



United States Department of Agriculture

Colorado Snow Surveys

# Water Conditions Monitoring Committee Meeting November 19<sup>th</sup>, 2024

## NRCS Snow Survey and Water Supply Forecasting Program

Brian Domonkos

Hydrologist

Brian.Domonkos@usda.gov

720-544-2853

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/co/snow/>

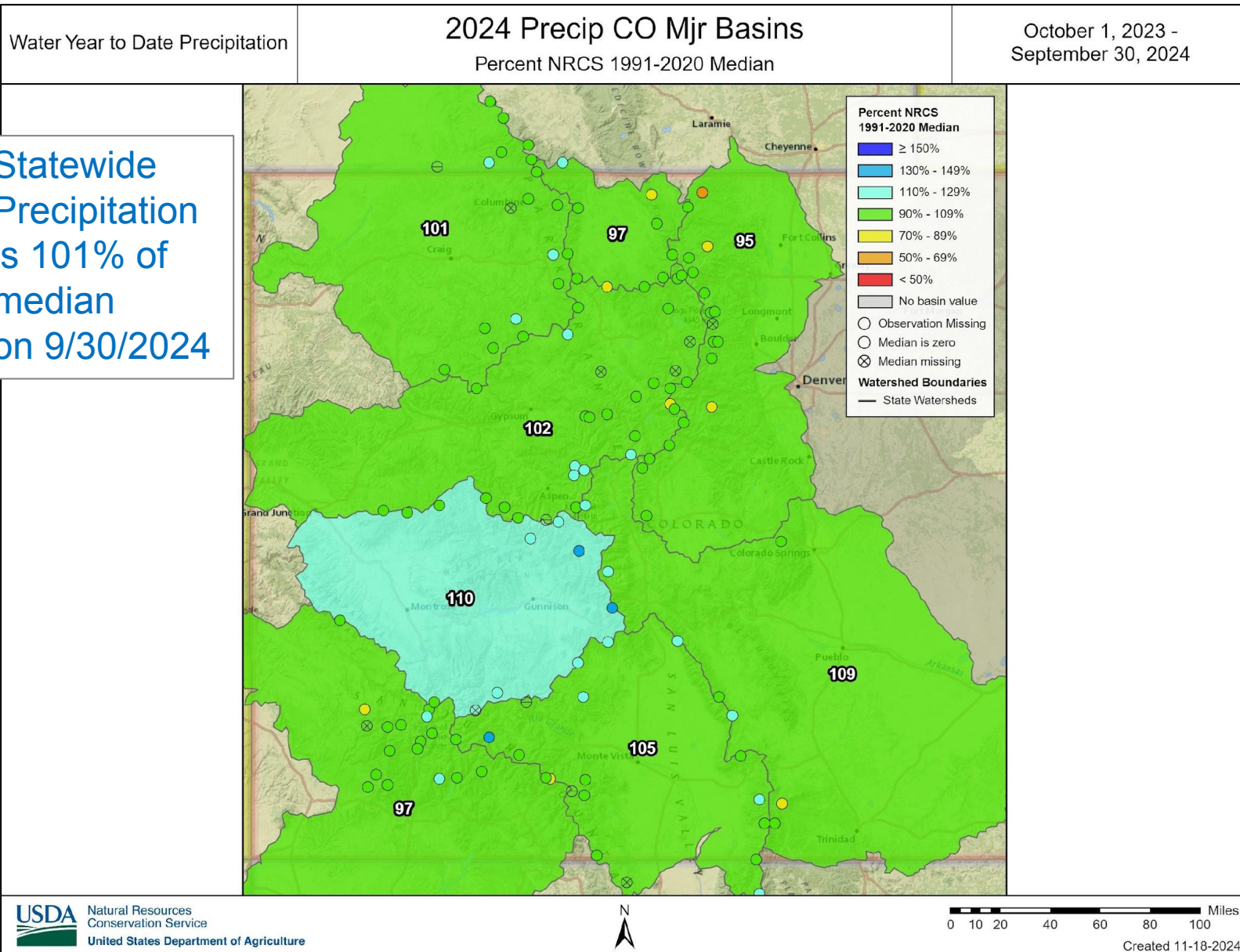


United States Department of Agriculture

# Colorado Snow Surveys

WY24 Precipitation

Statewide  
Precipitation  
is 101% of  
median  
on 9/30/2024



## PRECIPITATION ACCUMULATION IN STATE OF COLORADO

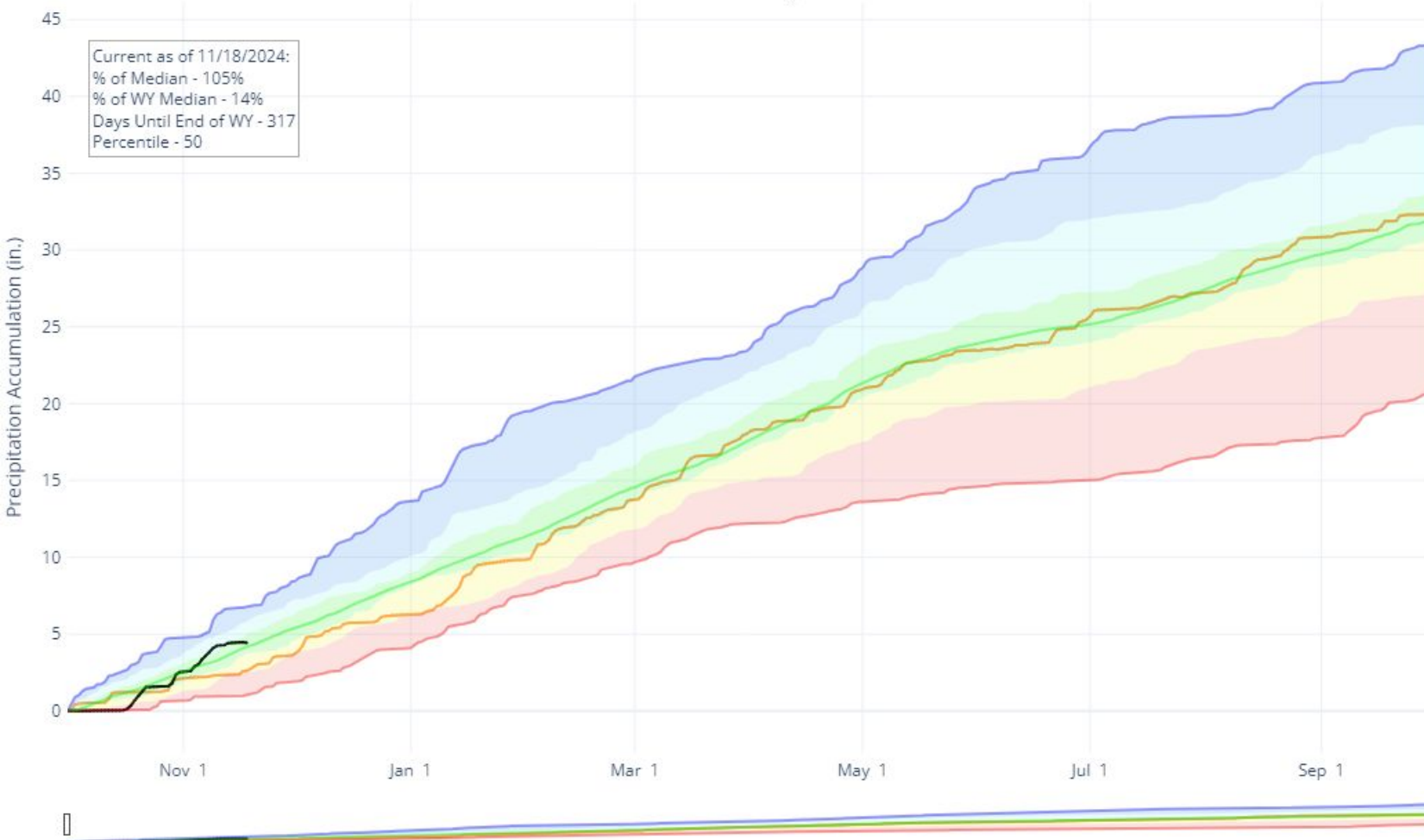
Reset Range

[Link to data: CSV / JSON](#)

Station List

Current as of 11/18/2024:  
 % of Median - 105%  
 % of WY Median - 14%  
 Days Until End of WY - 317  
 Percentile - 50

Max  
 Median ('91-'20)  
 Min  
 Stats. Shading  
 2025 (117 sites)  
 2024 (117 sites)





# Colorado Snow Surveys

## PRECIPITATION ACCUMULATION IN SOUTH PLATTE

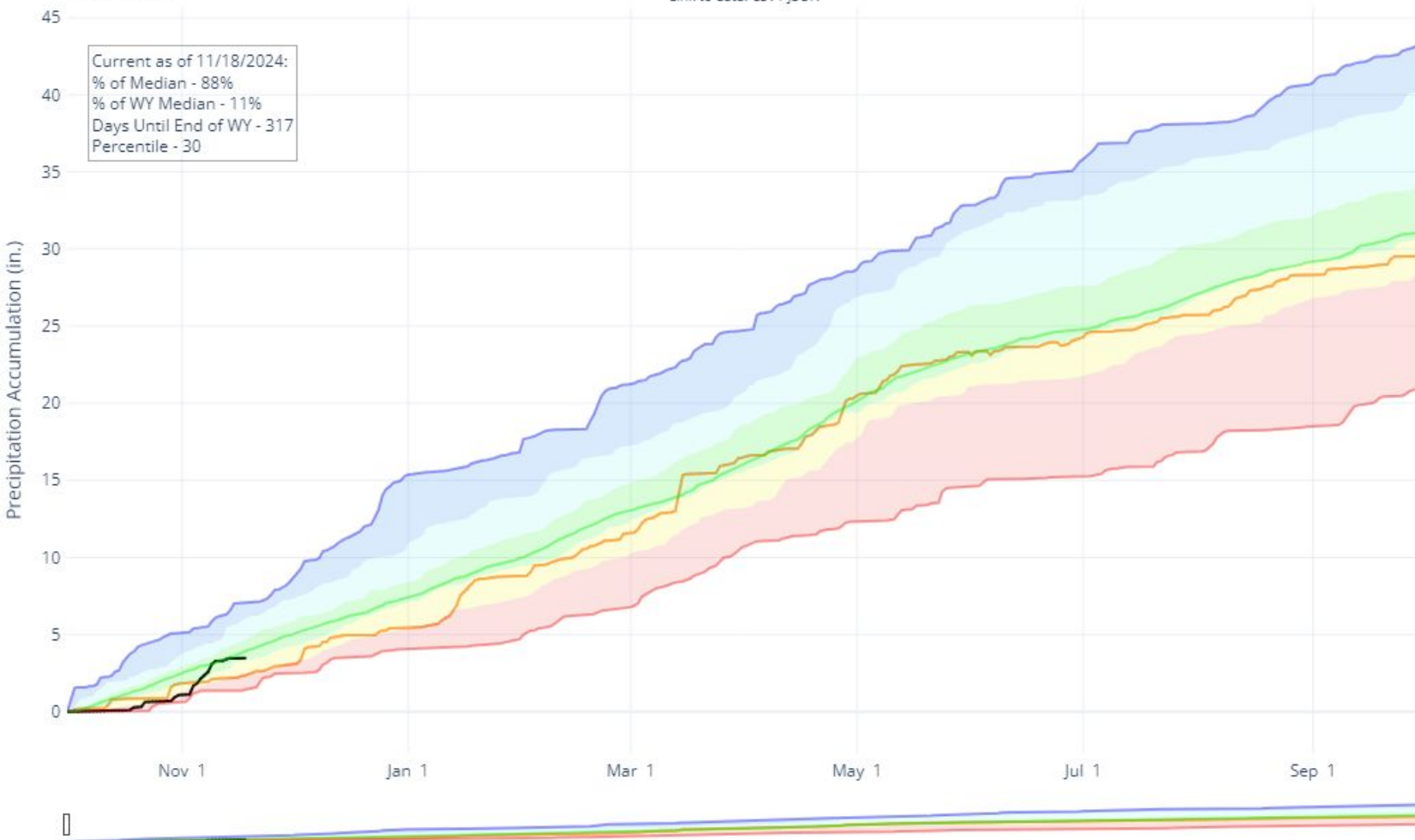
Reset Range

[Link to data: CSV / JSON](#)

Current as of 11/18/2024:  
% of Median - 88%  
% of WY Median - 11%  
Days Until End of WY - 317  
Percentile - 30

Station List

- Max
- Median ('91-'20)
- Min
- Stats. Shading
- 2025 (21 sites)
- 2024 (21 sites)





## PRECIPITATION ACCUMULATION IN ARKANSAS

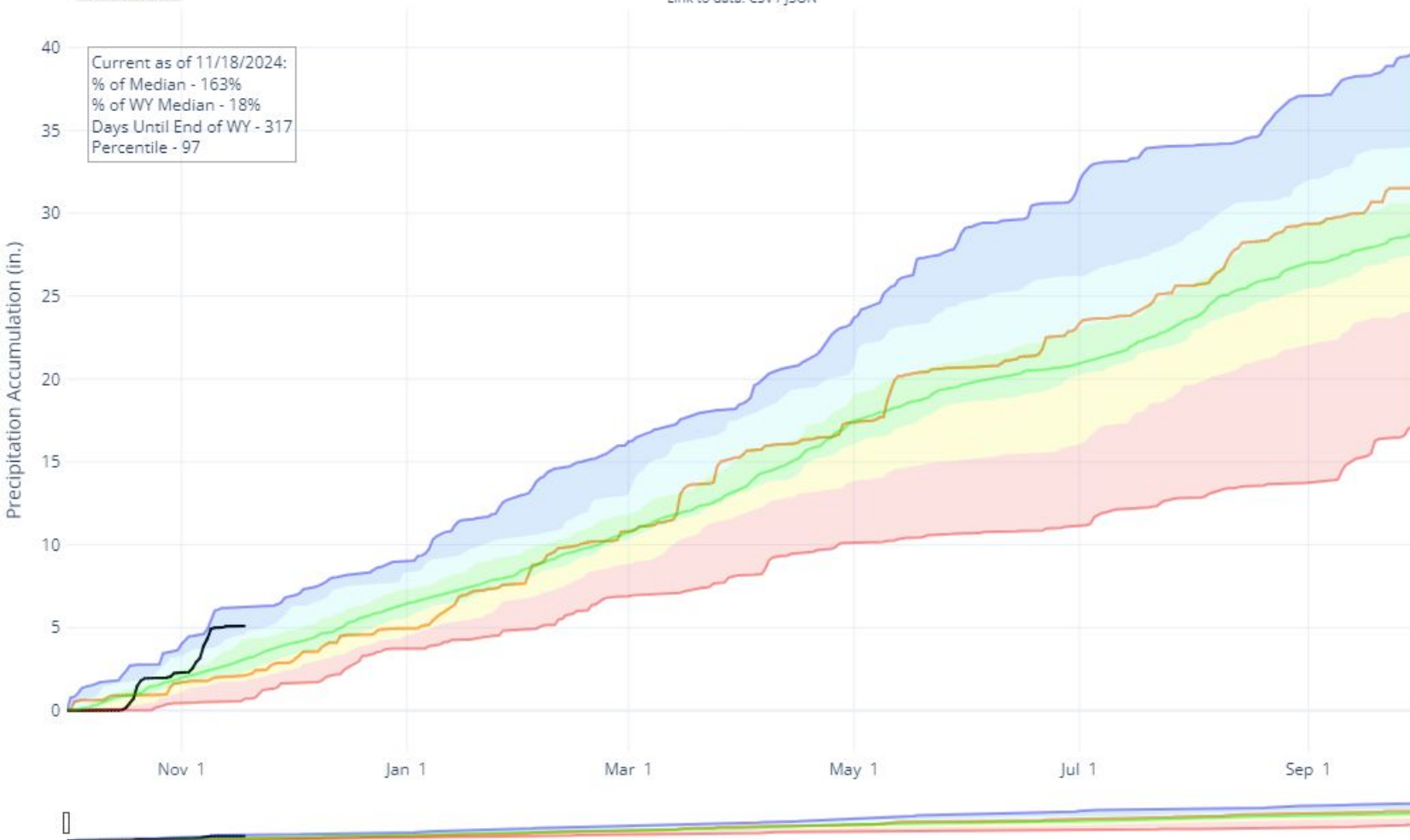
Reset Range

[Link to data: CSV / JSON](#)

Station List

Current as of 11/18/2024:  
 % of Median - 163%  
 % of WY Median - 18%  
 Days Until End of WY - 317  
 Percentile - 97

Max  
 Median ('91-'20)  
 Min  
 Stats. Shading  
 2025 (11 sites)  
 2024 (11 sites)





# Colorado Snow Surveys

## PRECIPITATION ACCUMULATION IN SAN MIGUEL-DOLORES-ANIMAS-SAN JUAN

Reset Range

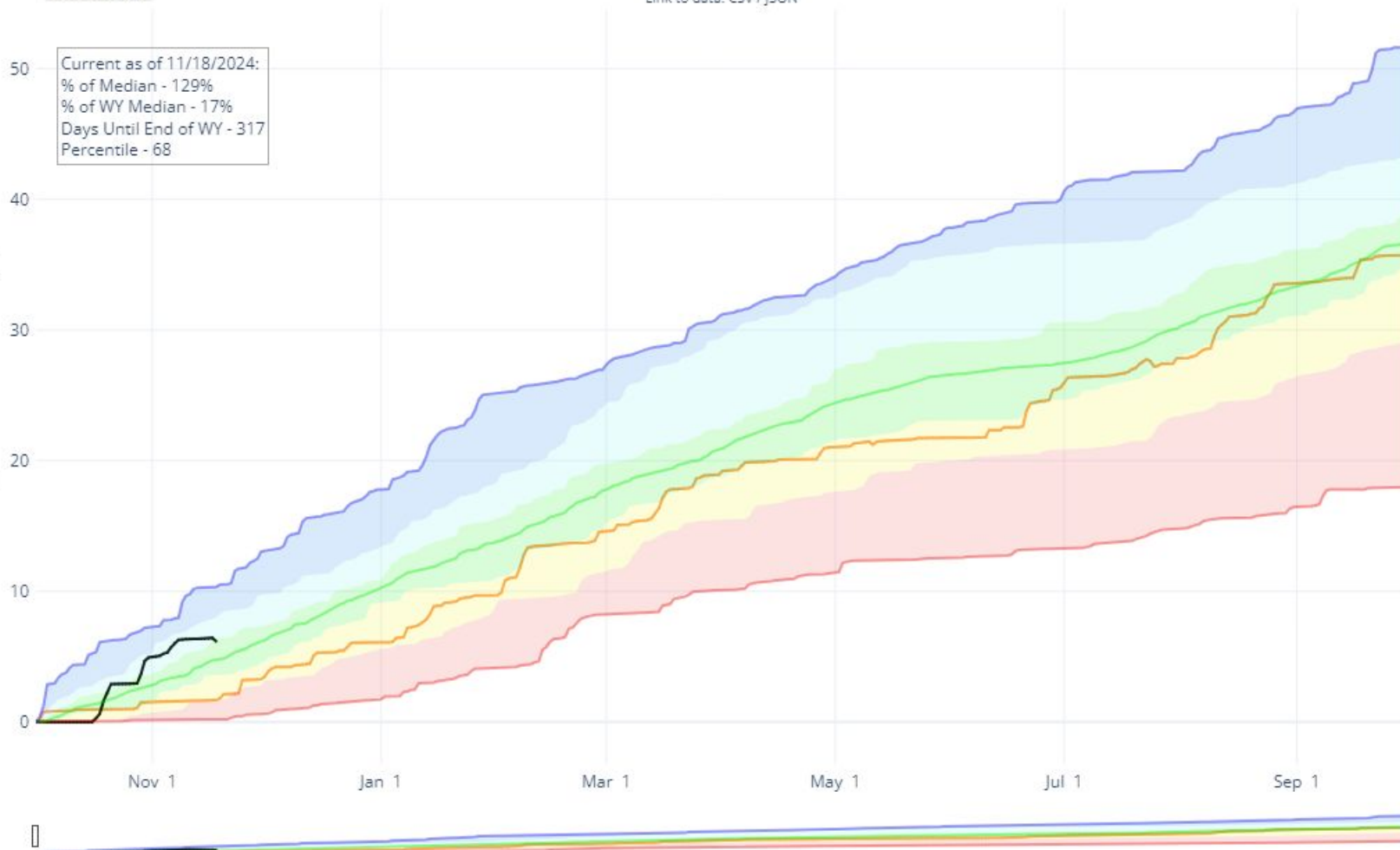
[Link to data: CSV / JSON](#)

Station List

Current as of 11/18/2024:  
% of Median - 129%  
% of WY Median - 17%  
Days Until End of WY - 317  
Percentile - 68

- Max
- Median ('91-'20)
- Min
- Stats. Shading
- 2025 (19 sites)
- 2024 (19 sites)

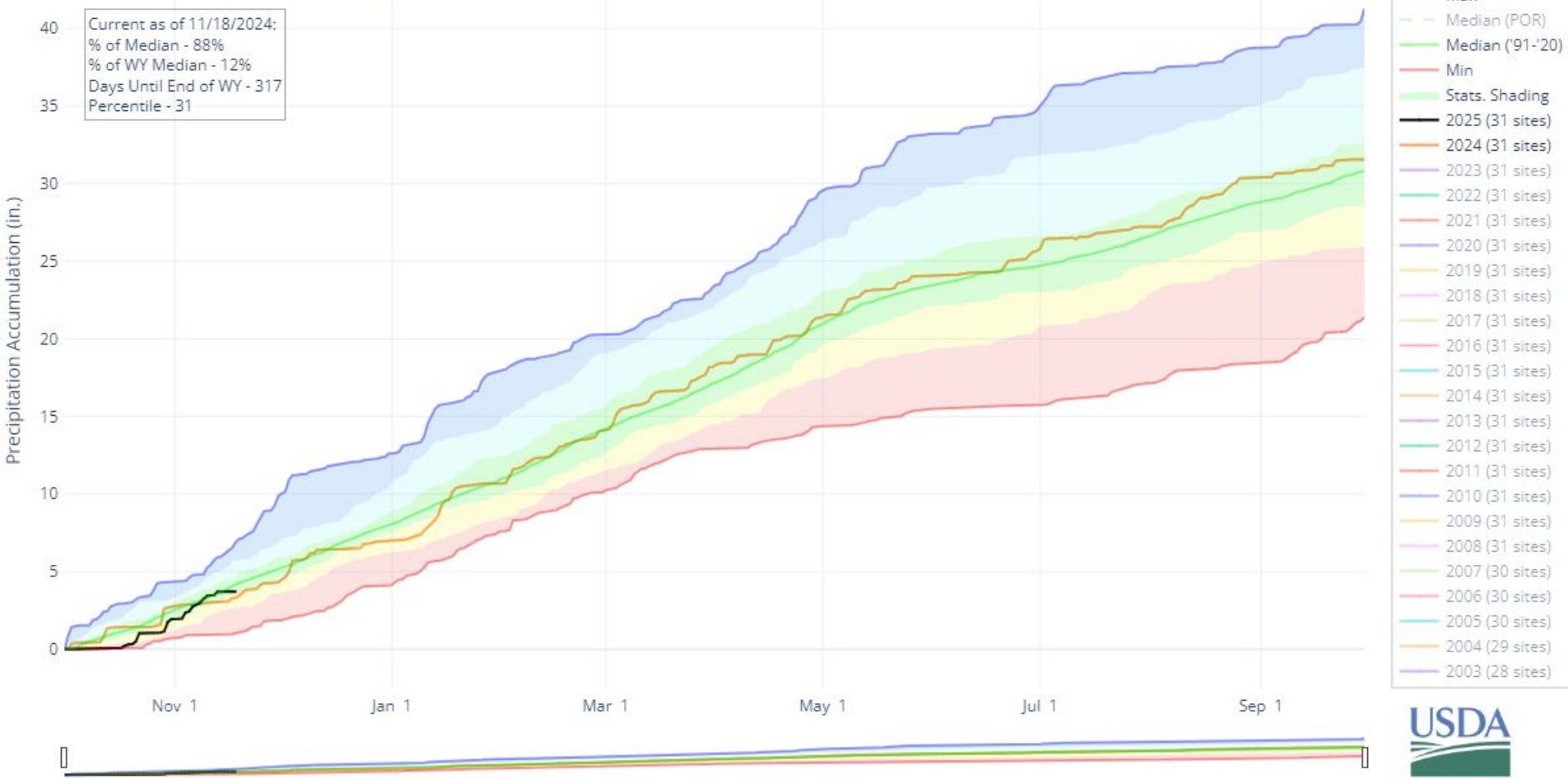
Precipitation Accumulation (in.)



## PRECIPITATION ACCUMULATION IN COLORADO HEADWATERS

Reset Range

[Link to data: CSV / JSON](#)

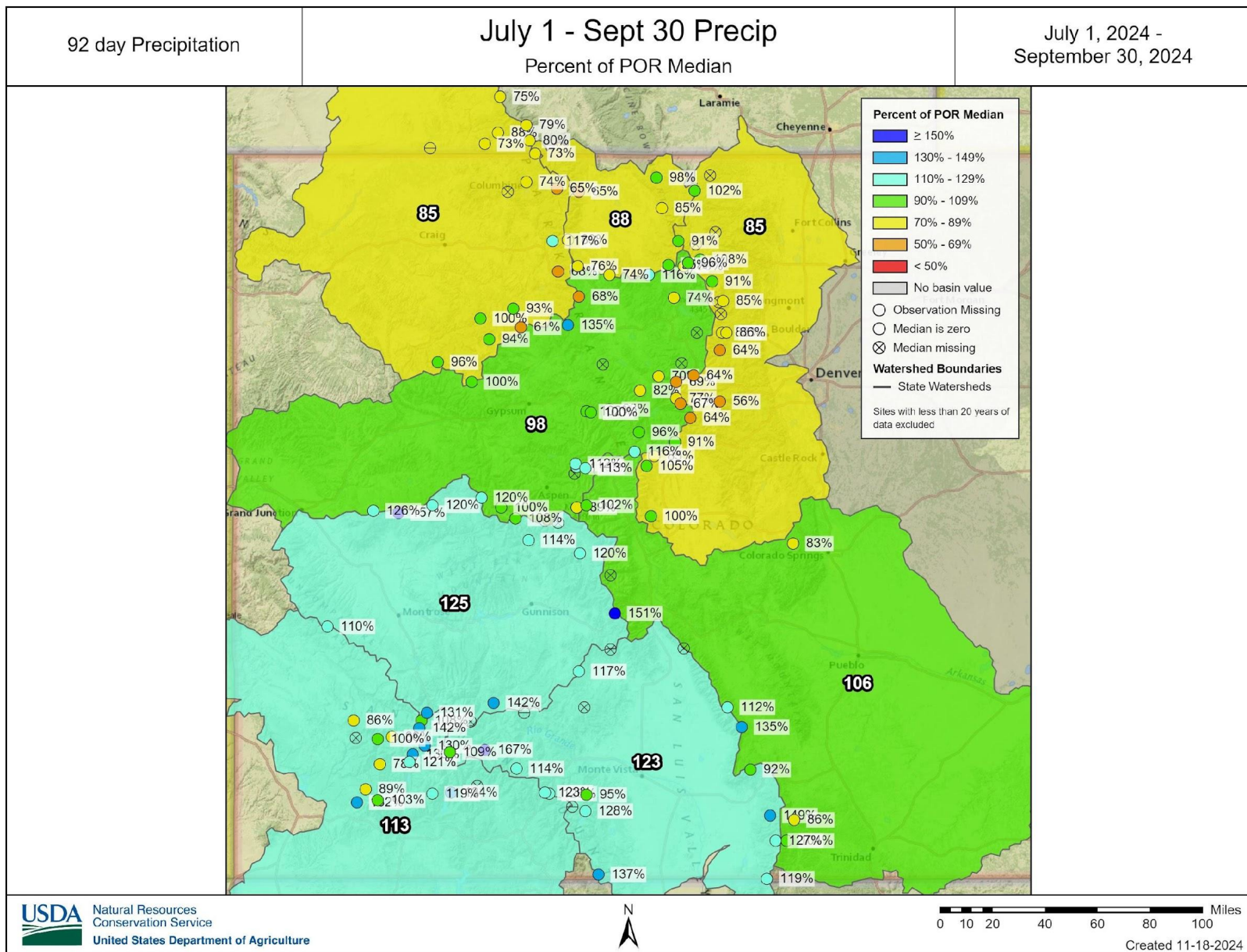




United States Department of Agriculture

# Colorado Snow Surveys

Last 3 Months of WY24  
Precip







# Colorado Snow Surveys

## PRECIPITATION ACCUMULATION IN STATE OF COLORADO

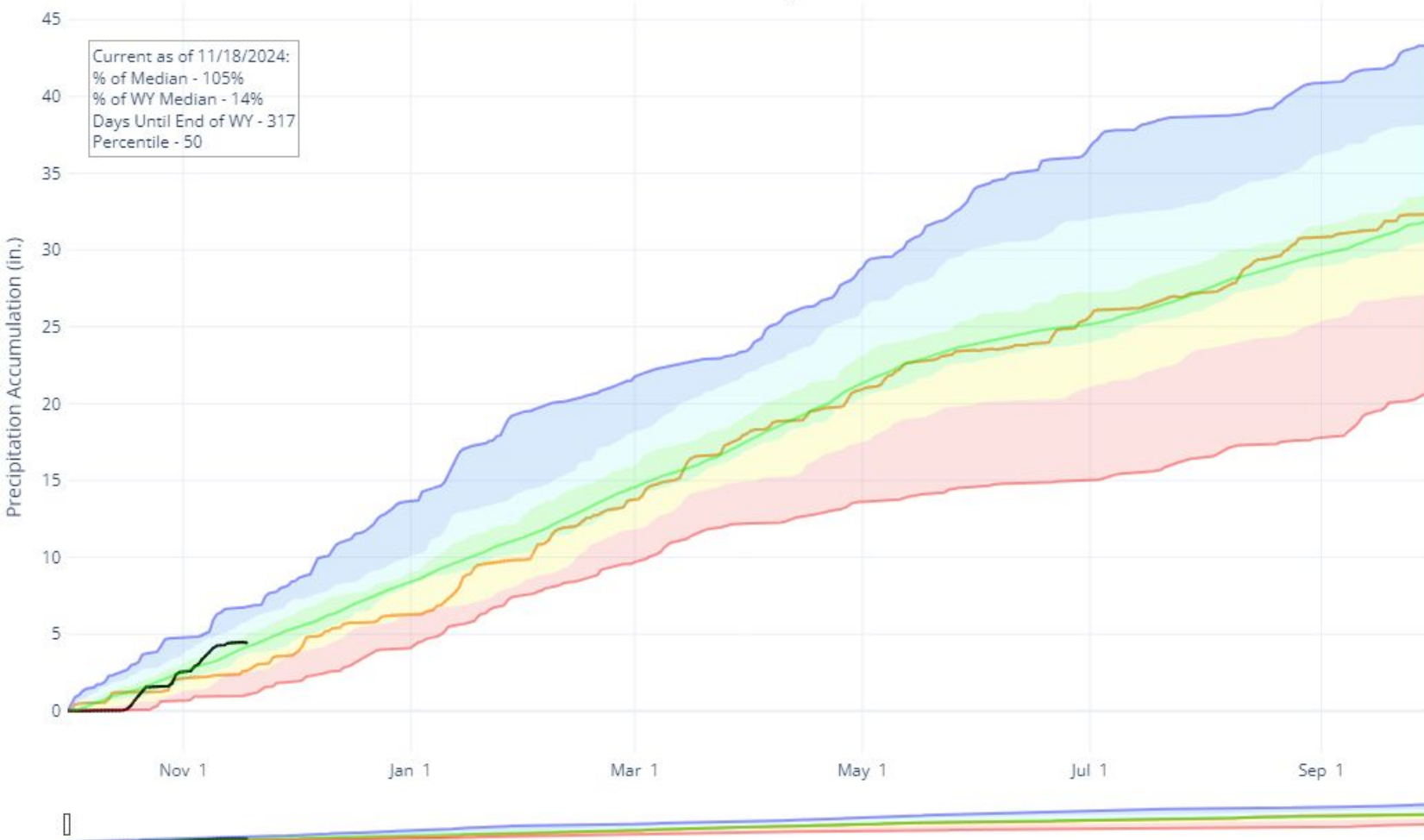
Reset Range

[Link to data: CSV / JSON](#)

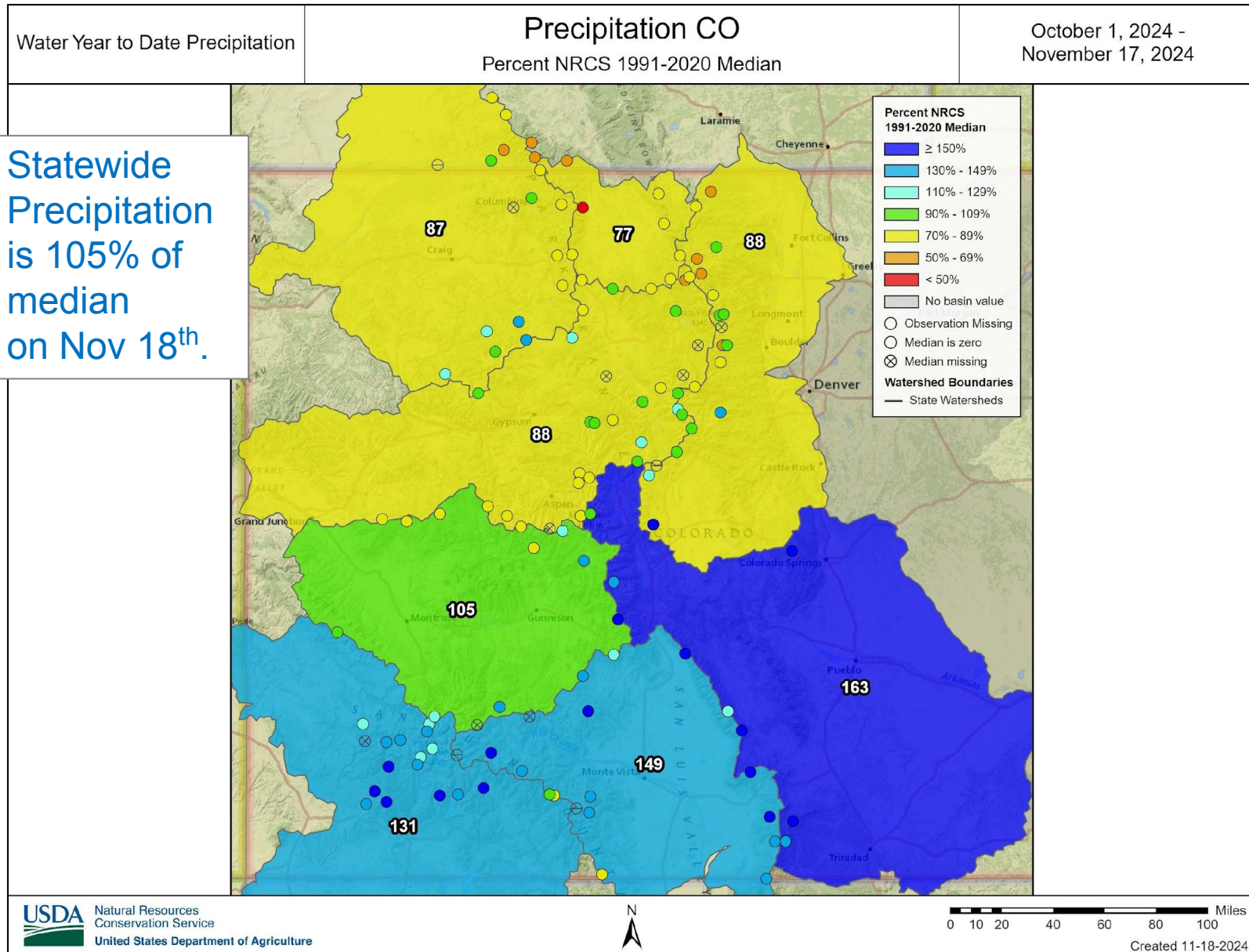
Station List

Current as of 11/18/2024:  
% of Median - 105%  
% of WY Median - 14%  
Days Until End of WY - 317  
Percentile - 50

Max  
Median ('91-'20)  
Min  
Stats. Shading  
2025 (117 sites)  
2024 (117 sites)



## WY25 Precipitation

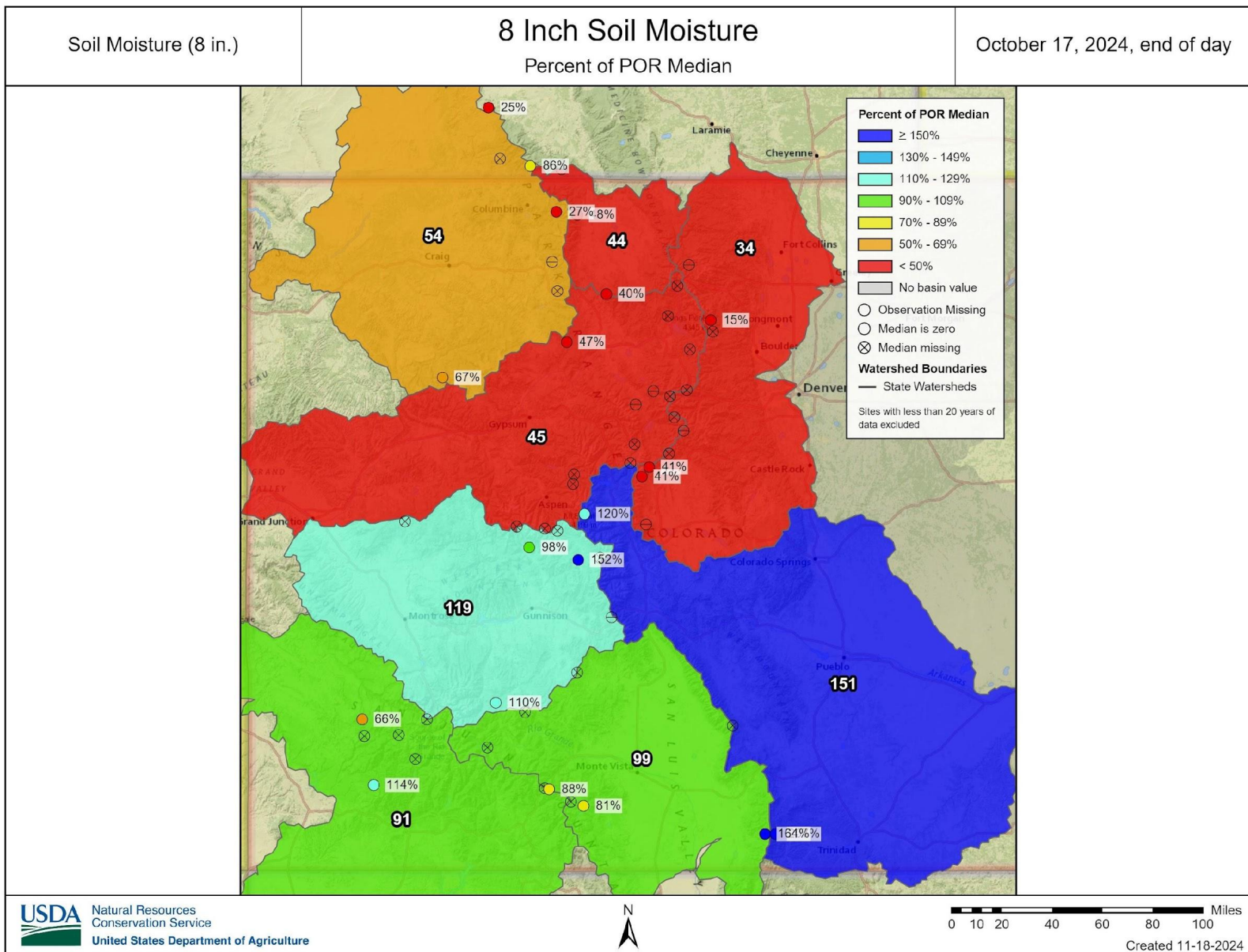




United States Department of Agriculture

# Colorado Snow Surveys

## 8 Inch Soil Moisture Data



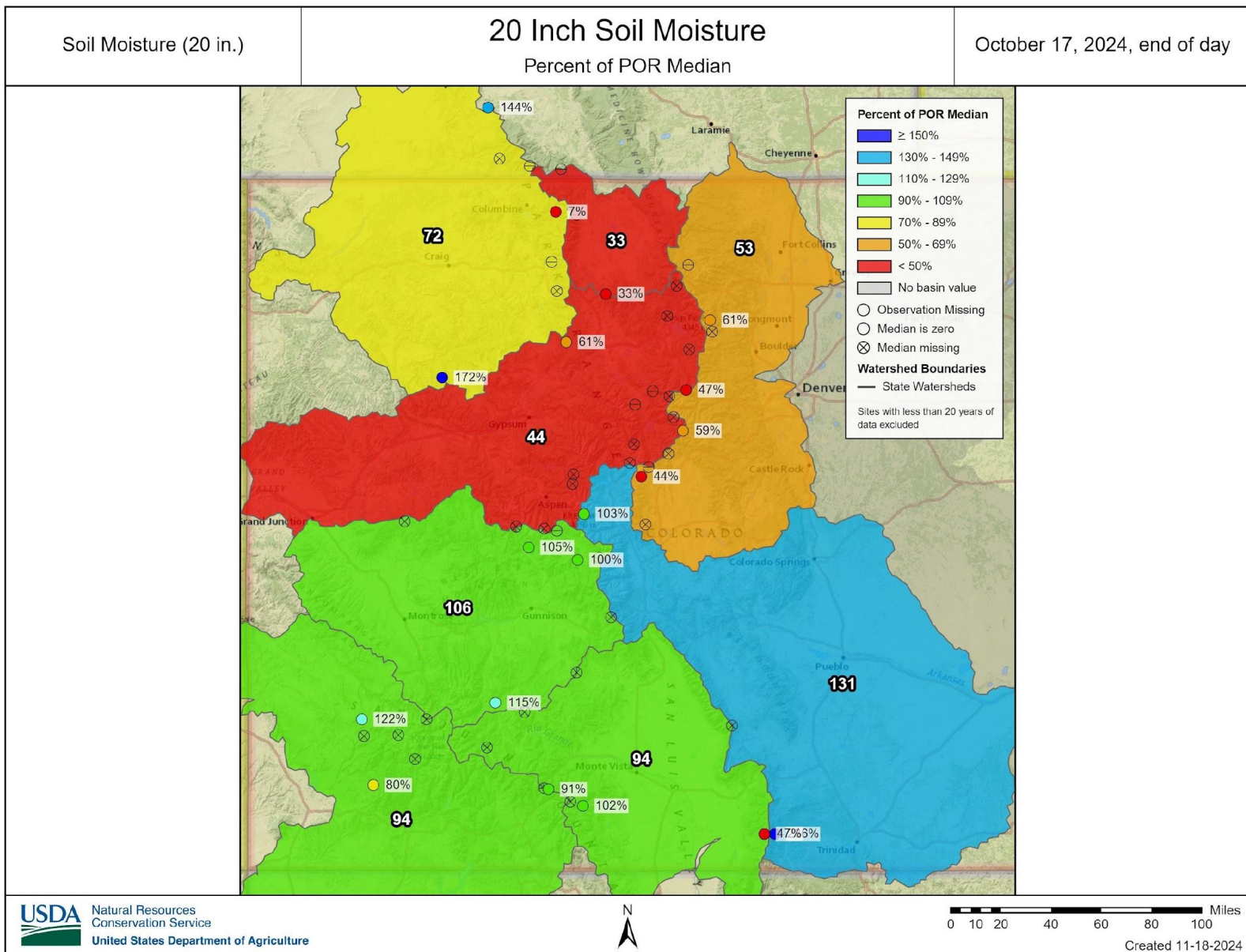




United States Department of Agriculture

# Colorado Snow Surveys

## 20 Inch Soil Moisture Data

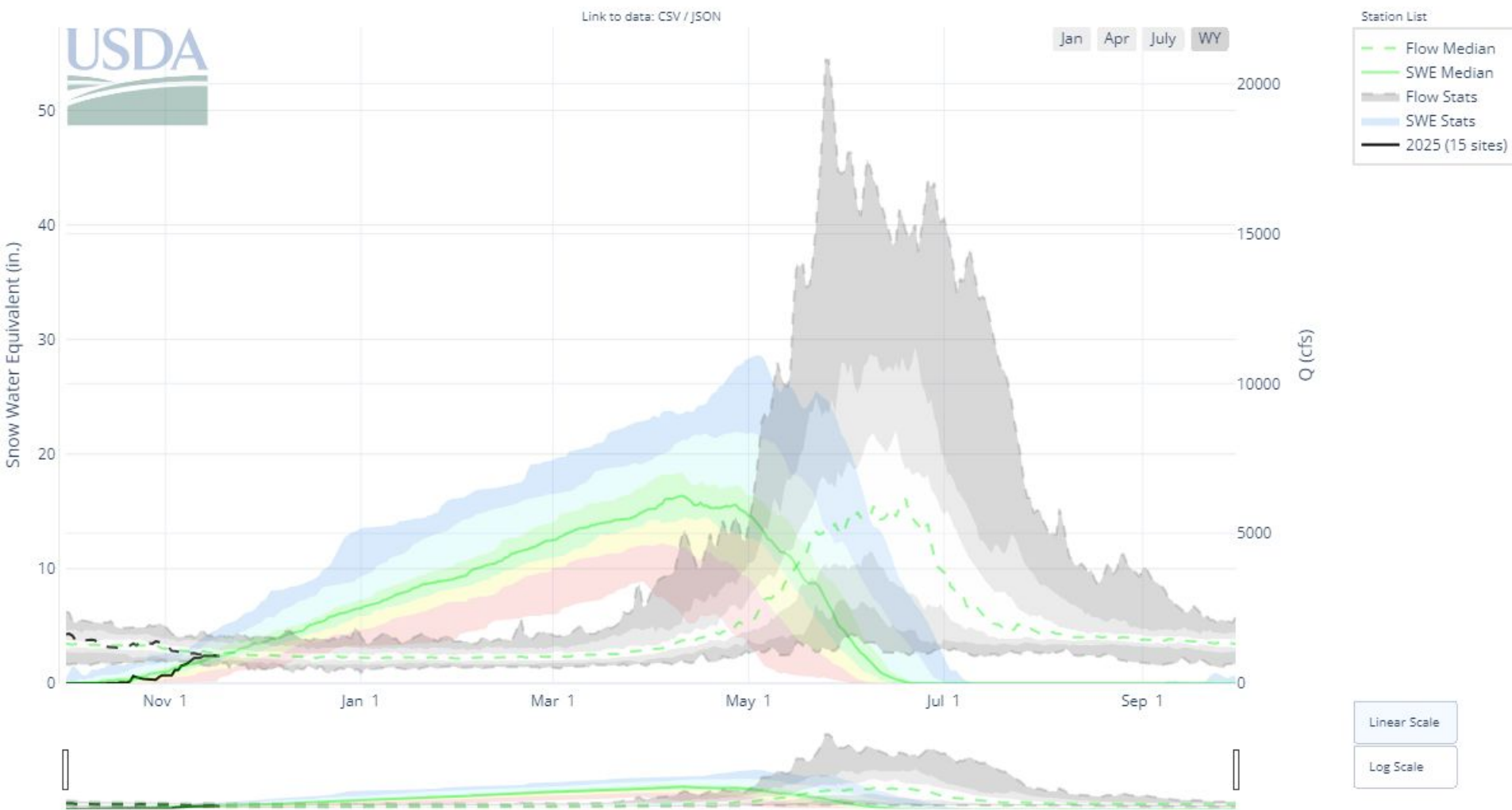






# Colorado Snow Surveys

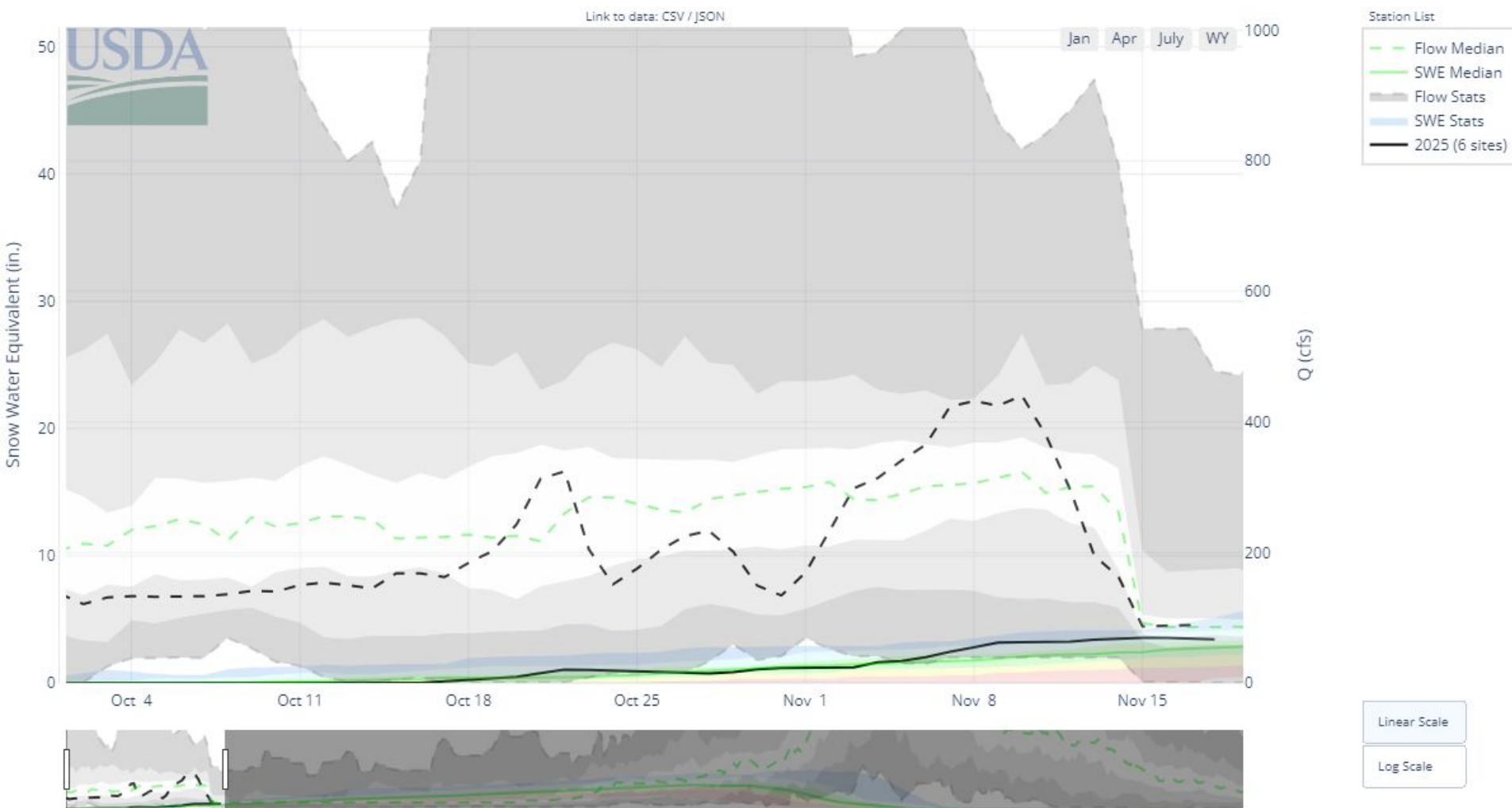
Colorado R nr Dotsero Snow to Flow Plot





# Colorado Snow Surveys

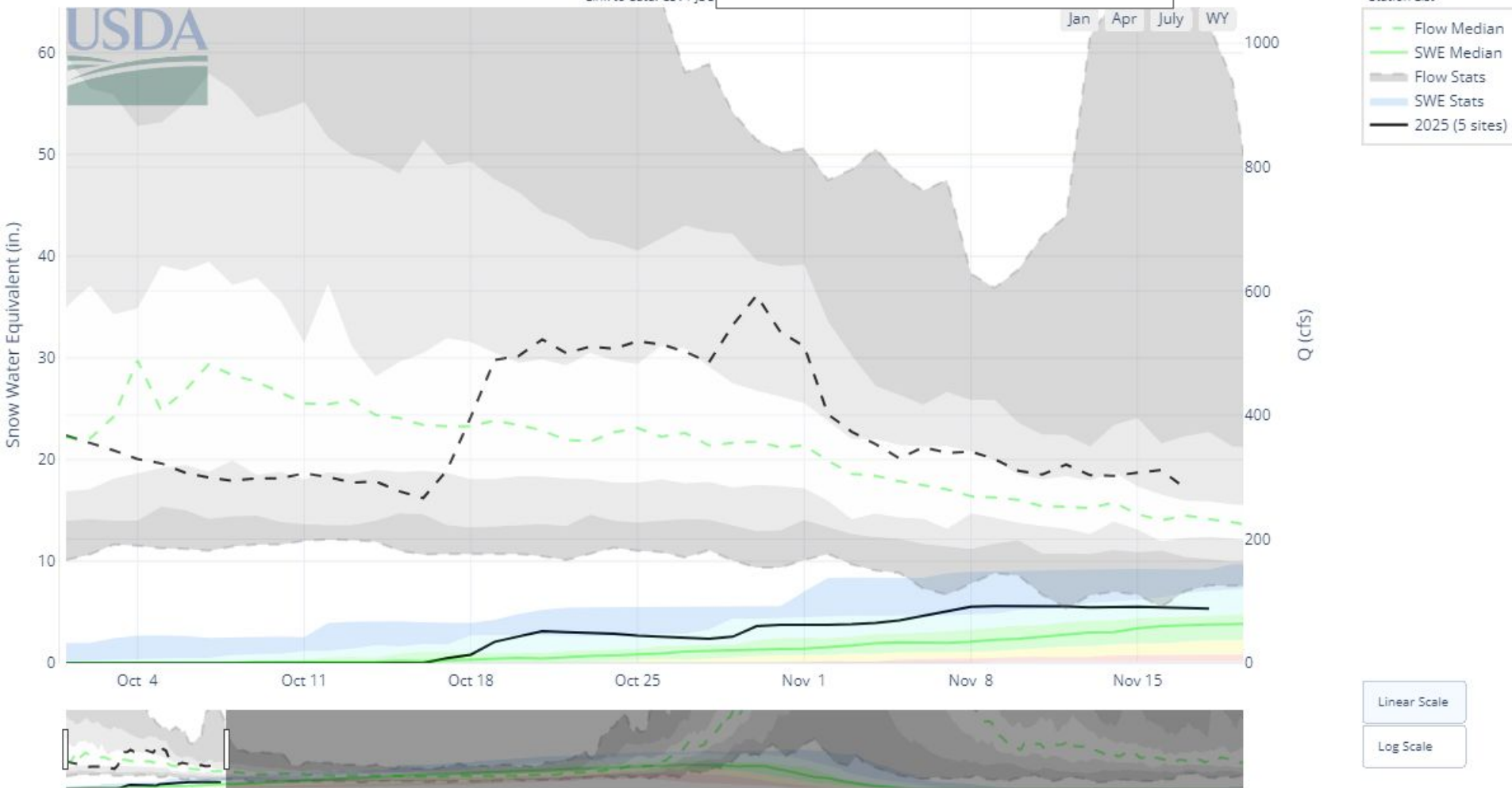
Arkansas R ab Pueblo Snow to Flow Plot



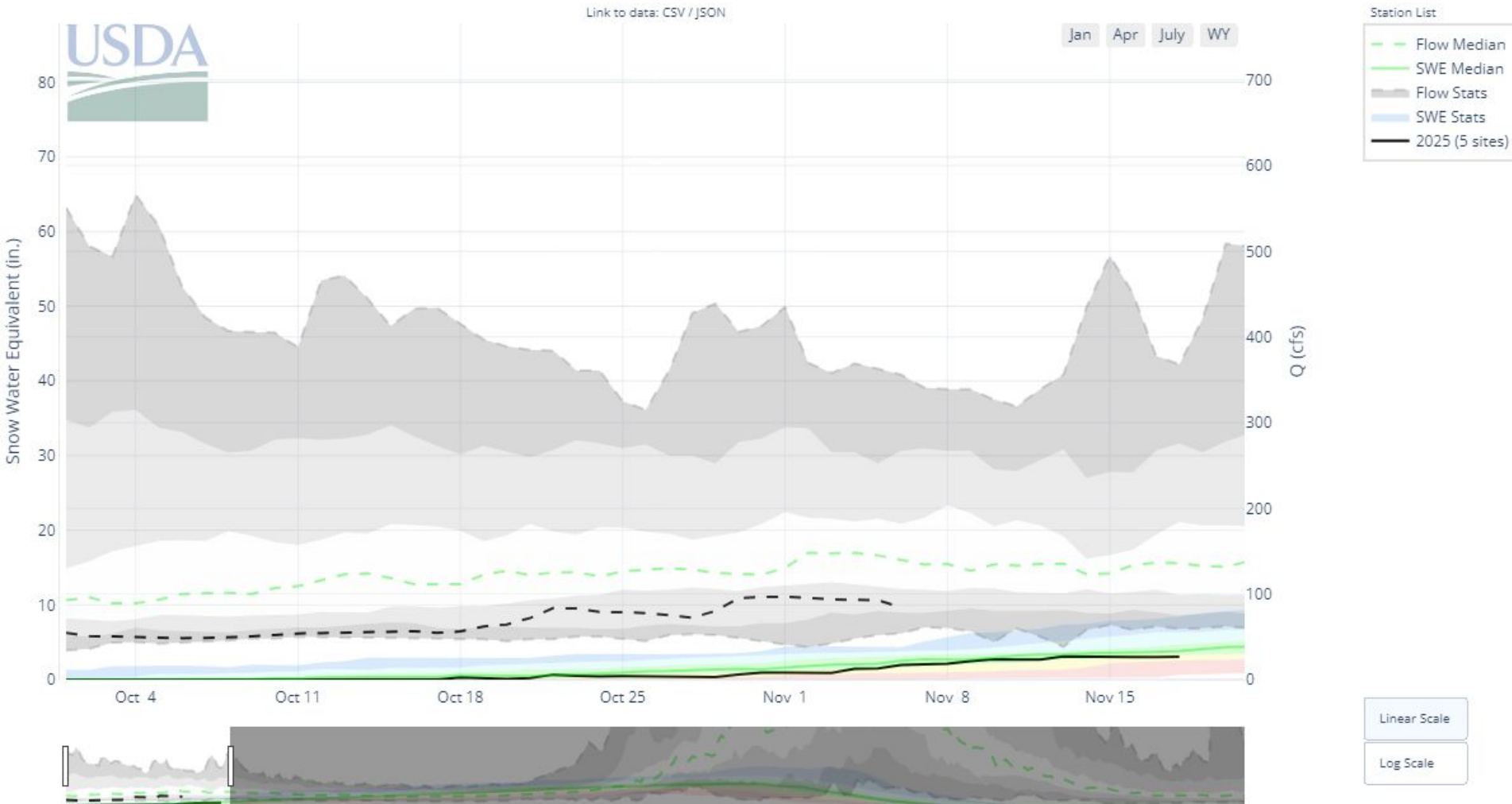
Rio Grande nr Del Norte Snow to Flow Plot

[Link to data: CSV / JSON](#)

68% of median flow on 7/22



North Platte R nr Northgate Snow to Flow Plot

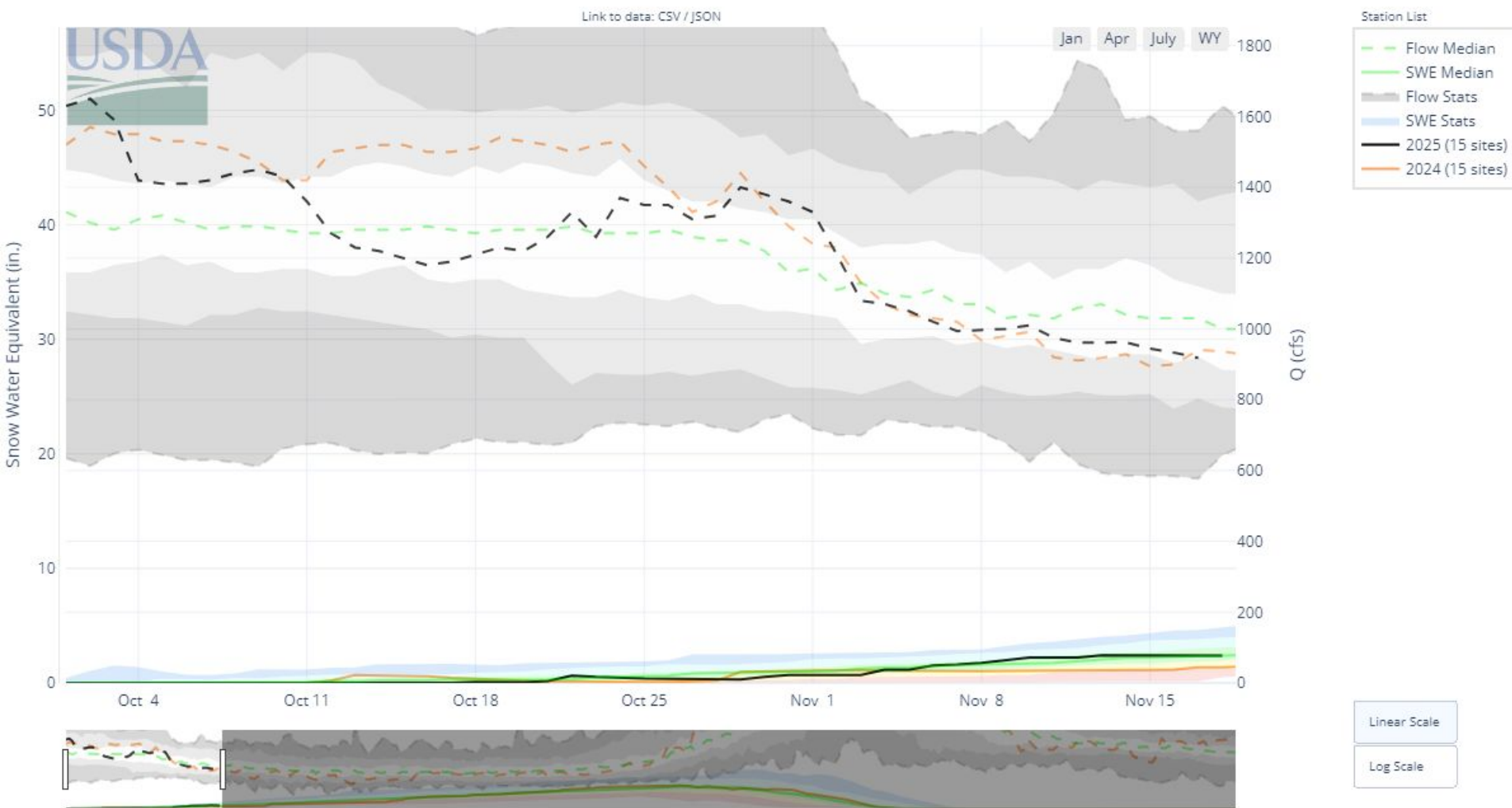




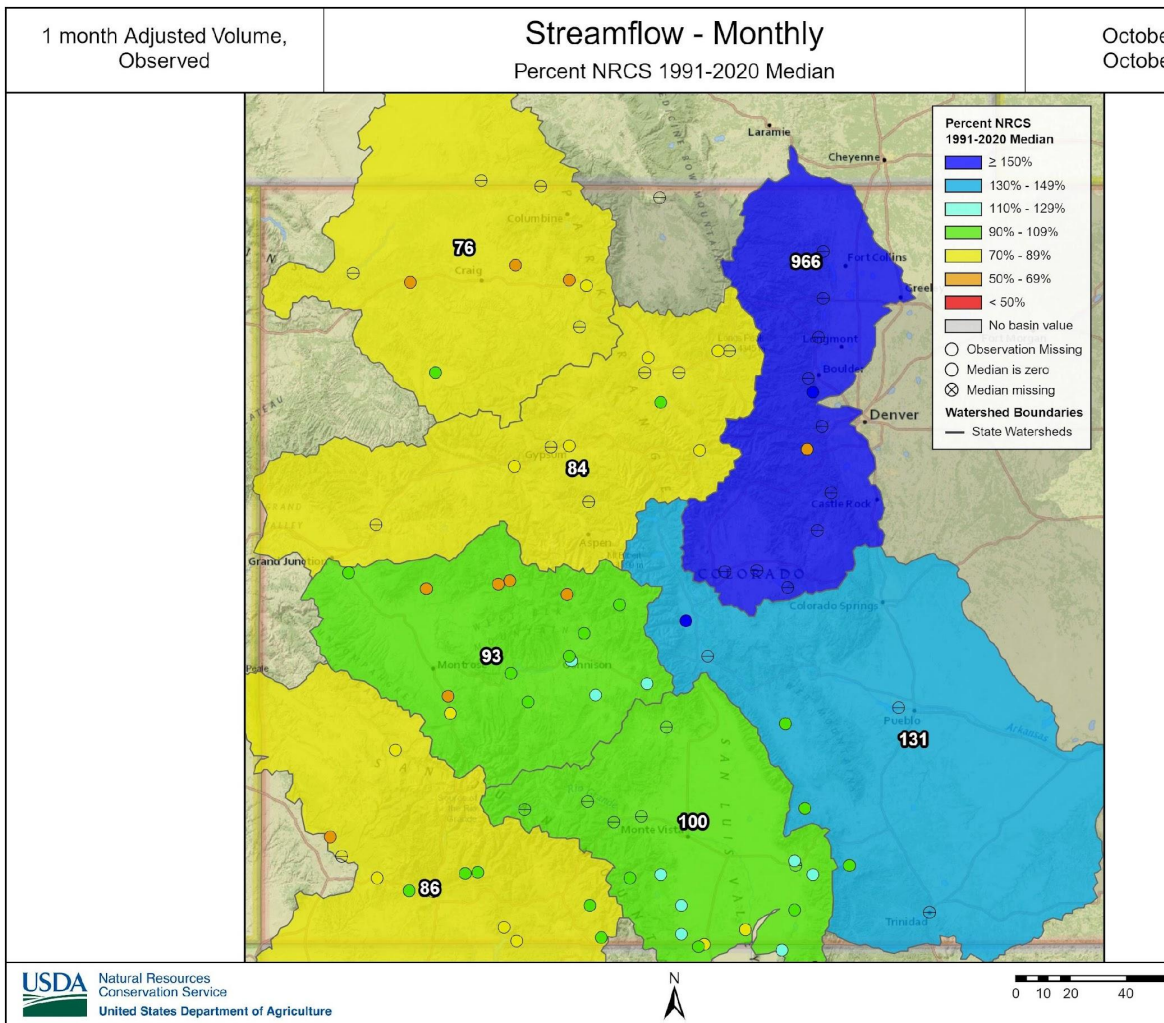
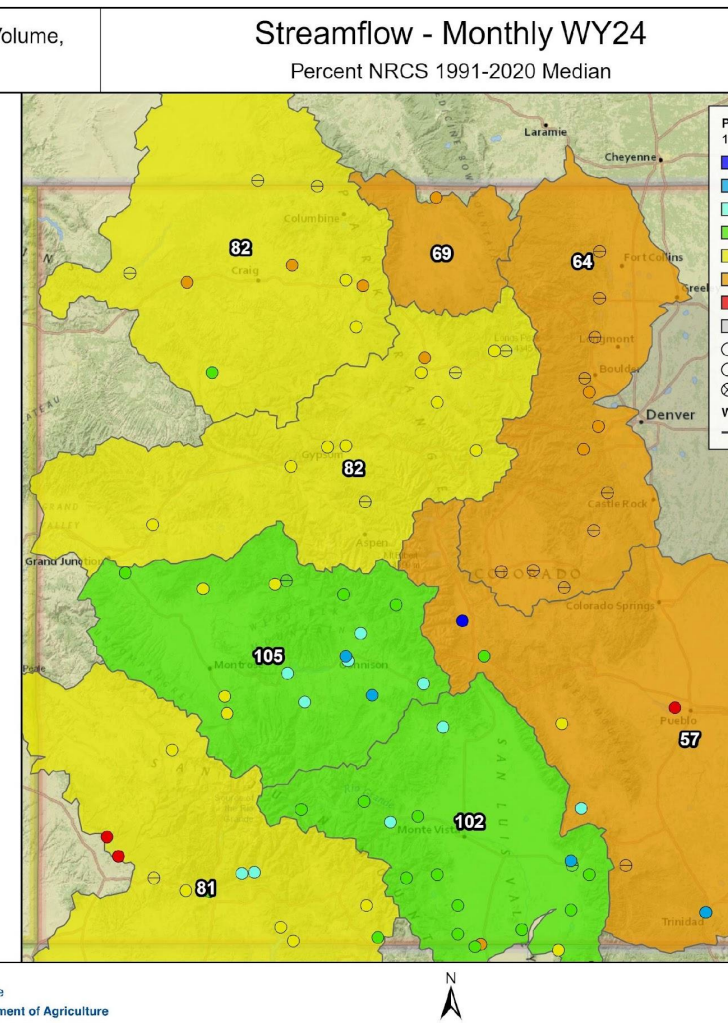


# Colorado Snow Surveys

Colorado R nr Dotsero Snow to Flow Plot



## September and October Streamflows



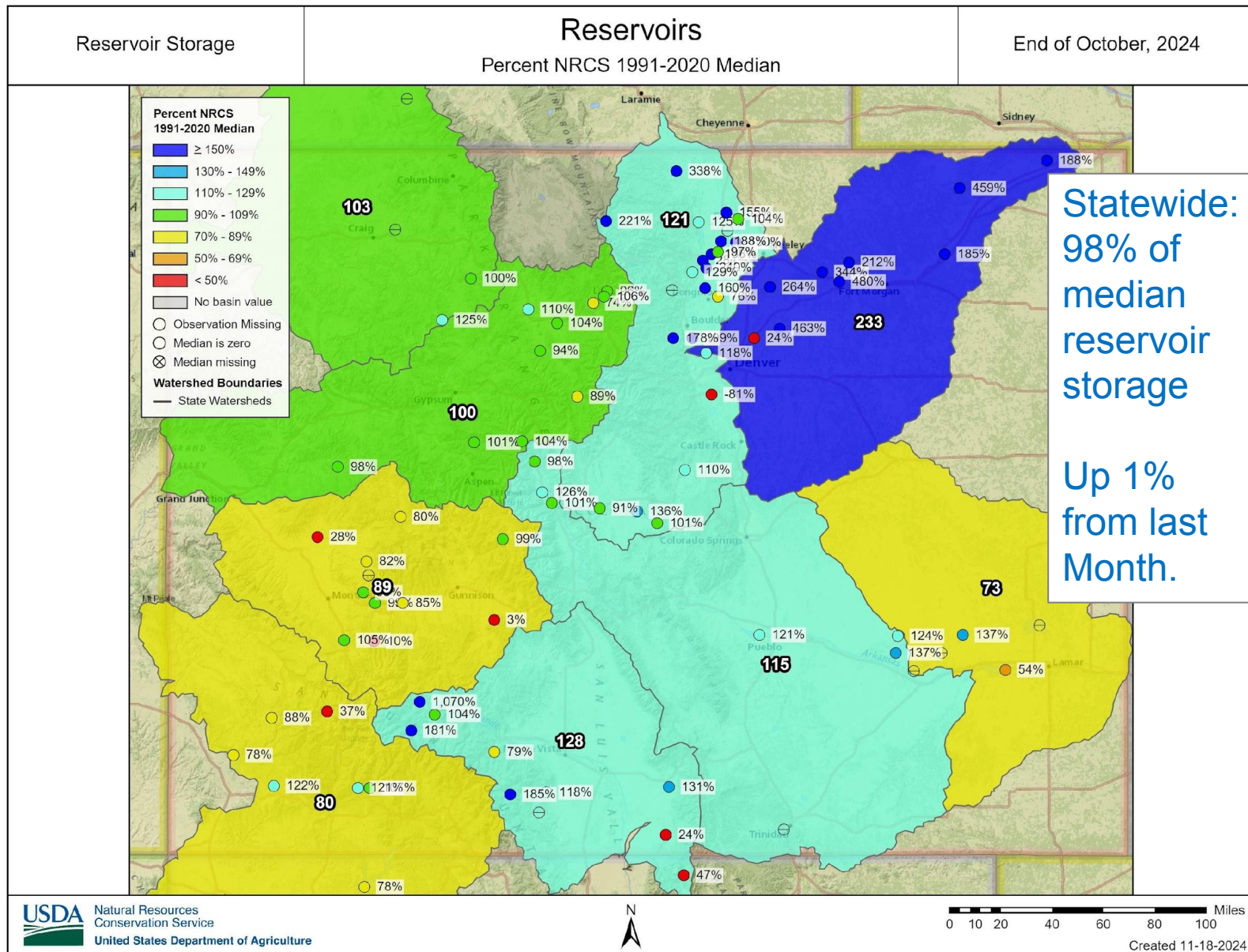




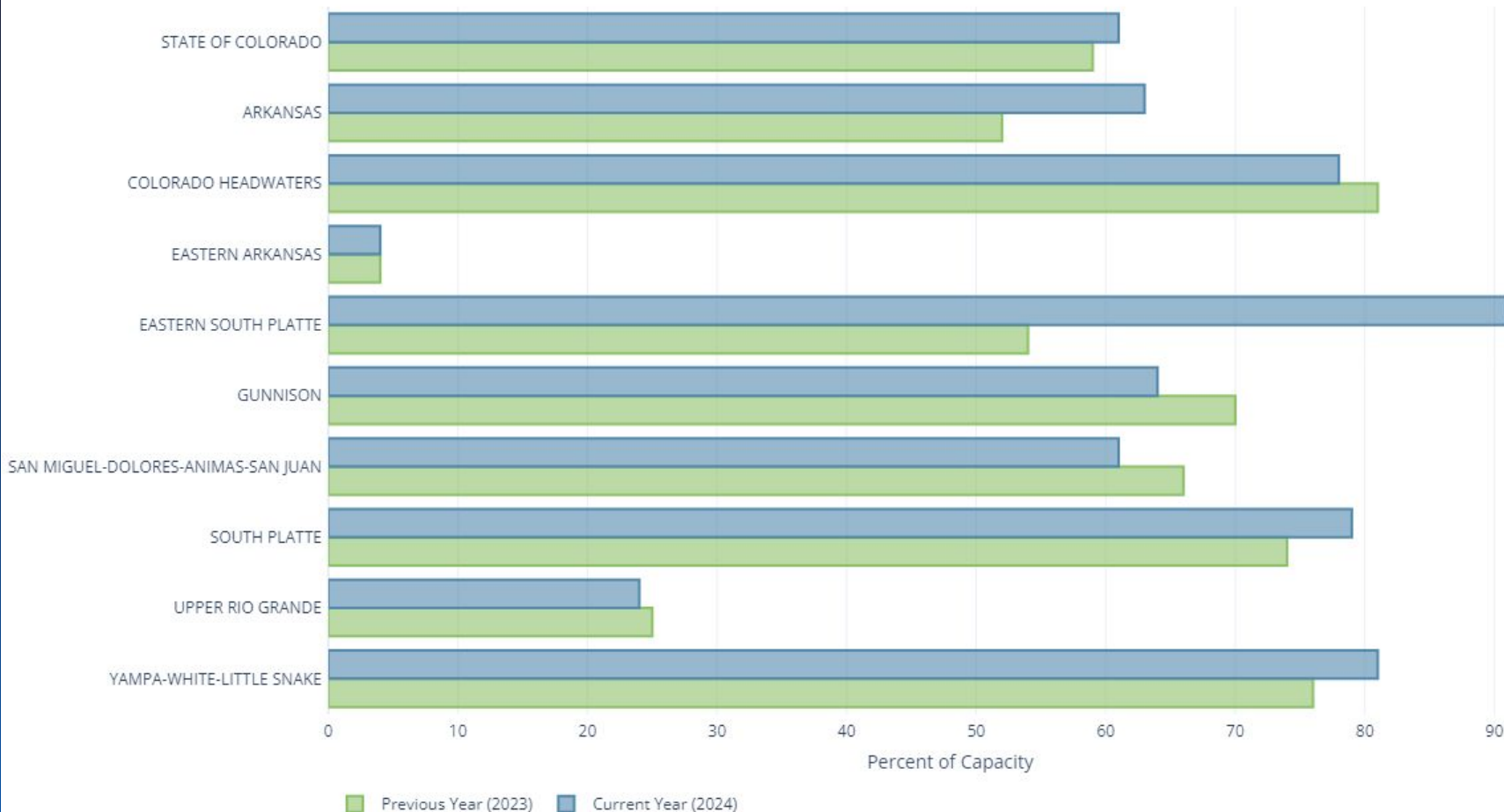
United States Department of Agriculture

# Colorado Snow Surveys

## Statewide Reservoir Storage Jun 1



RESERVOIR STORAGE IN COLORADO NOVEMBER 1, 2024





## SNOW WATER EQUIVALENT IN STATE OF COLORADO

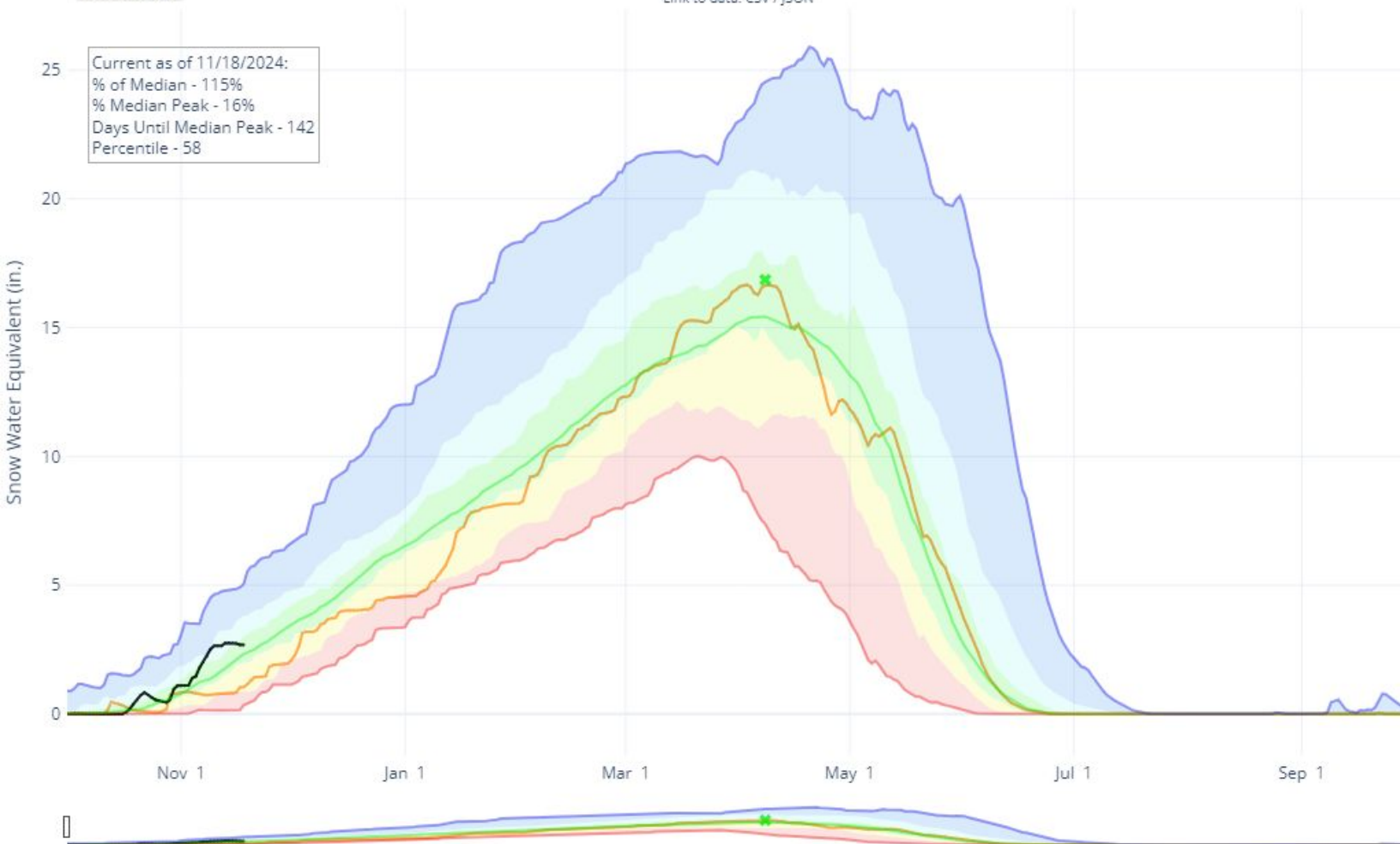
Reset Range

[Link to data: CSV / JSON](#)

Station List

Current as of 11/18/2024:  
 % of Median - 115%  
 % Median Peak - 16%  
 Days Until Median Peak - 142  
 Percentile - 58

- ✱ Median Peak SWE
- Max
- Median ('91-'20)
- Min
- Stats. Shading
- 2025 (115 sites)
- 2024 (115 sites)

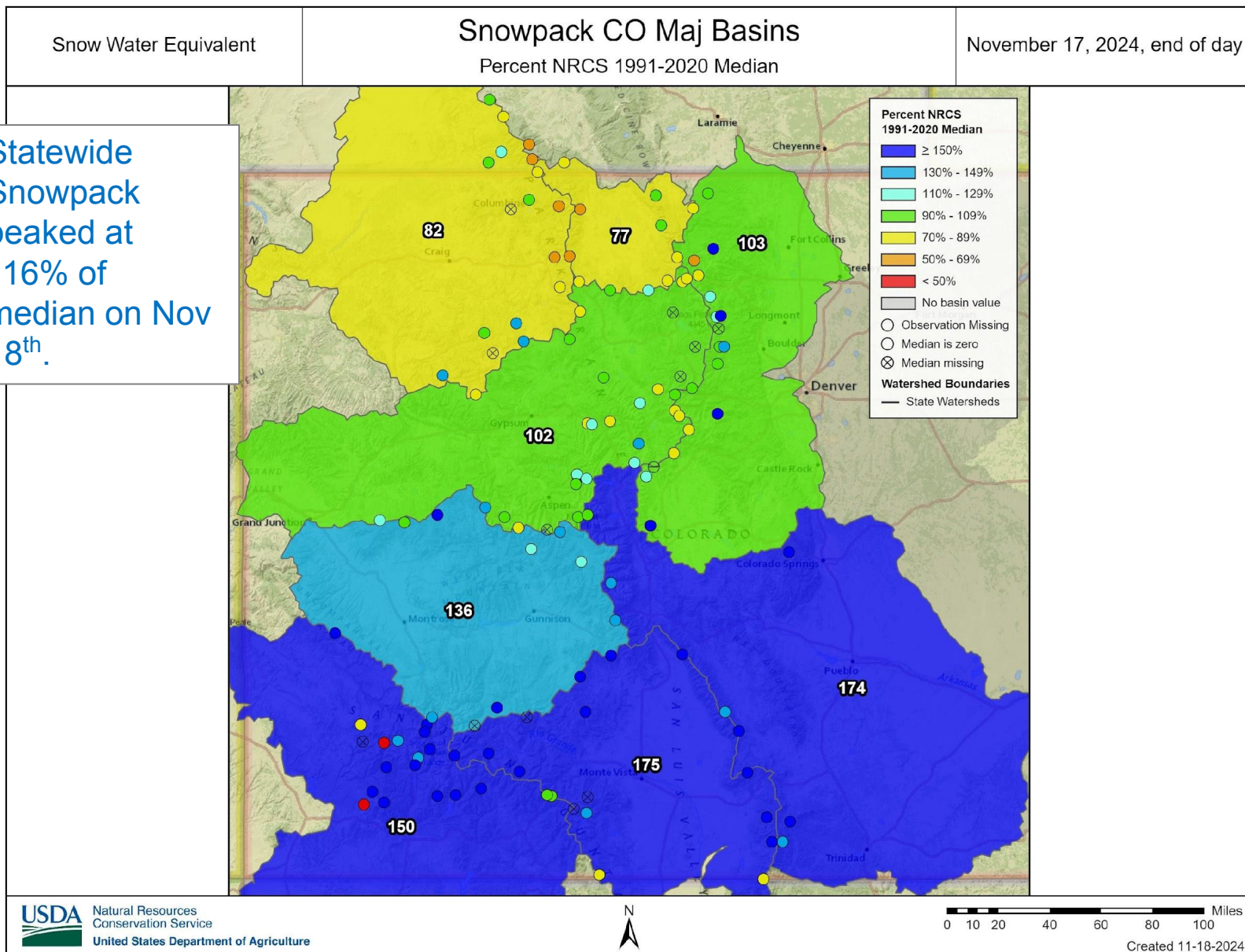


# WY25 Major Snow Storm Cycles

- Three major storm cycles since the beginning of the water year
  - Oct 18 – 21 – 200% -> 400% median snowpack
  - Oct 28 – 30 – 80% -> 157%
  - Nov 3 – 10 – 110% -> 173%
- As of Nov 18<sup>th</sup> Colorado is typically 15% of the way through the snowpack accumulation season. Most of winter is yet to come, how much snowpack is the question.

## Snowpack

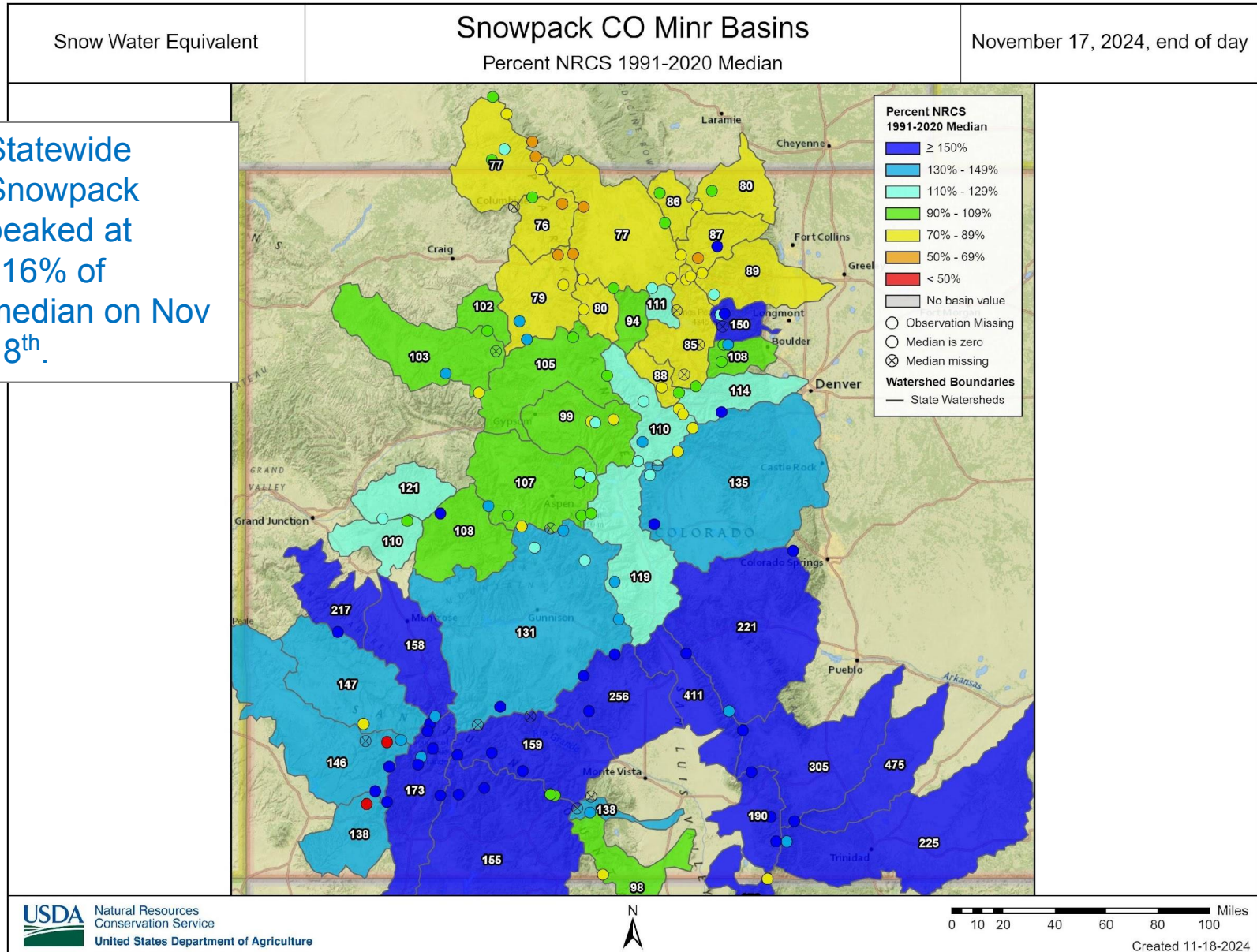
Statewide  
Snowpack  
peaked at  
116% of  
median on Nov  
18<sup>th</sup>.





## Snowpack

Statewide  
Snowpack  
peaked at  
116% of  
median on Nov  
18<sup>th</sup>.





## SNOW WATER EQUIVALENT IN UPPER RIO GRANDE

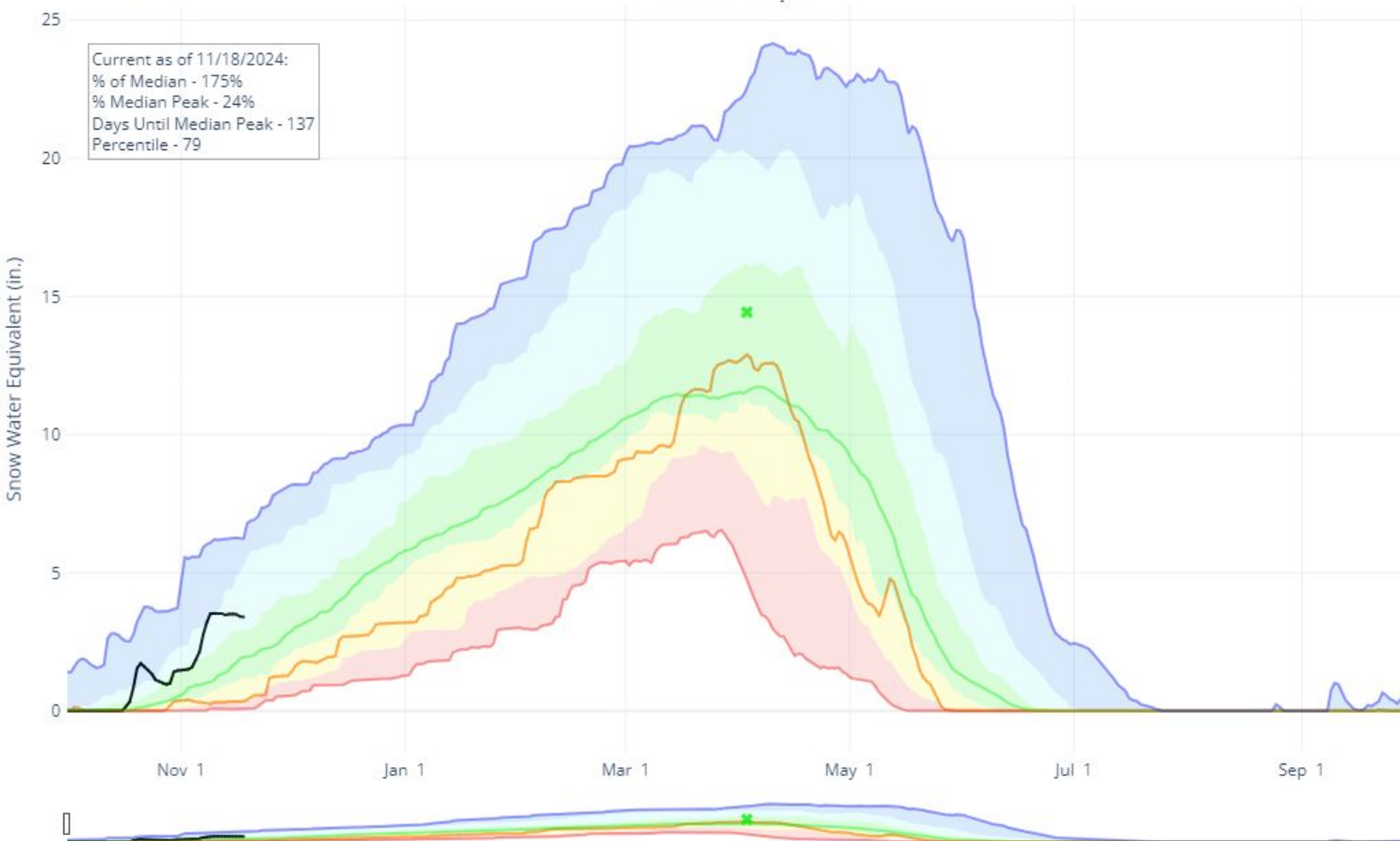
Reset Range

[Link to data: CSV / JSON](#)

Station List

Current as of 11/18/2024:  
 % of Median - 175%  
 % Median Peak - 24%  
 Days Until Median Peak - 137  
 Percentile - 79

- Median Peak SWE
- Max
- Median ('91-'20)
- Min
- Stats. Shading
- 2025 (17 sites)
- 2024 (17 sites)





# Colorado Snow Surveys

## SNOW WATER EQUIVALENT IN LARAMIE AND NORTH PLATTE

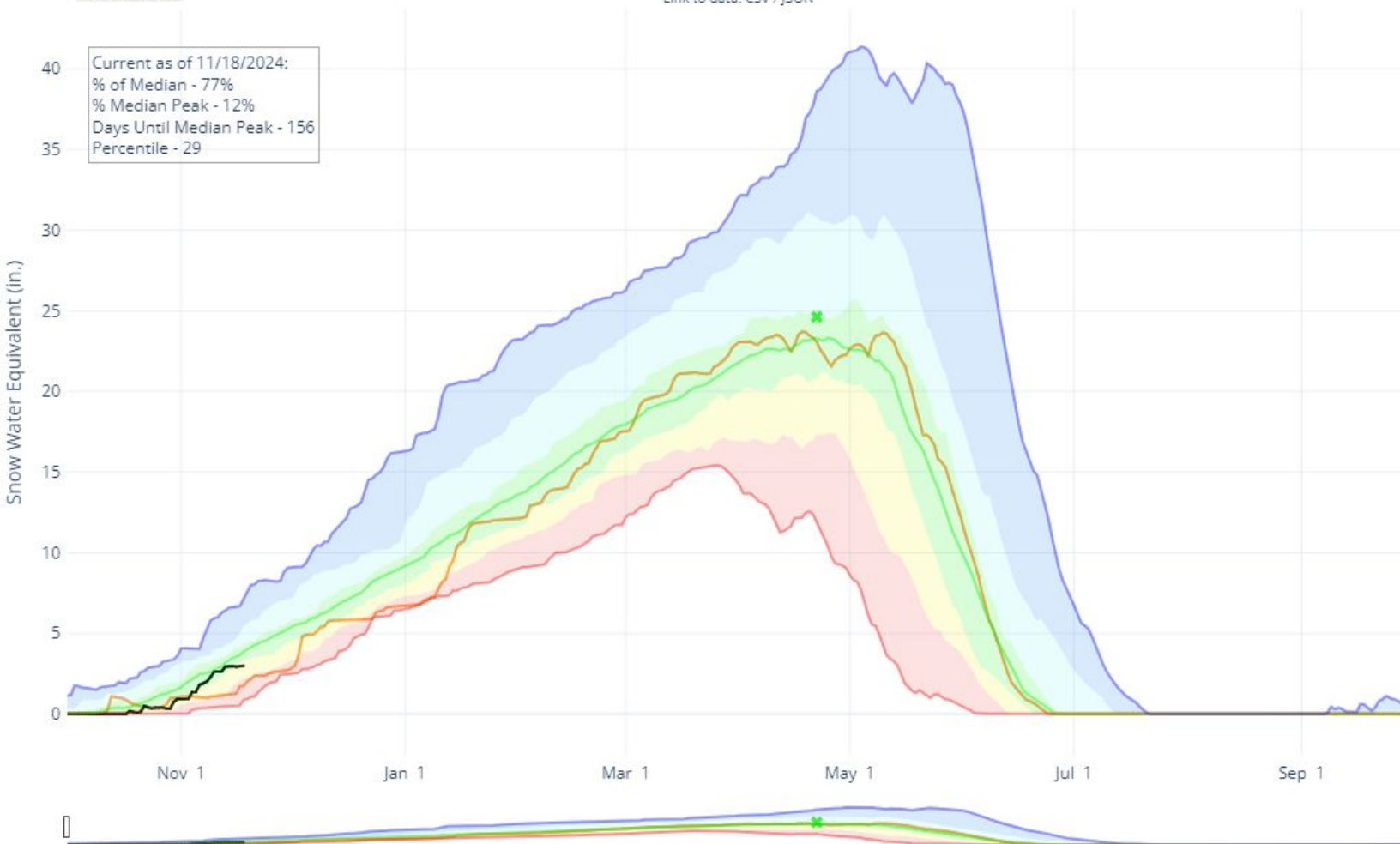
Reset Range

[Link to data: CSV / JSON](#)

Station List

Current as of 11/18/2024:  
% of Median - 77%  
% Median Peak - 12%  
Days Until Median Peak - 156  
Percentile - 29

- ✱ Median Peak SWE
- Max
- Median ('91-'20)
- Min
- Stats. Shading
- 2025 (12 sites)
- 2024 (12 sites)



## SNOW WATER EQUIVALENT IN SOUTH PLATTE

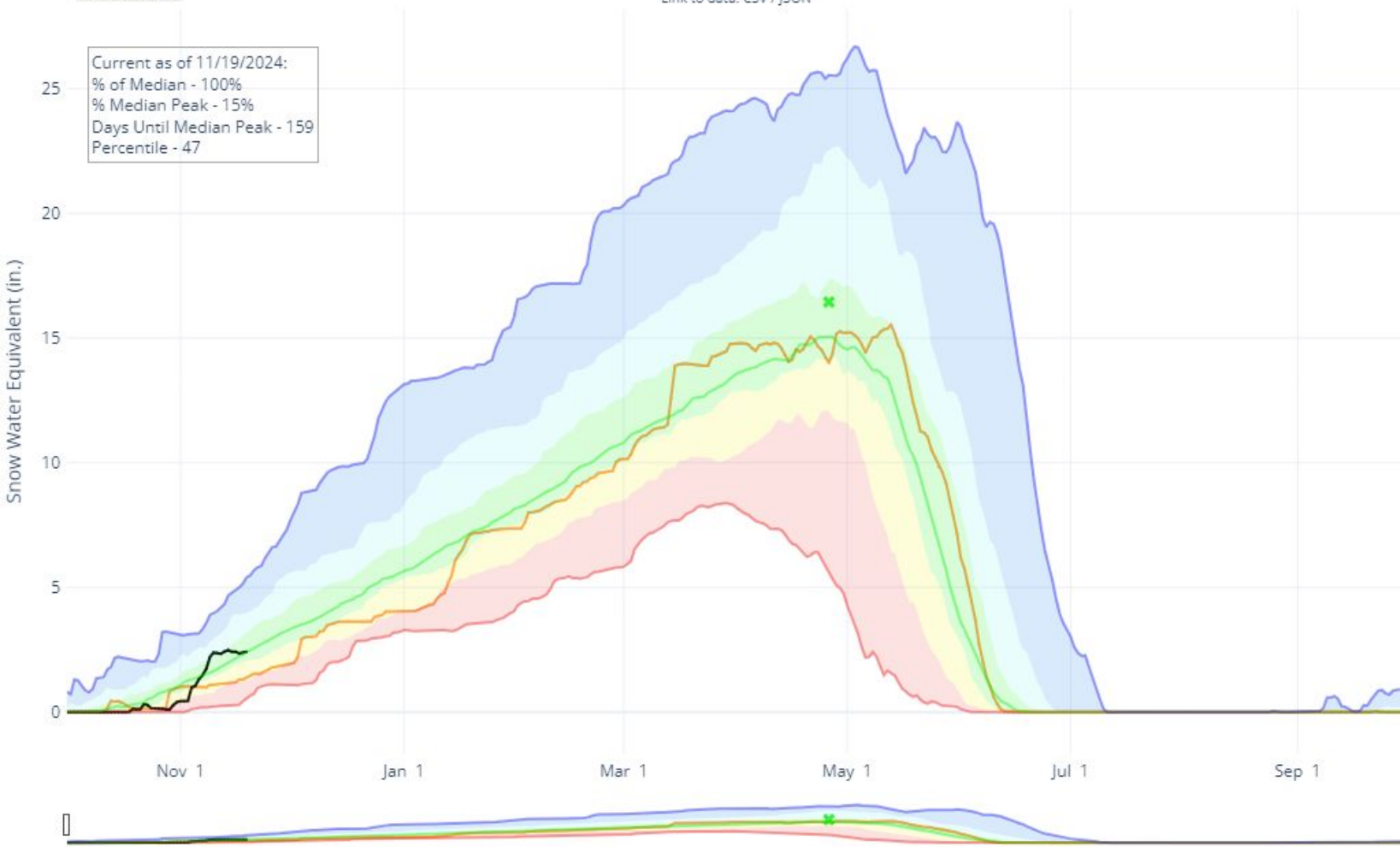
Reset Range

[Link to data: CSV / JSON](#)

Station List

Current as of 11/19/2024:  
 % of Median - 100%  
 % Median Peak - 15%  
 Days Until Median Peak - 159  
 Percentile - 47

- ✖ Median Peak SWE
- Max
- Median ('91-'20)
- Min
- Stats. Shading
- 2025 (21 sites)
- 2024 (21 sites)







## SNOW WATER EQUIVALENT IN ARKANSAS

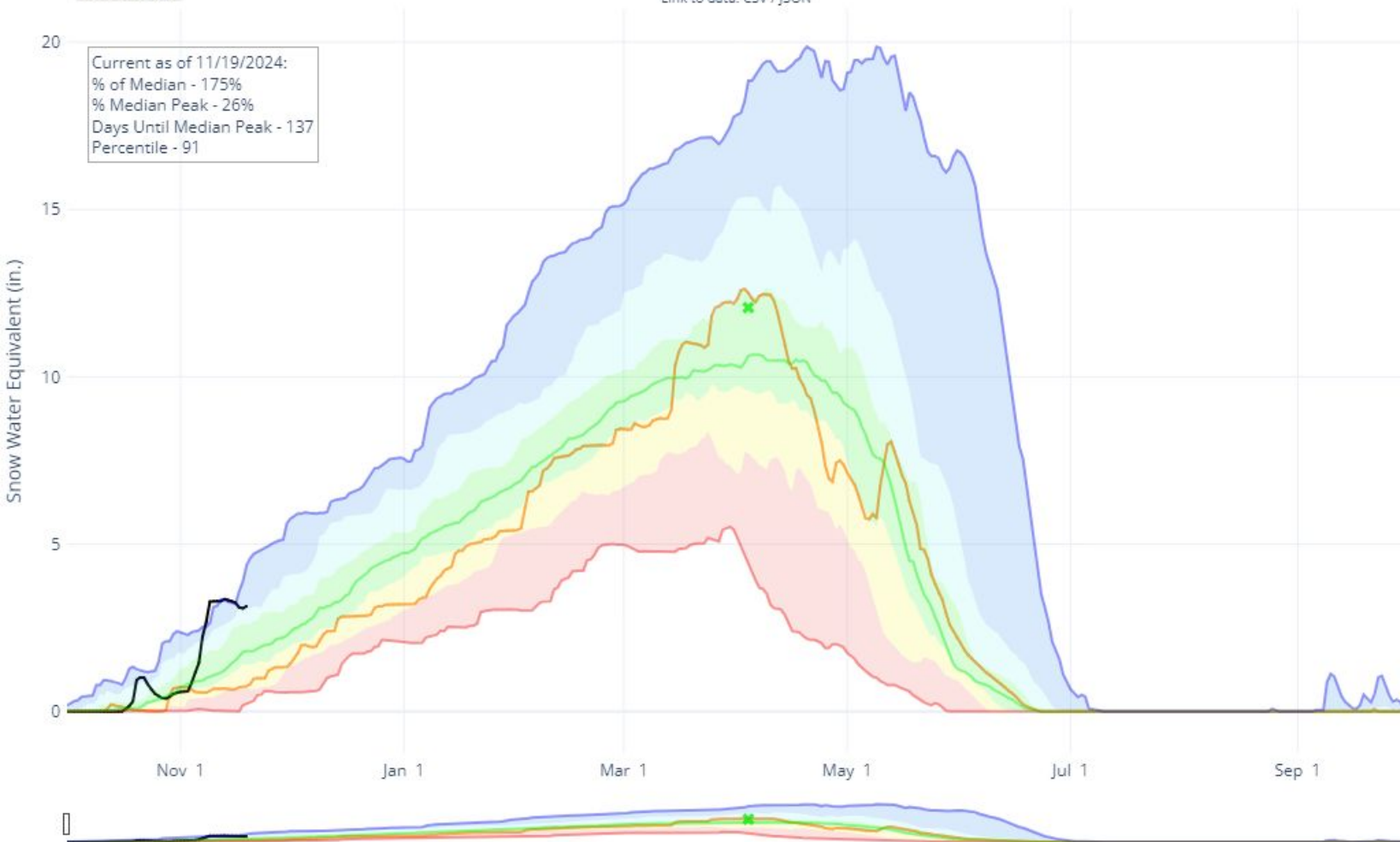
Reset Range

[Link to data: CSV / JSON](#)

Station List

Current as of 11/19/2024:  
% of Median - 175%  
% Median Peak - 26%  
Days Until Median Peak - 137  
Percentile - 91

- Median Peak SWE
- Max
- Median ('91-'20)
- Min
- Stats. Shading
- 2025 (11 sites)
- 2024 (11 sites)



## Summary

- Precipitation - Water year 2024 (10/1/23 – 9/30/24) closed out at 101% of median precipitation across the Mountains of Colorado
  - Major basin totals ranged from 95% of median in the South Platte to 110% of median in the Gunnison
- Mountain precipitation over last 4 months
  - Better in Southern Basins
  - Lacking in Northern Basins
- Antecedent conditions leading into winter - Soil moisture, streamflows, precip point to
  - Slightly above normal in Southern CO
  - Dry in Northern CO
- Mountain Snowpack is currently 116% of median
- At this point in the season Colorado has typically accumulated 15% of the average total snowpack
- Statewide reservoir storage is 98% of median.



## Non-Discrimination Statement:

In accordance with Federal civil rights law and U.S. Department of agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA 's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint](#) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call [866] 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: [program.intake@usda.gov](mailto:program.intake@usda.gov).





United States Department of Agriculture

Colorado Snow Surveys

# Water Conditions Monitoring Committee Meeting November 19<sup>th</sup>, 2024

## NRCS Snow Survey and Water Supply Forecasting Program

Brian Domonkos

Hydrologist

Brian.Domonkos@usda.gov

720-544-2853

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/co/snow/>