



# December 2024 Colorado Monthly Climate Summary

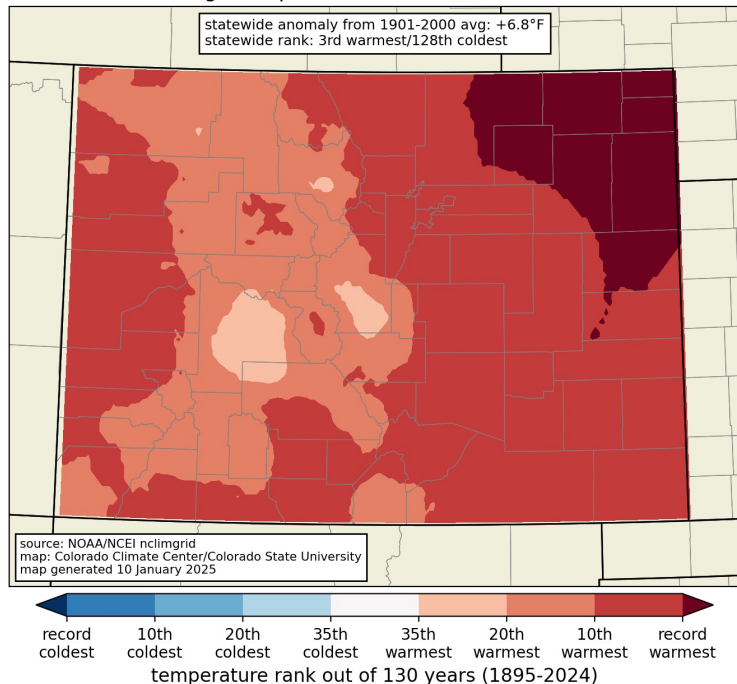
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ATMOSPHERIC SCIENCE  
COLORADO STATE UNIVERSITY

# temperature

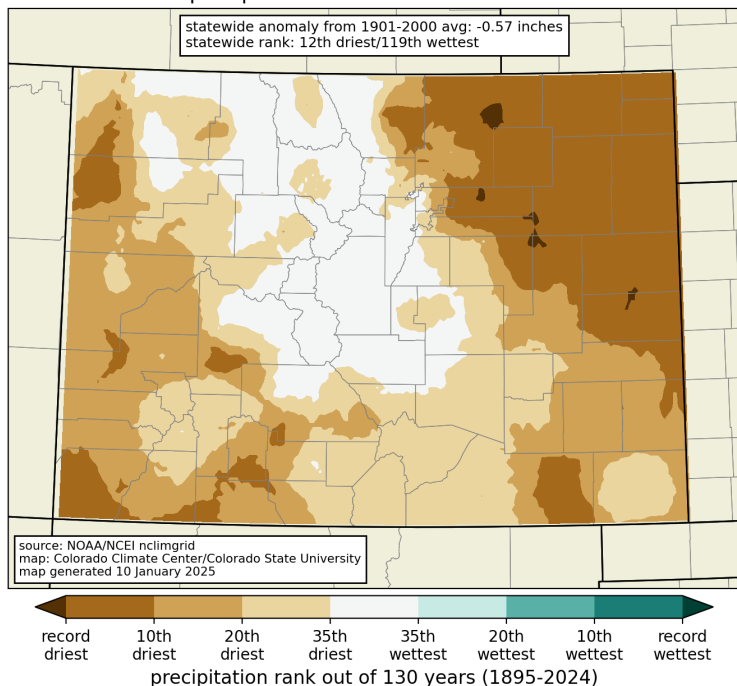
average temperature rank: December 2024



December 2024 was very warm across Colorado, or perhaps more accurately, there was a distinct lack of cold. It was the warmest December on record for the northeastern corner of the state, and much of the rest of the state was in the top 10. The one exception was around Gunnison (read more about that below).

# precipitation

precipitation rank: December 2024

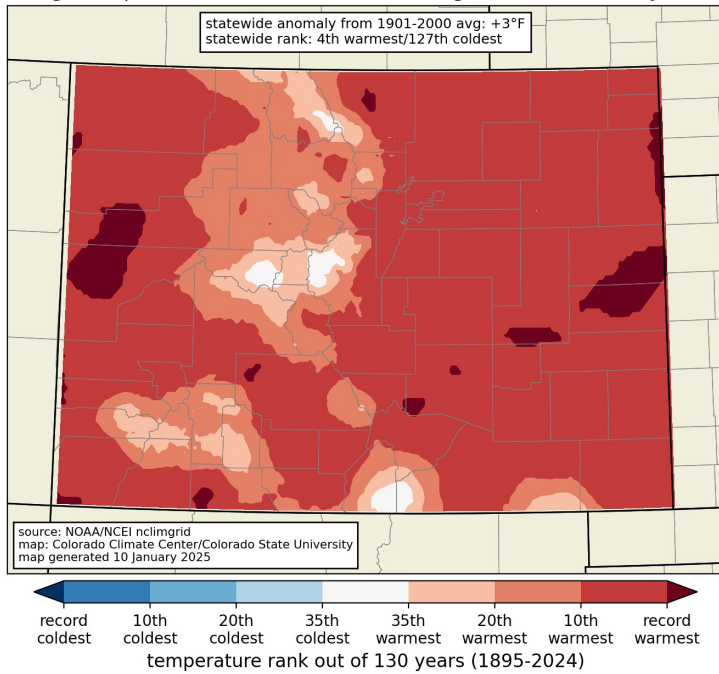


December was dry for much of the state, with both eastern and western Colorado experiencing much below average precipitation. A series of snowstorms late in month allowed the northern and central mountains to end December with near-average precipitation.



# temperature: calendar year 2024

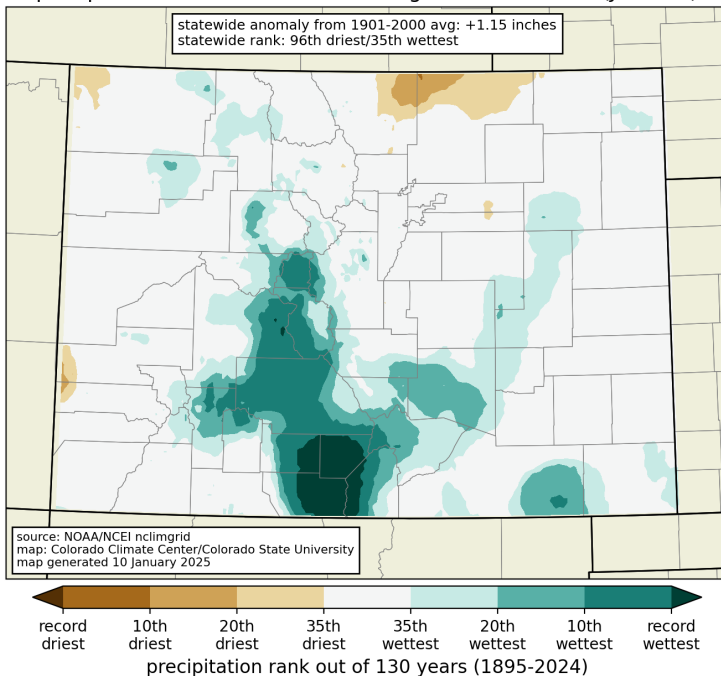
average temperature rank: 12 months ending December 2024 (Jan-Dec)



Calendar year 2024 was a warm one for Colorado: the 4<sup>th</sup> warmest in 130 years of records. Grand Junction had their hottest year on record, as did portions of the eastern plains. The only exceptions were in some mountain areas, which had temperatures closer to average in 2024.

# precipitation: calendar year 2024

precipitation rank: 12 months ending December 2024 (Jan-Dec)



Much of the state had near-average precipitation during 2024, with two clear exceptions: the southern San Luis Valley had its wettest calendar year on record, while northern Larimer and Weld Counties were much drier than average.



Calendar year 2024 had no months that were significantly cooler than normal. The last 6 months of the year were the 2<sup>nd</sup> warmest on record for Colorado, behind only 2021.

Month	T Rank (of 129 years)	Compared to 20 <sup>th</sup> century avg?
Jan	57 <sup>th</sup> warmest	near average
Feb	14 <sup>th</sup> warmest	above
Mar	39 <sup>th</sup> warmest	above
Apr	20 <sup>th</sup> warmest	above
May	47 <sup>th</sup> coolest	near average
Jun	3 <sup>rd</sup> warmest	much above
Jul	45 <sup>th</sup> warmest	near average
Aug	14 <sup>th</sup> warmest	above
Sep	7 <sup>th</sup> warmest	much above
Oct	2 <sup>nd</sup> warmest	much above
Nov	45 <sup>th</sup> coolest	near average
Dec	3 <sup>rd</sup> warmest	much above

The end of 2024 saw some big swings in terms of precipitation, with the huge storms in November that made it much wetter than average turning to a rather dry December across the state.

Month	P Rank (of 129 years)	Compared to 20 <sup>th</sup> century avg?
Jan	47 <sup>th</sup> wettest	near average
Feb	15 <sup>th</sup> wettest	above
Mar	29 <sup>th</sup> wettest	above
Apr	43 <sup>rd</sup> driest	near average
May	58 <sup>th</sup> driest	near average
Jun	38 <sup>th</sup> wettest	above
Jul	29 <sup>th</sup> driest	below
Aug	13 <sup>th</sup> wettest	above
Sep	41 <sup>st</sup> driest	near average
Oct	47 <sup>th</sup> wettest	near average
Nov	5 <sup>th</sup> wettest	much above
Dec	12 <sup>th</sup> driest	below



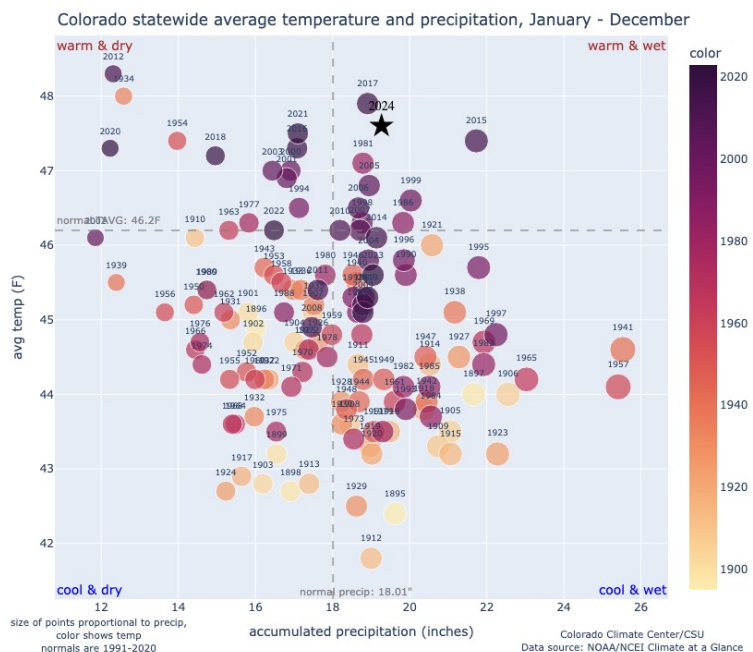
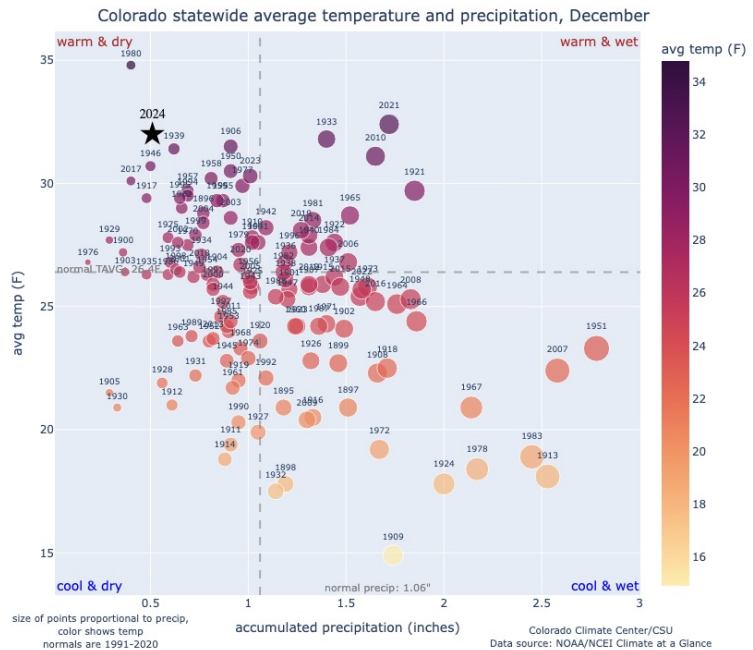
# quadrant charts

Each dot plots the precipitation on the x-axis and the temperature on the y-axis. Dots are colored based on temperature and size is based on precipitation. The current year is denoted with a star. Long-term averages are denoted by the dashed lines.

Averaged across Colorado, December 2024 was very warm and dry. Statewide it was the 3<sup>rd</sup> warmest December, behind only 1980 and 2021. It was 5.6°F warmer than the 1991-2020 average and 6.8°F warmer than the 20<sup>th</sup>-century average. It was the 12<sup>th</sup> driest December statewide at 0.57" below average; the driest December since 2017.

This quadrant chart for calendar year 2024 has the circles color-shaded by year, with more recent years in the purple shades. It was the 4<sup>th</sup> warmest calendar year on record, 3.0°F warmer than the 20<sup>th</sup>-century average. 8 of the 10 warmest years in Colorado have been since 2012. Precipitation was 1.15" above average statewide, the 35<sup>th</sup> wettest year out of 130.

[view all quadrant charts](#)



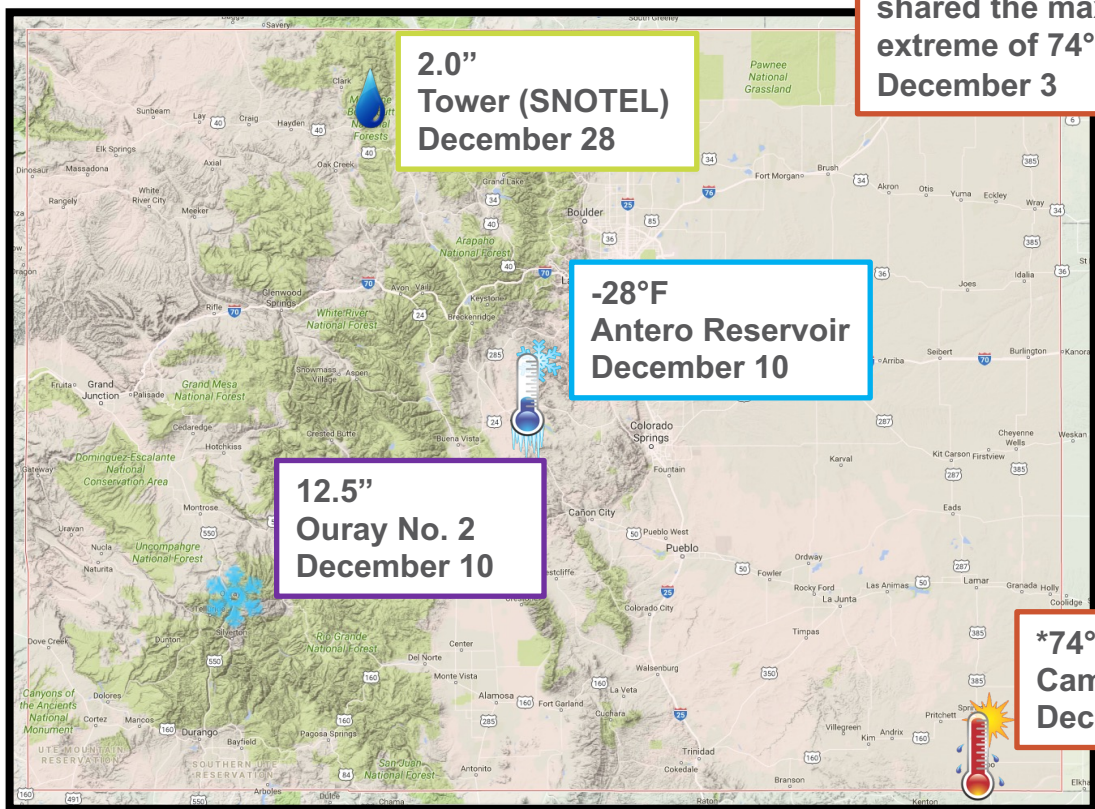


# records tied and broken

	High Max	Low Max	High Min	Low Min	Precip	Snow
Daily	25/120	3/18	50/129	0/2	14/38	0/10
Monthly	0/0	0/0	2/0	0/0	0/1	0/0
All-time	0/0	0/0	0/0	0/0	0/0	0/0

Tied/**Broken**, from NOAA National Centers for Environmental Information

# state extremes



**\*New Raymer 21 N**  
shared the maximum  
extreme of 74°F on  
December 3

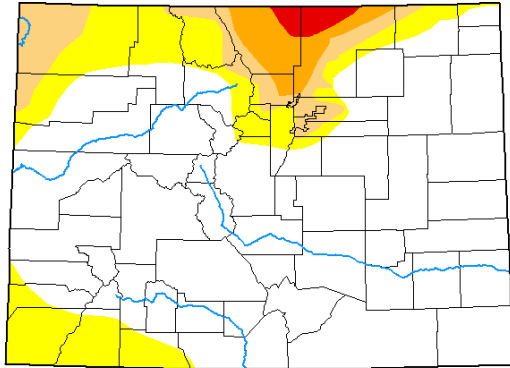
**\*74°F**  
Campo 7 S  
December 23



# drought & snowpack

## U.S. Drought Monitor Colorado

**December 31, 2024**  
(Released Wednesday, Jan. 1, 2025)  
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	75.05	24.95	10.15	4.08	0.98	0.00
Last Week 12-24-2024	72.84	27.16	14.05	5.55	0.93	0.00
3 Months Ago 10-01-2024	48.27	51.73	24.40	4.62	0.00	0.00
Start of Calendar Year 01-03-2024	34.65	65.35	29.59	8.85	2.05	0.00
Start of Water Year 10-01-2024	48.27	51.73	24.40	4.62	0.00	0.00
One Year Ago 01-02-2024	34.65	65.35	29.59	8.85	2.05	0.00

**Intensity**

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

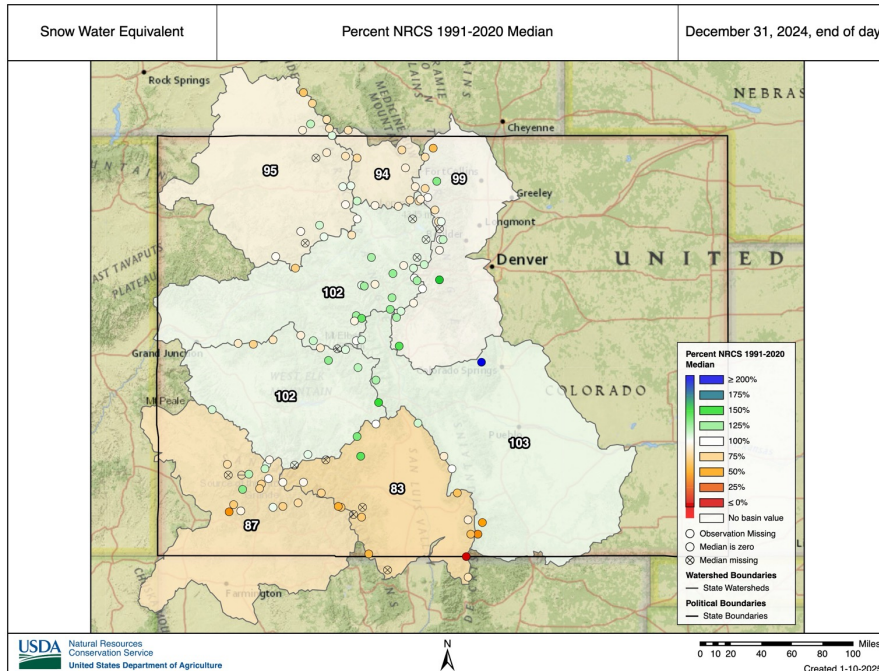
Author:  
Rocky Bilotta  
NCEI/NOAA



[droughtmonitor.unl.edu](http://droughtmonitor.unl.edu)

Warm and dry conditions across northern Colorado led to expansion of drought, especially in Larimer and Weld Counties, where a pocket of D3 (extreme drought) was in place. Just over 10% of the state was in drought as of the end of December, with about a quarter of the state in D0 (abnormally dry) or worse.

## [Colorado Drought Update Page](#)



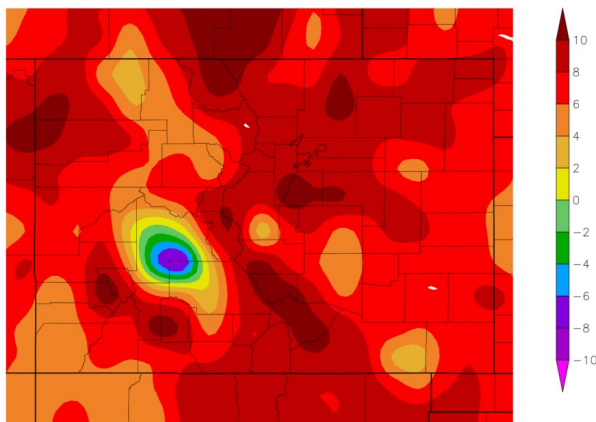
After a fast start to the snow accumulation in November, generally dry conditions through December brought the mountain snowpack back closer to average. Southwestern basins ended the month below average, while an active storm cycle in late December brought the northern mountains up near average after flatlining earlier in the month.



# significant events

***The curious case of the cold in Gunnison:*** For the first 3 weeks of December, the Gunnison valley remained stubbornly cold while the rest of the state was much warmer than average. It finally warmed up in late December, so the monthly numbers don't look so extreme. But what was going on that kept Gunnison so cold while everywhere around was warm? Read our blog post! (link on the last page of the summary)

Departure from Normal Temperature (F)  
12/15/2024 - 12/21/2024



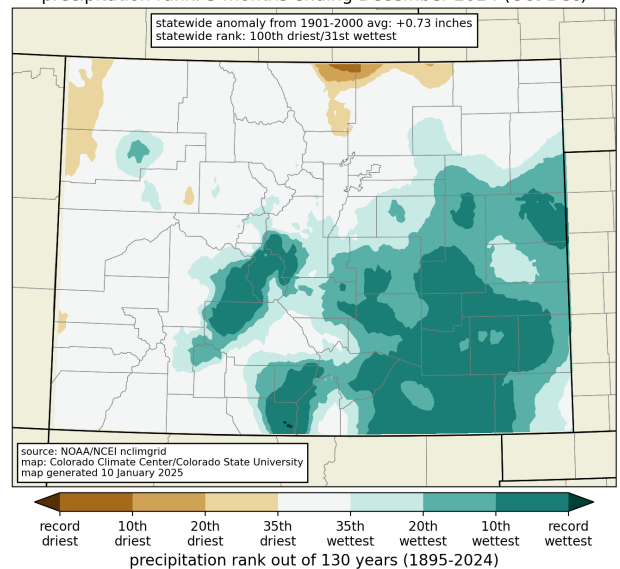
*Departure from normal temperature for December 15-21, showing Gunnison much colder than normal while the rest of the state was very warm. Map from the High Plains Regional Climate Center*

Generated 12/22/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

***Is it wet or dry in southeastern Colorado?*** You may remember the epic snowstorm on the eastern plains in early November. Then there was effectively no precipitation through December. But that snowstorm was so big that even though December was nearly record-dry, the water year to date is still nearly record wet across southeastern Colorado!

precipitation rank: 3 months ending December 2024 (Oct-Dec)



*Precipitation rank for the first 3 months of Water Year 2025, showing wet conditions in southeastern Colorado.*





# CCC in the news

- ❑ **December 19, 2024:** [State climatologist: sNOw outlook for the holidays](#) featuring Russ Schumacher in CSU Source.
- ❑ **December 21, 2024:** [Here are the chances of a white Christmas in Colorado communities](#) featuring Russ Schumacher in The Coloradoan.
- ❑ **December 23, 2024:** [State climatologist says Northern Colorado has worst drought conditions in the state](#) featuring Russ Schumacher on 9News.
- ❑ **December 23, 2024:** [Rain possible on the Front Range this week, but a white Christmas is a 'sure bet' in Colorado's mountains](#) featuring Russ Schumacher in CPR News.

[Read more about "The curious case of the cold in Gunnison" in our blog \(and subscribe to get new blog posts in your inbox if you're interested!\)](#)

