



United States Department of Agriculture

Colorado Snow Surveys

# Water Availability Task Force Meeting

## July 25<sup>th</sup>, 2023

### NRCS Snow Survey and Water Supply Forecasting Program

Karl Wetlaufer

Hydrologist

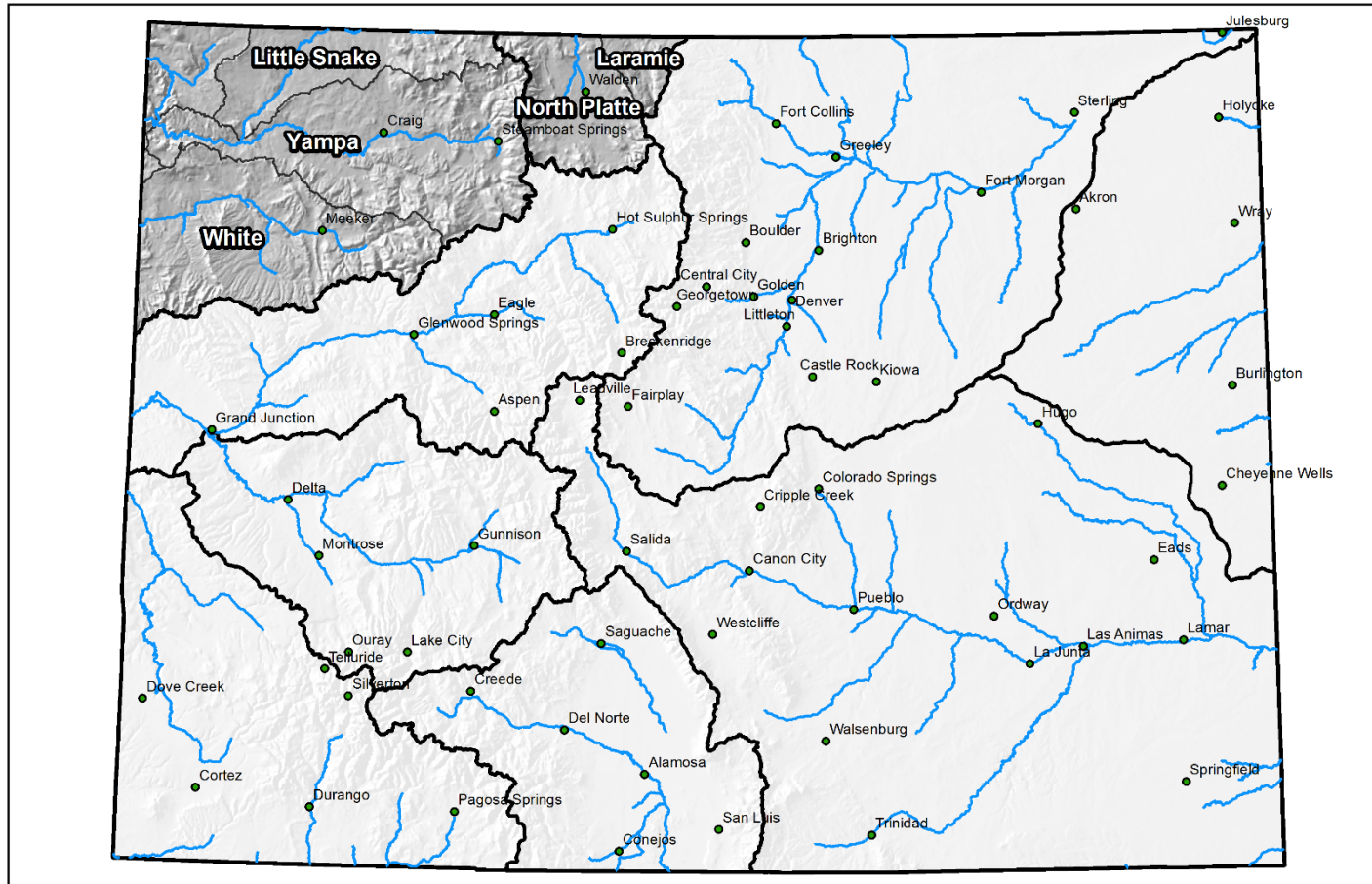
Karl.Wetlaufer@usda.gov

720-544-2853

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

## Major Basin Summary

Yampa, White, and North Platte River Basins



0 25 50 100 150 200 Miles



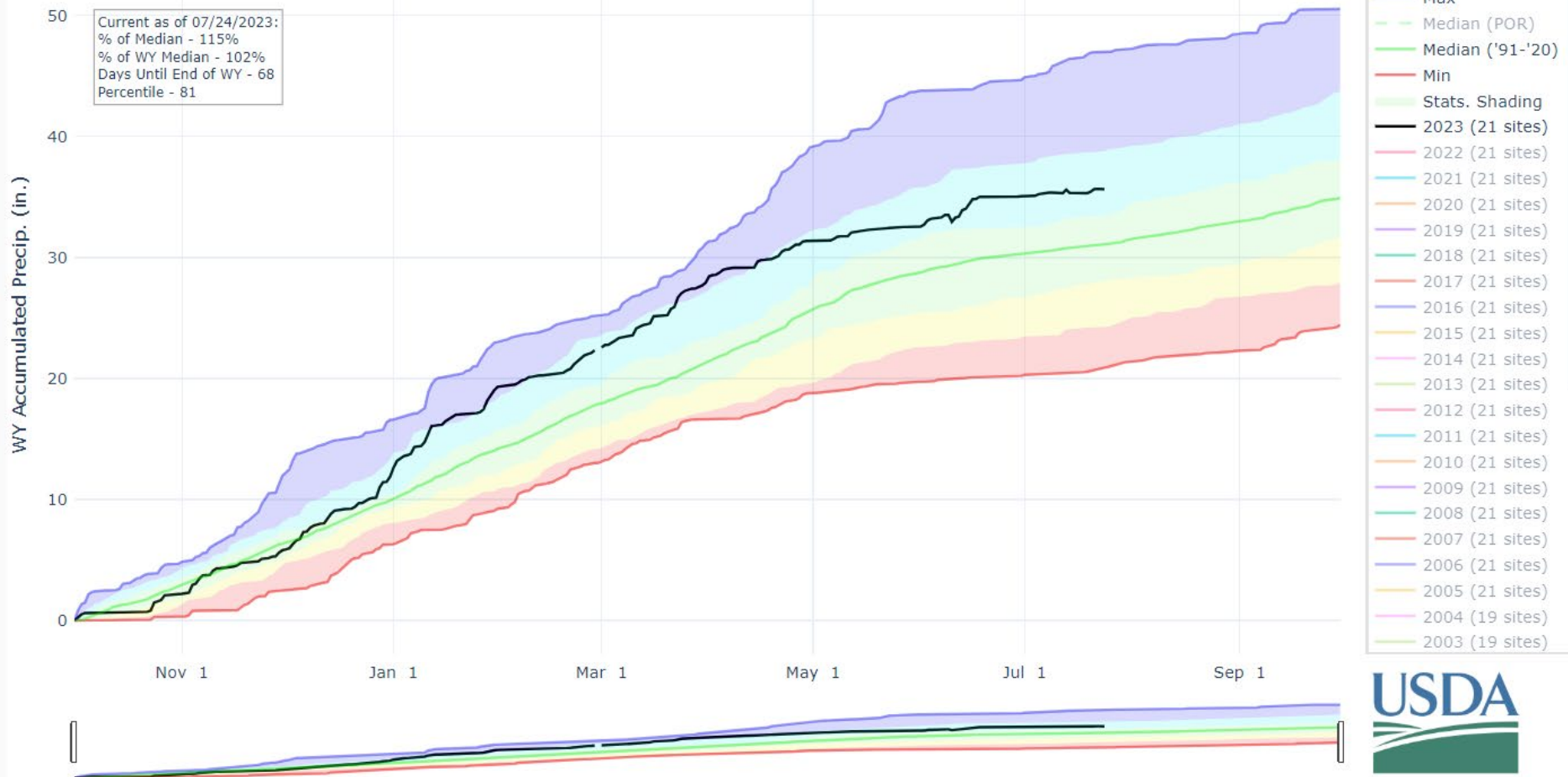
# Colorado Snow Surveys

## PRECIPITATION IN YAMPA-WHITE-LITTLE SNAKE

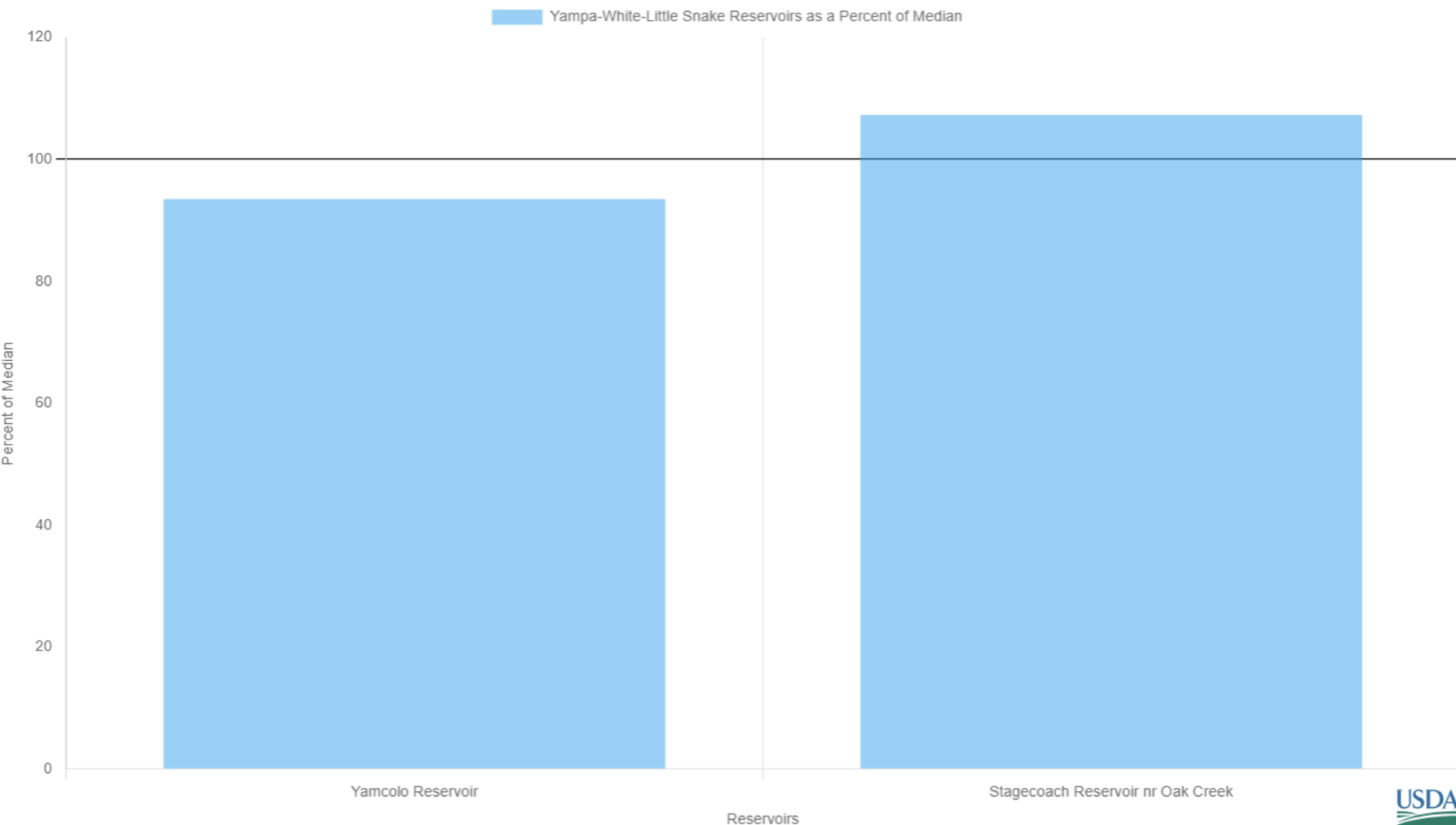
Reset Range

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

[Station List](#)



Yampa-White-Little Snake Reservoir Storage Summary for July 1st 2023

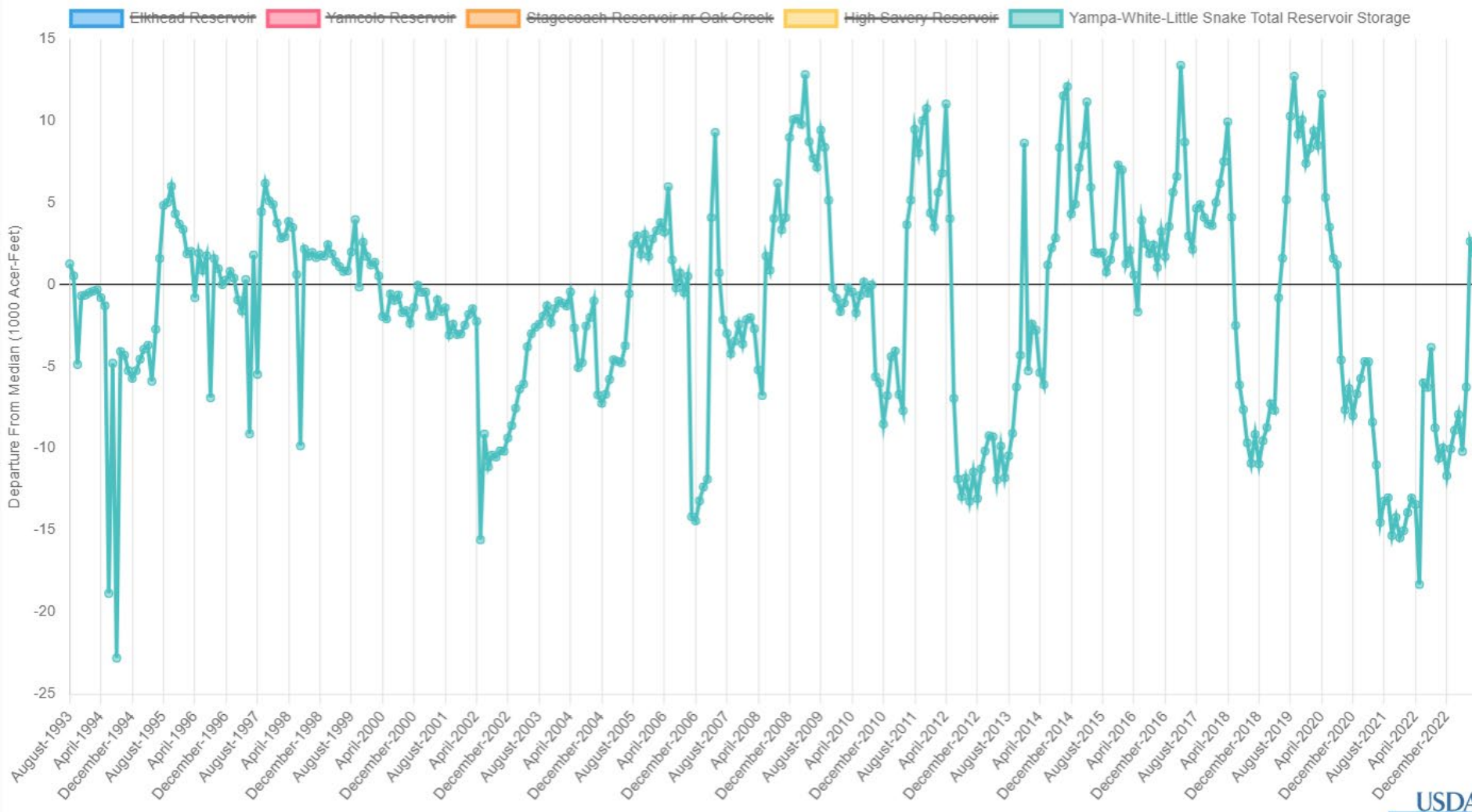


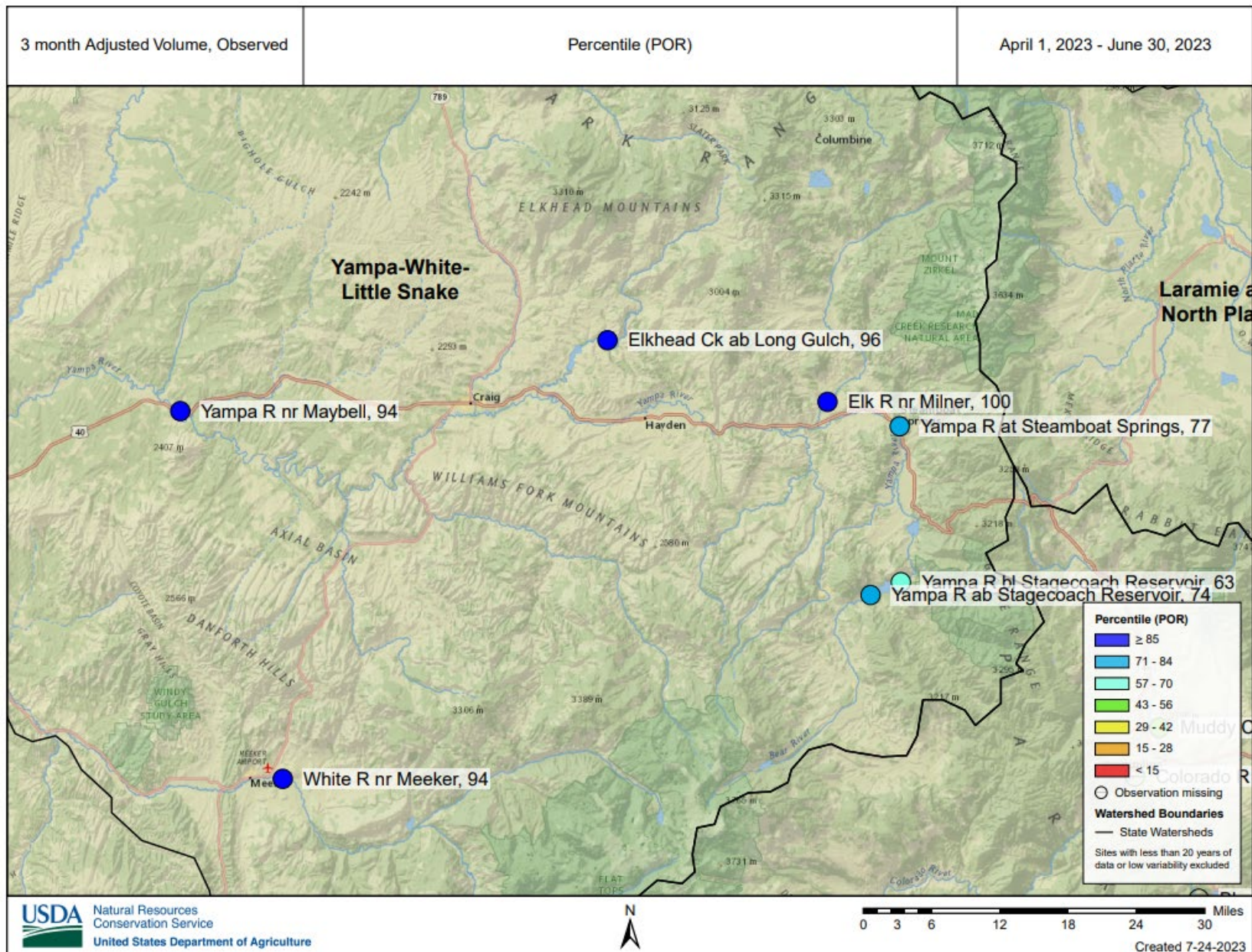




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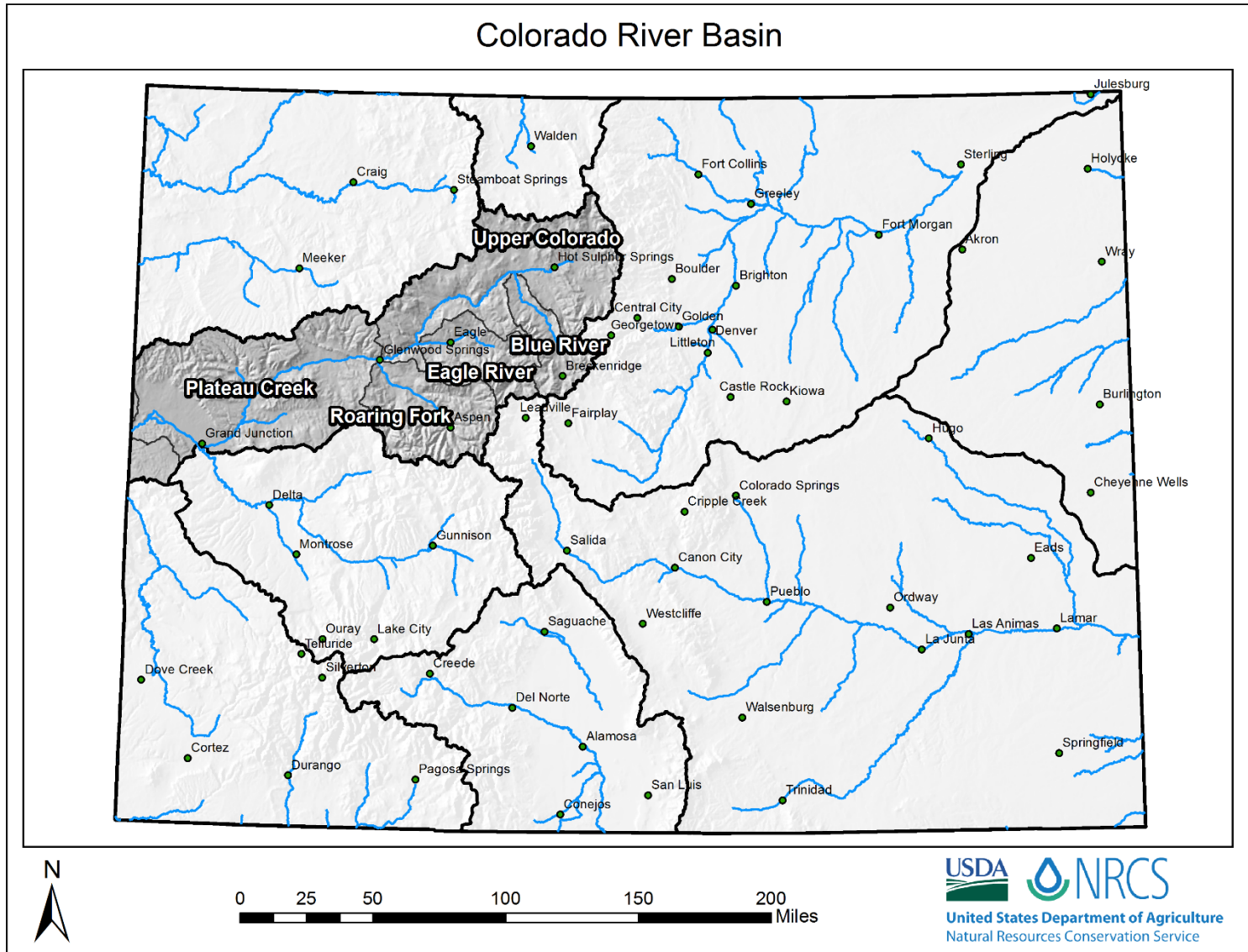
Yampa-White-Little Snake Departure From Median Timeseries Plot







## Major Basin Summary





# Colorado Snow Surveys

## PRECIPITATION IN COLORADO HEADWATERS

Reset Range

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

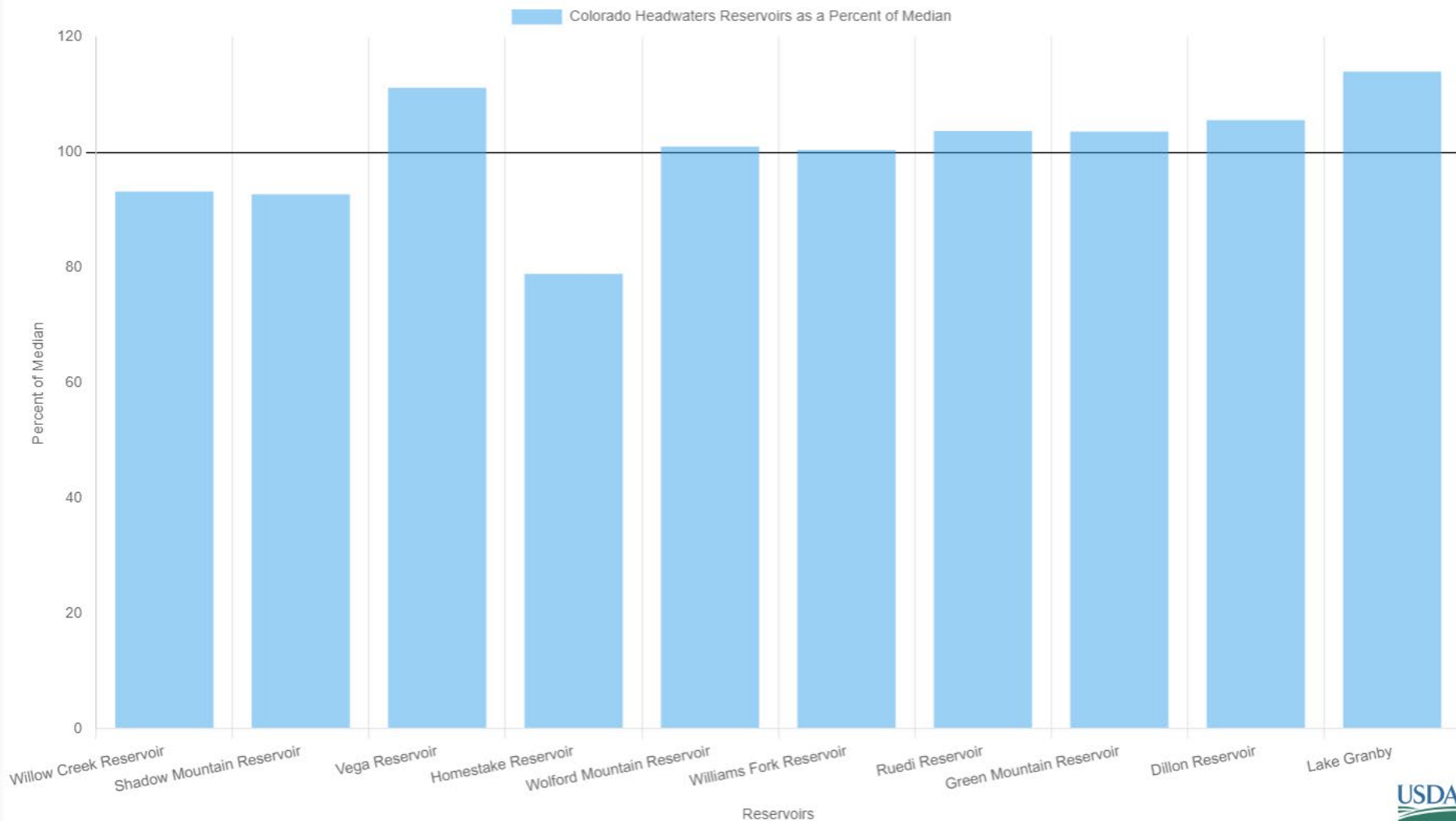
[Station List](#)

Current as of 07/24/2023:  
% of Median - 105%  
% of WY Median - 88%  
Days Until End of WY - 68  
Percentile - 62

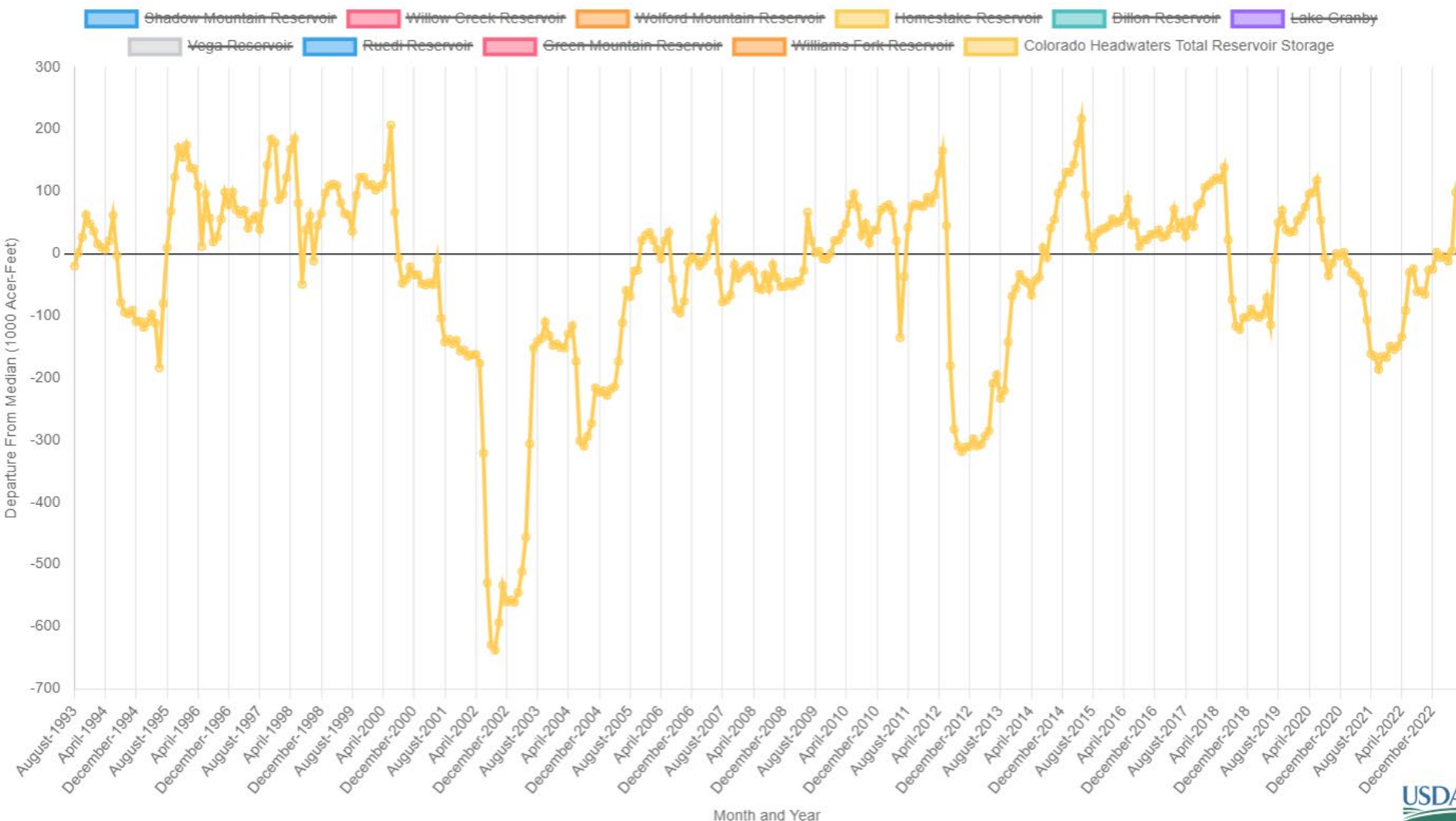
- Max
- Median (POR)
- Median ('91-'20)
- Min
- Stats. Shading
- 2023 (31 sites)
- 2022 (31 sites)
- 2021 (31 sites)
- 2020 (31 sites)
- 2019 (31 sites)
- 2018 (31 sites)
- 2017 (31 sites)
- 2016 (31 sites)
- 2015 (31 sites)
- 2014 (31 sites)
- 2013 (31 sites)
- 2012 (31 sites)
- 2011 (31 sites)
- 2010 (31 sites)
- 2009 (31 sites)
- 2008 (31 sites)
- 2007 (30 sites)
- 2006 (30 sites)
- 2005 (30 sites)
- 2004 (29 sites)
- 2003 (28 sites)



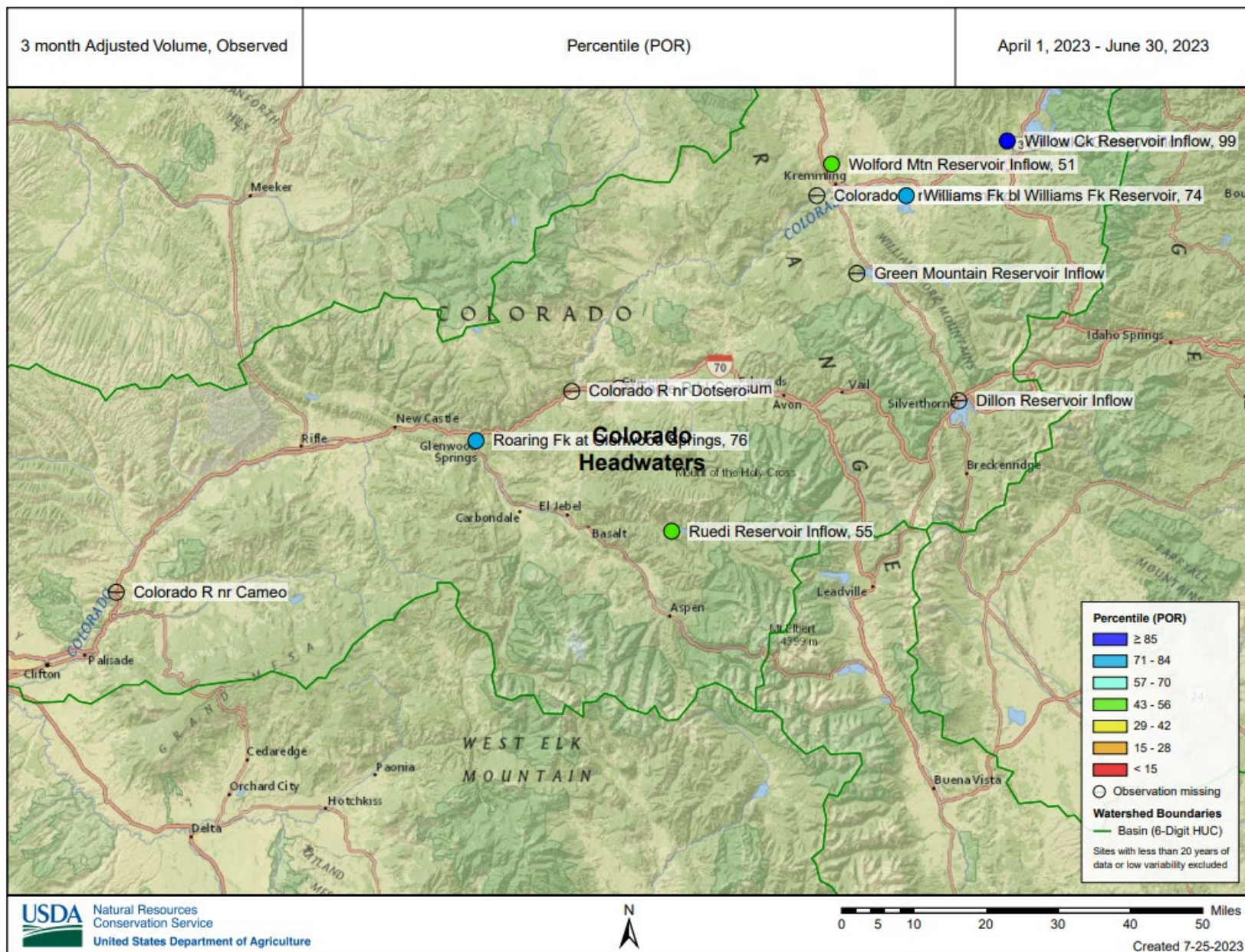
Colorado Headwaters Reservoir Storage Summary for July 1st 2023



Colorado Headwaters Departure From Median Timeseries Plot

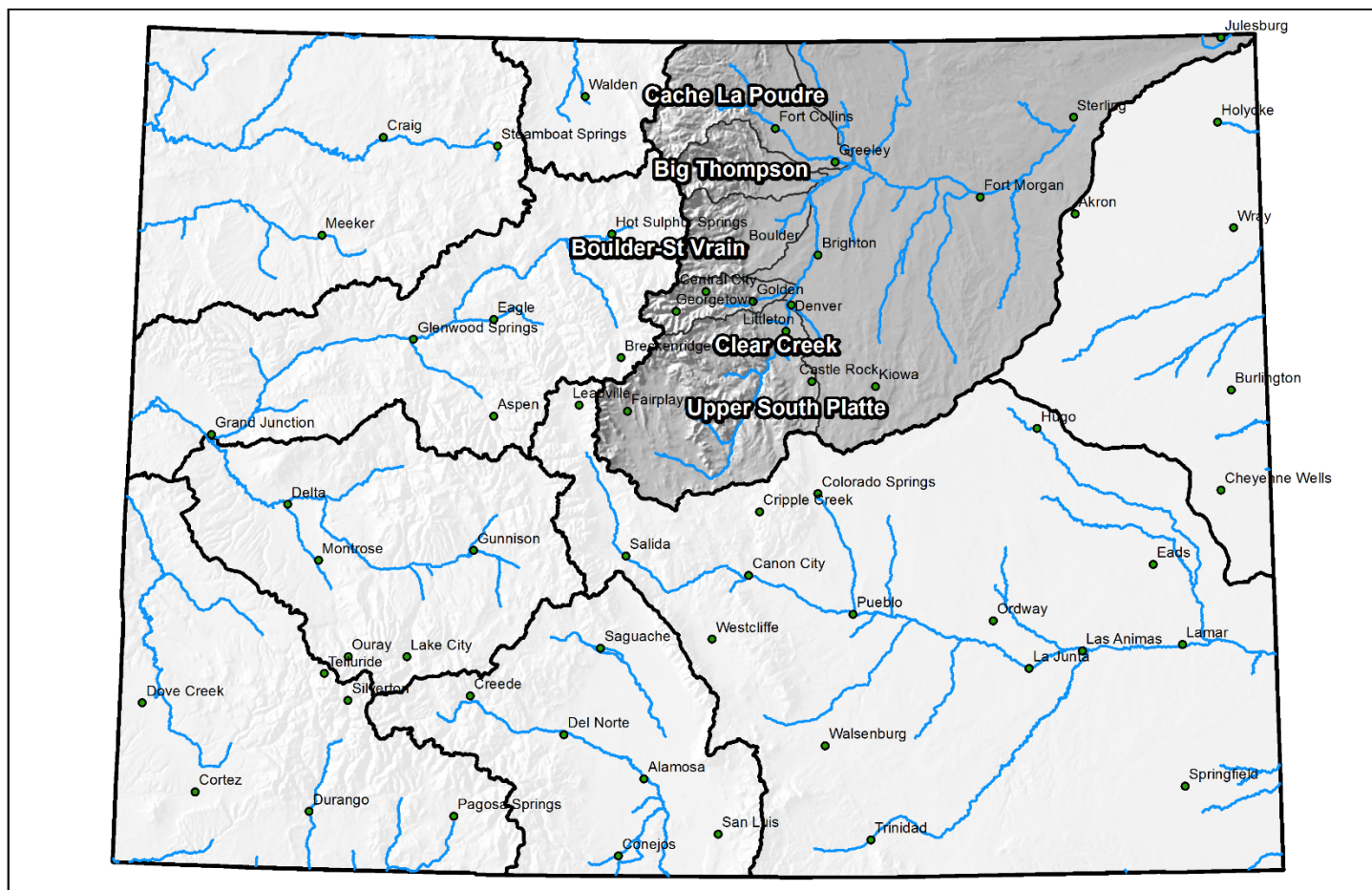






# Major Basin Summary

## South Platte River Basin







# Colorado Snow Surveys

## PRECIPITATION IN SOUTH PLATTE

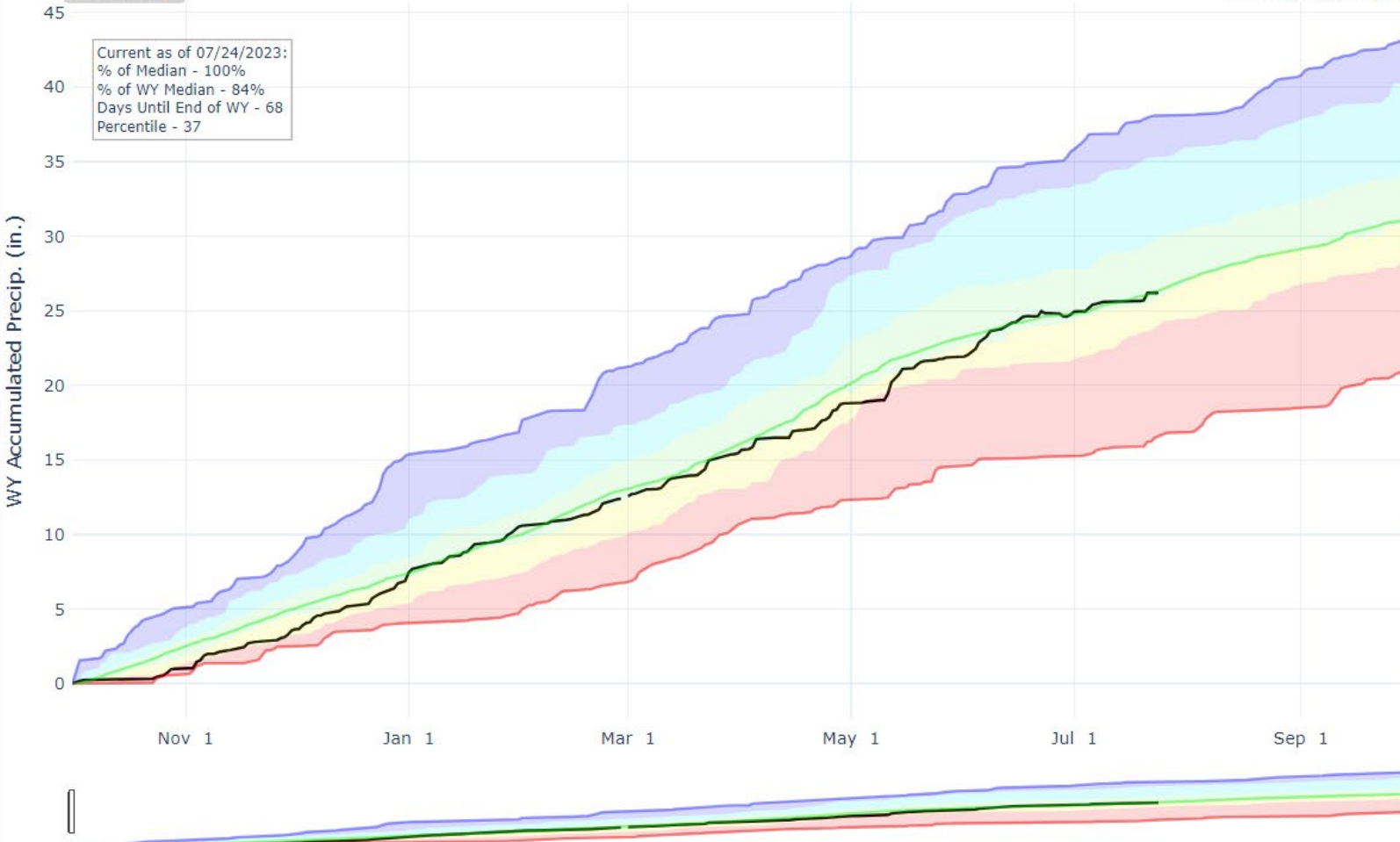
Reset Range

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

Station List

Current as of 07/24/2023:  
% of Median - 100%  
% of WY Median - 84%  
Days Until End of WY - 68  
Percentile - 37

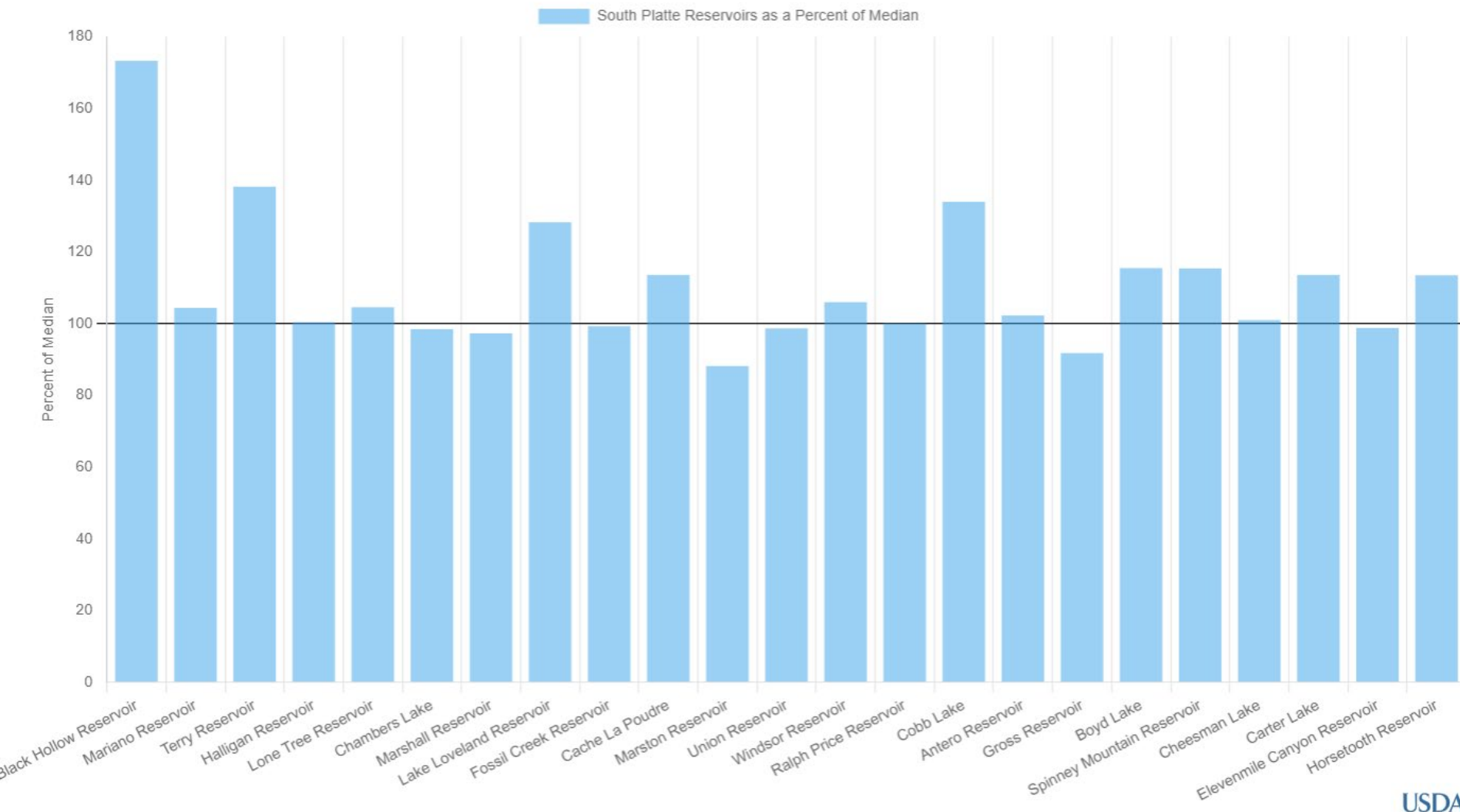
- Max
- Median (POR)
- Median ('91-'20)
- Min
- Stats. Shading
- 2023 (21 sites)
- 2022 (21 sites)
- 2021 (21 sites)
- 2020 (21 sites)
- 2019 (21 sites)
- 2018 (21 sites)
- 2017 (21 sites)
- 2016 (21 sites)
- 2015 (21 sites)
- 2014 (21 sites)
- 2013 (21 sites)
- 2012 (21 sites)
- 2011 (21 sites)
- 2010 (20 sites)
- 2009 (19 sites)
- 2008 (18 sites)
- 2007 (18 sites)
- 2006 (18 sites)
- 2005 (17 sites)
- 2004 (17 sites)
- 2003 (17 sites)



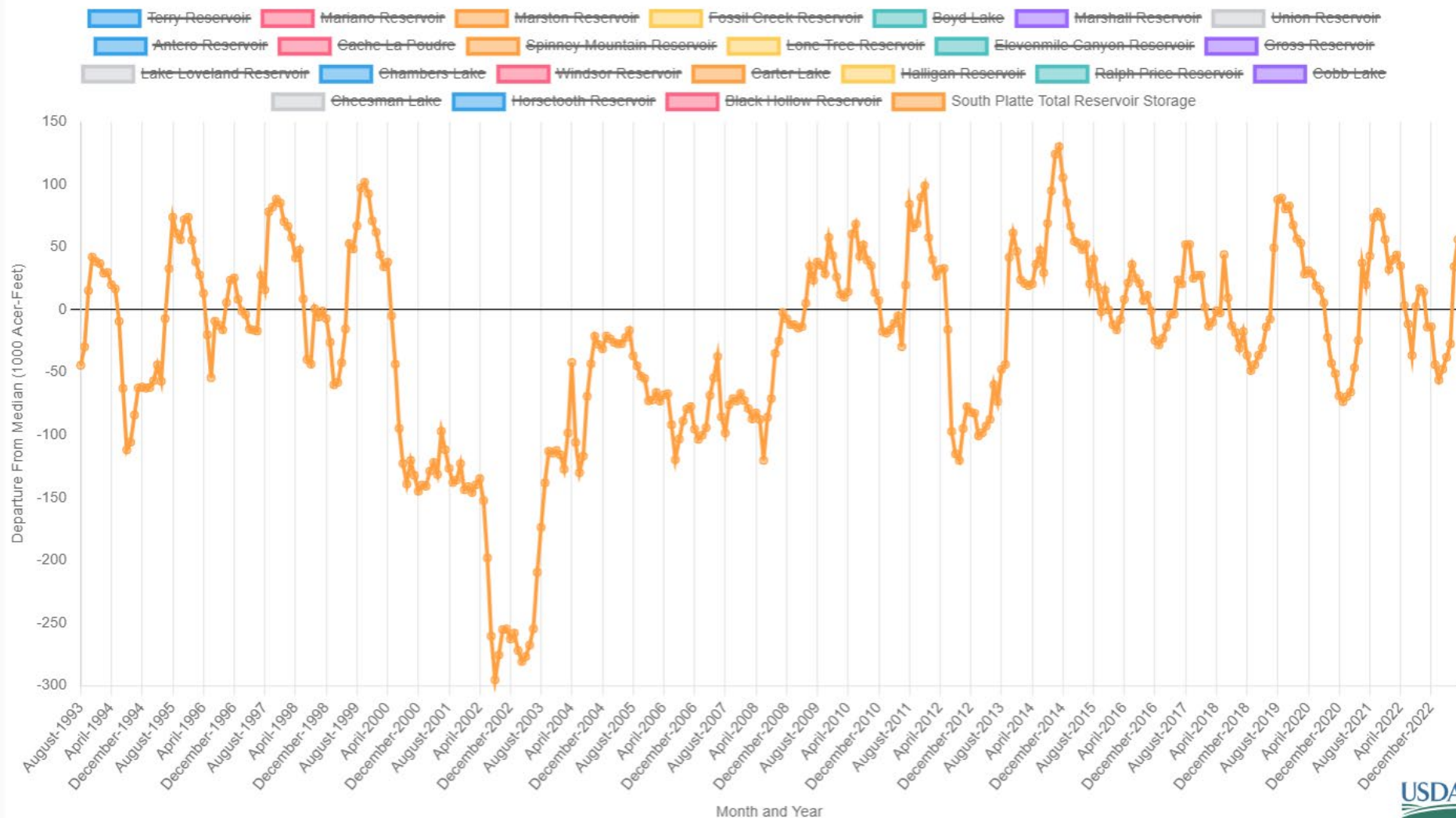


# Colorado Snow Surveys

South Platte Reservoir Storage Summary for July 1st 2023

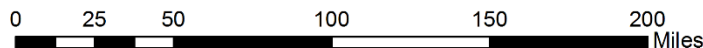
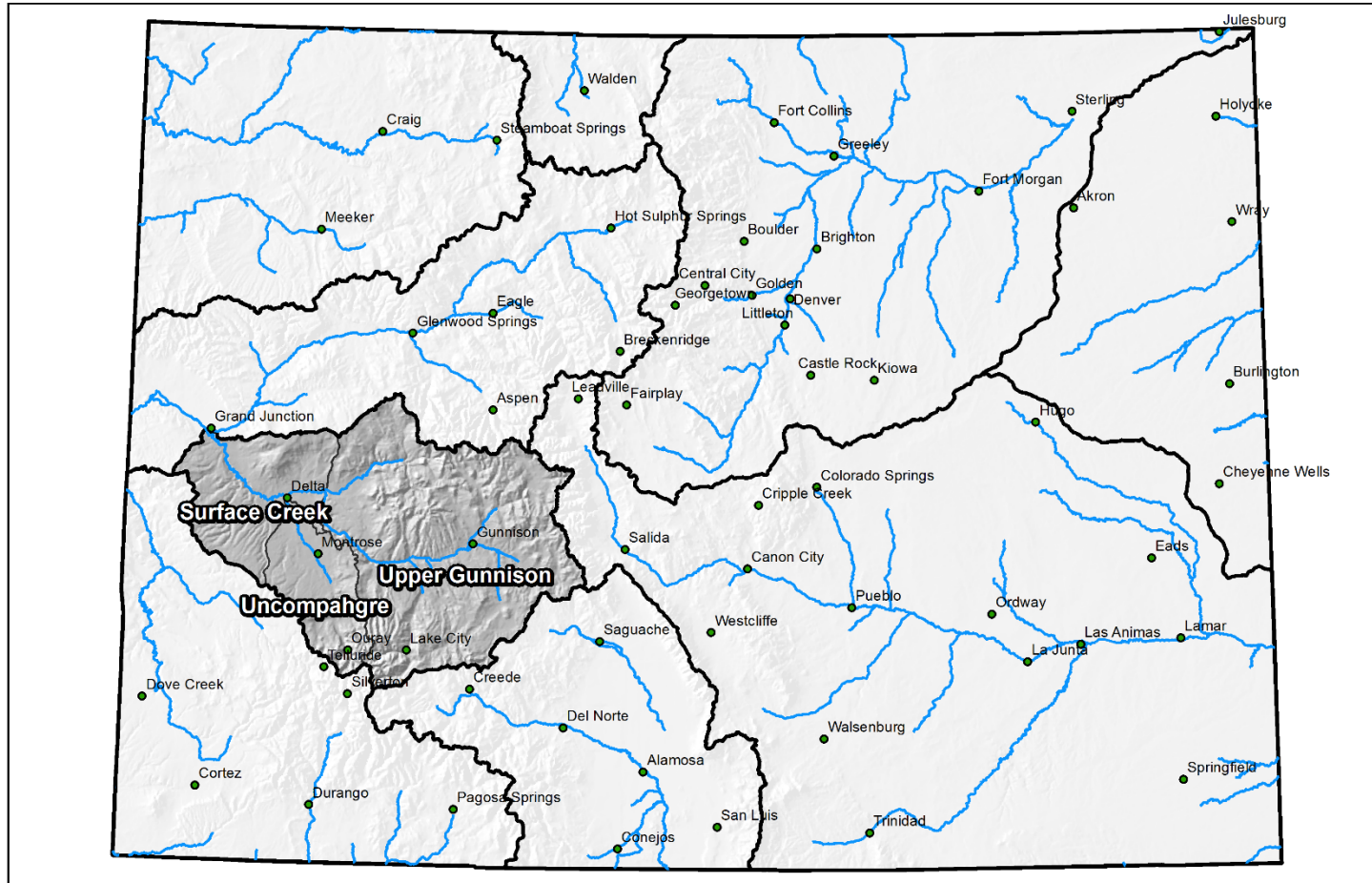


## South Platte Departure From Median Timeseries Plot



## Major Basin Summary

Gunnison River Basin







# Colorado Snow Surveys

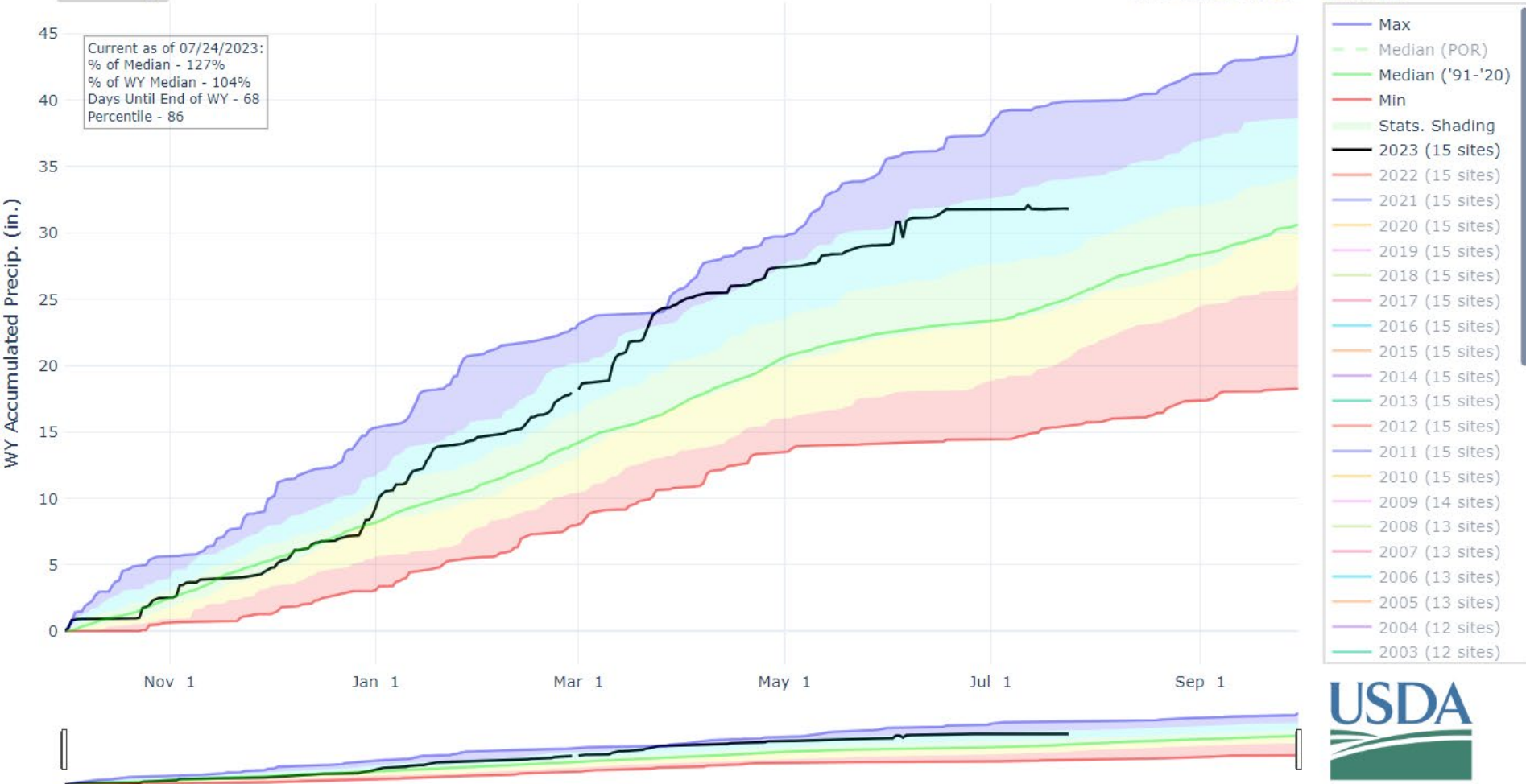
## PRECIPITATION IN GUNNISON

Reset Range

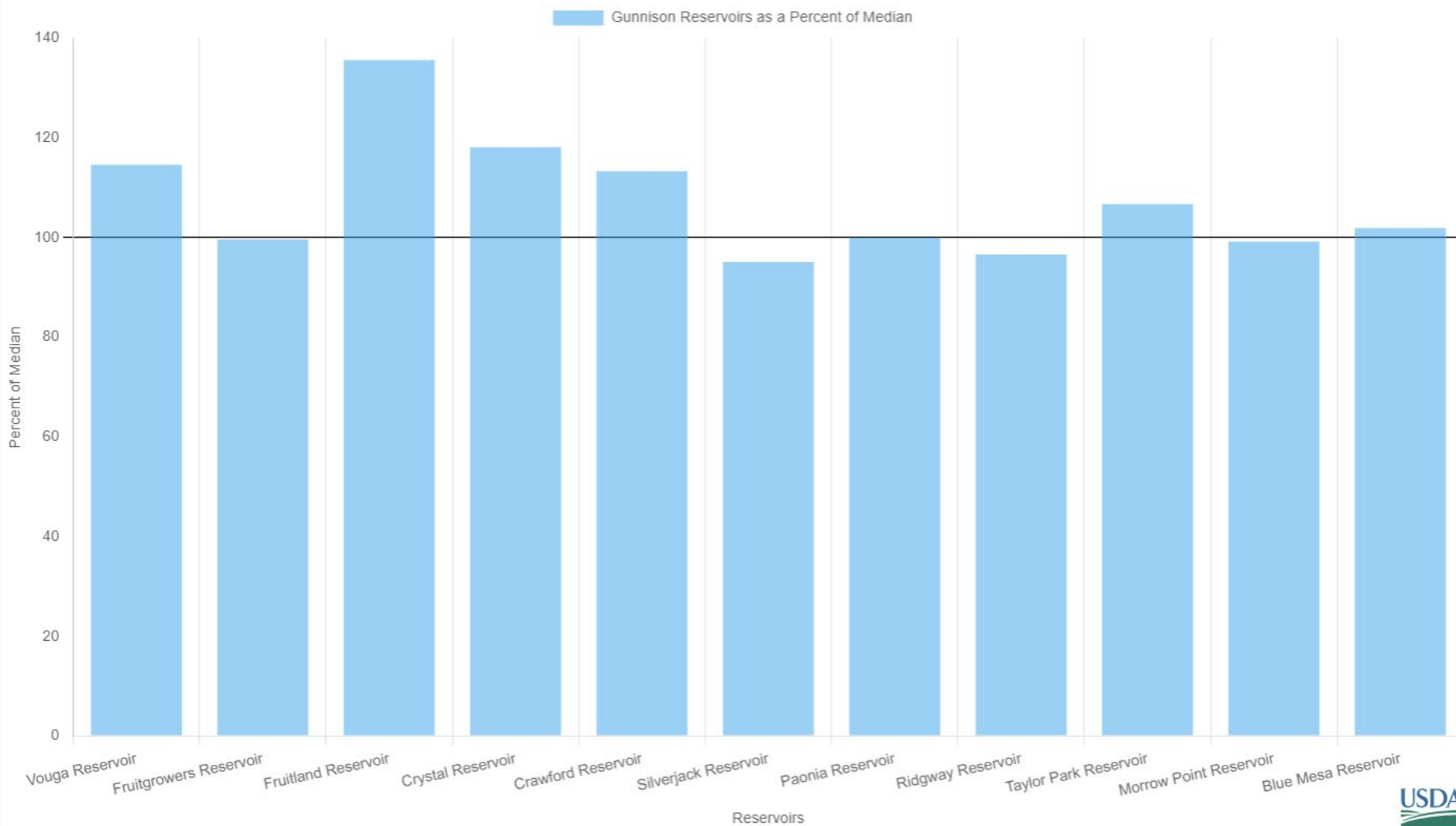
[Link to data: CSV / JSON](#)

[Station List](#)

Current as of 07/24/2023:  
% of Median - 127%  
% of WY Median - 104%  
Days Until End of WY - 68  
Percentile - 86



Gunnison Reservoir Storage Summary for July 1st 2023

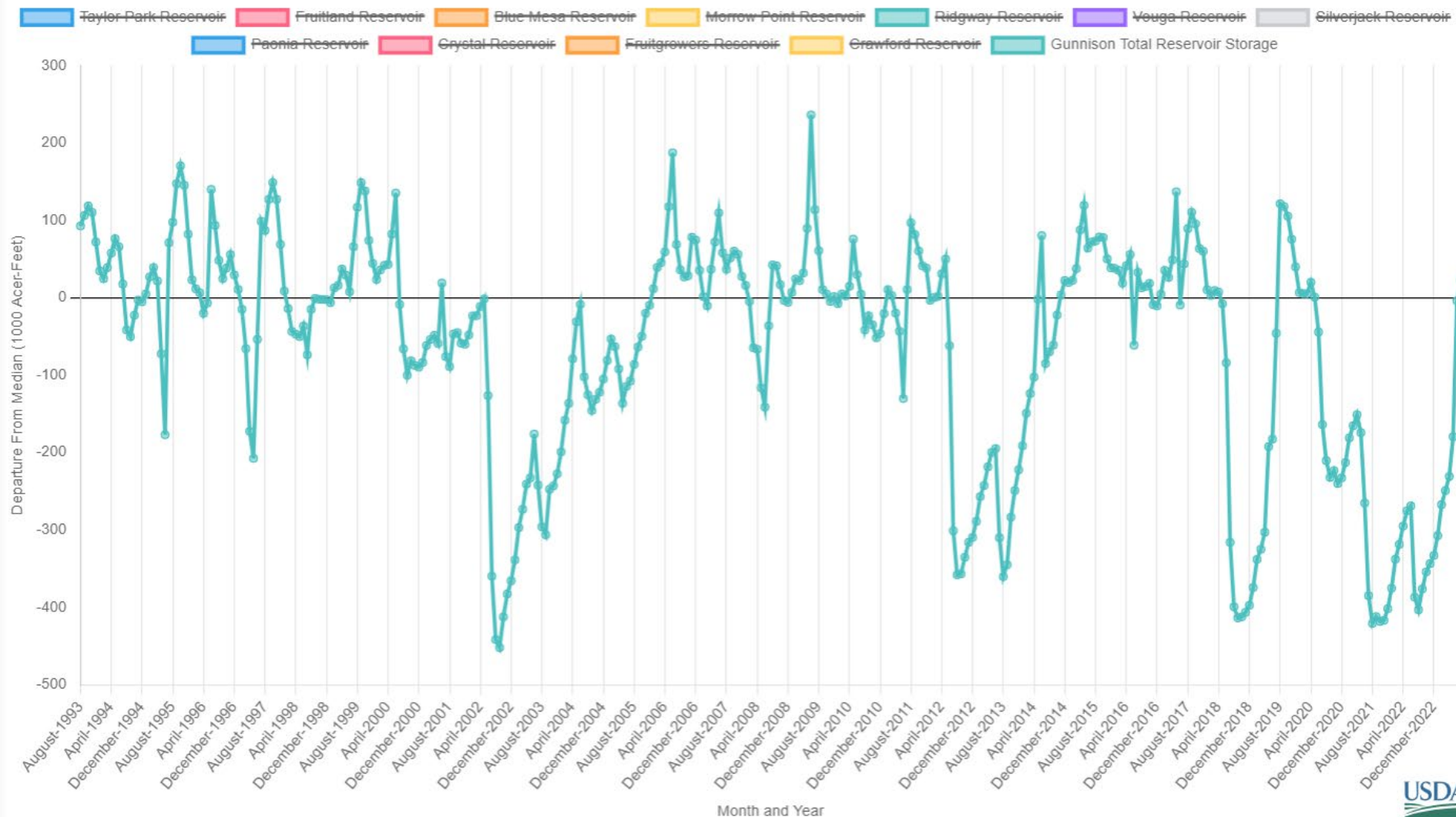




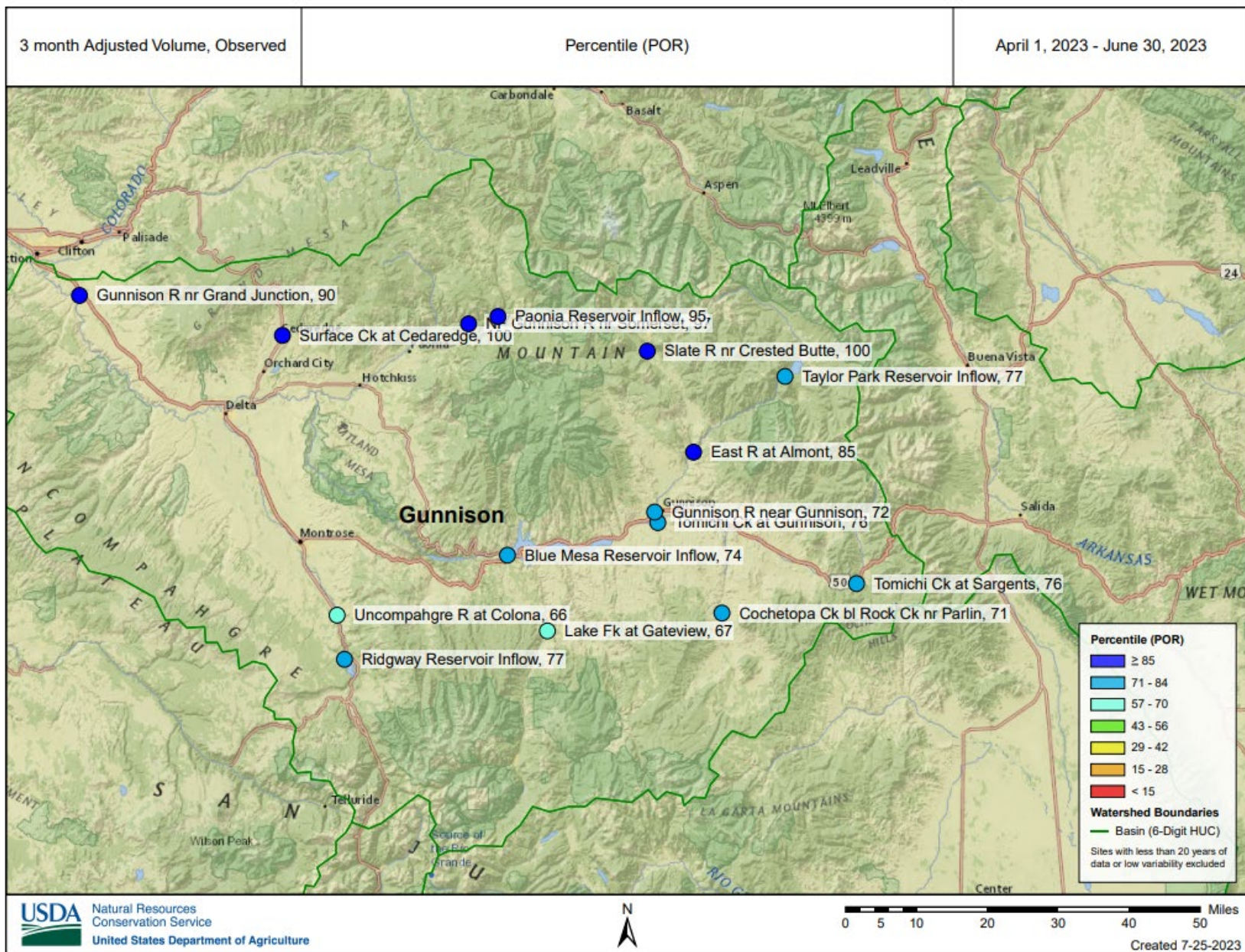
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# Colorado Snow Surveys

Gunnison Departure From Median Timeseries Plot

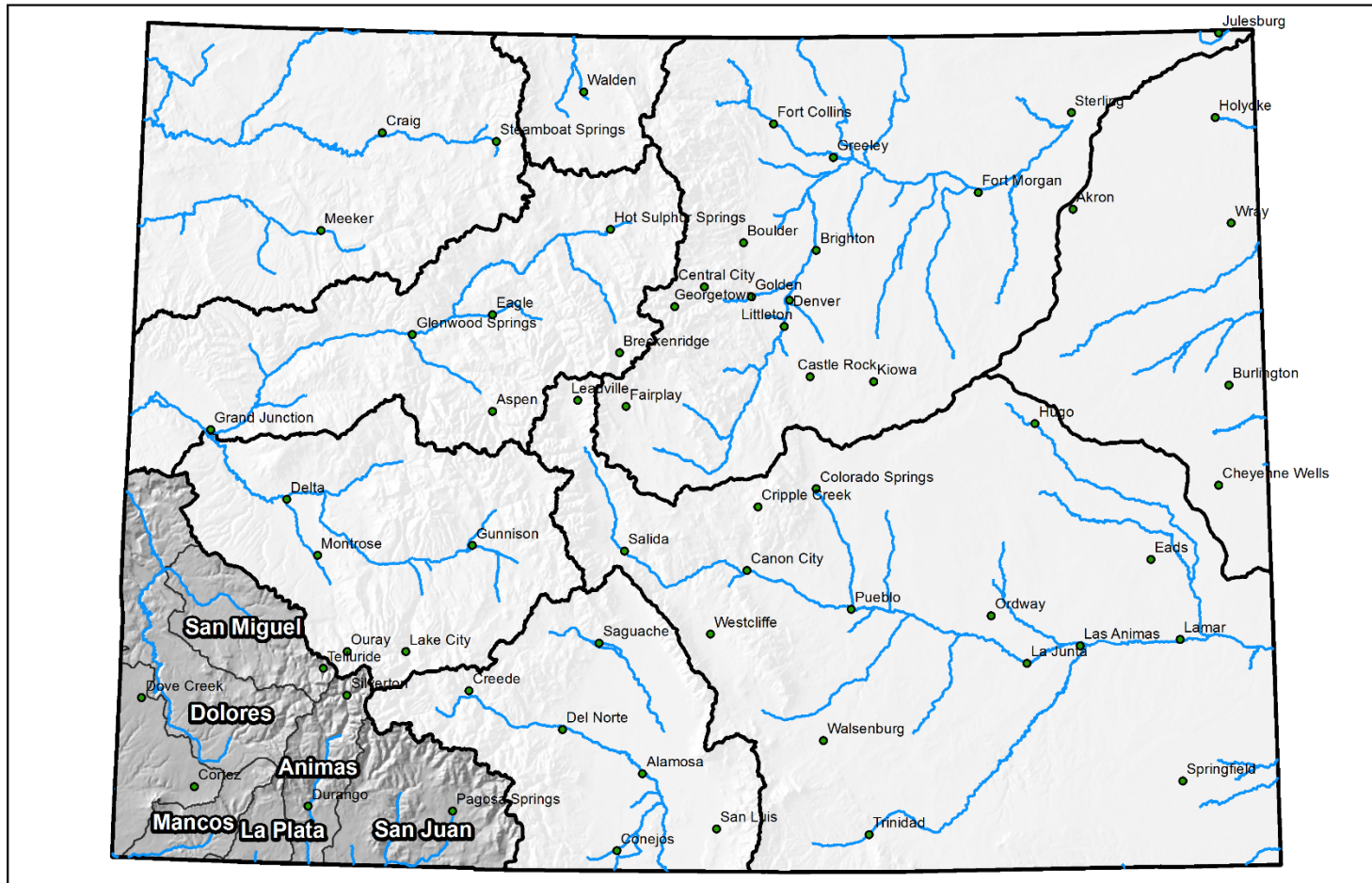






## Major Basin Summary

San Miguel, Dolores, Animas, and San Juan River Basins



0 25 50 100 150 200 Miles





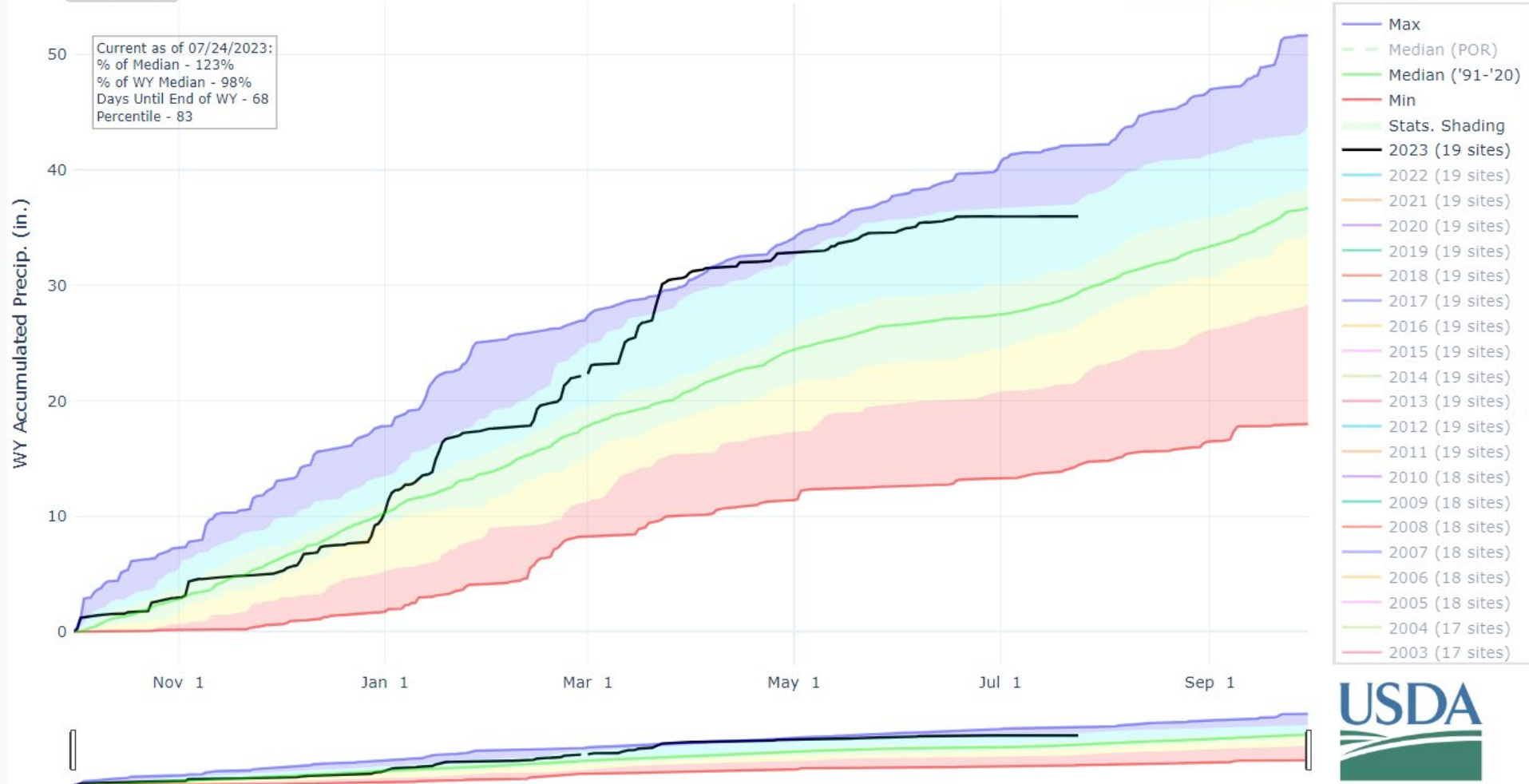
## PRECIPITATION IN SAN MIGUEL-DOLORES-ANIMAS-SAN JUAN

Reset Range

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

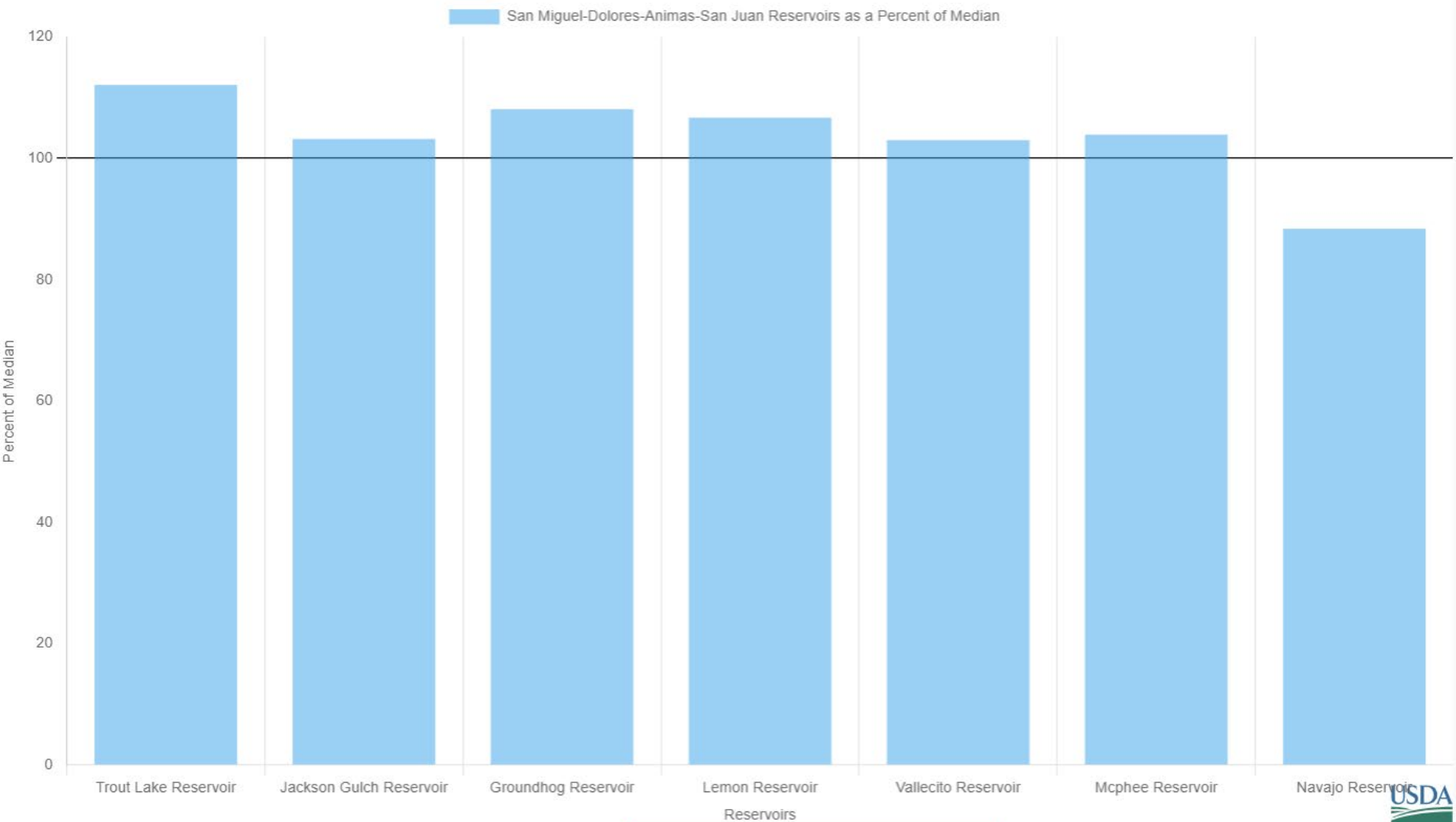
[Station List](#)

Current as of 07/24/2023:  
% of Median - 123%  
% of WY Median - 98%  
Days Until End of WY - 68  
Percentile - 83

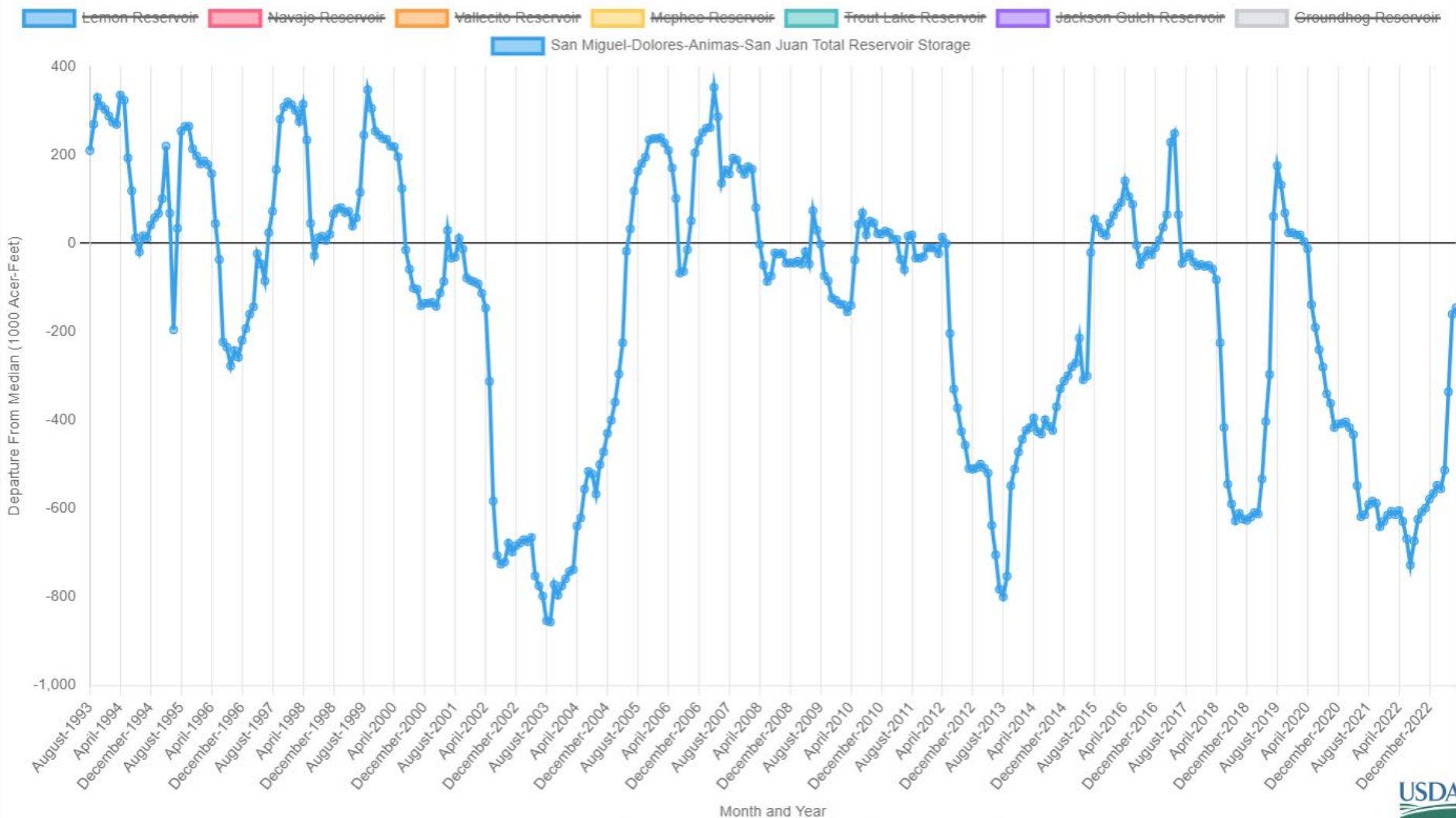




San Miguel-Dolores-Animas-San Juan Reservoir Storage Summary for July 1st 2023



## San Miguel-Dolores-Animas-San Juan Departure From Median Timeseries Plot

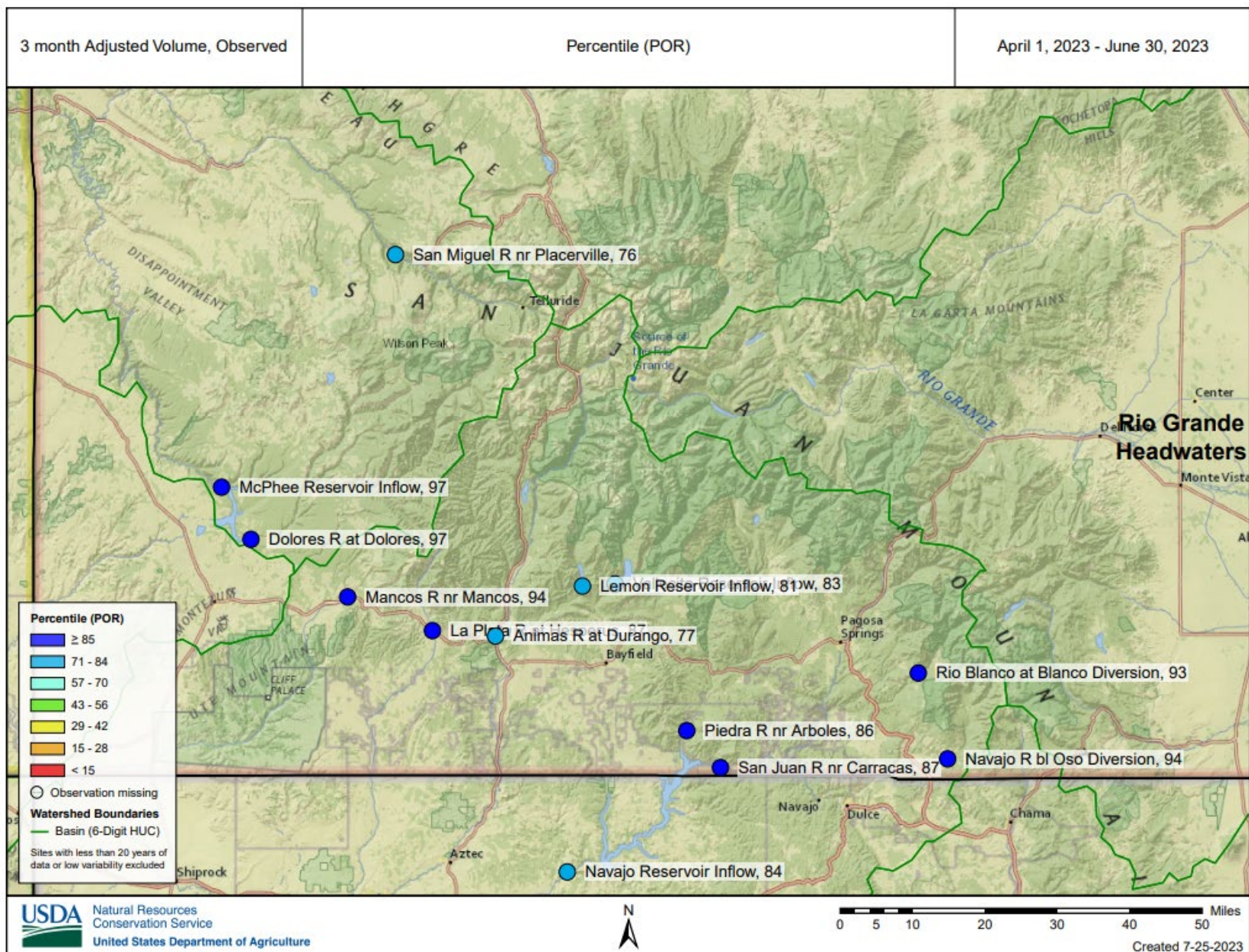




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# Colorado Snow Surveys

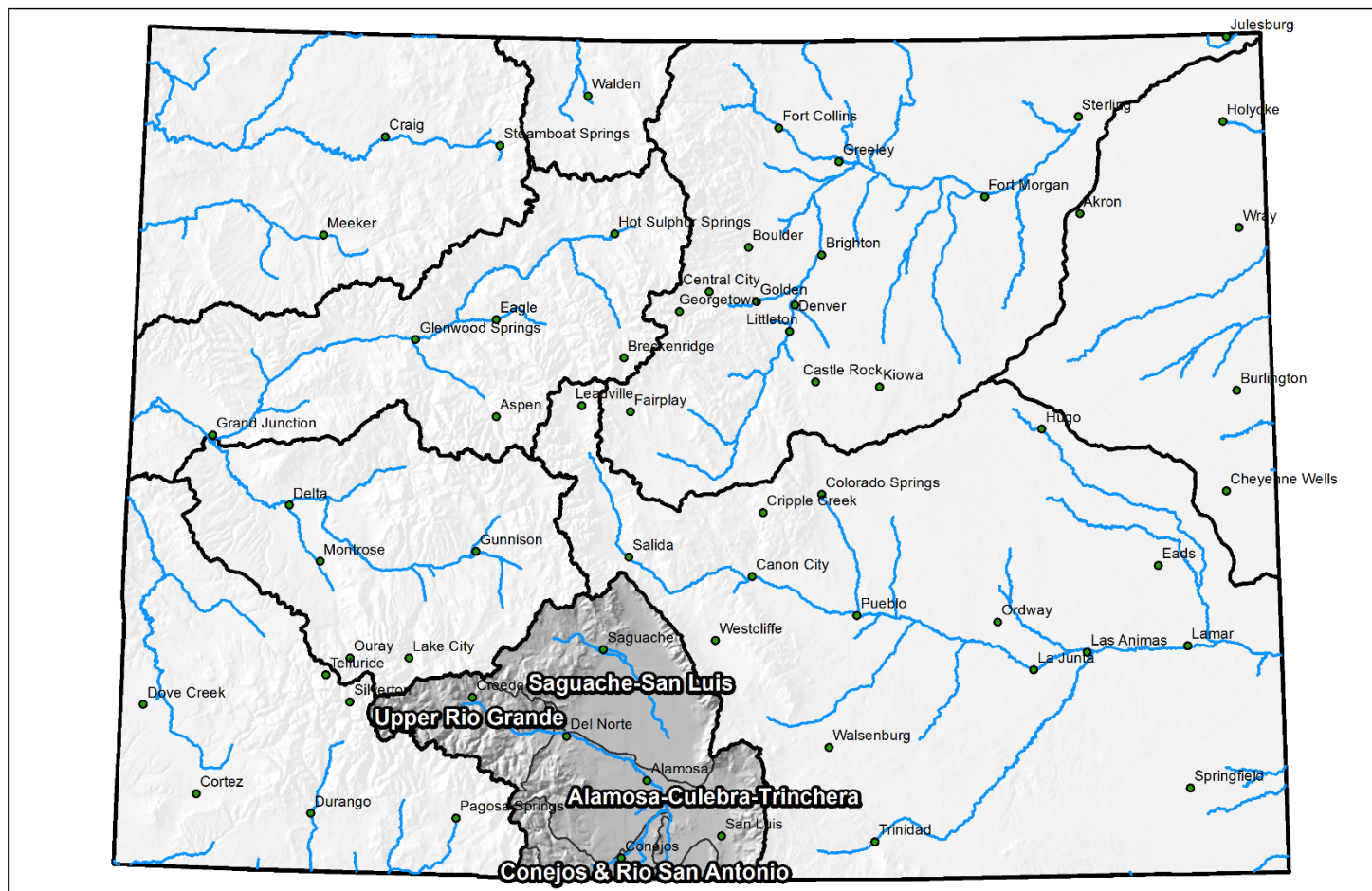
Observed Streamflow (percentile)





## Major Basin Summary

### Upper Rio Grande River Basin



0 25 50 100 150 200 Miles



# Colorado Snow Surveys

## PRECIPITATION IN UPPER RIO GRANDE

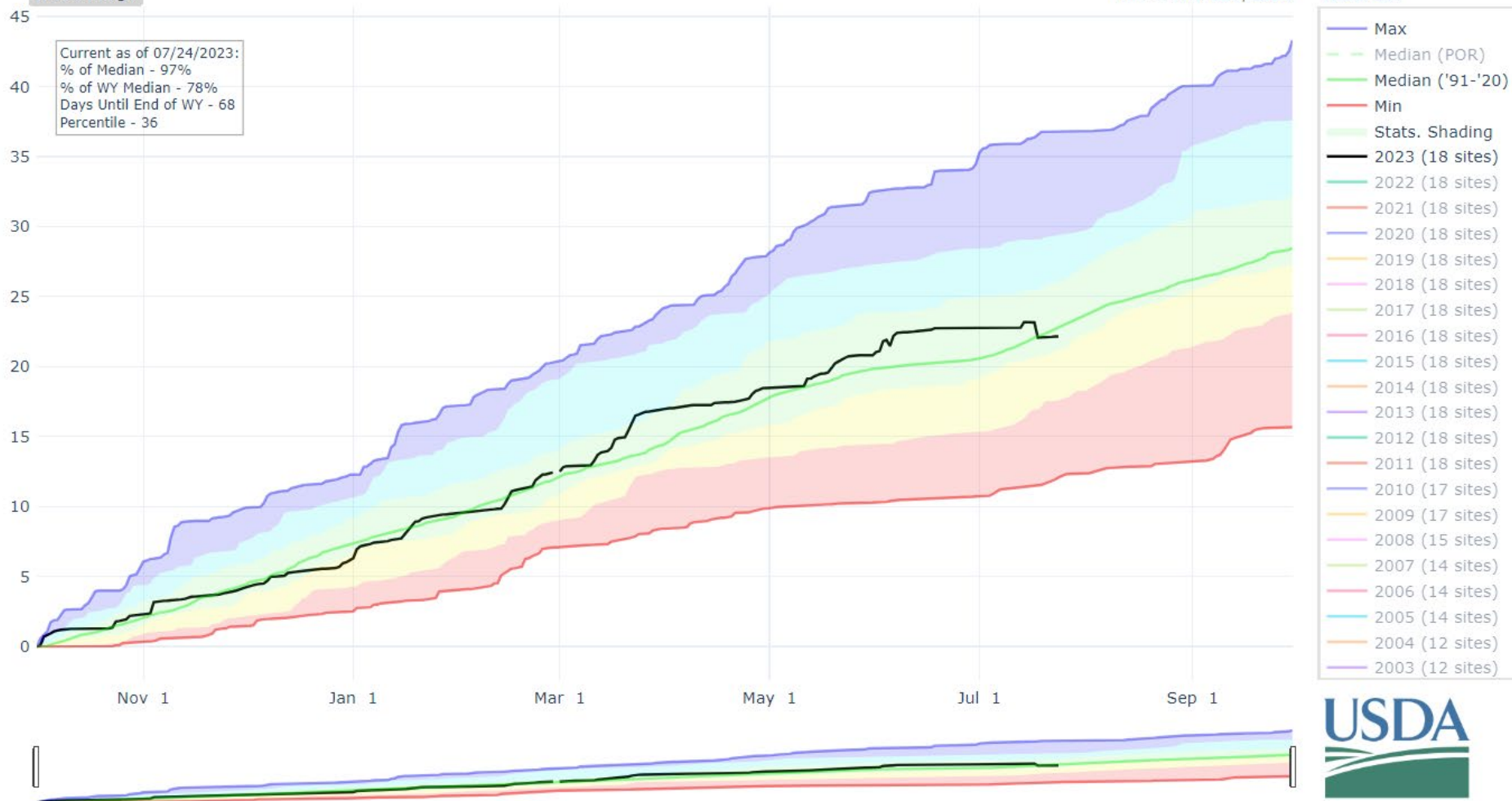
Reset Range

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

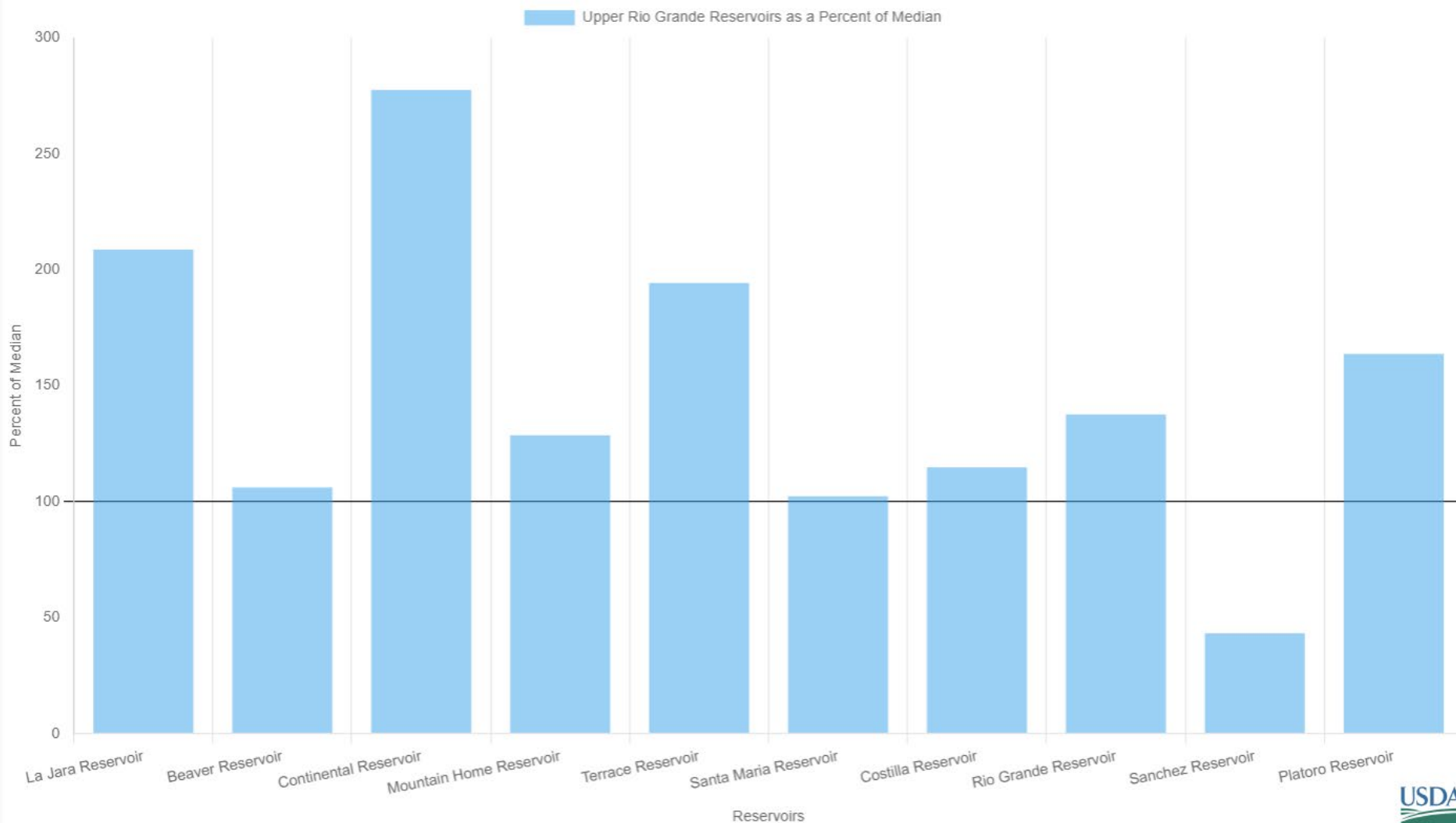
[Station List](#)

Current as of 07/24/2023:  
% of Median - 97%  
% of WY Median - 78%  
Days Until End of WY - 68  
Percentile - 36

WY Accumulated Precip. (in.)

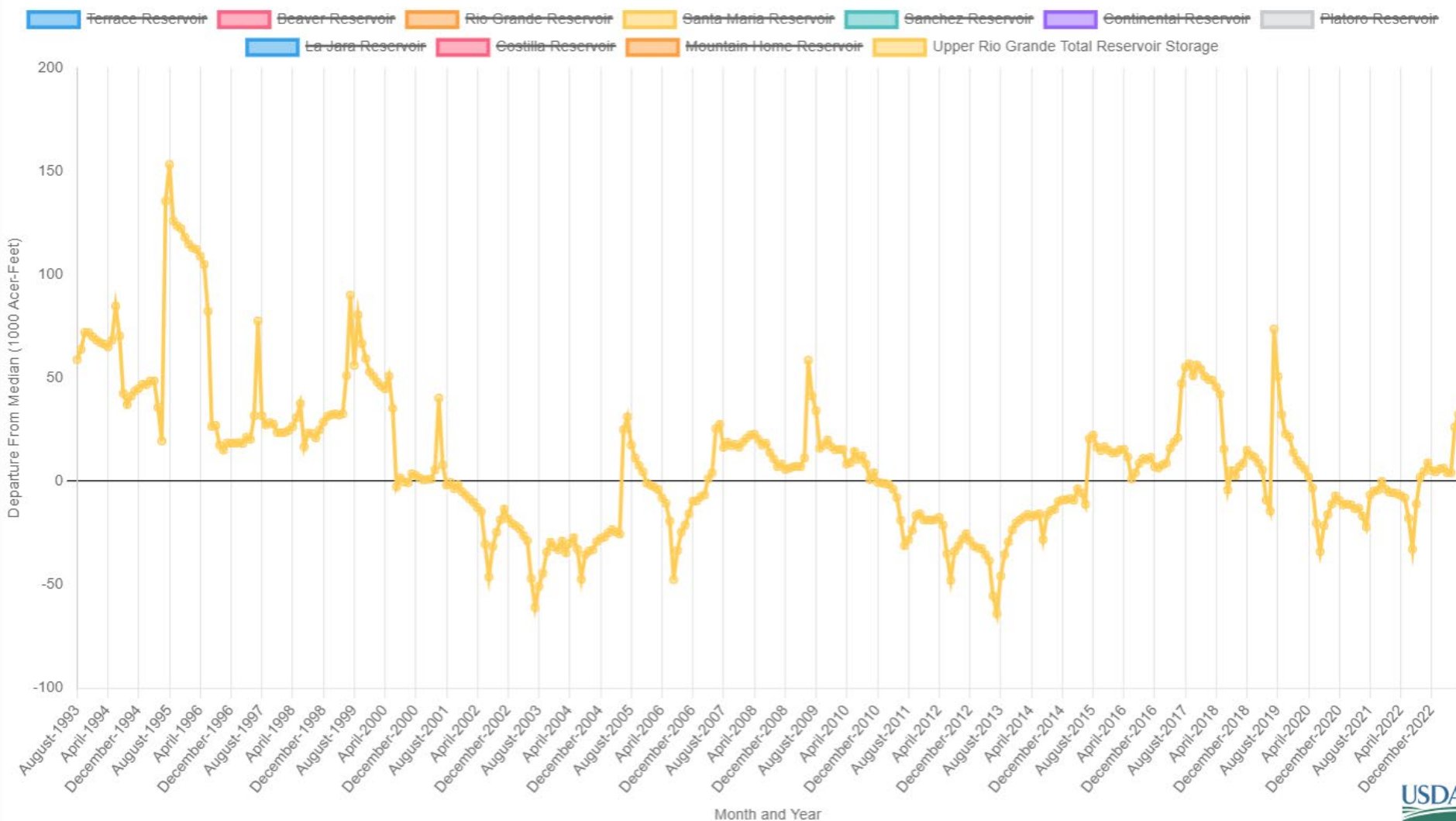


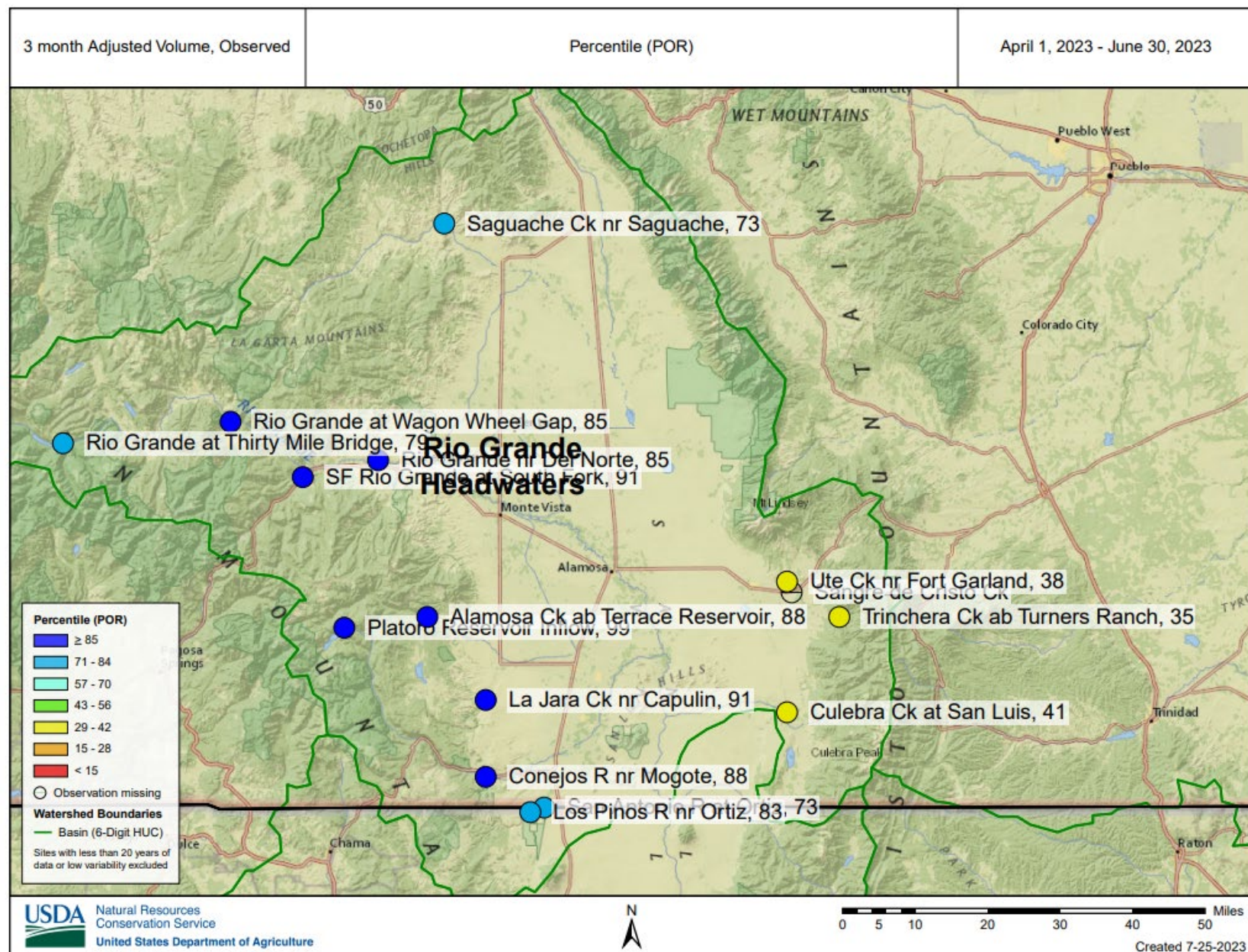
Upper Rio Grande Reservoir Storage Summary for July 1st 2023





## Upper Rio Grande Departure From Median Timeseries Plot

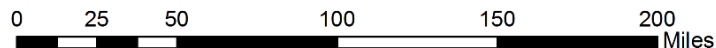
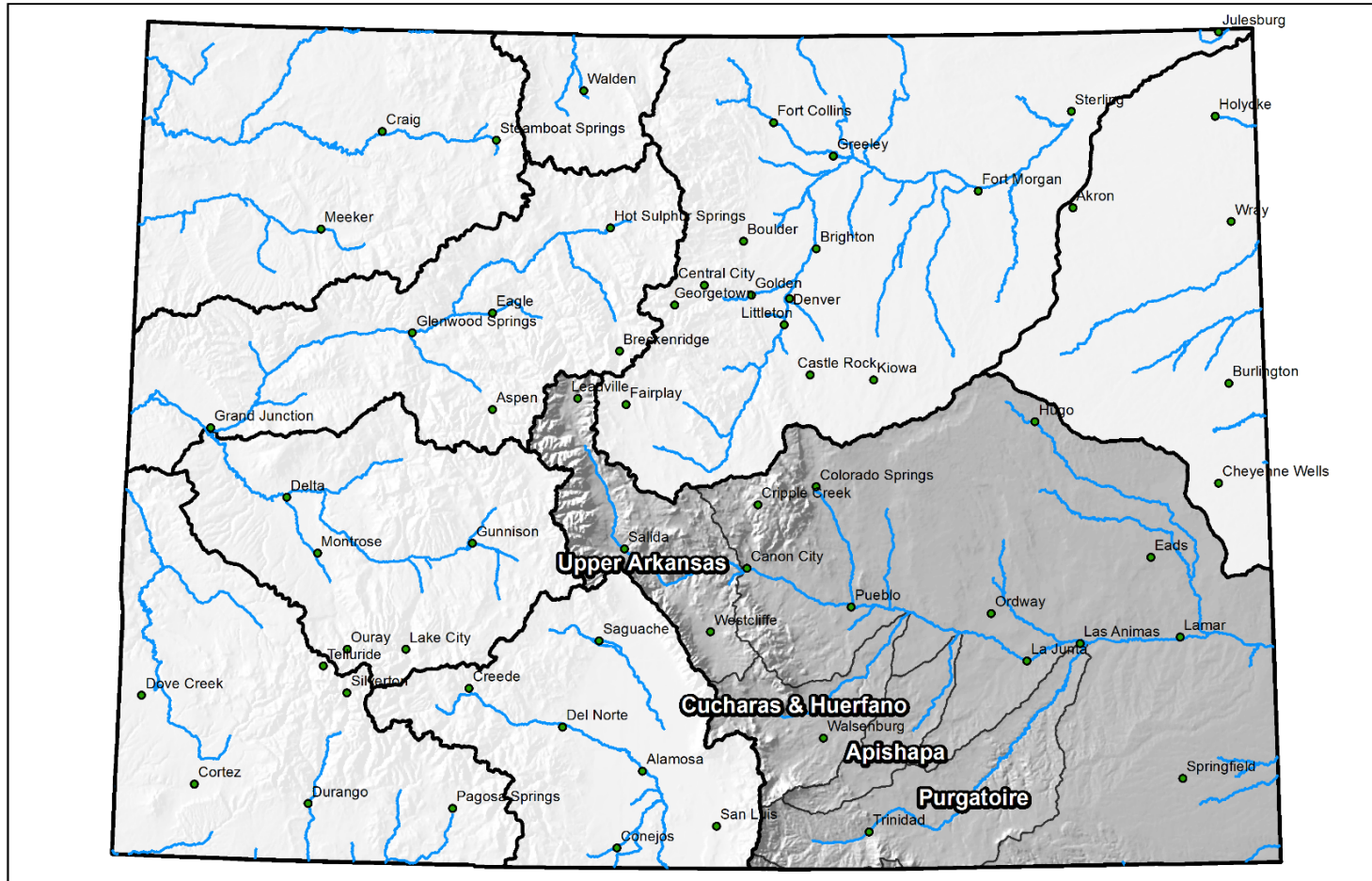






## Major Basin Summary

### Arkansas River Basin







# Colorado Snow Surveys

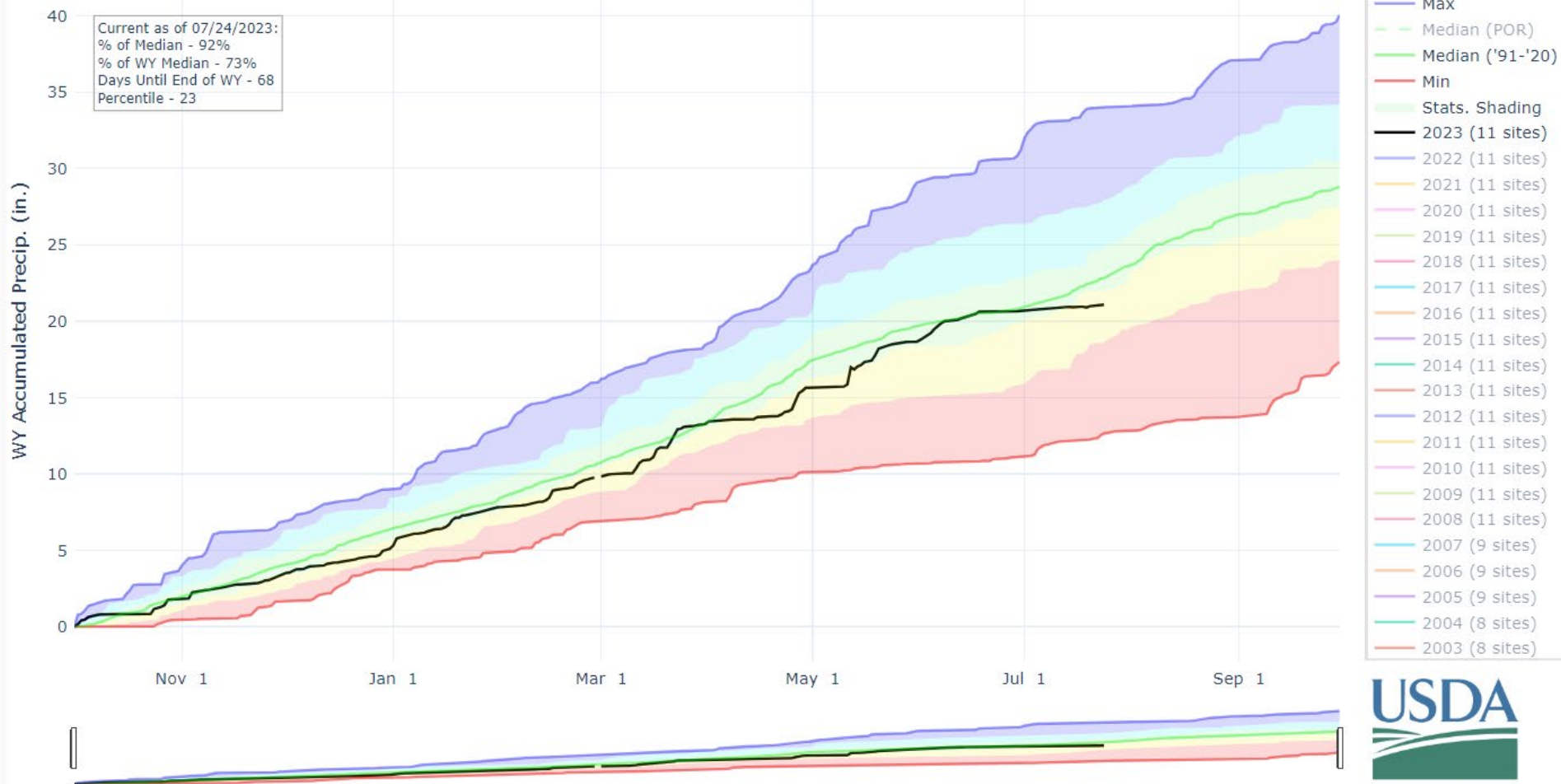
## PRECIPITATION IN ARKANSAS

Reset Range

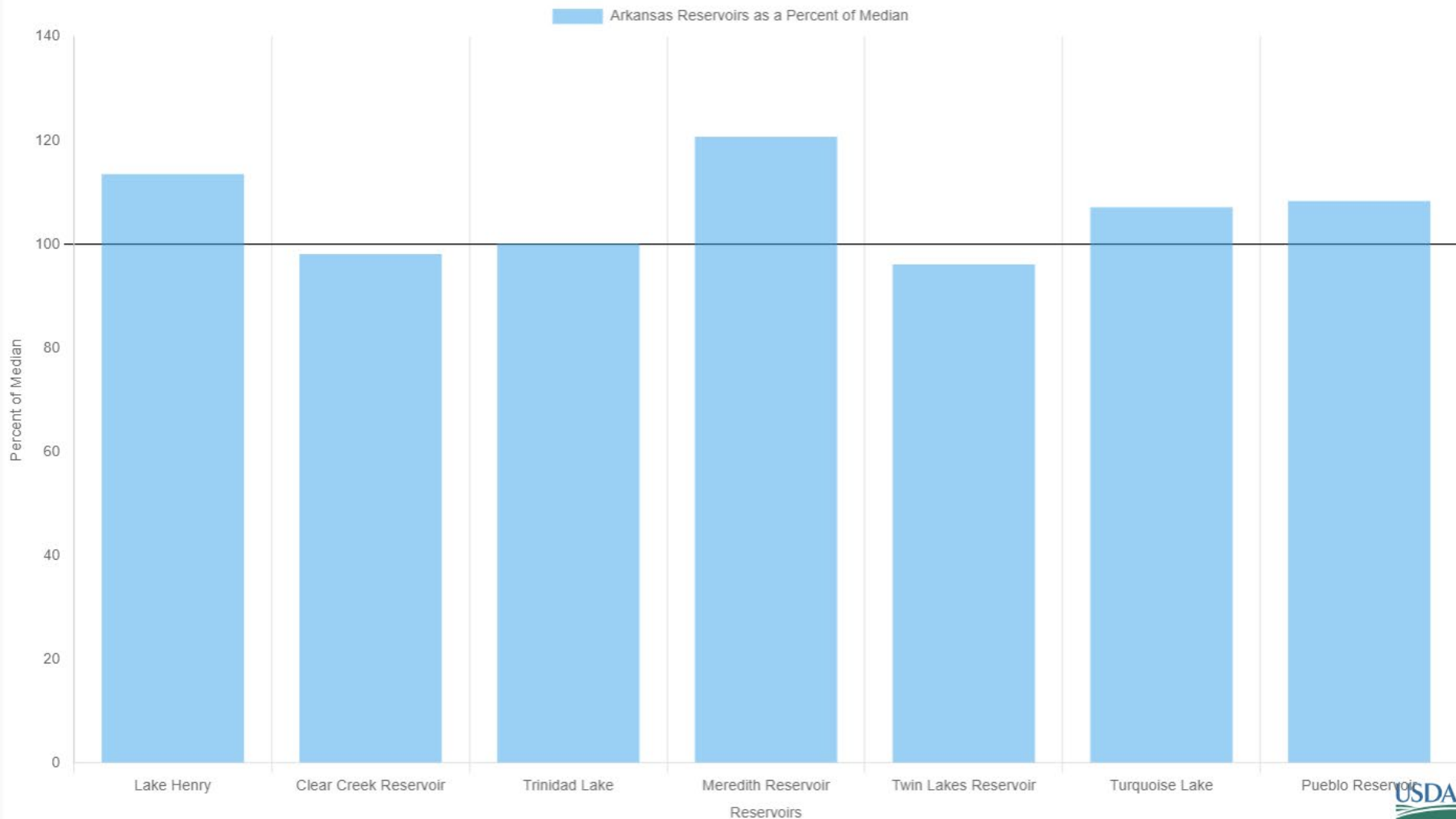
[Link to data: CSV / JSON](#)

[Station List](#)

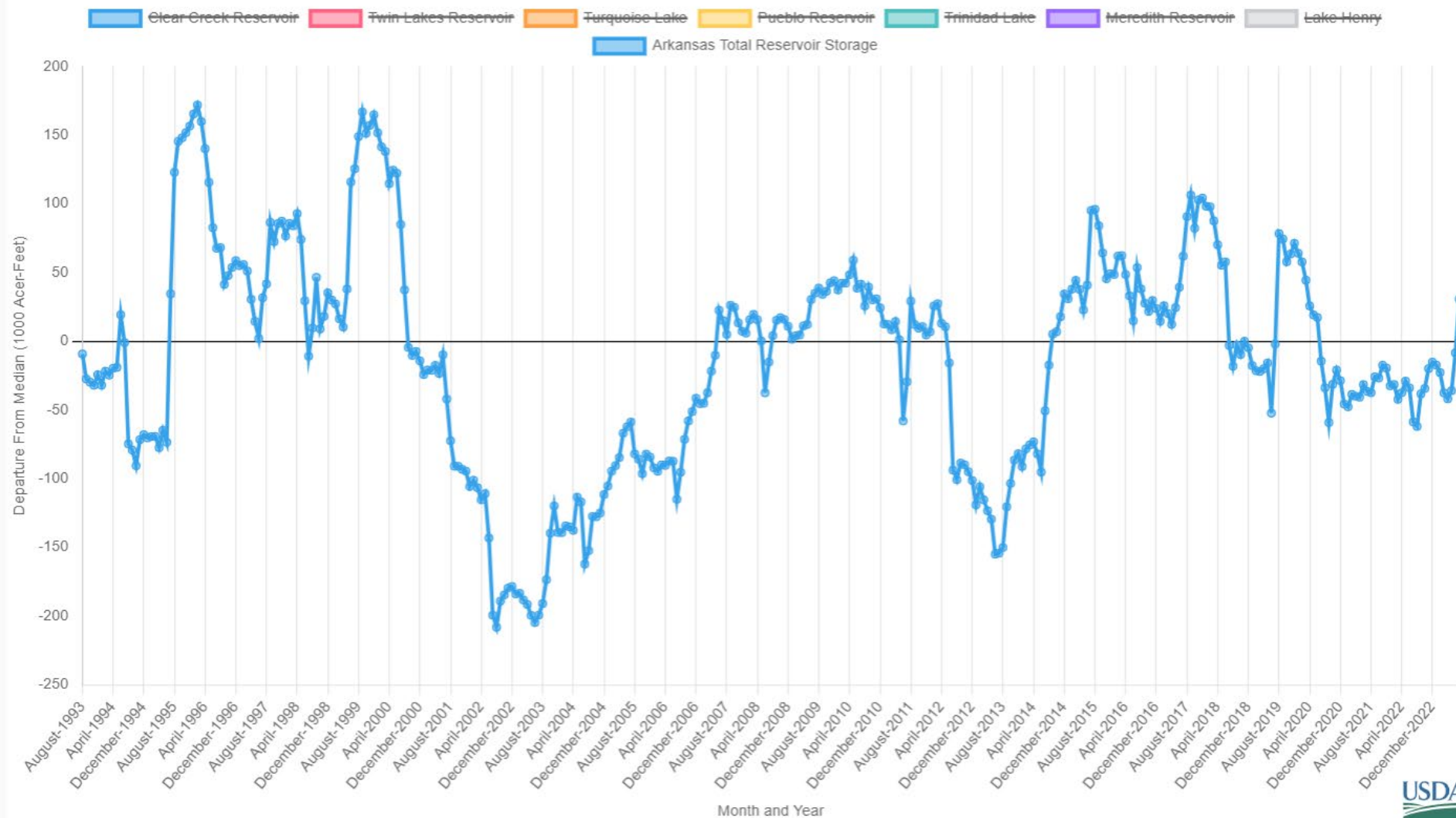
Current as of 07/24/2023:  
% of Median - 92%  
% of WY Median - 73%  
Days Until End of WY - 68  
Percentile - 23



Arkansas Reservoir Storage Summary for July 1st 2023

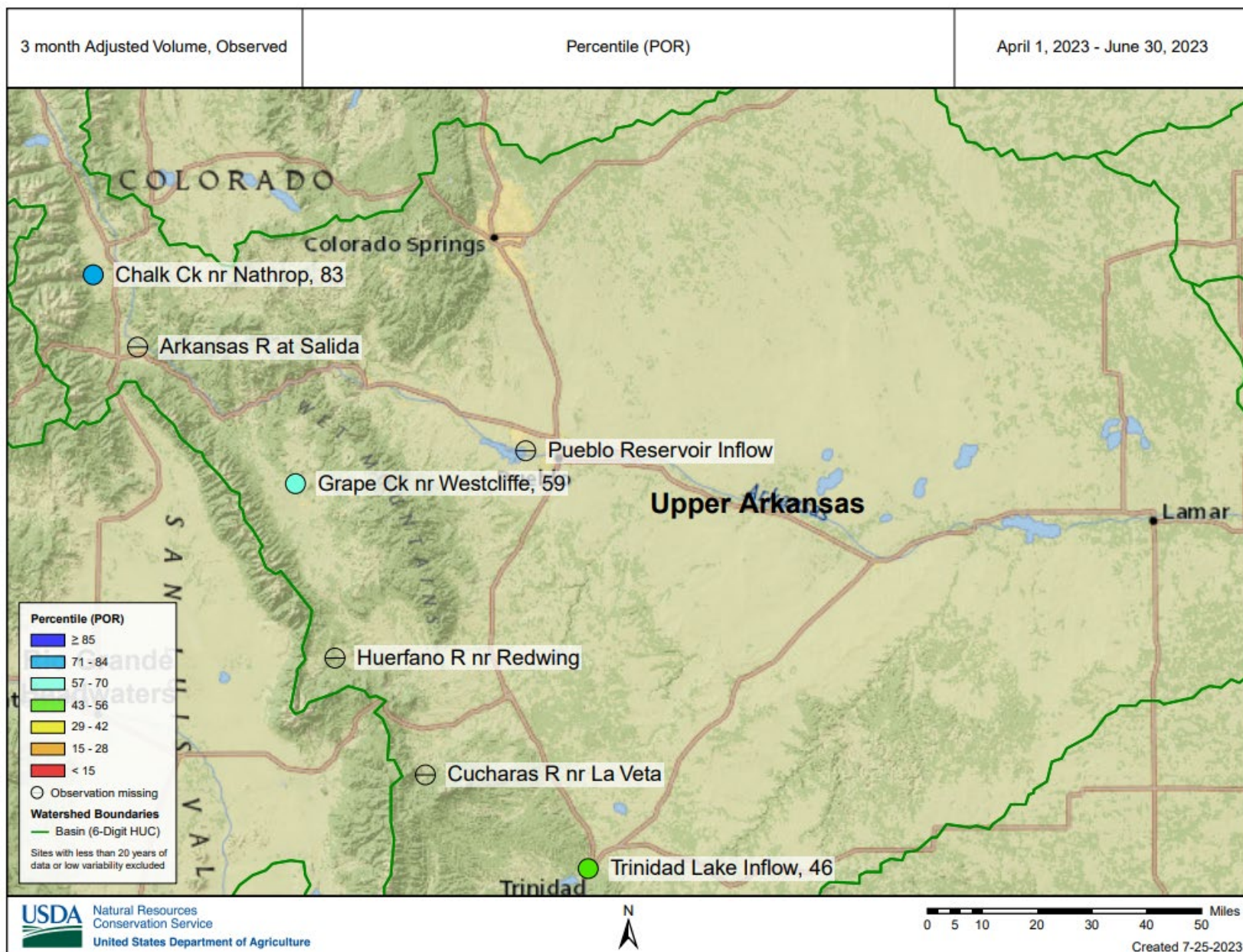


## Arkansas Departure From Median Timeseries Plot



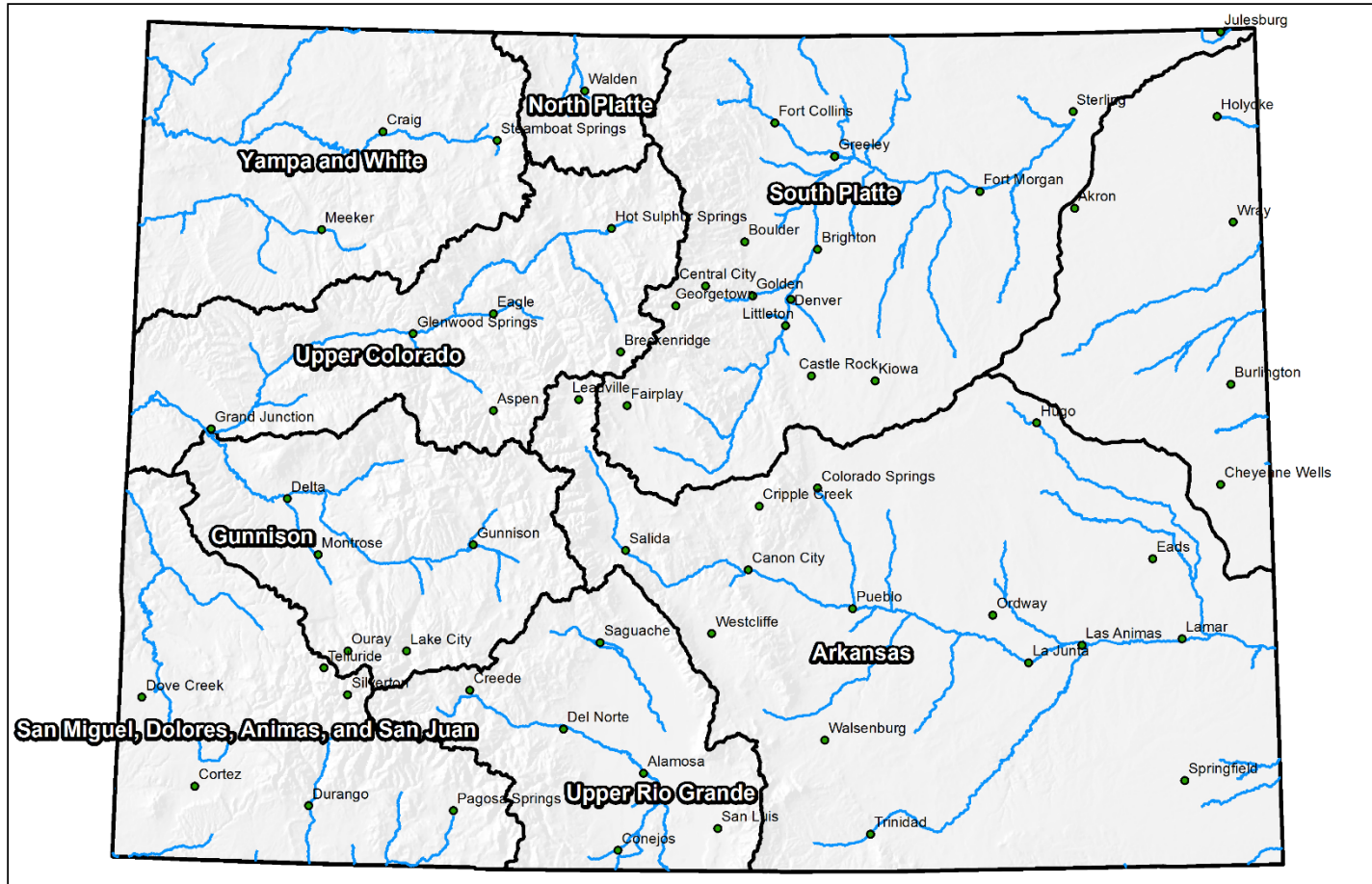


## Observed Streamflow (percentile)



## Colorado Statewide Summary

Colorado Major Basins



0 25 50 100 150 200 Miles

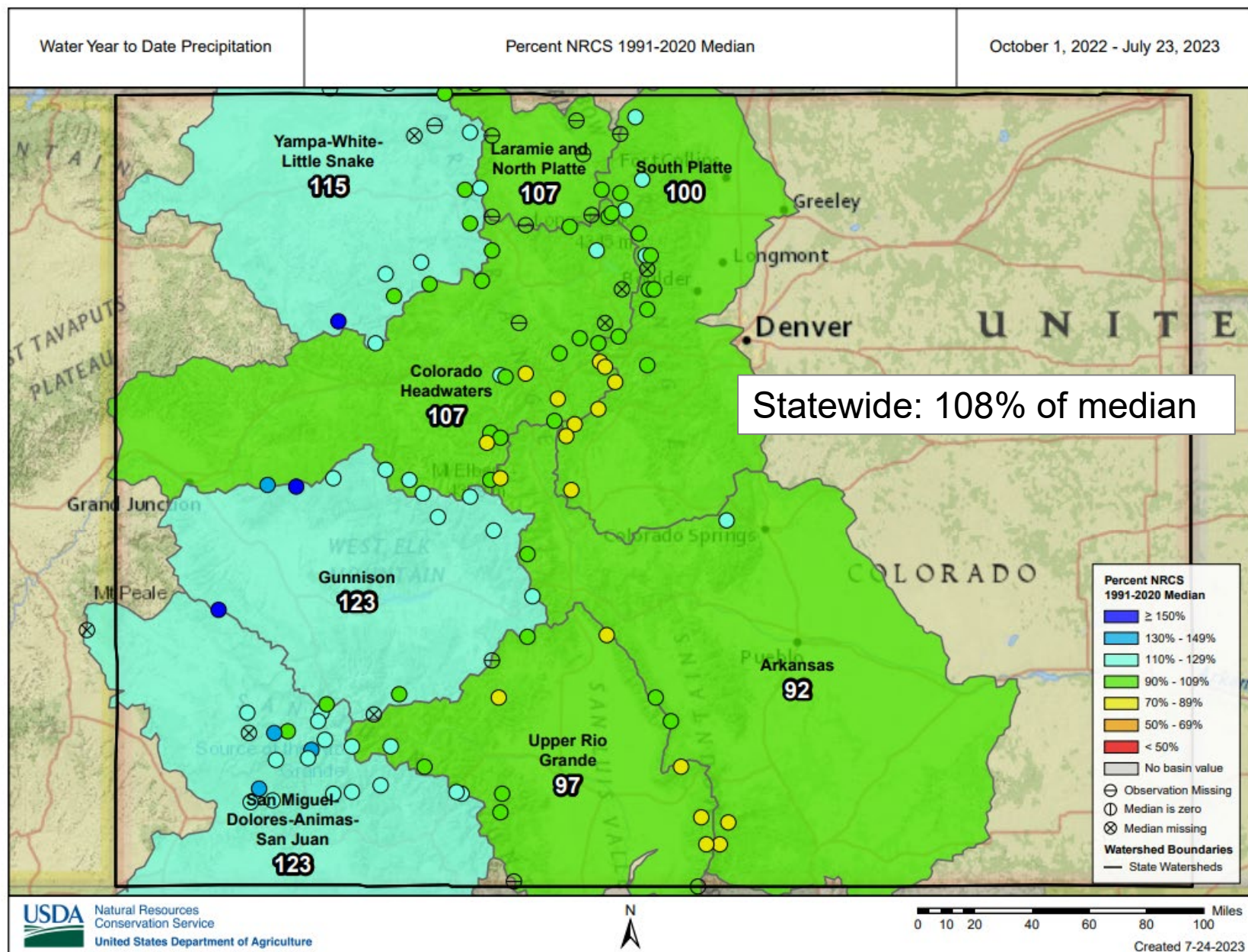




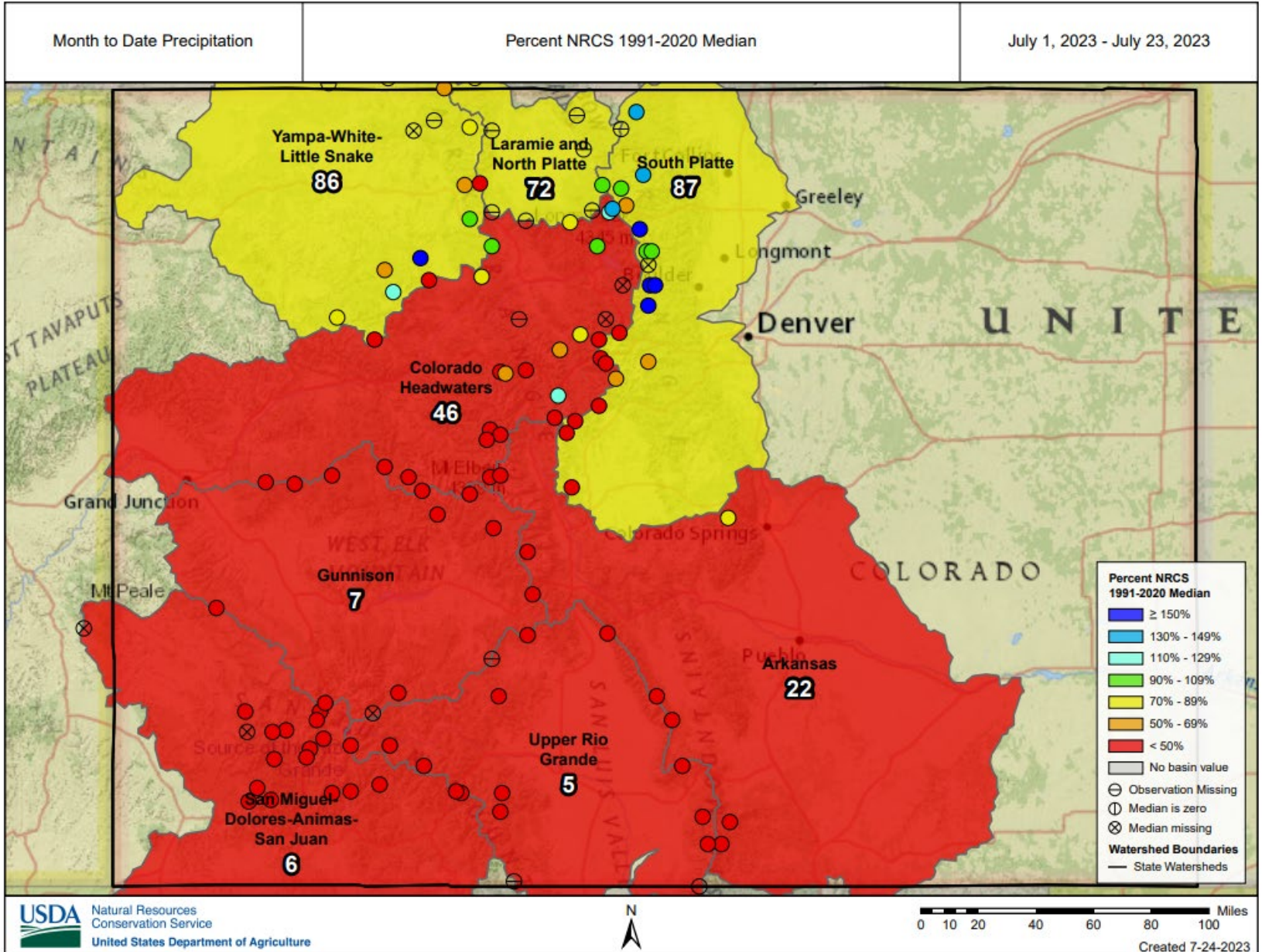
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# Colorado Snow Surveys

WY Precipitation









# Colorado Snow Surveys

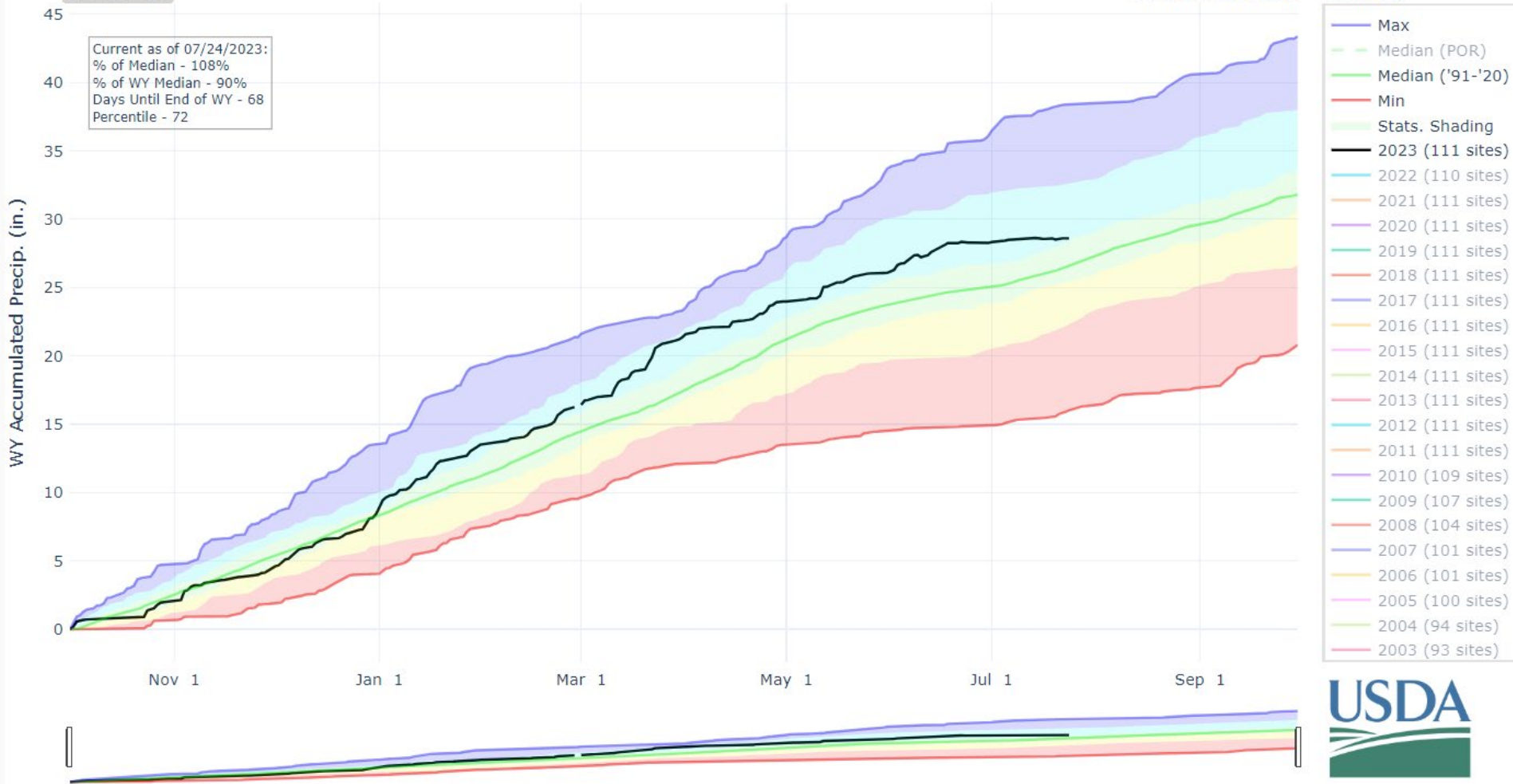
## PRECIPITATION IN STATE OF COLORADO

Reset Range

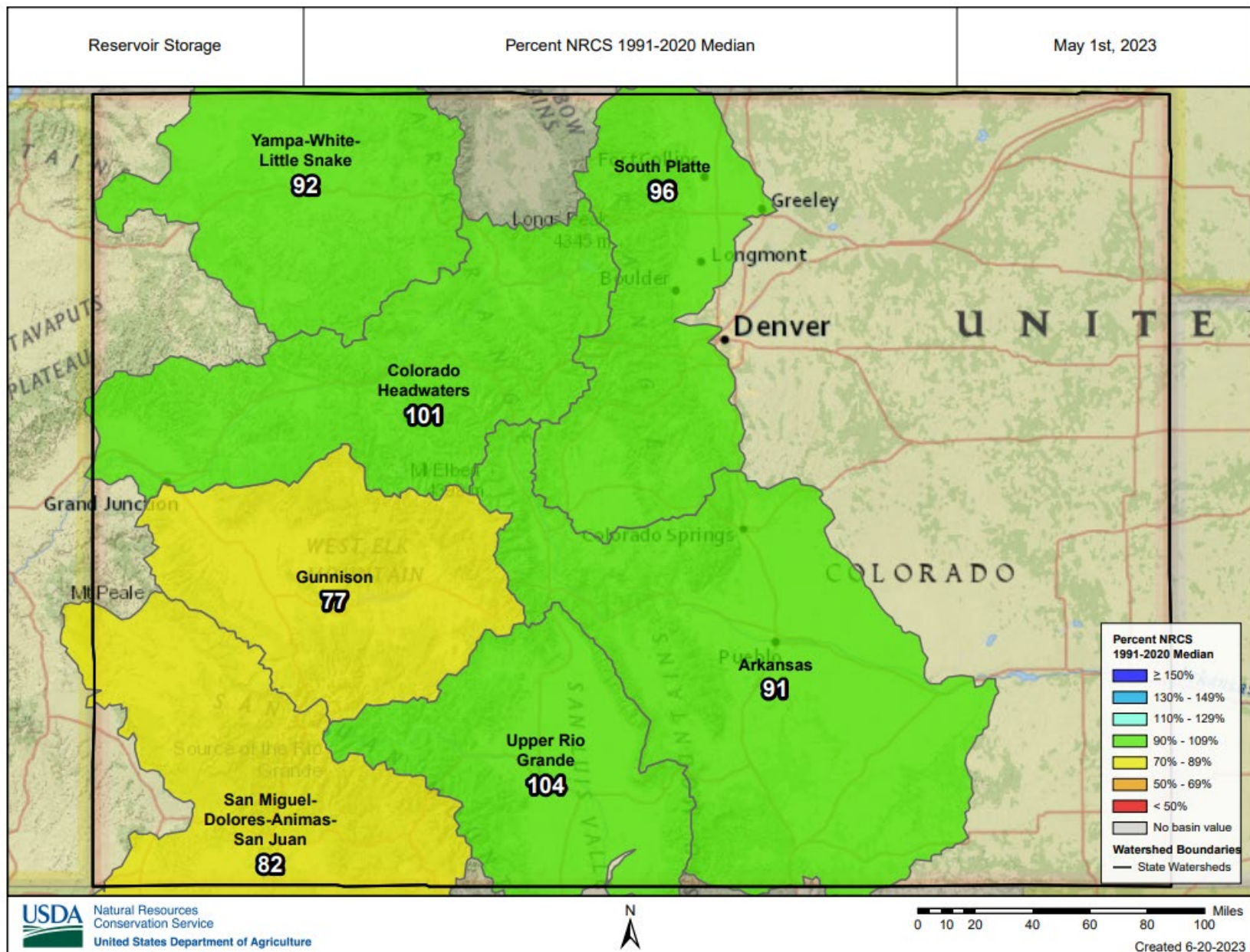
[Link to data: CSV / JSON](#)

[Station List](#)

Current as of 07/24/2023:  
% of Median - 108%  
% of WY Median - 90%  
Days Until End of WY - 68  
Percentile - 72







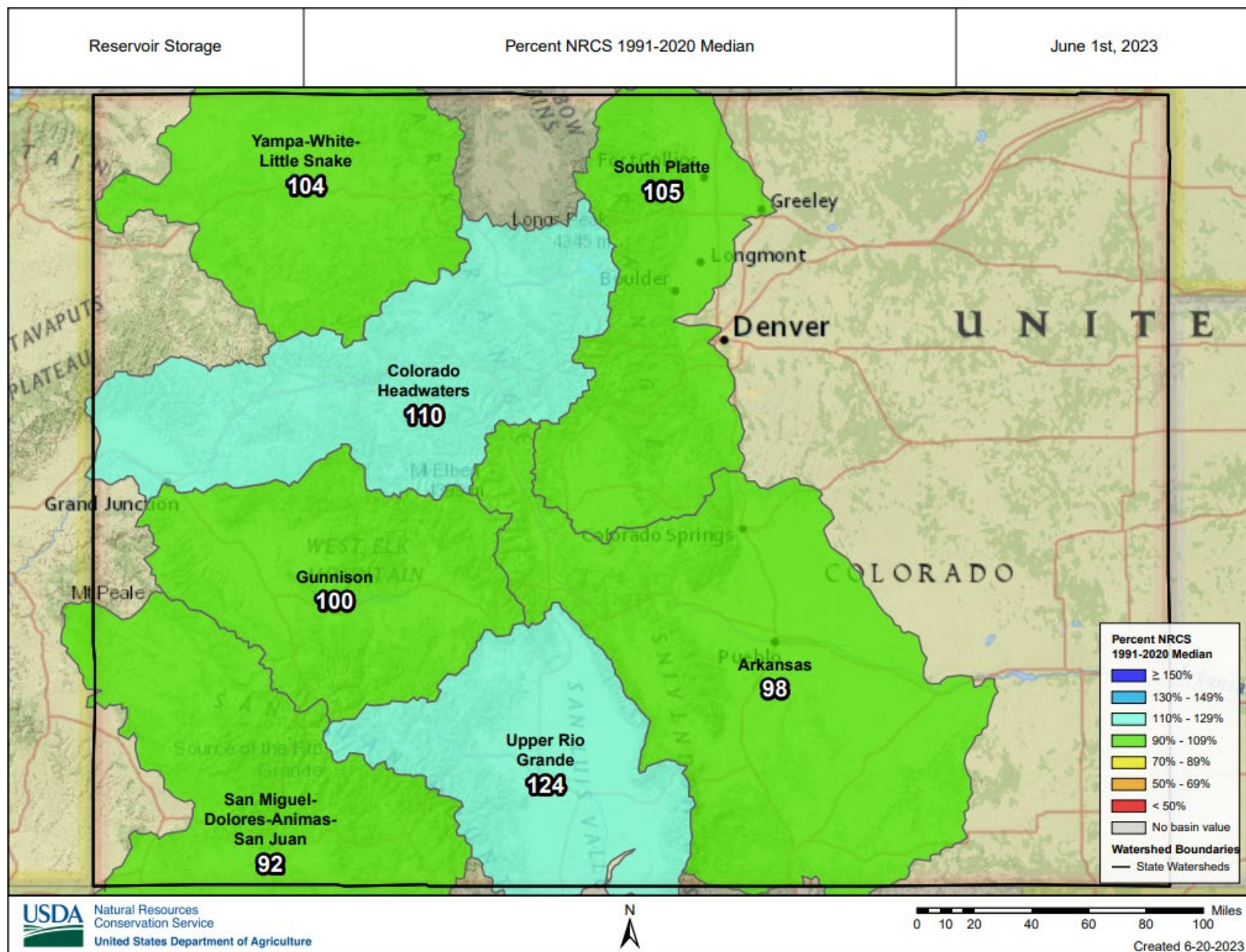




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# Colorado Snow Surveys

Reservoir Storage: June 1st



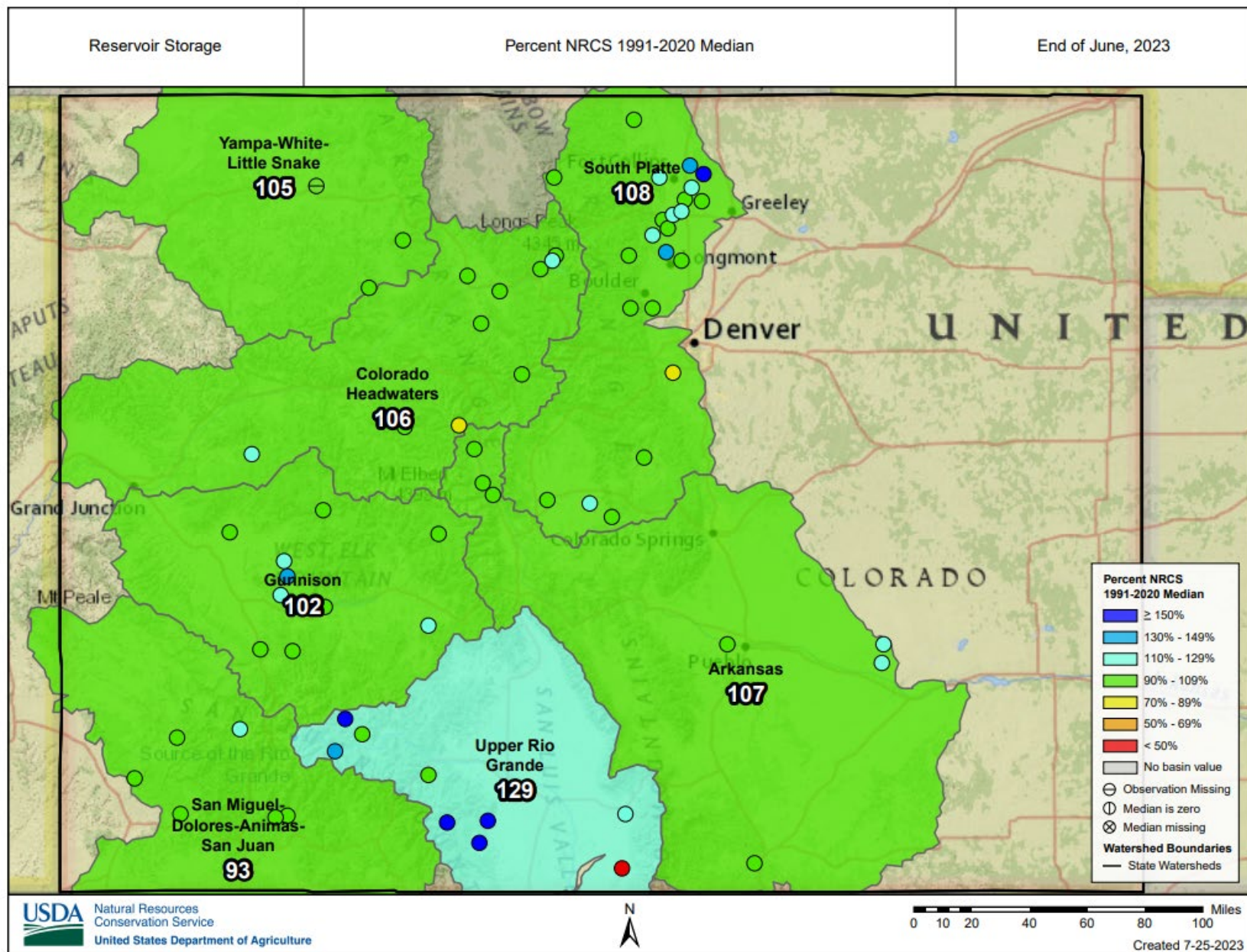




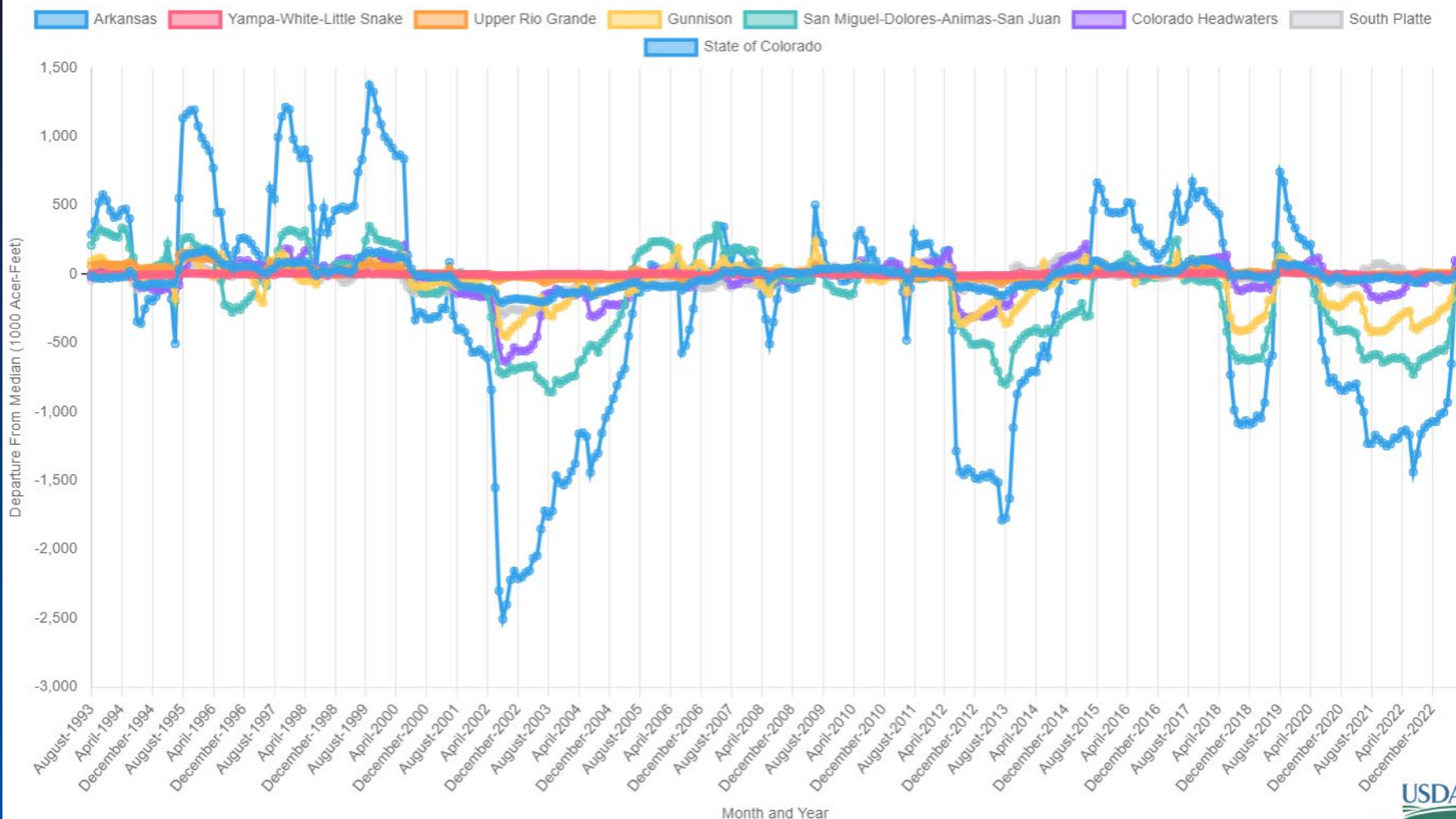
United States Department of Agriculture

# Colorado Snow Surveys

Reservoir Storage: July 1st

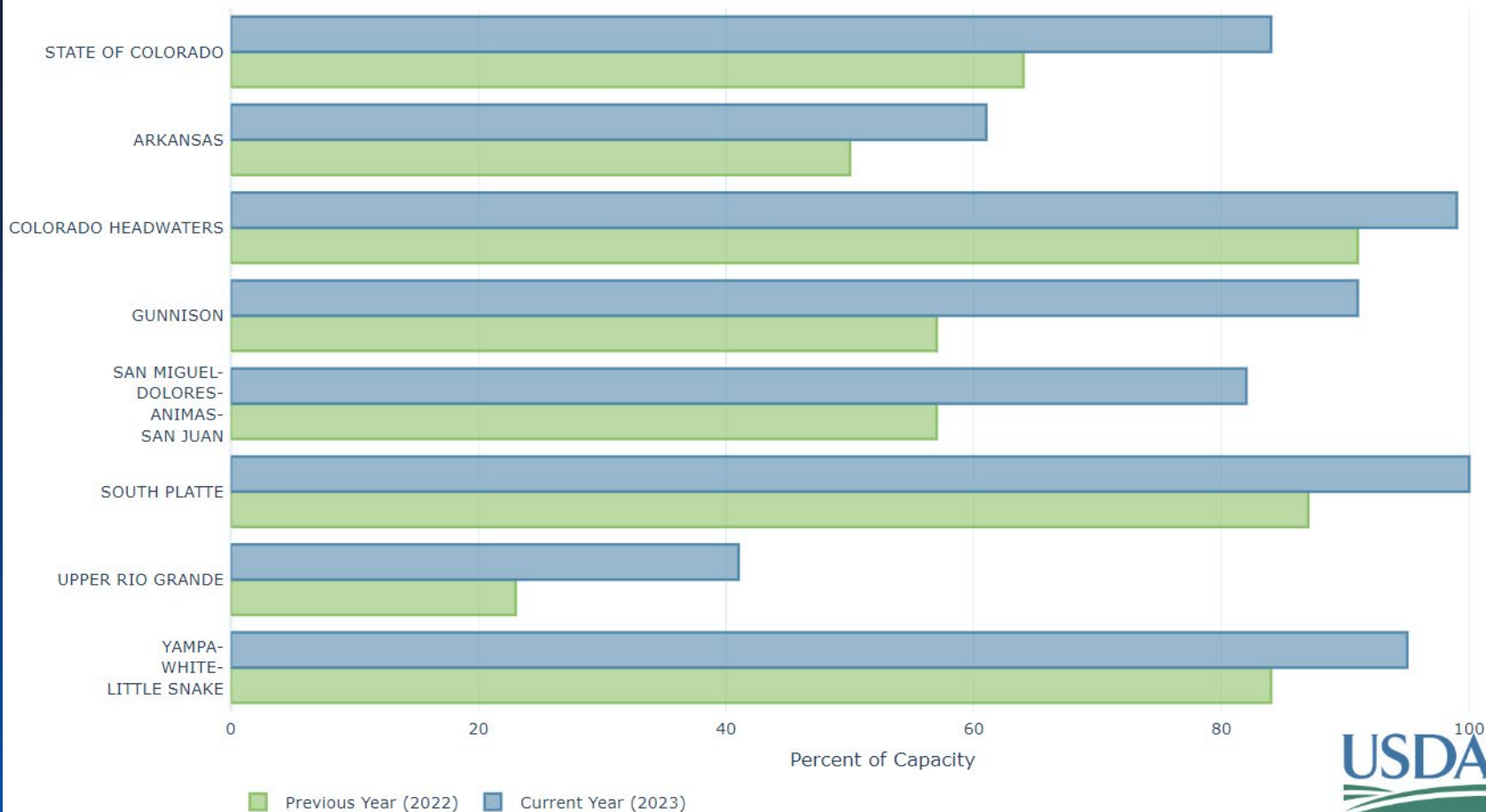


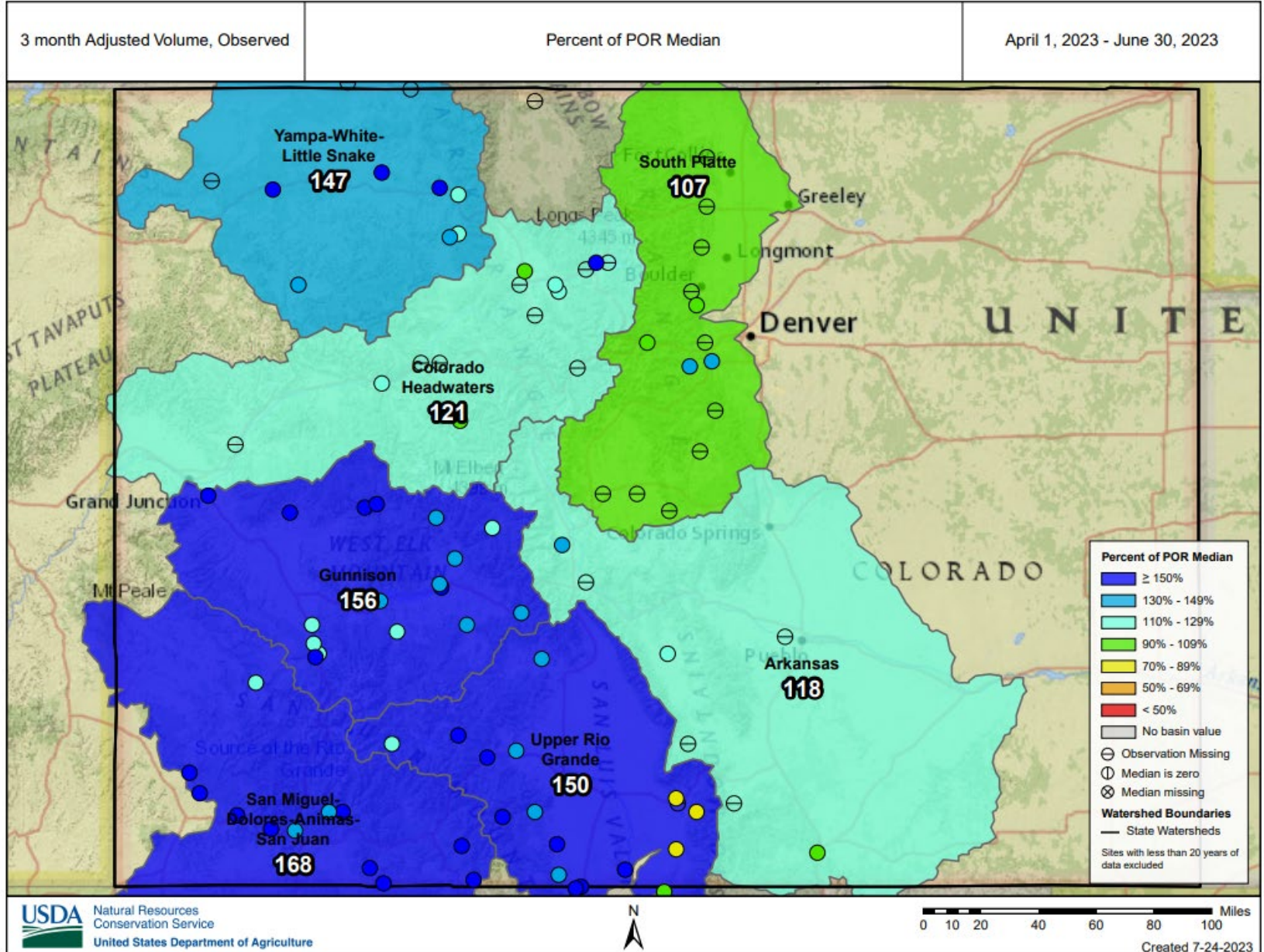
Colorado Departure From Median Timeseries Plot





RESERVOIR STORAGE IN COLORADO  
END OF JUNE 2023





# Summary

- Snowpack has melted out all SNOTEL sites in Colorado.
- Water Year to date precipitation is near to well above normal in all major basins of Colorado.
  - BUT July to date has been extremely dry across much of the state and most notably across much of Southern and Western Colorado.
- April-June observed streamflow volumes were well above normal across the state. The highest volumes, relative to normal, were observed across Western Colorado.
- About half of the streamflow forecast points in the state observed above the 75<sup>th</sup> percentile of volumetric streamflow in the last three months.
- Reservoir storage is above normal in almost all major basins. Considerable increases we observed in the Gunnison and combined Southwest basins during this runoff season.





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