Water Availability Task Force Meeting
May 19th, 2022

NRCS Snow Survey and Water Supply Forecasting Program

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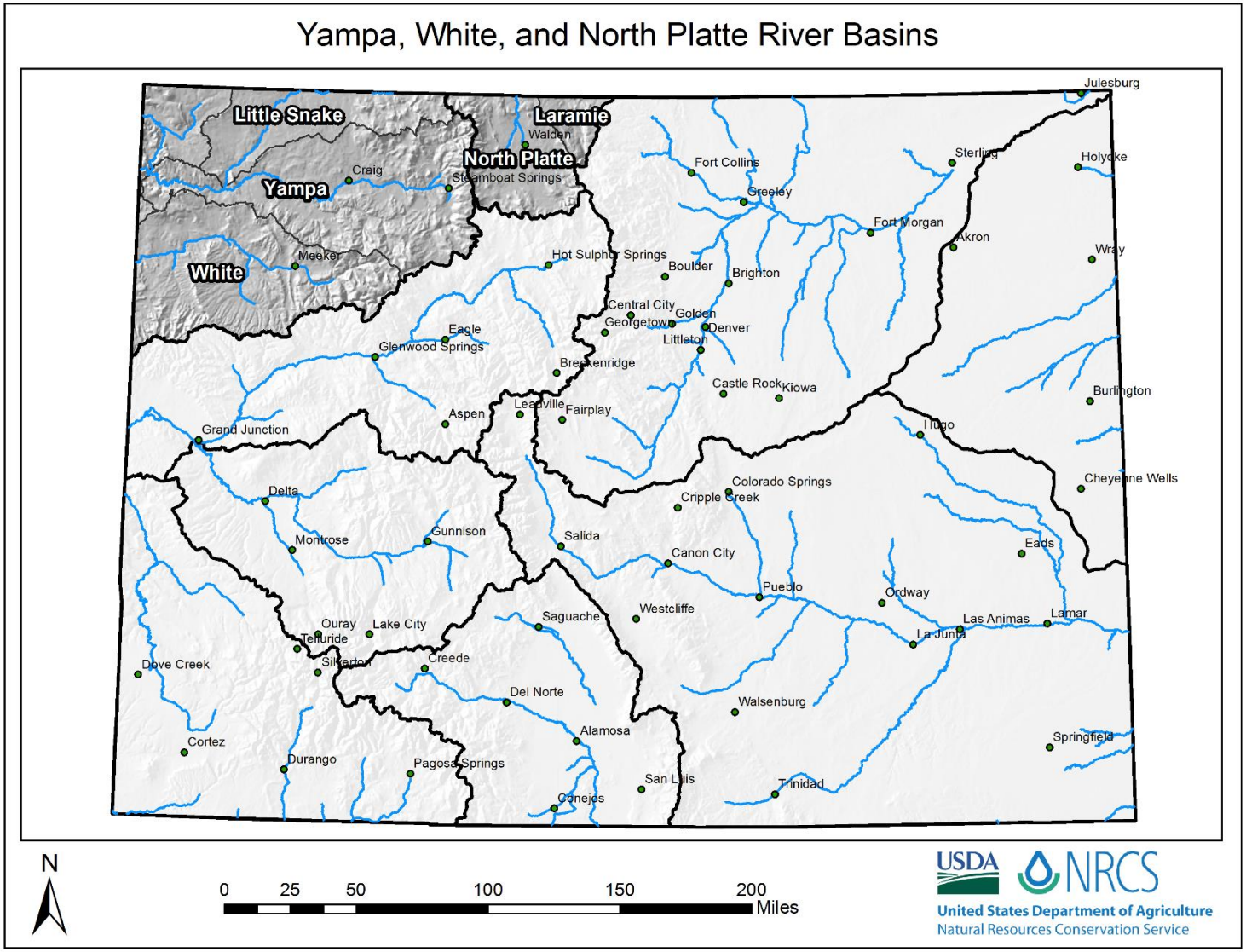
http://www.nrcs.usda.gov/wps/portal/nrcs/main/co/snow/

Major Basin Summary



Soil Moisture

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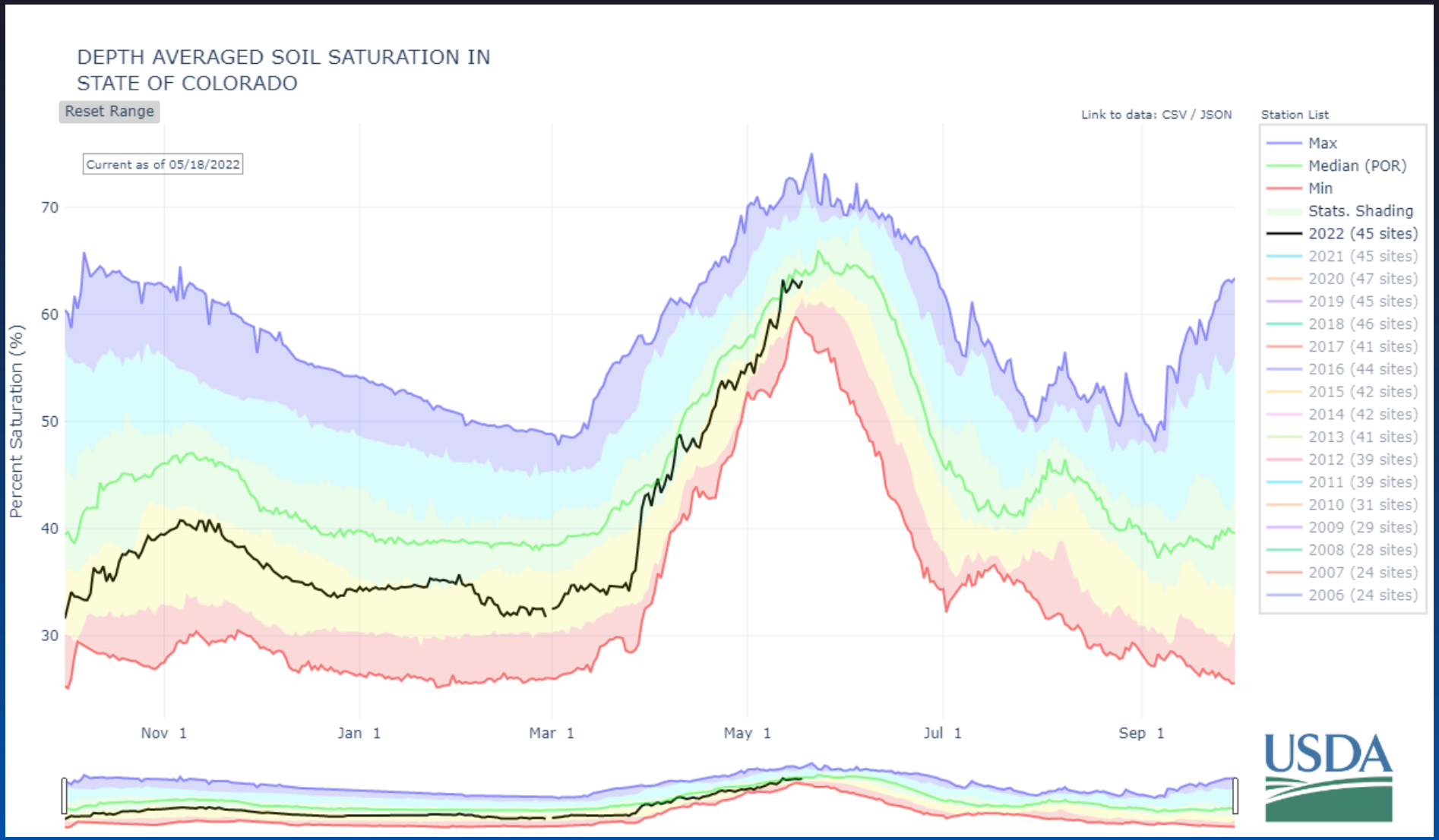
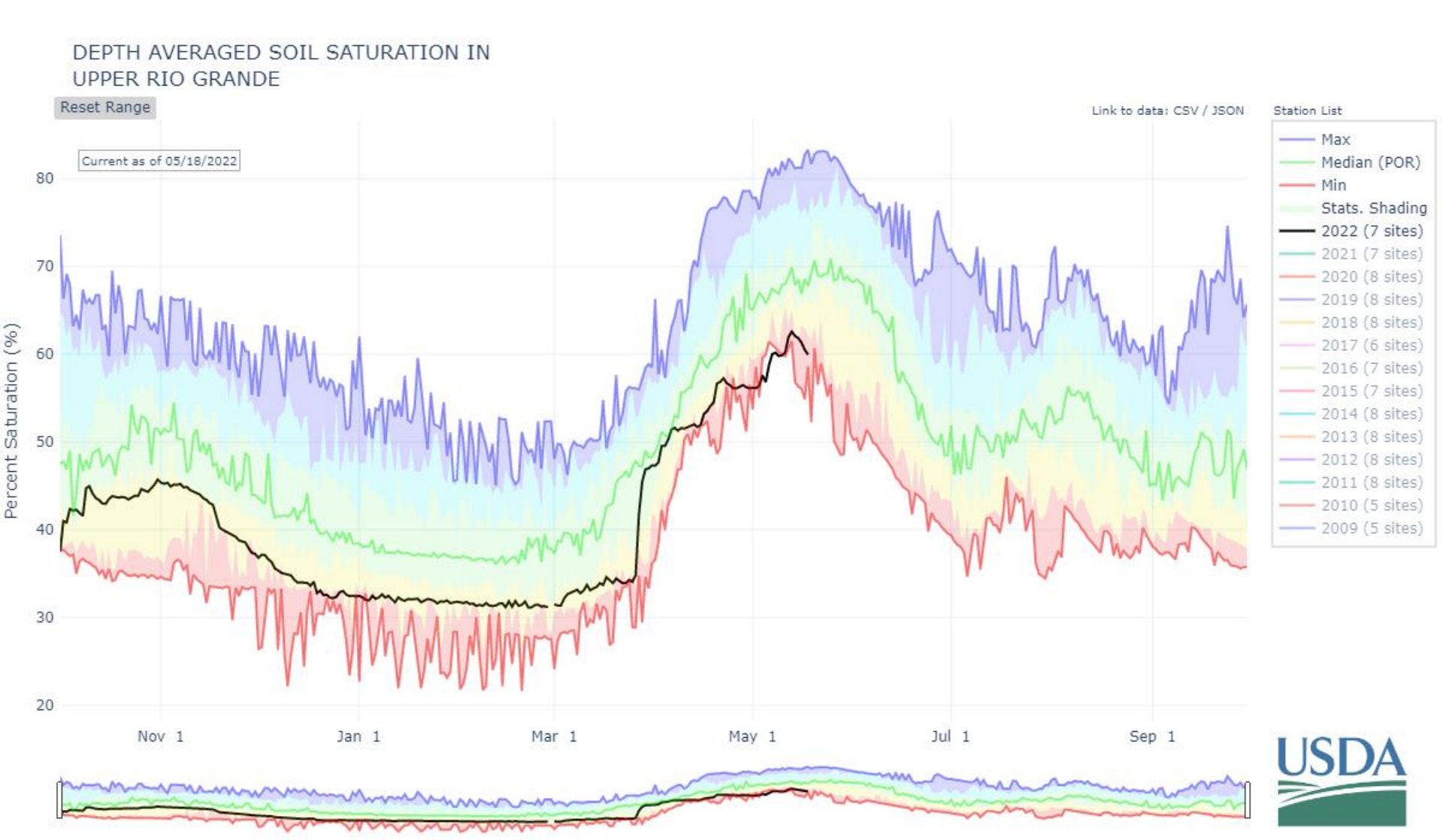
Colorado Snow Surveys



USDA

Colorado Snow Surveys



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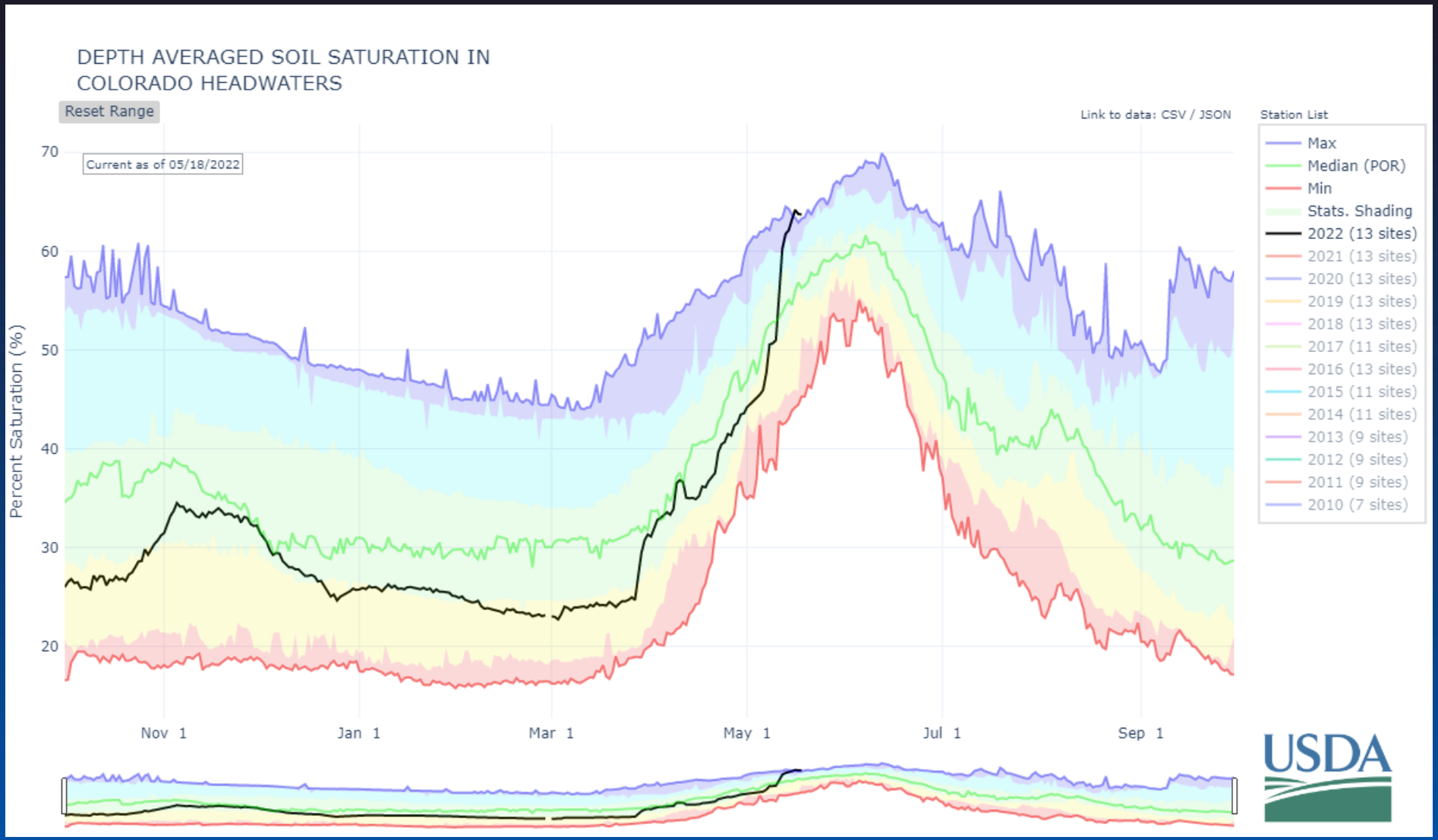
Colorado Snow Surveys



USDA

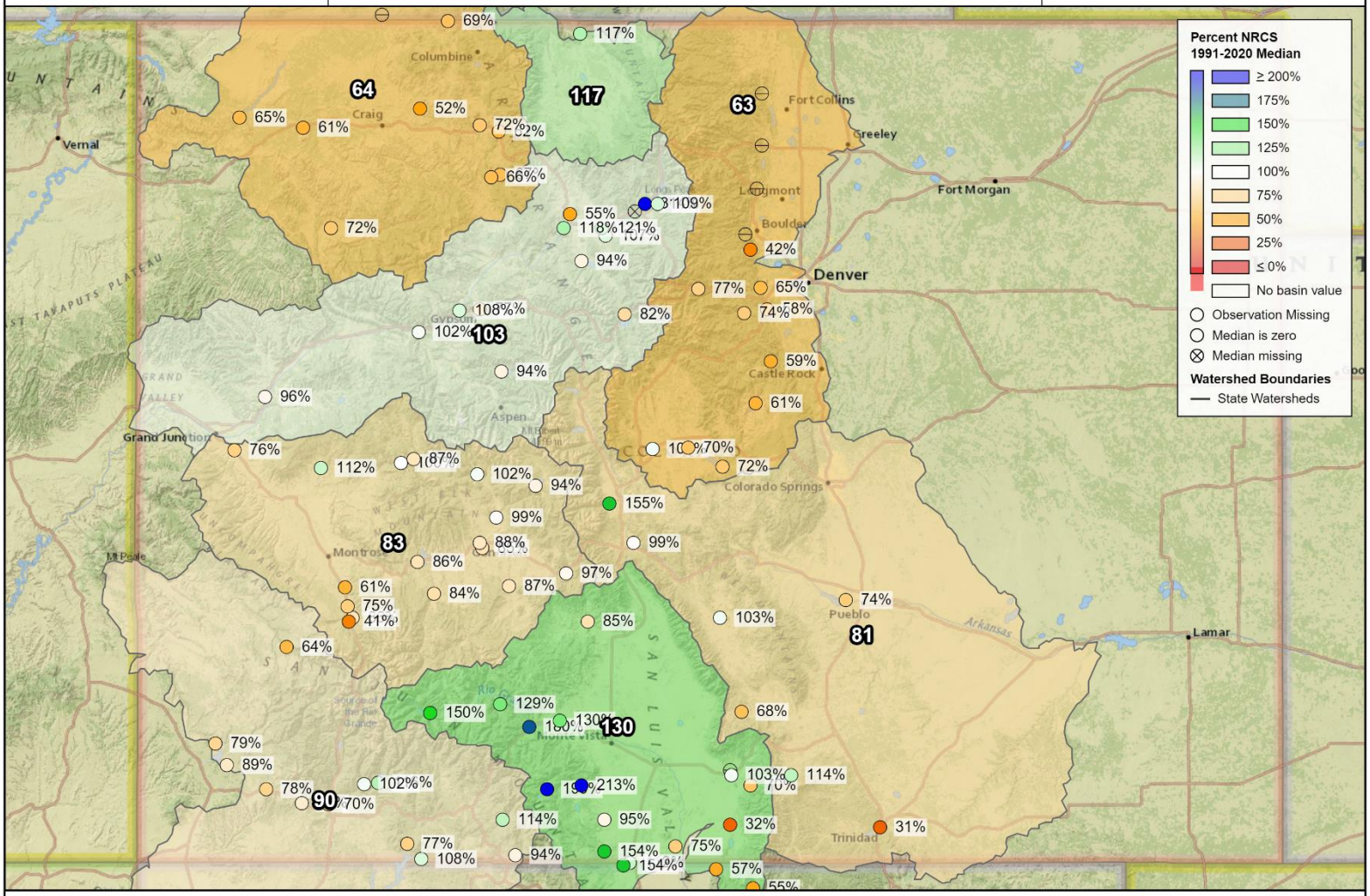
Soil Moisture Data

- Soil Moisture data still new
  - Need time to quality control. So data may change.
  - Soils should saturate during snowmelt.
- Low soil moisture trough winter across all basins concerning
- What to watch – recession after snowpack melt
  - Percent of normal
  - Rate of recession – drying out faster than normal

Streamflow

Colorado Snow Surveys

1 month Adjusted Volume, Observed	Statewide Apr Strmflow Percent NRCS 1991-2020 Median	April 1, 2022 - April 30, 2022



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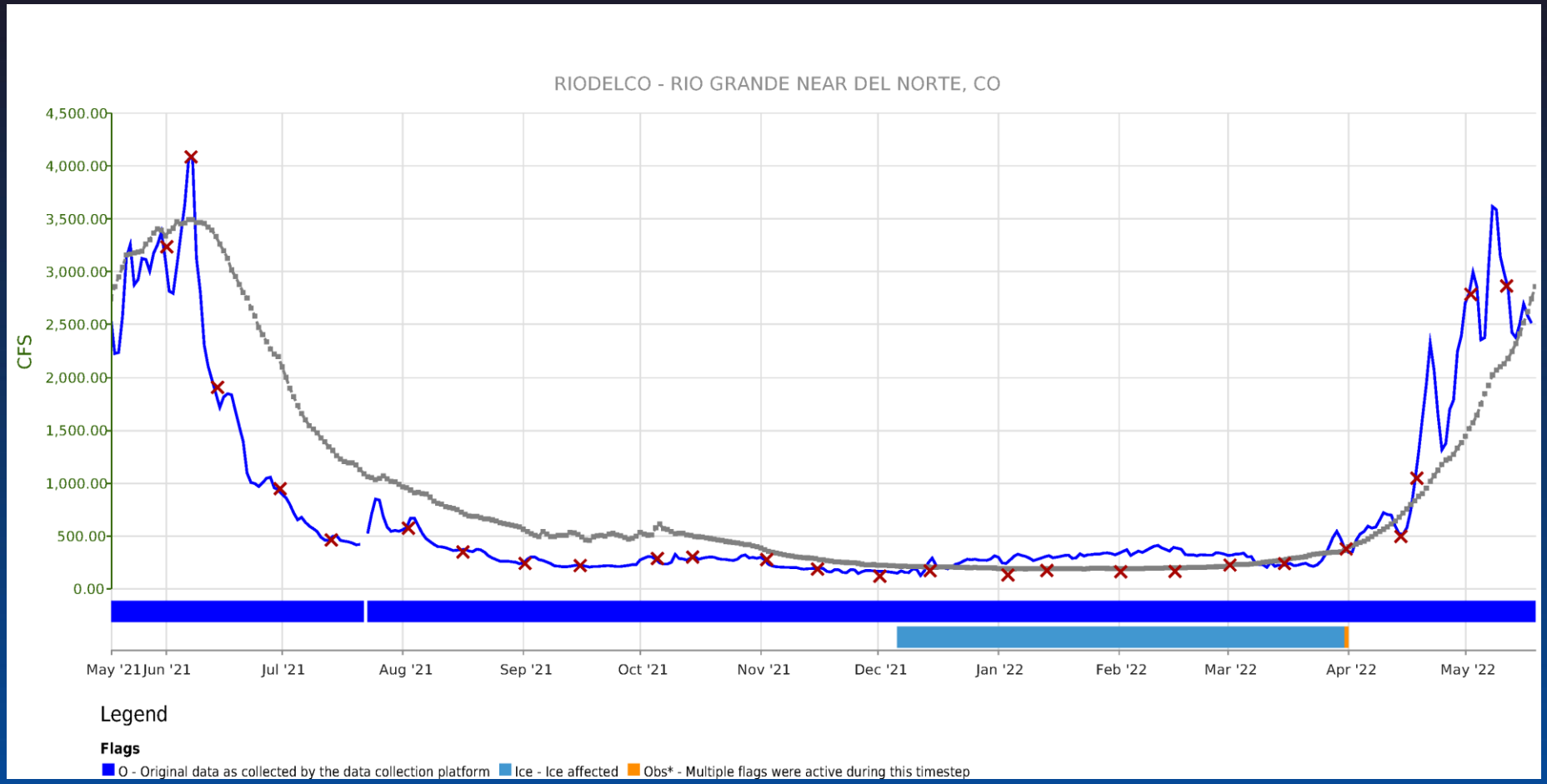
Colorado Snow Surveys



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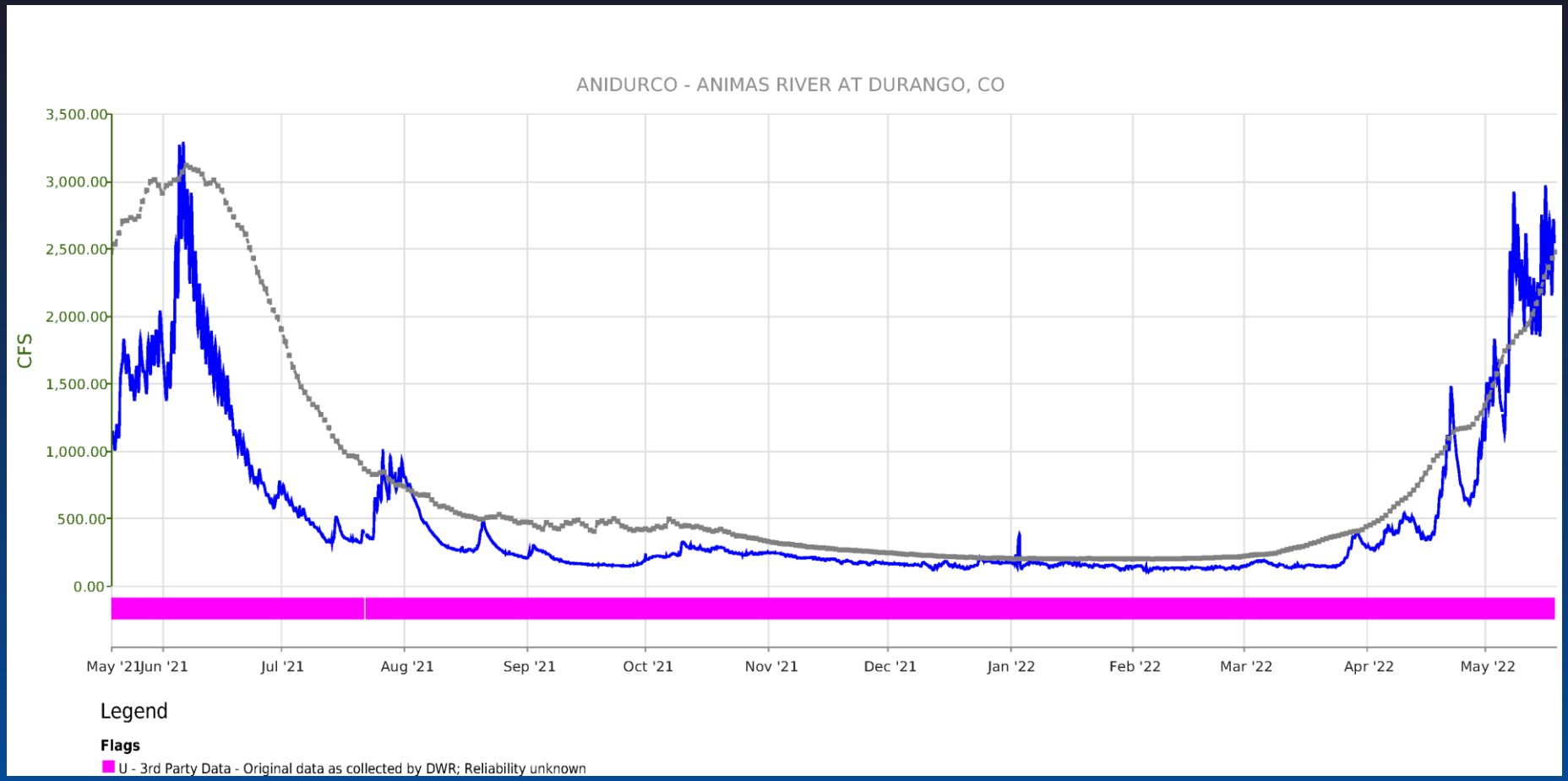
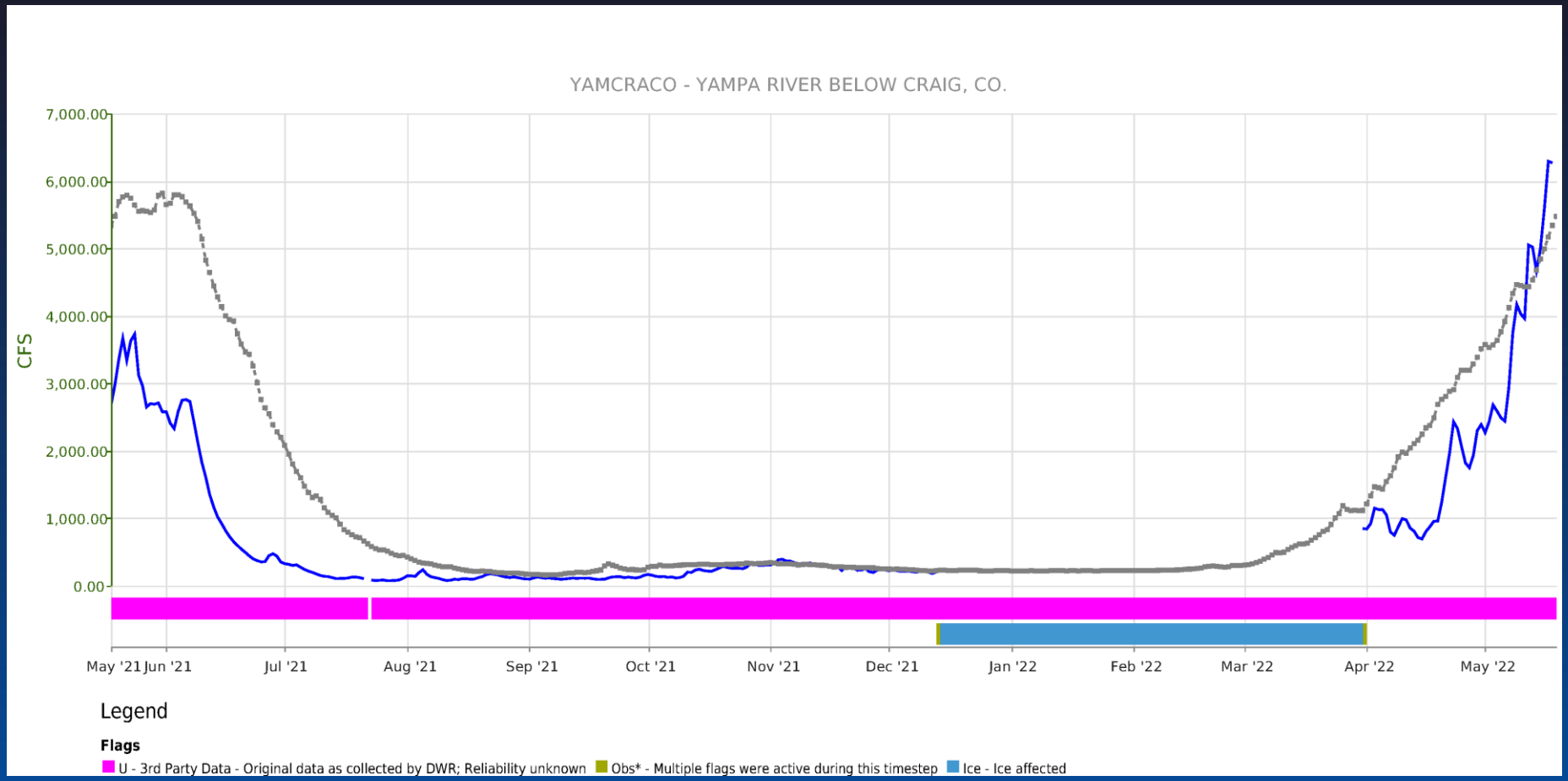
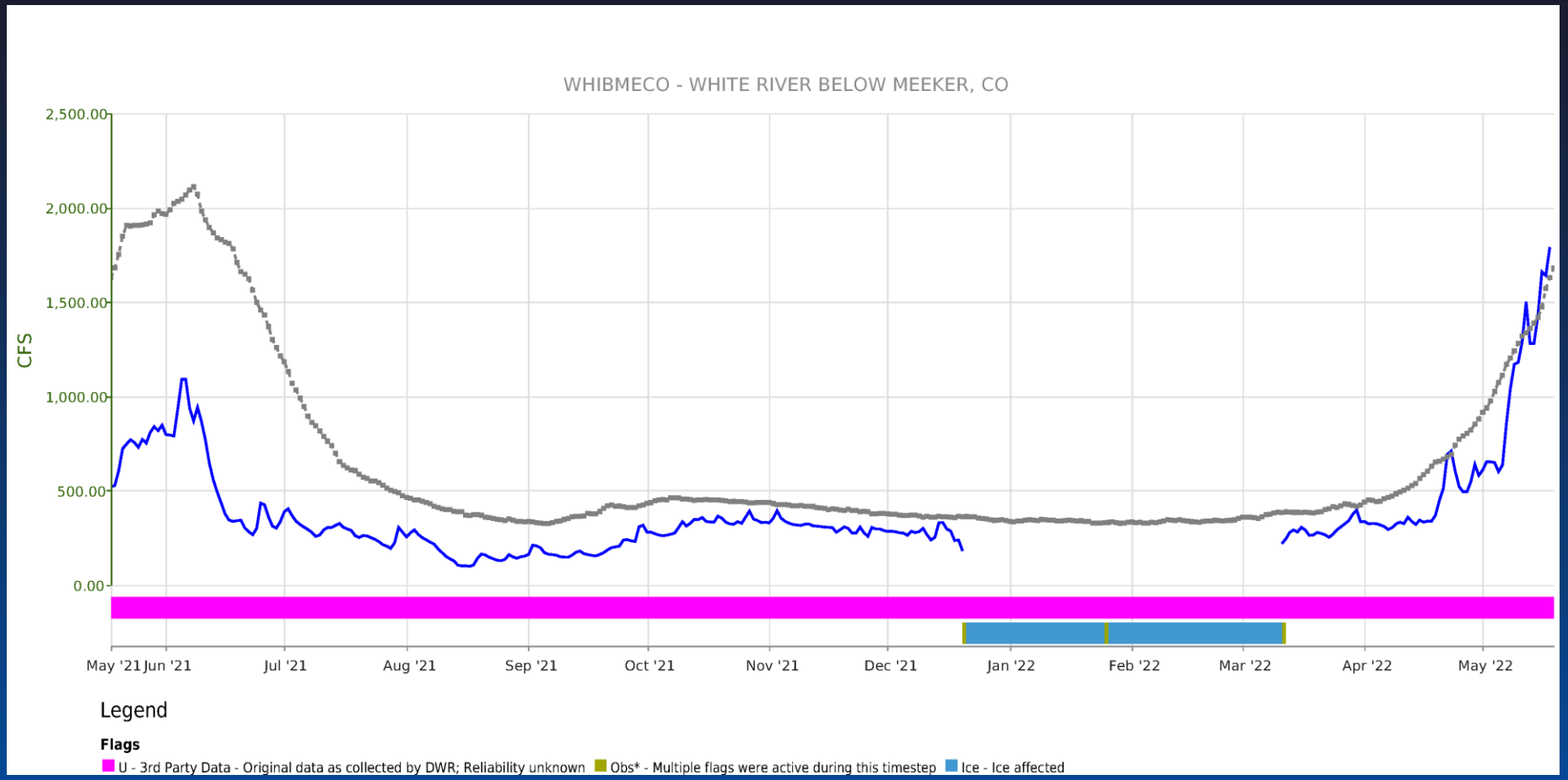
Colorado Snow Surveys



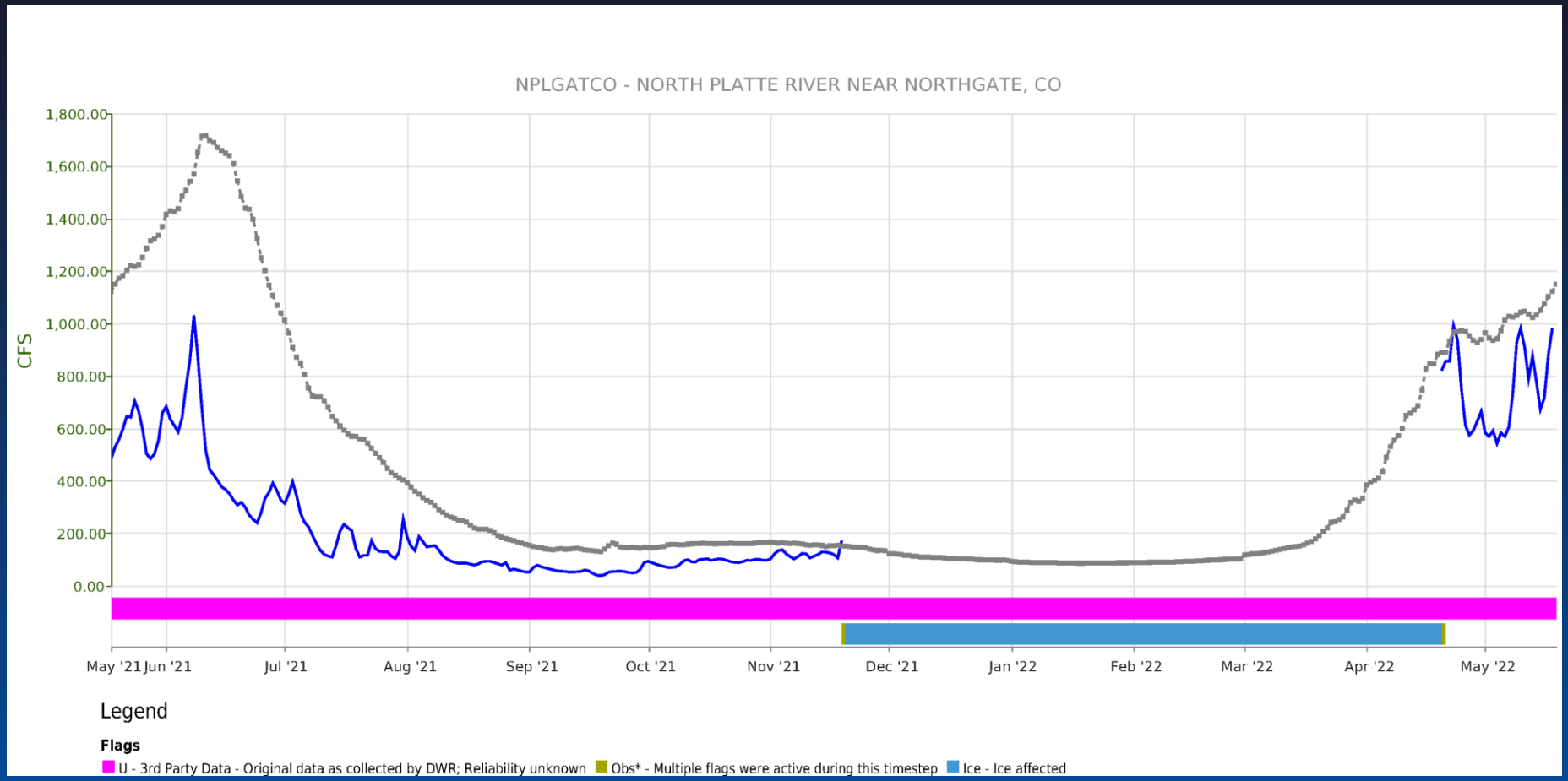
Colorado Snow Surveys



Colorado Snow Surveys

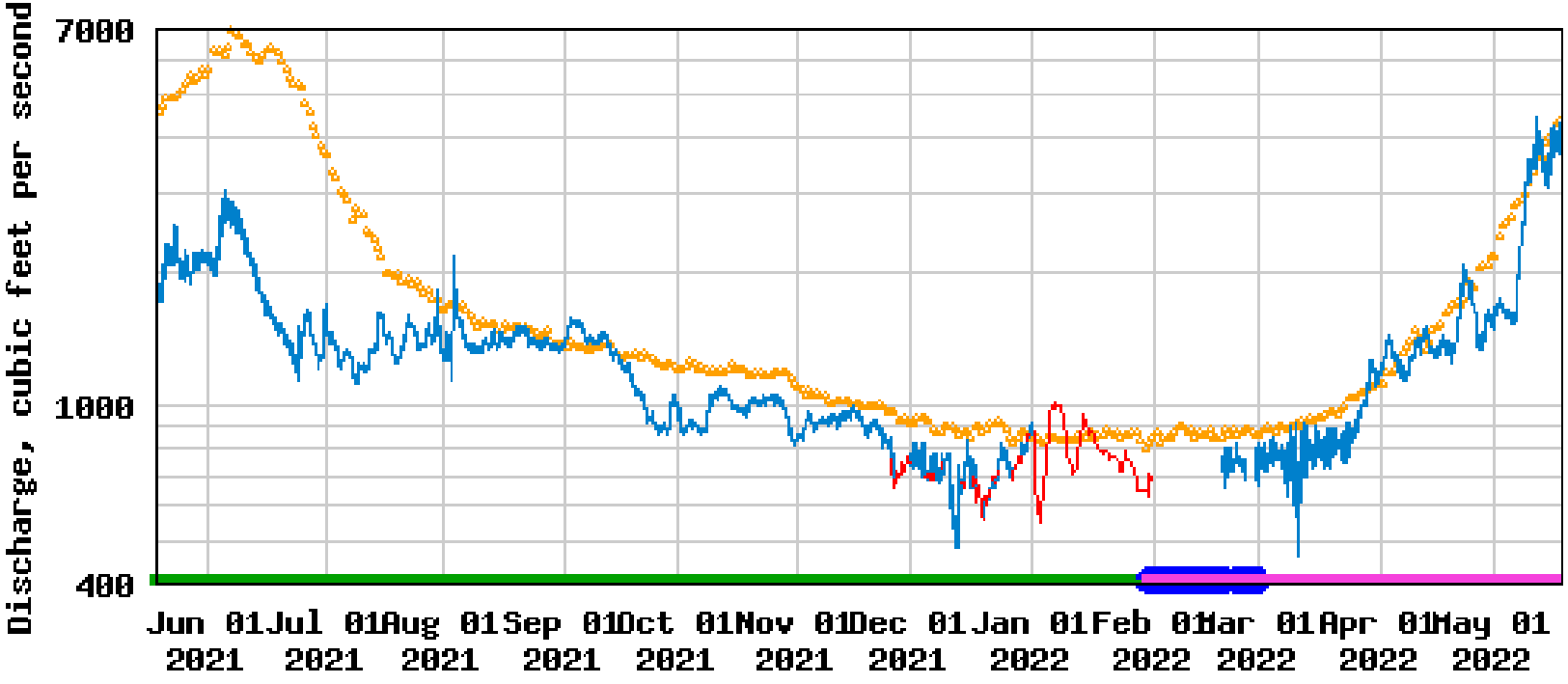


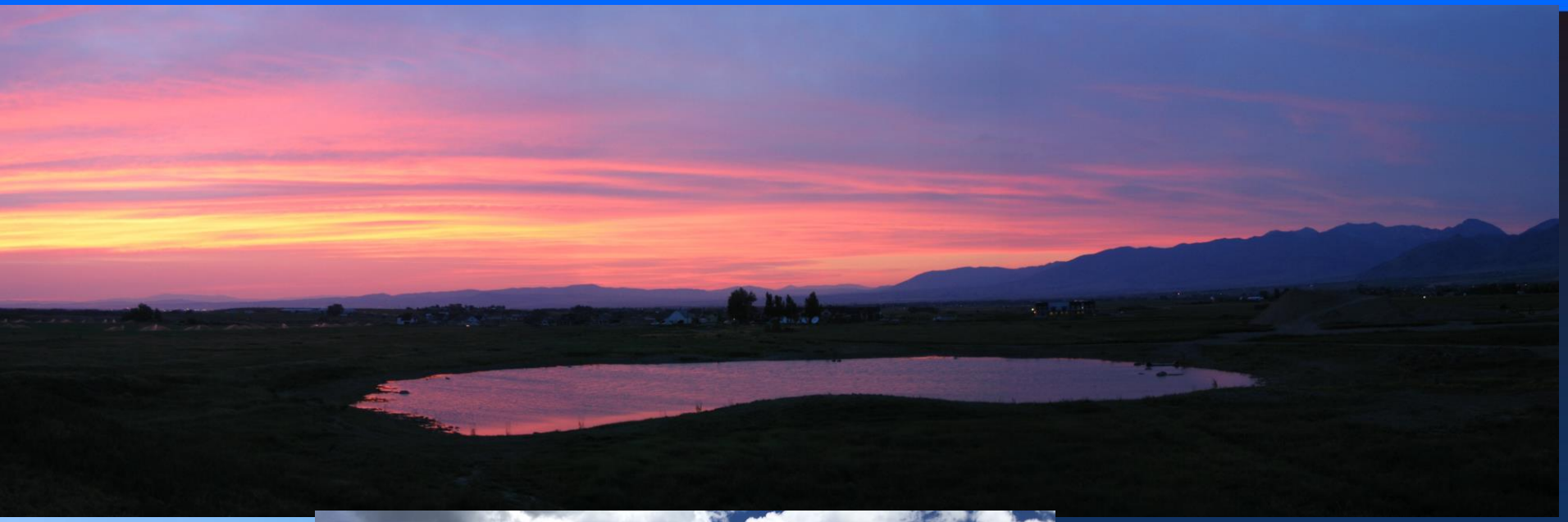
Colorado Snow Surveys



USGS

USGS 09070500 COLORADO RIVER NEAR DOTSERO, CO

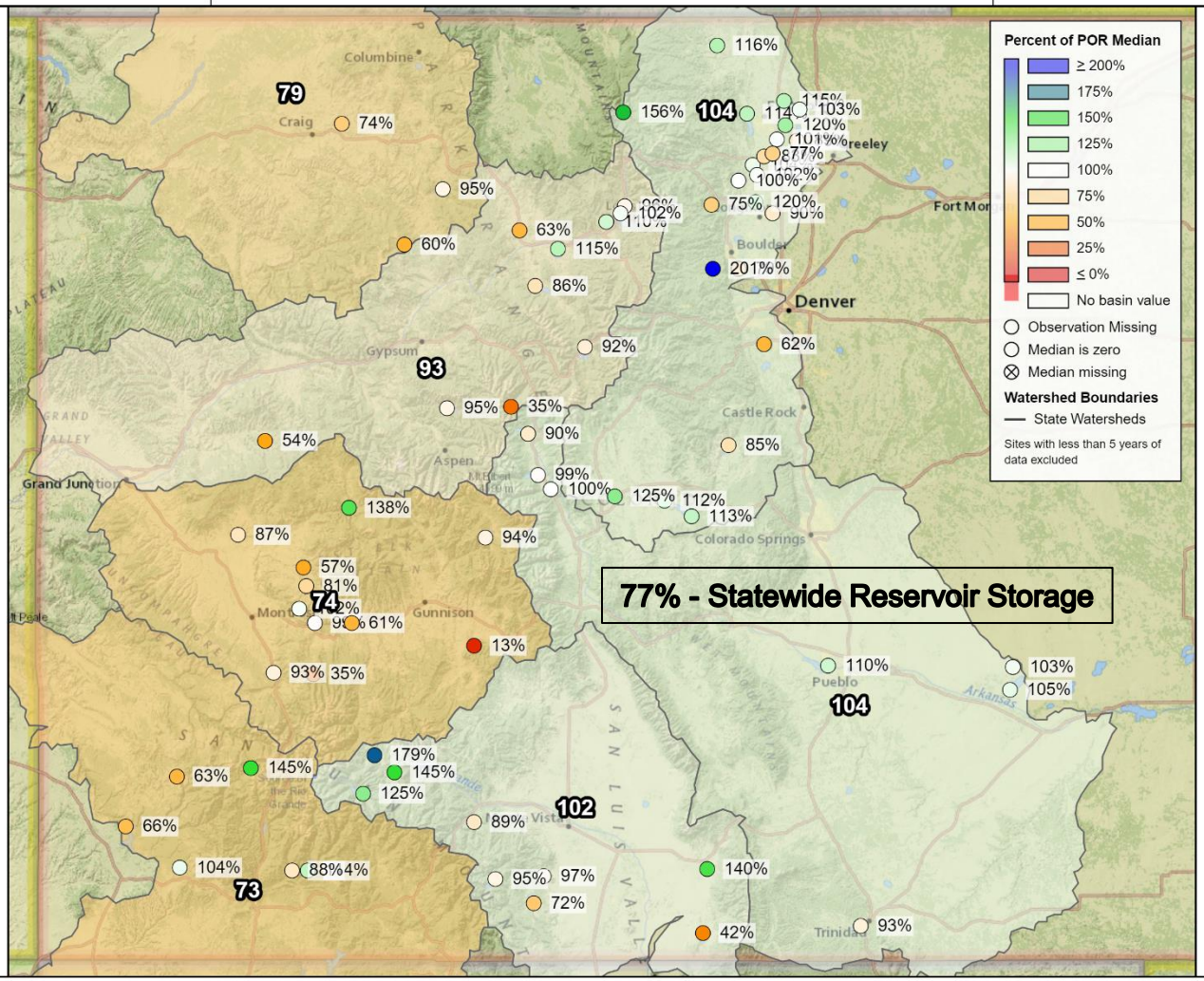




Reservoirs

Colorado Snow Surveys

Reservoir Storage	Statewide Reservoirs Percent of POR Median	End of April, 2022



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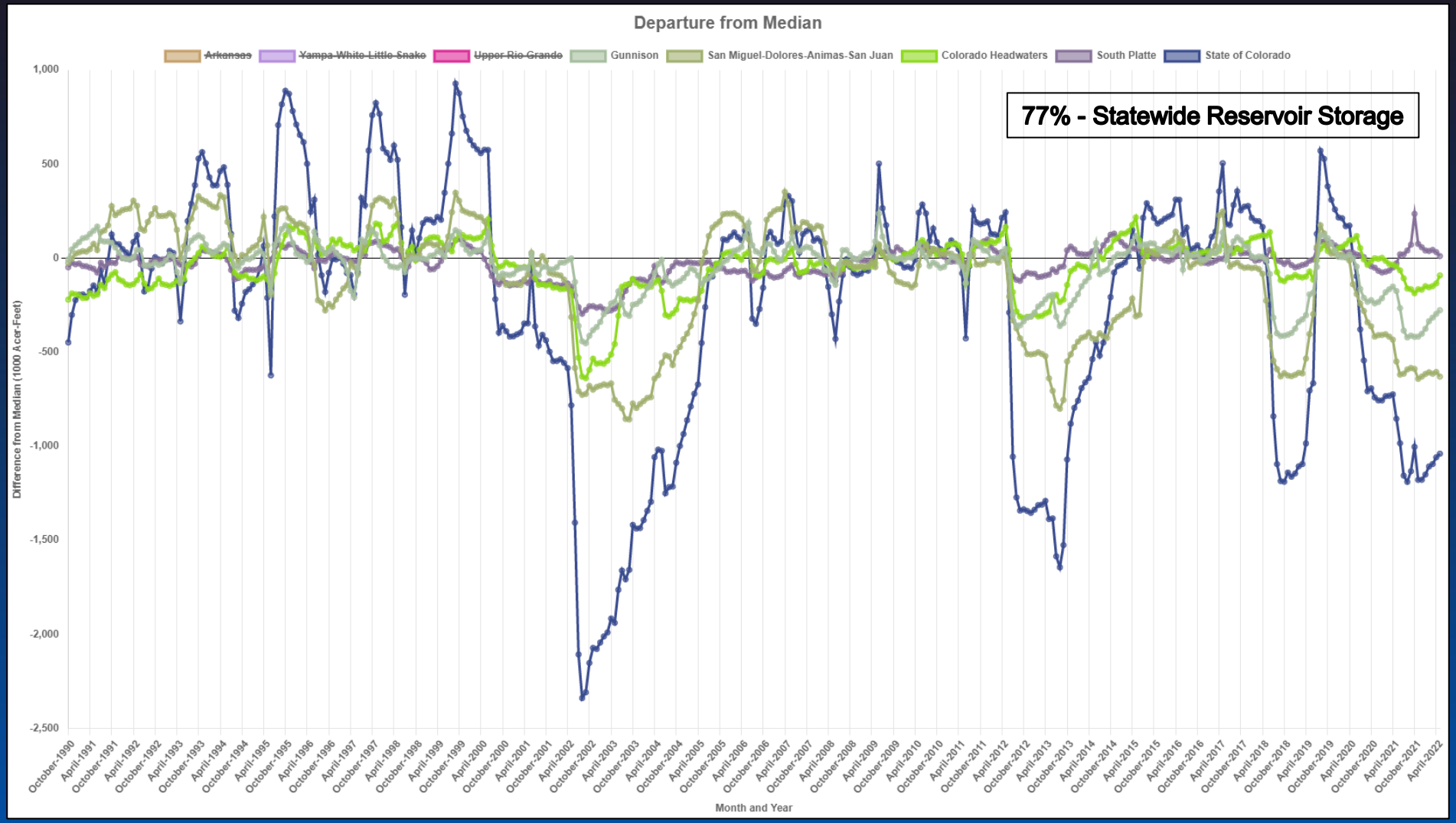
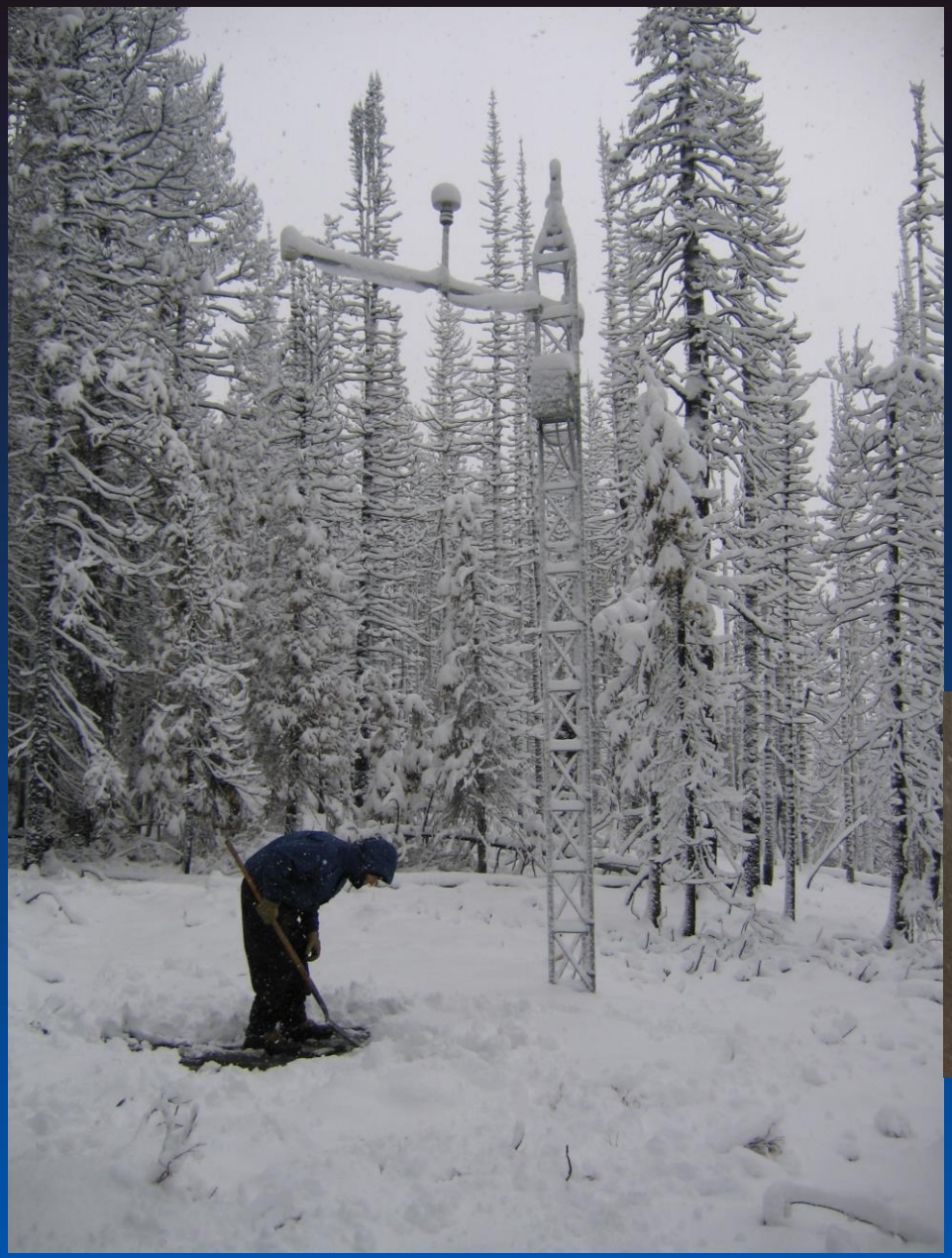
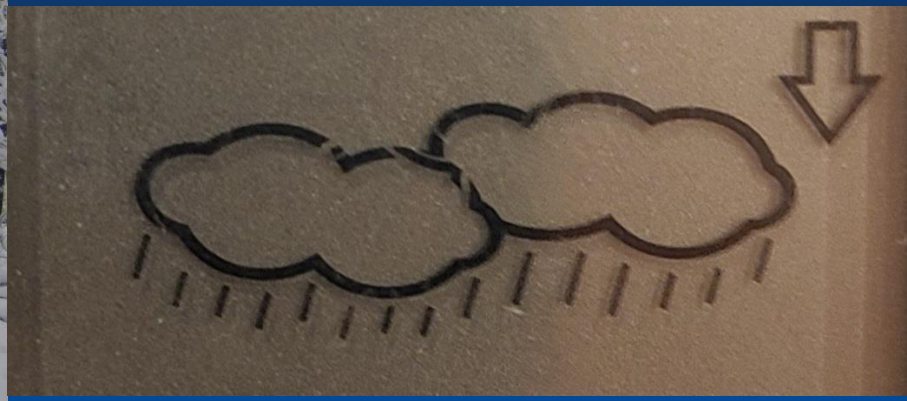
Colorado Snow Surveys

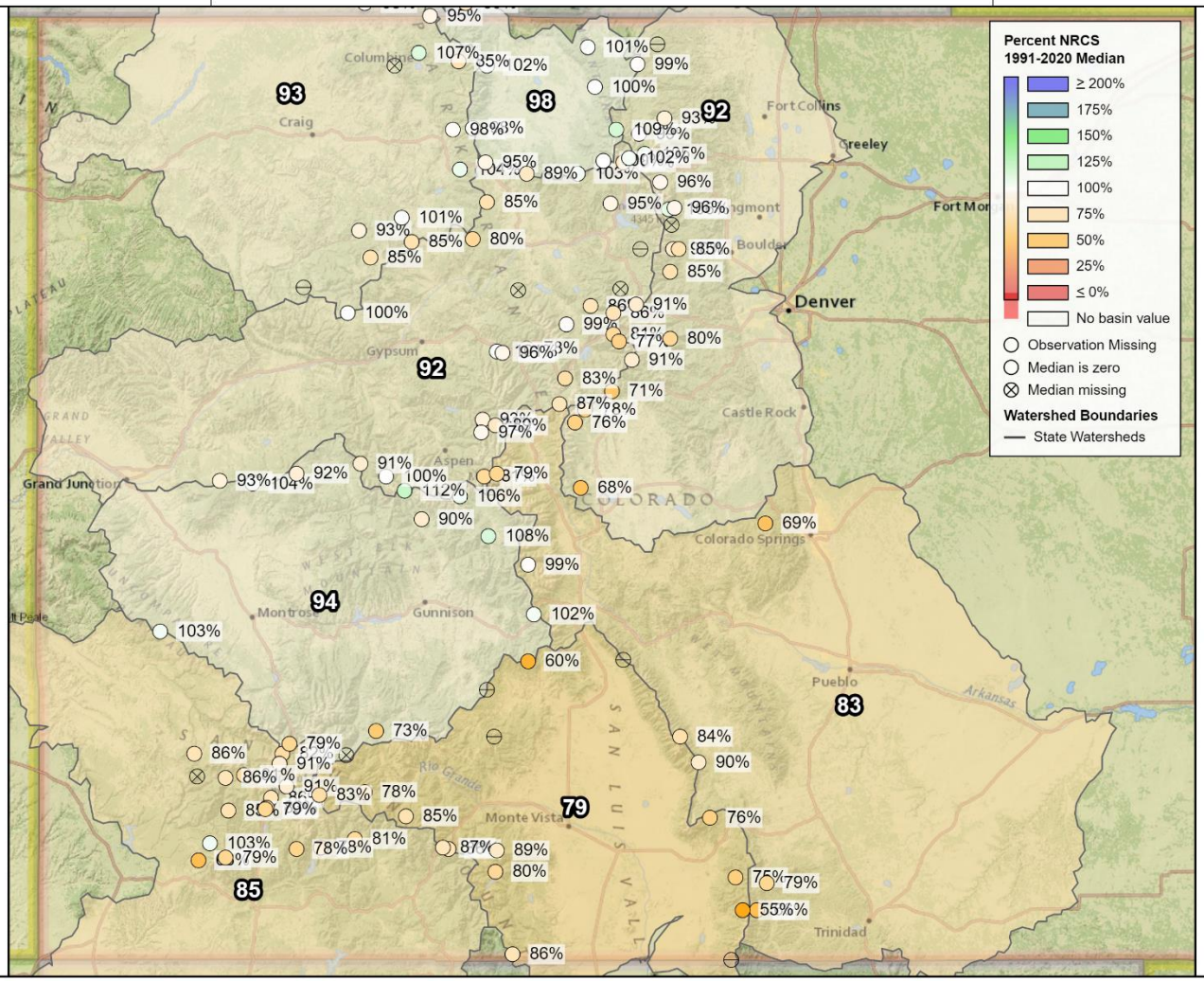




Precipitation



Water Year to Date Precipitation	Statewide YTD Precipitation Percent NRCS 1991-2020 Median	October 1, 2021 - May 17, 2022



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N

0 10 20 40 60 80 100 Miles

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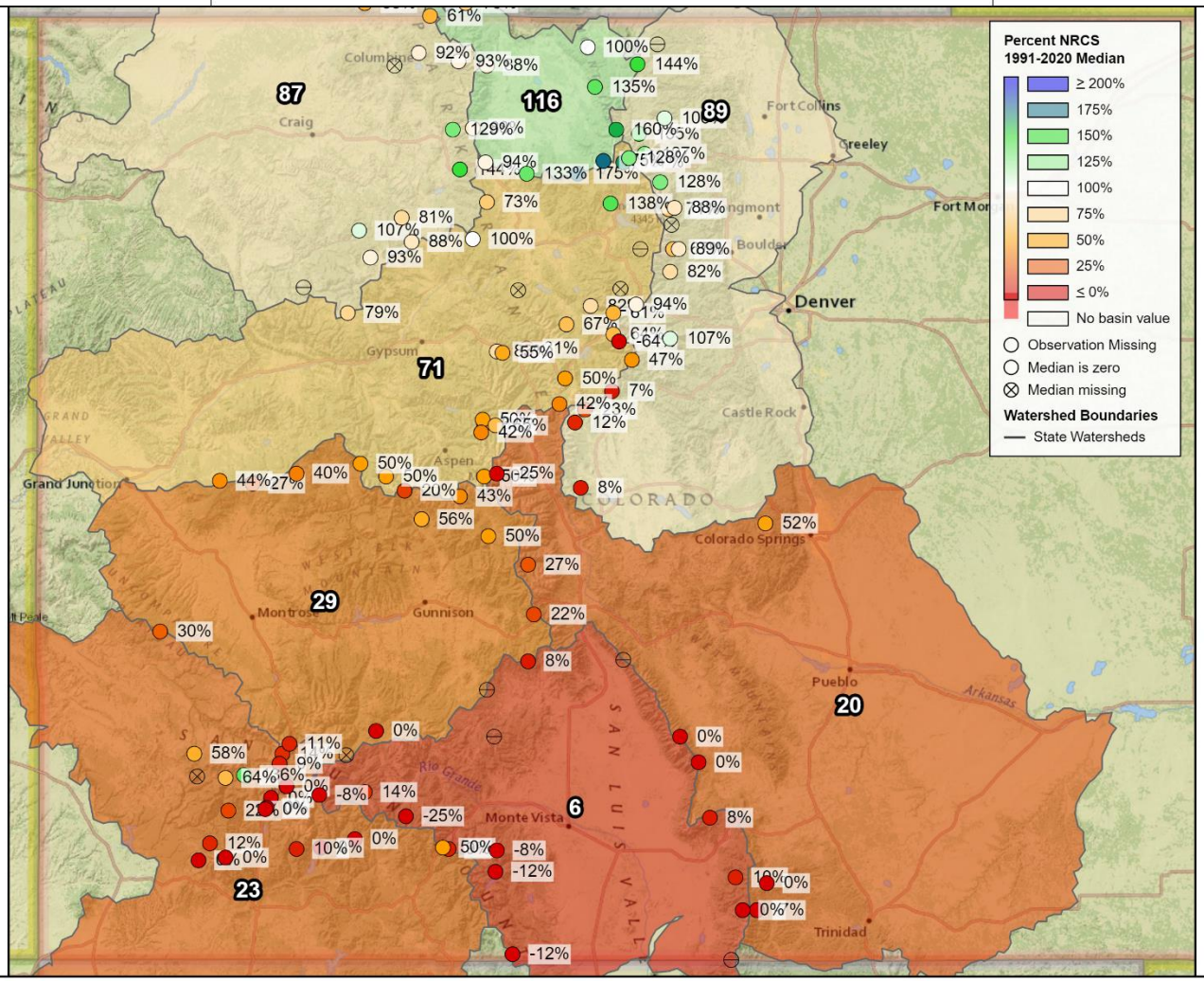
Month to Date Precipitation	Statewide MTD Precipitation Percent NRCS 1991-2020 Median	May 1, 2022 - May 17, 2022



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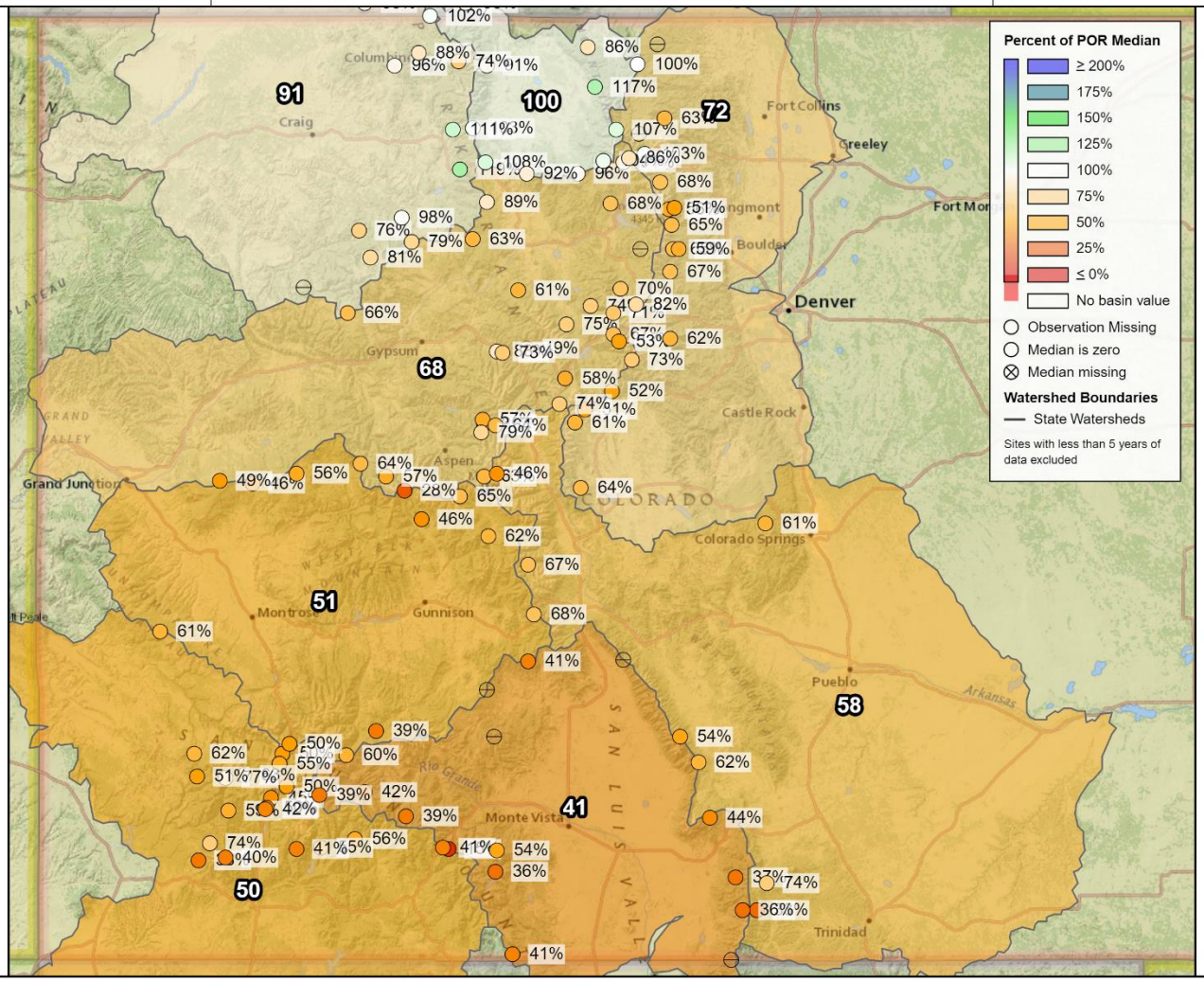
60 day Precipitation	Statewide 60 Day Precipitation Percent of POR Median	March 19, 2022 - May 17, 2022



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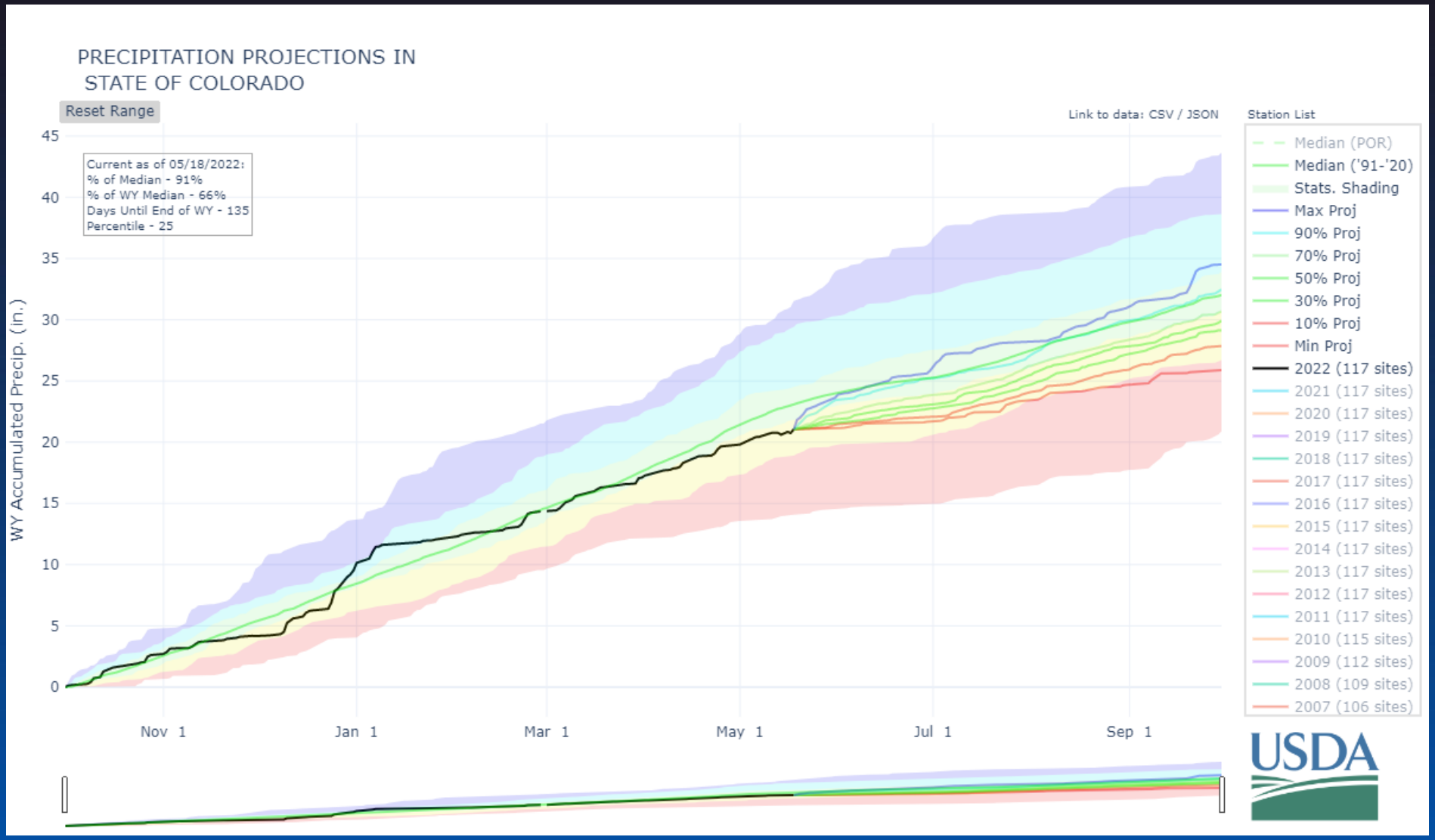

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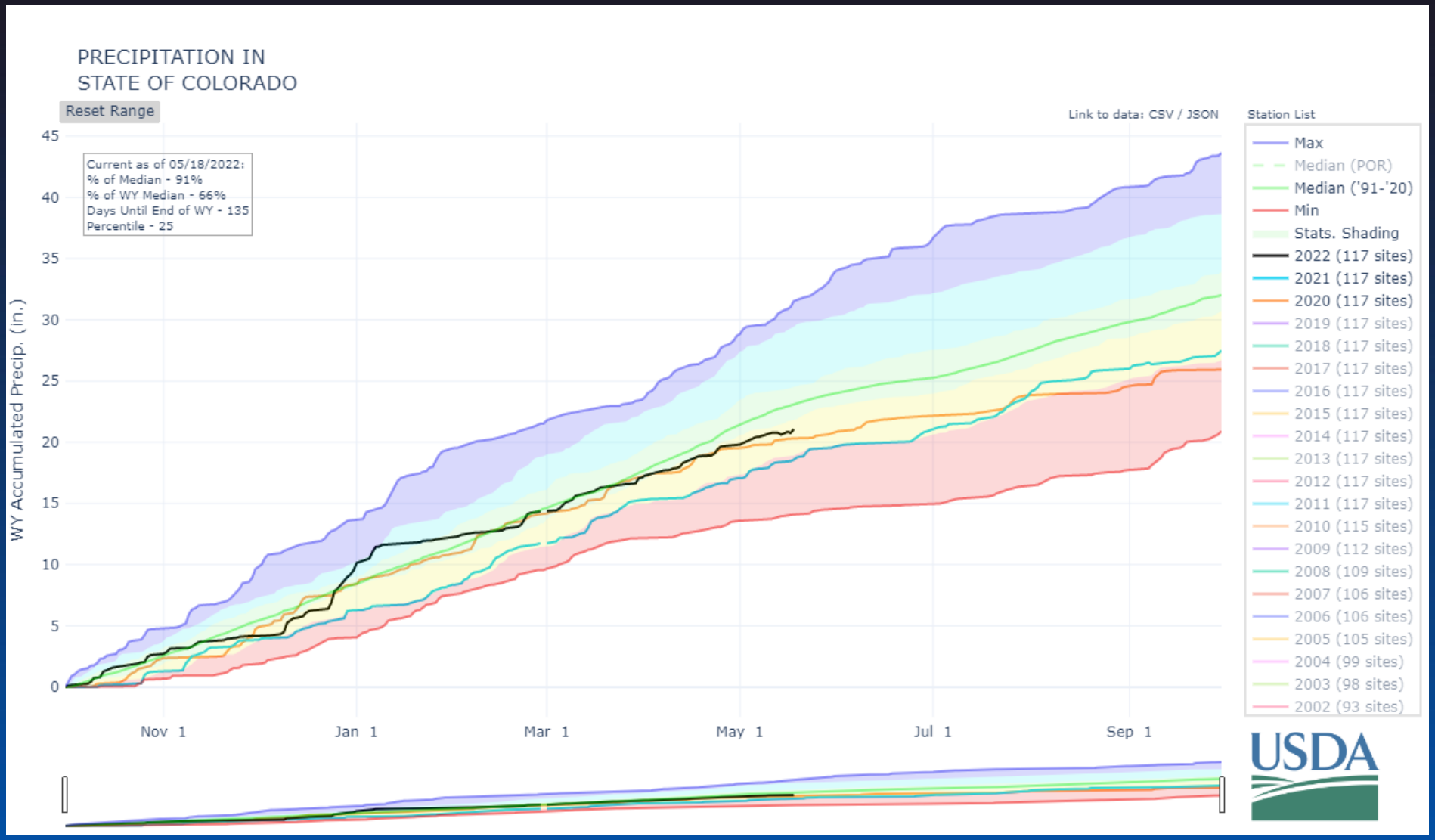
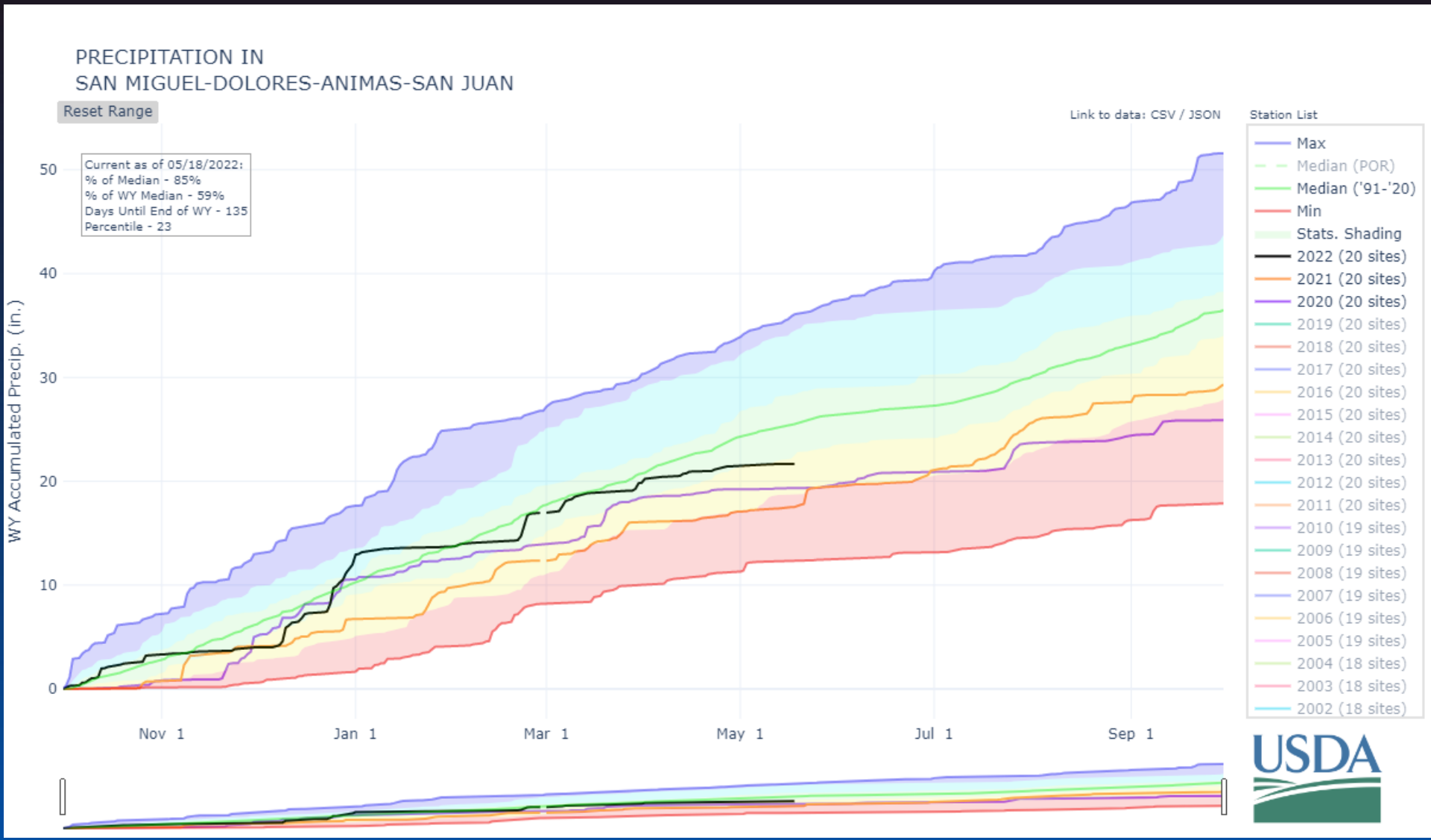
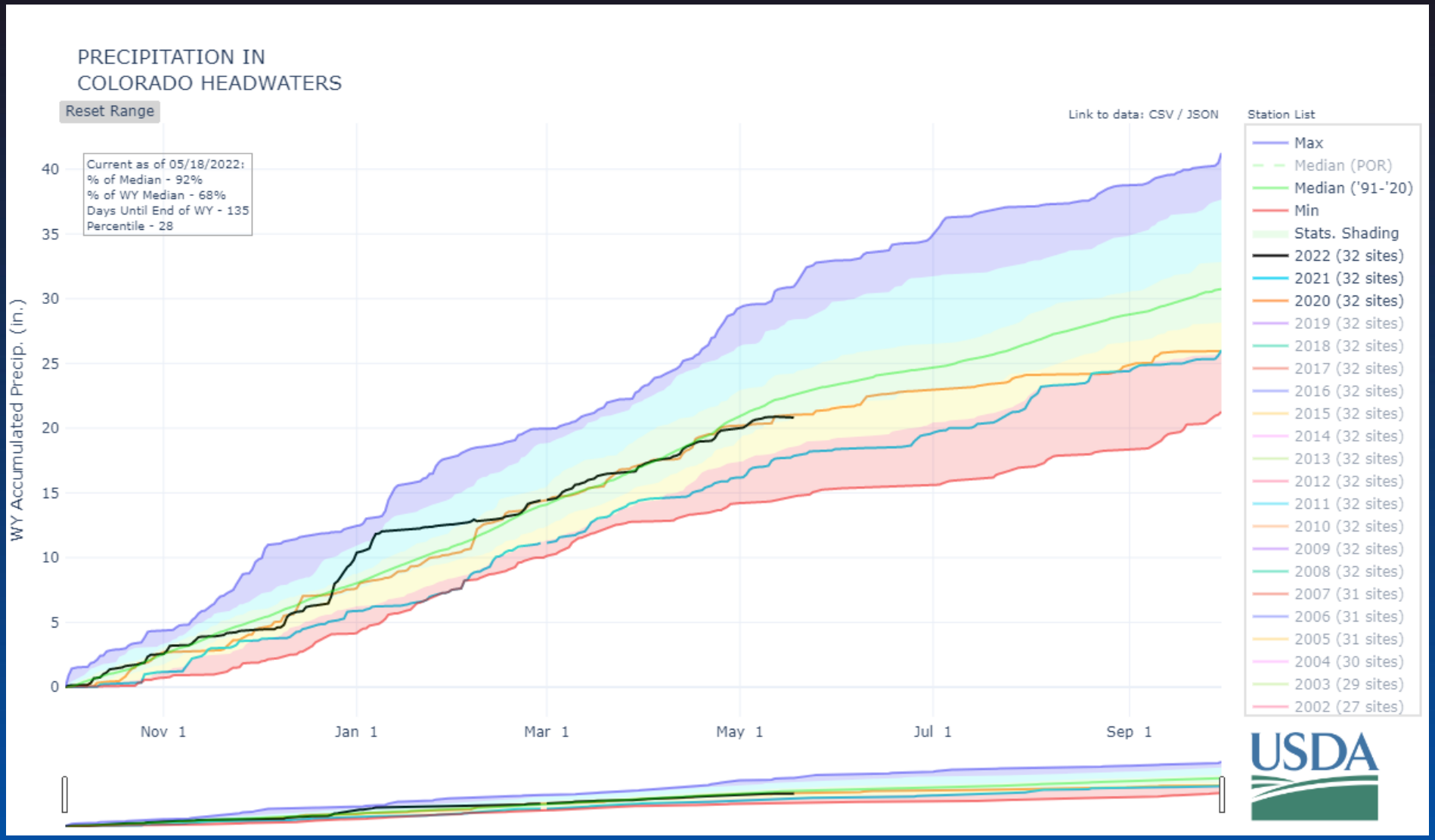


Colorado Snow Surveys



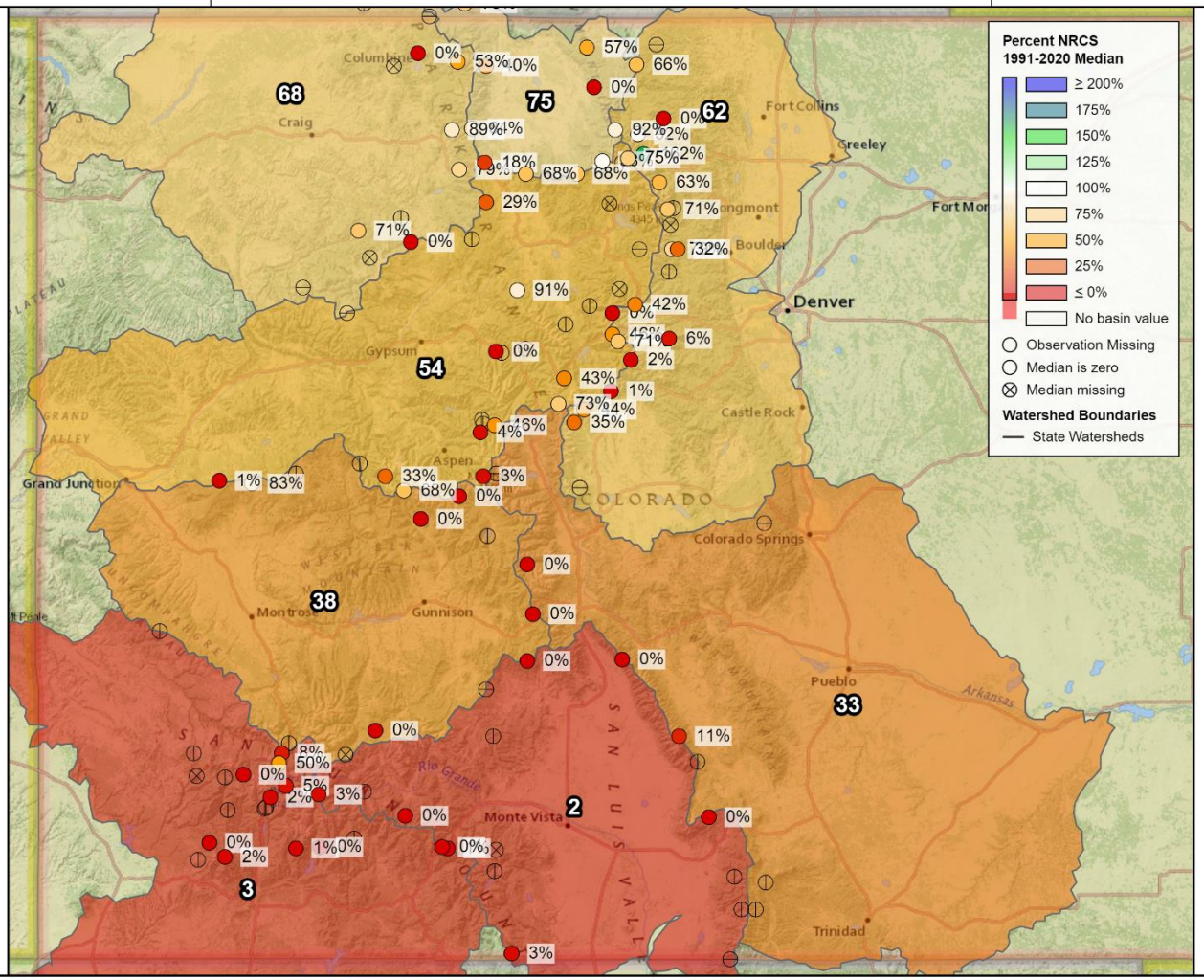
Colorado Snow Surveys



Snowpack

Colorado Snow Surveys

Snow Water Equivalent	Statewide Snowpack Percent NRCS 1991-2020 Median	May 17, 2022, end of day



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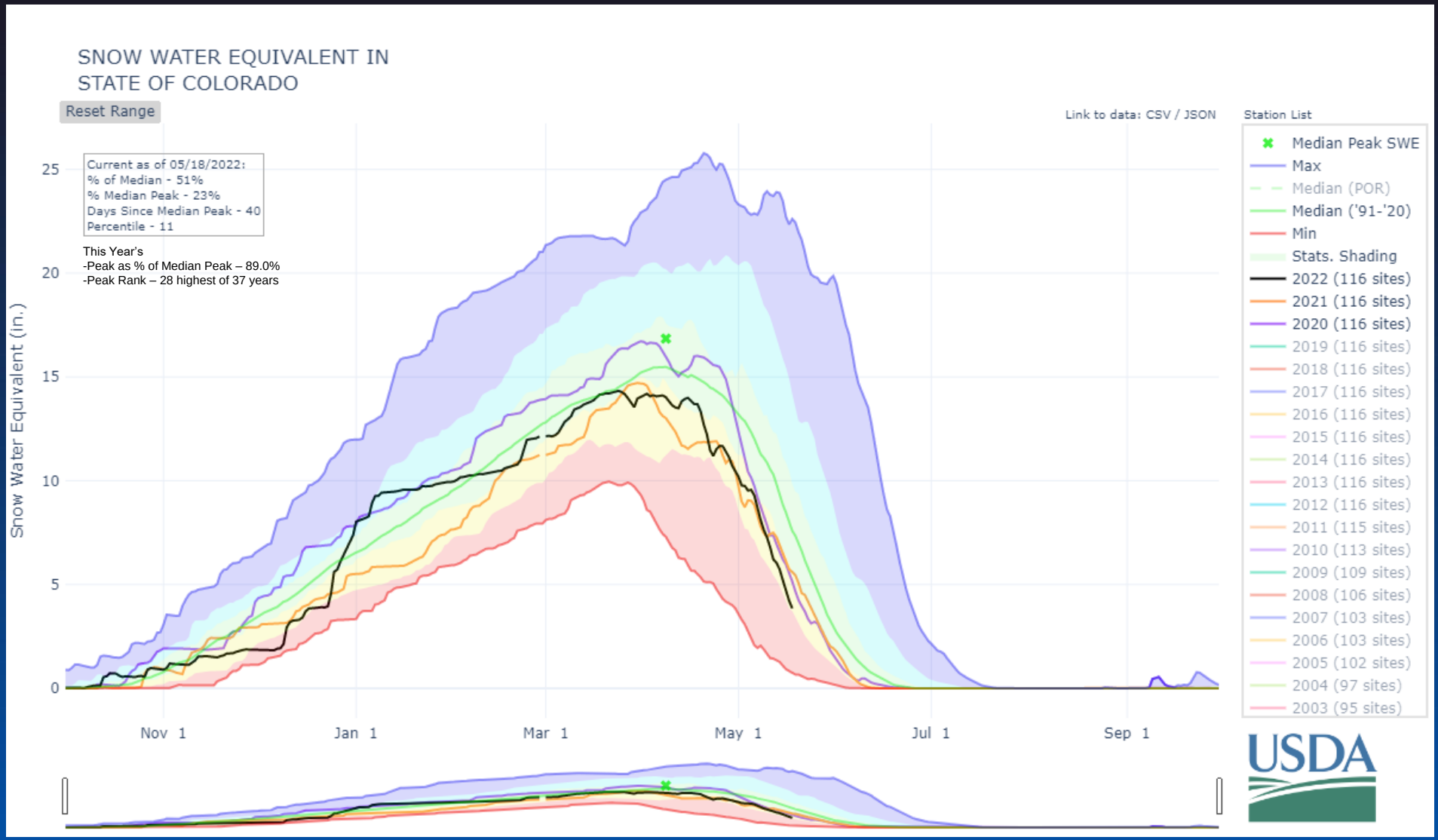

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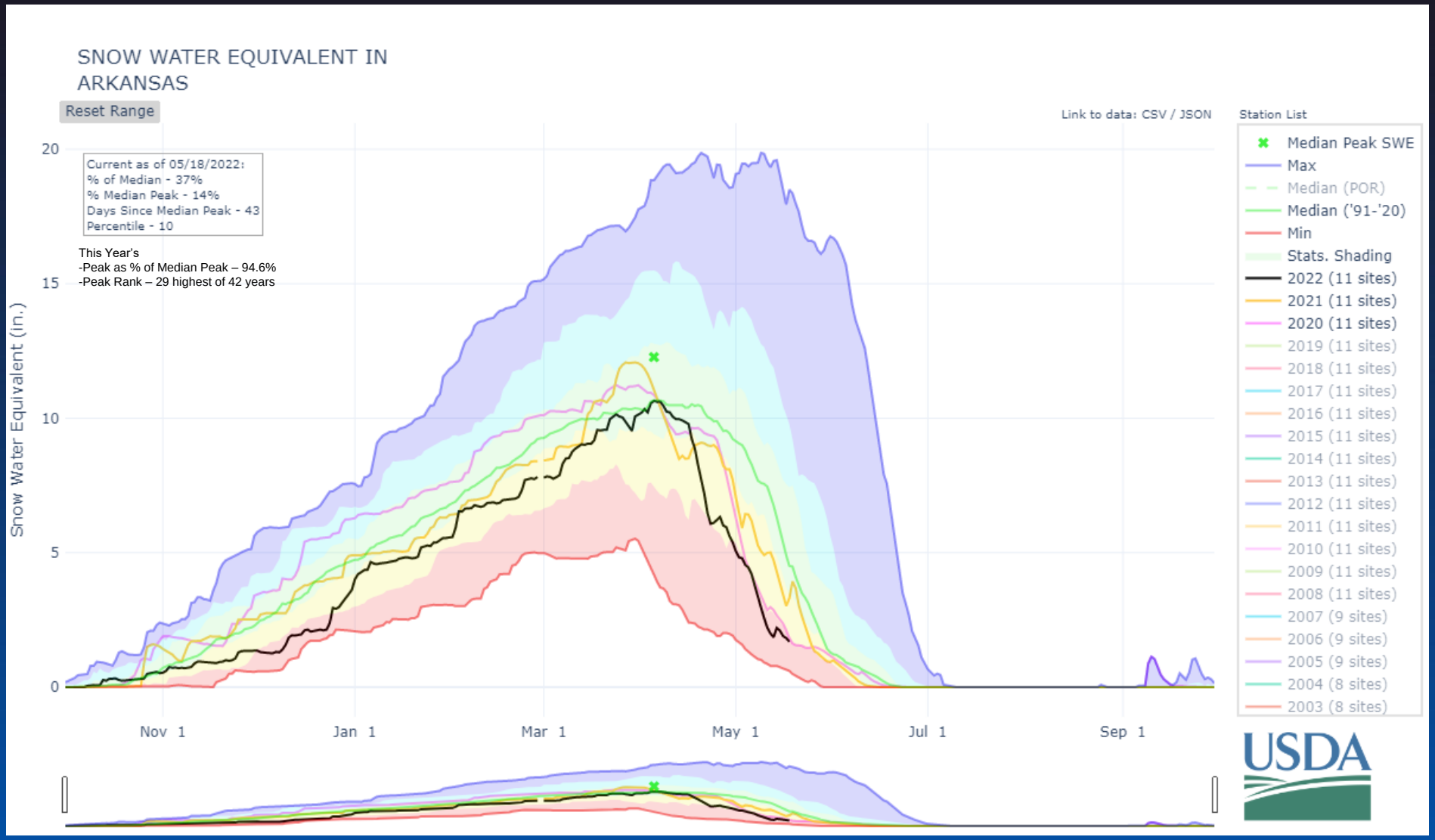

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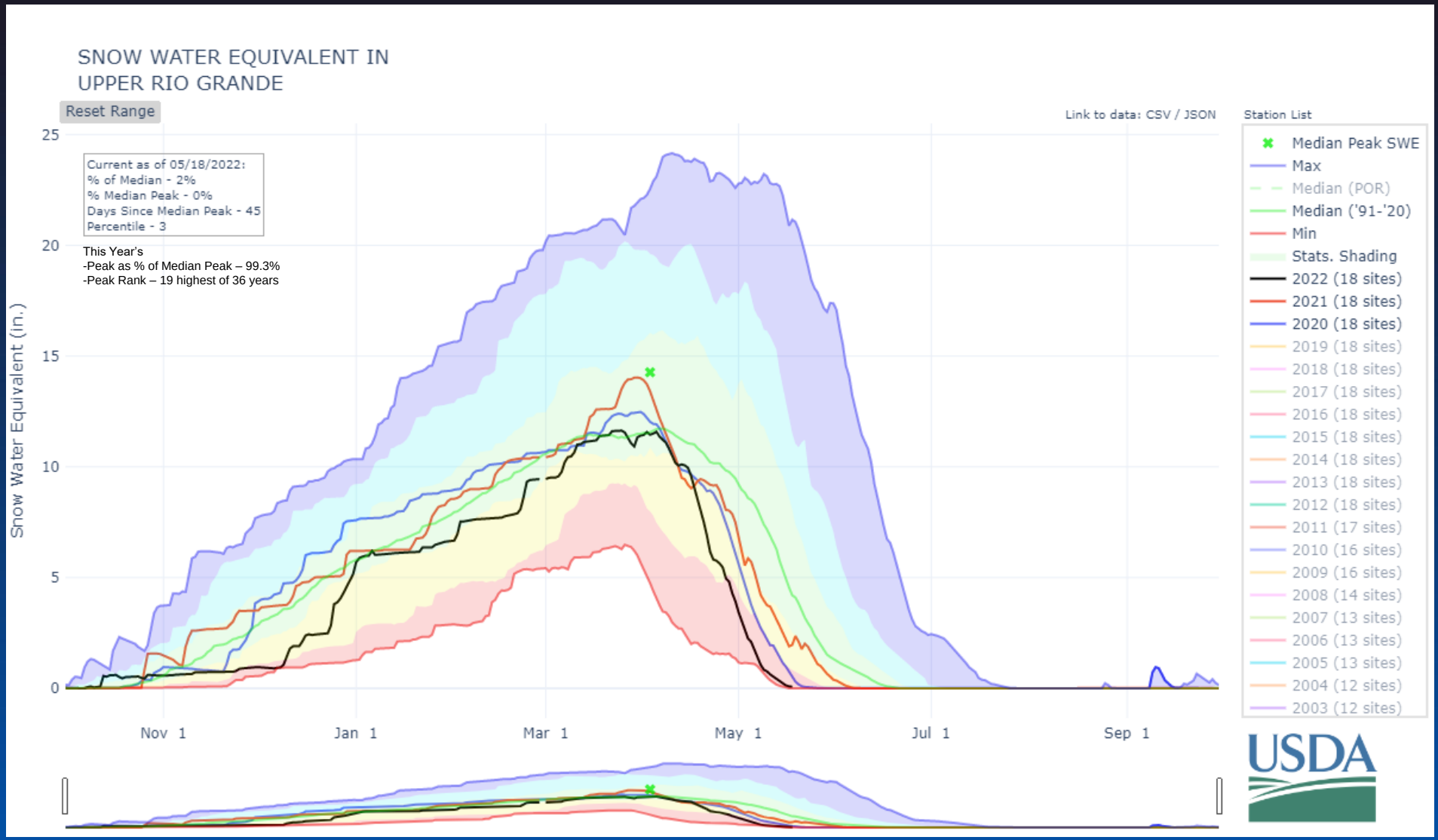

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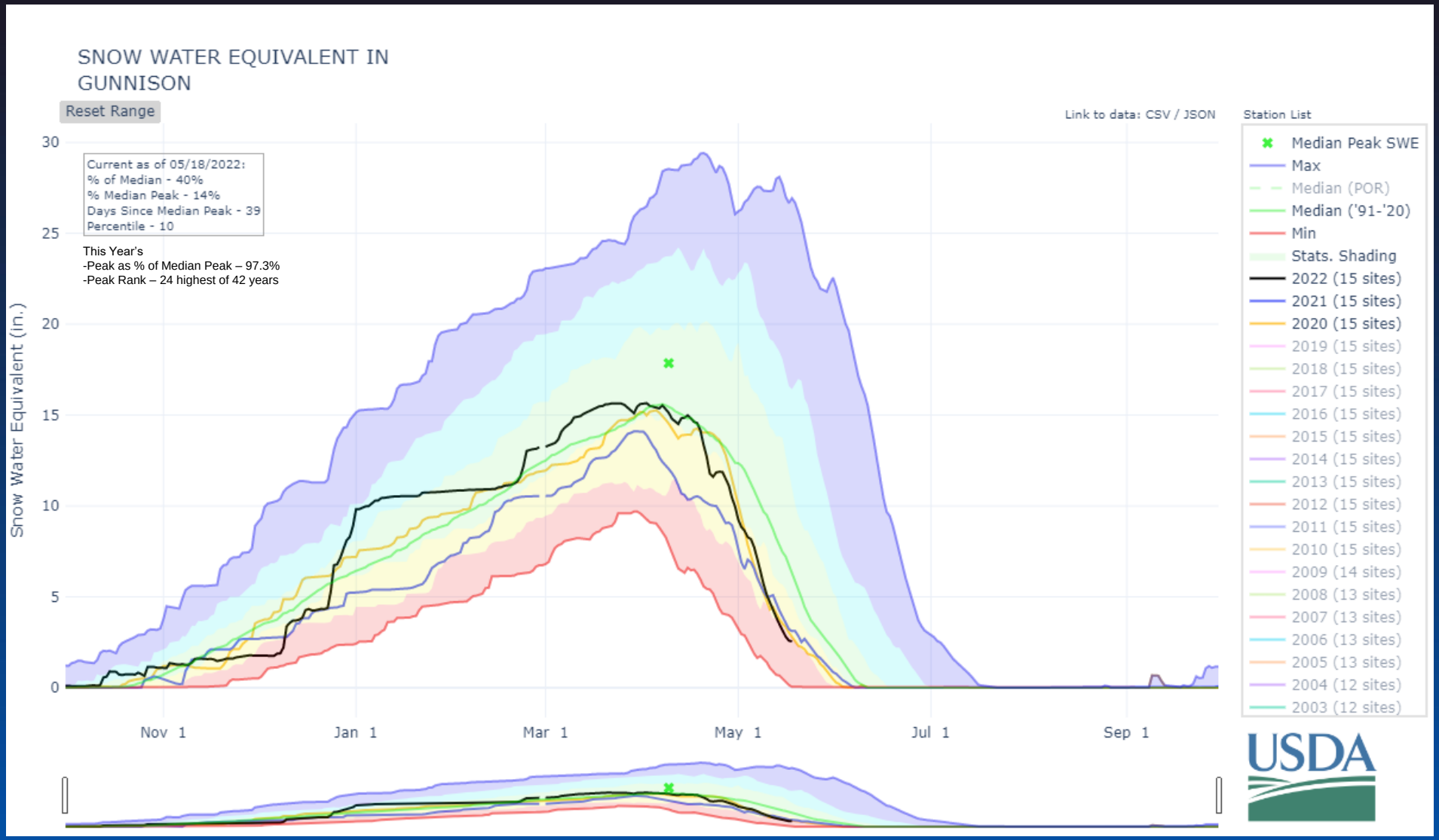

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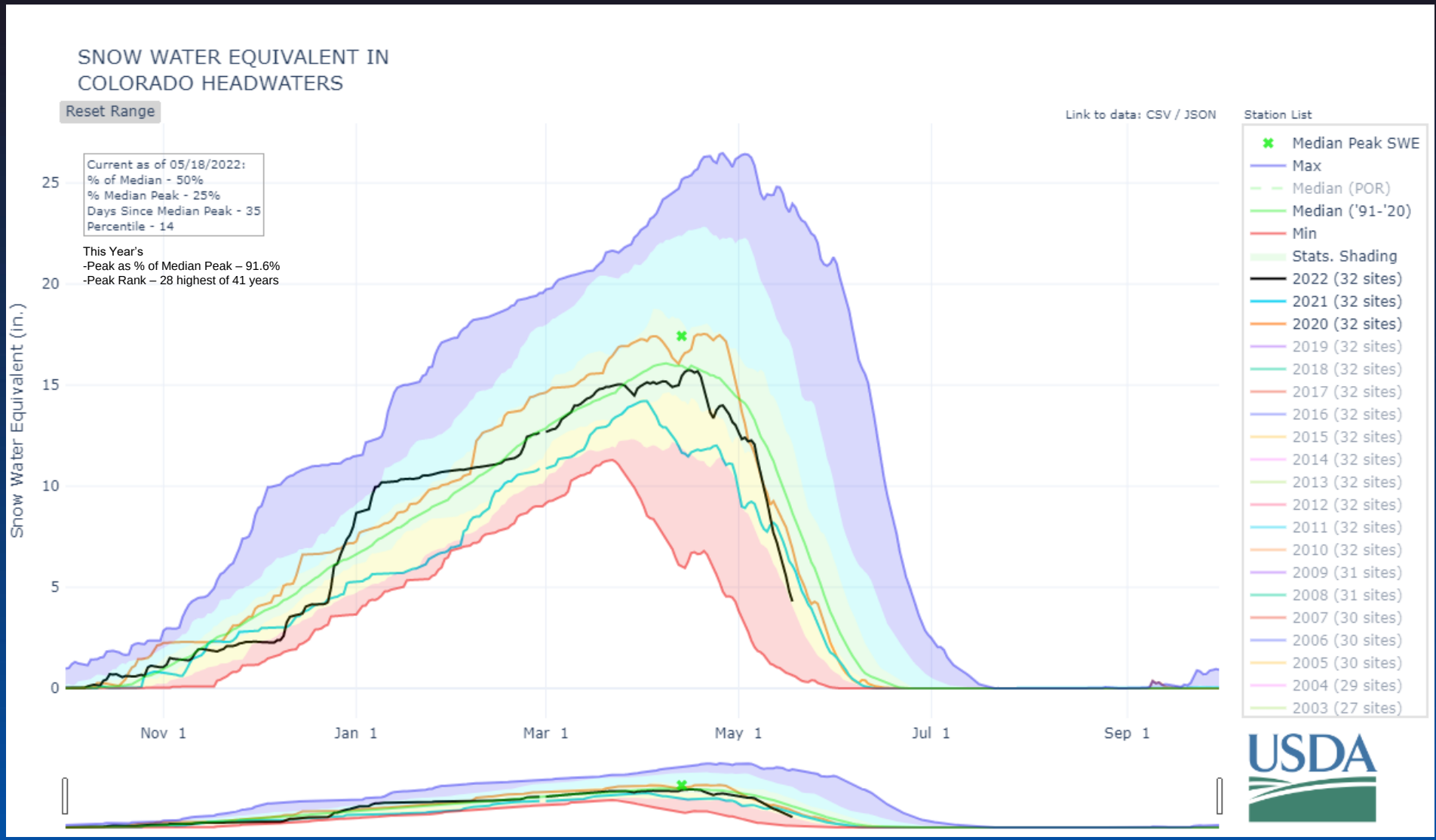

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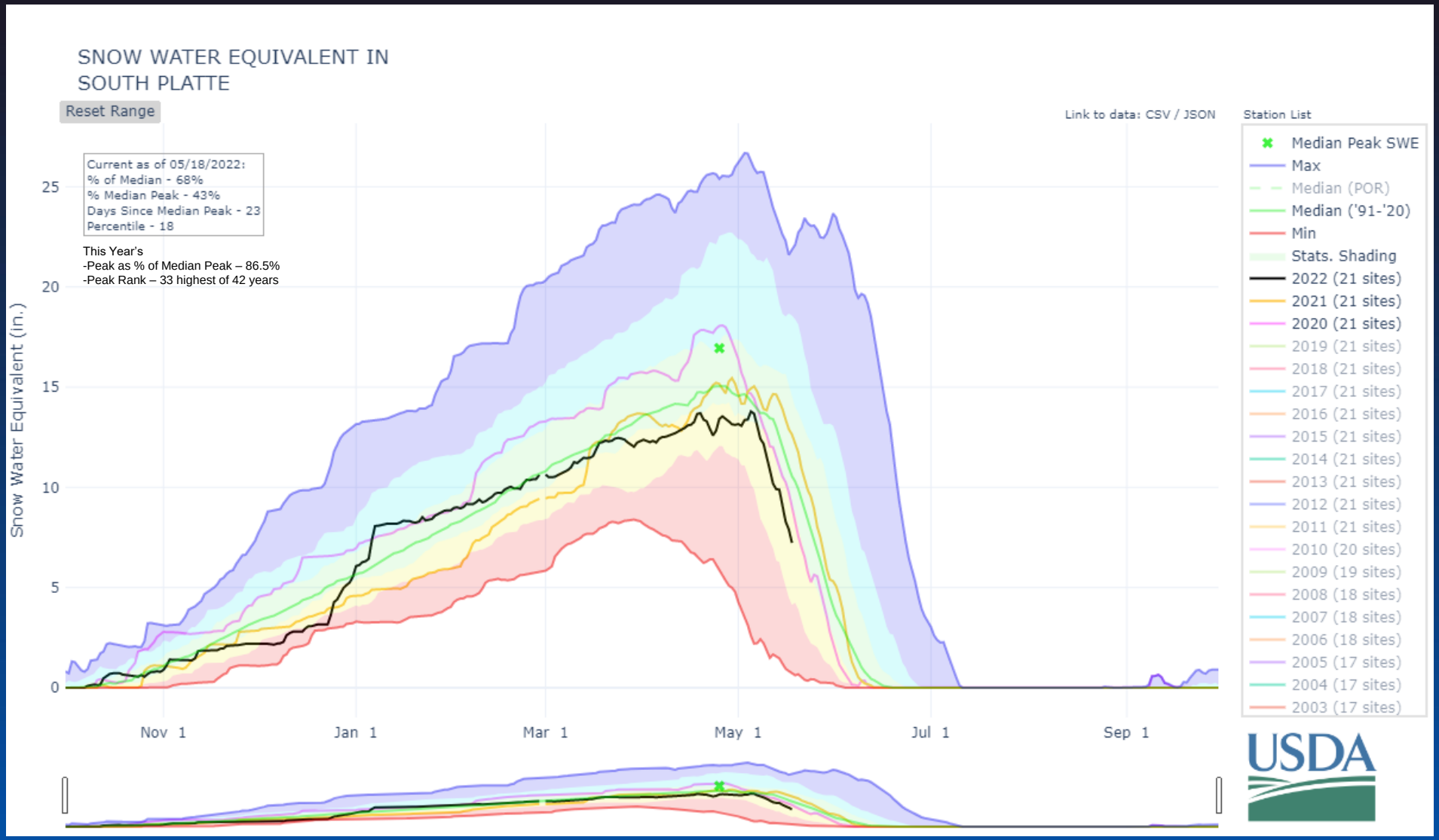

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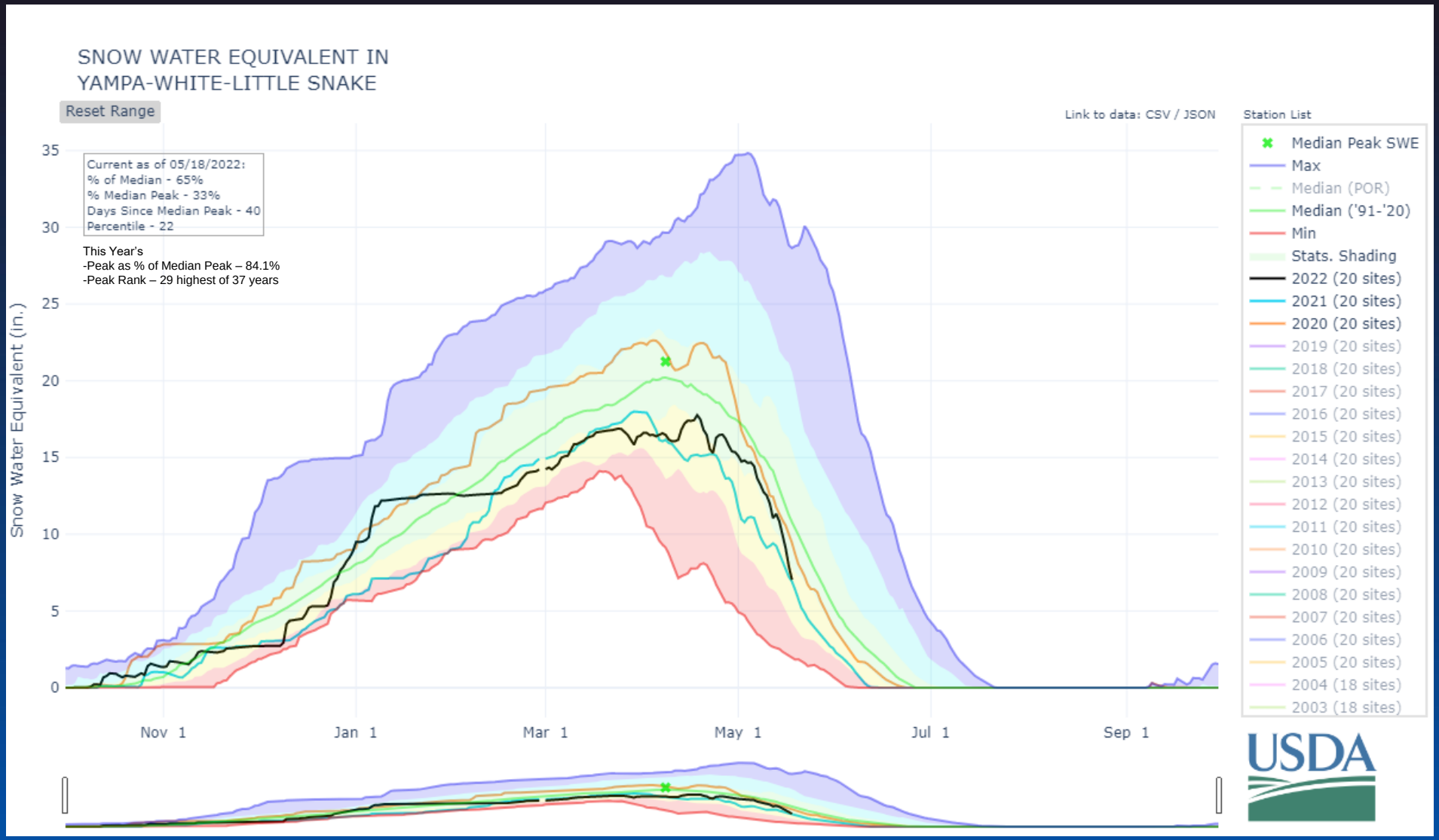

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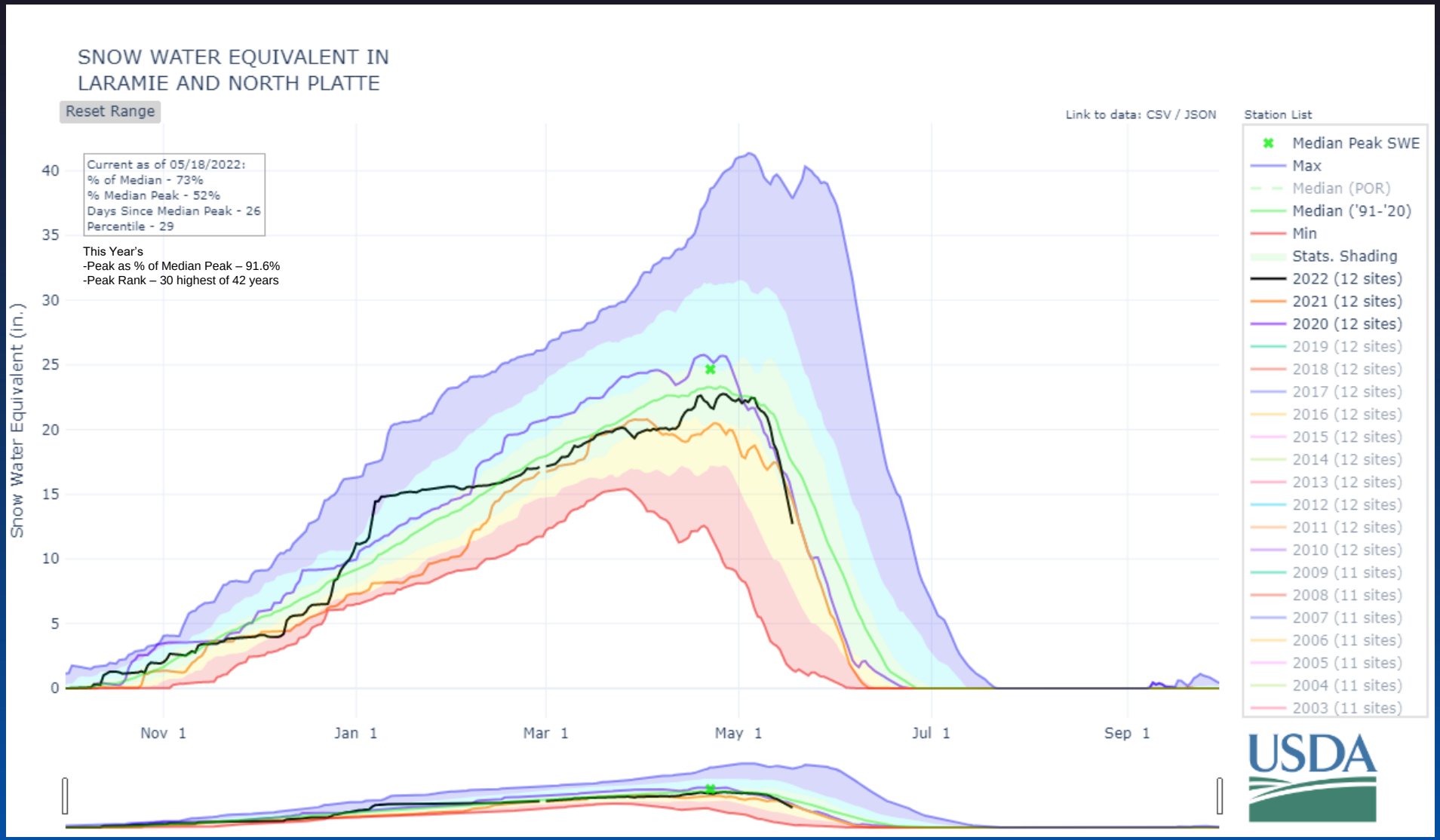

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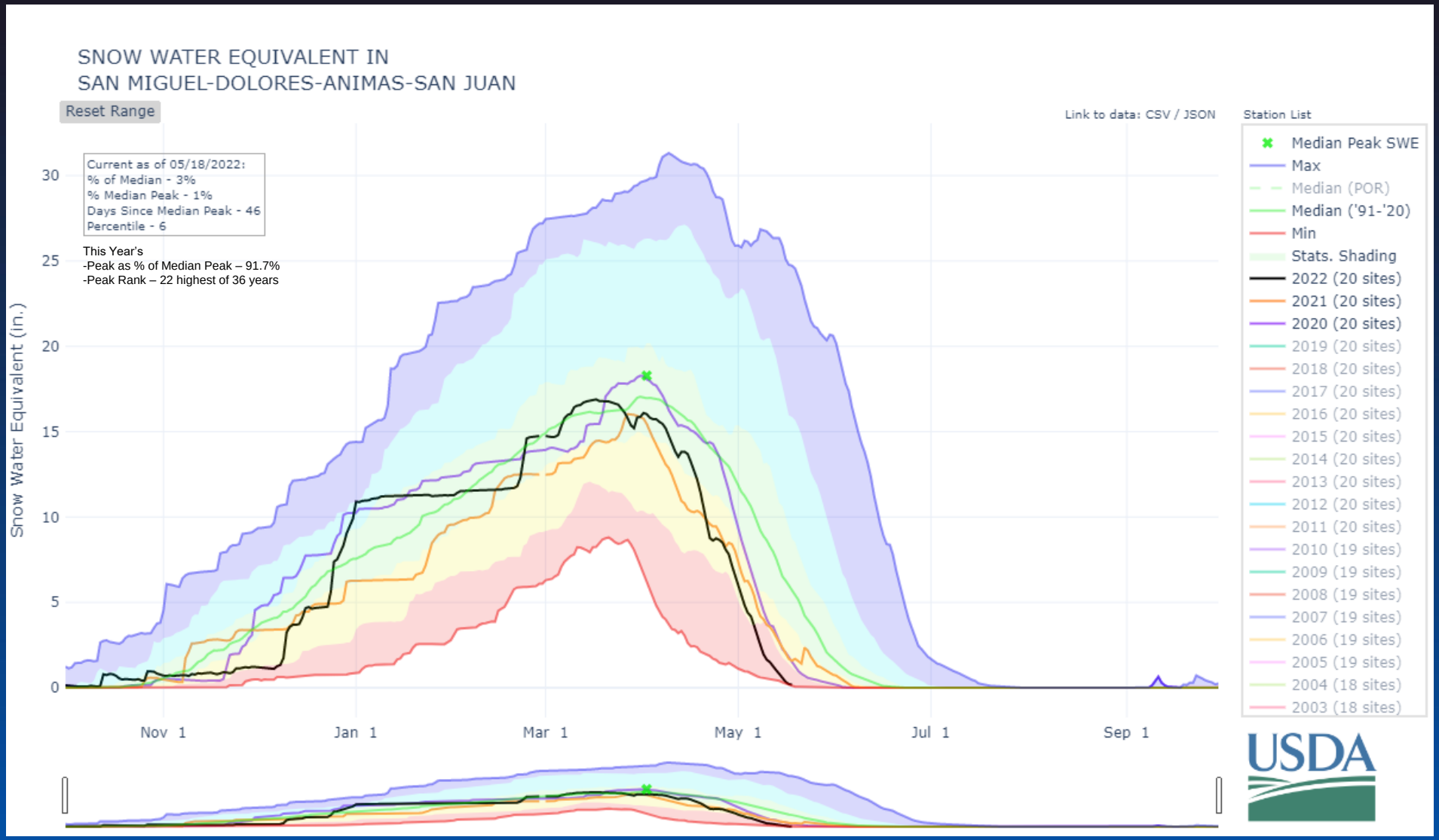
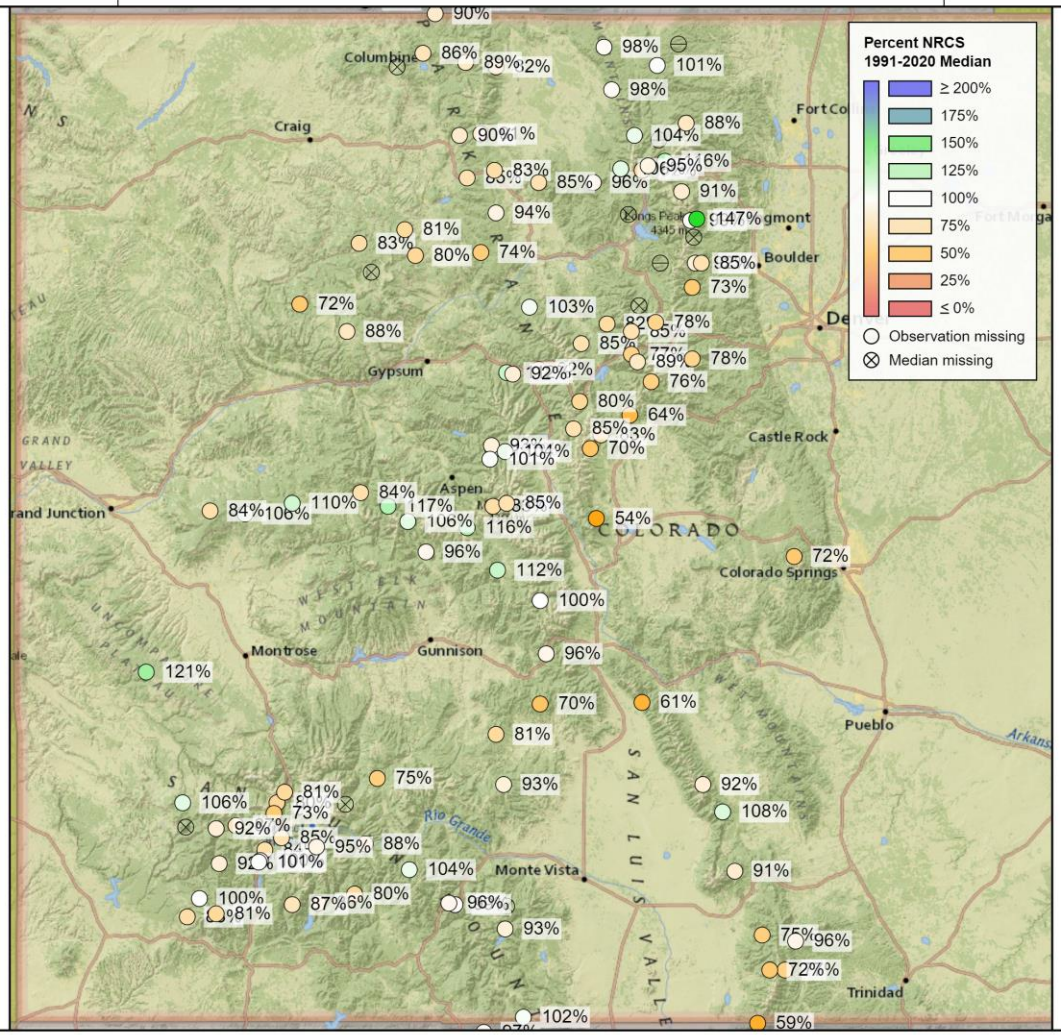


Colorado Snow Surveys

Snow Water Equivalent, Water Year Peak	Snowpack Peak As % Median Percent NRCS 1991-2020 Median	2022



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Miles
0 10 20 40 60 80 100

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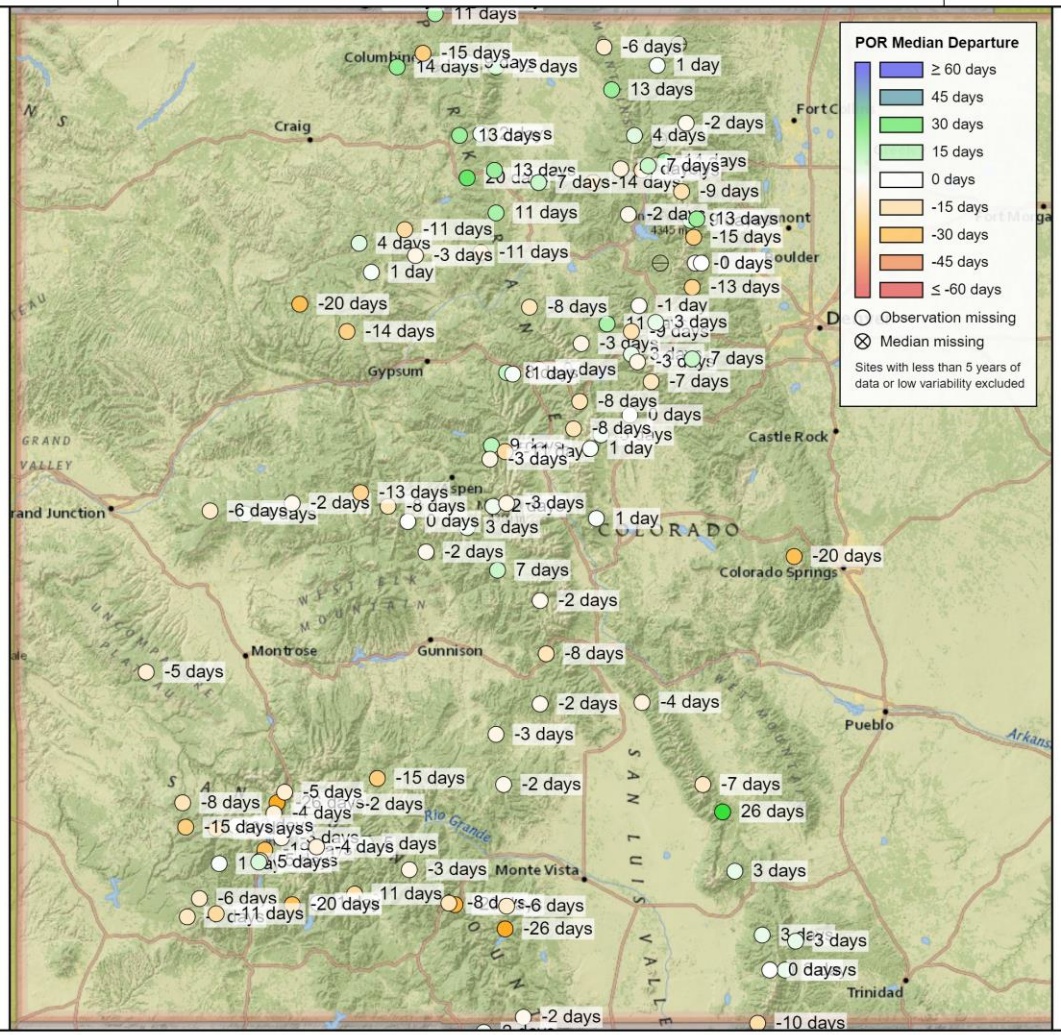
Colorado Snow Surveys

Snow Water Equivalent, Date of Water Year Peak	Snowpack Peak Date Anomaly POR Median Departure	2022



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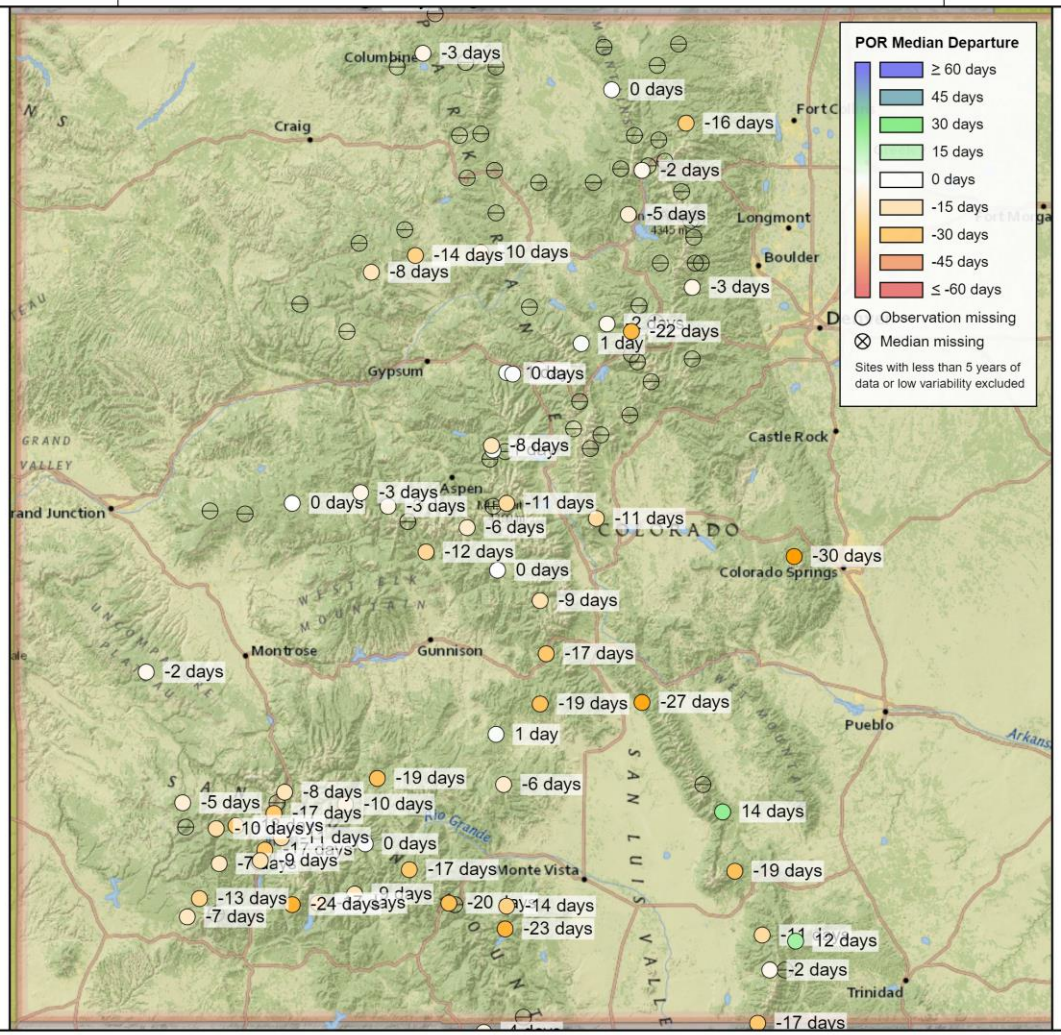
Created 5-18-2022

Colorado Snow Surveys

Snow Water Equivalent, Date of Water Year Melt Out	Snowpack Meltout Date Anomaly POR Median Departure	2022



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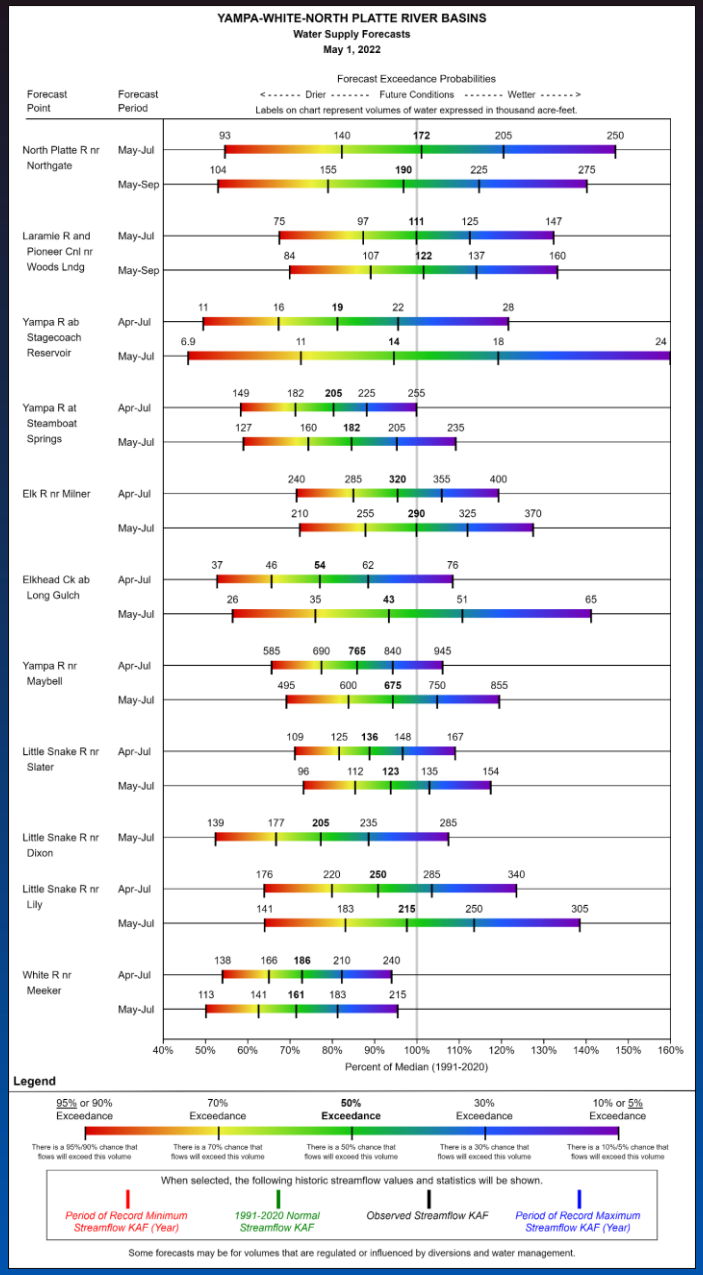
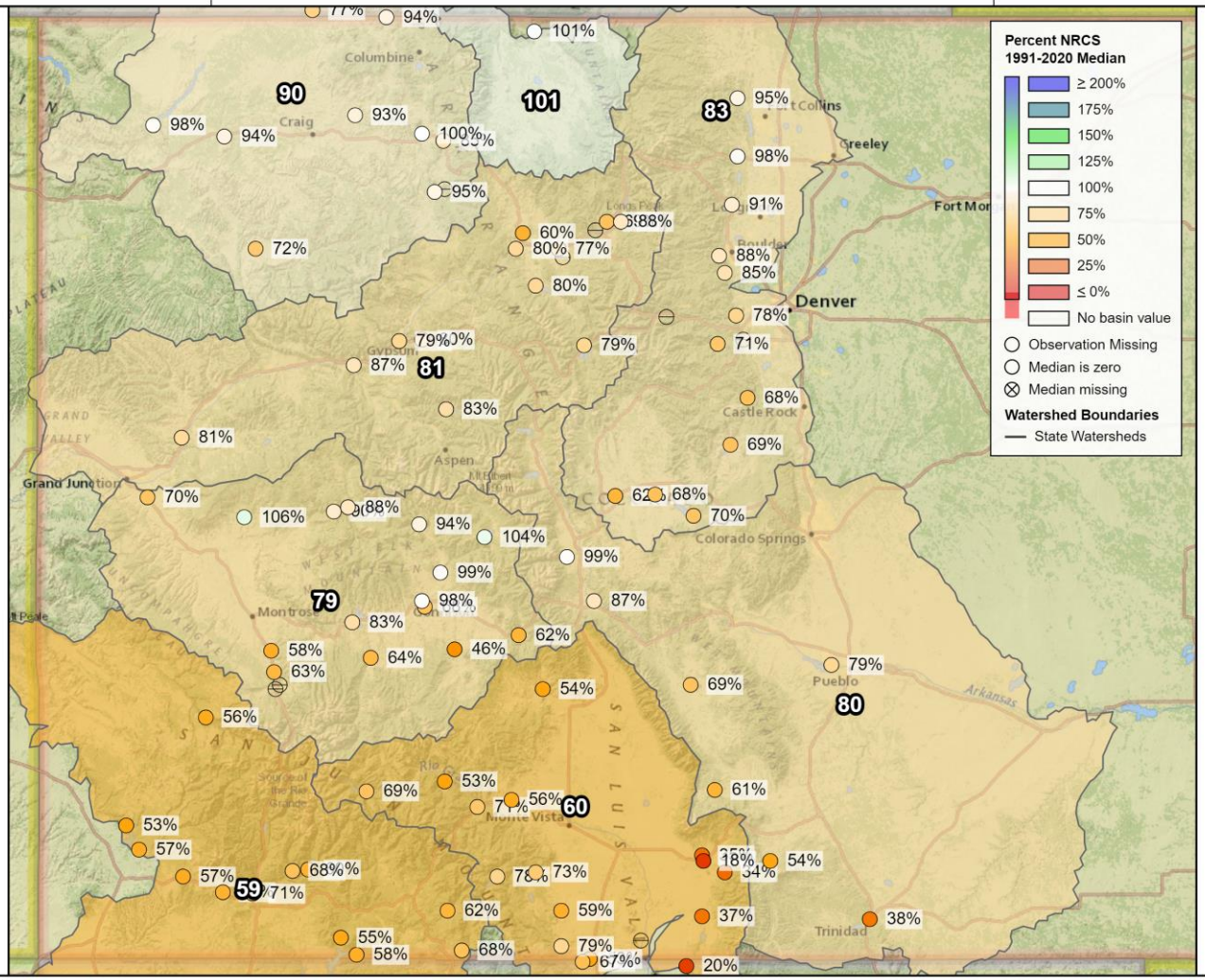
Created 5-18-2022



Streamflow Forecasts

Colorado Snow Surveys

Forecast Volume, 50% Exceedance Probability	Statewide Streamflow Percent NRCS 1991-2020 Median	Primary Period, May 1, 2022



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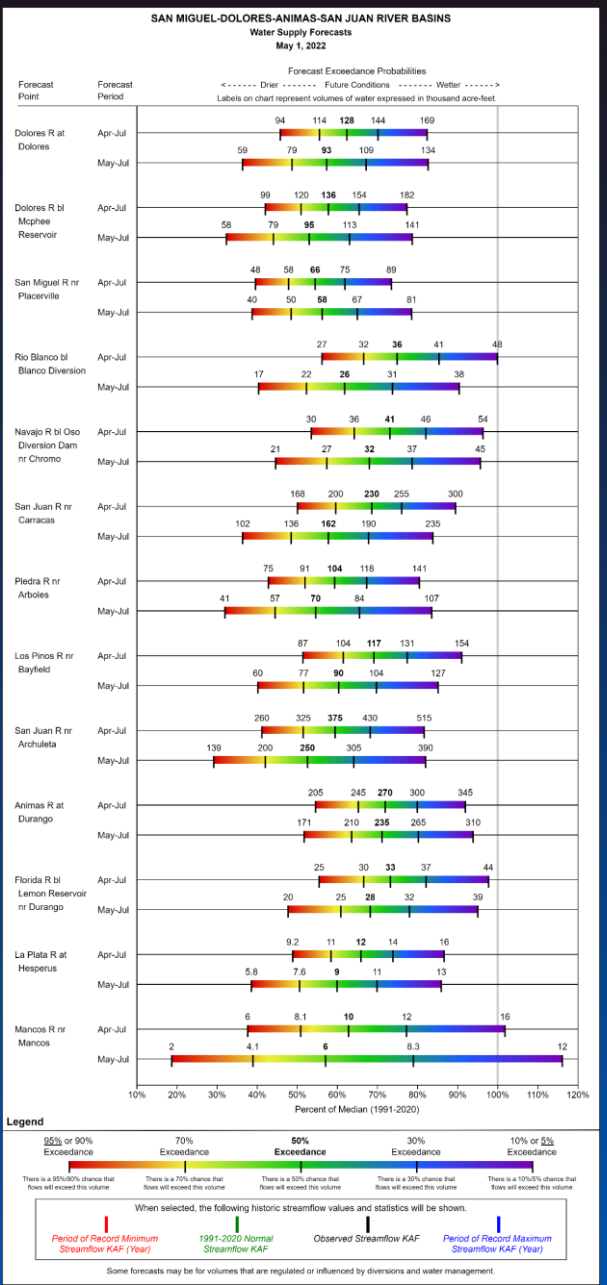

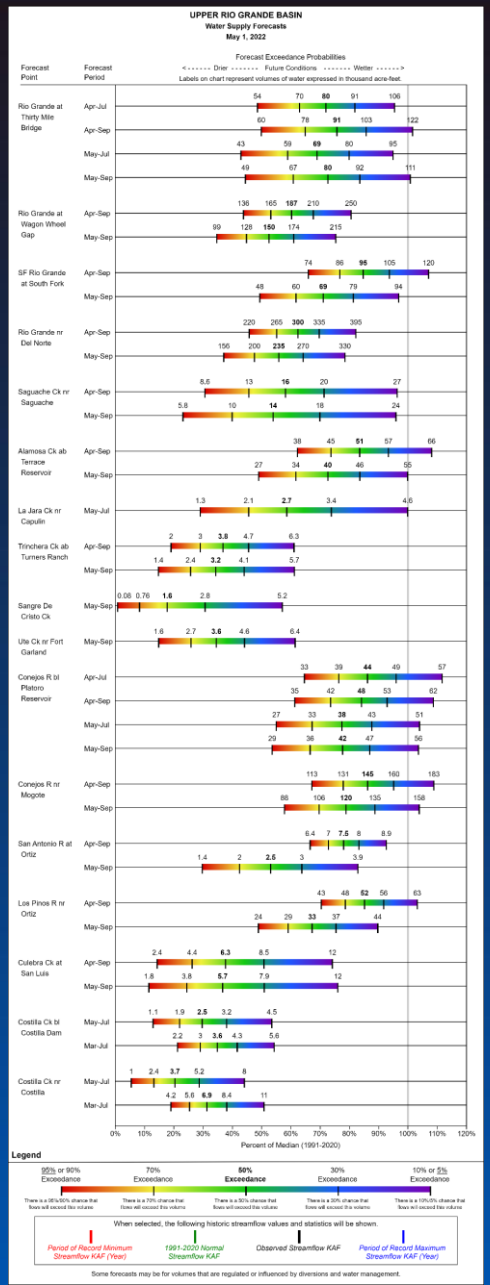

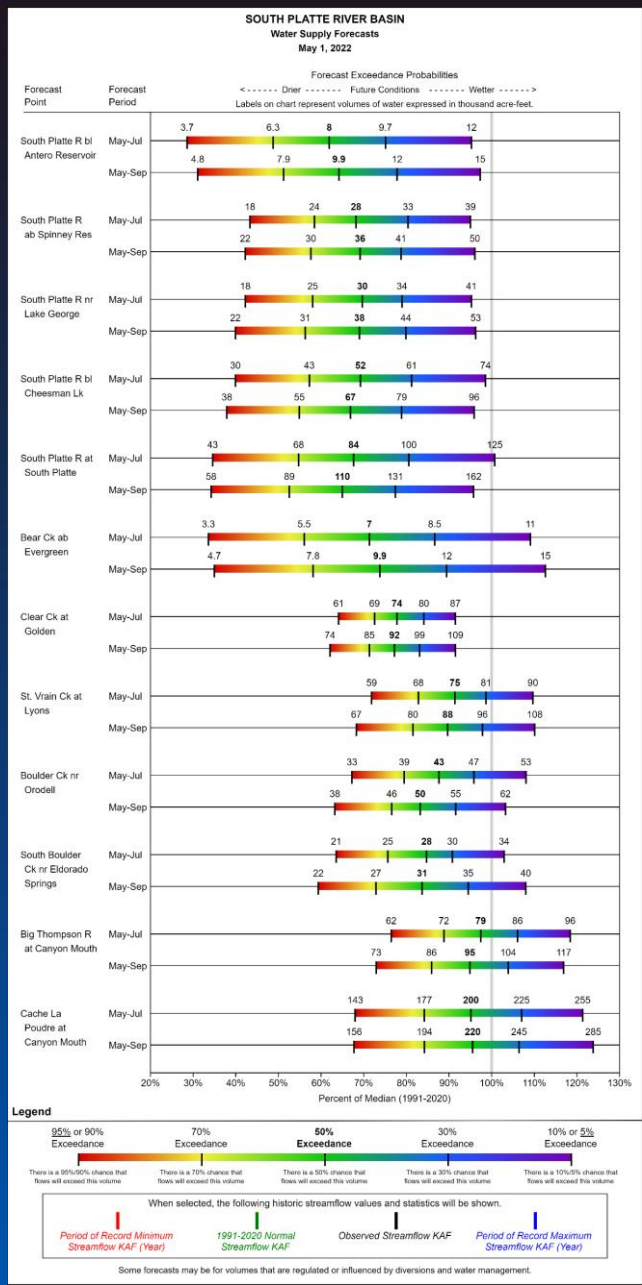

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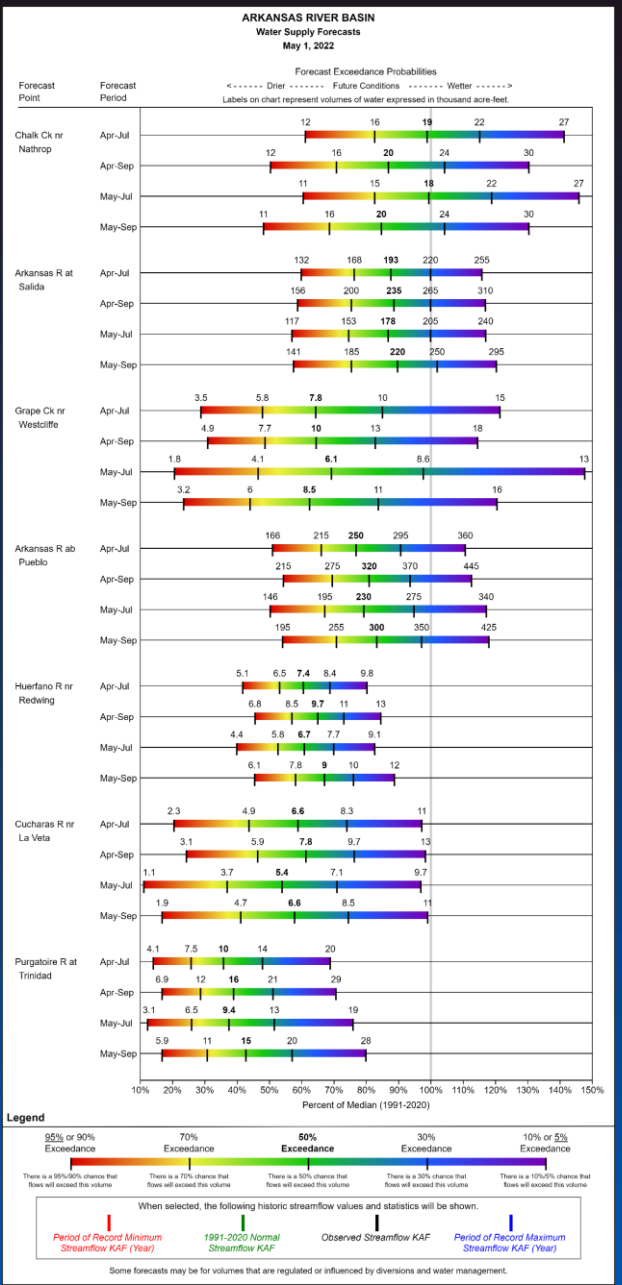
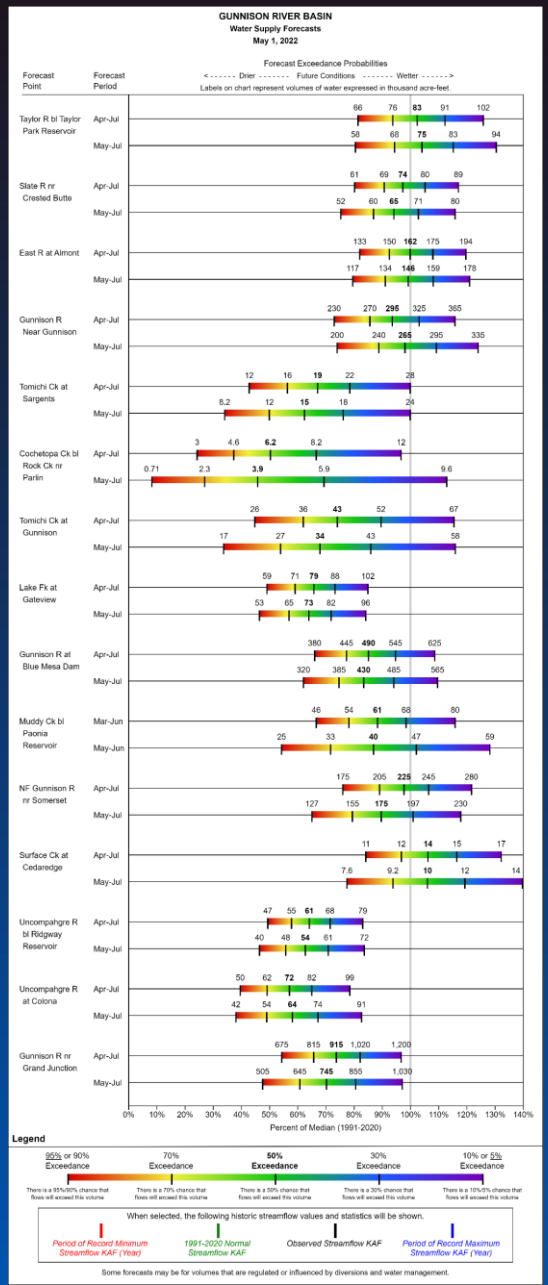
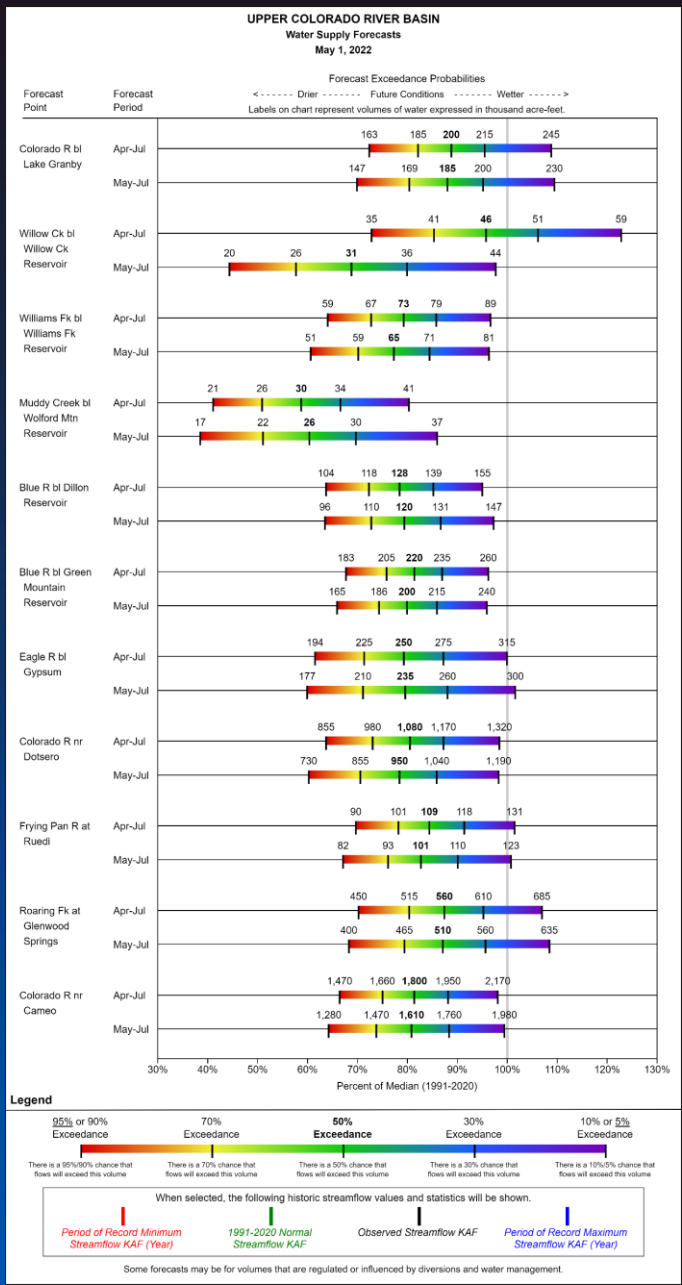
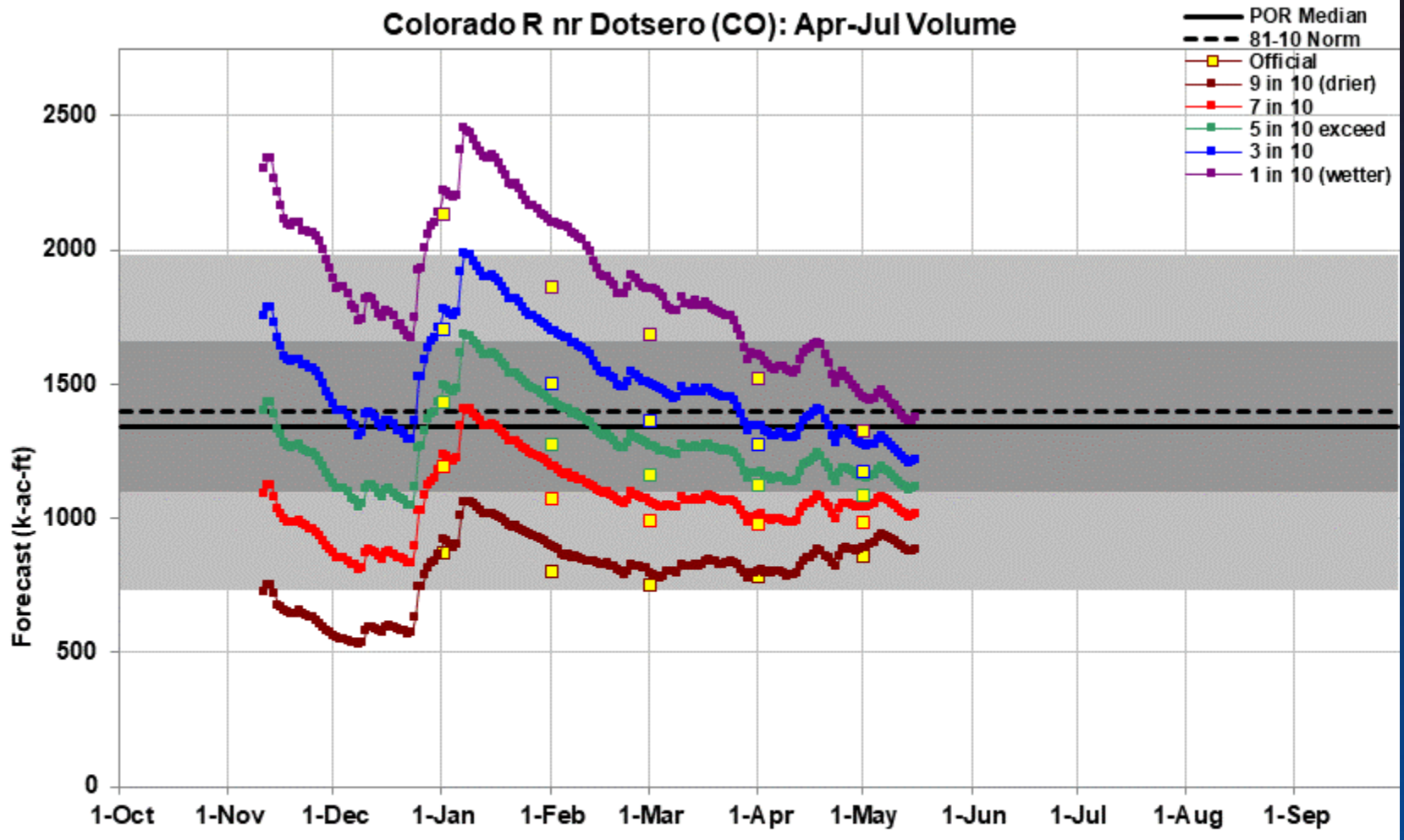
Colorado Snow Surveys







Colorado Snow Surveys

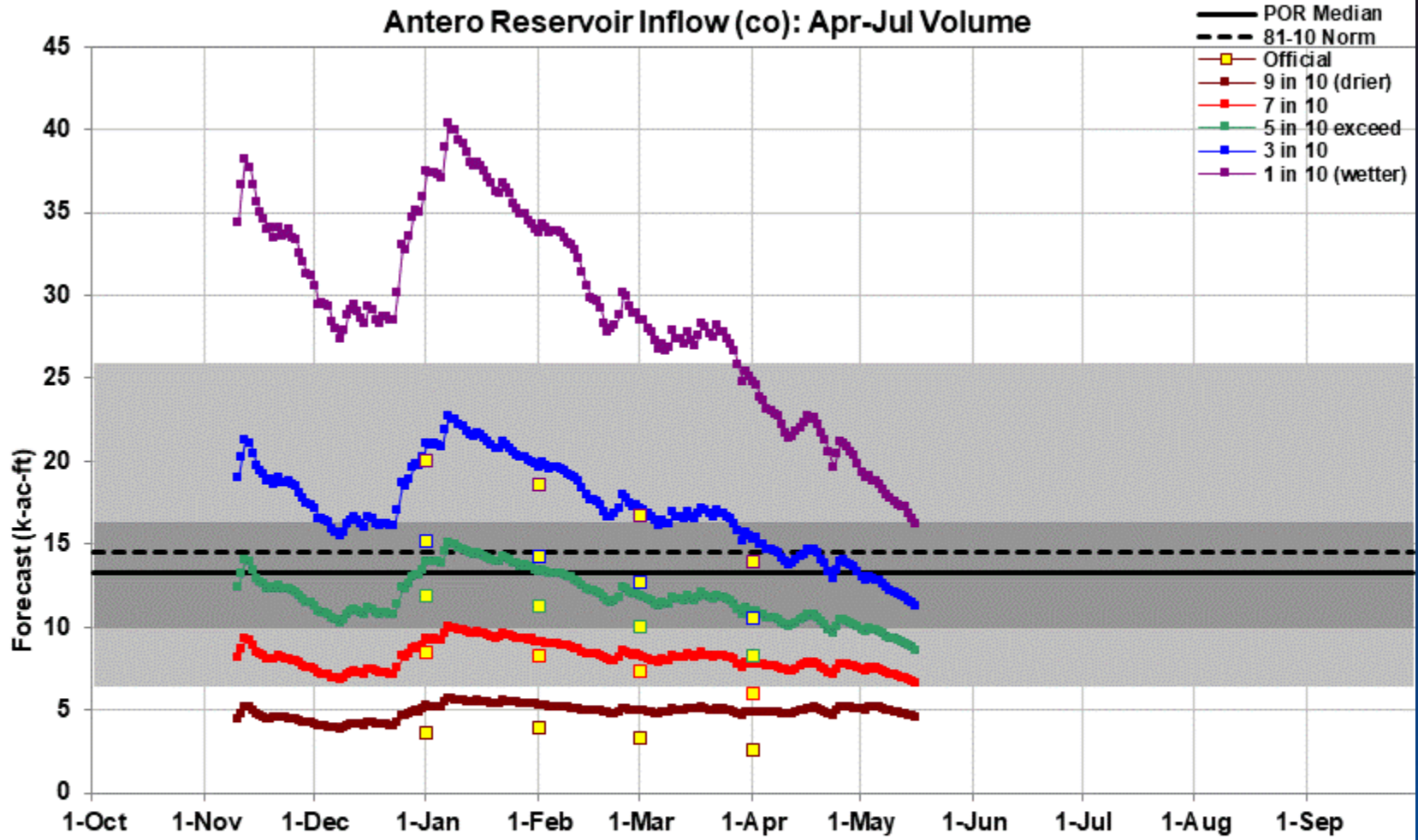


Created 14:31 May 16 2022

NRCS

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 wwwwcc.nrcs.usda.gov/wsf/daily_forecasts.html

Colorado Snow Surveys



Created 14:18 May 16 2022

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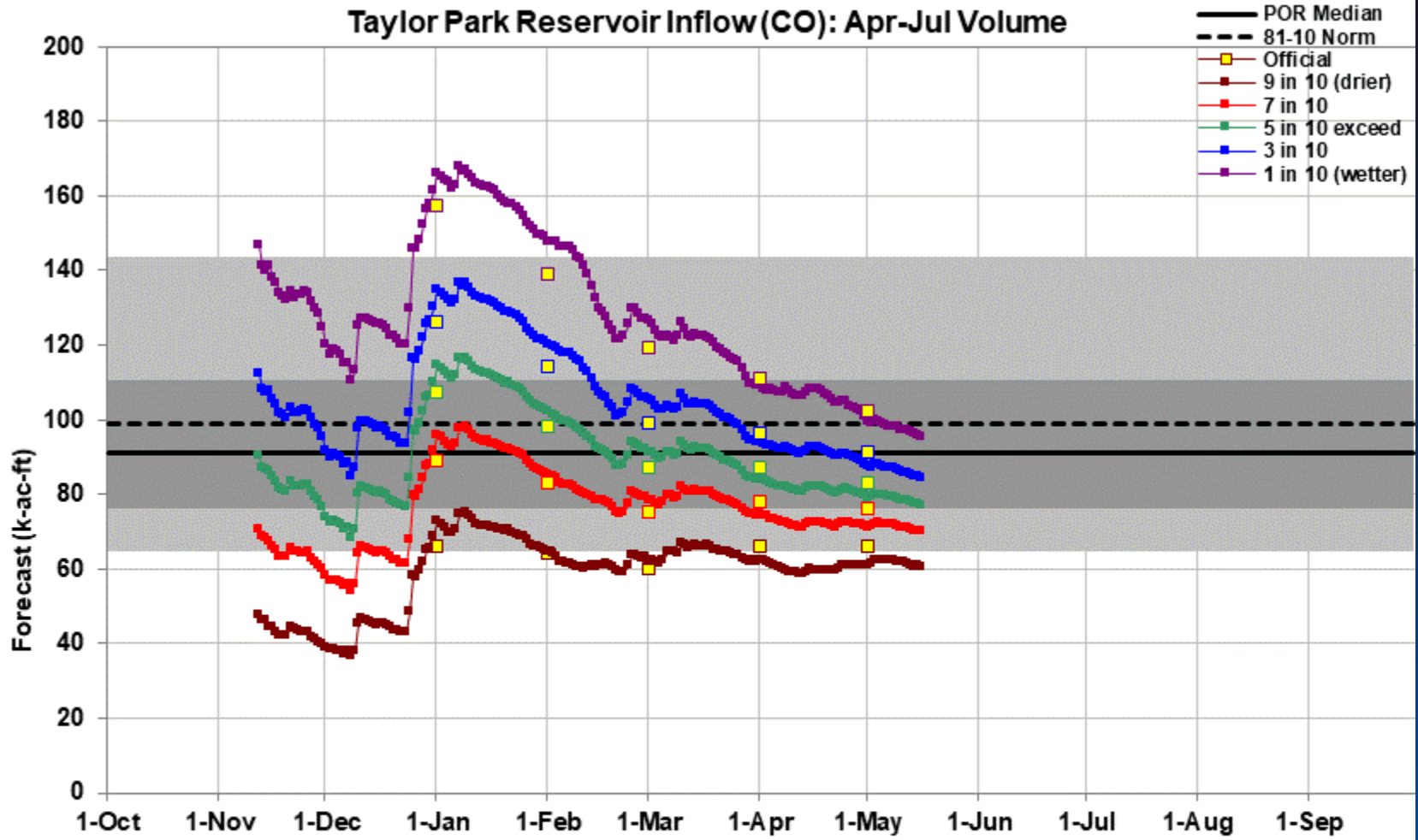
Colorado Snow Surveys



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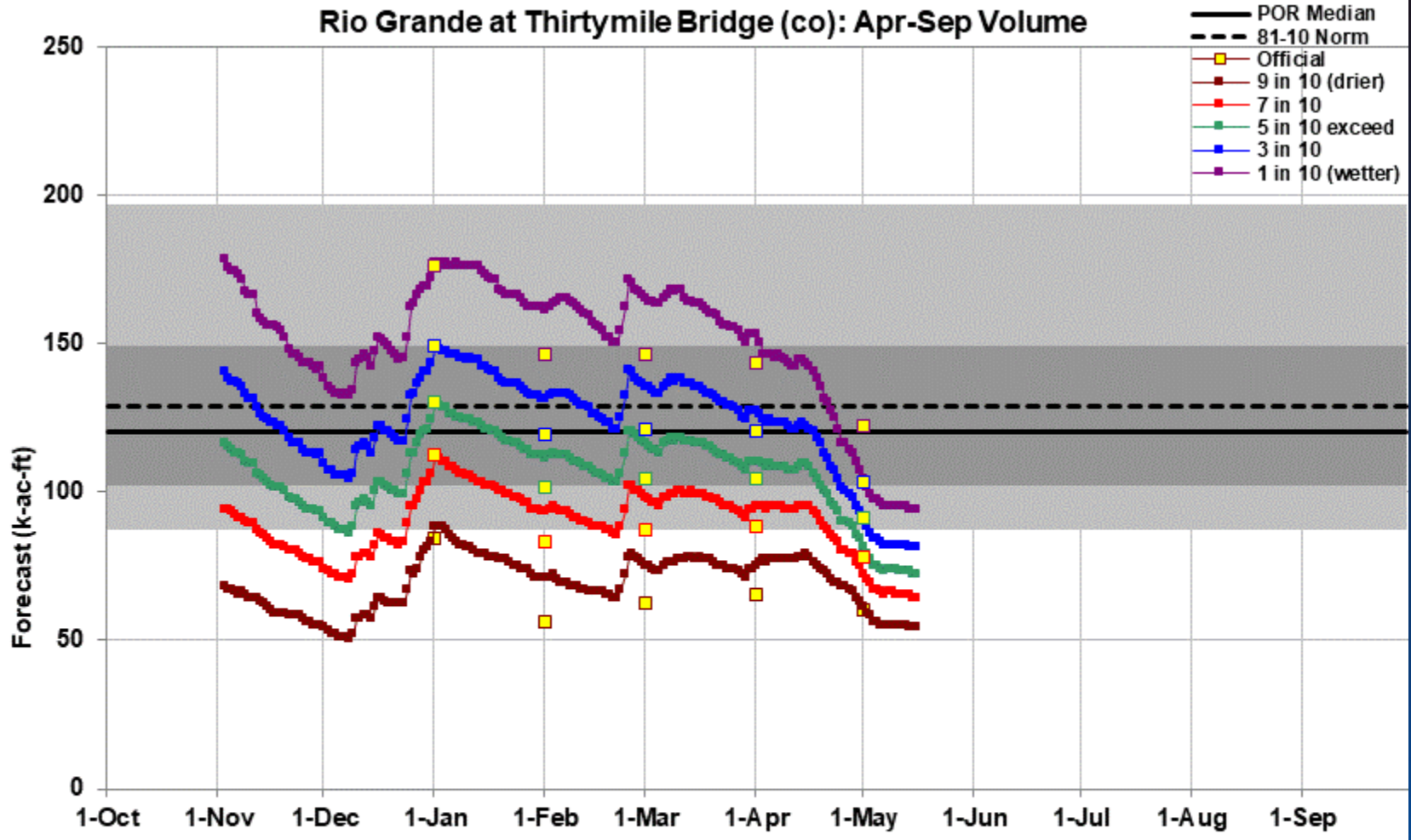
Colorado Snow Surveys



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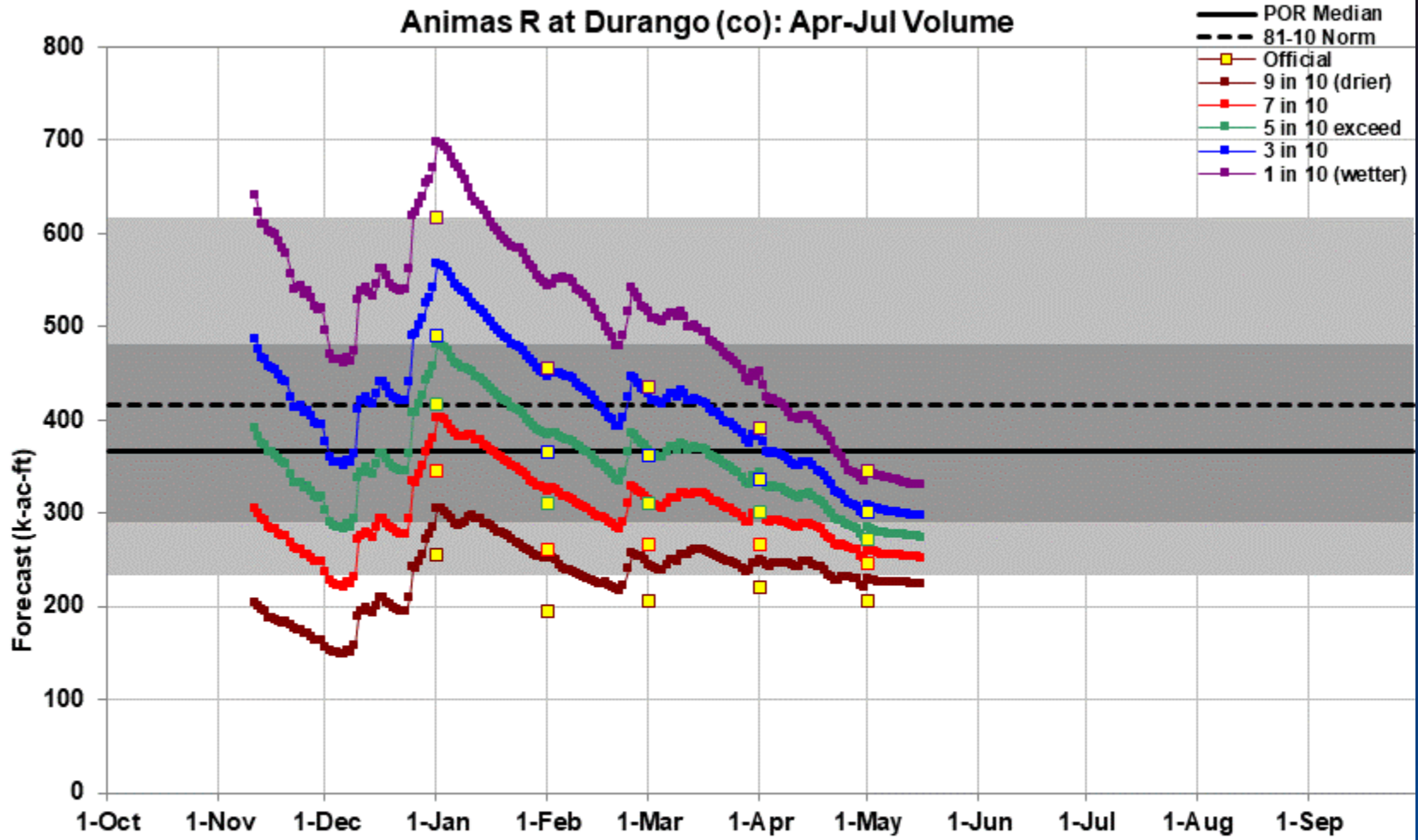
Colorado Snow Surveys



Created 14:48 May 16 2022

NRCS

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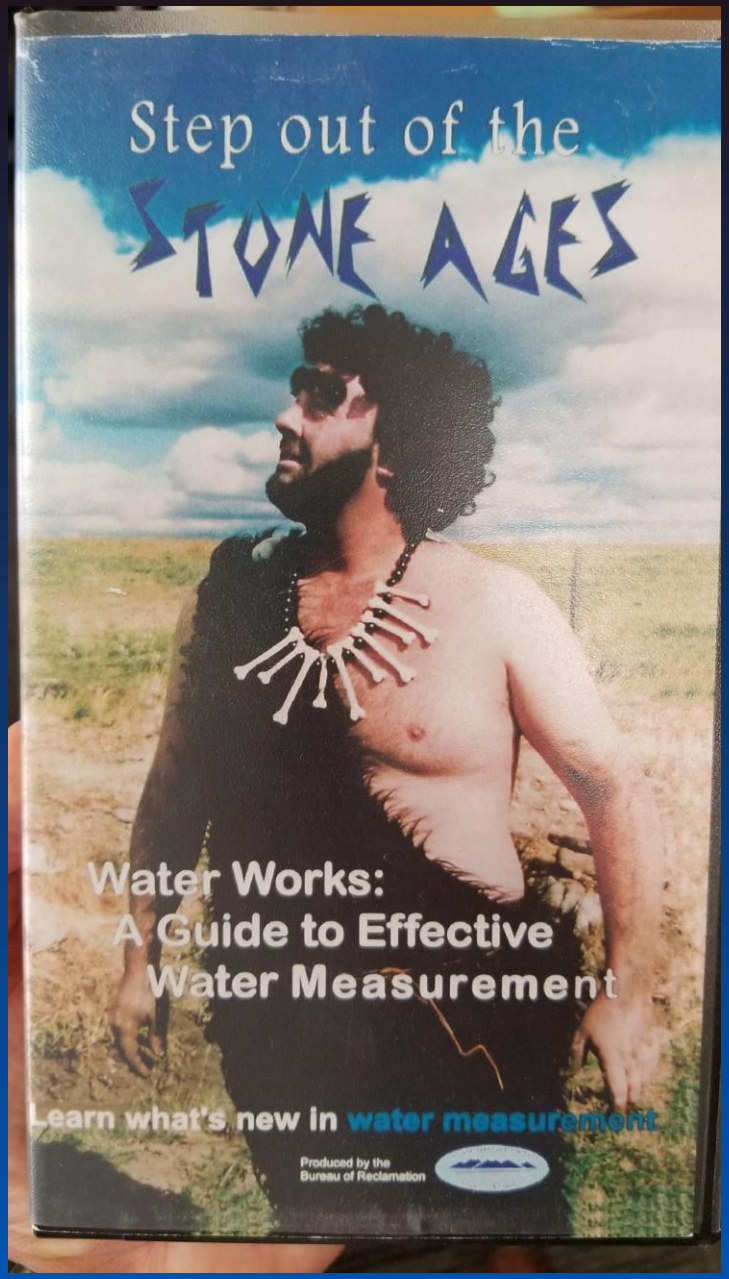
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Summary

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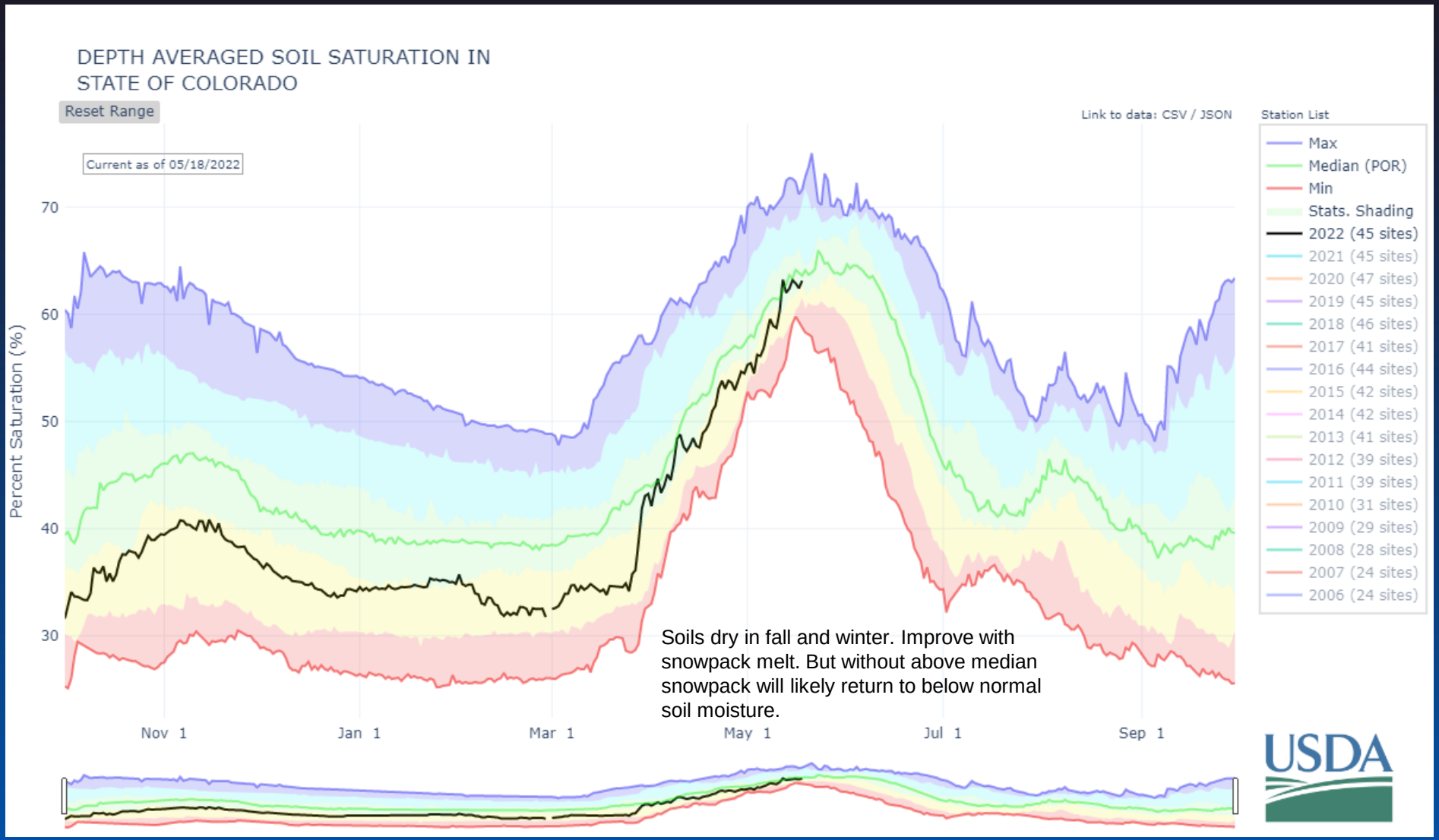
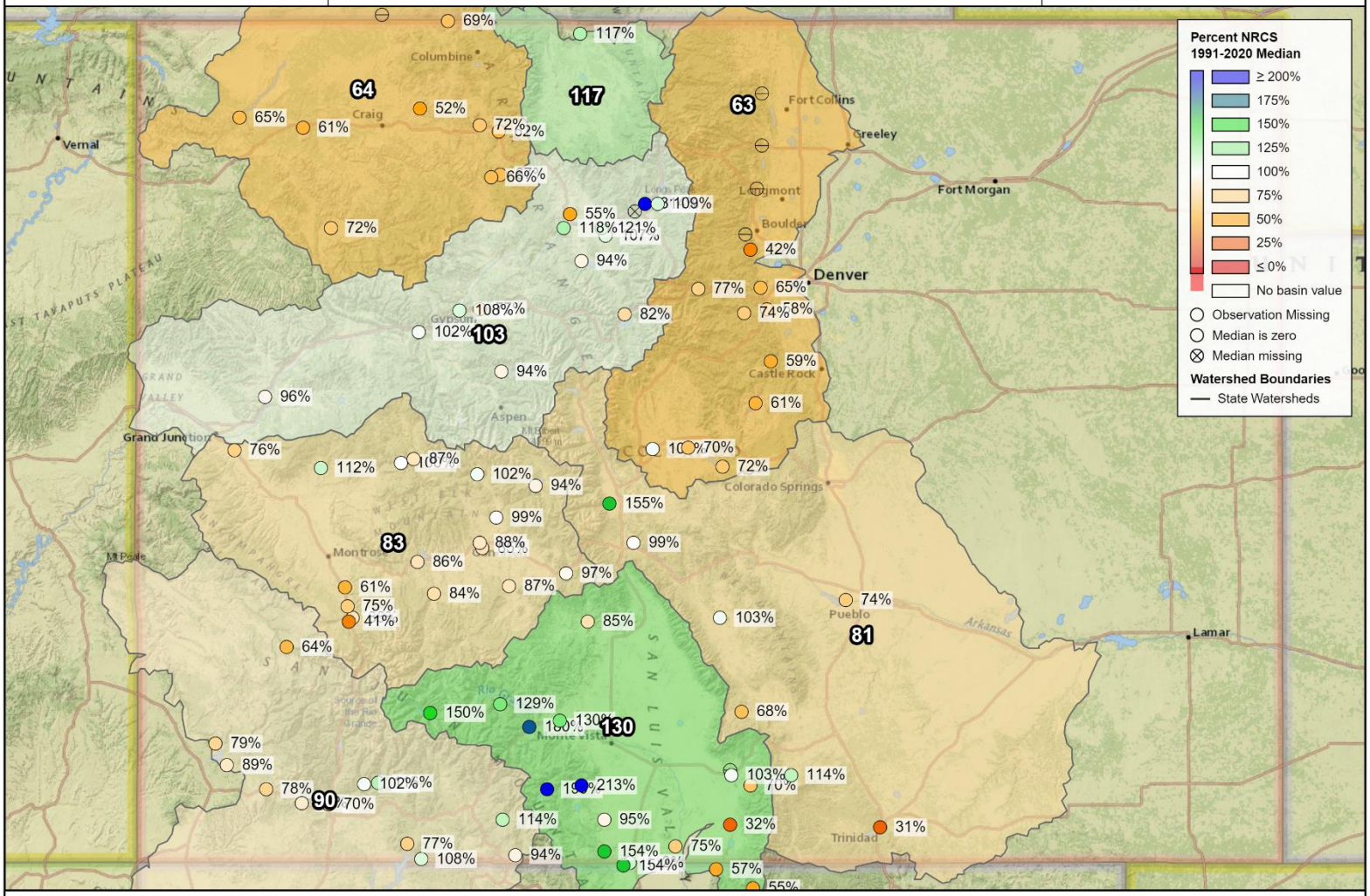
Colorado Snow Surveys



USDA

Colorado Snow Surveys

1 month Adjusted Volume, Observed	Statewide Apr Strmflow Percent NRCS 1991-2020 Median	April 1, 2022 - April 30, 2022



USDA Natural Resources Conservation Service
United States Department of Agriculture

N

Miles
0 10 20 40 60 80 100

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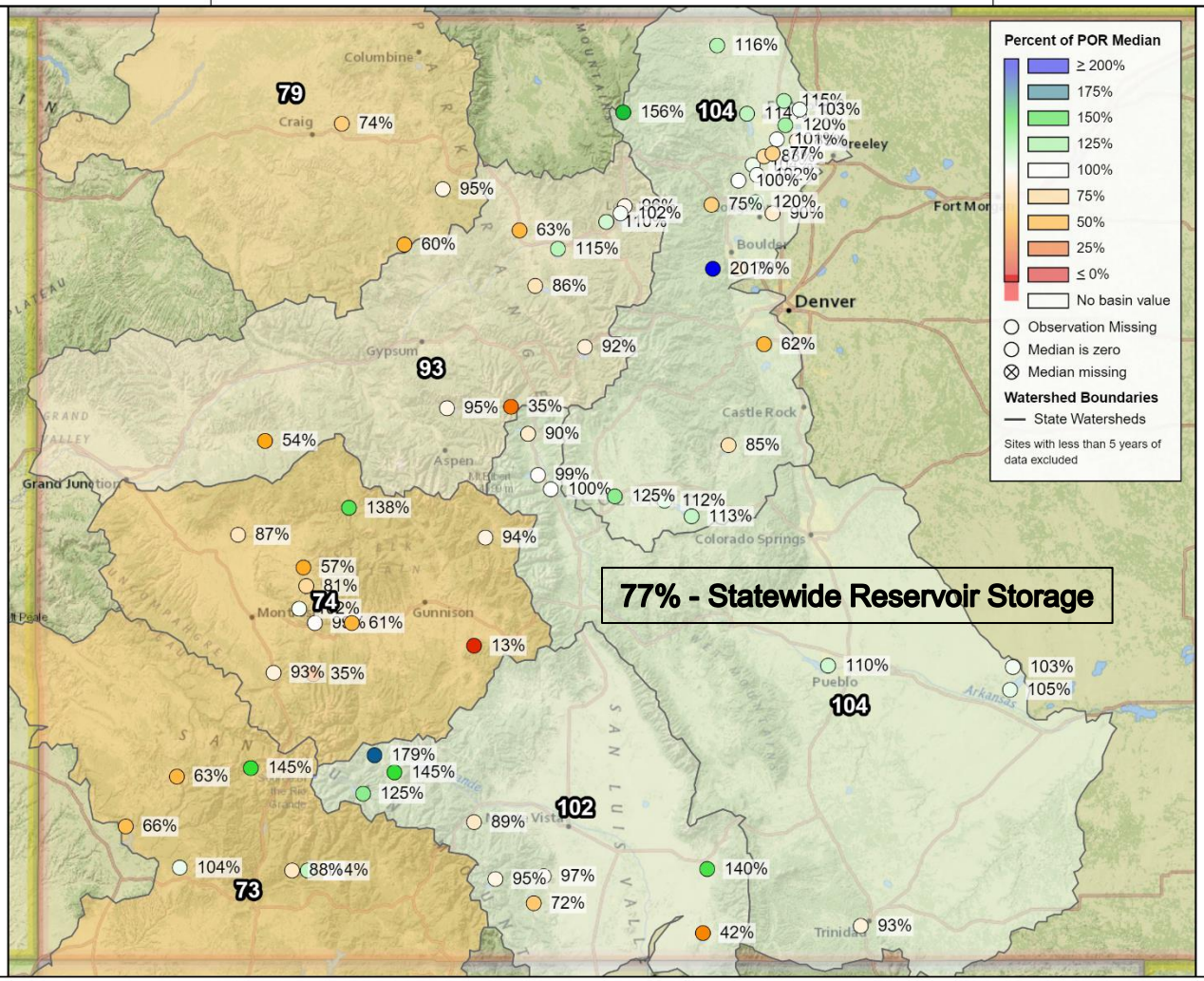
Colorado Snow Surveys

Reservoir Storage	Statewide Reservoirs Percent of POR Median	End of April, 2022



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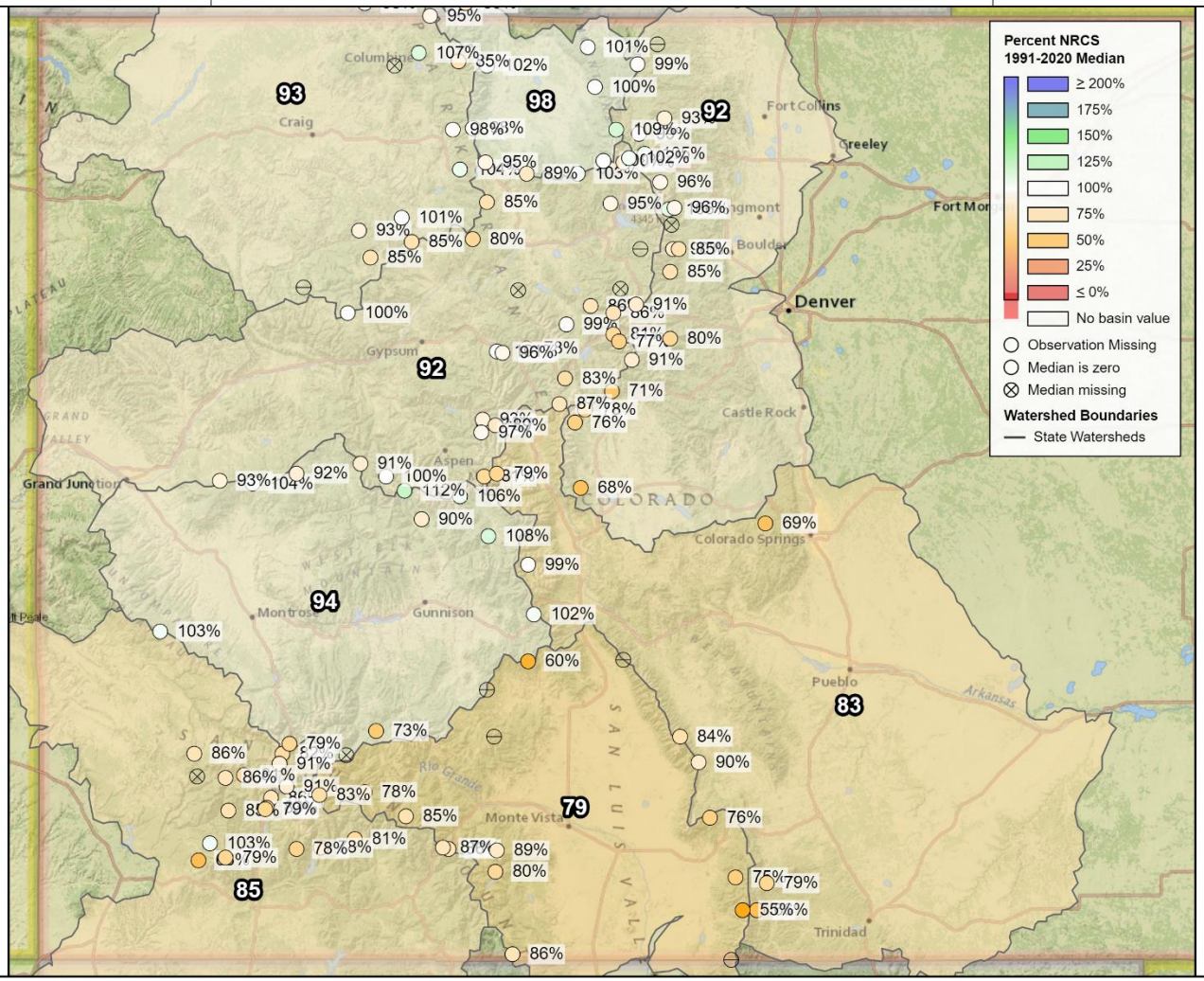
Water Year to Date Precipitation	Statewide YTD Precipitation Percent NRCS 1991-2020 Median	October 1, 2021 - May 17, 2022



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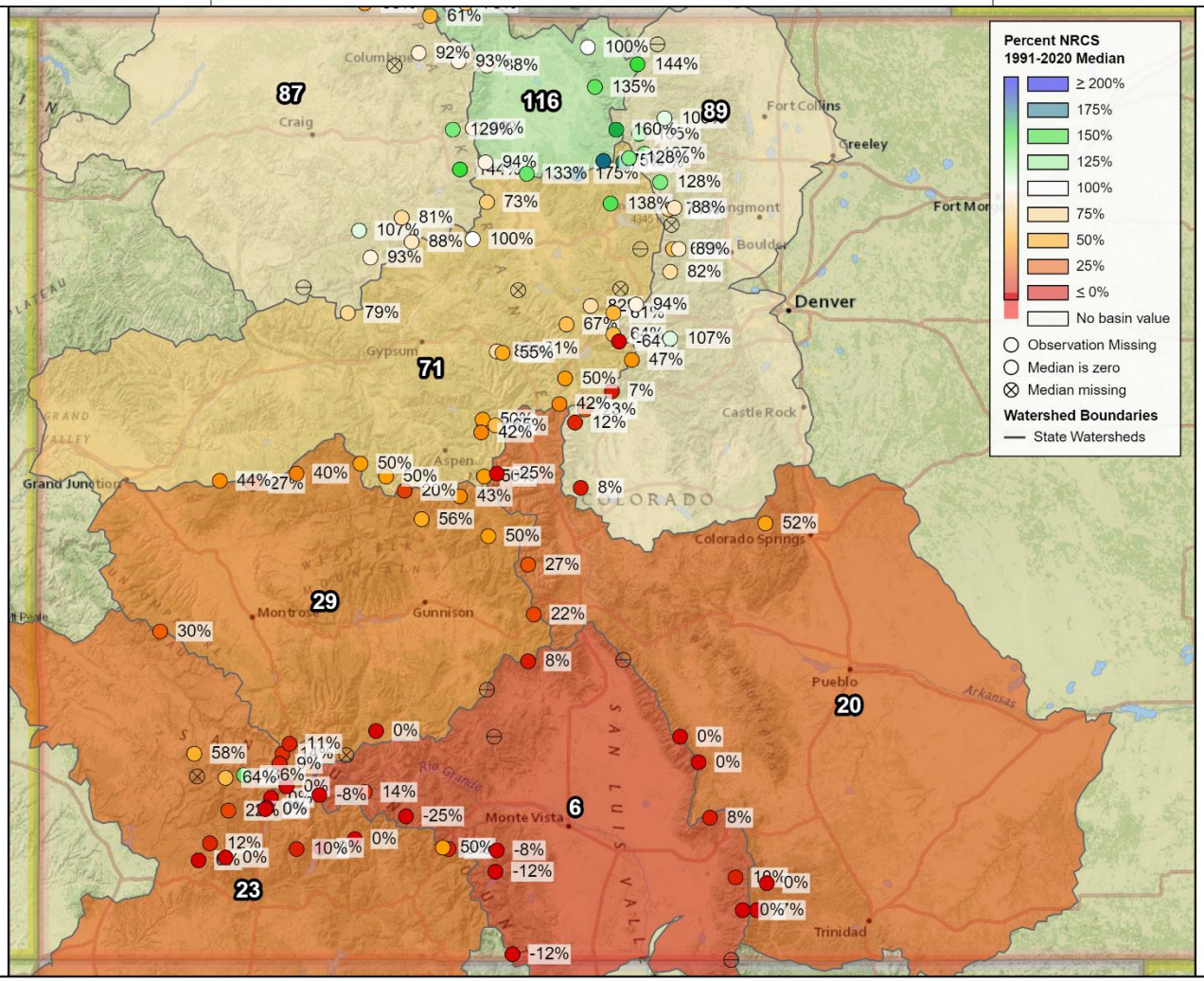
Month to Date Precipitation	Statewide MTD Precipitation Percent NRCS 1991-2020 Median	May 1, 2022 - May 17, 2022



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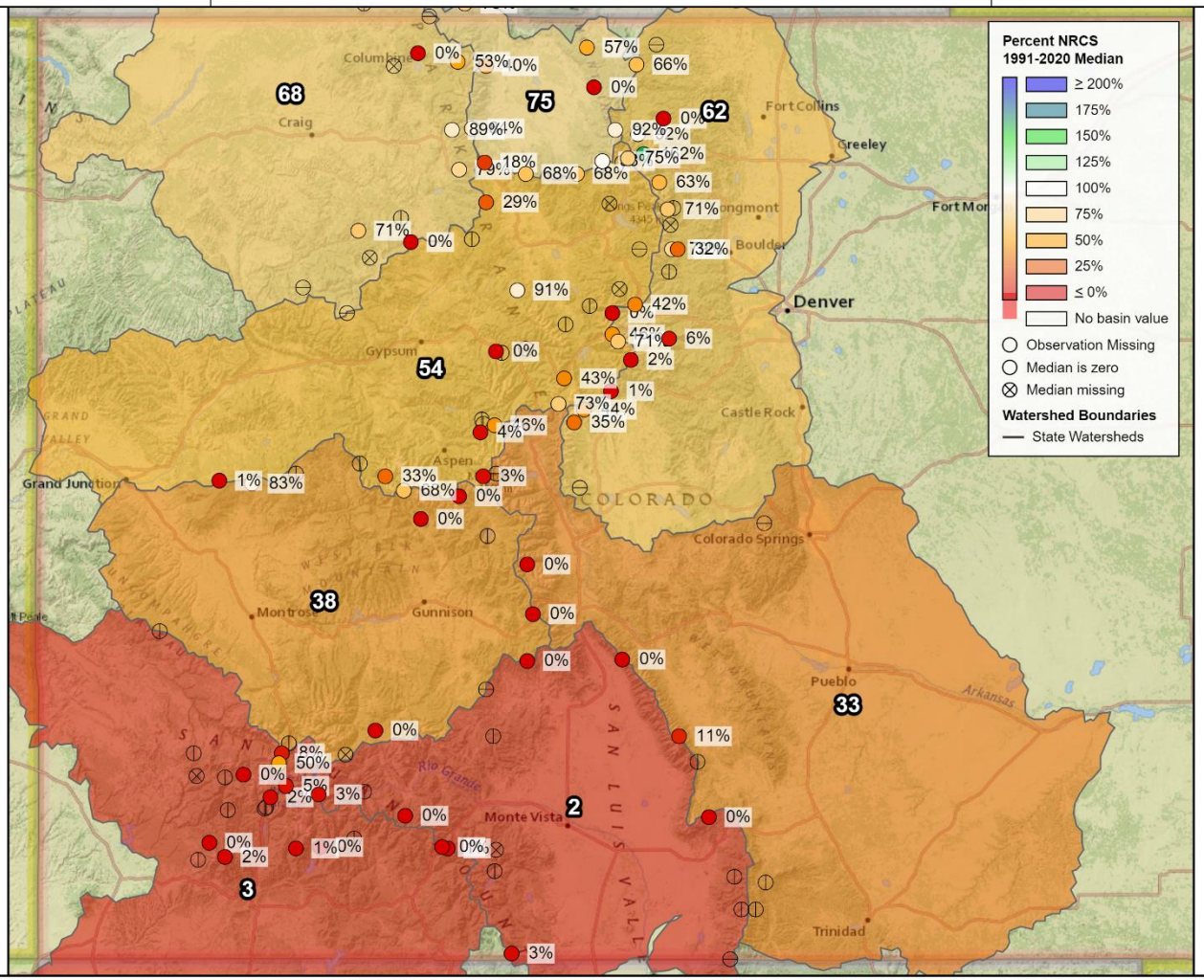
Snow Water Equivalent	Statewide Snowpack Percent NRCS 1991-2020 Median	May 17, 2022, end of day



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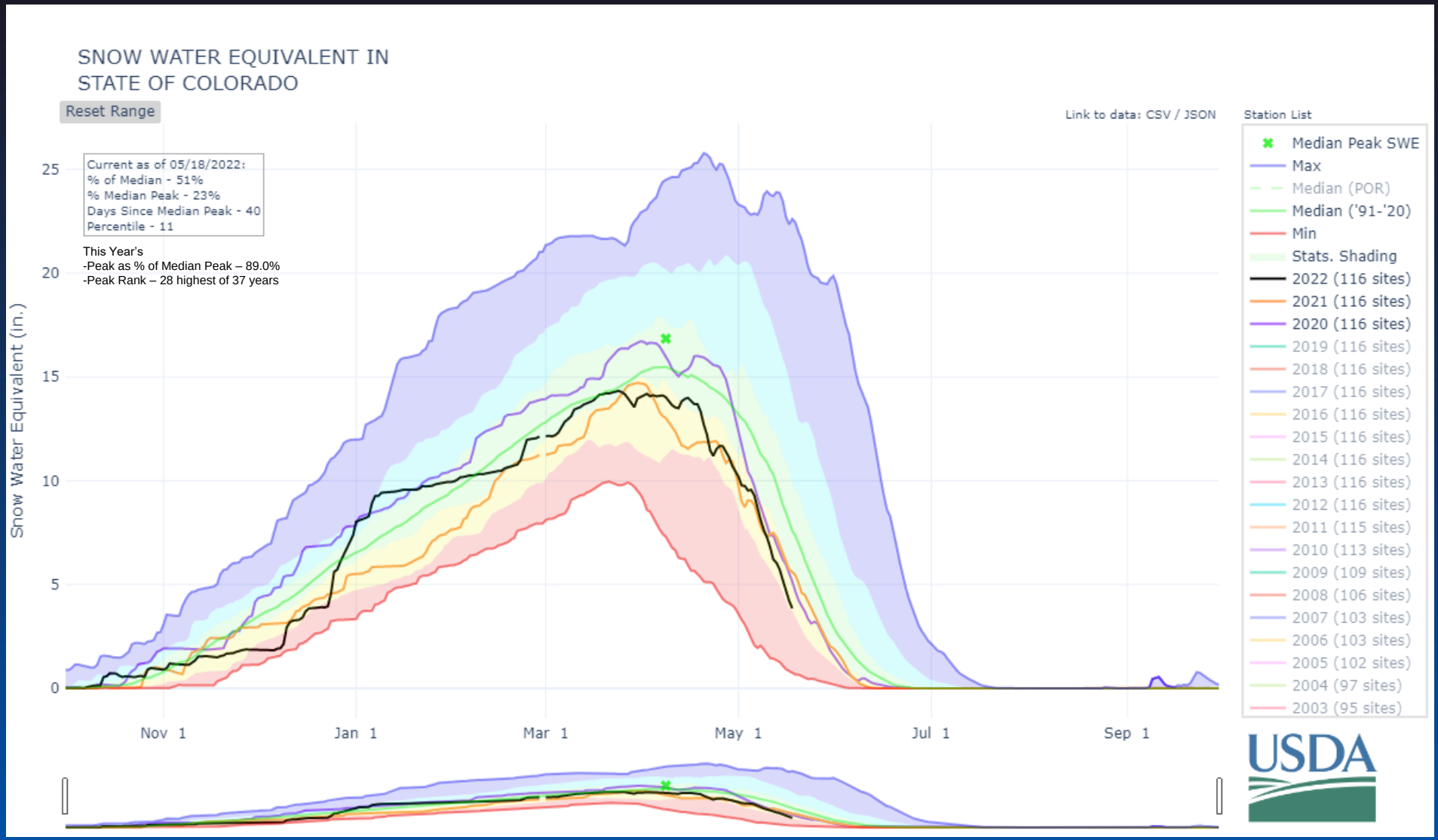
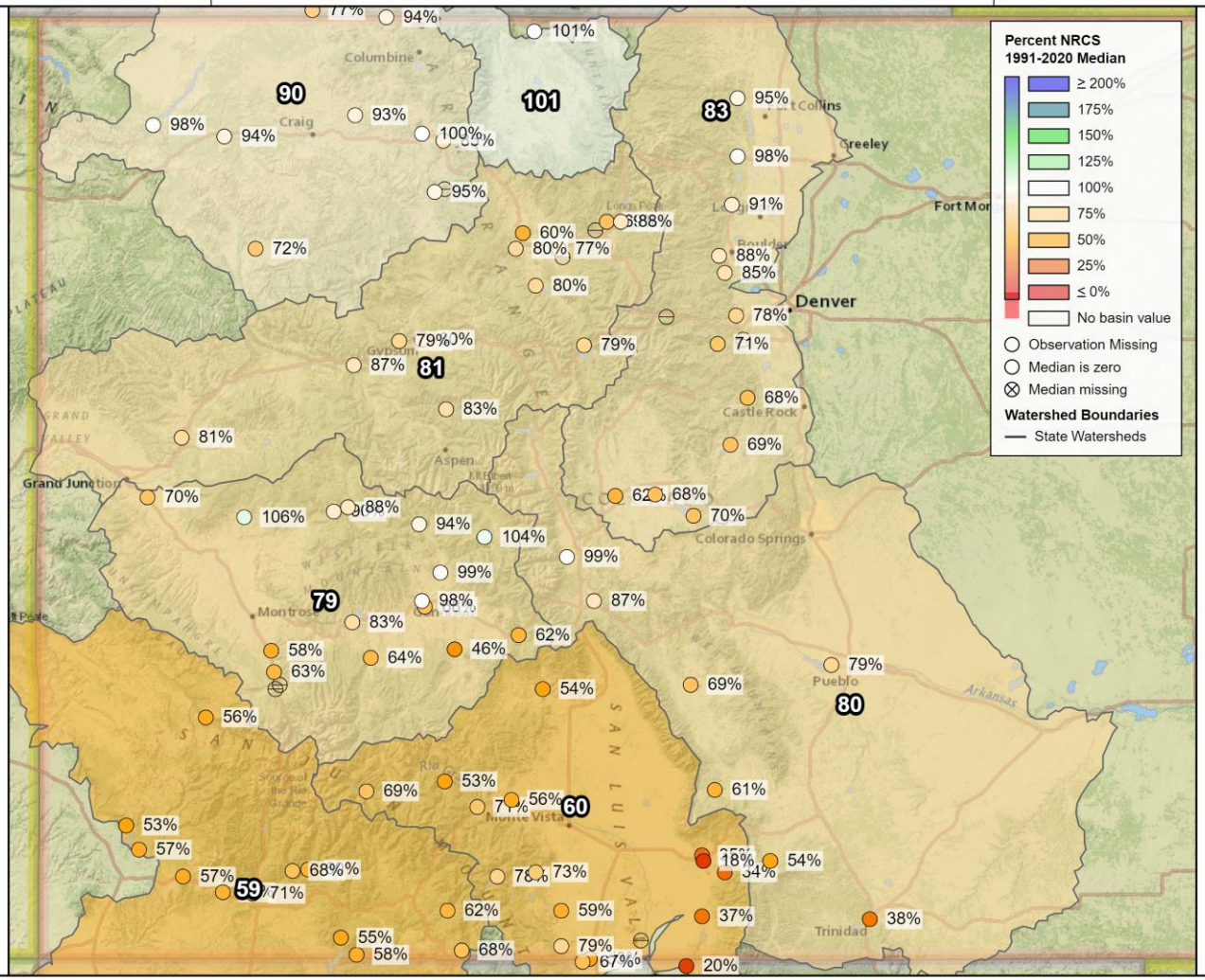


Colorado Snow Surveys

Forecast Volume, 50% Exceedance Probability	Statewide Streamflow Percent NRCS 1991-2020 Median	Primary Period, May 1, 2022



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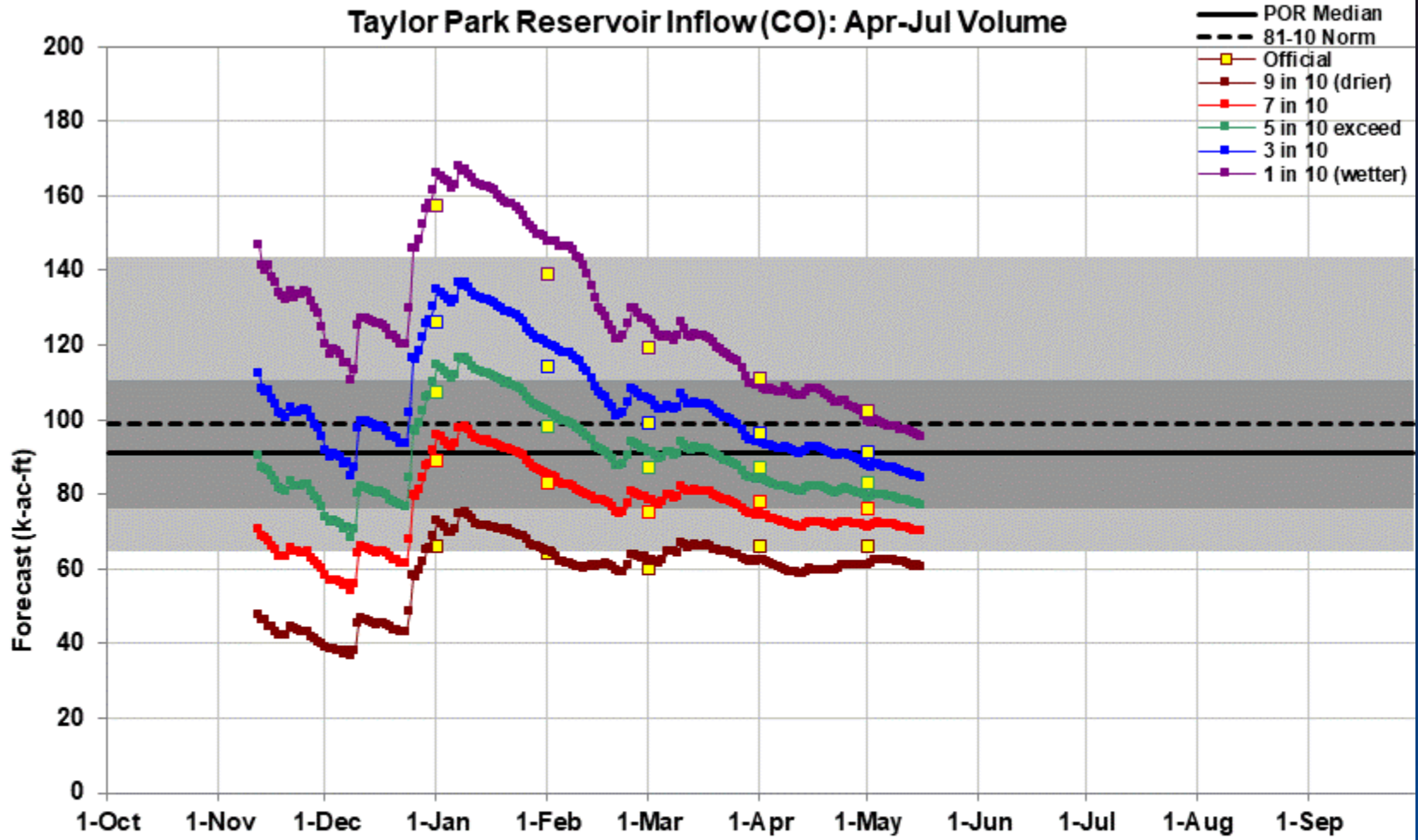

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Summary

- Overall, the water supply outlook is for below normal runoff across most of the state.
  - However, underlying factors vary across the basins
- Snowpack in southern basins peaked early. Northern basins peaked later then normal. All basin peaked below normal but southern basins generally peaked higher, as a percent of median, than the northern basins
- Recent precipitation was near to below normal. Better precipitation favoring the northern portions of the state. Less precipitation as one moves south.
- Snowpack melt rates have been well above normal further south.
- Most snowpack below tree-line is melted out in the south.
- Mountain soil moisture has wetted up as it typically does this time of year as snowpack melts. So it is hard to tell at this point how soil moisture will pan out after the snow melts off.
- Reservoirs range from 73% of normal across the combined San Miguel, Dolores, Animas & San Juan Basins to 104% of normal in the Arkansas and the South Platte alike. However next month values will provide the best indicator of reservoir outlooks.
- Streamflow forecasts for much of the state are expected to be below normal for the spring and summer. Poor precipitation trends could continue to degrade outlooks.

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Water Availability Task Force Meeting
May 19th, 2022

NRCS Snow Survey and Water Supply Forecasting Program

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