



Water Availability Task Force Meeting

April 20th, 2021

NRCS Snow Survey and Water Supply Forecasting Program

Brian Domonkos

Hydrologist

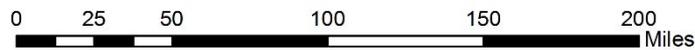
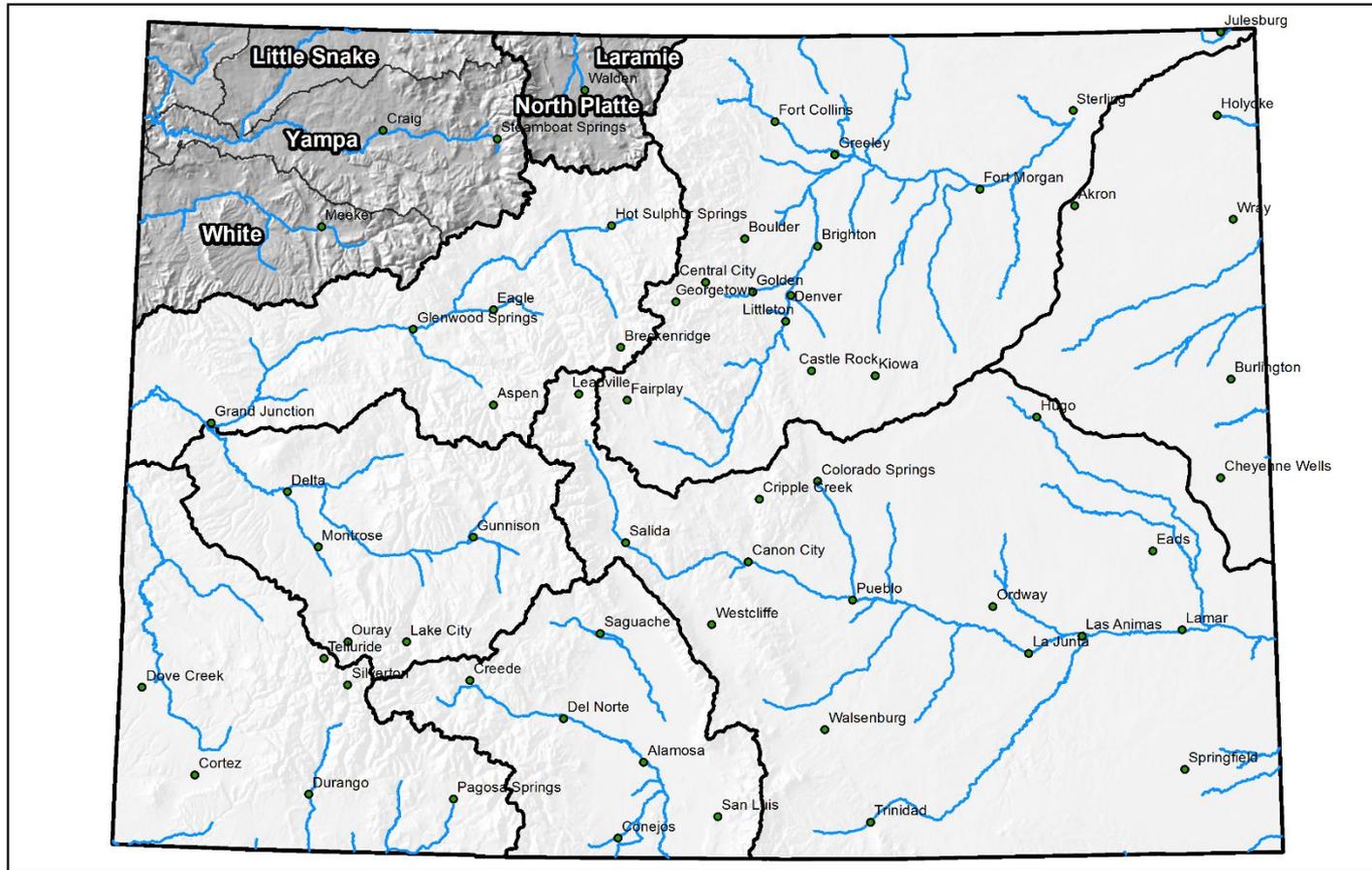
Asst. Snow Survey Supervisor

720-544-2852

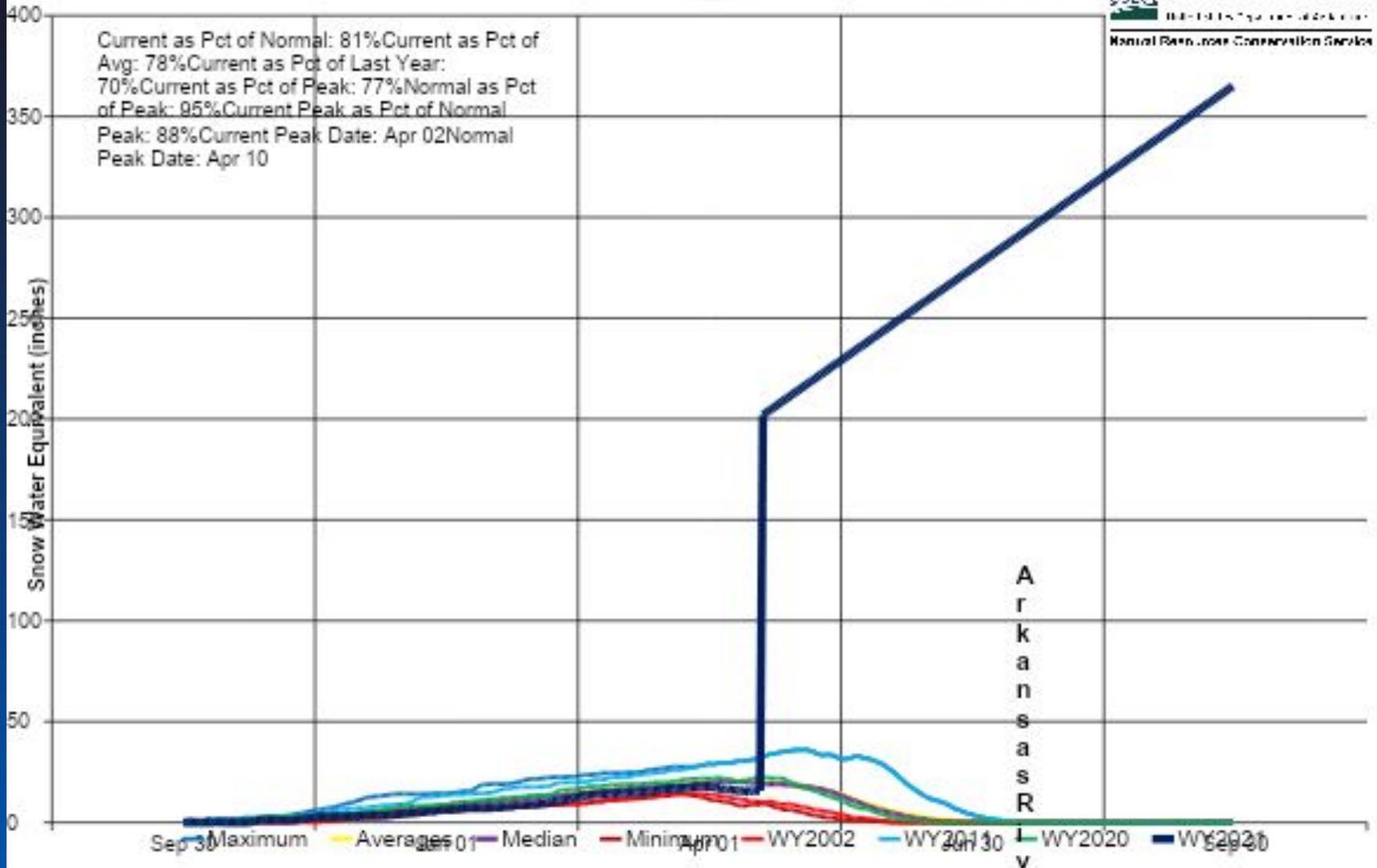
<http://www.nrcs.usda.gov/wps/portal/nrcs/main/co/snow/>

Major Basin Summary

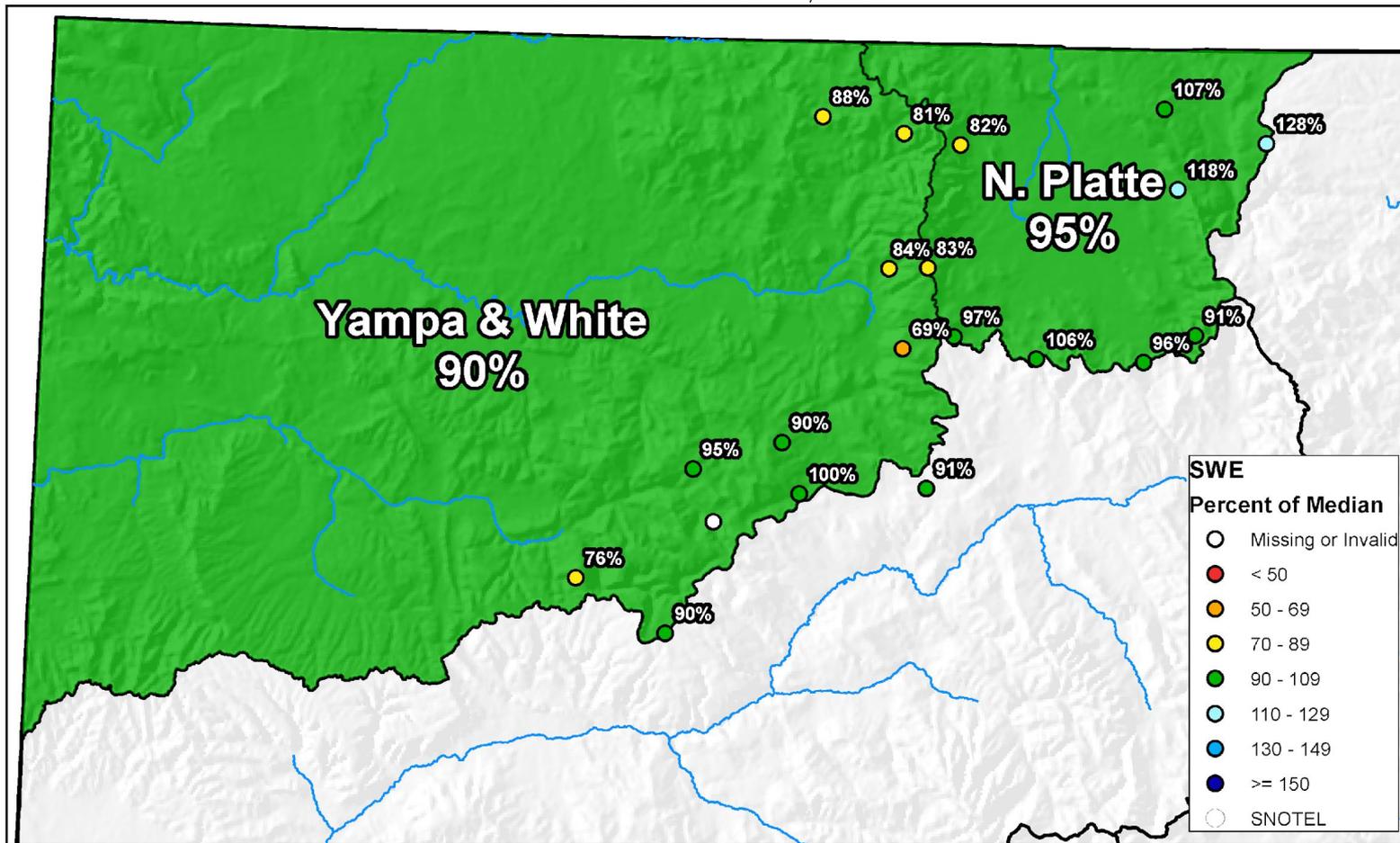
Yampa, White, and North Platte River Basins



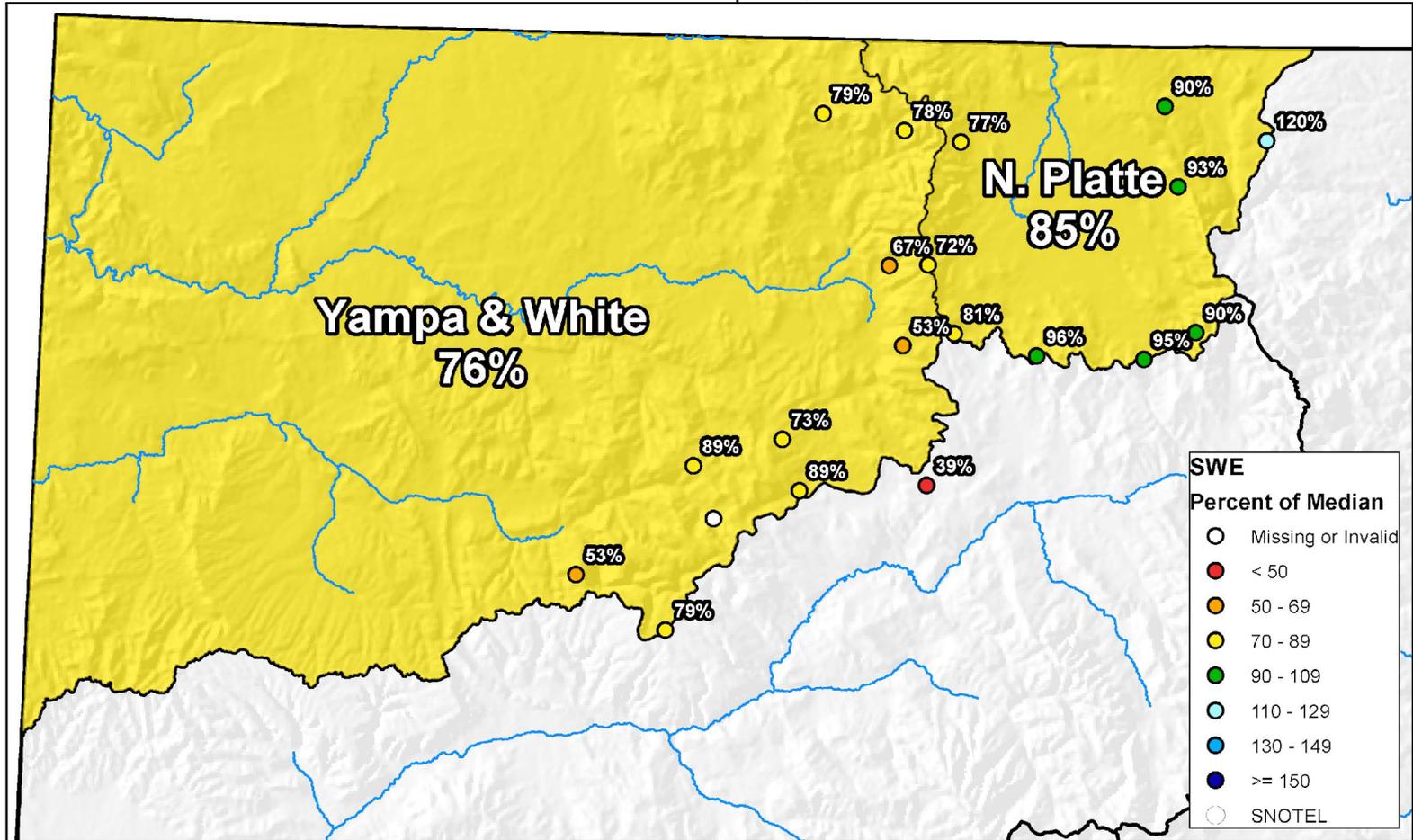
Yampa, White and North Platte River Basins High/Low Snowpack Summary *Based on Provisional SNOTEL data as of Apr 19, 2021*



Yampa, White, and North Platte River Basins Snow Water Equivalent (SWE) Summary Current as of Mar 17, 2021



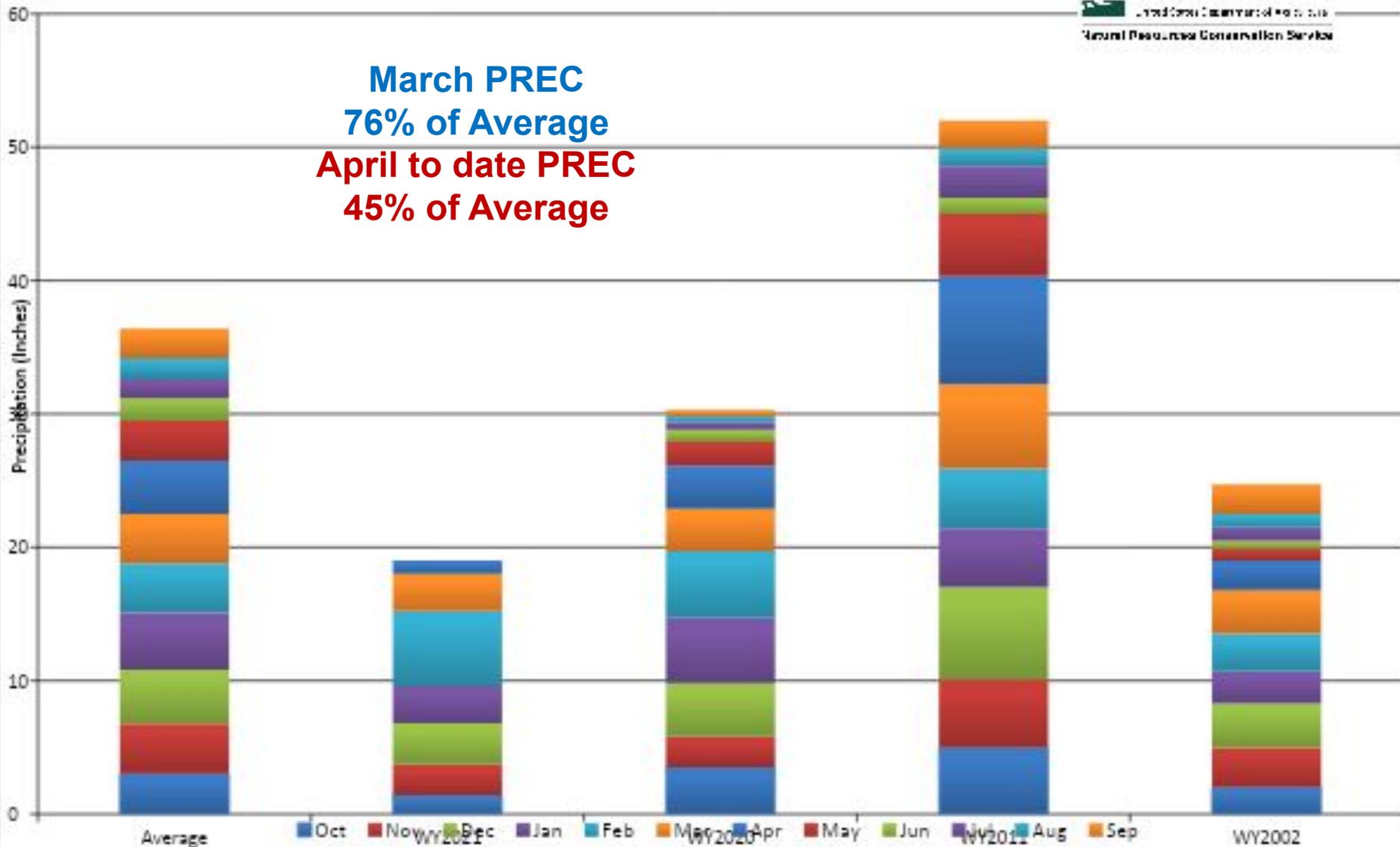
Yampa, White, and North Platte River Basins Snow Water Equivalent (SWE) Summary Current as of Apr 19, 2021



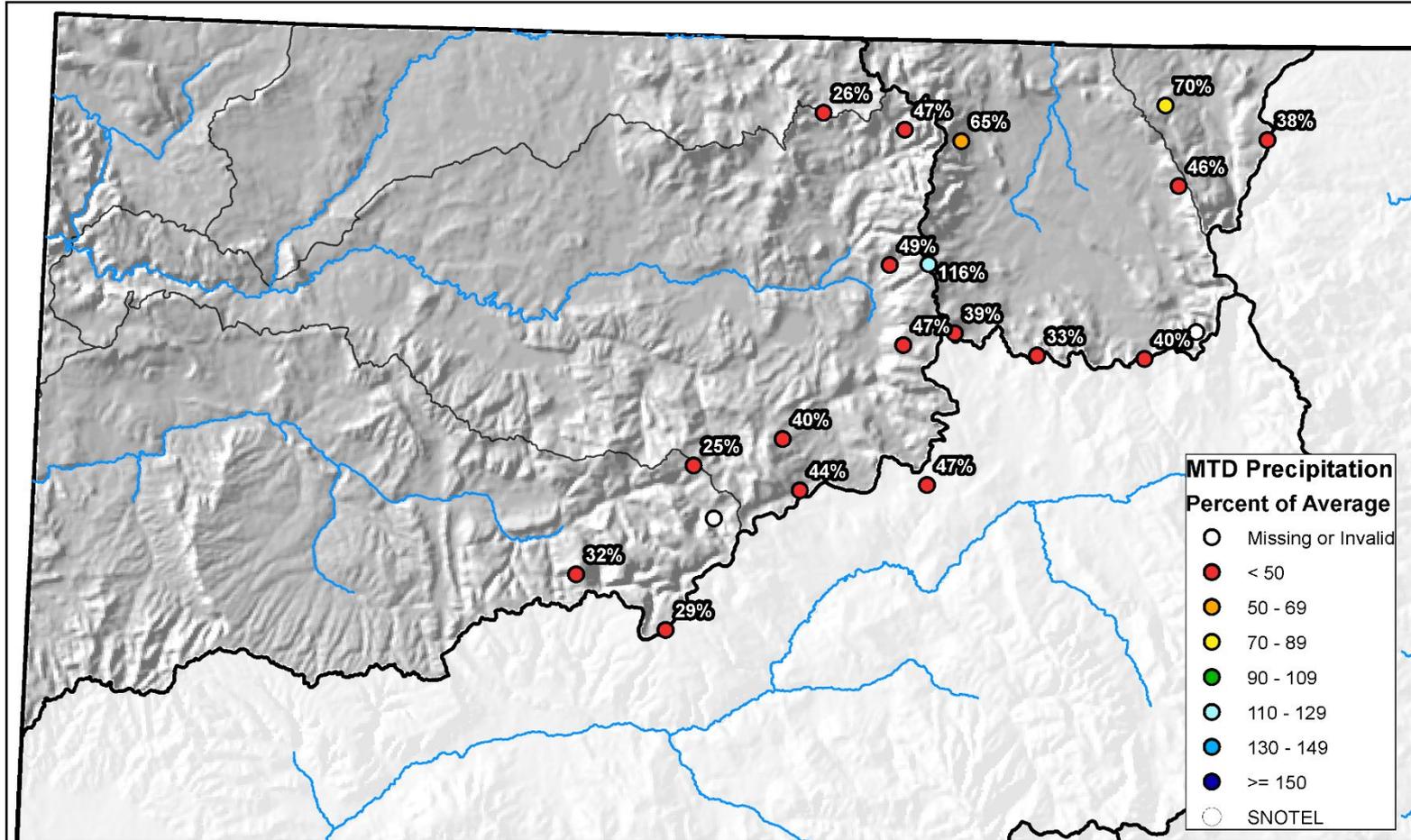
Yampa and White River Basins High/Low Monthly Precipitation Summary *Based on Provisional SNOTEL data as of Apr 19, 2021*

USDA
United States Department of Agriculture
Natural Resources Conservation Service

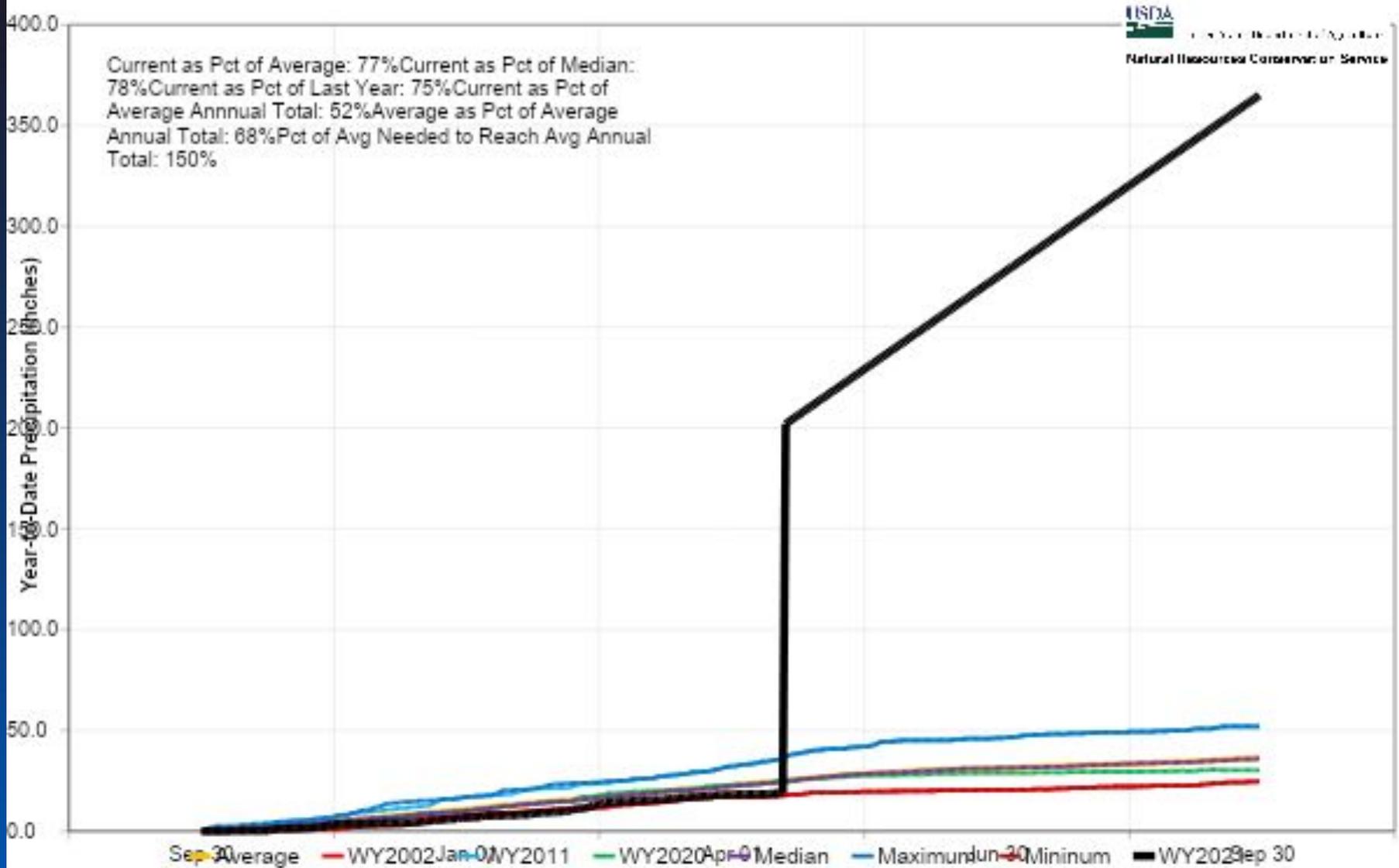
March PREC
76% of Average
April to date PREC
45% of Average



Yampa, White, and North Platte River Basins Month to Date Precipitation Summary Current as of Apr 19, 2021

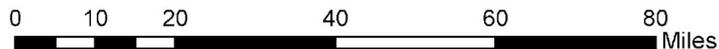
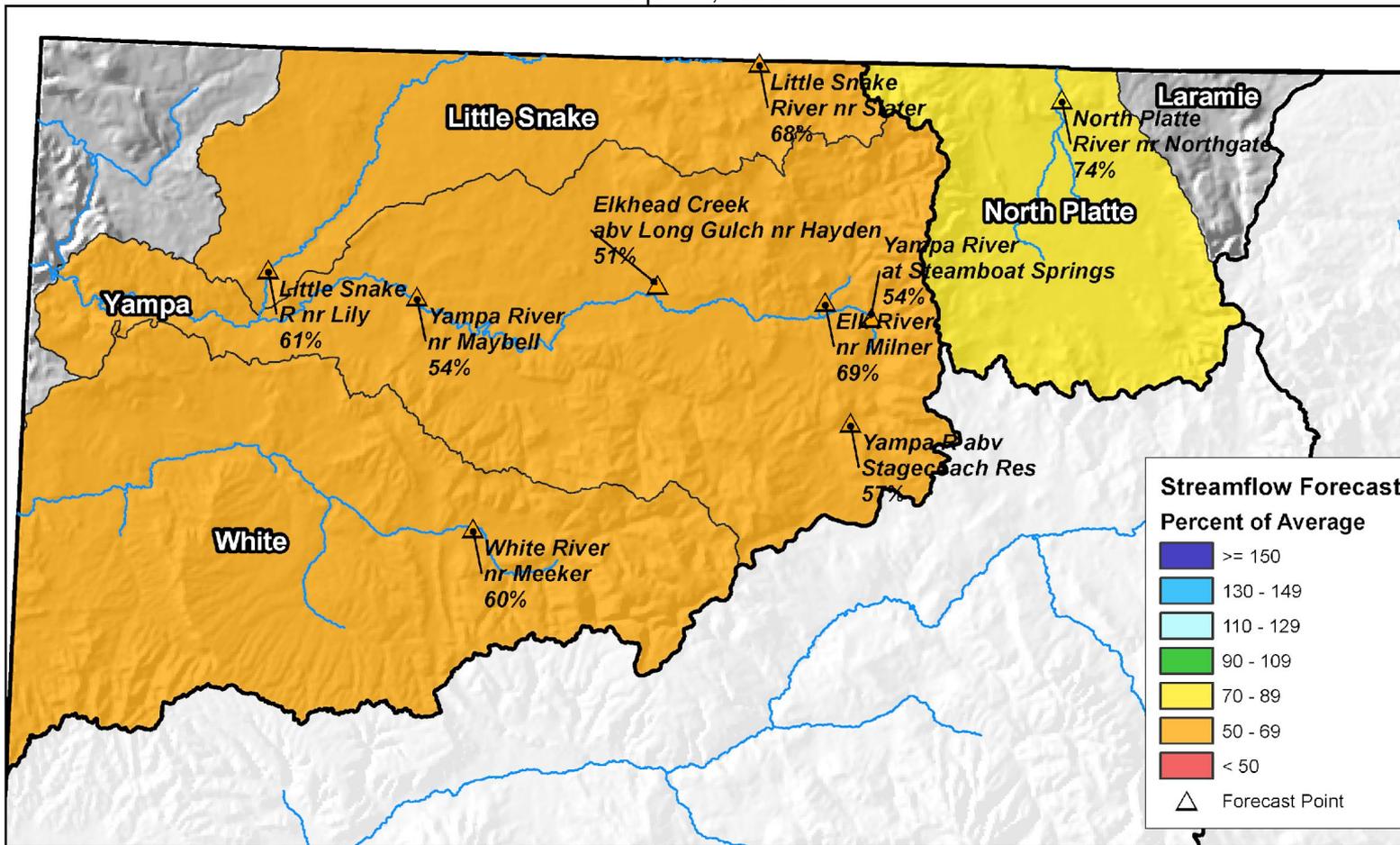


Yampa and White River Basins High/Low Year-to-Date Precipitation Summary Based on Provisional SNOTEL data as of Apr 19, 2021



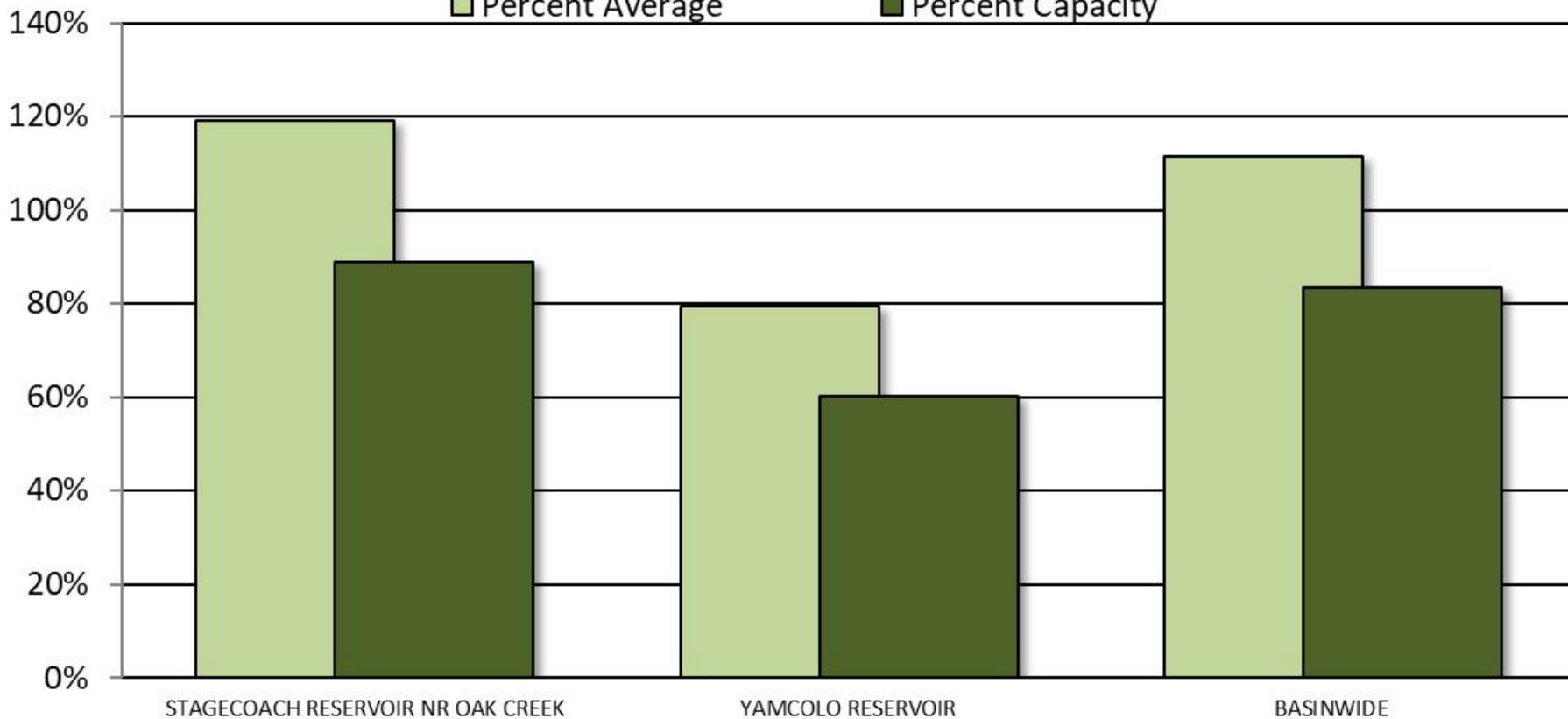
Yampa, White, and North Platte River Basins Streamflow Forecast Summary

April 1, 2021

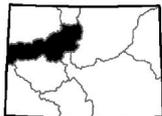
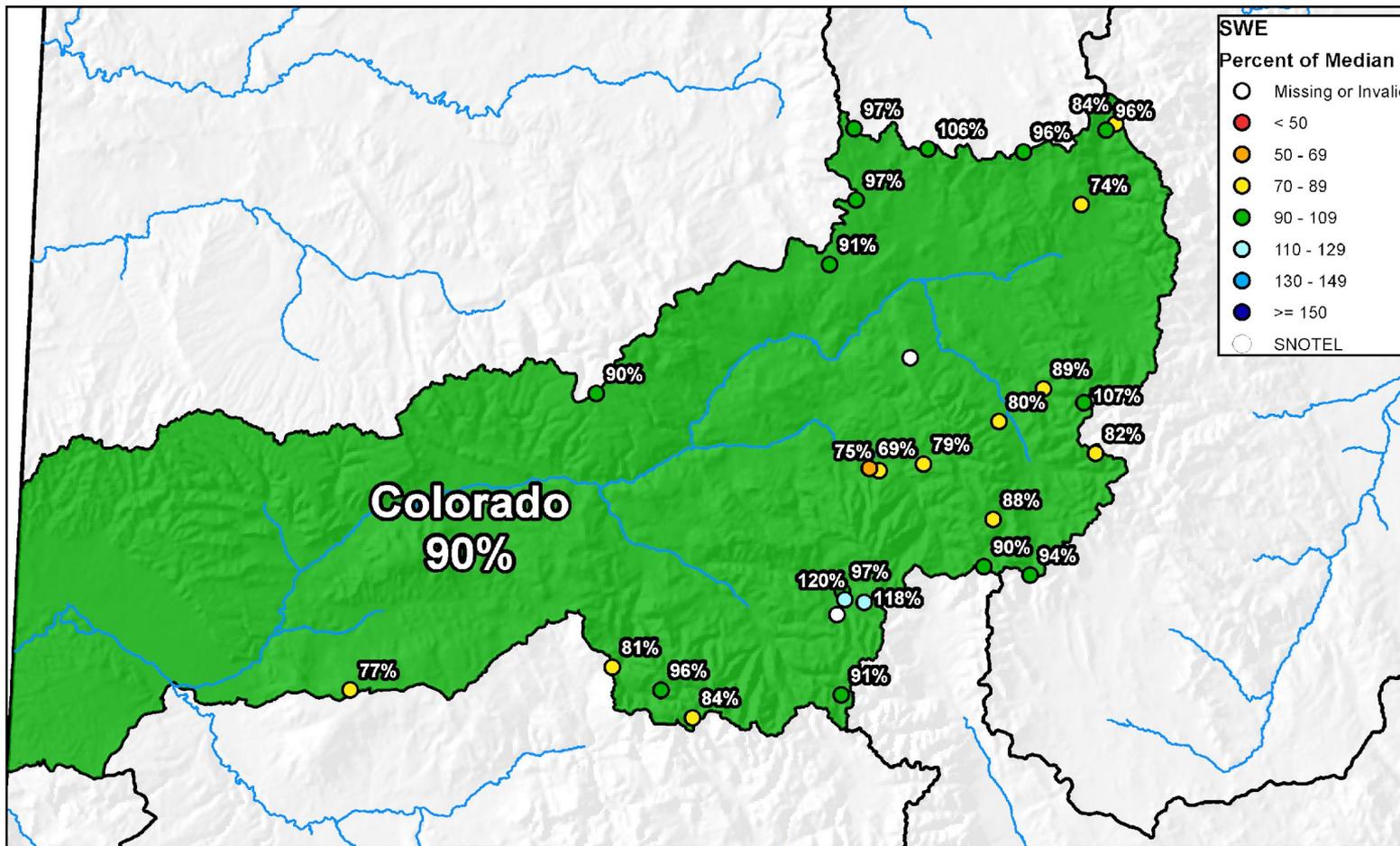


End of March Reservoir Storage

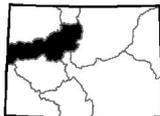
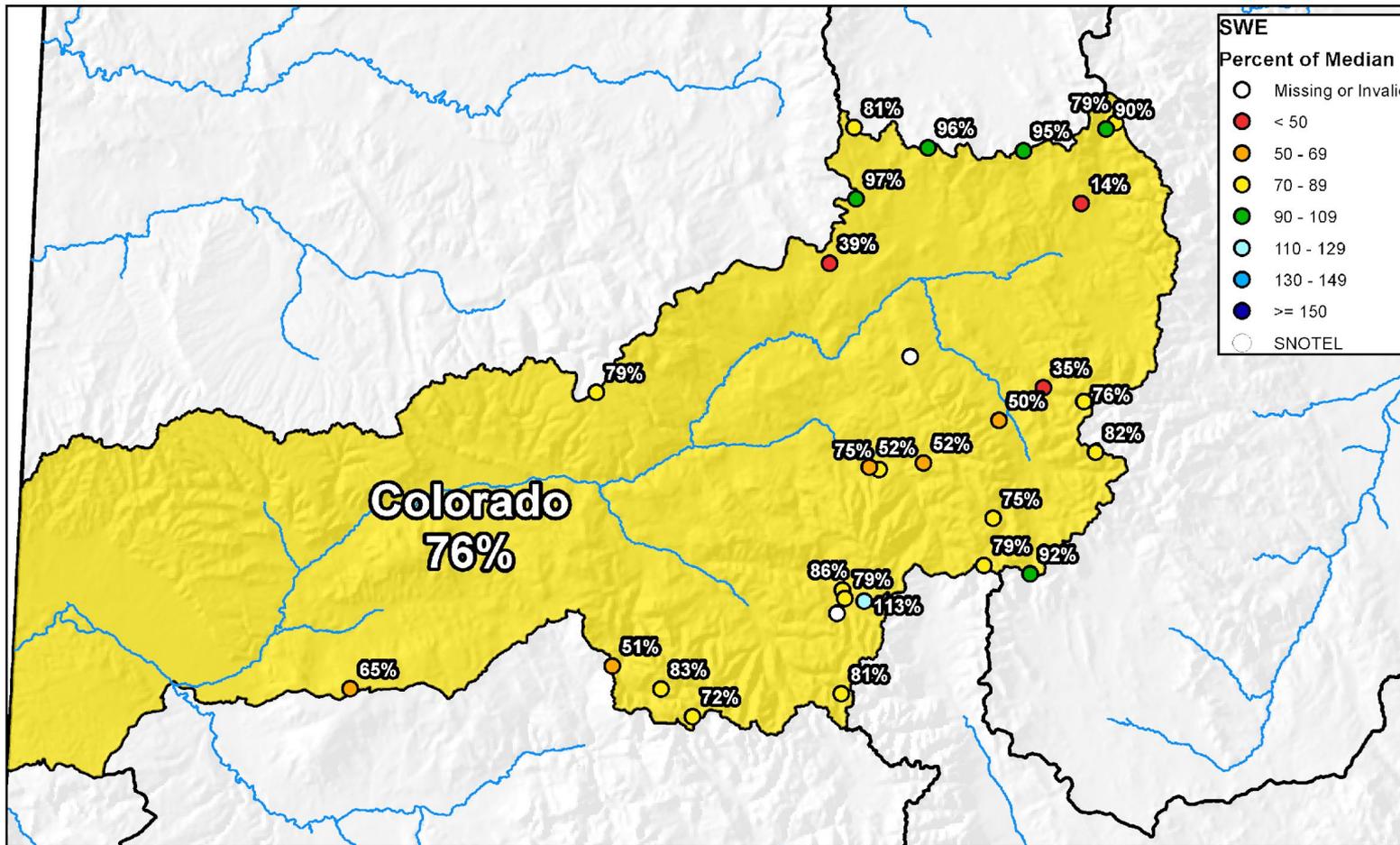
■ Percent Average
 ■ Percent Capacity



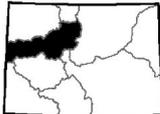
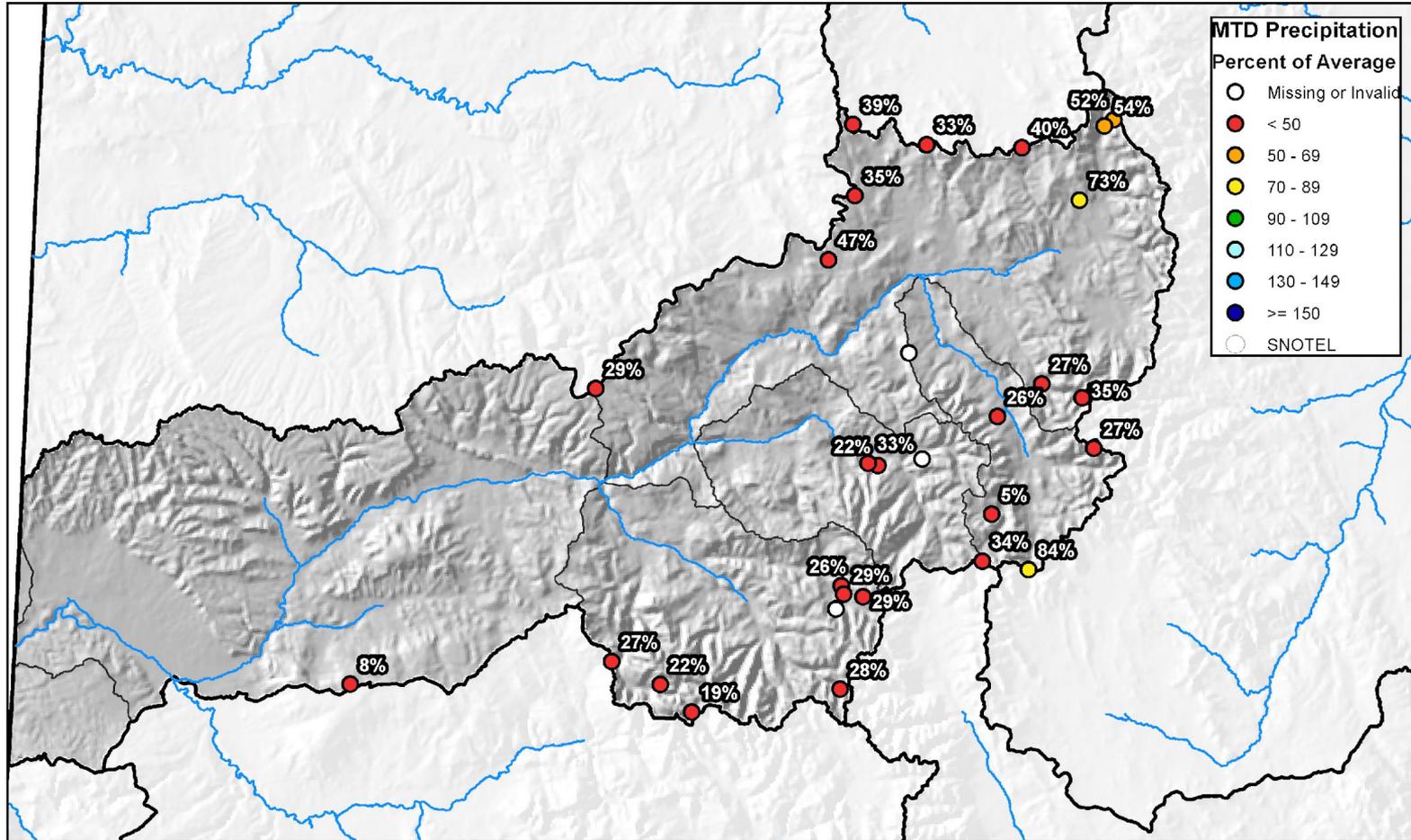
Upper Colorado River Basin Snow Water Equivalent (SWE) Summary Current as of Mar 17, 2021



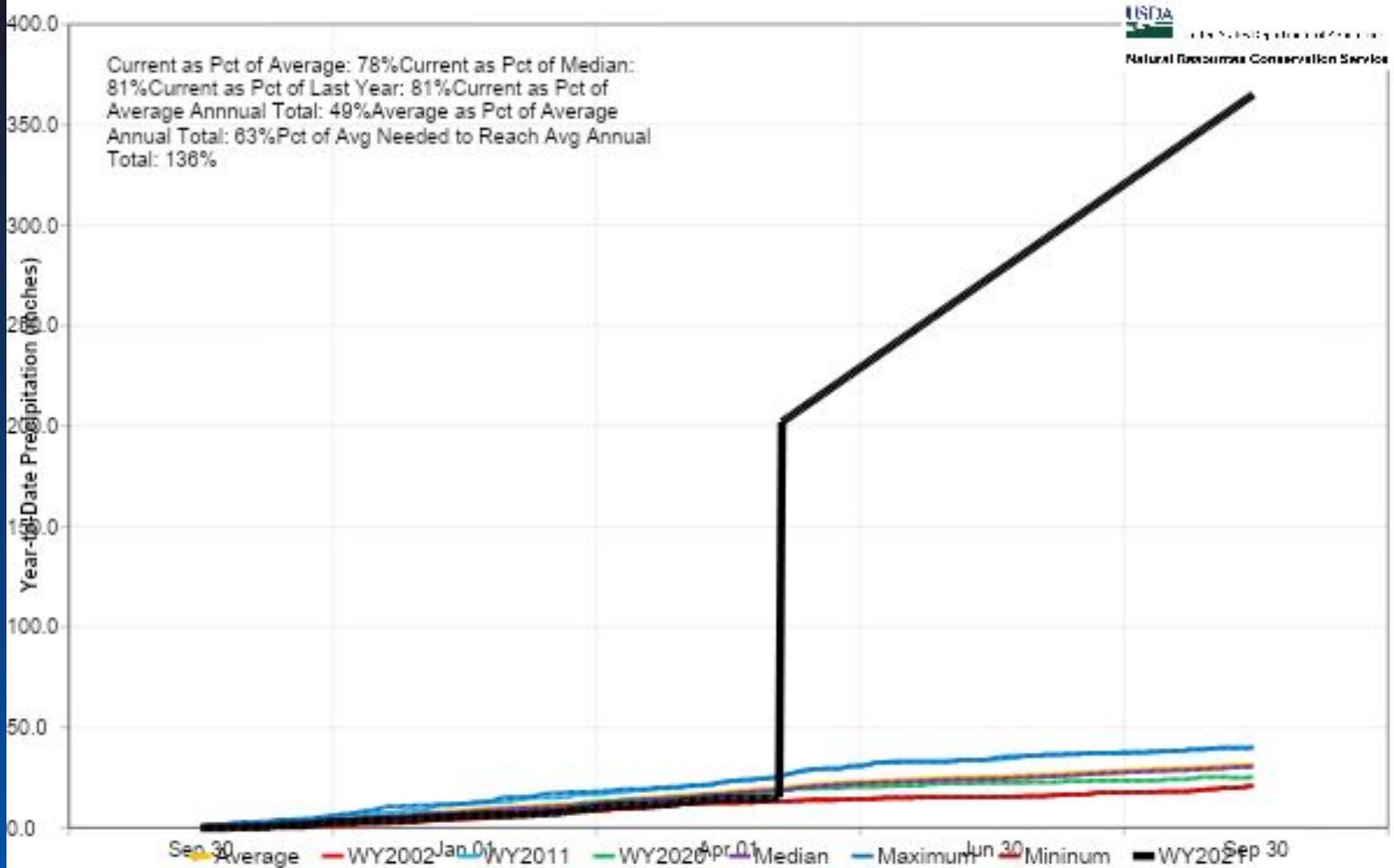
Upper Colorado River Basin Snow Water Equivalent (SWE) Summary Current as of Apr 19, 2021



Upper Colorado River Basin Month to Date Precipitation Summary Current as of Apr 19, 2021

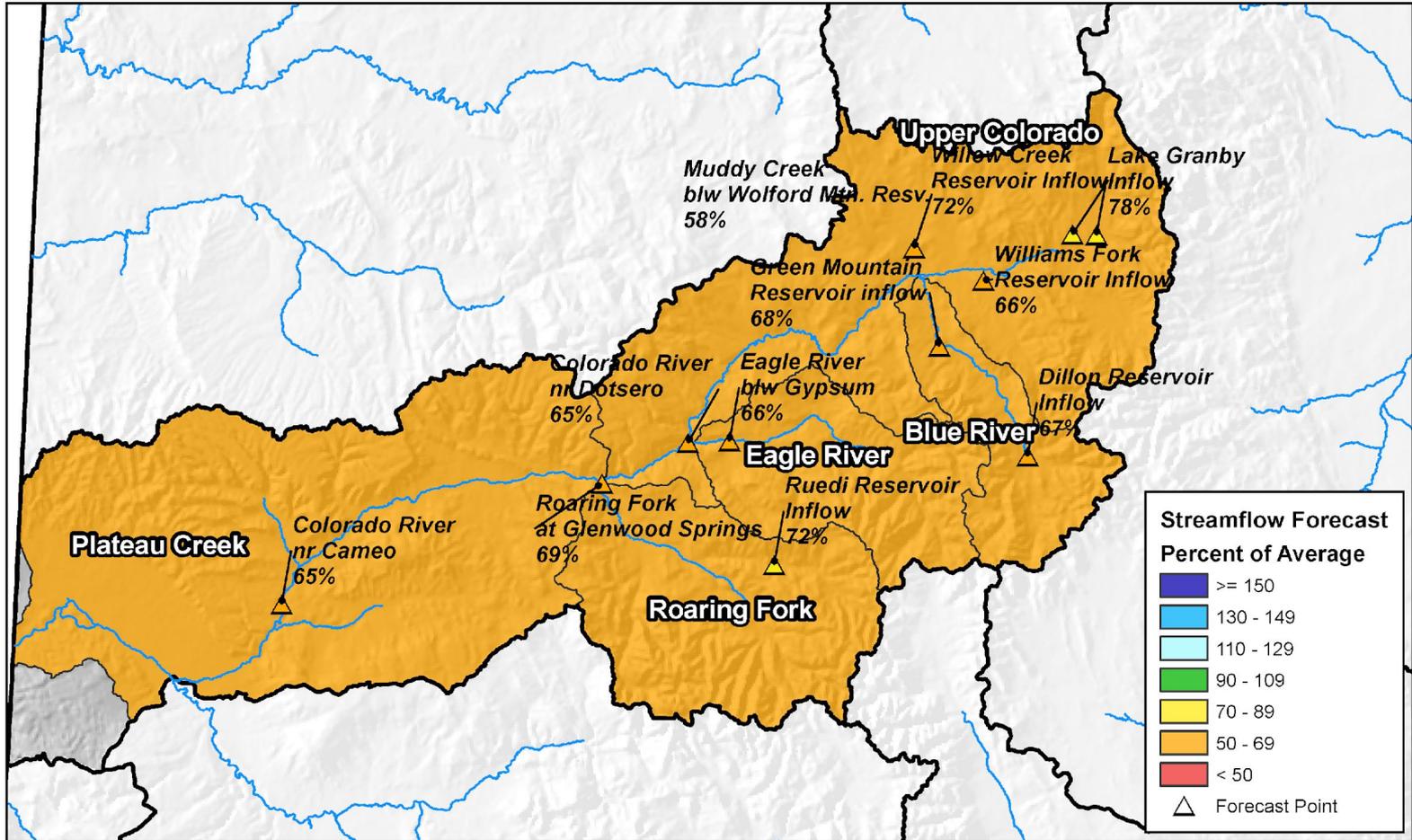


Upper Colorado River Basin High/Low Year-to-Date Precipitation Summary *Based on Provisional SNOTEL data as of Apr 19, 2021*



Upper Colorado River Basin Streamflow Forecast Summary

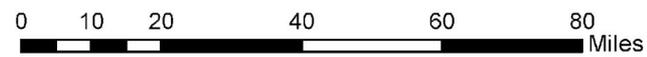
April 1, 2021



Streamflow Forecast Percent of Average

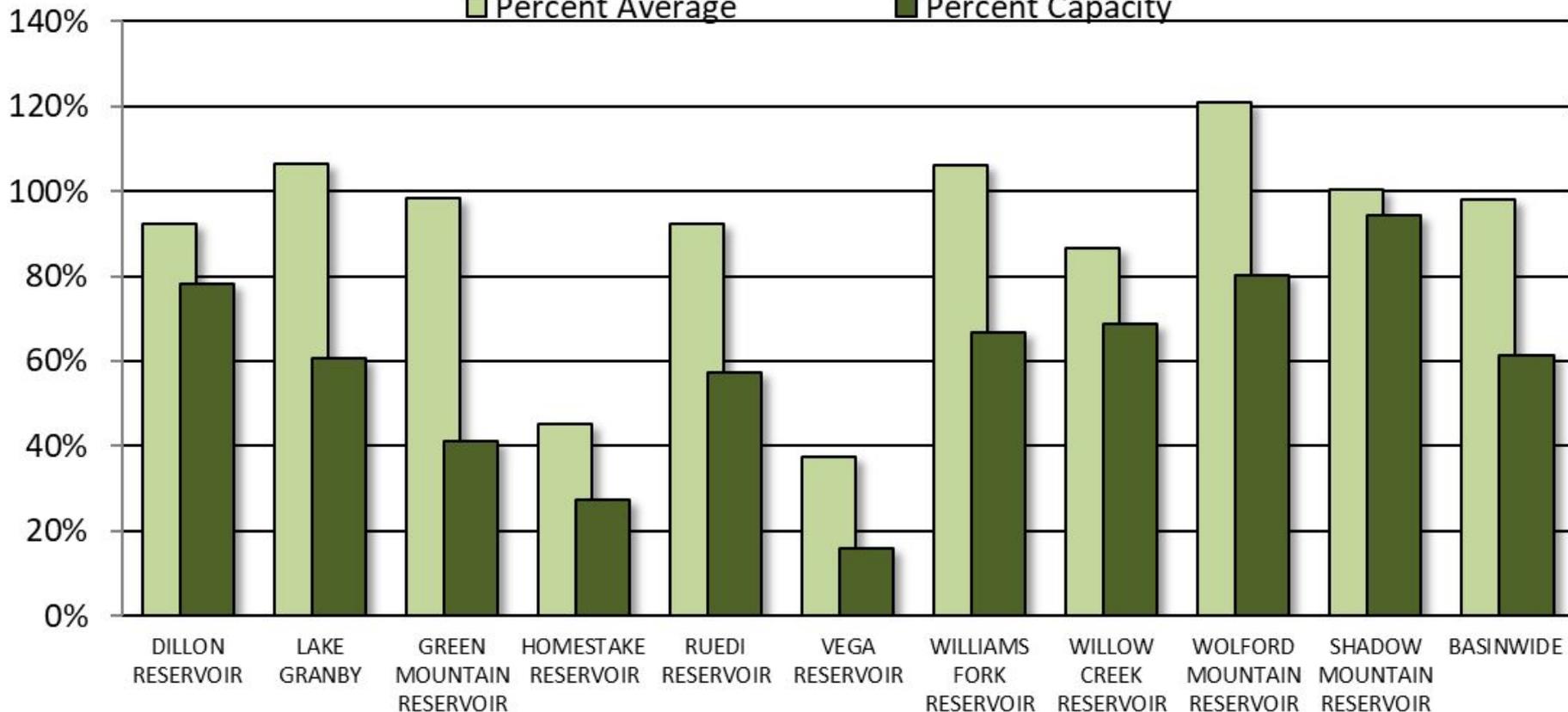
- ≥ 150
- 130 - 149
- 110 - 129
- 90 - 109
- 70 - 89
- 50 - 69
- < 50

Forecast Point

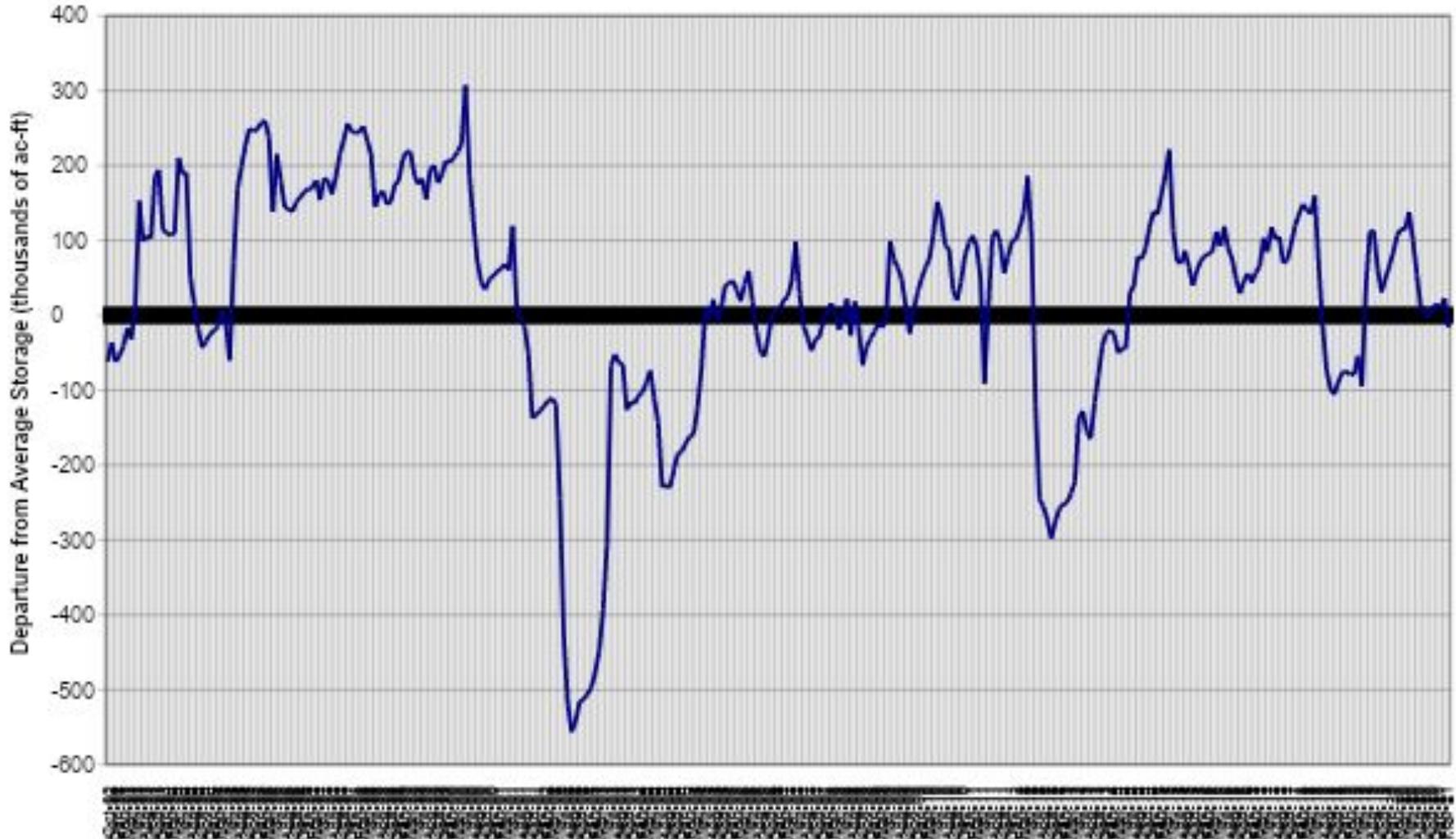


End of March Reservoir Storage

■ Percent Average ■ Percent Capacity

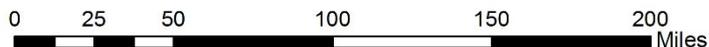
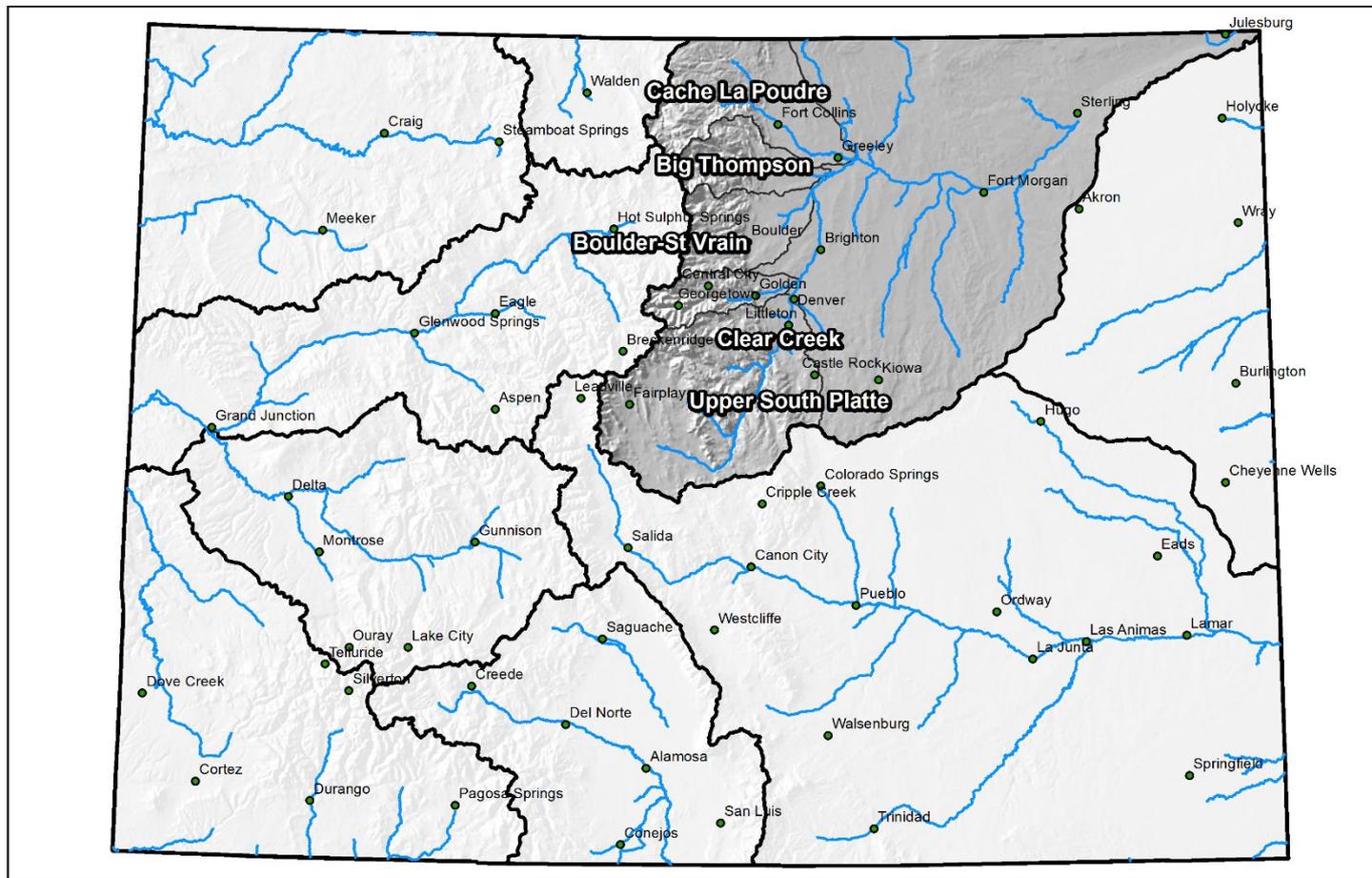


COLORADO RIVER BASIN
 Reservoir Storage
 Departure from Average

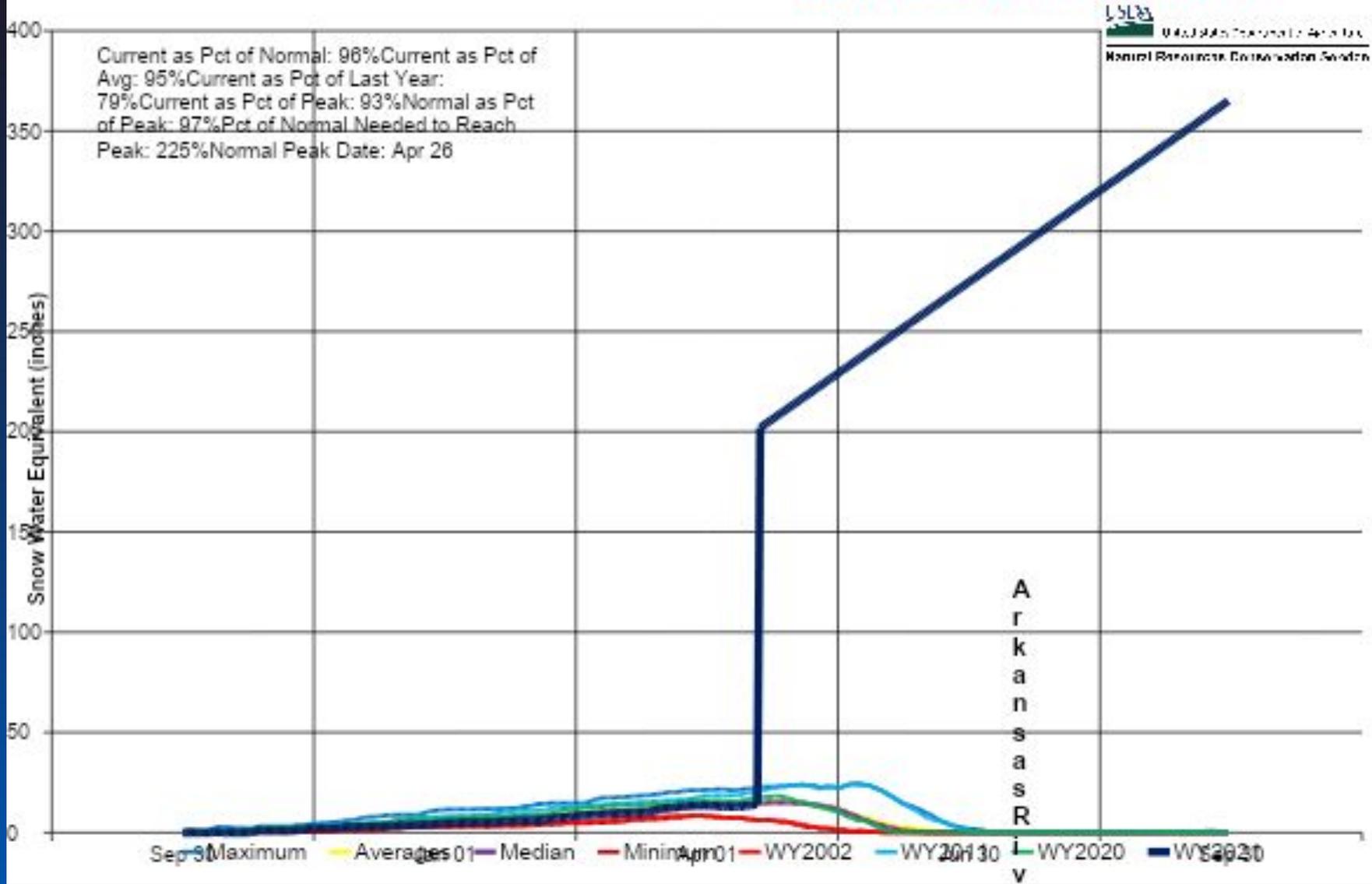


Major Basin Summary

South Platte River Basin

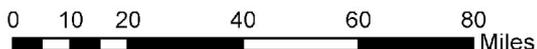
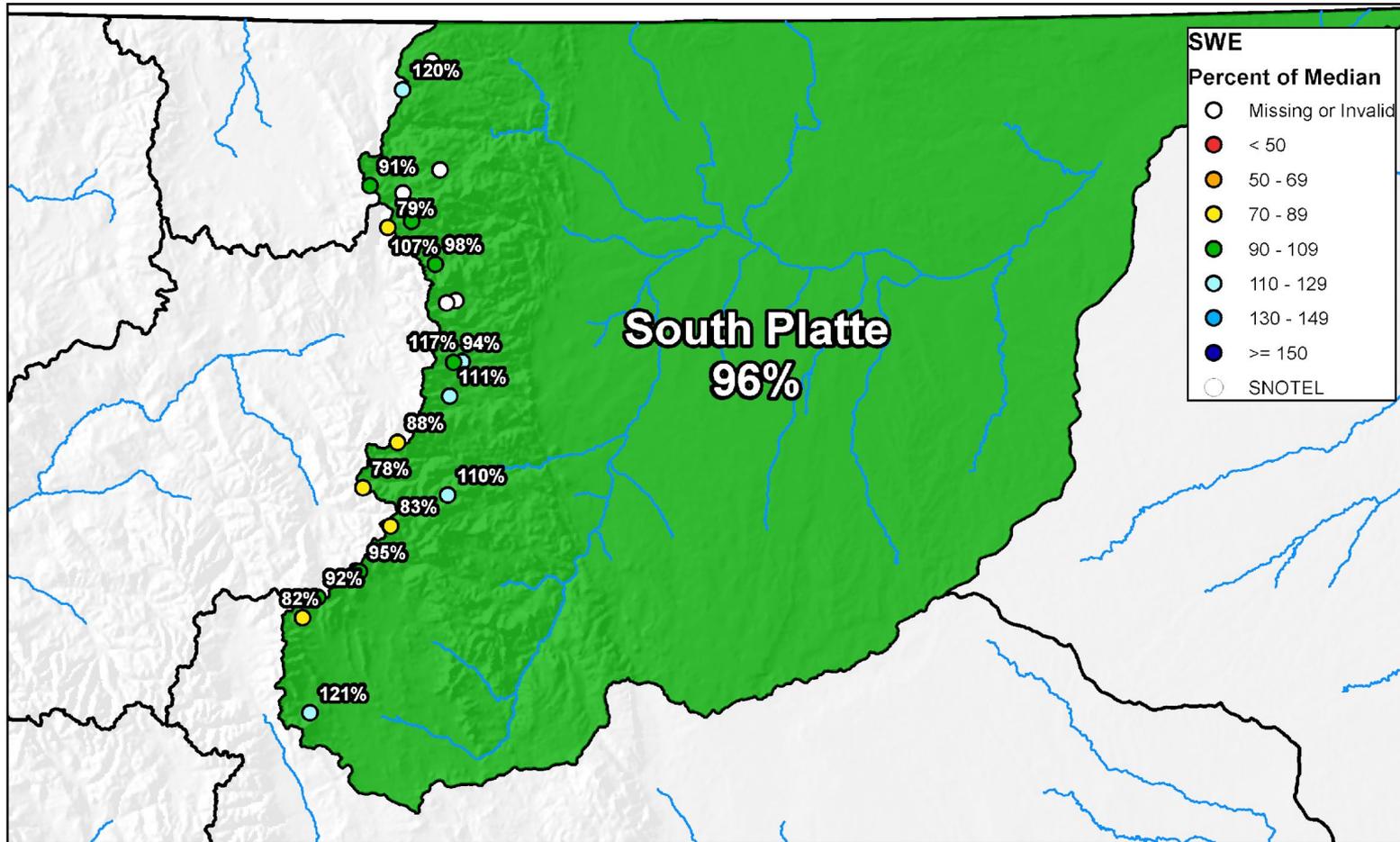


South Platte River Basin High/Low Snowpack Summary *Based on Provisional SNOTEL data as of Apr 19, 2021*



South Platte River Basin Snow Water Equivalent (SWE) Summary

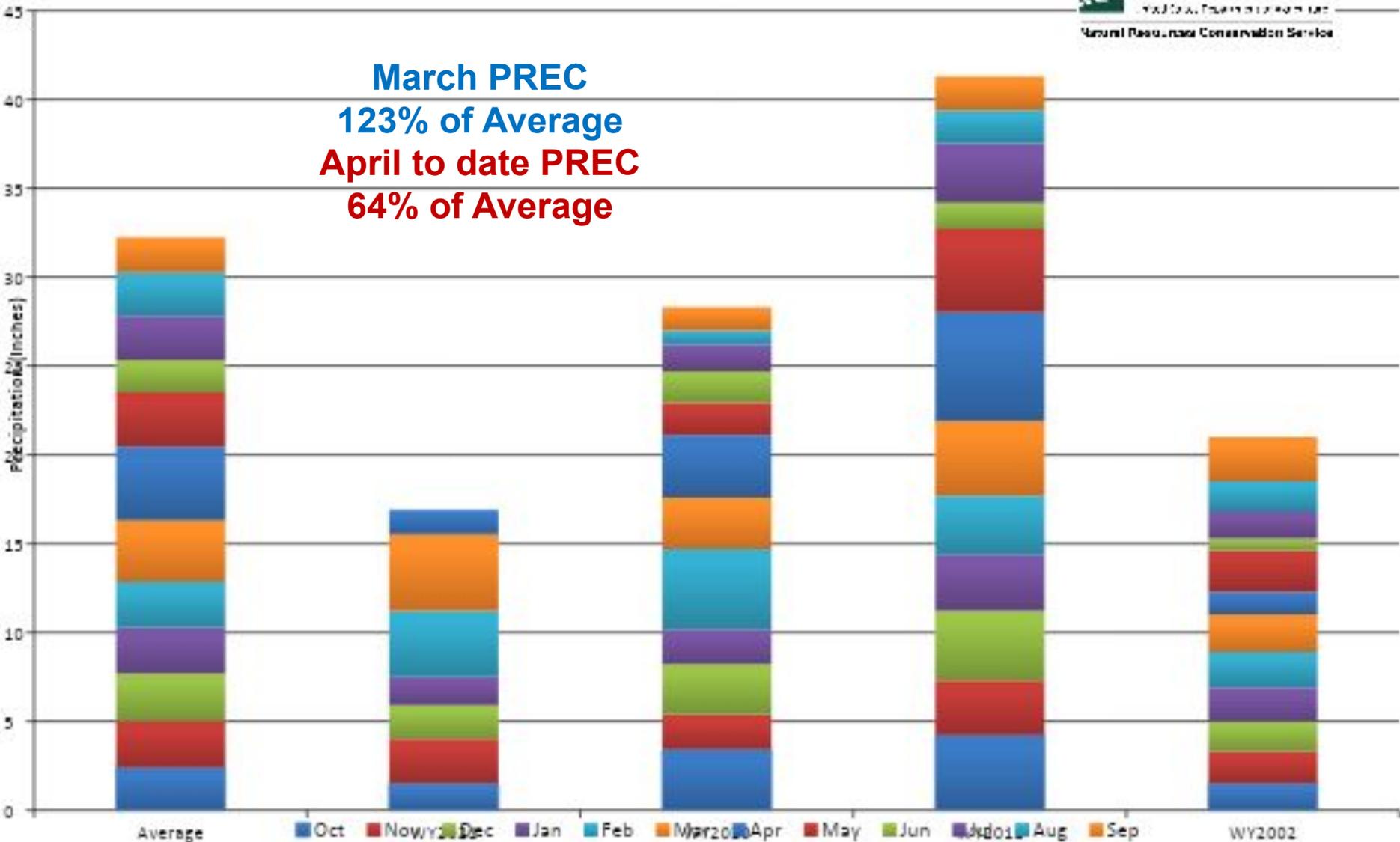
Current as of Apr 19, 2021



South Platte River Basin High/Low Monthly Precipitation Summary *Based on Provisional SNOTEL data as of Apr 19, 2021*

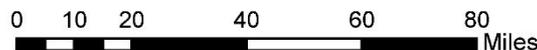
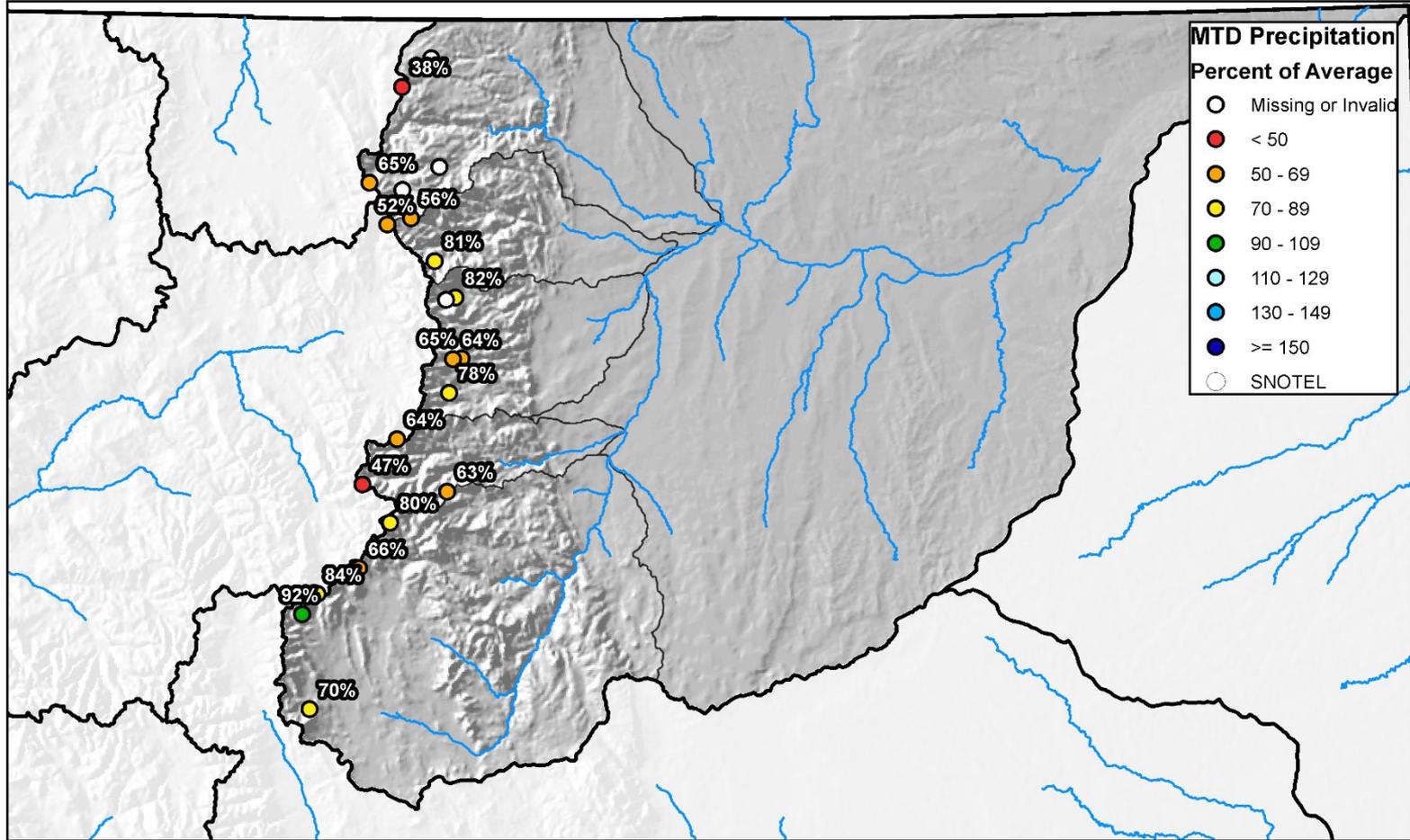
USDA
 National Technical Information Service
 Natural Resource Conservation Service

March PREC
123% of Average
April to date PREC
64% of Average

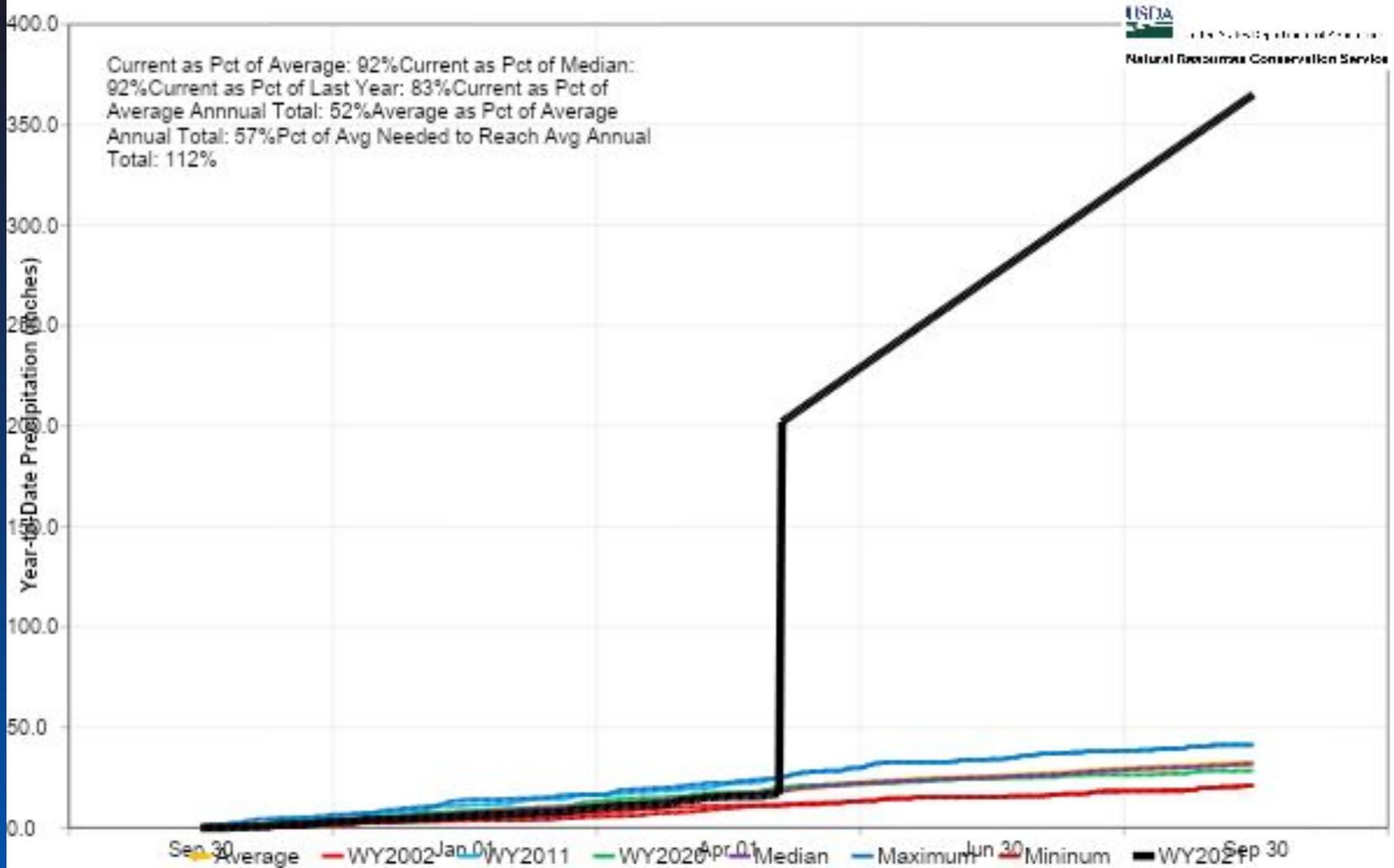


South Platte River Basin Month to Date Precipitation Summary

Current as of Apr 19, 2021

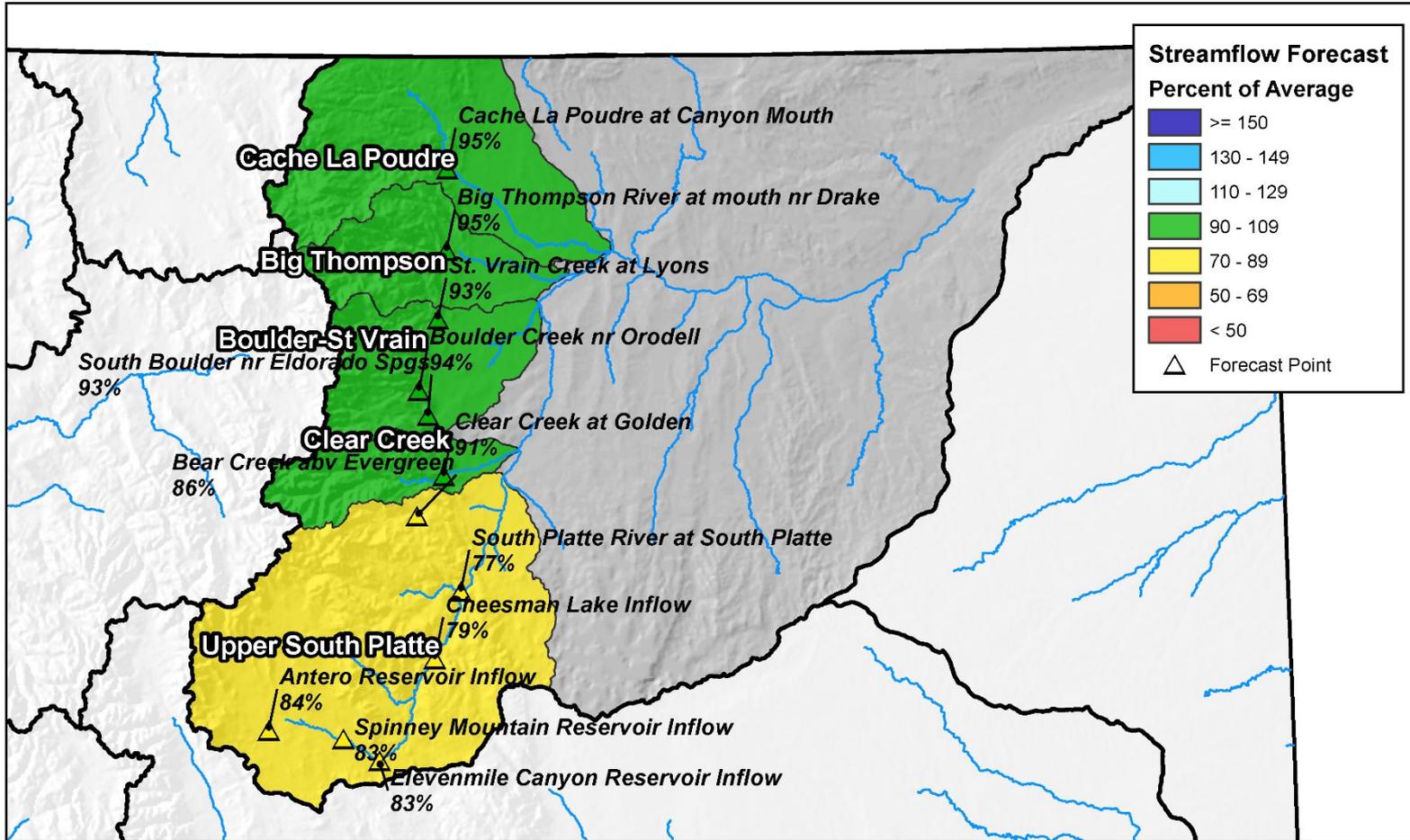


South Platte River Basin High/Low Year-to-Date Precipitation Summary *Based on Provisional SNOTEL data as of Apr 19, 2021*



South Platte River Basin Streamflow Forecast Summary

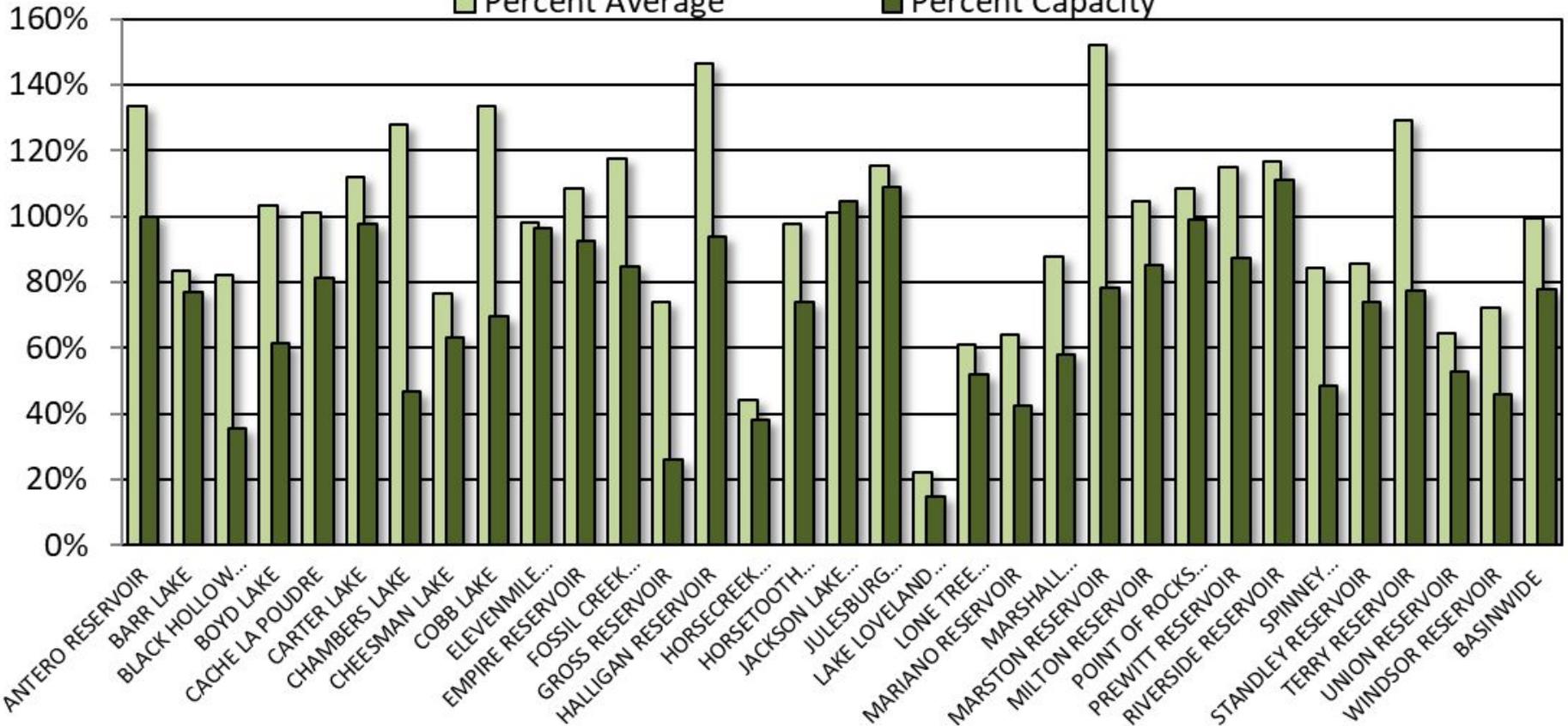
April 1, 2021



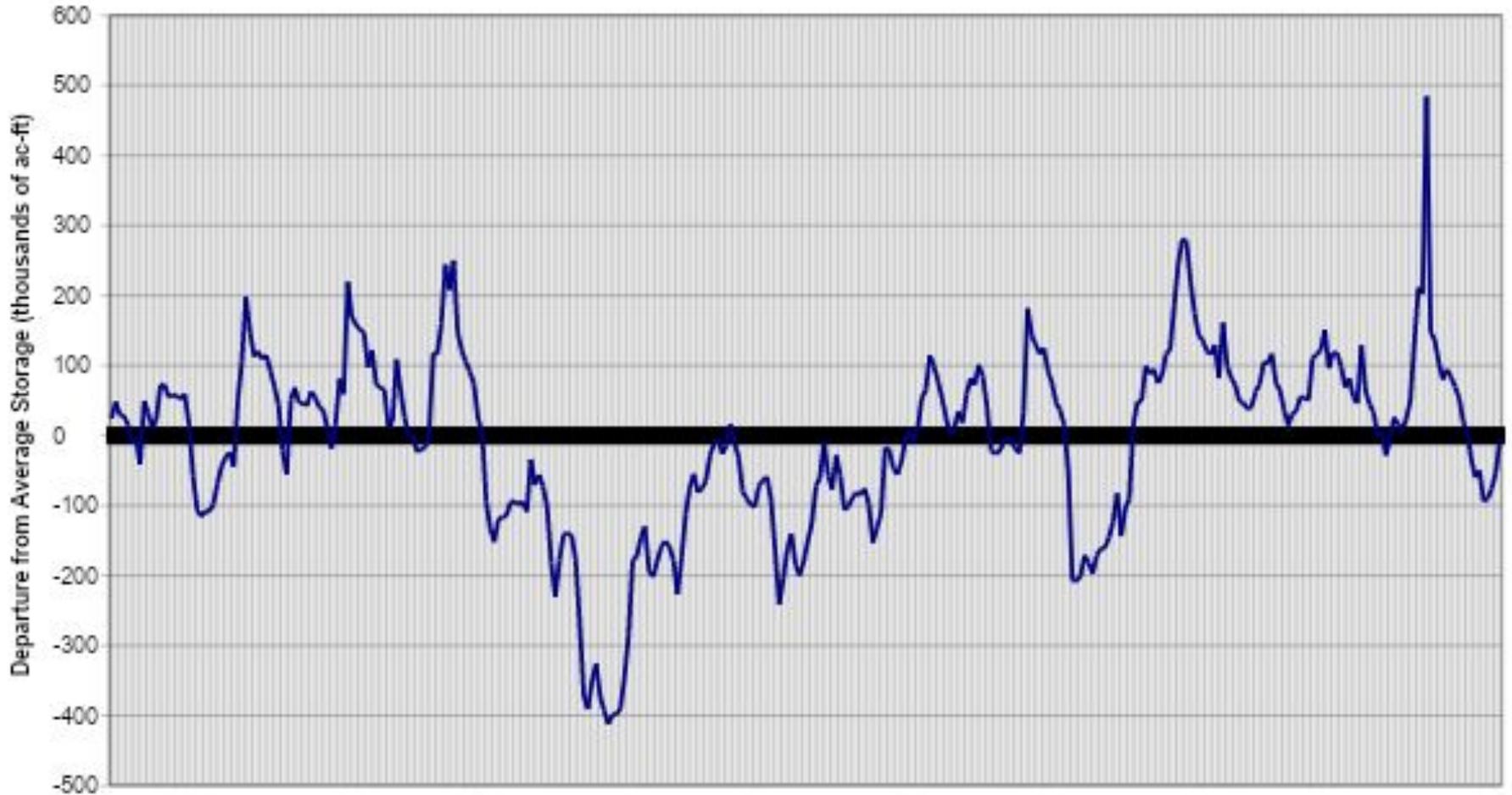
End of March Reservoir Storage

■ Percent Average

■ Percent Capacity

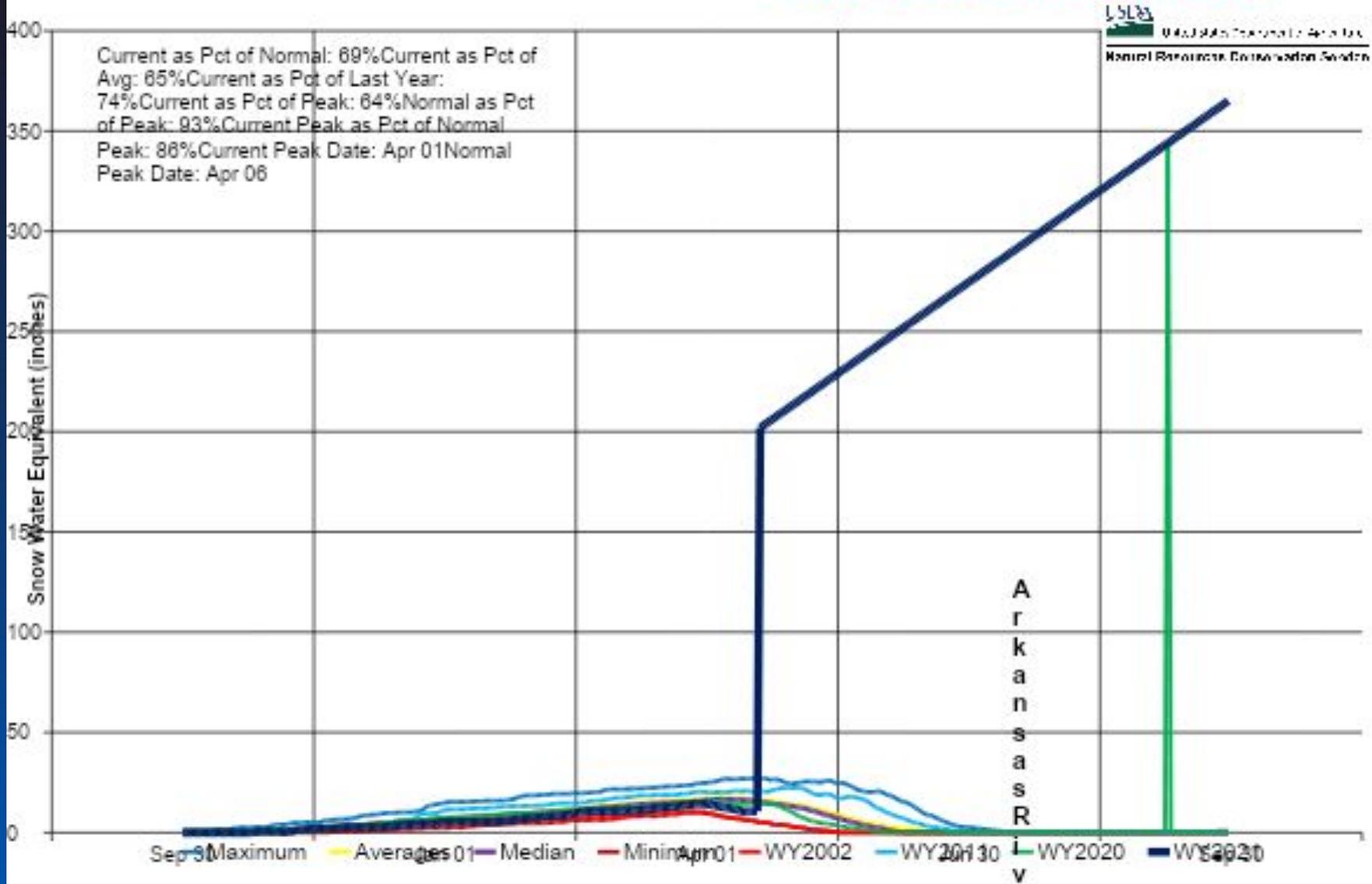


SOUTH PLATTE RIVER BASIN
 Reservoir Storage
 Departure from Average



Source: Colorado Department of Natural Resources, Colorado Snow Survey Data, 1950-2010

Gunnison River Basin High/Low Snowpack Summary *Based on Provisional SNOTEL data as of Apr 19, 2021*



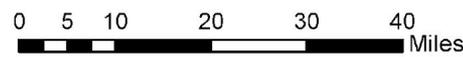
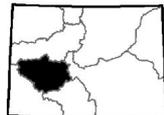
Gunnison River Basin Snow Water Equivalent (SWE) Summary

Current as of Mar 17, 2021



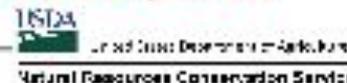
Gunnison River Basin Snow Water Equivalent (SWE) Summary

Current as of Apr 19, 2021

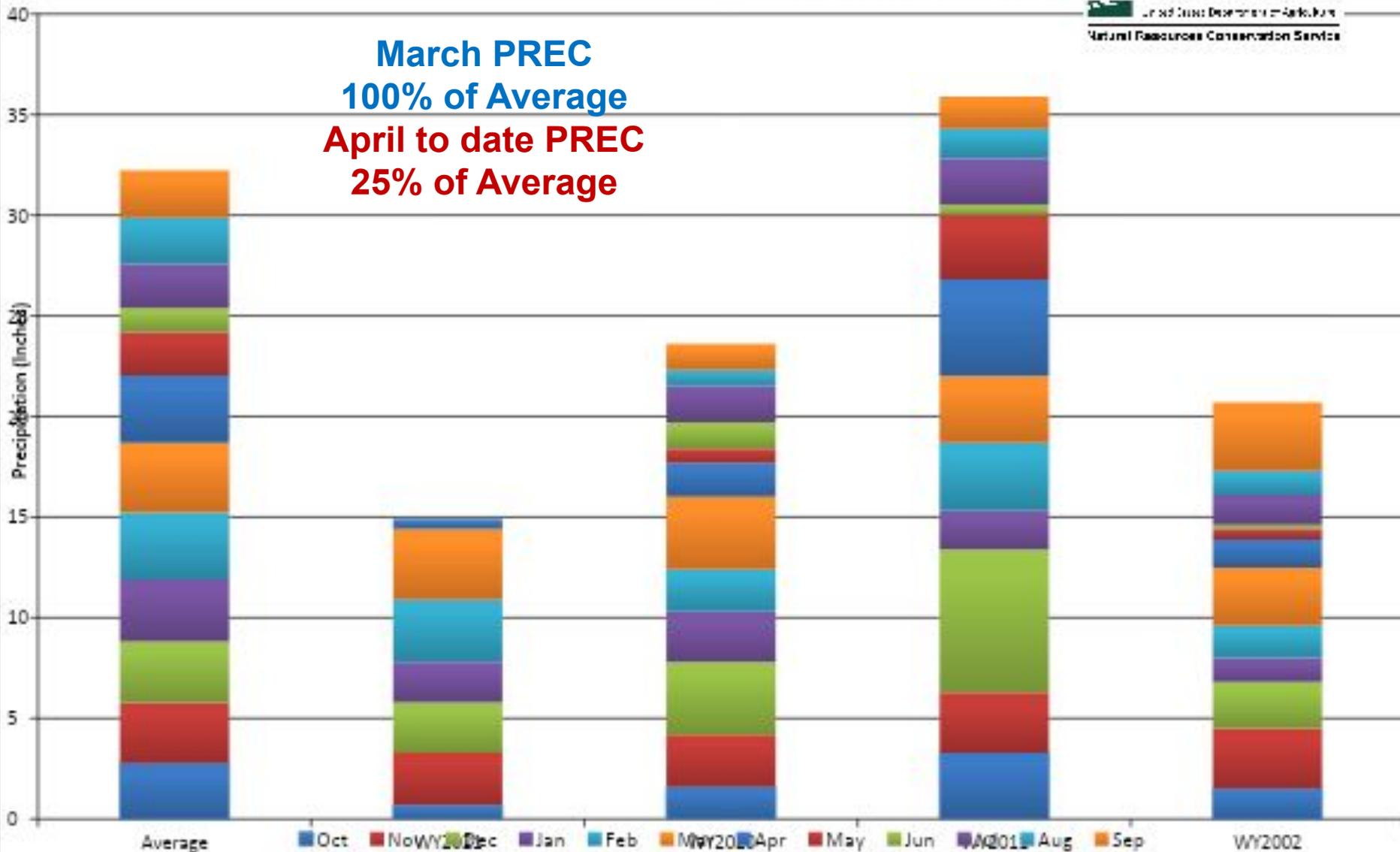




Gunnison River Basin High/Low Monthly Precipitation Summary *Based on Provisional SNOTEL data as of Apr 19, 2021*

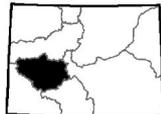
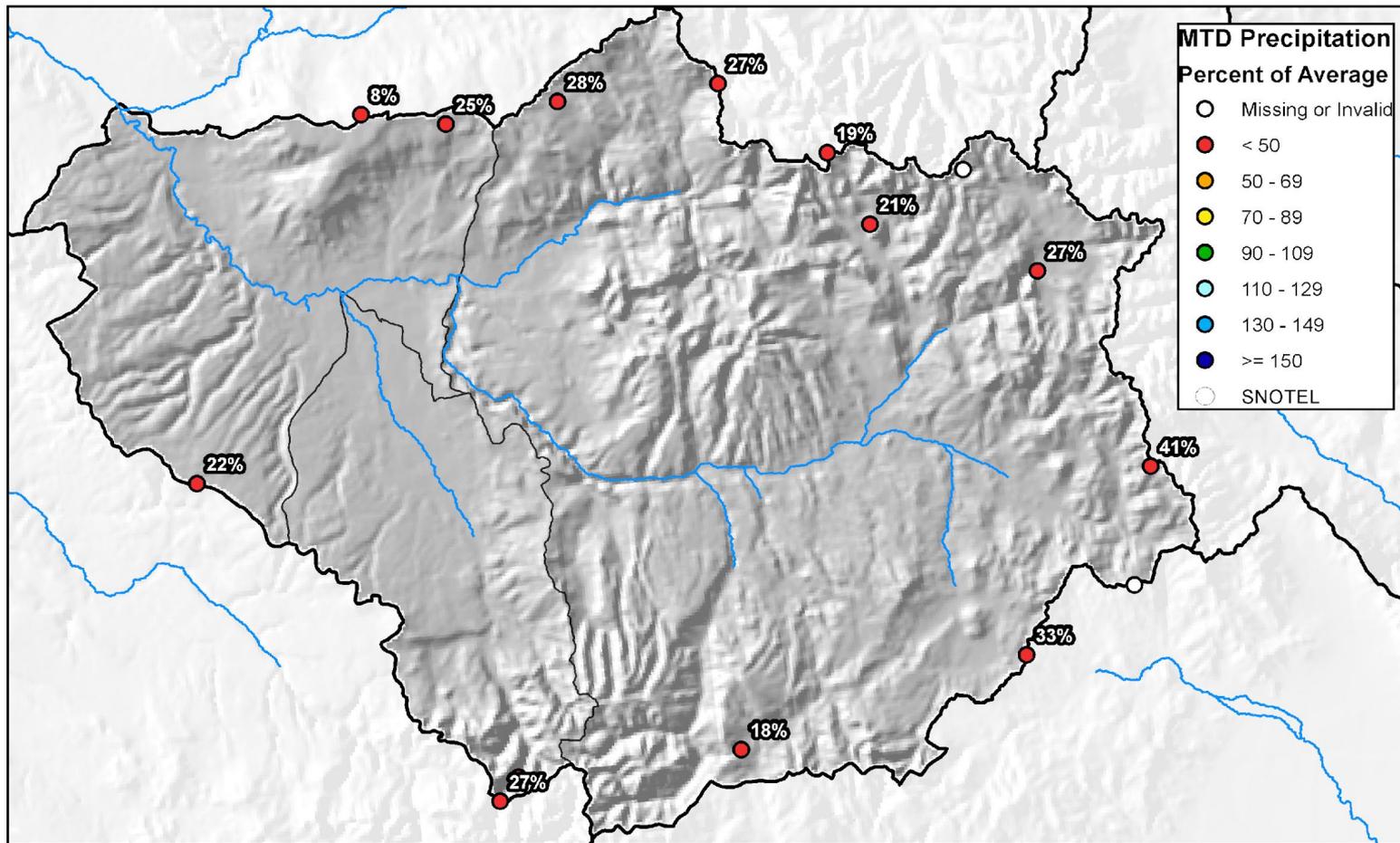


March PREC
100% of Average
April to date PREC
25% of Average

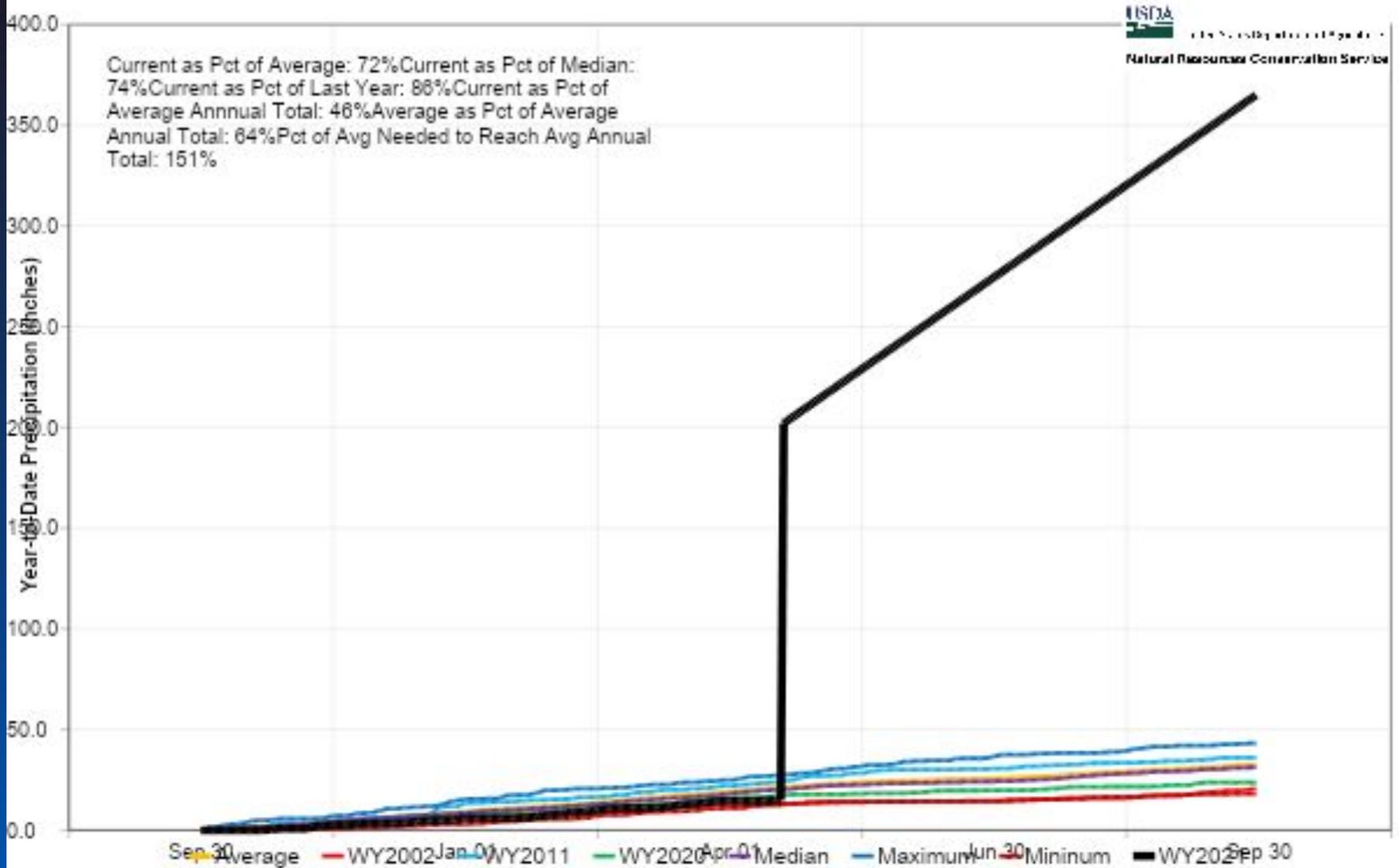


Gunnison River Basin Month to Date Precipitation Summary

Current as of Apr 19, 2021

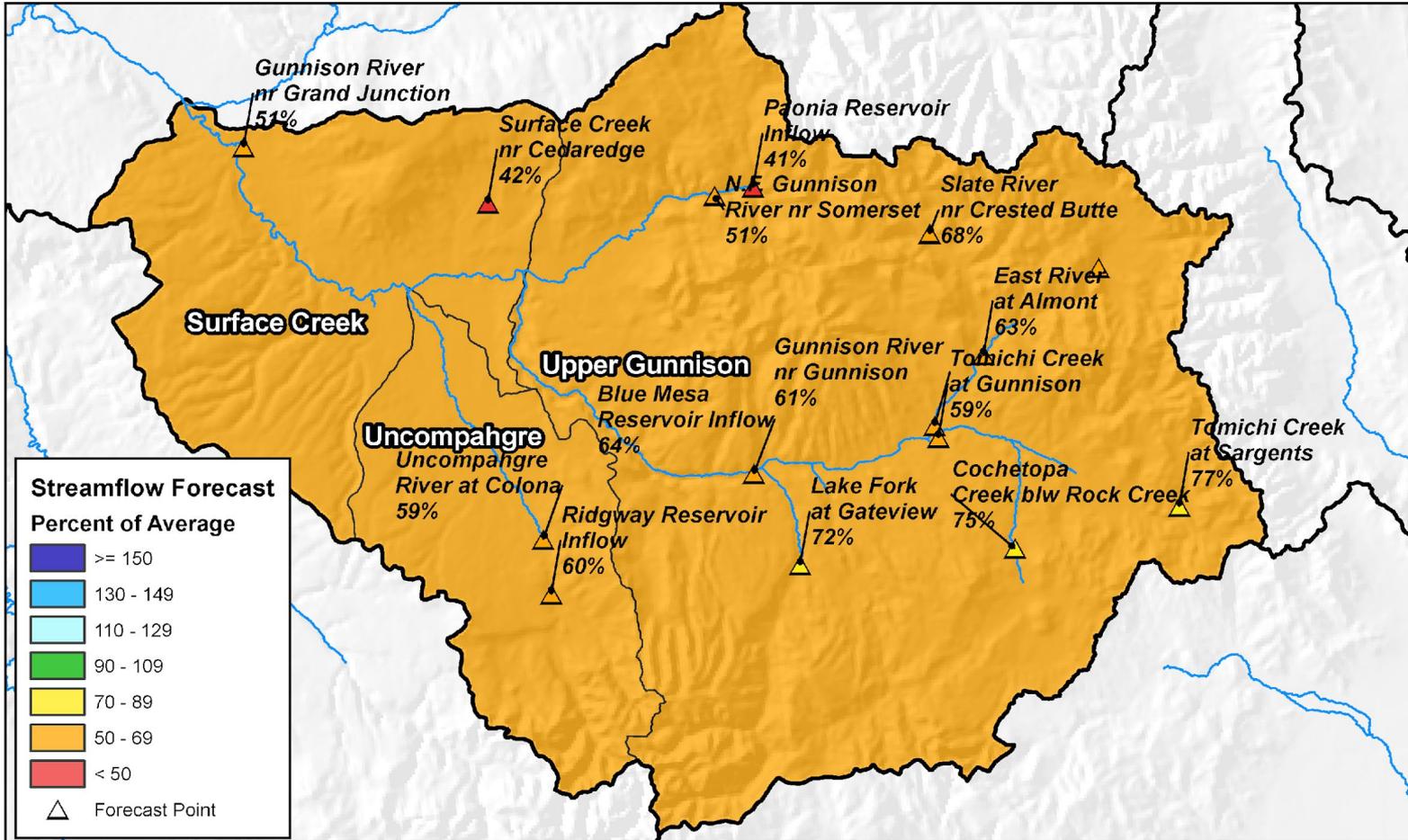


Gunnison River Basin High/Low Year-to-Date Precipitation Summary *Based on Provisional SNOTEL data as of Apr 19, 2021*



Gunnison River Basin Water Supply Forecast Summary

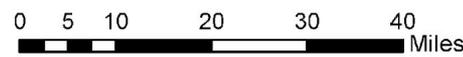
April 1, 2021



Streamflow Forecast
Percent of Average

- >= 150
- 130 - 149
- 110 - 129
- 90 - 109
- 70 - 89
- 50 - 69
- < 50

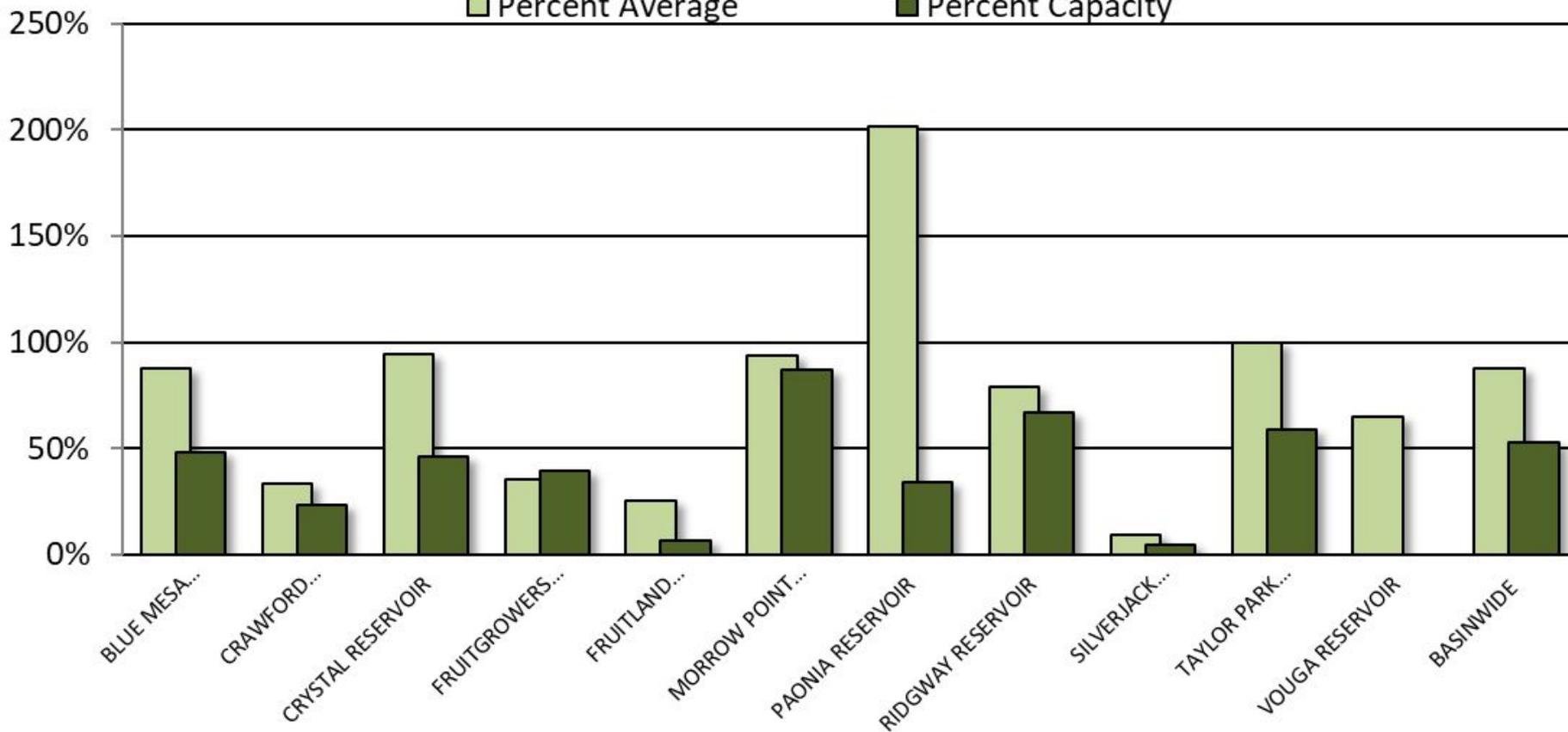
Forecast Point



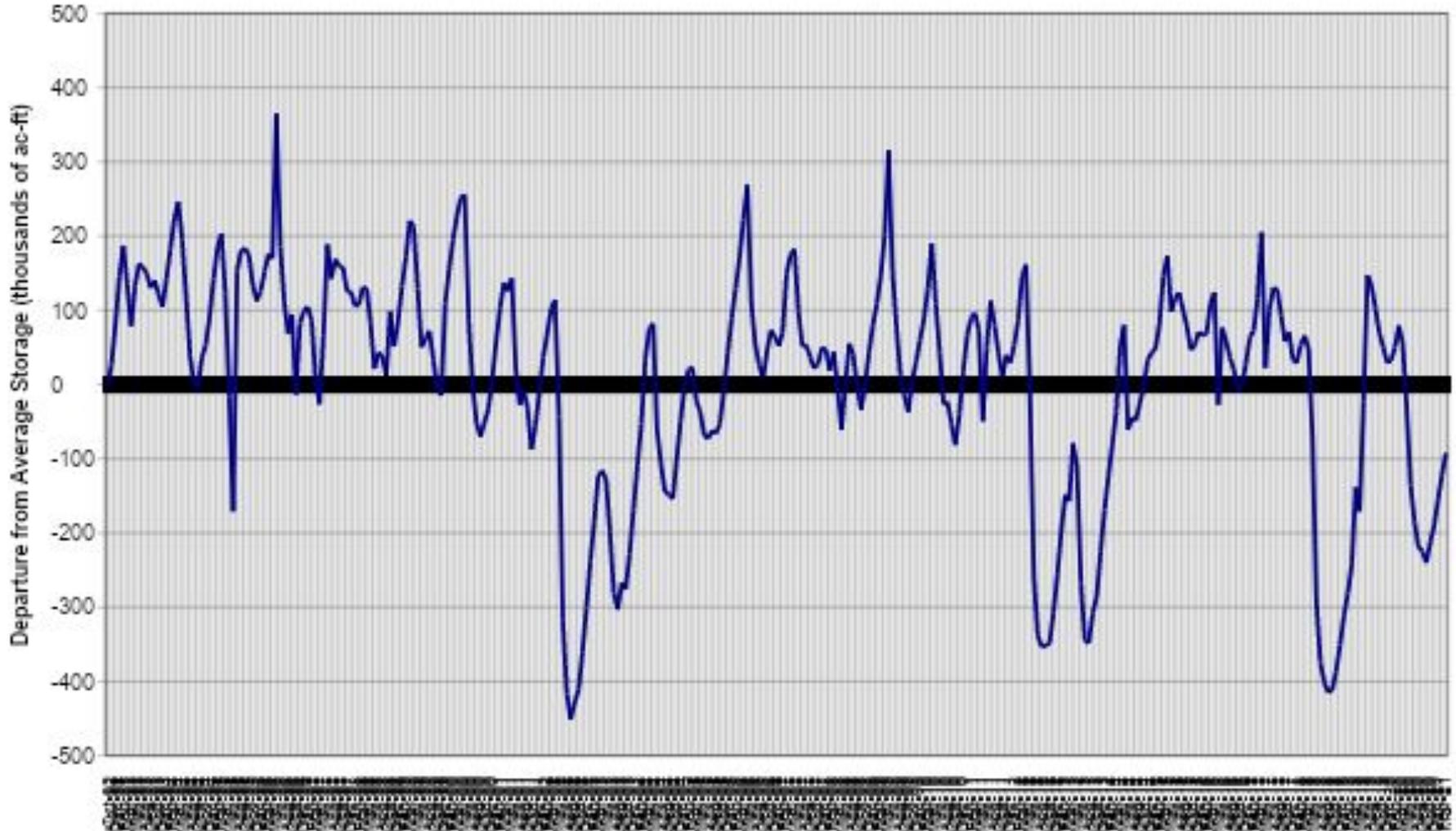
End of March Reservoir Storage

■ Percent Average

■ Percent Capacity

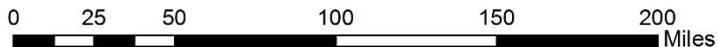
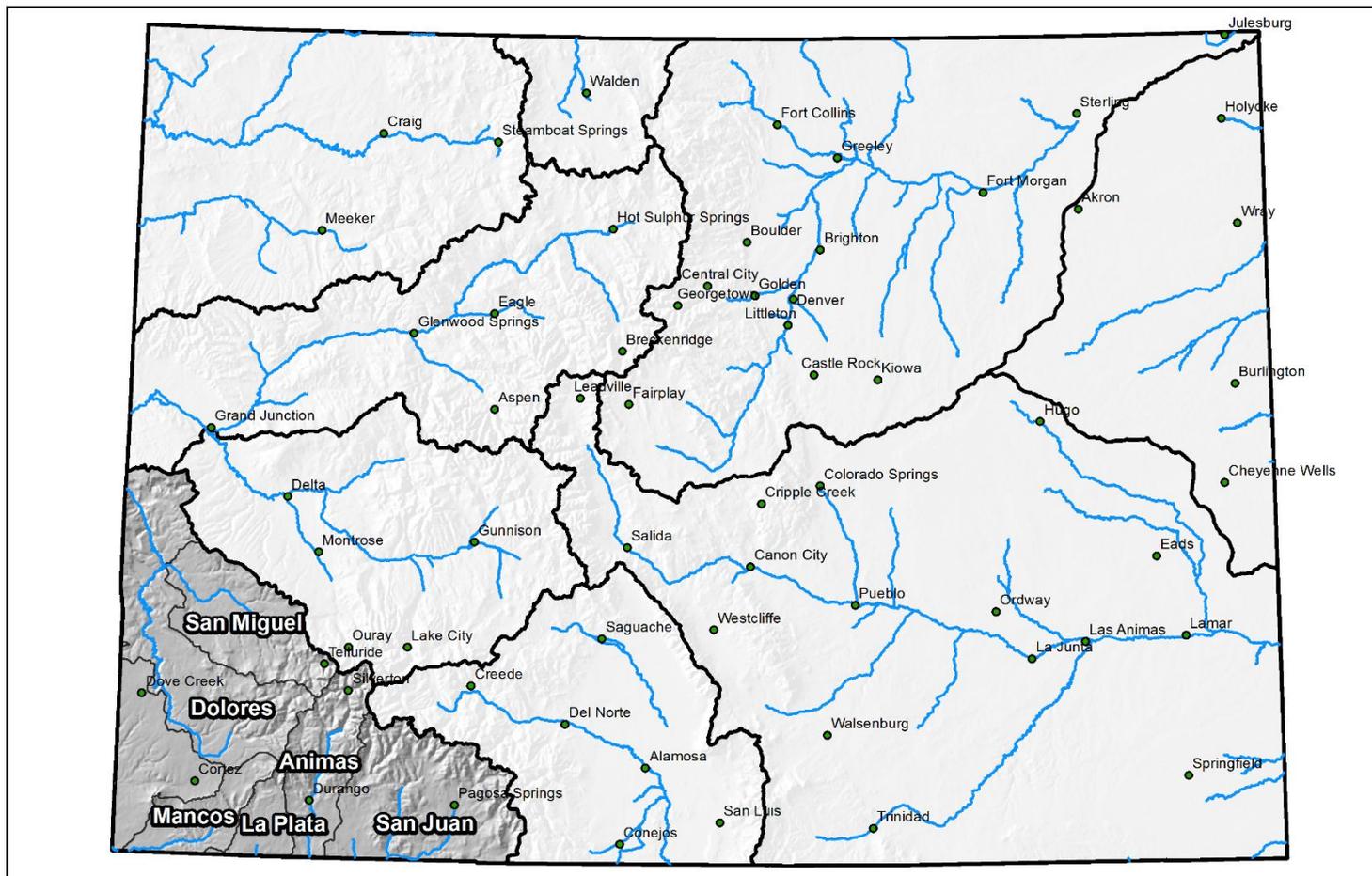


GUNNISON RIVER BASIN
 Reservoir Storage
 Departure from Average

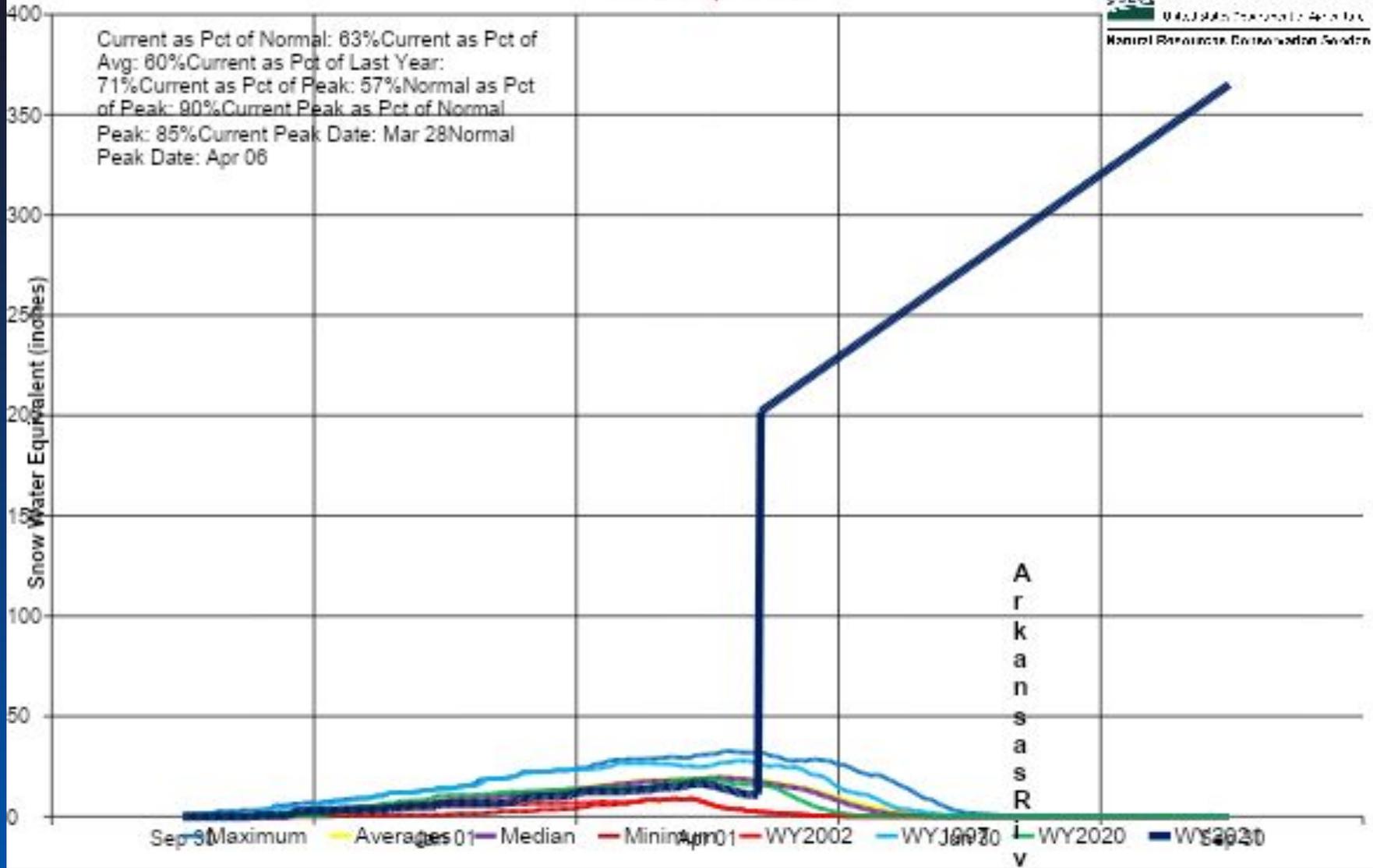


Major Basin Summary

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

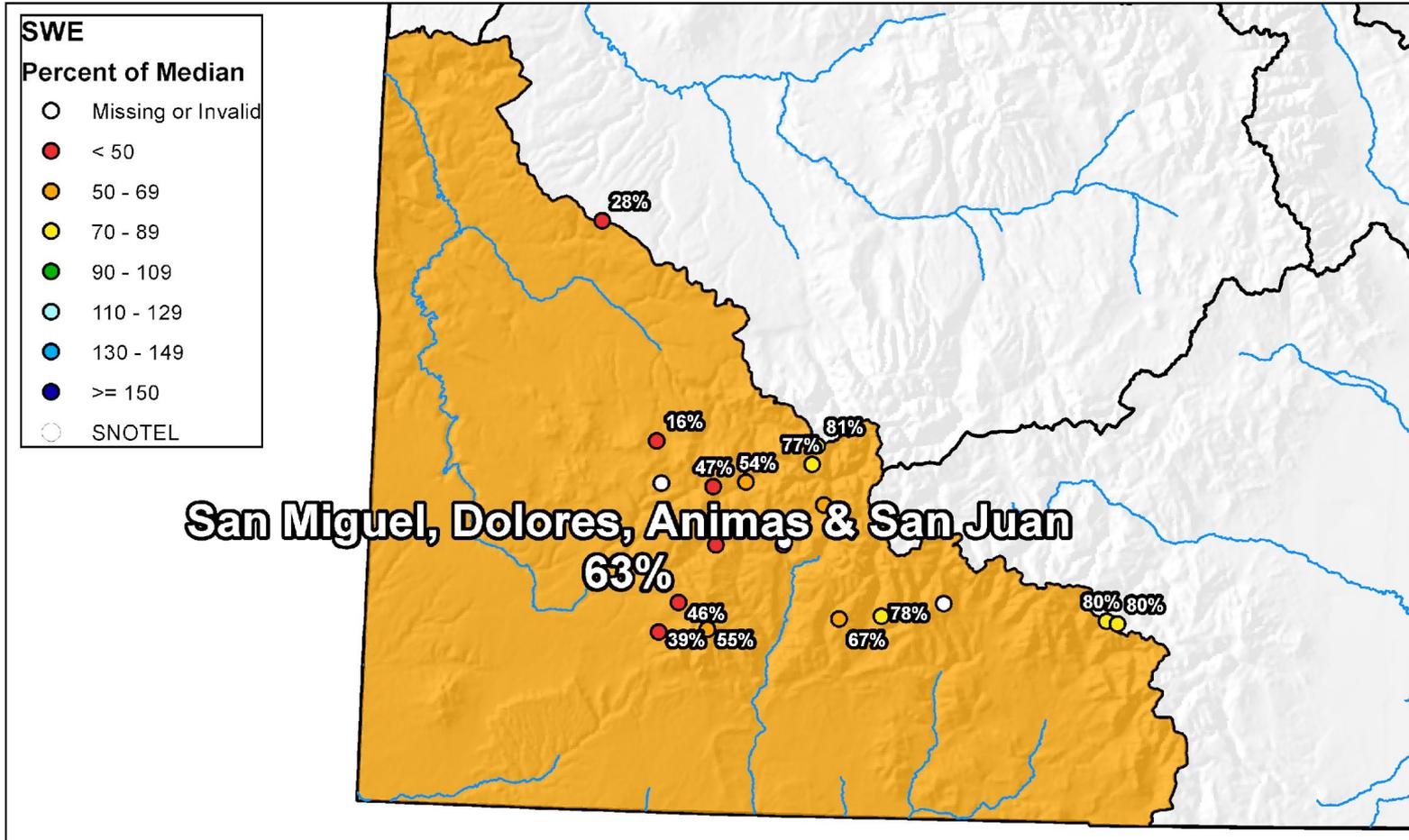


San Miguel, Dolores, Animas and San Juan River Basins High/Low Snowpack Summary Based on Provisional SNOTEL data as of Apr 19, 2021

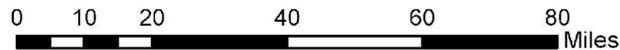
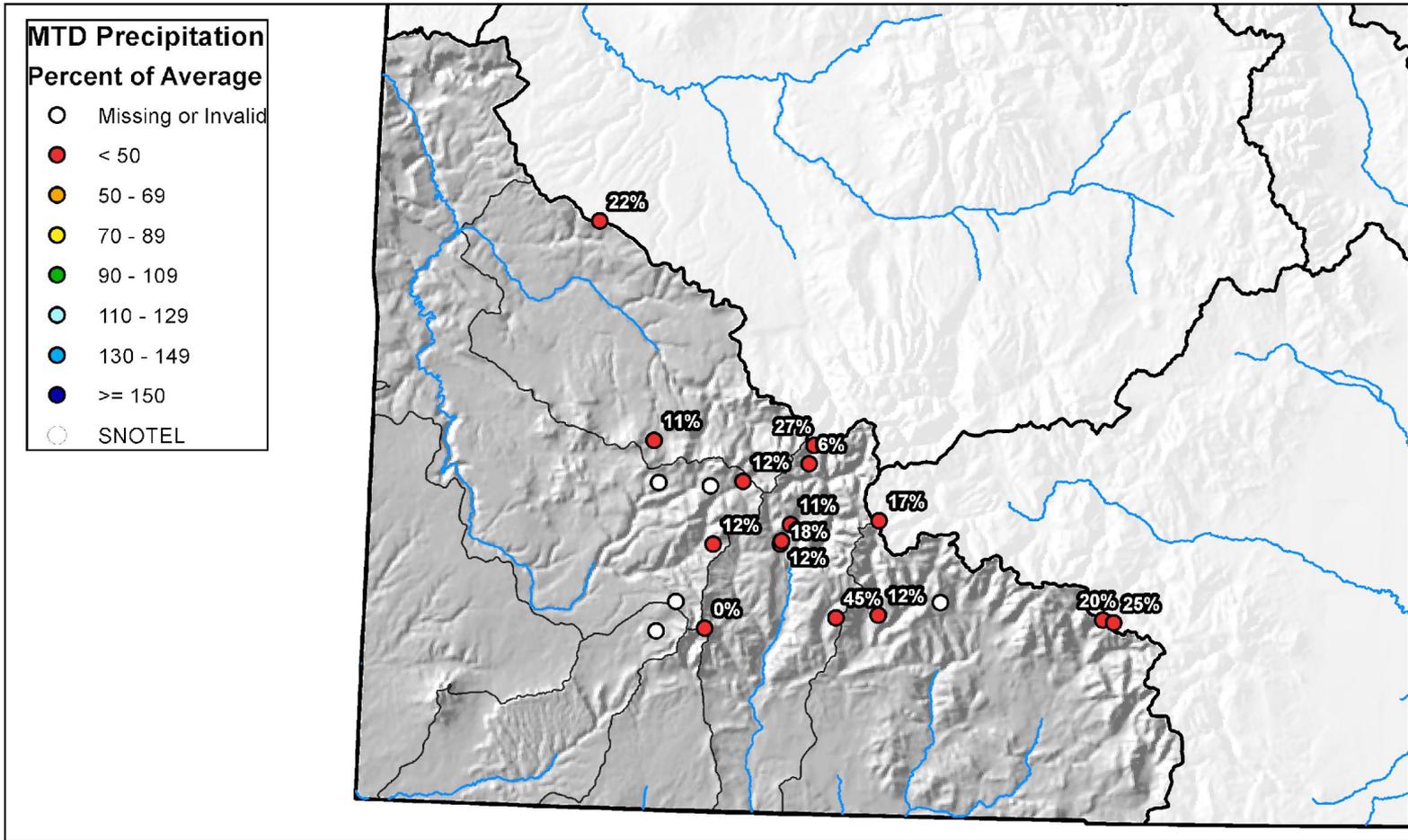


San Miguel, Dolores, Animas, and San Juan River Basins Snow Water Equivalent (SWE) Summary

Current as of Apr 19, 2021



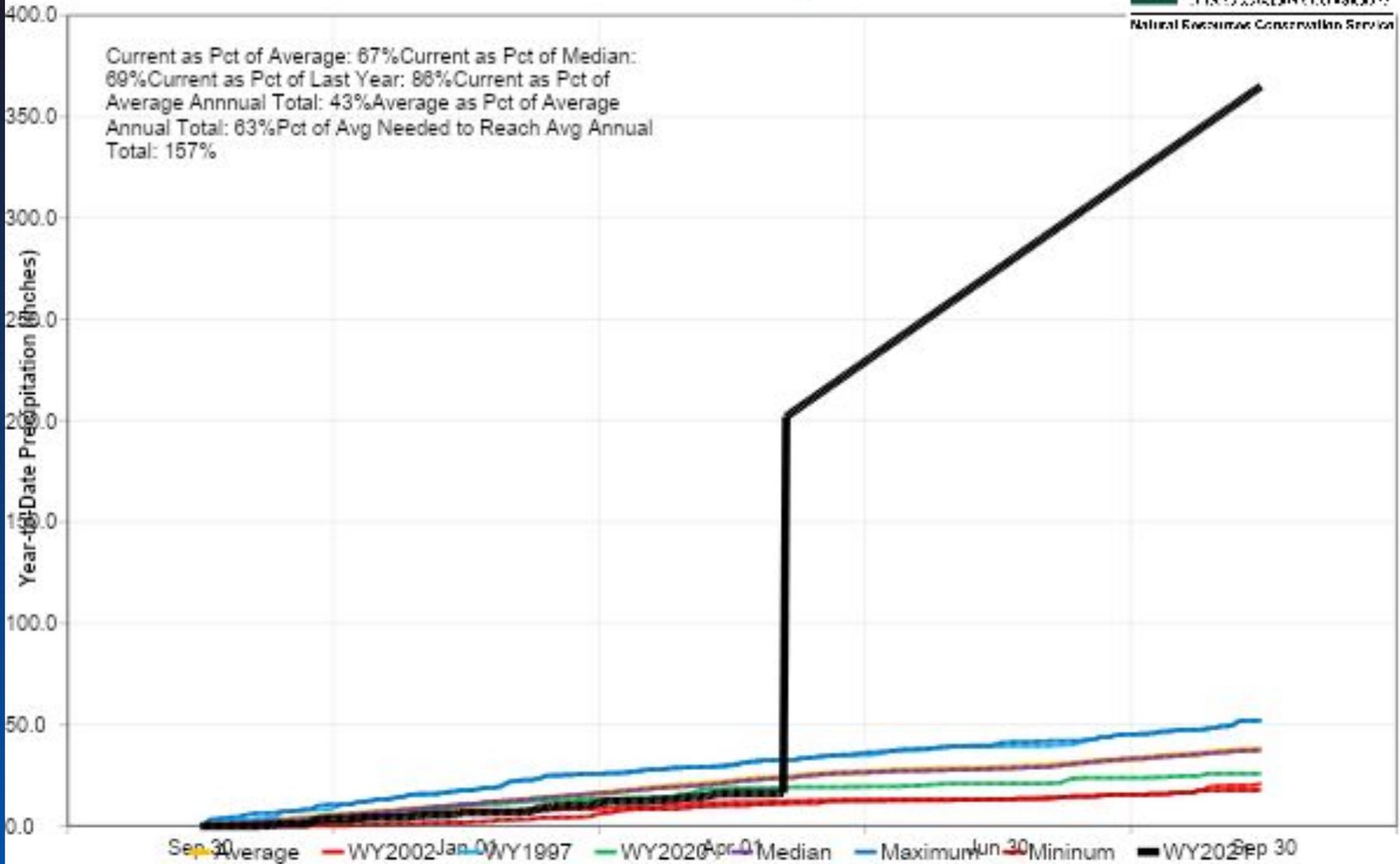
San Miguel, Dolores, Animas, and San Juan River Basins Month to Date Precipitation Summary Current as of Apr 19, 2021



San Miguel, Dolores, Animas and San Juan River Basins High/Low Year-to-Date Precipitation Summary *Based on Provisional SNOTEL data as of Apr 19, 2021*

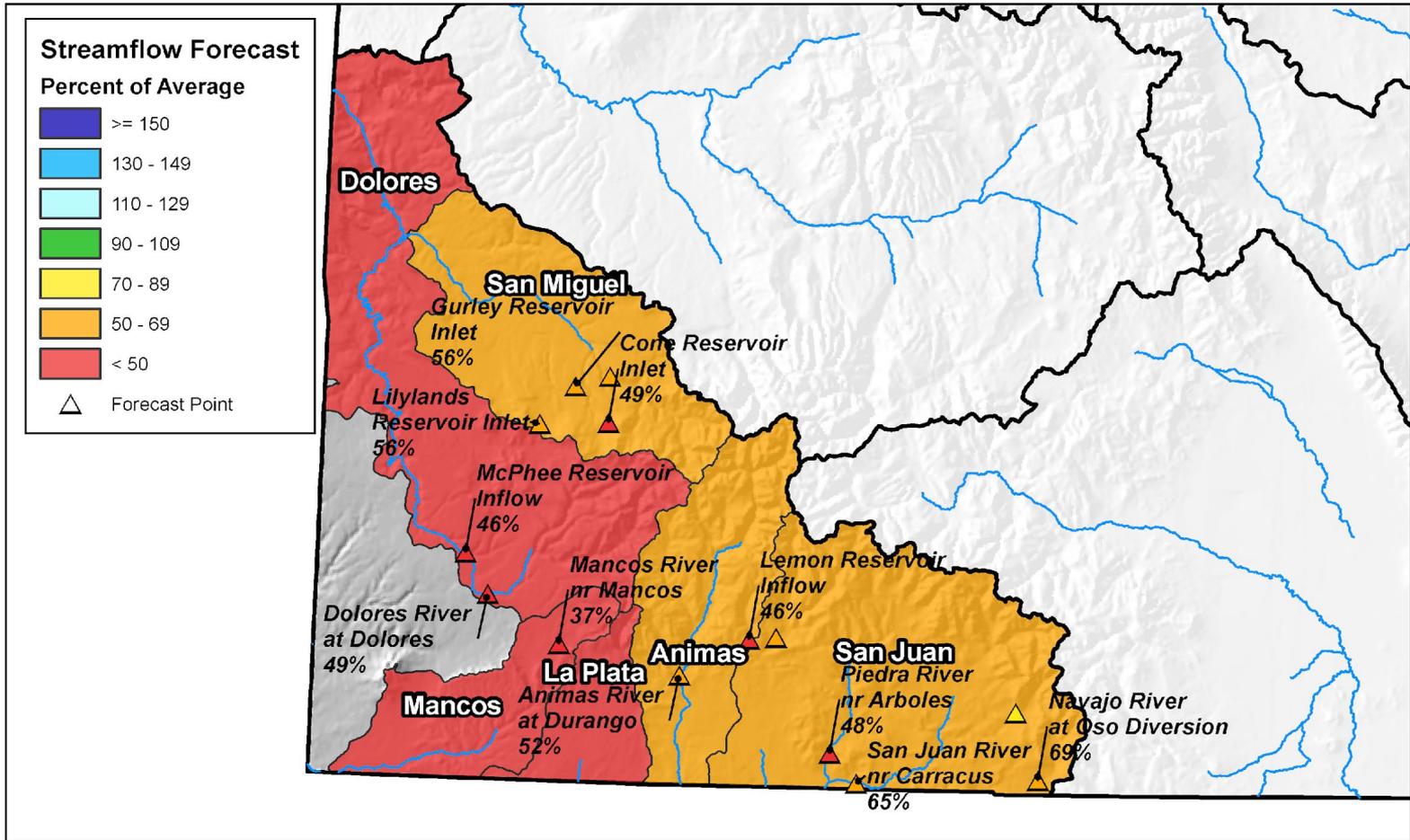
USDA
 U.S. Forest Service
 Natural Resource Conservation Service

Current as Pct of Average: 67%
 Current as Pct of Median: 69%
 Current as Pct of Last Year: 88%
 Current as Pct of Average Annual Total: 43%
 Average as Pct of Average Annual Total: 63%
 Pct of Avg Needed to Reach Avg Annual Total: 157%



San Miguel, Dolores, Animas, and San Juan River Basins Streamflow Forecast Summary

April 1, 2021



Streamflow Forecast
Percent of Average

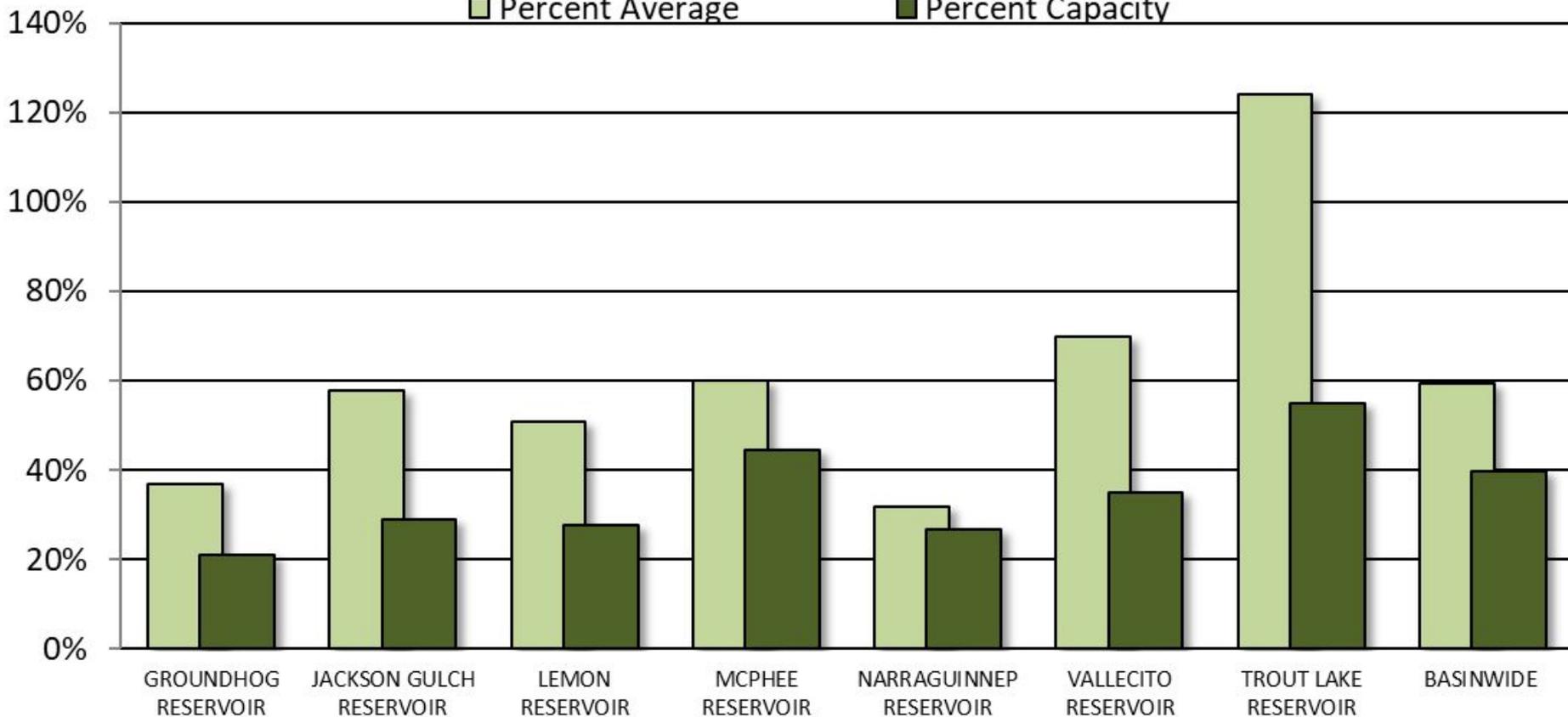
- ≥ 150
- 130 - 149
- 110 - 129
- 90 - 109
- 70 - 89
- 50 - 69
- < 50

Forecast Point

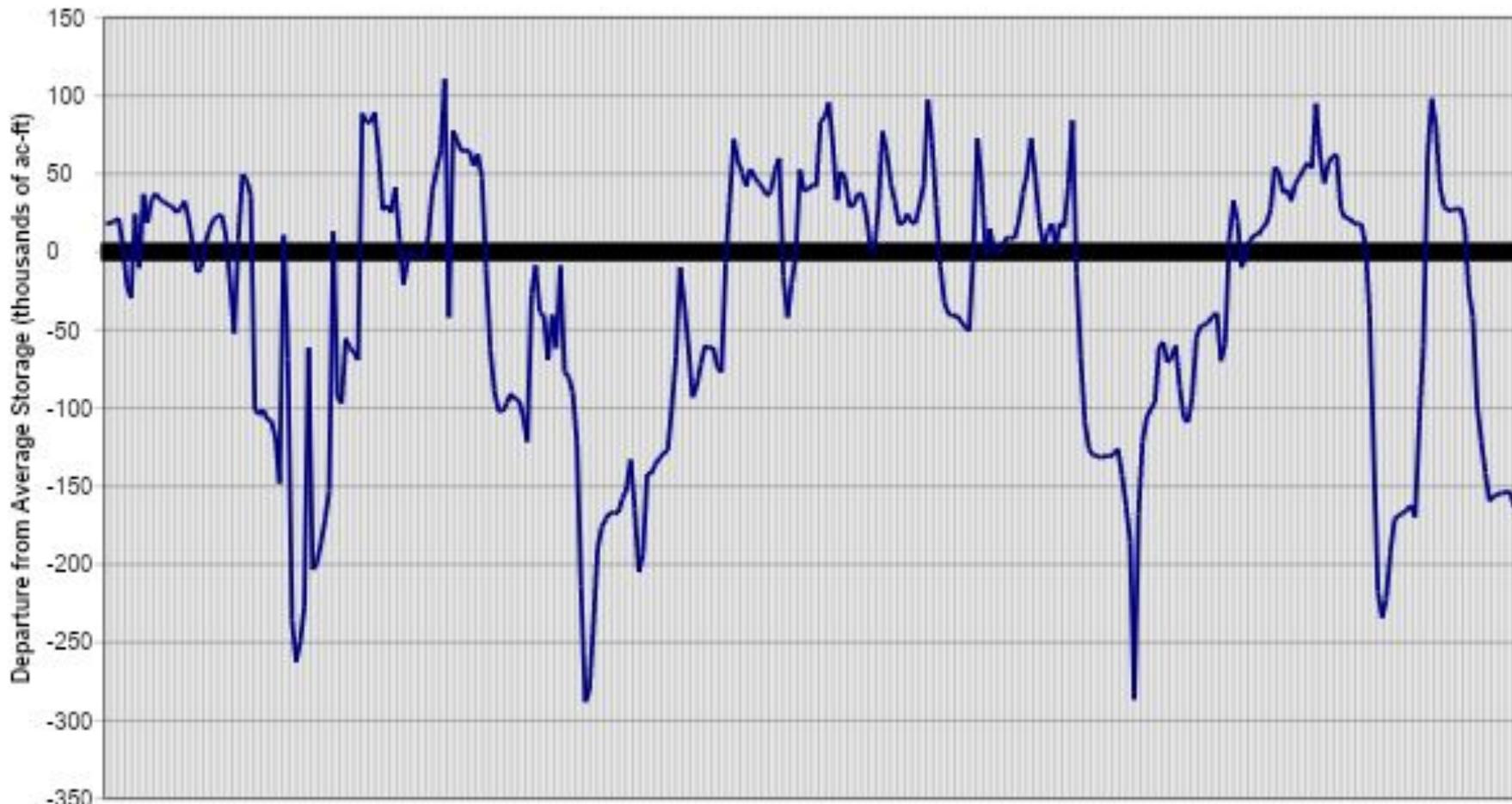


End of March Reservoir Storage

■ Percent Average ■ Percent Capacity

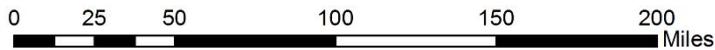
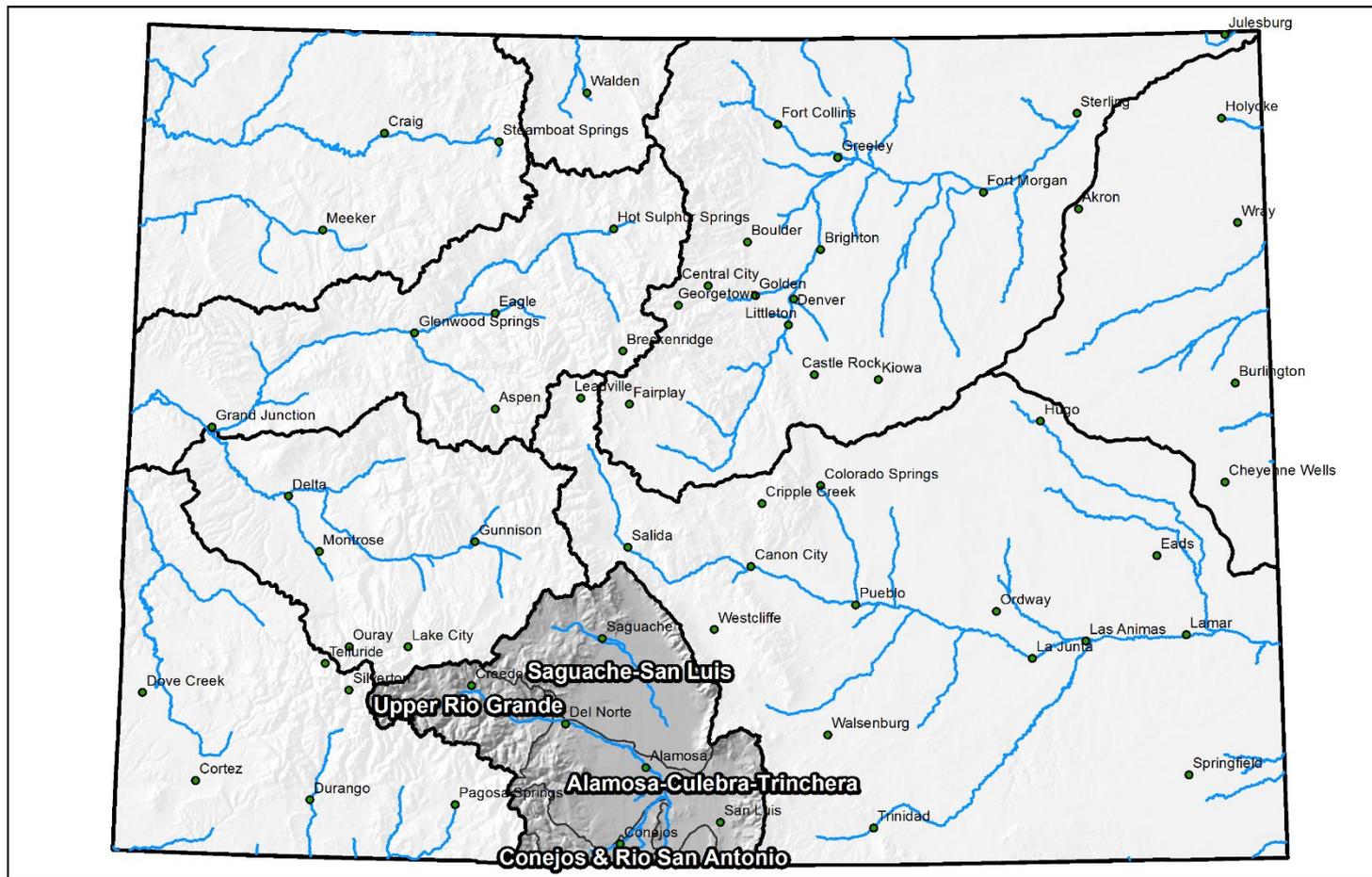


SAN MIGUEL, DOLORES, ANIMAS AND SAN JUAN RIVER BASINS
 Reservoir Storage
 Departure from Average

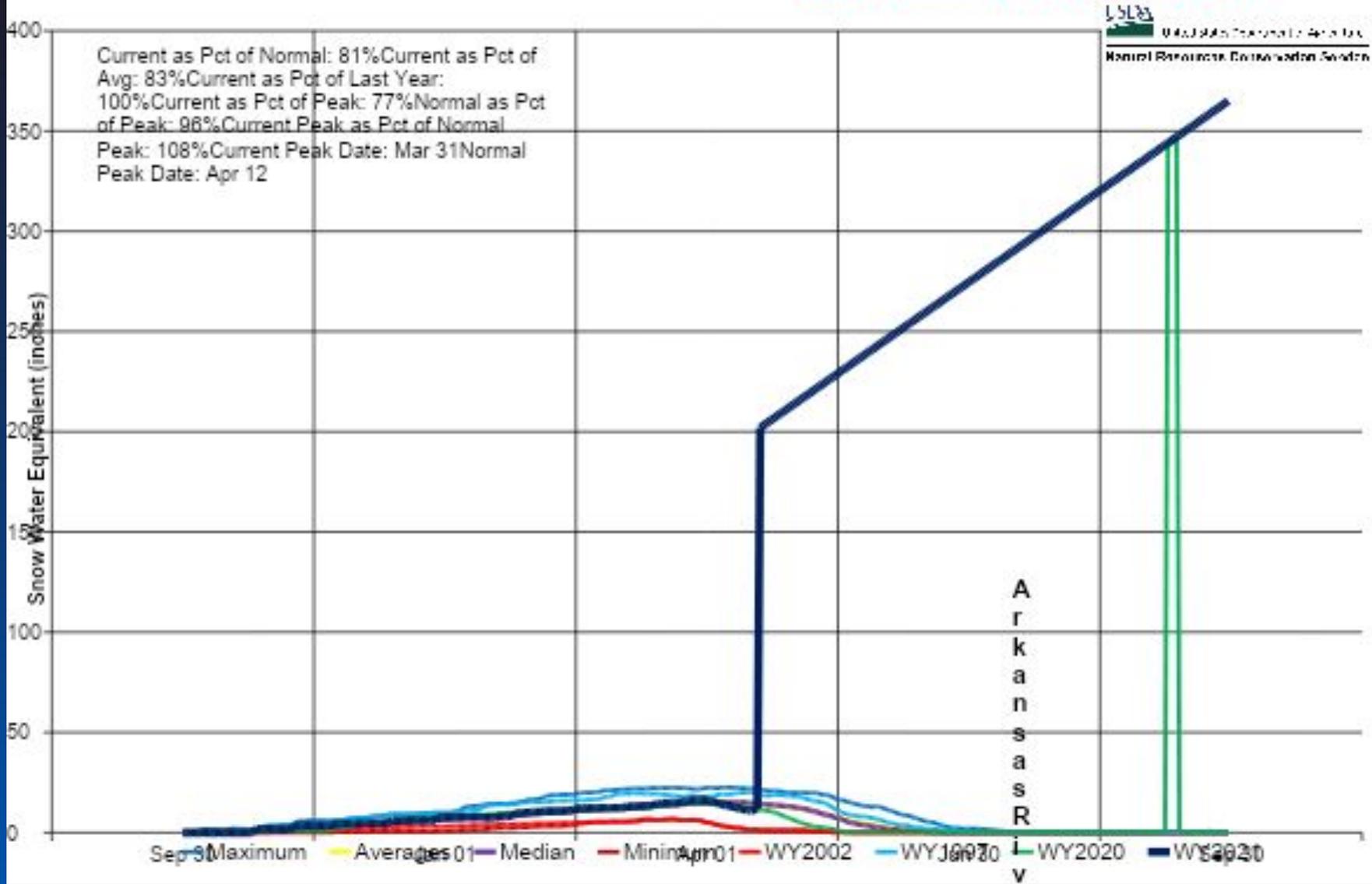


Major Basin Summary

Upper Rio Grande River Basin

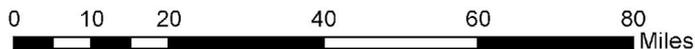
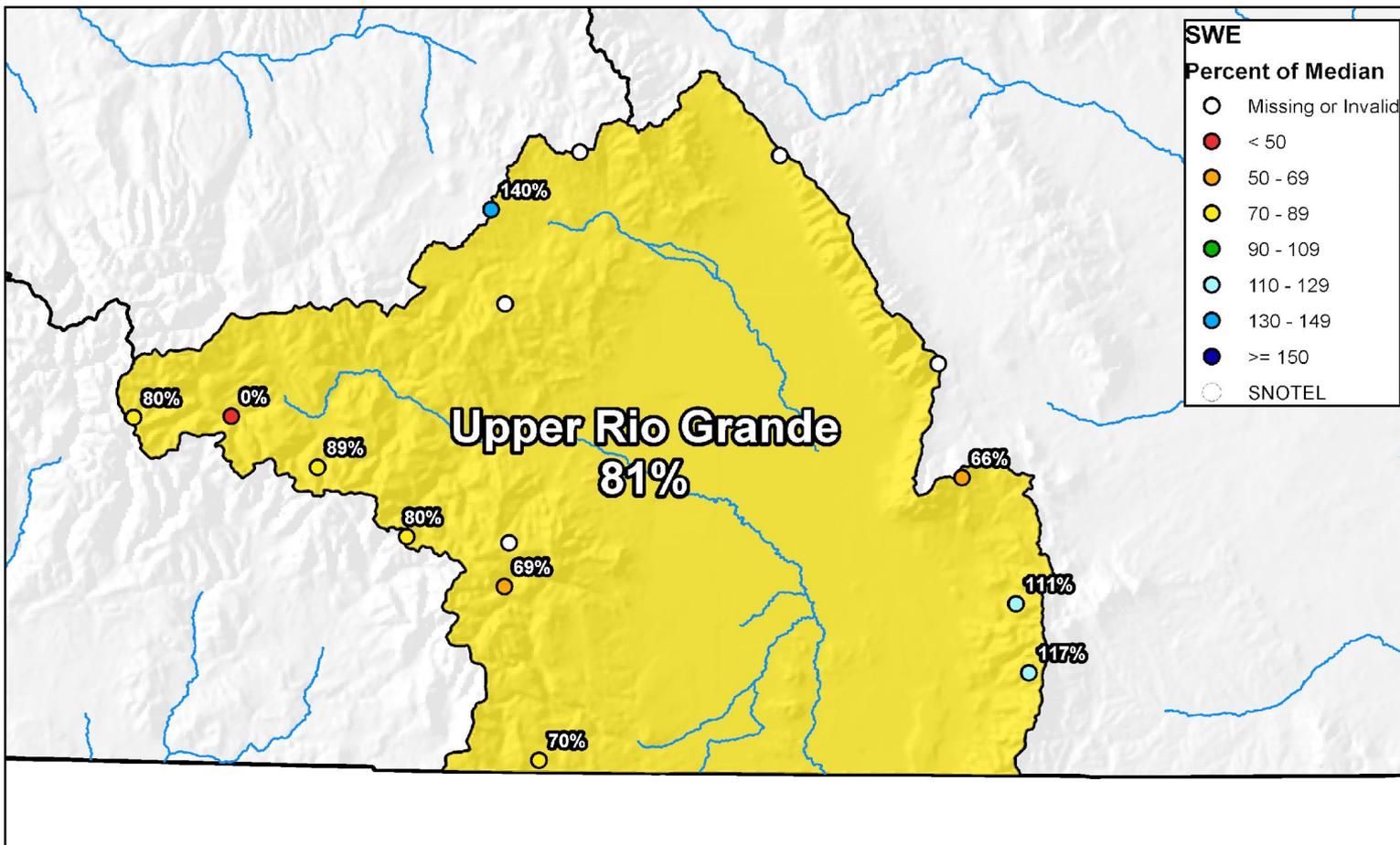


Upper Rio Grande Basin High/Low Snowpack Summary Based on Provisional SNOTEL data as of Apr 19, 2021



Upper Rio Grande River Basin Snow Water Equivalent (SWE) Summary

Current as of Apr 19, 2021

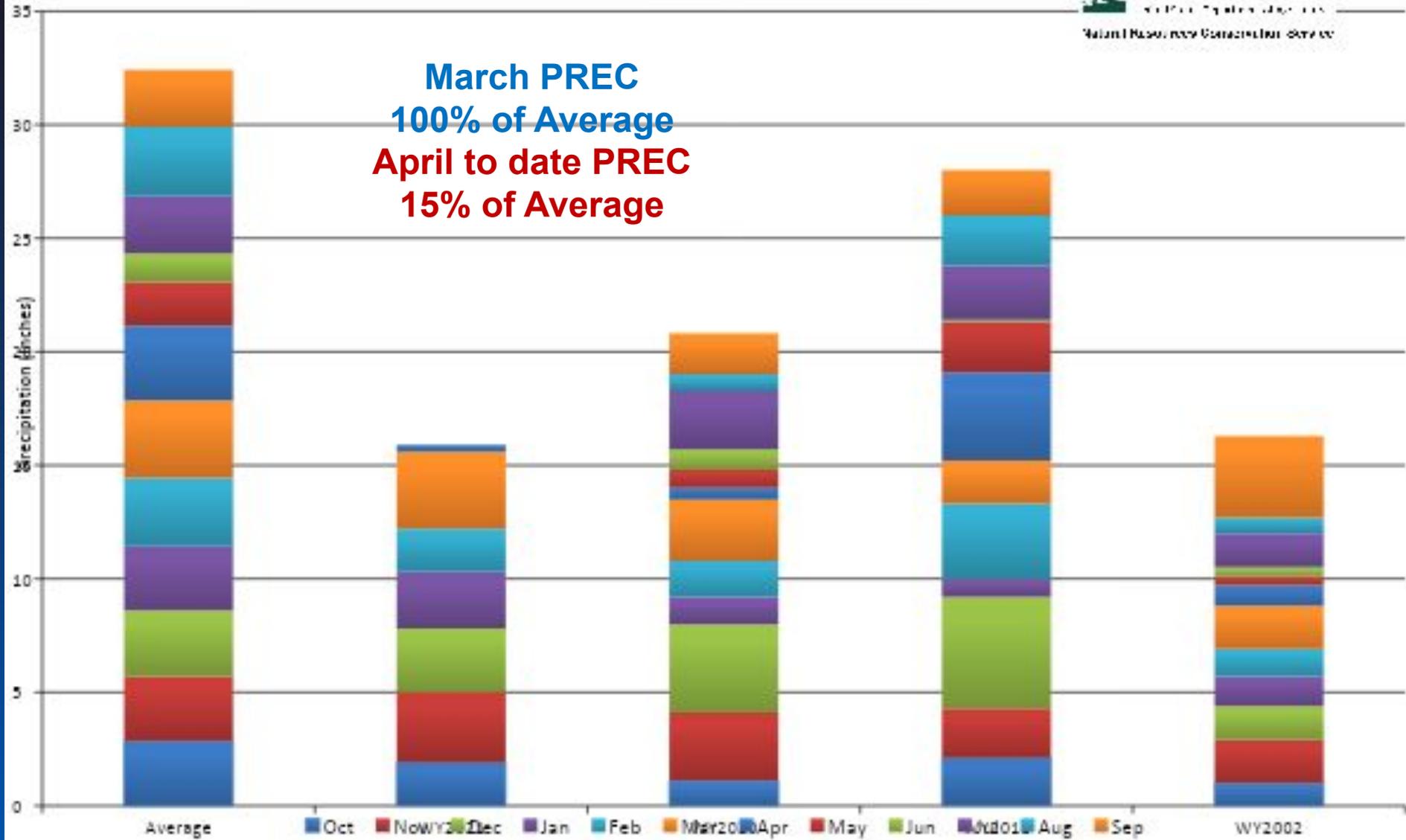




Upper Rio Grande River Basin High/Low Monthly Precipitation Summary *Based on Provisional SNOTEL data as of Apr 19, 2021*

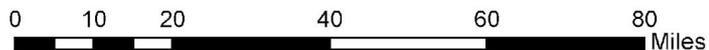
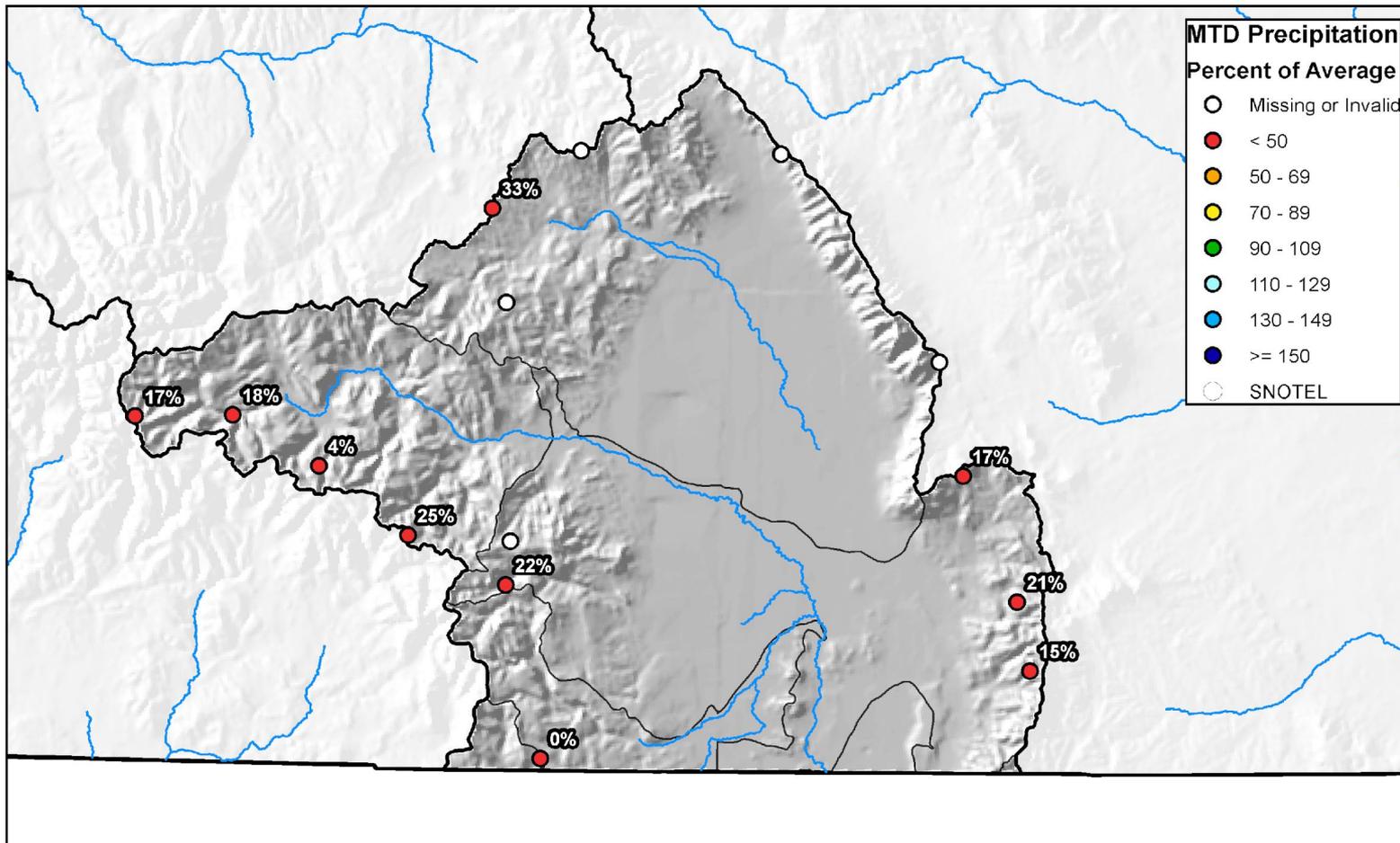
USDA
National Resources Conservation Service

March PREC
100% of Average
April to date PREC
15% of Average

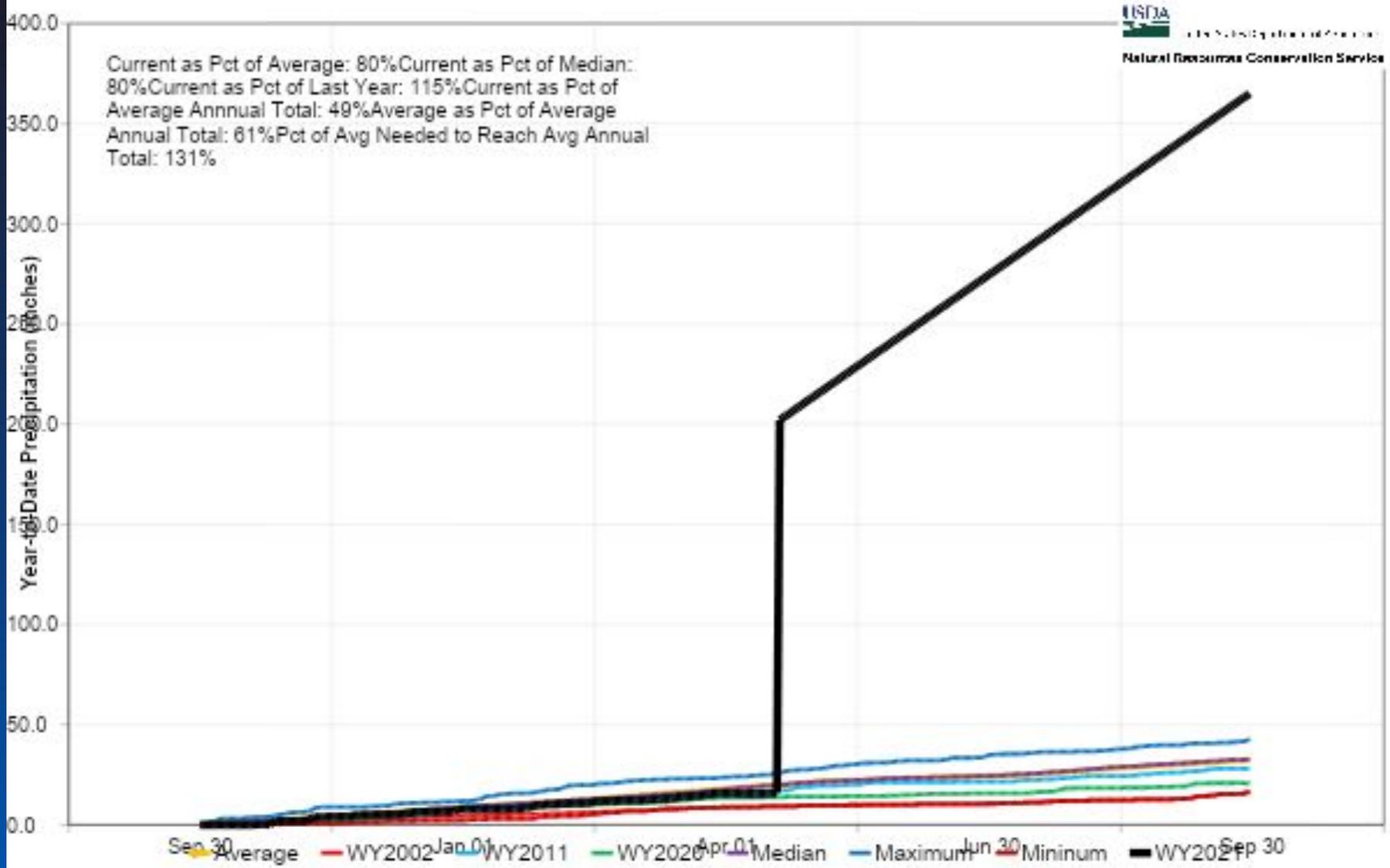


Upper Rio Grande River Basin Month to Date Precipitation Summary

Current as of Apr 19, 2021

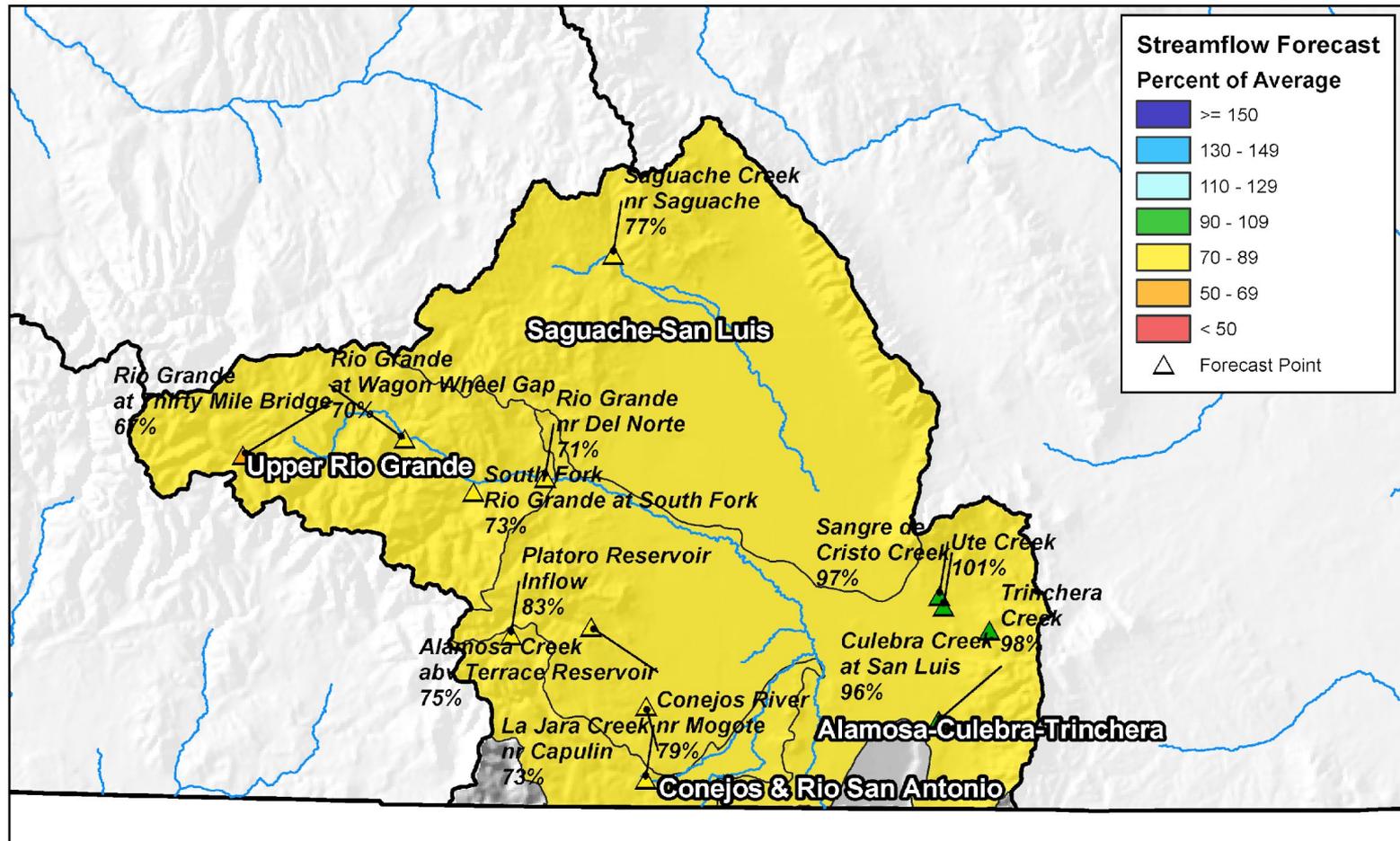


Upper Rio Grande River Basin High/Low Year-to-Date Precipitation Summary Based on Provisional SNOTEL data as of Apr 19, 2021



Upper Rio Grande River Basin Streamflow Forecast Summary

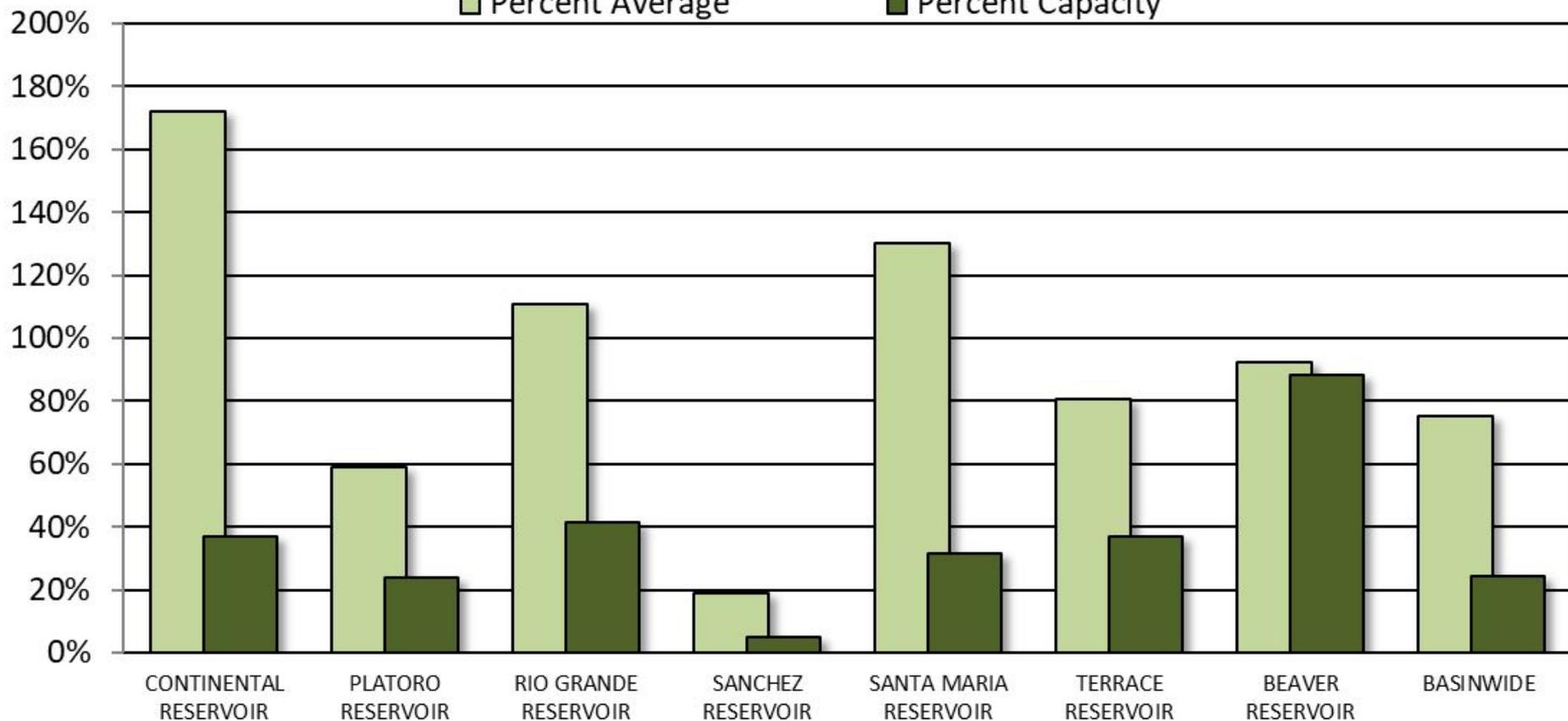
April 1, 2021



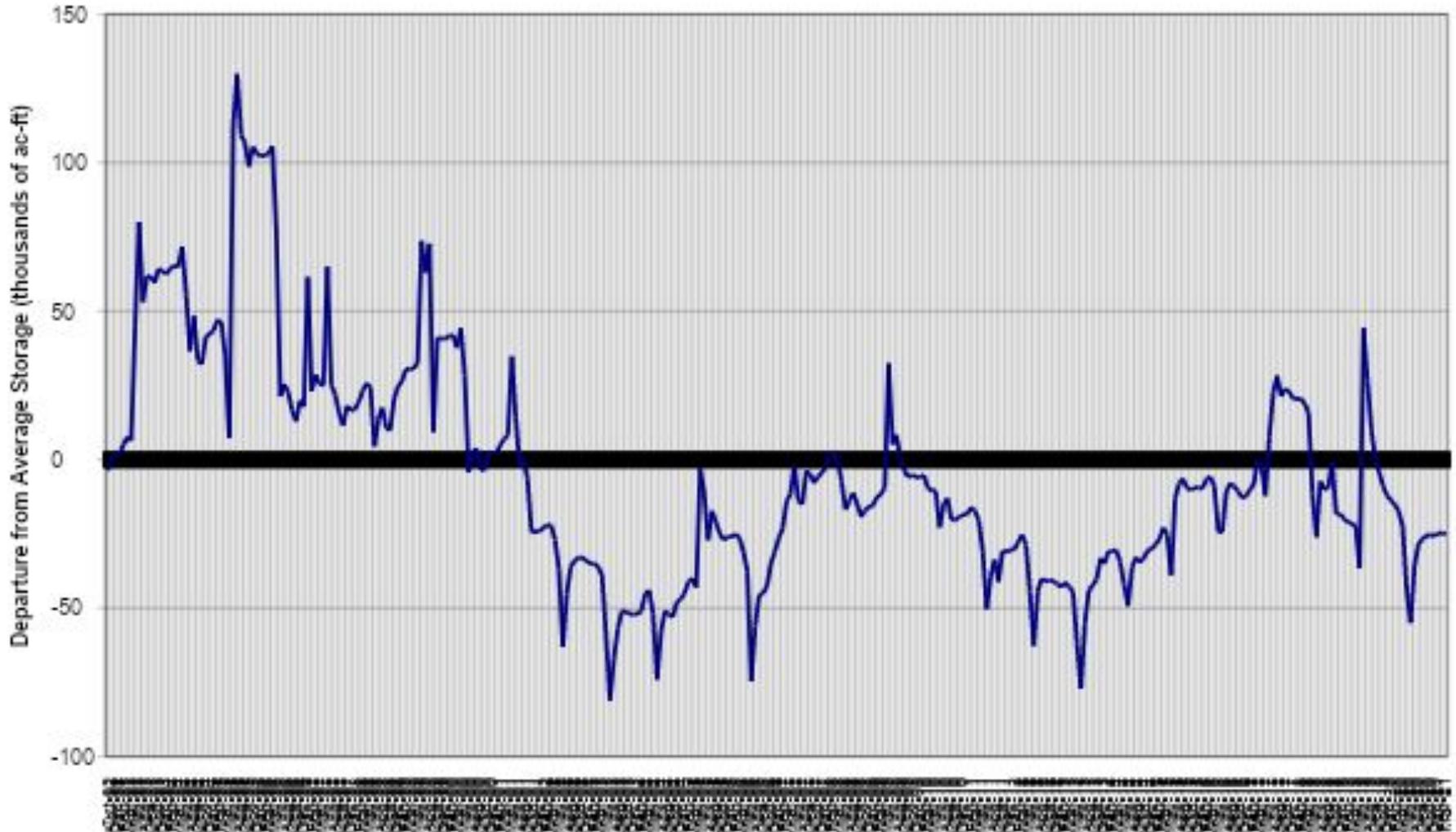
End of March Reservoir Storage

■ Percent Average

■ Percent Capacity

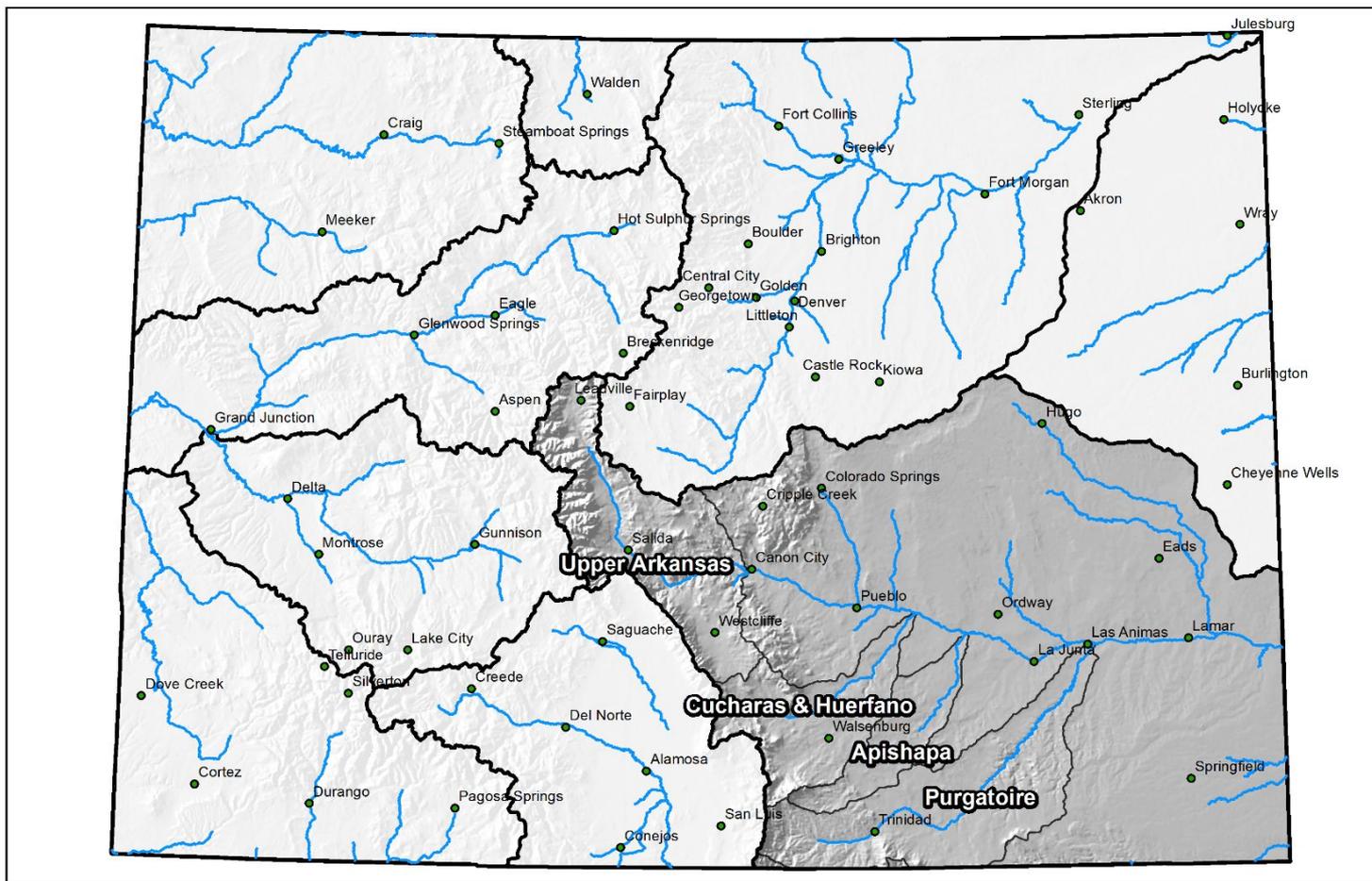


UPPER RIO GRANDE BASIN
Reservoir Storage
Departure from Average



Major Basin Summary

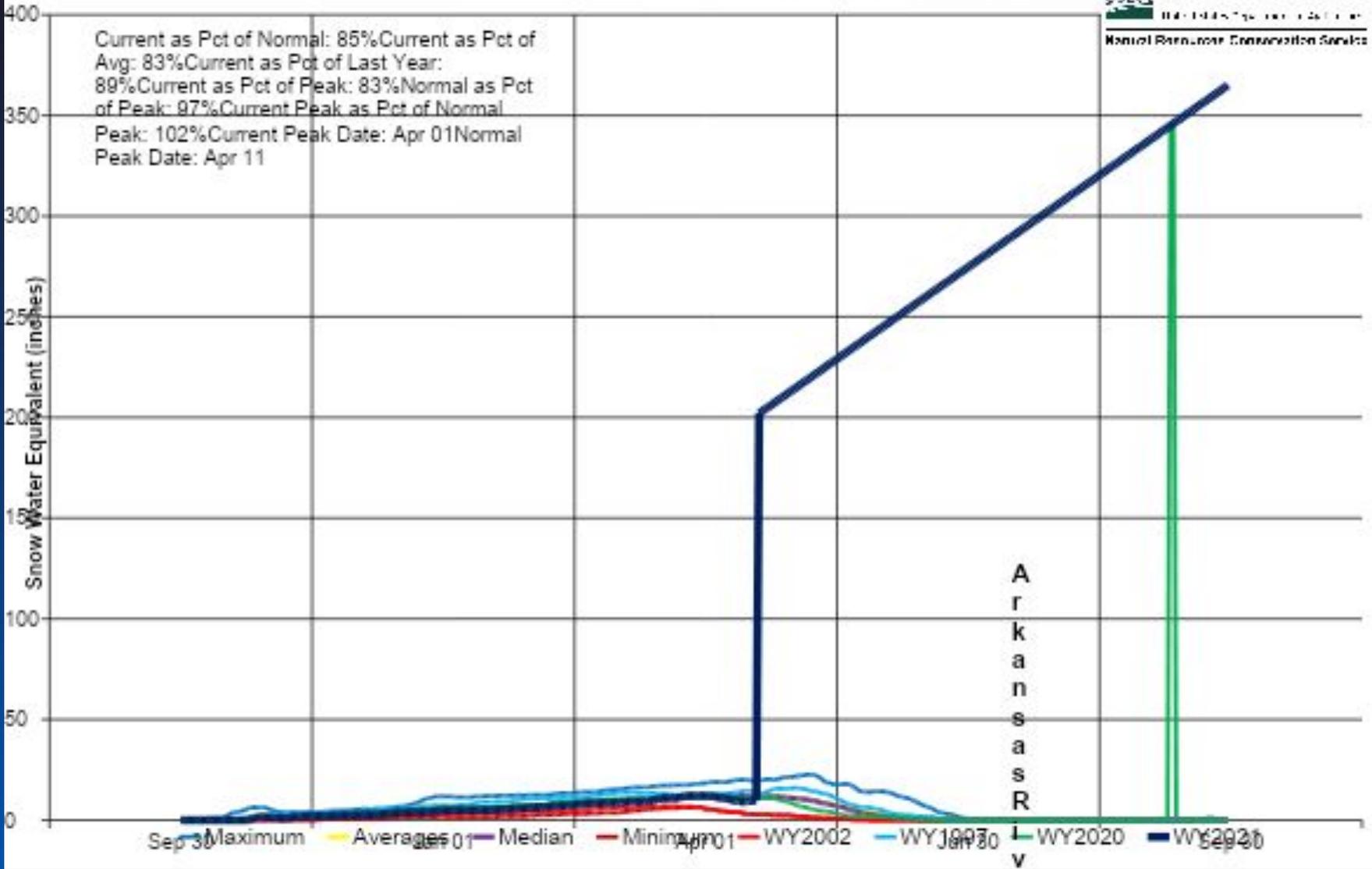
Arkansas River Basin



Arkansas River Basin High/Low Snowpack Summary Based on Provisional SNOTEL data as of Apr 19, 2021

USDA
Natural Resource Conservation Service

Current as Pct of Normal: 85%
 Current as Pct of Avg: 83%
 Current as Pct of Last Year: 89%
 Current as Pct of Peak: 83%
 Normal as Pct of Peak: 97%
 Current Peak as Pct of Normal: 102%
 Current Peak Date: Apr 01
 Normal Peak Date: Apr 11

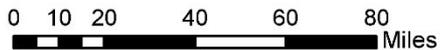
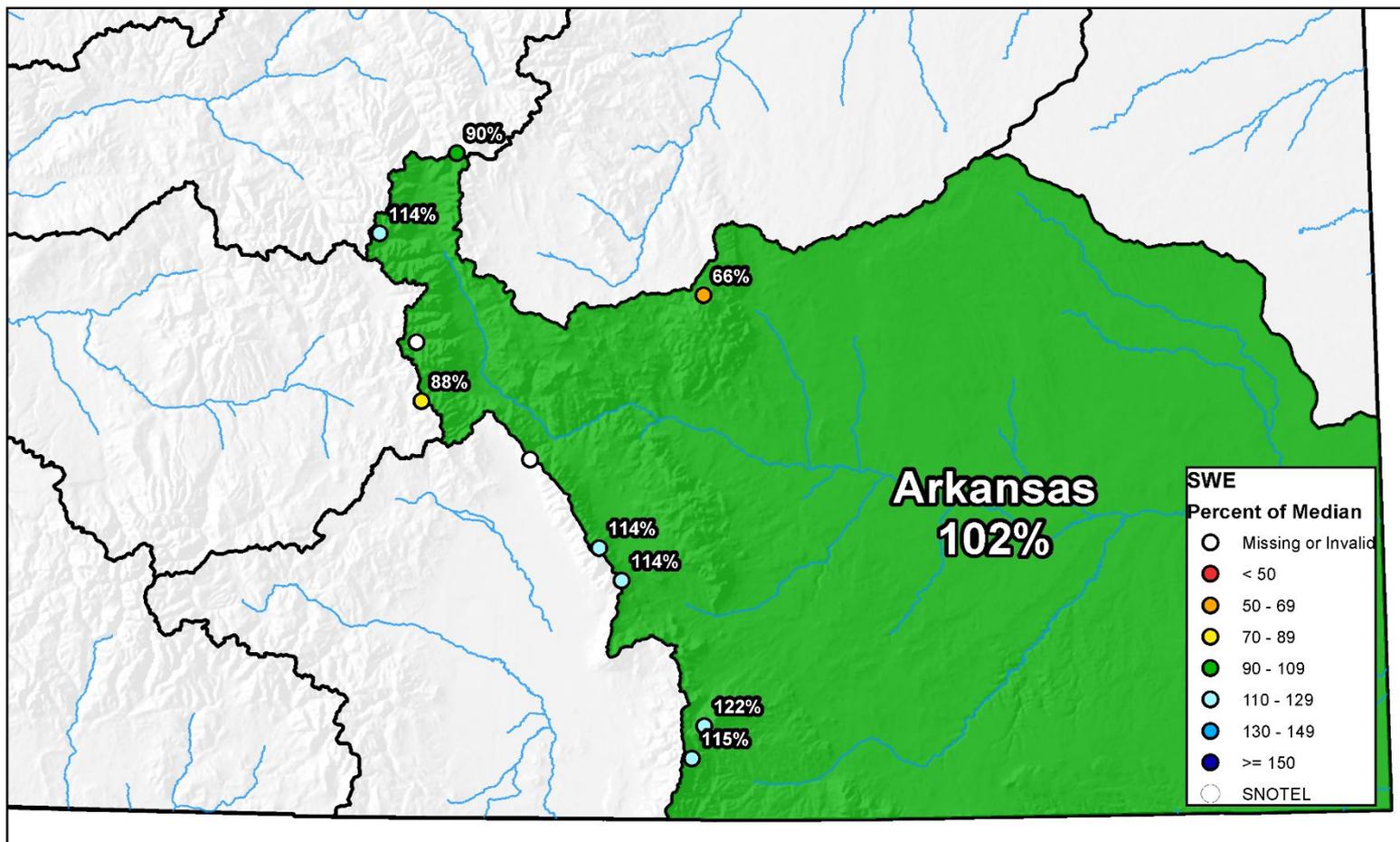


Arkansas River

Sep 30 Maximum Averages 01 Median Minimum Apr 01 WY2002 WY1970 WY2020 WY2020

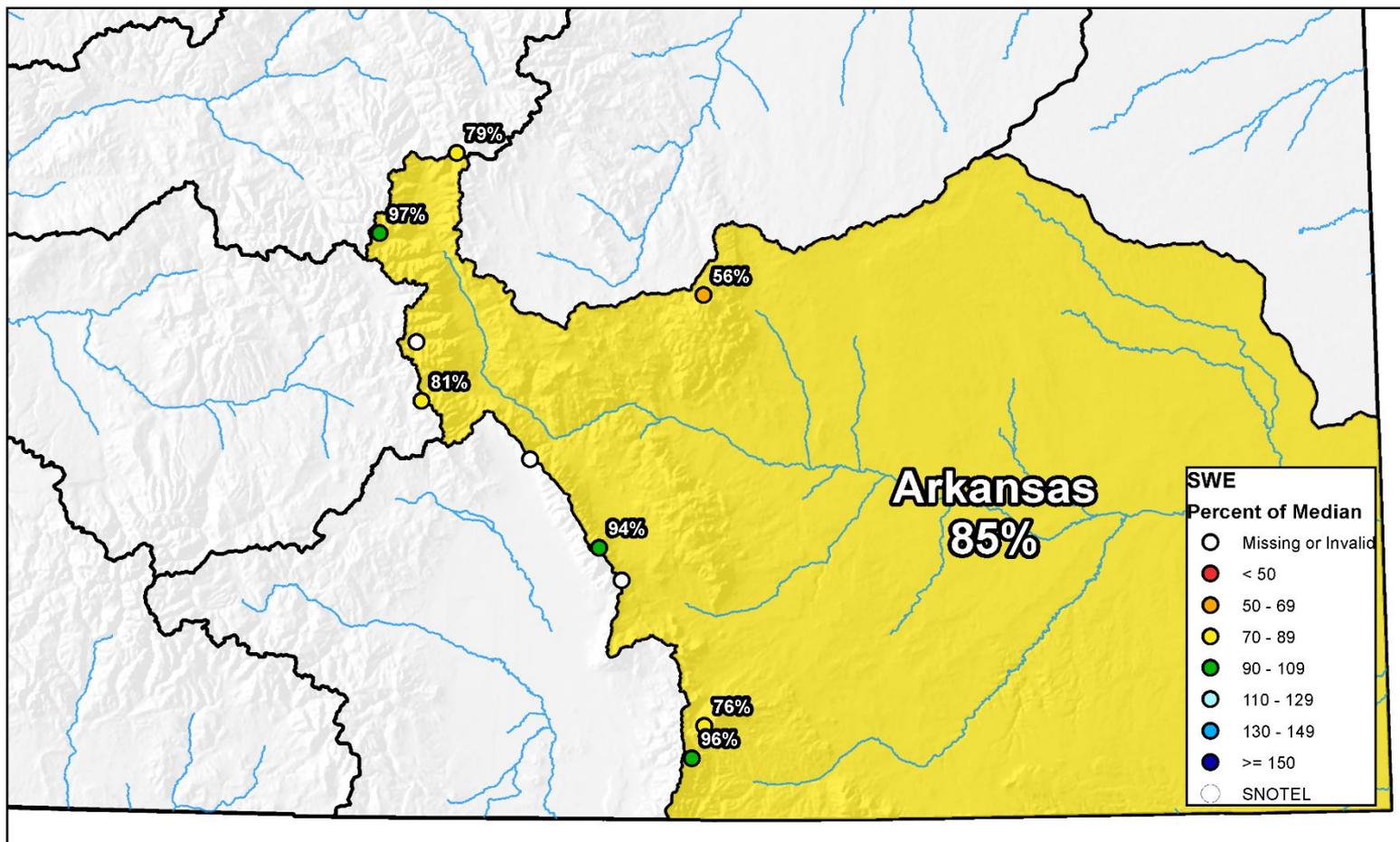
Arkansas River Basin Snow Water Equivalent (SWE) Summary

Current as of Mar 17, 2021



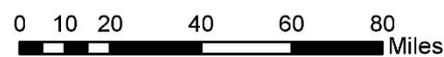
Arkansas River Basin Snow Water Equivalent (SWE) Summary

Current as of Apr 19, 2021



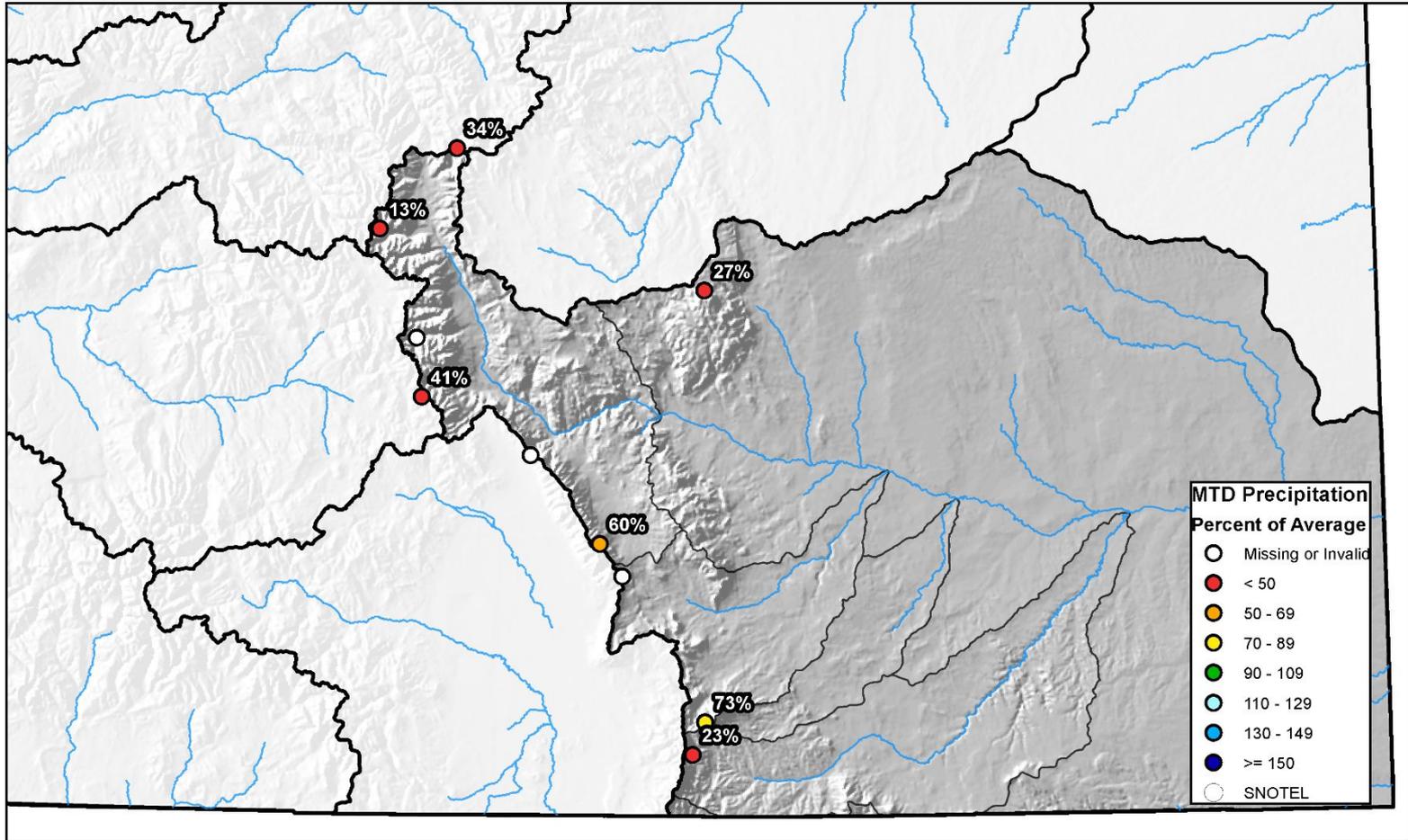
SWE
Percent of Median

- Missing or Invalid
- < 50
- 50 - 69
- 70 - 89
- 90 - 109
- 110 - 129
- 130 - 149
- >= 150
- SNOTEL

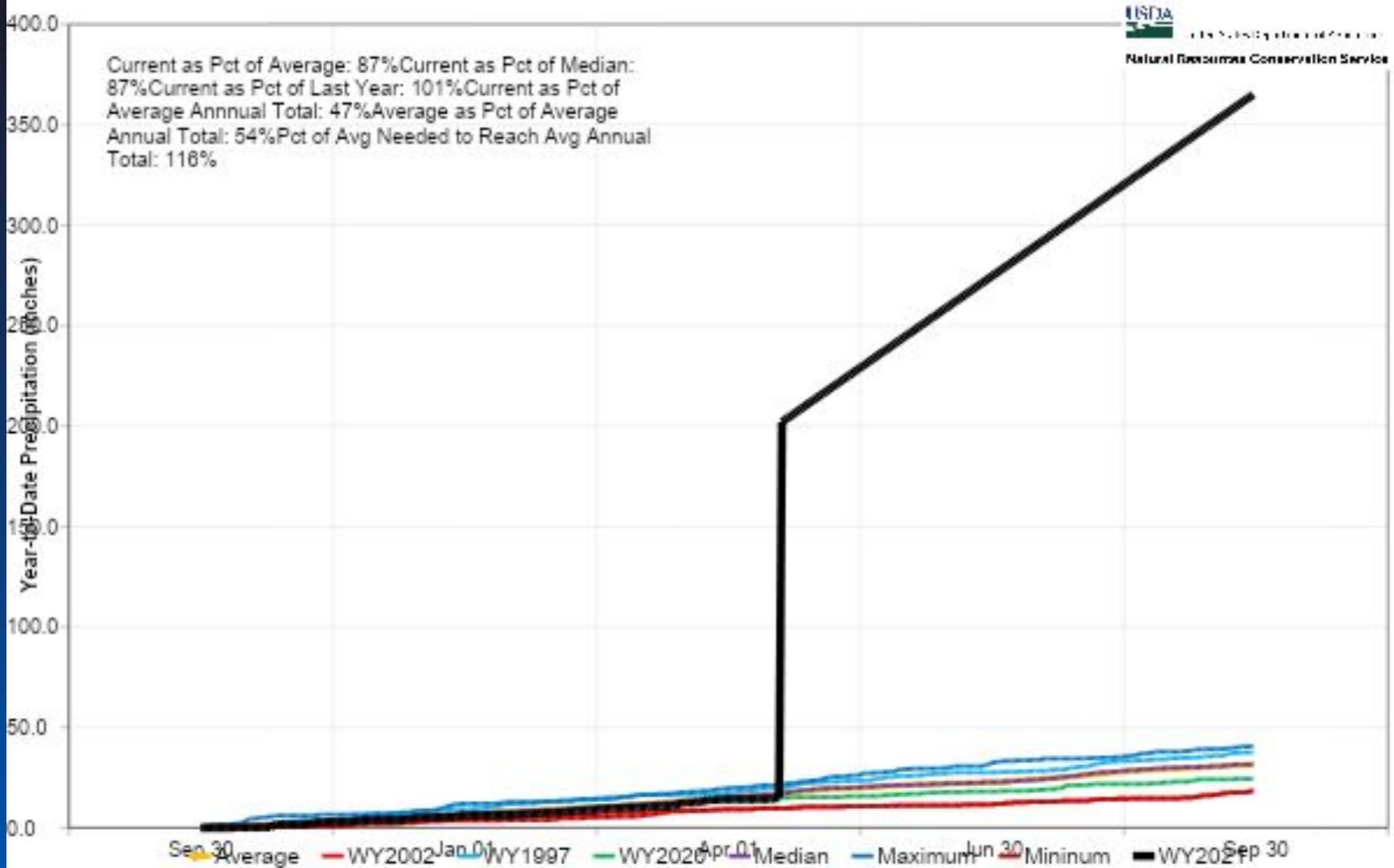


Arkansas River Basin Month to Date Precipitation Summary

Current as of Apr 19, 2021

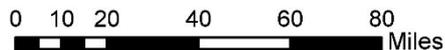
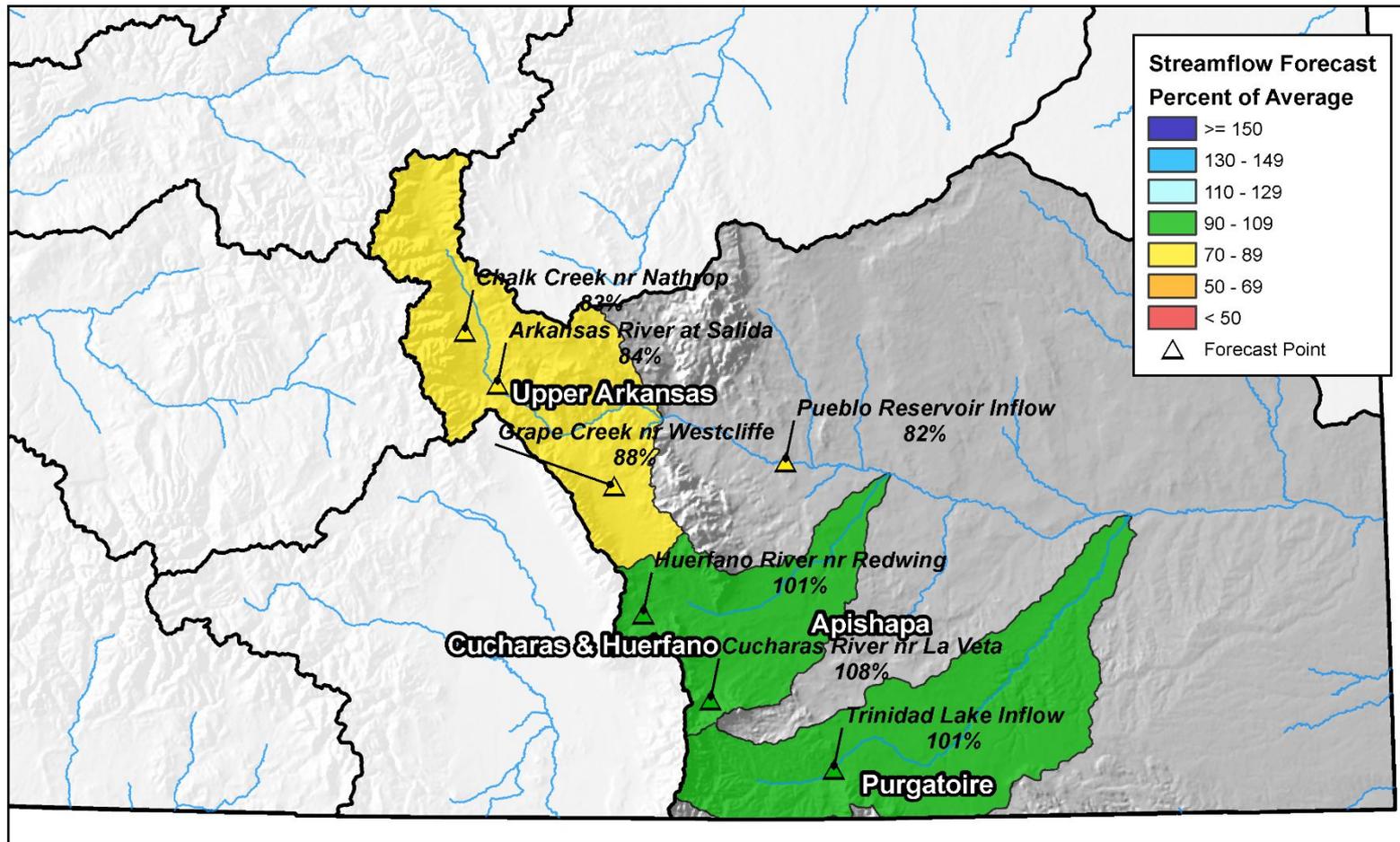


Arkansas River Basin High/Low Year-to-Date Precipitation Summary *Based on Provisional SNOTEL data as of Apr 19, 2021*



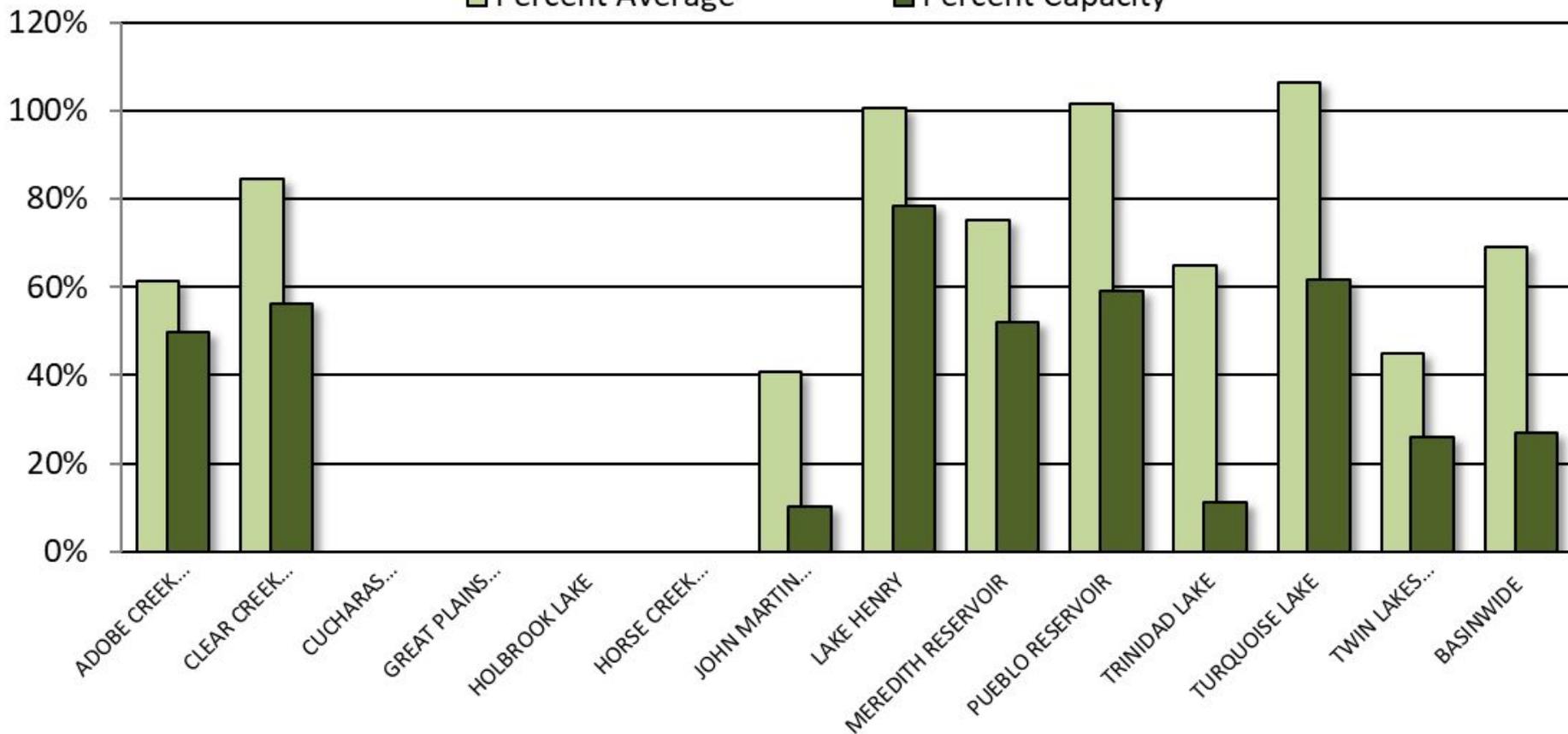
Arkansas River Basin Streamflow Forecast Summary

April 1, 2021

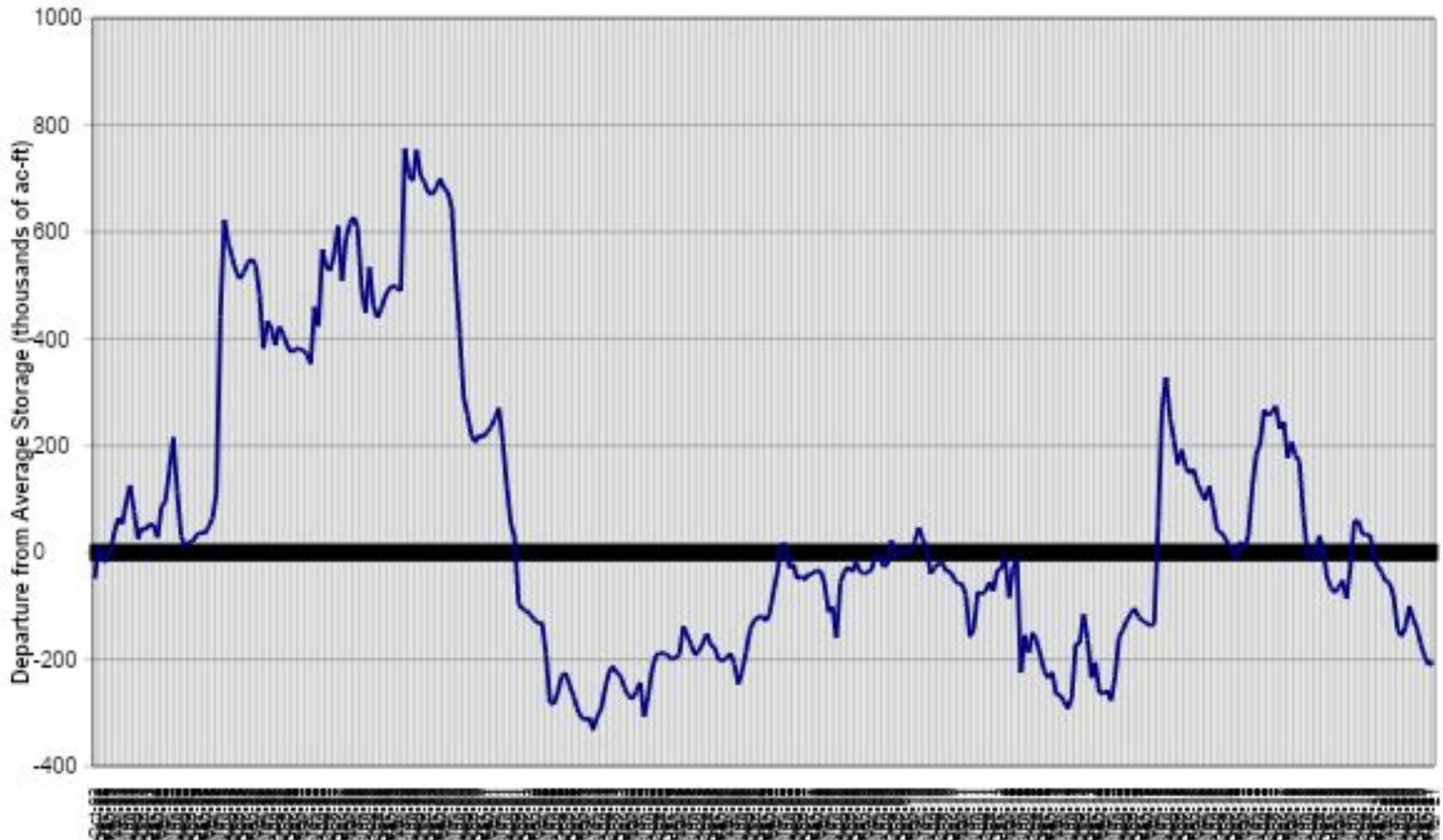


End of March Reservoir Storage

■ Percent Average
 ■ Percent Capacity

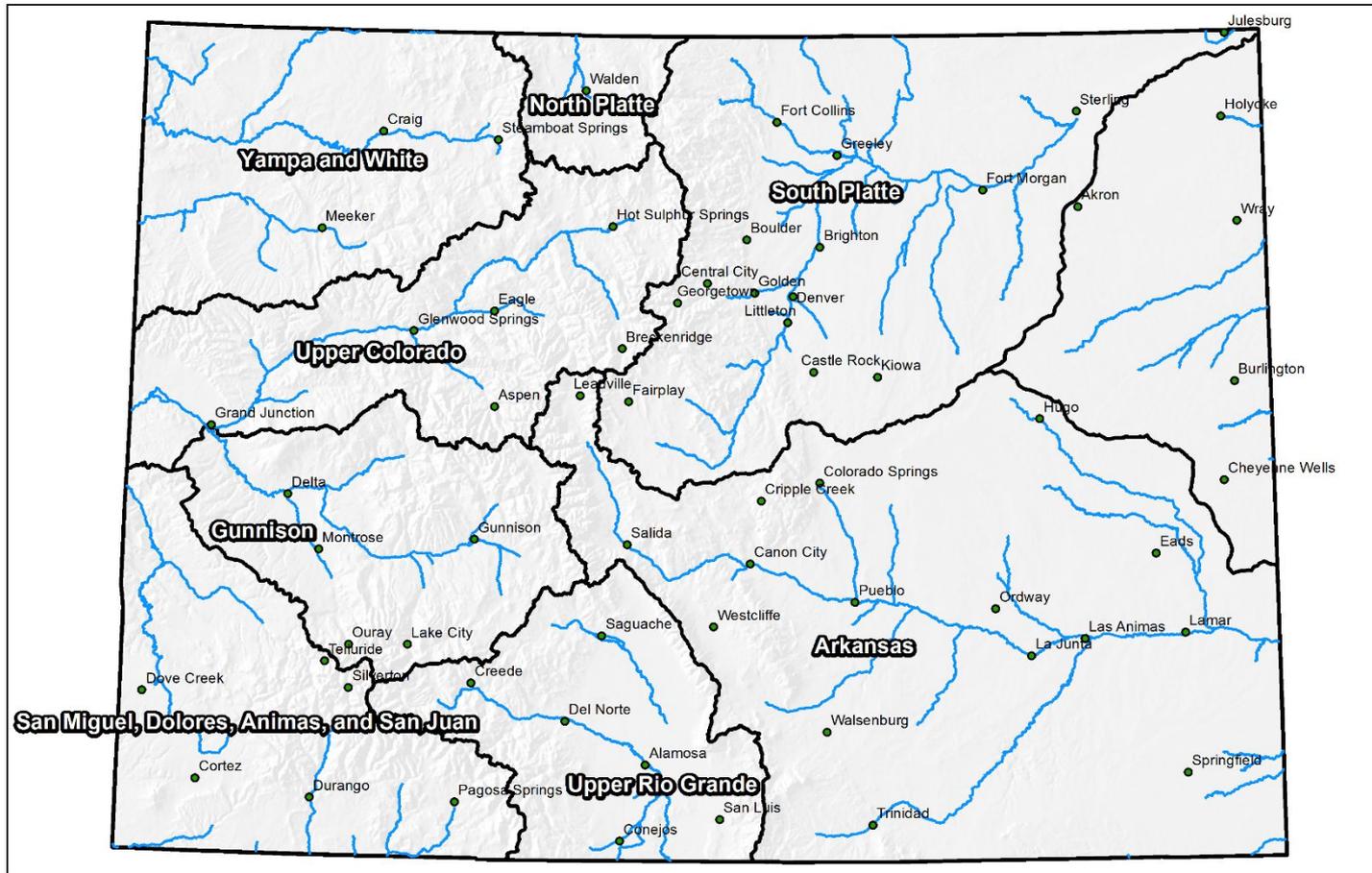


ARKANSAS RIVER BASIN
 Reservoir Storage
 Departure from Average



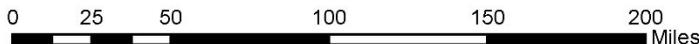
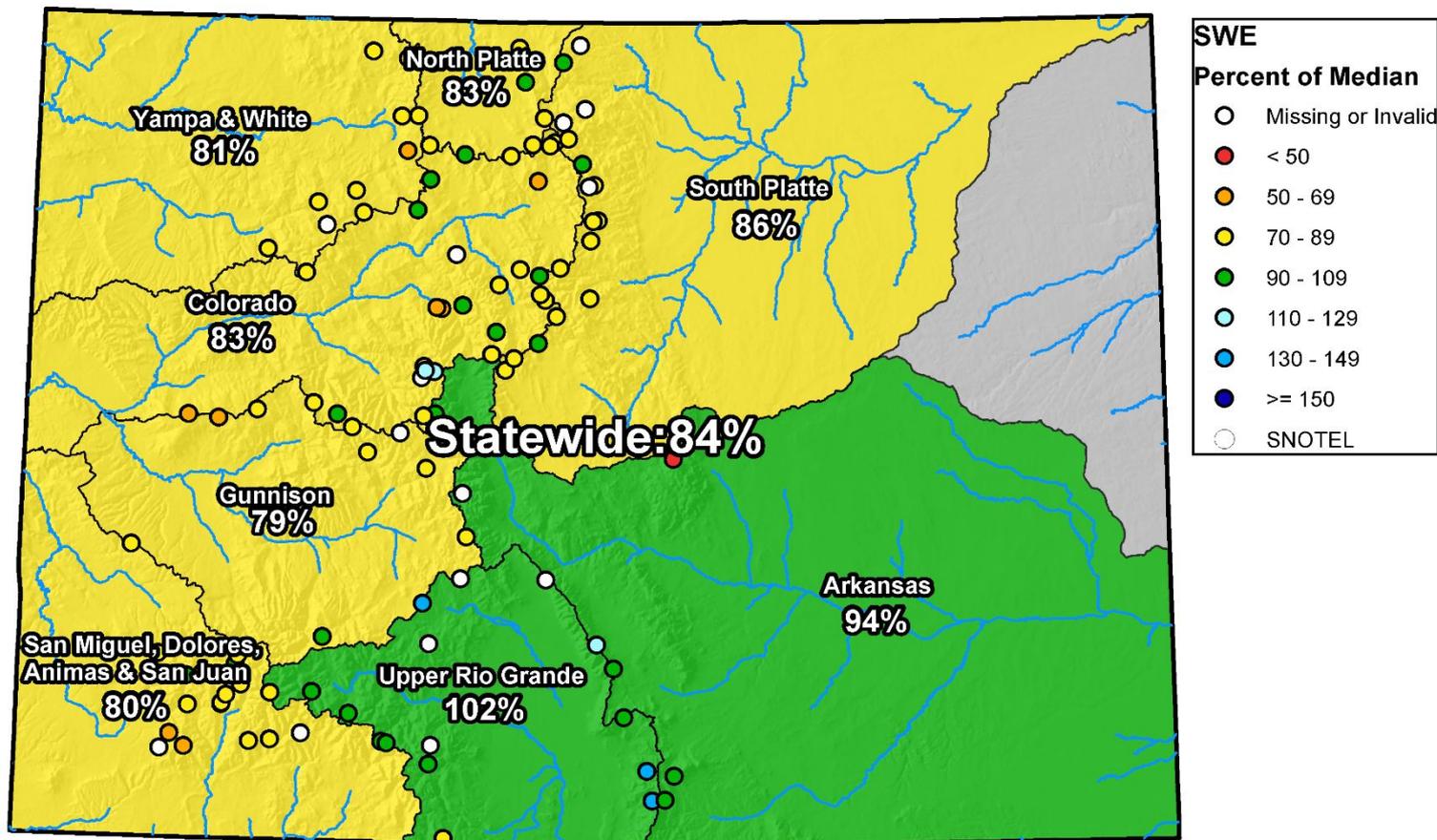
Colorado Statewide Summary

Colorado Major Basins



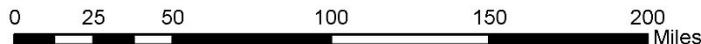
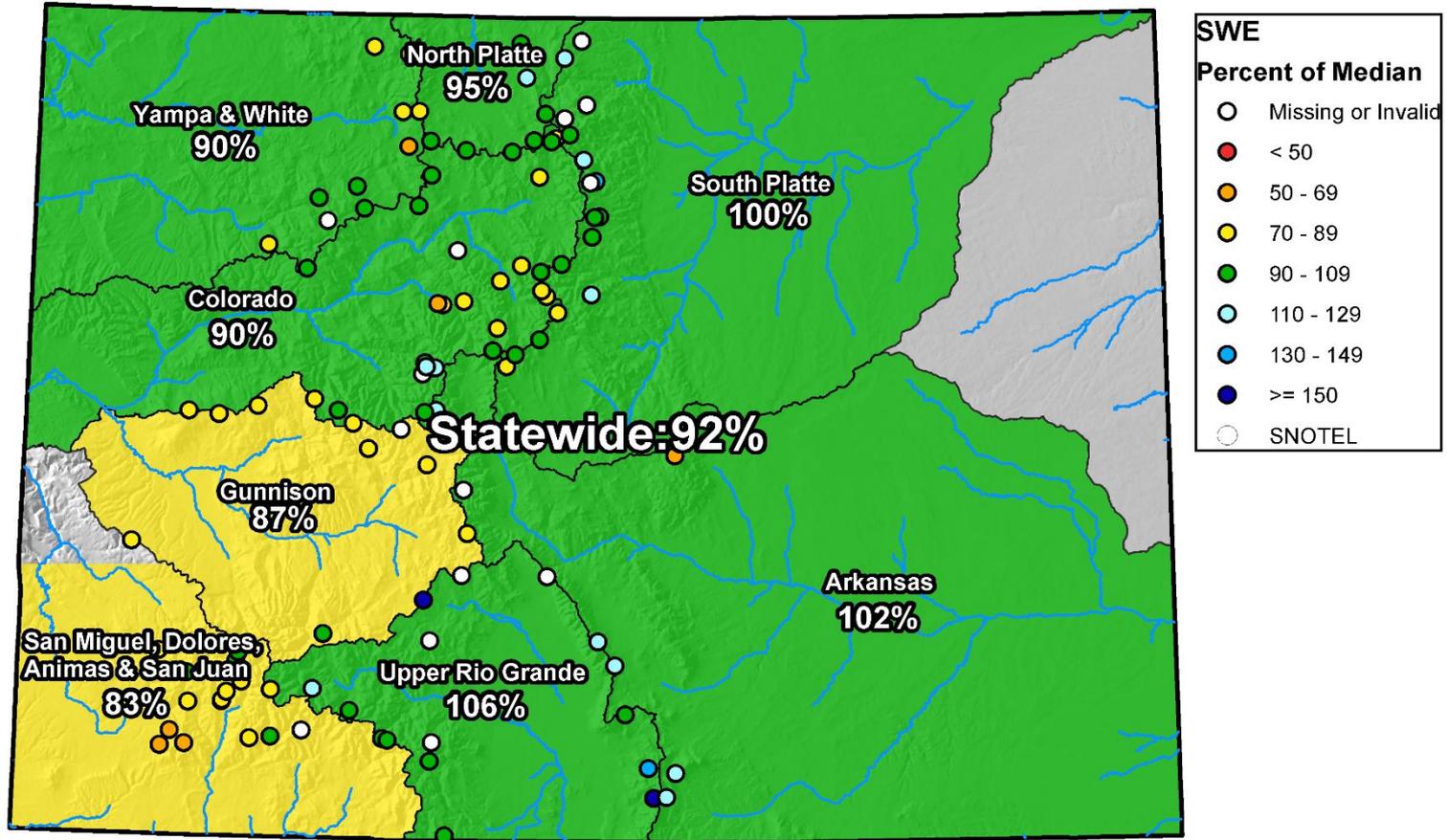
Colorado SNOTEL Snow Water Equivalent (SWE) Update Map with Site Data

Current as of Feb 12, 2021



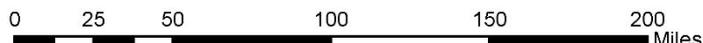
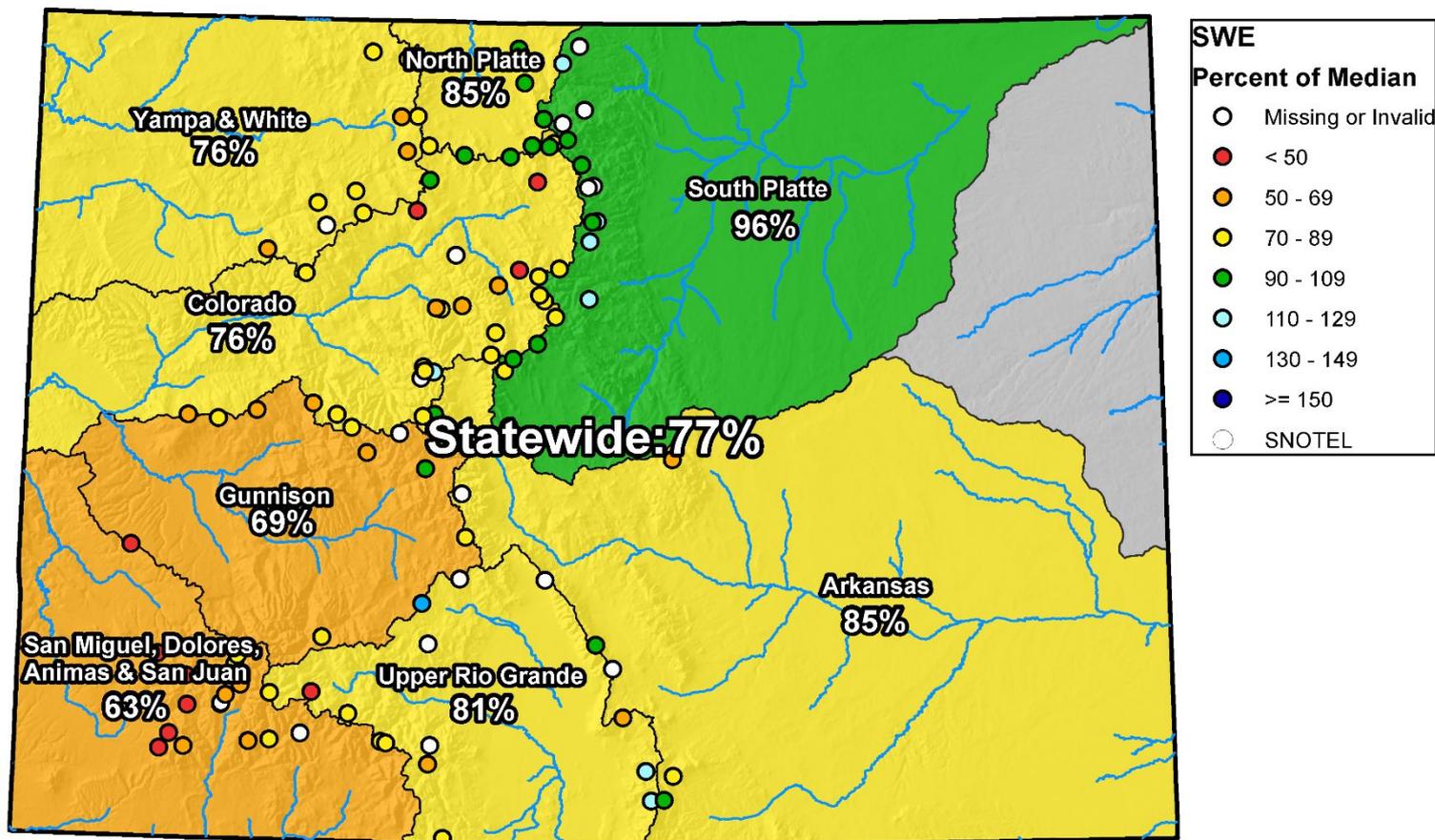
Colorado SNOTEL Snow Water Equivalent (SWE) Update Map with Site Data

Current as of Mar 17, 2021

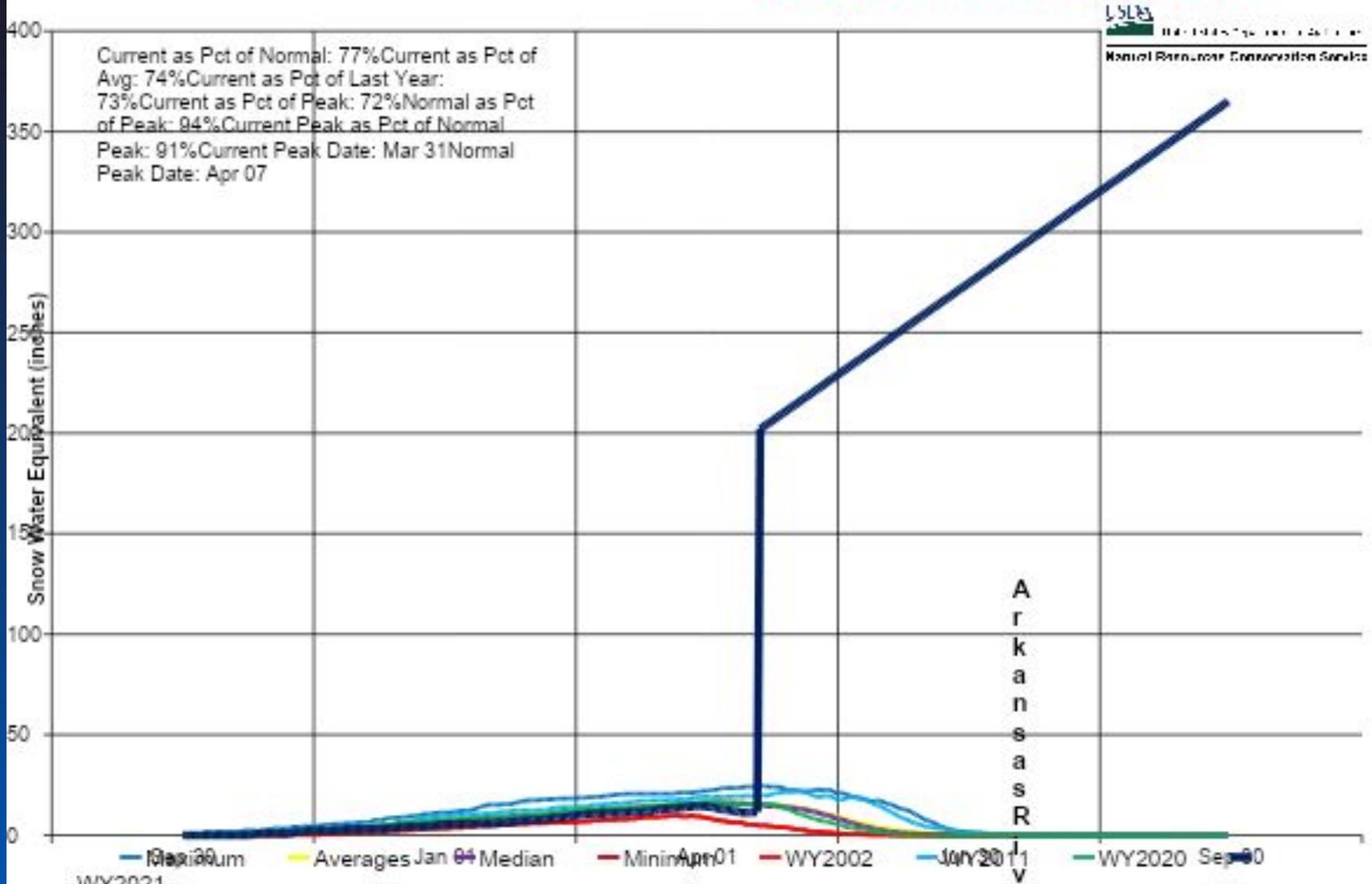


Colorado SNOTEL Snow Water Equivalent (SWE) Update Map with Site Data

Current as of Apr 19, 2021



Colorado Statewide High/Low Snowpack Summary Based on Provisional SNOTEL data as of Apr 19, 2021

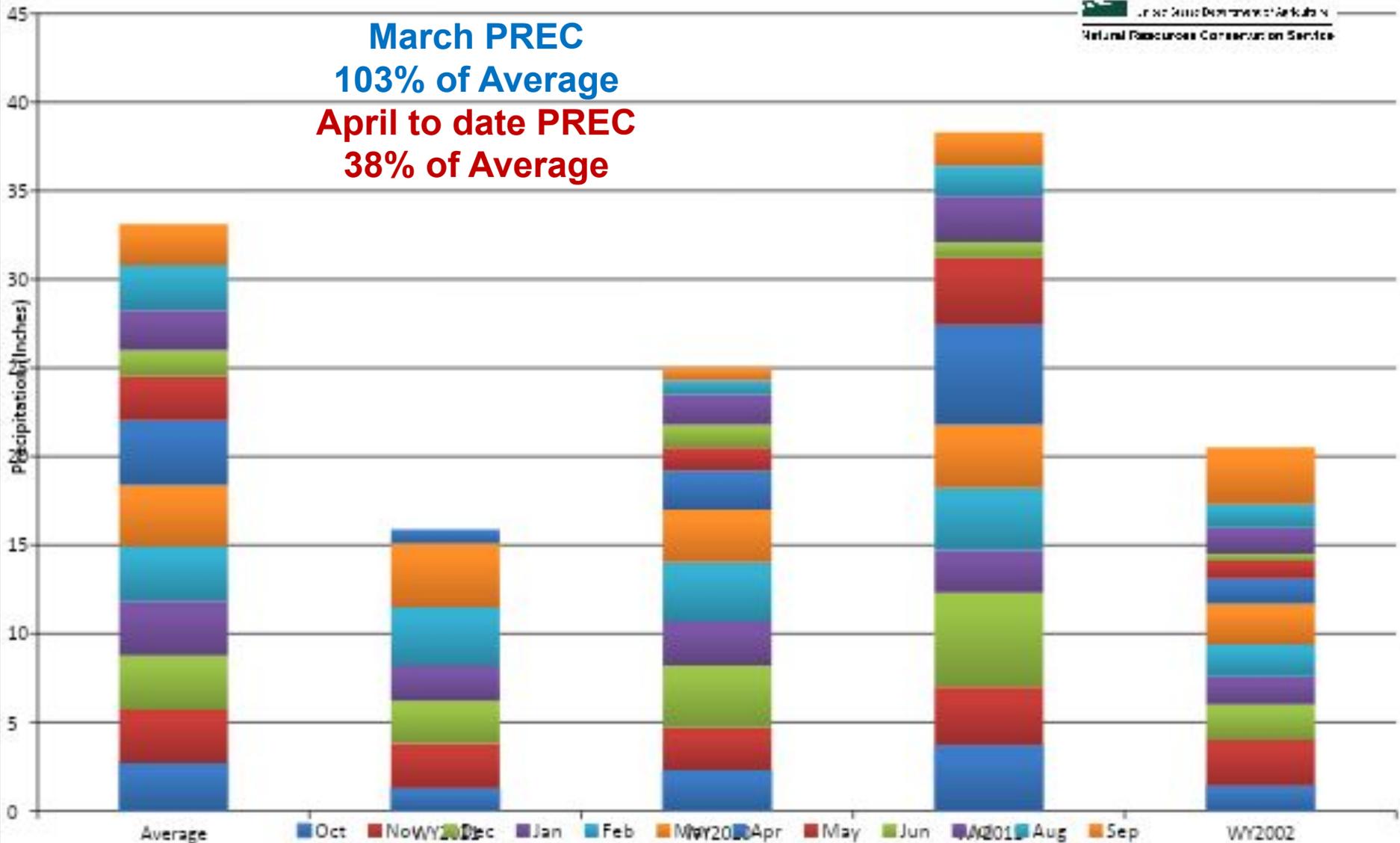




Colorado Statewide High/Low Monthly Precipitation Summary *Based on Provisional SNOTEL data as of Apr 19, 2021*

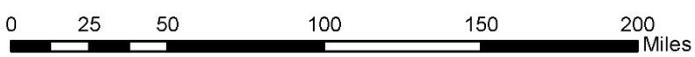
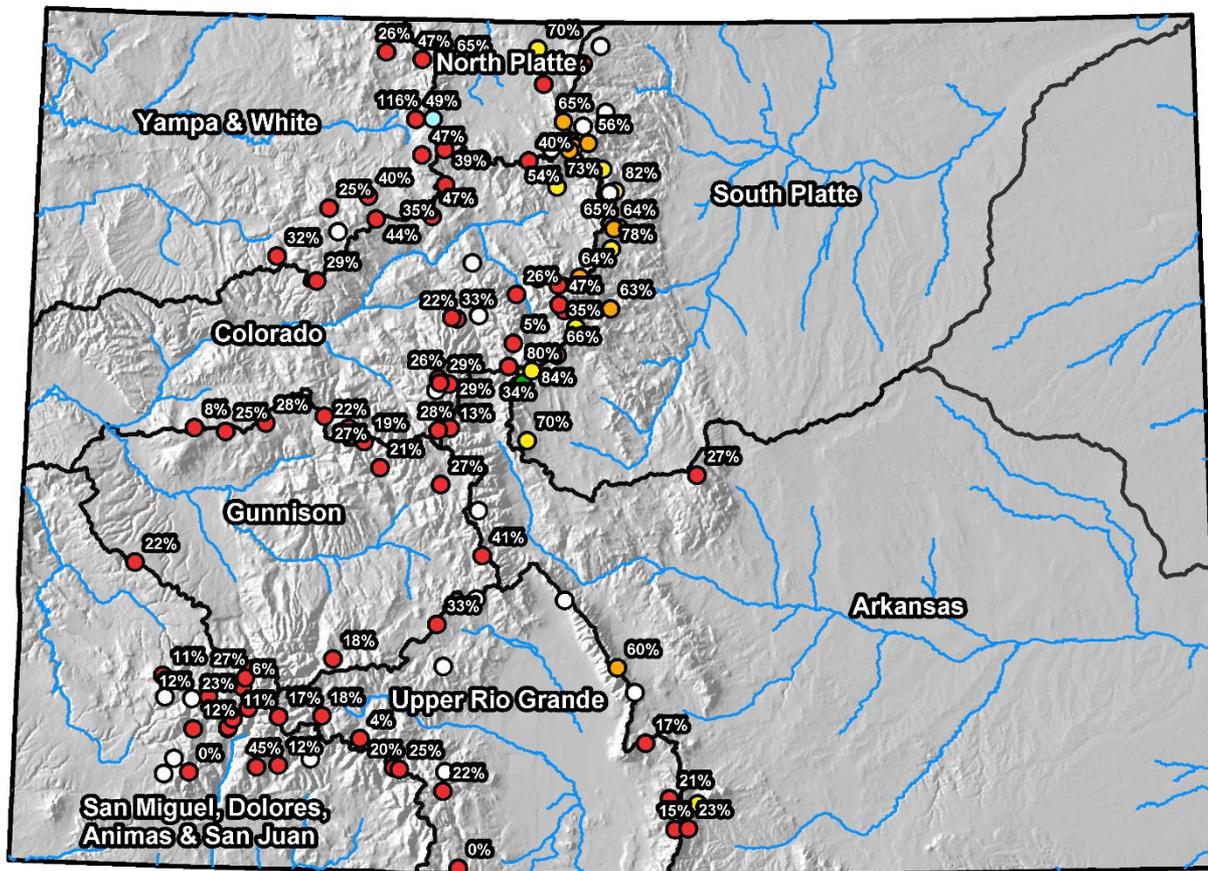


March PREC
103% of Average
April to date PREC
38% of Average

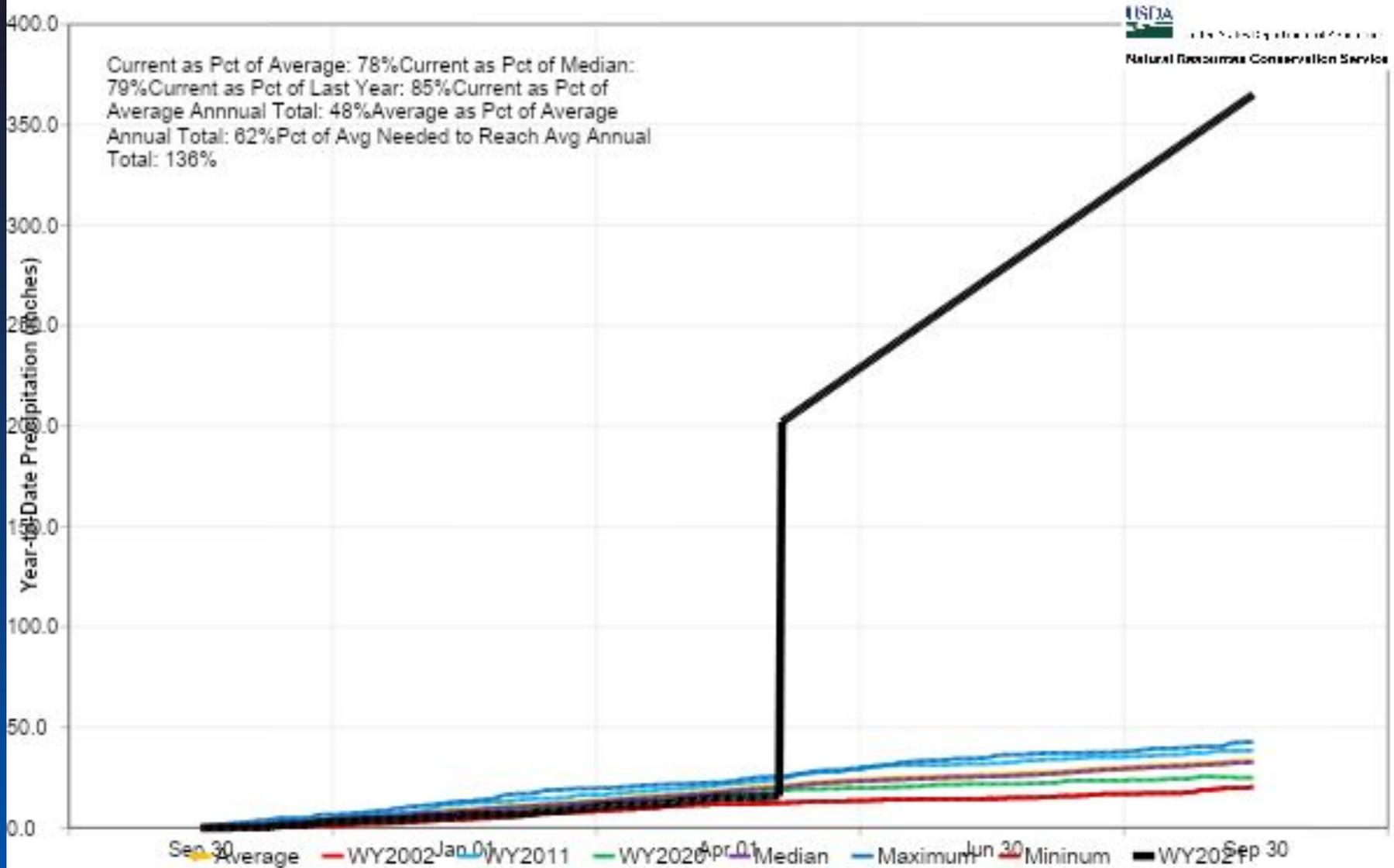


Colorado SNOTEL Month-to-Date Precipitation

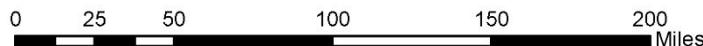
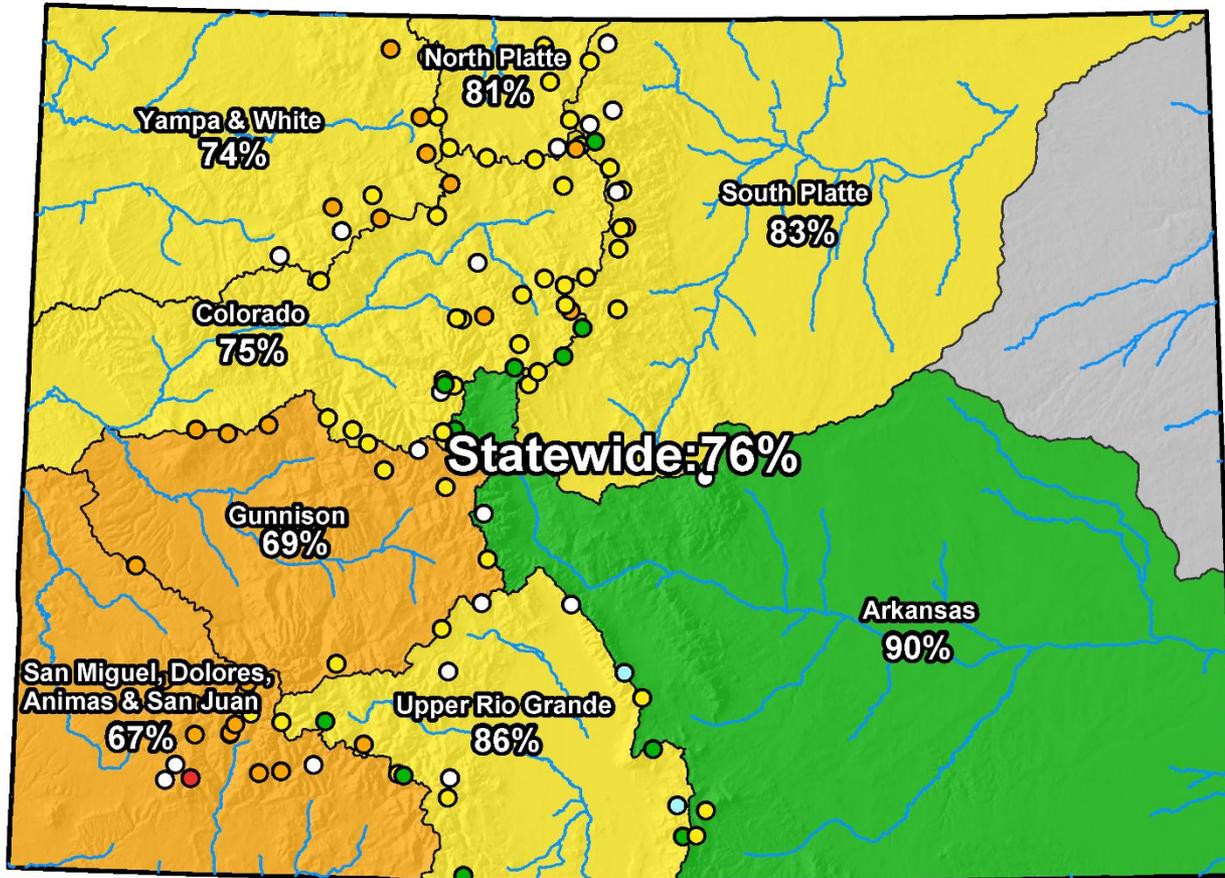
Current as of Apr 19, 2021



Colorado Statewide High/Low Year-to-Date Precipitation Summary *Based on Provisional SNOTEL data as of Apr 19, 2021*

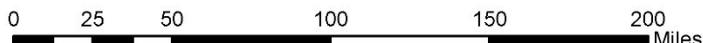
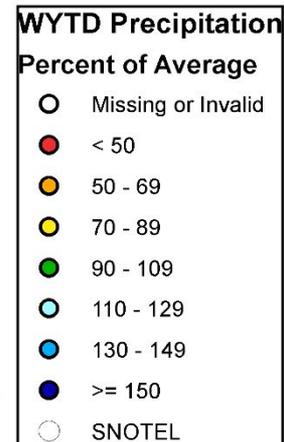
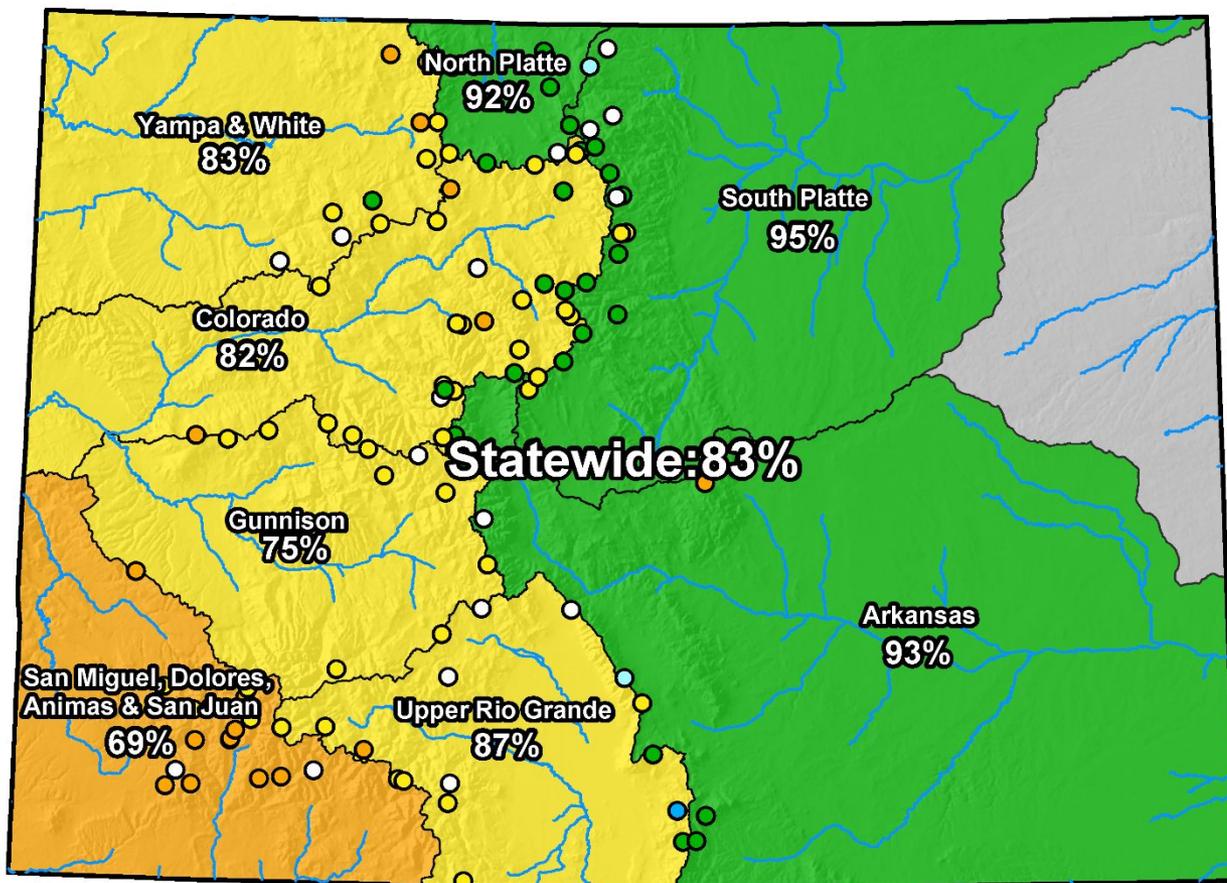


Colorado SNOTEL Water Year to Date Precipitation Current as of Feb 12, 2021



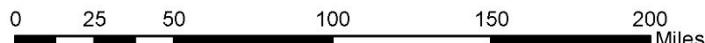
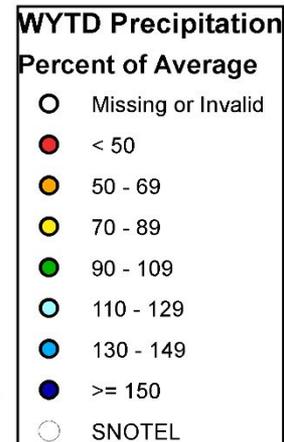
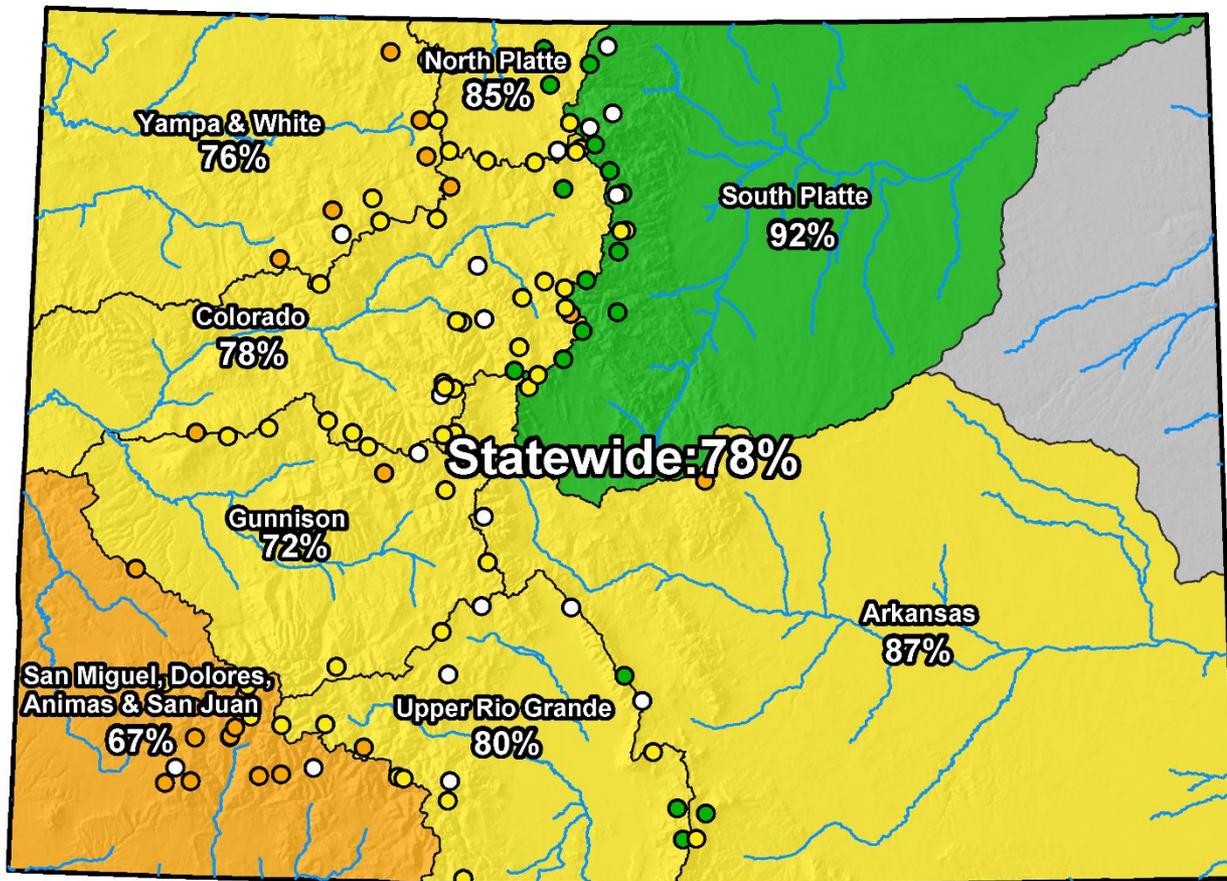
Colorado SNOTEL Water Year to Date Precipitation

Current as of Mar 17, 2021

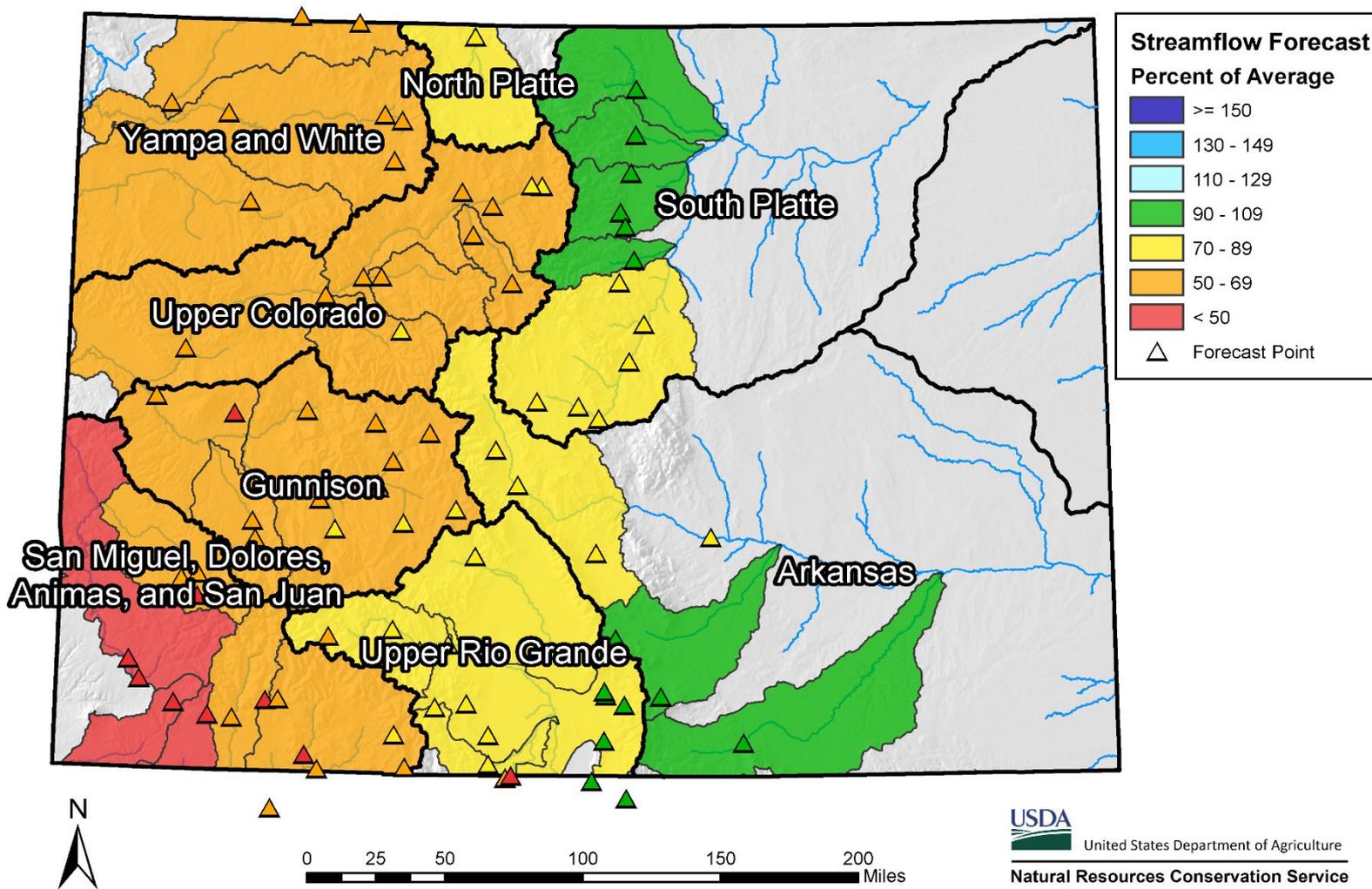


Colorado SNOTEL Water Year to Date Precipitation

Current as of Apr 19, 2021

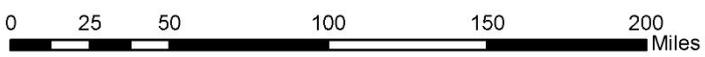
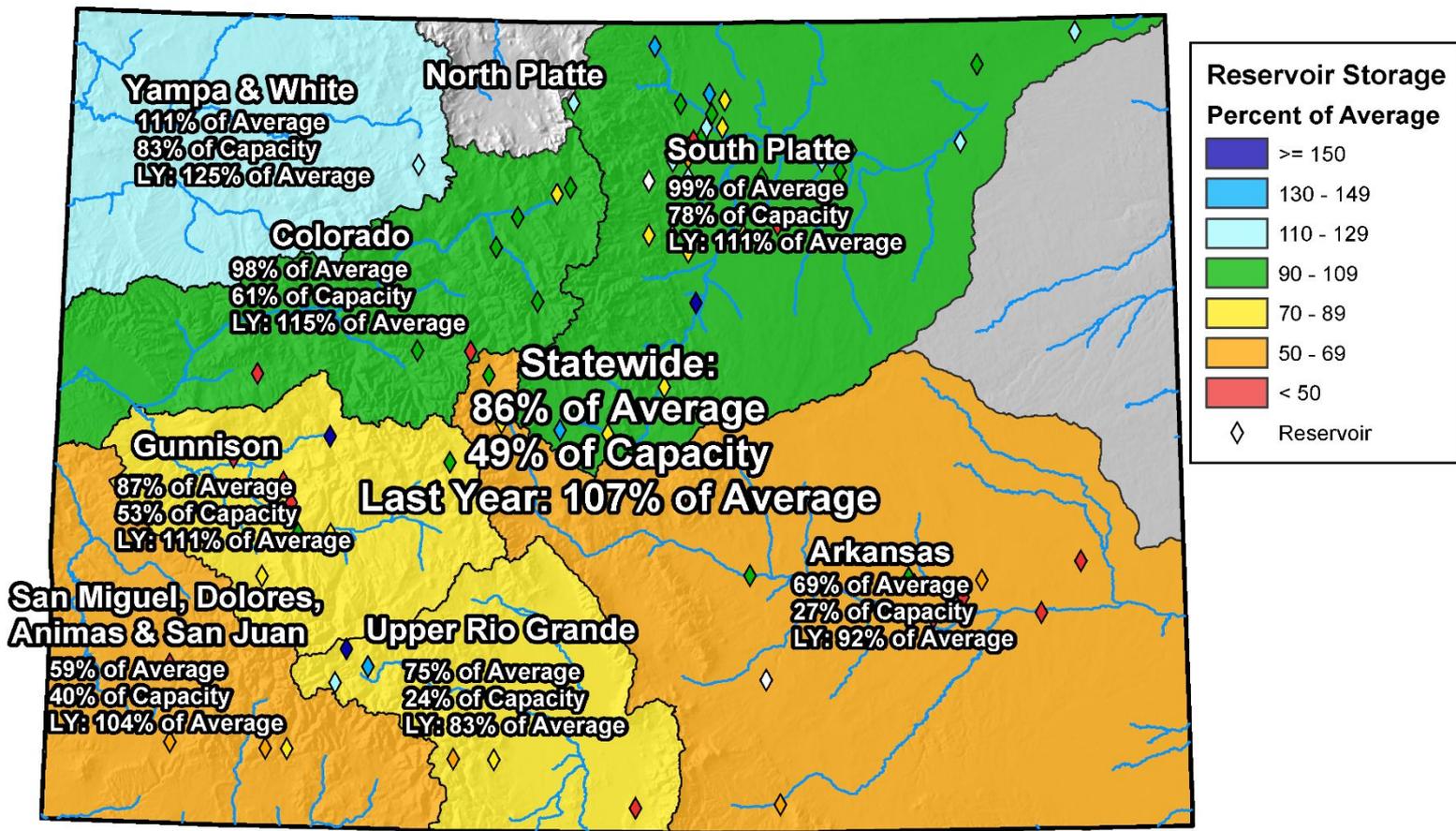


Colorado Streamflow Forecasts Summary April 1, 2021



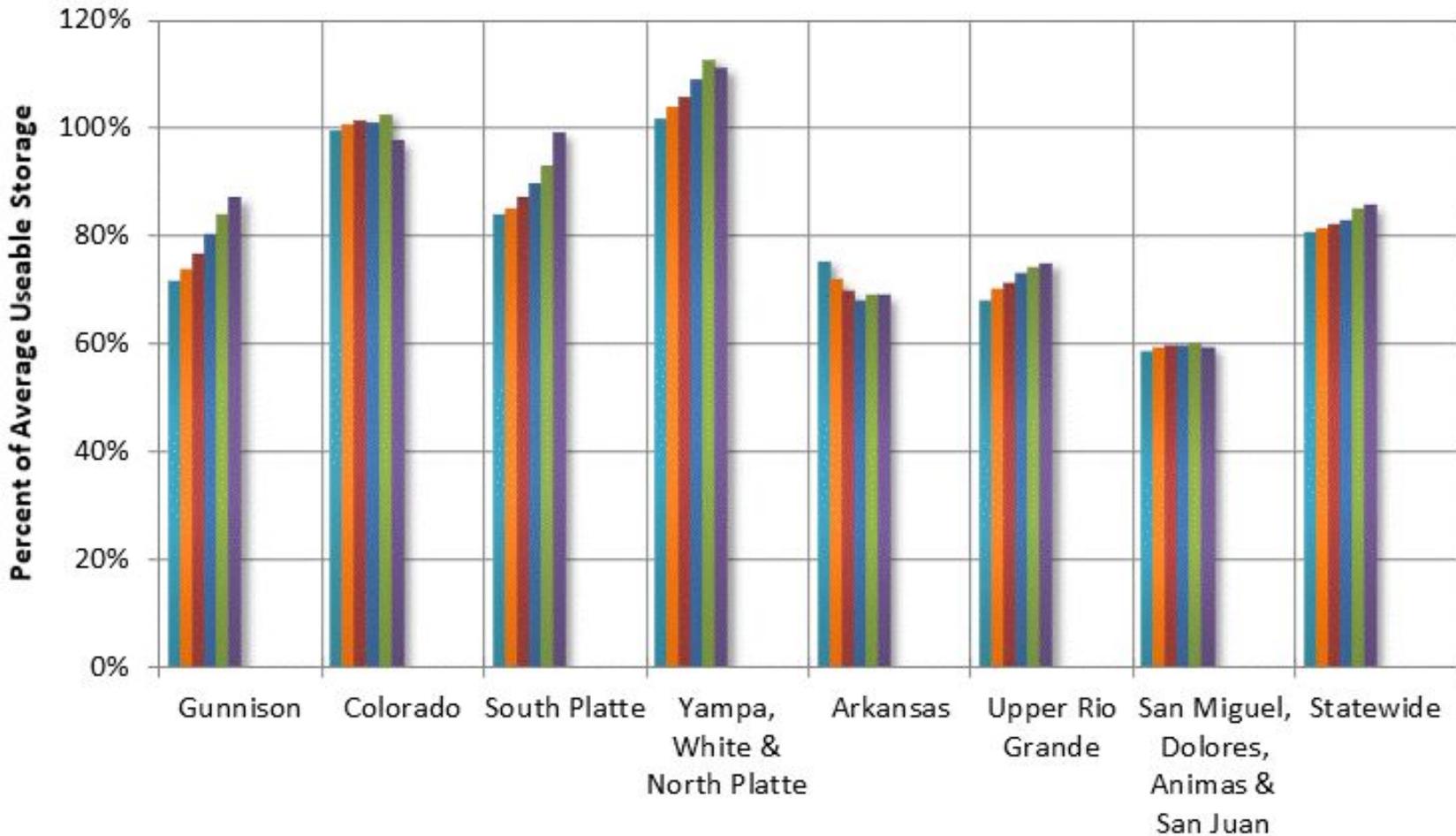
Colorado Monthly Reservoir Storage Summary

End of March 2021

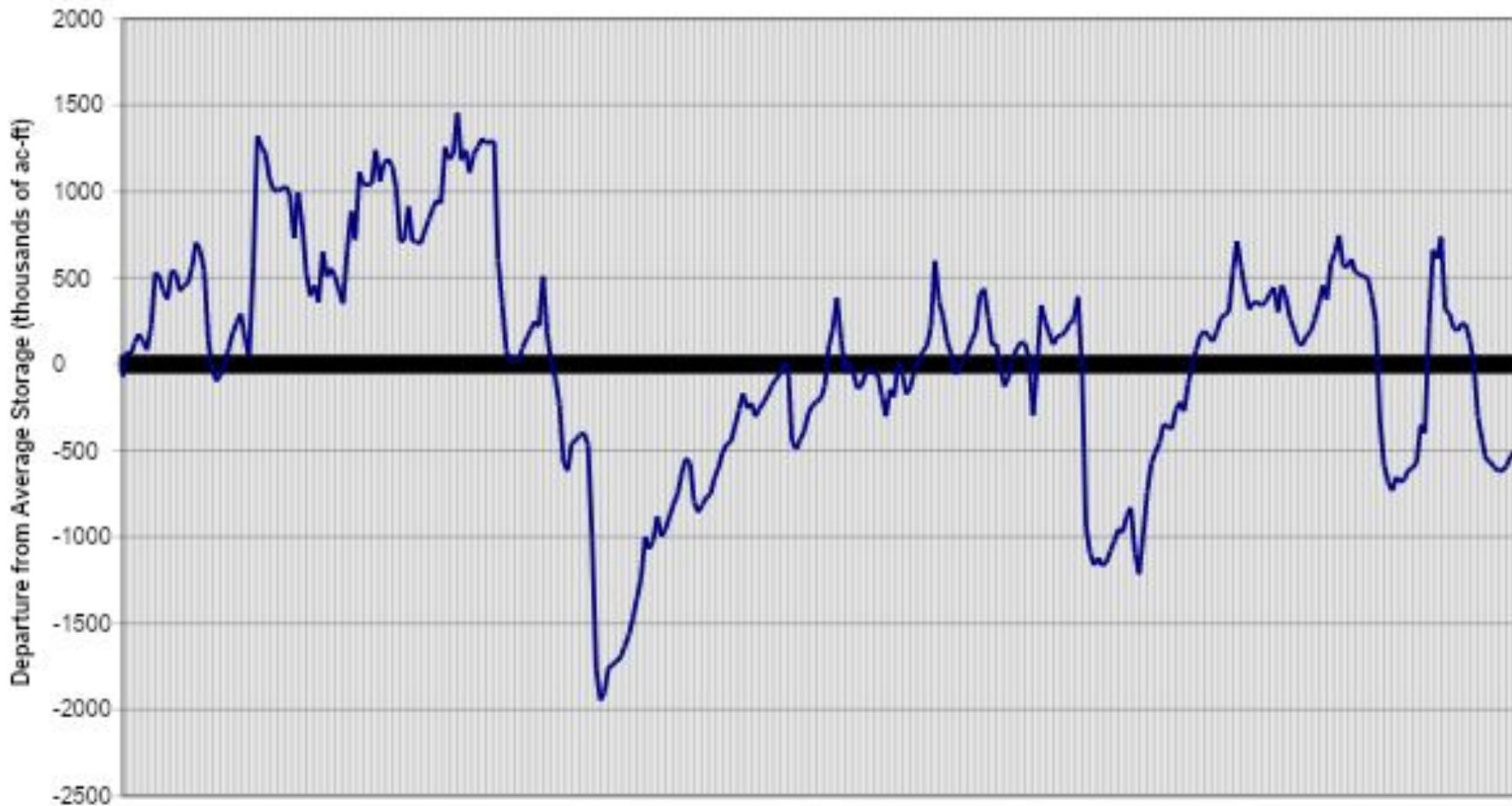


Colorado Reservoir Storage

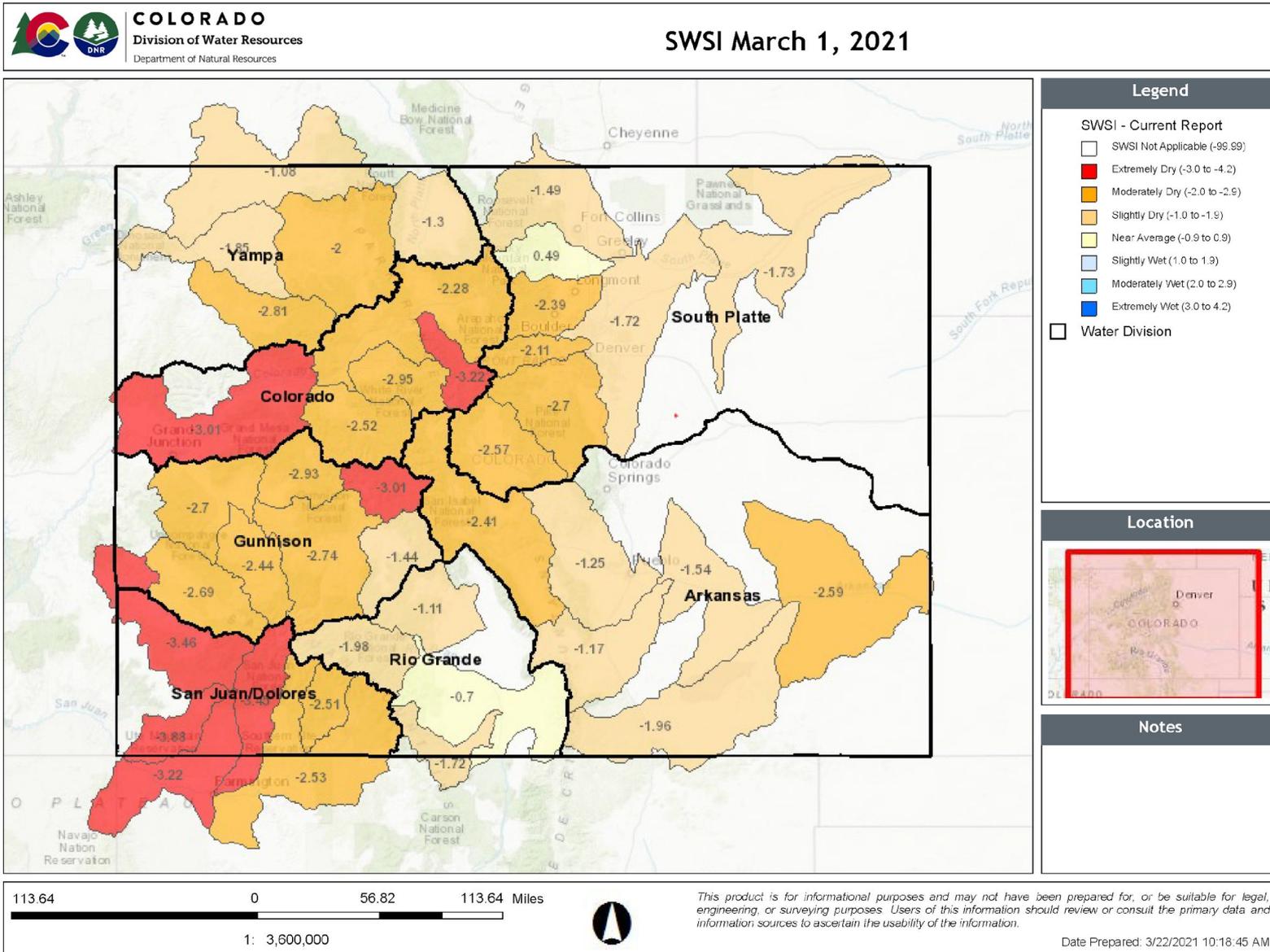
■ Oct-20 ■ Nov-20 ■ Dec-20 ■ Jan-21 ■ Feb-21 ■ Mar-21
■ Apr-21 ■ May-21 ■ Jun-21 ■ Jul-21 ■ Aug-21 ■ Sep-21



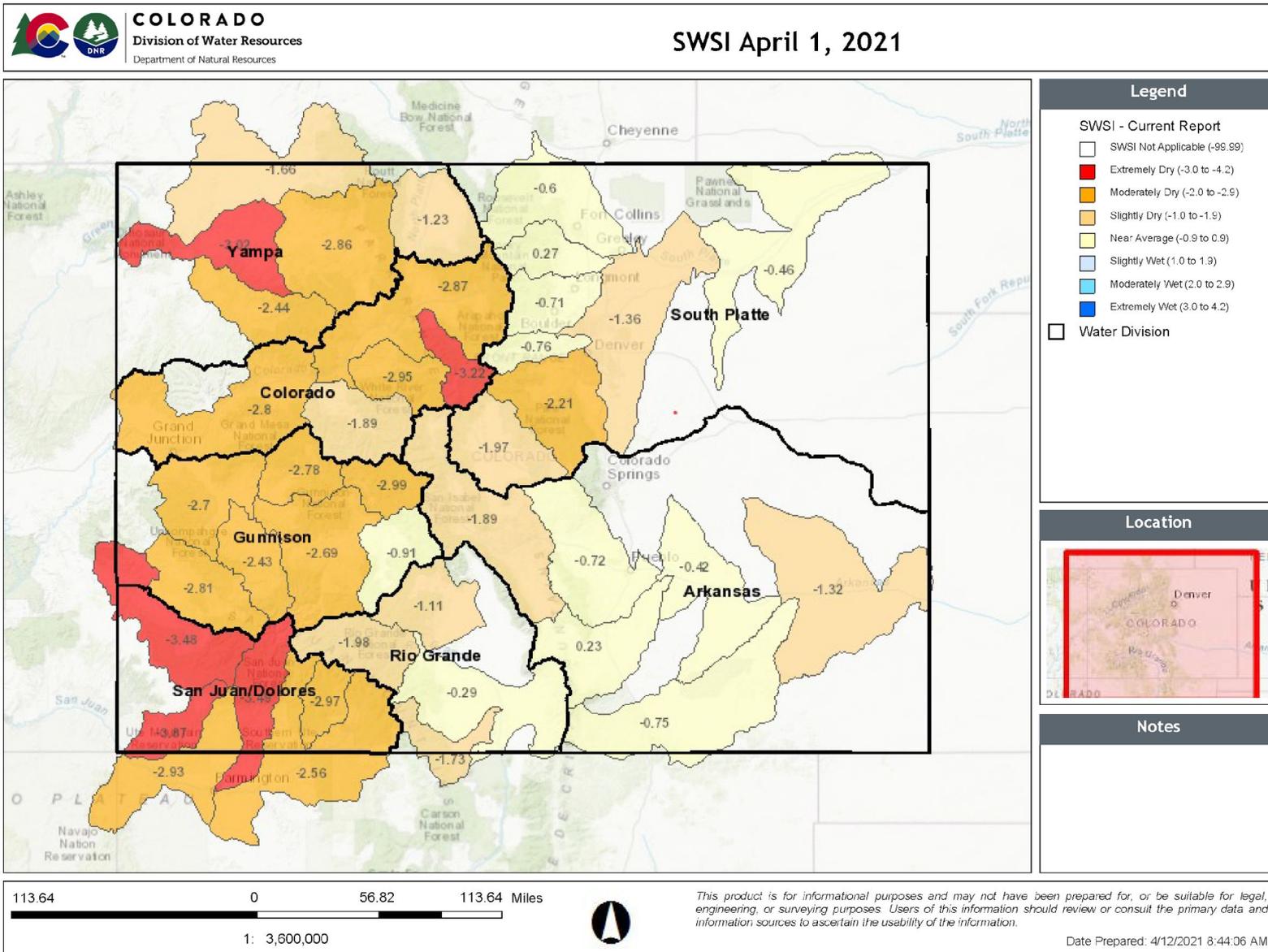
COLORADO STATEWIDE
Reservoir Storage
Departure from Average



March 1, 2020 SWSI



April 1, 2020 SWSI



Summary

- **Colorado Statewide snowpack at 77% of median**
 - April snow accumulation has been below normal and seen considerable snow melt
 - Have already likely seen the statewide snowpack peak at 91 percent of normal
- **Colorado year-to-date precipitation is 78% of average**
 - Month to date precipitation statewide for April so far has been 38% of average
- **Reservoir Storage is 86% of average, up 1% from last month with basin-wide storage values remaining better in the northern half of the state nearer normal below normal in the southern half of the state.**
- **Streamflow forecasts indicate below normal runoff this spring and summer.**
 - March snowstorm did little to improve runoff prospects.
 - Current April conditions will likely further decrease streamflow prospects.
 - Dry soils and low baseflows in rivers across the state are a significant factor in addition to the below normal precipitation in the predicted low streamflows.



Water Availability Task Force Meeting

April 20th, 2021

NRCS Snow Survey and Water Supply Forecasting Program

Brian Domonkos

Hydrologist

Asst. Snow Survey Supervisor

720-544-2852

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



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