



United States Department of Agriculture

Colorado Snow Surveys

Water Availability Task Force Meeting

May 25th, 2021

NRCS Snow Survey and Water Supply Forecasting Program

Karl Wetlaufer

Hydrologist

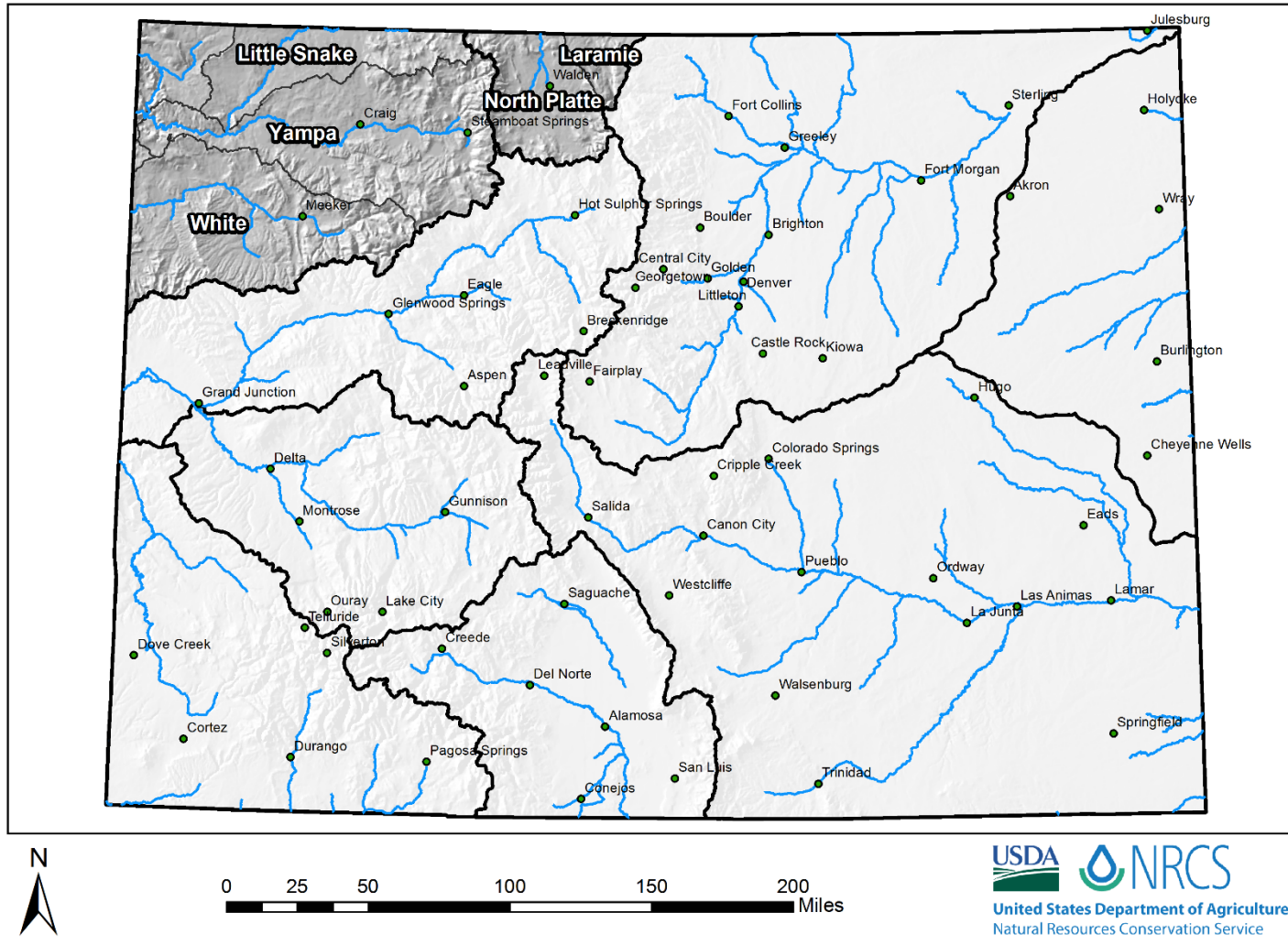
Asst. Snow Survey Supervisor

720-544-2852

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

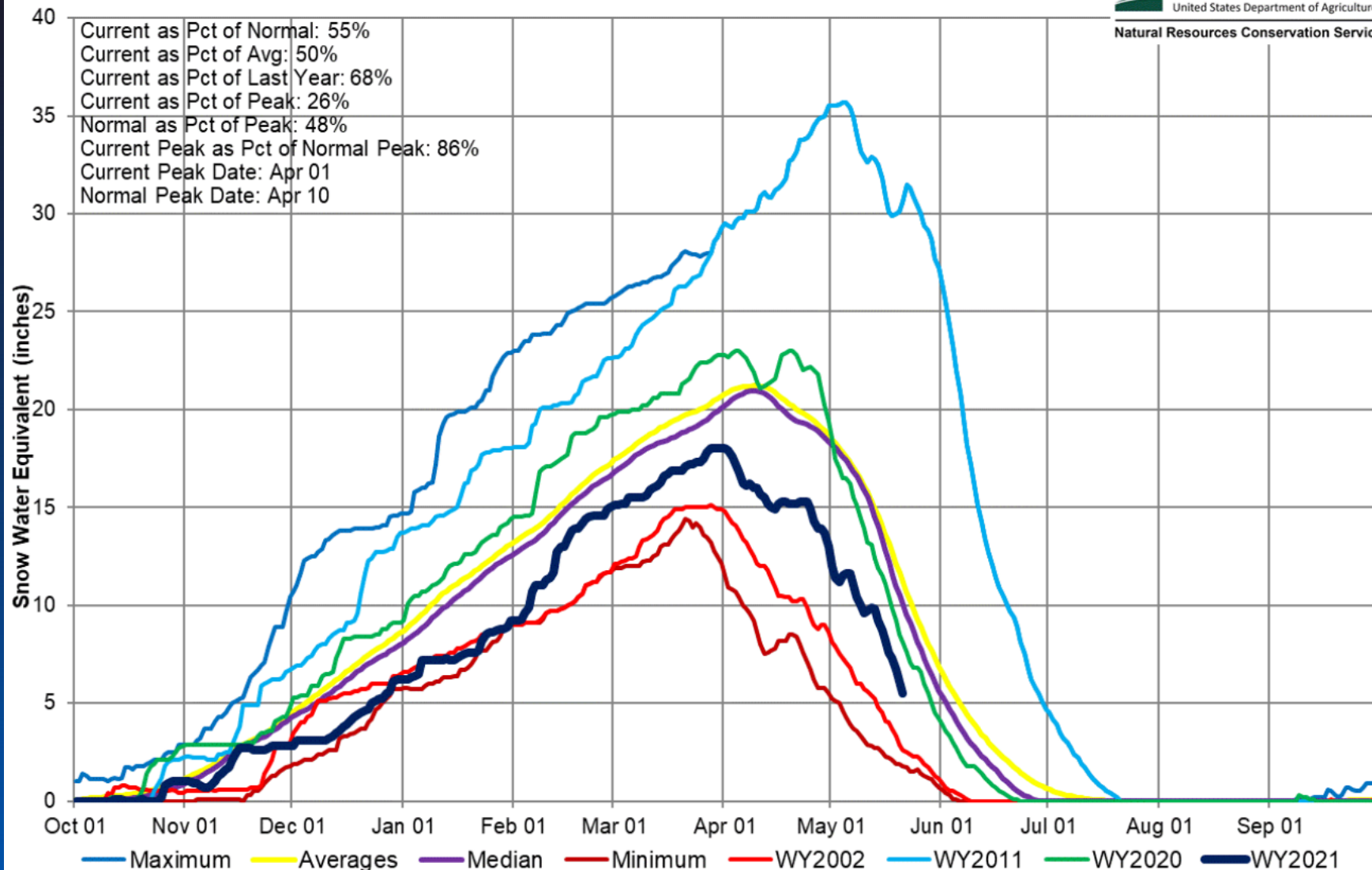
Major Basin Summary

Yampa, White, and North Platte River Basins

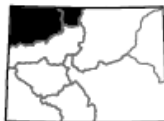
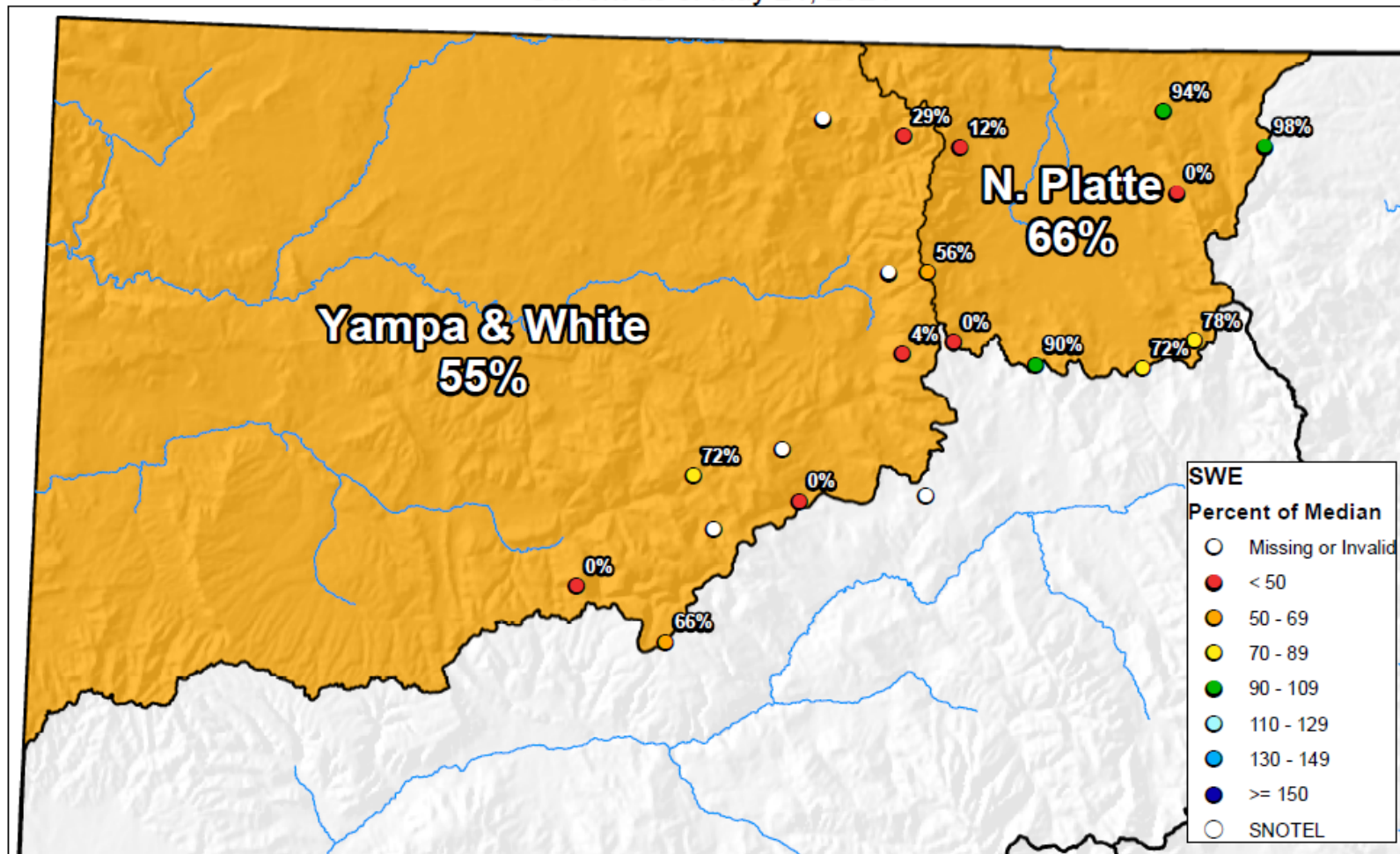


Yampa and White River Basins High/Low Snowpack Summary

Based on Provisional SNOTEL data as of May 21, 2021



Yampa, White, and North Platte River Basins Snow Water Equivalent (SWE) Summary Current as of May 21, 2021



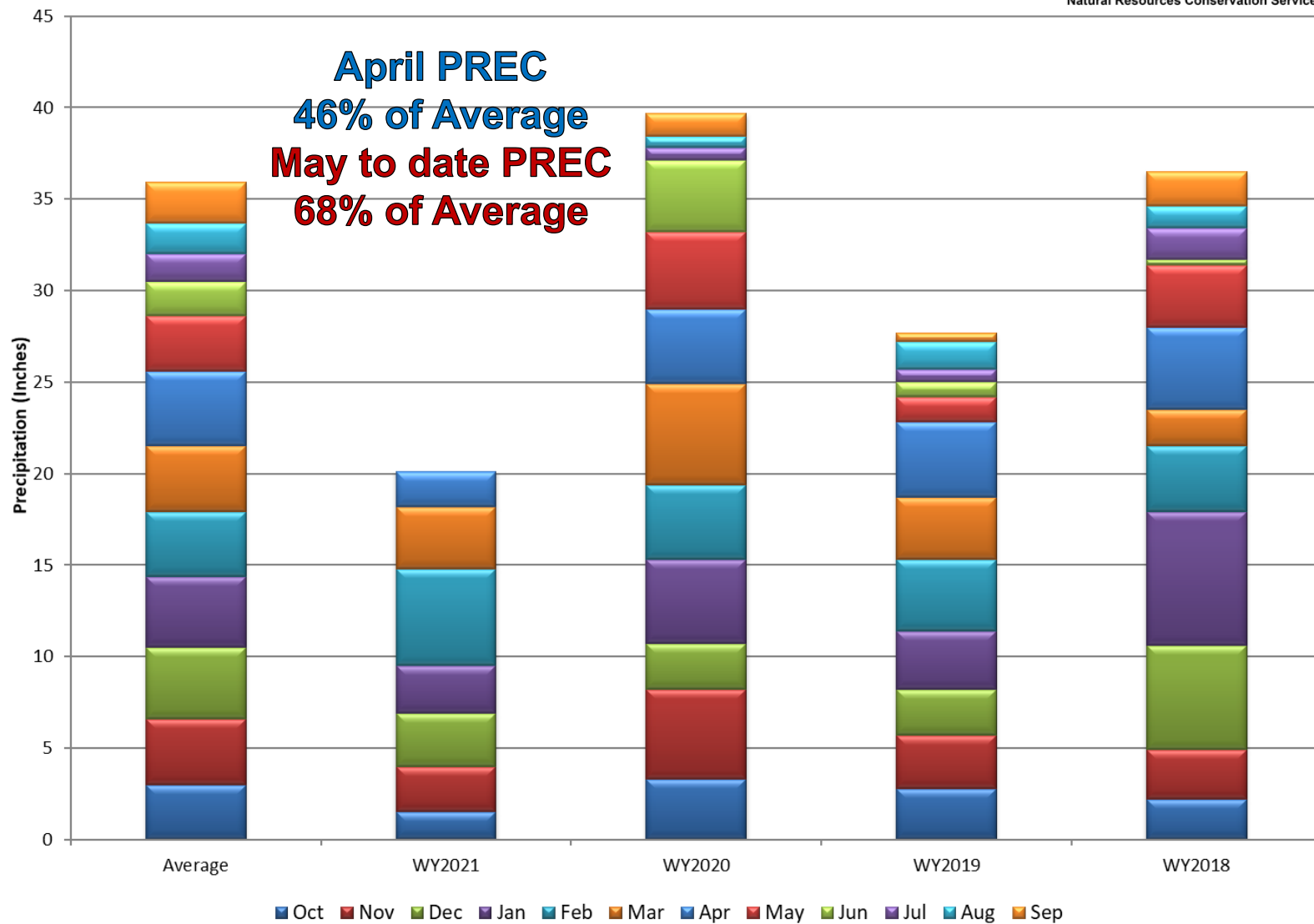
Yampa, White & North Platte River Basins Monthly Precipitation Summary

Based on Provisional SNOTEL data as of May 21, 2021



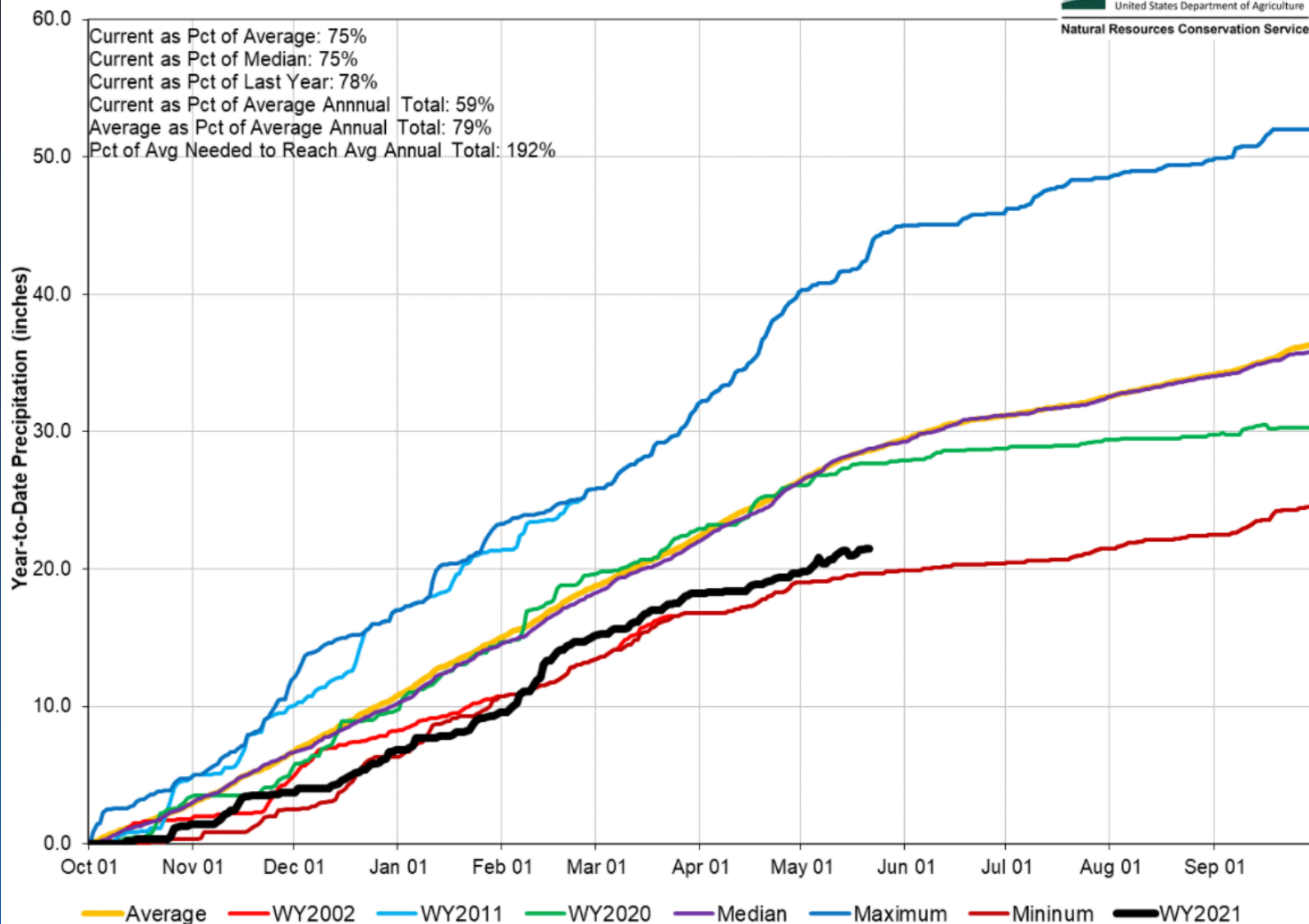
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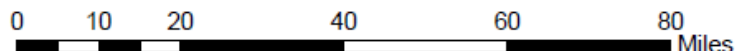
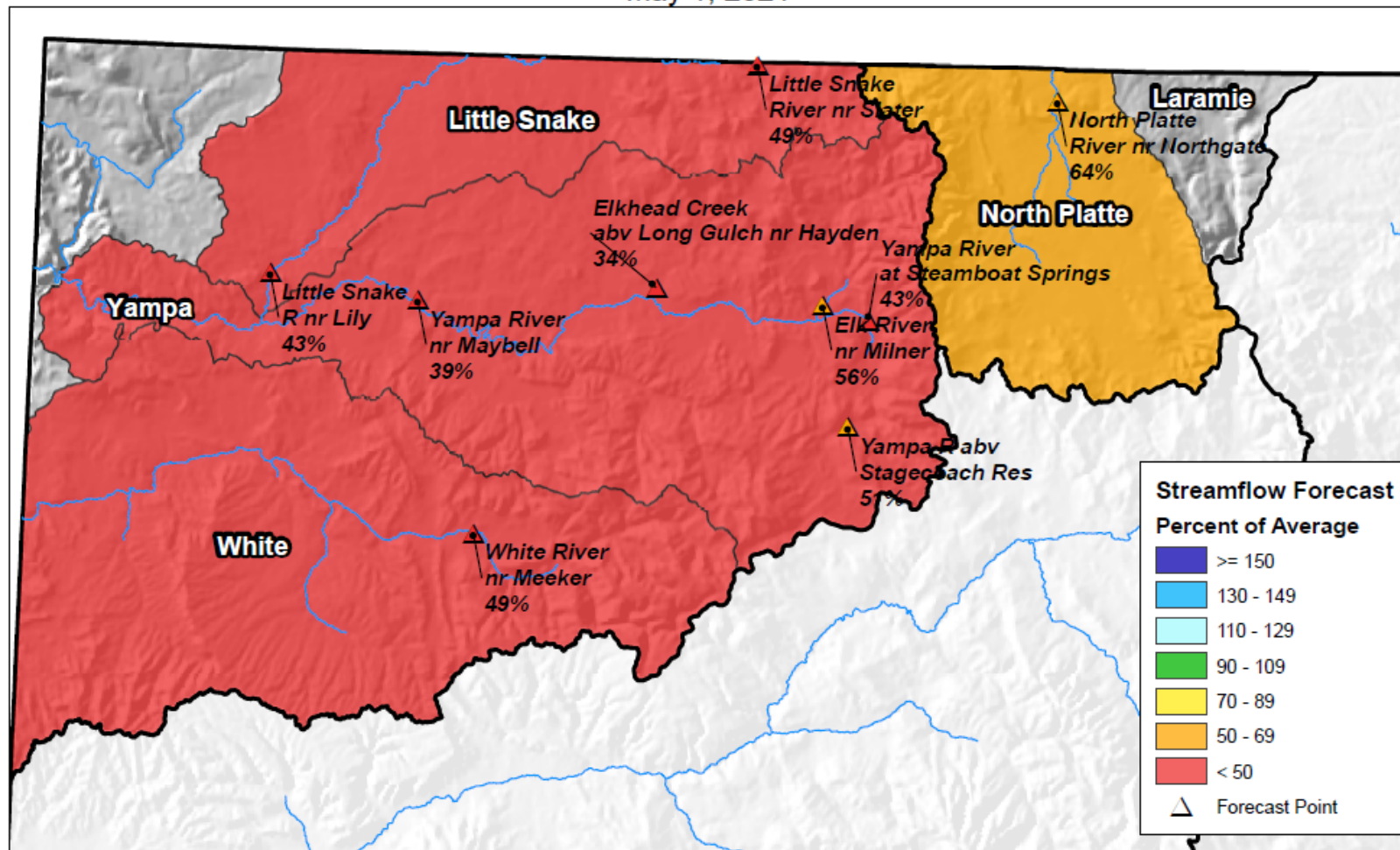


Yampa and White River Basins High/Low Year-to-Date Precipitation Summary

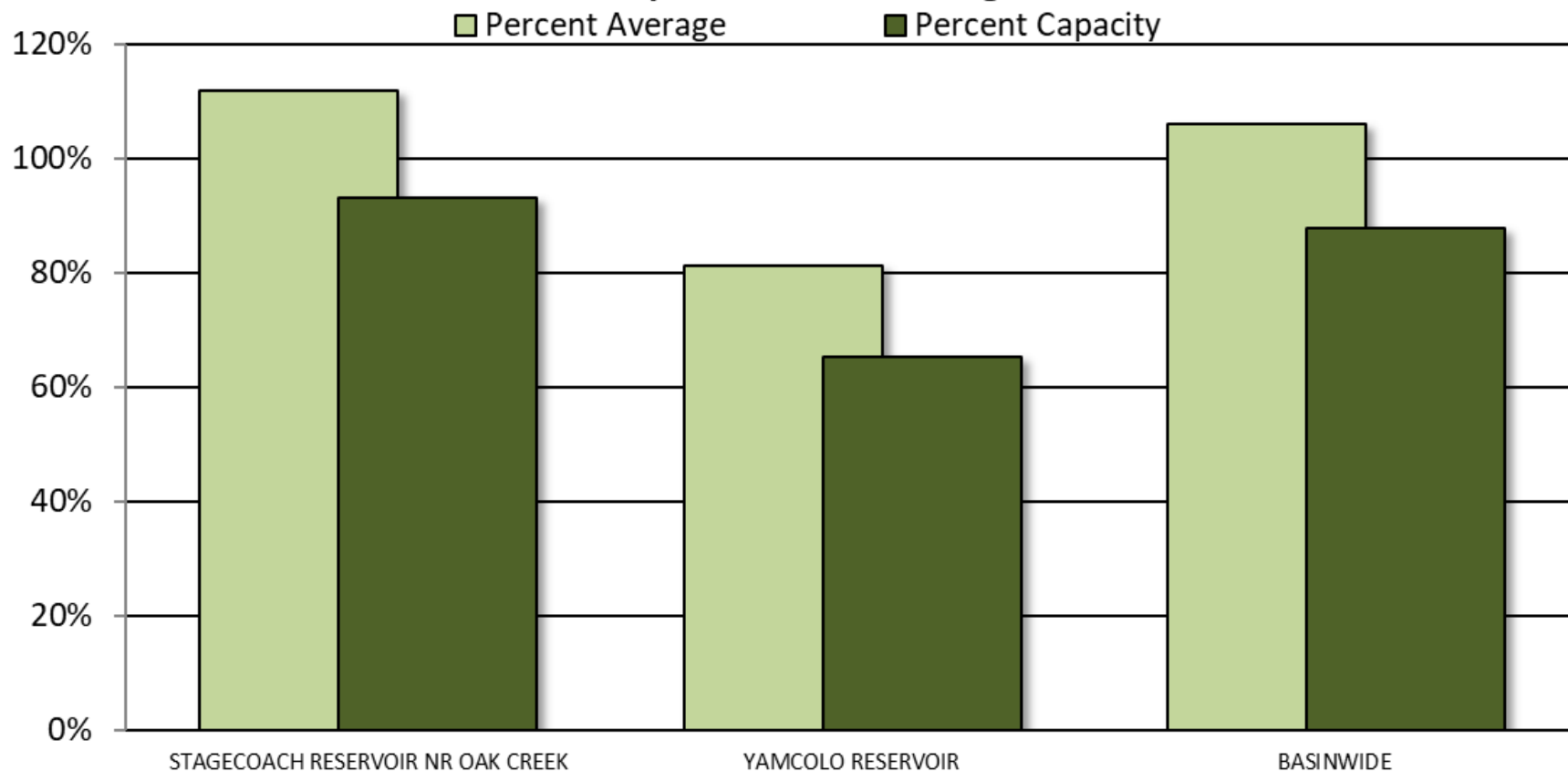
Based on Provisional SNOTEL data as of May 21, 2021



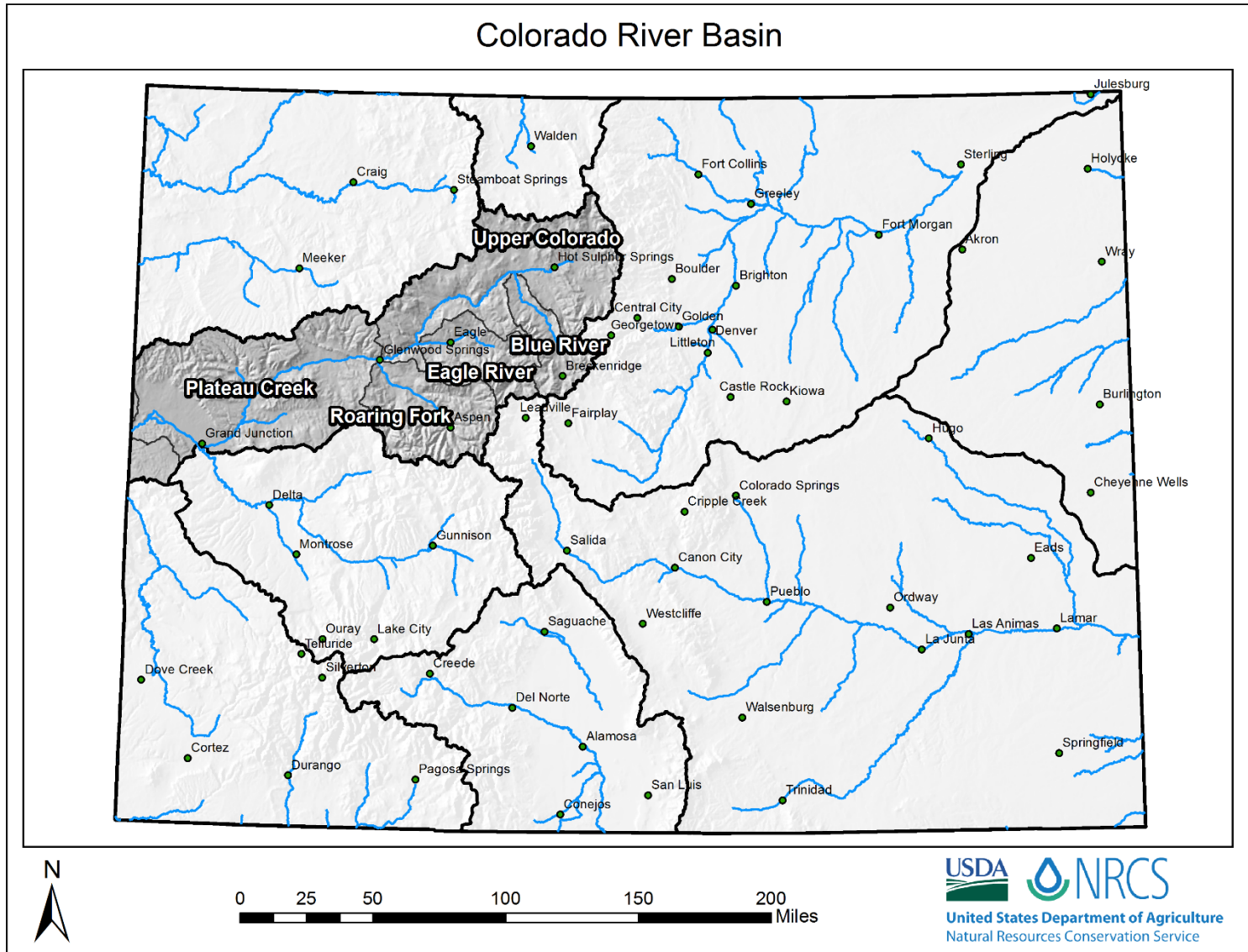
Yampa, White, and North Platte River Basins Streamflow Forecast Summary May 1, 2021



End of April Reservoir Storage



Major Basin Summary



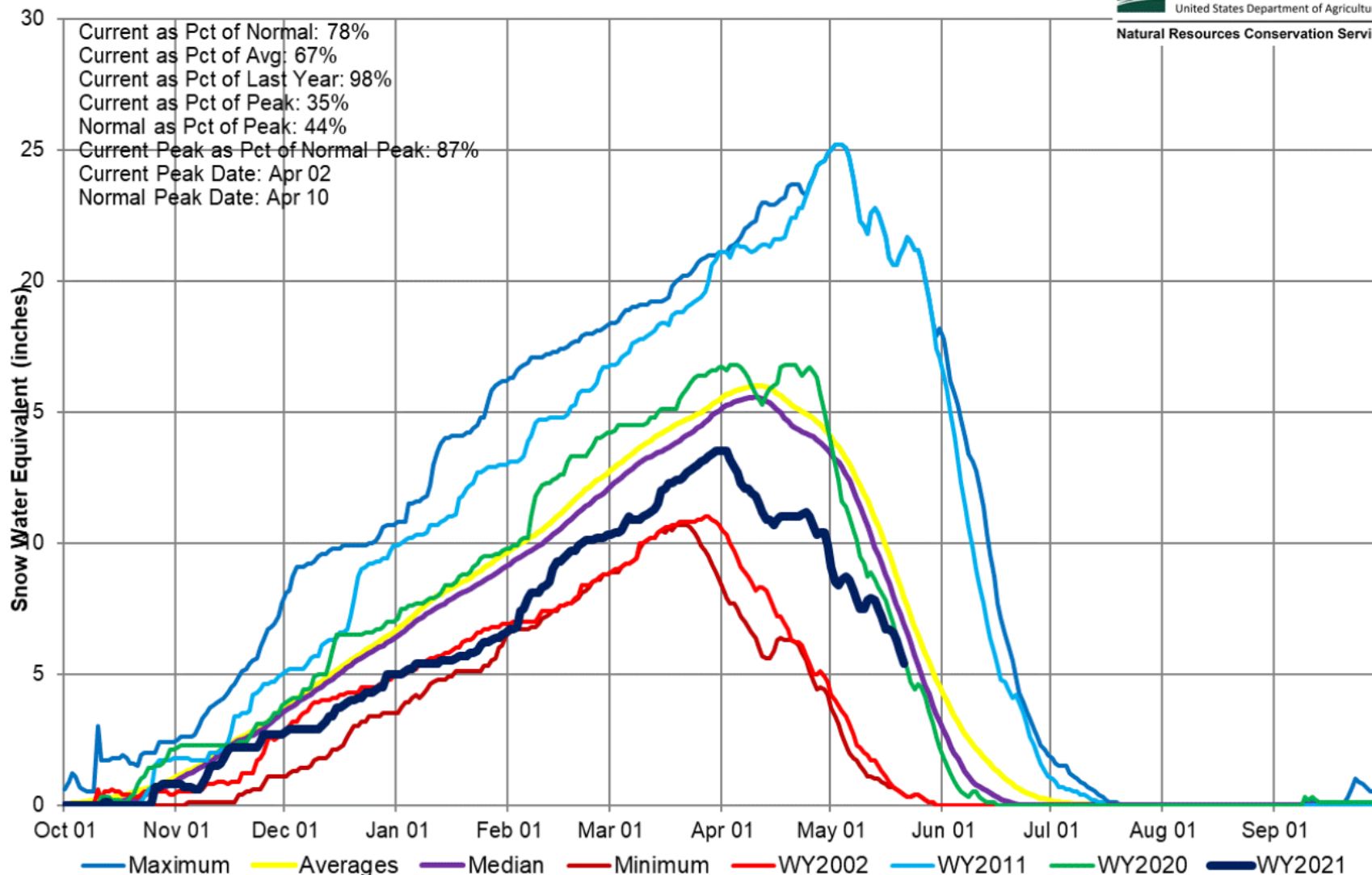
Upper Colorado River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of May 21, 2021

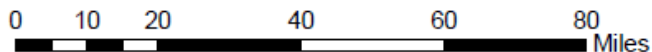
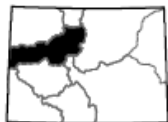
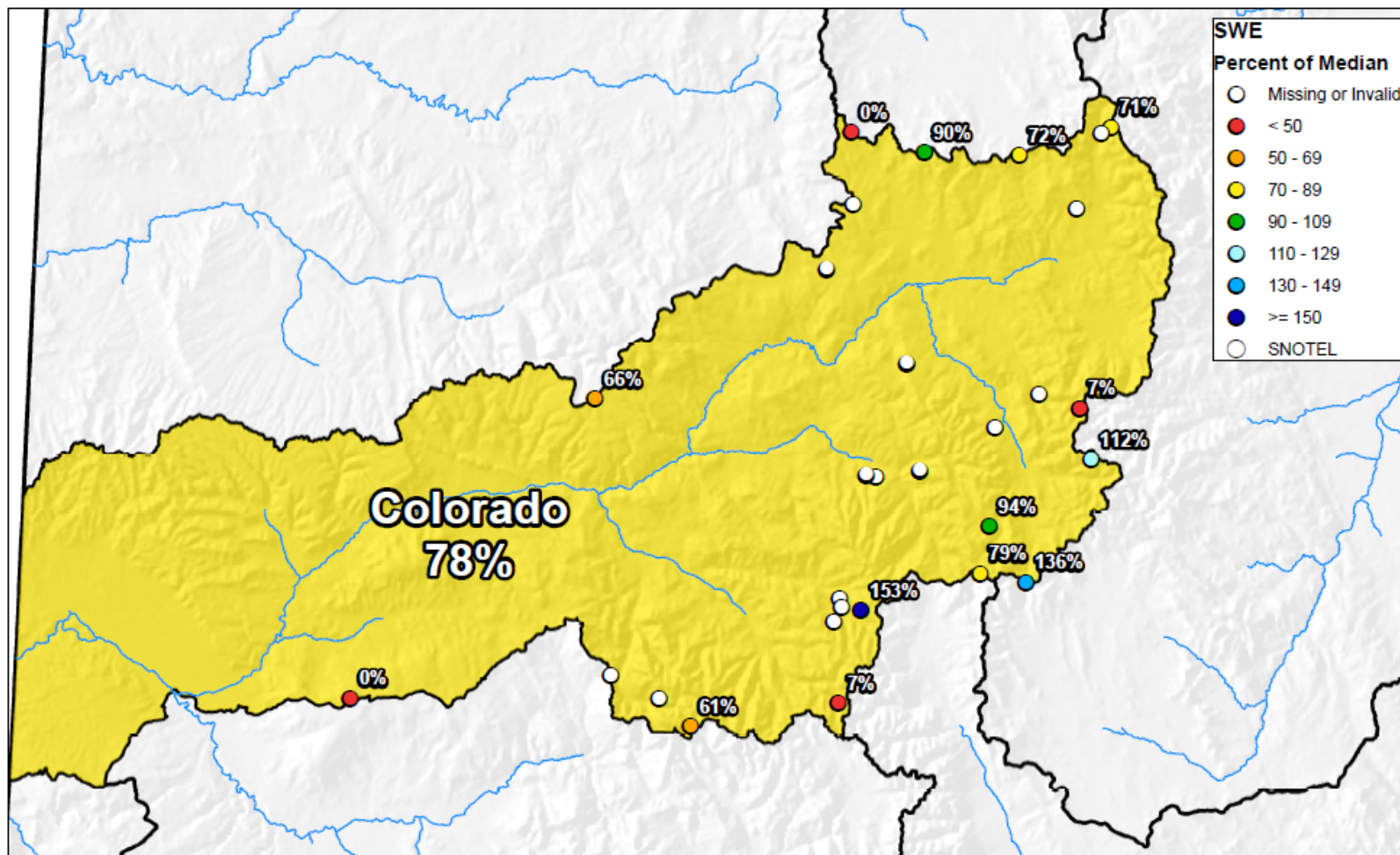


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Upper Colorado River Basin Snow Water Equivalent (SWE) Summary Current as of May 21, 2021



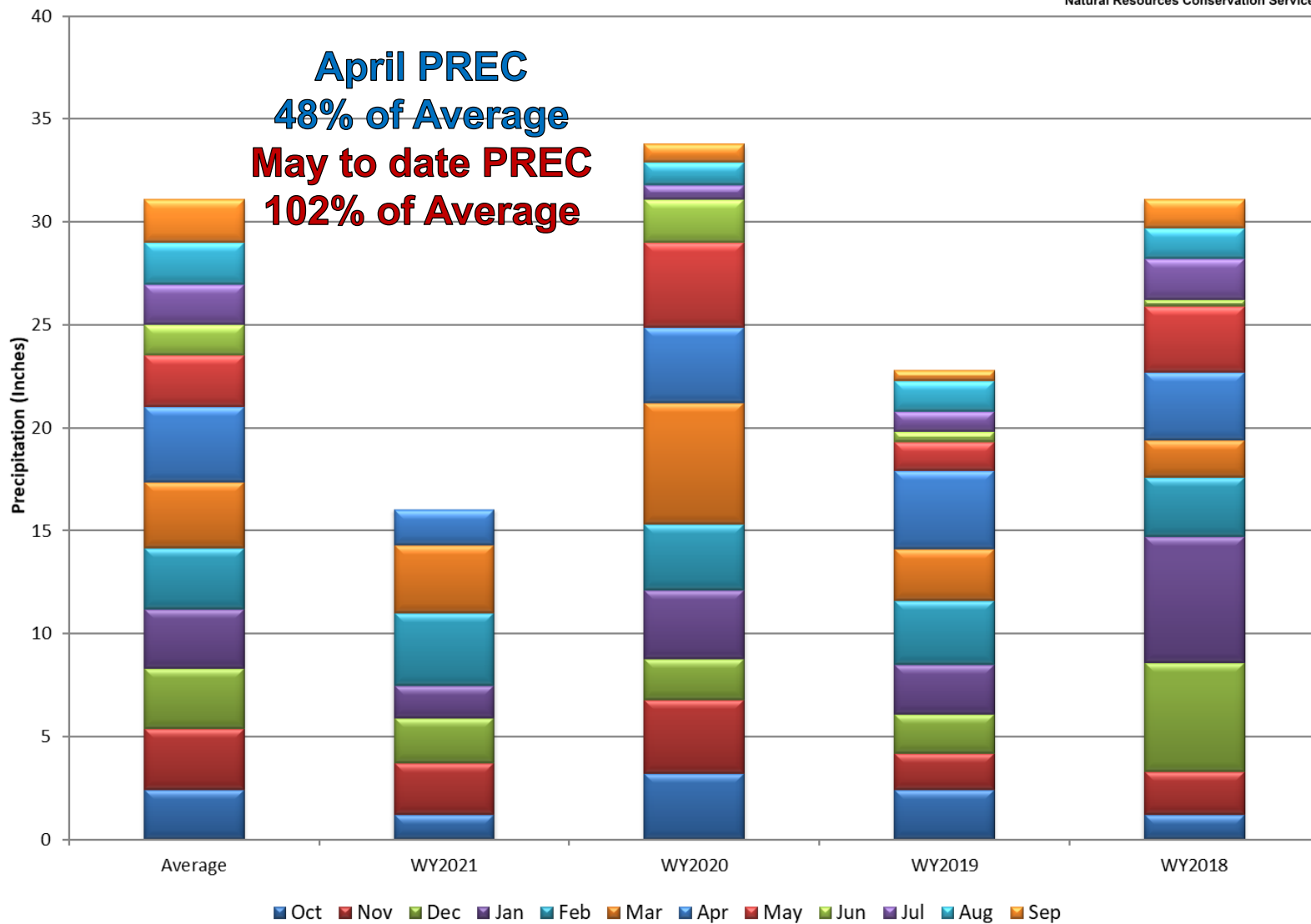
Colorado River Basin Monthly Precipitation Summary

Based on Provisional SNOTEL data as of May 21, 2021



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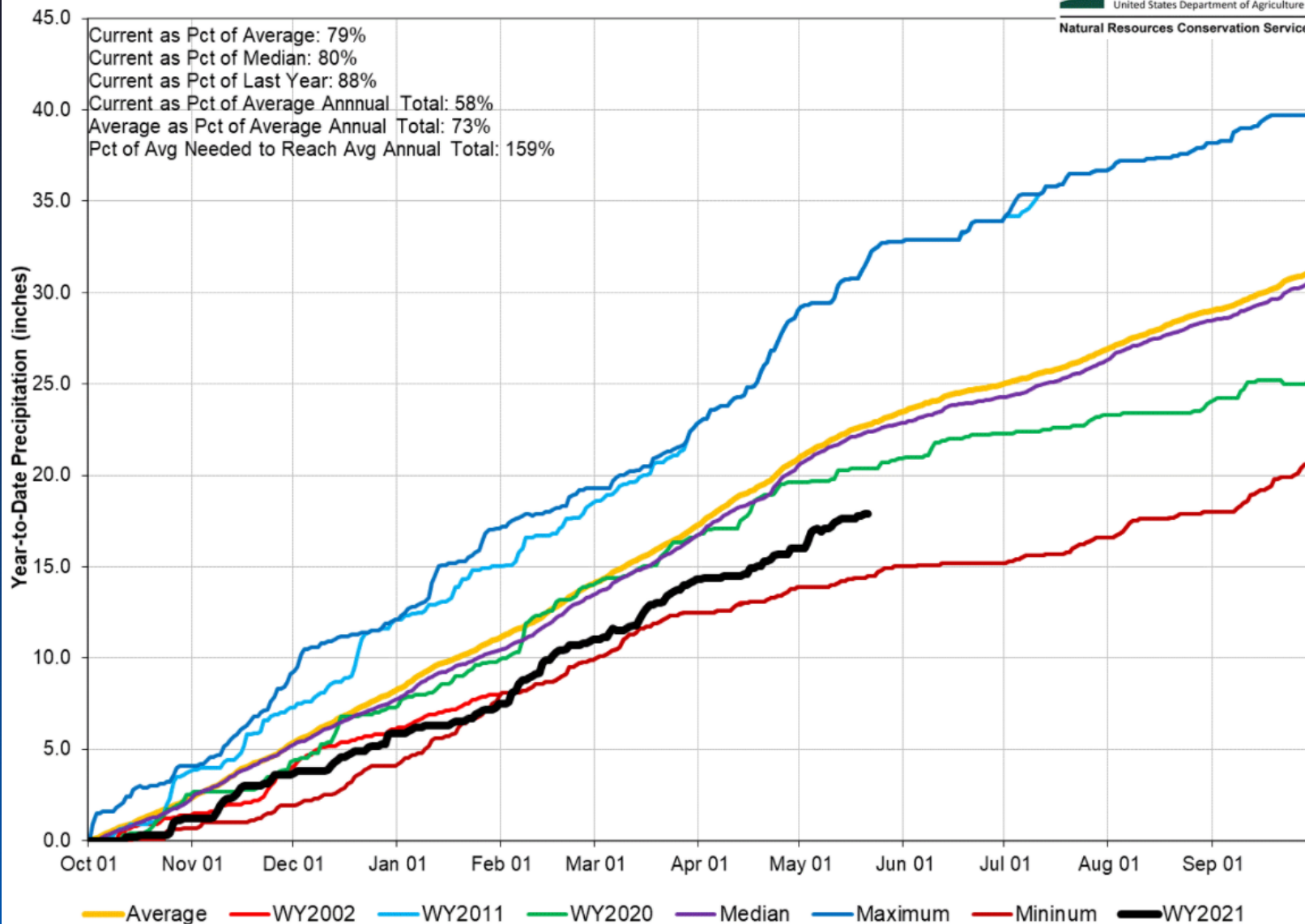
Upper Colorado River Basin High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of May 21, 2021



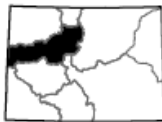
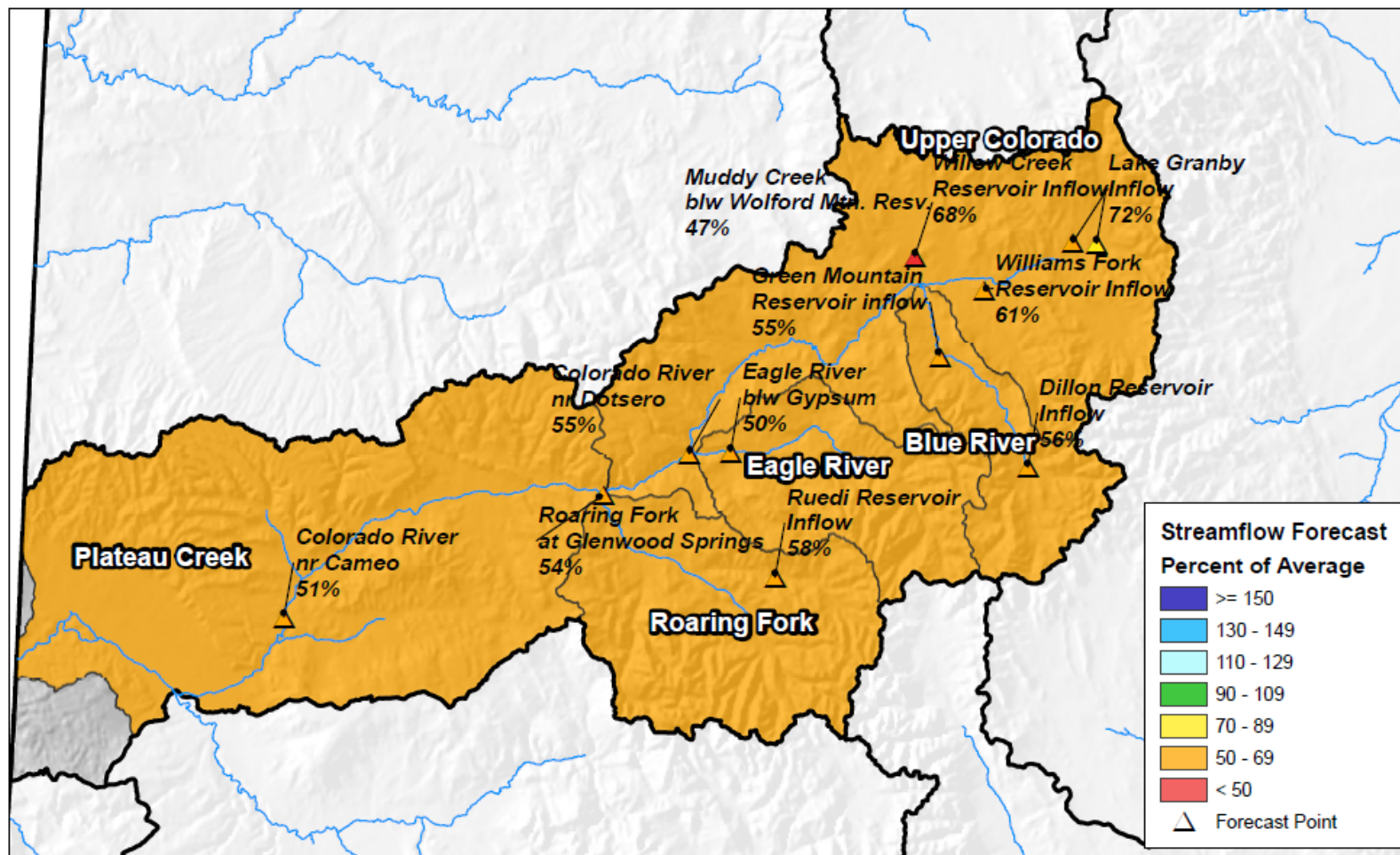
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Upper Colorado River Basin Streamflow Forecast Summary

May 1, 2021



0 10 20 40 60 80 Miles



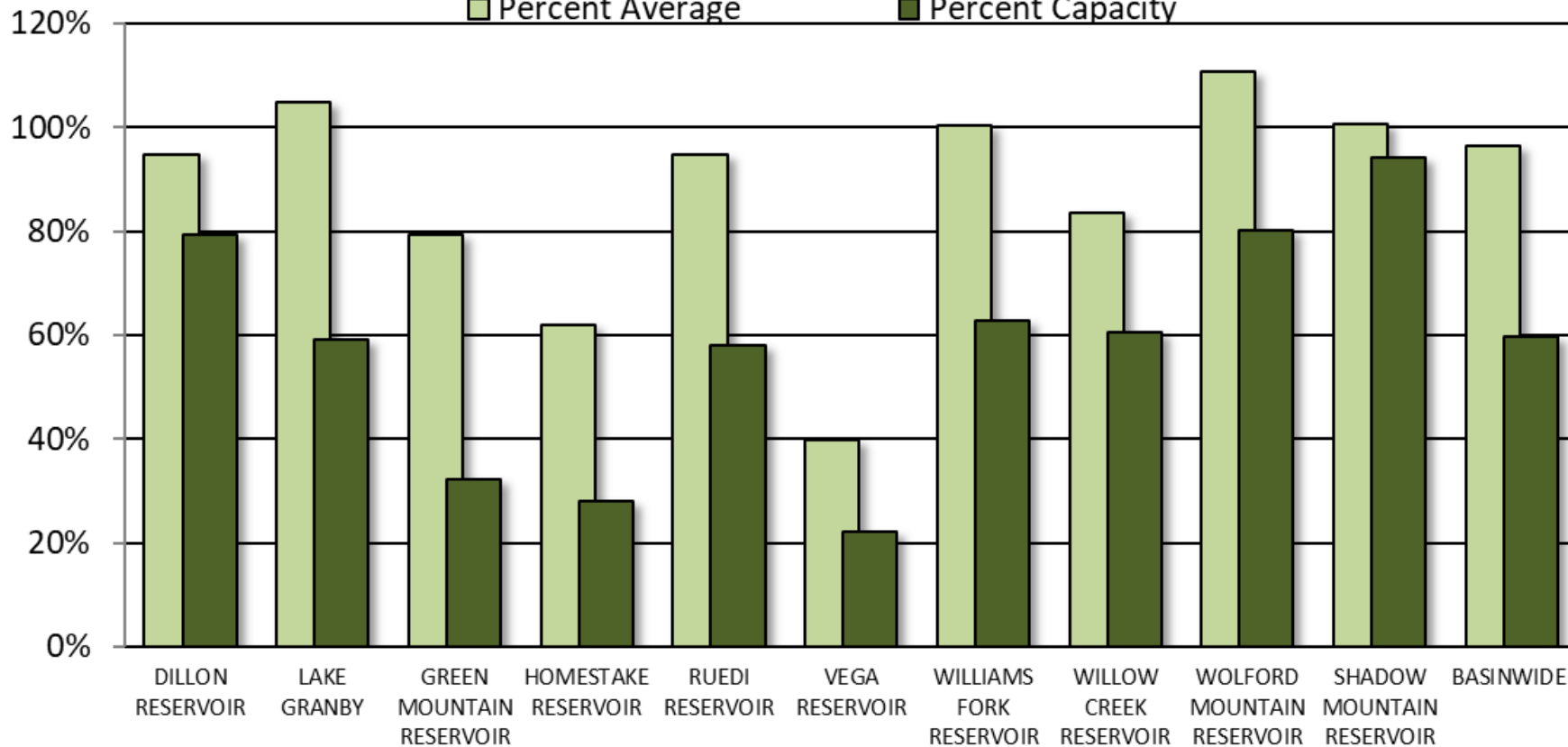
United States Department of Agriculture

Natural Resources Conservation Service

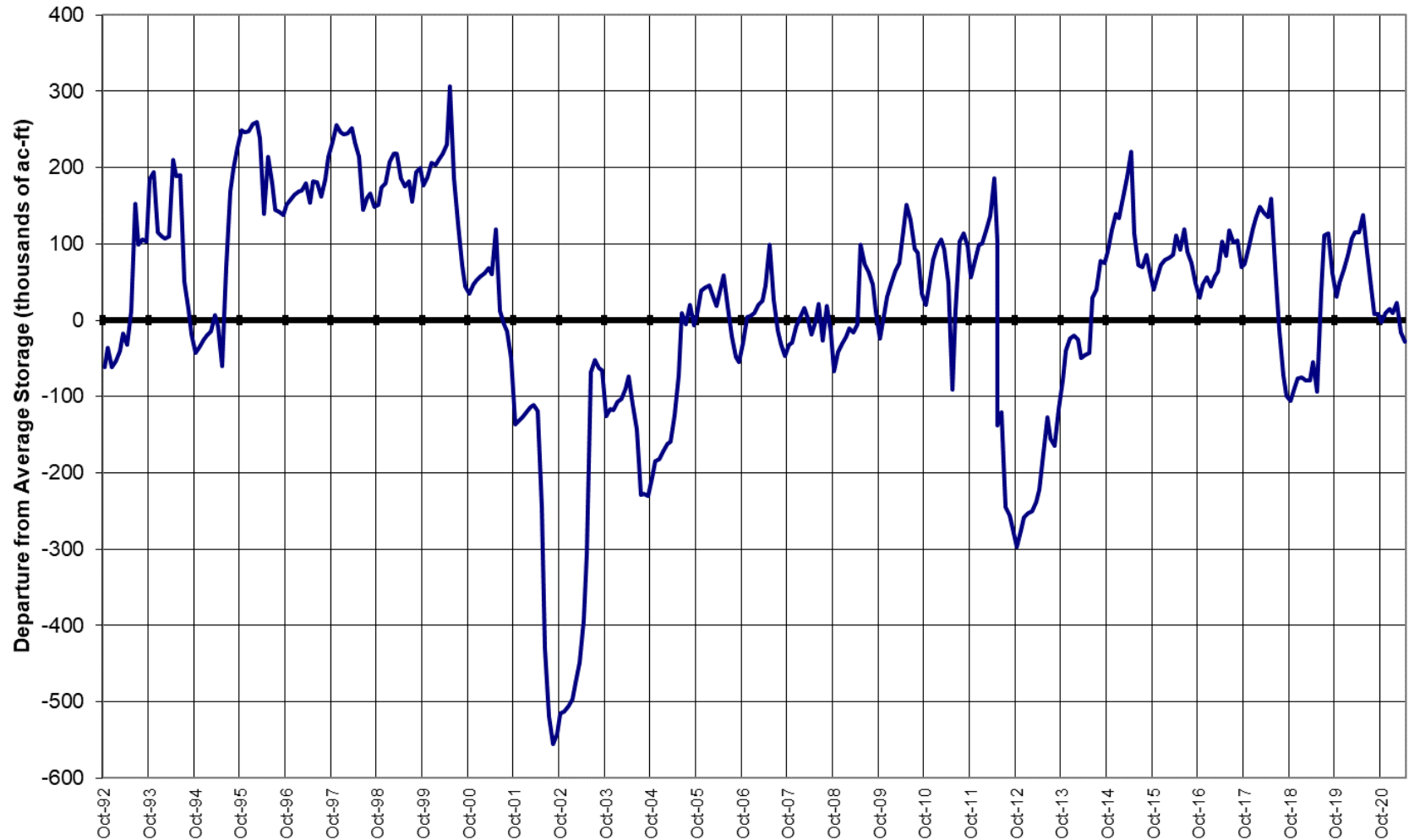
End of April Reservoir Storage

■ Percent Average

■ Percent Capacity

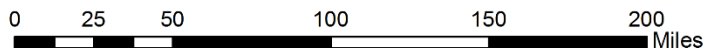
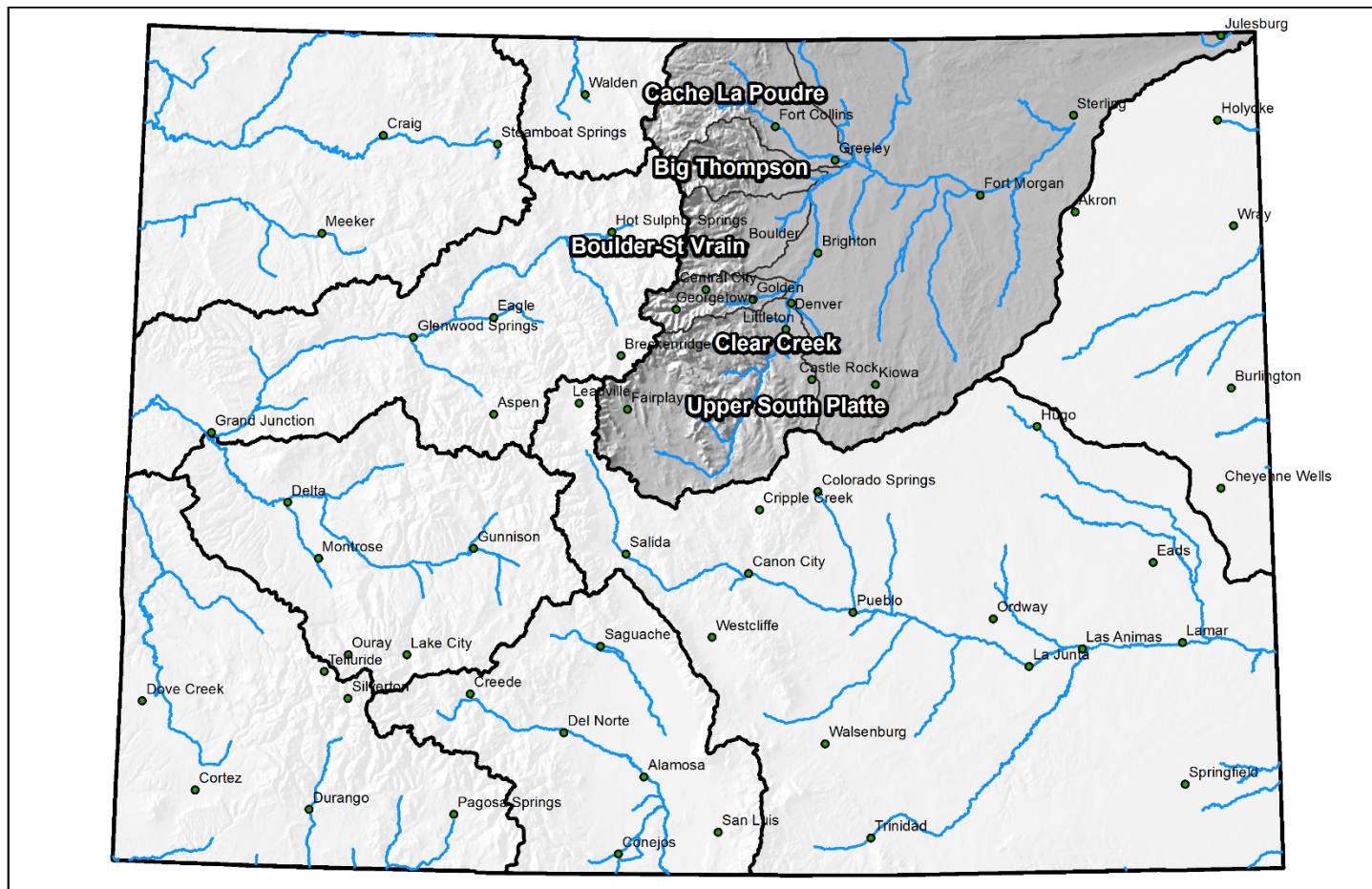


COLORADO RIVER BASIN Reservoir Storage Departure from Average



Major Basin Summary

South Platte River Basin



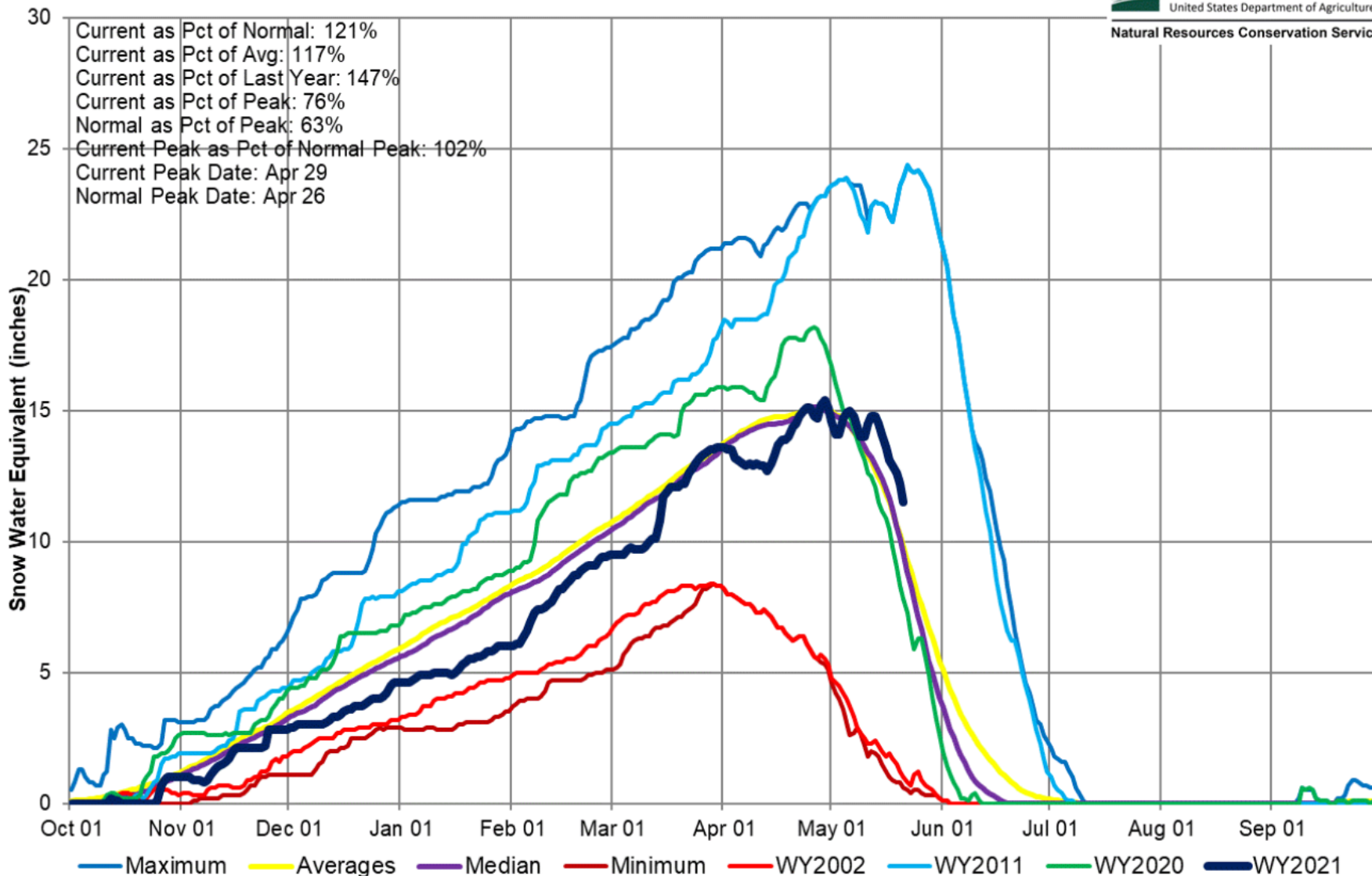
South Platte River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of May 21, 2021



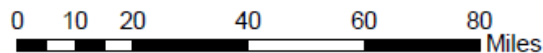
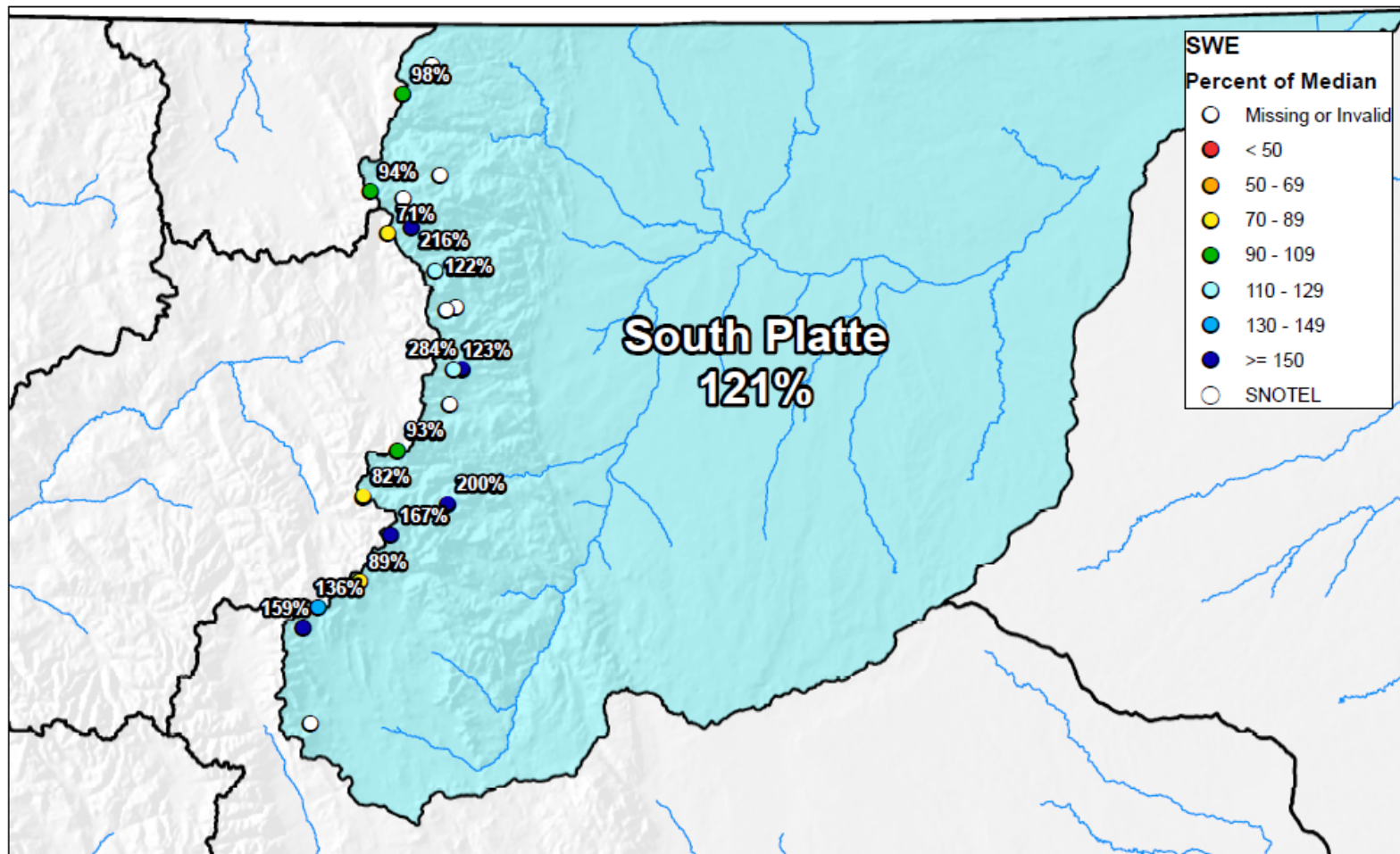
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South Platte River Basin Snow Water Equivalent (SWE) Summary

Current as of May 21, 2021



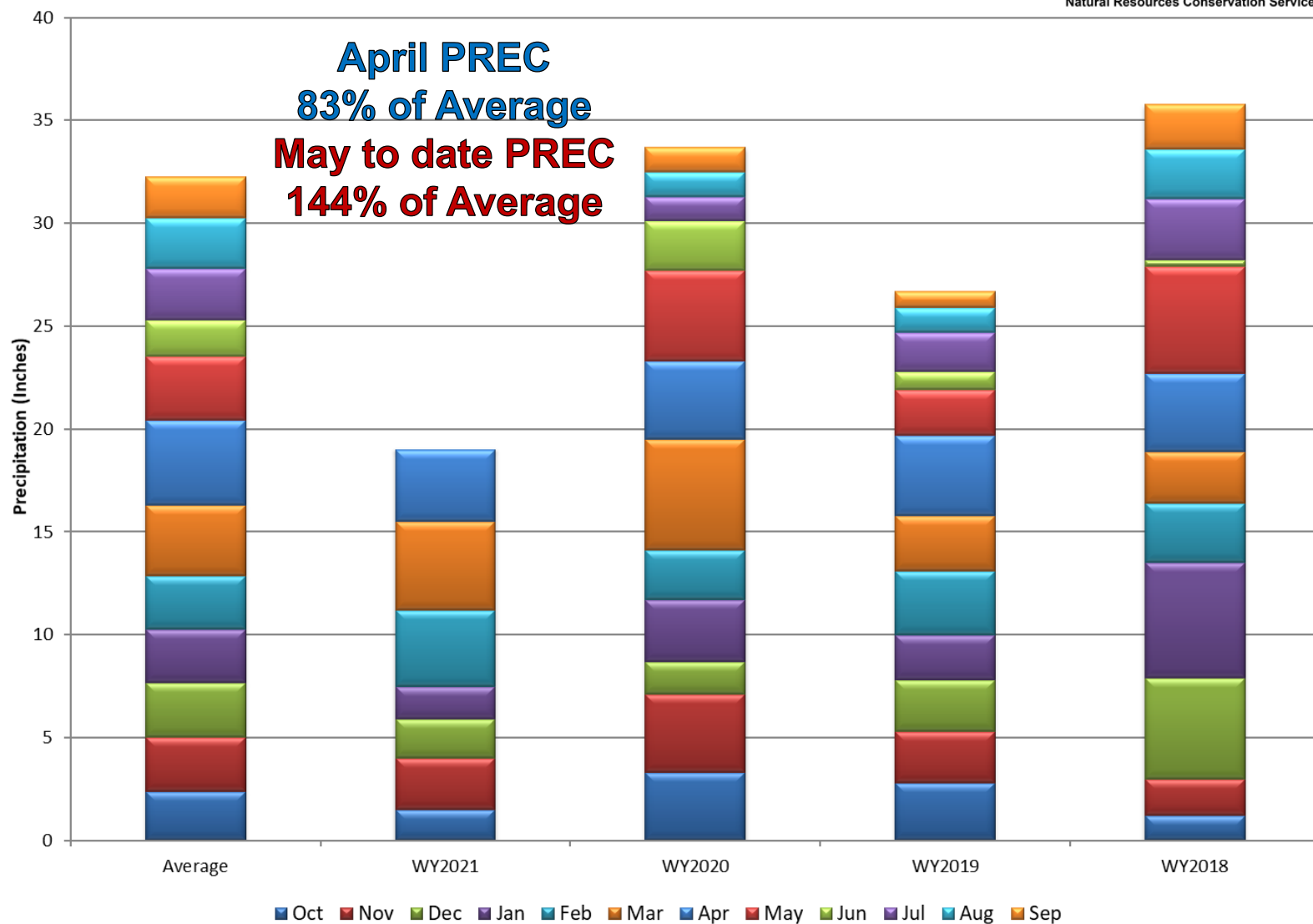
South Platte River Basin Monthly Precipitation Summary

Based on Provisional SNOTEL data as of May 21, 2021



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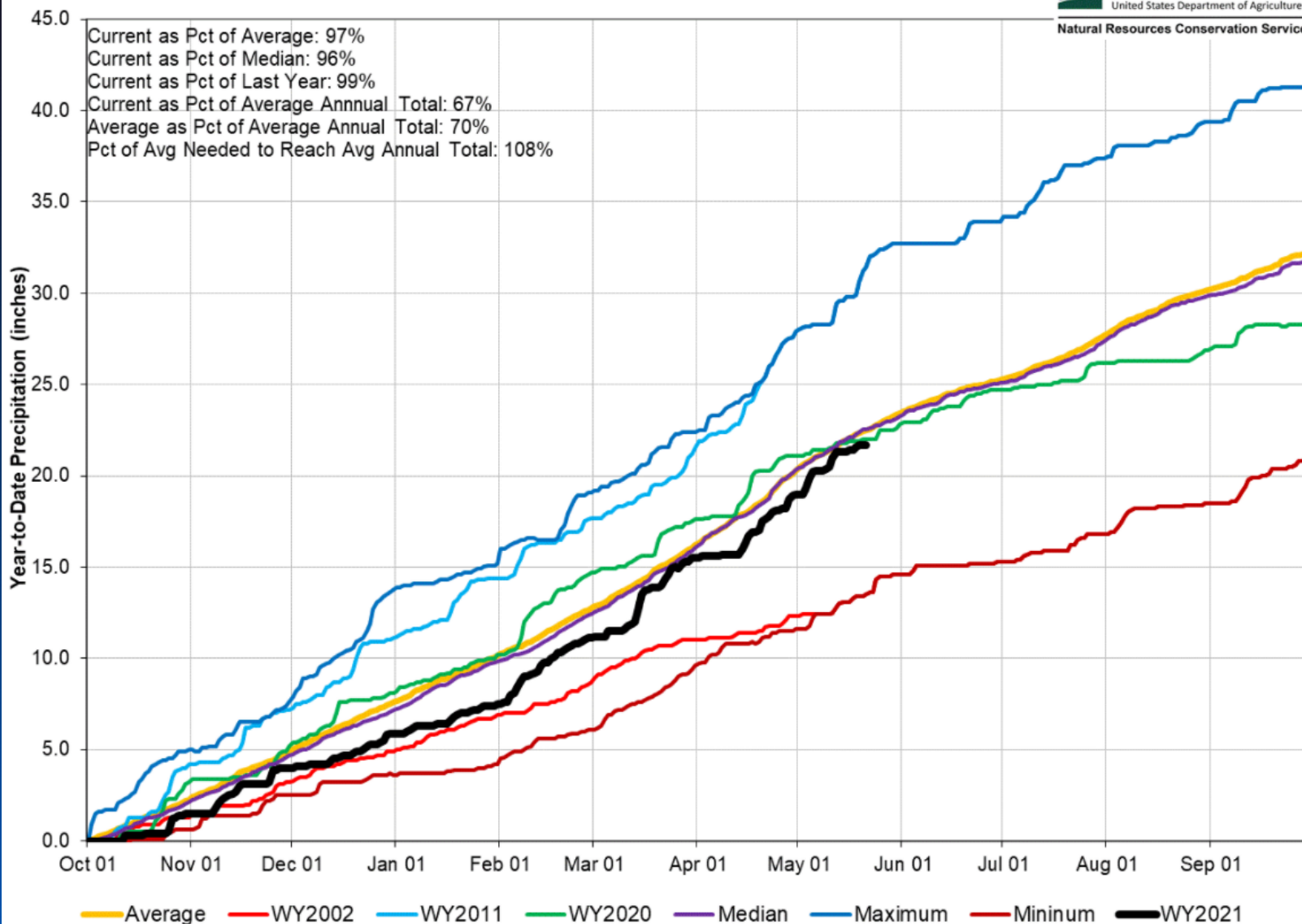
South Platte River Basin High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of May 21, 2021



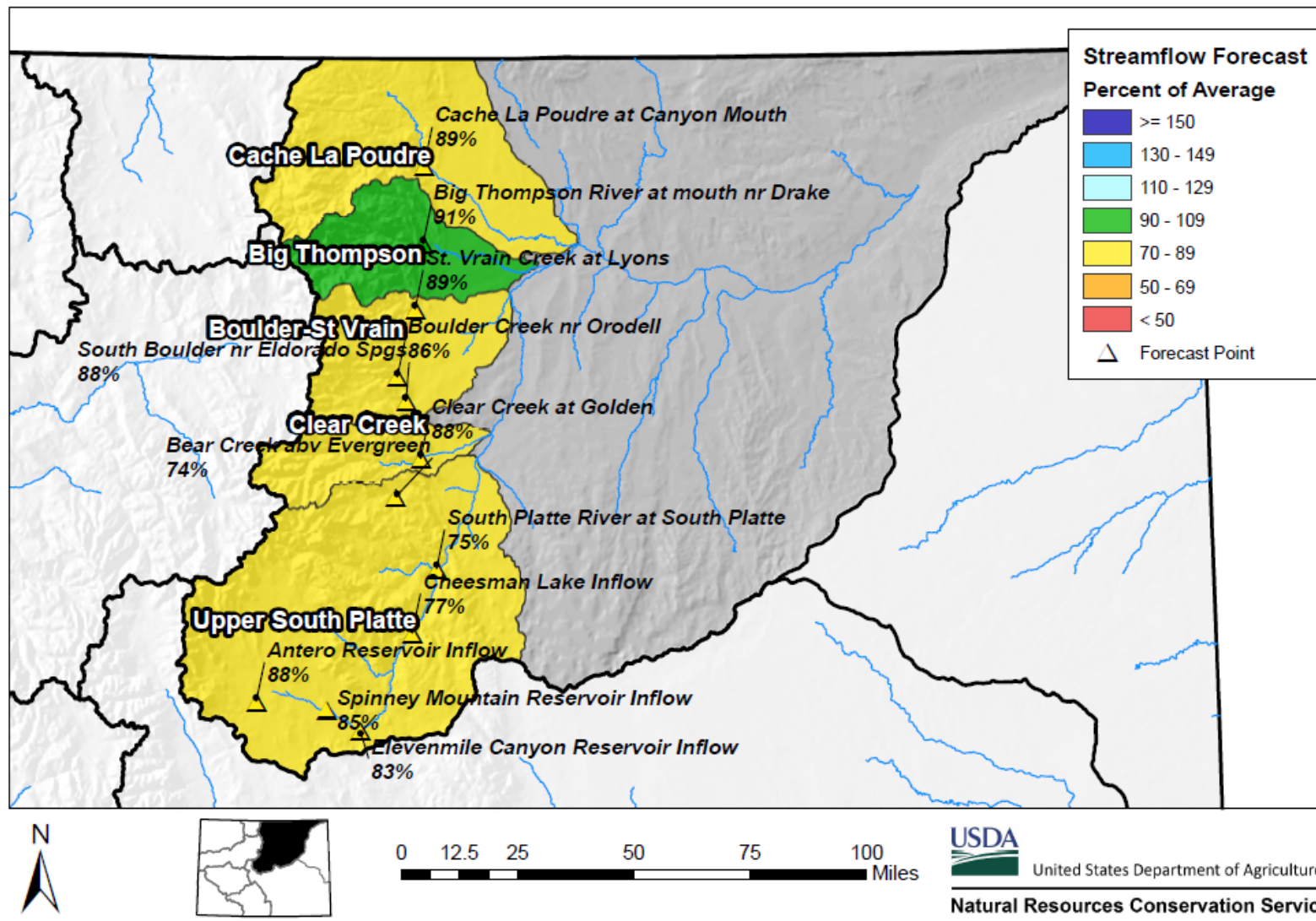
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South Platte River Basin Streamflow Forecast Summary

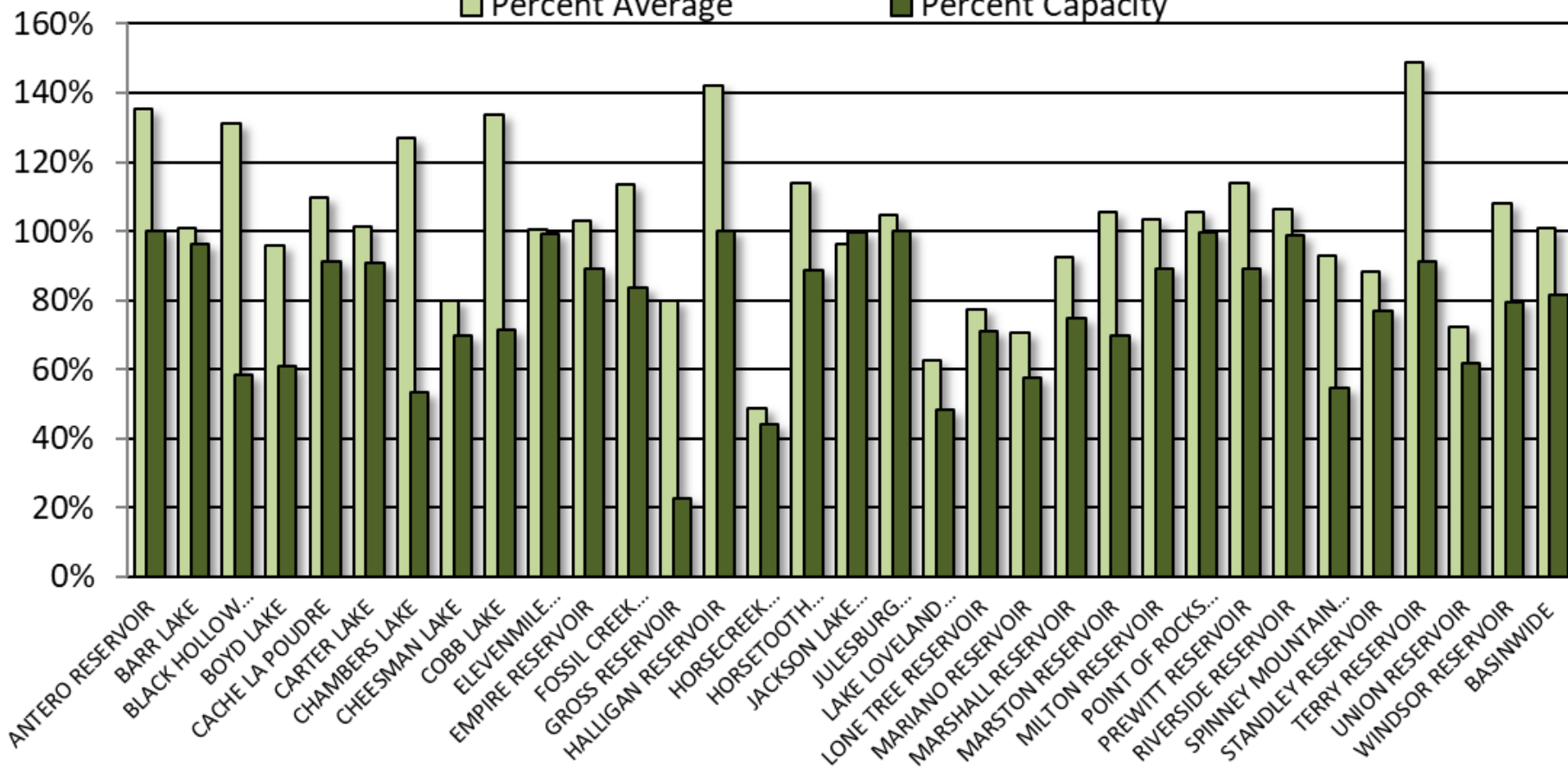
May 1, 2021



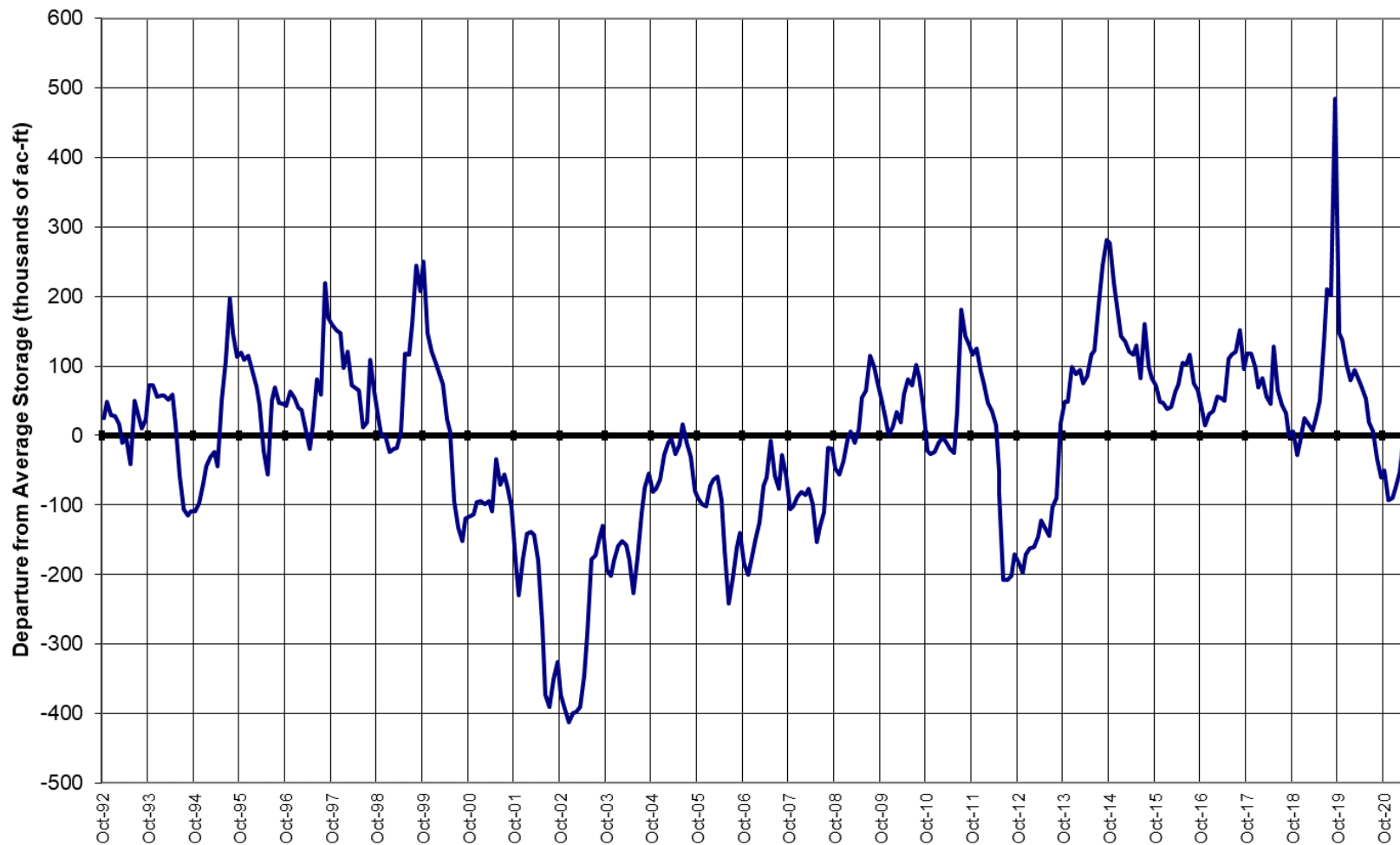
End of April Reservoir Storage

■ Percent Average

■ Percent Capacity

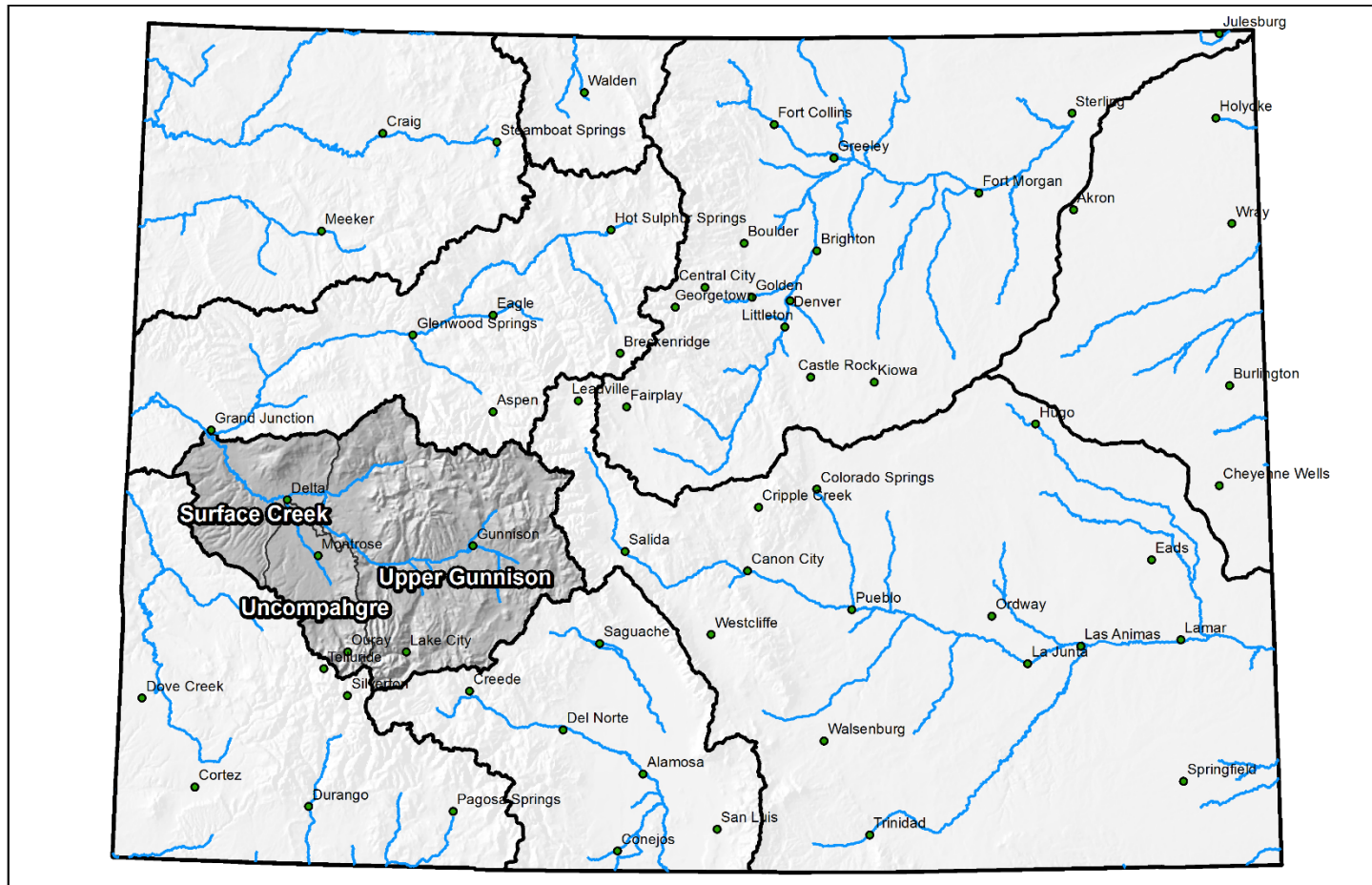


SOUTH PLATTE RIVER BASIN Reservoir Storage Departure from Average



Major Basin Summary

Gunnison River Basin



0 25 50 100 150 200 Miles

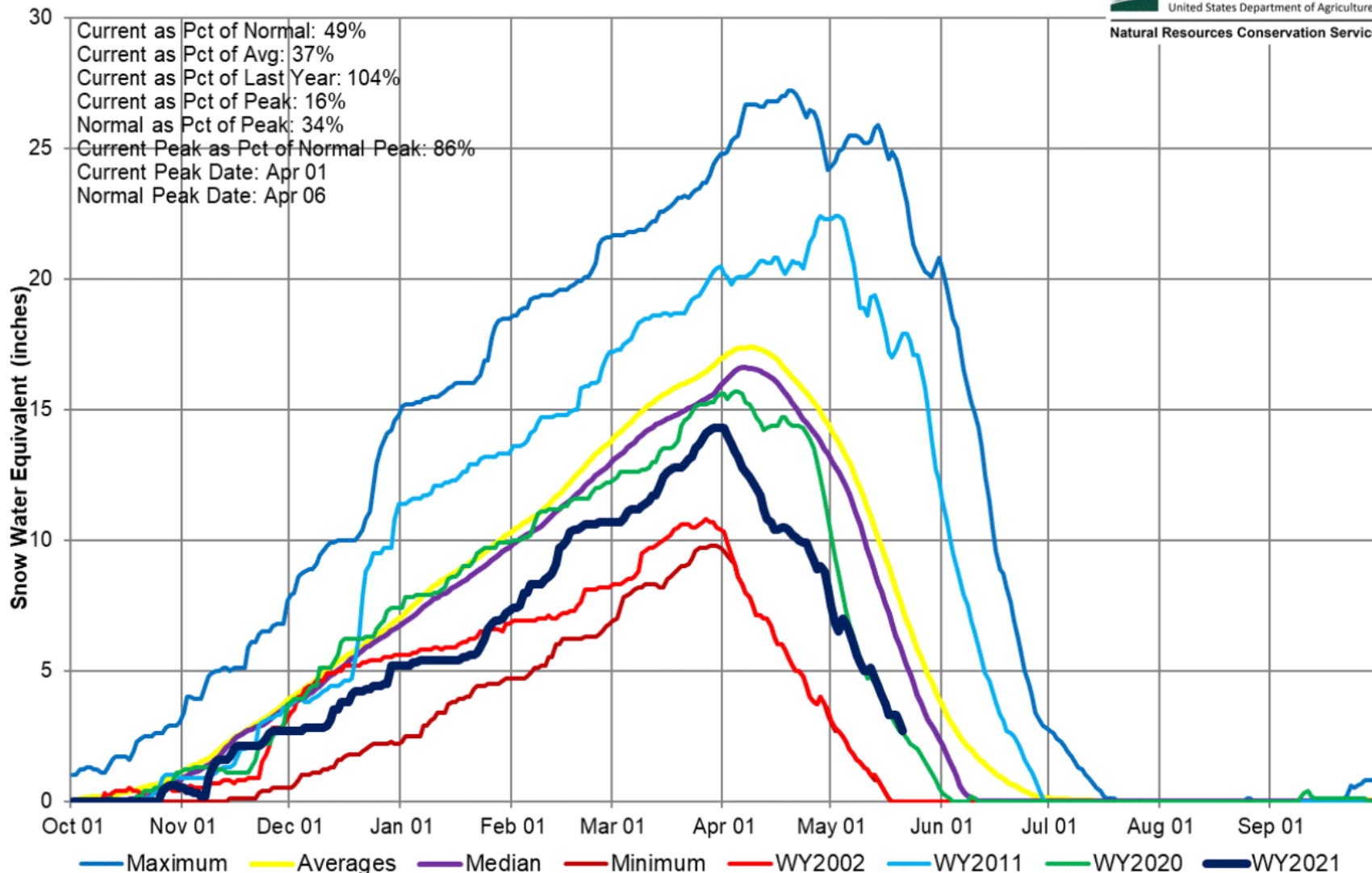
Gunnison River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of May 21, 2021



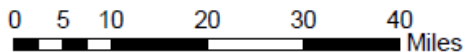
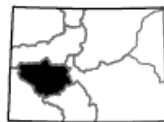
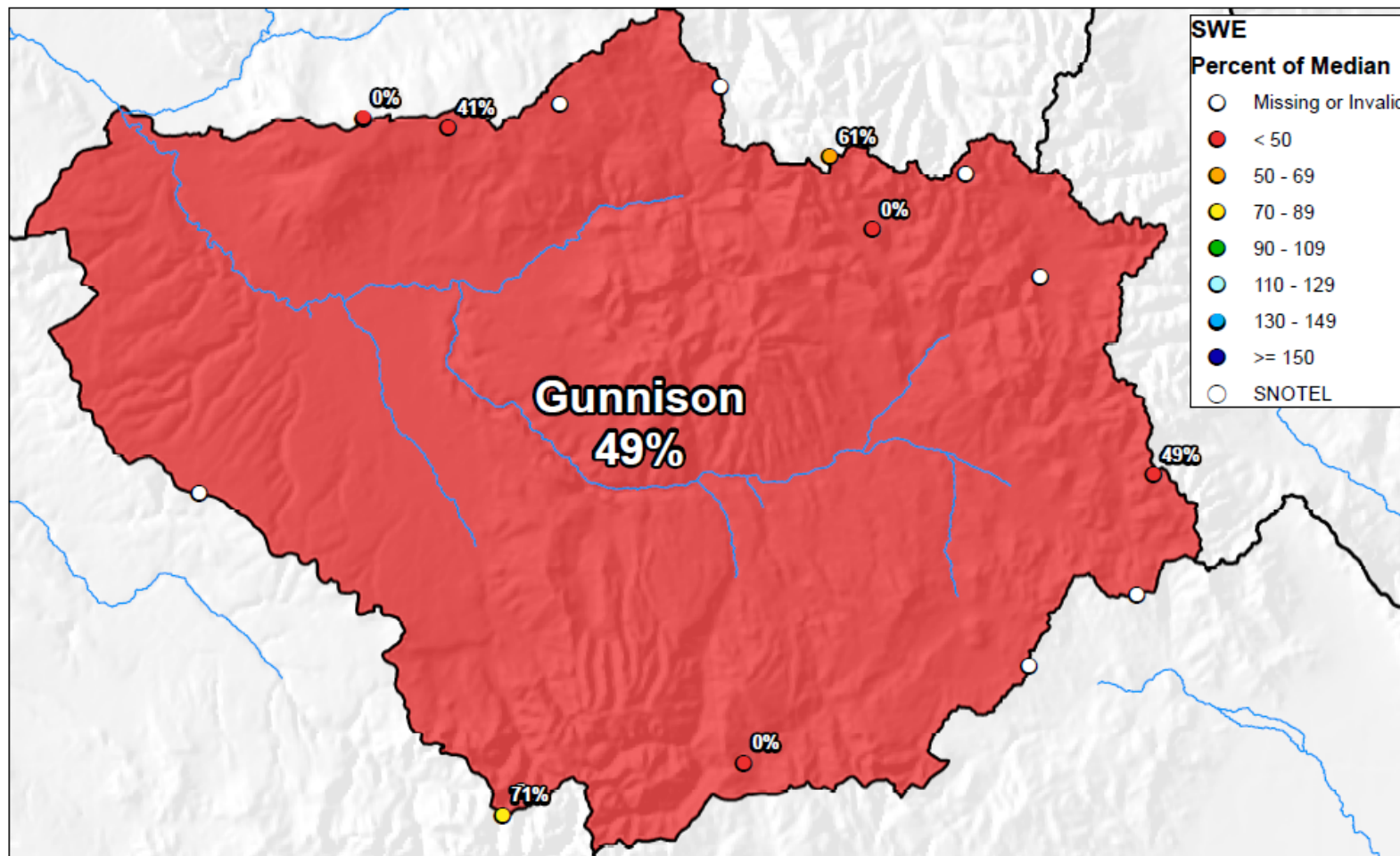
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Gunnison River Basin Snow Water Equivalent (SWE) Summary

Current as of May 21, 2021



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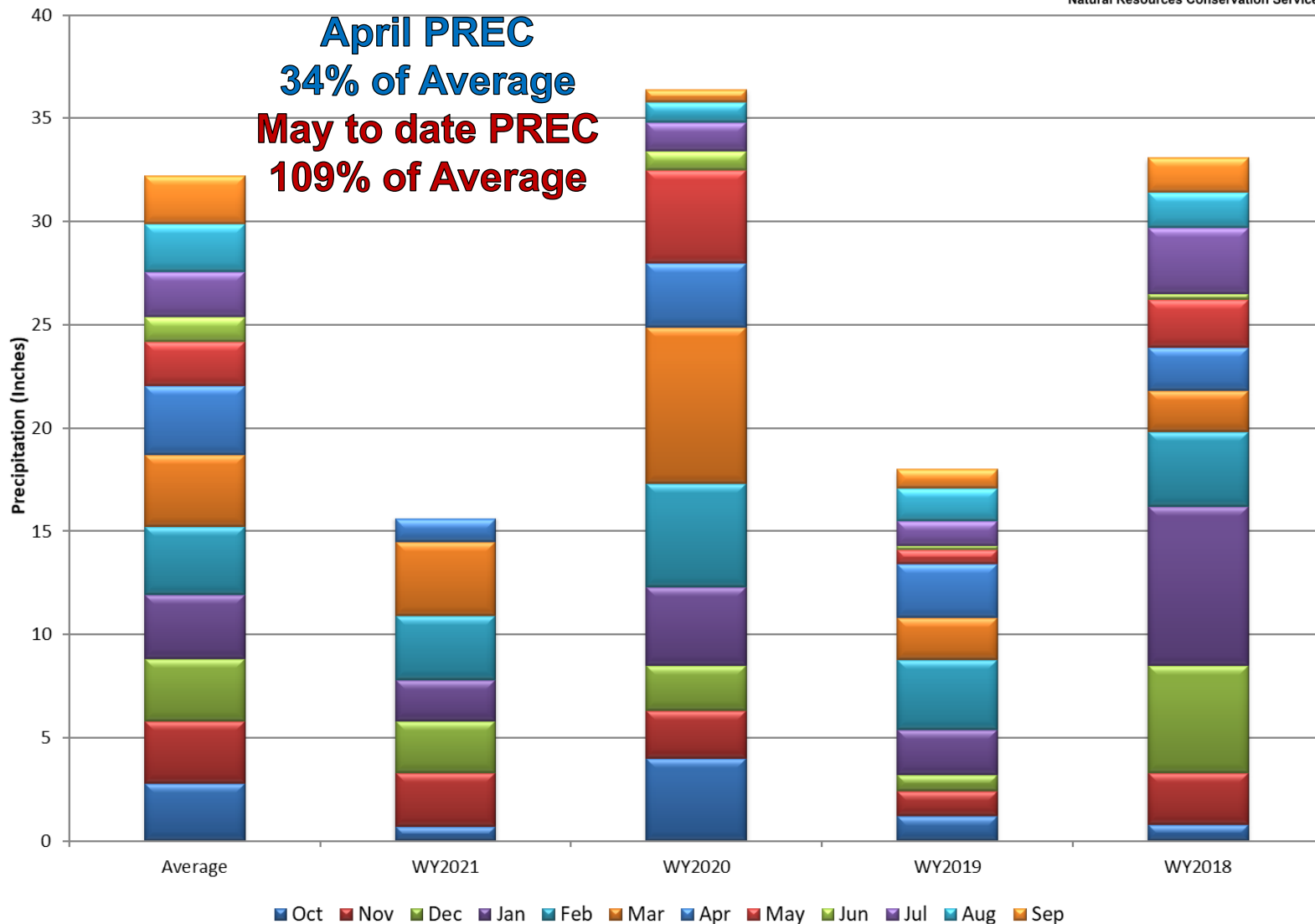
Gunnison River Basin Monthly Precipitation Summary

Based on Provisional SNOTEL data as of May 21, 2021



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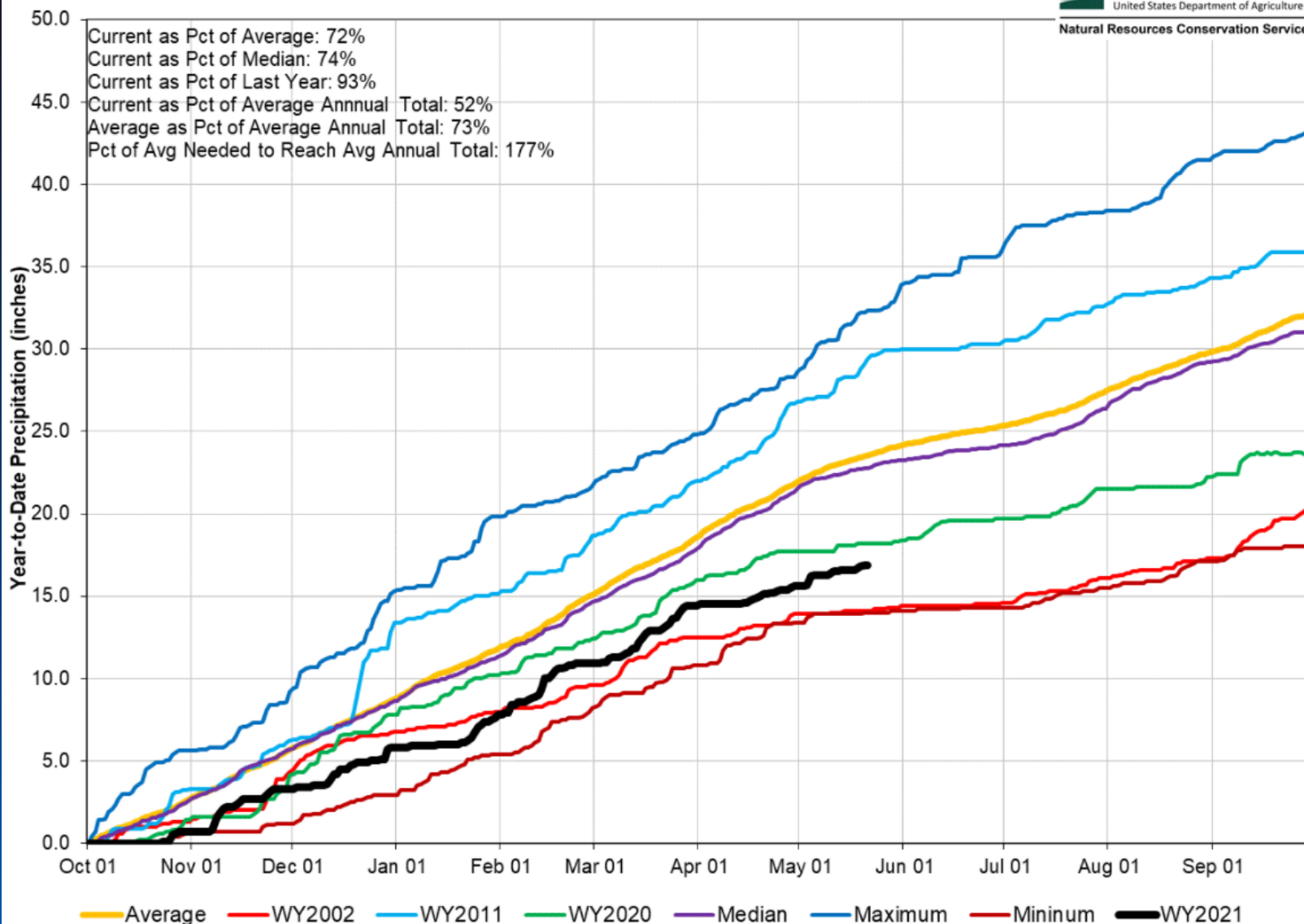
Gunnison River Basin High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of May 21, 2021



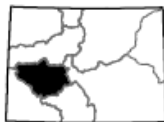
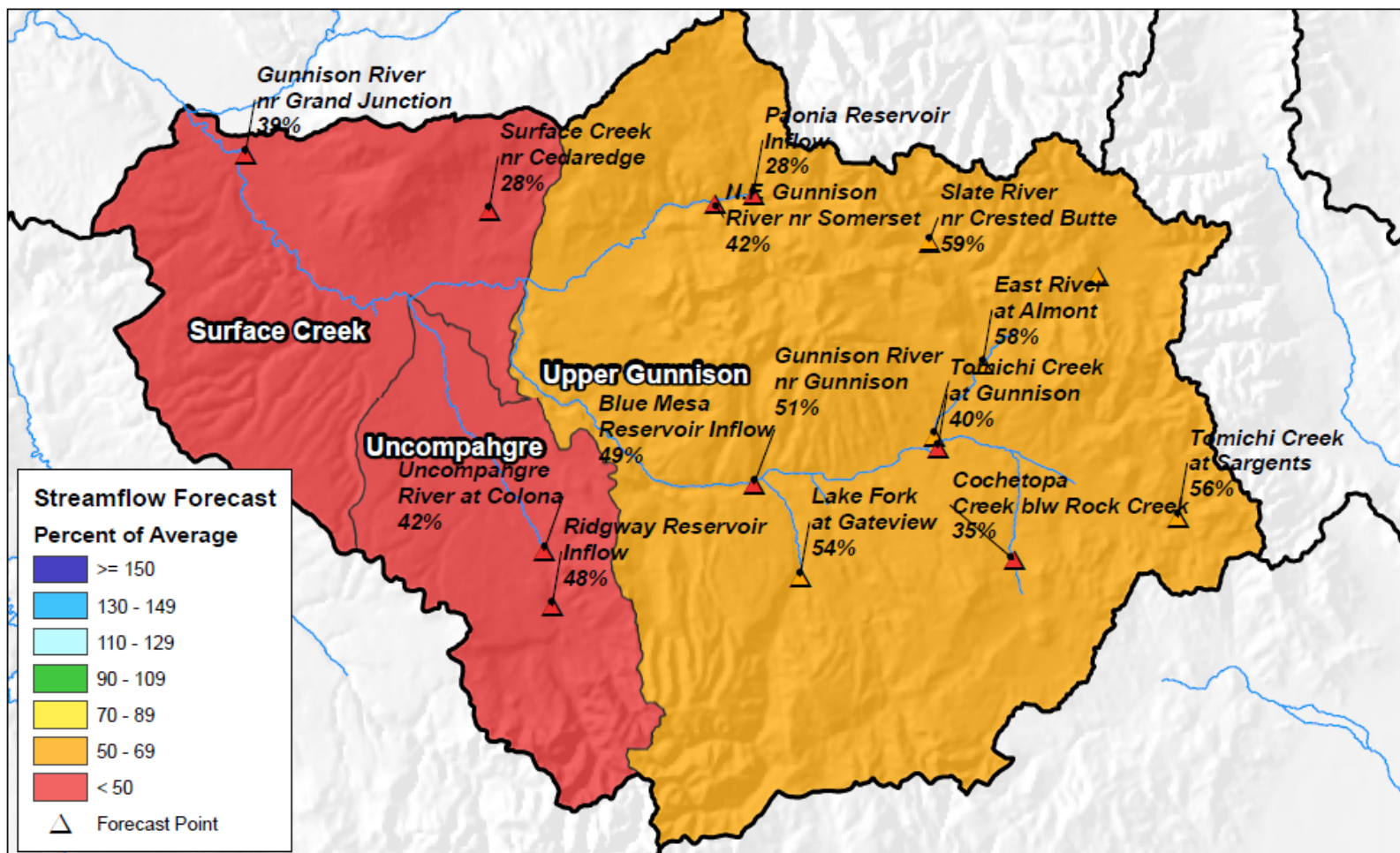
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Gunnison River Basin Water Supply Forecast Summary

May 1, 2021



0 5 10 20 30 40 Miles



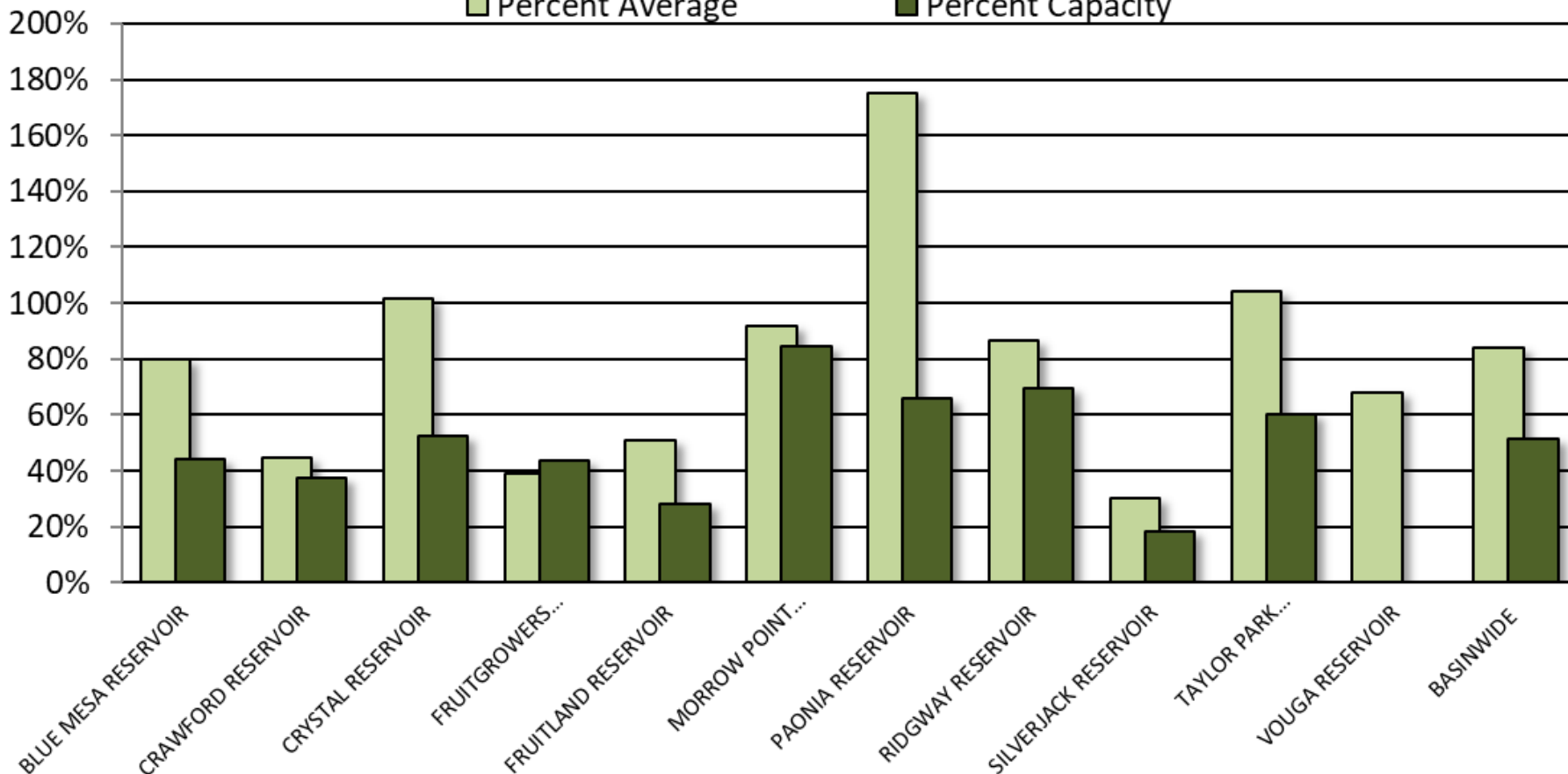
United States Department of Agriculture

Natural Resources Conservation Service

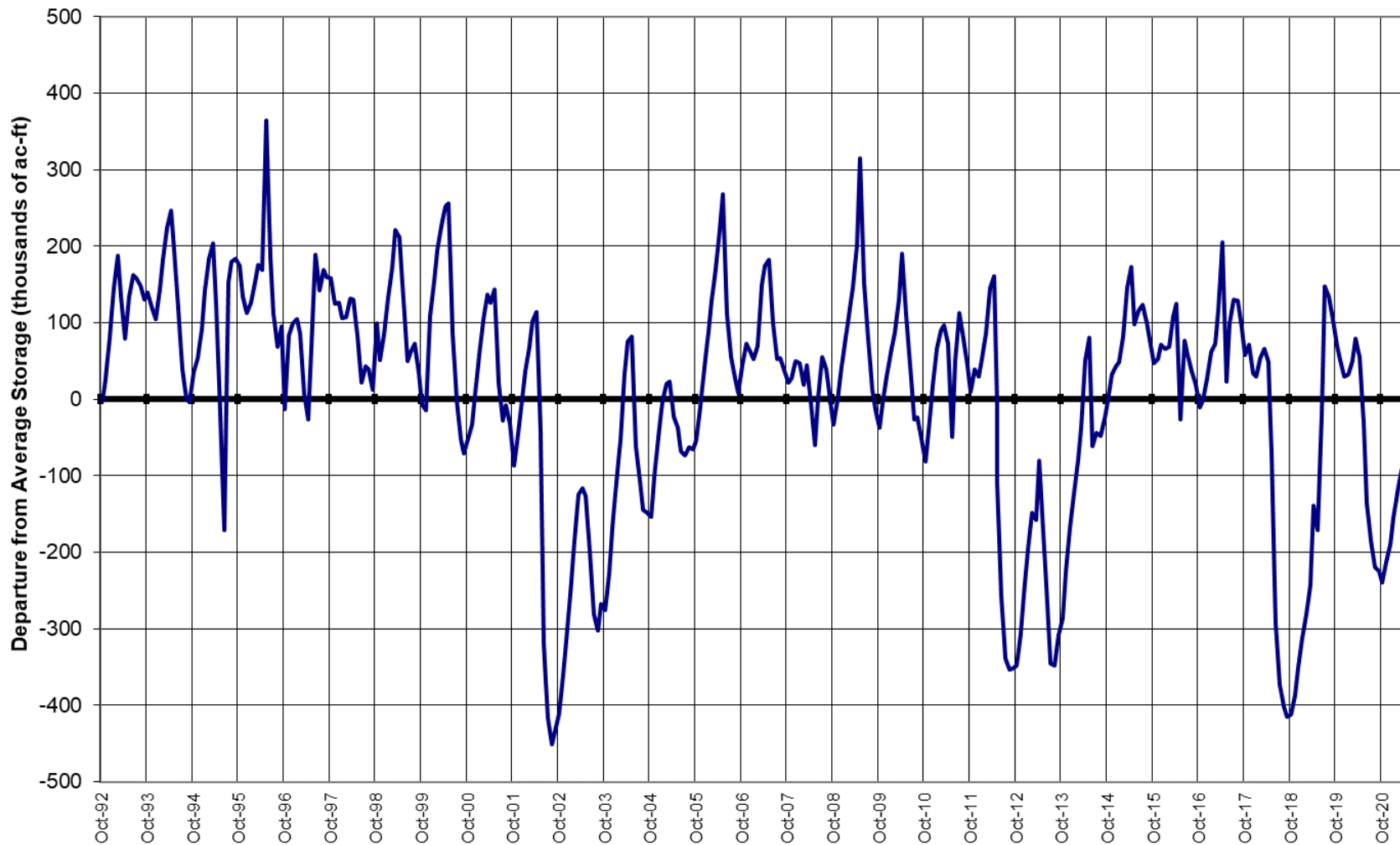
End of April Reservoir Storage

■ Percent Average

■ Percent Capacity

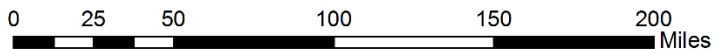
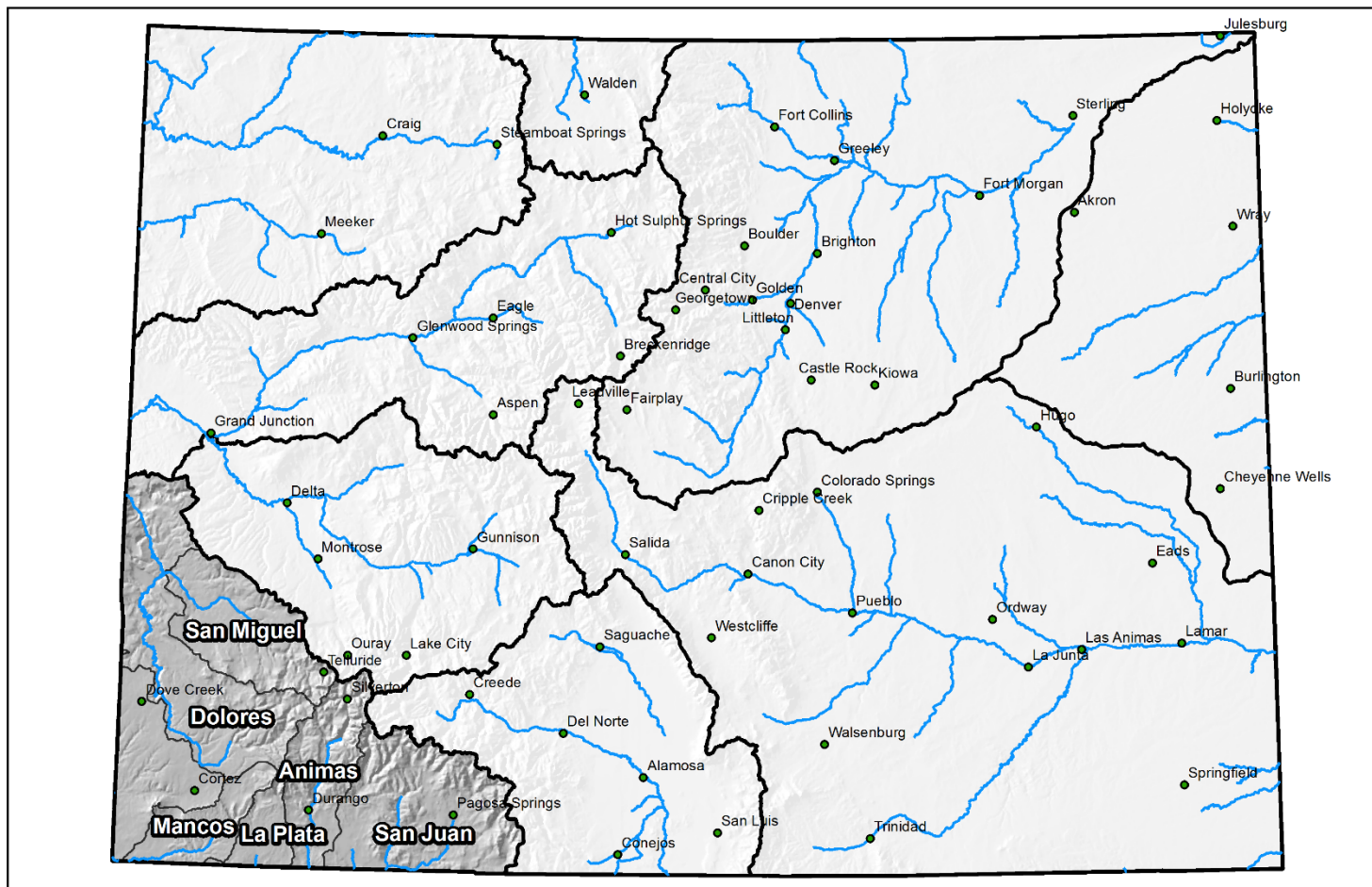


GUNNISON RIVER BASIN Reservoir Storage Departure from Average



Major Basin Summary

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



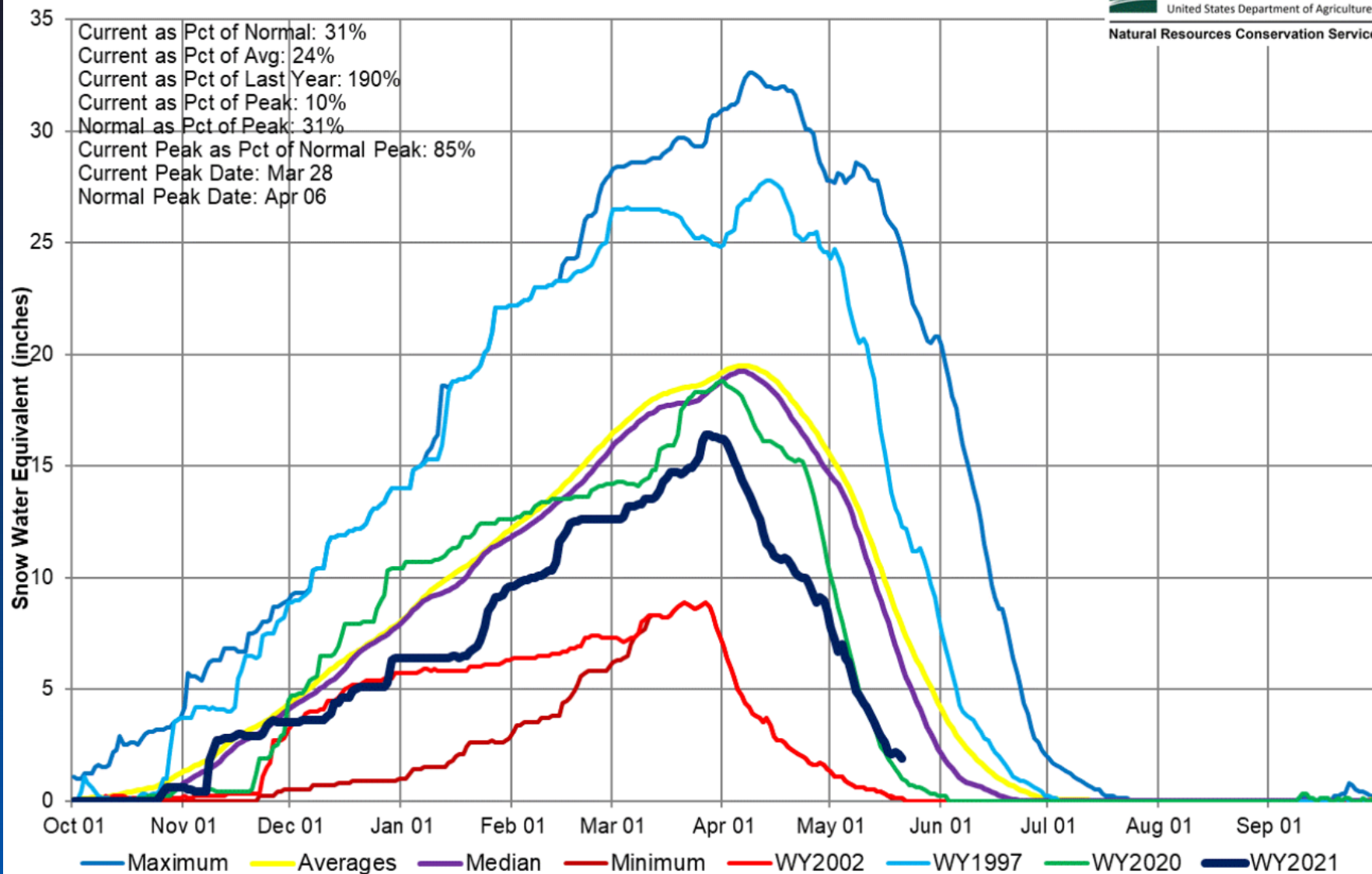
San Miguel, Dolores, Animas and San Juan River Basins High/Low Snowpack Summary

Based on Provisional SNOTEL data as of May 21, 2021



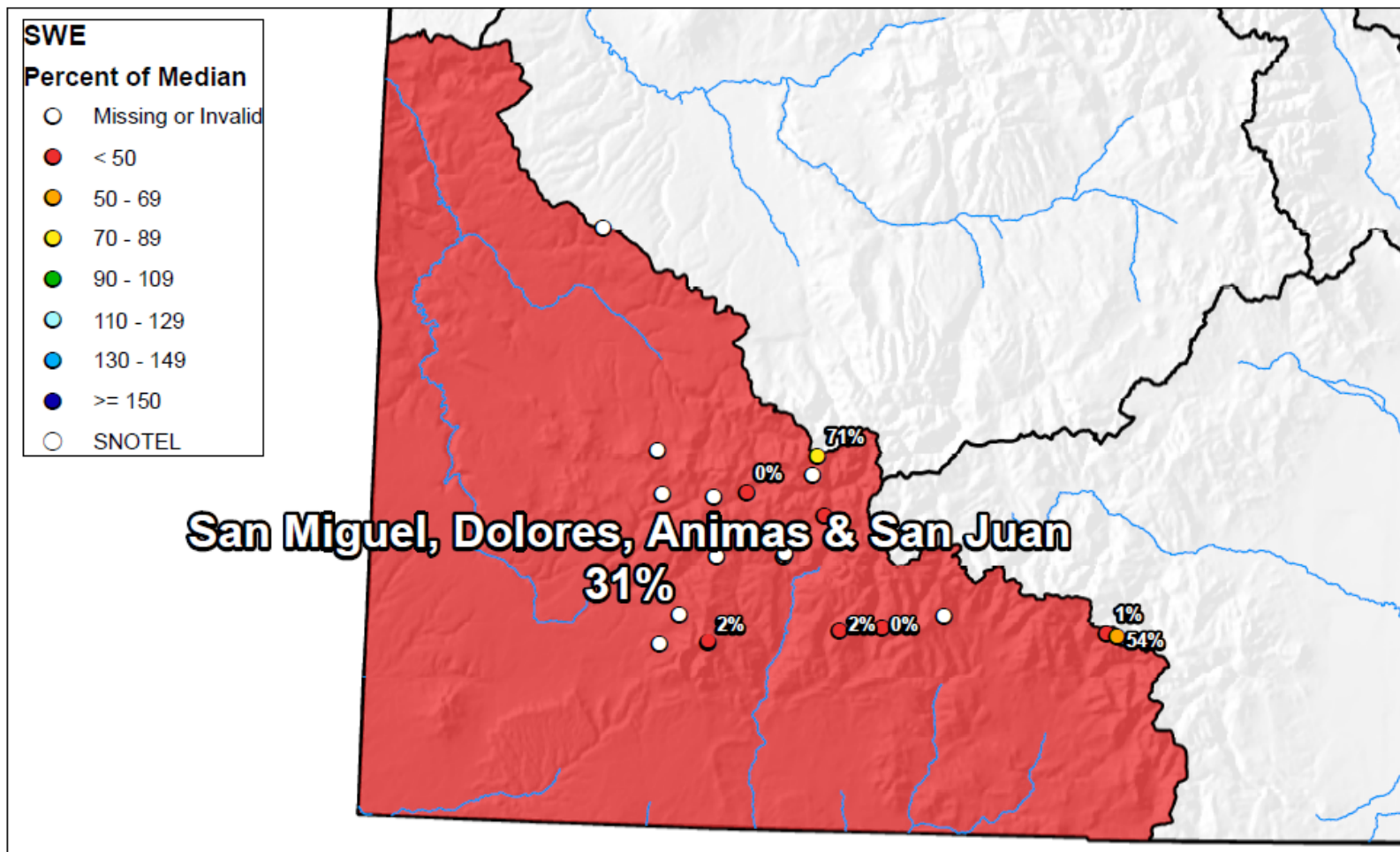
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San Miguel, Dolores, Animas, and San Juan River Basins Snow Water Equivalent (SWE) Summary

Current as of May 21, 2021



0 10 20 40 60 80 Miles

San Miguel, Dolores, Animas & San Juan River Basins

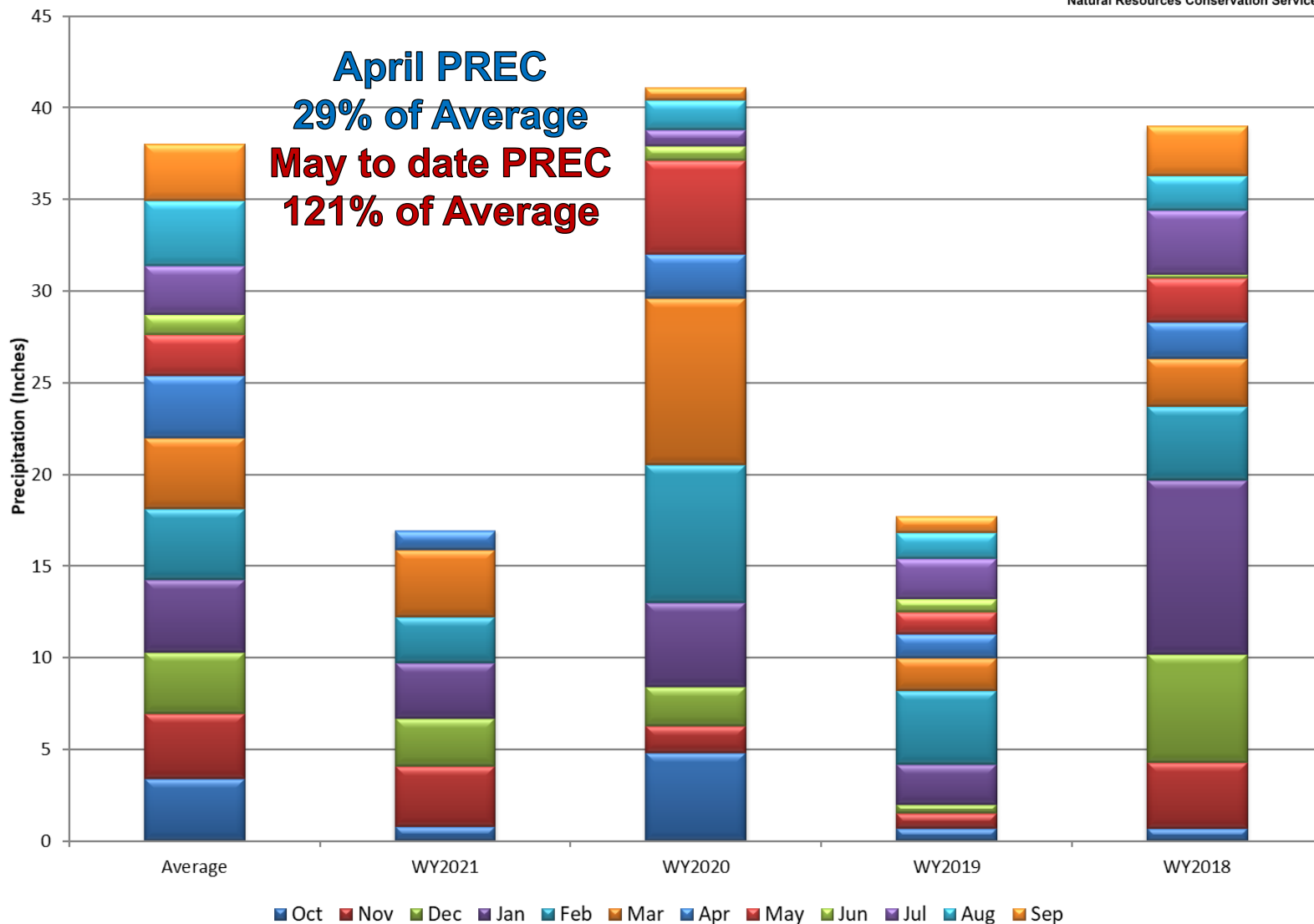
Monthly Precipitation Summary

Based on Provisional SNOTEL data as of May 21, 2021



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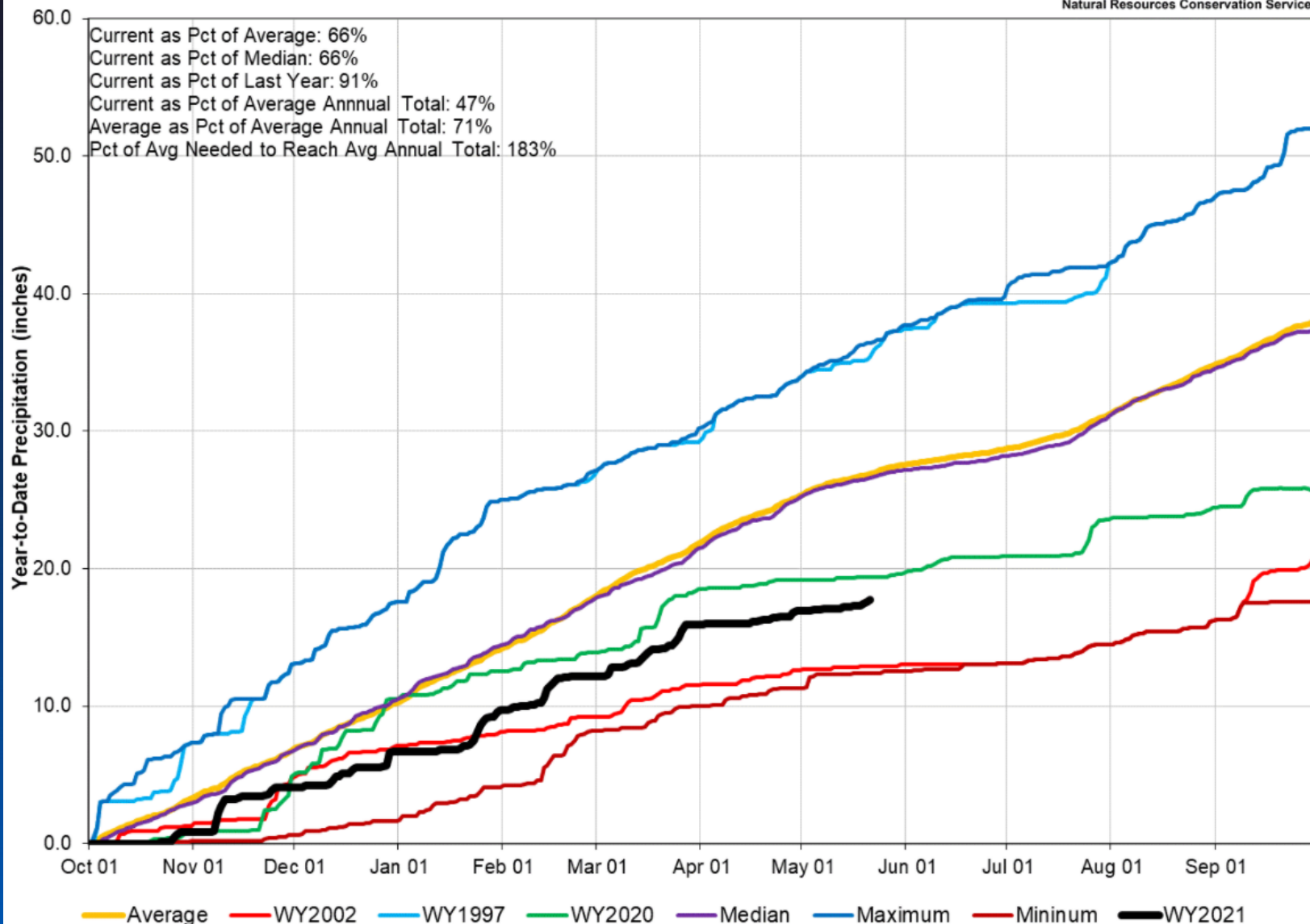
San Miguel, Dolores, Animas and San Juan River Basins High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of May 21, 2021



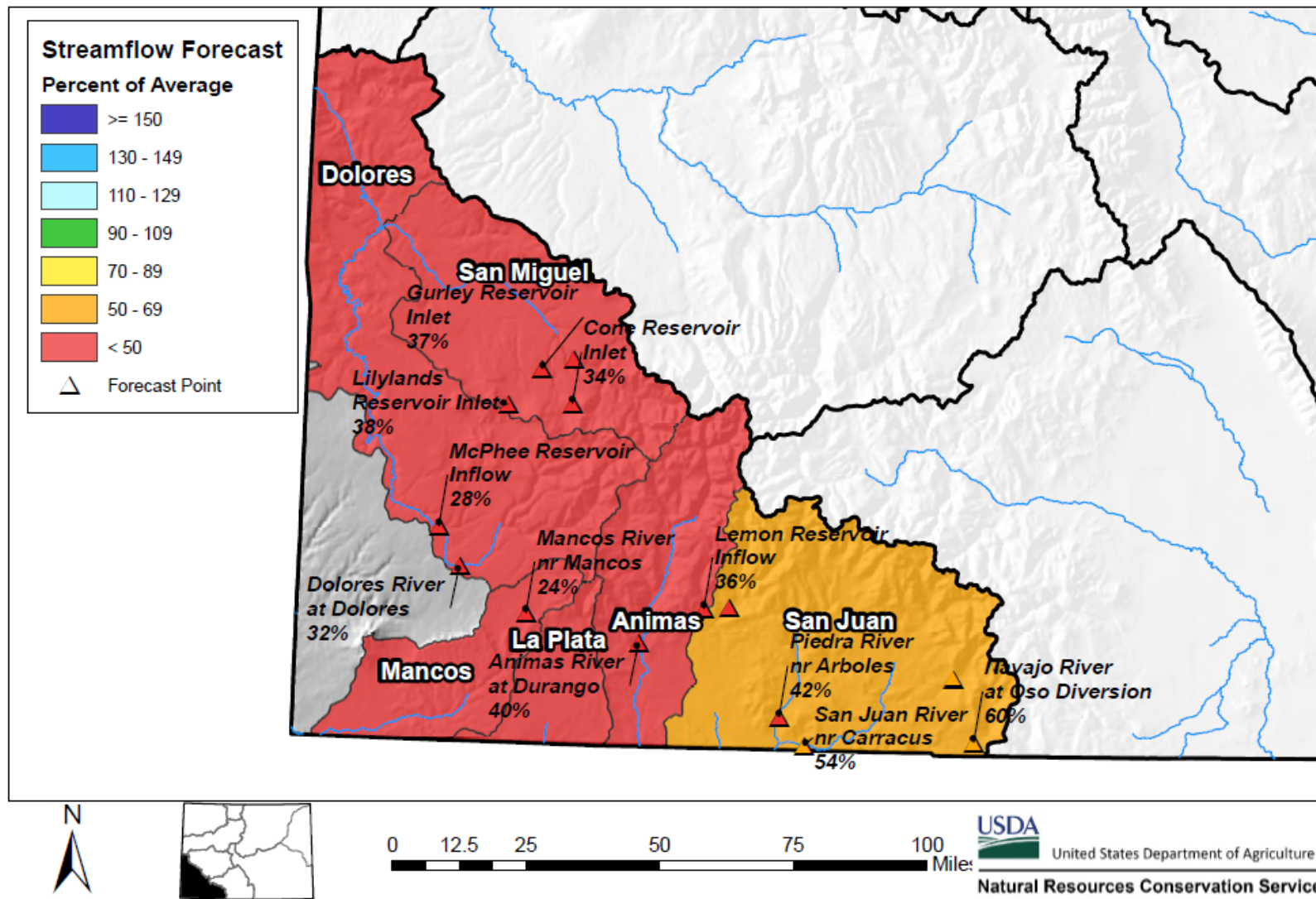
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San Miguel, Dolores, Animas, and San Juan River Basins Streamflow Forecast Summary

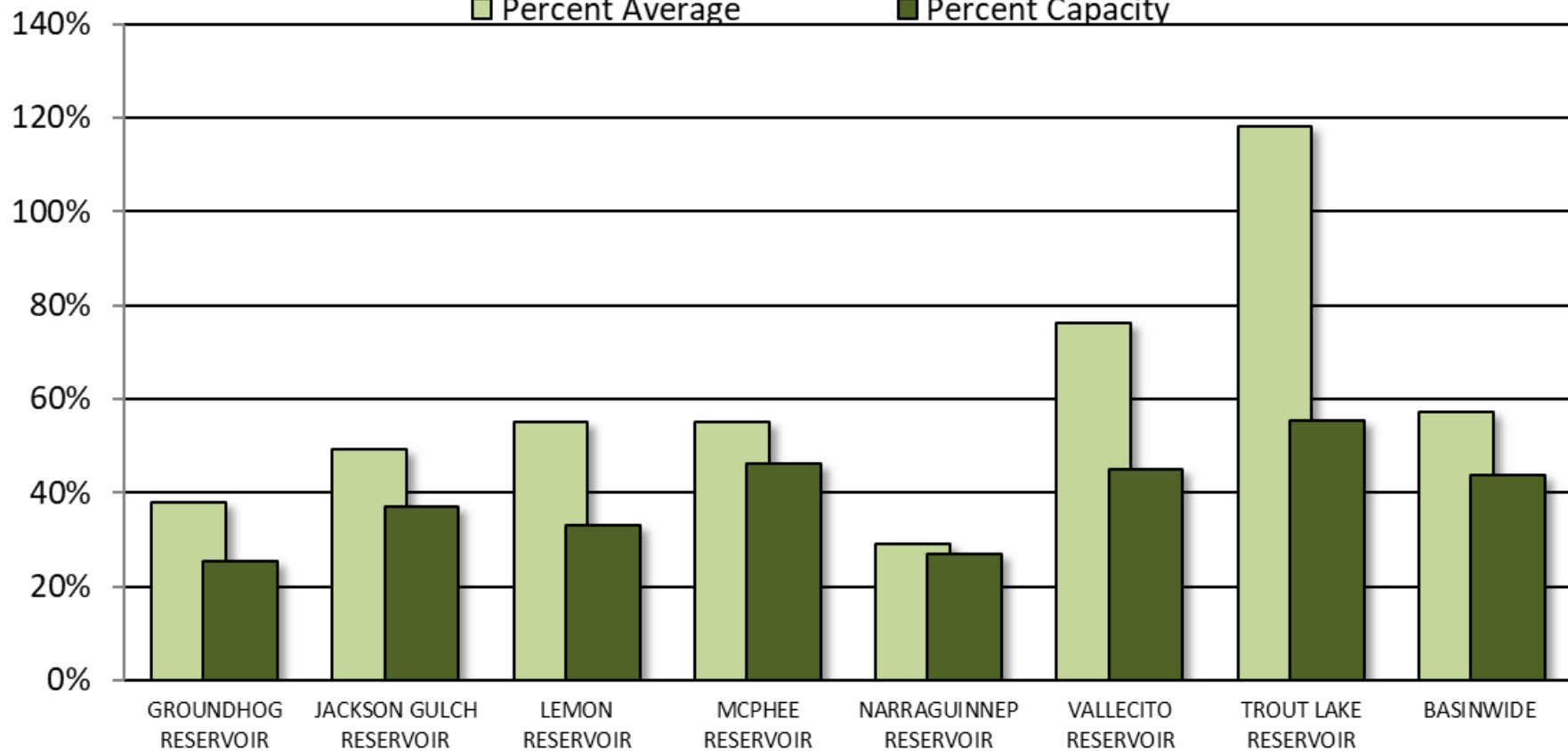
May 1, 2021



End of April Reservoir Storage

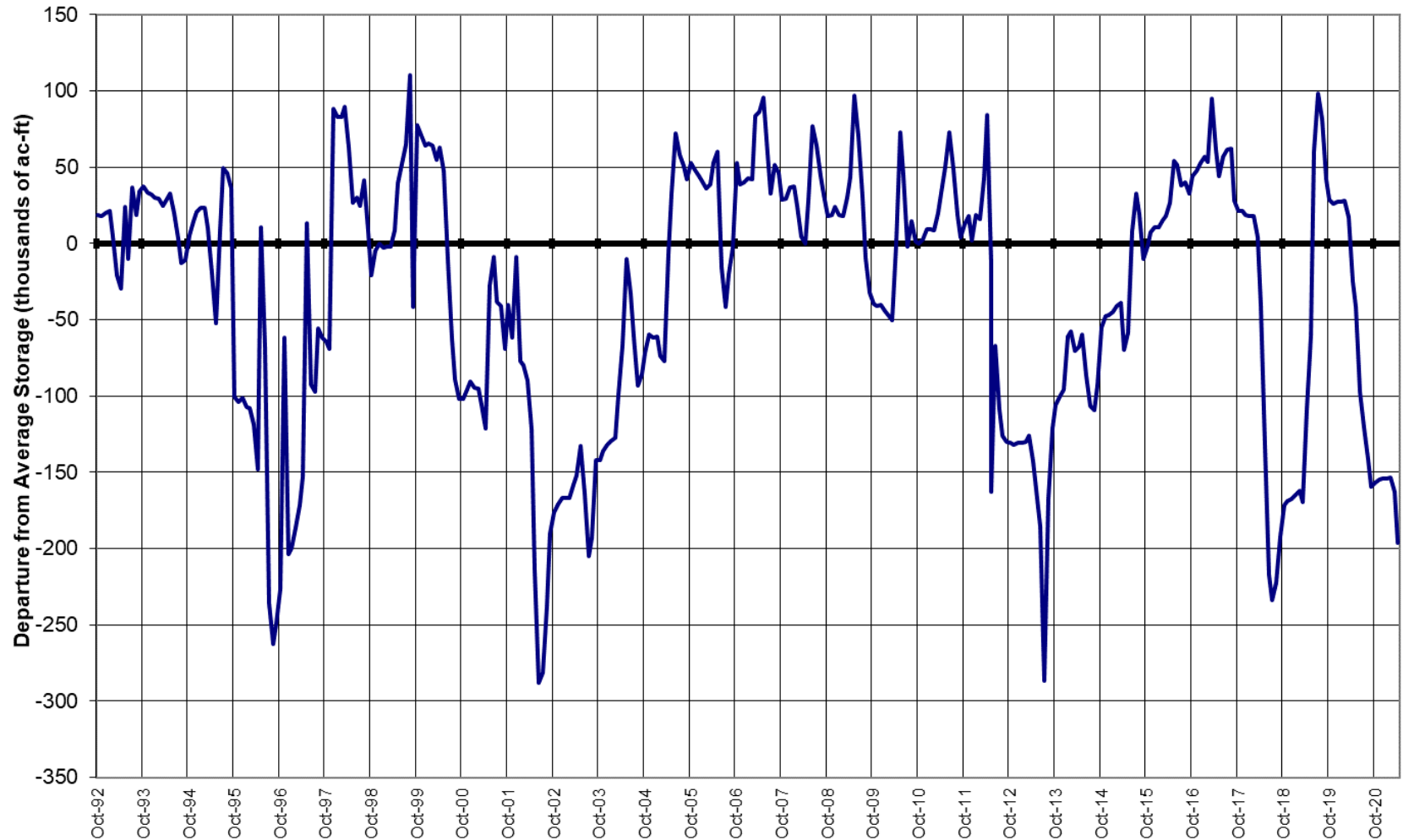
■ Percent Average

■ Percent Capacity



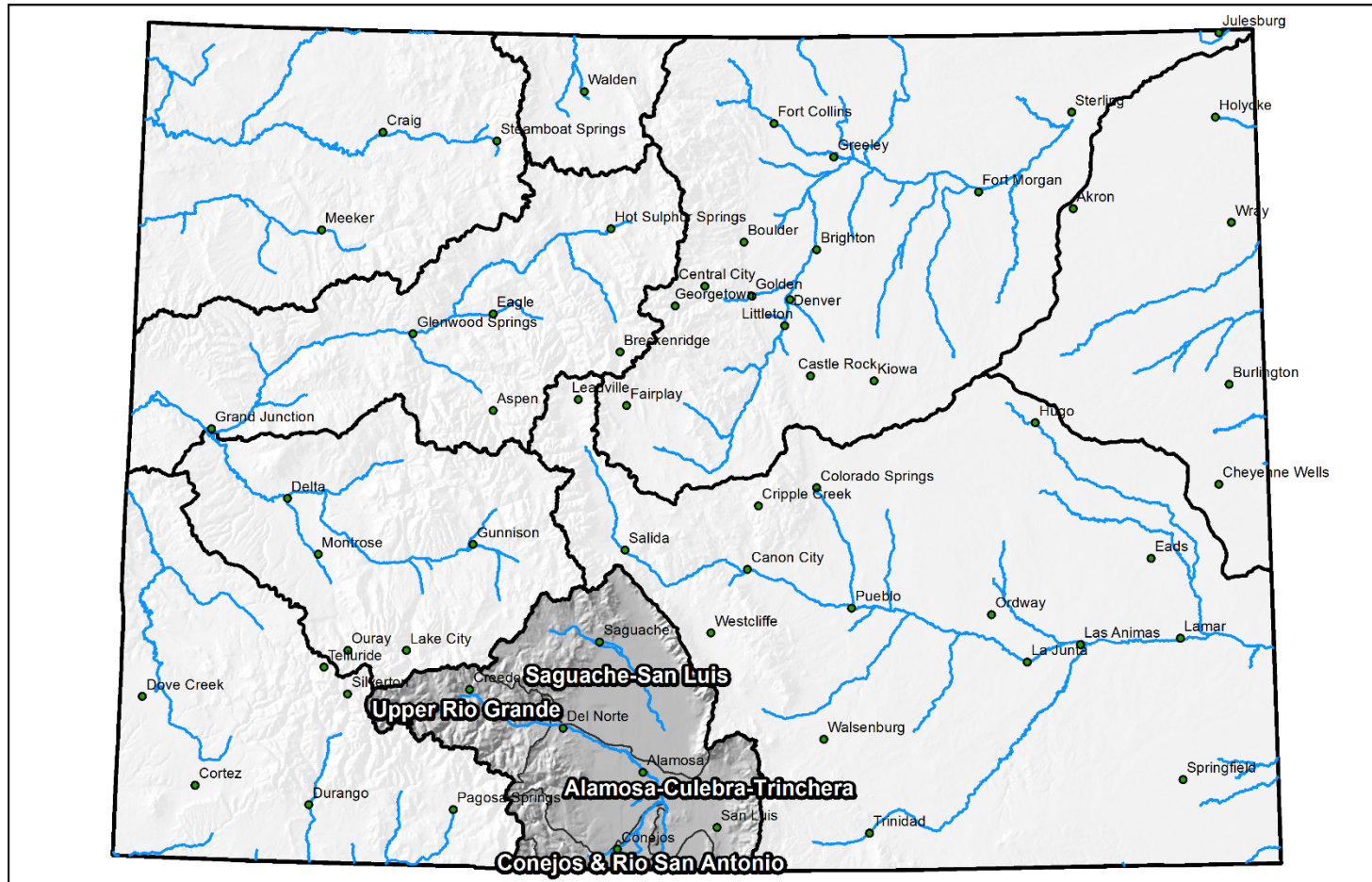
SAN MIGUEL, DOLORES, ANIMAS AND SAN JUAN RIVER BASINS

Reservoir Storage
Departure from Average



Major Basin Summary

Upper Rio Grande River Basin



0 25 50 100 150 200 Miles

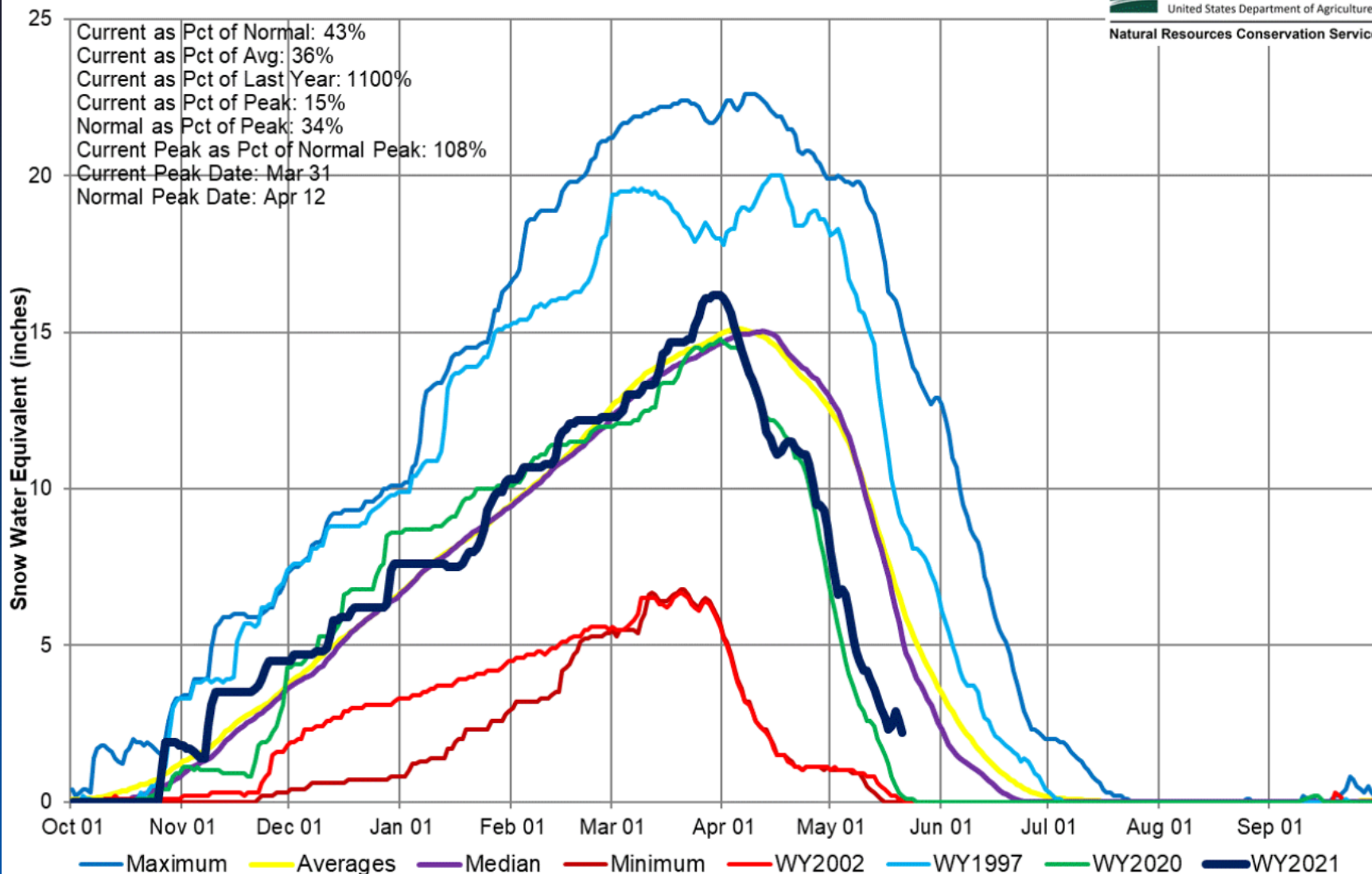
Upper Rio Grande Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of May 21, 2021



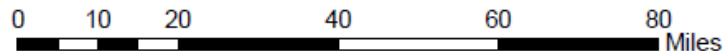
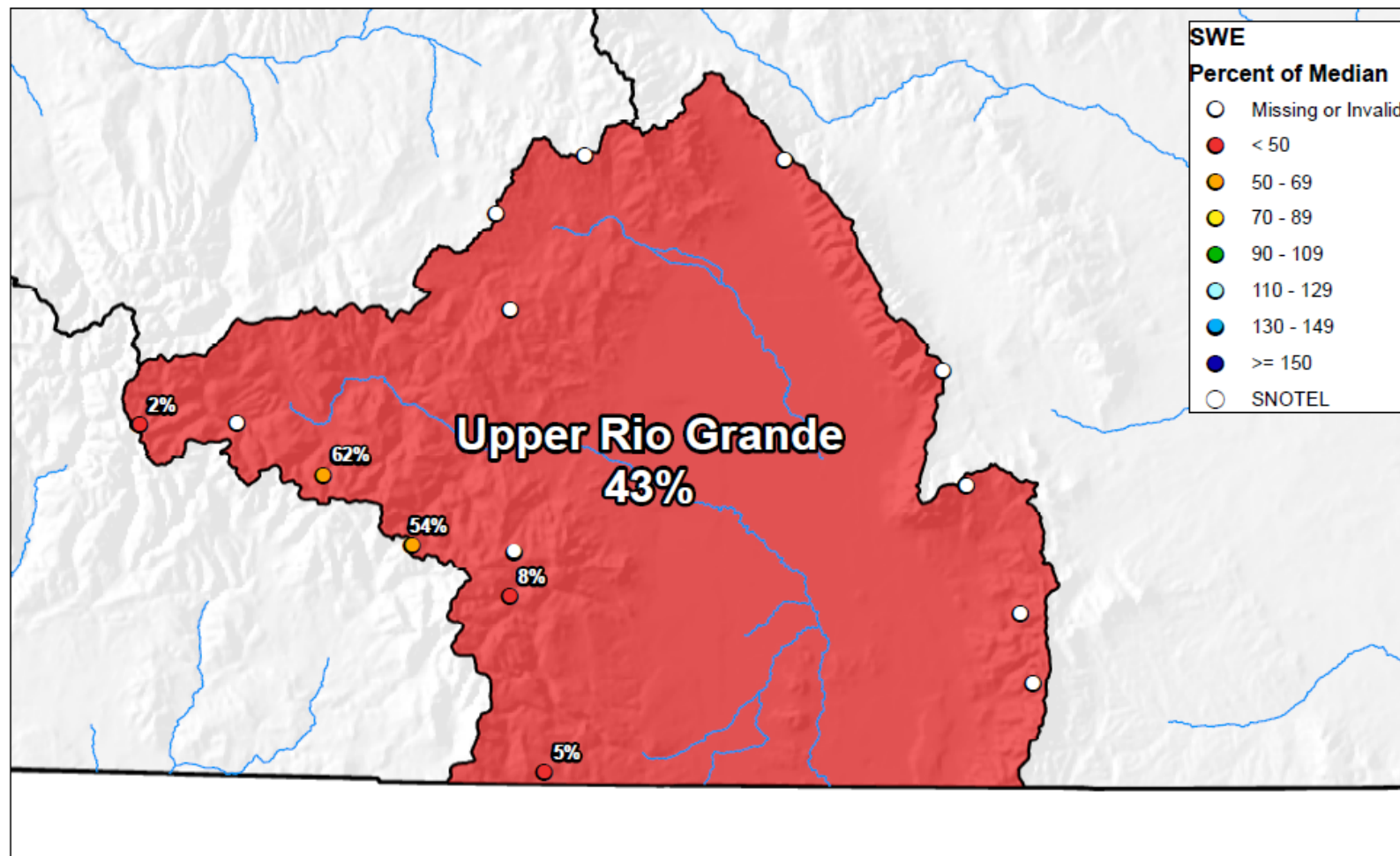
United States Department of Agriculture

Natural Resources Conservation Service



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

Current as of May 21, 2021

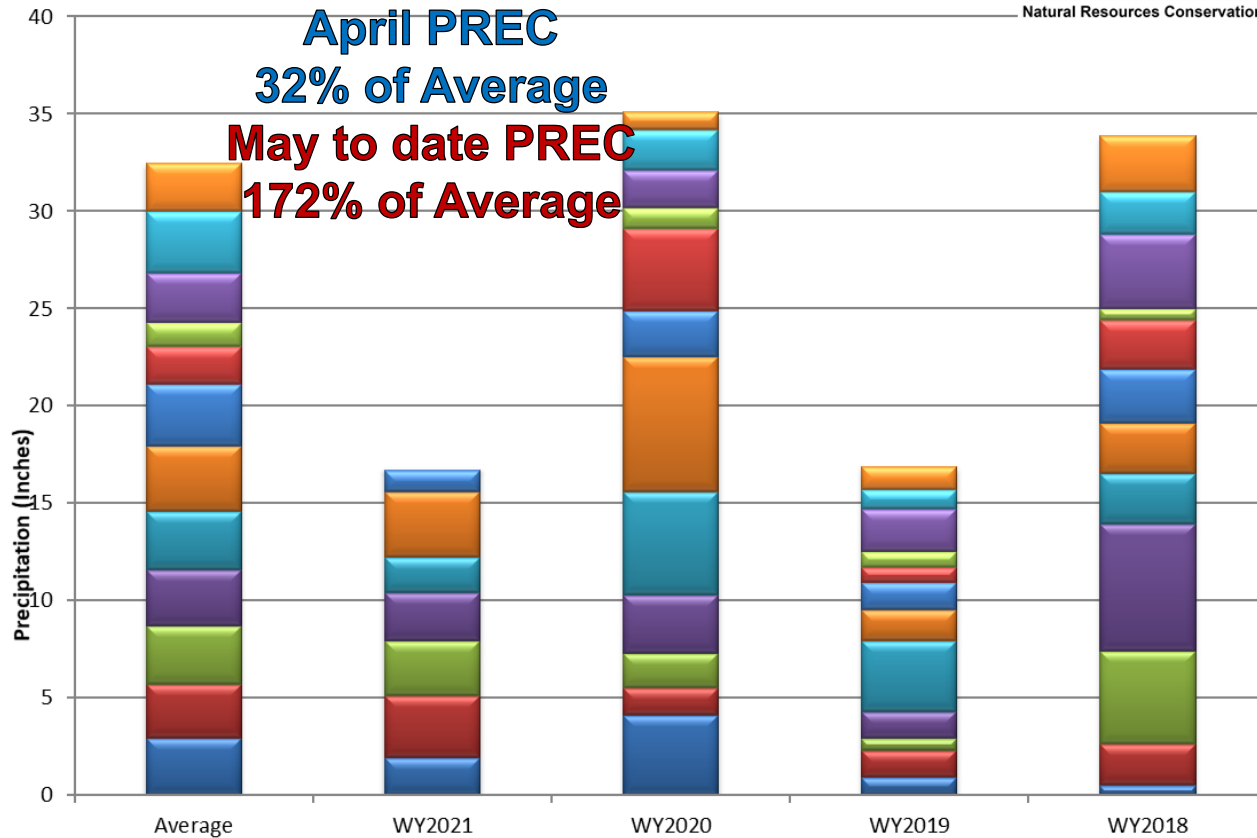


Upper Rio Grande Basin Monthly Precipitation Summary

Based on Provisional SNOTEL data as of May 21, 2021



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Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep

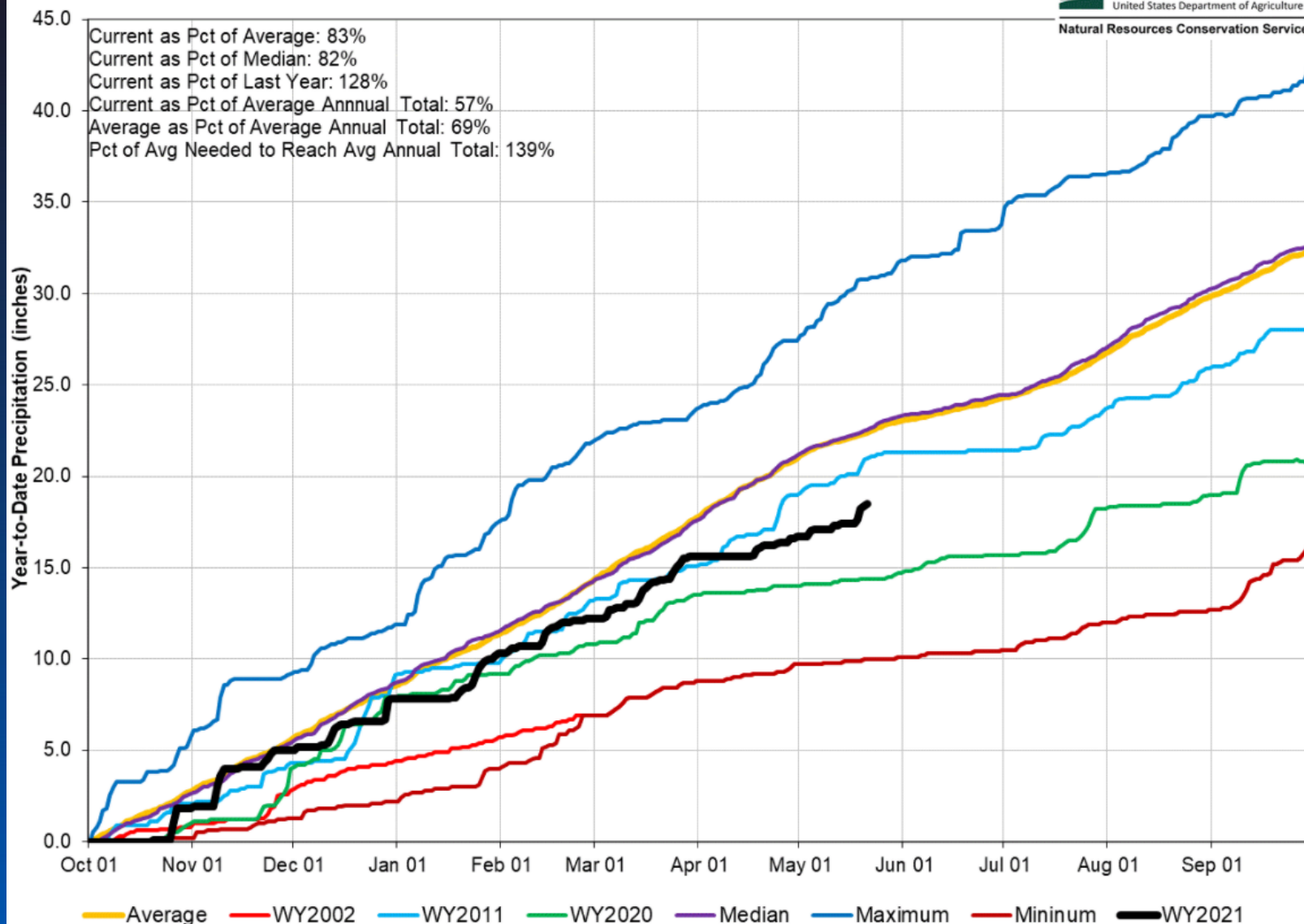
Upper Rio Grande River Basin High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of May 21, 2021



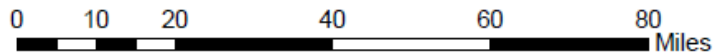
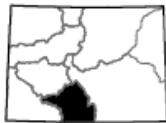
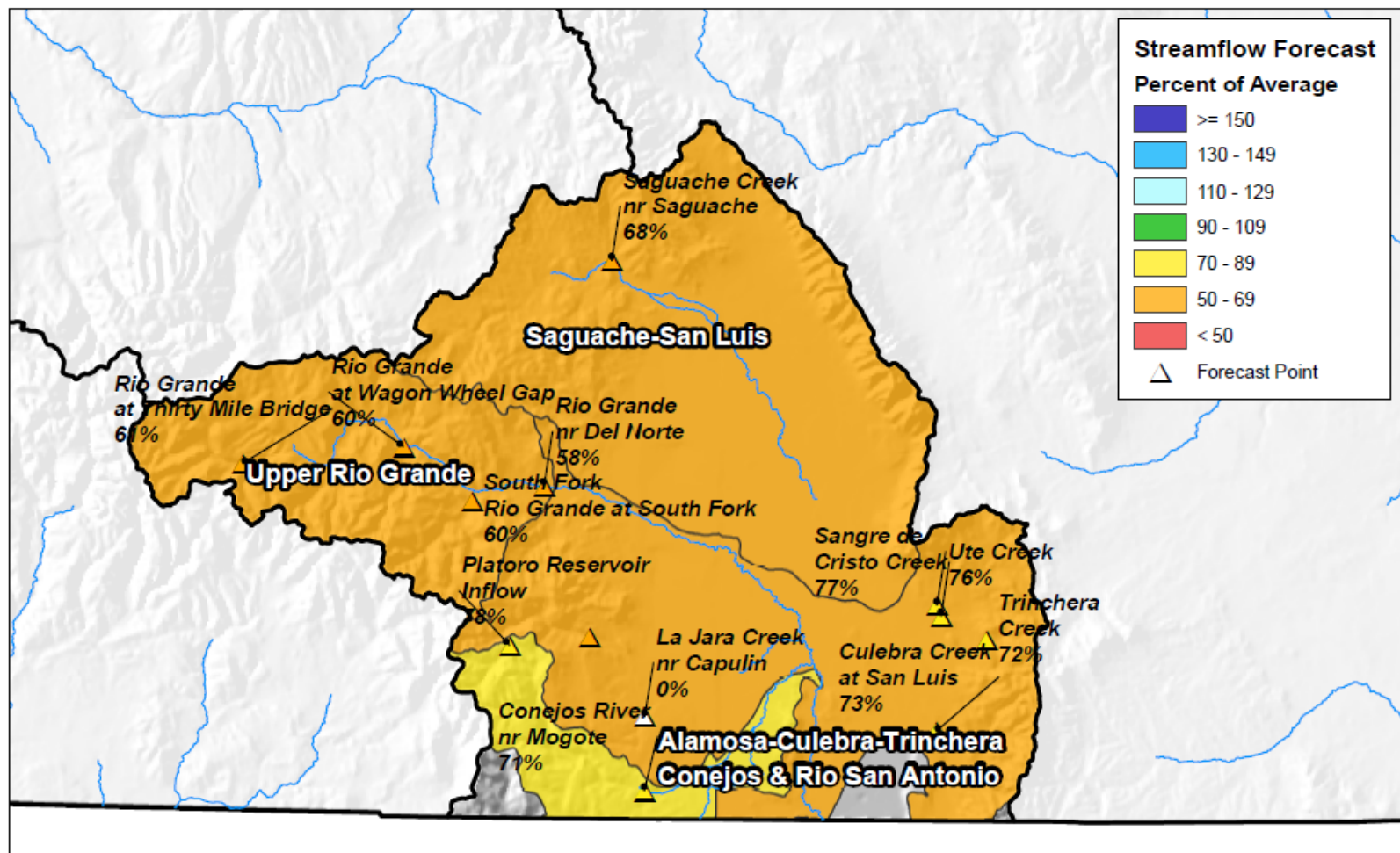
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Upper Rio Grande River Basin Streamflow Forecast Summary

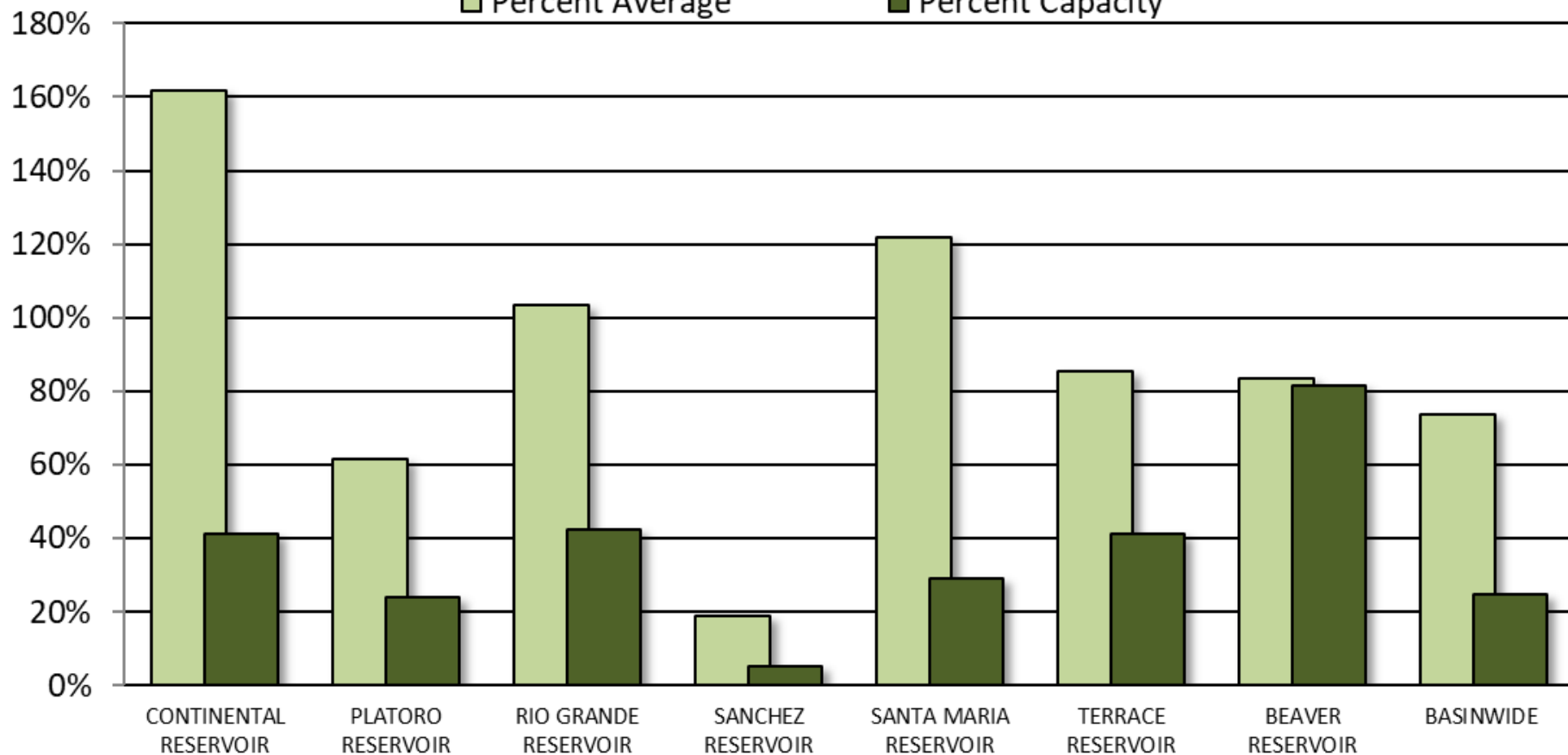
May 1, 2021



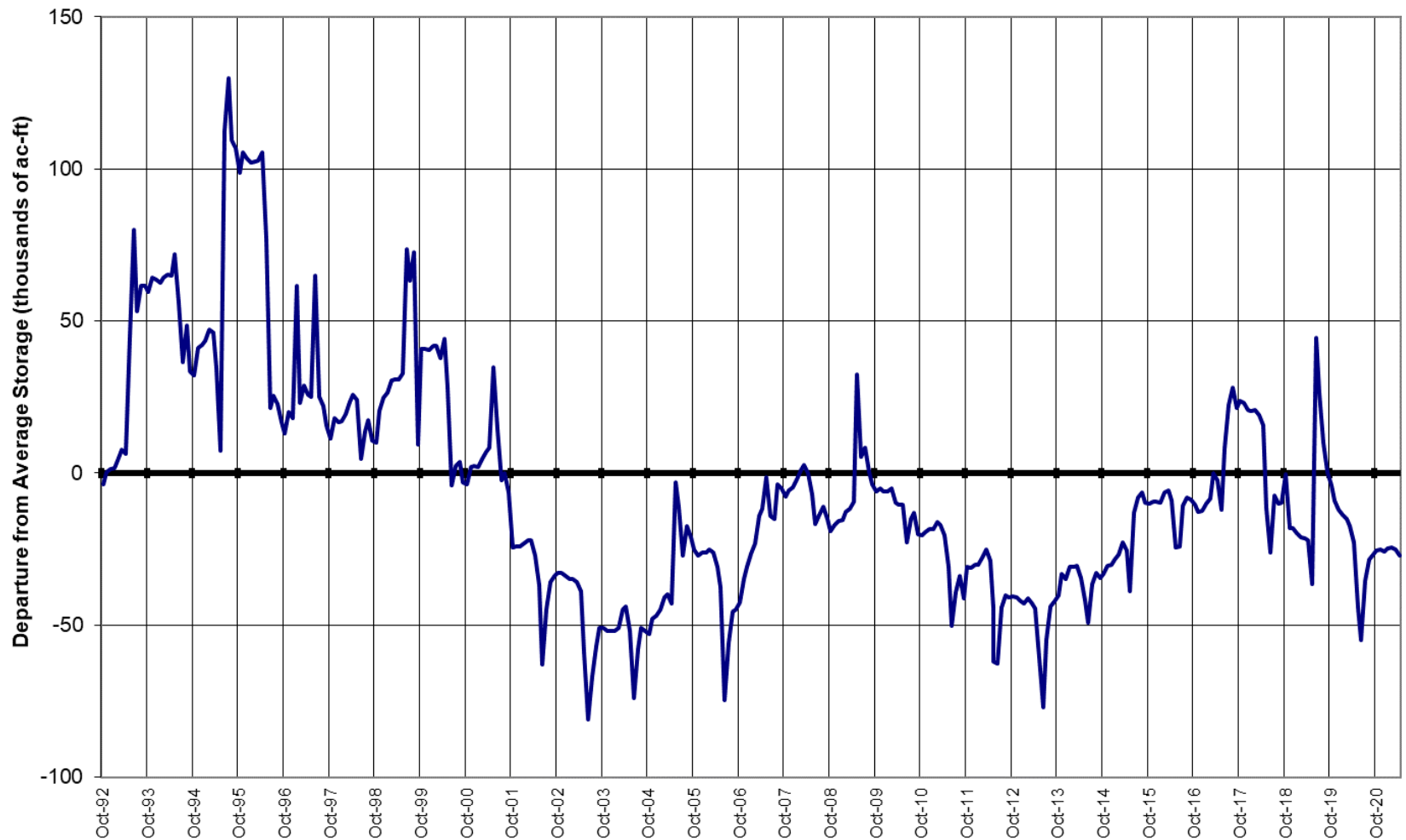
End of April Reservoir Storage

■ Percent Average

■ Percent Capacity

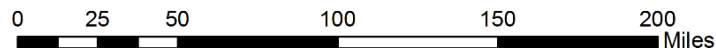
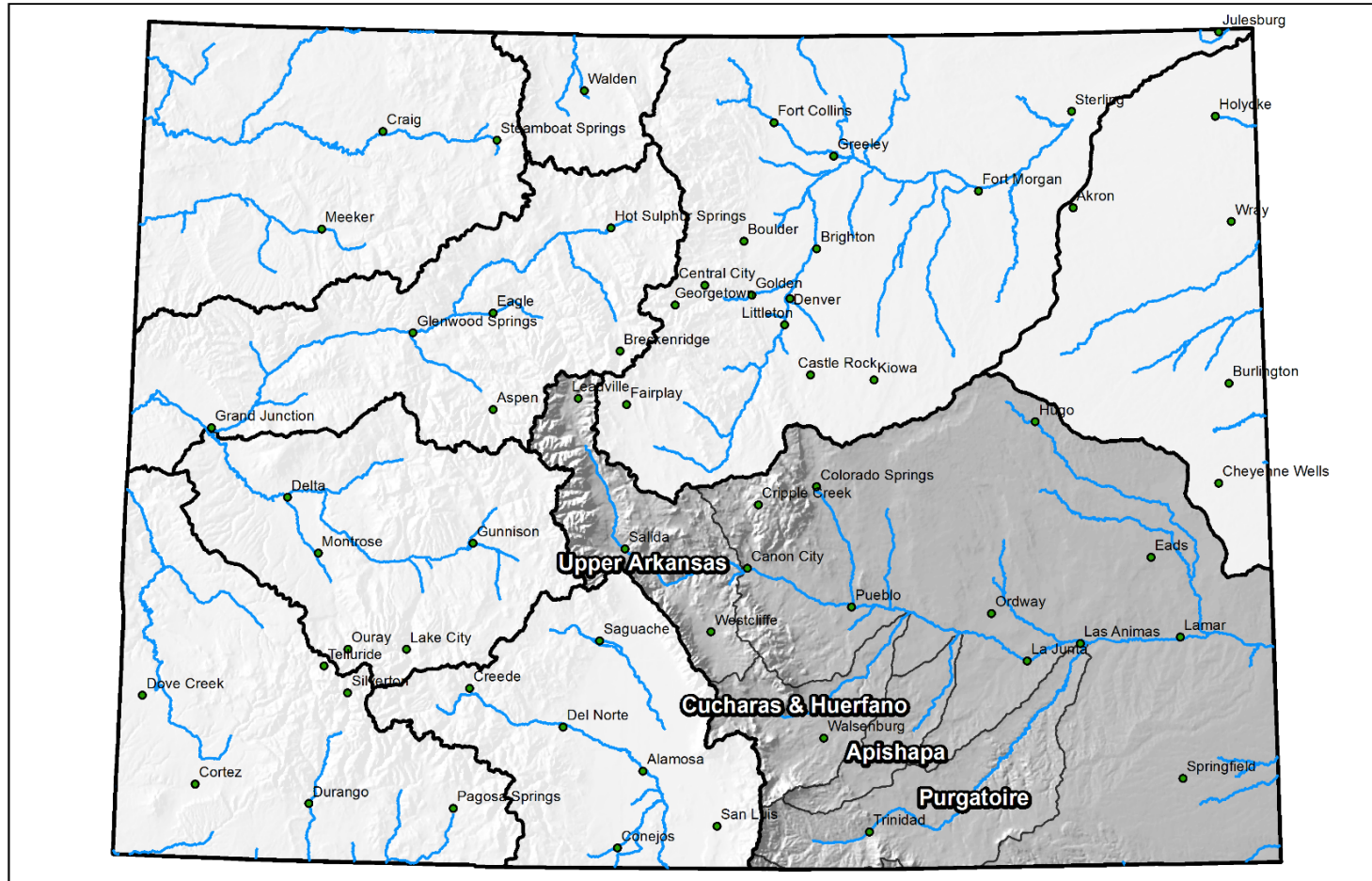


UPPER RIO GRANDE BASIN Reservoir Storage Departure from Average



Major Basin Summary

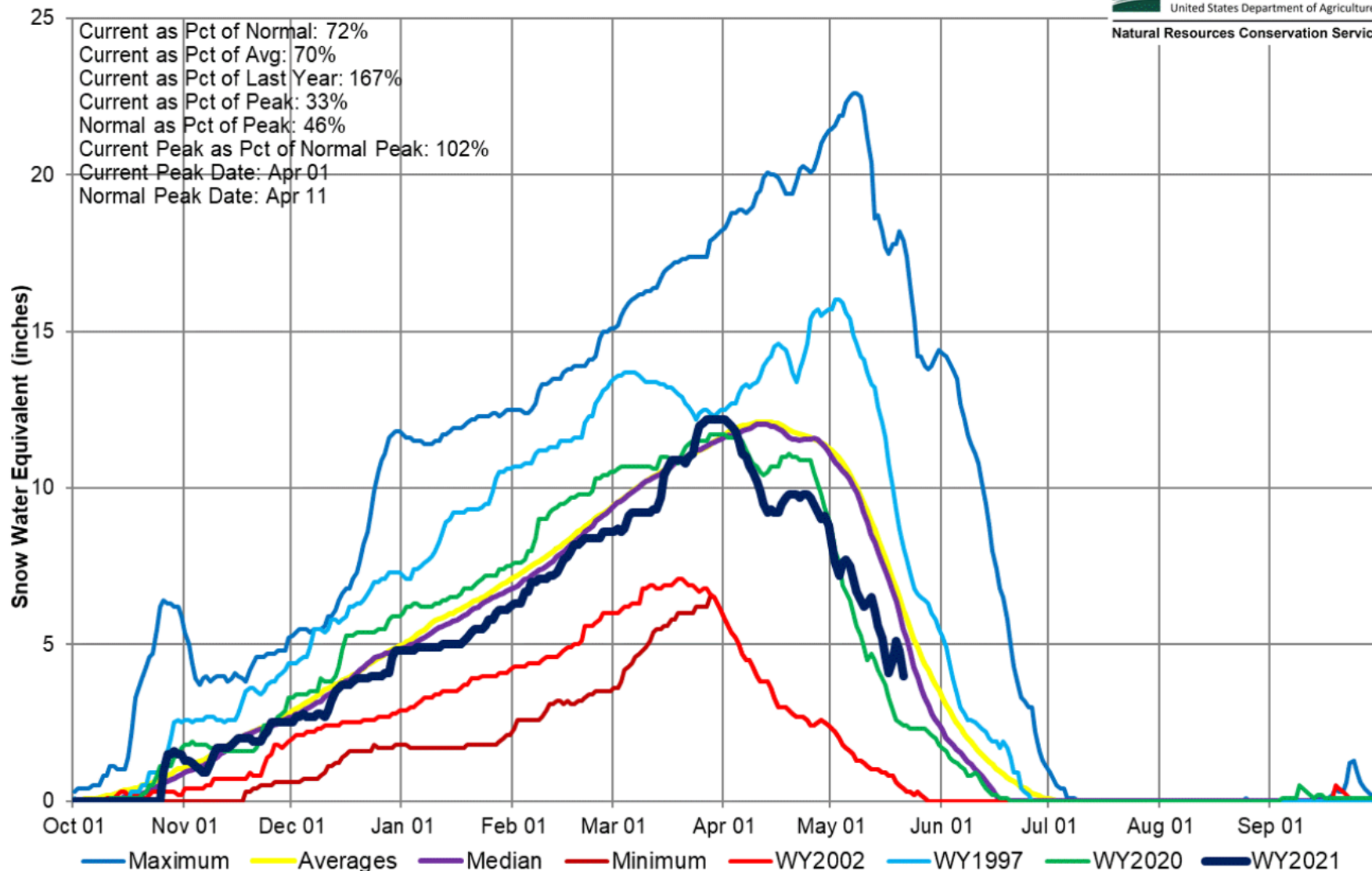
Arkansas River Basin





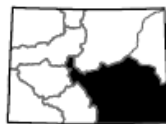
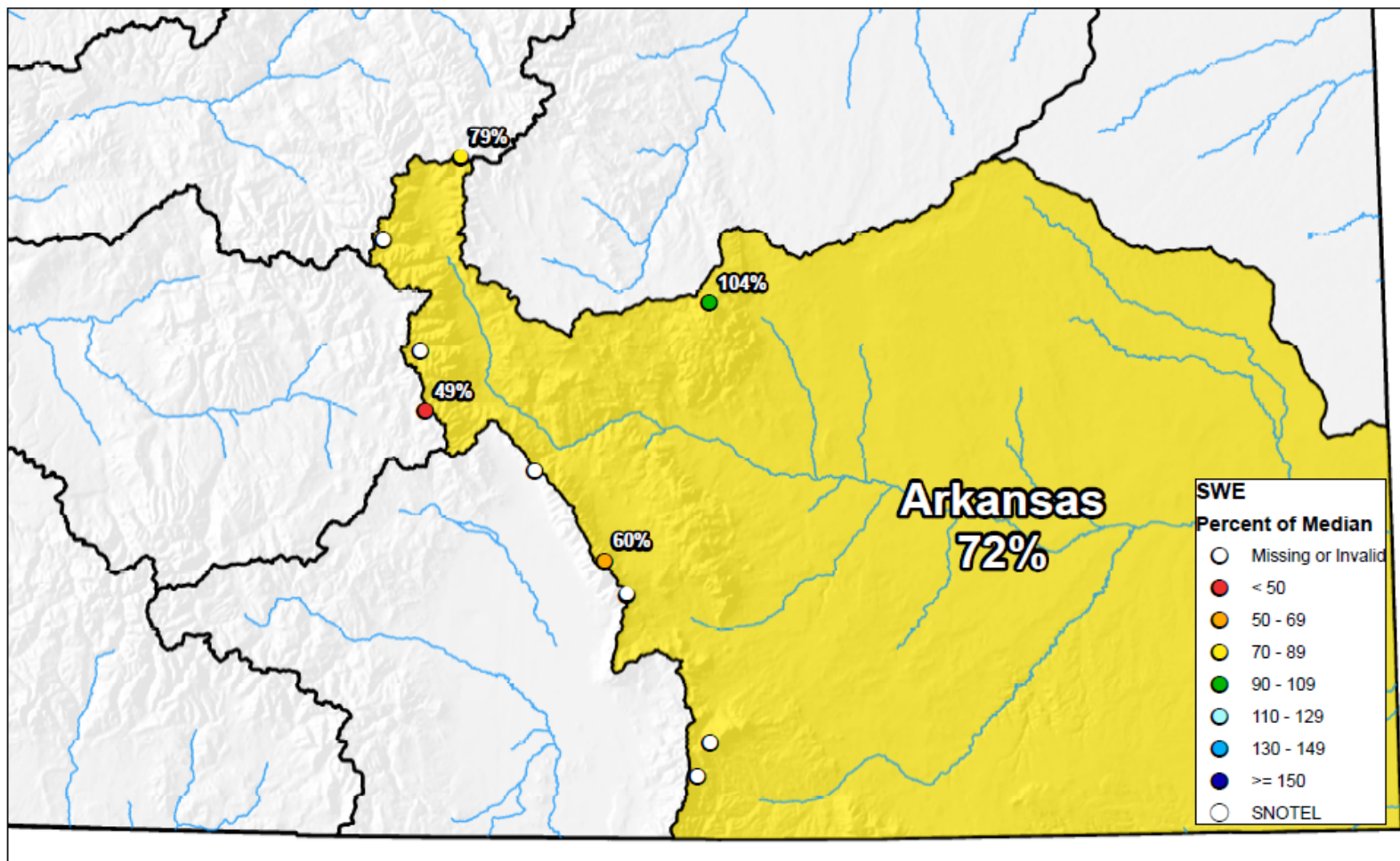
Arkansas River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of May 21, 2021



Arkansas River Basin Snow Water Equivalent (SWE) Summary

Current as of May 21, 2021



0 10 20 40 60 80 Miles

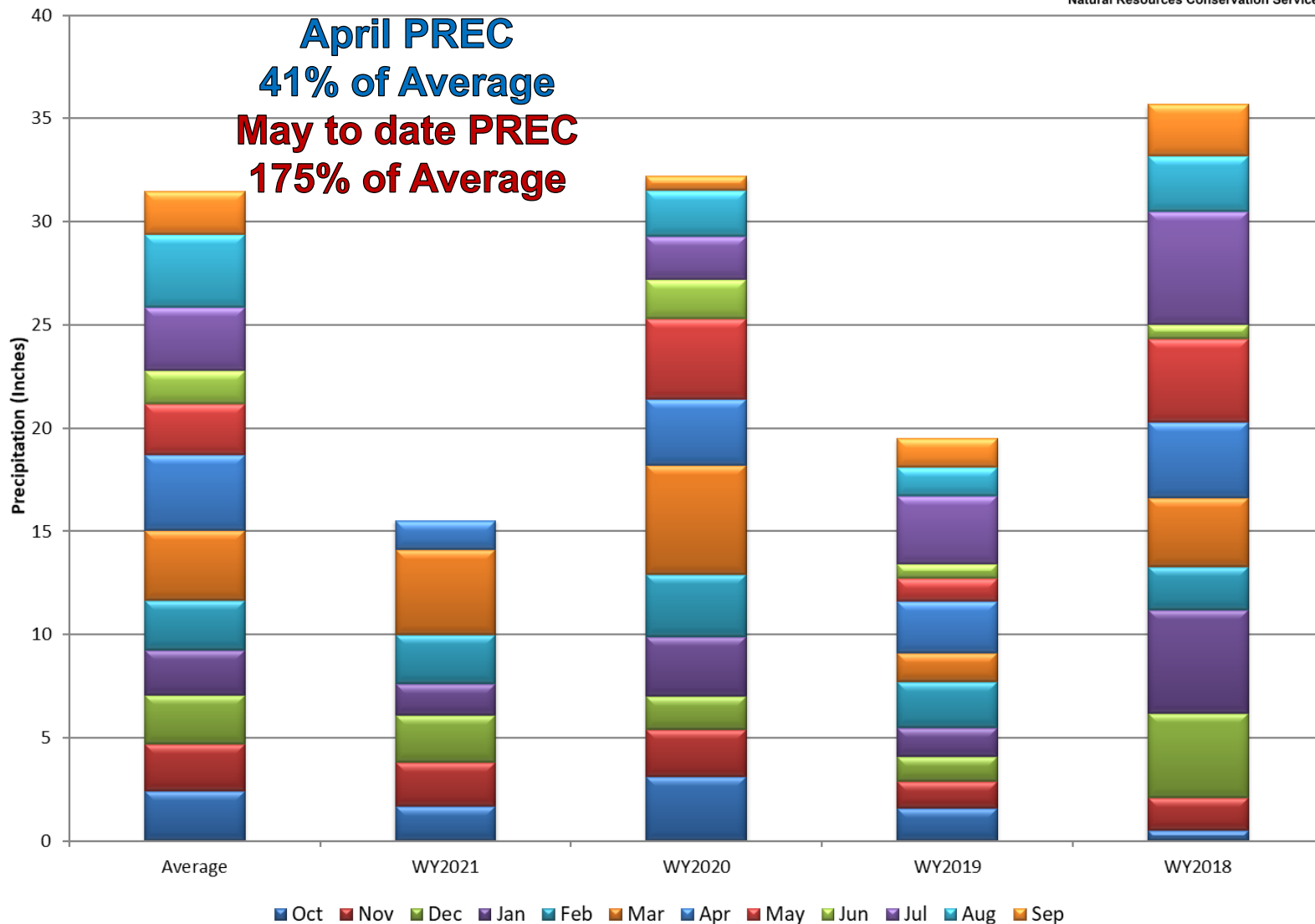
Arkansas River Basin Monthly Precipitation Summary

Based on Provisional SNOTEL data as of May 21, 2021



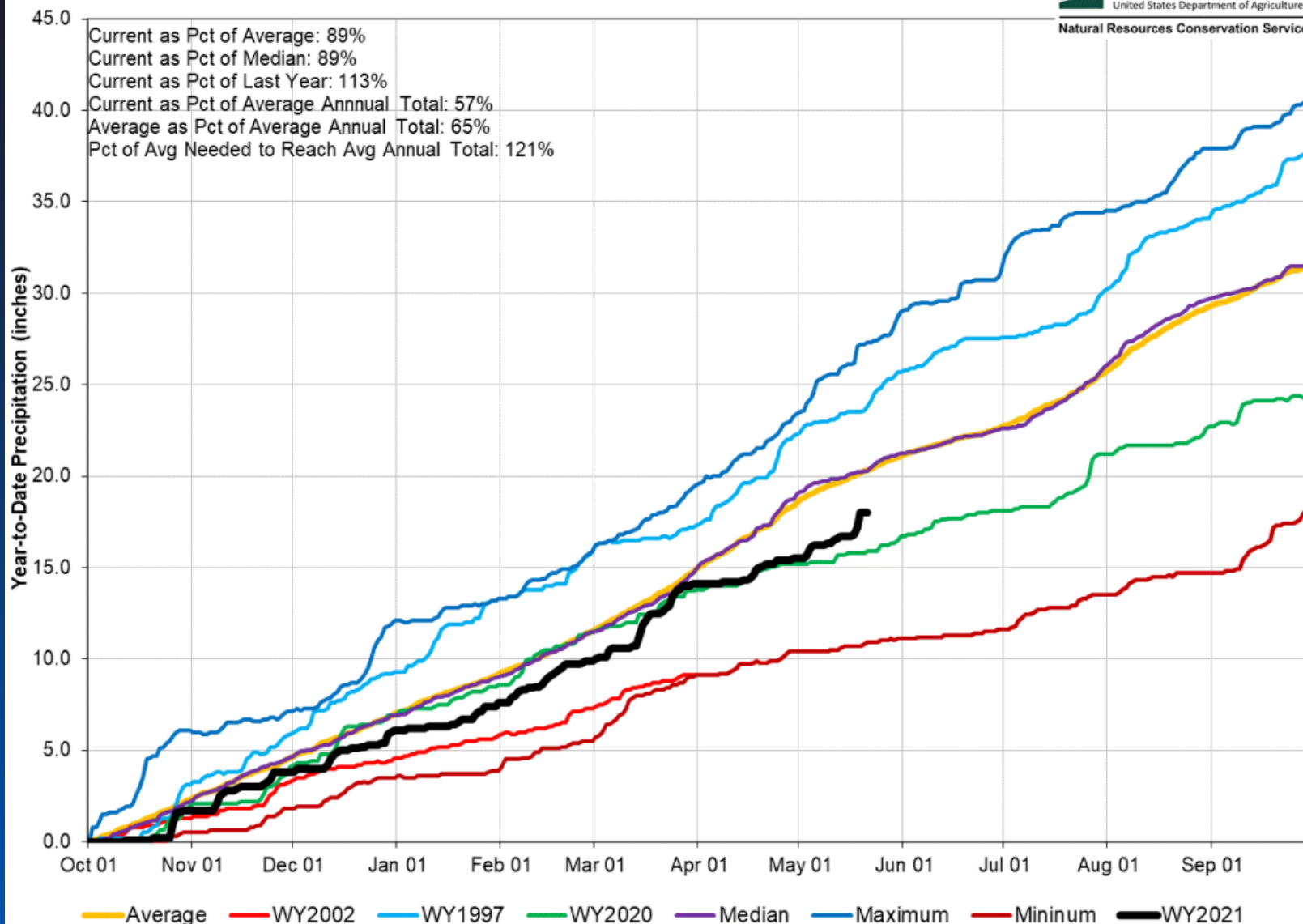
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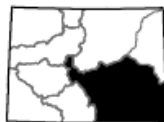
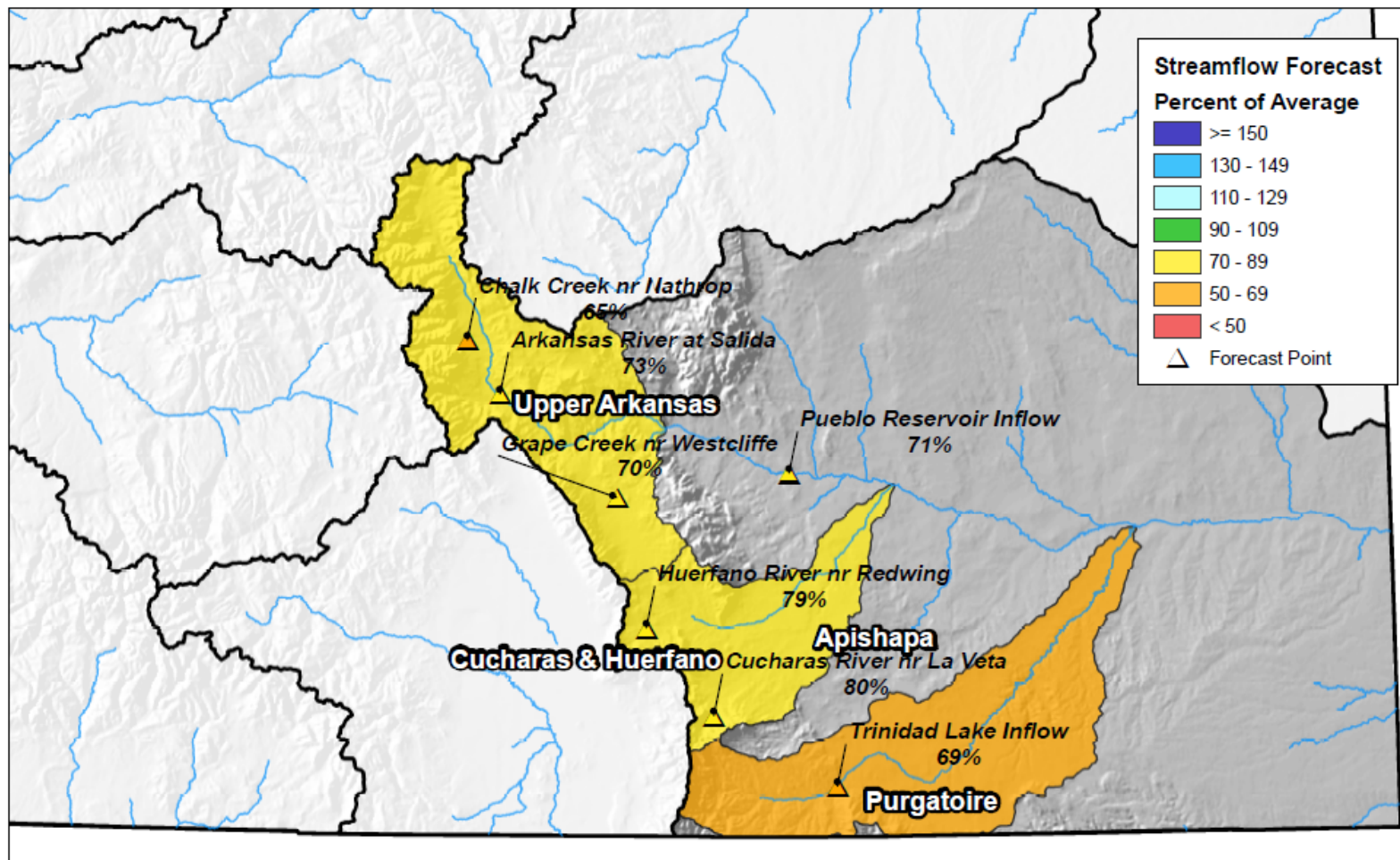
Arkansas River Basin High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of May 21, 2021

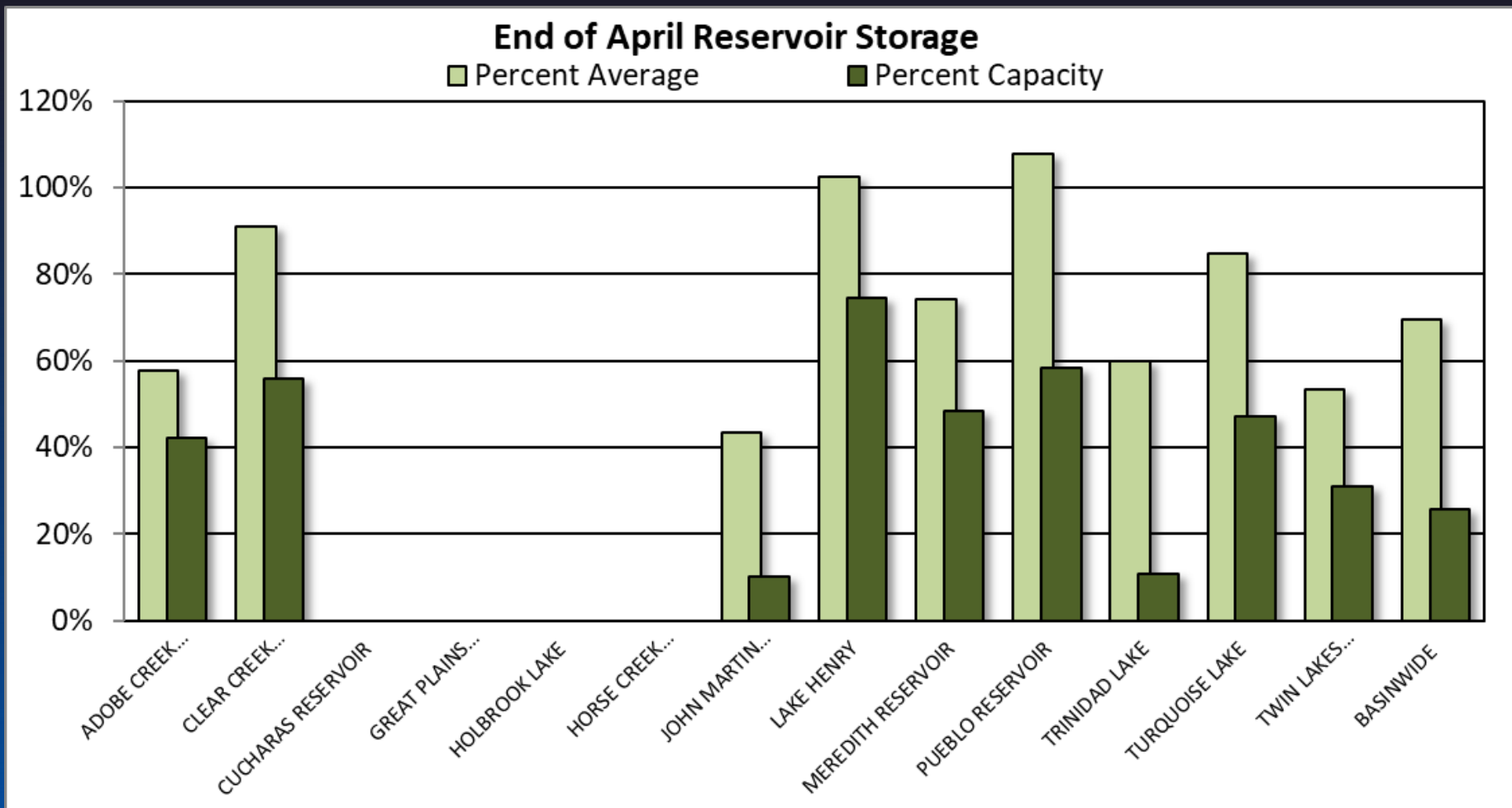


Arkansas River Basin Streamflow Forecast Summary

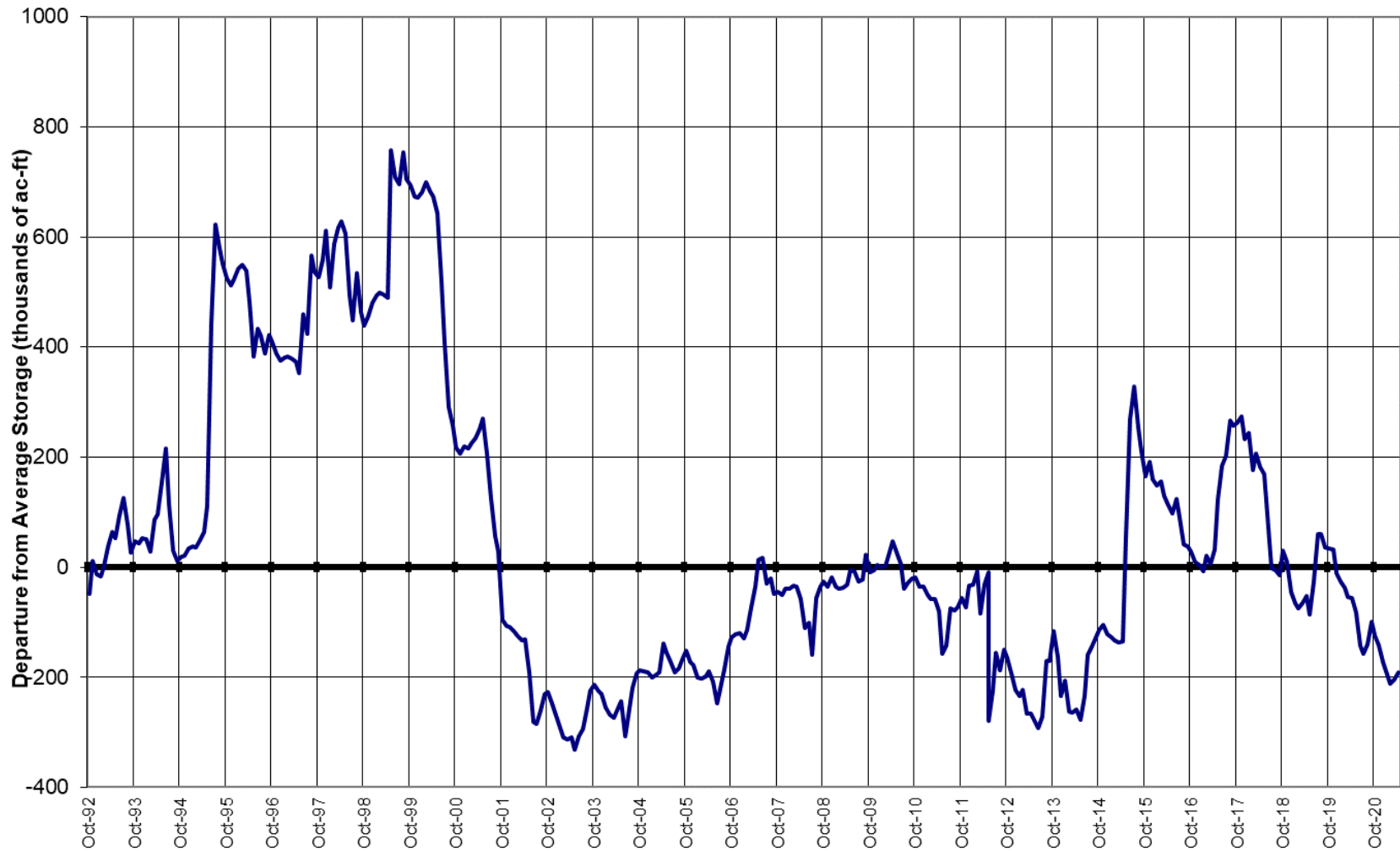
May 1, 2021



0 10 20 40 60 80 Miles

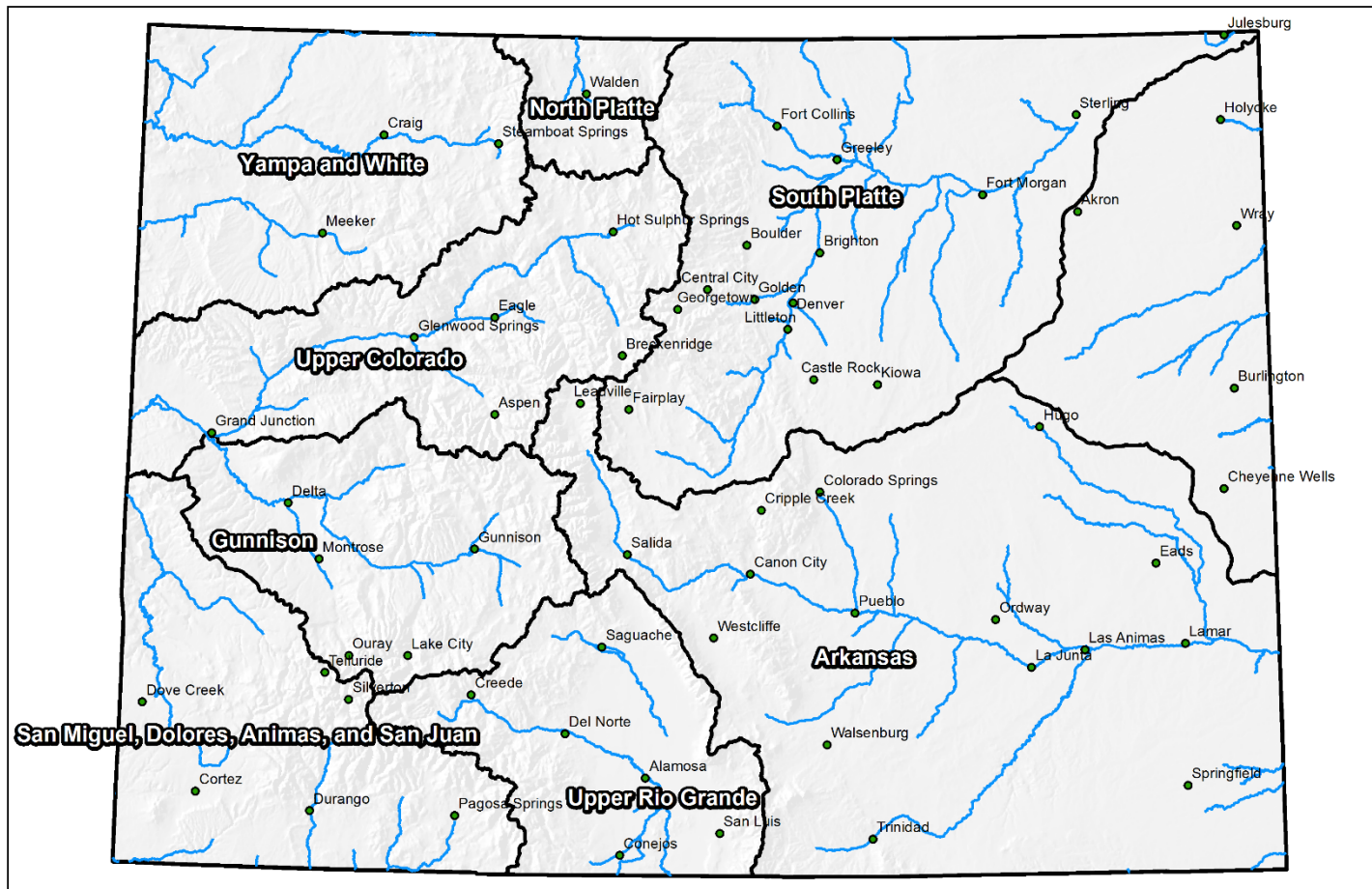


ARKANSAS RIVER BASIN Reservoir Storage Departure from Average



Colorado Statewide Summary

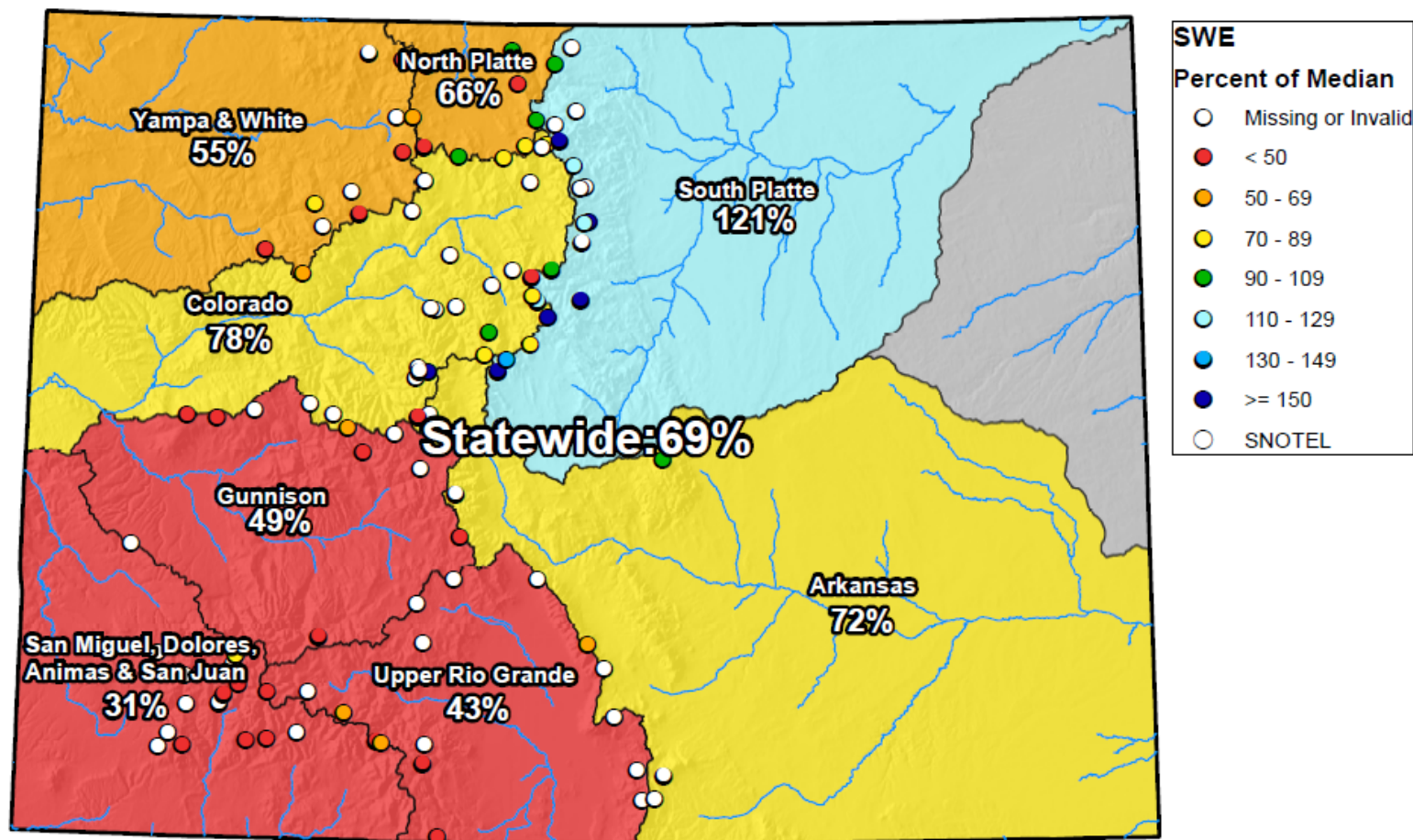
Colorado Major Basins



0 25 50 100 150 200 Miles

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

Current as of May 21, 2021



0 25 50 100 150 200 Miles

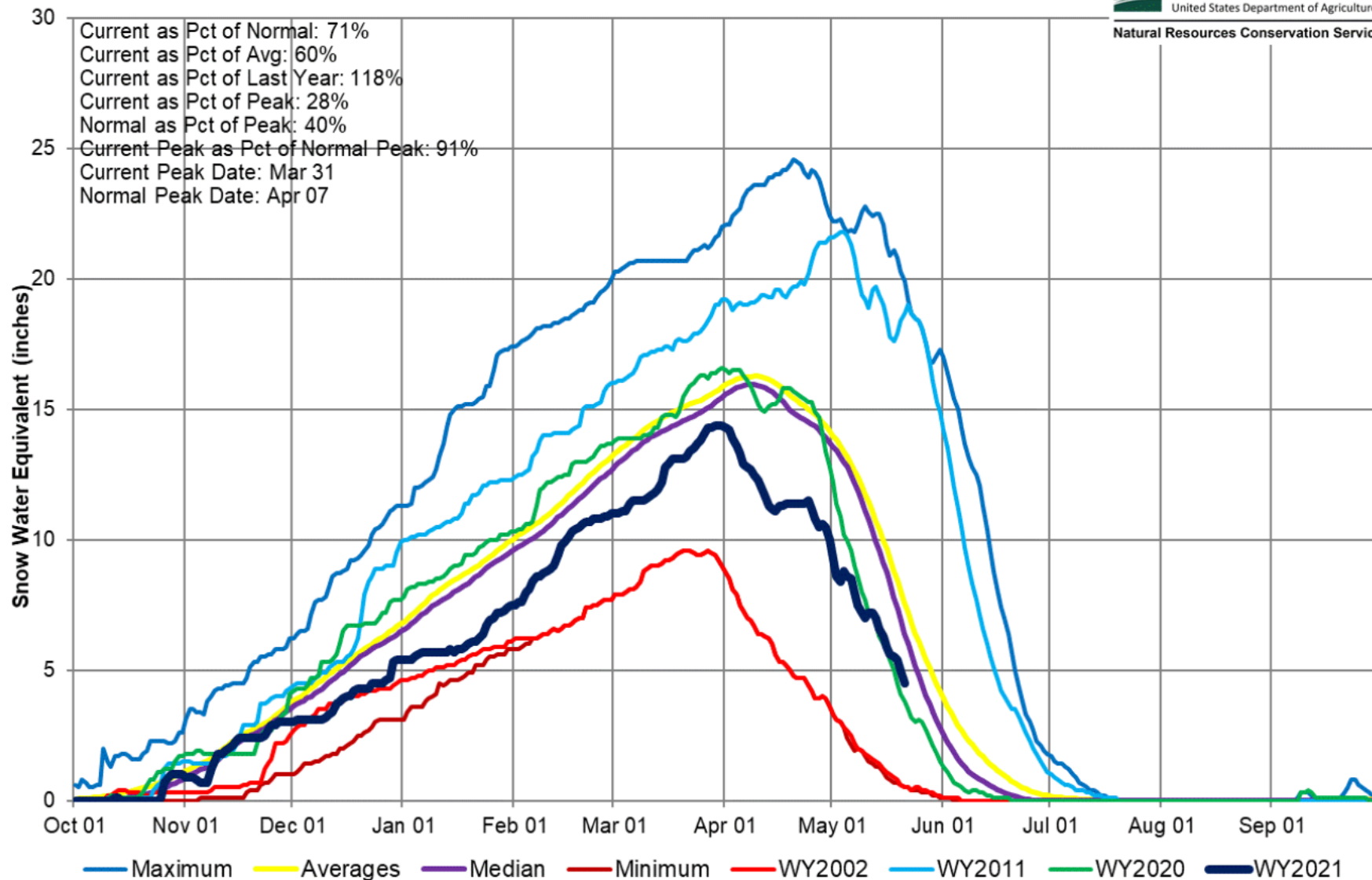
Colorado Statewide High/Low Snowpack Summary

Based on Provisional SNOTEL data as of May 21, 2021



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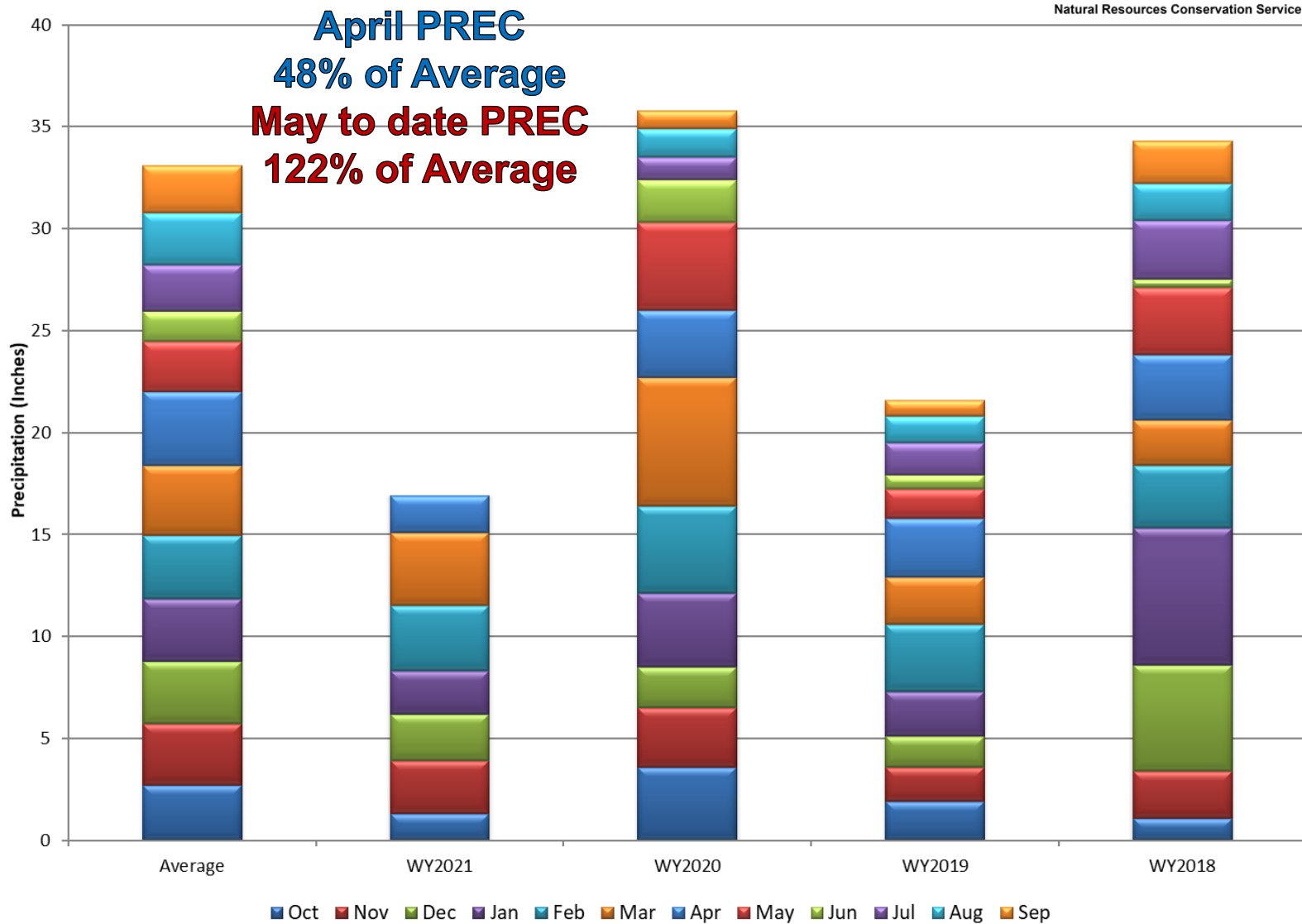
Colorado Statewide Monthly Precipitation Summary

Based on Provisional SNOTEL data as of May 21, 2021



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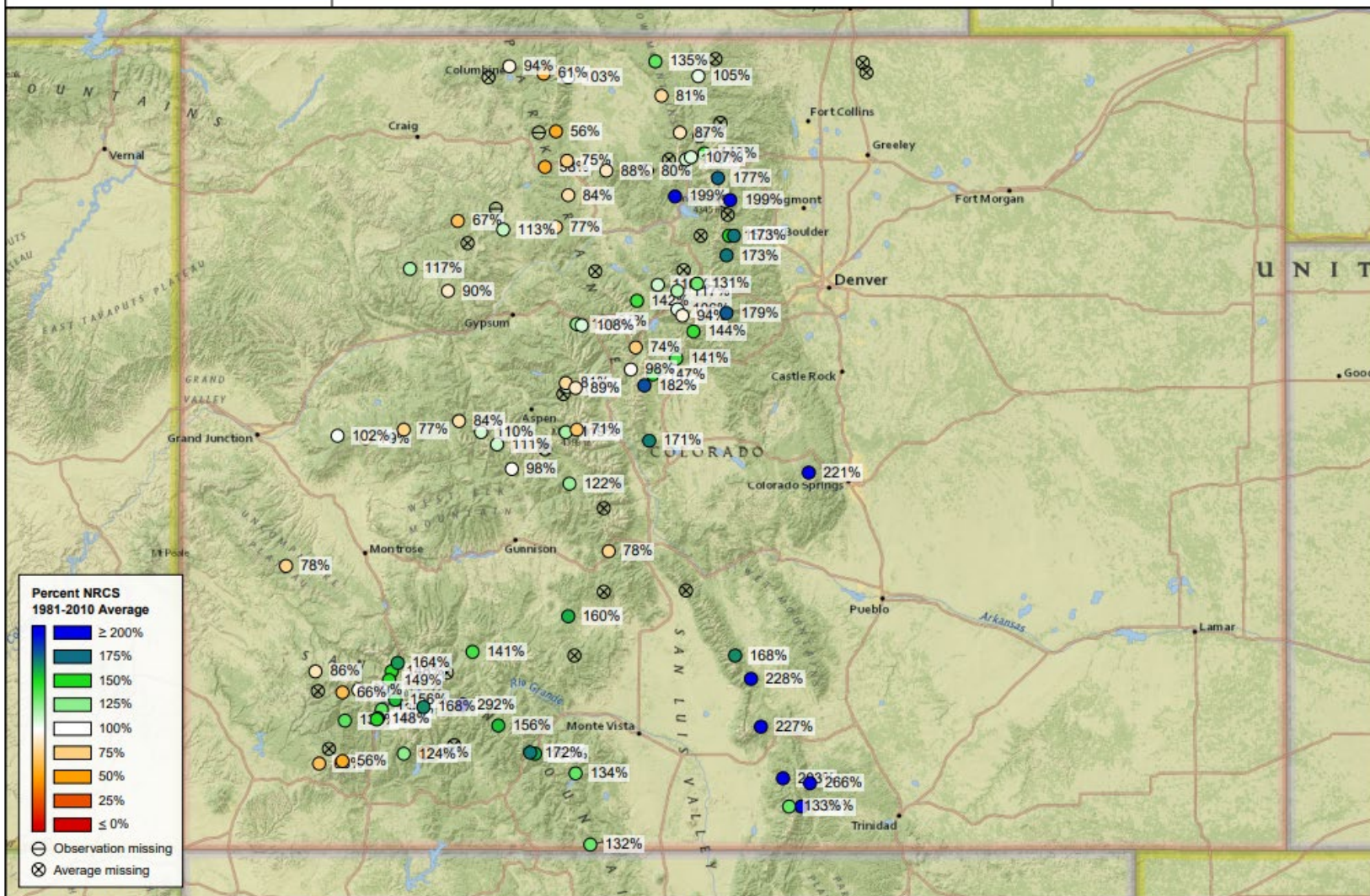
United States Department of Agriculture

Colorado Snow Surveys

Month to Date Precipitation

Percent NRCS 1981-2010 Average

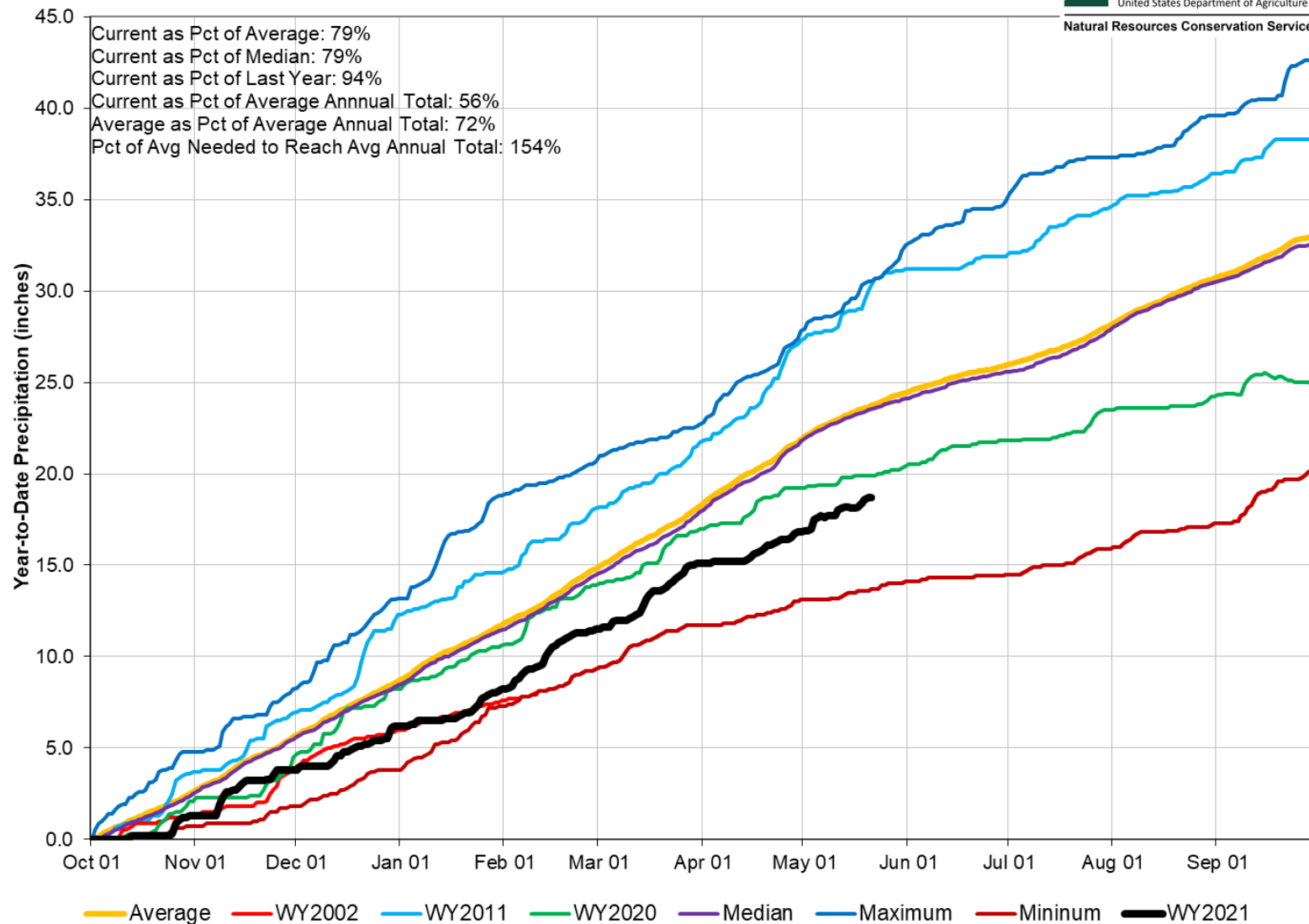
May 1, 2021 - May 24, 2021



Colorado Statewide High/Low Year-to-Date Precipitation Summary

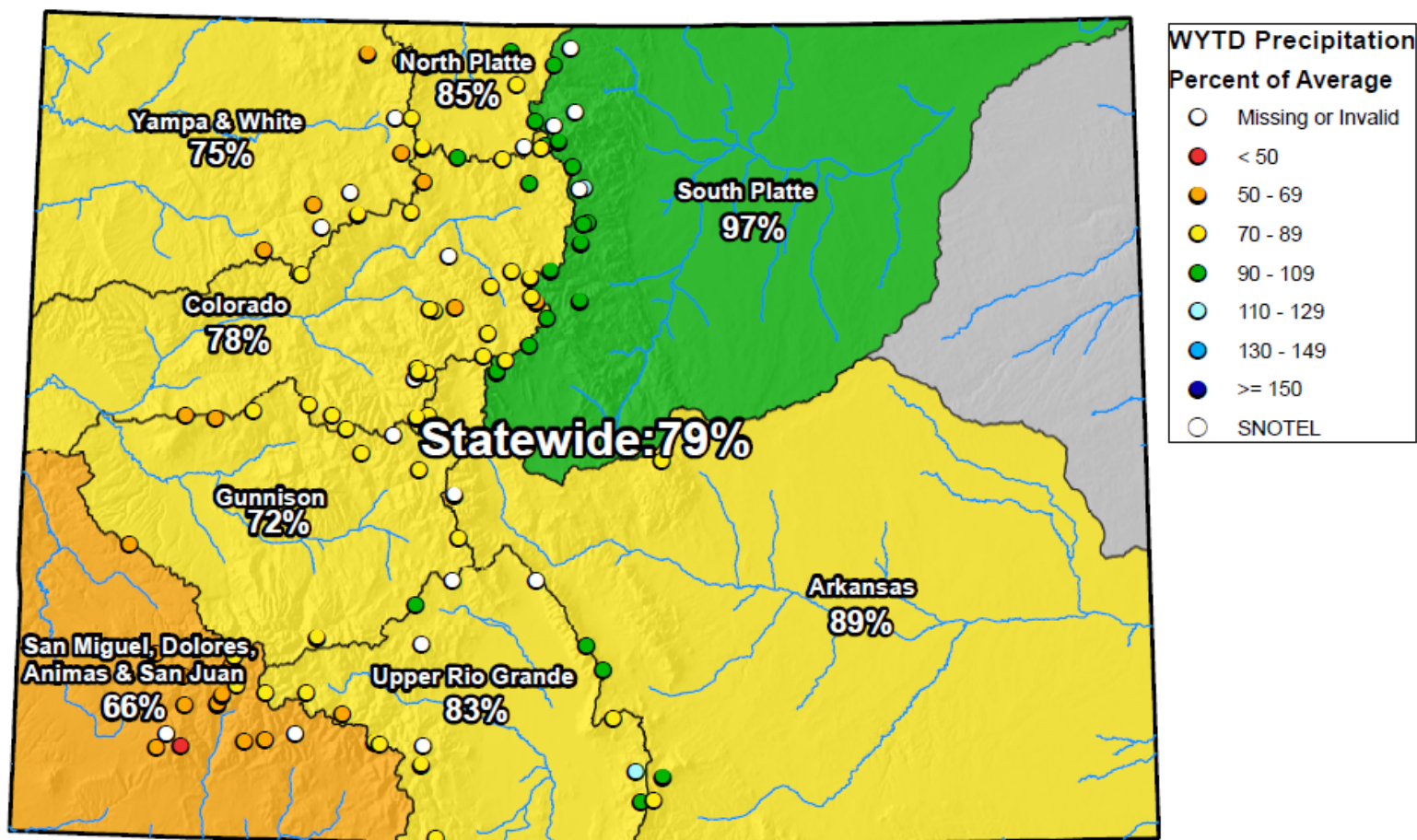
Based on Provisional SNOTEL data as of May 21, 2021

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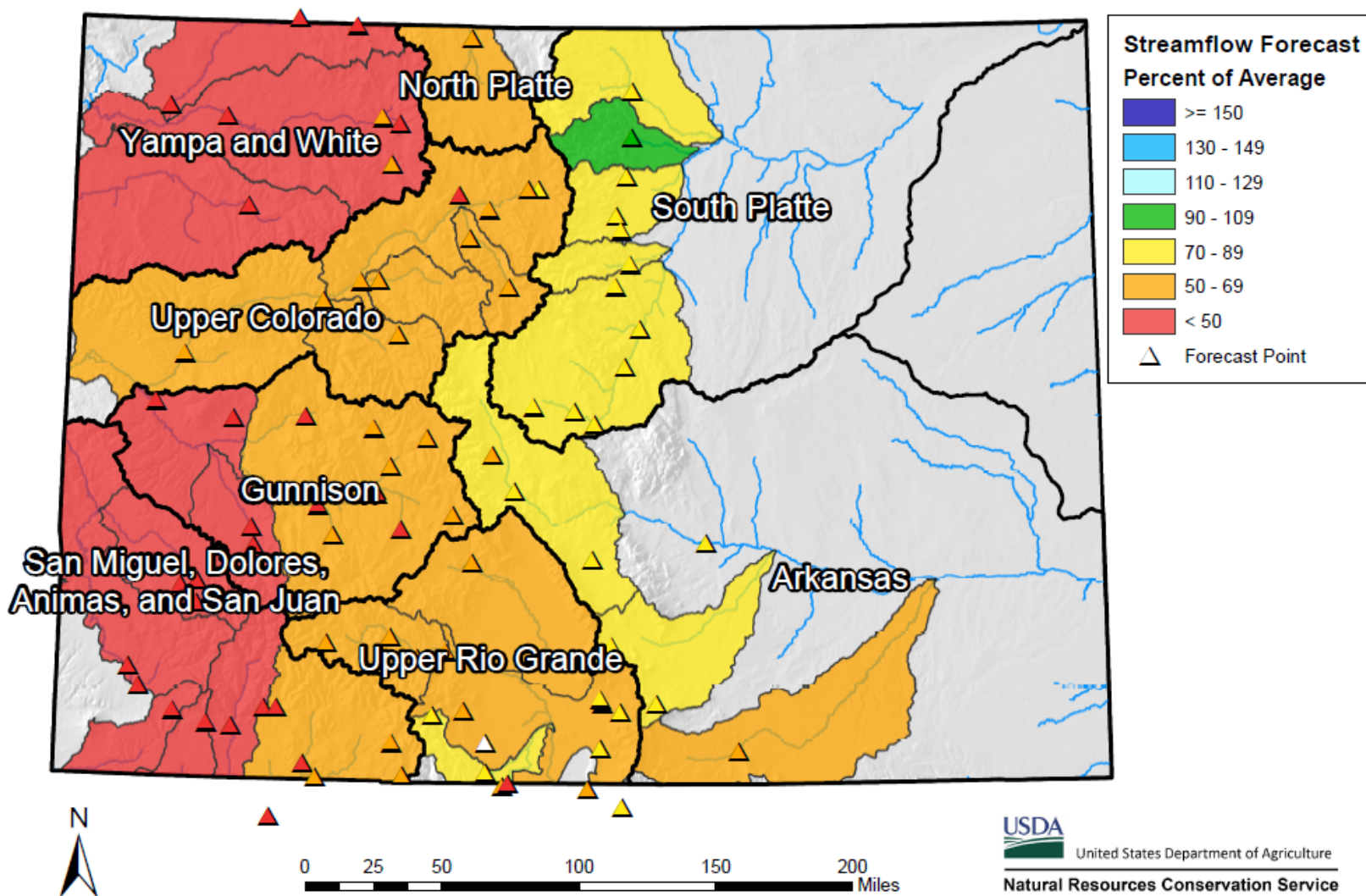
Colorado SNOTEL Water Year to Date Precipitation

Current as of May 21, 2021



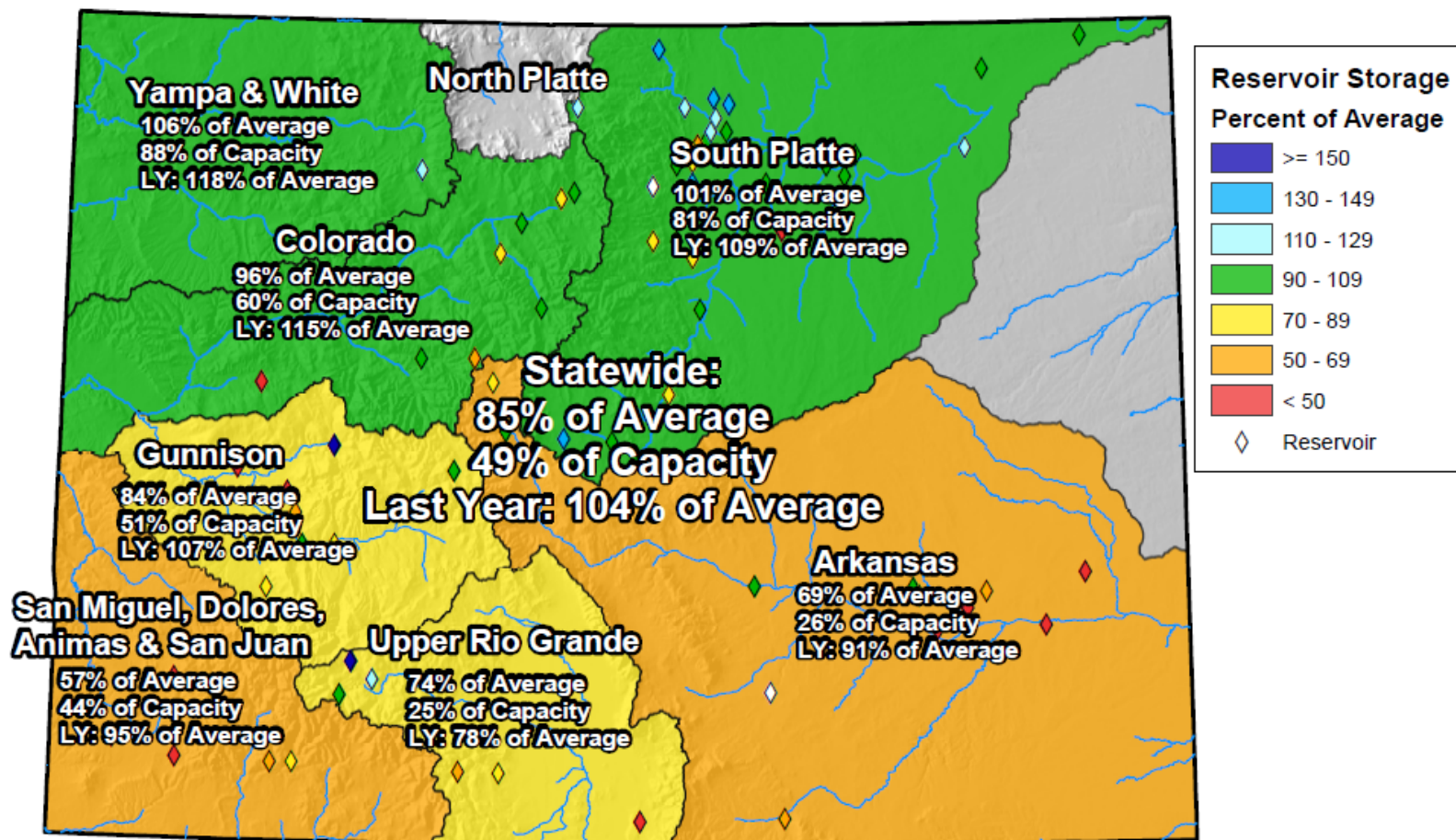
0 25 50 100 150 200 Miles

Colorado Streamflow Forecasts Summary May 1, 2021



Colorado Monthly Reservoir Storage Summary

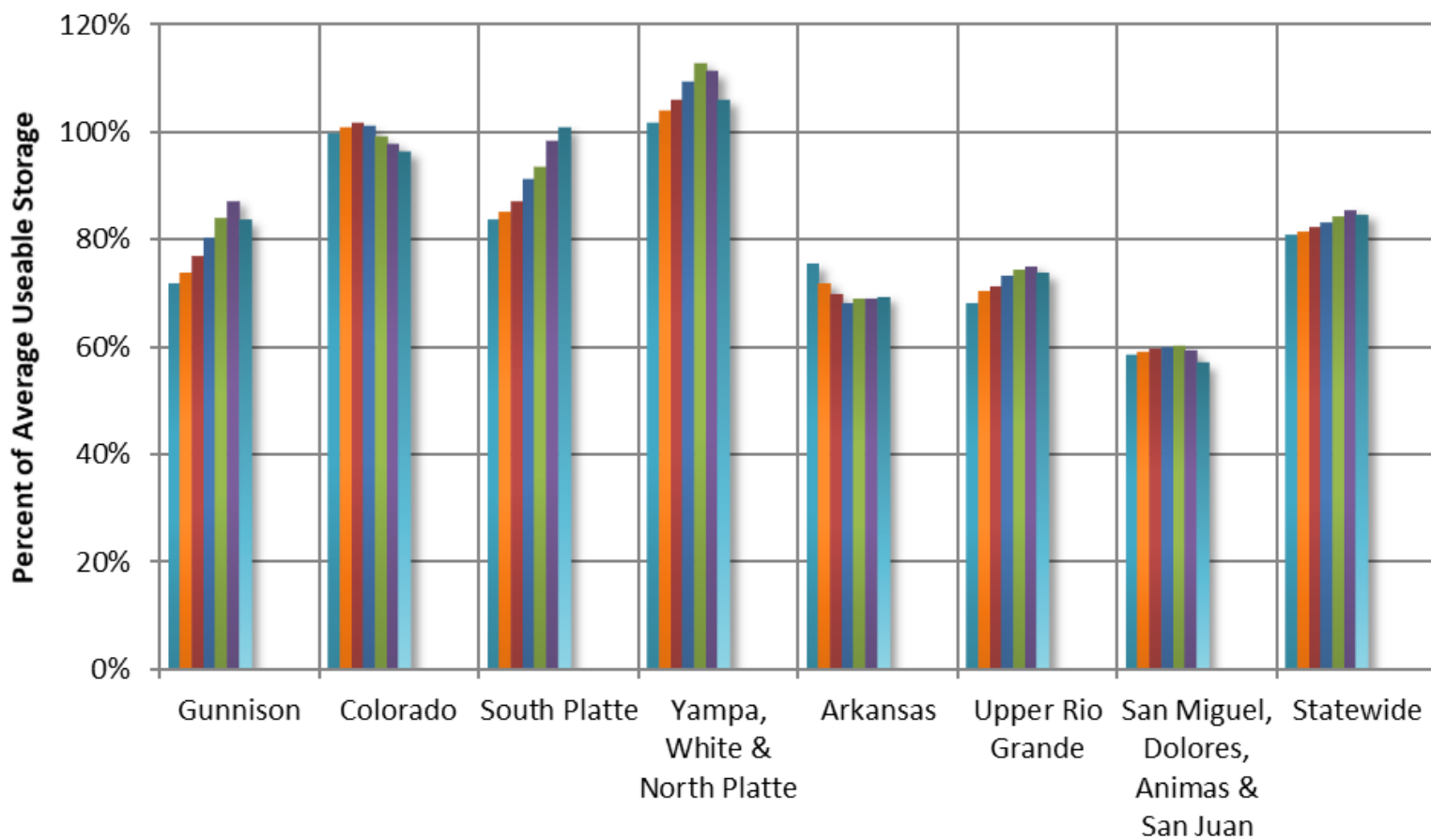
End of April 2021



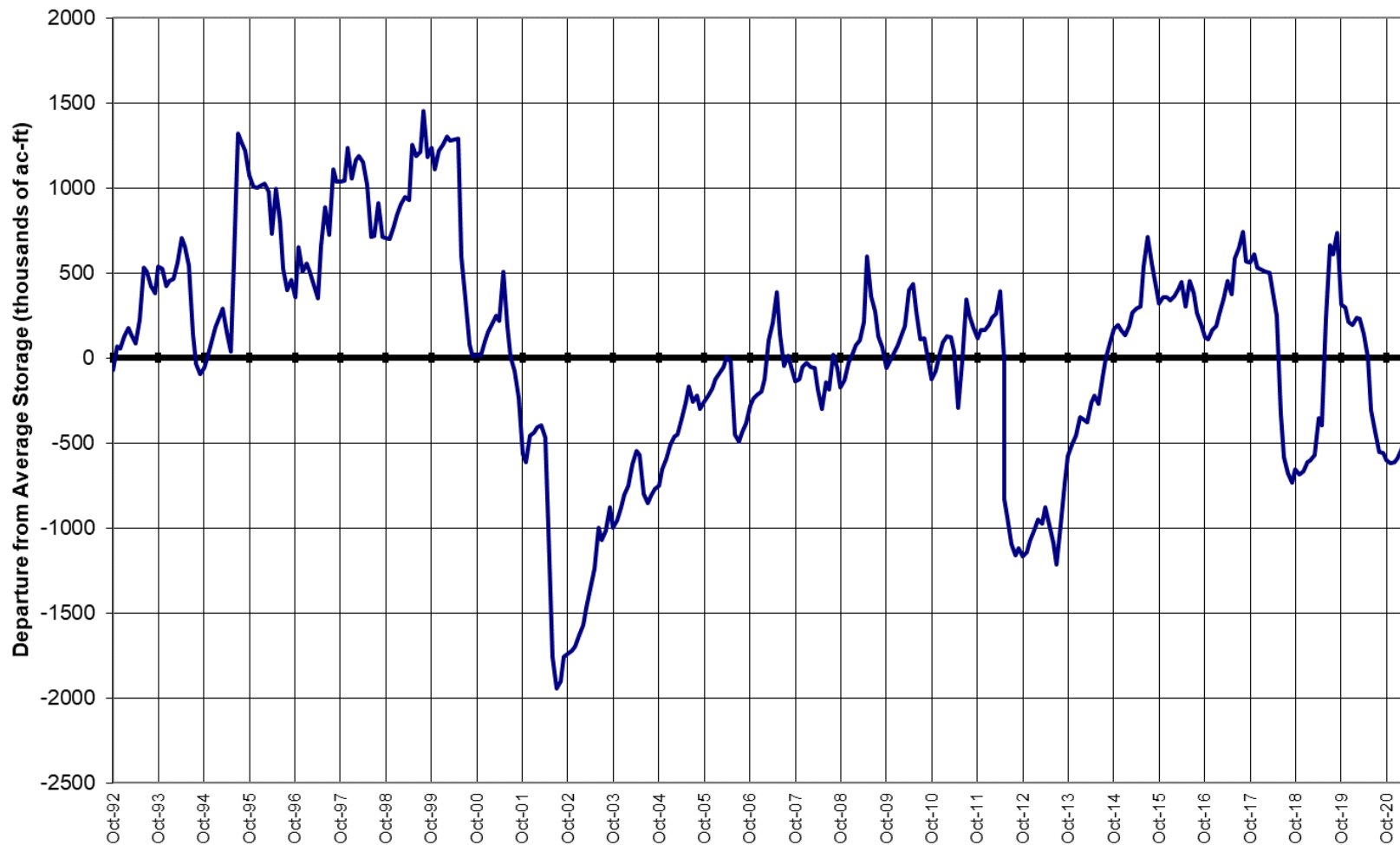
0 25 50 100 150 200 Miles

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



Summary

- Below average April precipitation led to decreases in streamflow forecasts across the state as of May 1st
- May-to-date precipitation has been above average across most major basins
 - The southern basins received the most moisture which are regions that have been the driest for the last two years
- Statewide snowpack peak was 91 percent of normal but this varied widely basin to basin
- Most of the state has been observing earlier than normal snowmelt
- Statewide reservoir storage is 85 percent of average but with the southern basins holding lower amounts of storage.
- Dry soils resulting from summer and fall of 2020 are causing streamflow forecasts to be substantially lower than would be commonly expected with a similar snowpack



United States Department of Agriculture

Colorado Snow Surveys

Water Availability Task Force Meeting

May 25th, 2021

NRCS Snow Survey and Water Supply Forecasting Program

Karl Wetlaufer

Hydrologist

Asst. Snow Survey Supervisor

720-544-2852

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



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