or the Center for Western Weather and Water Extremes (CW3E). A choice between the two is made for each forecast based on data availability and professional judgement. Starting this year, DWR is additionally incorporating precipitation forecasts produced by NOAA's Global Ensemble Forecast System (GEFS) for days 7-10.

Forecast Summary:
A warm and dry weather forecast, and recent melt conditions have resulted in the April-July runoff forecasts across all basins decreasing since the last B120 update. The statewide snowpack appears to have experienced an early transition into melt season, which is expected to continue to impact regional hydrology and water supply forecasts going forward. Although the snowpack gained considerable snow during the cold storm in the second half of February, the subsequent warm atmospheric river and unseasonably high temperatures (including snowpack not refreezing overnight) have resulted in strong melt rates for this time of year. On February 24 the statewide seasonal peak-to-date snowpack was at 16.4 inches of snow water content (61% of the April 1 average). Since then, the snowpack has melted an average of about 0.2 inches of snow water content per day to reach 50% of the April 1 average on March 9. This means that nearly 20% of what appears to have been the peak statewide snowpack has melted. The snowmelt has led to higher runoff for this time of year.

The projected median April-July (AJ) runoff in the major Southern Cascades/Sacramento River basins ranges from 44% of average for the Trinity River to 72% of average for the Inflow to Shasta; in the major San Joaquin River basins ranges from 45% of average for the Cosumnes River to 79% of average for the San Joaquin river; in the major Tulare Lake basins ranges from 50% of average for the Tule River to 81% of average for the Kings River; and for the North Lahontan region ranges from 50% of average for Truckee river and 67% of average for the West Walker River. The statewide seasonal AJ median forecast is 9.3 MAF which is 67% of average.

The projected median Water Year (WY) runoff in the major Sierra Nevada watersheds ranges from 67% of average for the Tule River to 103% of average for the Feather River. The projected statewide median WY runoff is 27.3 MAF which is 91% of the historic average.

After a near average February in terms of precipitation but below average snow accumulation for the Northern regions, the WSI indices moved in different directions from last month's issuance with the Sacramento Valley Index decreasing

but staying in the “Above Normal” classification, but the San Joaquin Valley Index rising to “Dry” from “Critical”. The WSI forecast is summarized as follows:

Sacramento River Unimpaired Runoff Water Year Forecast (50% exceedance)	**16.5 MAF (94% of average)**
Sacramento Valley Index (SVI) (50% exceedance)	**7.83 (Above Normal)**
San Joaquin Valley Index (SJI) (75% exceedance)	**2.24 (Dry)**

Runoff:

With little or no precipitation for the first several weeks of February, runoff for most of the month was half of the monthly average for most river basins. In the second half of the month, a large cold storm event that brought considerable snow was almost immediately followed by warmer atmospheric river that caused considerable melt of the low-lying snow. These events caused monthly flows to surge over the last several days of the month, bringing almost all rivers close to their monthly average. These events have been followed by unseasonably high temperatures including above freezing minimum temperatures that have caused ripe snowpacks to begin melting at strong rates. This is especially pronounced in the Northern Basins that have seen lower relative totals of snow this year. While the Central and Southern Sierra, generally have higher elevation basins more immune to higher temperature induced melt rates, they too have started melting in earnest. For current March-to-date flows, only the inflow to Shasta, the Sacramento River at Bend Bridge and Tule River flows have been below average. In the Trinities, southern Cascades, and northern Sierra Nevada, flows range from 85% of average for the inflow to Shasta to 132% of average for the Feather River. In the Central Sierra, flows currently range from 104% for the Merced to 152% for the Mokelumne. In the Tulare Lake region, the Tule is 98% of average while the Kern is 190% of average.

Unimpaired flows in Percent of Average for Water Year 2026 are as follows:

River	Oct	Nov	Dec	Jan	Feb	Oct-Feb	Mar (Month to Date)
Trinity	109	242	193	151	101	150	104
Shasta Inflow	97	125	148	136	69	113	85
Sacramento at Bend Bridge	91	113	152	128	80	114	88
Feather	116	132	226	160	101	150	132
Yuba	123	116	187	111	82	120	124
American	85	158	155	119	92	119	129
Sacramento Region	*98*	*122*	*175*	*132*	*87*	*124*	
Cosumnes	114	192	131	124	78	108	120
Mokelumne	85	188	128	136	94	121	152
Stanislaus	107	234	105	122	97	116	121
Tuolumne	143	264	119	118	81	117	106
Merced	138	269	97	117	96	115	104
San Joaquin	143	205	130	151	111	138	136
San Joaquin Region	*129*	*233*	*118*	*127*	*93*	*120*	
Kings	109	152	122	141	111	127	143
Kaweah	162	137	103	116	91	110	115
Tule	212	133	85	79	75	87	98
Kern	137	150	135	146	120	136	190
Tulare Region	*129*	*148*	*119*	*131*	*106*	*122*	

Precipitation:

Precipitation accumulated slightly above average statewide for the month of February. Precipitation primarily fell during two systems in the second half of the month; the first was a cold storm and accumulated considerable snow, whereas

the second was a warmer atmospheric river and fell mostly as rain in the northern half of the state. Of the mountainous regions, the Sacramento River/Northern Sierra region experienced the lowest relative February precipitation, with the Northern Sierra 8-Station Index (8SI) coming in at 92% of average. The Tulare Basin region experienced the highest February precipitation, with the Tulare Basin 6-Station Index (6SI) coming in at 119% of average. The San Joaquin 5-Station Index (5SI) finished February at 102% of average. Despite a below average January, the water year to date precipitation totals at the 8SI and 6SI are still above normal (106%, 102% of average respectively) due to high early season rainfall and a normal February. The 5SI dropped just below normal to 99% of average for the water year to date. March is off to a dry start, with little to no precipitation observed to date and a dry 6-day forecast. The water year precipitation percents of average will continue to drop if March stays on the dryer side.

Precipitation for Water Year 2026 accumulated at the following rates of average:

Region	% of Average							Precipitation Index (in)	
	Oct	Nov	Dec	Jan	Feb	Mar 9 (Month to Date)	WY to Date	Mar 9 (Month to Date)	WY to Date
Northern Sierra 8-Station Index	107	145	156	73	92	1	106	0.1	41.3
San Joaquin 5-Station Index	123	186	100	71	102	0	99	0.0	28.4
Tulare Basin 6-Station Index	200	161	100	65	119	0	102	0.0	20.9

Monthly Precipitation in Percent of Average for Water Year 2026 by Hydrologic Region

Hydrologic Region	Oct	Nov	Dec	Jan	Feb	Oct-Feb	WY
North Coast	129	101	111	67	104	97	70
San Francisco Bay	133	133	84	81	89	94	71
Central Coast	174	382	154	90	129	151	112
South Coast	155	449	120	91	99	140	105
Sacramento River	134	140	134	73	101	111	77
San Joaquin River	143	205	94	74	114	112	78
Tulare Lake	227	217	99	67	130	122	84
North Lahontan	160	139	156	106	97	125	80
South Lahontan	131	799	193	77	81	177	117
Colorado River	40	535	138	53	37	124	68
Statewide Weighted Average	142	227	124	74	104	117	82

Snowpack:

The snow water content (SWC) in California's snowpack is monitored in-situ (or on the ground) using two complementary methods: automatic snow sensor (or "pillow") readings and manual snow course measurements. The snow sensors give us a daily snapshot of snow conditions while the manual snow course measurements provide a monthly verification of snow conditions in locations where snow has been measured in the same manner for many years, some over 110 years.

March 1 snow course measurements were conducted during the 10-day measurement period which ran from February 22 through March 3. DWR and other member agencies of the California Cooperative Snow Survey program were able to successfully access and measure 219 of 223 scheduled courses. Statewide, the snow course measurements are at 68% of the March 1 average and 59% of the April 1 average.

Results of the March 1 snow course measurements are as follows:

Region	No. Courses	Avg SWC (inches)	% Average,	% Average,

			April 1	March 1
North Coast	12	10.4	33	37
Sacramento River	72	13.5	48	54
San Joaquin River	65	19.7	67	77
Tulare Lake	42	18.7	84	94
North Lahontan	11	14.2	54	61
South Lahontan	18	17.8	90	106
Statewide Average (weighted)			59	68

Based on the automated snow sensor network, the statewide SWC was around 15 inches on March 1 which is 56% of the historical April 1 average and 64% of normal for the date. The SWC, as measured by this network on March 1, was below average for all three regions, with the northern, central, and southern regions measuring 43%, 65%, and 86% of average respectively. As of the morning of March 9, the statewide SWC stands at 13.5 inches which is 53% of normal for this date.

The snowpack as of the morning of March 9, 2026 stands at the following (based on snow sensors):

Region	No. of Stations	Avg. SWC (in)	Percent of April 1	Percent of Normal
Northern	33	8.5	32	34
Central	54	14.9	54	57
Southern	21	17.6	72	76
Statewide	108	13.5	50	53

The snowpack has experienced an early transition into melt season. Since the statewide seasonal peak-to-date of 16.4 inches of SWC (61% of the April 1 average) on February 24, the snowpack has melted an average of about 0.2 inches of SWC per day to reach 50% of the April 1 average on March 9. This means that about 18% of what appears to have been the peak statewide snowpack has already melted. The northern region's average melt rate since its seasonal peak-to-date snowpack (at 44% of April 1 on February 25) has been slightly higher at about 0.3 inches of SWC per day. The average melt rates in the central and southern regions are more similar to the statewide trend. The rapid loss of snow has been early for this time of year and is expected to continue with forecasted warm temperatures. This early melt impacts regional hydrology, in the form of higher runoff for this time of year and lower snowmelt volumes in the April-July period.

Airborne Remote Sensing of Snow (ARSS):

Flight data from first flights in the Feather, Yuba, Merced, and Kaweah were fully processed and incorporated into B120 updates throughout the month of February. Additional flights in the Merced (flight #2) and Tuolumne (flight #2) occurred at the end of the month and were available for inclusion in this B120 forecast. An additional flight in the San Joaquin was conducted but data was still in processing at the time of publication. Initial flights in the Truckee and Carson, and an additional flight in the Kern (#2) were conducted 3/7-3/9 and will be included in forecast updates in the month of March. The ASO data gathered to date is summarized in the table below. The data collected was evaluated by the ASO Inc. team and ingested into iSnobal snow models by M3Works, and comprehensive reports were provided to DWR for analysis and use in B120 forecasting.

	ASO Flights Conducted		iSnoBal Model Estimates	
Watershed	**Flight Date**	**Raw Data SWC (TAF) Estimate**	**Model Date**	**Modeled SWC (TAF) Estimate**
Feather	2/3-2/5	308	3/8	266
Yuba	2/3	124	3/8	177
American				
Truckee	3/7-3/8	**		

Carson	3/9	*		
Tuolumne	2/27-2/28	576	2/8	506
Merced	2/26-2/27	380	2/8	331
San Joaquin	3/3	849	2/8	831
Kings	1/28-1/29	588	2/8	892
Kaweah	2/7	71		137
Kern	3/7-3/8	**	2/8	458

* Flight is scheduled but not yet collected
** Flight has been collected, but processing has not been completed prior to forecasting.
*** No updated M3W model reports were provided, as the most recent ASO report and volume were current.

Data and all model results from all ASO flights as well as other snow hydrology products are available on the CCSS Water Supply Forecasting Resources dashboard and will be reviewed and used to inform future updates of the B120 forecasts. For just a comparison of ASO related data and models, the information is available at the ARSS Flights and SWE Estimates dashboard. A more detailed look at modeled snowpack states is available on the iSnobal Modeled Snowpack States dashboard.

Weather and Climate Outlooks:
According to the CNRFC 6-day forecast, almost the entirety of the state will receive no precipitation statewide. The only exceptions are the far north coast and the Southern border which are both expected to receive a few hundredths of an inch. Freezing levels, which are already quite high, will continue to increase over the forecast. By day 6 of the forecast, all areas of the state will have freezing levels of at least 12,000 ft with most other areas near 13,000 and 14,000 feet.

The NWS Climate Prediction Center (CPC) one-month outlook issued on February 28, 2026, valid for the month of March, suggests greater chances of above normal temperatures for the entire State. The same outlook shows increased chances of below normal precipitation for all of California.

The CPC three-month (March-April-May) outlook issued on February 19, 2026 similarly suggests increased chances of above normal temperatures and below normal precipitation for the entire state.

According to the latest El Niño/Southern Oscillation (ENSO) discussion issued by the CPC on March 9, 2026, La Niña conditions are present. Equatorial sea surface temperatures (SSTs) are below average in the east-central Pacific Ocean. A transition from La Niña to ENSO-neutral is expected in February-April 2026 (60% chance), with ENSO-neutral likely persisting through the Northern Hemisphere summer (56% chance in June-August 2026).

Next Update:
A Bulletin 120 update forecast for conditions as of March 10 will be available by Thursday, March 12. If you have any questions regarding this forecast or need additional help, please contact a member of the Snow Surveys and Water Supply Forecasting Unit.

Interpreting Bulletin 120 Water Supply Forecasts:
All forecasts have uncertainty. For water supply forecasts, the sources of uncertainty include unknown future weather, model simplifications, and data limitations. To express this uncertainty, the forecast is presented not as a single value but as a range of values, each with a specific probability of occurrence. The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts generally become more certain thus tightening the spread among these values.

The Bulletin 120 provides a range of possible volumes of water that might show up in the April through July time period. It uses three points to characterize this range of outcomes: a 50% exceedance (median), a 10% exceedance, and a 90% exceedance. The median forecast is a value that represents where half the outcomes are expected to be above, and half are expected to be below. The 10% exceedance represents a higher end of the range where only 1 in 10 events would be expected to be higher. The 90% exceedance is a low mark where only 1 in 10 events would be expected to be lower. The

space between these points represents 80% of the expected outcomes and is often referred to as the 80% confidence interval. These three points provide a guide for water resources planning covering the range of possible outcomes that may still transpire as the wet season winds down and the snowmelt season begins. There is still a 20% chance that the actual streamflow volume will fall either below the 90% exceedance forecast or above the 10% exceedance forecast.

Tributary Forecasts:
Tributary forecasts are now available on CDEC at the link above under the B120 forecasts at the top of the email.

Banner Photo:
Photo from Devon Eckberg, DWR, taken on February 26th at Castle Meadow in the Yuba River basin showing intense snow runnelling resulting from a from rain event that fell on low density snow.

Bulletin 120 and Water Supply Index Forecast Schedule - Water Year 2026:

Forecast Type	Forecast Date	Issue Date	Issue Day of Week	Notes
~~**WSI**~~	~~**12/01/2025**~~	~~**12/08/2025**~~	~~**Monday**~~	
~~**WSI**~~	~~**01/01/2026**~~	~~**01/09/2026**~~	~~**Friday**~~	~~**New Years holiday (Jan 1st)**~~
~~**B120 / WSI**~~	~~**02/01/26**~~	~~**02/09/26**~~	~~**Monday**~~	
~~B120 Update~~	~~02/10/26~~	~~02/12/26~~	~~Thursday~~	
~~B120 Update~~	~~02/17/26~~	~~02/19/26~~	~~Thursday~~	
~~B120 Update~~	~~02/24/26~~	~~02/26/26~~	~~Thursday~~	
~~**B120 / WSI**~~	~~**03/01/26**~~	~~**03/09/26**~~	~~**Monday**~~	
B120 Update	03/10/26	03/12/26	Thursday	
B120 Update	03/17/26	03/19/26	Thursday	
B120 Update	03/24/26	03/26/26	Thursday	
B120 / WSI	**04/01/26**	**04/08/26**	**Wednesday**	
B120 Update	04/14/26	04/16/26	Thursday	
B120 Update	04/21/26	04/23/26	Thursday	
B120 Update	04/28/26	04/30/26	Thursday	
B120 / WSI	**05/01/26**	**05/08/26**	**Friday**	
B120 Update	05/12/26	05/14/26	Thursday	
B120 Update	05/19/26	05/21/26	Thursday	
B120 Update	05/26/26	05/28/26	Thursday	
B120 Update	06/02/26	06/04/26	Thursday	
B120 Update**	06/09/26	06/11/26	Thursday	
B120 Update**	06/16/26	06/18/26	Thursday	

Important Links:
CCSS Website
SnowTrax

Full Natural Flow Data:
Daily FNF
Monthly FNF
Seasonal FNF

Precipitation Data:
Latest Northern Sierra 8-Station Precipitation Index Tabular Data

Latest San Joaquin 5-Station Precipitation Index Tabular Data
Latest Tulare Basin 6-Station Precipitation Index Tabular Data
Latest Northern Sierra 8-Station Precipitation Index Plot
Latest San Joaquin 5-Station Precipitation Index Plot
Latest Tulare Basin 6-Station Precipitation Index Plot

Snow Data:
Latest Snow Sensor Report
Latest Statewide Summary of Snow Water Equivalents
SnowTrax – Snow Pillow Quantile Timeseries Dashboard
SnowTrax – Snow Pillow QC Dashboard
SnowTrax – SWE 3D Dashboard
SnowTrax – iSnobal Modeled Snowpack States
SnowTrax – ARSS Basin Wide SWE
SnowTrax - Snow Pillow Multi-Site Comparison *** **NEW** ***

Extended Regional Forecasts:
California Nevada River Forecast Center 6 Day QPF and Snow Level Forecast
Climate Prediction Center One-Month Outlook Forecasts
Climate Prediction Center Three-Month Outlook Forecasts
U.S. Seasonal Drought Outlook
Weather Forecast Office California Service Area-Products
El Niño Southern Oscillation (ENSO) Conditions and Weekly Discussion (including La Niña)
Atmospheric River Scale Forecast Products
CW3E Subseasonal to Seasonal Forecasts

Bulletin 120:
SnowTrax – CCSS Water Supply Forecasting Resources
SnowTrax – B120 Forecast Verification
SnowTrax - B120 Forecast Explorer *** **NEW** ***
SnowTrax - B120 Forecast Time Series *** **NEW** ***

Other Useful Links:
California Water Watch
U.S. Department of Agriculture California Climate Hub by California State Climatologist

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