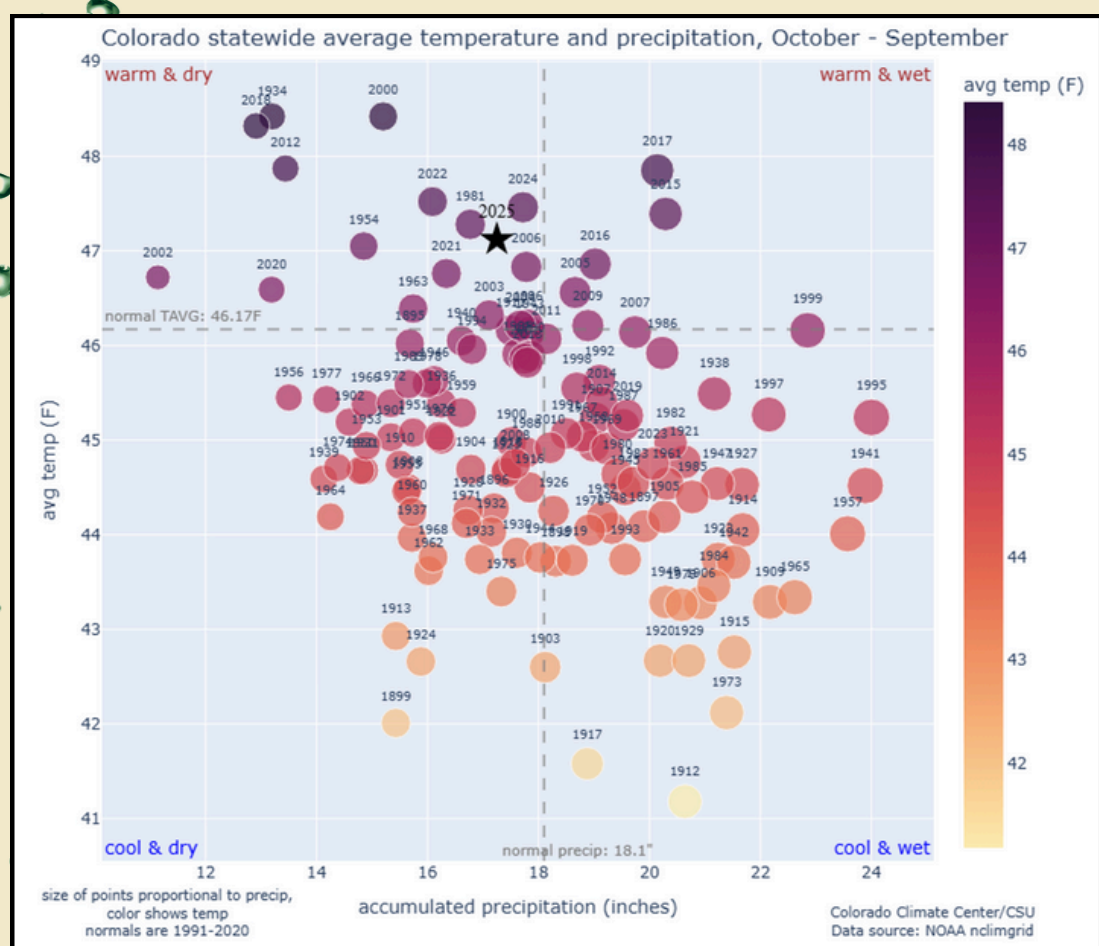


Colorado's Water Year 2025 in Review

Prepared by the Colorado Climate Center

Overview



Warm and Dry

Statewide average temperatures were well above average in Water Year 2025 (1.0°F above the 1991-2020 average of 46.2°F). It marked our 10th warmest water year on record out of 130 years of data.

Total precipitation across the state was slightly below normal at 0.85" below our statewide 30-year average of 18.1".

Previous water years that were similarly warm and dry to Water Year 2025 include 1981, 2024, 2006, and 2021.

[Click here to start learning more about what happened in Water Year 2025.](#)



ATMOSPHERIC SCIENCE
COLORADO STATE UNIVERSITY



Providing information and expertise on Colorado's complex climate

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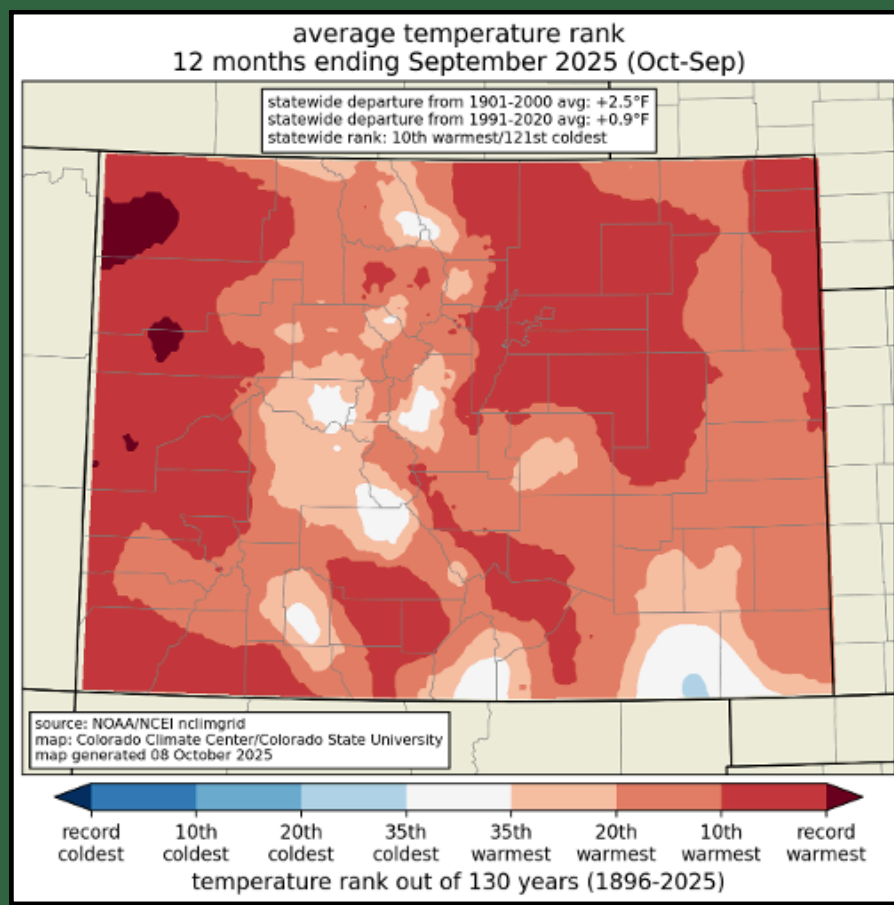
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Temperatures

A Top-10 Water Year for Temperatures

Month	T Rank (of 130 years)	Above, below, or near 20th century avg?
Oct	1st warmest	much above
Nov	48th coldest	below
Dec	3rd warmest	much above
Jan	24th coldest	below
Feb	34th warmest	above
Mar	10th warmest	much above
Apr	33rd warmest	above
May	59th warmest	near avg
Jun	23rd warmest	above
Jul	24th warmest	above
Aug	17th warmest	above
Sep	36th warmest	above

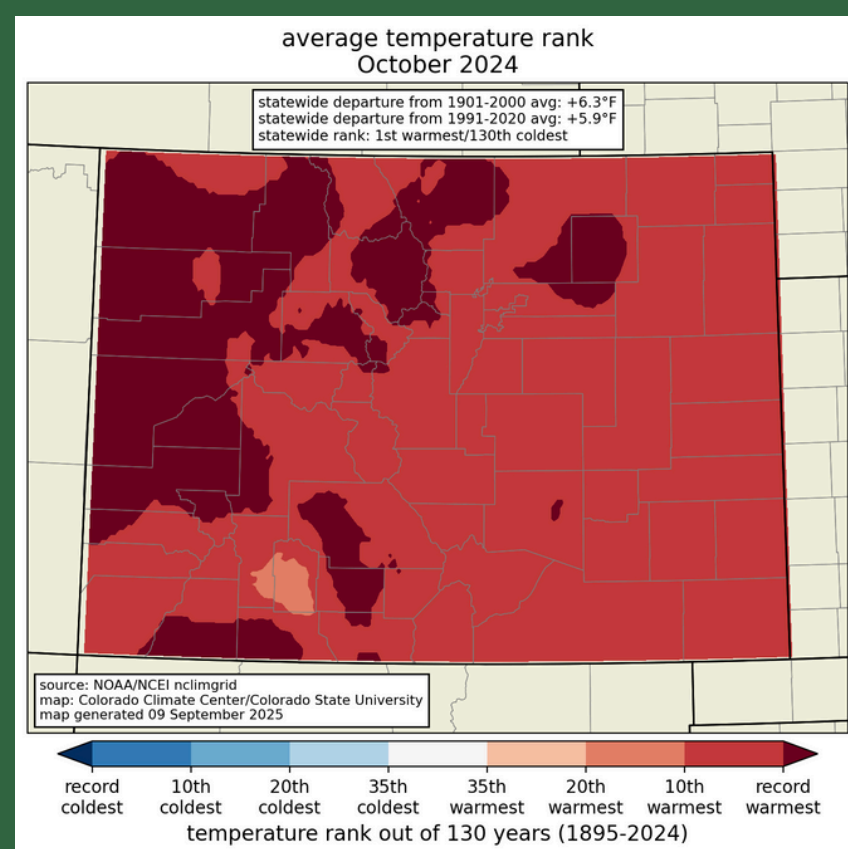


Statewide average temperatures ranked 10th on record for WY 2025 (out of 130 years of data). The last water year warmer than WY 2025 was WY 2024.

WY 2025 started out with record-setting warmth, with October 2024 ranking as the hottest October on record for the state. Late fall and early winter featured a mixed bag of temperature anomalies. November 2024 and January 2025 ranked below average, sandwiching a very warm December (the 3rd warmest on record).

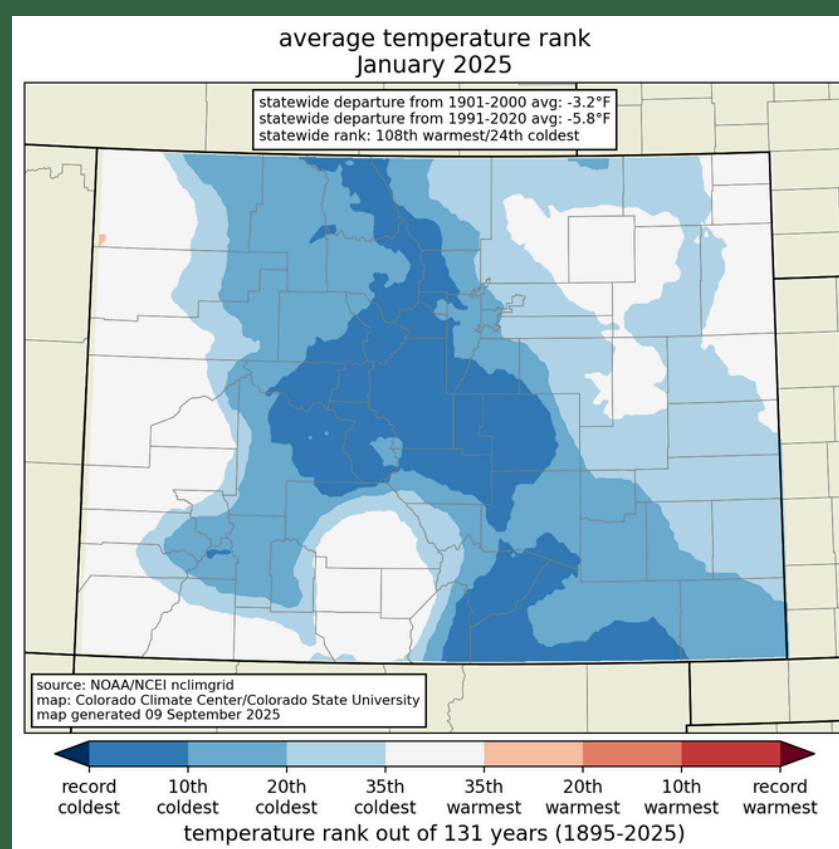
From February onward, every other month in WY 2025 finished above average (with the exception of May, which was near average). Spatially, the above average temperatures were realized in nearly every part of the state, though the most significant warmth occurred in northeast, western, and south-central Colorado. A few locations on the West Slope saw their warmest water year on record.

A closer look at WY 2025 temperatures



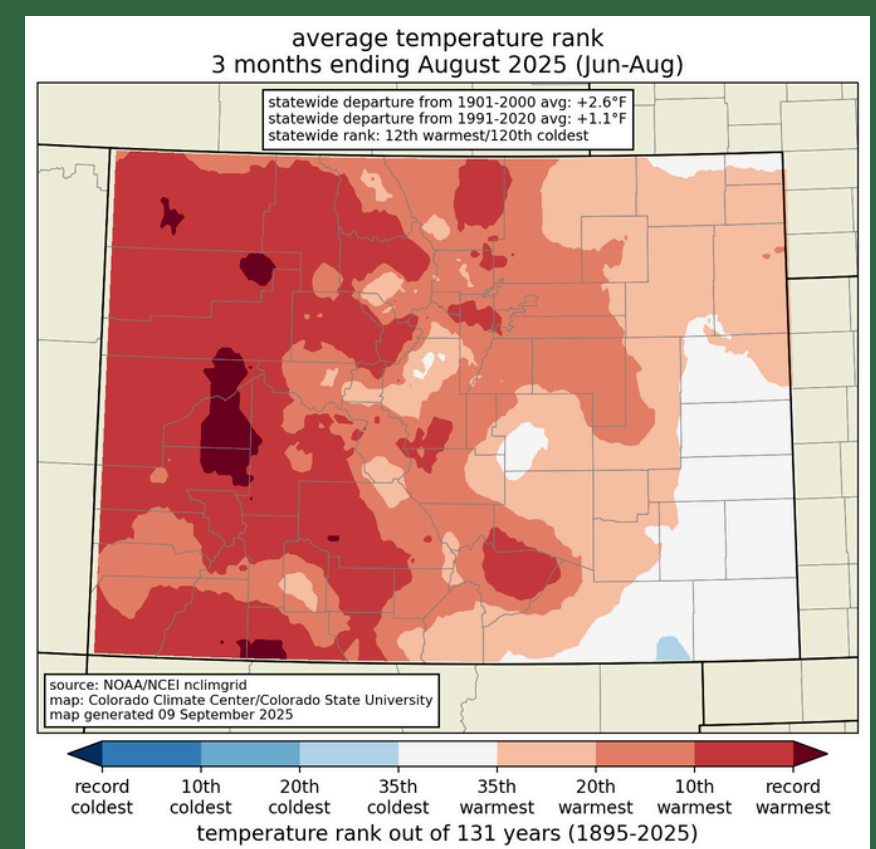
Warmest October on Record

Nearly every part of the state saw top-10 warmth, and the most noteworthy heat affected the West Slope and north-central Colorado.



A Chilly January

Much of the high terrain and parts of southeast Colorado saw temperatures ranking among the top 10-coldest on record for January.

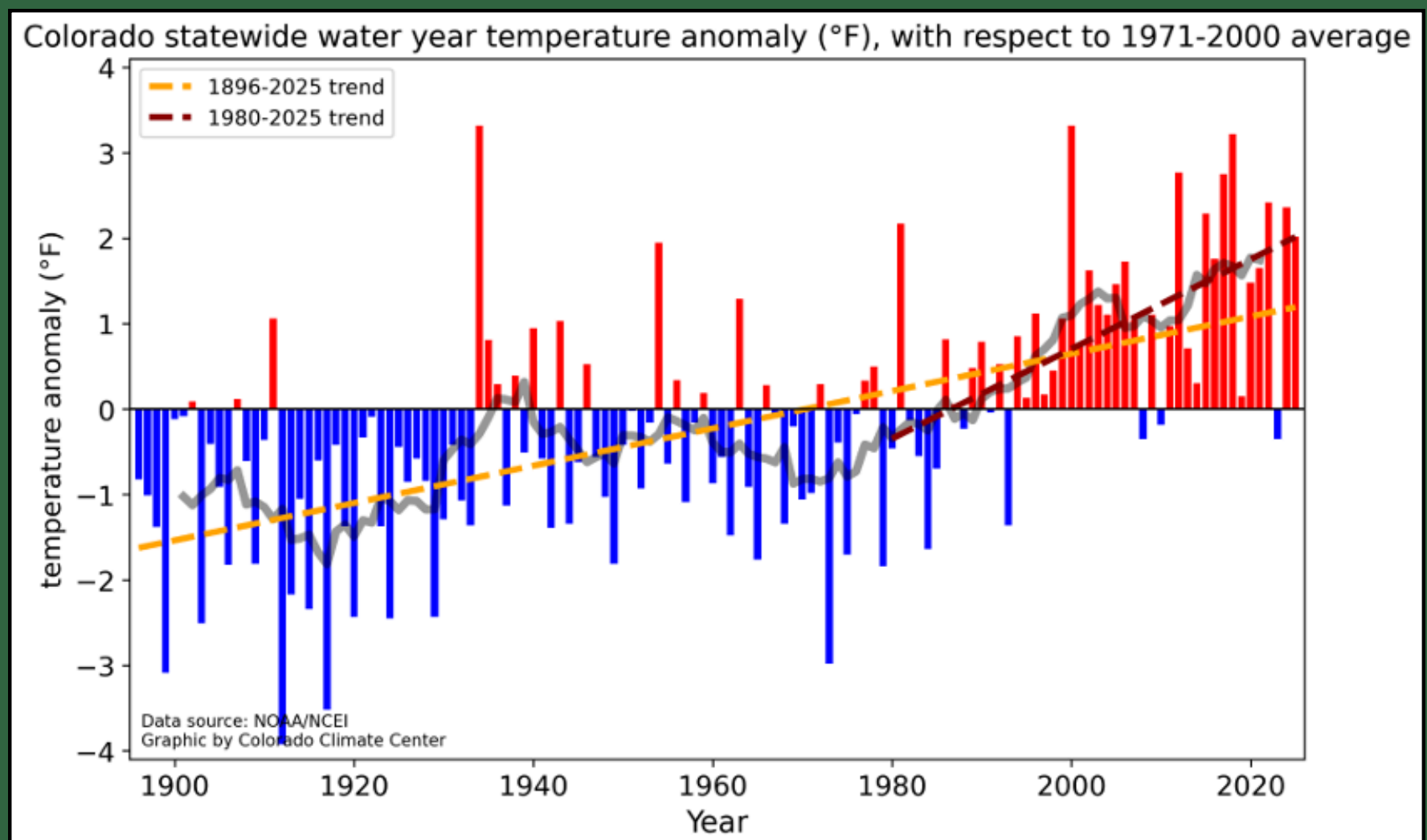


Summer: Hot, Especially West

Summer temperatures were above-average for most of the state, but areas west of the Divide saw the brunt of the heat.

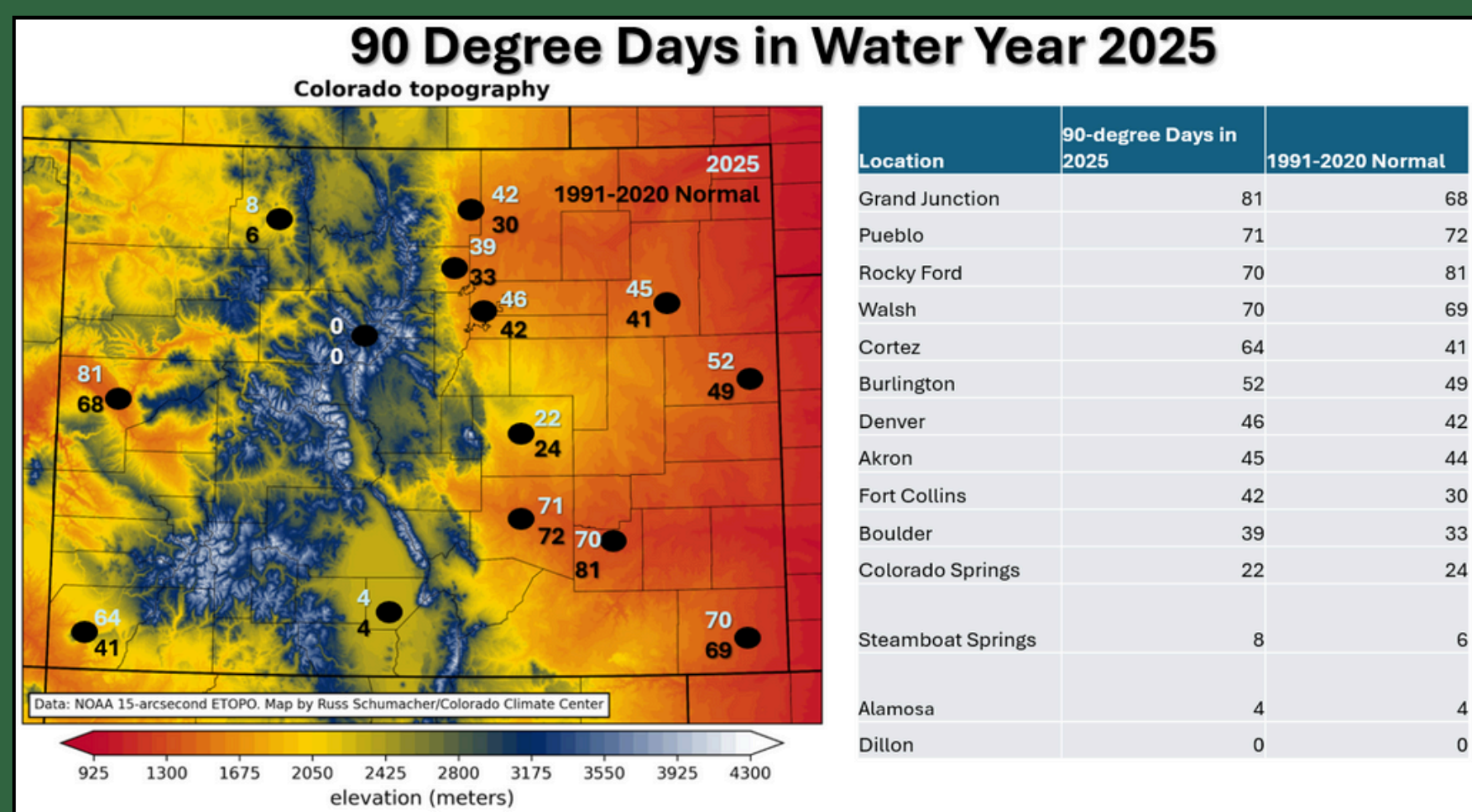
2025 follows a long-term trend of increasing temperatures across our state.

7 of our top 10 warmest water years on record have occurred since 2012.



90°F days: how did Water Year 2025 compare to average?

- Cortez: 64 days (average: 41)
- Grand Junction: 81 days (average: 68)
- Fort Collins: 42 days (average: 30)
- Rocky Ford: 70 days (average: 81)

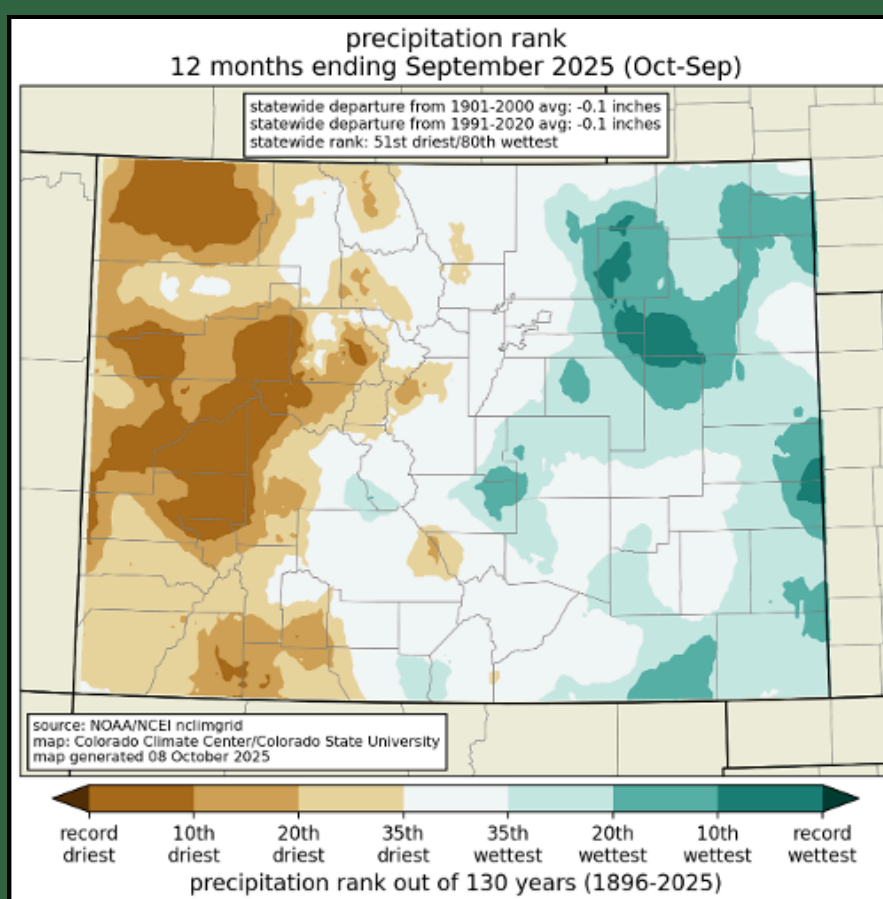


Precipitation

WY 2025 finished near-average in terms of precipitation, ranking as the 51st driest in the 130-year record. The last water year that was drier than WY 2025 was WY 2022.

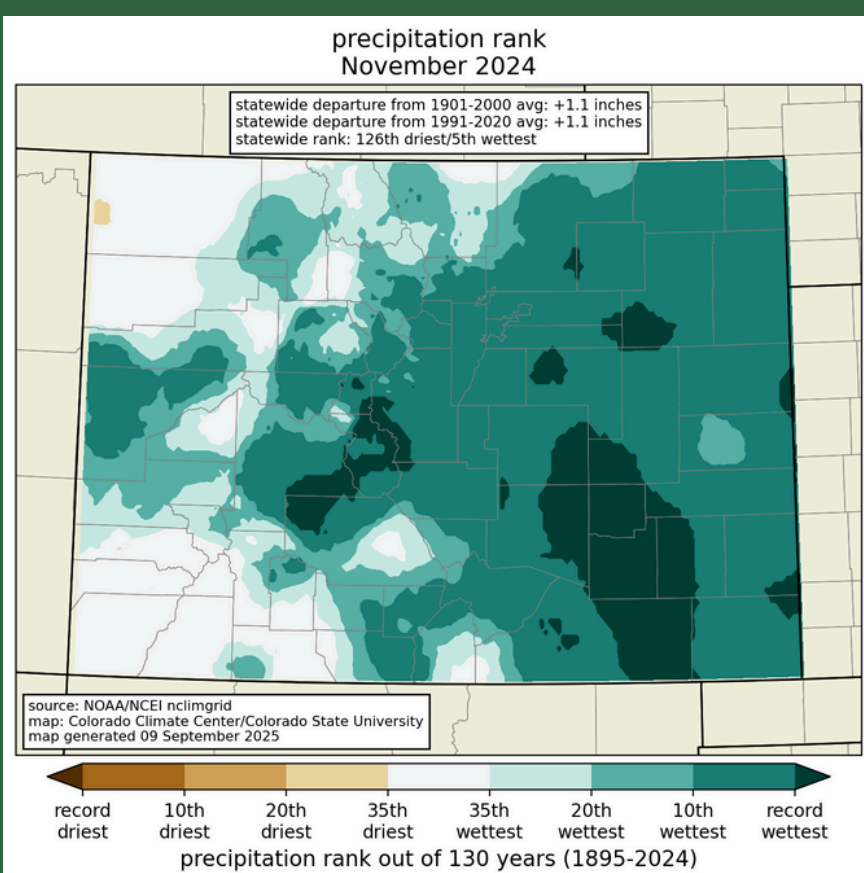
Statewide, most months in WY 2025 do not stand out as particularly noteworthy, though there were a few exceptions. November 2024, which featured a record-breaking snowstorm that affected most of the state, finished as the 5th wettest on record. (For more on that event, check out the “Notable Events” tab or our [blog post](#) for an even deeper dive). That abnormally wet month was followed by a much drier December--the 9th driest on record.

Perhaps the biggest story surrounding precipitation during WY 2025 was that conditions were very different depending on which side of the Divide you were on. Much of the West Slope saw a top-10 dry water year, while a few locations on the Eastern Plains saw a top-10 wettest year. These precipitation patterns also led to variability in drought conditions (more on that in the “Drought” tab).



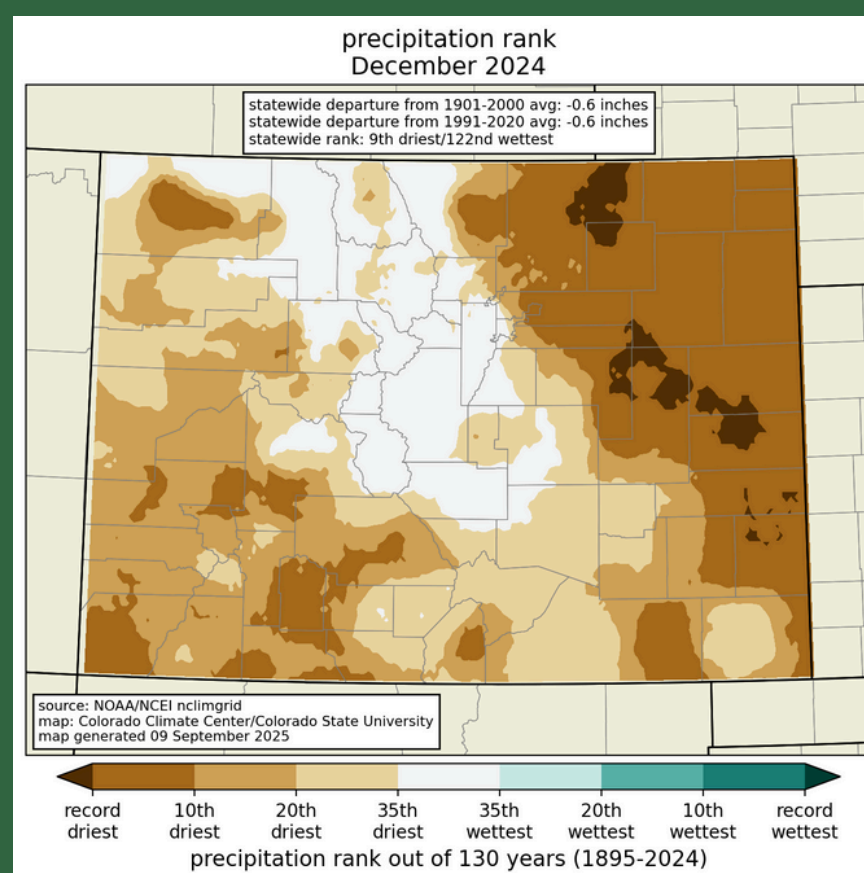
Month	P Rank (of 129 years)	Above, below, or near 20th century avg?
Oct	47th wettest	near avg
Nov	5th wettest	much above
Dec	9th driest	much below
Jan	35th driest	below
Feb	49th driest	near avg
Mar	51st driest	near avg
Apr	15th driest	below
May	62nd wettest	near avg
Jun	56th wettest	near avg
Jul	29th driest	below
Aug	52nd wettest	near avg
Sep	31st wettest	above

A closer look at WY 2025 precipitation



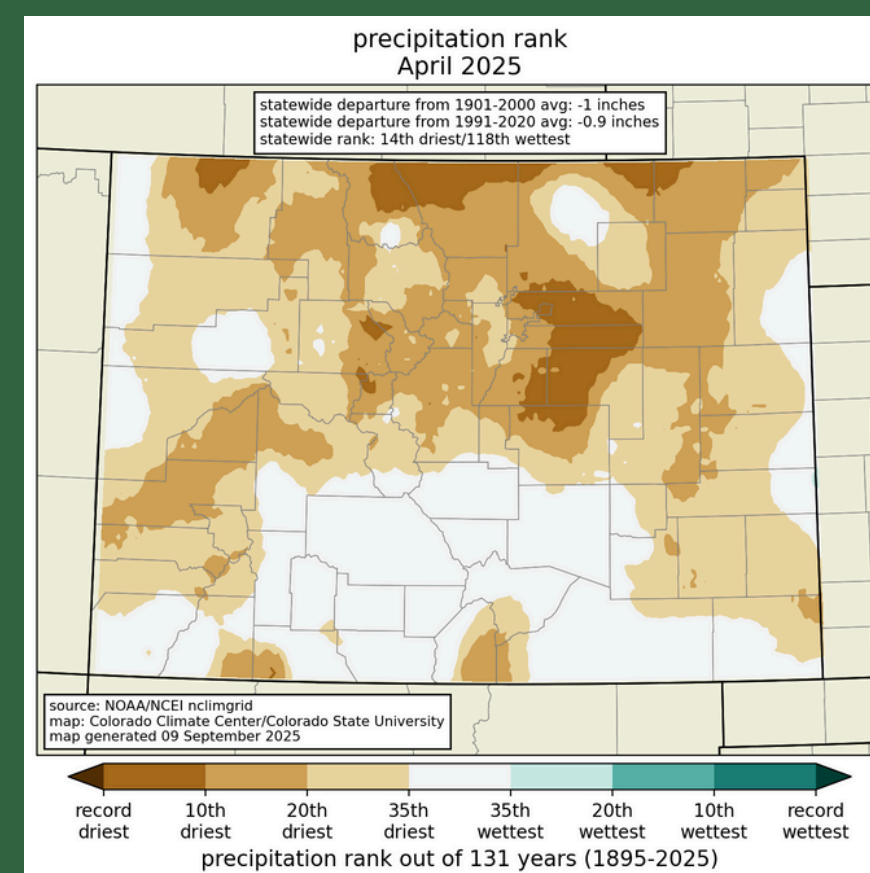
A Wet Start to Winter

Parts of eastern Colorado saw more than three feet of snow, and some locations saw their wettest November on record.



December Flips Dry

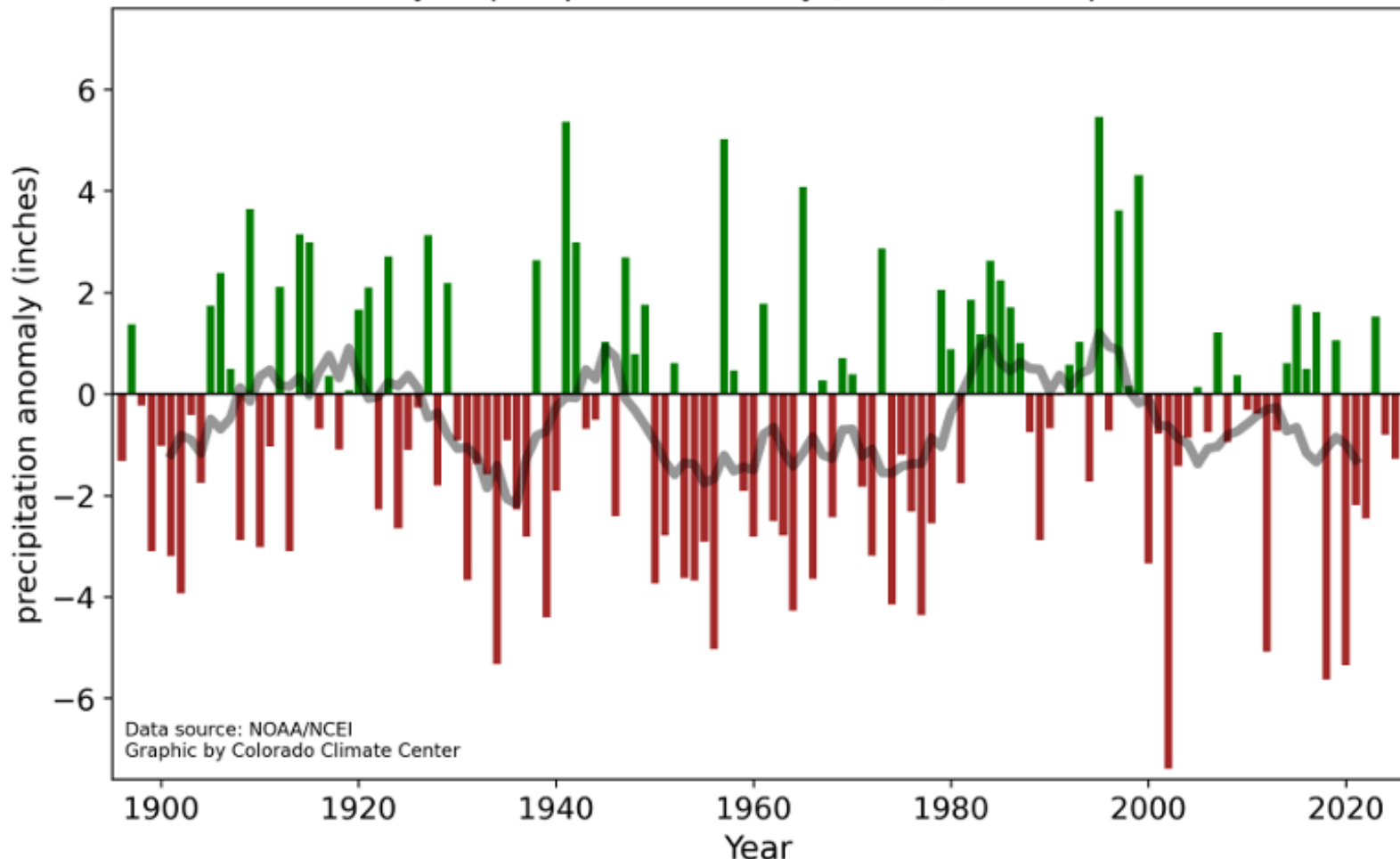
Most of the Eastern Plains experienced a December that was at least among the top-10 driest on record.



A Rough Ending for Seasonal Snowpack

Abnormally dry conditions persisted throughout the remainder of winter, and April (a key month for building snowpack) was no exception, finishing as the 14th driest on record.

Colorado statewide water year precipitation anomaly (inches), with respect to 1971-2000 average



Unlike long-term temperature trends, Colorado’s precipitation trends are murkier.

In the 21st century, Colorado’s abnormally dry water years have outweighed the abnormally wet water years on the order of ~2:1.

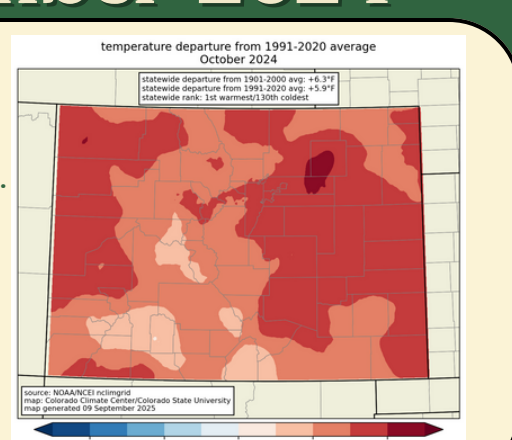
Records & Notable Events

October-December 2024

October

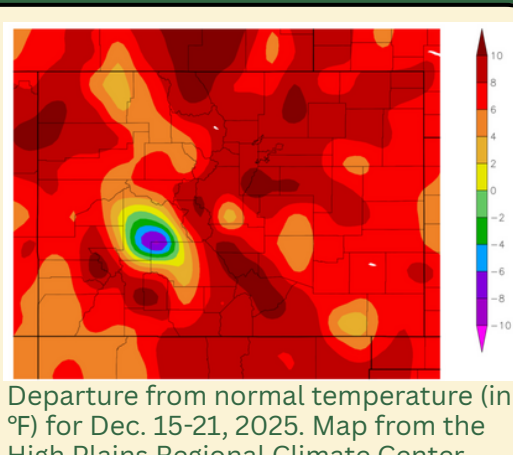
October 2024 was the warmest October on record. Statewide temperatures were nearly 6°F above the 1991-2020 average.

Image: Statewide temperature departure from the 1991-2020 average.



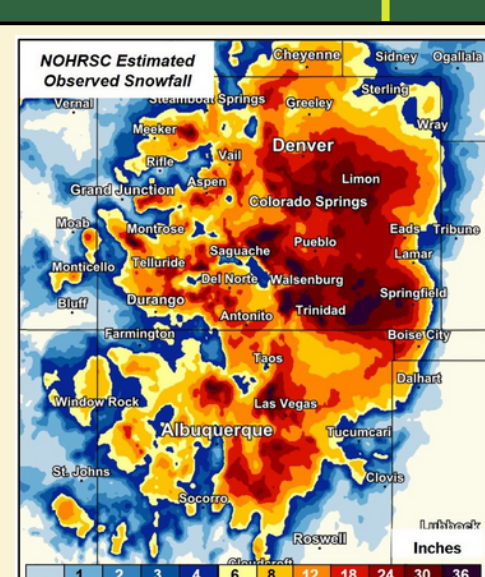
Early December

Practically everywhere in the state recorded unusually warm December temperatures... except for Gunnison. They stayed below average for the first several weeks of December. What was the cause of this strange cold signal? Blame it on geography and snow cover (more on our blog!).



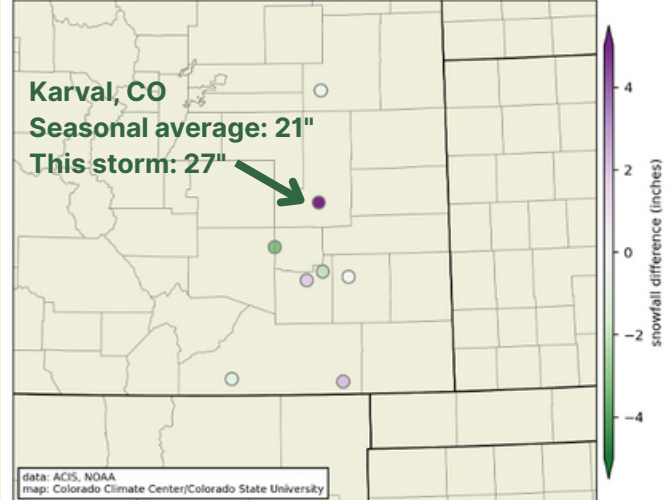
November 4-10

A major snowstorm impacted the state. Over 5 ft of snow fell in parts of the Sangre de Cristos, and a few areas in the Eastern Plains received more than 4 ft of snow. Some locations exceeded their average annual snowfall from this single storm! (More on this storm on our blog)



Snowfall map from the NOAA Weather Prediction Center for Nov. 4-9.

7-day total from November 2024 storm minus average annual total snowfall

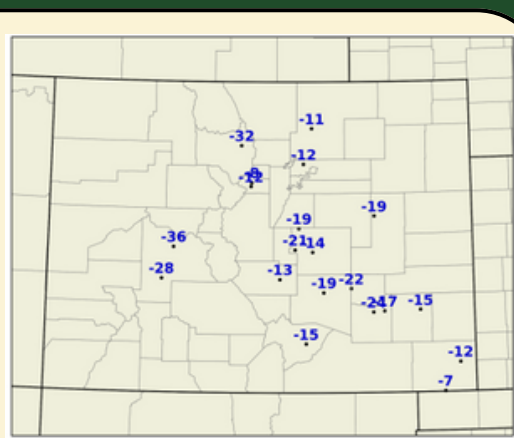


Stations that saw more snow from this storm than their annual average snowfall.

January-March 2025

Mid-January

Record-cold temperatures gripped the state, with the Arkansas River Valley seeing the brunt of it. Rocky Ford fell below -15°F for four consecutive nights (Jan. 19-22): a first in its 125+ years of records. A few daily low temperature records were shattered by more than 5°F.



Daily record low temperatures set on Jan. 21 at stations with 50+ years of records.

Mid-March

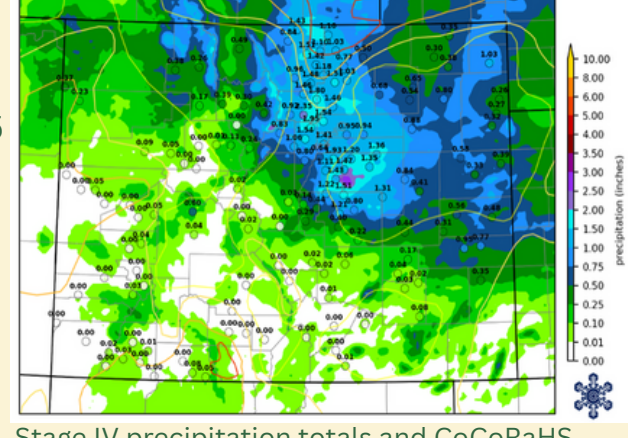
A bomb cyclone affected the eastern part of the state, bringing blowing dust across parts of eastern Colorado. While this storm did not eclipse Colorado's record low pressure measurement (which occurred during the 2019 bomb cyclone), a sea level pressure of 977.3 mb was recorded in Springfield, CO, which is among the lowest we see in the state.



GOES-16 visible satellite imagery from Mar. 14, 2025. Image from CSU/CIRA/NOAA.

Late March

March is typically one of the snowiest months for eastern CO, but March 2025 was quite dry until the end of the month. While this storm brought rain rather than snow, widespread totals of 1" were recorded across the Front Range Urban Corridor and were a welcome sight for drought relief.



Stage IV precipitation totals and CoCoRaHS reports, overlaid by US Drought Monitor contours, for Mar. 25-31.

Early February

A striking early-season heat wave shattered daily high temperature records across the state, some by more than 10°F. Grand Junction, Ridgeway, and Alamosa additionally recorded their all-time warmest winter (Dec.-Feb.) day on record, which is particularly impressive given that these temperatures occurred in early (rather than late) February. (More details on our blog).

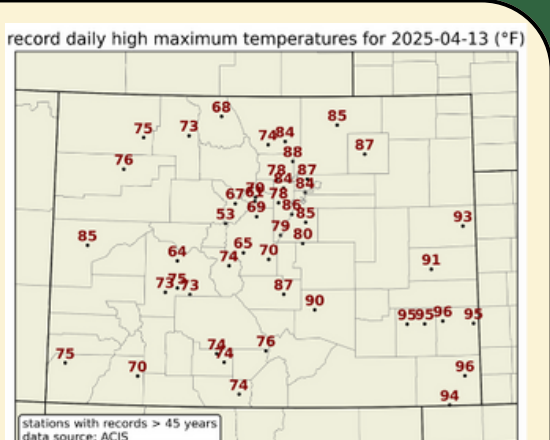
New Record Date (2025)	Location	New Record (°F)	Previous Record (°F)	Year of Previous Record
Feb. 3	Alamosa-Bergman Field	67*	55*	2018
Feb. 3	Crestone 2SE	61*	51*	2000
Feb. 4	Winter Park	51*	38*	2004
Feb. 4	Palmer Lake	66*	56*	1993
Feb. 4	Ridgeway	67*	57*	2000
Feb. 4	Grand Junction GESE	68*	58*	1995
Feb. 5	Grand Junction GESE	68*	56*	2015
Feb. 5	Colorado Natl. Monument	66*	55*	1995
Feb. 6	Walsh 1SW	77*	66*	2018

Select daily station records broken between Feb. 3-6.

April-June 2025

April 11-13

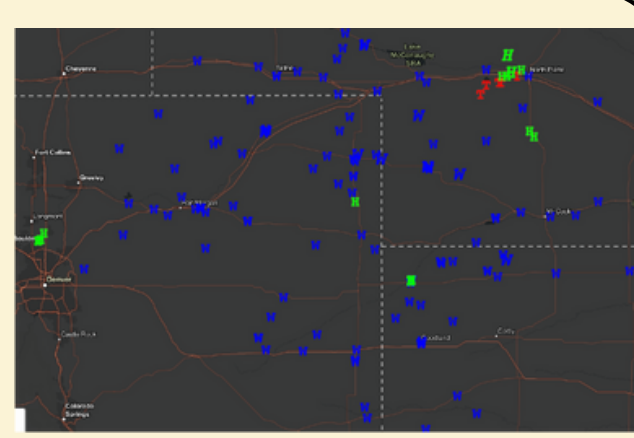
Mid-April featured record-setting heat, as high temperatures soared to more than 20°F above average. In records back to 1951, Apr. 13 was the warmest day observed so early in the year across CO.



Daily record high temperatures set on Apr. 13 at stations with 45+ years of records.

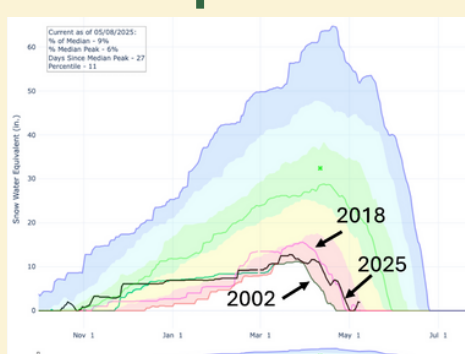
Mid-May

Several rounds of severe storms impacted CO. On May 14, severe storms brought wind gusts up to 86 mph to northeast CO. There were 54 total wind reports that day, the 2nd-highest single-day wind report count on record (2nd to the 2020 derecho). Then on May 18, four tornadoes occurred east of Denver in Adams County, and three of them were rated EF-2. They were the first EF-2 or stronger tornadoes to occur in Adams County since July 1996.



Severe thunderstorm reports from May 14-15. "W" indicates a severe wind report and "H" signifies severe hail. Image from SPC.

Late April



Historical and 2025 snow water equivalent (SWE) at the Upper San Juan SNOTEL site. Image from USDA/NRCS.

Dry, warm weather brought early snowpack melt, especially in the San Juans. By the end of April, many SNOTEL sites in the area showed near-total or total snowpack loss. For some locations, this melt-out was 20-30 days earlier than average.

June 17

June brought more severe weather to CO. Between 2am-5am on June 17, hail in excess of 2" (which denotes "significant severe" hail) fell in parts of northeast CO. It is very unusual to see hailstones of this size in CO during those hours of the day. Since, 1955, there have only been seven other 2"+ hail reports in CO between 2am-5am.

Image: A CoCoRaHS hail report from Wellington, CO capturing a 2.5" hailstone that fell early on Jun. 17.



Hail Observation CO-18-1146, Wellington 0.6 SSE Obs Date: 2025-06-17 2:30 AM

July-September 2025

July

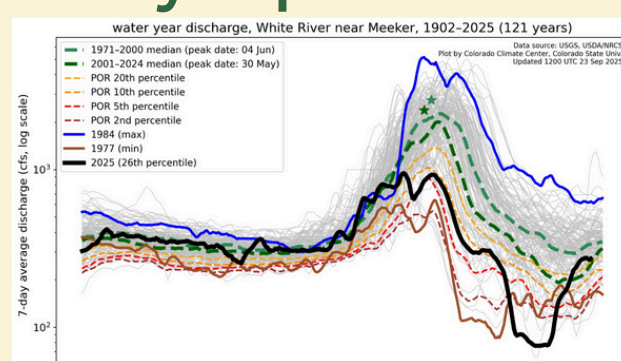
Wildfires broke out in western CO during July as drought intensified across the area. Two of those fires ignited on opposite ends of Black Canyon of the Gunnison National Park, prompting its closure for several days. The Turner Gulch fire in Mesa County also grew quickly thanks to the hot, dry, windy conditions, ultimately growing to over 30,000 acres.



South Rim Fire around Jul. 15. Image from Facebook.

Late August - Early September

Monsoon-driven moisture finally made a late arrival to western CO in late Aug., bringing much-needed rainfall and drought relief to the region. Along the Lee Fire burn scar, there were several instances of flash flooding and debris flows.



Hydrograph from the White River near Meeker showing a strong recovery in streamflow starting in late Aug. (black line) versus historical streamflows. Data from USGS.

Eastern CO also saw heavy rainfall during August, with widespread totals of 4-5" in some locations. On Aug. 30, Walsh saw its all-time wettest day (records back to the late 1960s) when 5.02" of rain fell.



Image: CSU Plainsman Research Center in Walsh, CO. Photo by Zane Martin.

Early-Mid August



Lee Fire near Meeker on Aug. 4. Photo by Kristie Davis.

Wildfires continued to ignite and spread during much of August. One of those fires was the Lee Fire, which burned across Rio Blanco County. It eventually grew to over 138,000 acres, becoming CO's 4th-largest wildfire on record.

September 4



A flooded Grand Junction trail. Photo from @gjparksandrec on Instagram.

Over 2" of rain fell in just a couple hours on the south side of the Grand Junction (a greater than 1-in-200 year rainstorm for that area), prompting localized flooding.

Mid-September

A brief EF-1 tornado occurred on Sep. 13 on Sawtooth Mountain in Saguache County. While no additional tornadoes affected CO that day, storms prompted tornado warnings in southwest CO, including the first tornado warnings on record for San Miguel and Dolores counties.



Tree damage from the Sawtooth Mountain tornado. Image from NWS Pueblo, obtained via the Denver Gazette.

Records Tied and Broken in WY 2025

	Max(T _{max})		Min(T _{max})		Max(T _{min})		Min(T _{min})		Precip		Snowfall	
	Tied	Broken	Tied	Broken	Tied	Broken	Tied	Broken	Tied	Broken	Tied	Broken
October	168	324	2	6	100	313	2	2	31	112	1	1
November	13	23	24	219	8	39	7	37	27	202	4	114
December	25	120	3	18	50	129	0	2	14	38	0	10
January	11	17	40	490	3	16	25	423	21	43	12	30
February	55	290	14	153	55	507	10	60	18	59	5	32
March	52	112	12	111	51	104	11	27	26	61	1	5
April	54	149	20	133	37	180	15	56	6	31	2	19
May	15	9	18	120	27	61	15	13	20	91	0	4
June	49	55	11	24	47	188	9	11	44	66	0	0
July	31	40	3	6	42	76	31	71	18	50	0	0
August	106	355	17	64	85	298	22	33	22	94	0	0
September	2	2	10	35	12	30	4	9	28	104	0	0
Total	581	1496	174	1379	517	1941	151	744	275	951	25	215

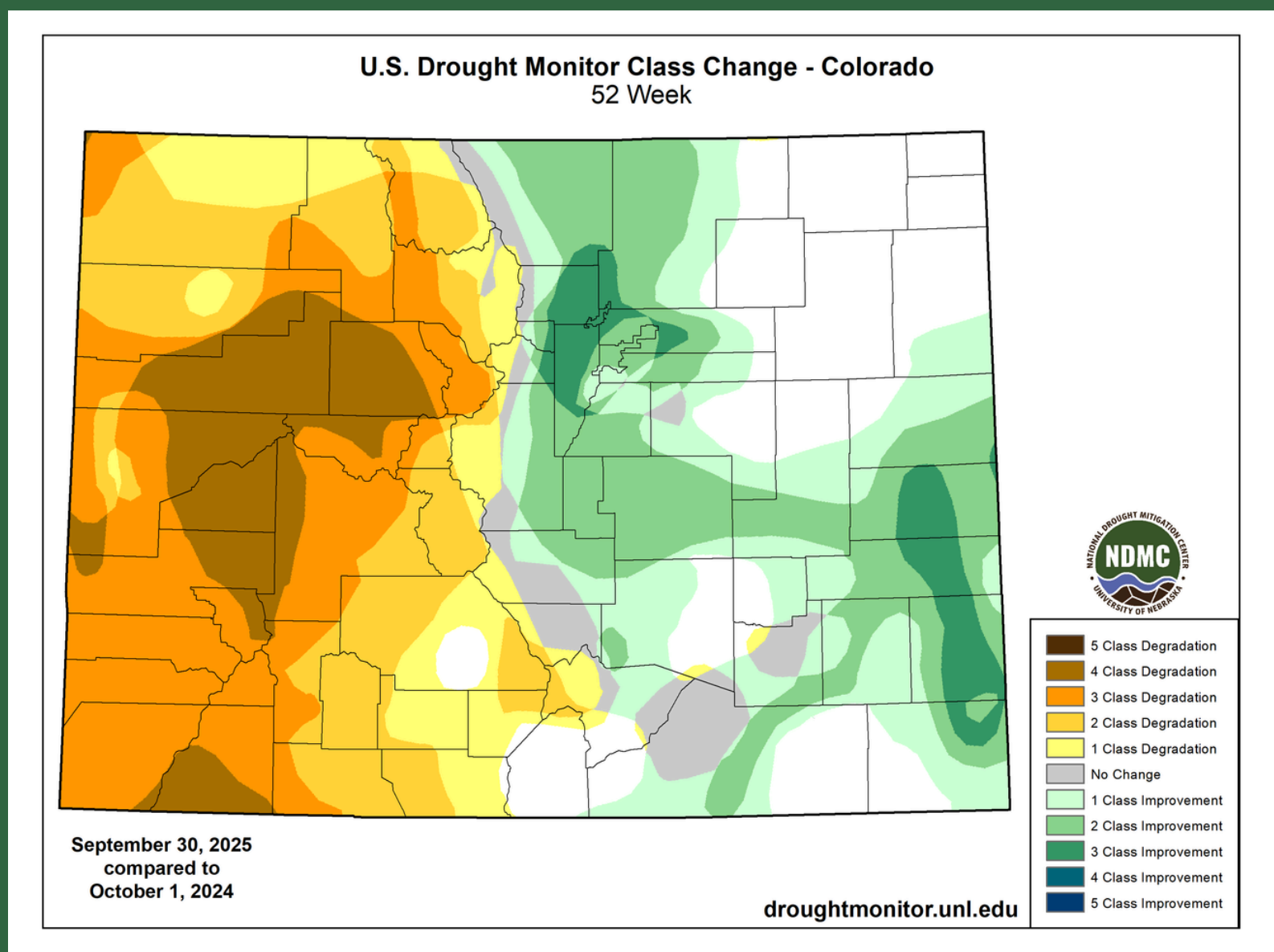
There were ~1.9 maximum (warm) records broken for every minimum (cool) record broken.

Data from NCEI

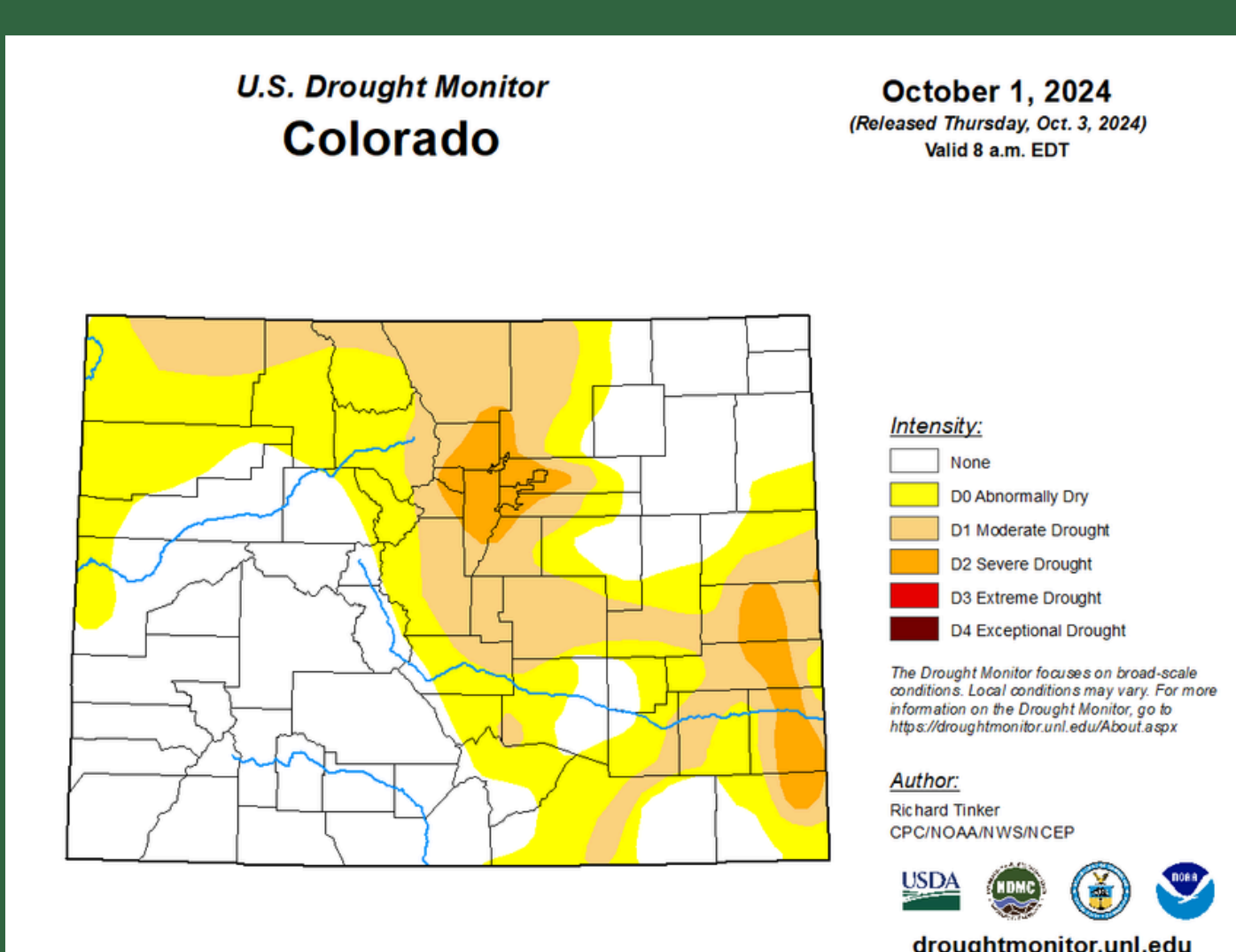
Drought

In a nutshell, Colorado drought in Water Year 2025 can be summarized as “amelioration east of the Divide, development west of the Divide”.

Winter featured poor snowpack, and that was followed by dry conditions during the spring. In the west, precipitation deficits continued to stack up throughout the summer, while the Eastern Plains saw drought relief due to consistent systems that brought showers and thunderstorms. Late summer and early fall finally brought some moisture to western Colorado, which improved (but did not eradicate) drought conditions there.



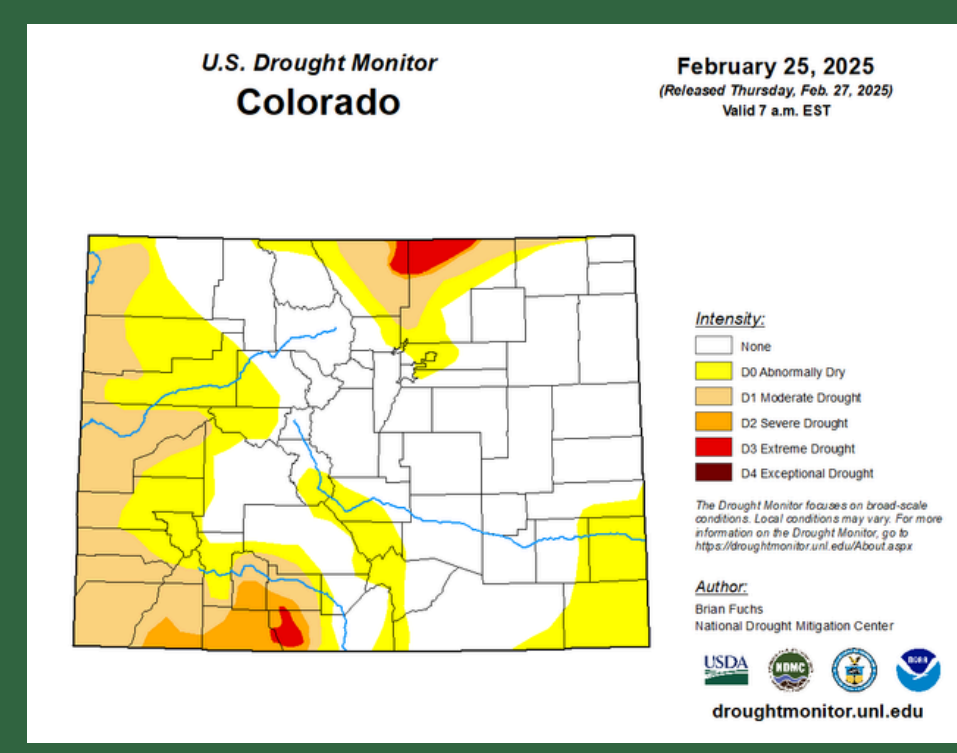
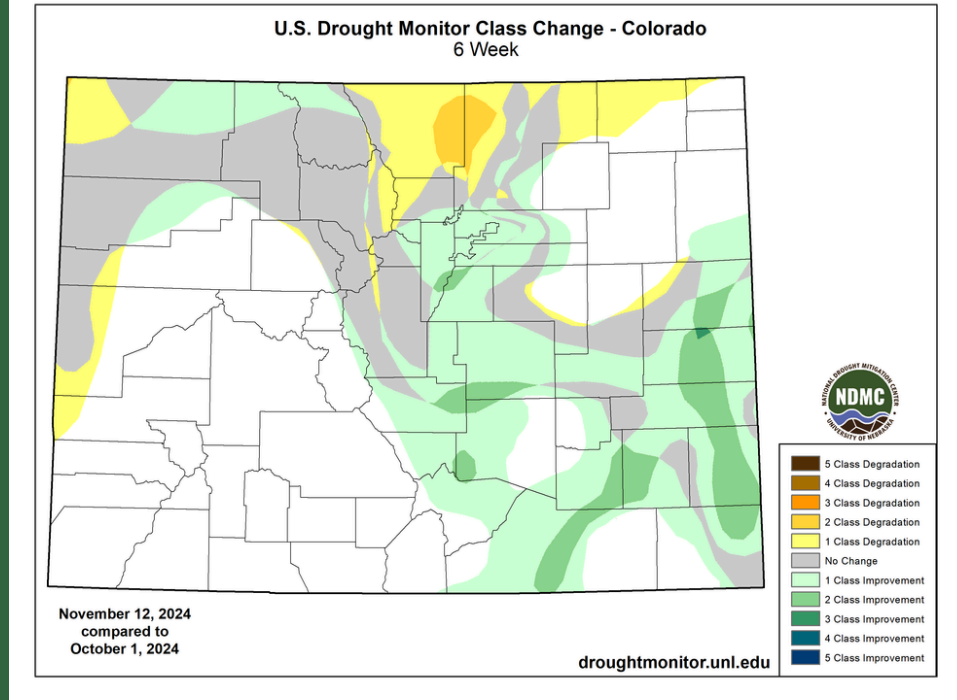
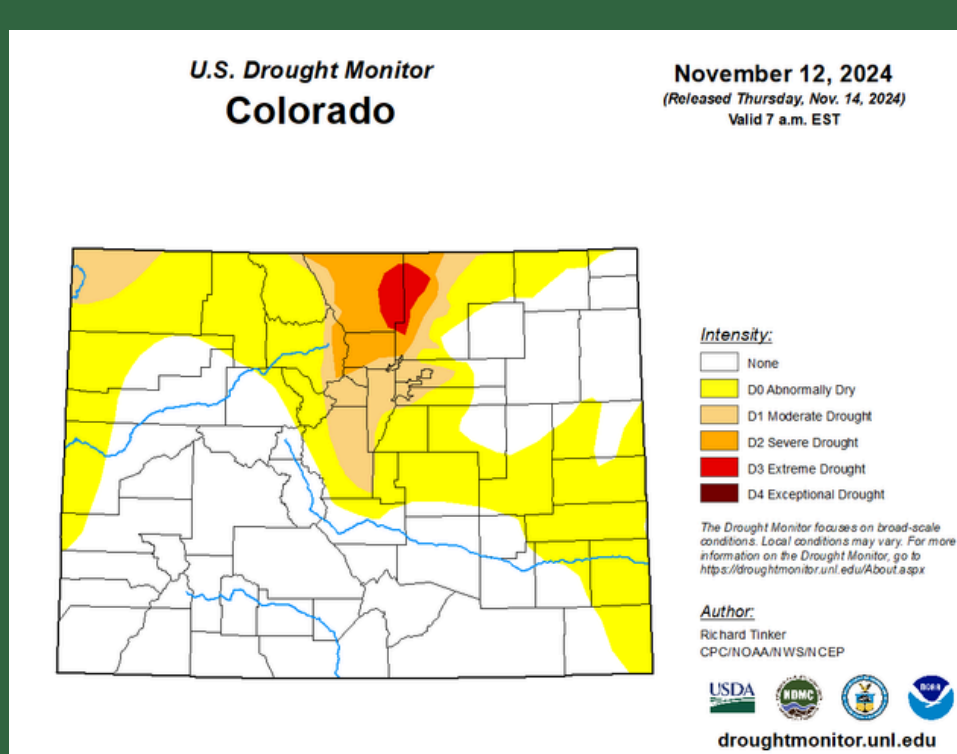
October 2024: the start of the water year



In the beginning of Water Year 2025, only about ¼ of Colorado was experiencing drought. The worst conditions were D2 (severe drought), and those areas were limited to the Denver and Boulder metro areas and parts of the Southeastern Plains. The western half of the state was nearly drought-free at that time.

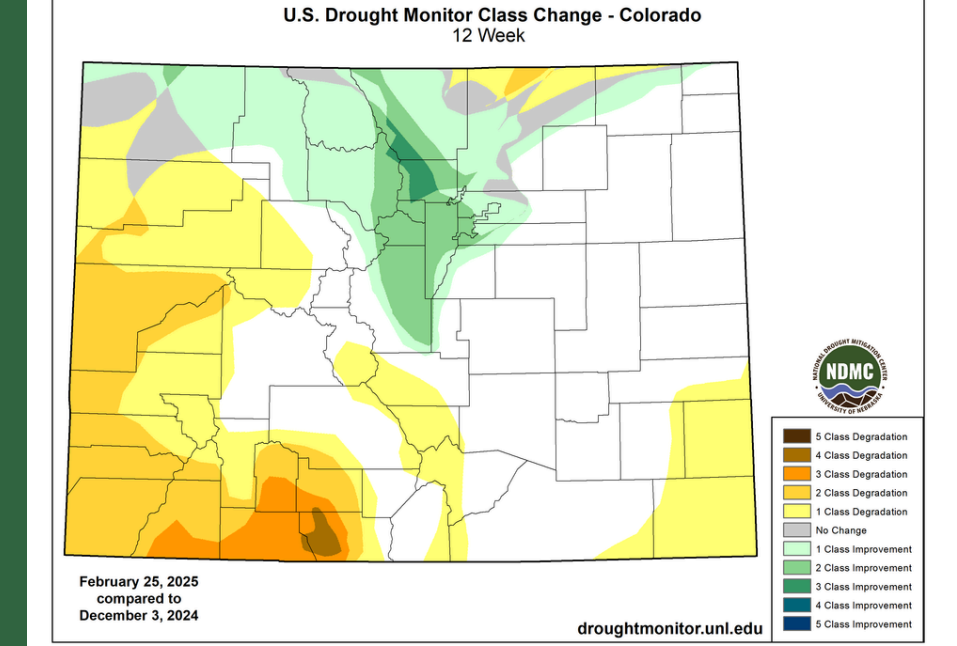
Early November 2024: additional relief from a major snowstorm

The big snow event in early November affected most of the state, and that brought additional drought relief to the Eastern Plains and parts of the Front Range Urban Corridor. North-central Colorado (including Larimer, Boulder, and Weld counties) missed out on this beneficial precipitation and continued to dry out after a hot, dry October, prompting D3 (extreme drought) conditions for that area.



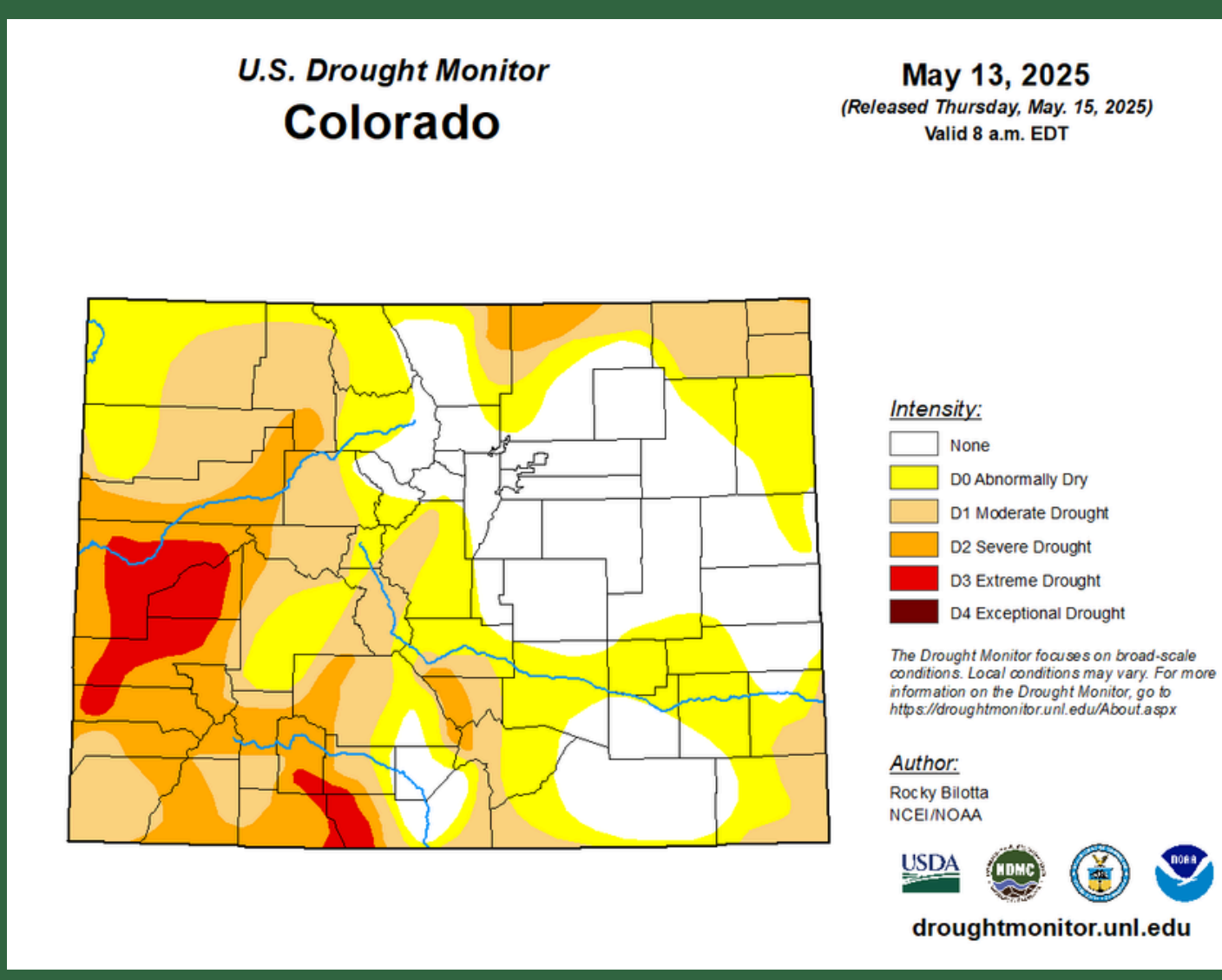
Winter: drought creeps into the West Slope while snow brings some relief to northern Colorado

After the big November snow, precipitation over southwest Colorado was in short supply, leading to severe to extreme drought to develop in the area. Drought development also began to affect the West Slope, where D1 conditions were present. Meanwhile, the basins in northern Colorado saw a couple good shots of snow in February, which helped ameliorate drought conditions there.



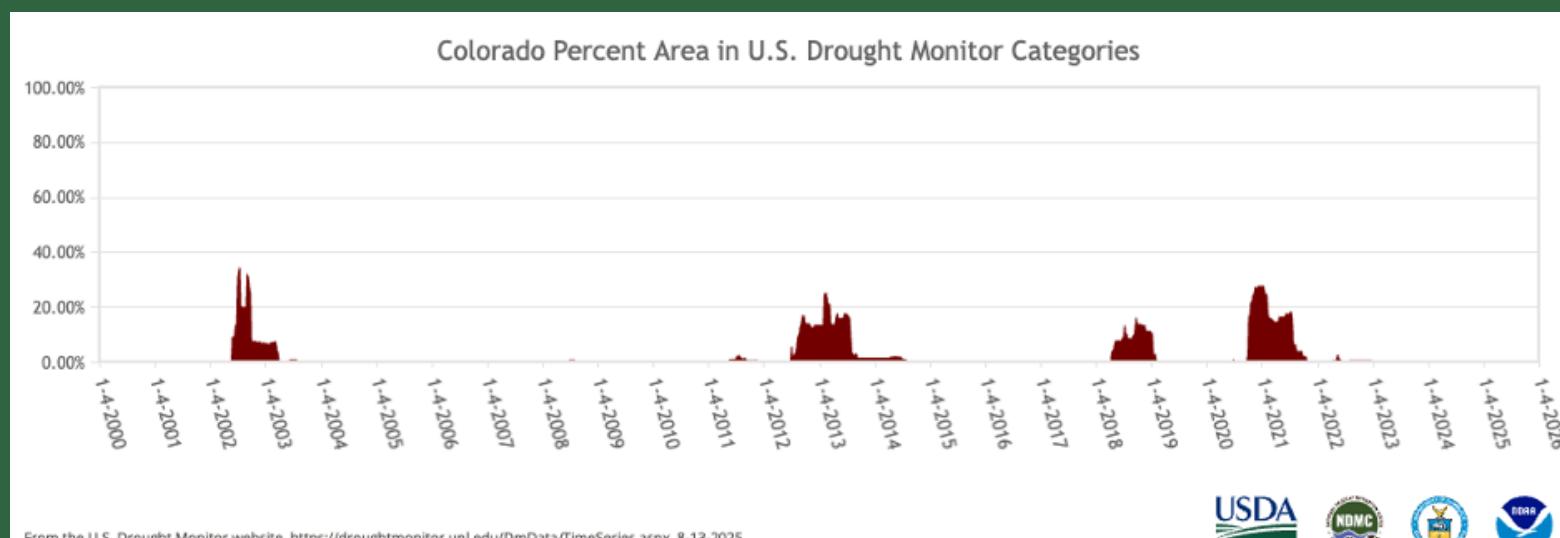
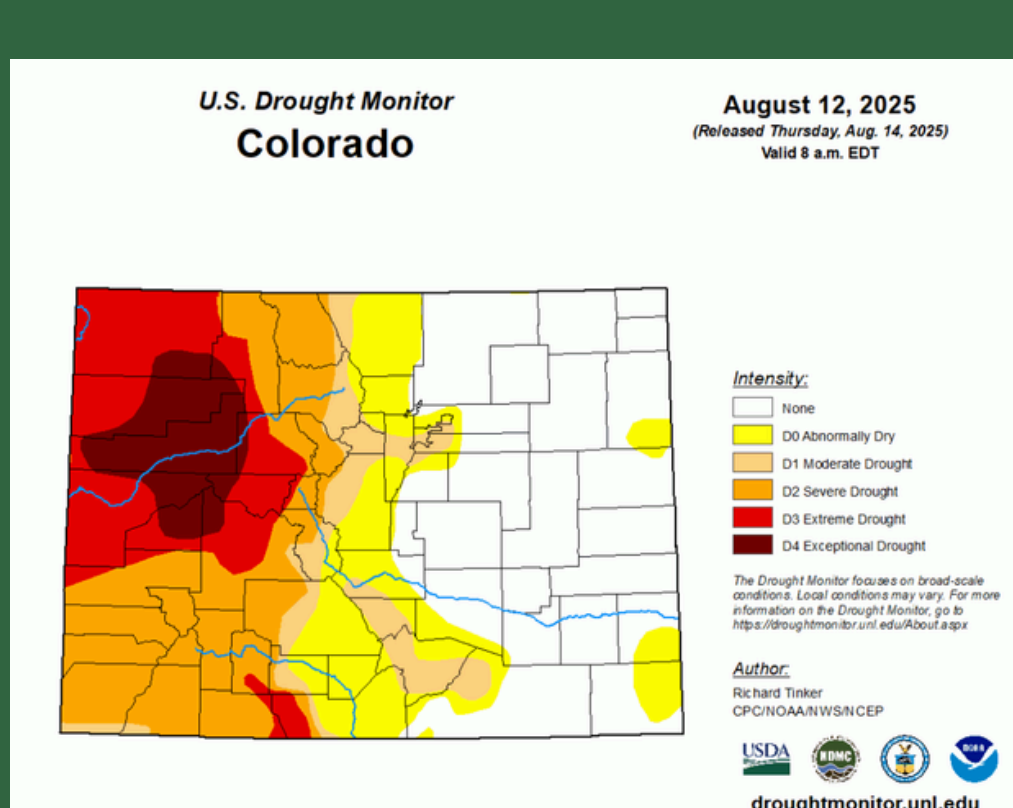
Spring: drought intensifies

Precipitation in March through early May was in short supply across much of Colorado. Across the West Slope, San Juans, and Sangre de Cristos, drought intensified and expanded. Abnormally dry and moderate drought conditions also developed along parts of the Eastern Plains, though a significant rainstorm in early May helped limit drought intensification.



Mid-August 2025: exceptional drought returns to the state for the first time since 2023

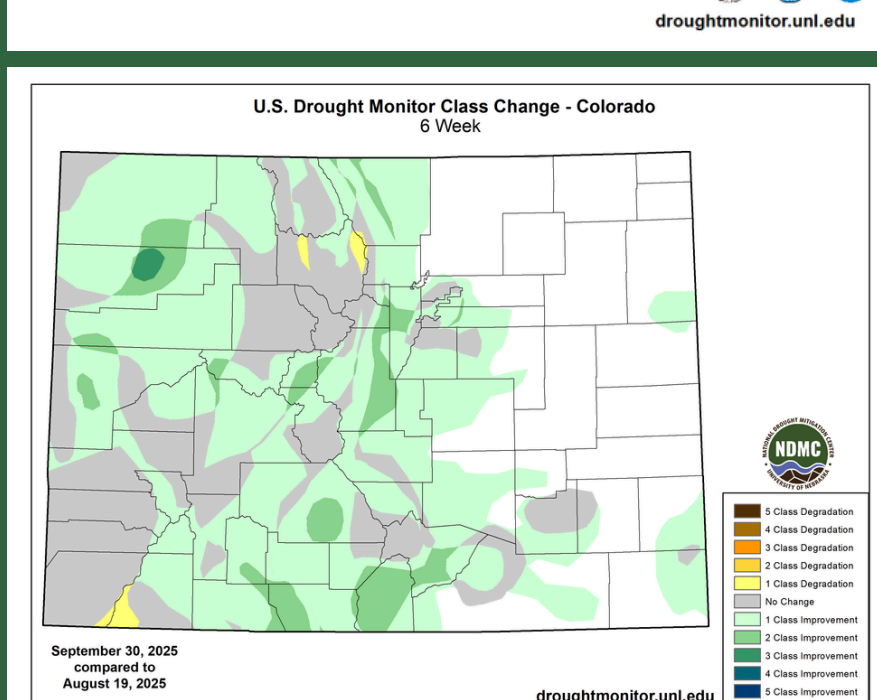
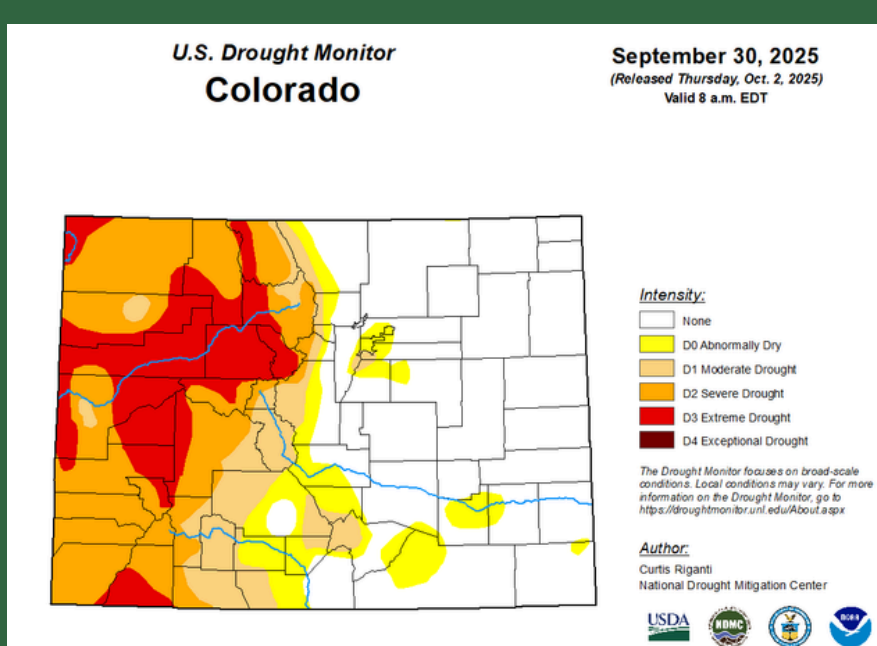
While the Eastern Plains were fortunate to see further drought relief during the summer, western Colorado was much less lucky. As precipitation deficits intensified and stream flows slowed, exceptional drought had developed across parts of the West Slope by mid-August. It was the first time that western Colorado had seen exceptional drought since October 2021. The dry, hot conditions helped fan wildfires over the area.



Percent area of CO in exceptional drought over time.

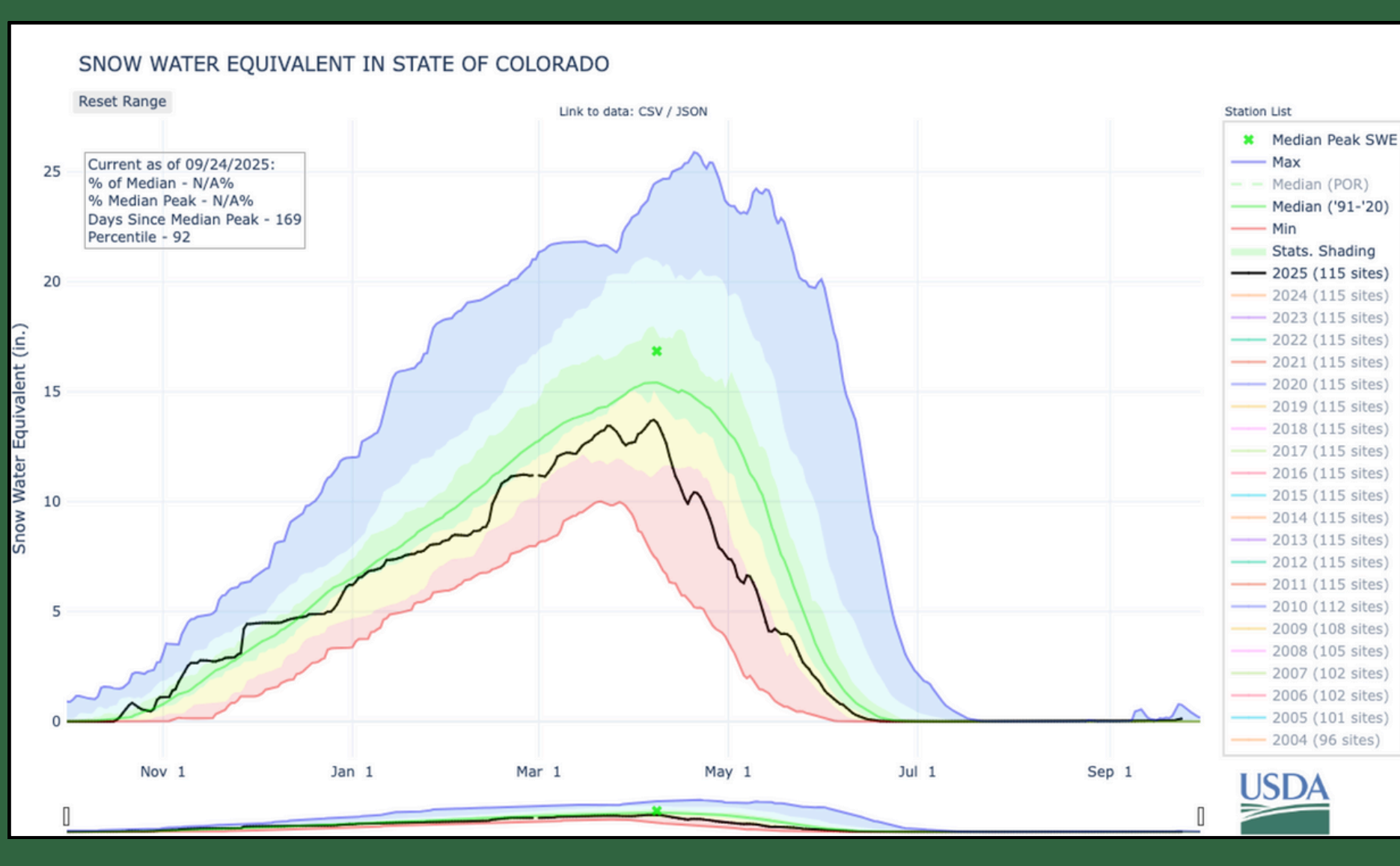
Late September 2025: some drought relief at the end of the water year

Soon after the exceptional drought developed in August, monsoon moisture finally brought much-needed precipitation to western Colorado. While the showers and thunderstorms did put a dent in some of the drought conditions (as well as led to some flash flooding), widespread severe to extreme drought conditions were still present west of the Continental Divide at the end of Water Year 2025.



Water: Snowpack, Streamflow & Reservoirs

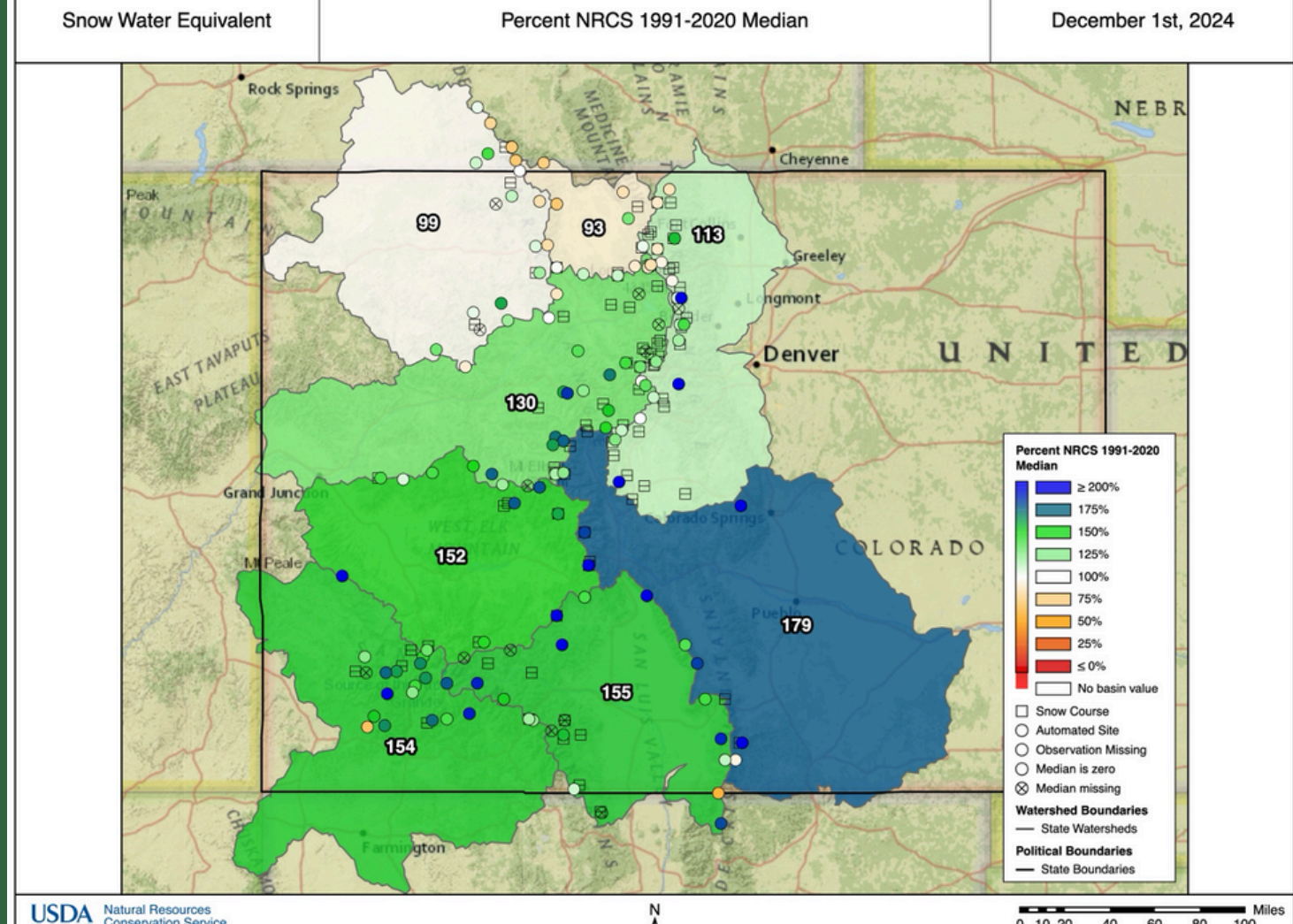
Statewide, Water Year 2025 featured below-average snowpack. While the season started out on a positive note, conditions trended drier as winter progressed. The worst snowpack conditions occurred across southern Colorado in the San Juan and Sangre de Cristo mountains.



A closer look at WY 2025 snowpack

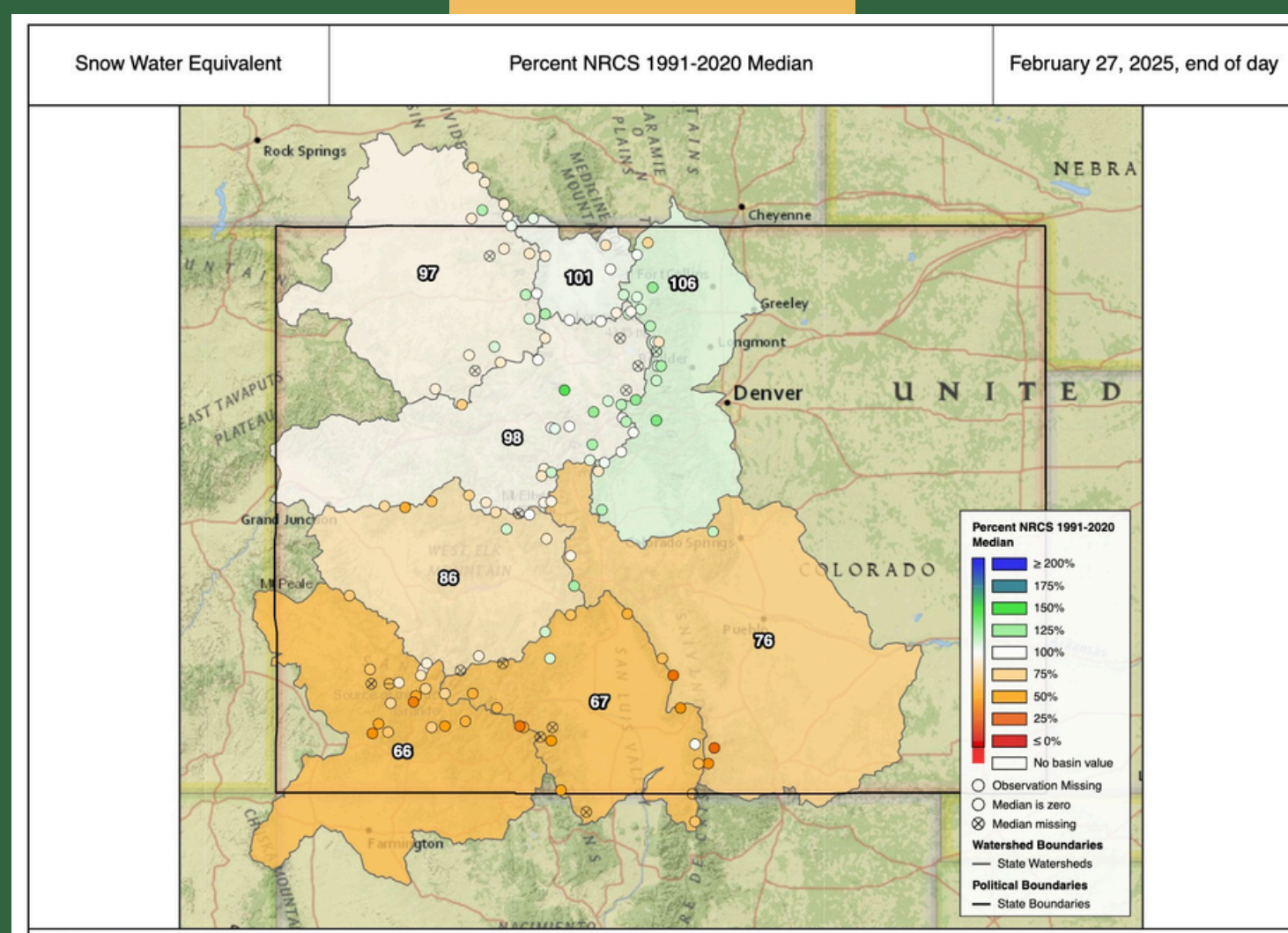
Percent of 1991-2020 snowpack: **December 1**

Early-season storms brought above-average snowpack conditions across much of southern Colorado. At the start of December, the Gunnison, Arkansas, Upper Rio Grande, and San Miguel-Dolores-Animas-San Juan basins were all running at over 150% of average.



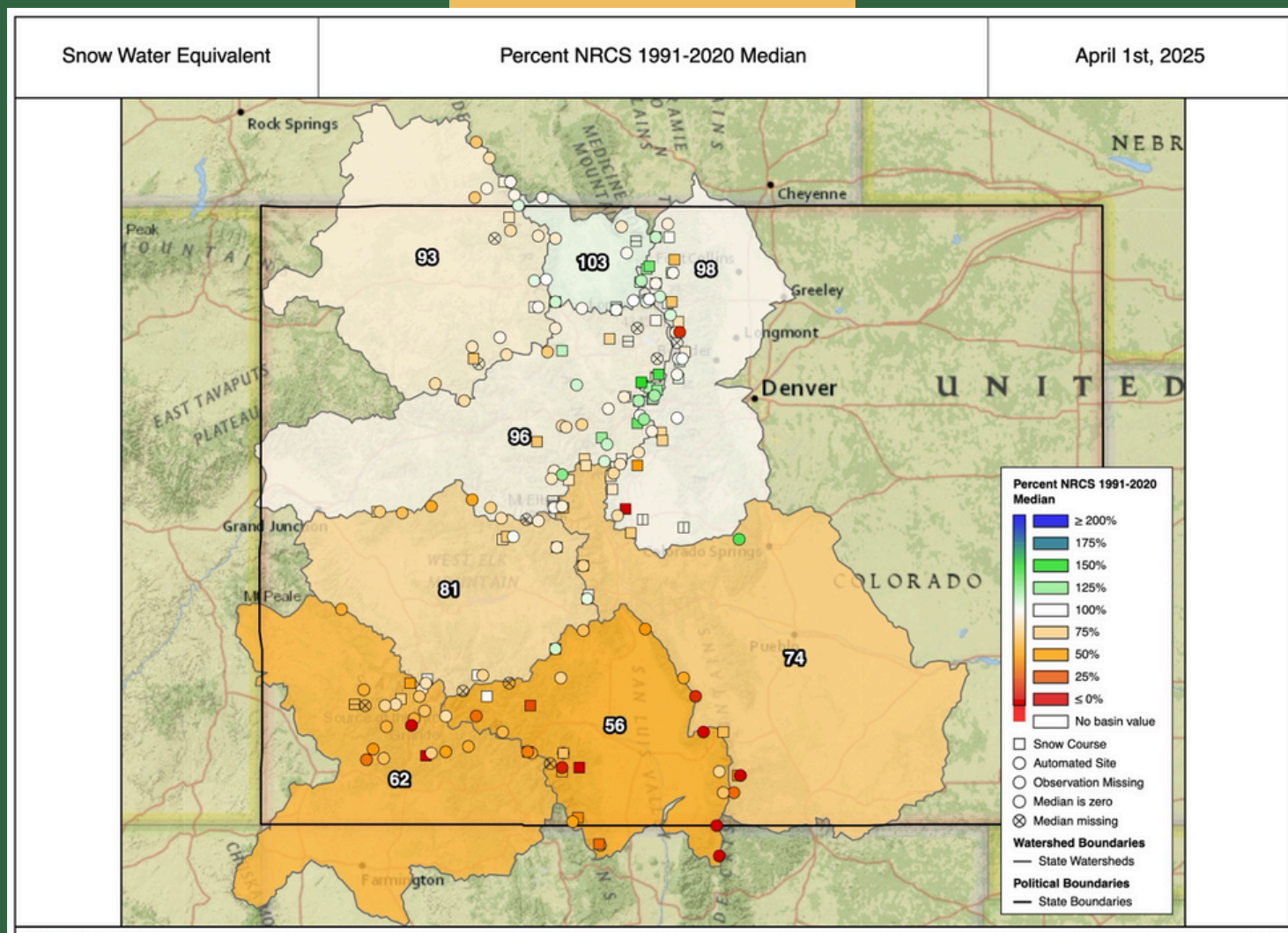
Percent of 1991-2020 snowpack: **February 27**

Despite the solid start to winter in southern Colorado, conditions shifted towards much drier in December and January. By the end of February, Colorado's southeastern basins were seeing only ~2/3 of their normal snowpack. Further north, mid-February snow provided a needed boost in the snowpack, keeping conditions in the Yampa-White-Little Snake, Laramie & North Platte, South Platte, and Colorado Headwaters basins near-normal.



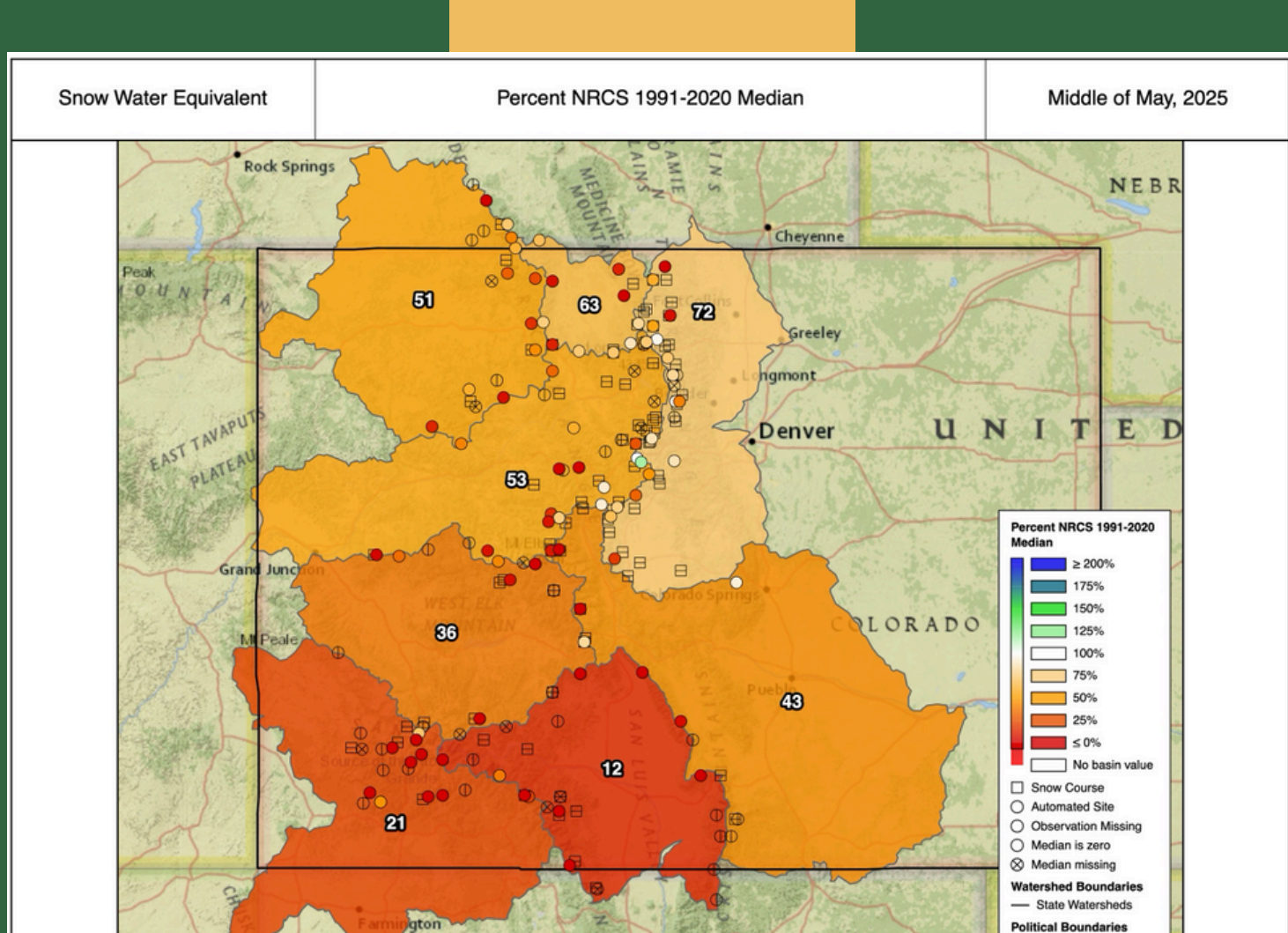
Percent of 1991-2020 snowpack: **April 1**

Below-average snowfall persisted throughout March, and by early April snowpack conditions remained poor in southern Colorado. While the state's southern basins did see a couple snow events in April, it wasn't enough to make up for several months of deficits. Meanwhile, snowpack in the northern part of the state remained near-average.

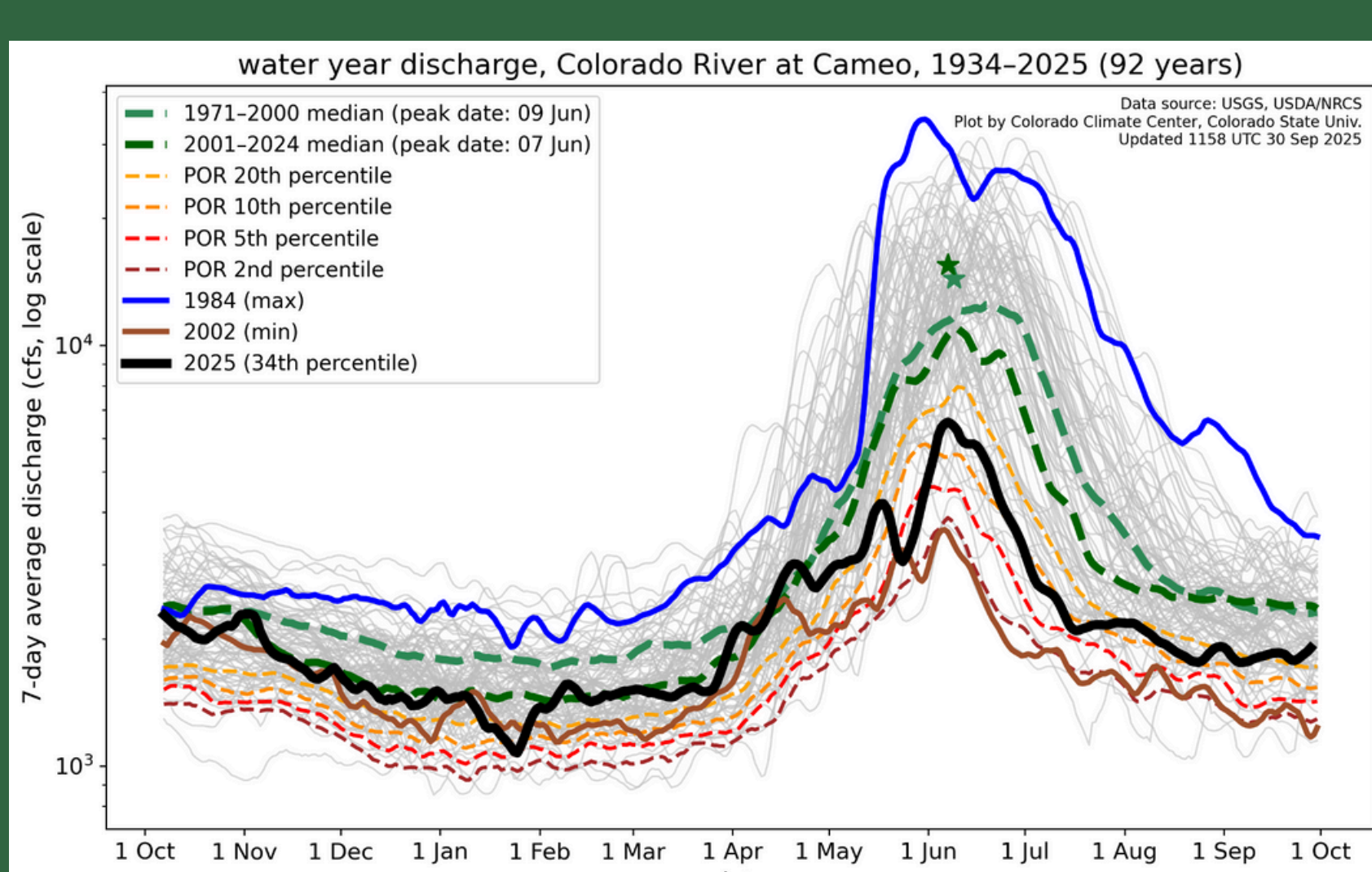


Percent of 1991-2020 snowpack: **Mid-May**

Snowpack deficits started to become evident in northern Colorado as April brought drier than normal conditions (and the mid-April heat wave didn't help the cause either). Conditions remained grim in southern Colorado: by the end of the month, several SNOTEL sites in that part of the state showed near-total to total melt-off, which was 20-30 days earlier than average in some cases.



Streamflow

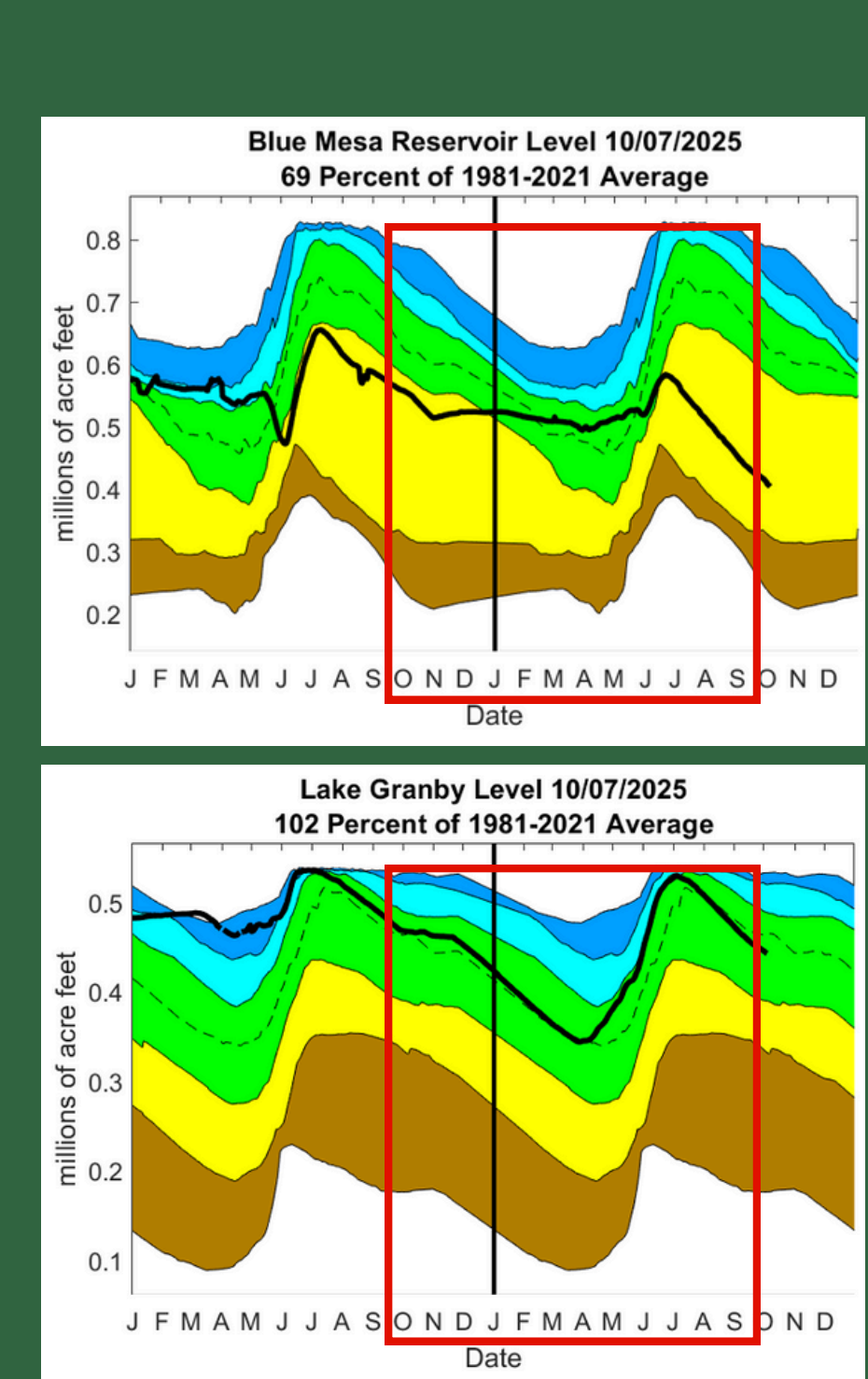
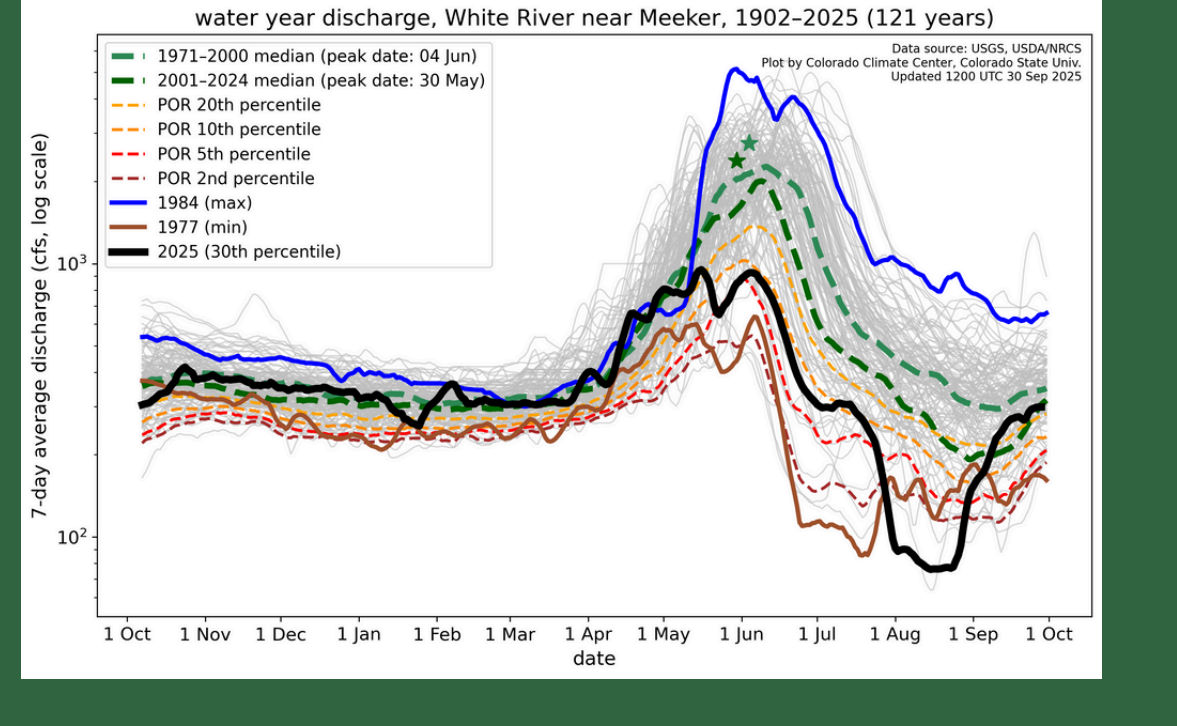
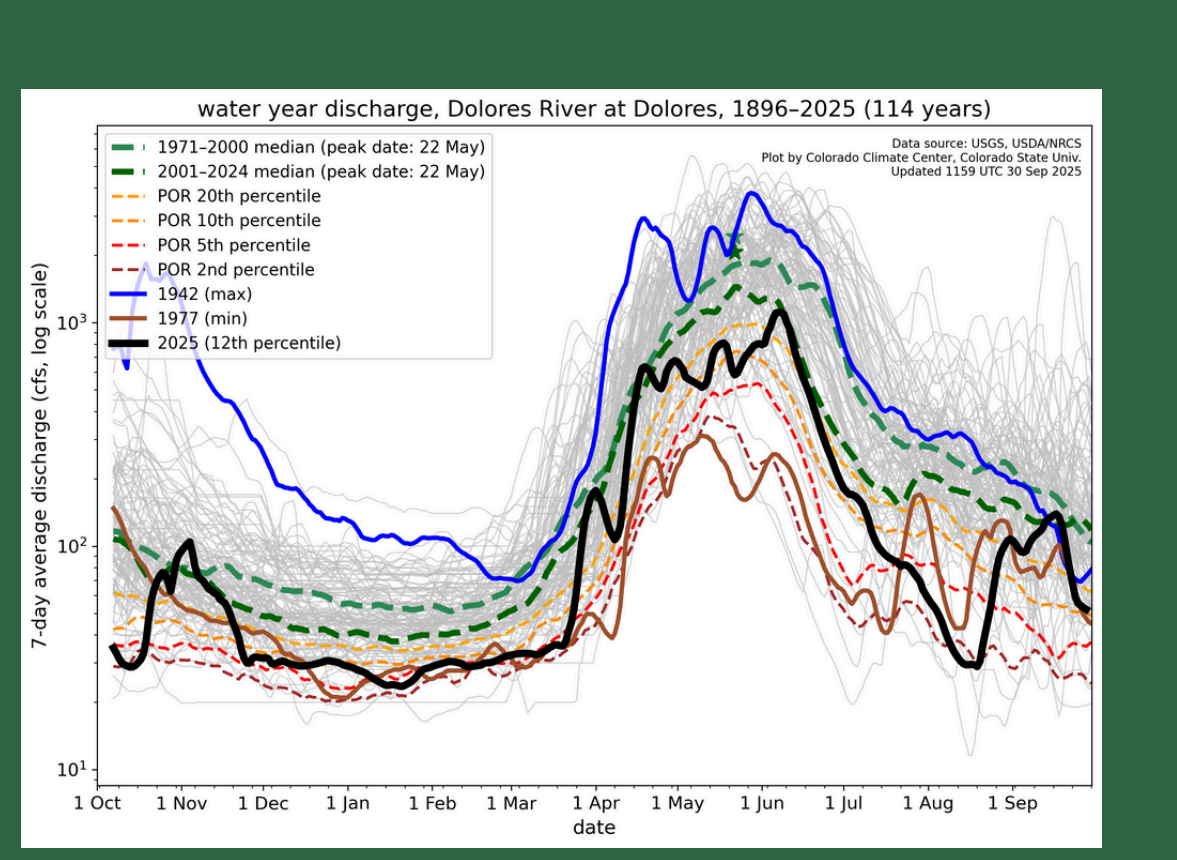


Colorado River at Cameo

- Flows were near the 2001-2024 median until ~late April, then they were below median for the remainder of the water year
- After peak flow was reached, discharge hovered between the ~10th to 20th percentile of the period-of-record average
- Timing of the peak flow was near-normal

Rainfall boosts late season streamflow

- By late summer, streamflows in parts of western Colorado were well below average and near record-low in some locations
- When the monsoon finally became active in late August to early September, some locations (such as the Dolores River at Dolores and the White River near Meeker, shown here) saw notable upticks in streamflow



Reservoir Storage

At Blue Mesa reservoir, conditions were near or slightly-above average throughout much of winter and spring. However, the storage boost in late spring and early summer was rather limited, and storage remained below-normal for the remainder of the water year.

Lake Granby reservoir storage was normal to slightly above-normal throughout water year 2025.