

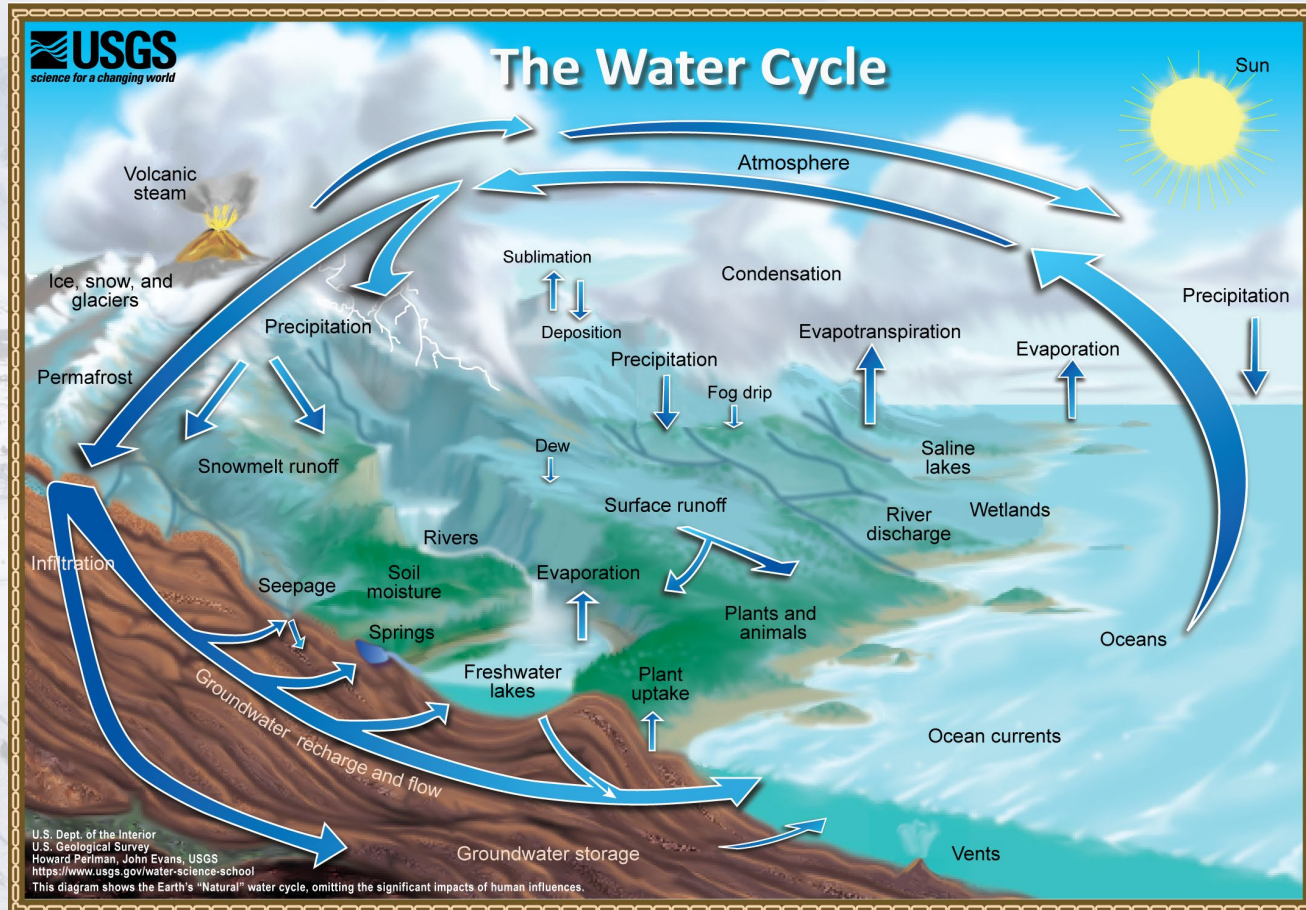
An aerial photograph of a vast, snow-covered mountain range and valley. The mountains in the background are rugged and covered in snow, with some peaks partially obscured by white clouds. The valley below is a wide expanse of snow, with scattered evergreen trees and a winding road. The sky is a clear, pale blue with soft, white clouds. The overall scene is bright and serene, capturing a winter landscape.

Measuring snow

Chad Lamacchia

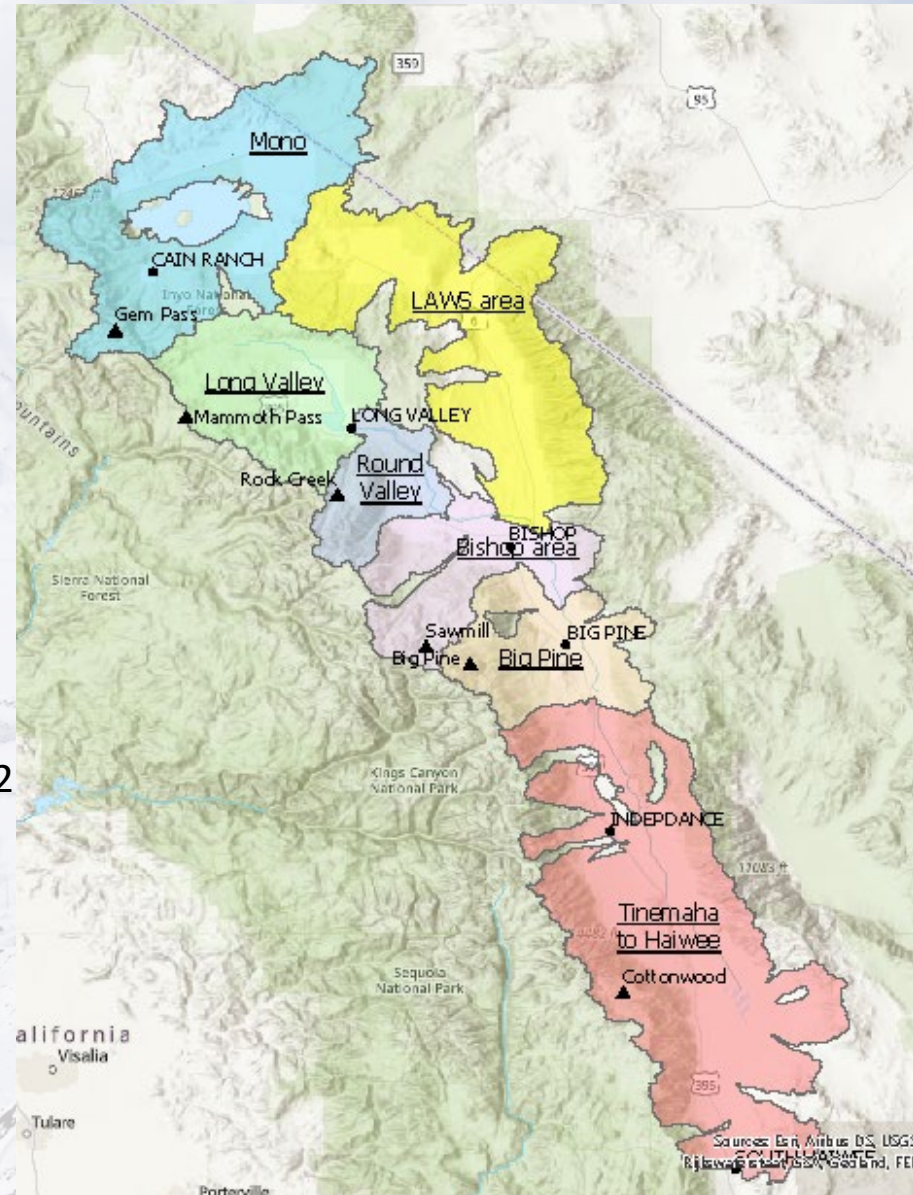
5/2/2026

Hydrologic Cycle



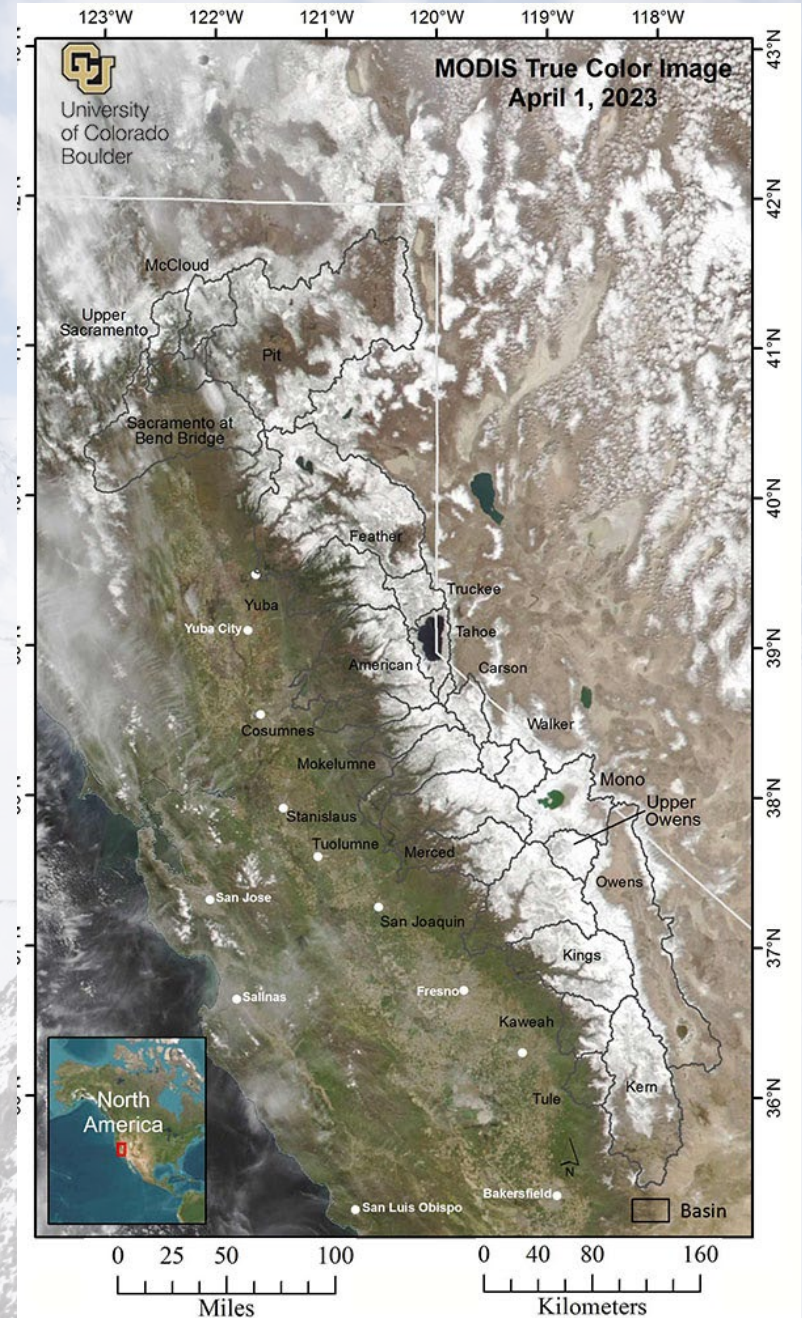
Eastern Sierra Watershed

- Area: 5,900 mi²
- 5 primary sub-basins
 - Long Valley: 613 mi²
 - Round Valley: 290 mi²
 - Bishop area: 487 mi²
 - Big Pine: 475 mi²
 - Tinemaha to Haiwee: 1,753 mi²

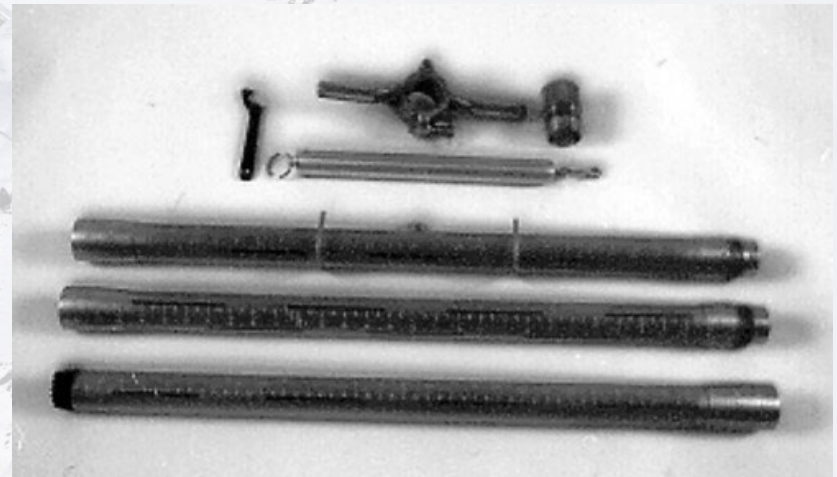


Eastern Sierra Watershed

- Snow-dominated
 - SWE: Snow-Water Equivalent
- 5 primary sub-basins
 - Long Valley: 27%
 - Round Valley: 16%
 - Bishop area: 19%
 - Big Pine: 12%
 - Tinemaha to Haiwee: 24%
- Average Runoff: 405,000 ac-ft



The Father of Snow Science



Measuring the Snow

- Snow Pillows (real-time)
- Snow Surveys (monthly)

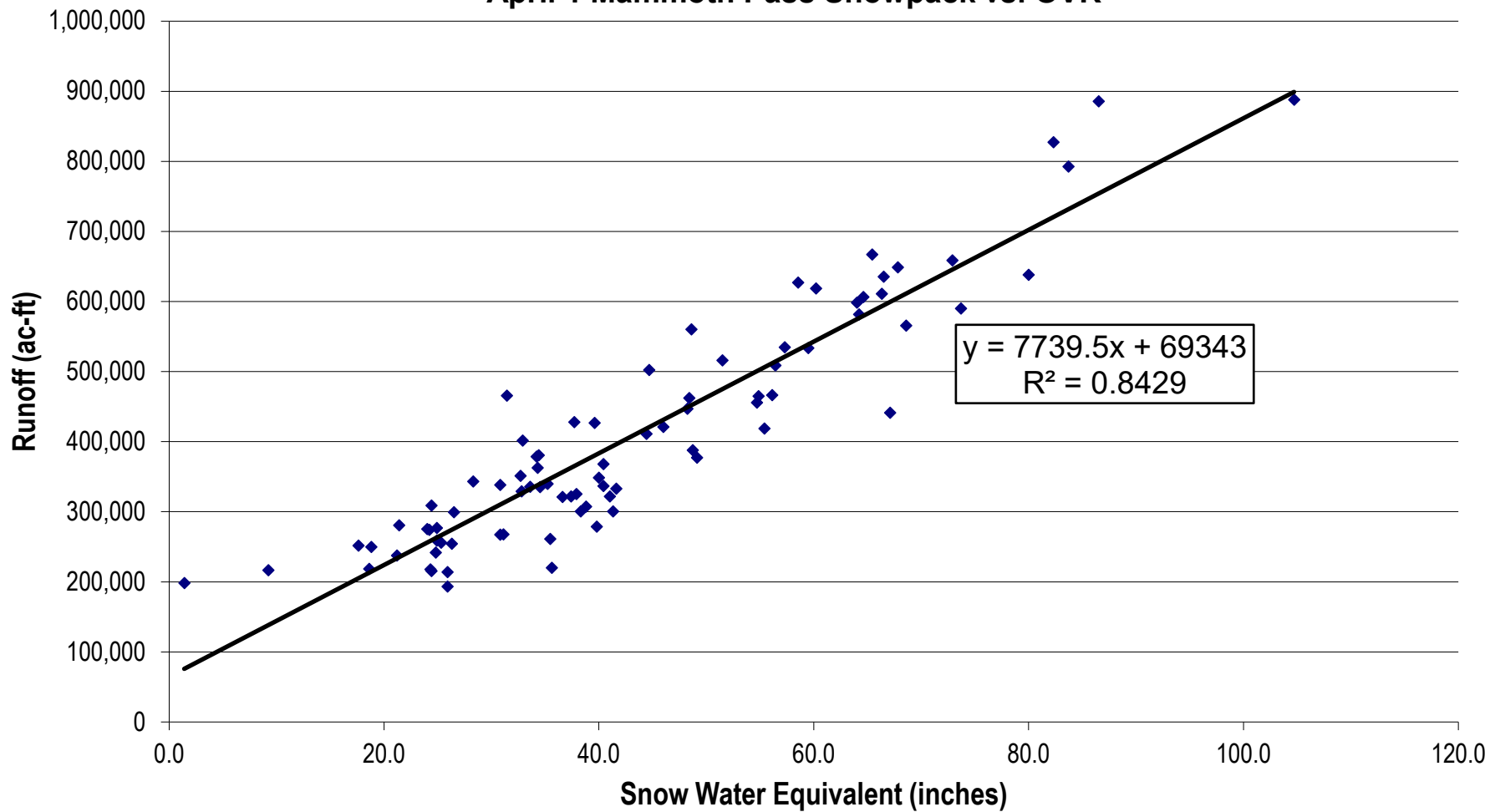


Measuring the Snow





April 1 Mammoth Pass Snowpack vs. OVR

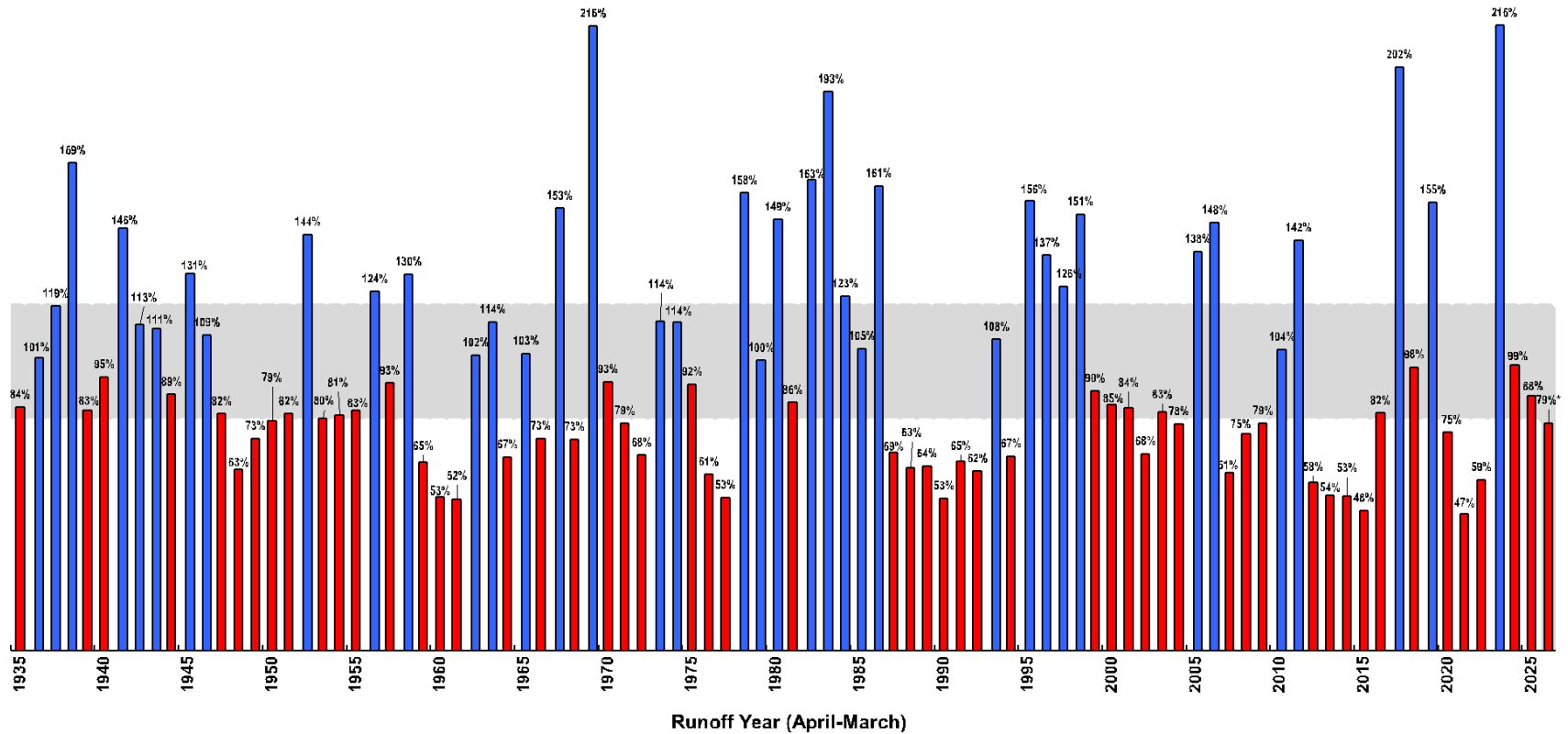


Vastly different conditions



Vastly different conditions

Owens Valley Runoff: Percent of Normal



Avg. Runoff: 409,575 ac-ft

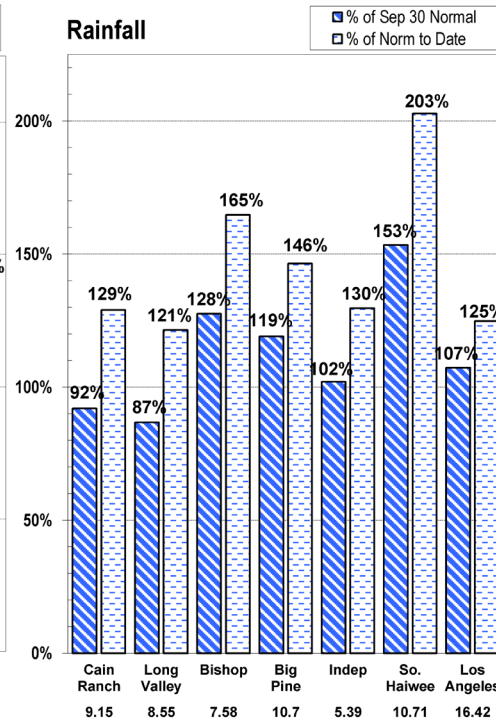
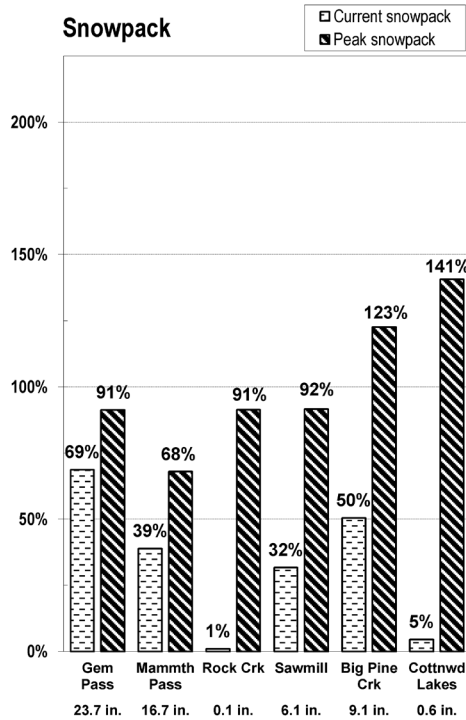
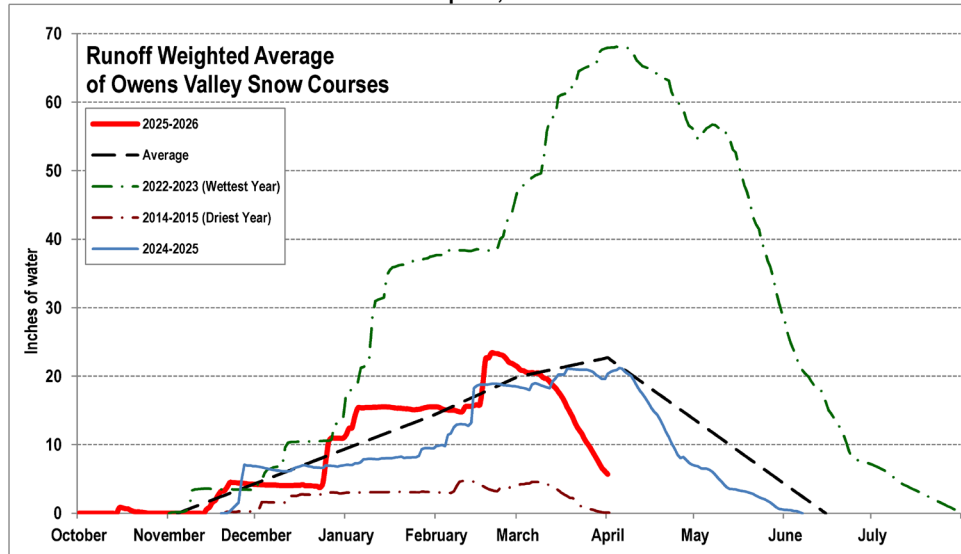
■ = Below Average
53 years 58%

■ = ± 20% of Average
35 years 38%

■ = Above Average
38 years 42%

*Forecasted

EASTERN SIERRA CURRENT PRECIPITATION CONDITIONS April 1, 2026



EASTERN SIERRA SNOW SURVEY RESULTS

April 1, 2026

MAMMOTH LAKES AREA (Contributes 27% of Owens River Basin runoff)

<u>Course</u>	<u>Water Content</u>	<u>April 1 Normal</u>	<u>% of April 1 Normal</u>
Mammoth Pass	16.7	42.8	39%
Mammoth Lakes	2.2	20.2	11%
Minarets 2	5.7	29.4	19%
Average:	8.2	30.8	27%

ROCK CREEK AREA (Contributes 16% of Owens River Basin runoff)

<u>Course</u>	<u>Water Content</u>	<u>April 1 Normal</u>	<u>% of April 1 Normal</u>
Rock Creek 1	0.0	7.4	0%
Rock Creek 2	0.3	10.3	3%
Rock Creek 3	0.1	13.2	1%
Average:	0.1	10.3	1%

BISHOP AREA (Contributes 19% of Owens River Basin runoff)

<u>Course</u>	<u>Water Content</u>	<u>April 1 Normal</u>	<u>% of April 1 Normal</u>
Sawmill	6.1	19.3	32%
Average:	6.1	19.3	32%

BIG PINE AREA (Contributes 13% of Owens River Basin runoff)

<u>Course</u>	<u>Water Content</u>	<u>April 1 Normal</u>	<u>% of April 1 Normal</u>
Big Pine Creek 2	1.9	12.8	15%
Big Pine Creek 3	9.1	18.0	50%
Average:	5.5	15.4	36%

COTTONWOOD AREA (Contributes 25% of Owens Basin River runoff)

<u>Course</u>	<u>Water Content</u>	<u>April 1 Normal</u>	<u>% of April 1 Normal</u>
Cottonwood Lakes 1	0.6	12.6	5%
Trailhead**	1.6	12.8	13%
Average:	1.1	12.7	9%

EASTERN SIERRA OVERALL SNOW PACK (Average of all snow courses)

<u>Average of all Snow Courses</u>	<u>Water Content</u>	<u>April 1 Normal*</u>	<u>% of April 1 Normal</u>
	4.2	17.7	24%

*Normals are based on the 1971-2020 period.

**Trailhead has only been measured since 1982, so the normal is estimated.



**2026 EASTERN SIERRA
RUNOFF FORECAST
April 1, 2026**

APRIL THROUGH SEPTEMBER RUNOFF

	MOST PROBABLE VALUE (Acre-feet)	(% of Avg.)	REASONABLE MAXIMUM (% of Avg.)	REASONABLE MINIMUM (% of Avg.)	LONG-TERM MEAN (1971 - 2020) (Acre-feet)
MONO BASIN:	71,400	71%	84%	59%	100,307
OWENS RIVER BASIN:	217,100	73%	86%	59%	298,780

APRIL THROUGH MARCH RUNOFF

	MOST PROBABLE VALUE (Acre-feet)	(% of Avg.)	REASONABLE MAXIMUM (% of Avg.)	REASONABLE MINIMUM (% of Avg.)	LONG-TERM MEAN (1971 - 2020) (Acre-feet)
MONO BASIN:	84,300	71%	85%	58%	118,600
OWENS RIVER BASIN:	322,300	79%	91%	66%	409,575

NOTE - Owens River Basin includes Long, Round, and Owens Valleys

MOST PROBABLE - That runoff which is expected if median precipitation occurs after the forecast date.

REASONABLE MAXIMUM - That runoff which is expected to occur if precipitation subsequent to the forecast is equal to the amount which is exceeded on the average once in 10 years.

REASONABLE MINIMUM - That runoff which is expected to occur if precipitation subsequent to the forecast is equal to the amount which is exceeded on the average 9 out of 10 years.

An aerial photograph of a vast, snow-covered landscape. In the background, a range of rugged mountains is completely blanketed in white snow, with some rocky peaks visible. A large, calm lake occupies the middle ground, its surface reflecting the bright sky. The foreground shows a valley with scattered evergreen trees and a winding road or path. The overall scene is serene and wintry.

Questions?