UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

California Water Supply Outlook Report

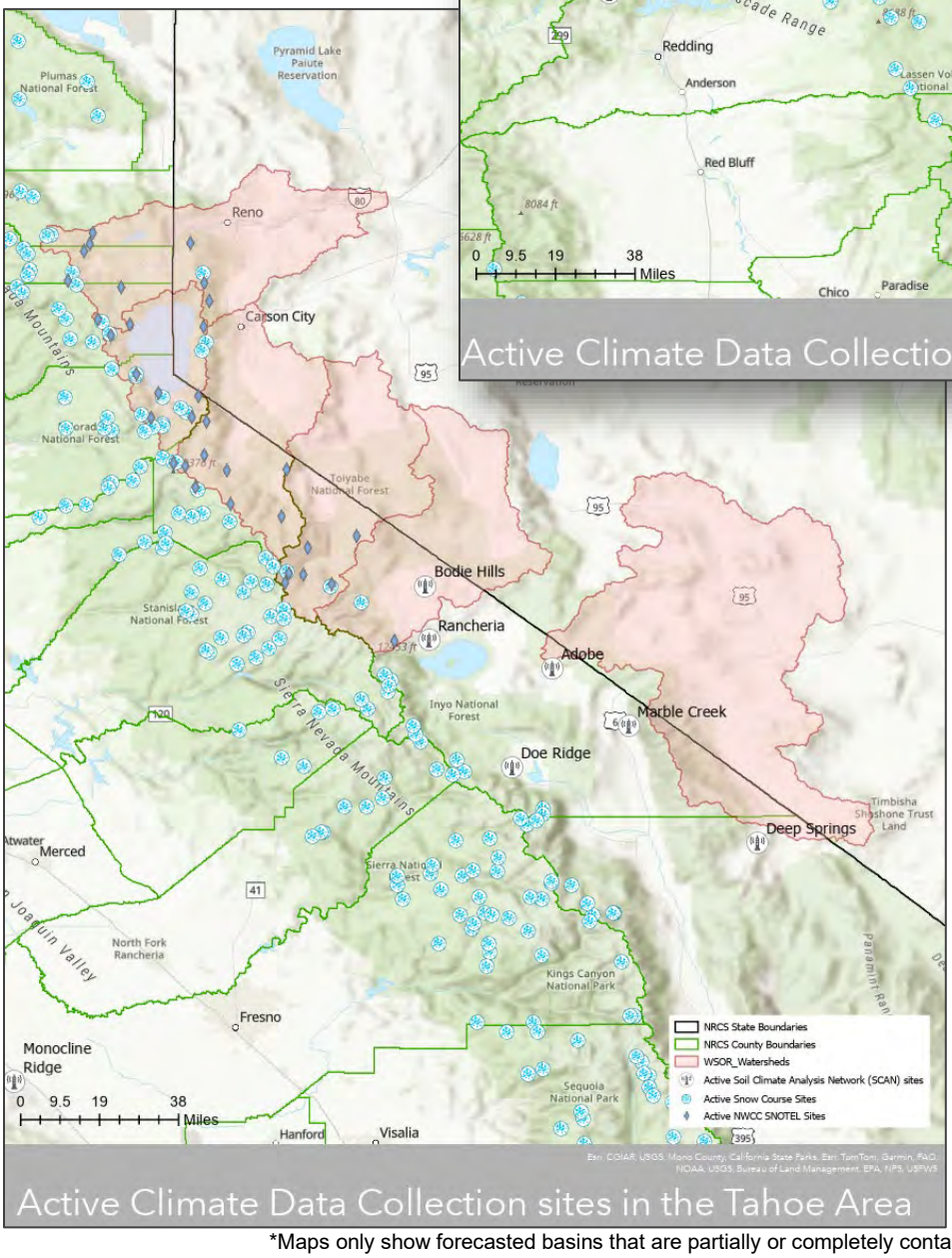
May 2025

Contents

Map Updated 4/18/2024

**Don Pedro Reservoir is not labeled at this scale but is situated between New Melones and Lake McClure.

Map Updated 4/18/2024



*Maps only show forecasted basins that are partially or completely contained in CA. Maps Updated 4/18/2024

STATE OF CALIFORNIA GENERAL OUTLOOK
May 2025

Snow Survey

NRCS CA maintains 4 snow courses in the Lake Tahoe region: Richardson #2, Palisades Tahoe #2, Rubicon #1, and Mount Rose. NRCS CA started measuring snow depth around February 1 for the 2025 Water Year and is now finished for the Water Year. Snow Course Locations and Data can be found at https://nwcc-apps.sc.egov.usda.gov/ under "Interactive Map."

DWR cooperator partners maintain other snow courses around CA. That data can be found in the DWR B120 links below.

Snowpack

As of May 2nd, snowpack is 78 percent of normal for the dates in the northern Sierras (down from 122 percent on April 7th); 73 percent of normal in the central Sierras (down from 96 percent as of March 13th); and 48 percent of normal in the southern Sierras (down from 85 percent on March 13th). The DWR Daily Statewide Summary of Snow Water Content map is attached at the end of the General Outlook. More information is available online at: http://cdec.water.ca.gov/snow/current/snow/index2.html.

Precipitation

As of May 2nd, the Northern Sierra-, San Joaquin-, and Tulare Basin Index stations received 110-, 71-, and 86 percent of average for this date. April precipitation decreased the precipitation averages for all three basins. More information is available online at: http://cdec.water.ca.gov/snow_rain.html

Reservoirs

As of May 6th, 2025, total reservoir storage in intrastate California is 116 percent of average. Total interstate reservoir storage, including Lake Powell, Lake Mead and the North Coast watershed is 85 percent of average. As of May 1st, 2025, storage at Shasta Reservoir was 114 percent of average, down from 116 percent of average on April 8, 2025. Storage at Oroville Reservoir was 120 percent of average, the same as it was on April 8, 2025. As of April 30, 2025, Don Pedro Reservoir was 116 percent of average, up from 113 percent of average on April 7, 2025. The DWR Selected Reservoirs Daily Graph – Water Supply summary chart is attached at the end of the General Outlook. More information is available online at: https://cdec.water.ca.gov/reservoir.html.

Lake Oroville, along with 16 other reservoirs, is managed by DWR through the State Water Project. Shasta Dam, along with 5 other storage reservoirs, is managed by the US Bureau of Reclamation as part of the Central Valley Project. Don Pedro Dam and Reservoir is jointly owned by Turlock and Modesto Irrigation Districts. These three reservoirs are just one example of why the CA Cooperative Snow Survey Partnership is so critical to understanding where and how the water is stored and eventually distributed.

Streamflow

NRCS forecasts in the Tahoe, Truckee, Carson, and Walker River basins are approximately 73 - 115 percent of the 1991-2020 median. NRCS forecasts for stations in the Klamath Basin are 61 - 222 percent of the 1991-2020 medians between April and September. NRCS Forecast summaries are attached after the General Outlook Report.

For the Sacramento, San Joaquin, Tulare, North Coast, and Owens Lake forecasts, please refer to the most up to date information on the DWR and NWS webpages. Links with instructions on how to access the data are provided below.

Links to Data for Sacramento, San Joaquin and Tulare Lake Basins data:

Please note that DWR and NWS use percent of average while NRCS uses percent of median to display forecasted stream flows.

- California Department of Water Resources (DWR):
  - B120 (ca.gov) This version of DWR's Bulletin 120 links to the seasonal (April – July) forecasting summary for 18 points in the three watersheds and also provides DWR staff contact information.

B-120 WATER SUPPLY FORECAST SUMMARY

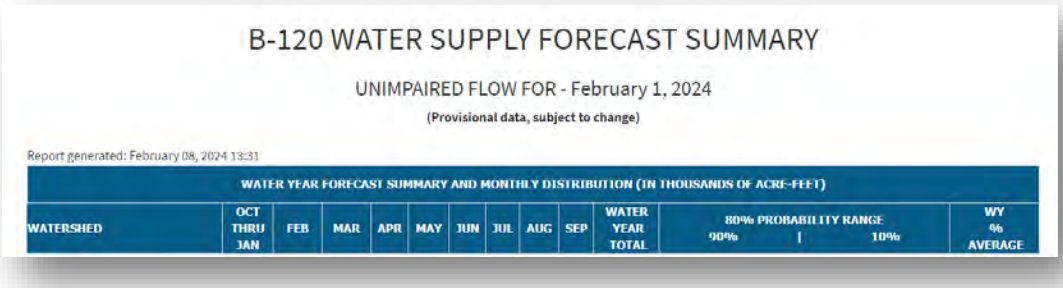
UNIMPAIRED FLOW FOR - February 2024

(Provisional data, subject to change)

Report generated: February 8, 2024 17:48

APRIL-JULY FORECAST SUMMARY (IN THOUSANDS OF ACRE-FEET)			
HYDROLOGIC REGION WATERSHED	APRIL-JULY FORECAST	PERCENT OF AVERAGE	80% PROBABILITY RANGE 90% | 10%

  - B120DIST (ca.gov) This version of DWR's Bulletin 120 links to the monthly stream forecasts (Feb – Sept) for 16 points in CA and also provides DWR staff contact information.



B-120 WATER SUPPLY FORECAST SUMMARY

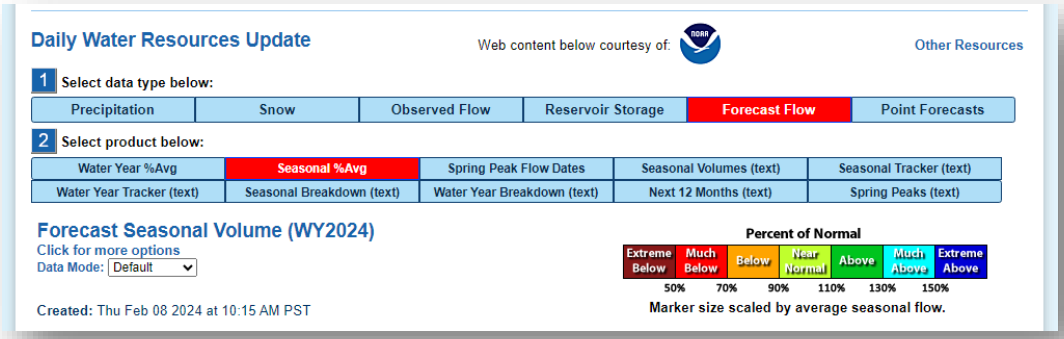
UNIMPAIRED FLOW FOR - February 1, 2024

(Provisional data, subject to change)

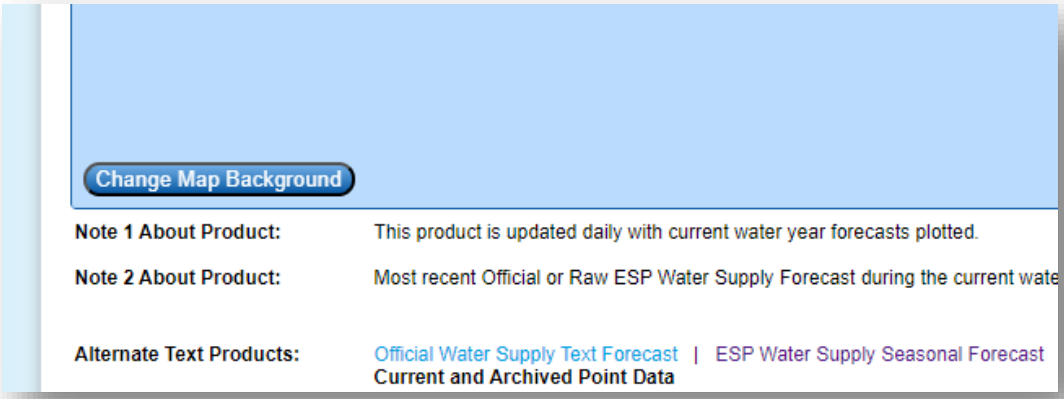
Report generated: February 08, 2024 13:31

WATER YEAR FORECAST SUMMARY AND MONTHLY DISTRIBUTION (IN THOUSANDS OF ACRE-FEET)												
WATERSHED	OCT THRU JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WATER YEAR TOTAL	80% PROBABILITY RANGE 90% | 10%	WY % AVERAGE

- National Weather Service (NWS): CNRFC - Water Resources - Daily Water Resources Update (noaa.gov) The California Nevada Forecast Center provides Daily Water updates. The report that is closest to the NRCS forecasting report is the "Seasonal %Avg" product in the "Forecast Flow" data type.



Seasonal Forecast Volumes (as percentages) can be provided by clicking the “show data table” button on the top right of the interactive map. This value is for the whole water year and is not broken down by month. In order to get monthly forecasting data, text reports are available. The “ESP Water Supply Seasonal Forecast” product is the one NRCS used to report data in its previous products.



CURRENT REGIONAL SNOWPACK FROM AUTOMATED SNOW SENSORS

% of April 1 Average / % of Normal for This Date

NORTH	
Data as of May 2, 2025	
Number of Stations Reporting	27
Average snow water equivalent (Inches)	14.5
Percent of April 1 Average (%)	56
Percent of normal for this date (%)	78

CENTRAL	
Data as of May 2, 2025	
Number of Stations Reporting	53
Average snow water equivalent (Inches)	15.3
Percent of April 1 Average (%)	55
Percent of normal for this date (%)	73

SOUTH	
Data as of May 2, 2025	
Number of Stations Reporting	24
Average snow water equivalent (Inches)	7.6
Percent of April 1 Average (%)	34
Percent of normal for this date (%)	48

STATE	
Data as of May 2, 2025	
Number of Stations Reporting	104
Average snow water equivalent (Inches)	13.3
Percent of April 1 Average (%)	51
Percent of normal for this date (%)	69

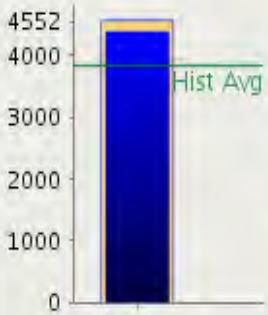
Statewide Average: 51% / 69%

Data as of May 2, 2025

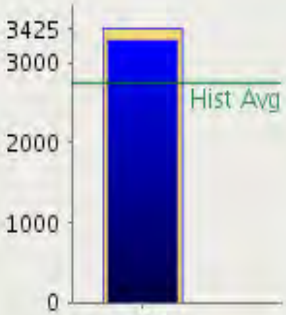
CURRENT CONDITIONS: MAJOR WATER SUPPLY RESERVOIRS:01-MAY-2025

Data as of Midnight: 01-May-2025

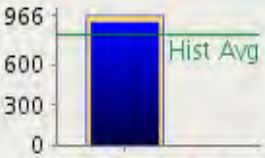
Change Date: 01-May-2025



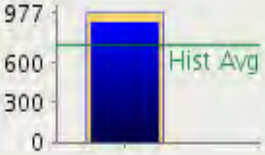
Shasta
96% (Total Cap.) | 114% (Hist. Avg.)



Oroville
96% (Total Cap.) | 120% (Hist. Avg.)



New Bullards Bar
95% (Total Cap.) | 112% (Hist. Avg.)



Folsom
93% (Total Cap.) | 124% (Hist. Avg.)

LEGEND

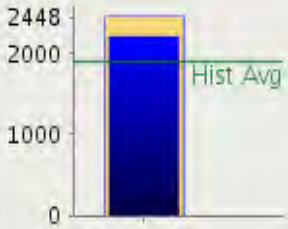
Blue Bar: Storage level for date

Gold Bar: Total reservoir capacity

Green Line: Historic level for date.

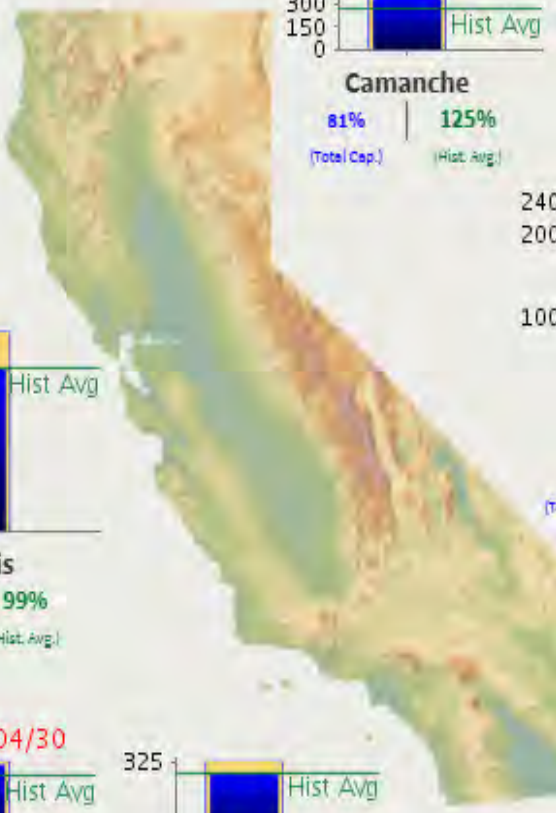
% of Capacity | **% Hist. Avg.**

(Click res. 3 char. code for details)

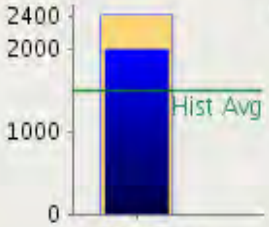


Trinity
90% (Total Cap.) | 116% (Hist. Avg.)

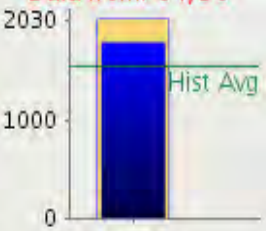
Camanche
81% (Total Cap.) | 125% (Hist. Avg.)



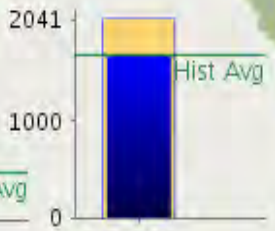
Data from: 04/30



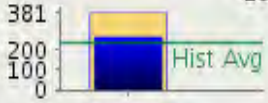
New Melones
83% (Total Cap.) | 134% (Hist. Avg.)



Don Pedro
89% (Total Cap.) | 116% (Hist. Avg.)

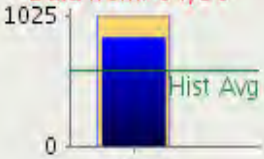


San Luis
82% (Total Cap.) | 99% (Hist. Avg.)



Sonoma
69% (Total Cap.) | 111% (Hist. Avg.)

Data from: 04/30

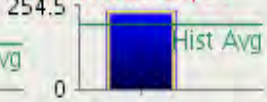


McClure
84% (Total Cap.) | 143% (Hist. Avg.)

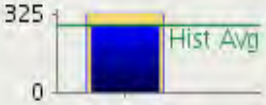
Data from: 04/30

Cachuma
87% (Total Cap.) | 114% (Hist. Avg.)

Data from: 04/30



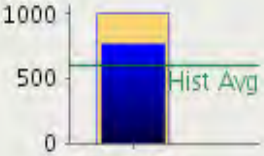
Casitas
96% (Total Cap.) | 116% (Hist. Avg.)



Castaic
85% (Total Cap.) | 98% (Hist. Avg.)

Diamond Valley
96% (Total Cap.) | 128% (Hist. Avg.)

Millerton
83% (Total Cap.) | 117% (Hist. Avg.)



Pine Flat
77% (Total Cap.) | 129% (Hist. Avg.)

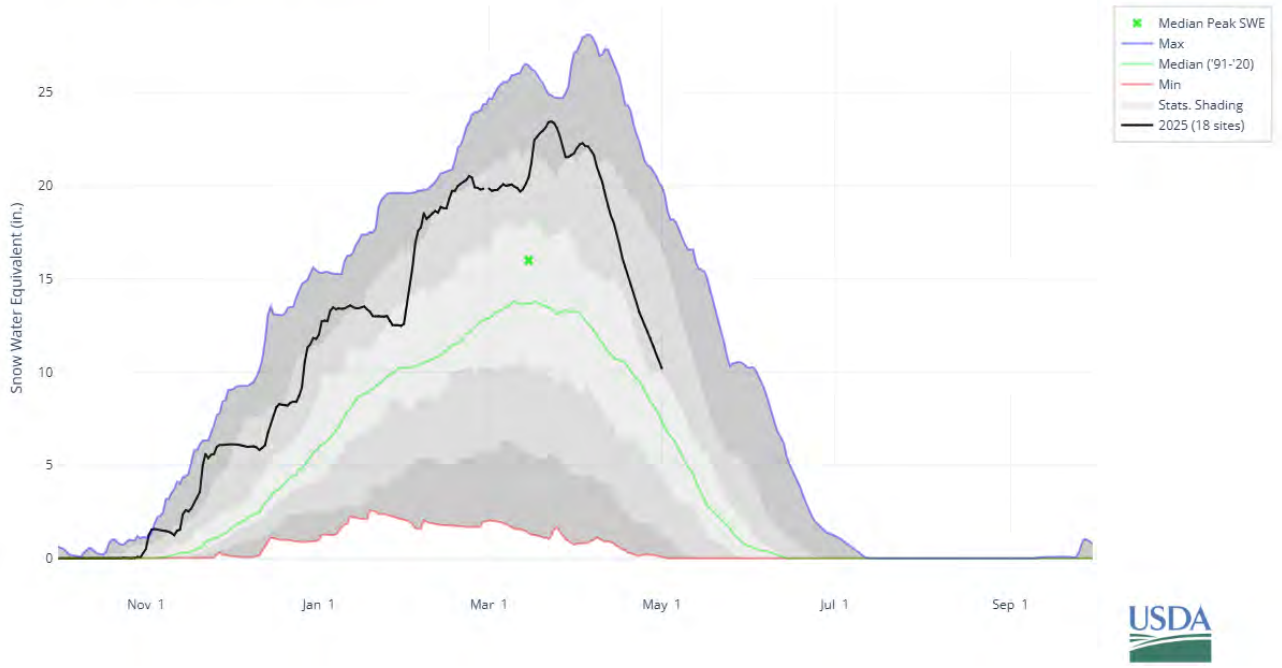
Click to download printable version of current data.

Report Generated: 02-May-2025 11:10 AM

The CSI link has been disabled to zoom in, for the lack of historical data.

Klamath Basin Summary from the Oregon WSOR

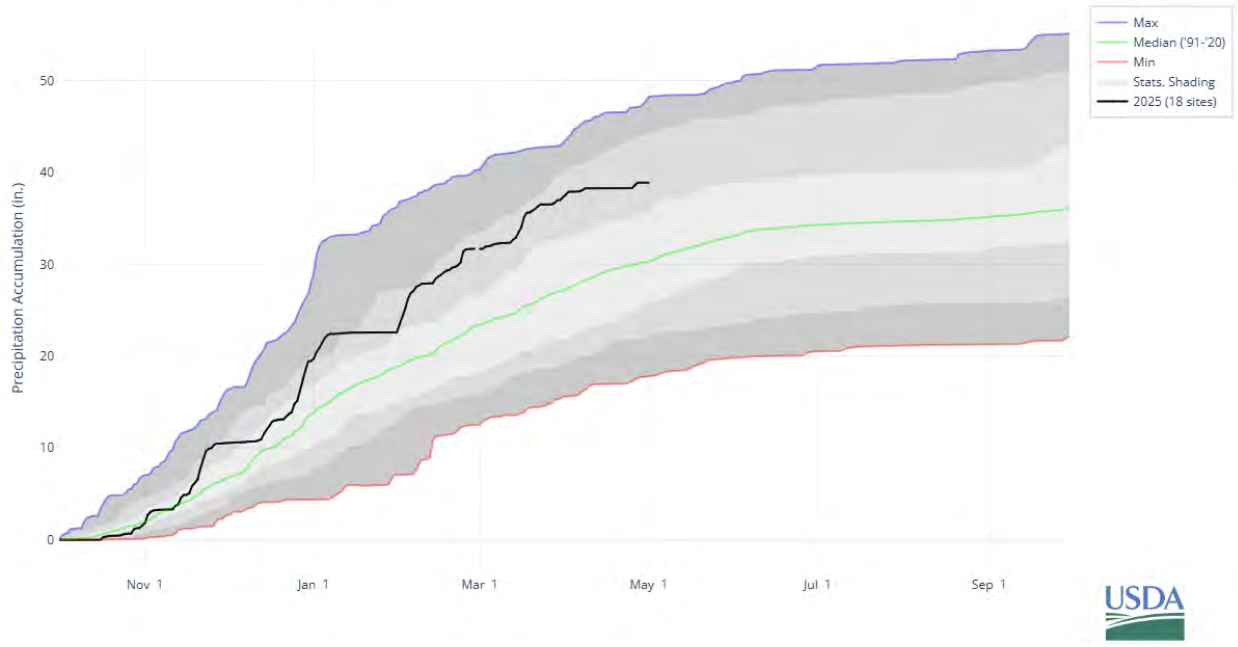
SNOWPACK



As of May 1, the basin snowpack is slightly above normal at 127% of median. This is lower than April 1 when the basin snowpack was 167% of median.

► *View snowpack for individual sites by accessing the basin data report* **here**.

PRECIPITATION



April precipitation is below normal at 45% of median. Precipitation since the beginning of the water year (October 1 - May 1) is 133% of median.

► *View precipitation for individual sites by accessing the basin data report* **here**.

Statistical shading percentiles are calculated from period of record (POR) data, excluding the current water year. Percentile categories range from: minimum to 10th percentile, 10th-30th, 30th-70th, 70th-90th, 90th-maximum.

RESERVOIR STORAGE

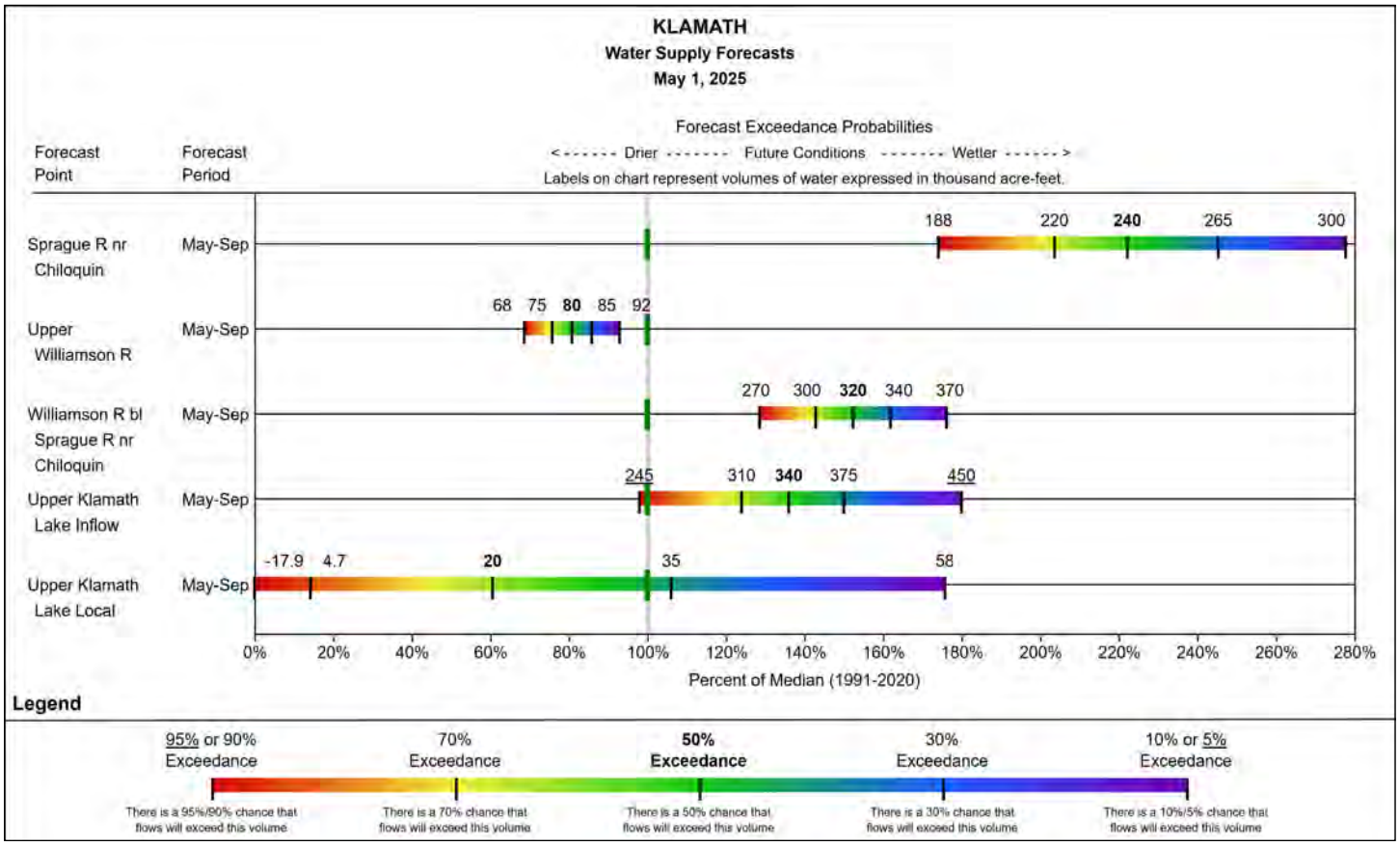
As of May 1, storage at major reservoirs in the basin ranges from 93% of median at Fourmile Lake to 136% of median at Upper Klamath Lake. *View reservoir storage for individual sites by accessing the basin data report* ***here***.

KLAMATH					Water Year 2025		
Site	Elevation (ft)	Capacity (kaf)	Median (kaf)	Median % Capacity	Storage (kaf)	% Capacity	% Median
Fourmile Lake	5750	15.6	8.5	54	7.875	50	93
Hyatt Prairie	5020	16.2	12.5	77	15.042	93	120
Gerber	4830	94.3	66.3	70	88.618	94	134
Howard Prairie	4530	62.1	42.2	68	54.917	88	130
Clear Lake	4480	513.3	174.3	34	207.25	40	119
Upper Klamath Lake	4140	523.7	466.3	89	632.061	121	136
Basin Index						82	131
# Reservoirs						6	6

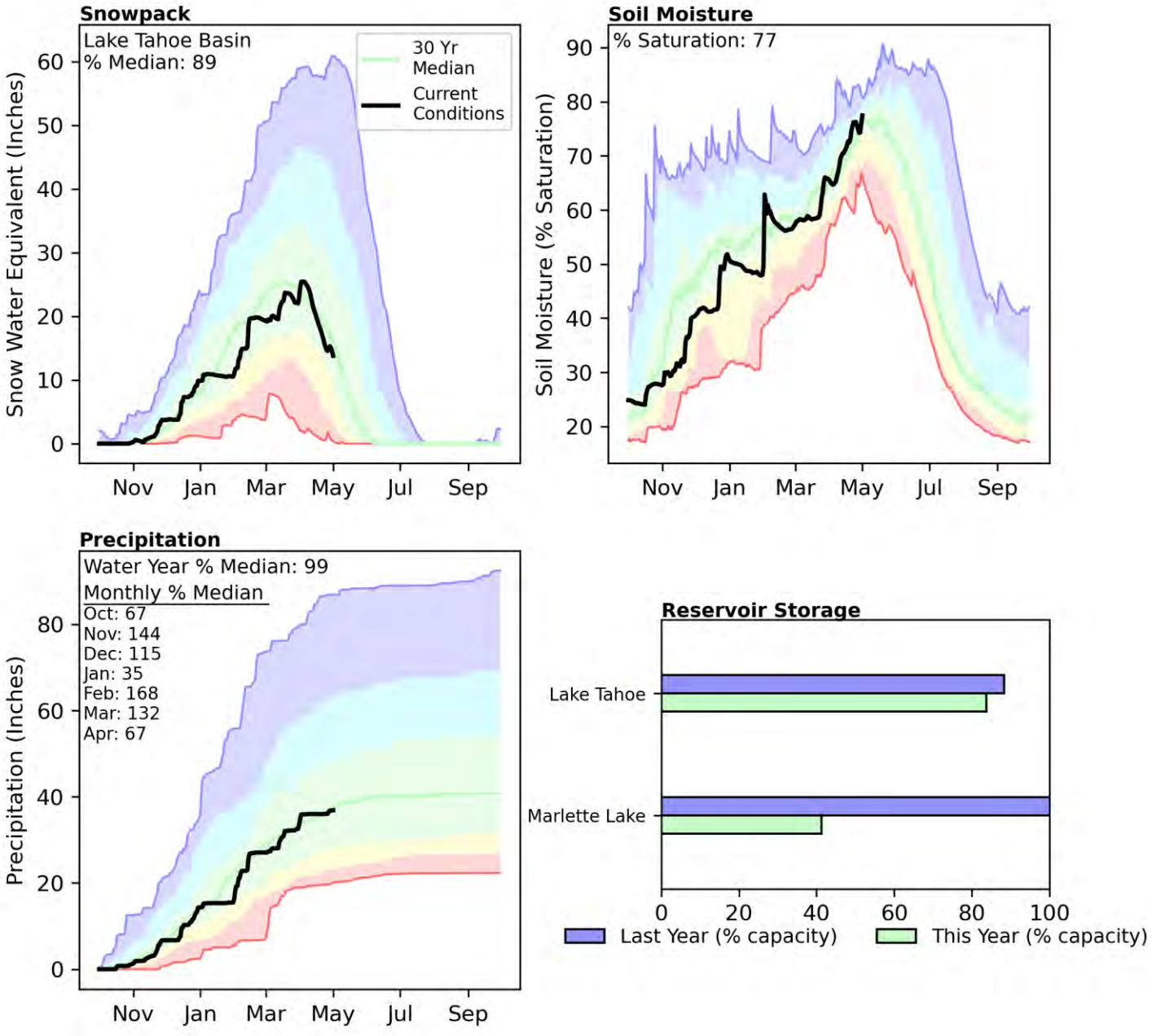
STREAMFLOW FORECAST

The streamflow forecasts for the primary period in the basin range from 61% to 222% of median.

For data in tabular format and to view other forecasts please view the basin data reports **here**.

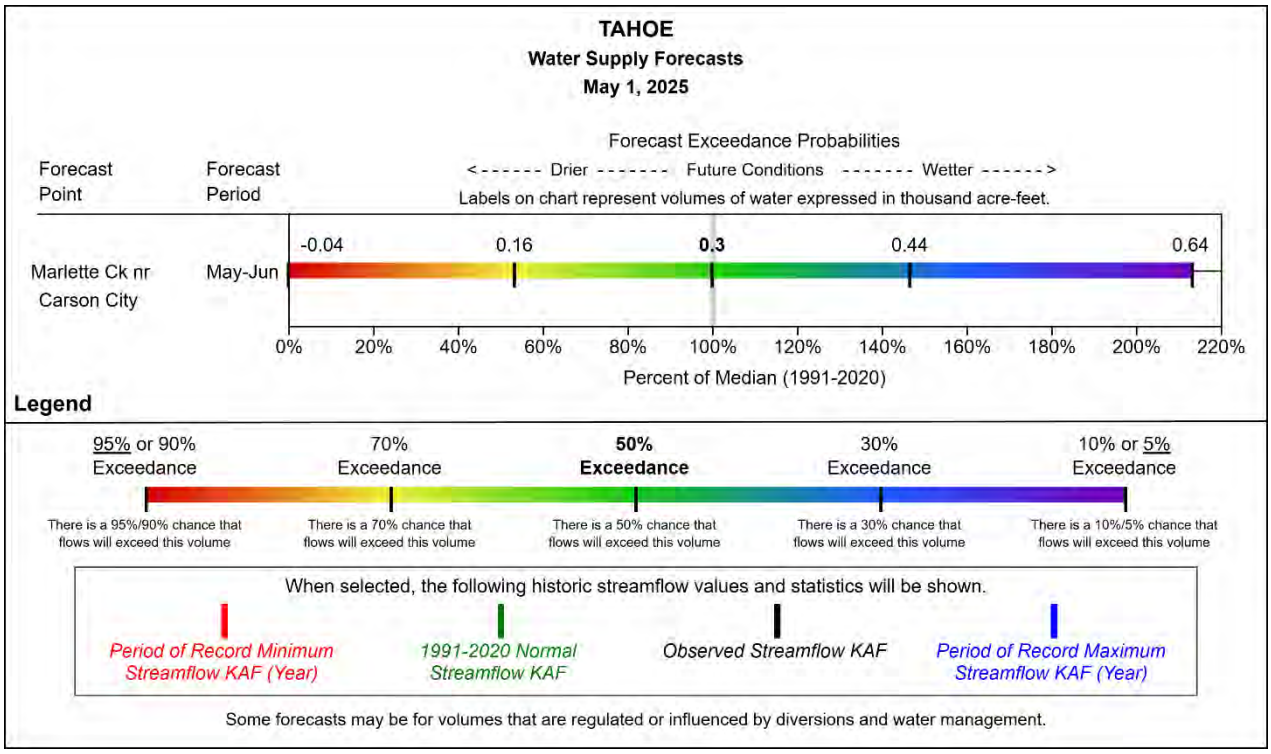


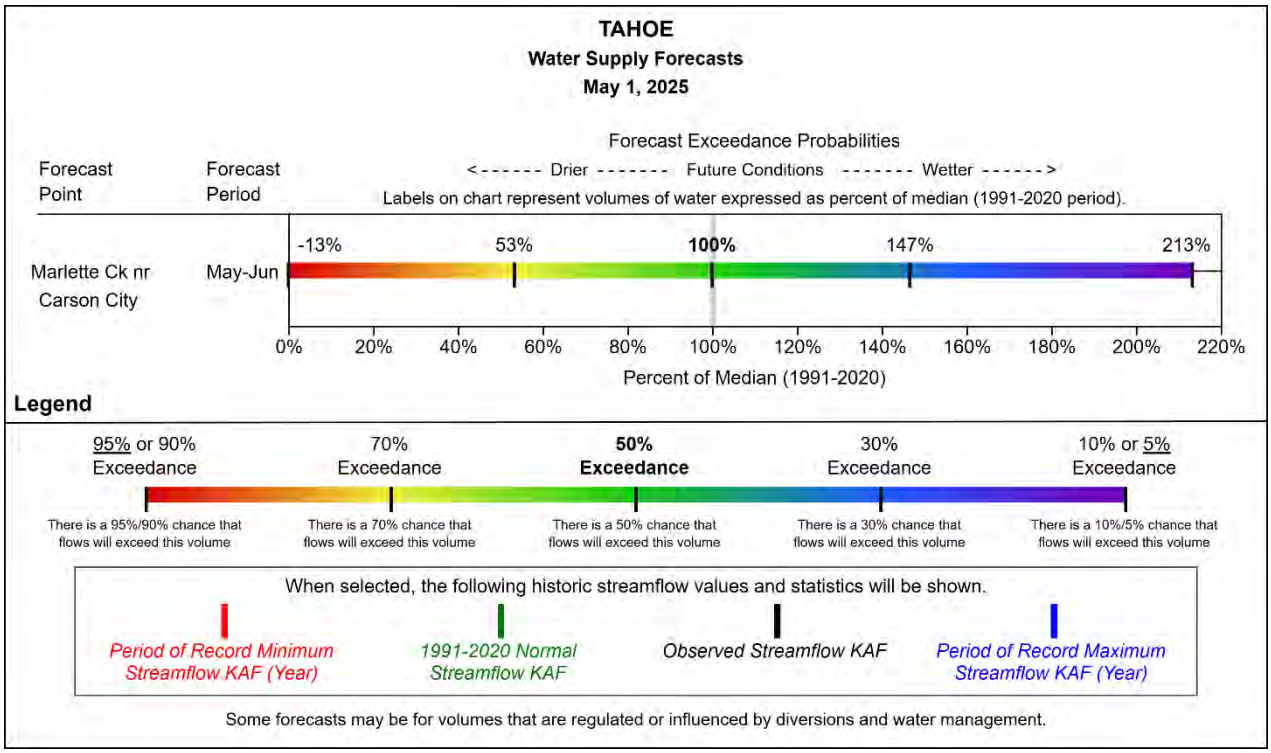
Snowpack in the Lake Tahoe Basin is below normal at 89% of median, compared to 102% at this time last year. Precipitation in April was well below normal at 67%, which brings the seasonal accumulation (October-April) to 99% of median. Soil moisture is at 77% saturation compared to 79% saturation last year. Reservoir storage is 88% of capacity, compared to 47% last year.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: 30 year normal calculation description

Important Information about Forecast Coordination: Hydrologists with the NRCS and National Weather Service California Nevada River Forecast Center (CNRFC) coordinate Lake Tahoe Rise, Truckee River at Farad, Little Truckee River near Boca, and the Carson River at Ft. Churchill forecasts (following page) using output of their respective hydrology models at the request of the Bureau of Reclamation. The NRCS model is a statistical model based on the current data as of the first of each month. The CNRFC ensemble forecasting system incorporates near-term weather prediction and climatology into their model. These models can provide different answers because of the nature of the model systems, and from the inclusion of future weather in the CNRFC model. The hydrologists agree on forecast values using guidance from both models to best provide an accurate water supply forecast for these points.


TAHOE
Water Supply Forecasts
May 1, 2025
Forecast Exceedance Probabilities
Forecast Point
Forecast Period
<------- Drier ------- Future Conditions ------- Wetter ------->
Labels on chart represent volumes of water expressed in thousand acre-feet.
Marlette Ck nr Carson City
May-Jun
-0.04
0.16
0.3
0.44
0.64
0%
20%
40%
60%
80%
100%
120%
140%
160%
180%
200%
220%
Percent of Median (1991-2020)
Legend
95% or 90% Exceedance
70% Exceedance
50% Exceedance
30% Exceedance
10% or 5% Exceedance
There is a 95%/90% chance that flows will exceed this volume
There is a 70% chance that flows will exceed this volume
There is a 50% chance that flows will exceed this volume
There is a 30% chance that flows will exceed this volume
There is a 10%/5% chance that flows will exceed this volume
When selected, the following historic streamflow values and statistics will be shown.
Period of Record Minimum Streamflow KAF (Year)
1991-2020 Normal Streamflow KAF
Observed Streamflow KAF
Period of Record Maximum Streamflow KAF (Year)
Some forecasts may be for volumes that are regulated or influenced by diversions and water management.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Water Supply Forecasts
May 1, 2025
Forecast Exceedance Probabilities
Forecast Point
Forecast Period
<------- Drier ------- Future Conditions ------- Wetter ------->
Labels on chart represent volumes of water expressed as percent of median (1991-2020 period).
Marlette Ck nr Carson City
May-Jun
-13%
53%
100%
147%
213%
0%
20%
40%
60%
80%
100%
120%
140%
160%
180%
200%
220%
Percent of Median (1991-2020)
Legend
95% or 90% Exceedance
70% Exceedance
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There is a 95%/90% chance that flows will exceed this volume
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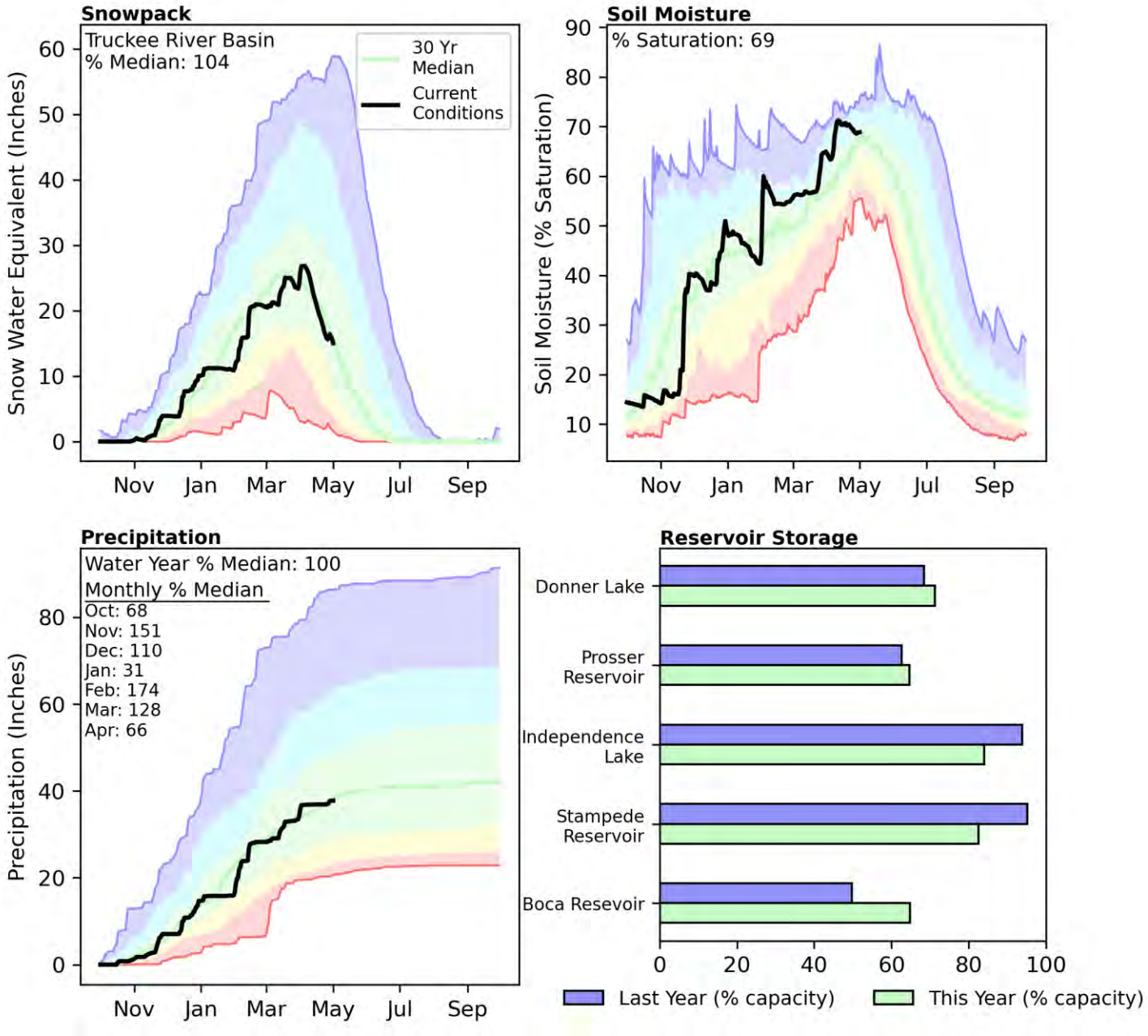
1991-2020 Normal Streamflow KAF
Observed Streamflow KAF
Period of Record Maximum Streamflow KAF (Year)
Some forecasts may be for volumes that are regulated or influenced by diversions and water management.

Truckee River Basin | May 1, 2025

Snowpack in the Truckee River Basin is about normal at 104% of median, compared to 105% at this time last year. Precipitation in April was well below normal at 66%, which brings the seasonal accumulation (October-April) to 100% of median. Soil moisture is at 69% saturation compared to 74% saturation last year. Reservoir storage is 86% of capacity, compared to 67% last year.



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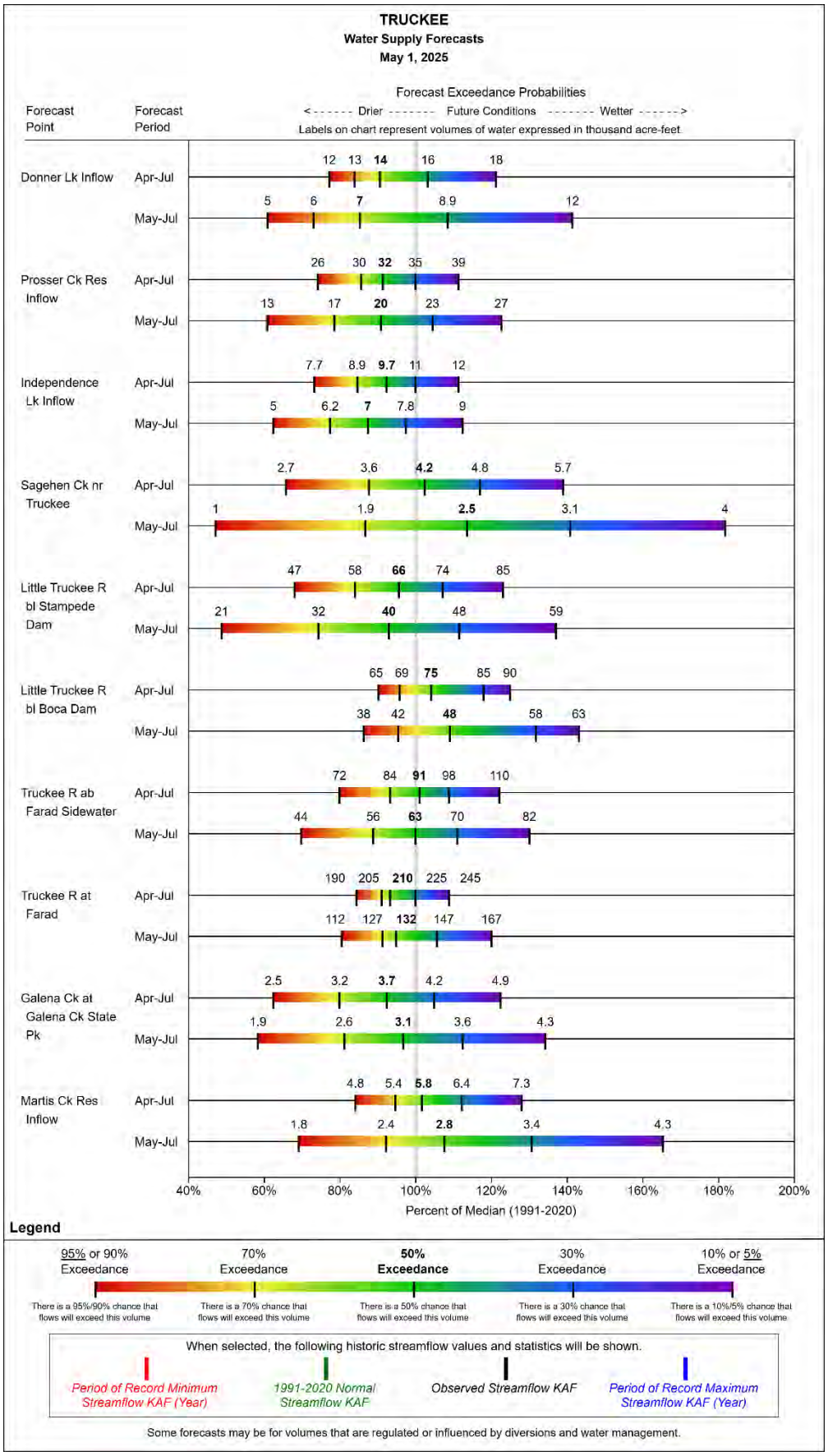
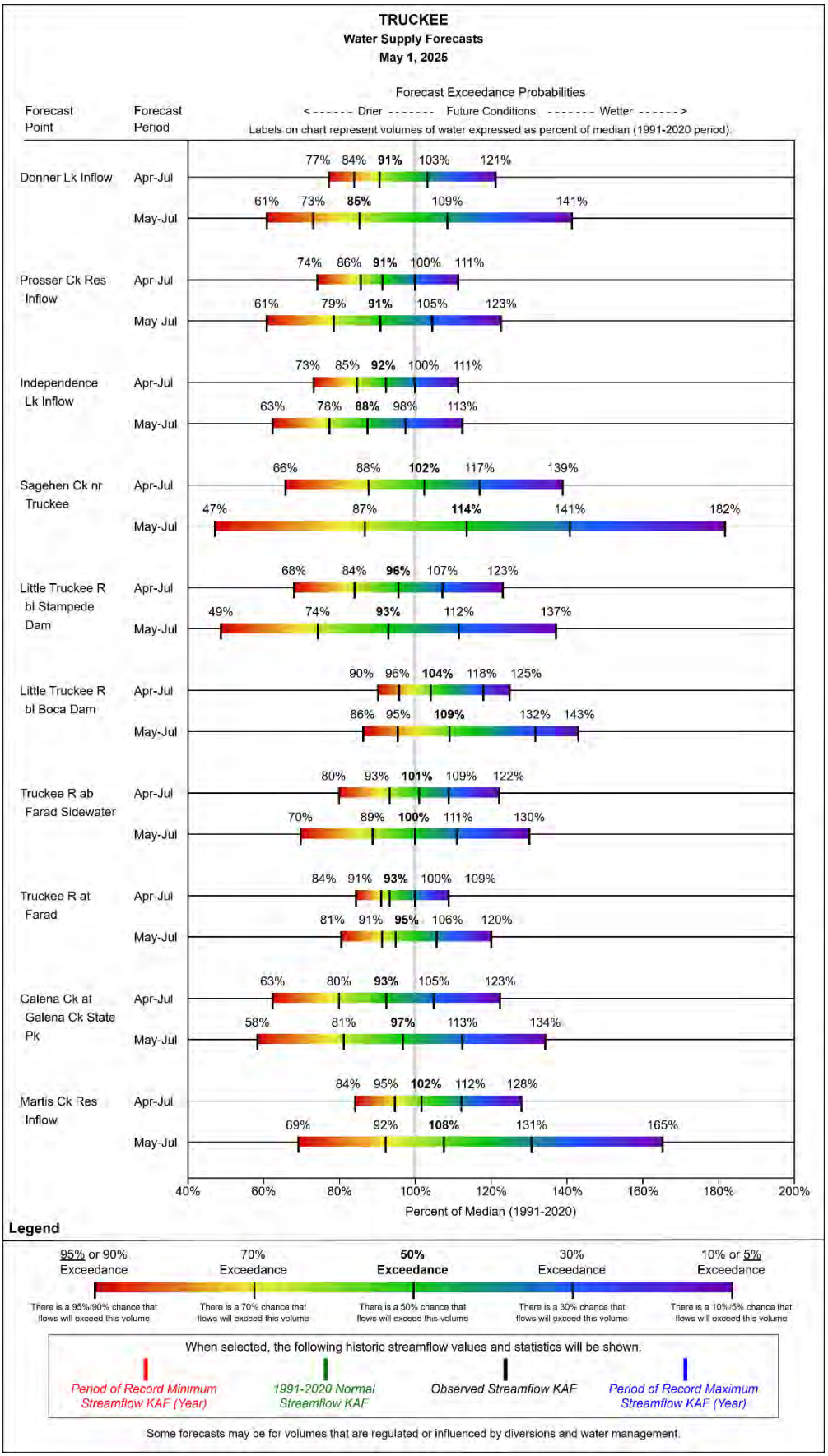
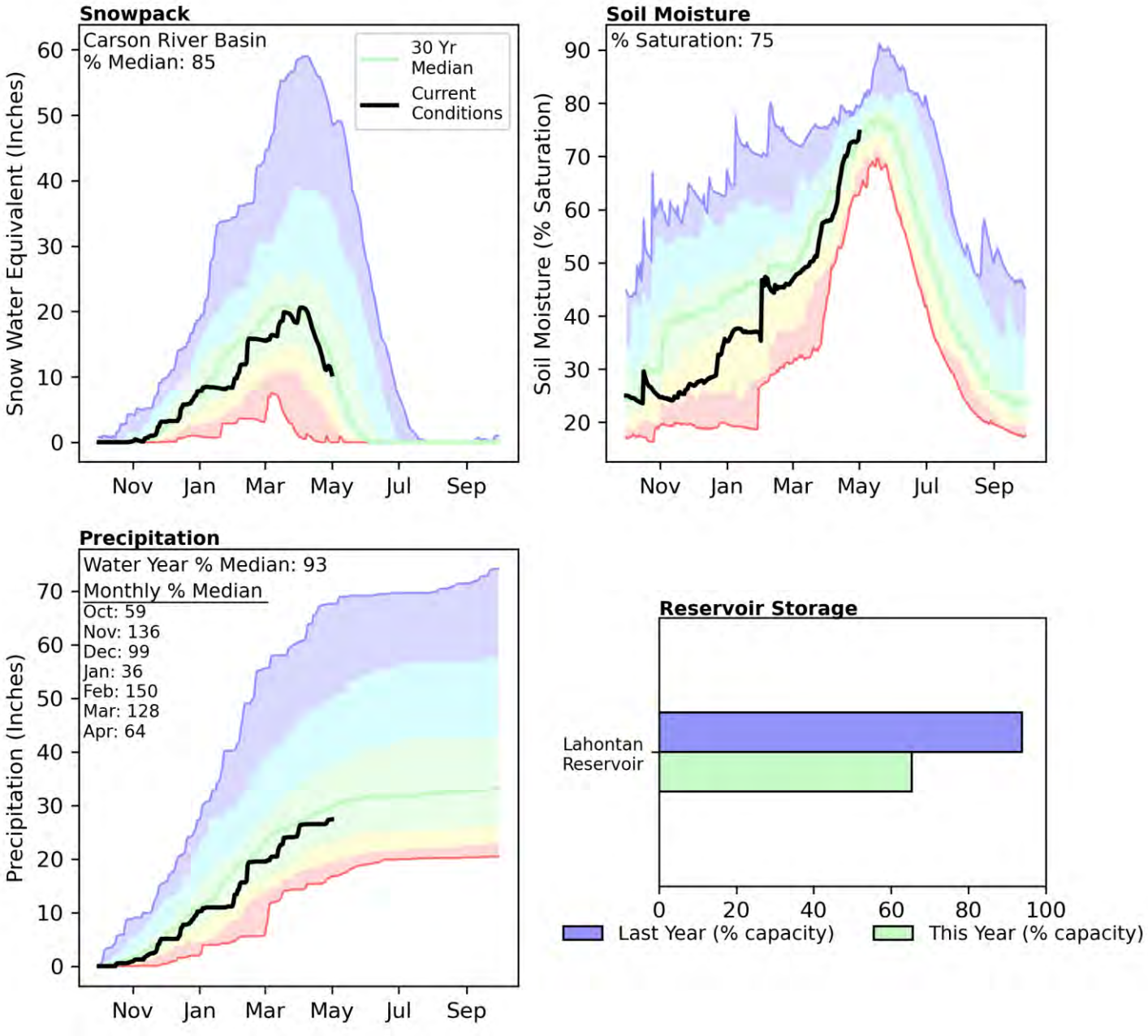

TRUCKEE
Water Supply Forecasts
May 1, 2025
Forecast Exceedance Probabilities
Forecast Point
Forecast Period
<------- Drier -------- Future Conditions -------- Wetter ------>
Labels on chart represent volumes of water expressed in thousand acre-feet
Donner Lk Inflow
Apr-Jul
12 13 14 16 18
May-Jul
5 6 7 8.9 12
Prosser Ck Res Inflow
Apr-Jul
26 30 32 35 39
May-Jul
13 17 20 23 27
Independence Lk Inflow
Apr-Jul
7.7 8.9 9.7 11 12
May-Jul
5 6.2 7 7.8 9
Sagehen Ck nr Truckee
Apr-Jul
2.7 3.6 4.2 4.8 5.7
May-Jul
1 1.9 2.5 3.1 4
Little Truckee R bl Stampede Dam
Apr-Jul
47 58 66 74 85
May-Jul
21 32 40 48 59
Little Truckee R bl Boca Dam
Apr-Jul
65 69 75 85 90
May-Jul
38 42 48 58 63
Truckee R ab Farad Sidewater
Apr-Jul
72 84 91 98 110
May-Jul
44 56 63 70 82
Truckee R at Farad
Apr-Jul
190 205 210 225 245
May-Jul
112 127 132 147 167
Galena Ck at Galena Ck State Pk
Apr-Jul
2.5 3.2 3.7 4.2 4.9
May-Jul
1.9 2.6 3.1 3.6 4.3
Martis Ck Res Inflow
Apr-Jul
4.8 5.4 5.8 6.4 7.3
May-Jul
1.8 2.4 2.8 3.4 4.3
40% 60% 80% 100% 120% 140% 160% 180% 200%
Percent of Median (1991-2020)
Legend
95% or 90% Exceedance
There is a 95%/90% chance that flows will exceed this volume
70% Exceedance
There is a 70% chance that flows will exceed this volume
50% Exceedance
There is a 50% chance that flows will exceed this volume
30% Exceedance
There is a 30% chance that flows will exceed this volume
10% or 5% Exceedance
There is a 10%/5% chance that flows will exceed this volume
When selected, the following historic streamflow values and statistics will be shown.
Period of Record Minimum Streamflow KAF (Year)
1991-2020 Normal Streamflow KAF
Observed Streamflow KAF
Period of Record Maximum Streamflow KAF (Year)
Some forecasts may be for volumes that are regulated or influenced by diversions and water management.


TRUCKEE
Water Supply Forecasts
May 1, 2025
Forecast Exceedance Probabilities
Forecast Point
Forecast Period
<------- Drier ------- Future Conditions ------- Wetter ------>
Labels on chart represent volumes of water expressed as percent of median (1991-2020 period)
Donner Lk Inflow Apr-Jul 77% 84% 91% 103% 121%
May-Jul 61% 73% 85% 109% 141%
Prosser Ck Res Inflow Apr-Jul 74% 86% 91% 100% 111%
May-Jul 61% 79% 91% 105% 123%
Independence Lk Inflow Apr-Jul 73% 85% 92% 100% 111%
May-Jul 63% 78% 88% 98% 113%
Sagehen Ck nr Truckee Apr-Jul 66% 88% 102% 117% 139%
May-Jul 47% 87% 114% 141% 182%
Little Truckee R bl Stampede Dam Apr-Jul 68% 84% 96% 107% 123%
May-Jul 49% 74% 93% 112% 137%
Little Truckee R bl Boca Dam Apr-Jul 90% 96% 104% 118% 125%
May-Jul 86% 95% 109% 132% 143%
Truckee R ab Farad Sidewater Apr-Jul 80% 93% 101% 109% 122%
May-Jul 70% 89% 100% 111% 130%
Truckee R at Farad Apr-Jul 84% 91% 93% 100% 109%
May-Jul 81% 91% 95% 106% 120%
Galena Ck at Galena Ck State Pk Apr-Jul 63% 80% 93% 105% 123%
May-Jul 58% 81% 97% 113% 134%
Martis Ck Res Inflow Apr-Jul 84% 95% 102% 112% 128%
May-Jul 69% 92% 108% 131% 165%
40% 60% 80% 100% 120% 140% 160% 180% 200%
Percent of Median (1991-2020)
Legend
95% or 90% Exceedance
70% Exceedance
50% Exceedance
30% Exceedance
10% or 5% Exceedance
There is a 95%/90% chance that flows will exceed this volume
There is a 70% chance that flows will exceed this volume
There is a 50% chance that flows will exceed this volume
There is a 30% chance that flows will exceed this volume
There is a 10%/5% chance that flows will exceed this volume
When selected, the following historic streamflow values and statistics will be shown.
Period of Record Minimum Streamflow KAF (Year)
1991-2020 Normal Streamflow KAF
Observed Streamflow KAF
Period of Record Maximum Streamflow KAF (Year)
Some forecasts may be for volumes that are regulated or influenced by diversions and water management.

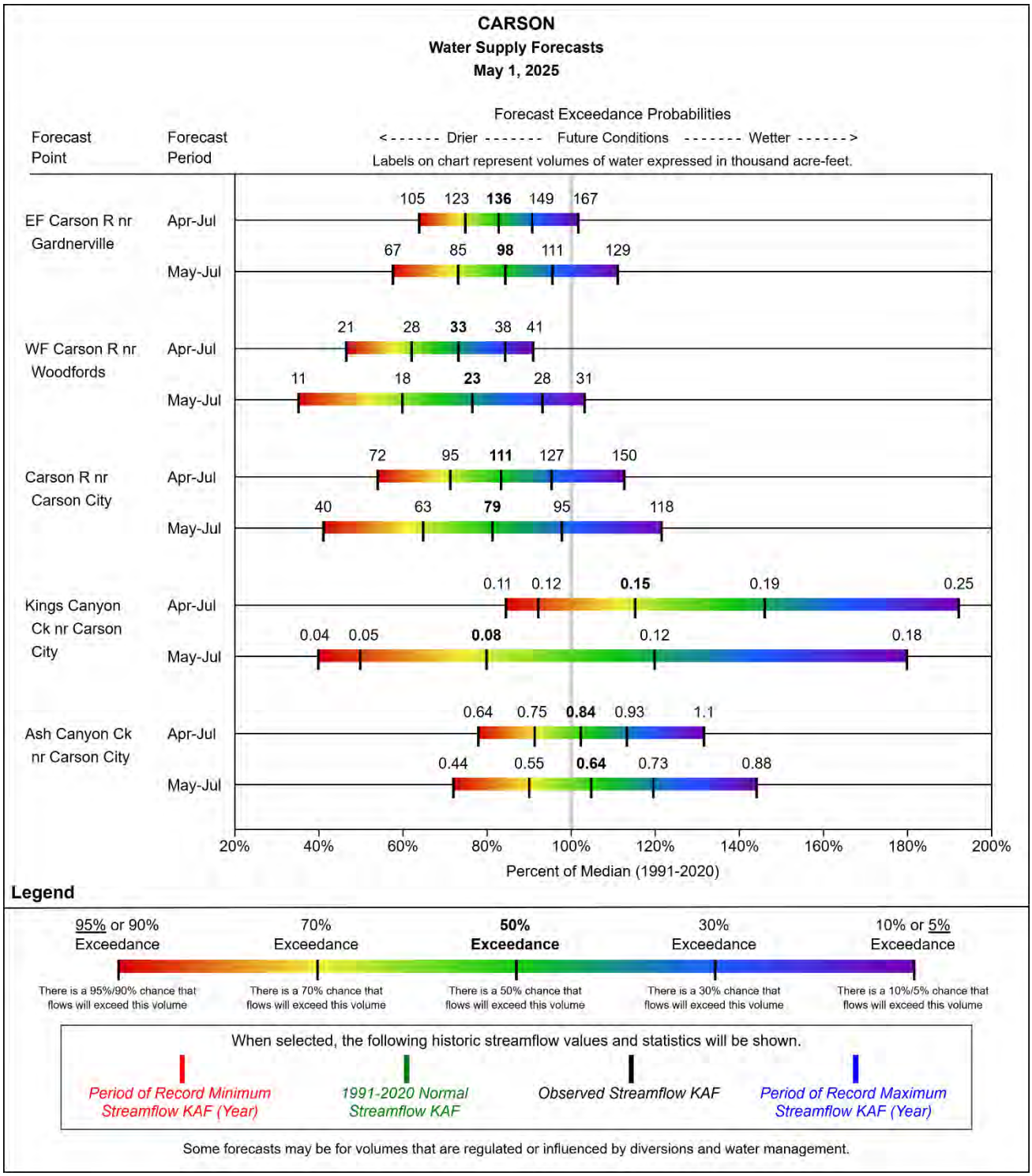
Carson River Basin | May 1, 2025

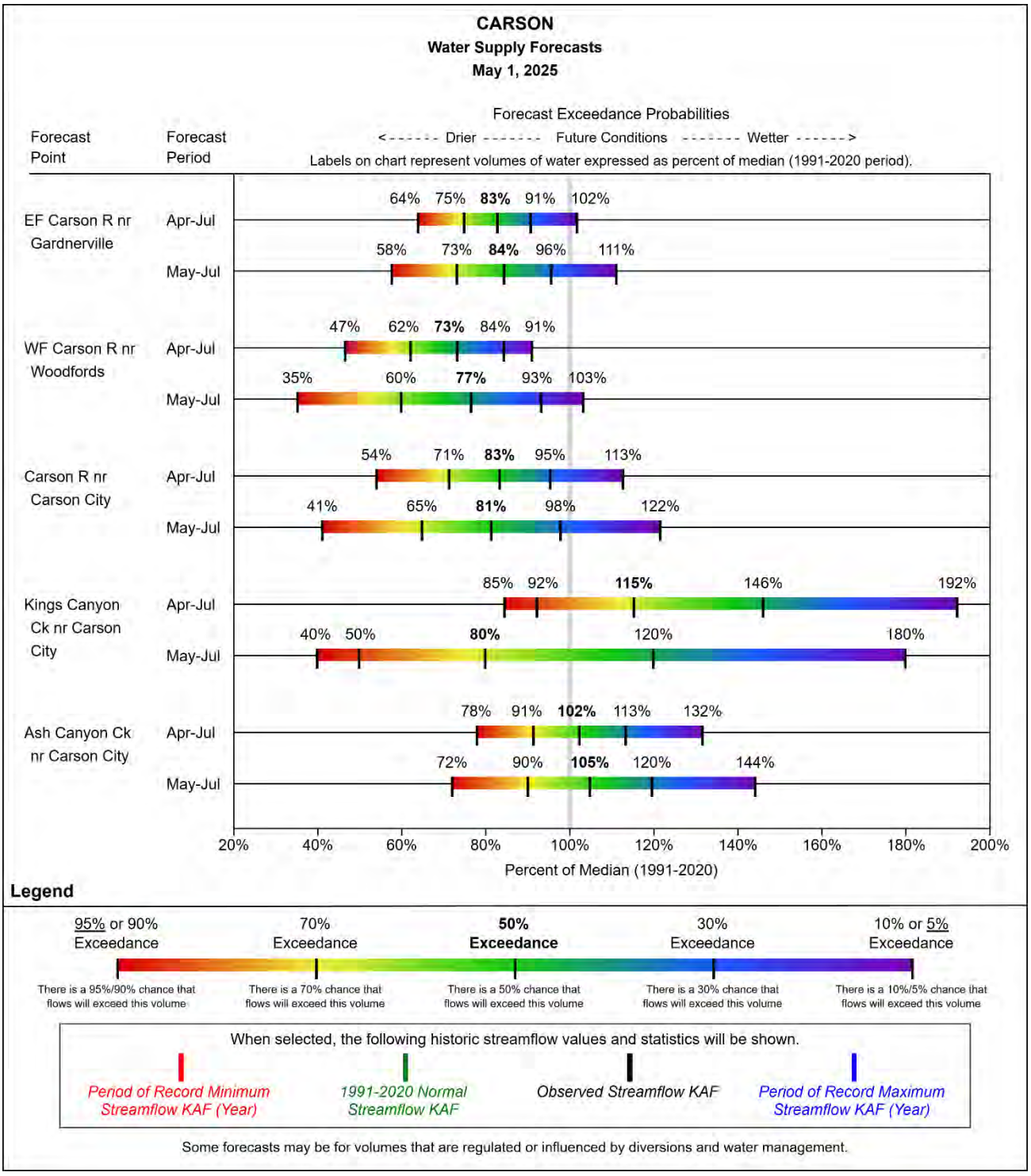
Snowpack in the Carson River Basin is below normal at 85% of median, compared to 118% at this time last year. Precipitation in April was well below normal at 64%, which brings the seasonal accumulation (October-April) to 93% of median. Soil moisture is at 75% saturation compared to 76% saturation last year. Reservoir storage is 91% of capacity, compared to 24% last year.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: 30 year normal calculation description

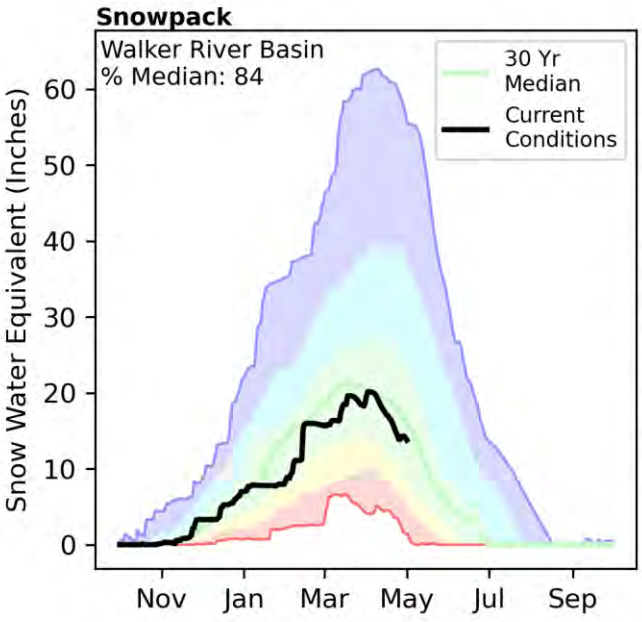
Important Information about Forecast Coordination: Hydrologists with the NRCS and National Weather Service California Nevada River Forecast Center (CNRFC) coordinate Lake Tahoe Rise, Truckee River at Farad, Little Truckee River near Boca, and the Carson River at Ft. Churchill forecasts (following page) using output of their respective hydrology models at the request of the Bureau of Reclamation. The NRCS model is a statistical model based on the current data as of the first of each month. The CNRFC ensemble forecasting system incorporates near-term weather prediction and climatology into their model. These models can provide different answers because of the nature of the model systems, and from the inclusion of future weather in the CNRFC model. The hydrologists agree on forecast values using guidance from both models to best provide an accurate water supply forecast for these points.

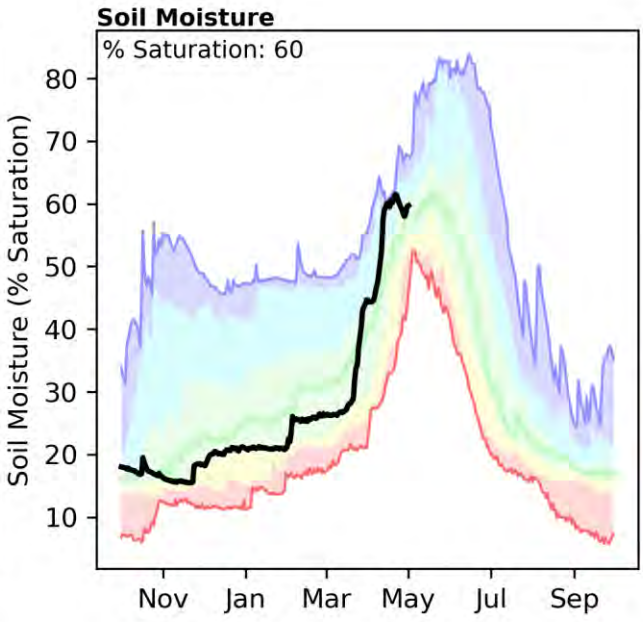

CARSON
Water Supply Forecasts
May 1, 2025
Forecast Exceedance Probabilities
Forecast Point
Forecast Period
<------- Drier -------- Future Conditions -------- Wetter ------->
Labels on chart represent volumes of water expressed in thousand acre-feet.
EF Carson R nr Gardnerville
Apr-Jul
105 123 136 149 167
May-Jul
67 85 98 111 129
WF Carson R nr Woodfords
Apr-Jul
21 28 33 38 41
May-Jul
11 18 23 28 31
Carson R nr Carson City
Apr-Jul
72 95 111 127 150
May-Jul
40 63 79 95 118
Kings Canyon Ck nr Carson City
Apr-Jul
0.11 0.12 0.15 0.19 0.25
May-Jul
0.04 0.05 0.08 0.12 0.18
Ash Canyon Ck nr Carson City
Apr-Jul
0.64 0.75 0.84 0.93 1.1
May-Jul
0.44 0.55 0.64 0.73 0.88
20% 40% 60% 80% 100% 120% 140% 160% 180% 200%
Percent of Median (1991-2020)
Legend
95% or 90% Exceedance
70% Exceedance
50% Exceedance
30% Exceedance
10% or 5% Exceedance
There is a 95%/90% chance that flows will exceed this volume
There is a 70% chance that flows will exceed this volume
There is a 50% chance that flows will exceed this volume
There is a 30% chance that flows will exceed this volume
There is a 10%/5% chance that flows will exceed this volume
When selected, the following historic streamflow values and statistics will be shown.
Period of Record Minimum Streamflow KAF (Year)
1991-2020 Normal Streamflow KAF
Observed Streamflow KAF
Period of Record Maximum Streamflow KAF (Year)
Some forecasts may be for volumes that are regulated or influenced by diversions and water management.

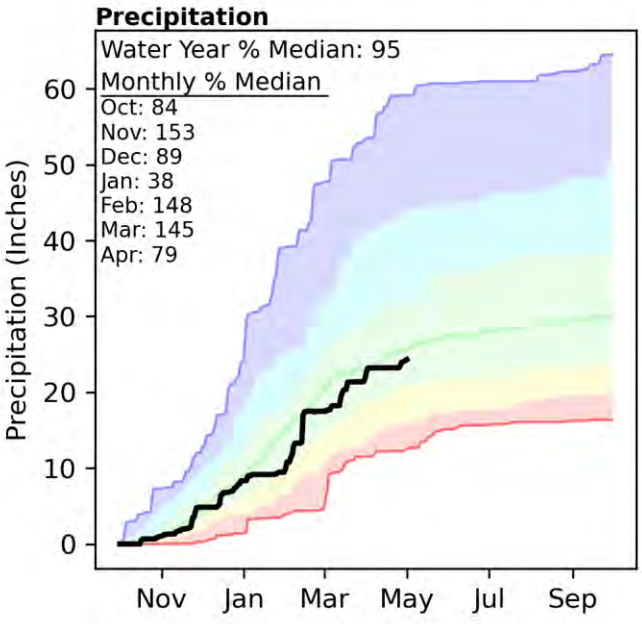

CARSON
Water Supply Forecasts
May 1, 2025
Forecast Exceedance Probabilities
Forecast Point
Forecast Period
<------ Drier ------- Future Conditions ------- Wetter ------>
Labels on chart represent volumes of water expressed as percent of median (1991-2020 period).
EF Carson R nr Gardnerville
Apr-Jul
64% 75% 83% 91% 102%
May-Jul
58% 73% 84% 96% 111%
WF Carson R nr Woodfords
Apr-Jul
47% 62% 73% 84% 91%
May-Jul
35% 60% 77% 93% 103%
Carson R nr Carson City
Apr-Jul
54% 71% 83% 95% 113%
May-Jul
41% 65% 81% 98% 122%
Kings Canyon Ck nr Carson City
Apr-Jul
85% 92% 115% 146% 192%
May-Jul
40% 50% 80% 120% 180%
Ash Canyon Ck nr Carson City
Apr-Jul
78% 91% 102% 113% 132%
May-Jul
72% 90% 105% 120% 144%
20% 40% 60% 80% 100% 120% 140% 160% 180% 200%
Percent of Median (1991-2020)
Legend
95% or 90% Exceedance
There is a 95%/90% chance that flows will exceed this volume
70% Exceedance
There is a 70% chance that flows will exceed this volume
50% Exceedance
There is a 50% chance that flows will exceed this volume
30% Exceedance
There is a 30% chance that flows will exceed this volume
10% or 5% Exceedance
There is a 10%/5% chance that flows will exceed this volume
When selected, the following historic streamflow values and statistics will be shown.
Period of Record Minimum Streamflow KAF (Year)
1991-2020 Normal Streamflow KAF
Observed Streamflow KAF
Period of Record Maximum Streamflow KAF (Year)
Some forecasts may be for volumes that are regulated or influenced by diversions and water management.

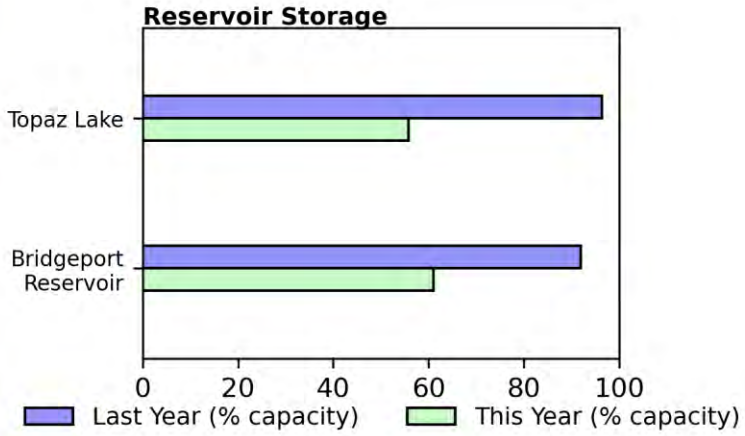
Walker River Basin | May 1, 2025

Snowpack in the Walker River Basin is below normal at 84% of median, compared to 104% at this time last year. Precipitation in April was below normal at 79%, which brings the seasonal accumulation (October-April) to 95% of median. Soil moisture is at 60% saturation compared to 68% saturation last year. Reservoir storage is 95% of capacity, compared to 17% last year.

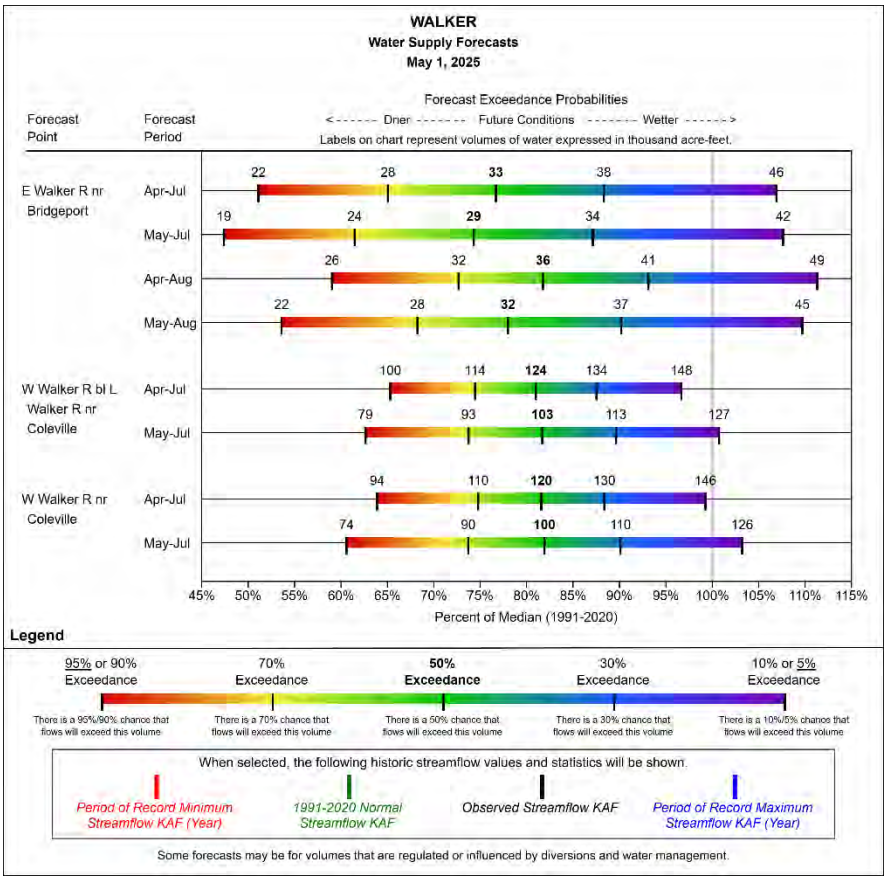


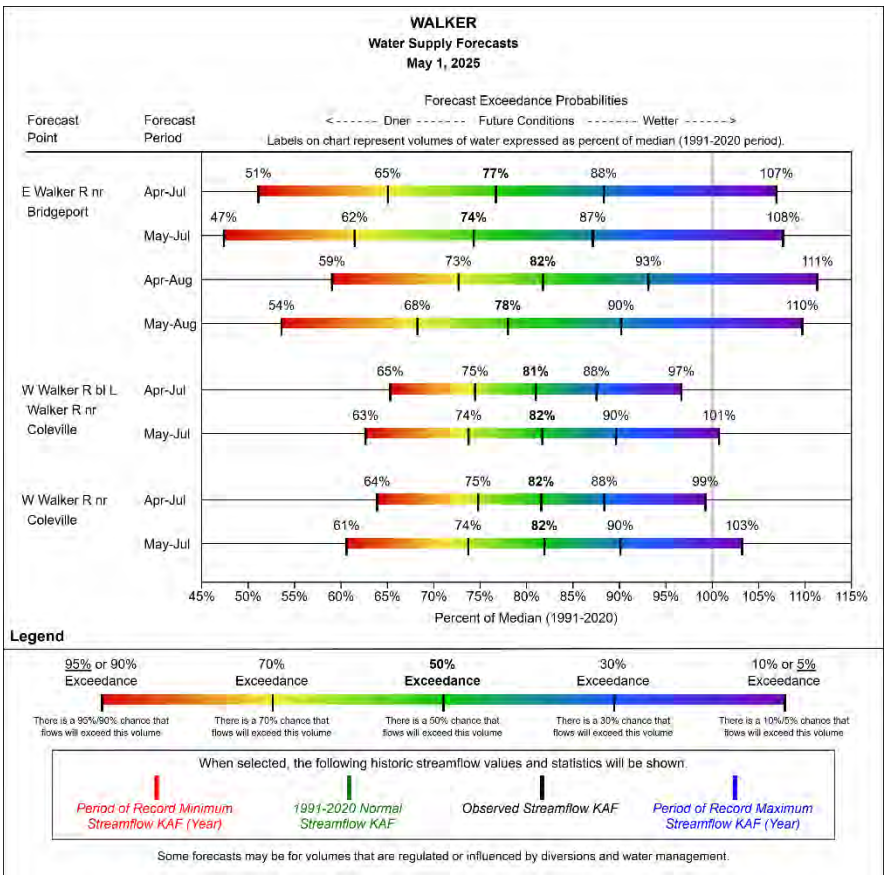






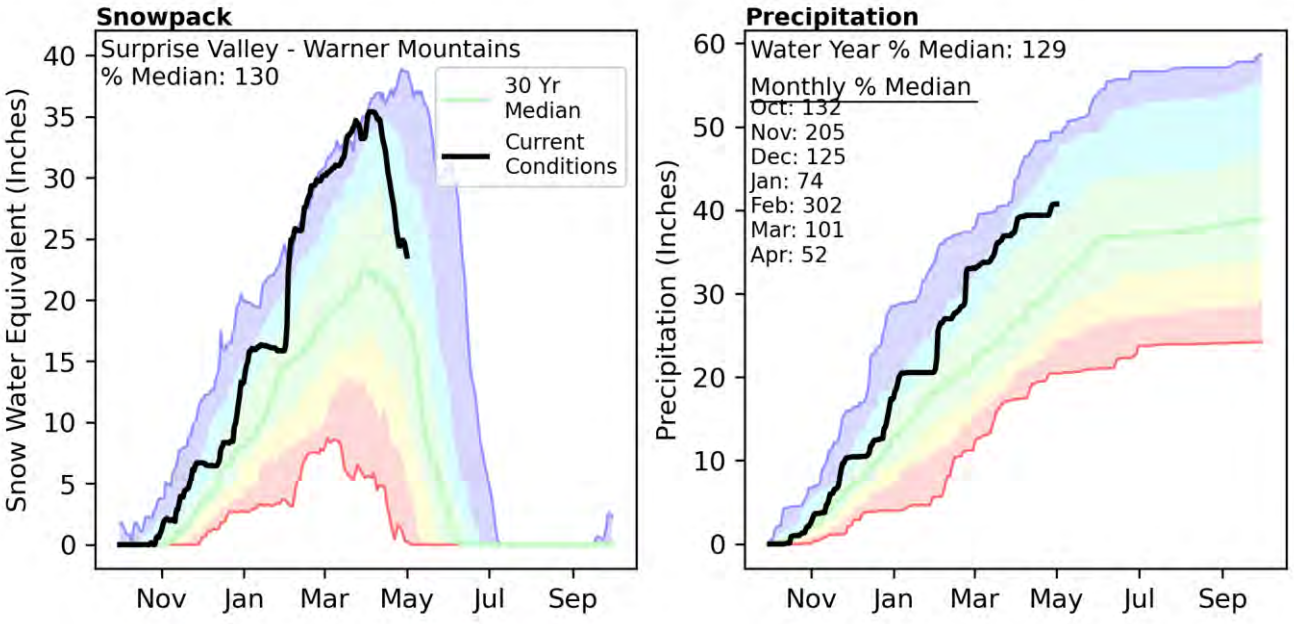
Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: 30 year normal calculation description


WALKER
Water Supply Forecasts
May 1, 2025
Forecast Exceedance Probabilities
Forecast Point
Forecast Period
<------ Drier ------- Future Conditions ------- Wetter ------>
Labels on chart represent volumes of water expressed in thousand acre-feet.
E Walker R nr Bridgeport
Apr-Jul 22 28 33 38 46
May-Jul 19 24 29 34 42
Apr-Aug 26 32 36 41 49
May-Aug 22 28 32 37 45
W Walker R bl L Walker R nr Coleville
Apr-Jul 100 114 124 134 148
May-Jul 79 93 103 113 127
W Walker R nr Coleville
Apr-Jul 94 110 120 130 146
May-Jul 74 90 100 110 126
45% 50% 55% 60% 65% 70% 75% 80% 85% 90% 95% 100% 105% 110% 115%
Percent of Median (1991-2020)
Legend
95% or 90% Exceedance
There is a 95%/90% chance that flows will exceed this volume
70% Exceedance
There is a 70% chance that flows will exceed this volume
50% Exceedance
There is a 50% chance that flows will exceed this volume
30% Exceedance
There is a 30% chance that flows will exceed this volume
10% or 5% Exceedance
There is a 10%/5% chance that flows will exceed this volume
When selected, the following historic streamflow values and statistics will be shown:
Period of Record Minimum Streamflow KAF (Year)
1991-2020 Normal Streamflow KAF
Observed Streamflow KAF
Period of Record Maximum Streamflow KAF (Year)
Some forecasts may be for volumes that are regulated or influenced by diversions and water management.


WALKER
Water Supply Forecasts
May 1, 2025
Forecast Exceedance Probabilities
Forecast Point
Forecast Period
<------ Drier ------- Future Conditions ------- Wetter ------>
Labels on chart represent volumes of water expressed as percent of median (1991-2020 period).
E Walker R nr Bridgeport
Apr-Jul 51% 65% 77% 88% 107%
May-Jul 47% 62% 74% 87% 108%
Apr-Aug 59% 73% 82% 93% 111%
May-Aug 54% 68% 78% 90% 110%
W Walker R bl L Walker R nr Coleville
Apr-Jul 65% 75% 81% 88% 97%
May-Jul 63% 74% 82% 90% 101%
W Walker R nr Coleville
Apr-Jul 64% 75% 82% 88% 99%
May-Jul 61% 74% 82% 90% 103%
45% 50% 55% 60% 65% 70% 75% 80% 85% 90% 95% 100% 105% 110% 115%
Percent of Median (1991-2020)
Legend
95% or 90% Exceedance
There is a 95%/90% chance that flows will exceed this volume
70% Exceedance
There is a 70% chance that flows will exceed this volume
50% Exceedance
There is a 50% chance that flows will exceed this volume
30% Exceedance
There is a 30% chance that flows will exceed this volume
10% or 5% Exceedance
There is a 10%/5% chance that flows will exceed this volume
When selected, the following historic streamflow values and statistics will be shown:
Period of Record Minimum Streamflow KAF (Year)
1991-2020 Normal Streamflow KAF
Observed Streamflow KAF
Period of Record Maximum Streamflow KAF (Year)
Some forecasts may be for volumes that are regulated or influenced by diversions and water management.

Surprise Valley - Warner Mountains | May 1, 2025

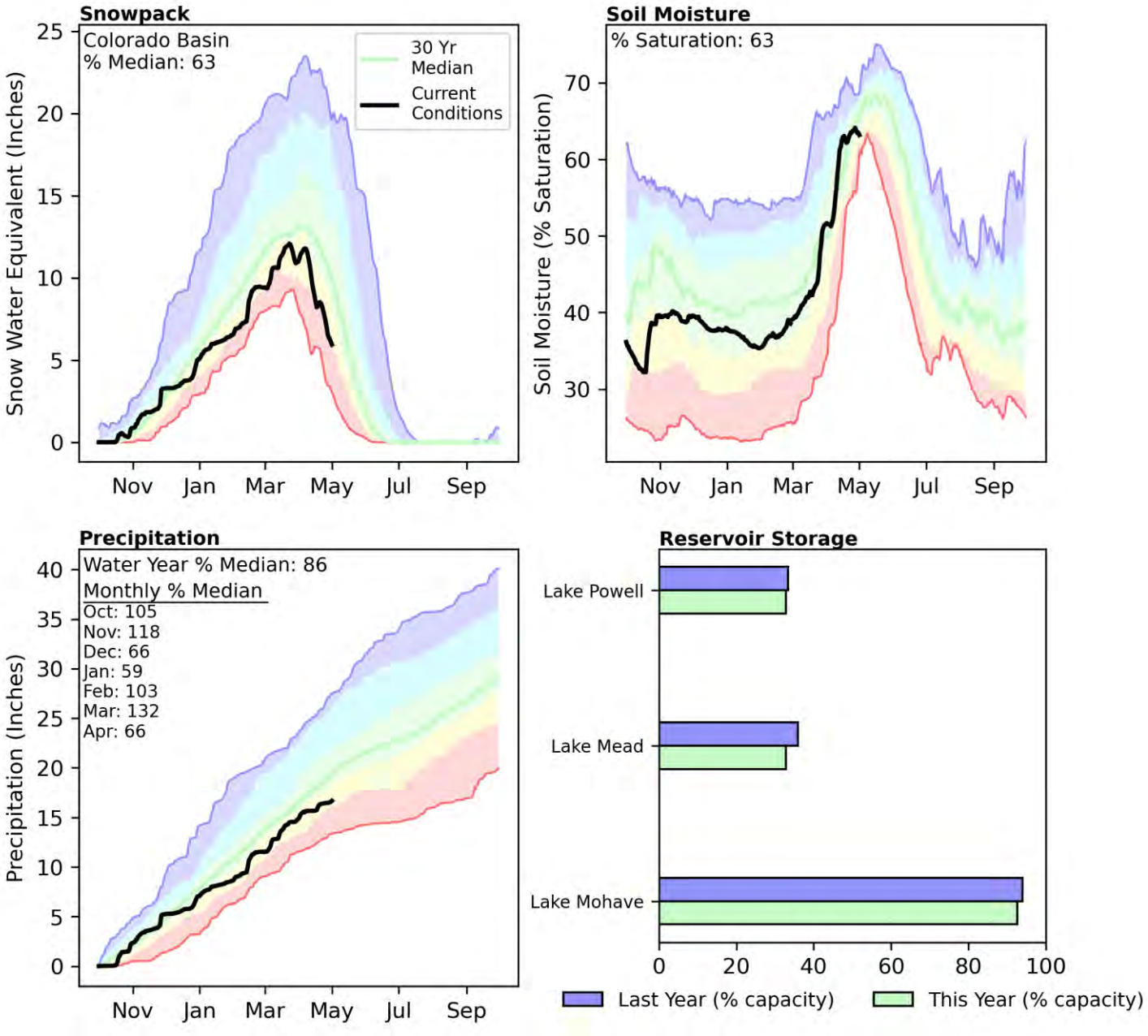
Snowpack in the Surprise Valley - Warner Mountains is well above normal at 130% of median, compared to 123% at this time last year. Precipitation in April was well below normal at 52%, which brings the seasonal accumulation (October-April) to 129% of median.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: 30 year normal calculation description

Colorado Basin | May 1, 2025

Snowpack in the Colorado Basin is well below normal at 63% of median, compared to 92% at this time last year. Precipitation in April was well below normal at 66%, which brings the seasonal accumulation (October-April) to 86% of median. Soil moisture is at 63% saturation compared to 68% saturation last year. Reservoir storage is 34% of capacity, compared to 36% last year.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: 30 year normal calculation description

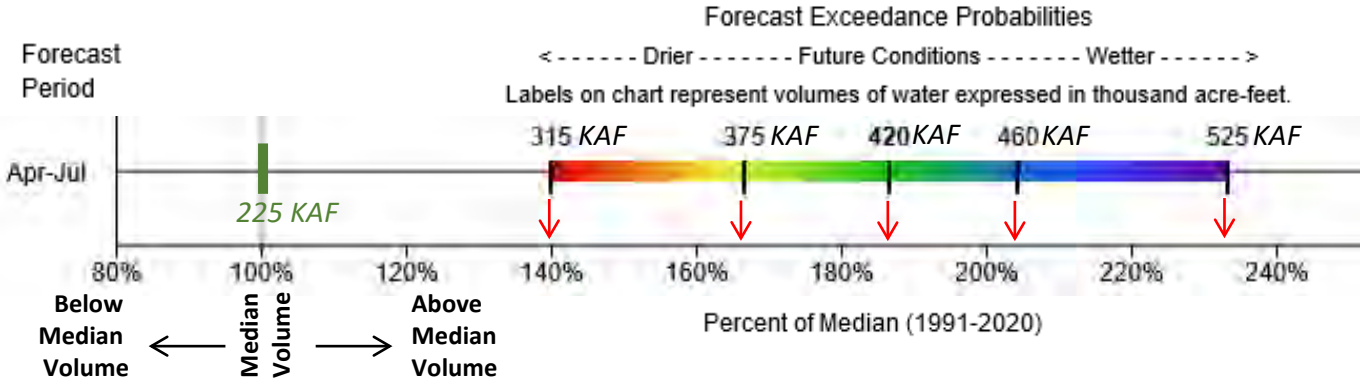
Appendix: Interpreting the Streamflow Forecast Chart

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Median	30% (KAF)	10% (KAF)	30yr Median (KAF)
APR-JUL	315	375	420	187%	460	525	225

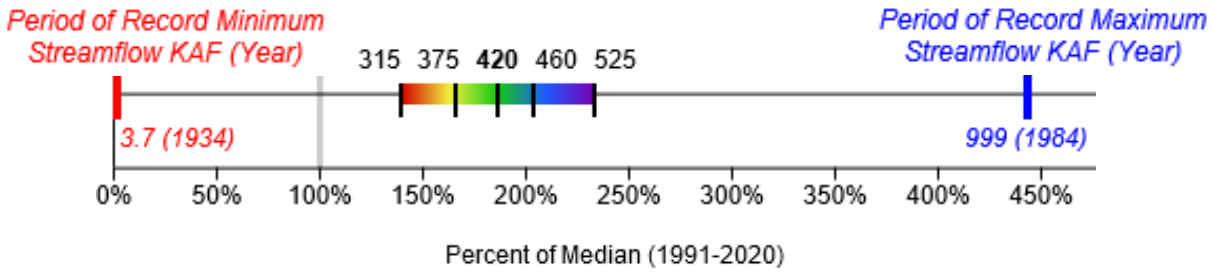
The Forecast Chart (below) provides an alternative to the tables (above) used in the basin summaries. The chart displays the forecast exceedance range as a colored bar. The vertical lines on the bar signify the five forecast exceedances.

The numbers above the forecast bar are the five exceedance probability volumes in thousand acre-feet (KAF). Each exceedance forecast's percent of median can be estimated by looking at the horizontal axis. The green line and number centered above 100% on the horizontal axis represents the 1981-2010 historical median streamflow for the forecast period in KAF.



In the example above, the entire forecast bar is shifted right of the green bar indicating a forecast for above the median Apr-Jul streamflow of 225KAF. The 50% exceedance is represented by the black line in the green portion of the colored bar. This represents a forecast volume of 420KAF which is ~185% of median. If drier than normal future conditions occur the 70% exceedance forecast may be more likely (375KAF or ~165% of median). If future conditions turn wetter than normal, the 30% exceedance forecast may be more likely (460KAF or ~205% of median). Water users are encouraged to consider the range of forecast exceedances instead of relying solely only on the 50% forecast.

In very wet or dry years forecasts may approach historical records. In these cases the period of record minimum or maximum may be displayed. The minimum is represented by a heavy red line, while the maximum is represented by a heavy blue line. The numbers below the red and blue lines represent the volume in KAF and the year it occurred in parentheses.

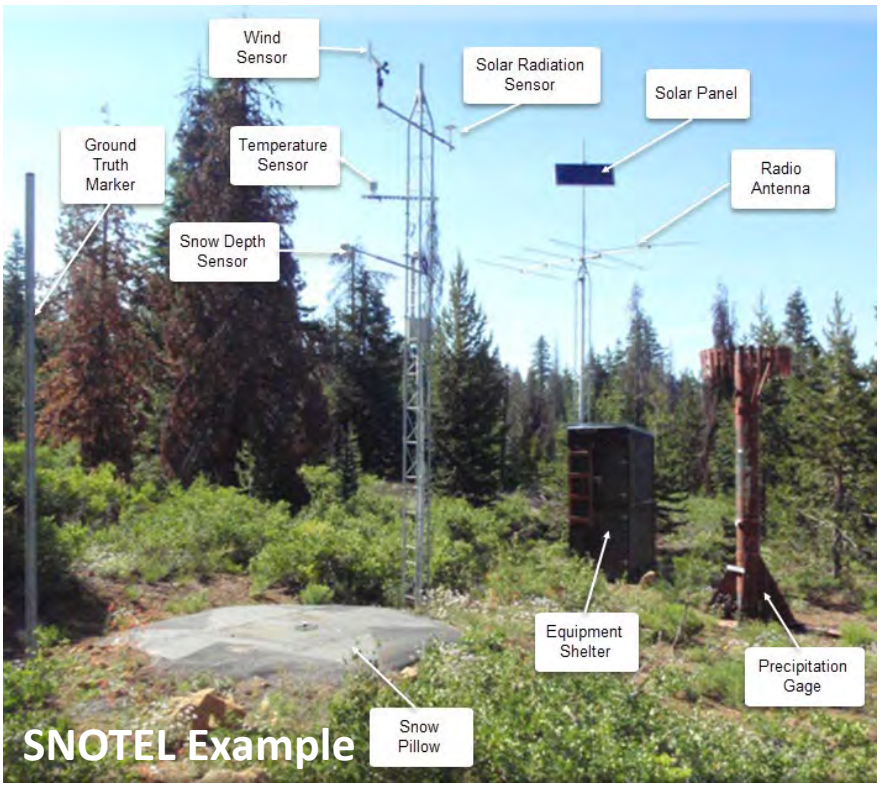


Click here for an online version which allows users to see averages instead of medians, as well as historic forecasts.

Appendix - SNOTEL and Snow Course Overview

SNOTEL

The NRCS operates an extensive, automated data collection network called SNOTEL (short for Snow Telemetry). SNOTEL sites are designed to operate unattended in remote mountain locations. Data are collected and transmitted hourly and available on the internet. Daily data (midnight values) are quality checked by NRCS hydrologists on at least a weekly basis. SNOTEL sites provide snowpack water content data via a pressure-sensing snow pillow. Other data include snow depth, water year precipitation accumulation, air temperature with daily maximums, minimums, and averages, soil moisture and soil temperature at depths of 2, 8 and 20 inches. The earliest NRCS SNOTEL sites have data back to 1981 or a bit earlier.



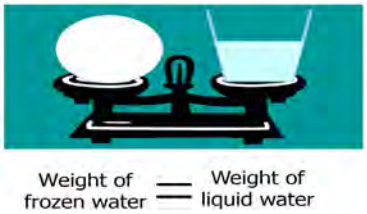
Snow Course

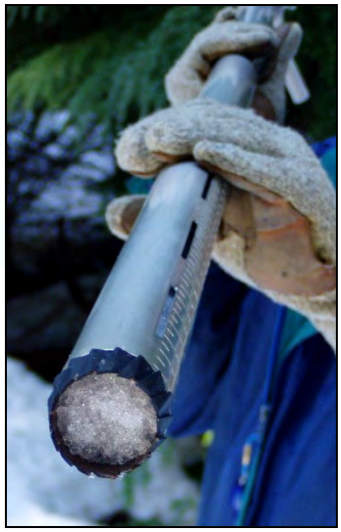
Snow courses are measurement transects where snow tubes are used by snow surveyors during the winter season to determine the depth and water content of the snowpack. Hollow snow tubes are used to vertically core the snowpack. The tubes are then weighed to determine the water content of the snow. Generally, snow courses are situated in meadows or forest openings protected from the wind. A snow course measurement is the average of a number of sample points, typically 5 to 10. Snow courses are measured on a monthly basis typically between February 1 and April 1. Snow courses provide a longer record than SNOTEL. The earliest snow courses in the Lake Tahoe and Truckee basins have data back to 1910.

Snow Water Equivalent (SWE):

Sometimes also called snow water content, this is the amount of water contained within the snowpack. It can be thought of as the depth of water (in inches) that would result if you melted the snowpack. For example, if the snowpack was contained 12 inches of SWE, then when melted there would a puddle of water 12 inches deep on the ground.

SWE measurements made by snow pillows or snow tubes rely on the fact that water weighs the same whether it is liquid or frozen.





Snow core inside snow tubes

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https://www.nrcs.usda.gov/resources/data-and-reports/california-snow-survey

California Water Supply Outlook