



Water Availability Task Force Meeting

March 28th, 2023

NRCS Snow Survey and Water Supply Forecasting Program

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Hydrologist

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720-544-2853

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



SNOW WATER EQUIVALENT IN YAMPA-WHITE-LITTLE SNAKE

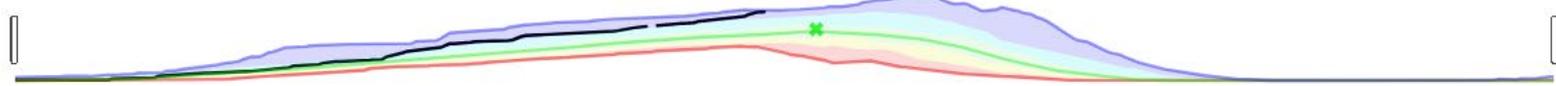
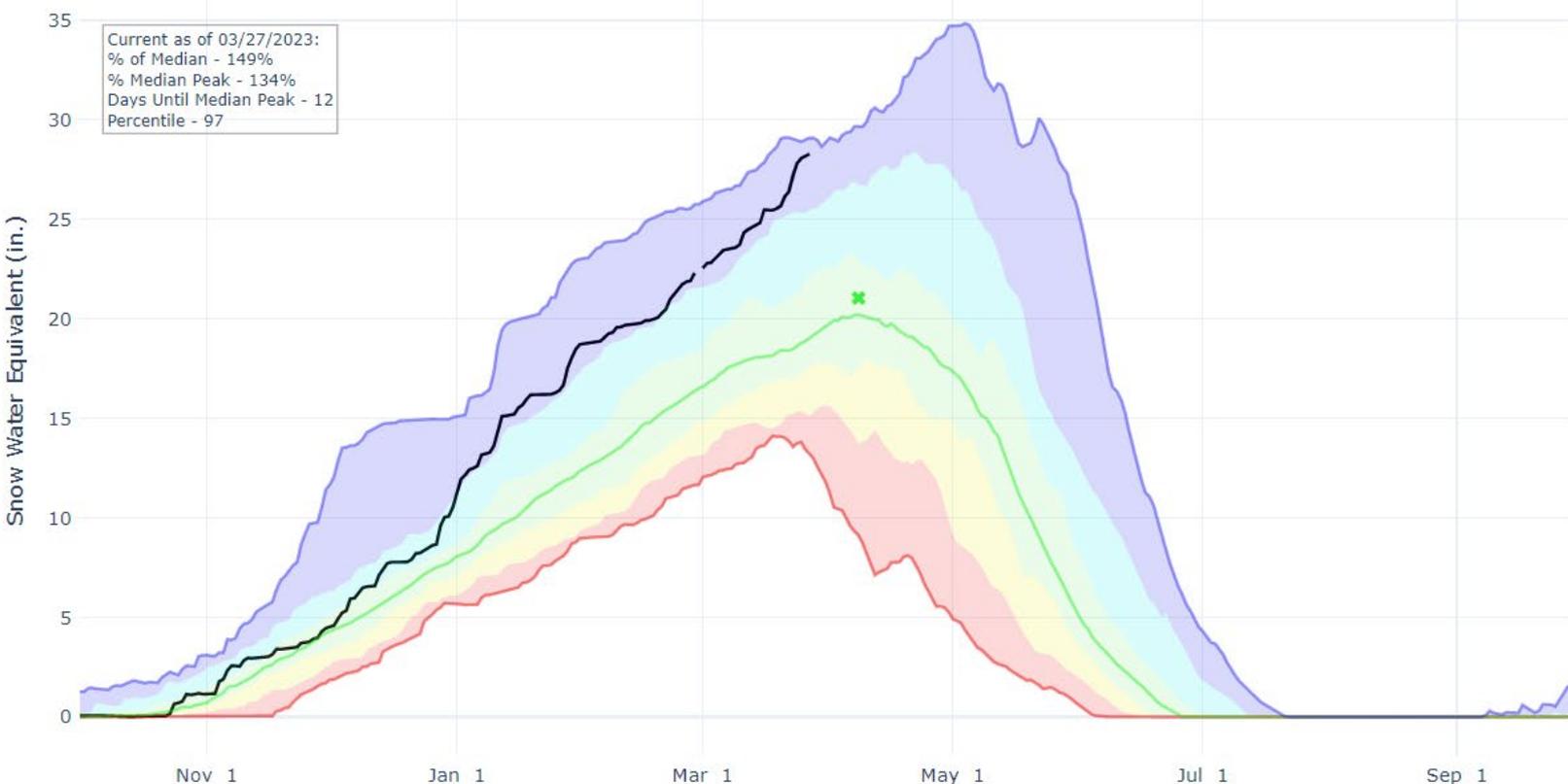
Reset Range

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

Station List

Current as of 03/27/2023:
 % of Median - 149%
 % Median Peak - 134%
 Days Until Median Peak - 12
 Percentile - 97

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



SNOW WATER EQUIVALENT IN LARAMIE AND NORTH PLATTE

Reset Range

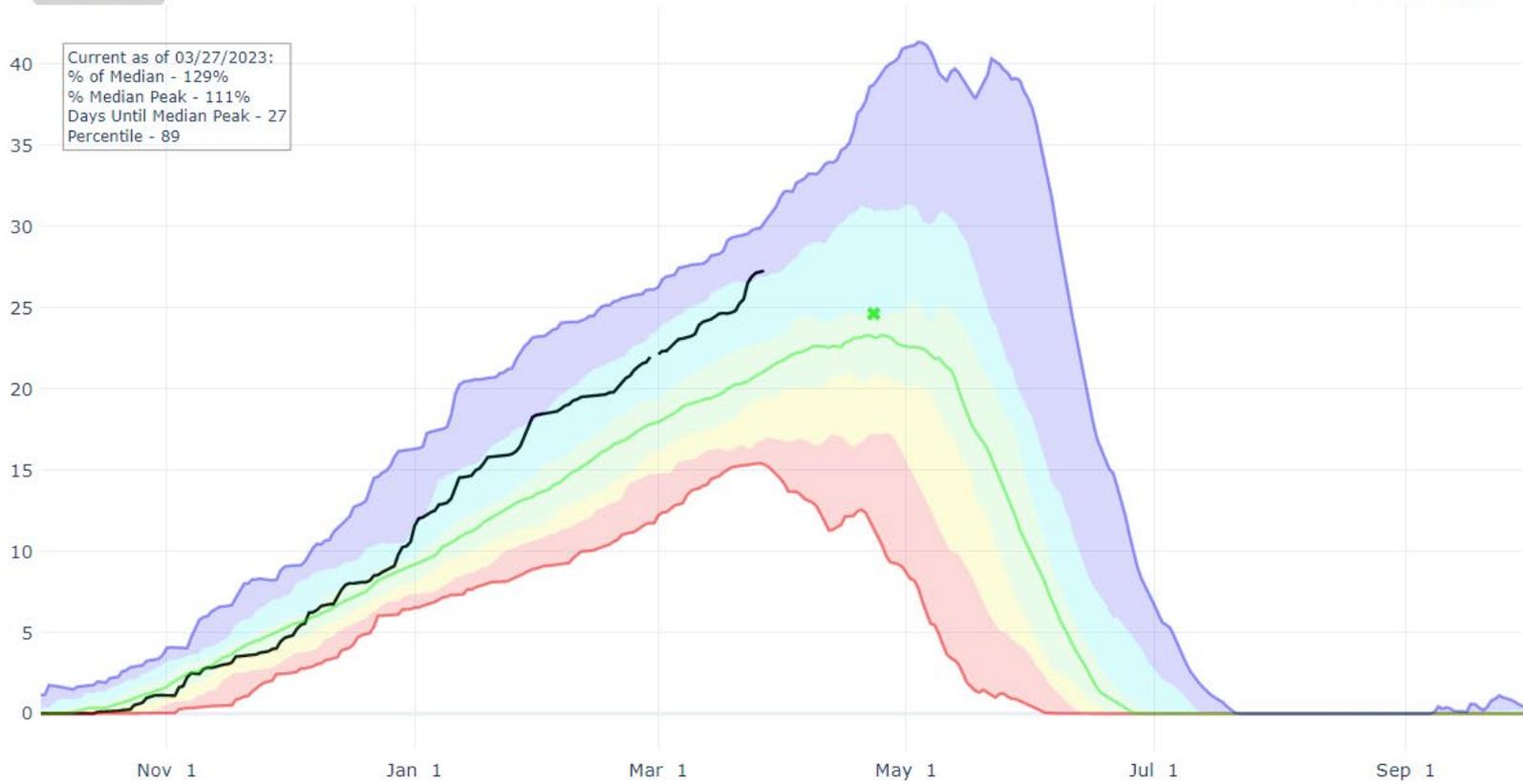
[Link to data: CSV / JSON](#)

[Station List](#)

Current as of 03/27/2023:
 % of Median - 129%
 % Median Peak - 111%
 Days Until Median Peak - 27
 Percentile - 89

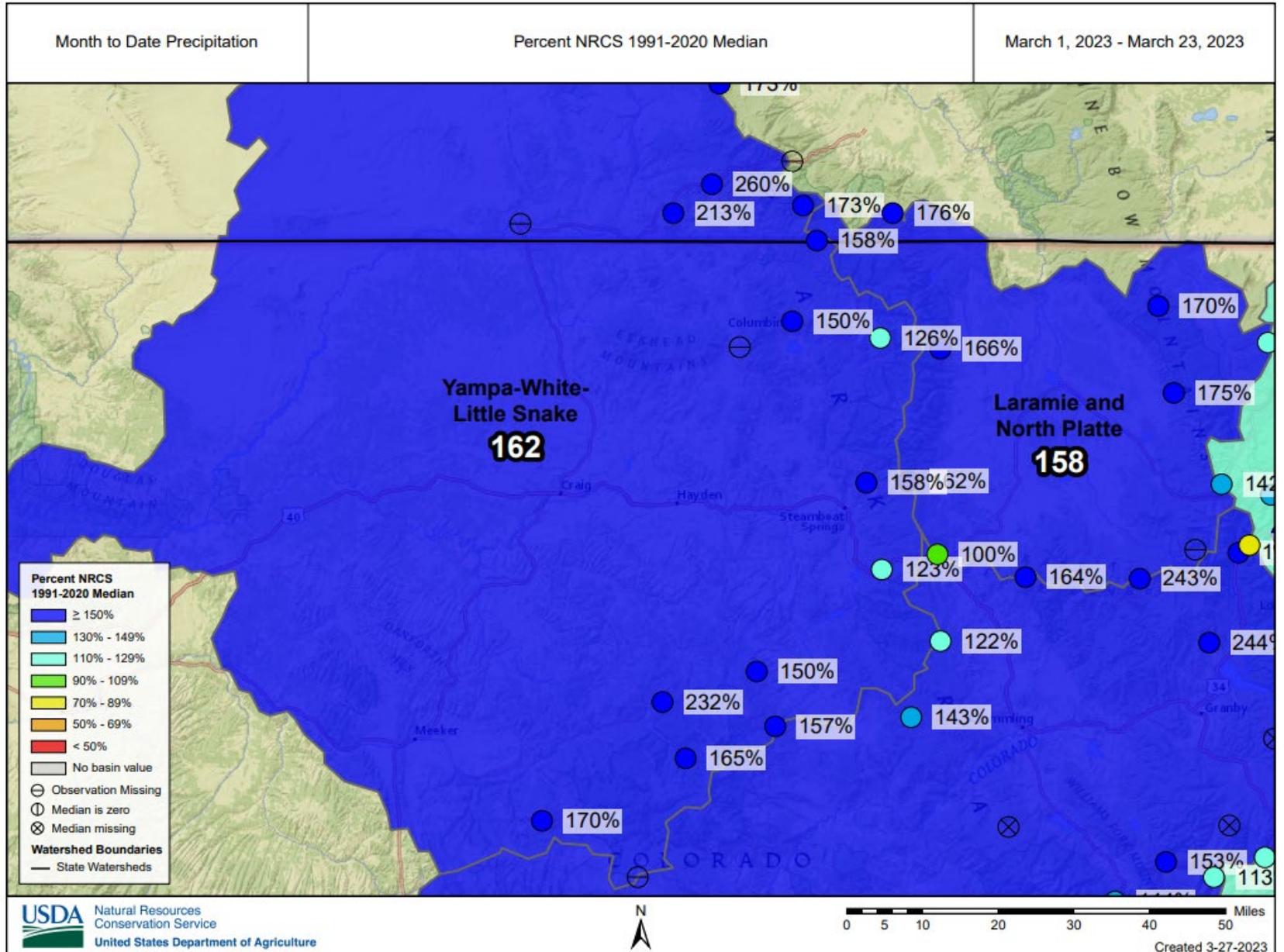
- ✖ Median Peak SWE
- Max
- Median (POR)
- Median ('91-'20)
- Min
- Stats. Shading
- 2023 (12 sites)
- 2022 (12 sites)
- 2021 (12 sites)
- 2020 (12 sites)
- 2019 (12 sites)
- 2018 (12 sites)
- 2017 (12 sites)
- 2016 (12 sites)
- 2015 (12 sites)
- 2014 (12 sites)
- 2013 (12 sites)
- 2012 (12 sites)
- 2011 (12 sites)
- 2010 (12 sites)
- 2009 (11 sites)
- 2008 (11 sites)
- 2007 (11 sites)
- 2006 (11 sites)
- 2005 (11 sites)

Snow Water Equivalent (in.)

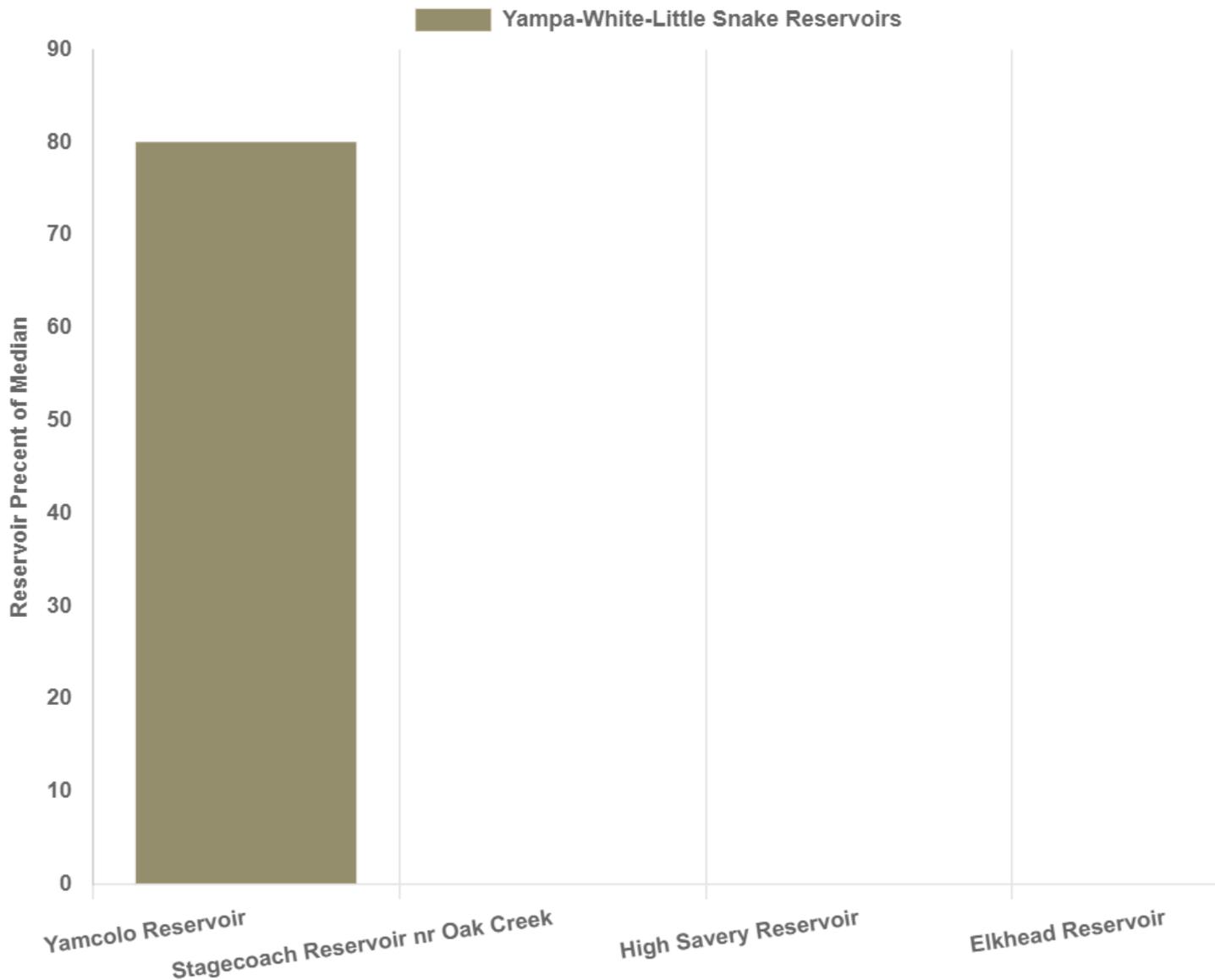




Colorado Snow Surveys

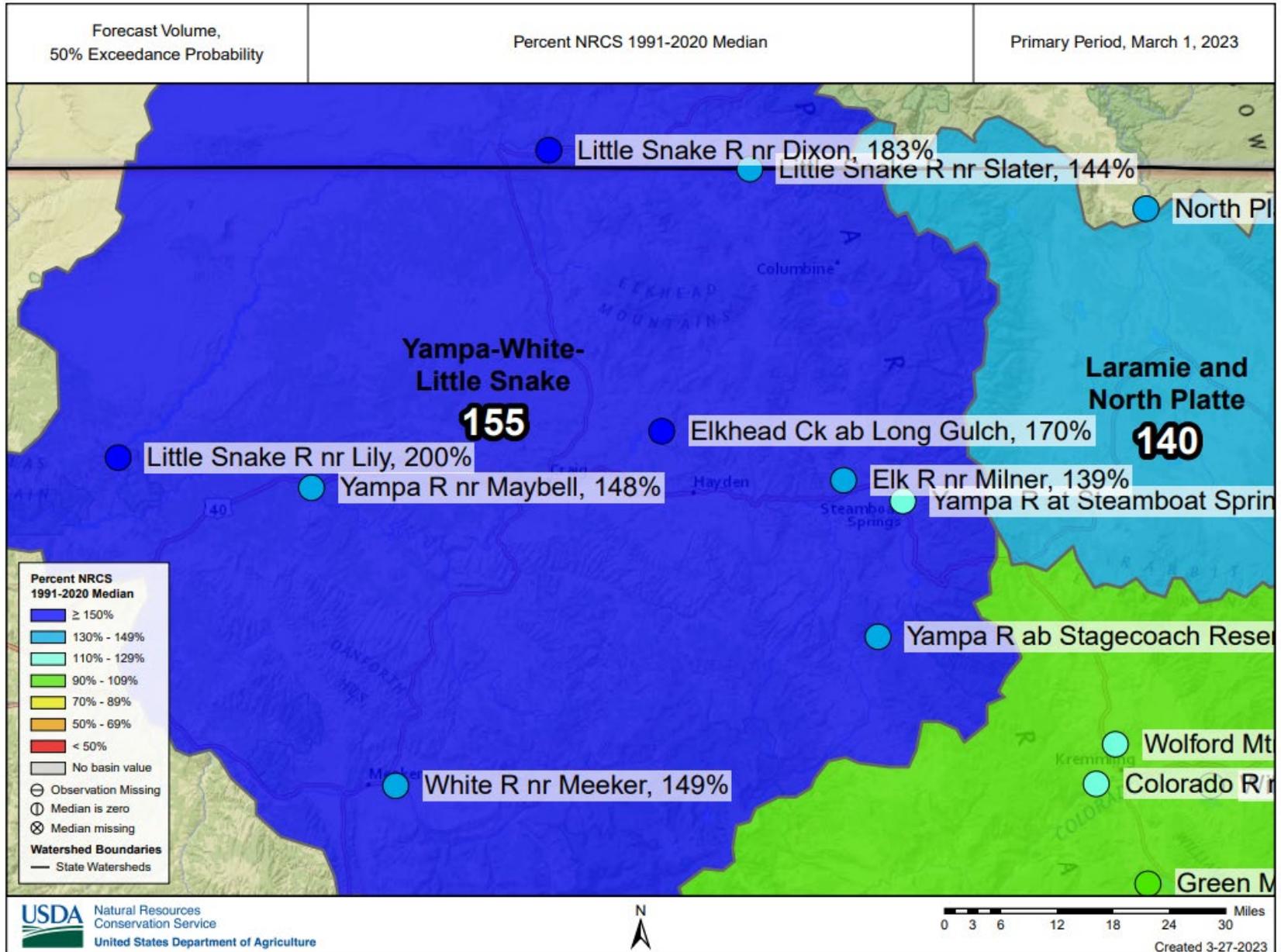


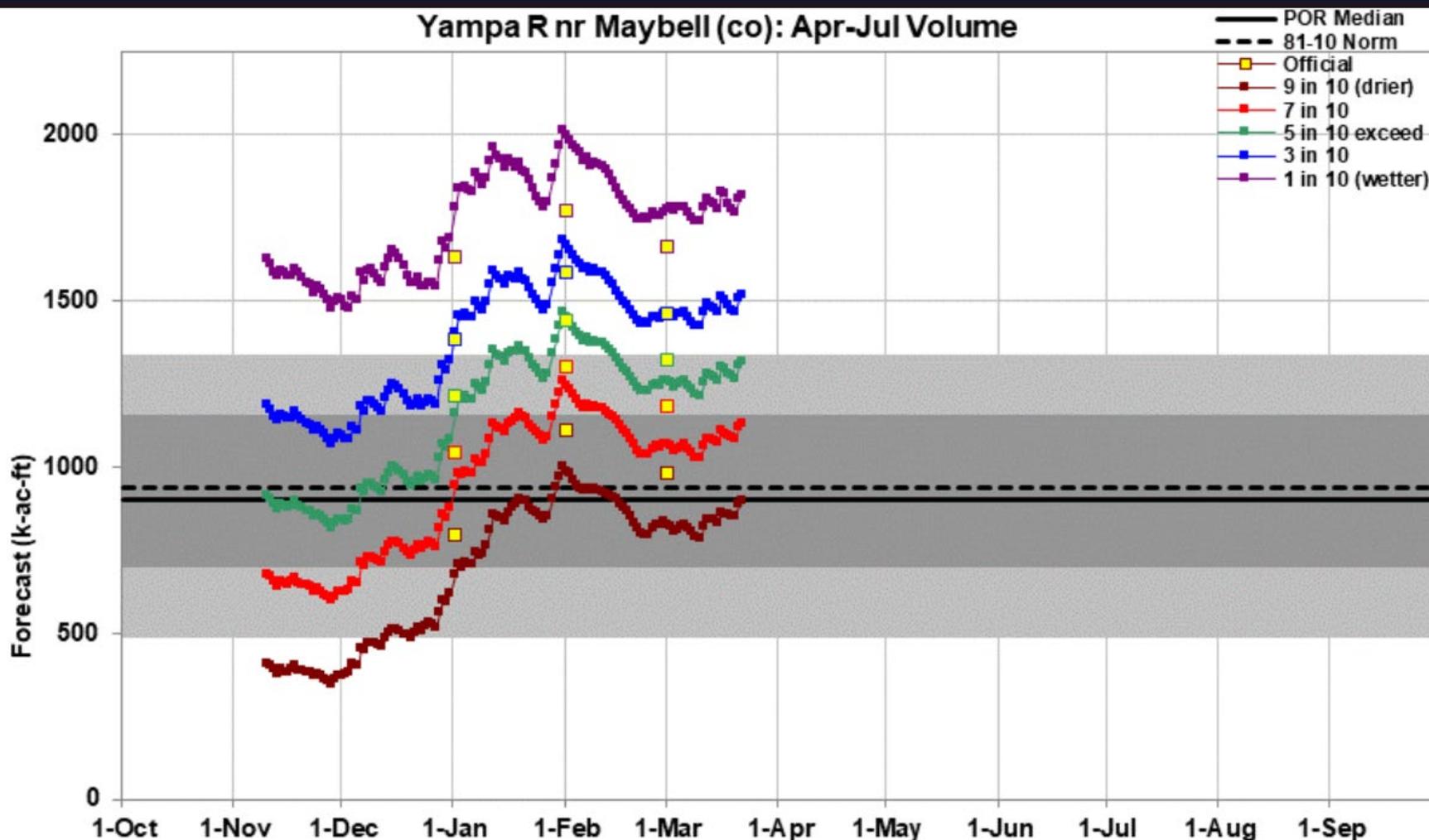
Reservoir Conditions for Yampa-White-Little Snake on March 1st 2023





Colorado Snow Surveys



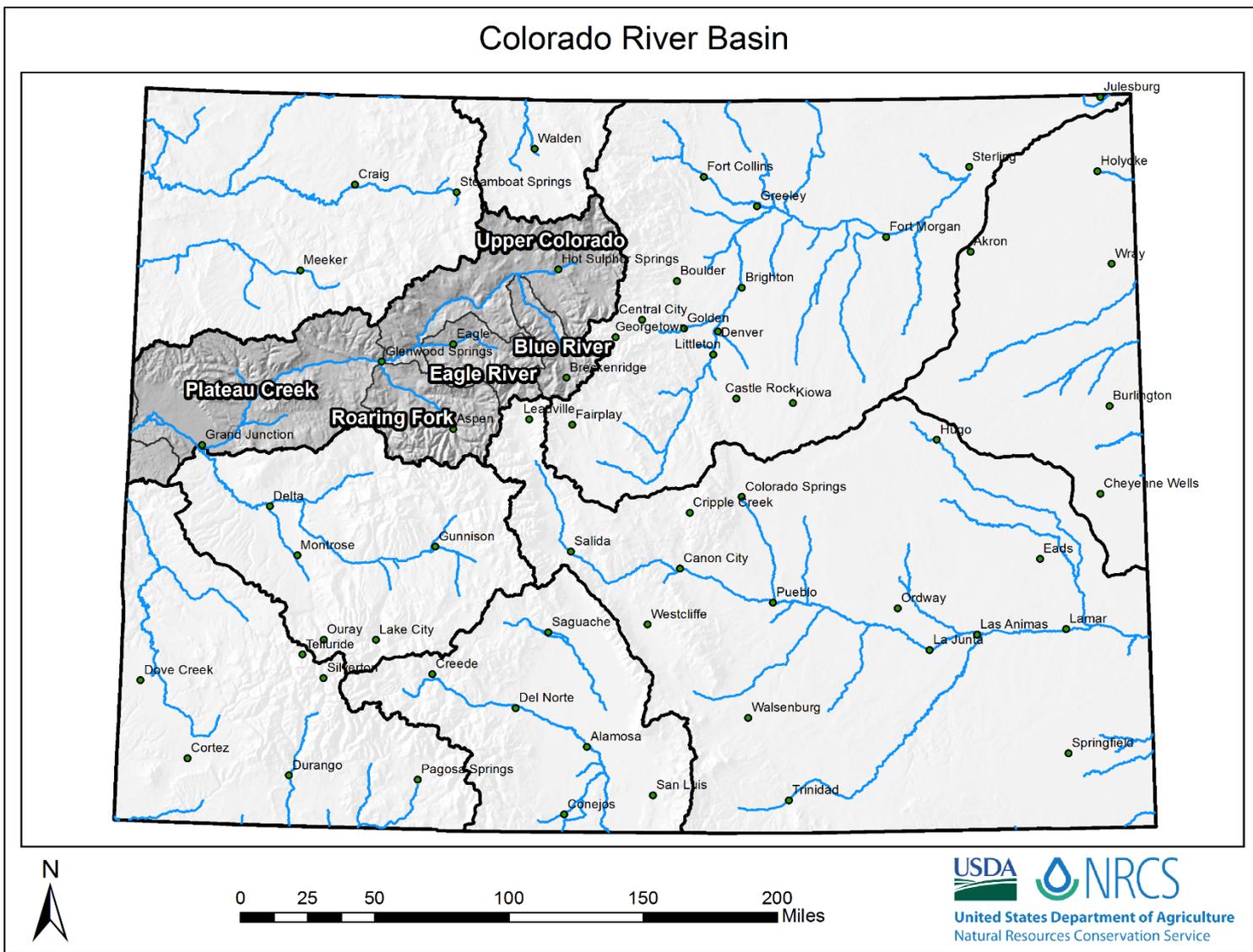


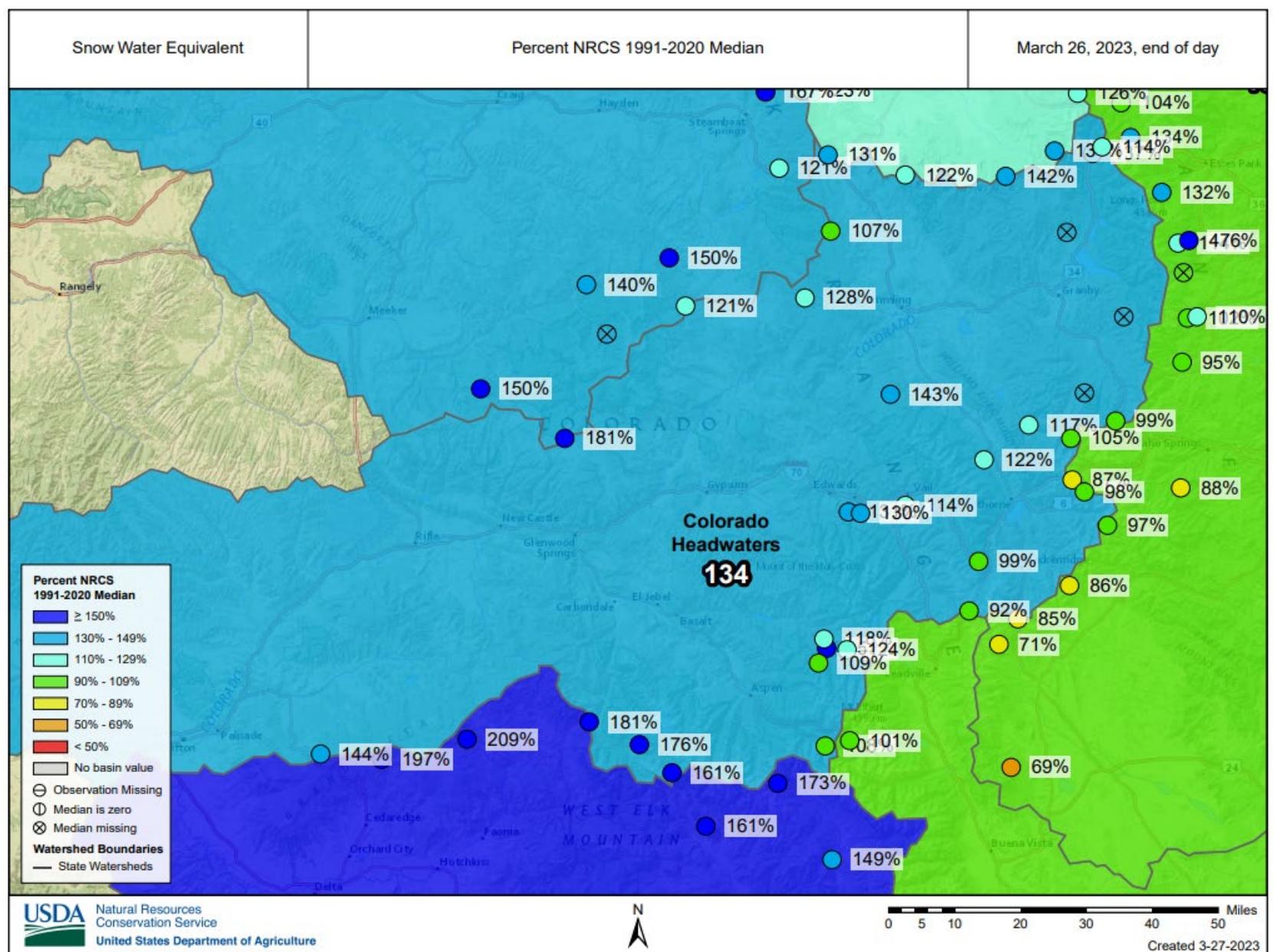
Created 1:03 Mar 23 2023



This is an automated product based solely on SNOTEL data, provisional data are subject to change. This product is a statistically based guidance forecast combining indices of snowpack and precipitation. **Yellow squares** are the official outlooks. **Gray background** is the historical period of record variability. This product does not consider climate information such as El Nino or short range weather forecasts, or a variety of other factors considered in the official forecasts. This product is not meant to replace or supercede the official forecasts produced in coordination with the National Weather Service. Science Contact: Cara.s.McCarthy@por.usda.gov www.wcc.nrcs.usda.gov/wsfdaily_forecasts.html

Major Basin Summary





Natural Resources Conservation Service
United States Department of Agriculture

Miles
0 5 10 20 30 40 50

Created 3-27-2023



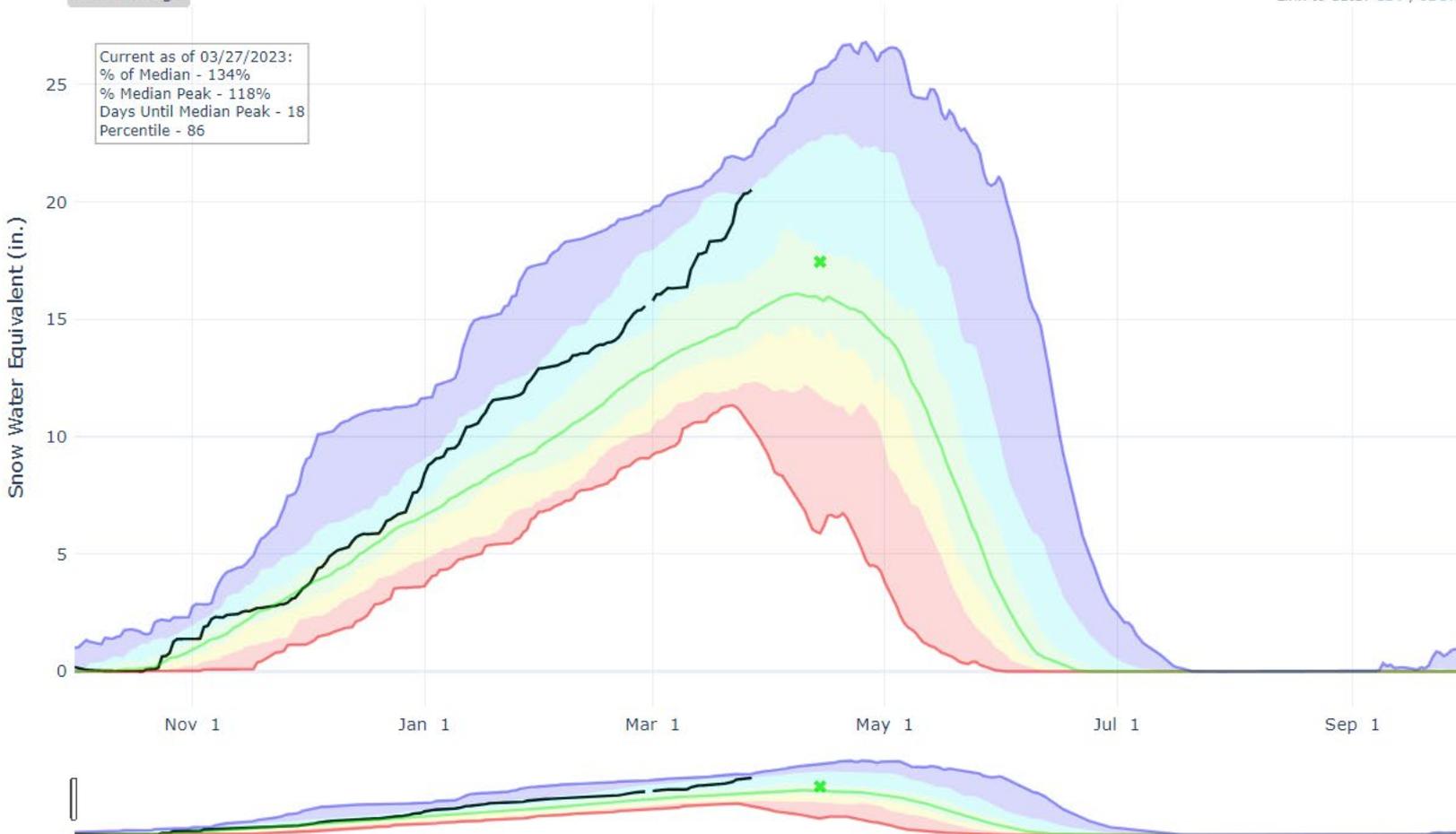
SNOW WATER EQUIVALENT IN COLORADO HEADWATERS

Reset Range

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

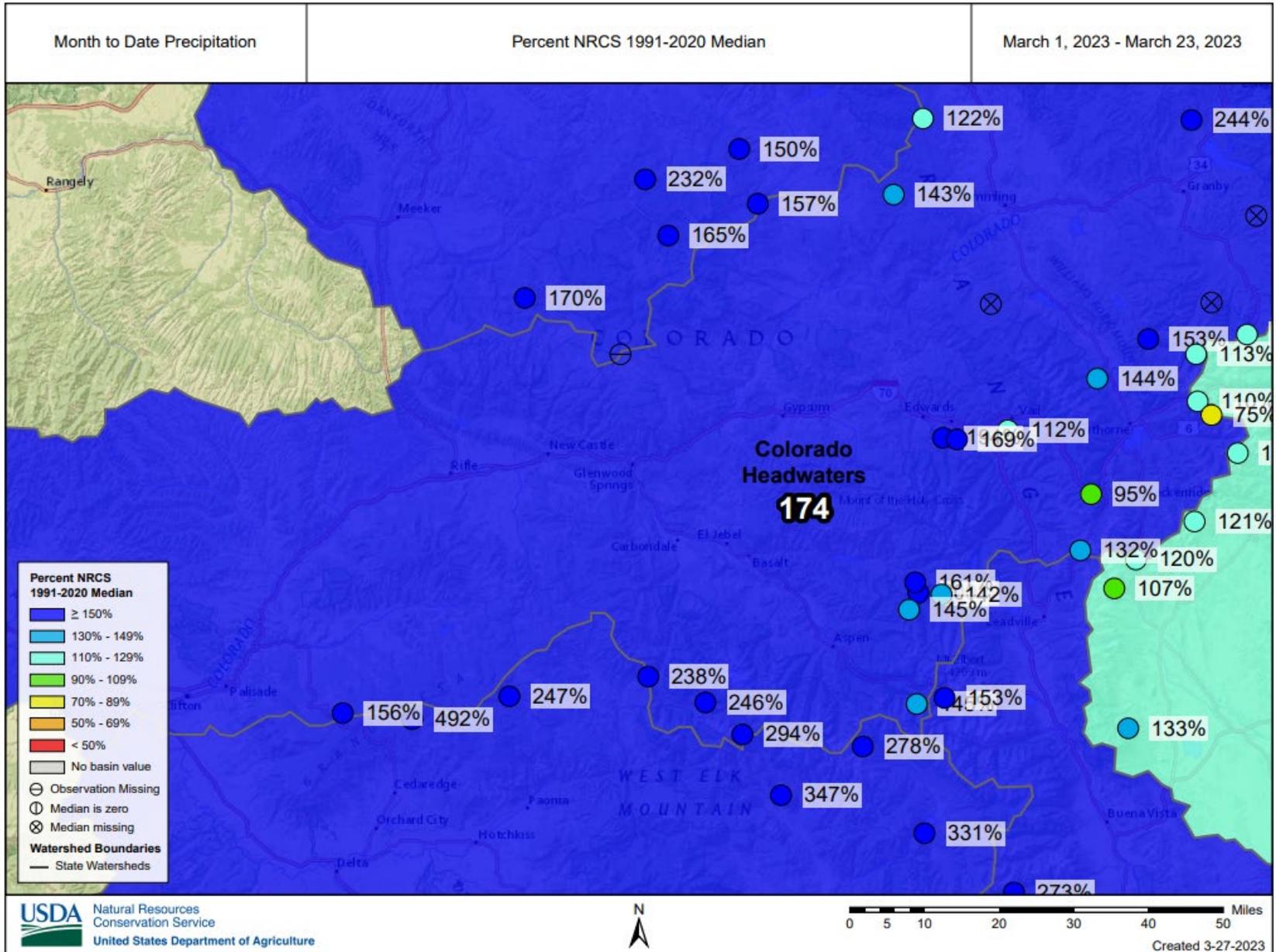
[Station List](#)

Current as of 03/27/2023:
 % of Median - 134%
 % Median Peak - 118%
 Days Until Median Peak - 18
 Percentile - 86

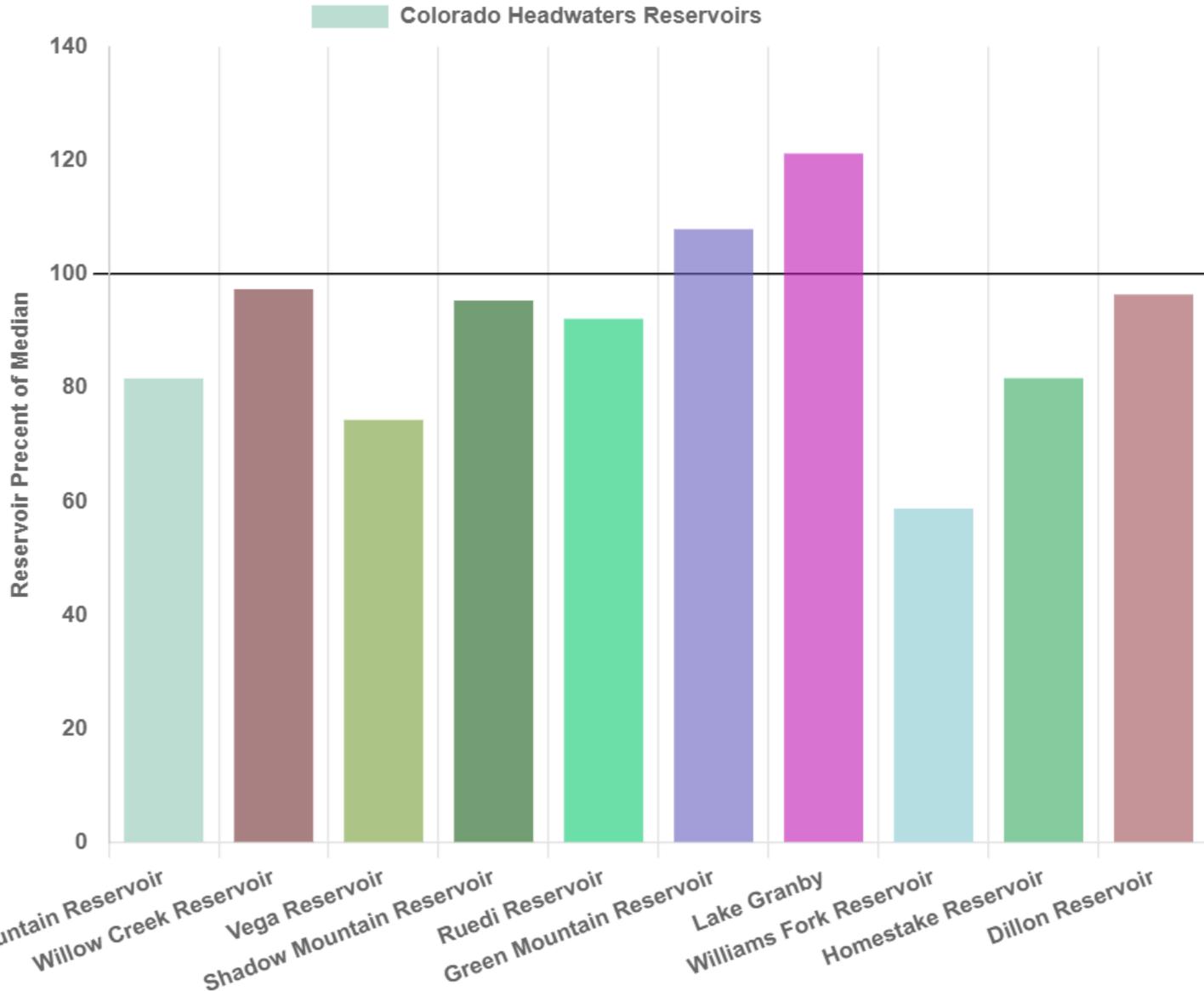


- ✱ Median Peak SWE
- Max
- Median (POR)
- Median ('91-'20)
- Min
- Stats. Shading
- 2023 (31 sites)
- 2022 (31 sites)
- 2021 (31 sites)
- 2020 (31 sites)
- 2019 (31 sites)
- 2018 (31 sites)
- 2017 (31 sites)
- 2016 (31 sites)
- 2015 (31 sites)
- 2014 (31 sites)
- 2013 (31 sites)
- 2012 (31 sites)
-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

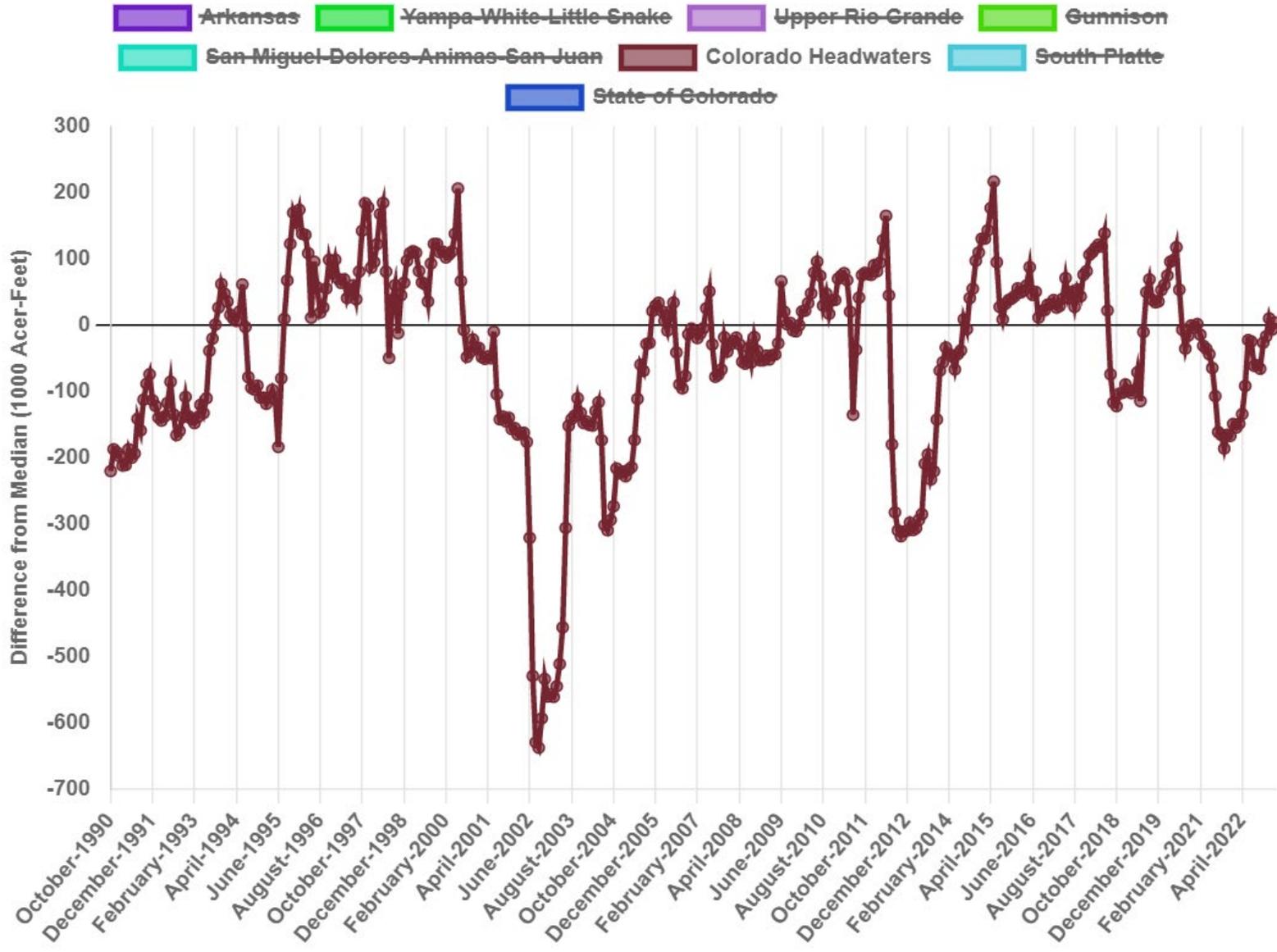


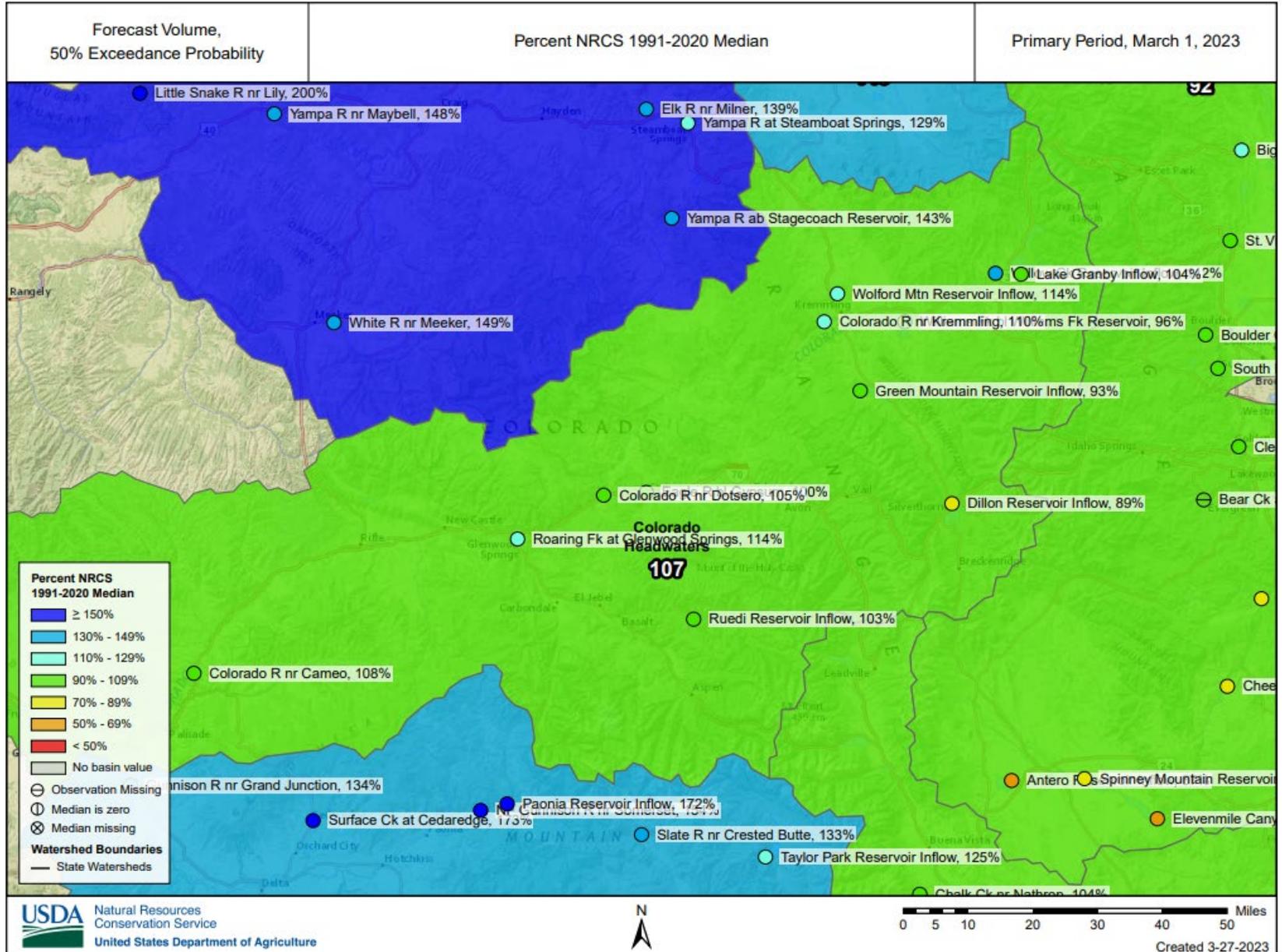


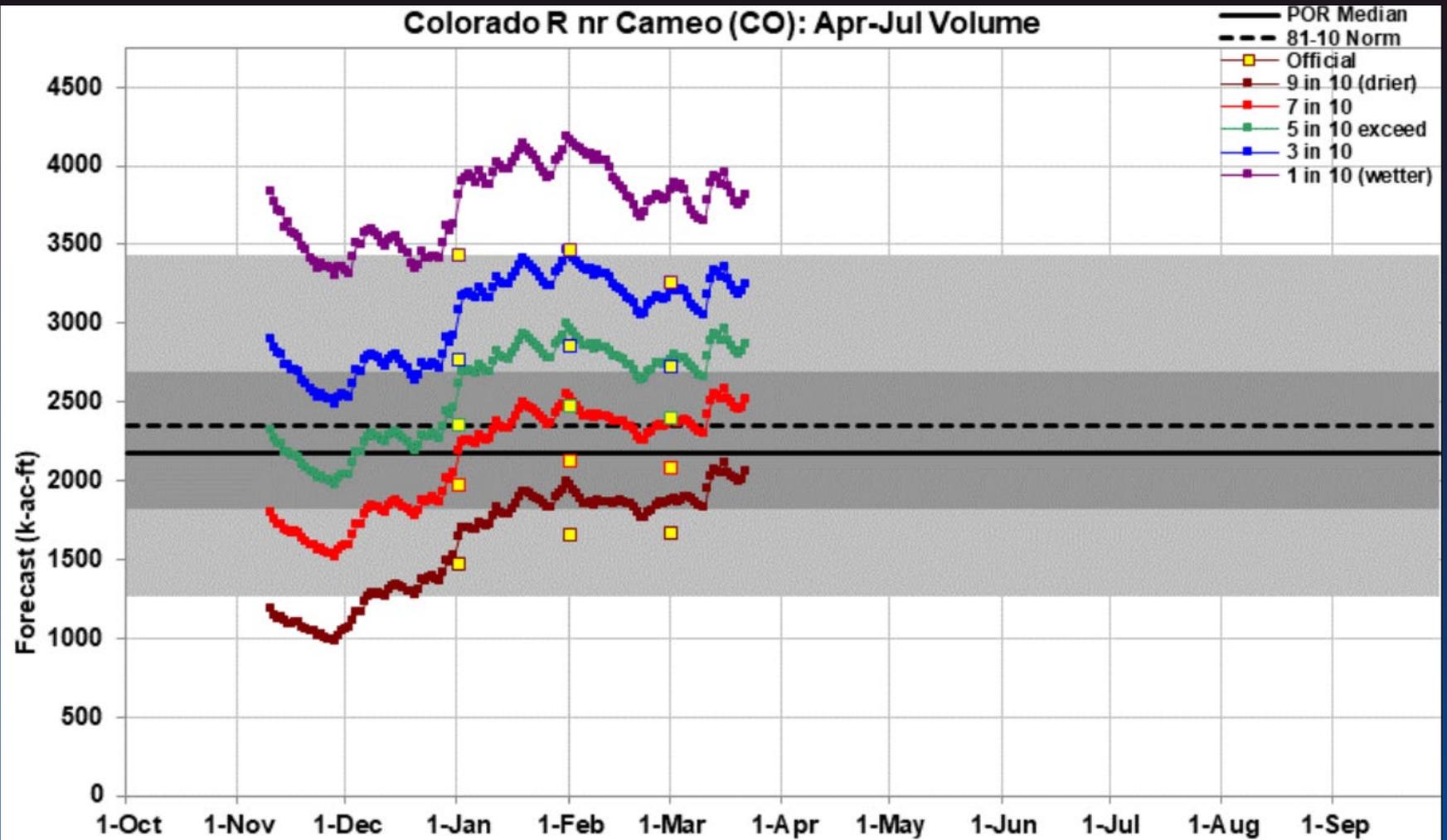
Reservoir Conditions for Colorado Headwaters on March 1st 2023



Departure from Median







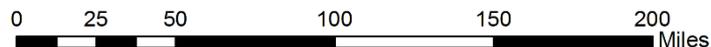
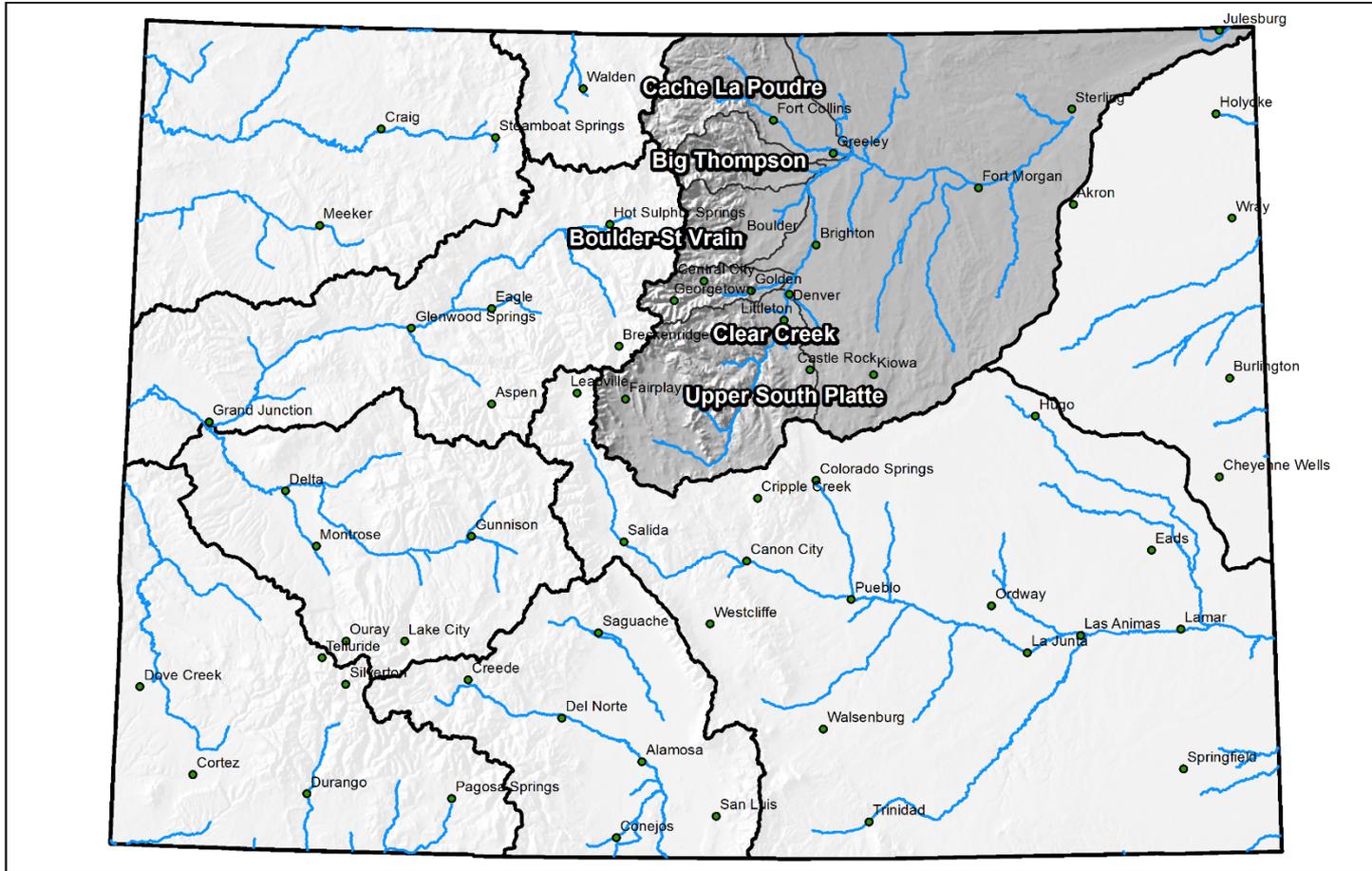
Created 0:55 Mar 23 2023



This is an automated product based solely on SNOTEL data, provisional data are subject to change. This product is a statistically based guidance forecast combining indices of snowpack and precipitation. **Yellow squares** are the official outlooks. **Gray background** is the historical period of record variability. This product does not consider climate information such as El Nino or short range weather forecasts, or a variety of other factors considered in the official forecasts. This product is not meant to replace or supercede the official forecasts produced in coordination with the National Weather Service. Science Contact: Cara.s.McCarthy@por.usda.gov www.wcc.nrcs.usda.gov/wsf/daily_forecasts.html

Major Basin Summary

South Platte River Basin





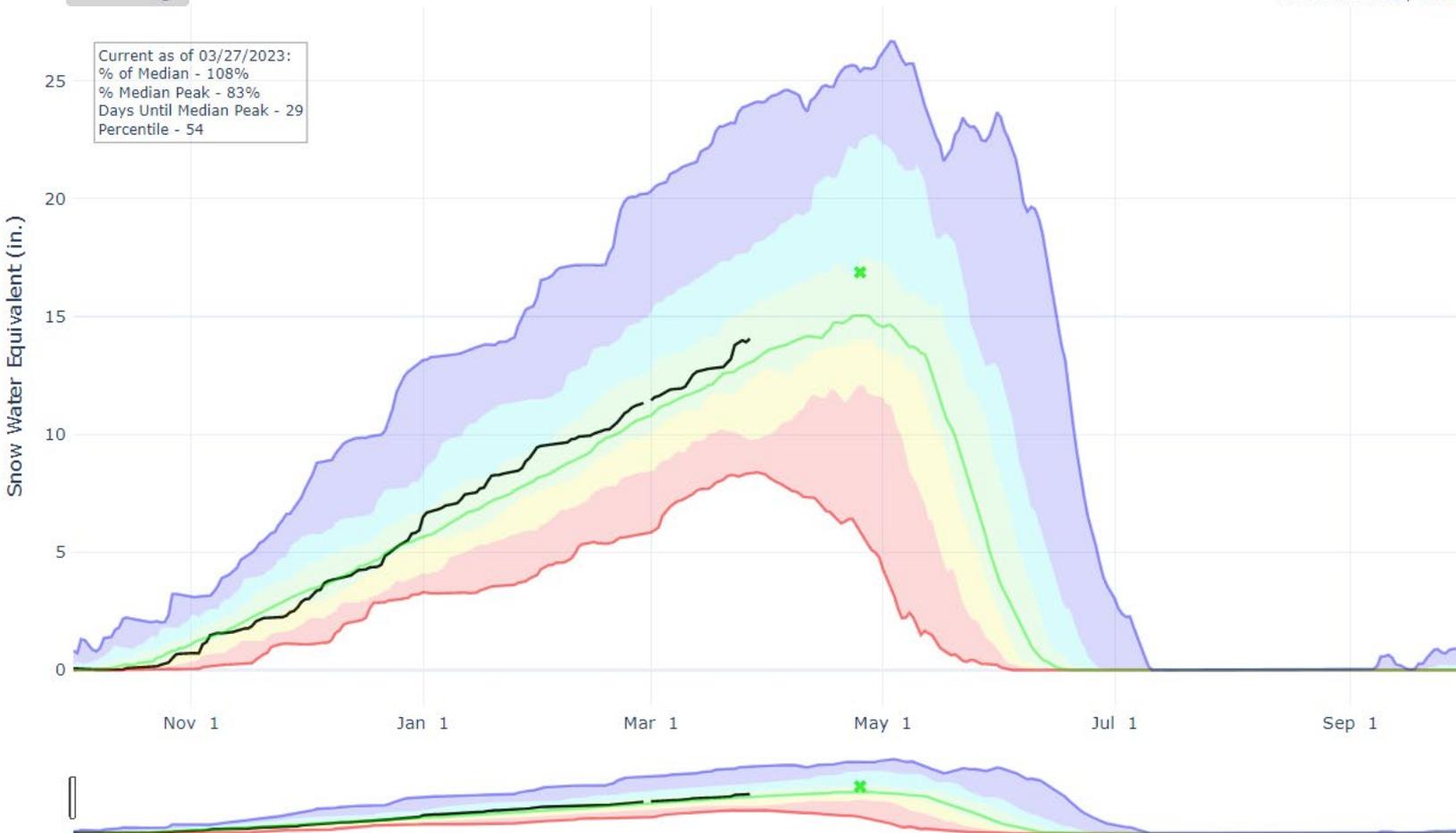
SNOW WATER EQUIVALENT IN SOUTH PLATTE

Reset Range

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

[Station List](#)

Current as of 03/27/2023:
 % of Median - 108%
 % Median Peak - 83%
 Days Until Median Peak - 29
 Percentile - 54

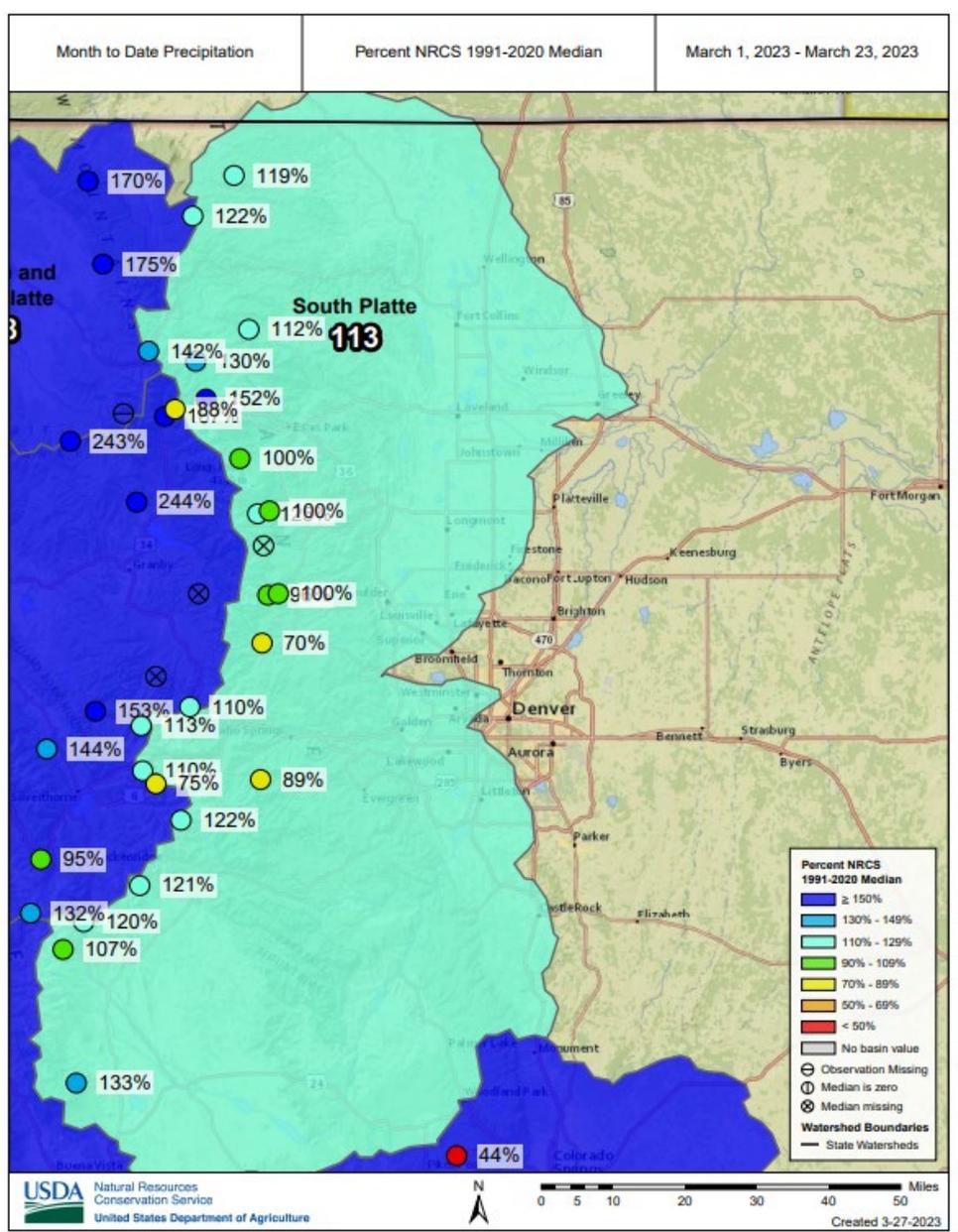


- ✱ Median Peak SWE
- Max
- Median (POR)
- Median ('91-'20)
- Min
- Stats. Shading
- 2023 (21 sites)
- 2022 (21 sites)
- 2021 (21 sites)
- 2020 (21 sites)
- 2019 (21 sites)
- 2018 (21 sites)
- 2017 (21 sites)
- 2016 (21 sites)
- 2015 (21 sites)
- 2014 (21 sites)
- 2013 (21 sites)
- 2012 (21 sites)
-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



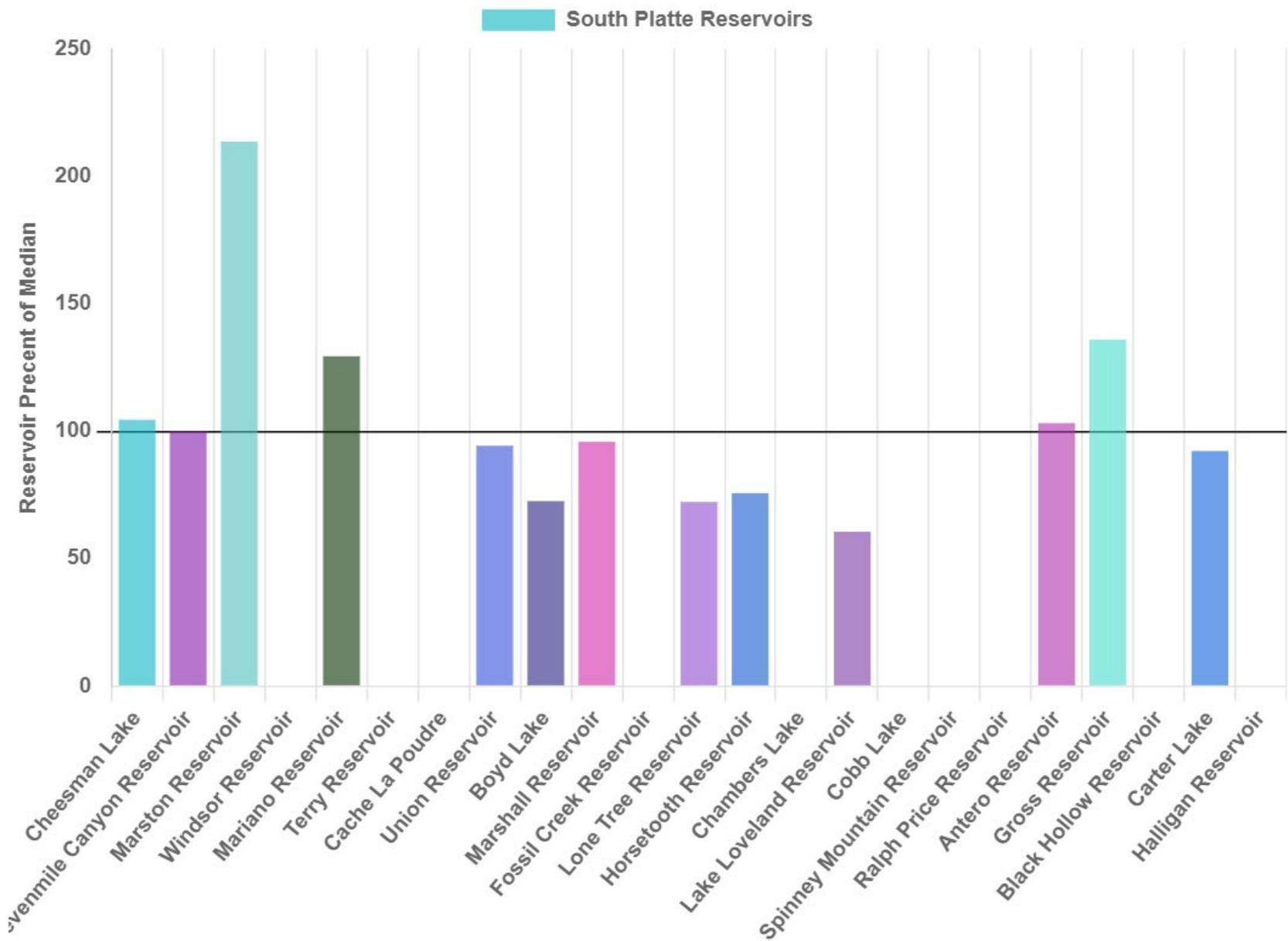


Colorado Snow Surveys

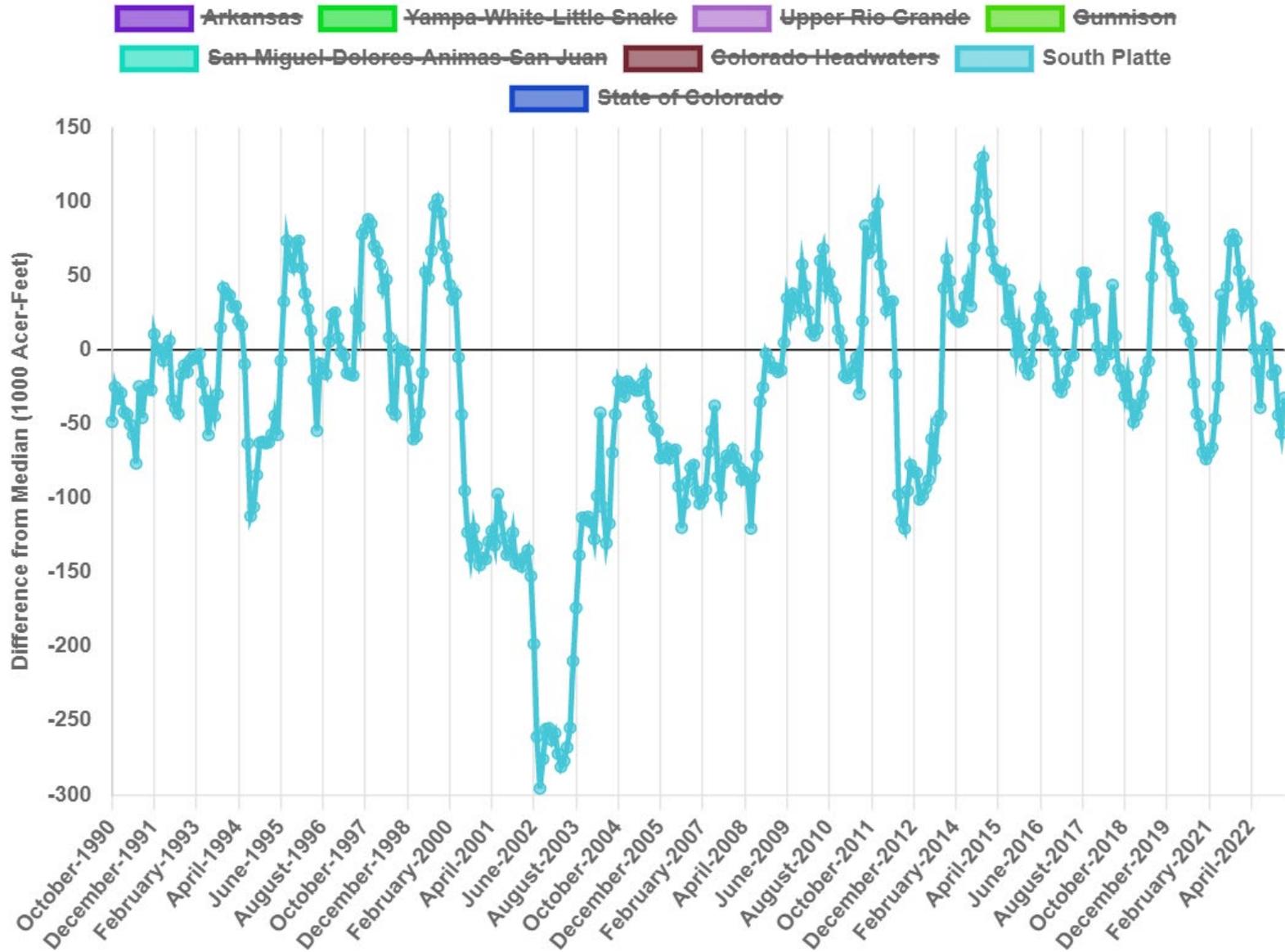


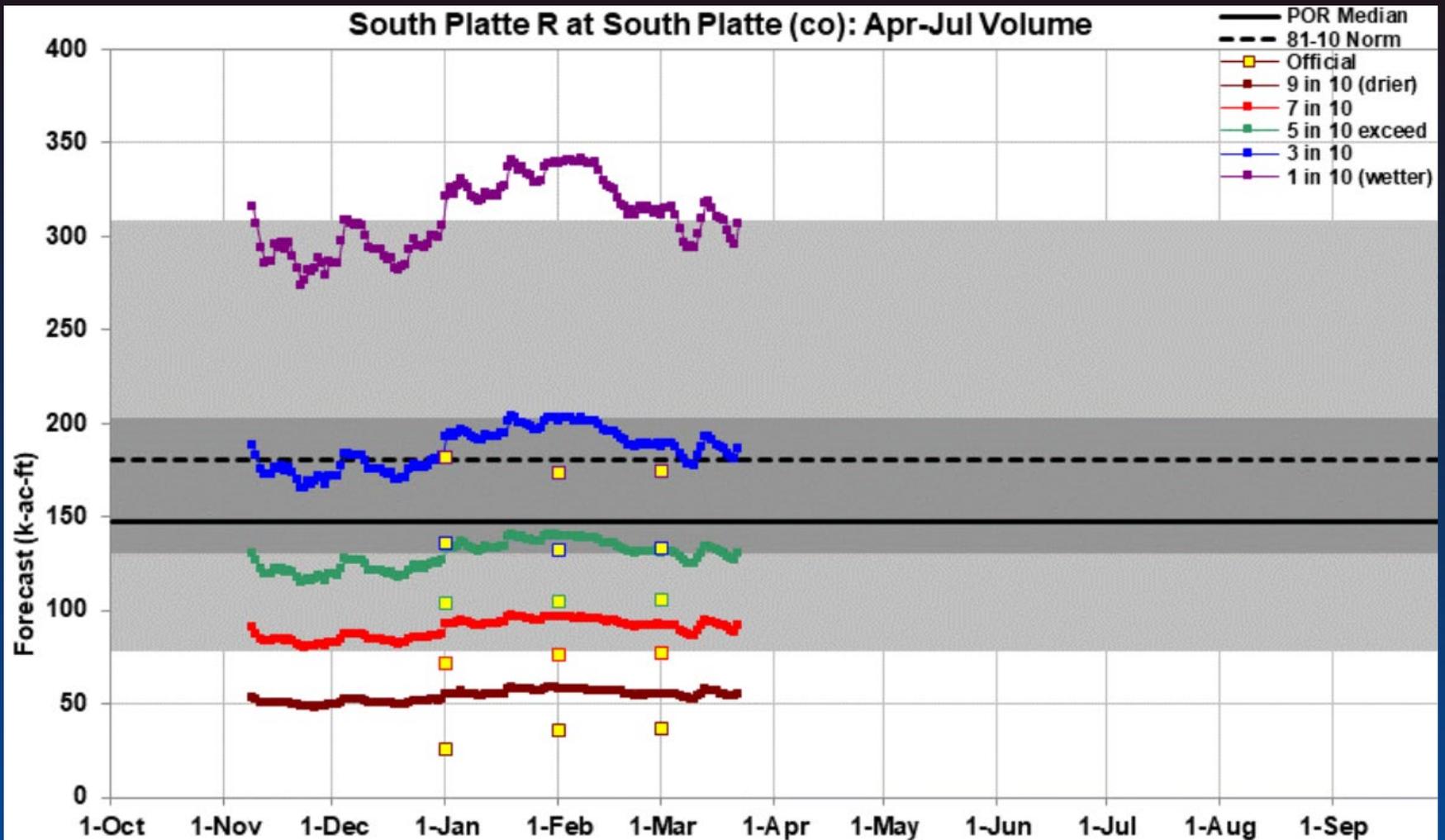


Colorado Snow Surveys



Departure from Median





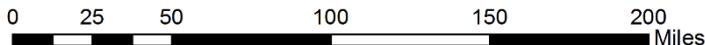
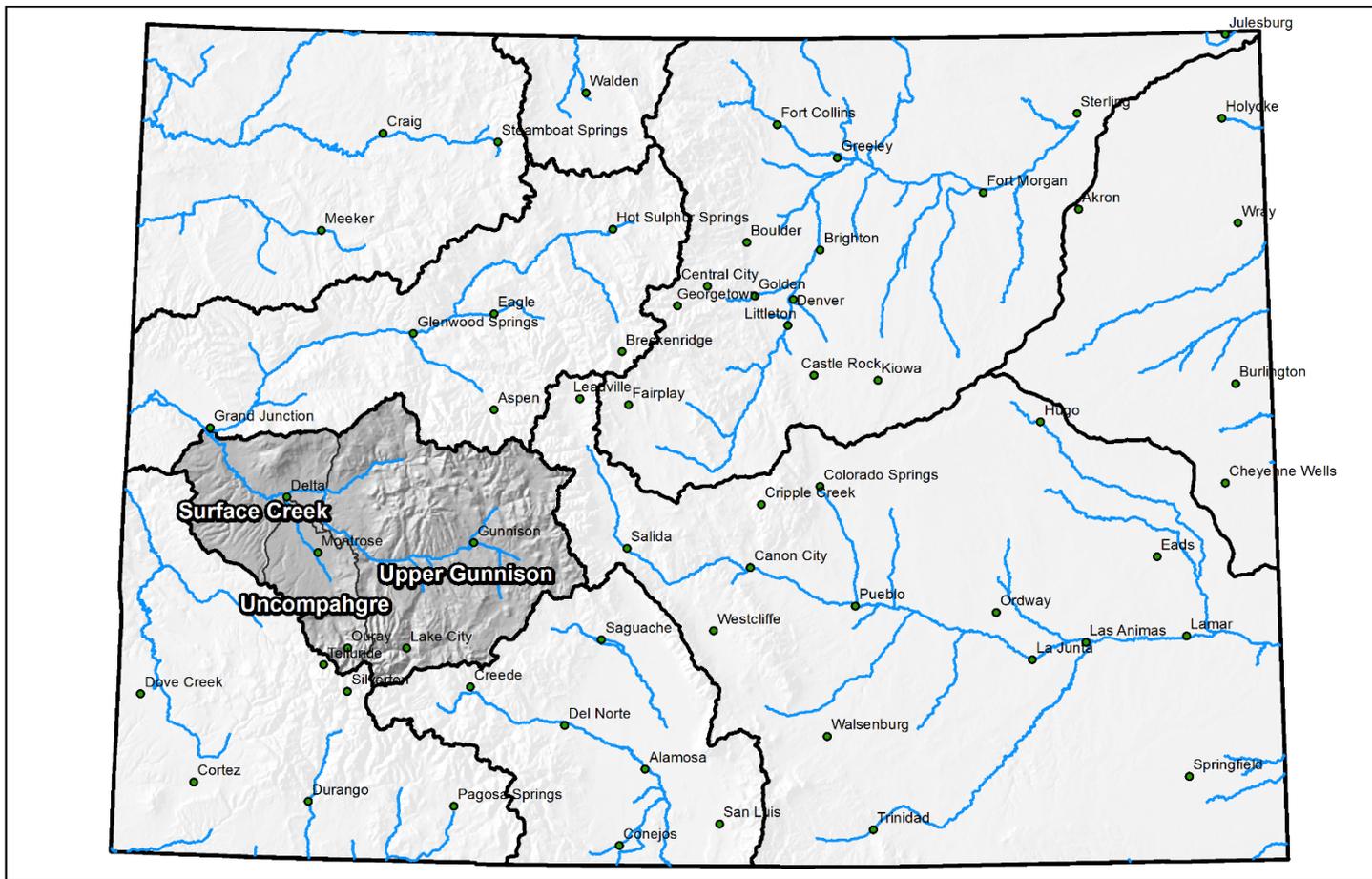
Created 0:42 Mar 23 2023



This is an automated product based solely on SNOTEL data, provisional data are subject to change. This product is a statistically based guidance forecast combining indices of snowpack and precipitation. **Yellow squares** are the official outlooks. **Gray background** is the historical period of record variability. This product does not consider climate information such as El Nino or short range weather forecasts, or a variety of other factors considered in the official forecasts. This product is not meant to replace or supercede the official forecasts produced in coordination with the National Weather Service. Science Contact: Cara.s.McCarthy@por.usda.gov www.wcc.nrcs.usda.gov/wsfdaily_forecasts.html

Major Basin Summary

Gunnison River Basin



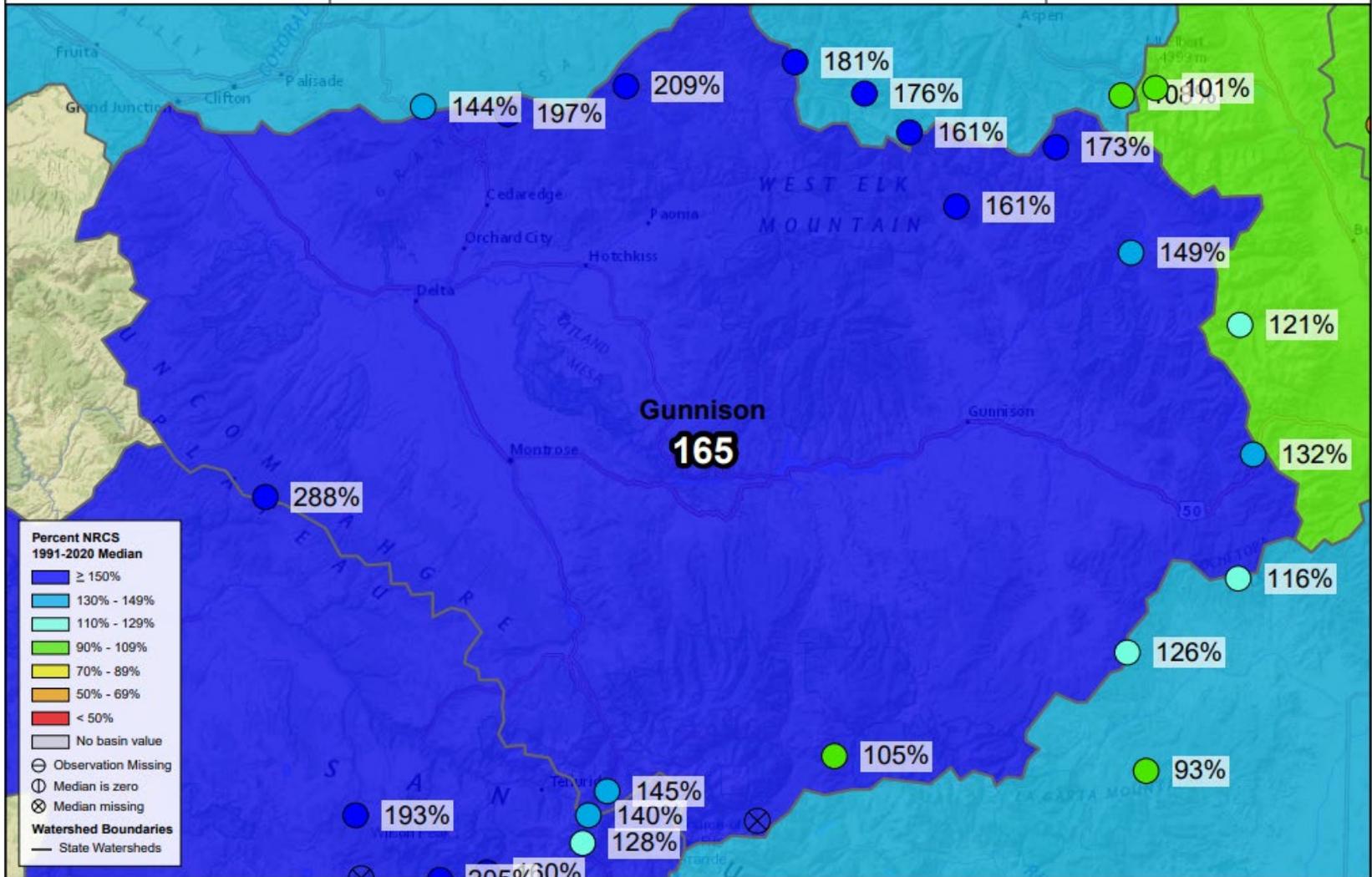


Colorado Snow Surveys

Snow Water Equivalent

Percent NRCS 1991-2020 Median

March 26, 2023, end of day



Percent NRCS 1991-2020 Median

- ≥ 150%
- 130% - 149%
- 110% - 129%
- 90% - 109%
- 70% - 89%
- 50% - 69%
- < 50%
- No basin value
- ⊖ Observation Missing
- ⊕ Median is zero
- ⊗ Median missing

Watershed Boundaries

- State Watersheds

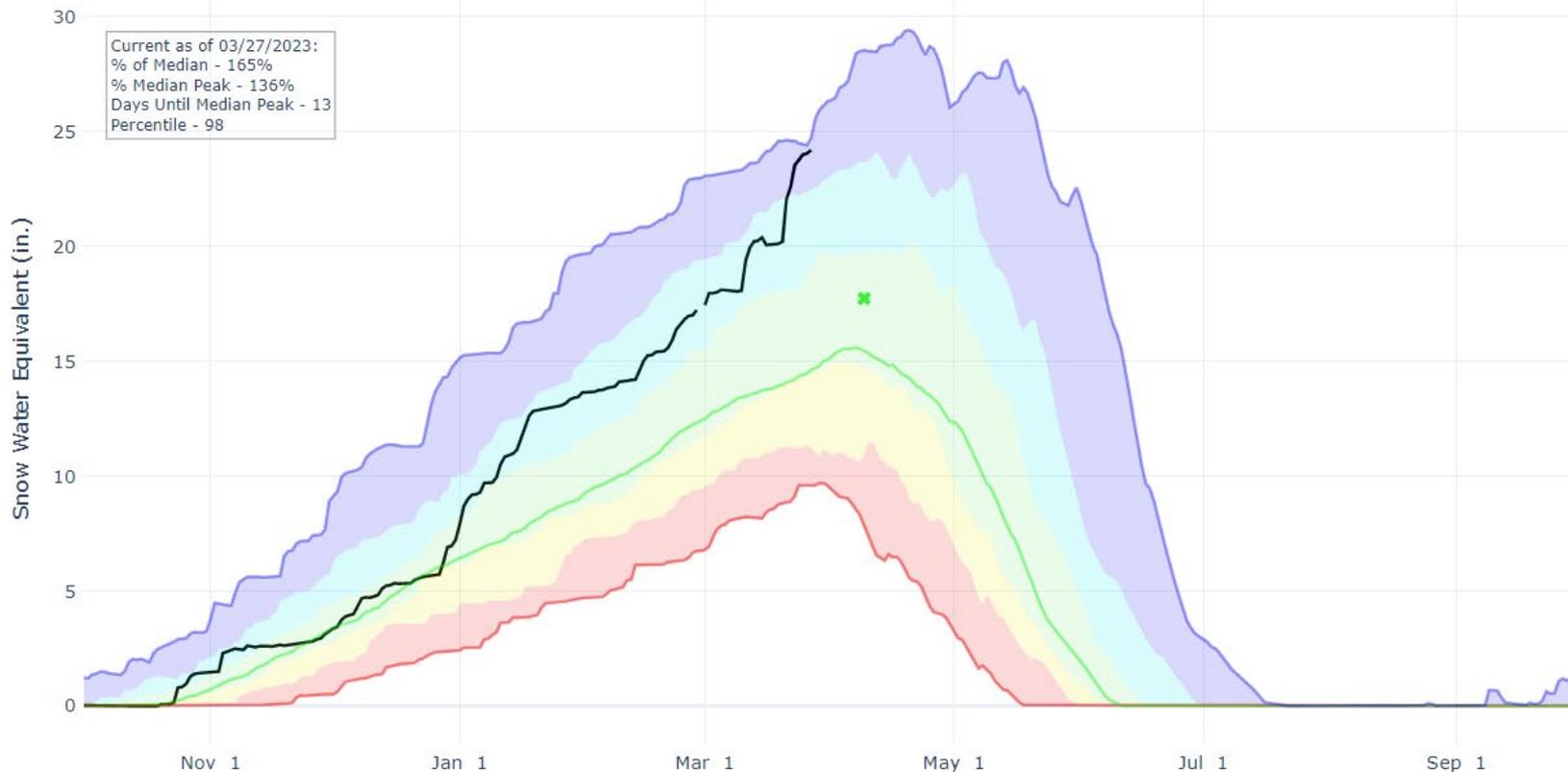


SNOW WATER EQUIVALENT IN GUNNISON

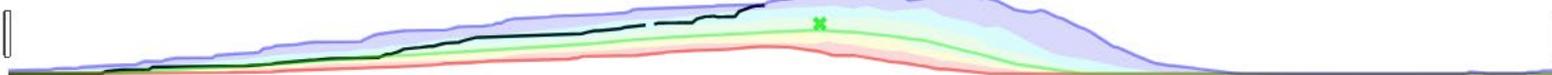
Reset Range

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

Station List

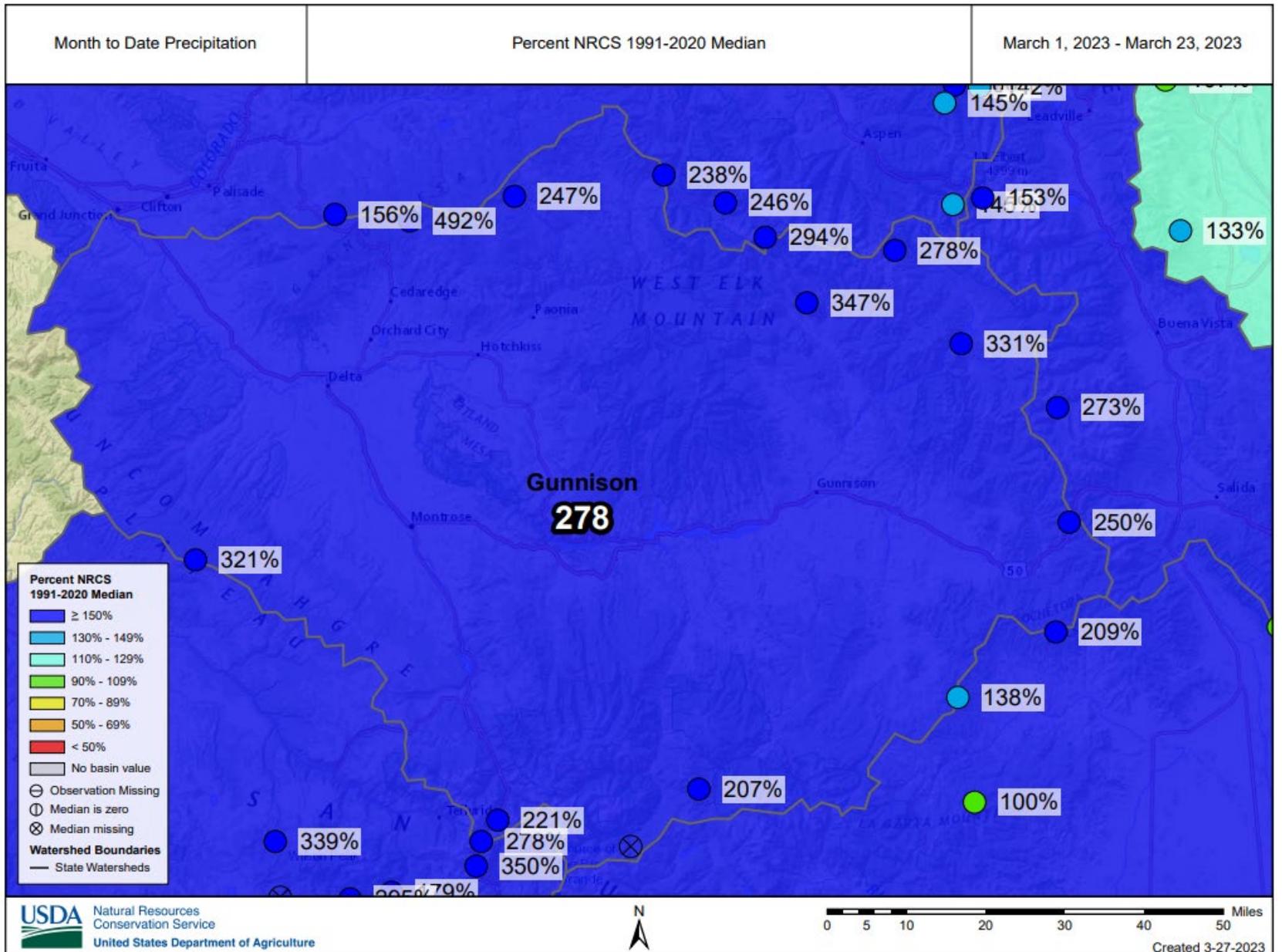


- ✱ Median Peak SWE
- Max
- Median (POR)
- Median ('91-'20)
- Min
- Stats. Shading
- 2023 (15 sites)
- 2022 (15 sites)
- 2021 (15 sites)
- 2020 (15 sites)
- 2019 (15 sites)
- 2018 (15 sites)
- 2017 (15 sites)
- 2016 (15 sites)
- 2015 (15 sites)
- 2014 (15 sites)
- 2013 (15 sites)
- 2012 (15 sites)
- 2011 (15 sites)
- 2010 (15 sites)
- 2009 (14 sites)
- 2008 (13 sites)
- 2007 (13 sites)
- 2006 (13 sites)
- 2005 (13 sites)

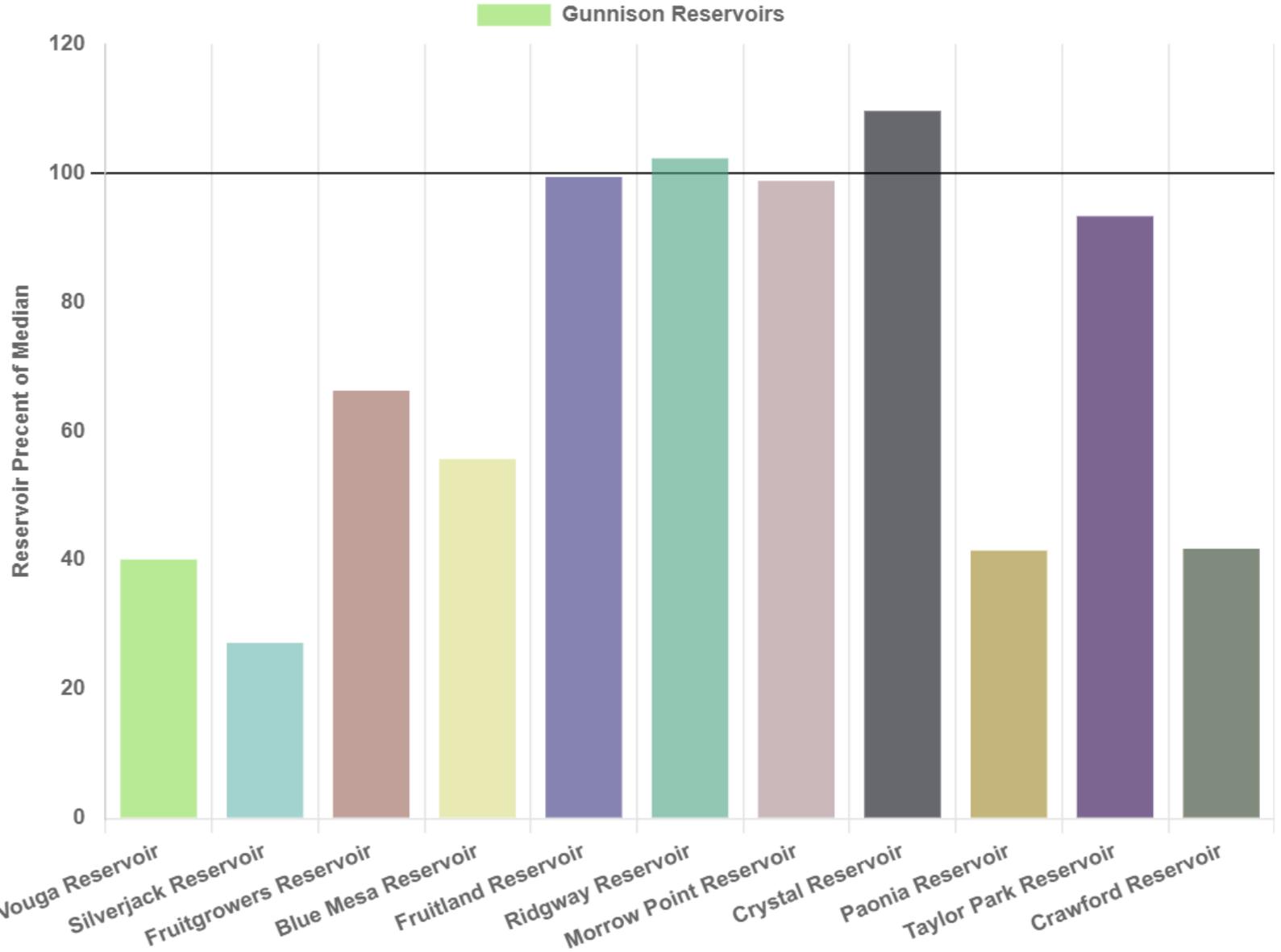




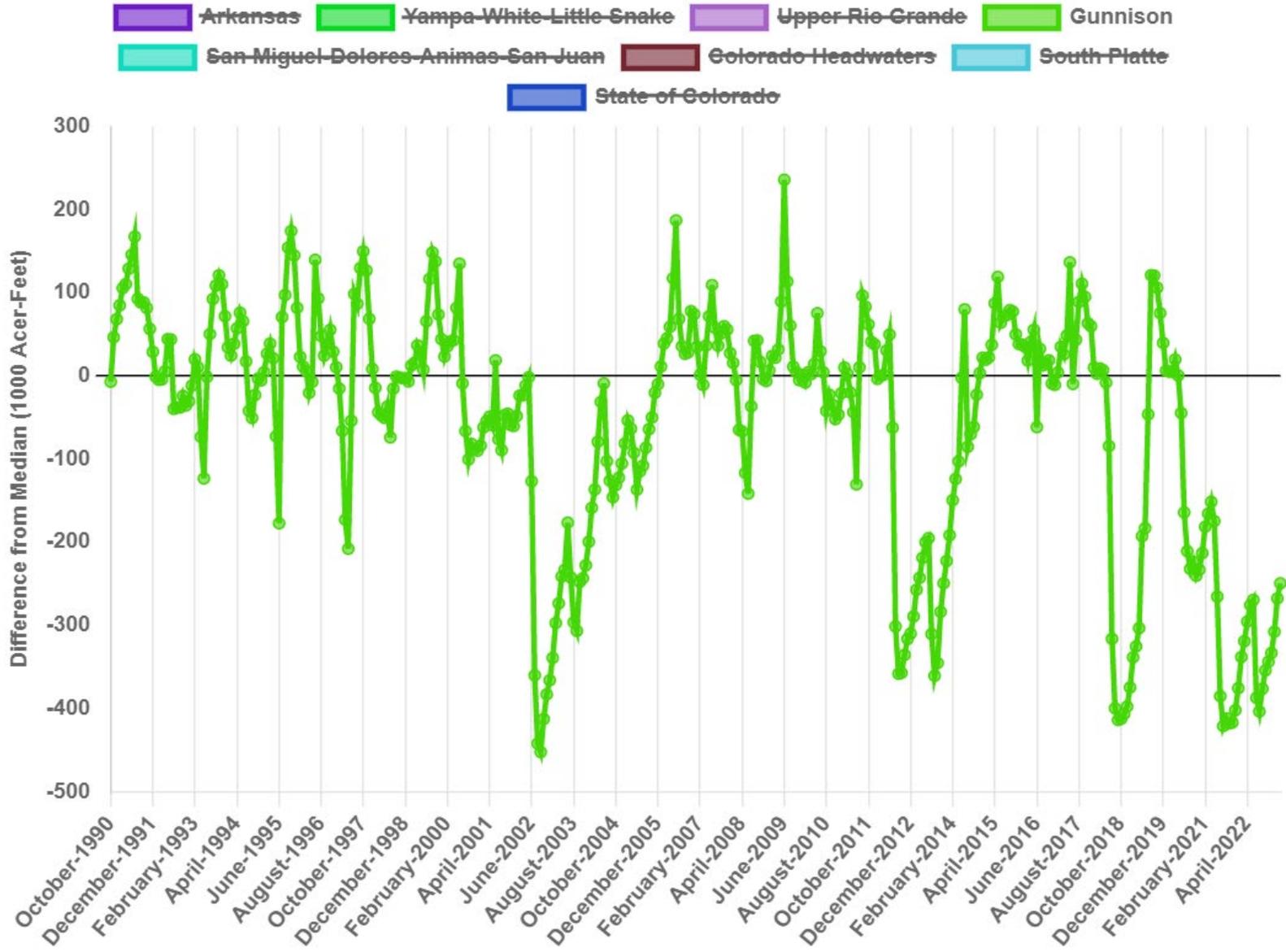
Colorado Snow Surveys



Reservoir Conditions for Gunnison on March 1st 2023



Departure from Median



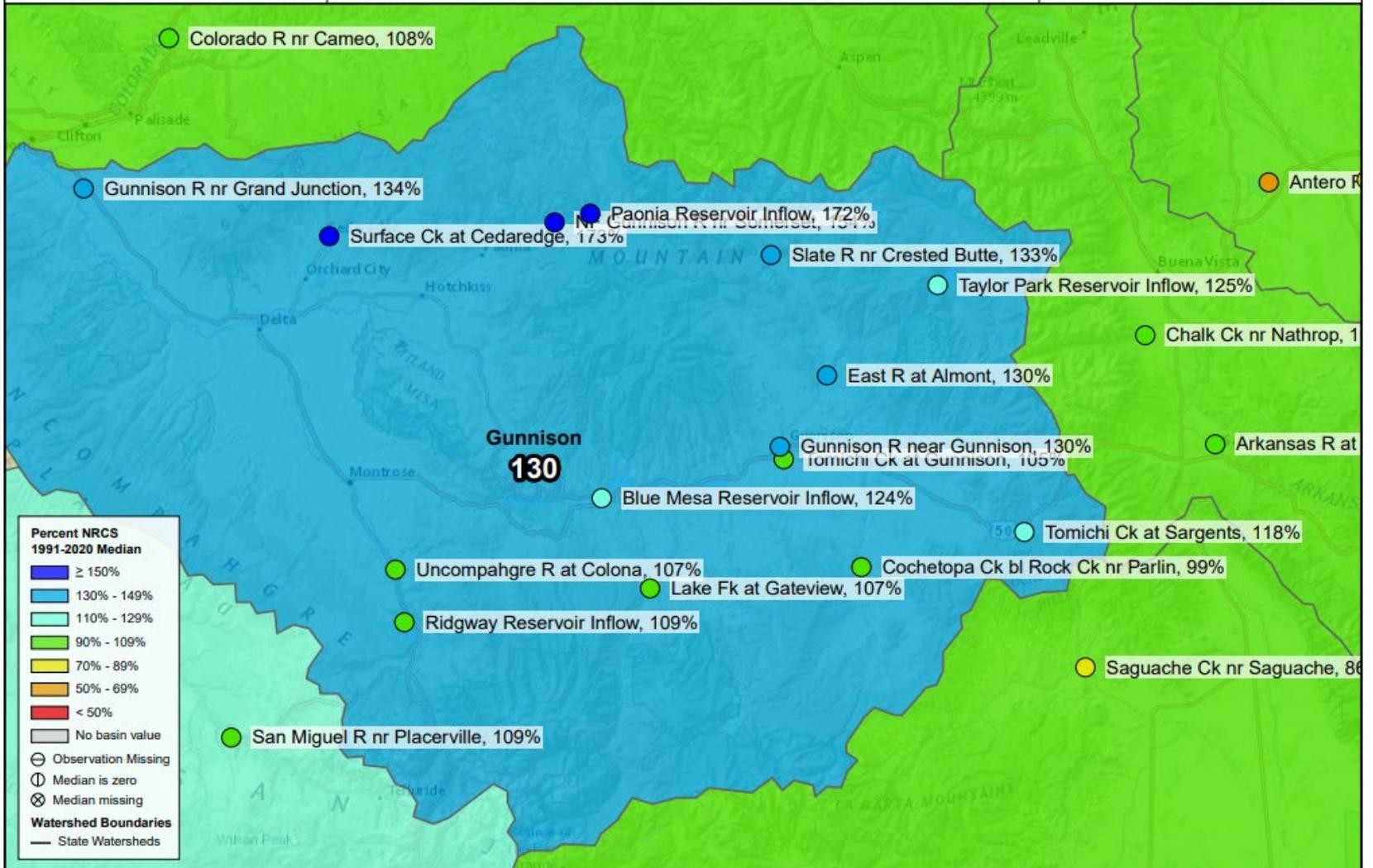


Colorado Snow Surveys

Forecast Volume,
50% Exceedance Probability

Percent NRCS 1991-2020 Median

Primary Period, March 1, 2023



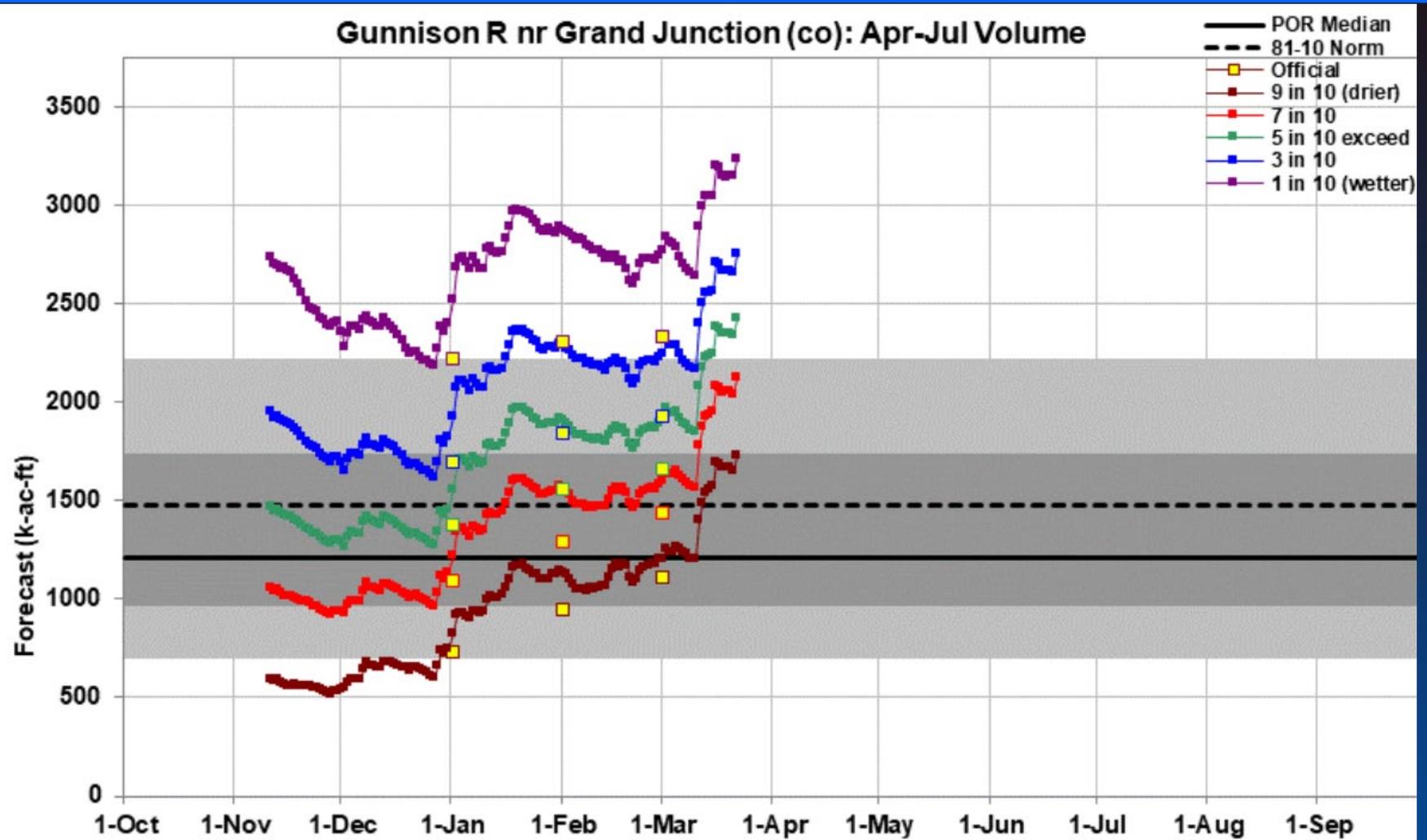
Percent NRCS 1991-2020 Median

- ≥ 150%
- 130% - 149%
- 110% - 129%
- 90% - 109%
- 70% - 89%
- 50% - 69%
- < 50%
- No basin value
- ⊖ Observation Missing
- ⊕ Median is zero
- ⊗ Median missing

Watershed Boundaries

- State Watersheds





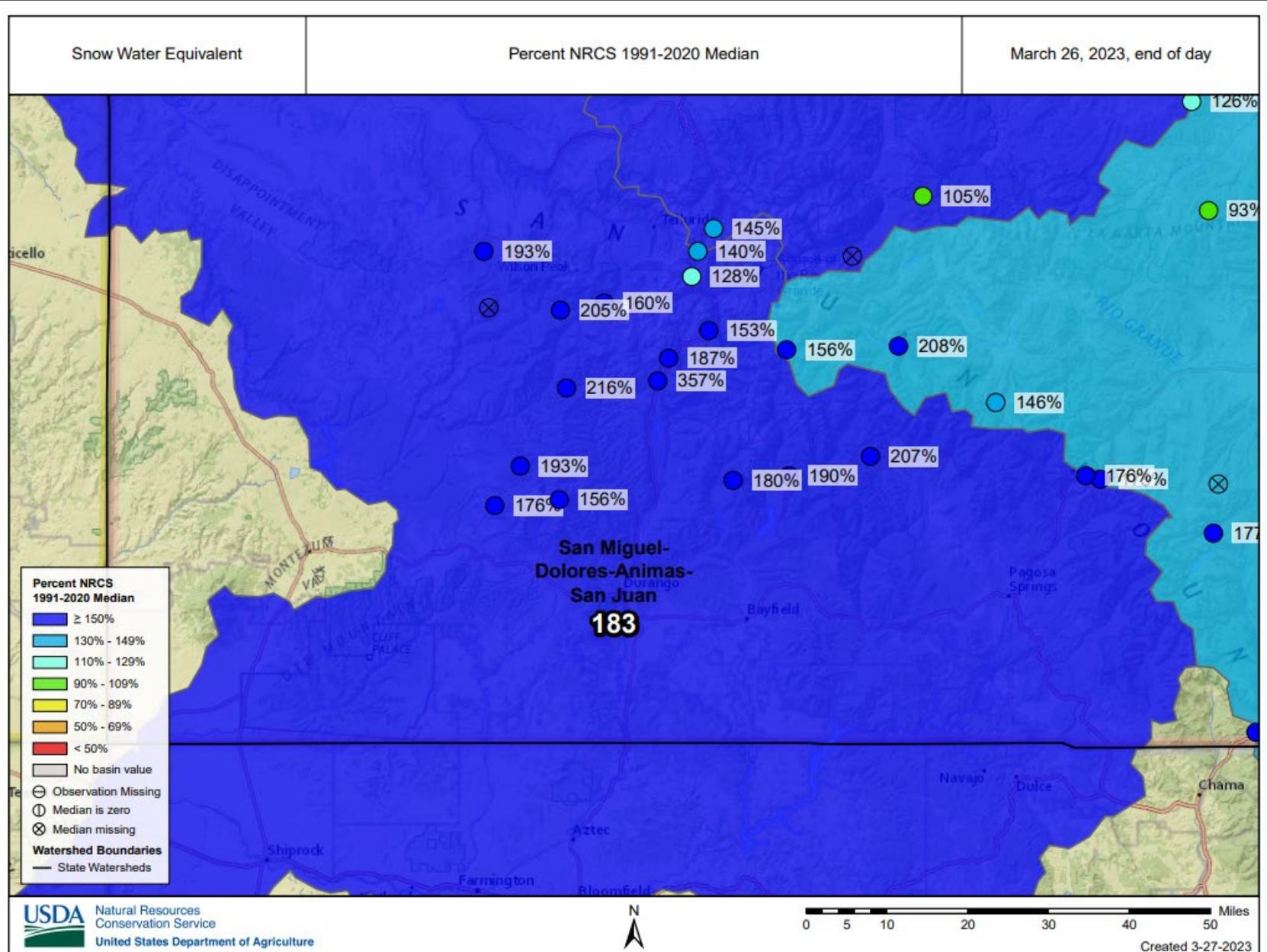
Created 0:59 Mar 23 2023



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Colorado Snow Surveys



SNOW WATER EQUIVALENT IN SAN MIGUEL-DOLORES-ANIMAS-SAN JUAN

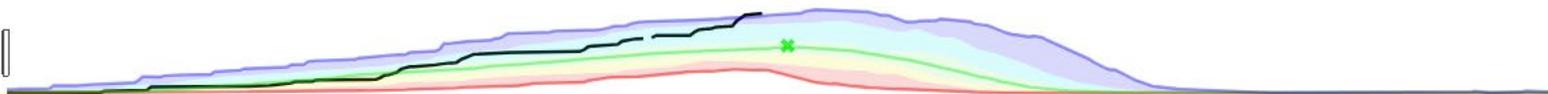
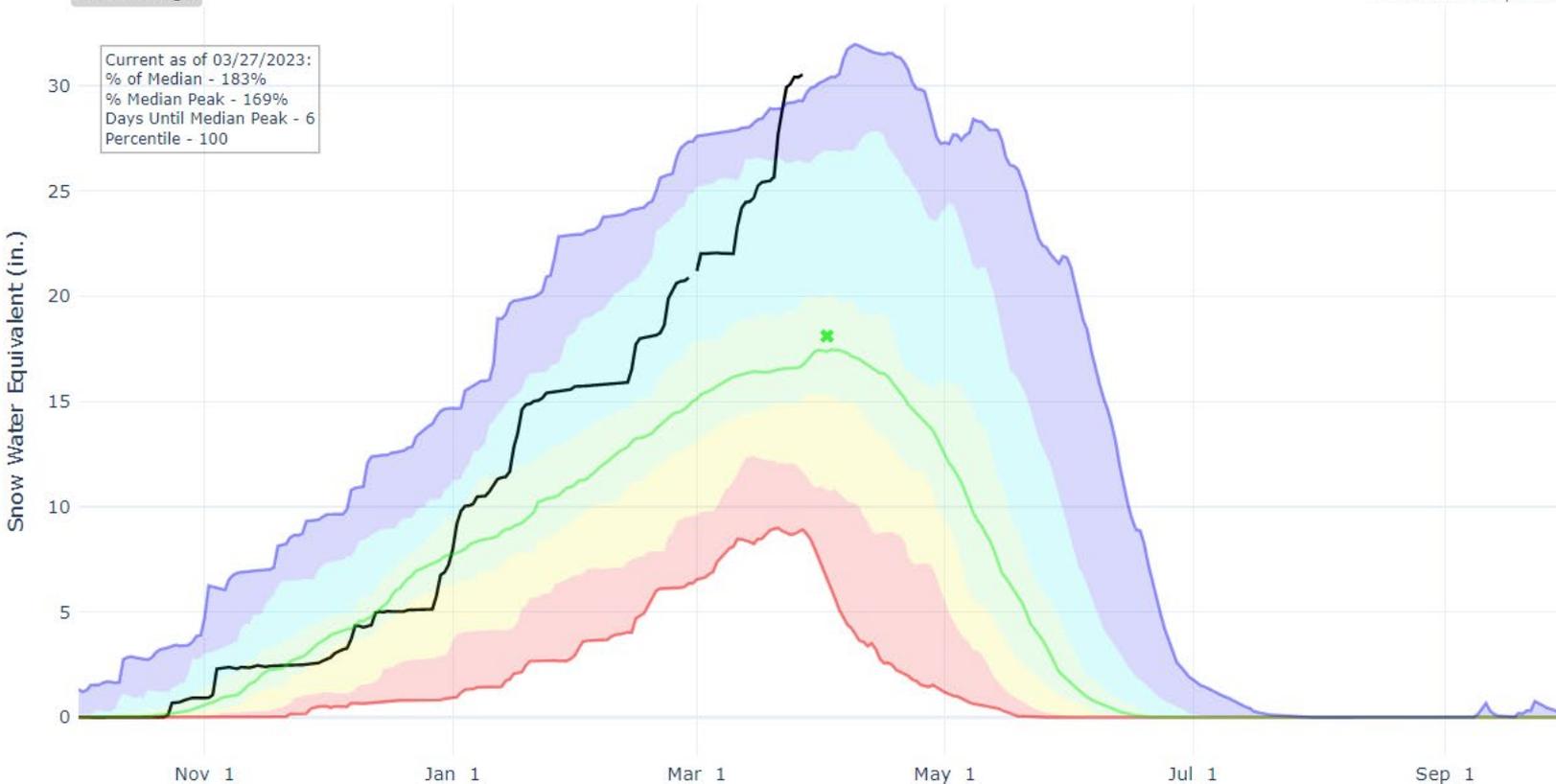
Reset Range

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

Station List

Current as of 03/27/2023:
 % of Median - 183%
 % Median Peak - 169%
 Days Until Median Peak - 6
 Percentile - 100

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



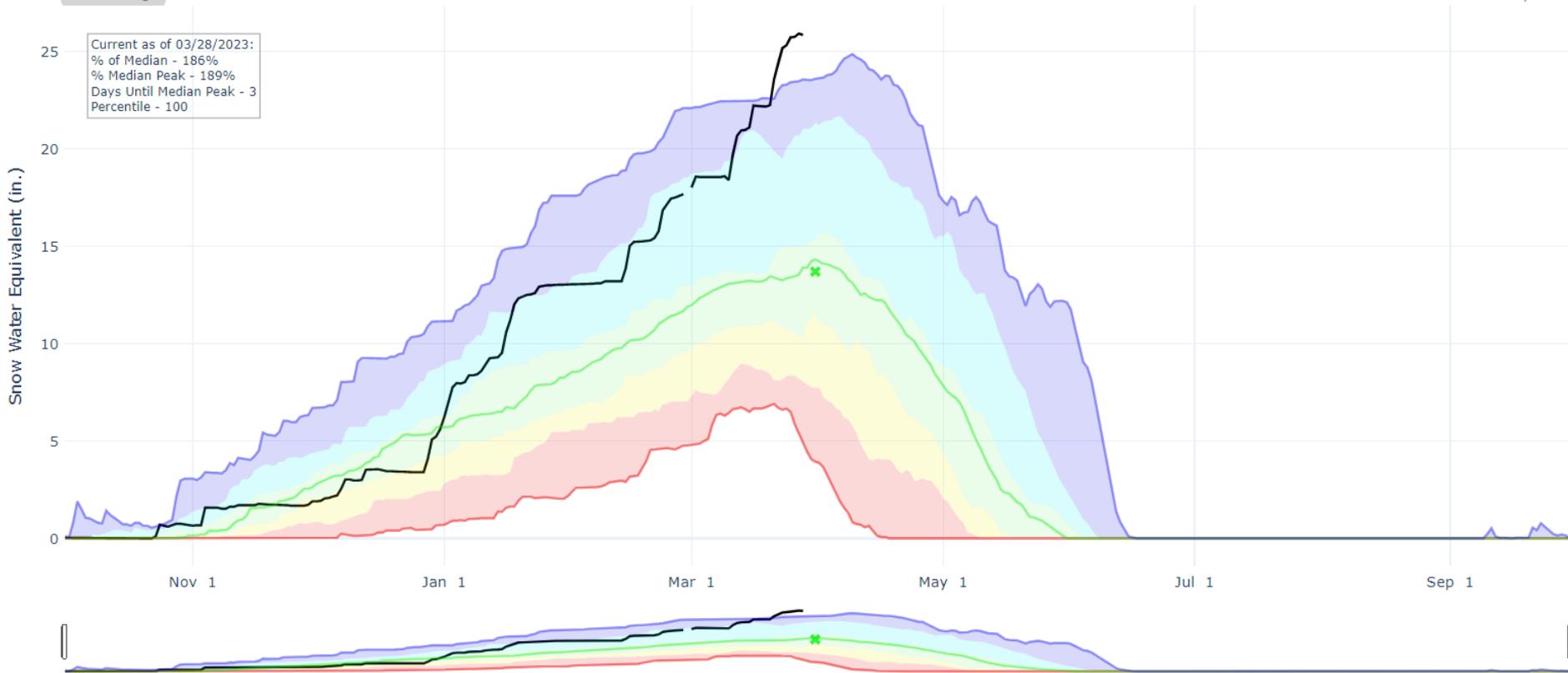


SNOW WATER EQUIVALENT IN DOLORES

Reset Range

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

Current as of 03/28/2023:
% of Median - 186%
% Median Peak - 189%
Days Until Median Peak - 3
Percentile - 100



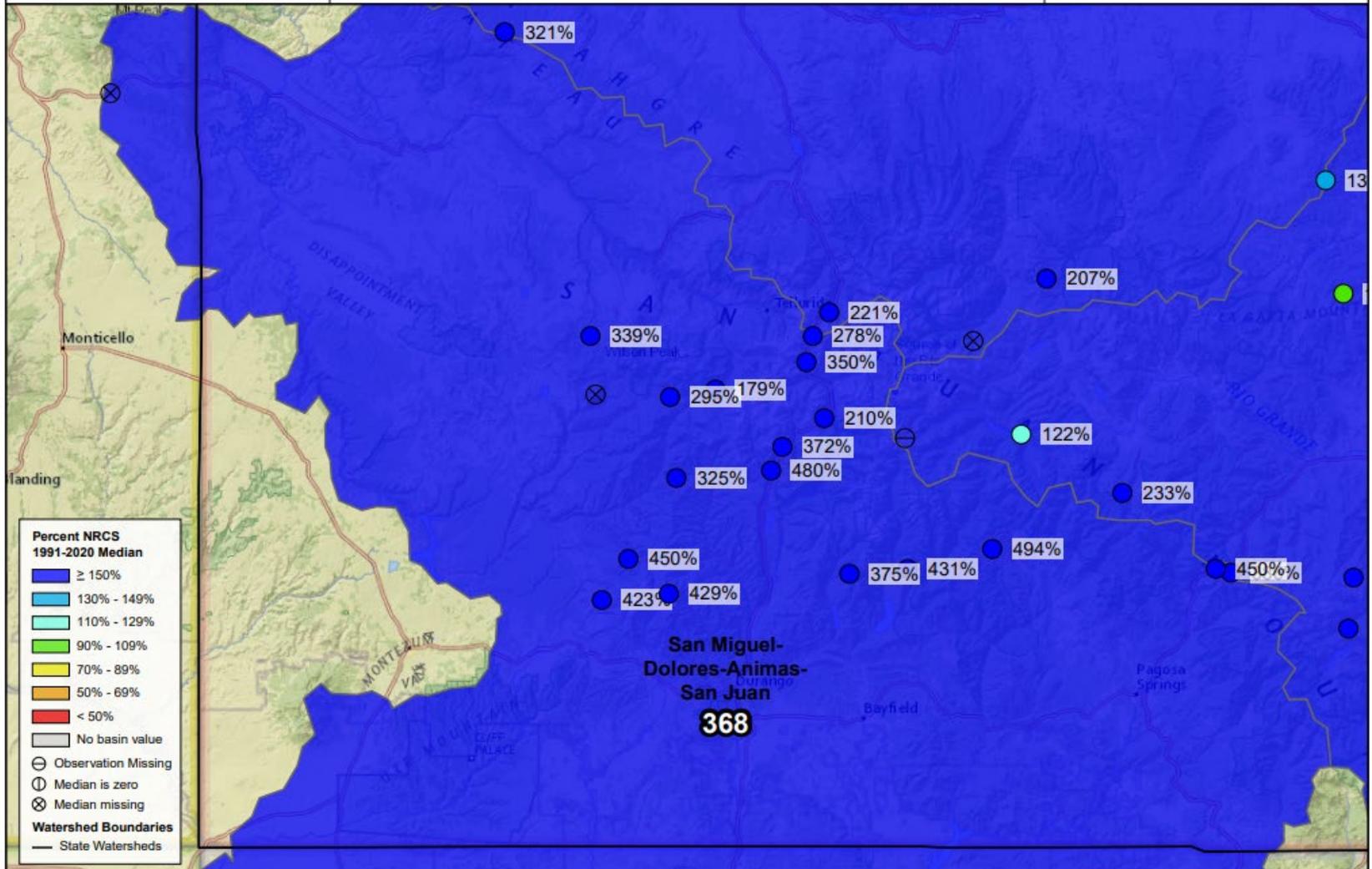


Colorado Snow Surveys

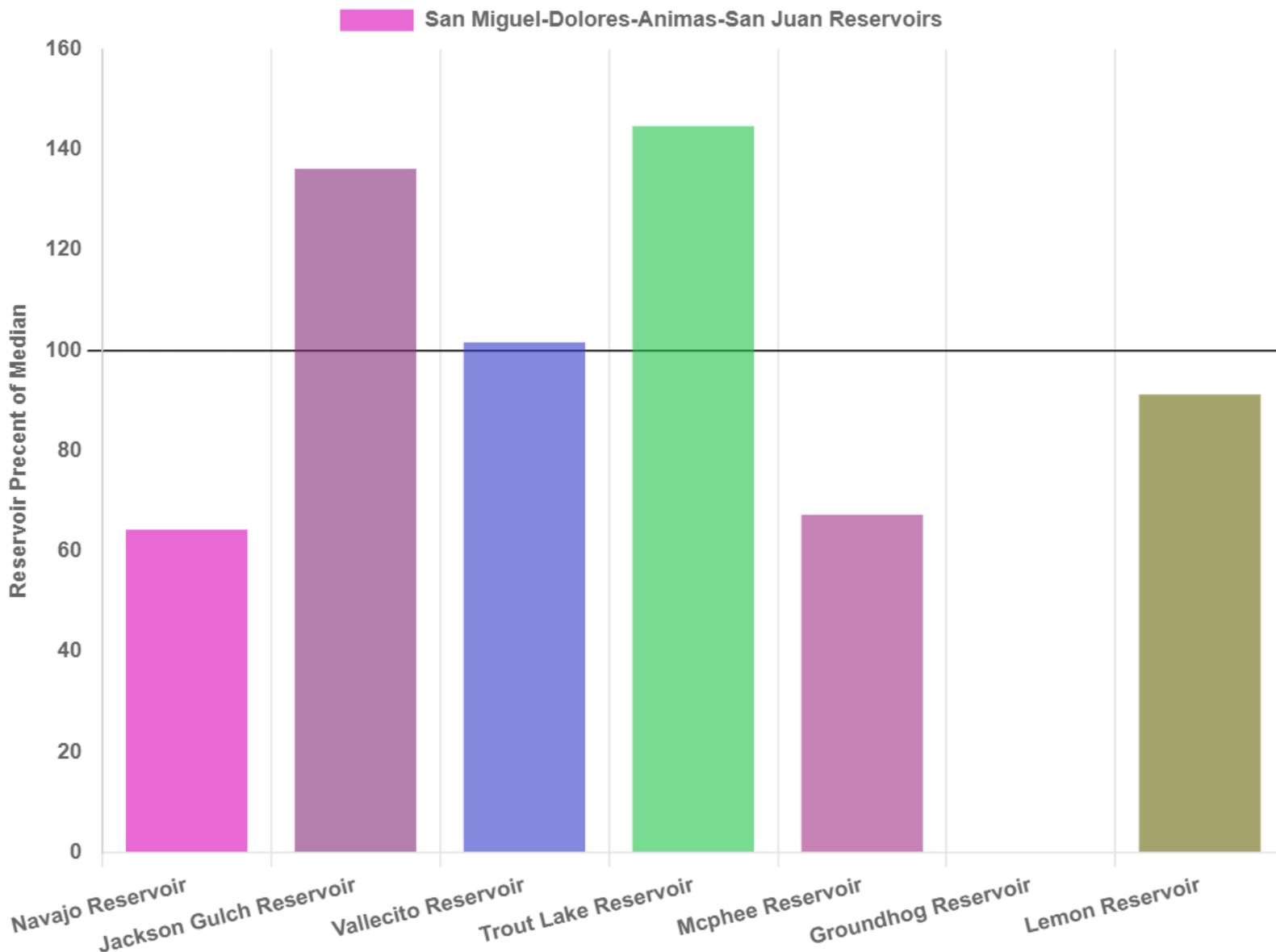
Month to Date Precipitation

Percent NRCS 1991-2020 Median

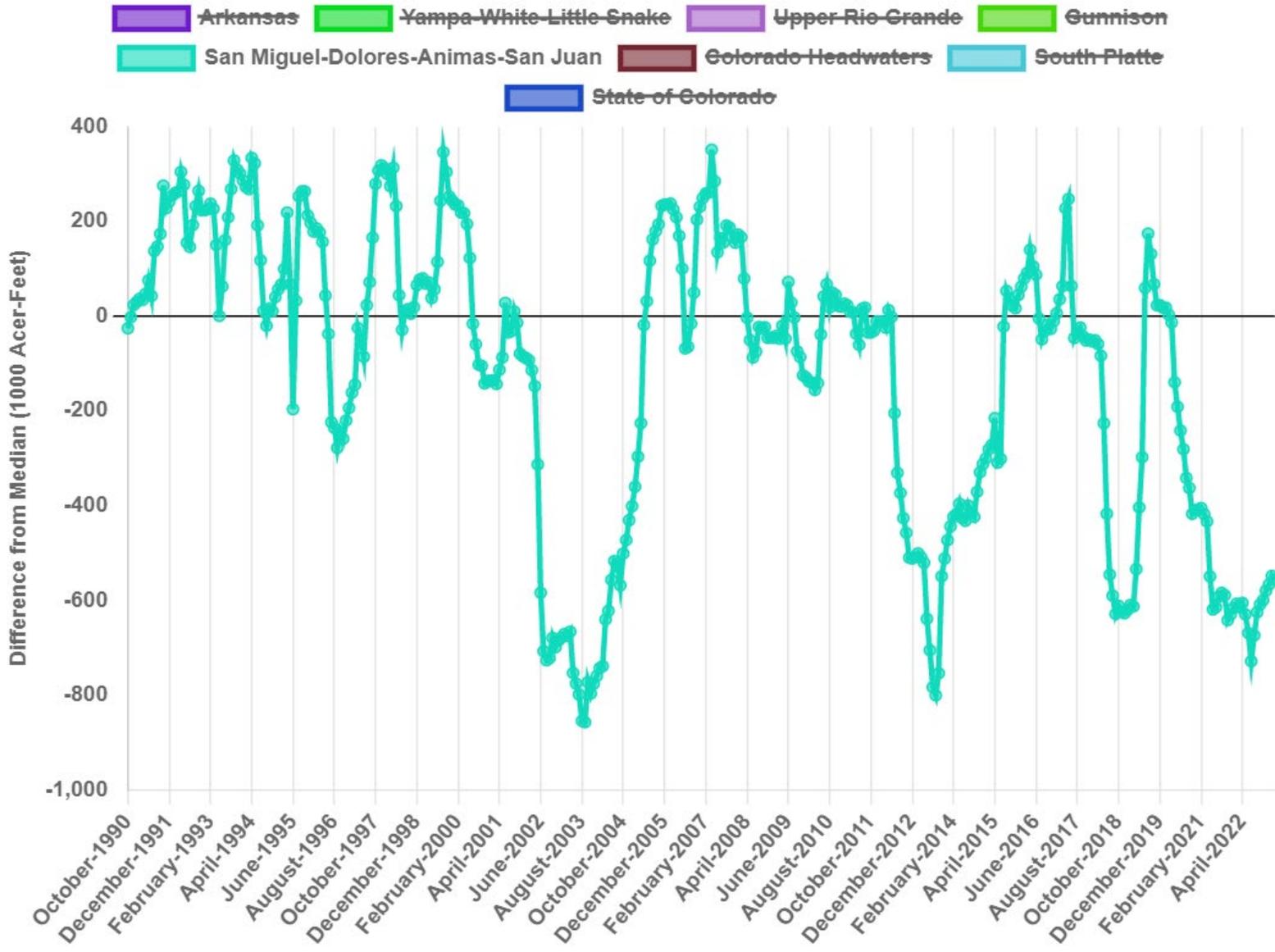
March 1, 2023 - March 23, 2023



Reservoir Conditions for San Miguel-Dolores-Animas-San Juan on March 1st 2023

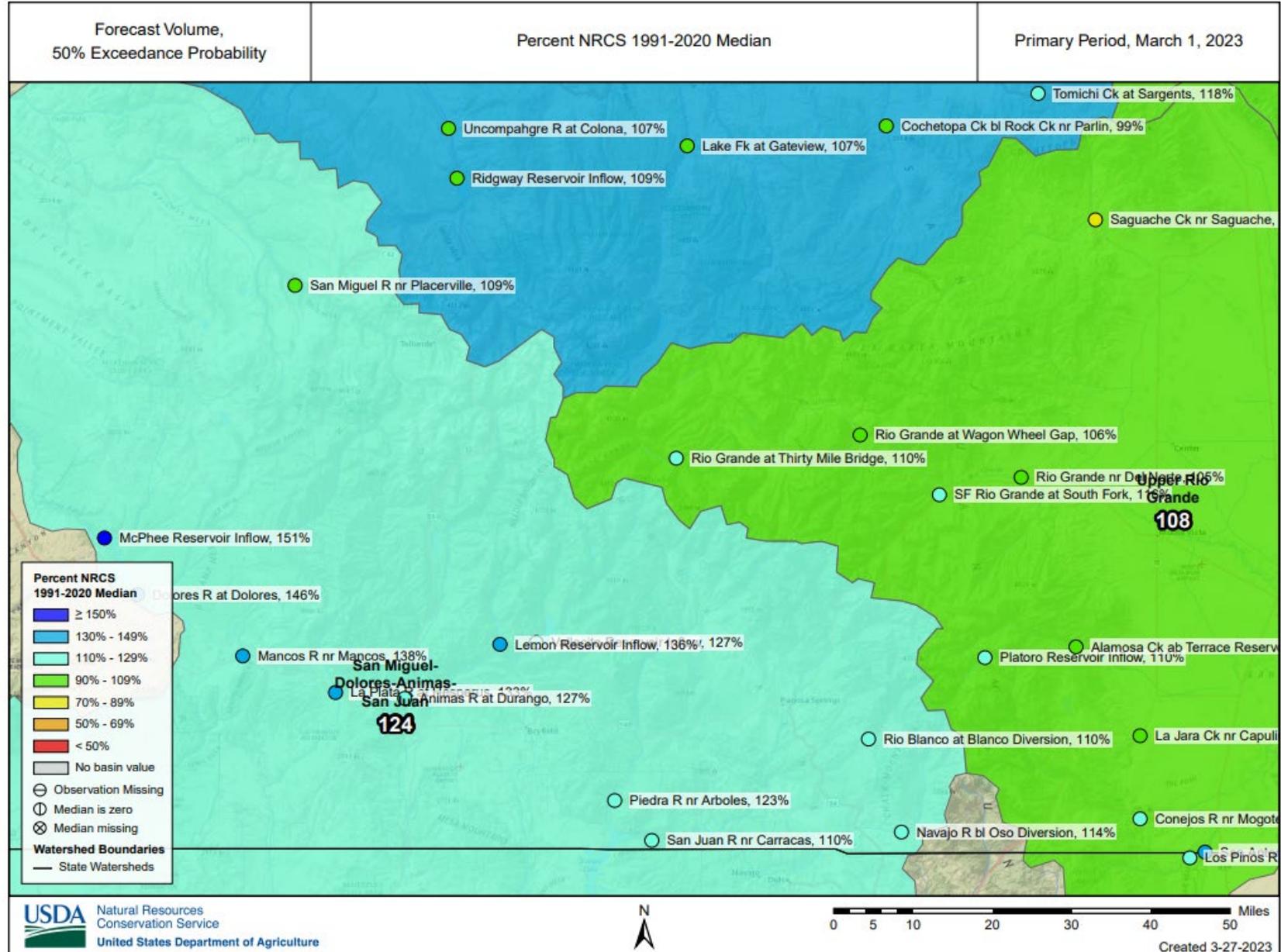


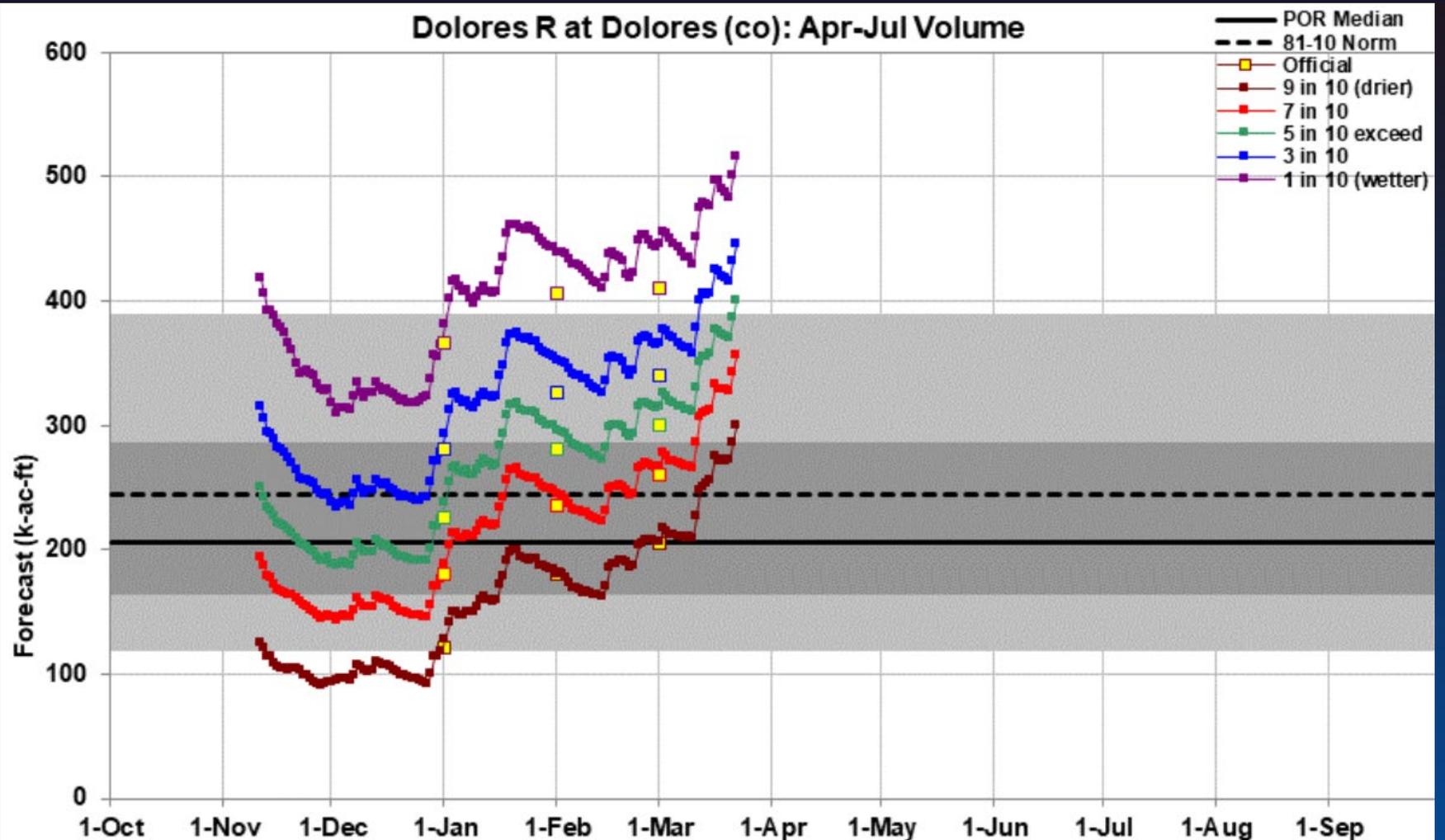
Departure from Median





Colorado Snow Surveys





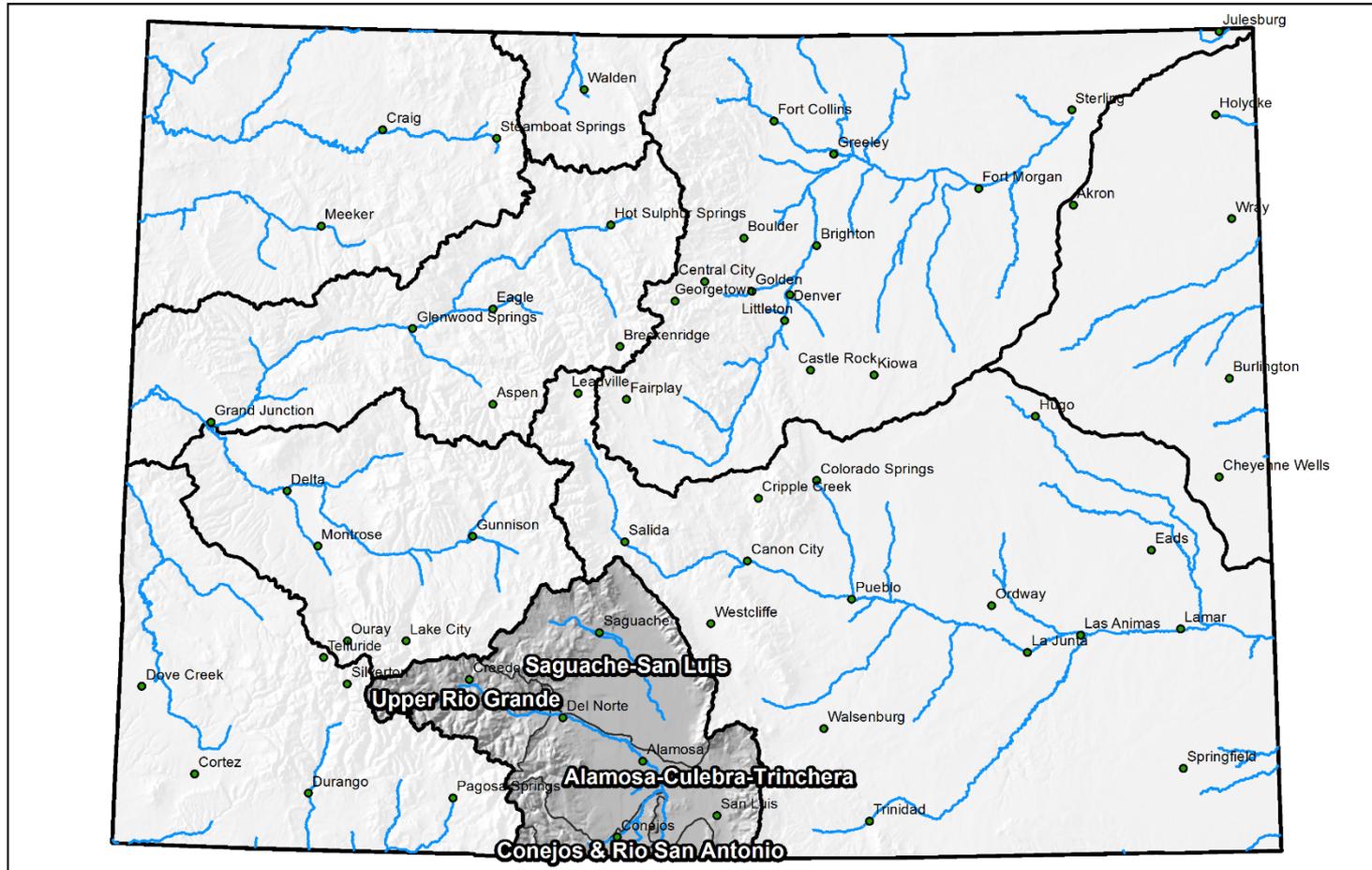
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Created 0:59 Mar 23 2023



Major Basin Summary

Upper Rio Grande River Basin



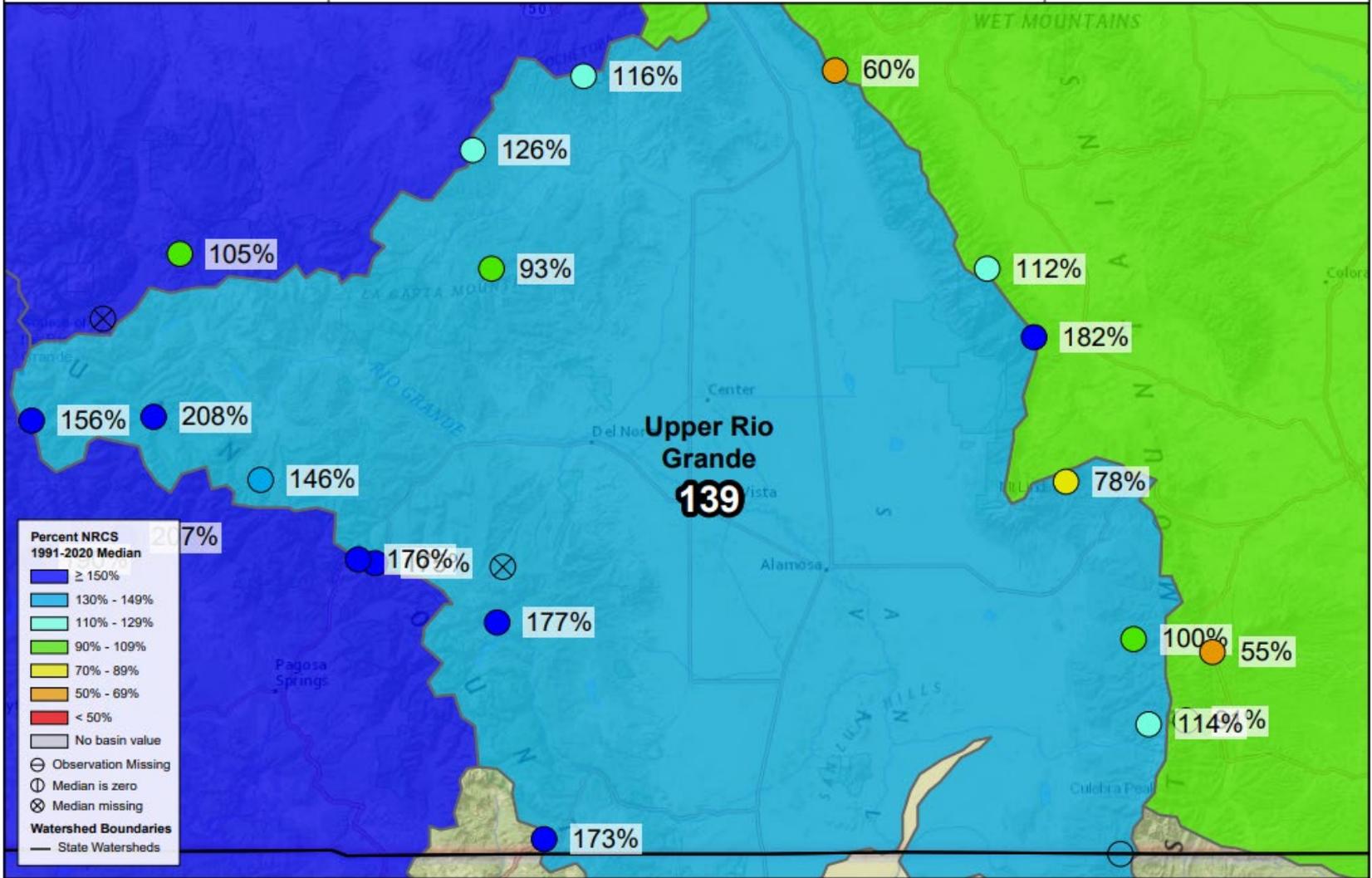


Colorado Snow Surveys

Snow Water Equivalent

Percent NRCS 1991-2020 Median

March 26, 2023, end of day





SNOW WATER EQUIVALENT IN UPPER RIO GRANDE

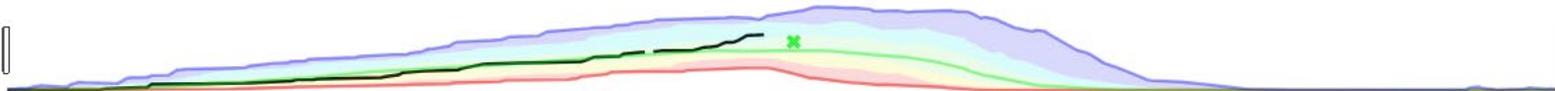
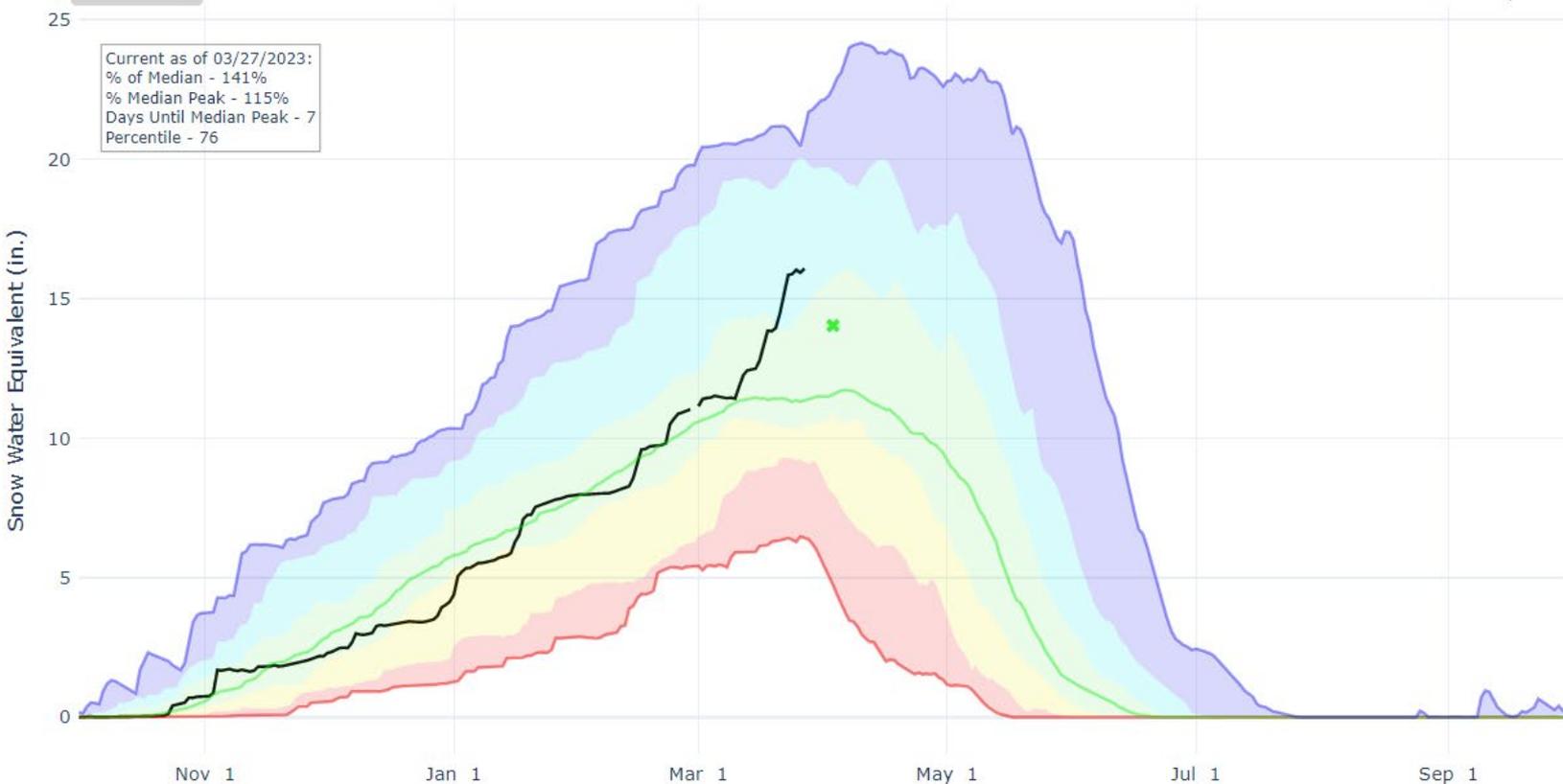
Reset Range

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

Station List

Current as of 03/27/2023:
 % of Median - 141%
 % Median Peak - 115%
 Days Until Median Peak - 7
 Percentile - 76

- ✖ Median Peak SWE
- Max
- Median (POR)
- Median ('91-'20)
- Min
- Stats. Shading
- 2023 (18 sites)
- 2022 (18 sites)
- 2021 (18 sites)
- 2020 (18 sites)
- 2019 (18 sites)
- 2018 (18 sites)
- 2017 (18 sites)
- 2016 (18 sites)
- 2015 (18 sites)
- 2014 (18 sites)
- 2013 (18 sites)
- 2012 (18 sites)
- 2011 (17 sites)
- 2010 (16 sites)
- 2009 (16 sites)
- 2008 (14 sites)
- 2007 (13 sites)
- 2006 (13 sites)
- 2005 (13 sites)



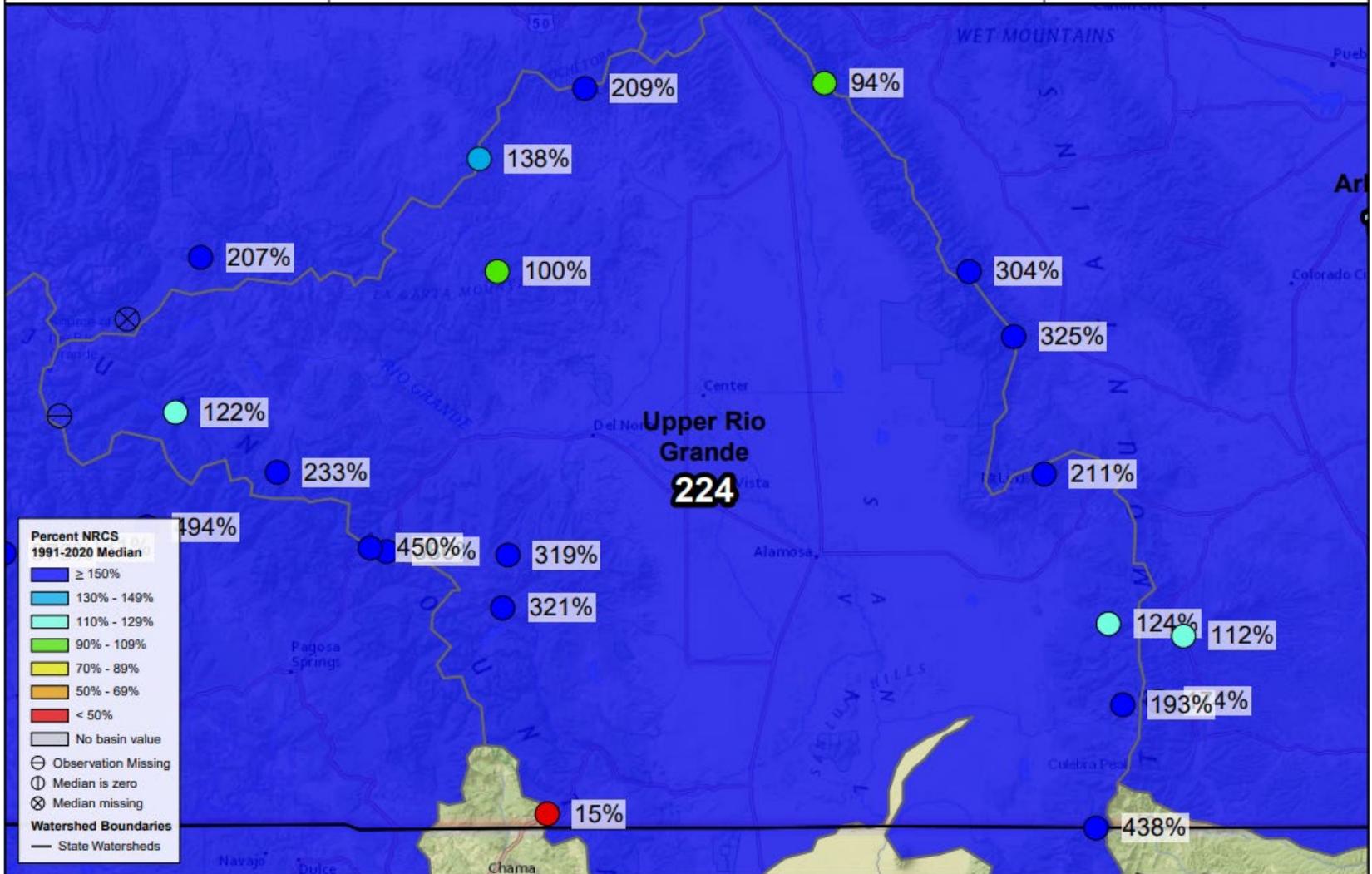


Colorado Snow Surveys

Month to Date Precipitation

Percent NRCS 1991-2020 Median

March 1, 2023 - March 23, 2023



Percent NRCS 1991-2020 Median

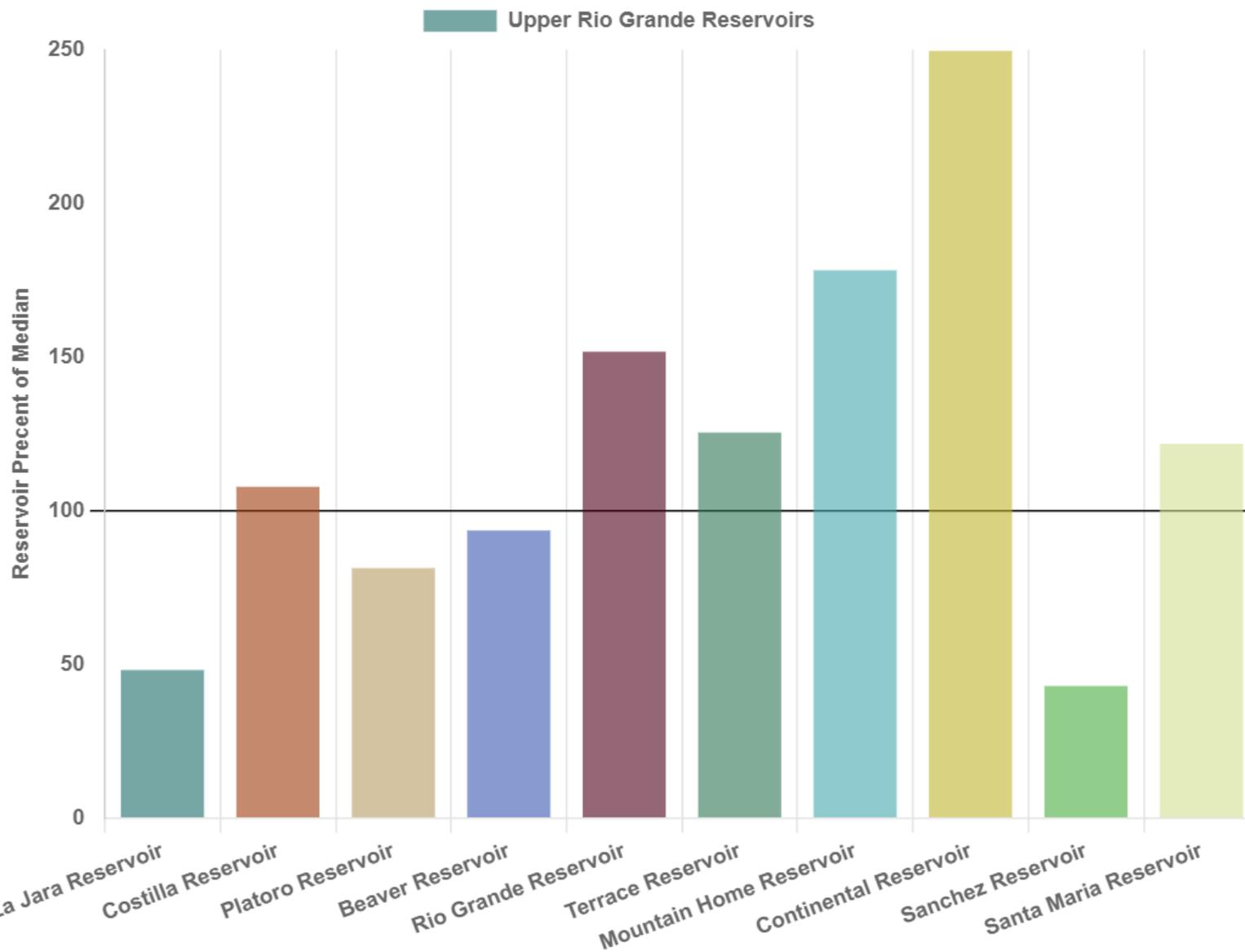
- ≥ 150%
- 130% - 149%
- 110% - 129%
- 90% - 109%
- 70% - 89%
- 50% - 69%
- < 50%
- No basin value
- ⊖ Observation Missing
- ⊕ Median is zero
- ⊗ Median missing

Watershed Boundaries

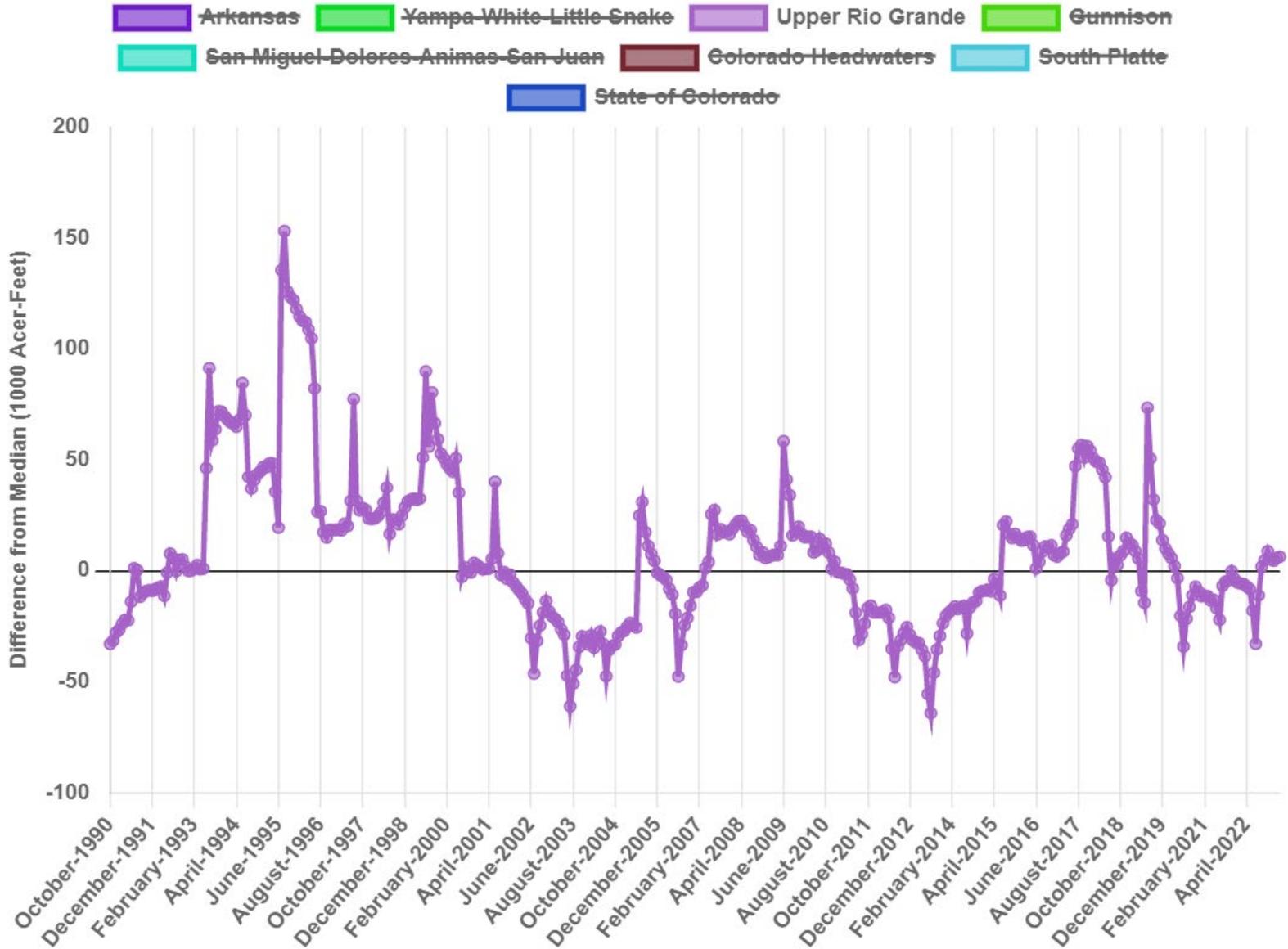
- State Watersheds



Reservoir Conditions for Upper Rio Grande on March 1st 2023



Departure from Median



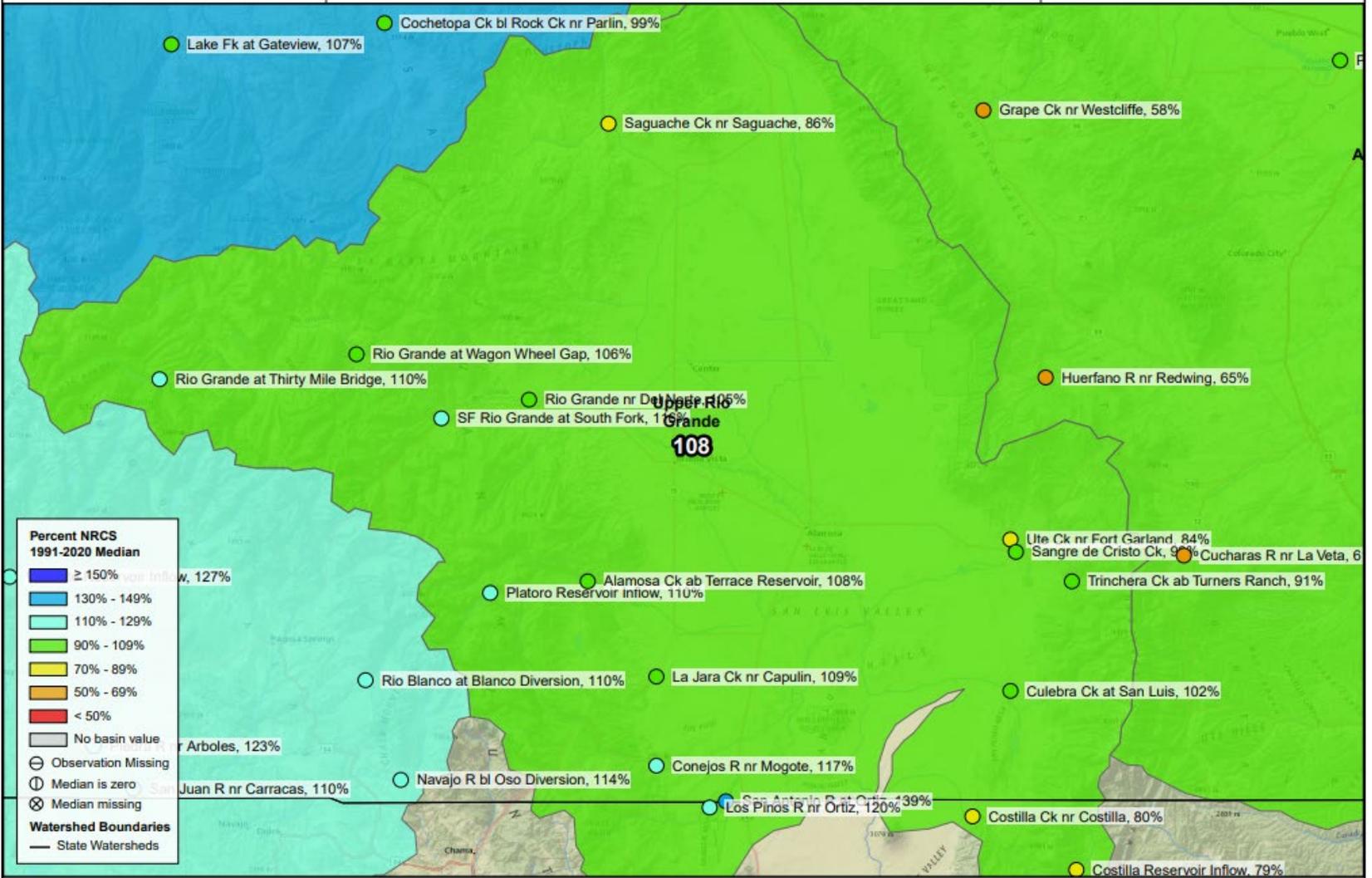


Colorado Snow Surveys

Forecast Volume,
50% Exceedance Probability

Percent NRCS 1991-2020 Median

Primary Period, March 1, 2023



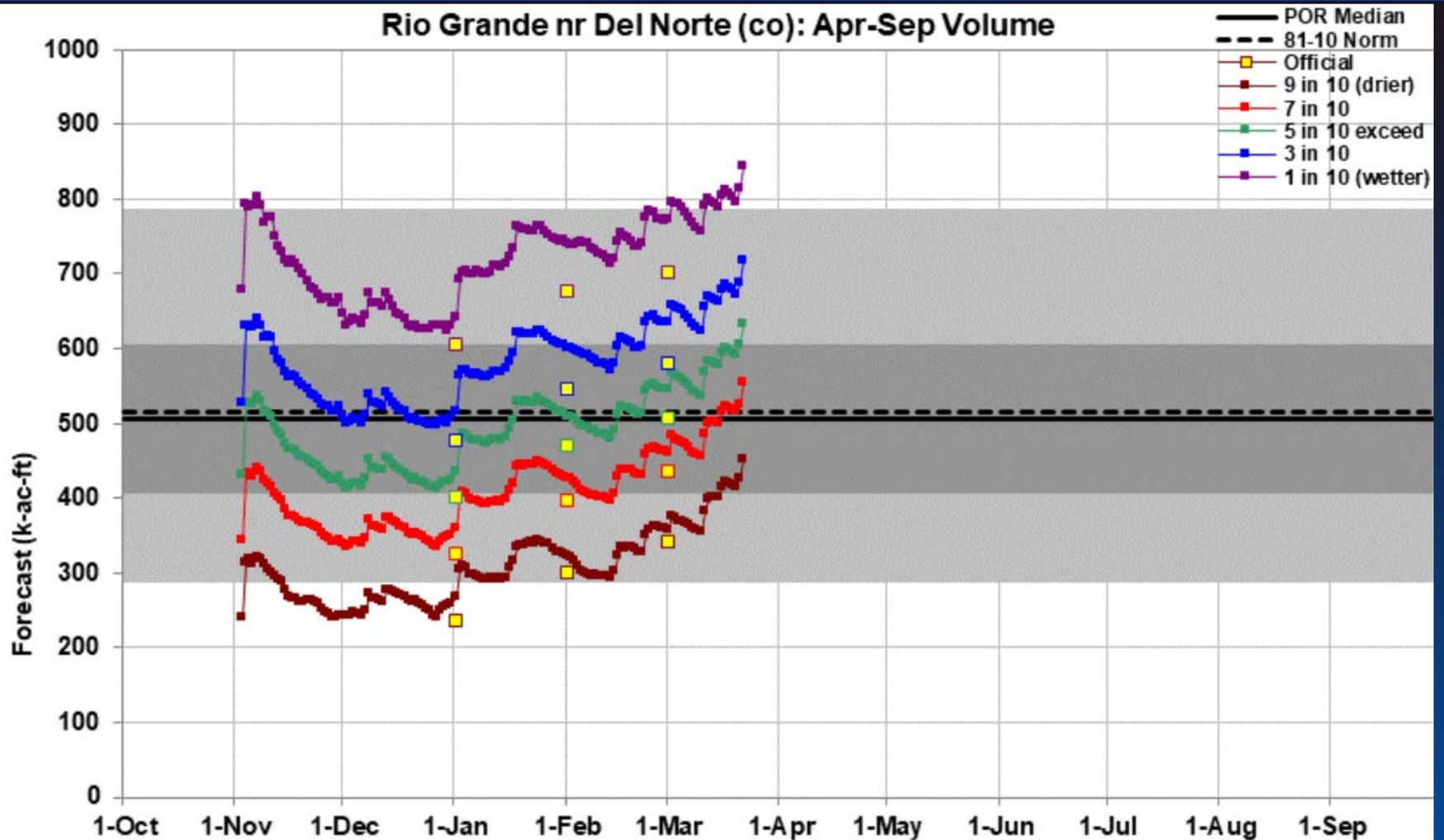
Percent NRCS 1991-2020 Median

- ≥ 150%
- 130% - 149%
- 110% - 129%
- 90% - 109%
- 70% - 89%
- 50% - 69%
- < 50%
- No basin value
- ⊖ Observation Missing
- ⊕ Median is zero
- ⊗ Median missing

Watershed Boundaries

- State Watersheds





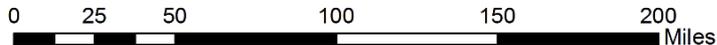
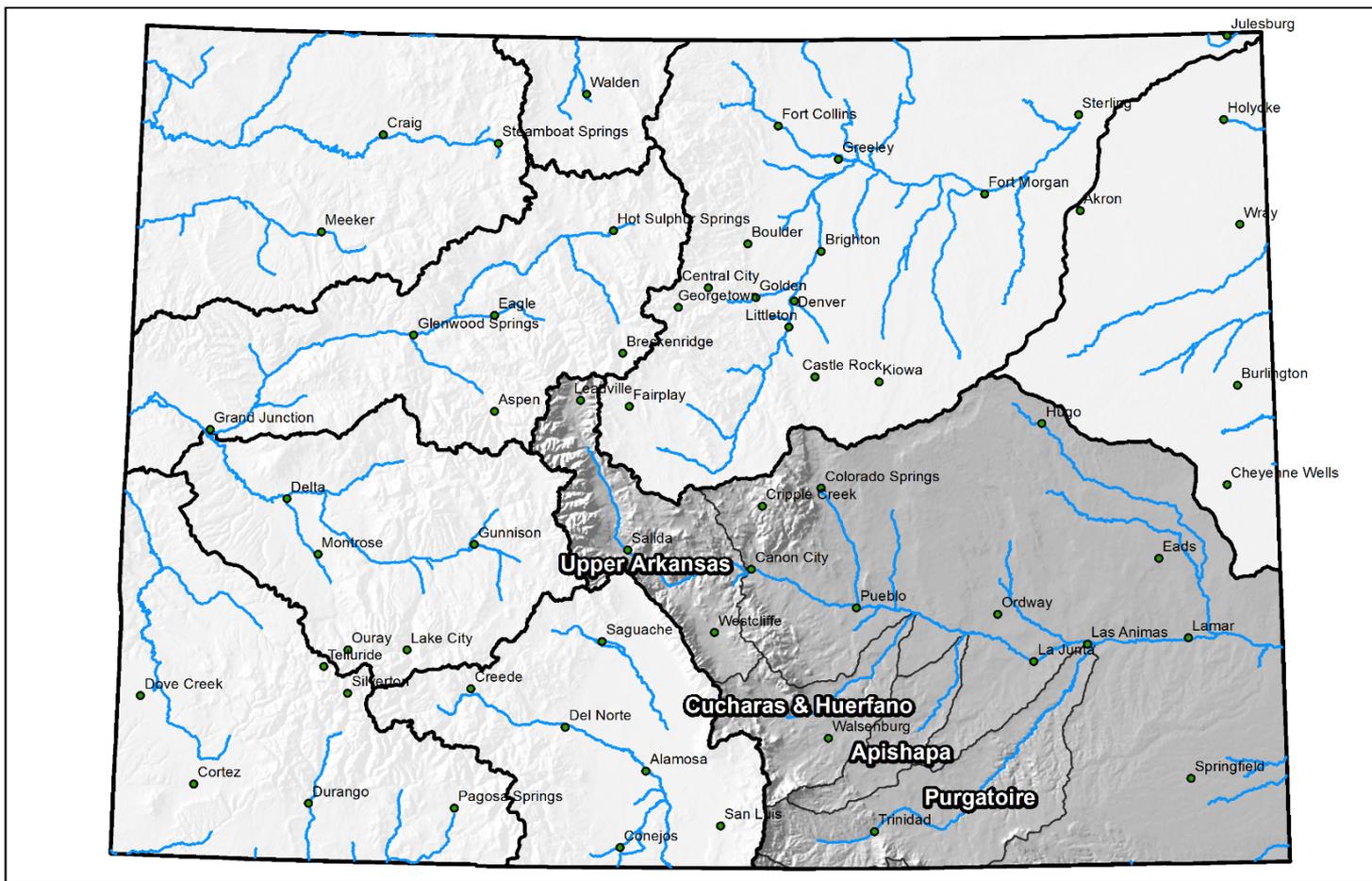
Created 0:46 Mar 23 2023



This is an automated product based solely on SNOTEL data, provisional data are subject to change. This product is a statistically based guidance forecast combining indices of snowpack and precipitation. **Yellow squares** are the official outlooks. **Gray background** is the historical period of record variability. This product does not consider climate information such as El Nino or short range weather forecasts, or a variety of other factors considered in the official forecasts. This product is not meant to replace or supercede the official forecasts produced in coordination with the National Weather Service. Science Contact: Cara.s.McCarthy@por.usda.gov www.wcc.nrcs.usda.gov/ws/daily_forecasts.html

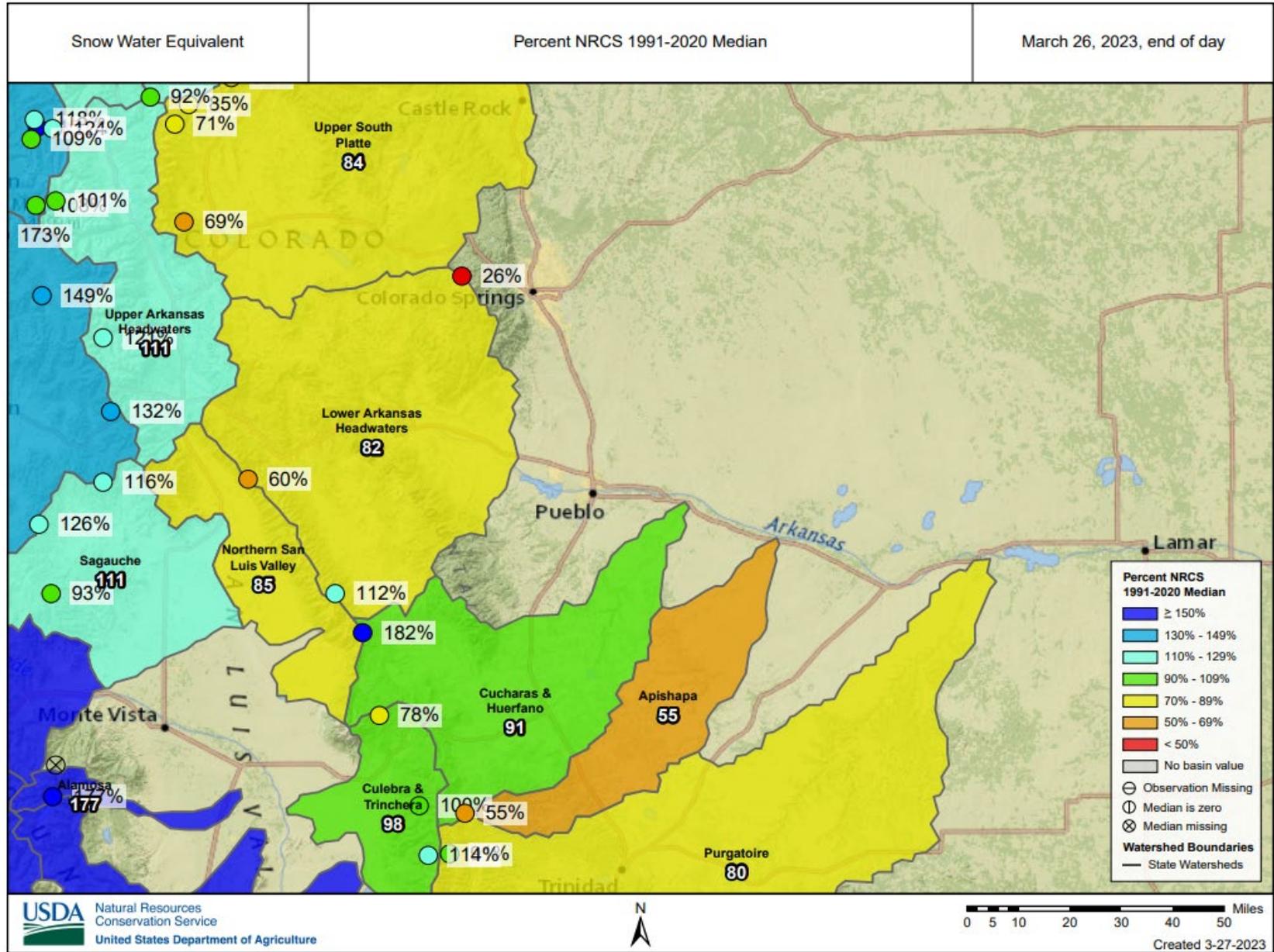
Major Basin Summary

Arkansas River Basin





Colorado Snow Surveys





SNOW WATER EQUIVALENT IN ARKANSAS

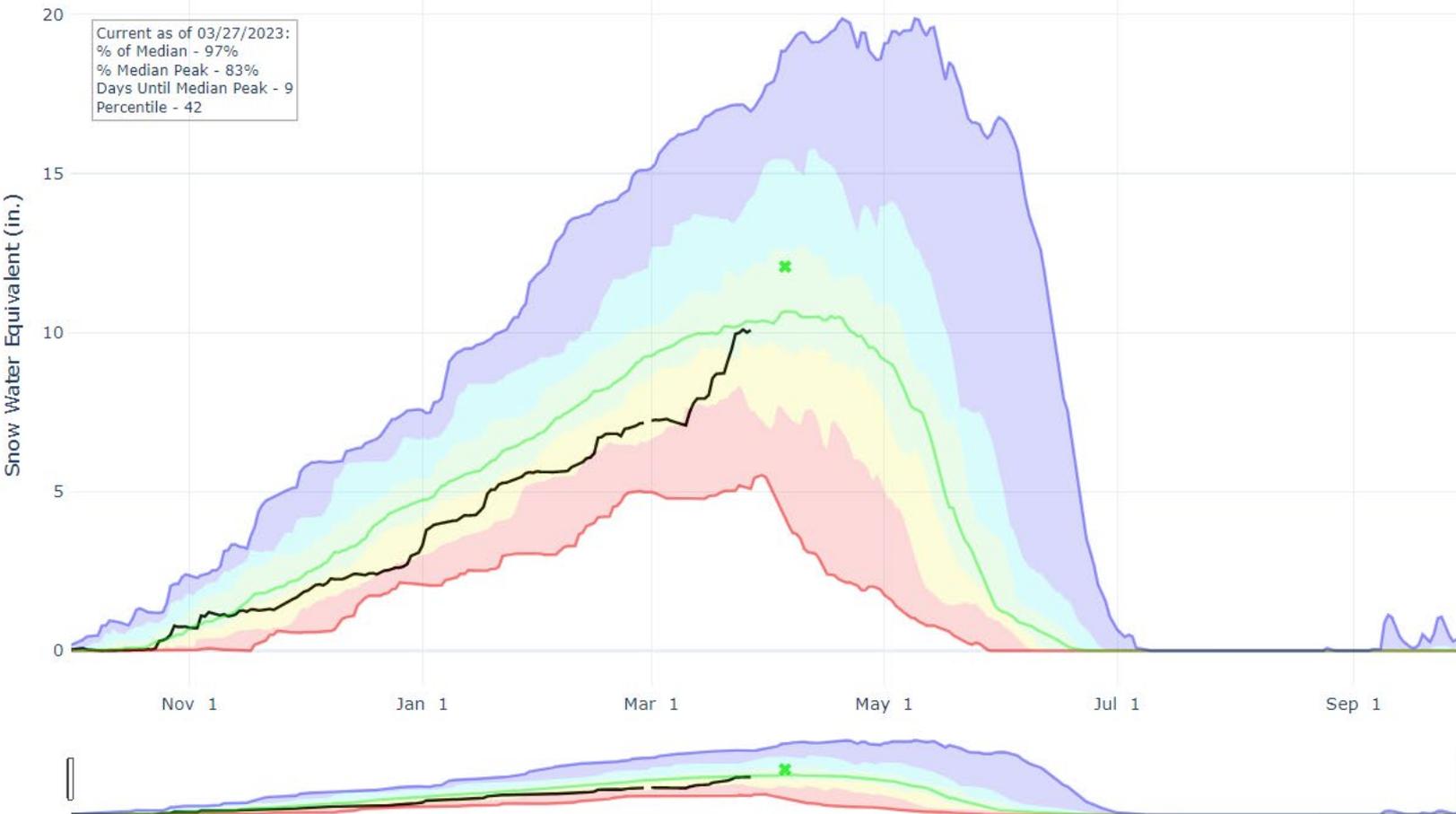
Reset Range

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

[Station List](#)

Current as of 03/27/2023:
 % of Median - 97%
 % Median Peak - 83%
 Days Until Median Peak - 9
 Percentile - 42

- ✖ Median Peak SWE
- Max
- Median (POR)
- Median ('91-'20)
- Min
- Stats. Shading
- 2023 (11 sites)
- 2022 (11 sites)
- 2021 (11 sites)
- 2020 (11 sites)
- 2019 (11 sites)
- 2018 (11 sites)
- 2017 (11 sites)
- 2016 (11 sites)
- 2015 (11 sites)
- 2014 (11 sites)
- 2013 (11 sites)
- 2012 (11 sites)
- 2011 (11 sites)
- 2010 (11 sites)
- 2009 (11 sites)
- 2008 (11 sites)
- 2007 (9 sites)
- 2006 (9 sites)
- 2005 (9 sites)



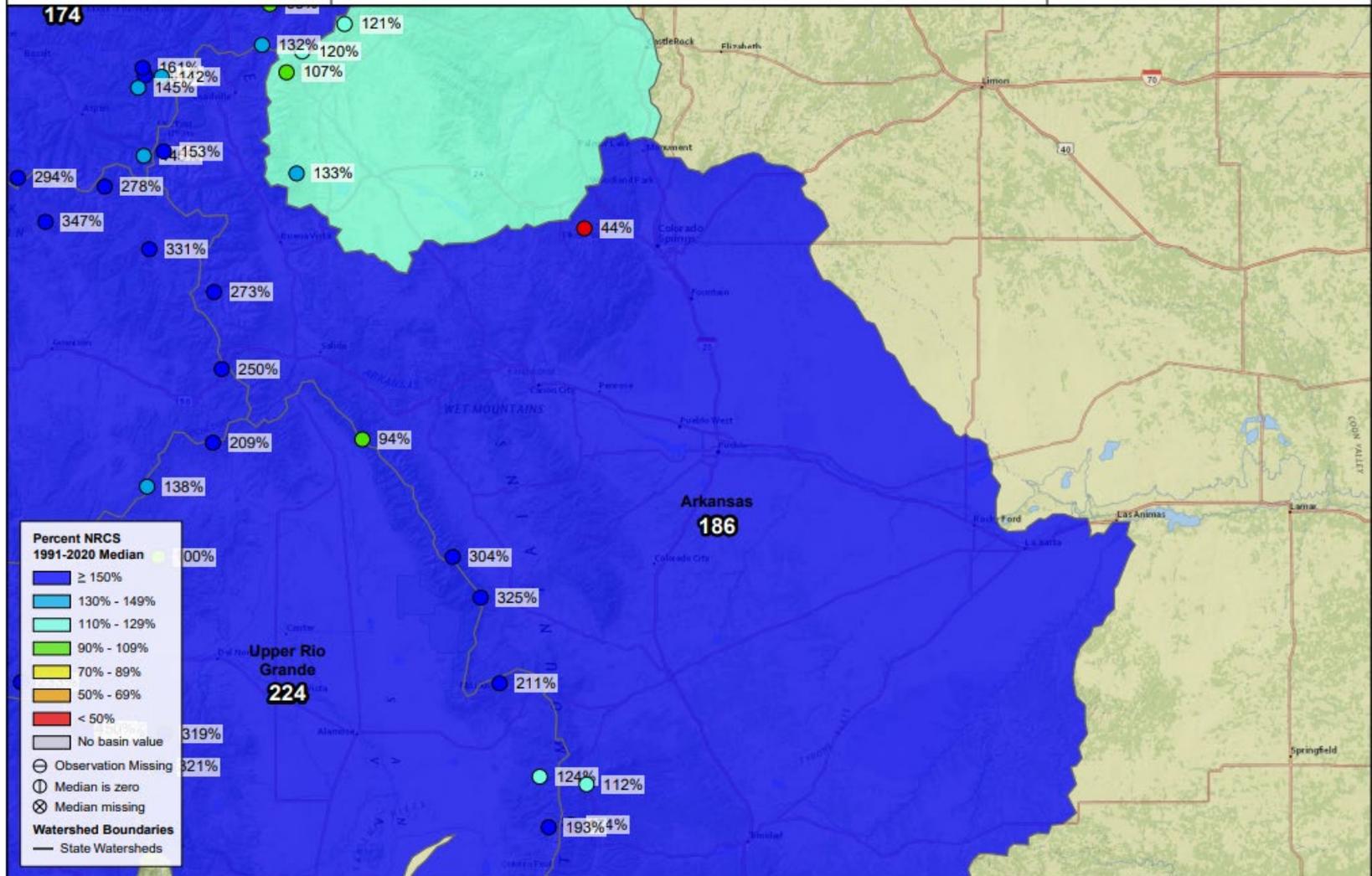


Colorado Snow Surveys

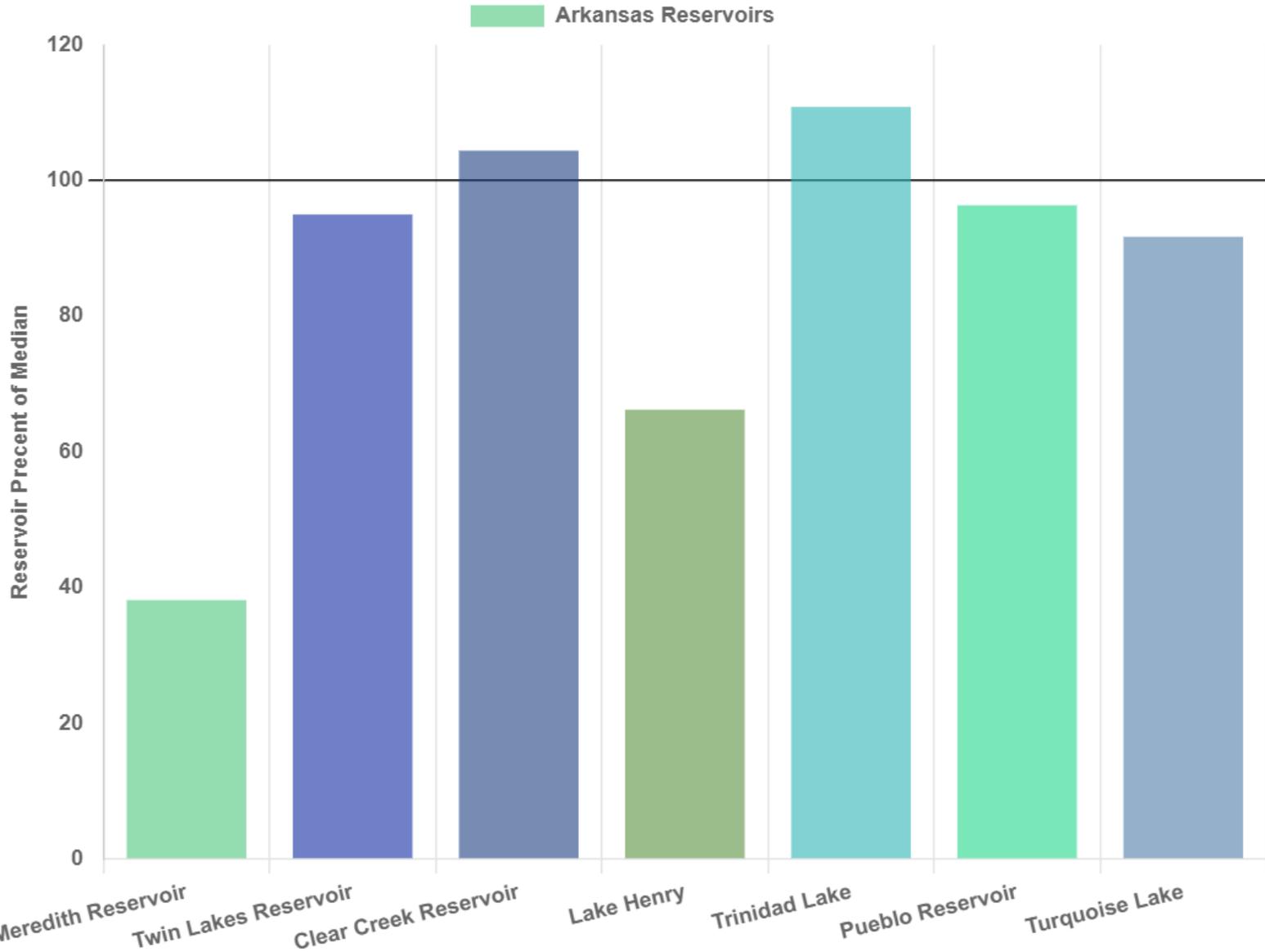
Month to Date Precipitation

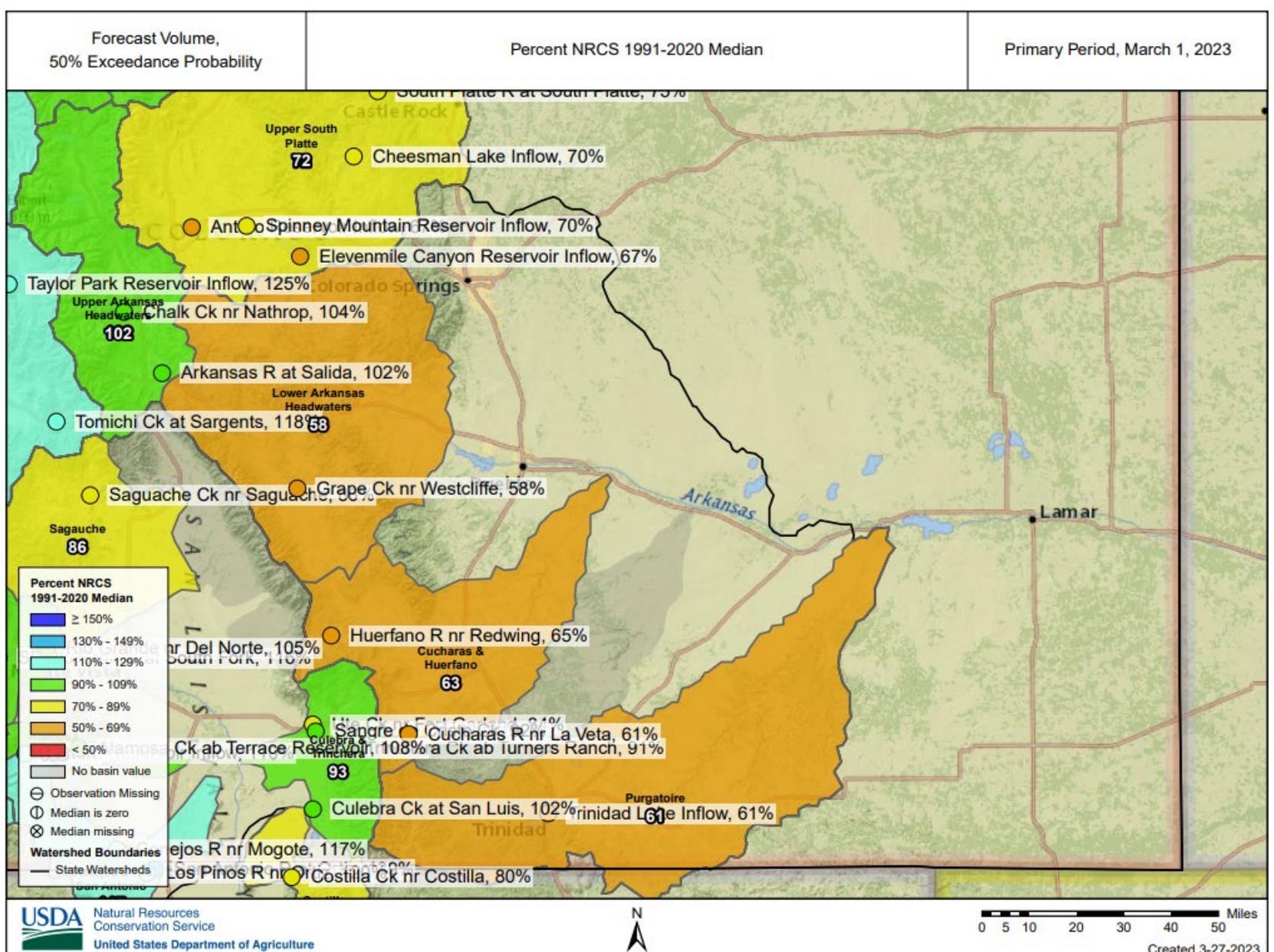
Percent NRCS 1991-2020 Median

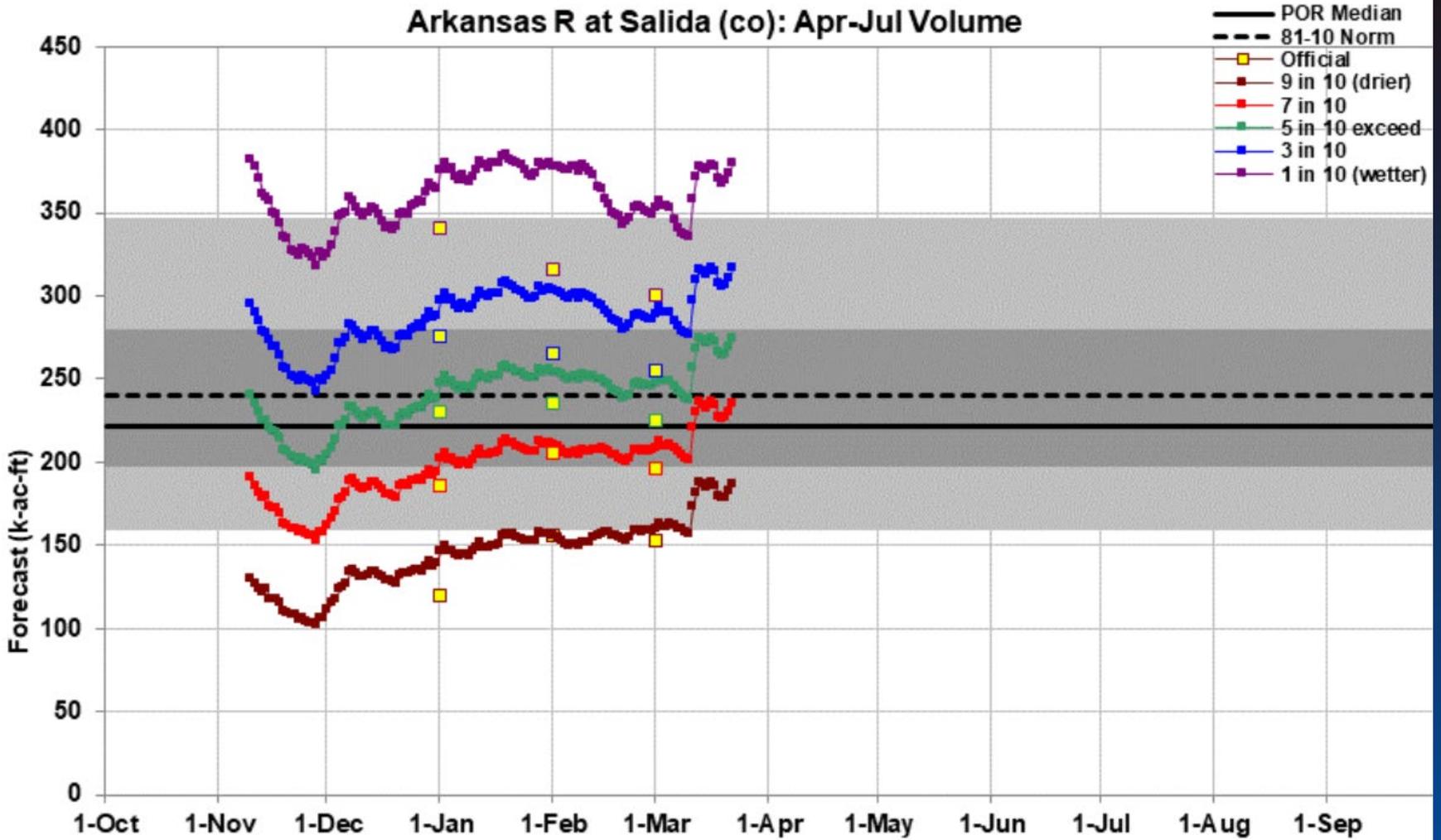
March 1, 2023 - March 23, 2023



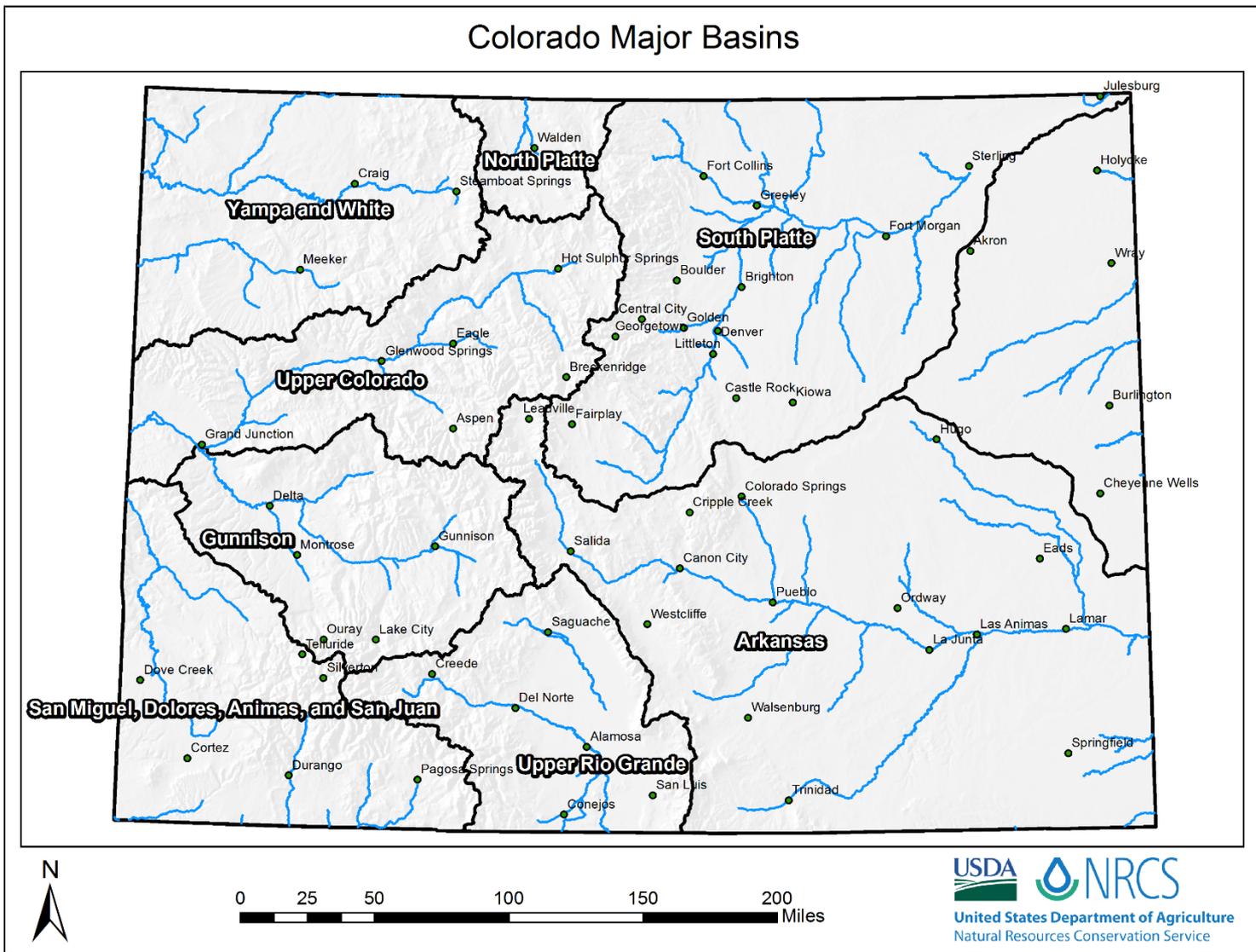
Reservoir Conditions for Arkansas on March 1st 2023







Colorado Statewide Summary

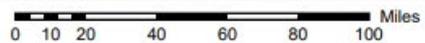
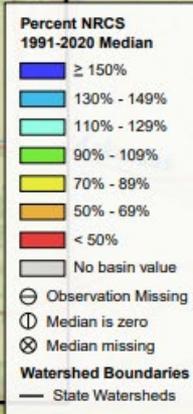
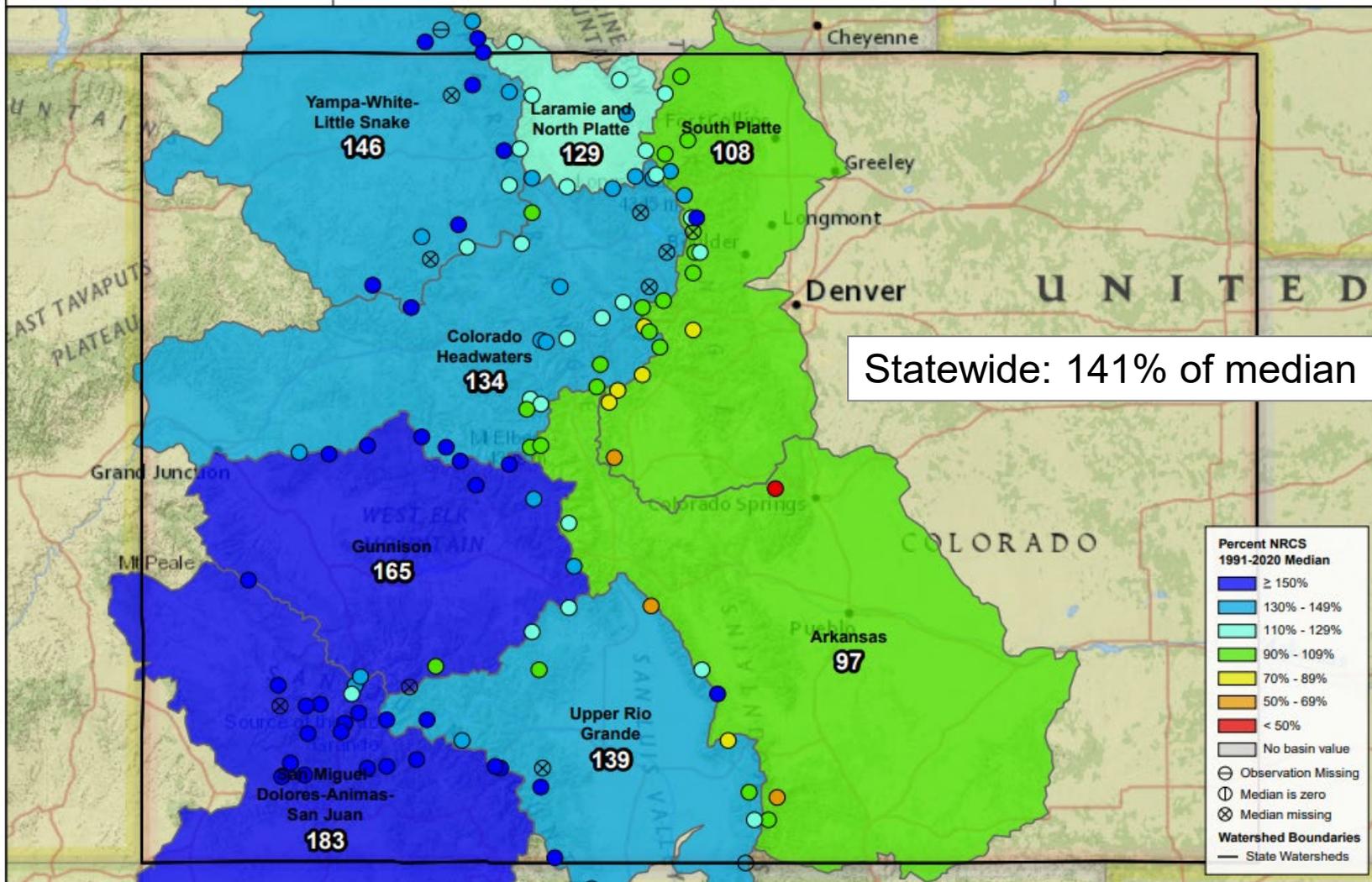




Snow Water Equivalent

Percent NRCS 1991-2020 Median

March 26, 2023, end of day





SNOW WATER EQUIVALENT IN STATE OF COLORADO

Reset Range

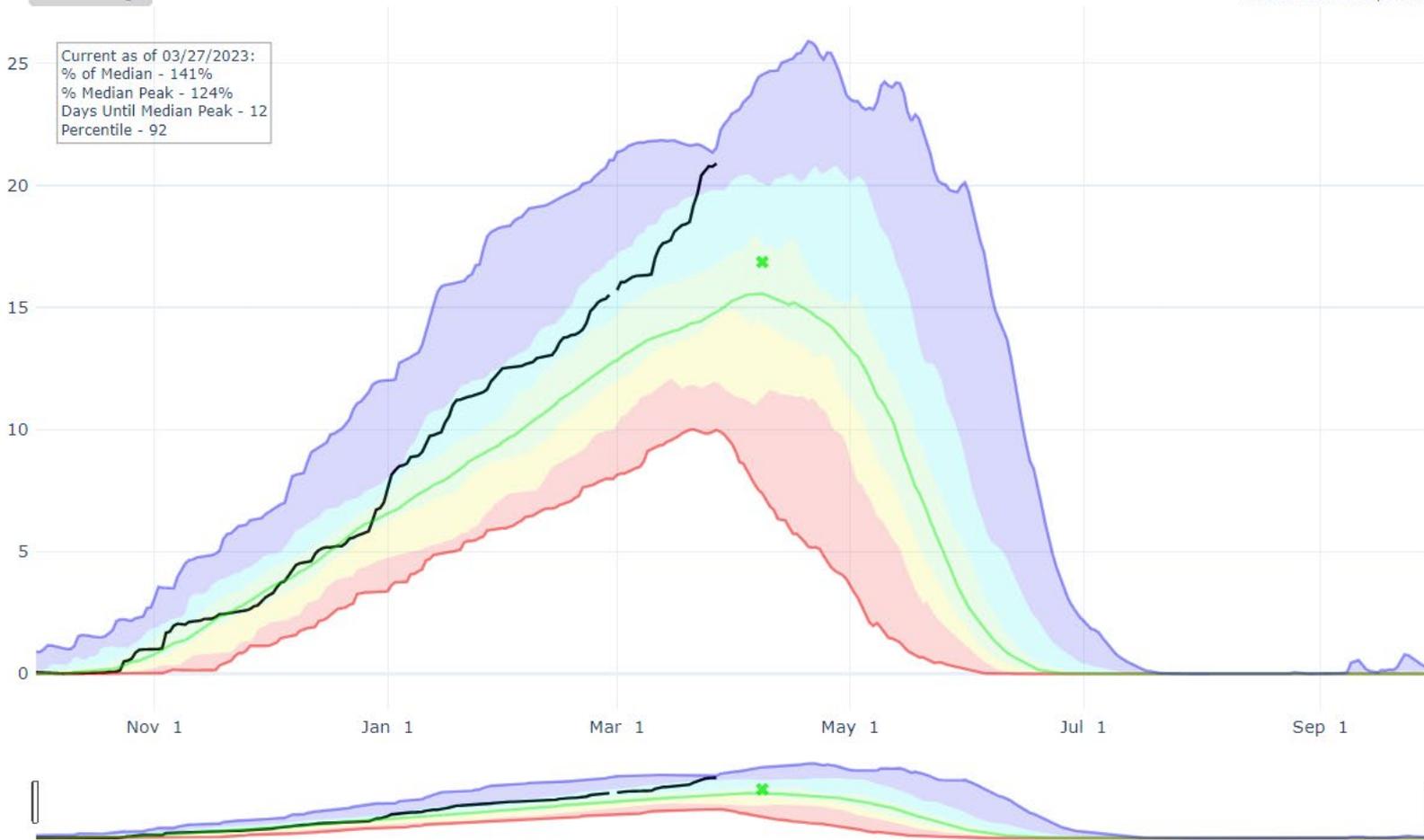
[Link to data: CSV / JSON](#)

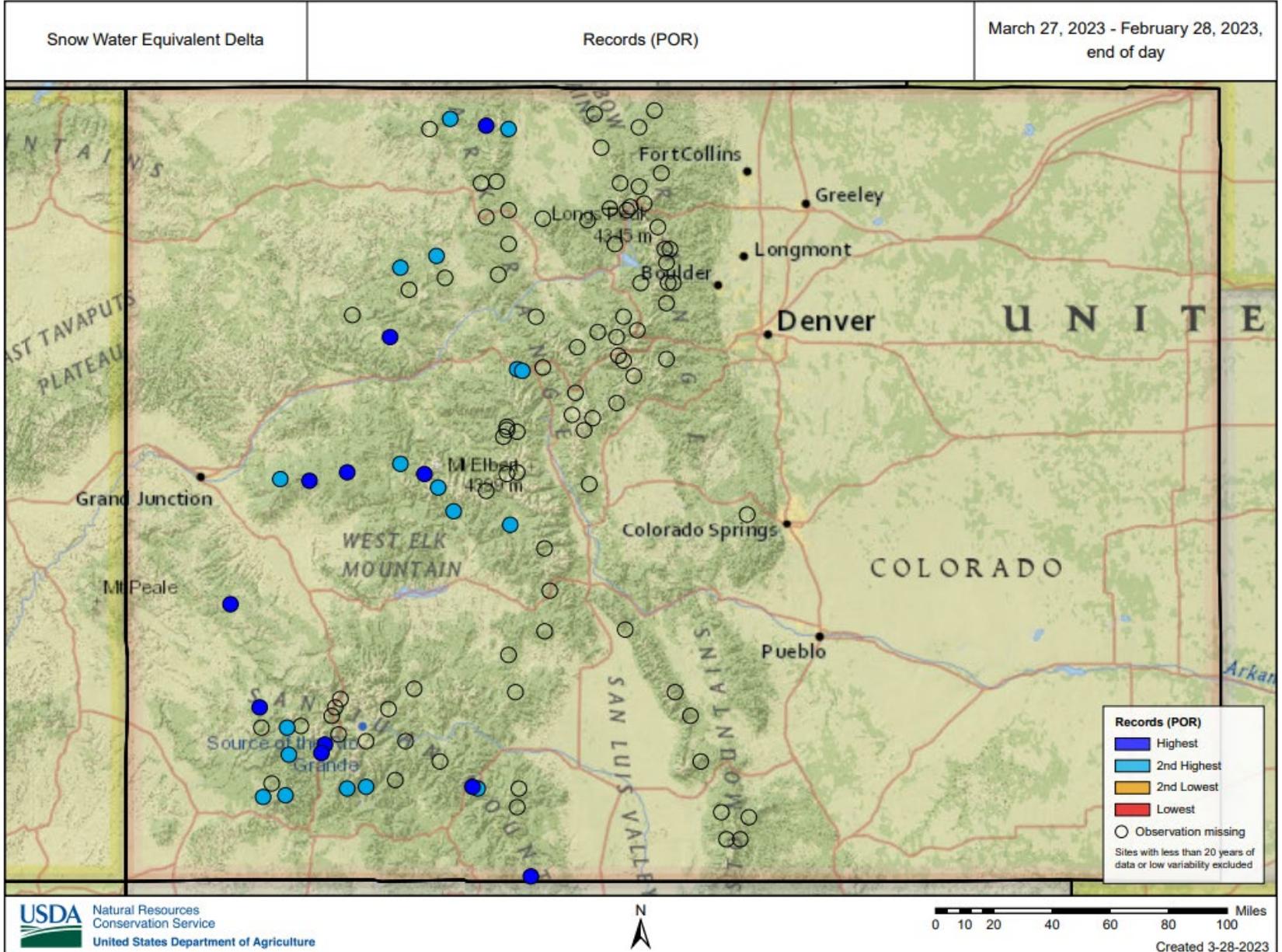
[Station List](#)

Current as of 03/27/2023:
% of Median - 141%
% Median Peak - 124%
Days Until Median Peak - 12
Percentile - 92

- ✖ Median Peak SWE
- Max
- Median (POR)
- Median ('91-'20)
- Min
- Stats. Shading
- 2023 (115 sites)
- 2022 (115 sites)
- 2021 (115 sites)
- 2020 (115 sites)
- 2019 (115 sites)
- 2018 (115 sites)
- 2017 (115 sites)
- 2016 (115 sites)
- 2015 (115 sites)
- 2014 (115 sites)
- 2013 (115 sites)
- 2012 (115 sites)
- 2011 (114 sites)
- 2010 (112 sites)
- 2009 (108 sites)
- 2008 (105 sites)
- 2007 (102 sites)
- 2006 (102 sites)
- 2005 (101 sites)

Snow Water Equivalent (in.)





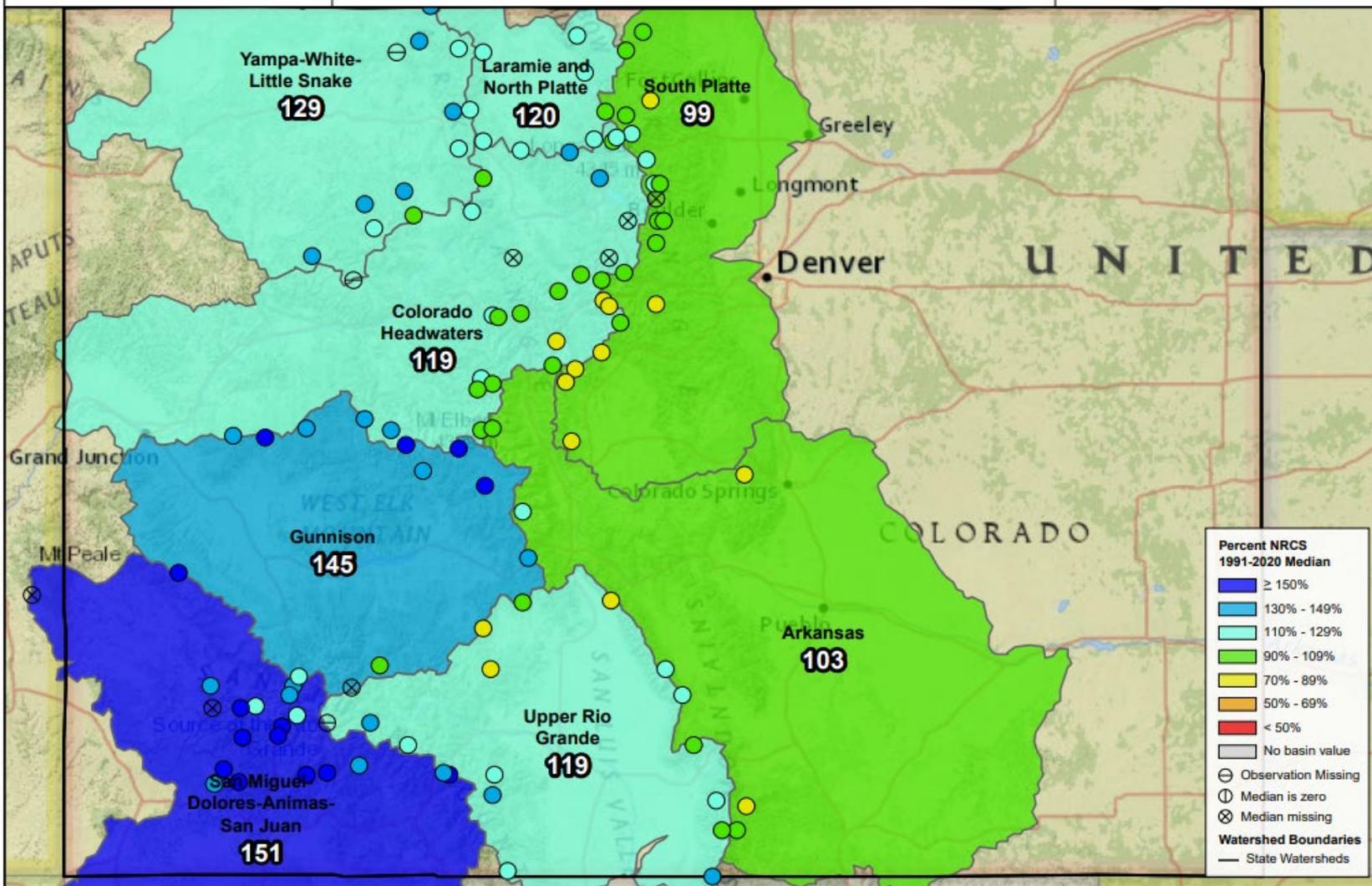


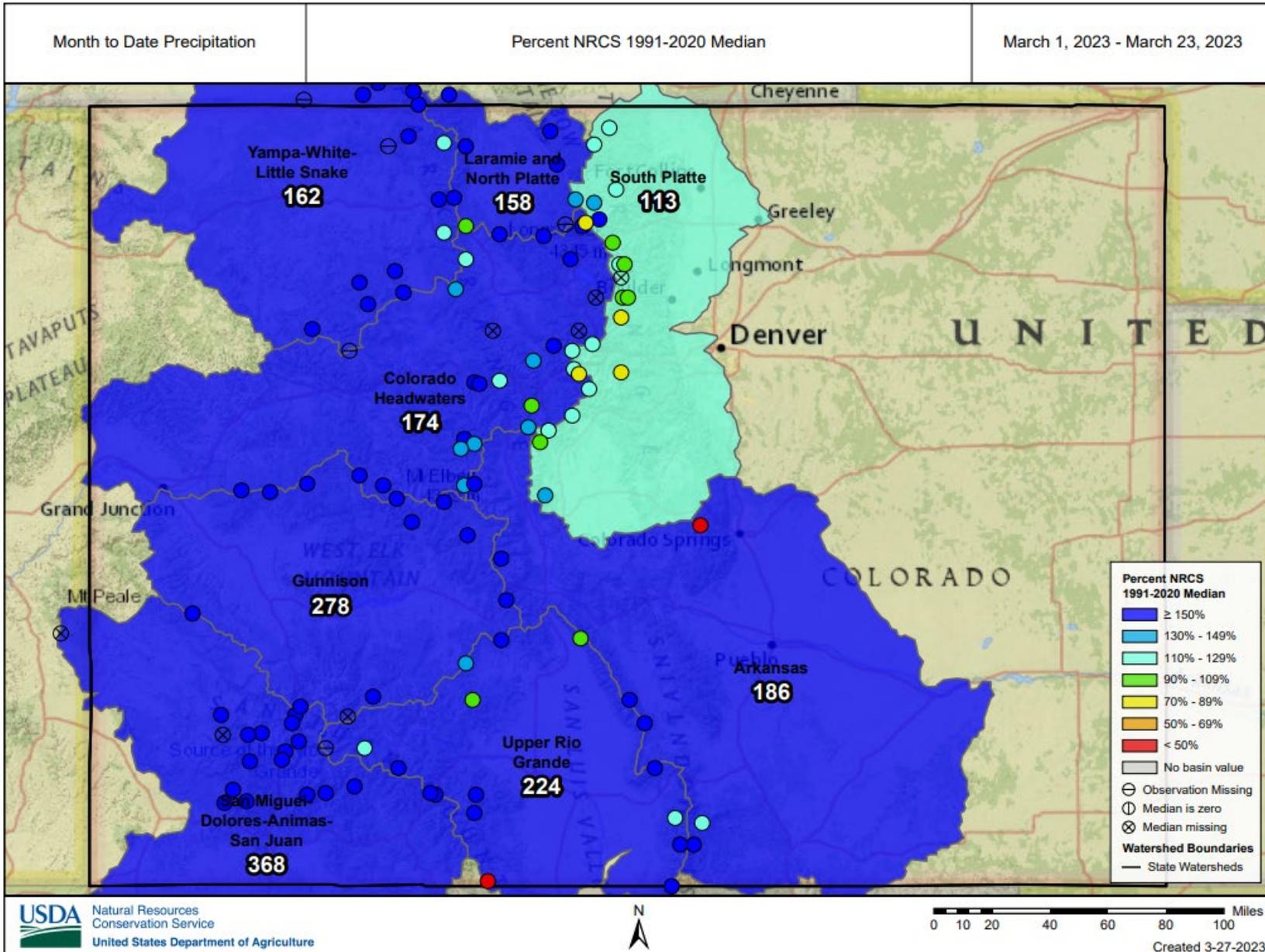
WY Precipitation

Water Year to Date Precipitation

Percent NRCS 1991-2020 Median

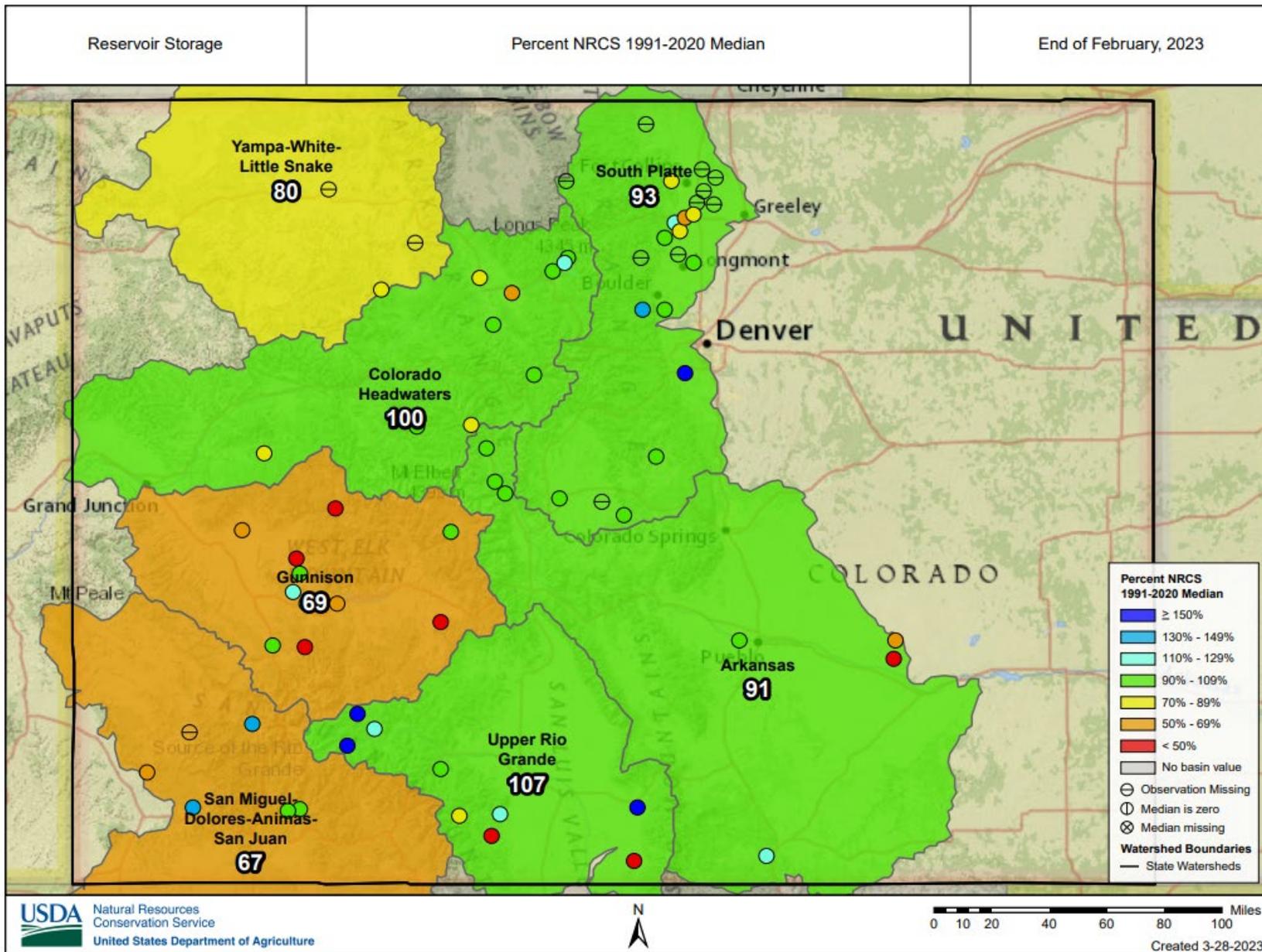
October 1, 2022 - March 23, 2023



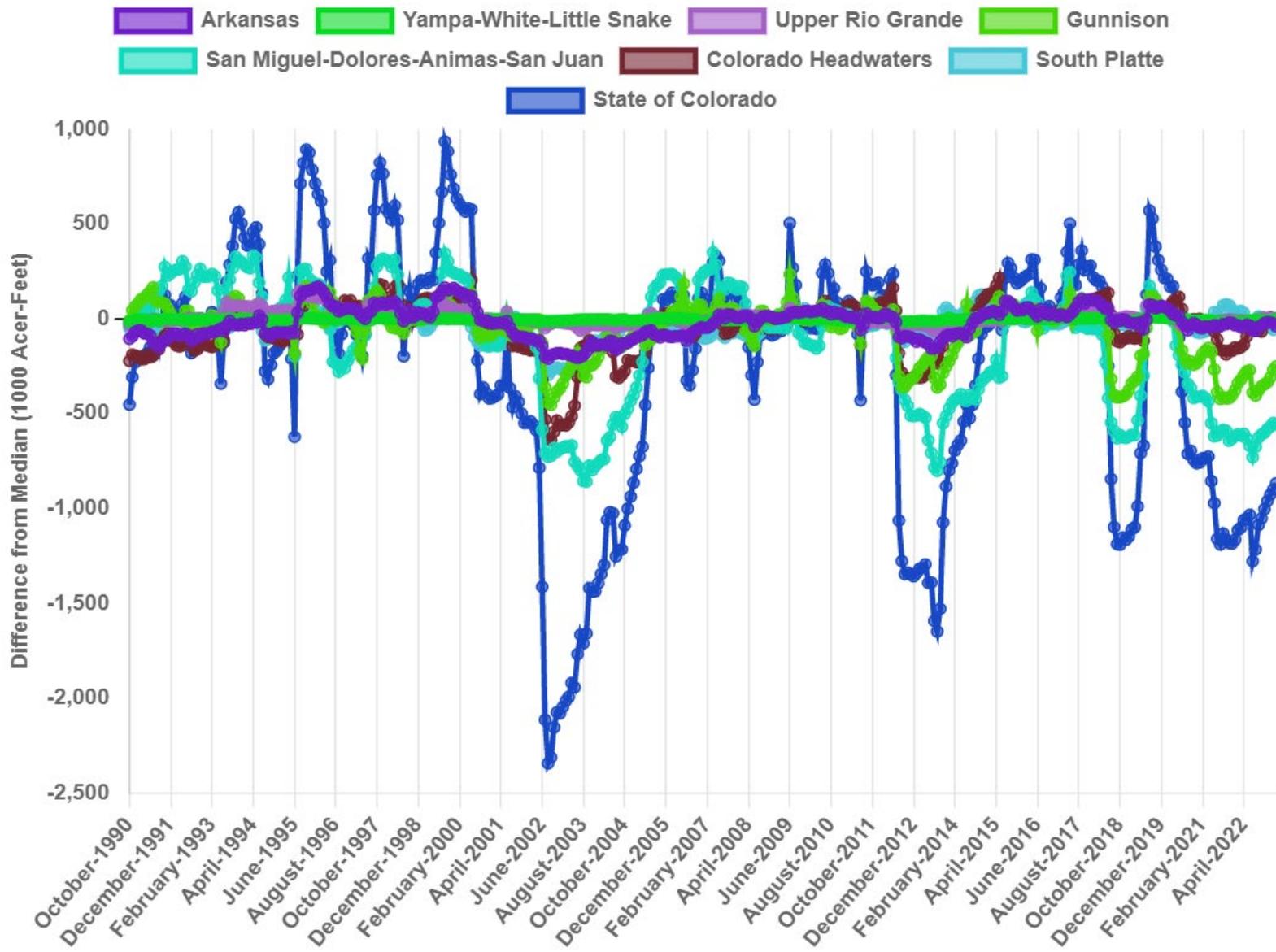




Reservoir Storage

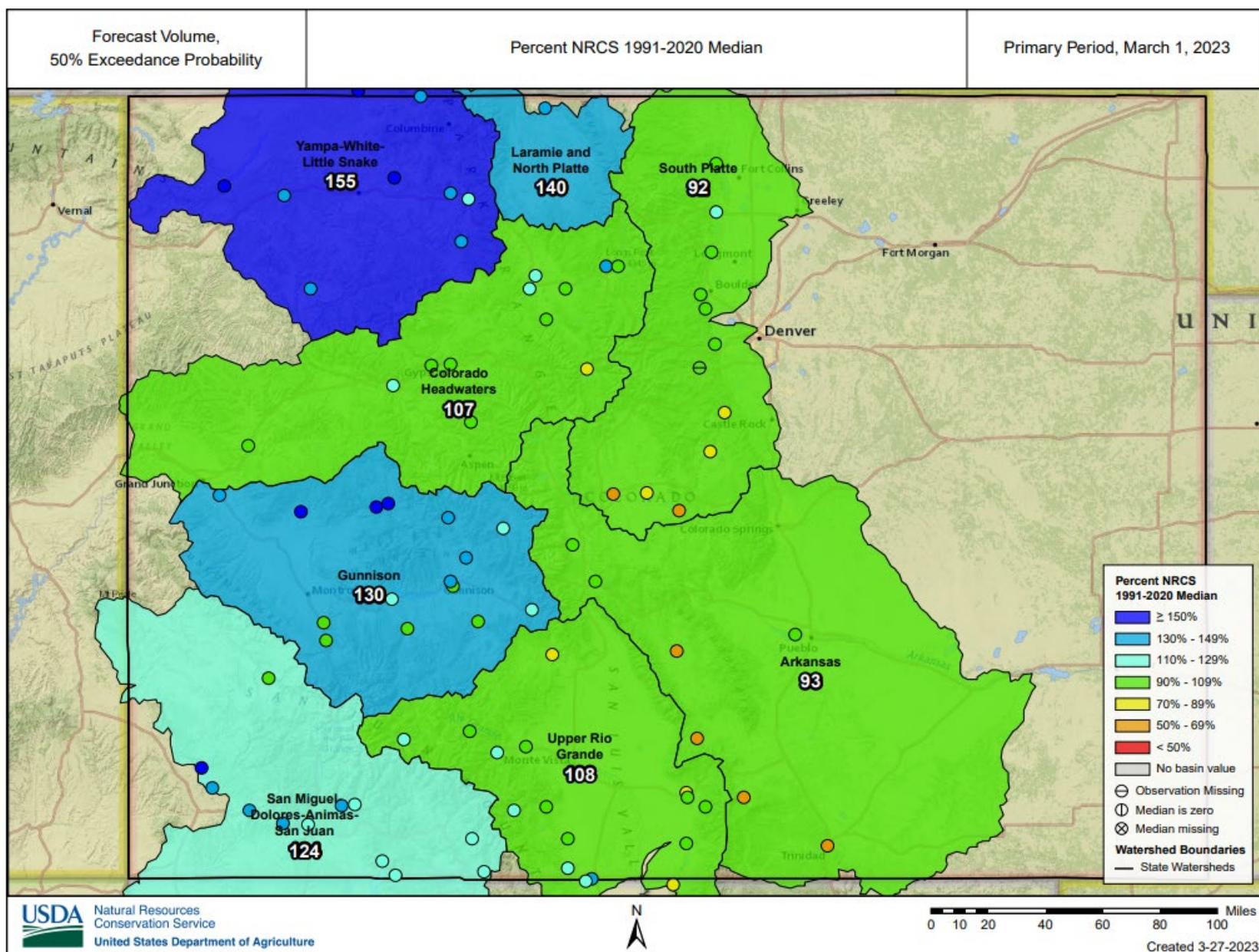


Departure from Median





Streamflow Forecasts



Summary

- The month of March brought well above normal precipitation and snowpack accumulation across Colorado.
 - Most prominently seen in Southwest Colorado.
- All major basins are holding above normal snowpack with the exception of the Arkansas.
 - The combined basins of Southwest Colorado have reached record snowpack for this time of year.
- March 1st Streamflow Forecasts were for above normal seasonal volumes in all major basins except the Arkansas and South Platte. Forecasts within these basins are also highly variable.
 - Forecasts in many areas are anticipated to be substantially higher for April 1st forecasts after an extremely wet March.
- Reservoir storage remains highly variable across Colorado with the Gunnison and combined Southwest Basins holding substantially less water than any other basins.
 - The basins that are holding the lowest reservoir storage also have the most plentiful snowpack which is encouraging for replenishing storage volumes.



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