



Water Availability Task Force Meeting

November 13th, 2018

NRCS Snow Survey and Water Supply Forecasting Program

Karl Wetlaufer

Hydrologist

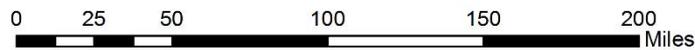
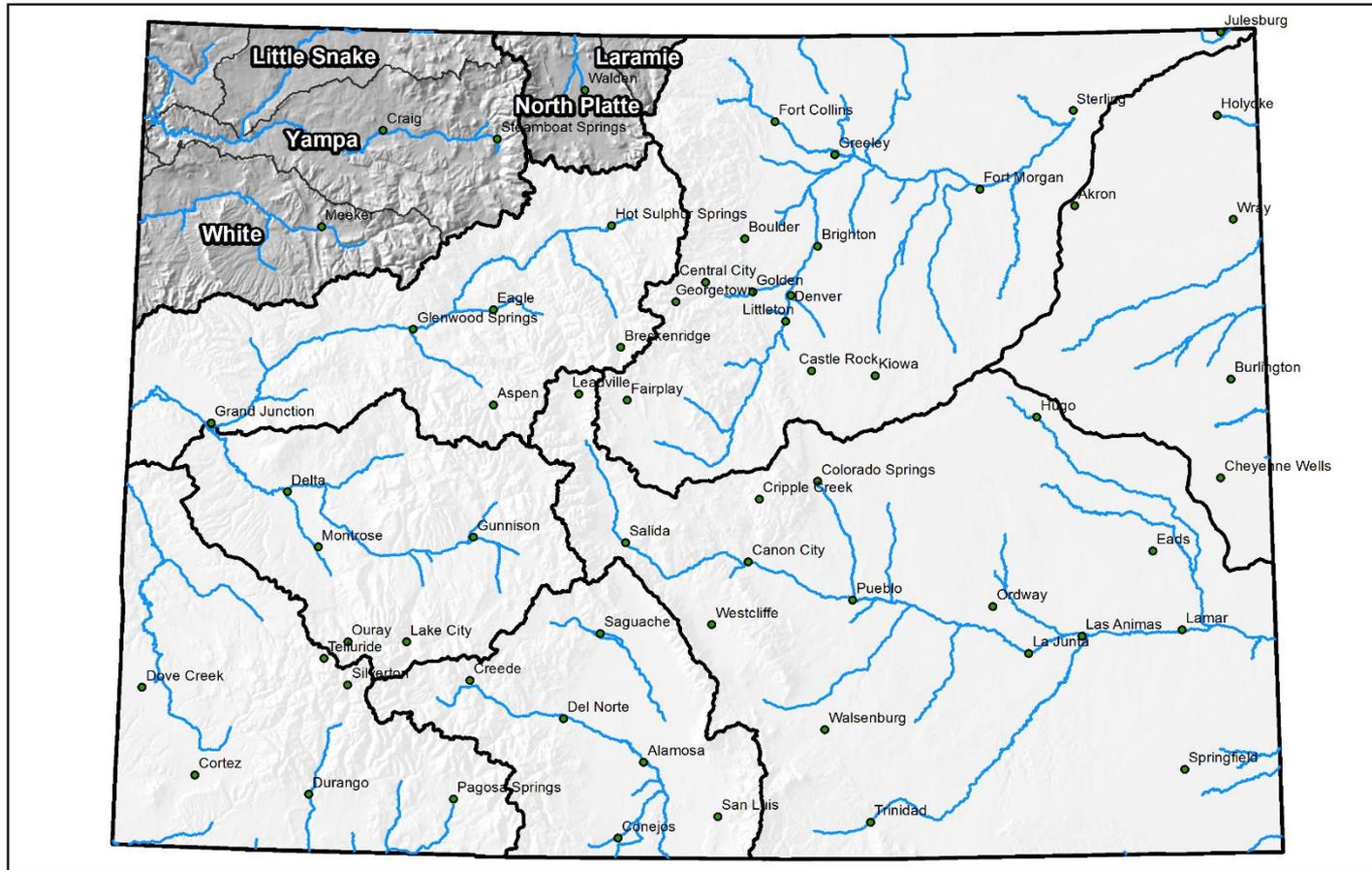
Asst. Snow Survey Supervisor

720-544-2852

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

Major Basin Summary

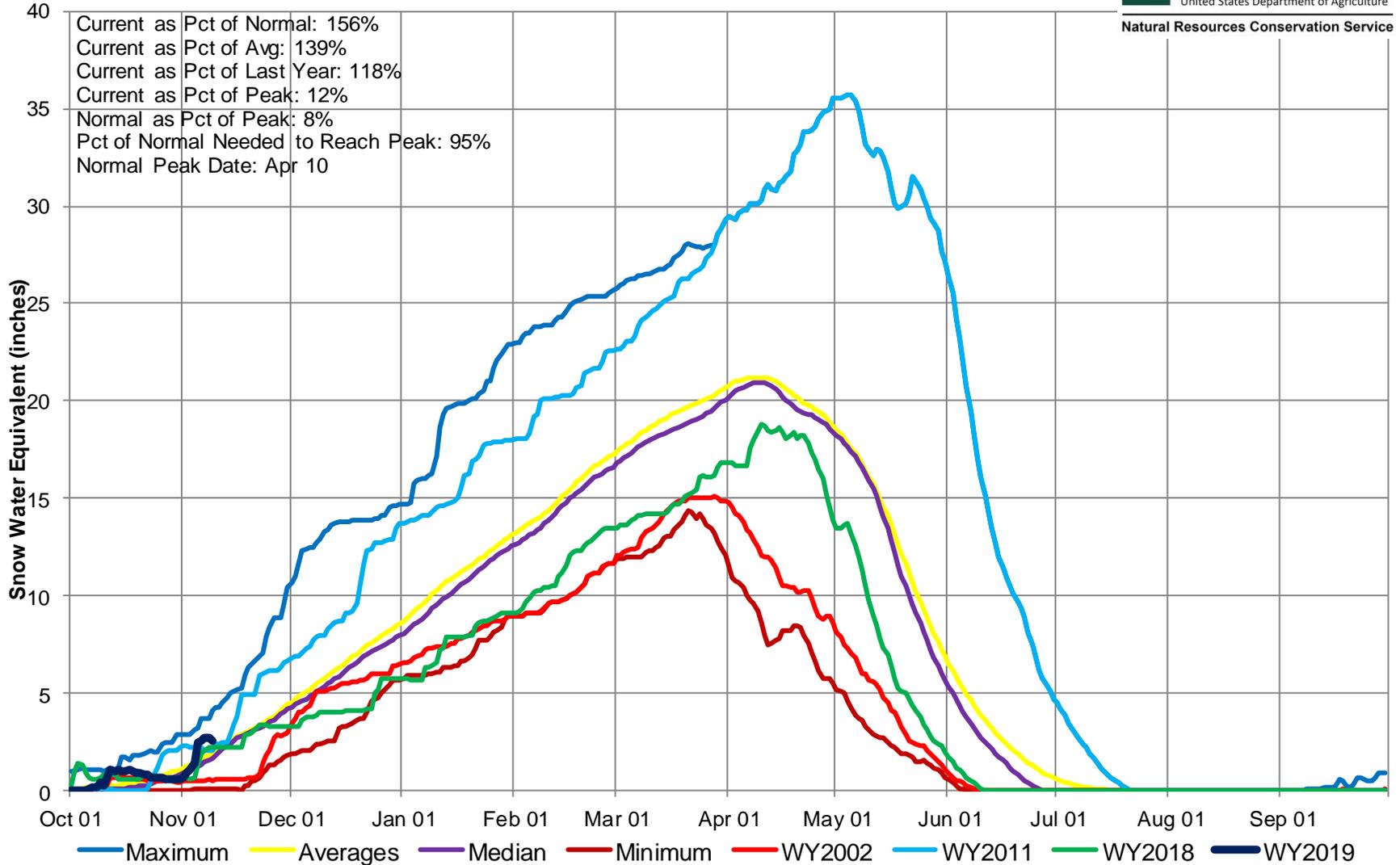
Yampa, White, and North Platte River Basins



Yampa and White River Basins High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Nov 09, 2018

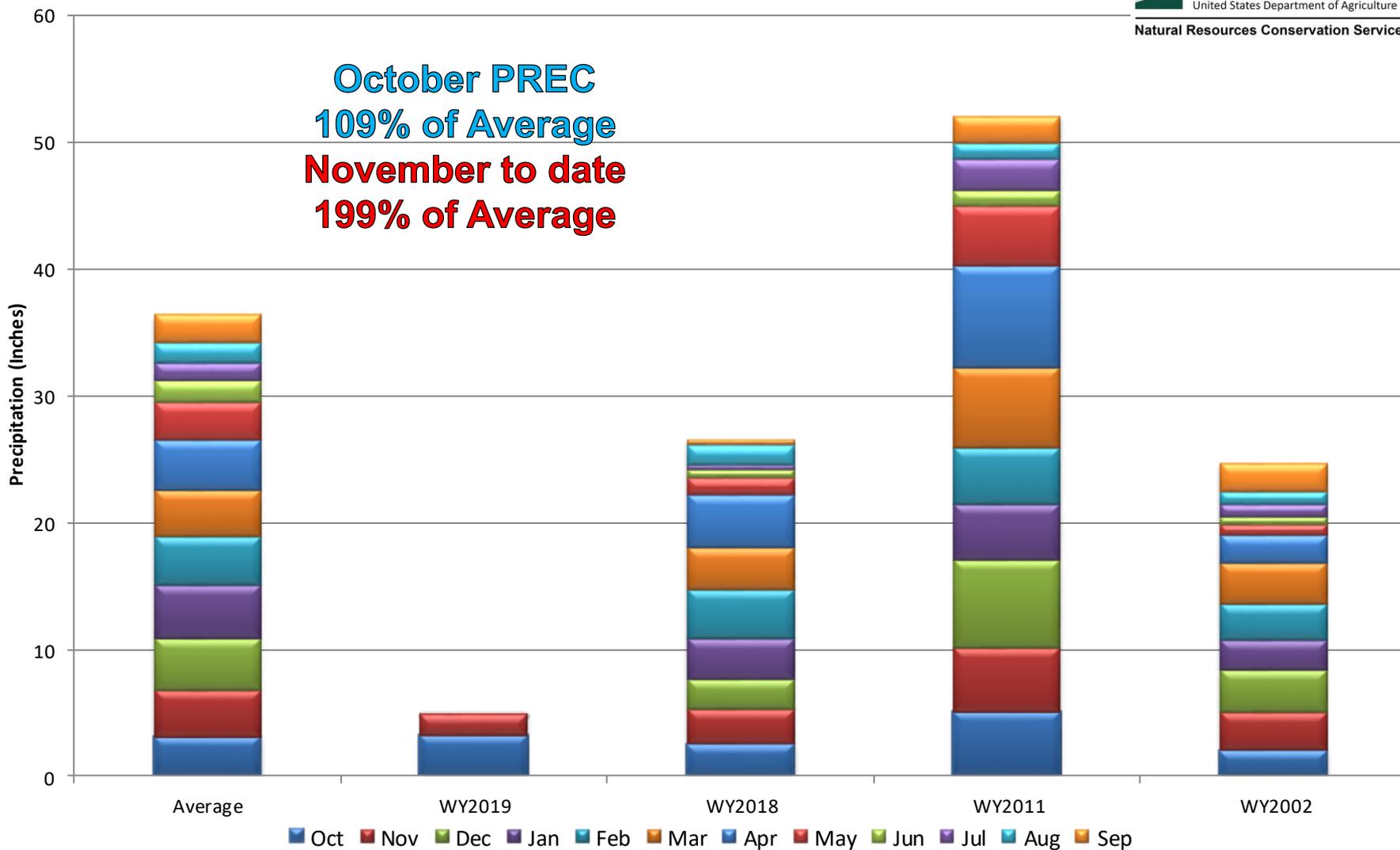
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Natural Resources Conservation Service



Yampa and White River Basins High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Nov 09, 2018

USDA
United States Department of Agriculture
Natural Resources Conservation Service



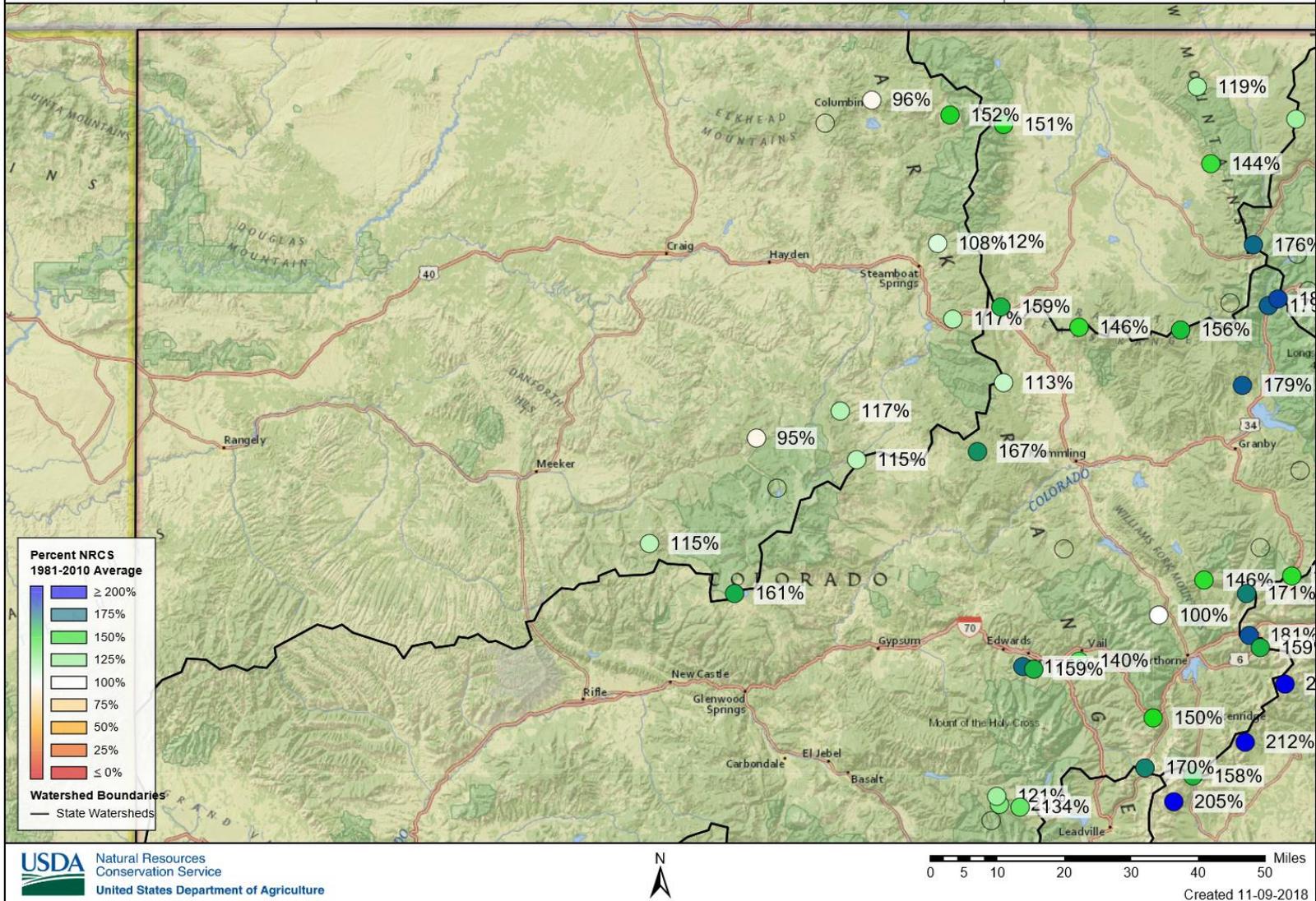


Colorado Snow Surveys

Water Year to Date Precipitation

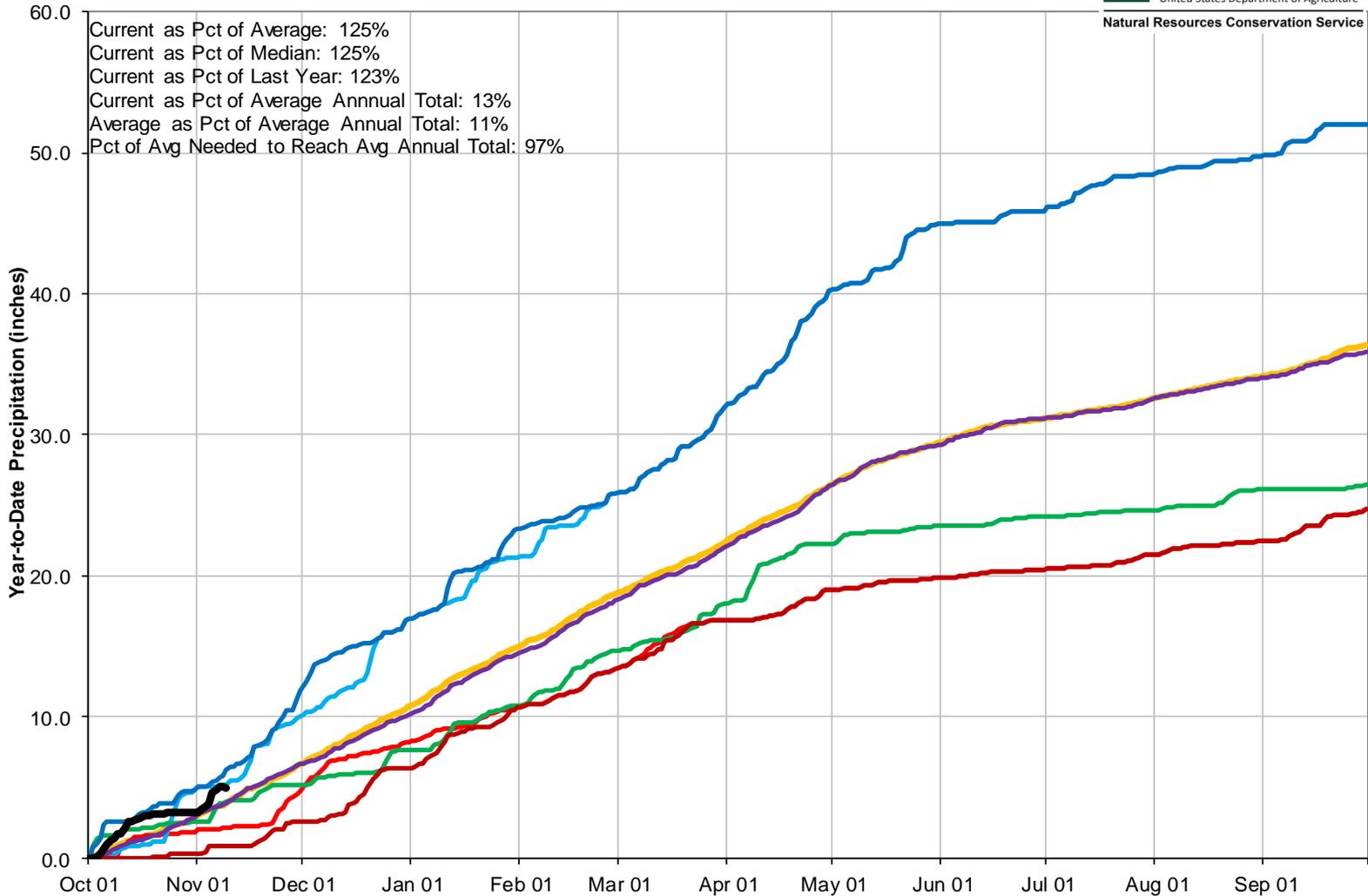
Percent NRCS 1981-2010 Average

October 1, 2018 - November 8, 2018



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

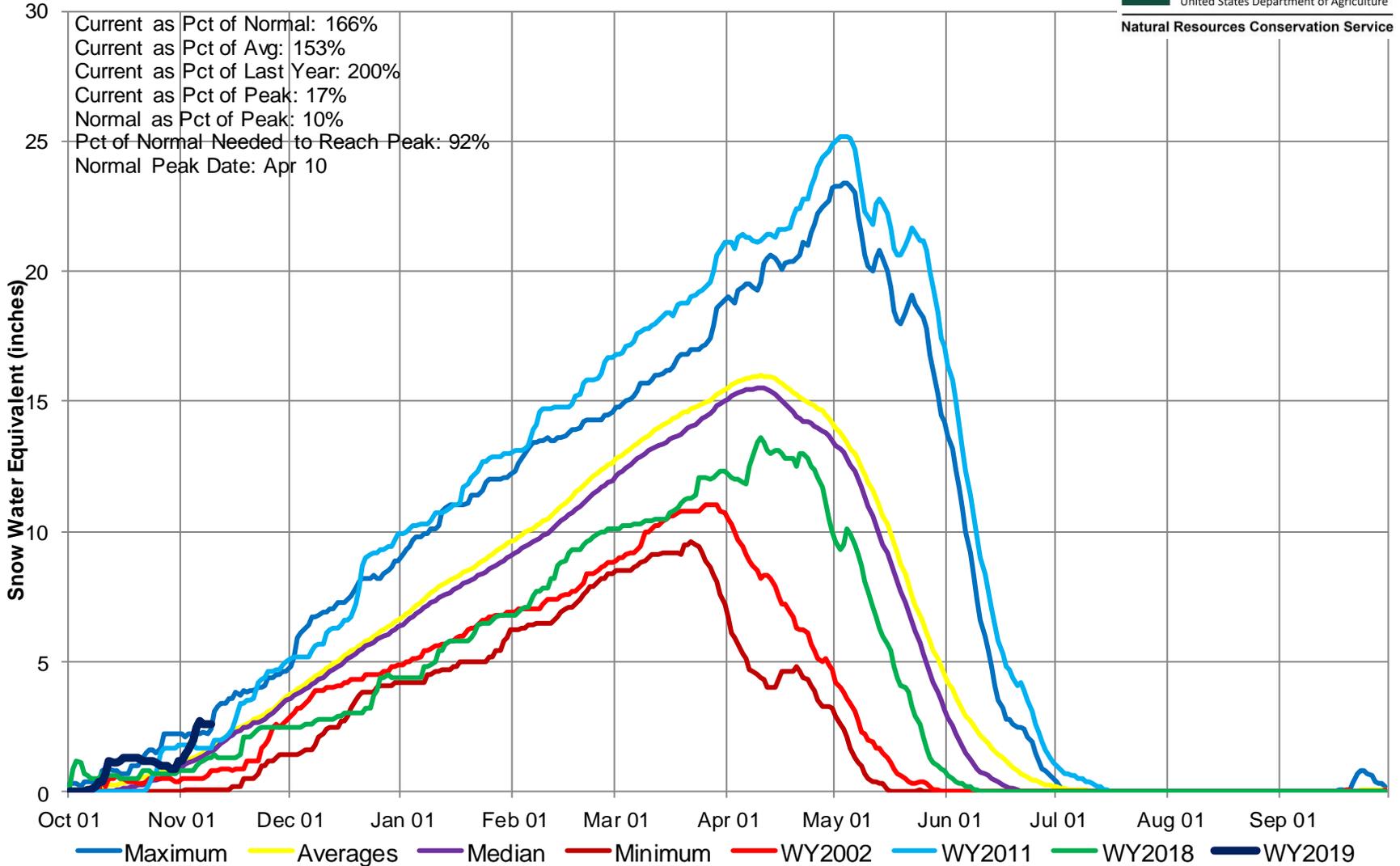
Based on Provisional SNOTEL data as of Nov 09, 2018



Upper Colorado River Basin High/Low Snowpack Summary

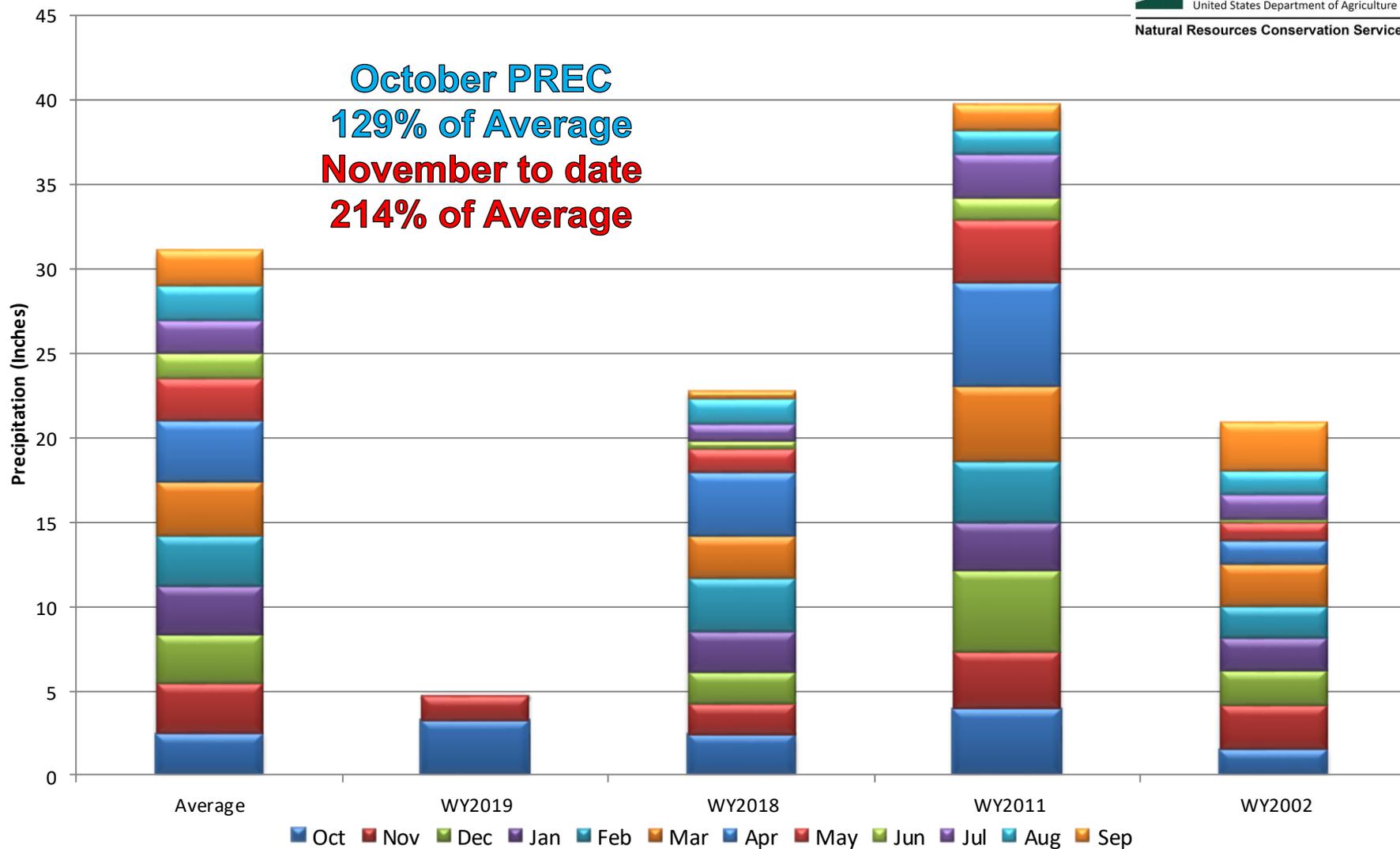
Based on Provisional SNOTEL data as of Nov 09, 2018

United States Department of Agriculture
 Natural Resources Conservation Service



Upper Colorado River Basin High/Low Monthly Precipitation Summary

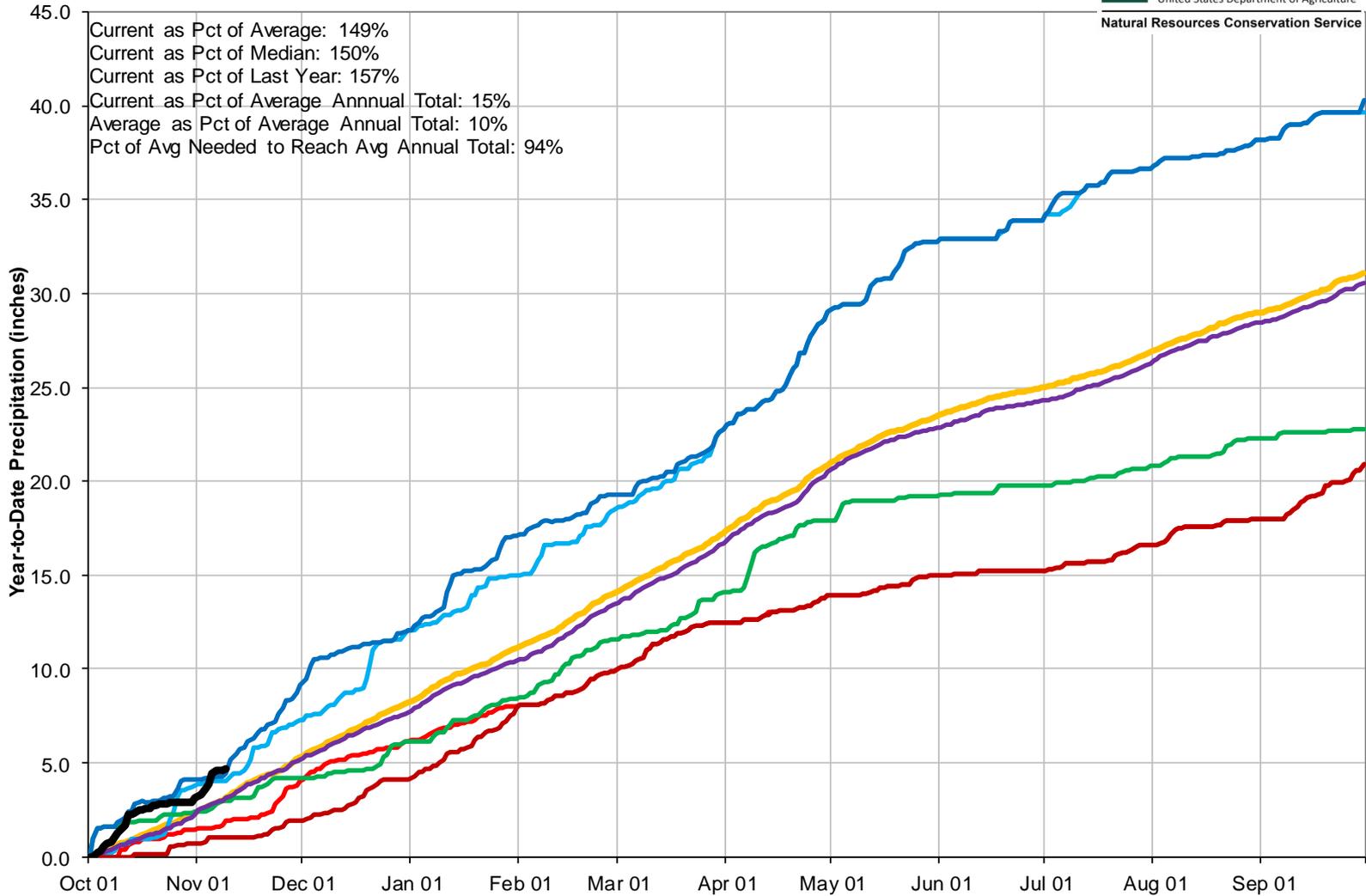
Based on Provisional SNOTEL data as of Nov 09, 2018





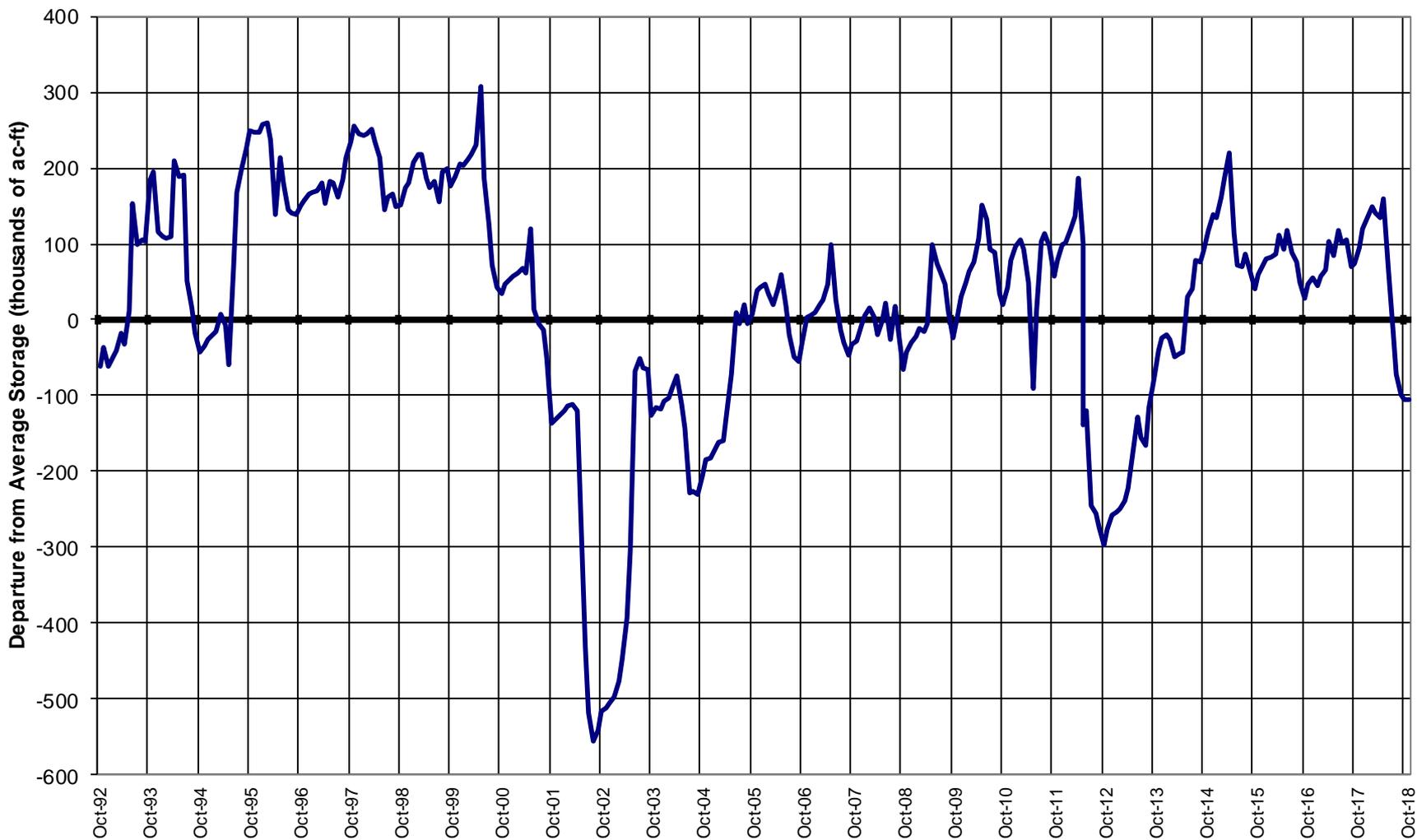
Upper Colorado River Basin High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of Nov 09, 2018



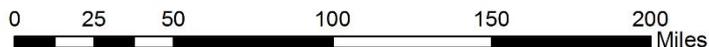
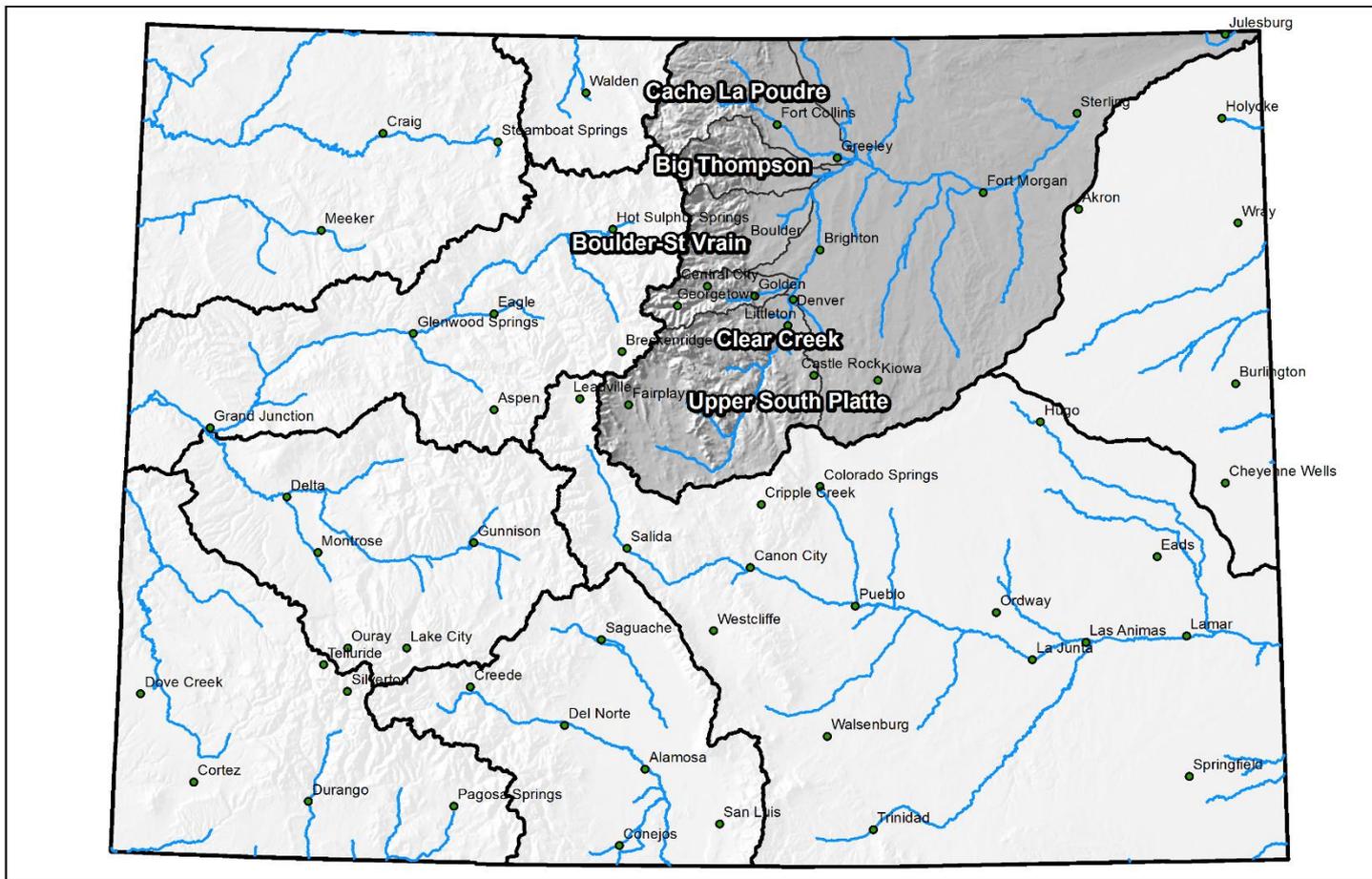


COLORADO RIVER BASIN Reservoir Storage Departure from Average



Major Basin Summary

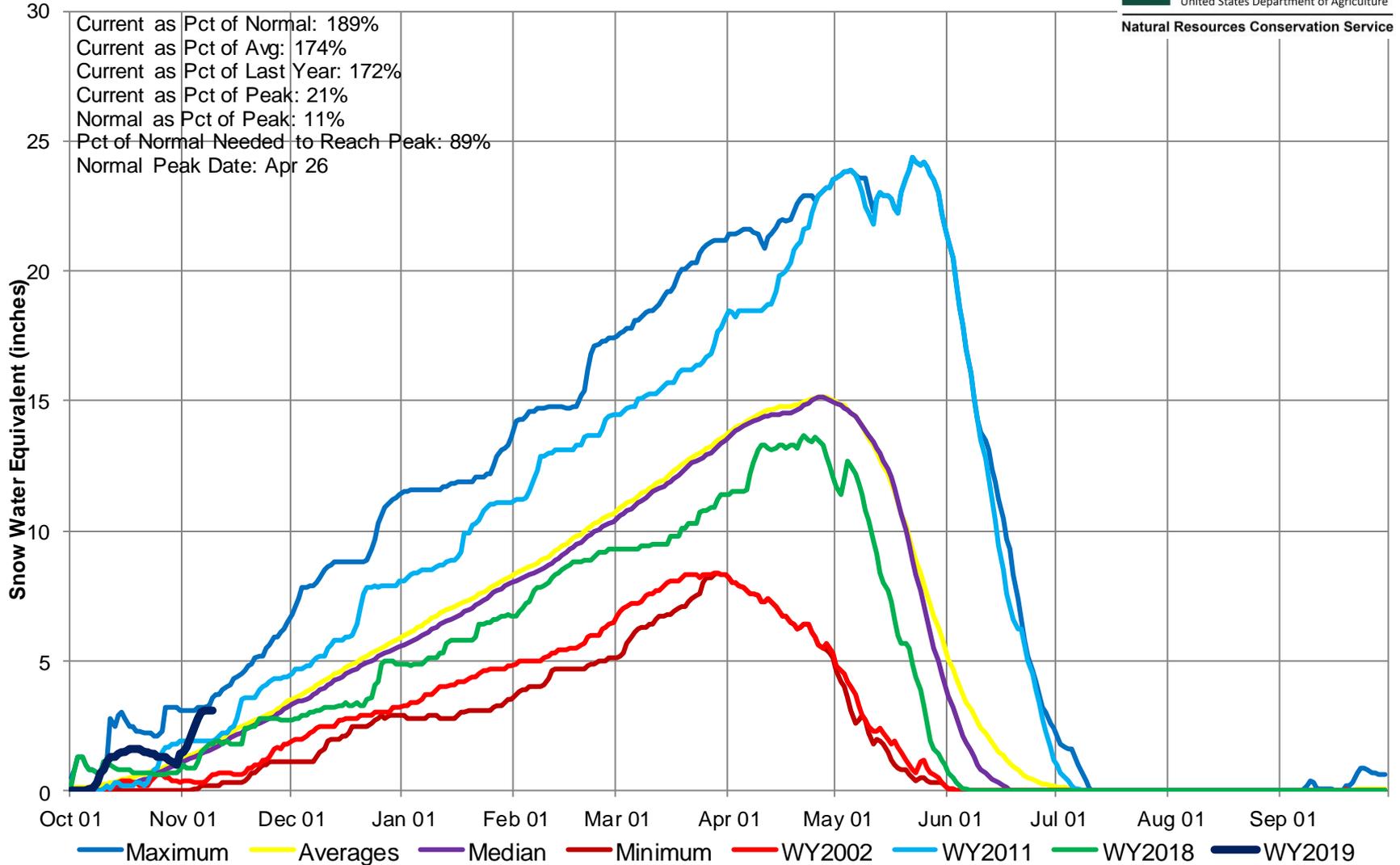
South Platte River Basin



South Platte River Basin High/Low Snowpack Summary

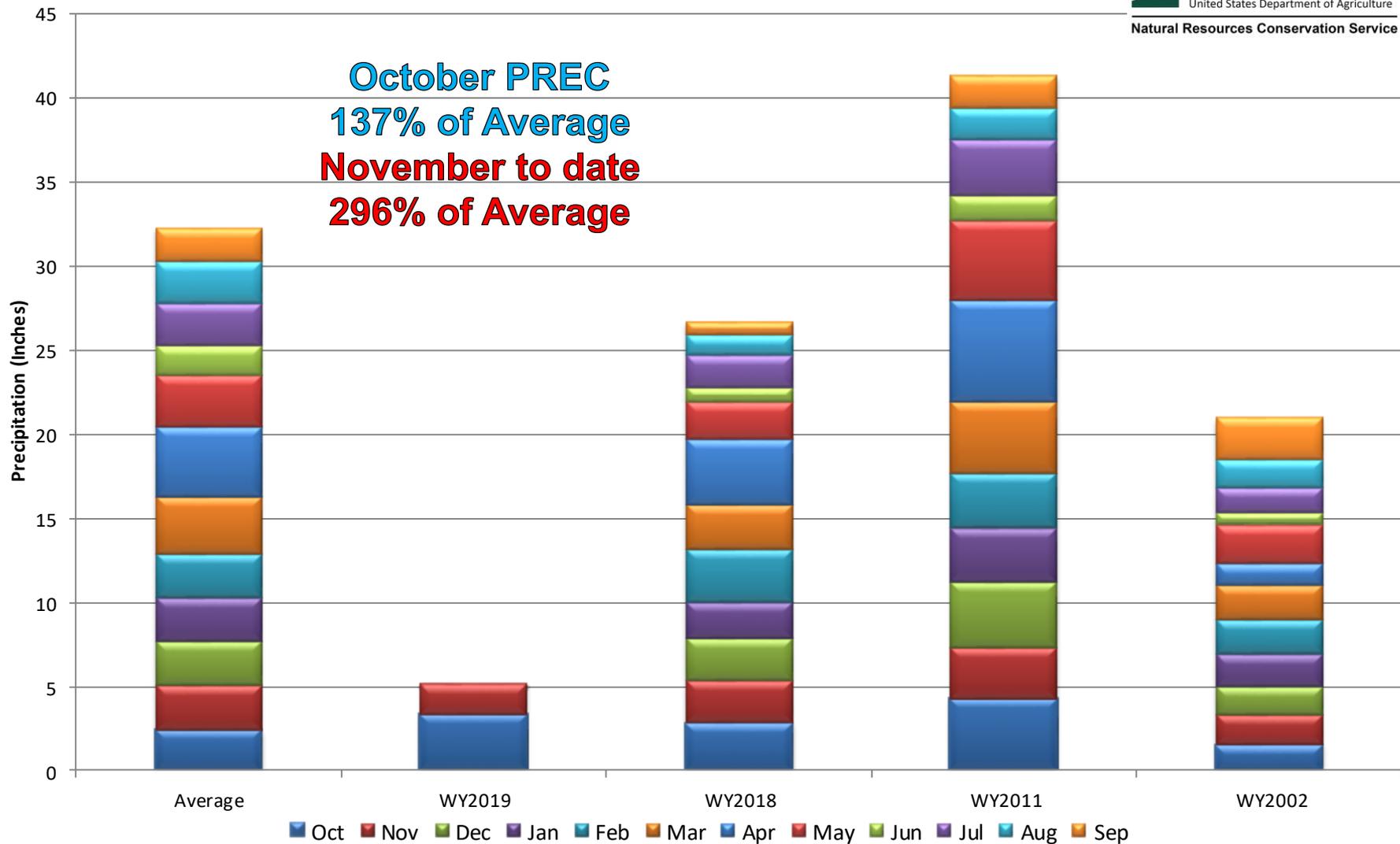
Based on Provisional SNOTEL data as of Nov 09, 2018

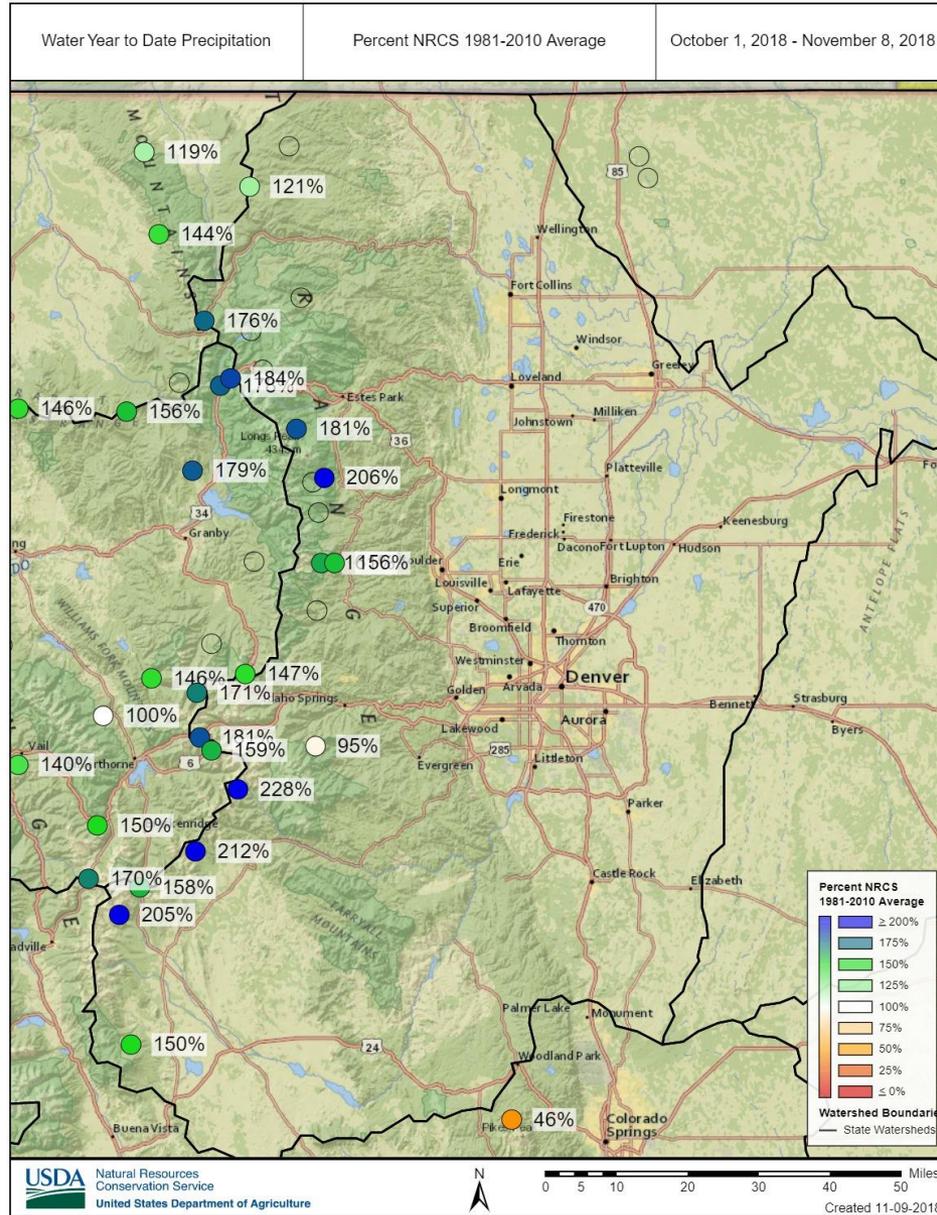
United States Department of Agriculture
 Natural Resources Conservation Service



South Platte River Basin High/Low Monthly Precipitation Summary

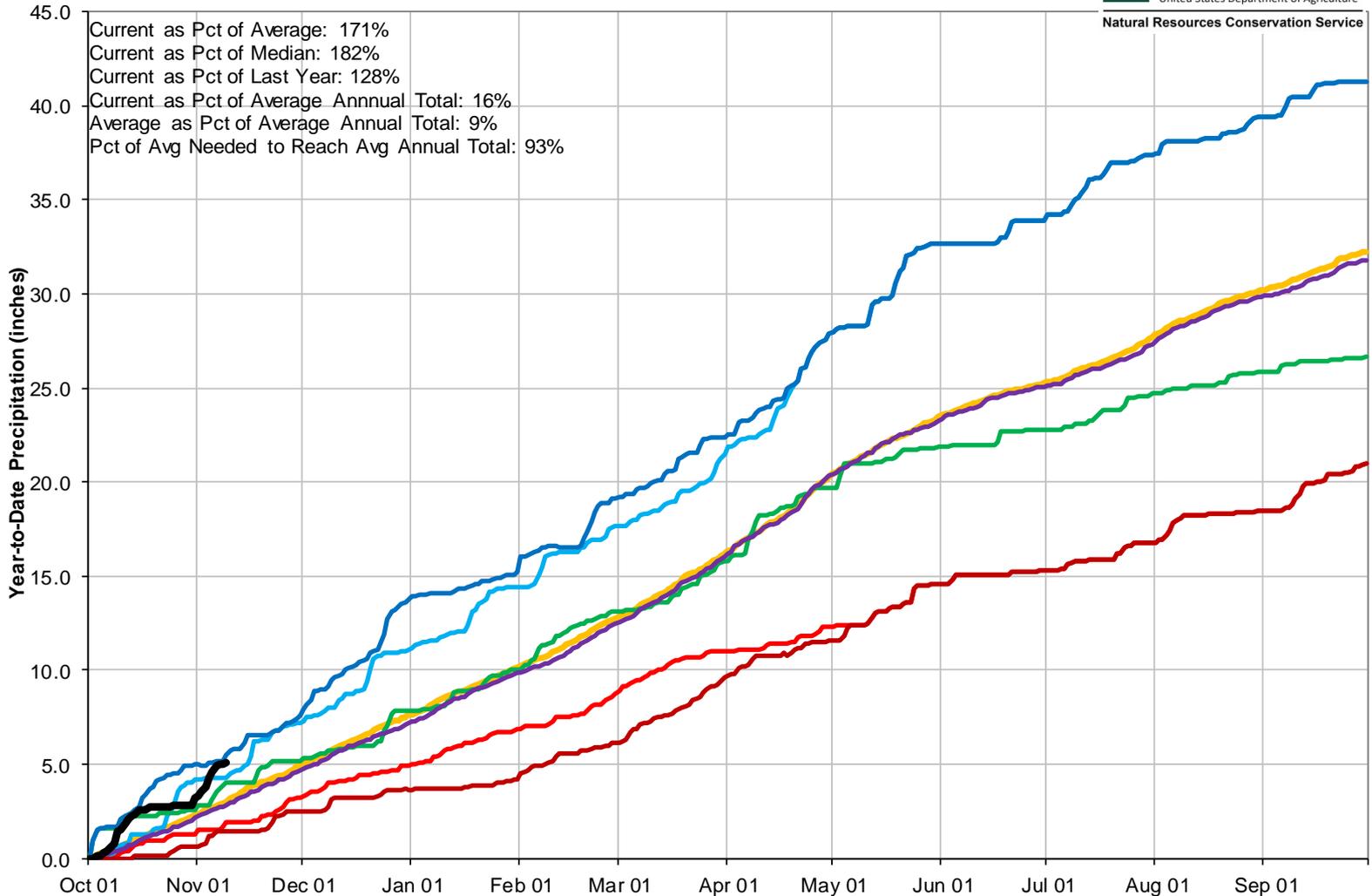
Based on Provisional SNOTEL data as of Nov 09, 2018





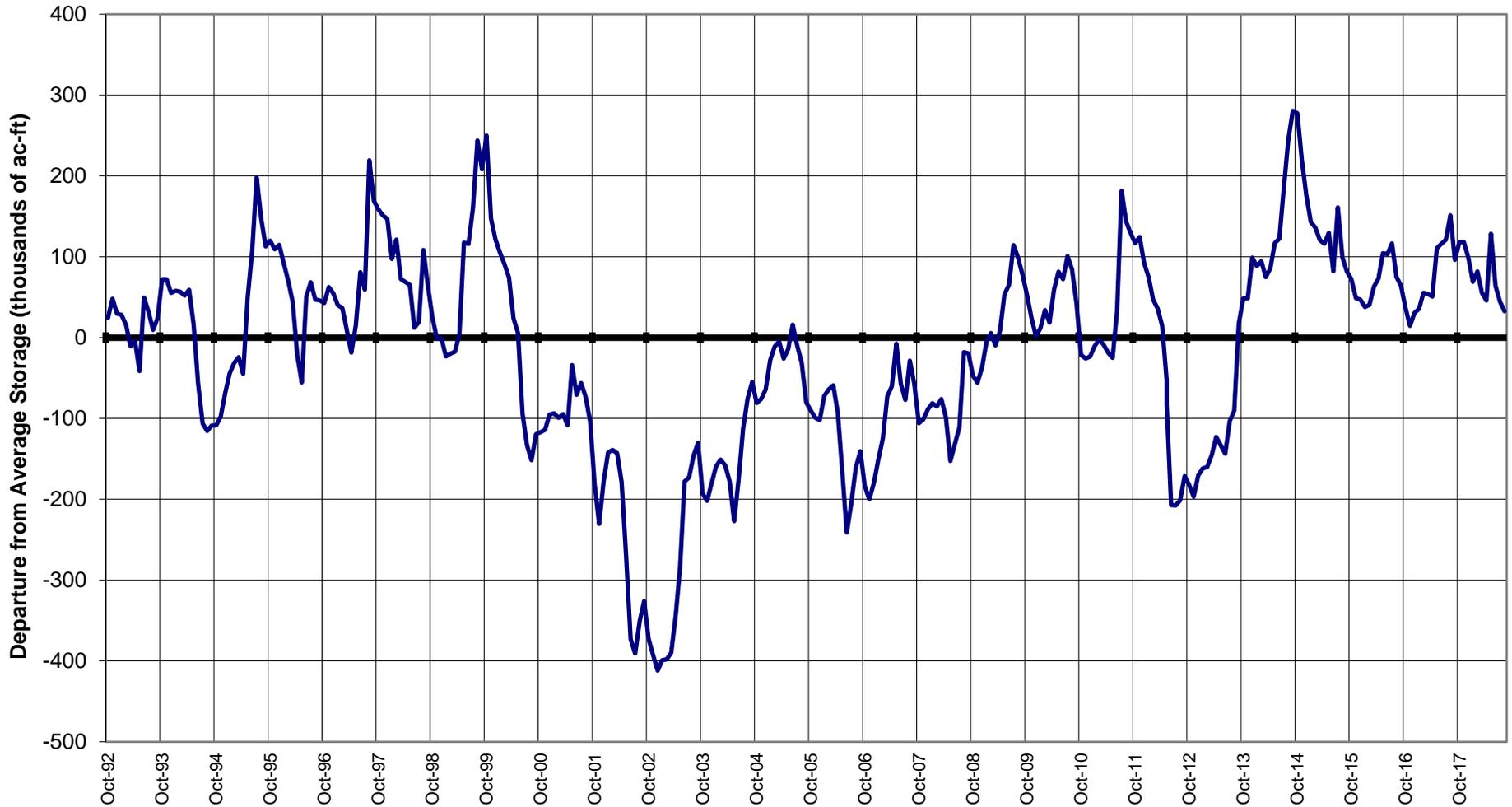
South Platte River Basin High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of Nov 09, 2018



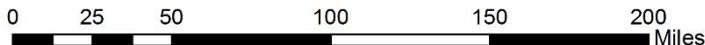
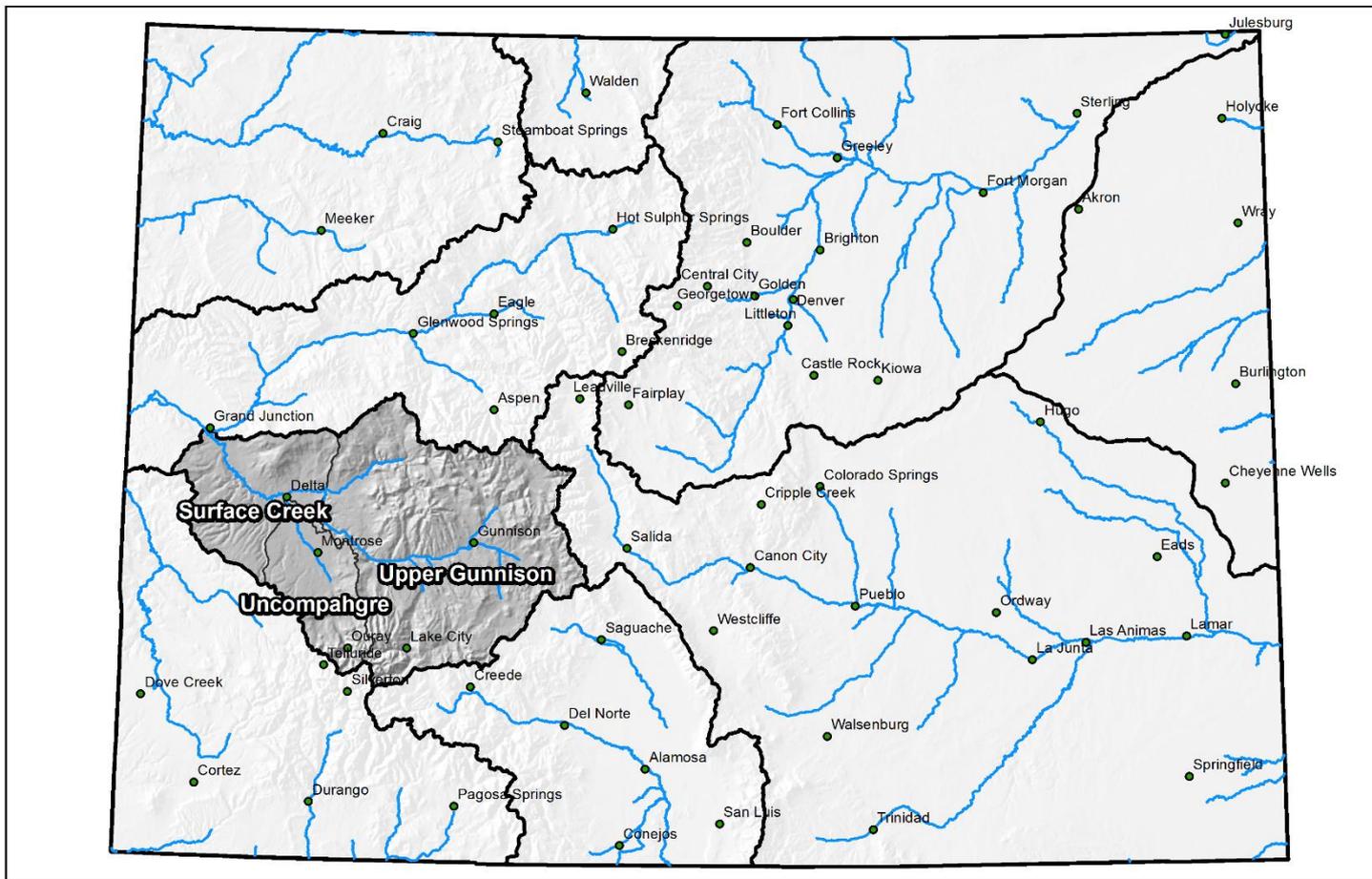


SOUTH PLATTE RIVER BASIN Reservoir Storage Departure from Average



Major Basin Summary

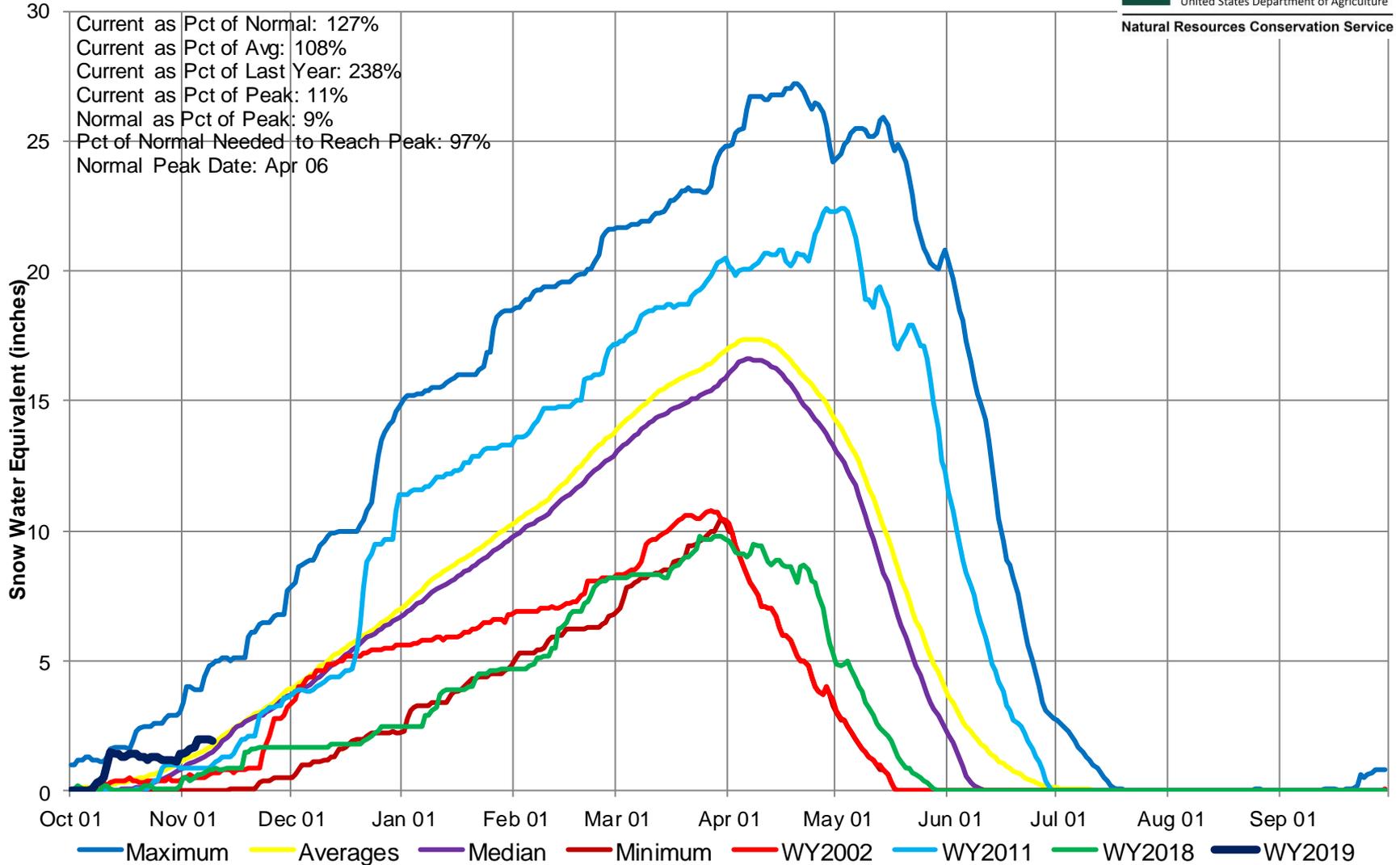
Gunnison River Basin





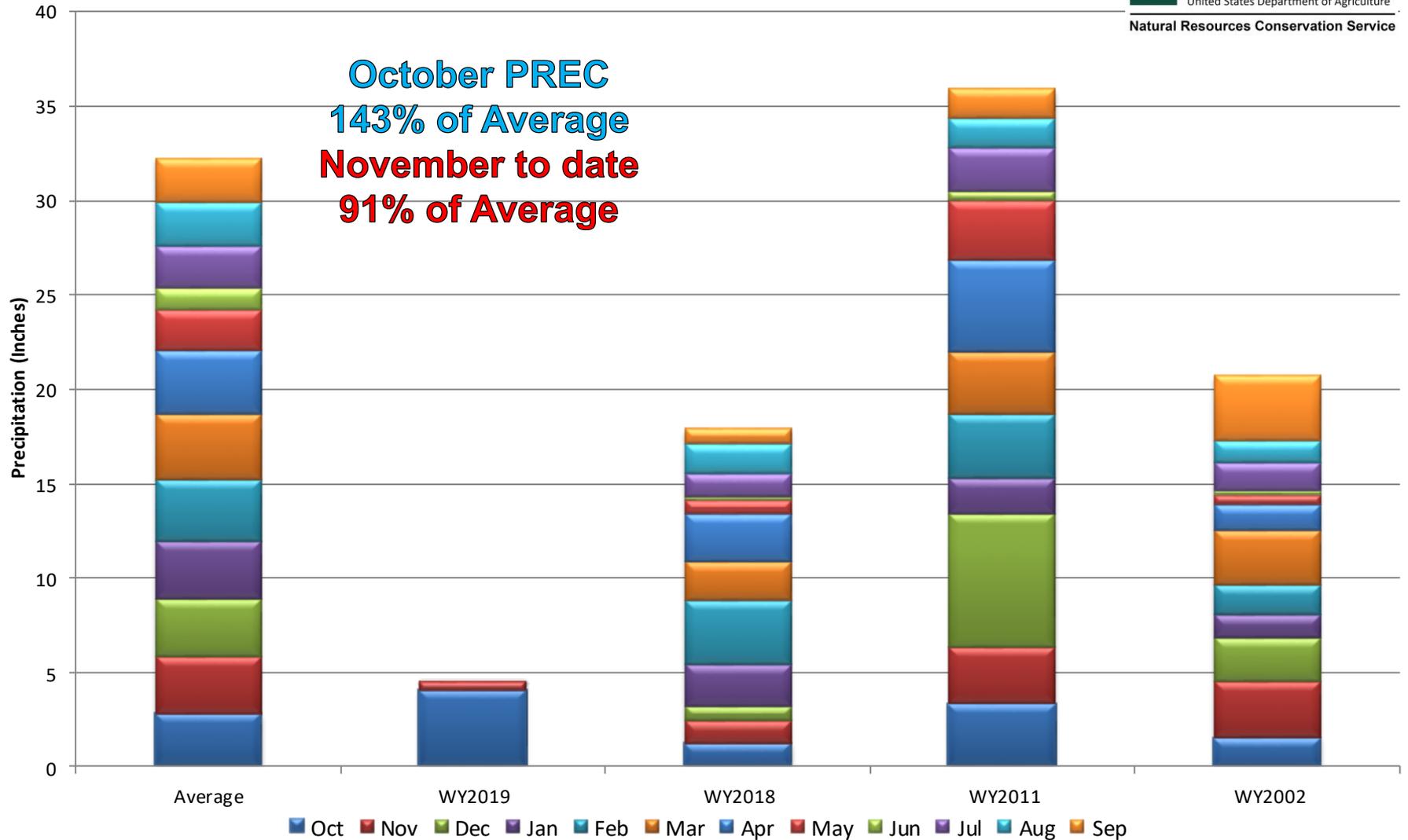
Gunnison River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Nov 09, 2018



Gunnison River Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Nov 09, 2018



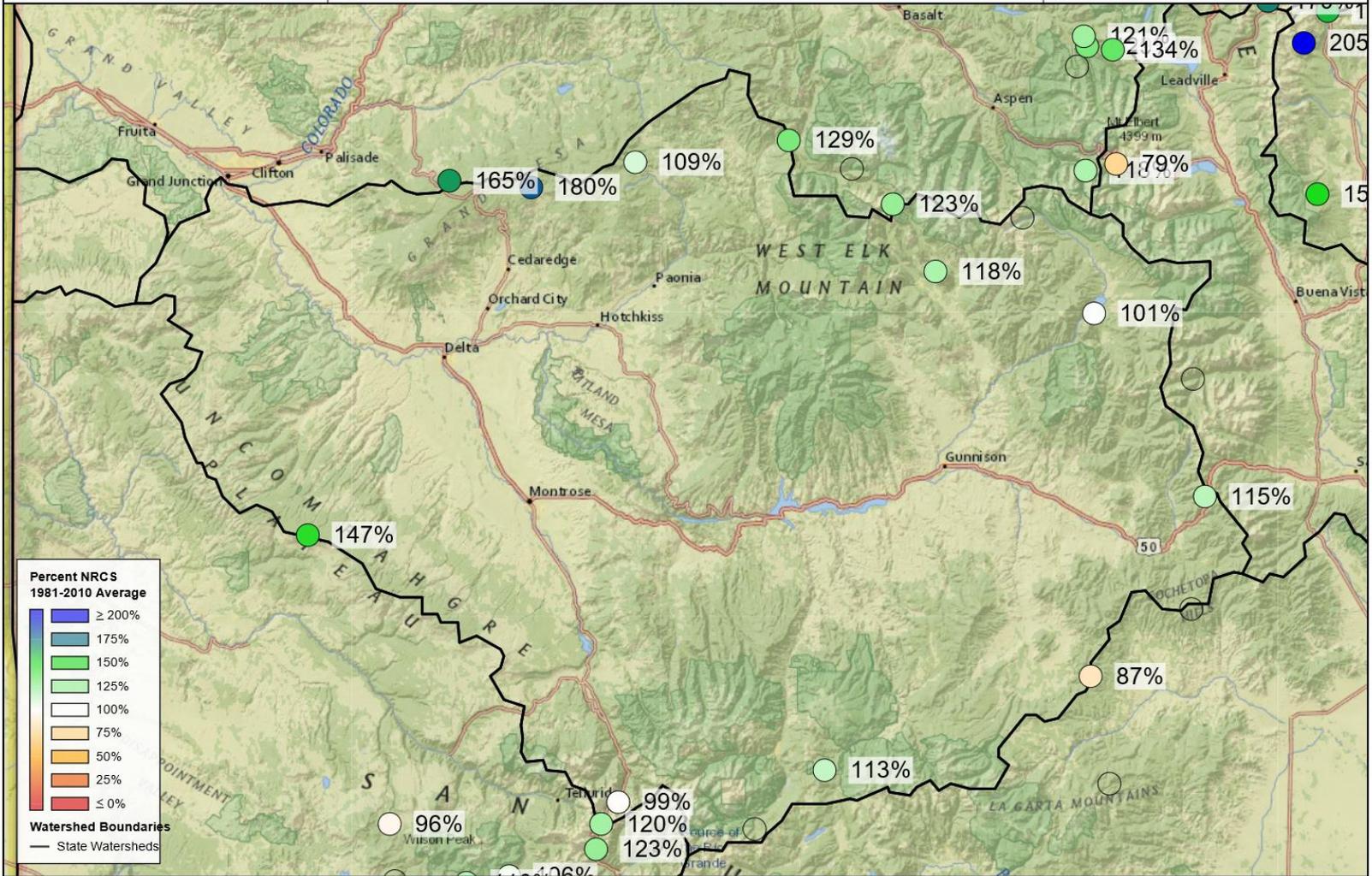


Colorado Snow Surveys

Water Year to Date Precipitation

Percent NRCS 1981-2010 Average

October 1, 2018 - November 8, 2018



Percent NRCS 1981-2010 Average

- ≥ 200%
- 175%
- 150%
- 125%
- 100%
- 75%
- 50%
- 25%
- ≤ 0%

Watershed Boundaries

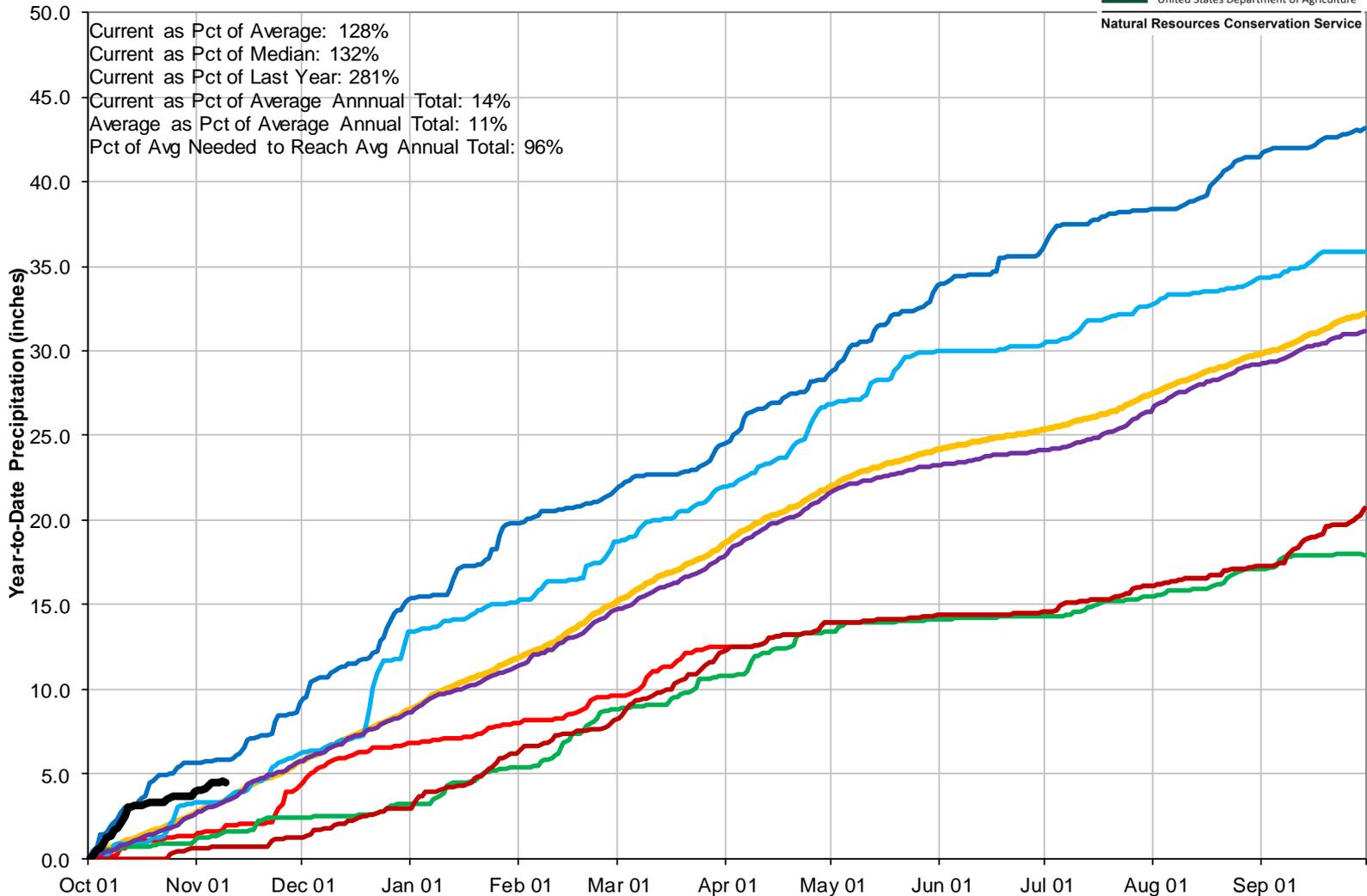
- State Watersheds





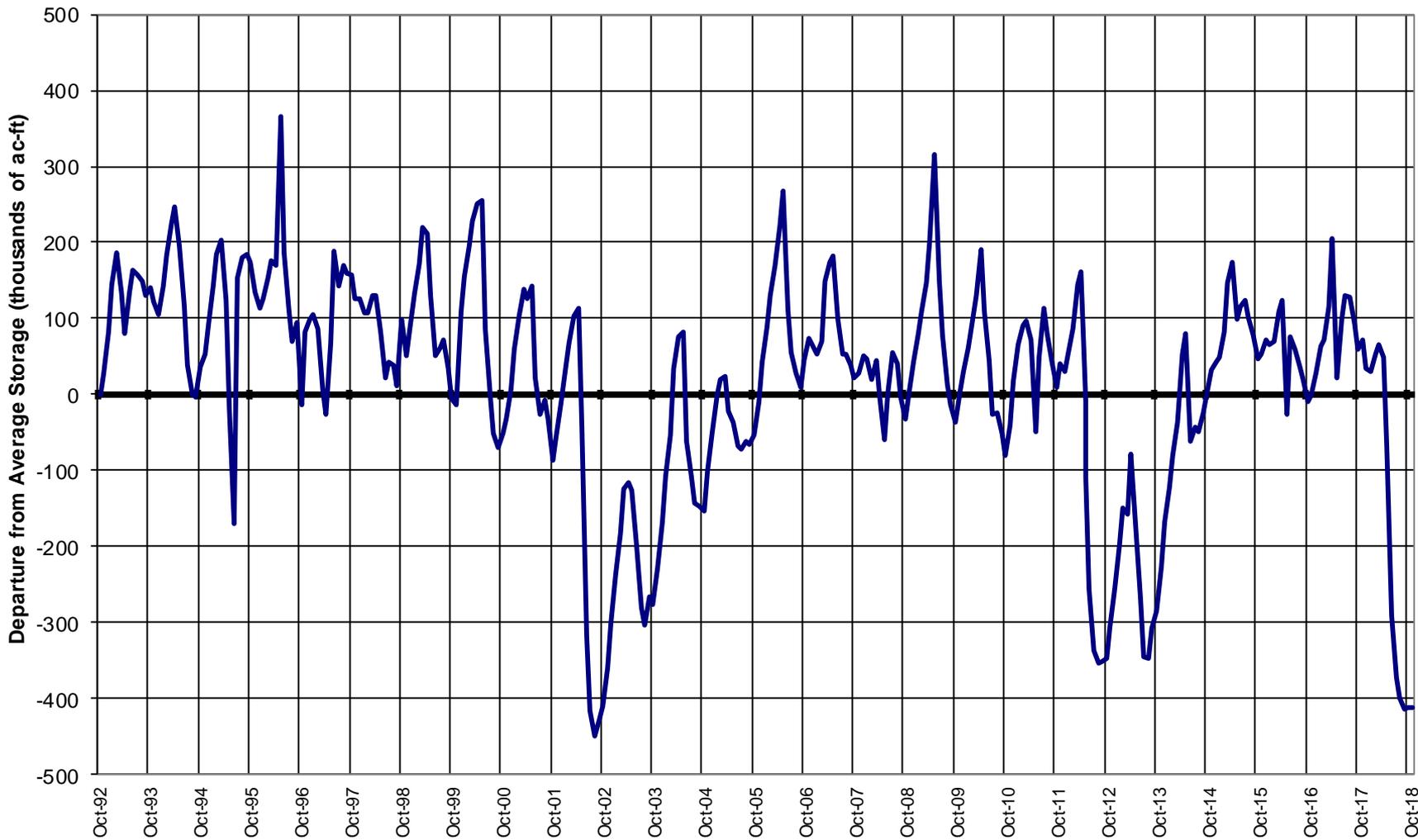
Gunnison River Basin High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of Nov 09, 2018





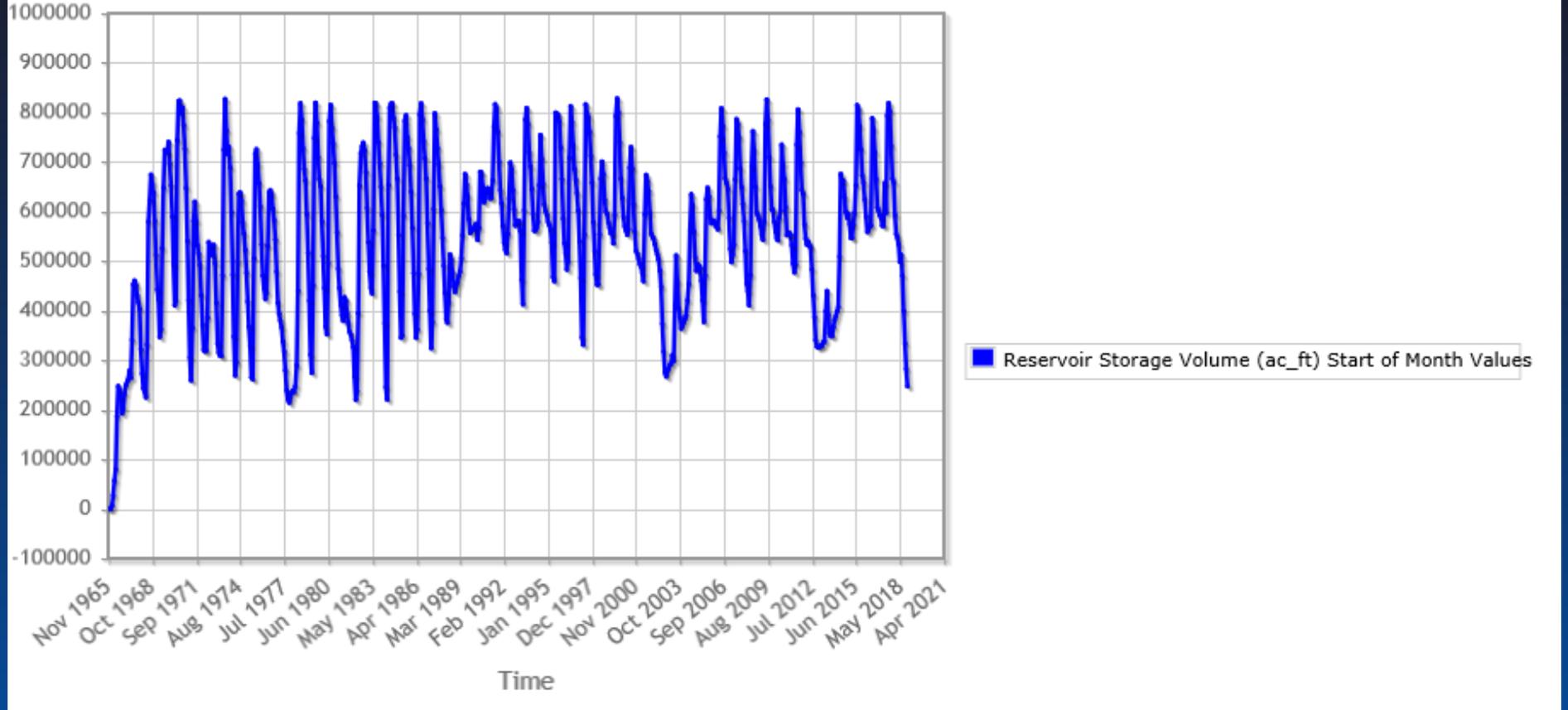
GUNNISON RIVER BASIN Reservoir Storage Departure from Average





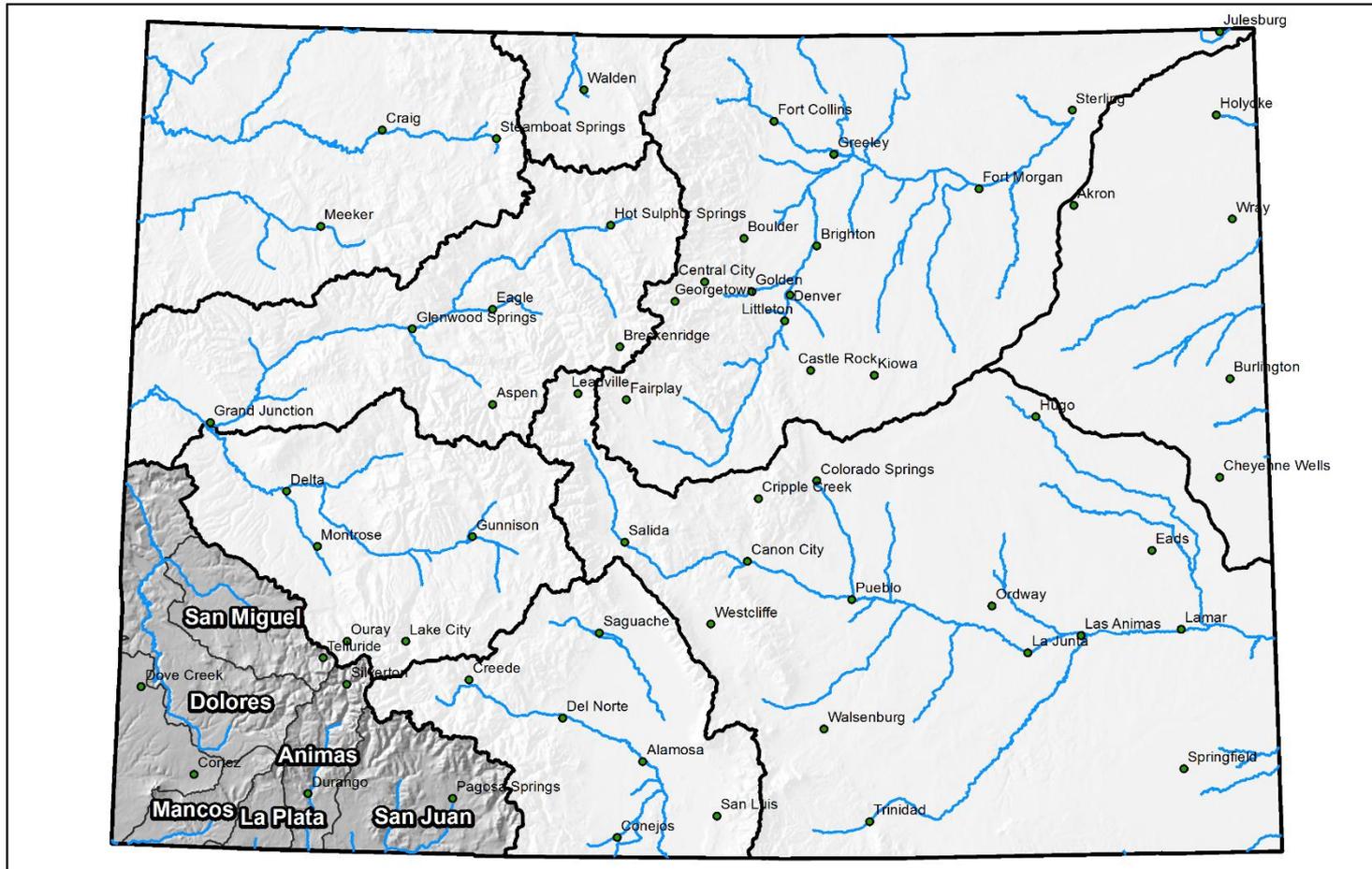
Colorado Snow Surveys

Blue Mesa Reservoir (09009010) Colorado RESERVOIR Site - 7550 ft Reporting Frequency: Monthly; Date Range: Period of Record



Major Basin Summary

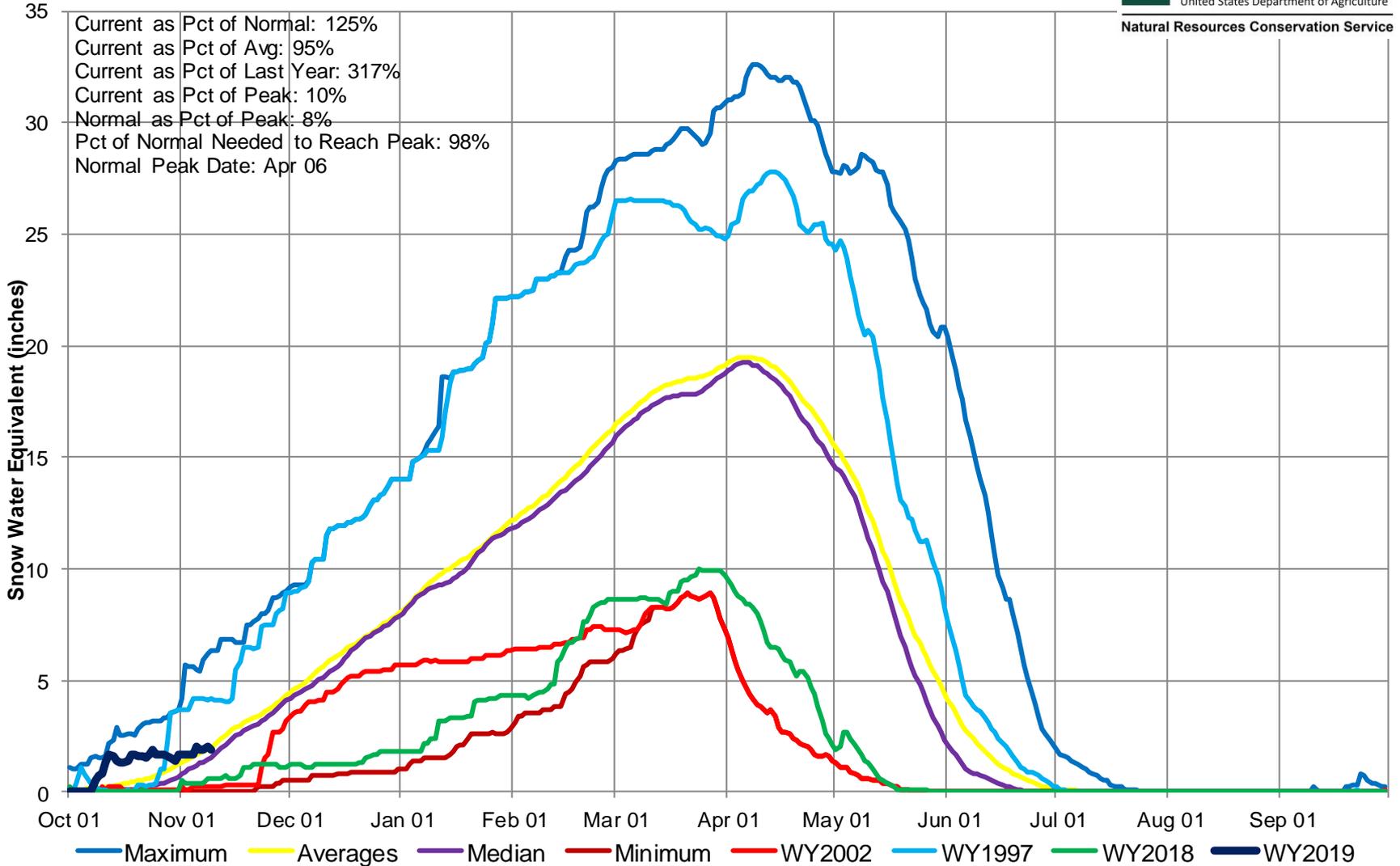
San Miguel, Dolores, Animas, and San Juan River Basins





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

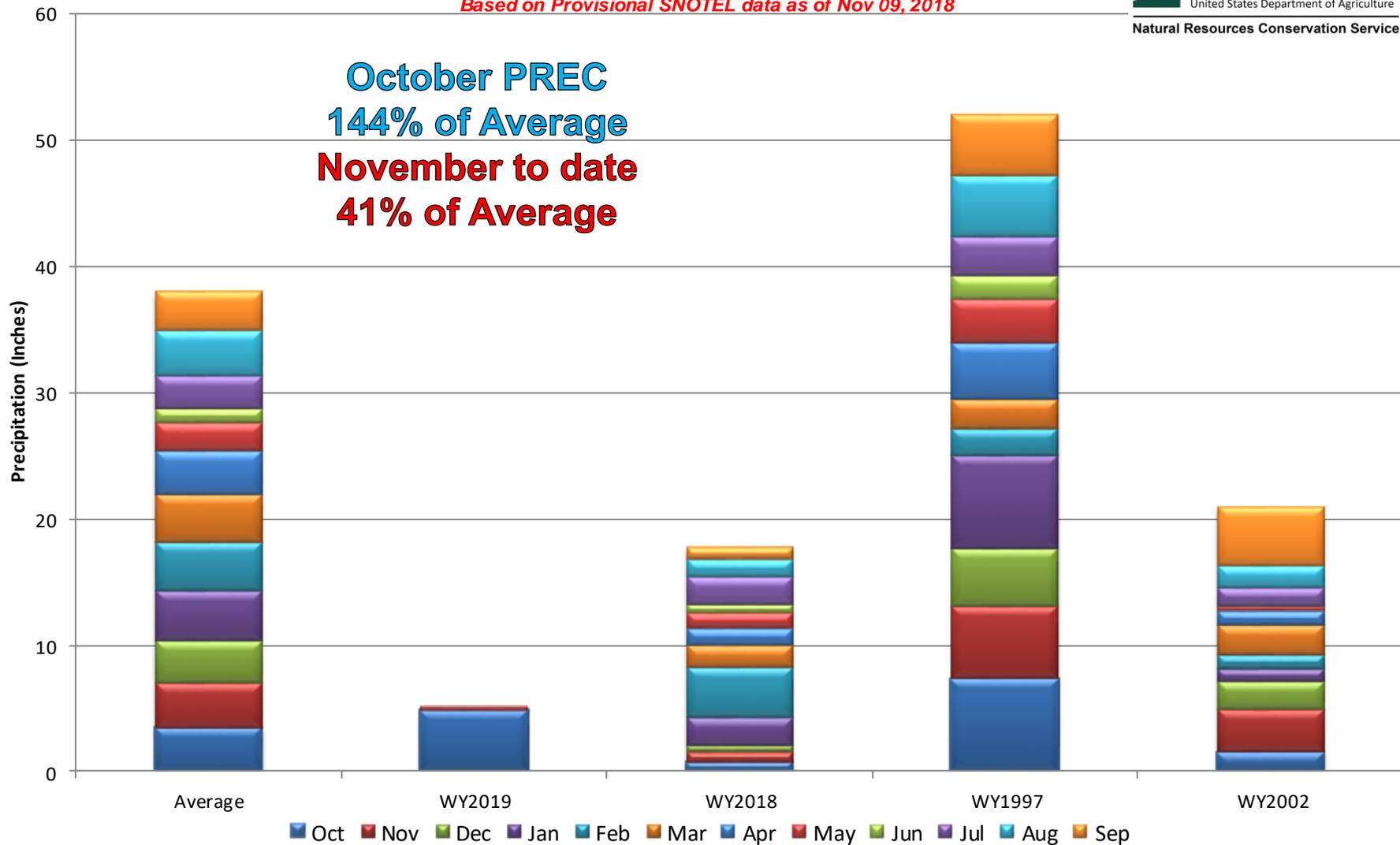
Based on Provisional SNOTEL data as of Nov 09, 2018



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

Based on Provisional SNOTEL data as of Nov 09, 2018

October PREC
144% of Average
November to date
41% of Average



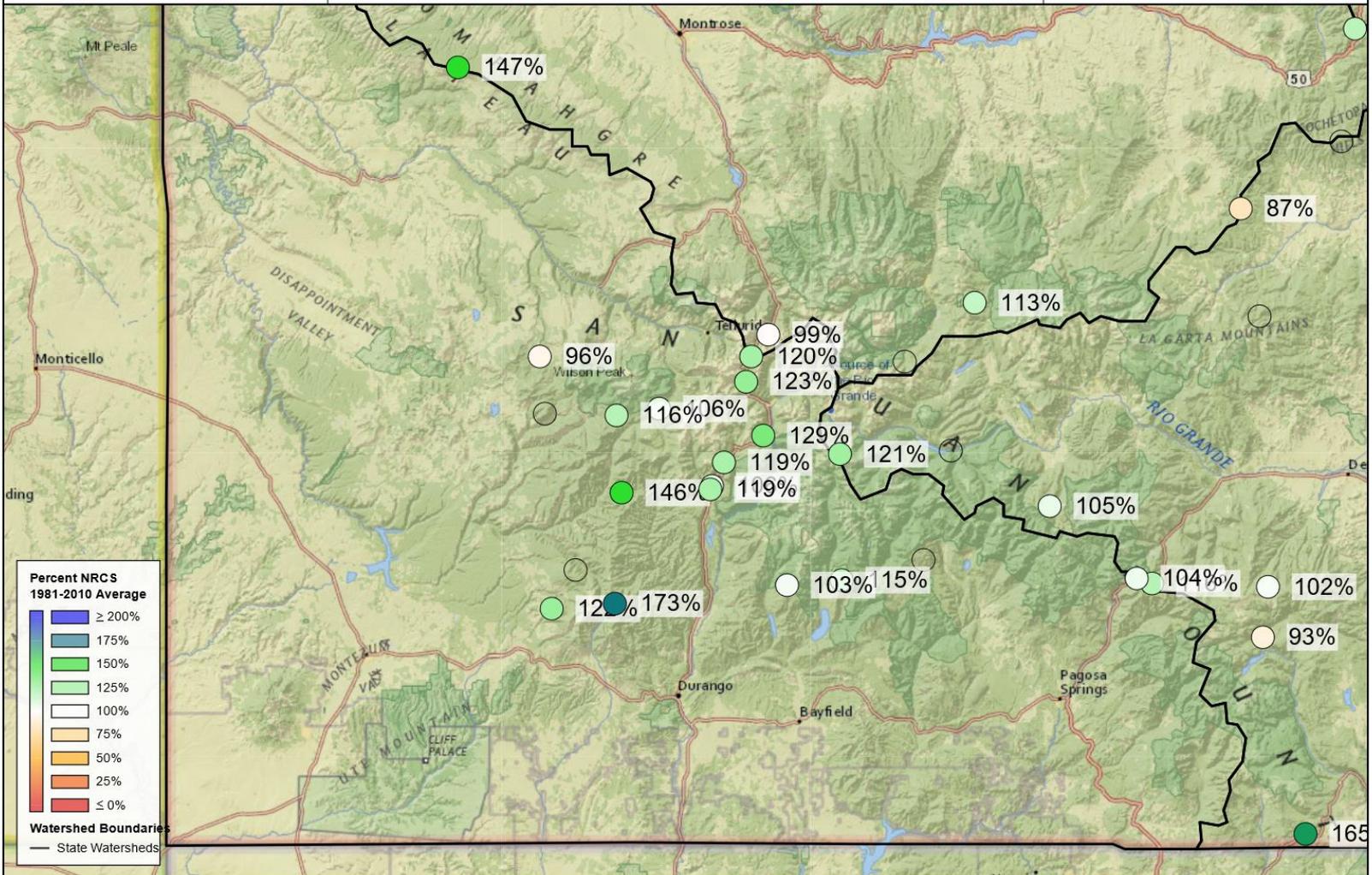


Colorado Snow Surveys

Water Year to Date Precipitation

Percent NRCS 1981-2010 Average

October 1, 2018 - November 8, 2018



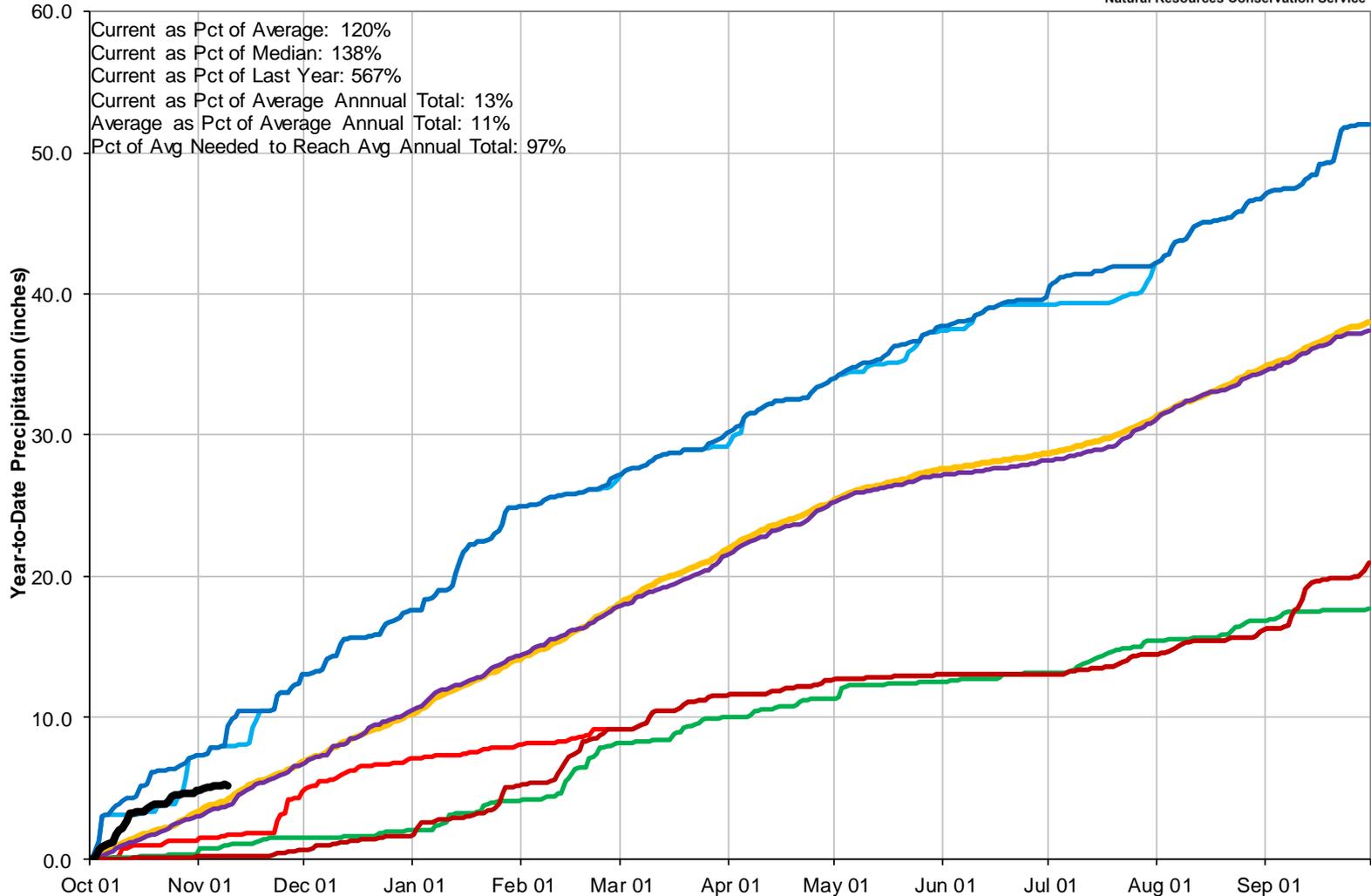
San Miguel, Dolores, Animas and San Juan River Basins High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of Nov 09, 2018



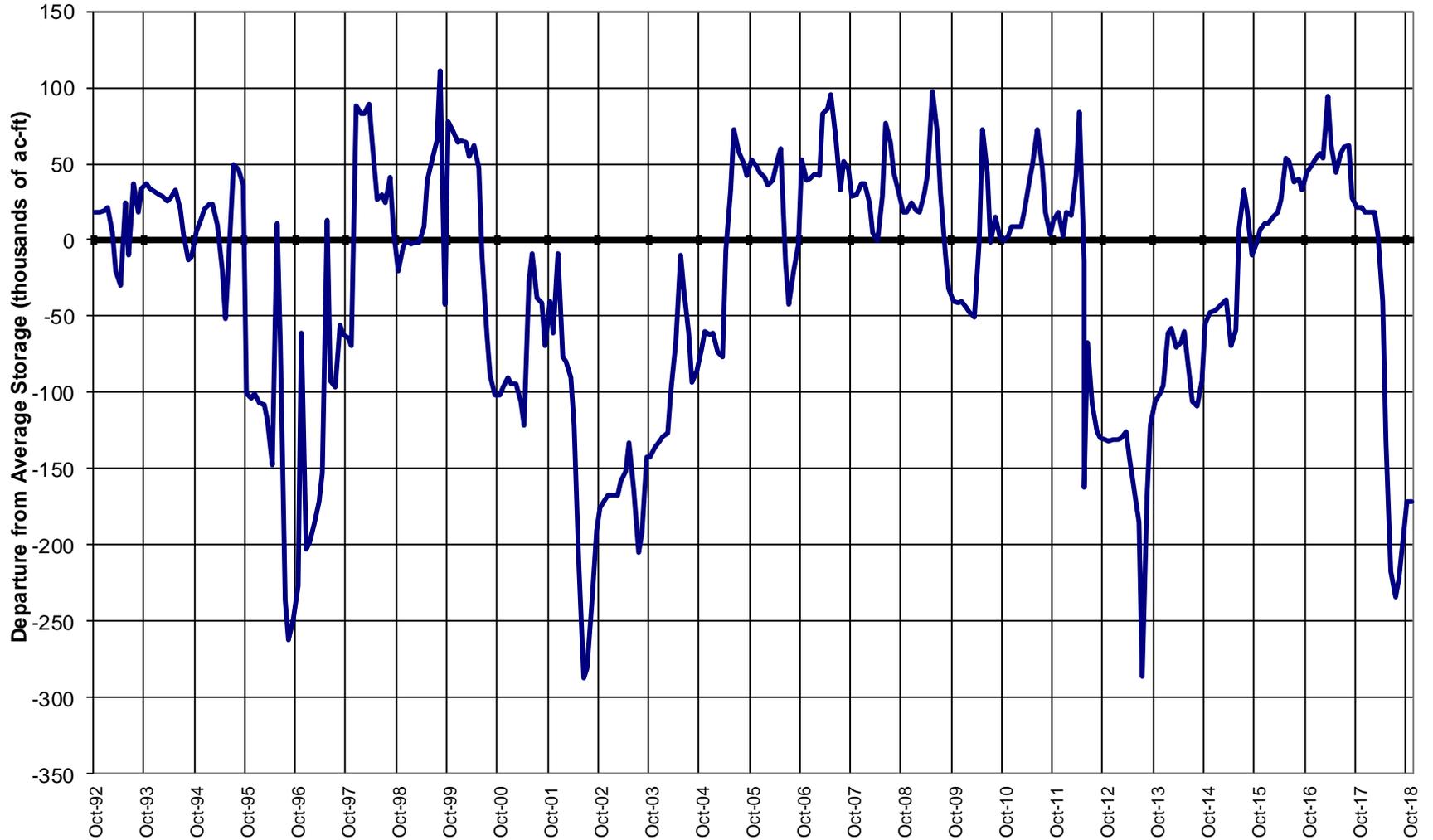
United States Department of Agriculture

Natural Resources Conservation Service



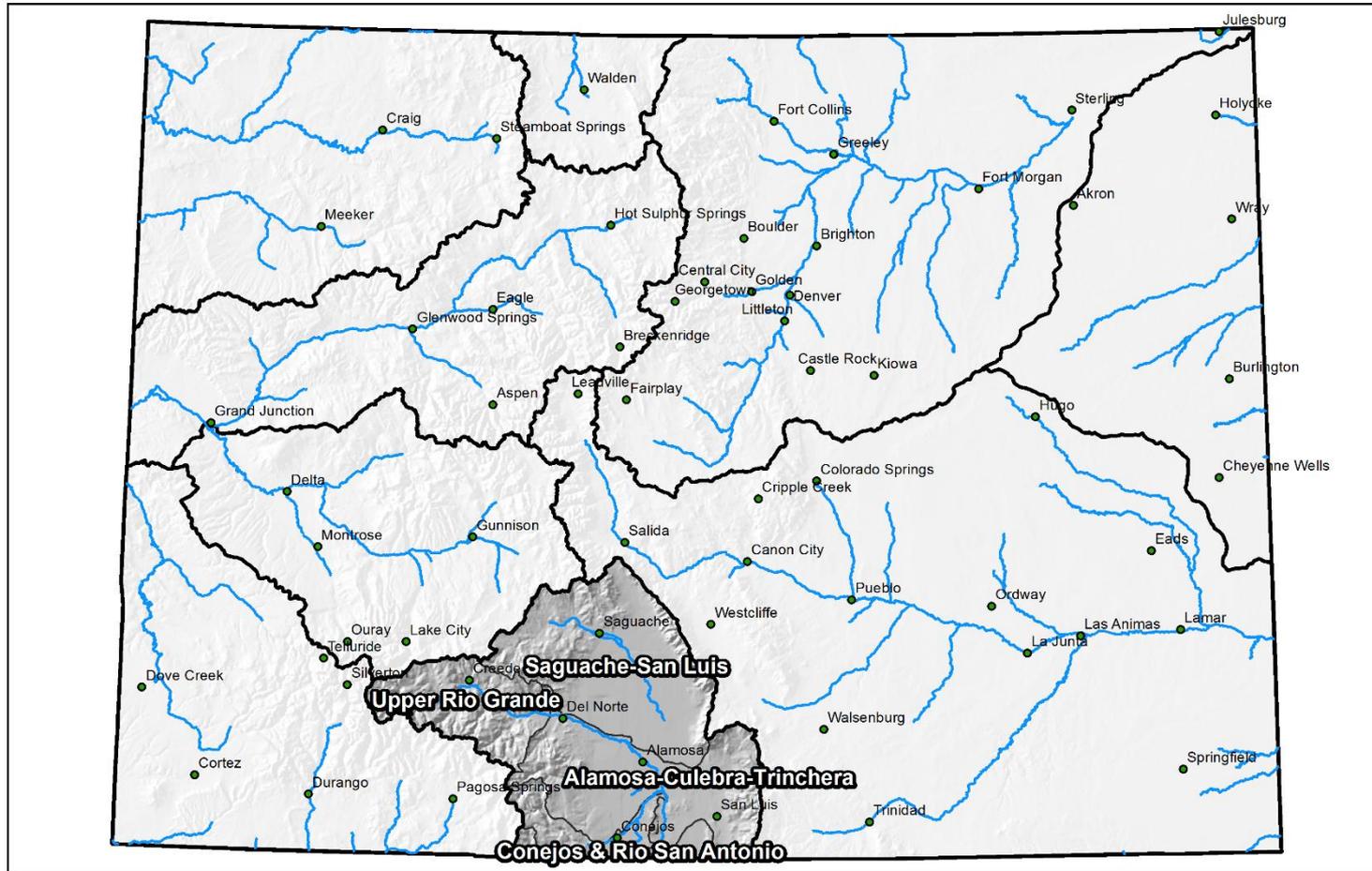


SAN MIGUEL, DOLORES, ANIMAS AND SAN JUAN RIVER BASINS Reservoir Storage Departure from Average



Major Basin Summary

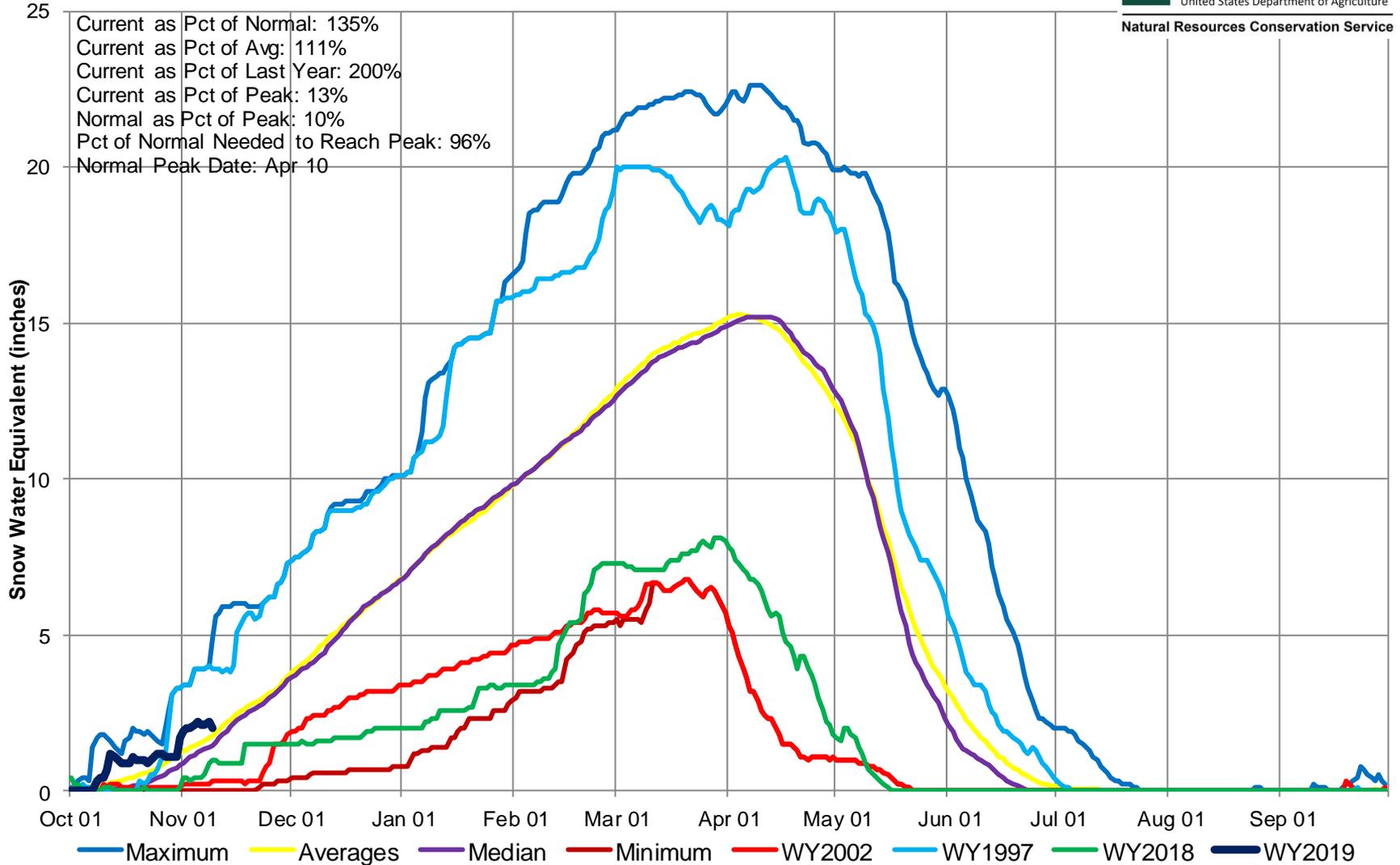
Upper Rio Grande River Basin





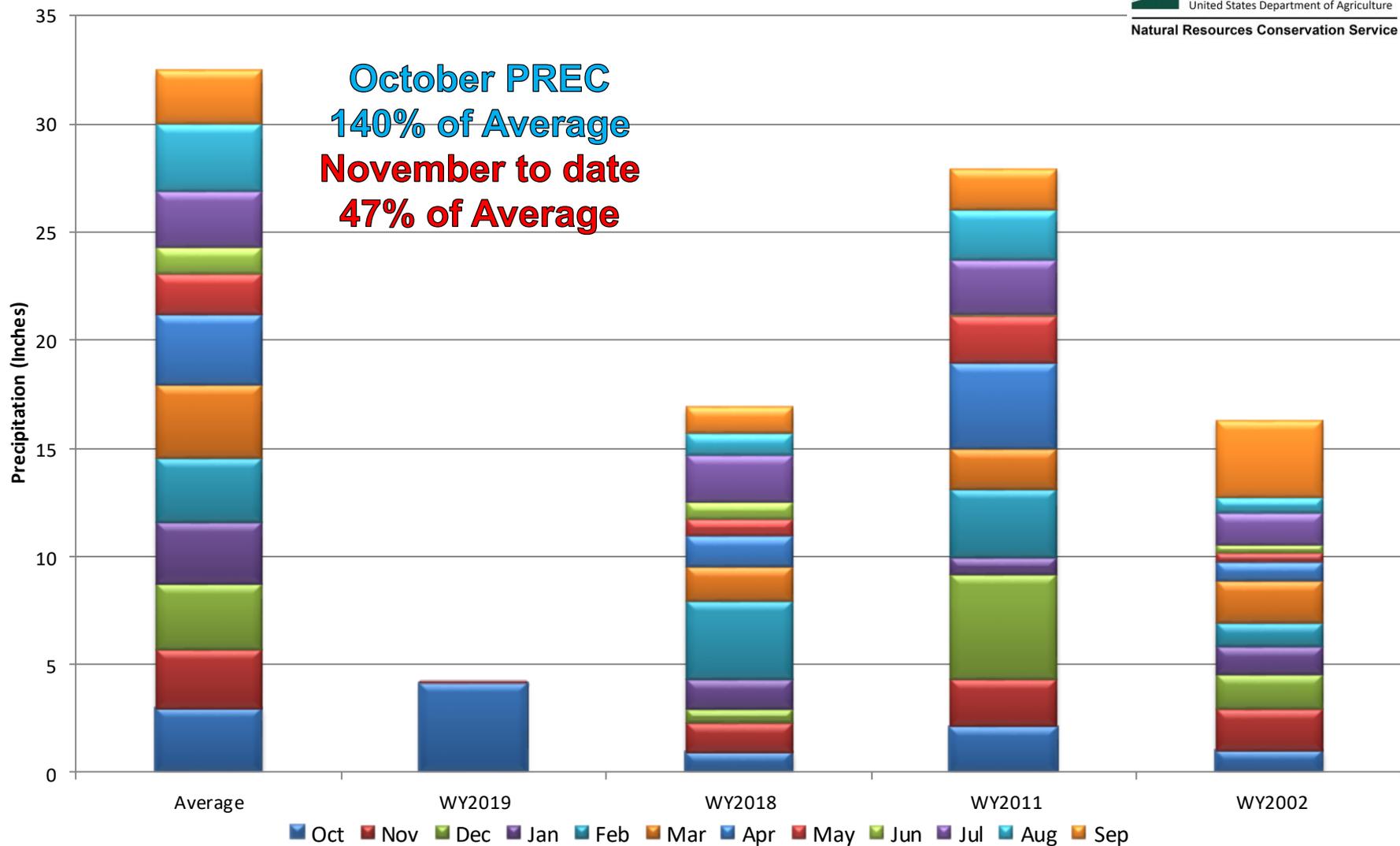
Upper Rio Grande Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Nov 09, 2018



Upper Rio Grande River Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Nov 09, 2018

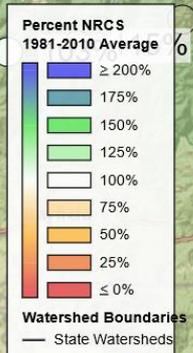
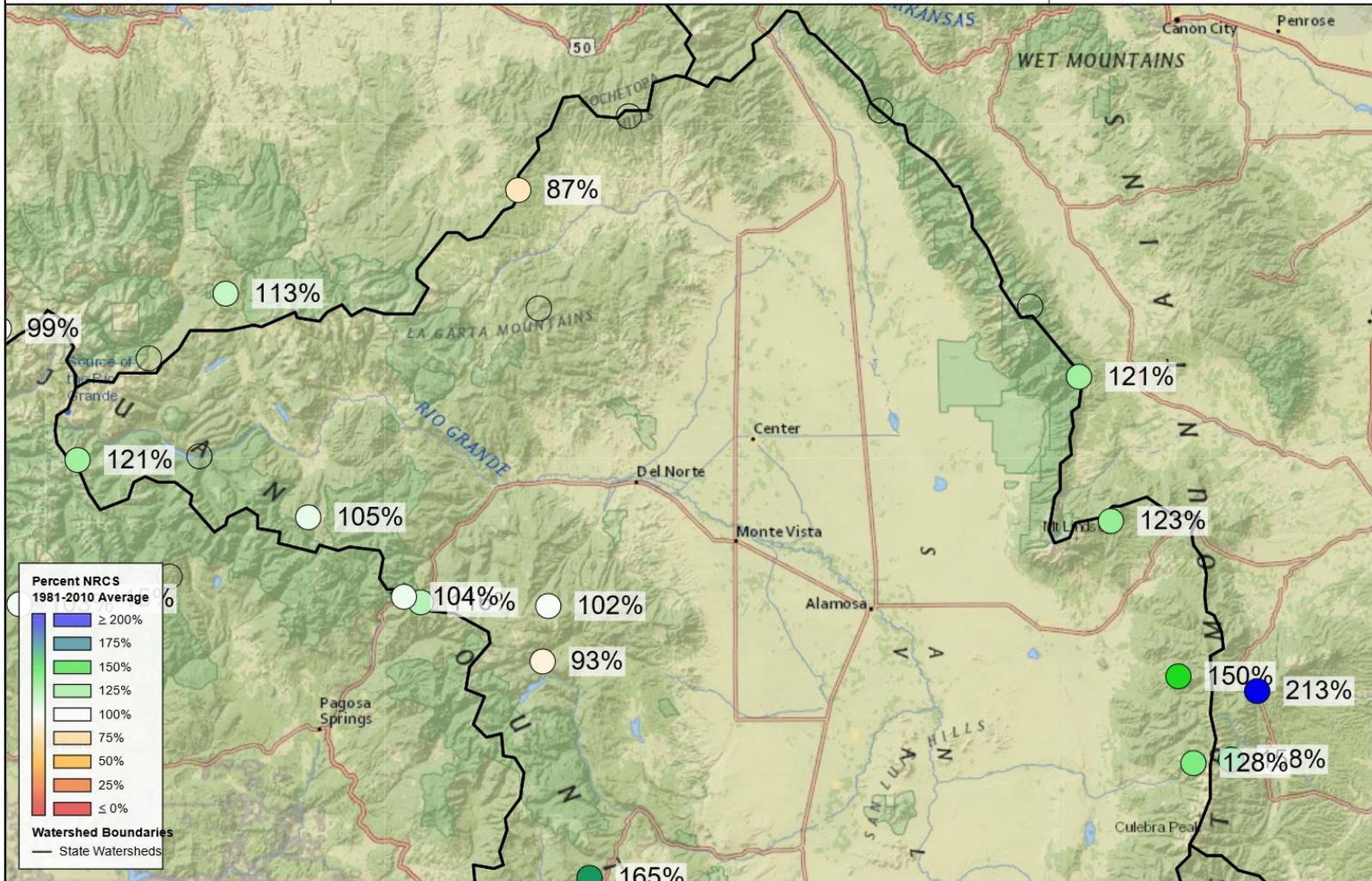




Water Year to Date Precipitation

Percent NRCS 1981-2010 Average

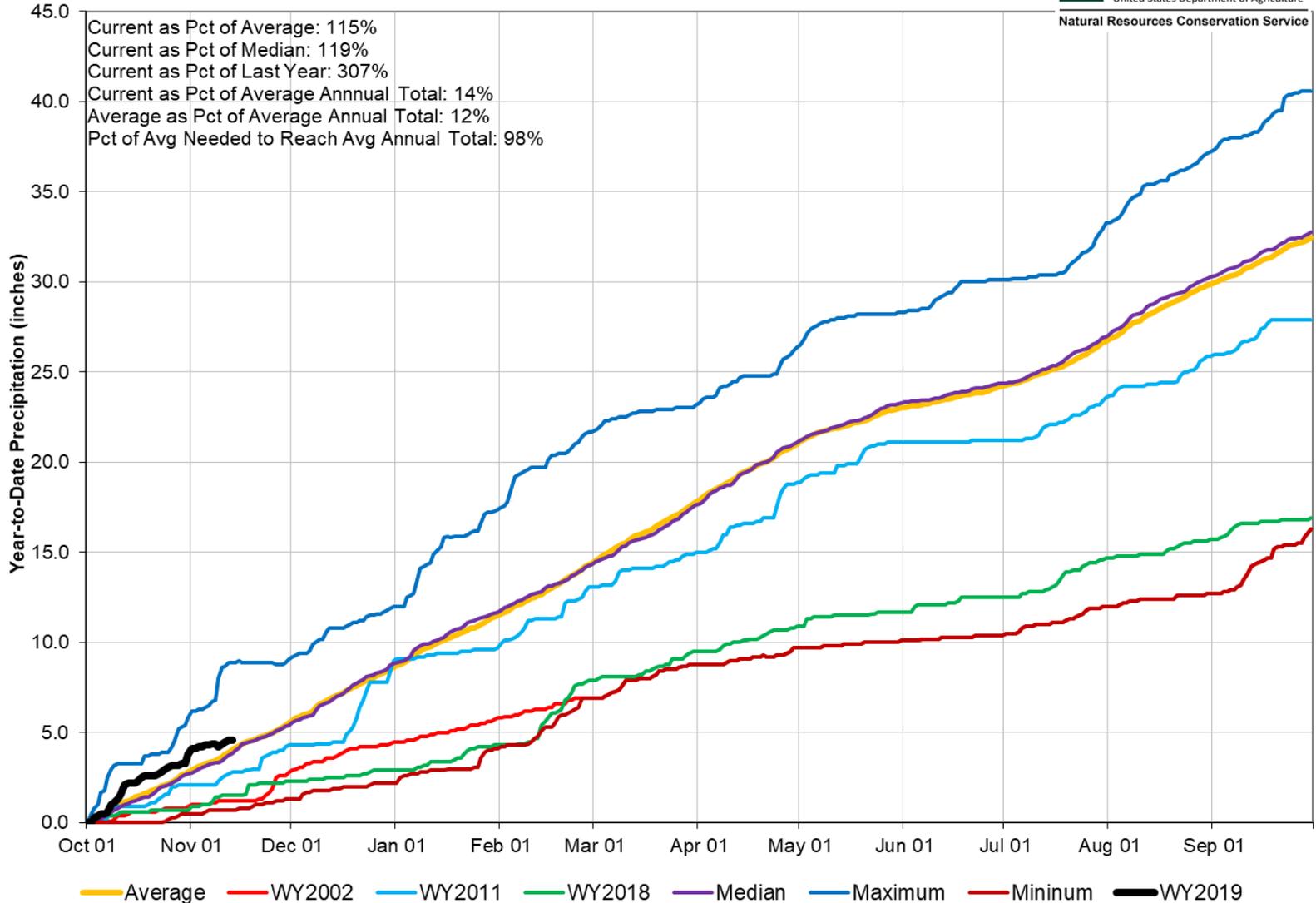
October 1, 2018 - November 8, 2018



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

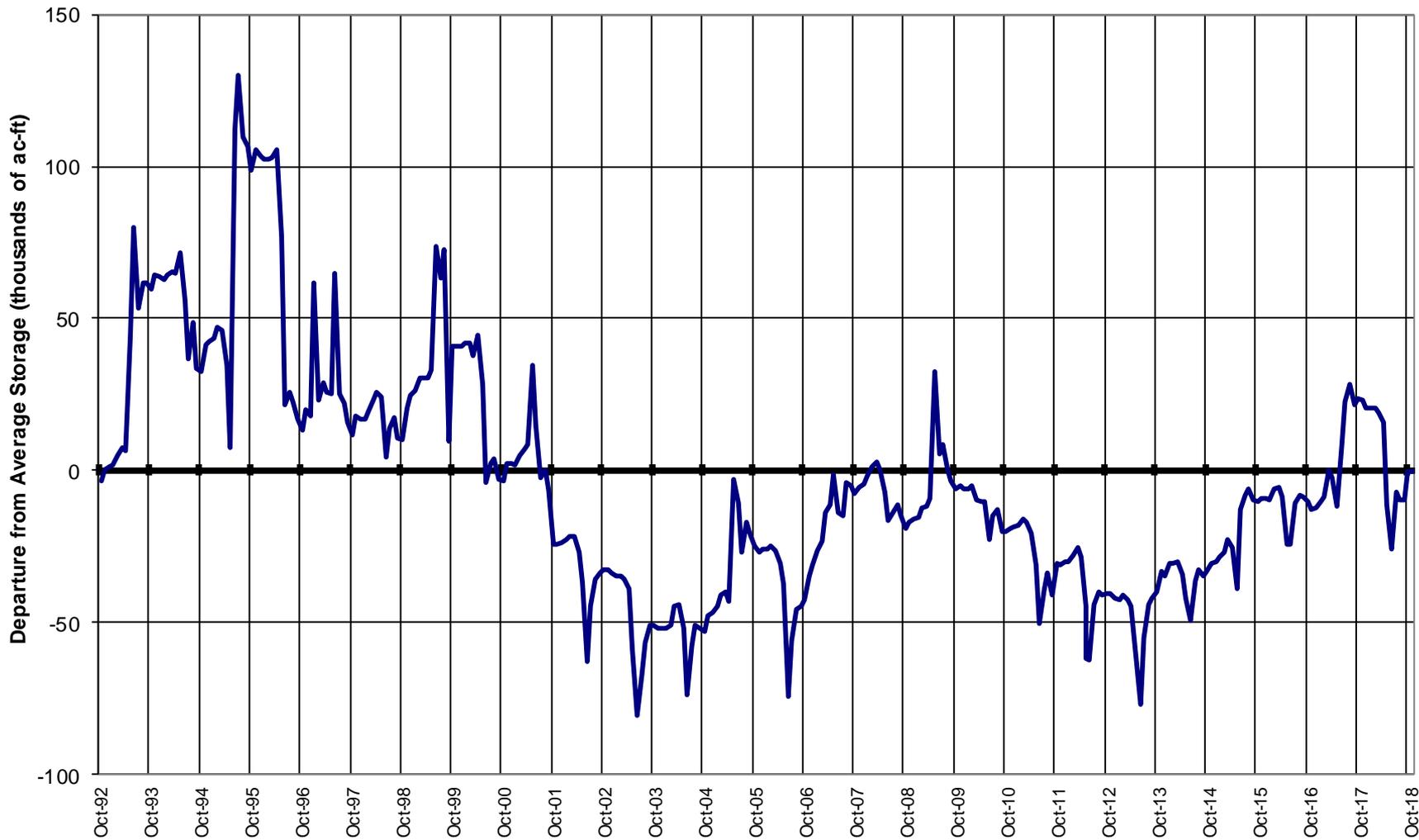
Based on Provisional SNOTEL data as of Nov 13, 2018

USDA
United States Department of Agriculture
Natural Resources Conservation Service



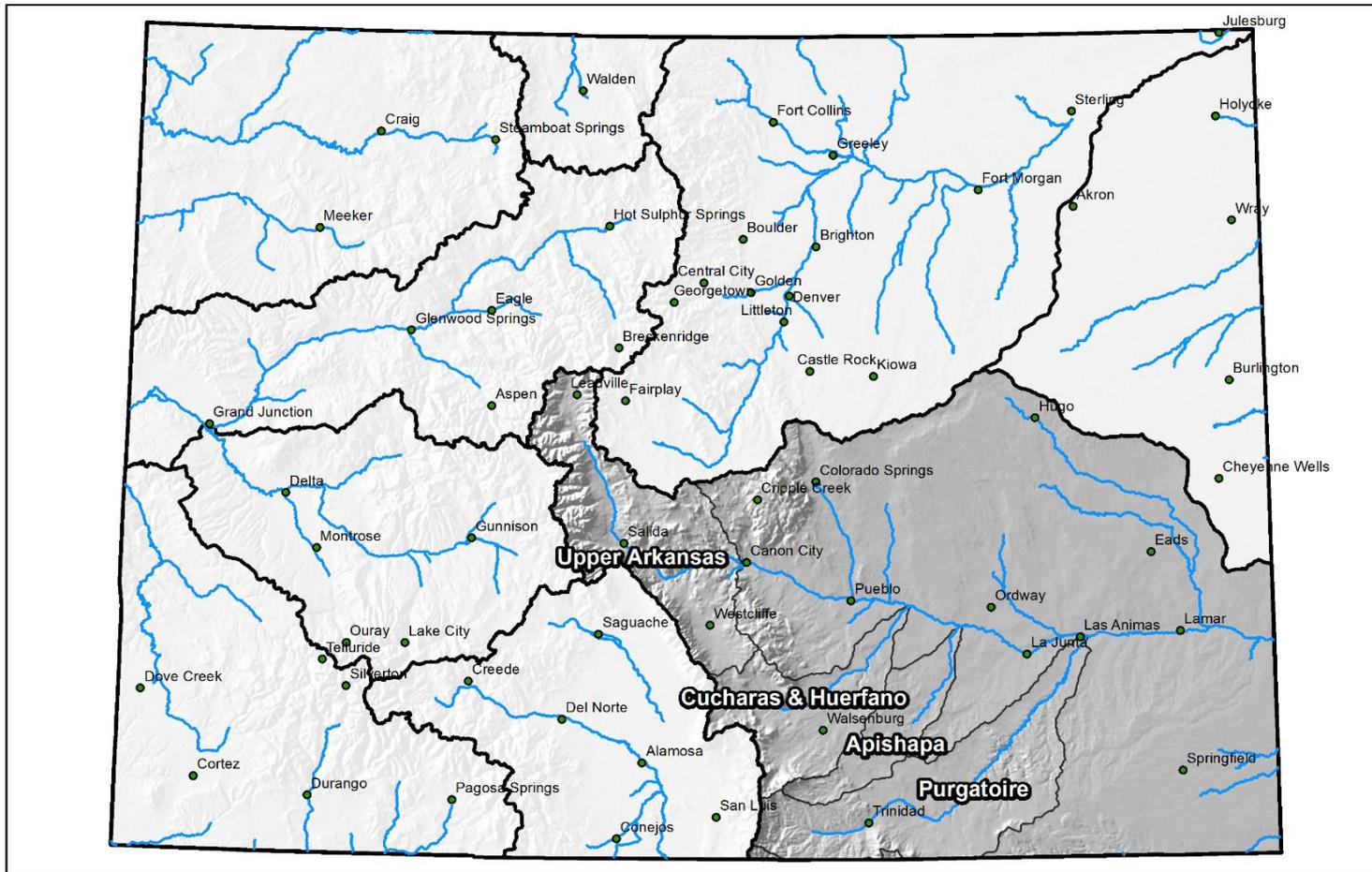


UPPER RIO GRANDE BASIN Reservoir Storage Departure from Average



Major Basin Summary

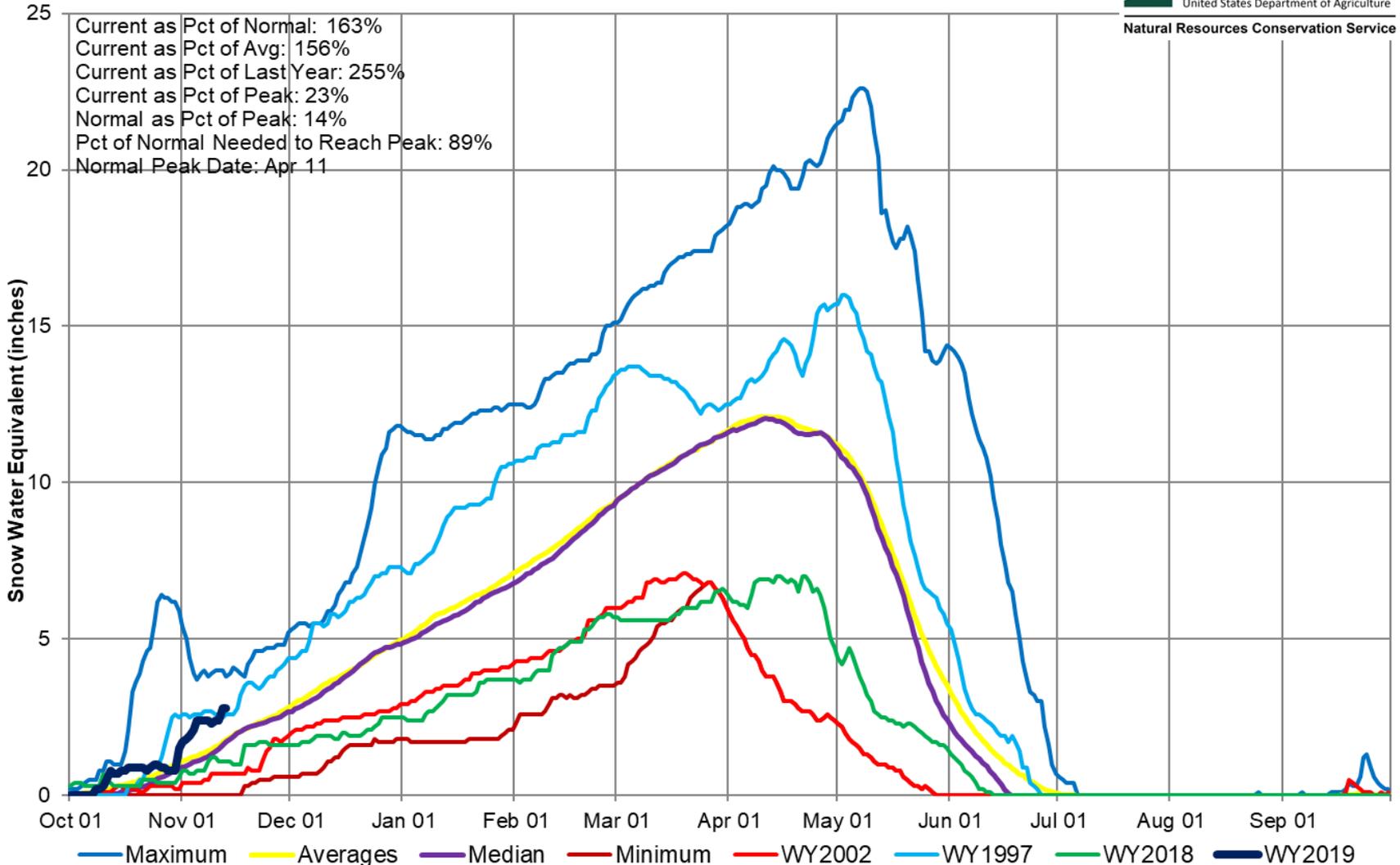
Arkansas River Basin



Arkansas River Basin High/Low Snowpack Summary

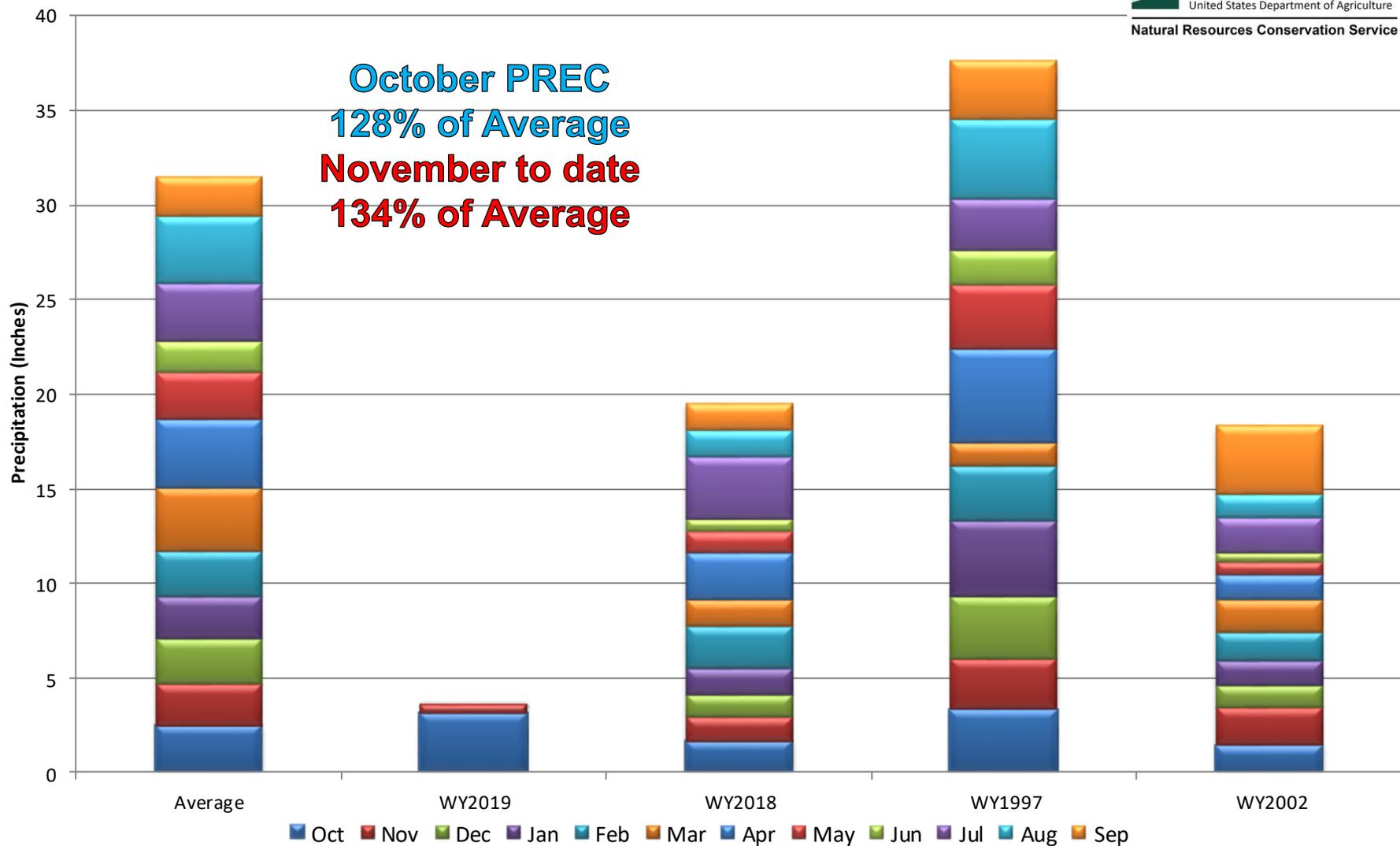
Based on Provisional SNOTEL data as of Nov 13, 2018

USDA
United States Department of Agriculture
Natural Resources Conservation Service



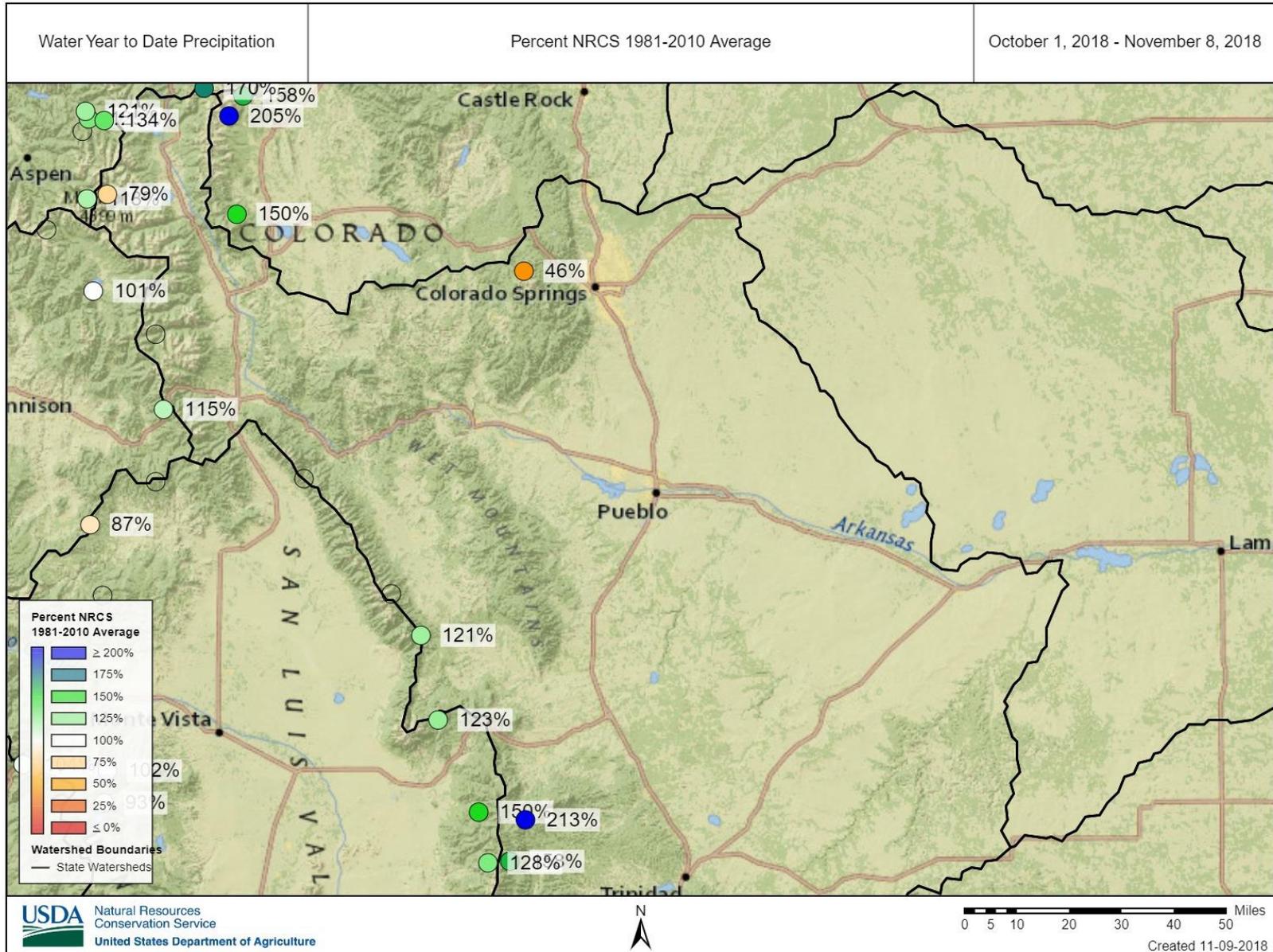
Arkansas River Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Nov 09, 2018



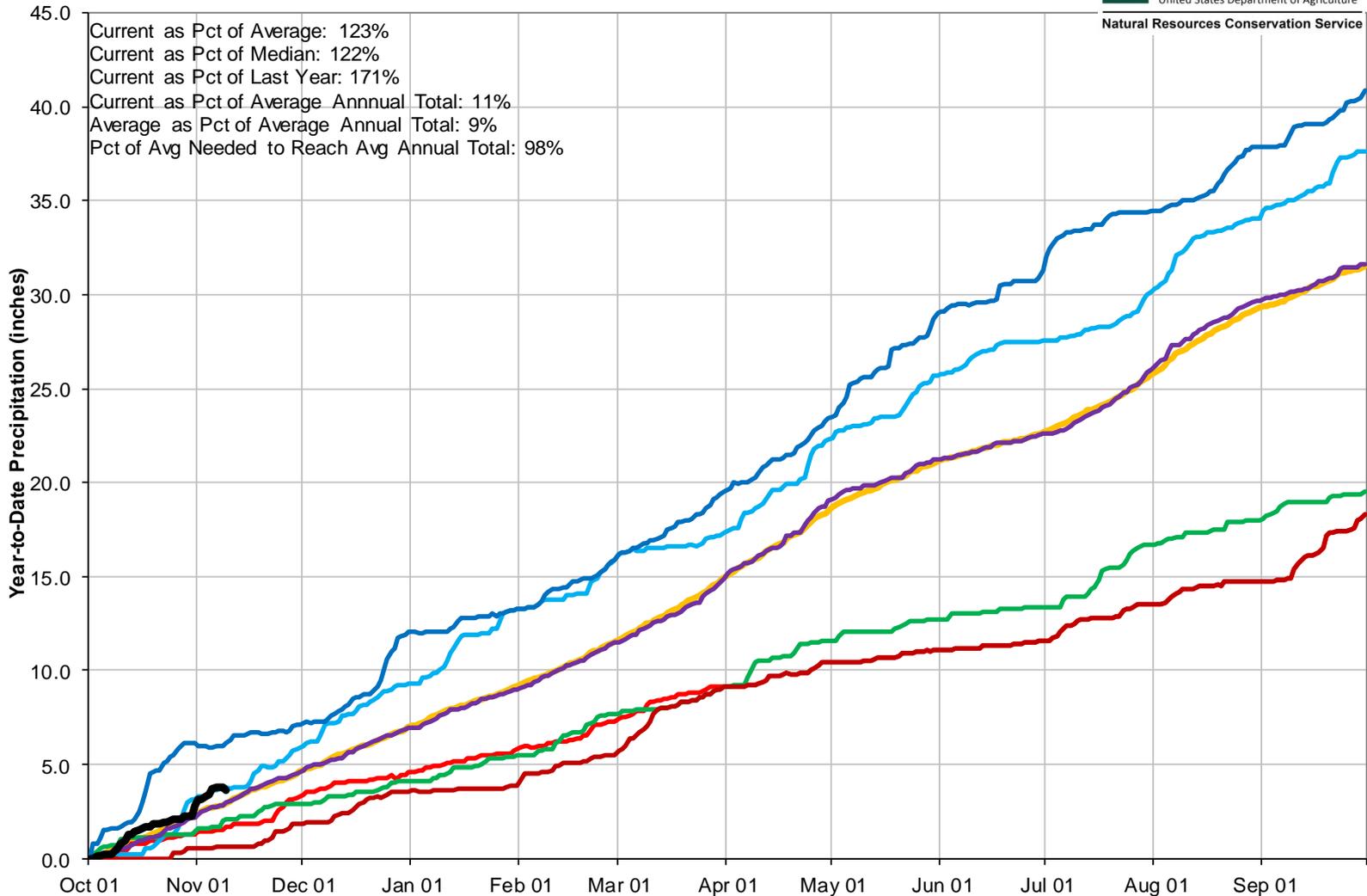


Colorado Snow Surveys



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

Based on Provisional SNOTEL data as of Nov 09, 2018

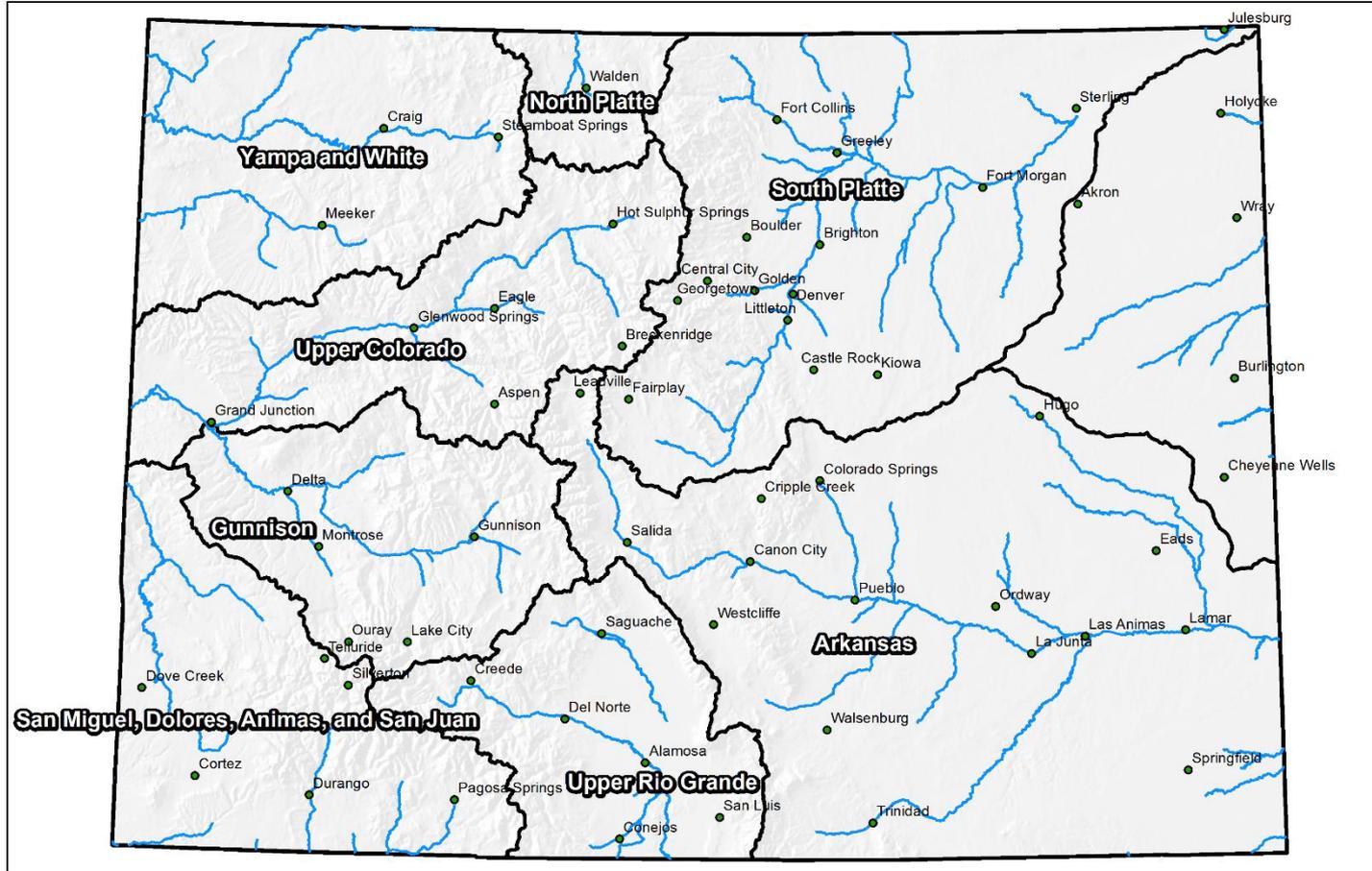


ARKANSAS RIVER BASIN Reservoir Storage Departure from Average



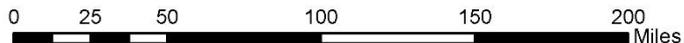
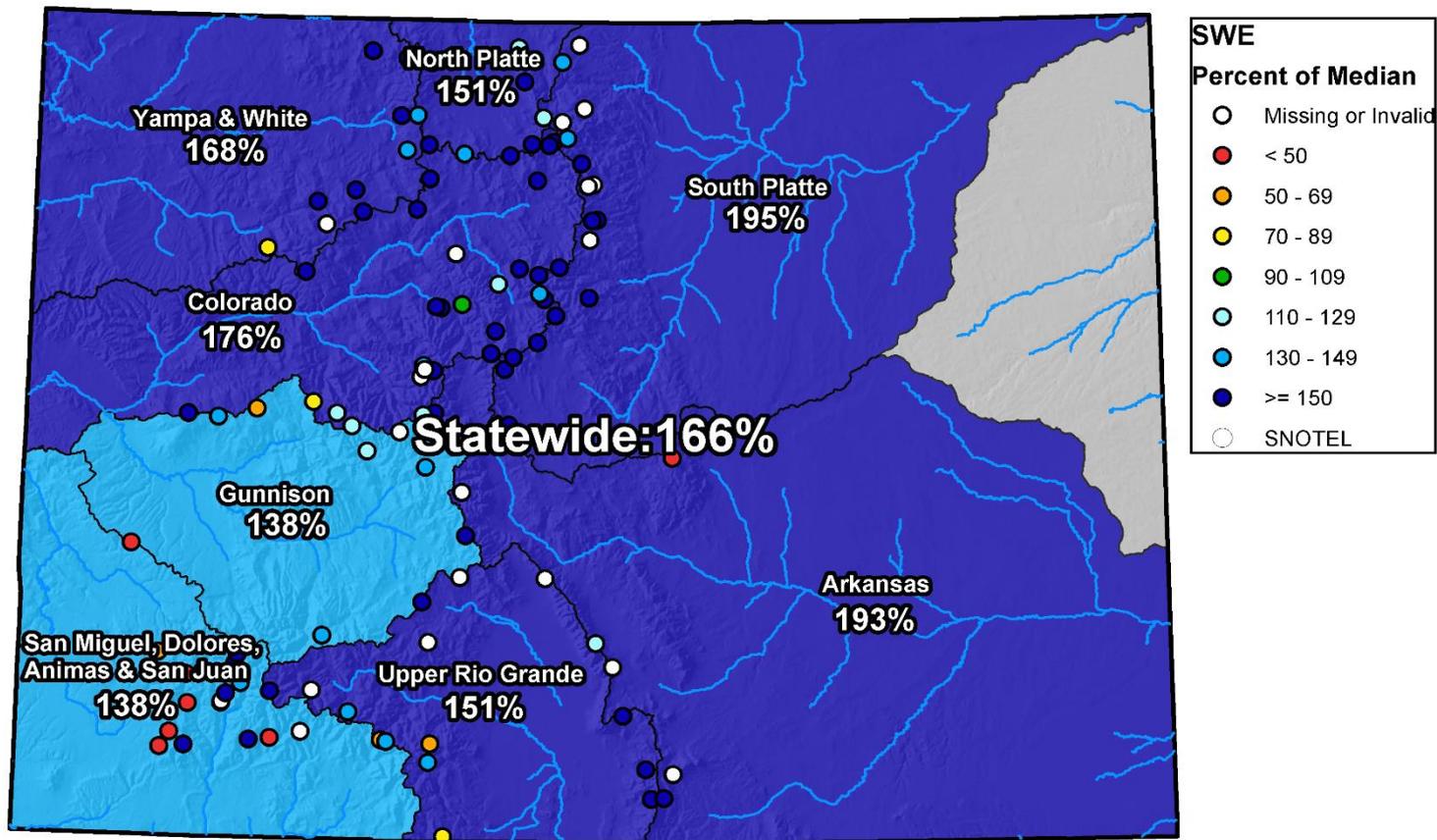
Colorado Statewide Summary

Colorado Major Basins



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

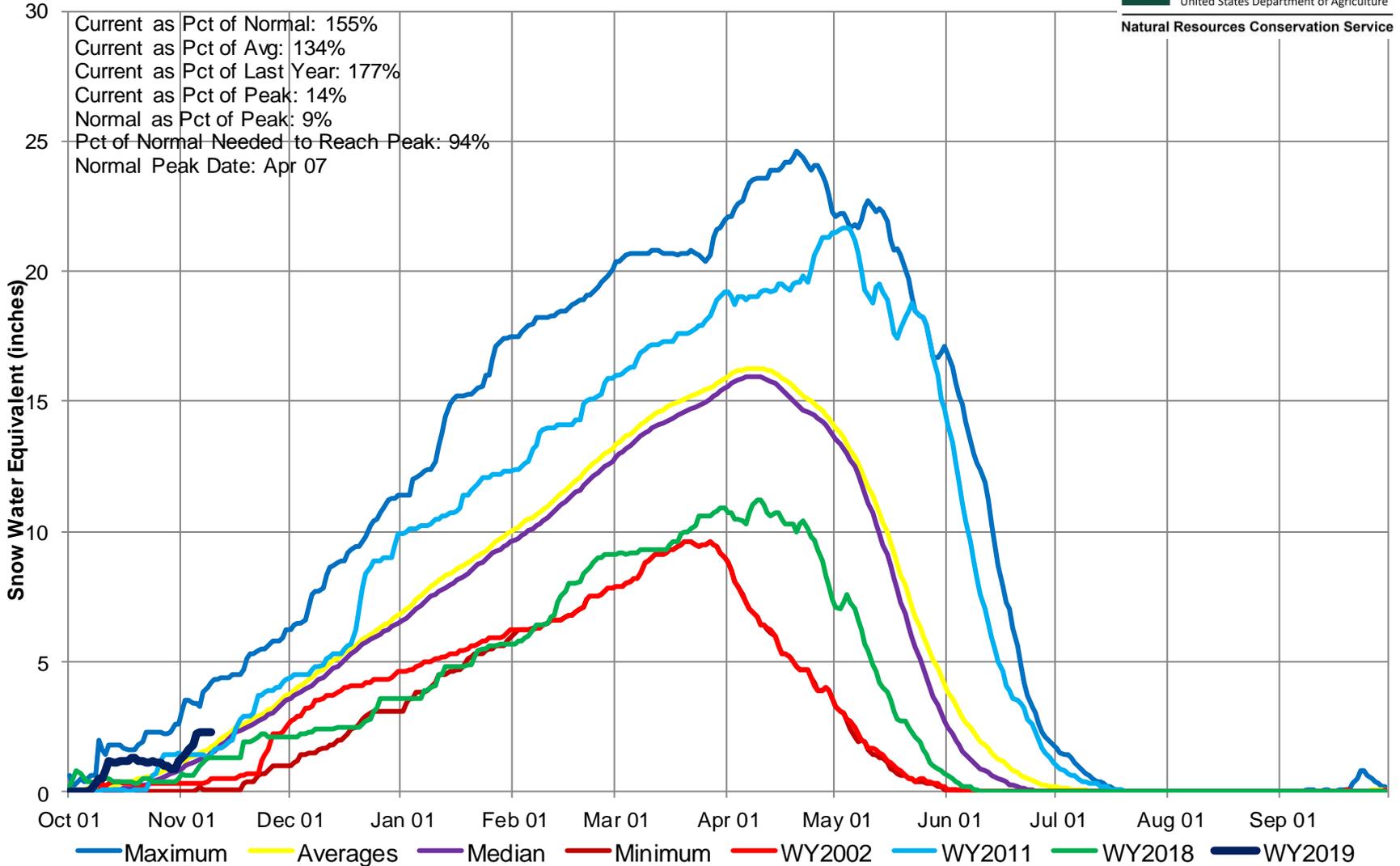
Current as of Nov 08, 2018





Colorado Statewide High/Low Snowpack Summary

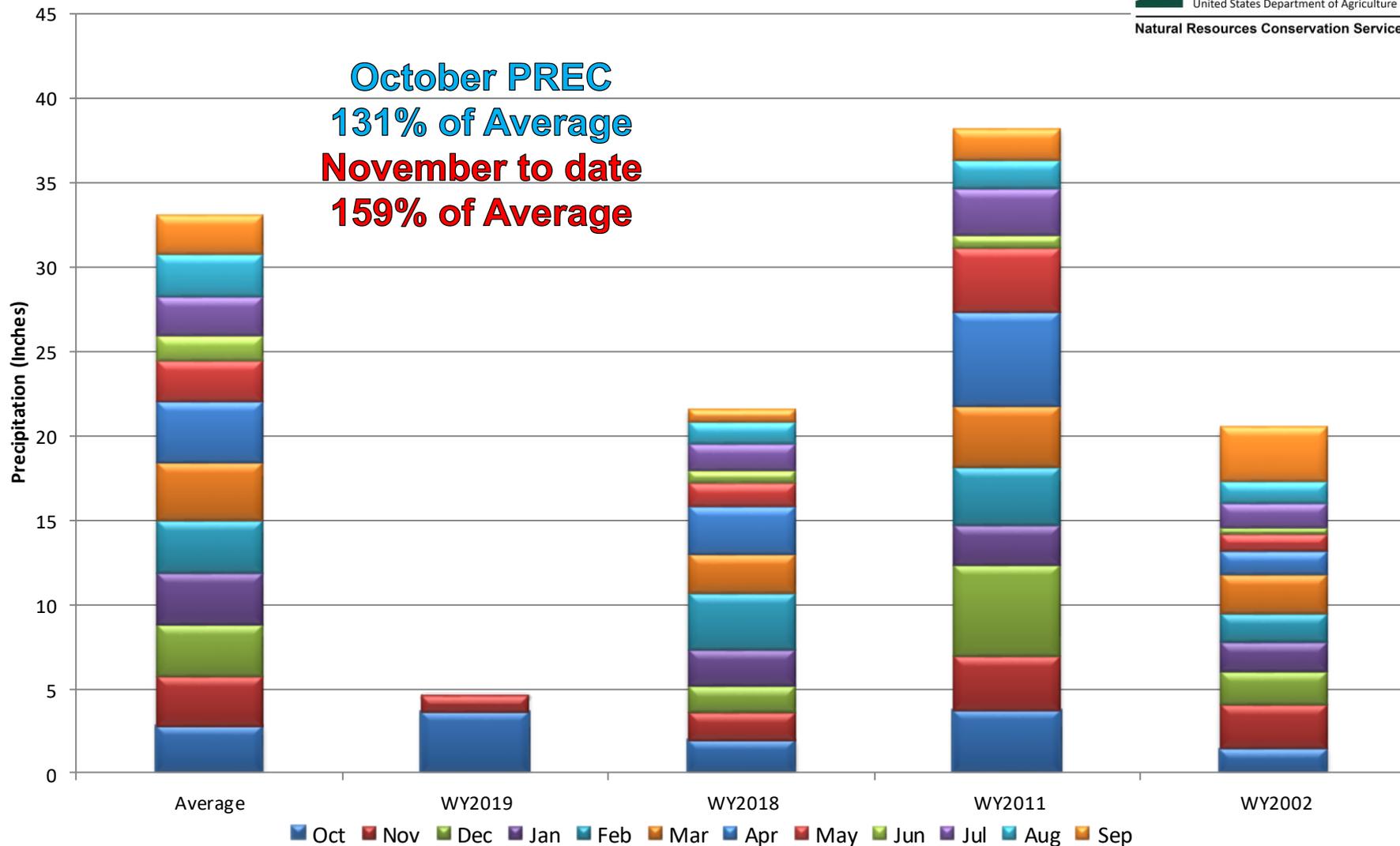
Based on Provisional SNOTEL data as of Nov 09, 2018



Colorado Statewide High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Nov 09, 2018

October PREC
131% of Average
November to date
159% of Average



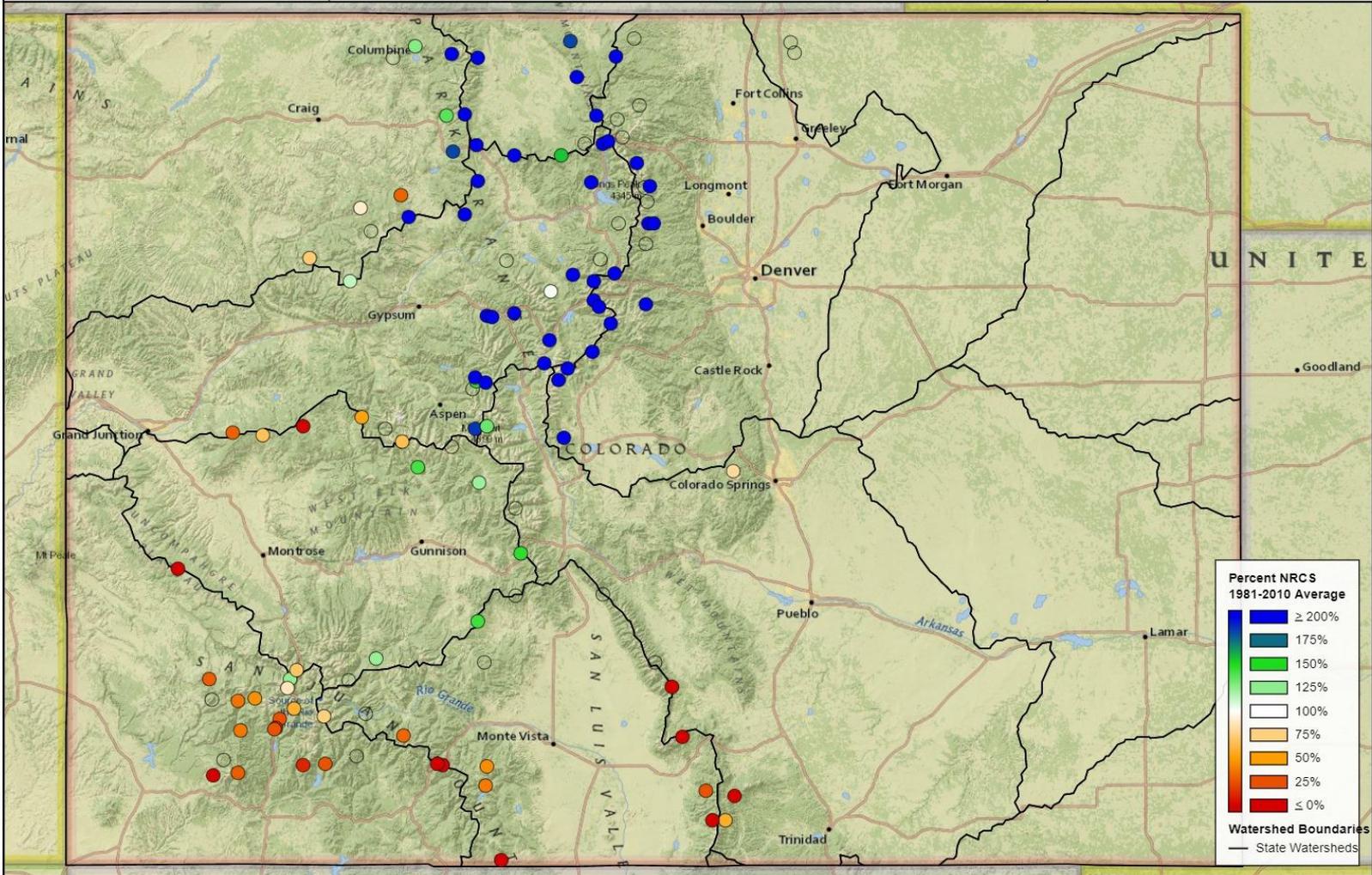


Colorado Snow Surveys

Month to Date Precipitation

Percent NRCS 1981-2010 Average

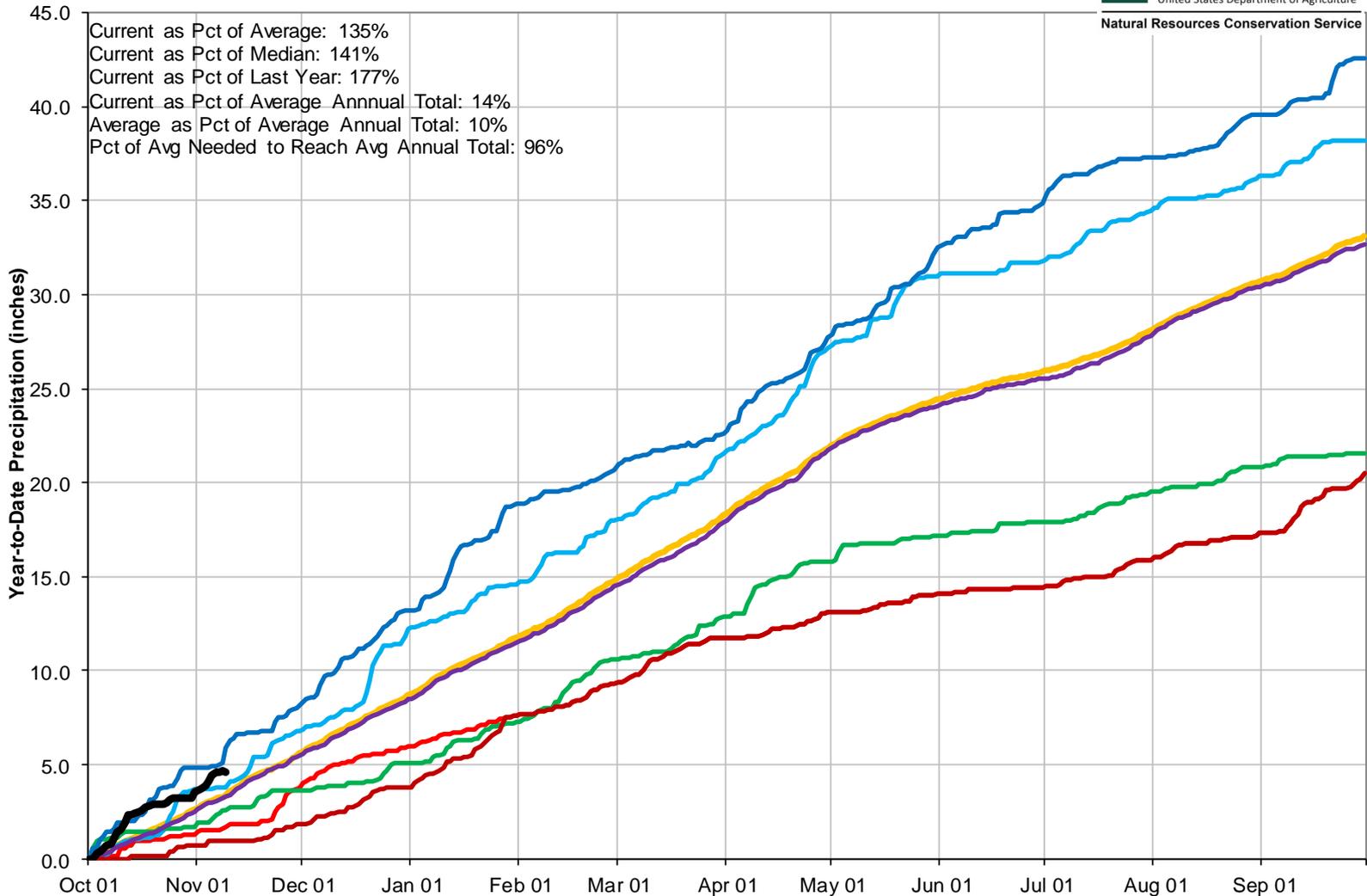
November 1, 2018 - November 8, 2018





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

Based on Provisional SNOTEL data as of Nov 09, 2018

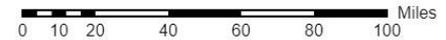
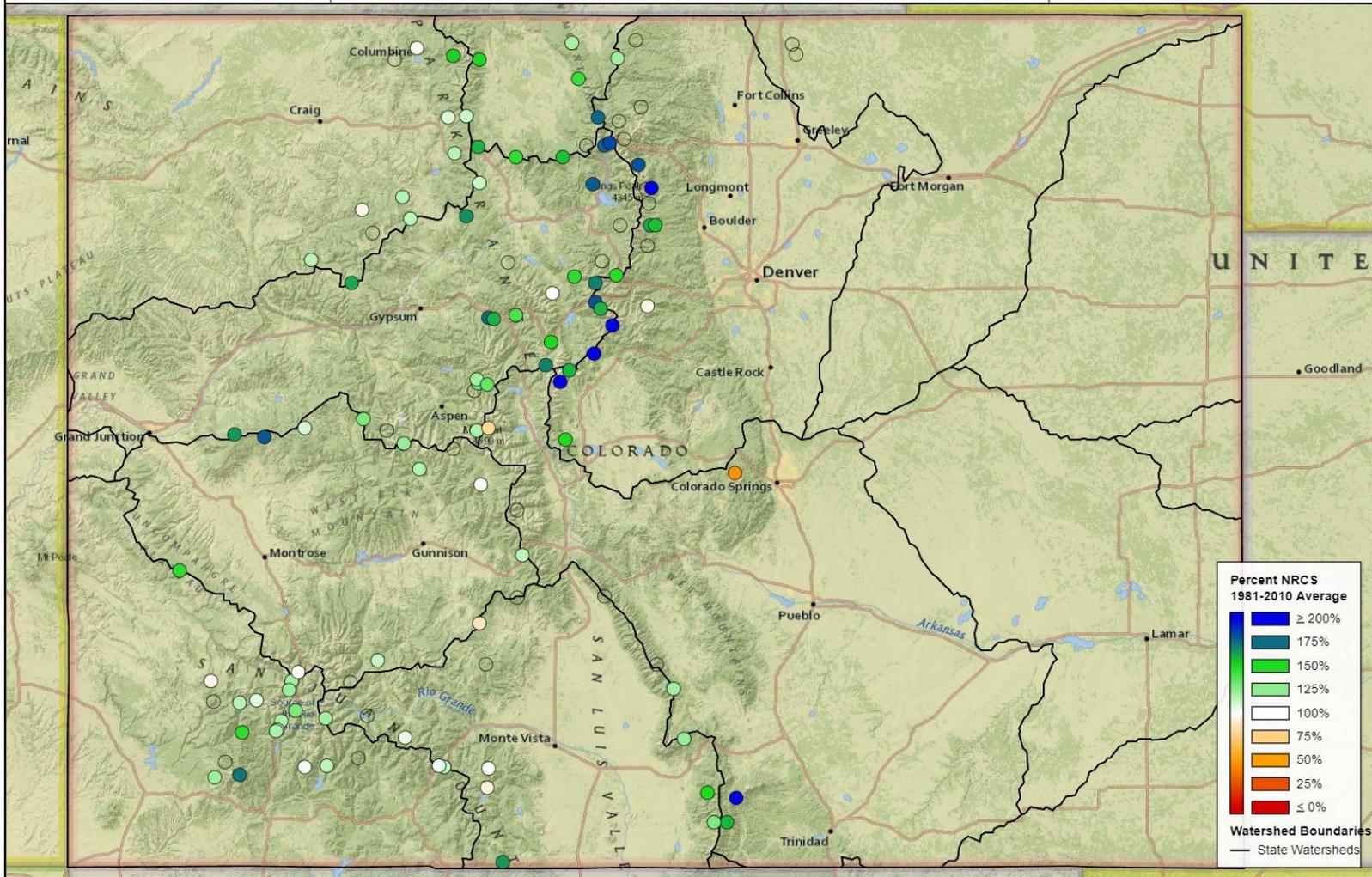




Water Year to Date Precipitation

Percent NRCS 1981-2010 Average

October 1, 2018 - November 8, 2018

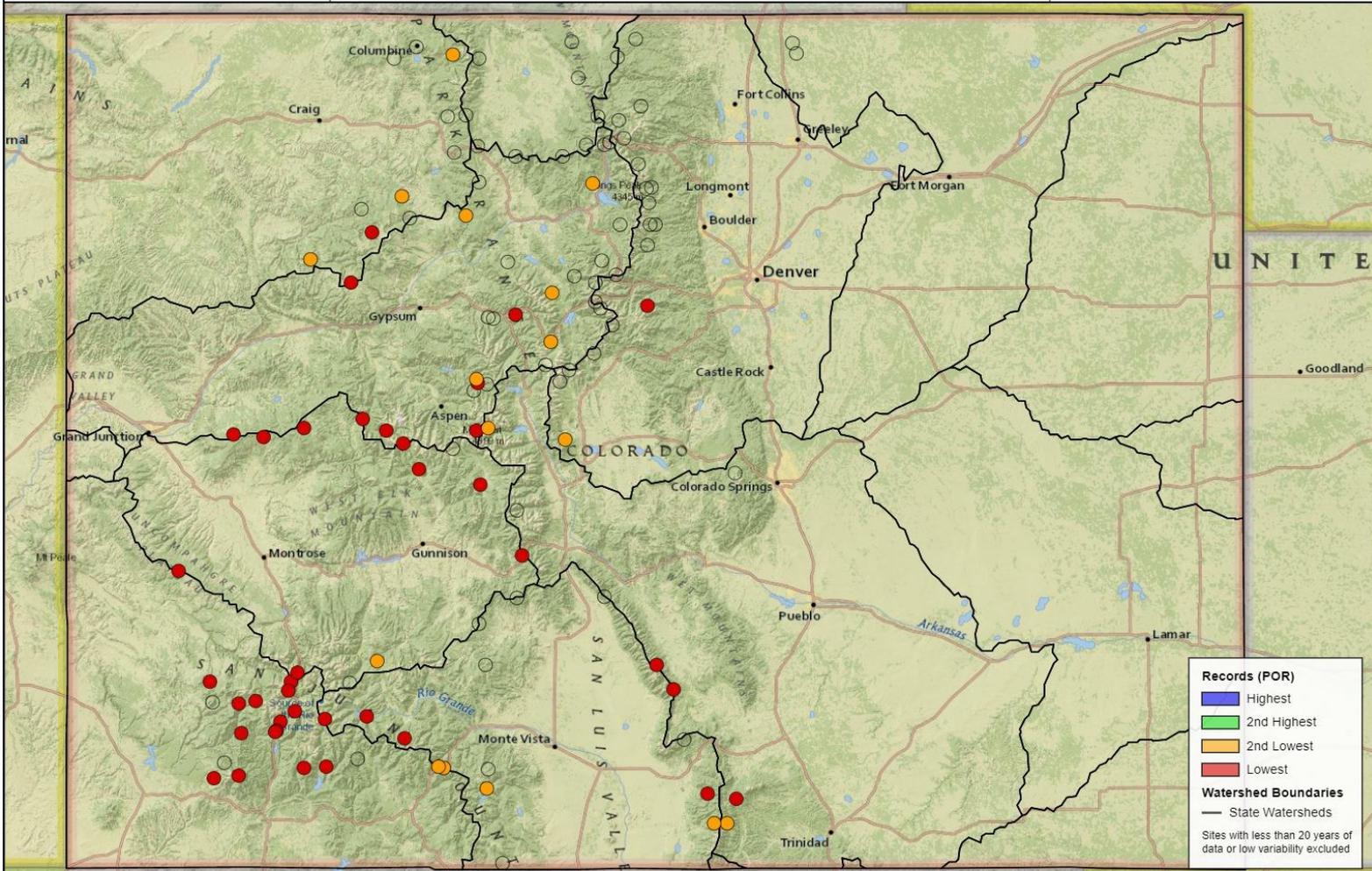




Water Year to Date Precipitation

Records (POR)

October 1, 2017 - September 30, 2018

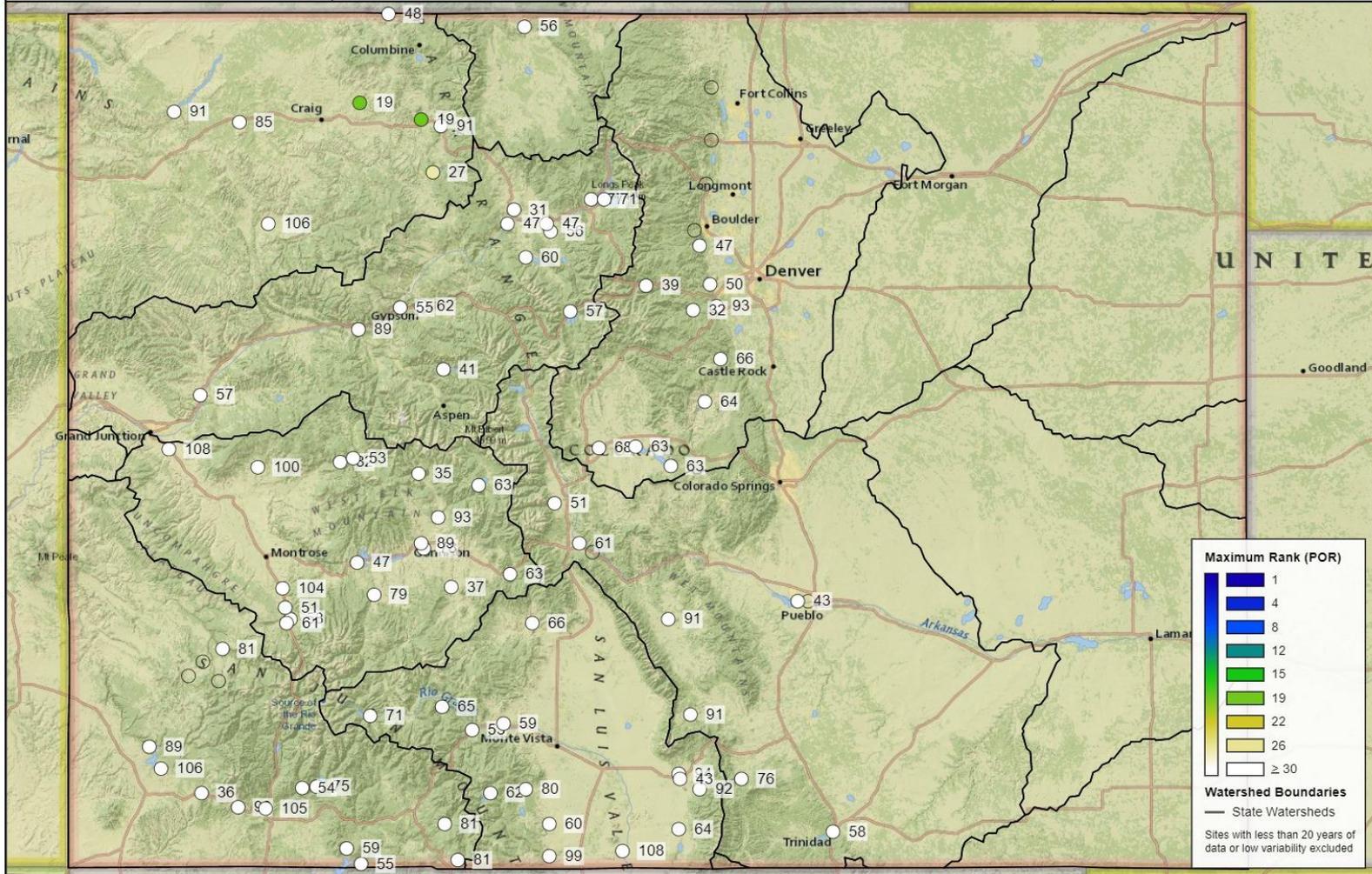




4 month Adjusted Volume, Observed

Maximum Rank (POR)

April 1, 2018 - July 31, 2018

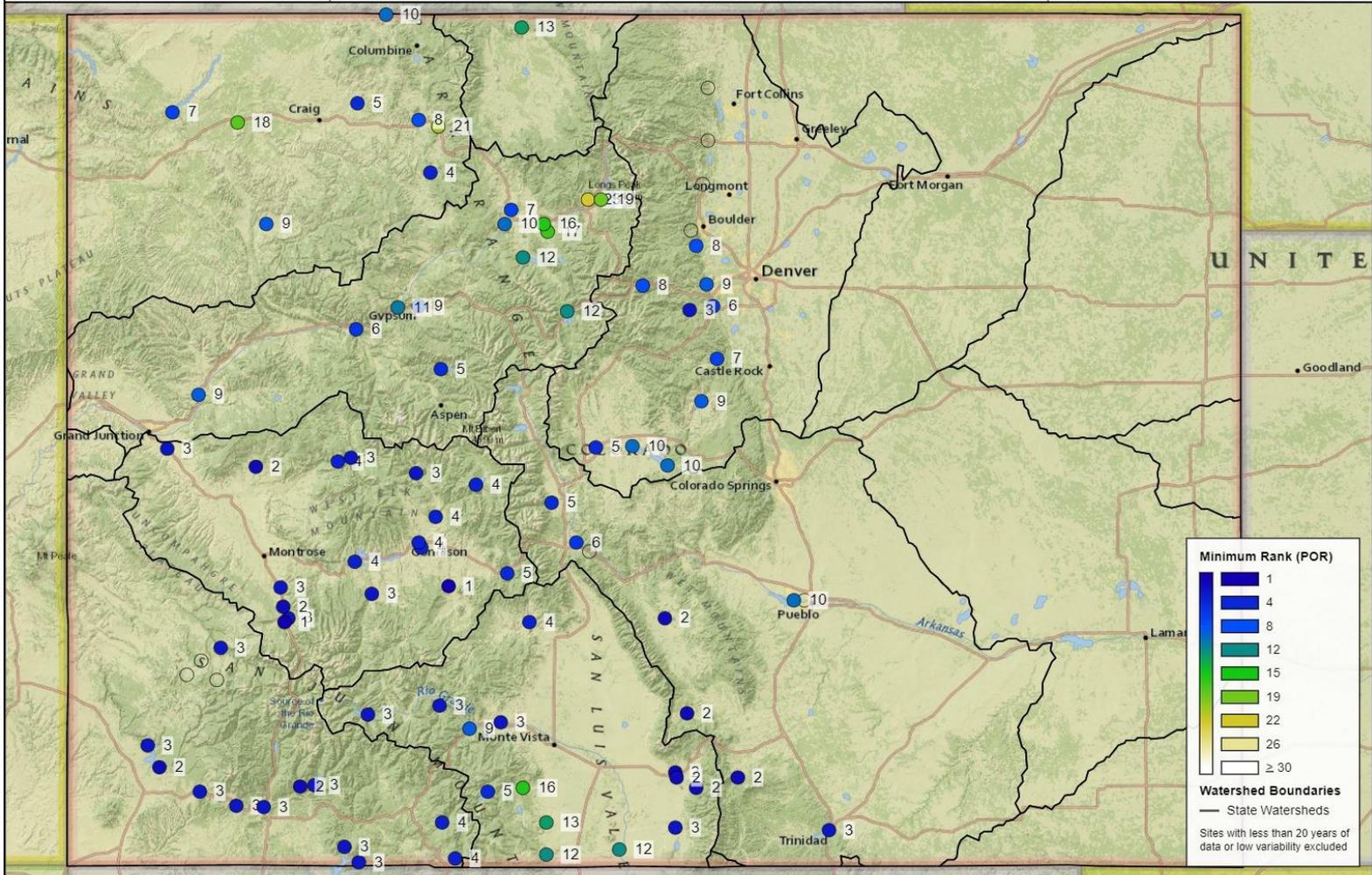




4 month Adjusted Volume, Observed

Minimum Rank (POR)

April 1, 2018 - July 31, 2018

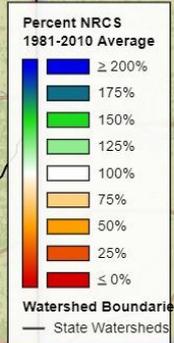
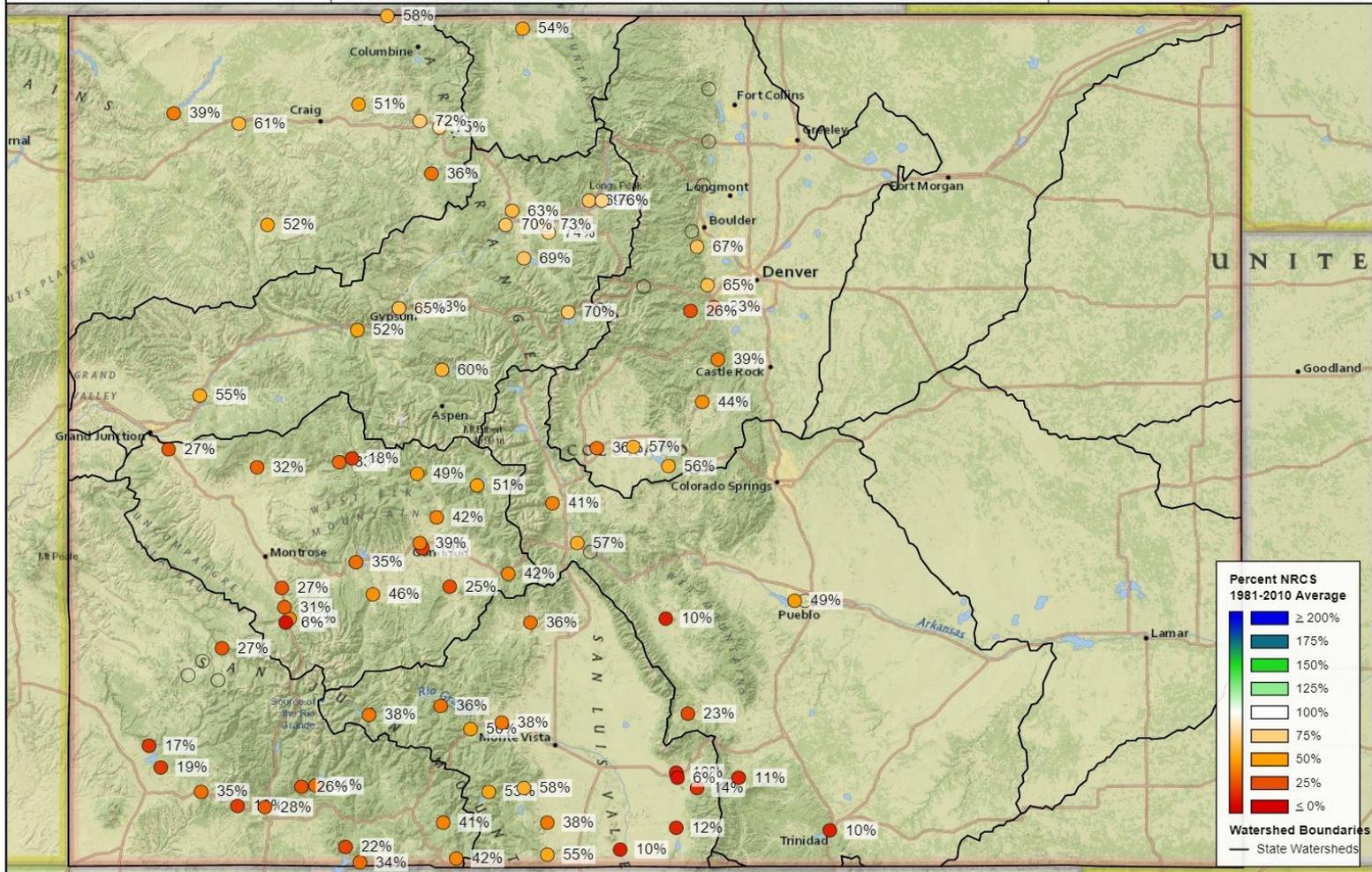




4 month Adjusted Volume, Observed

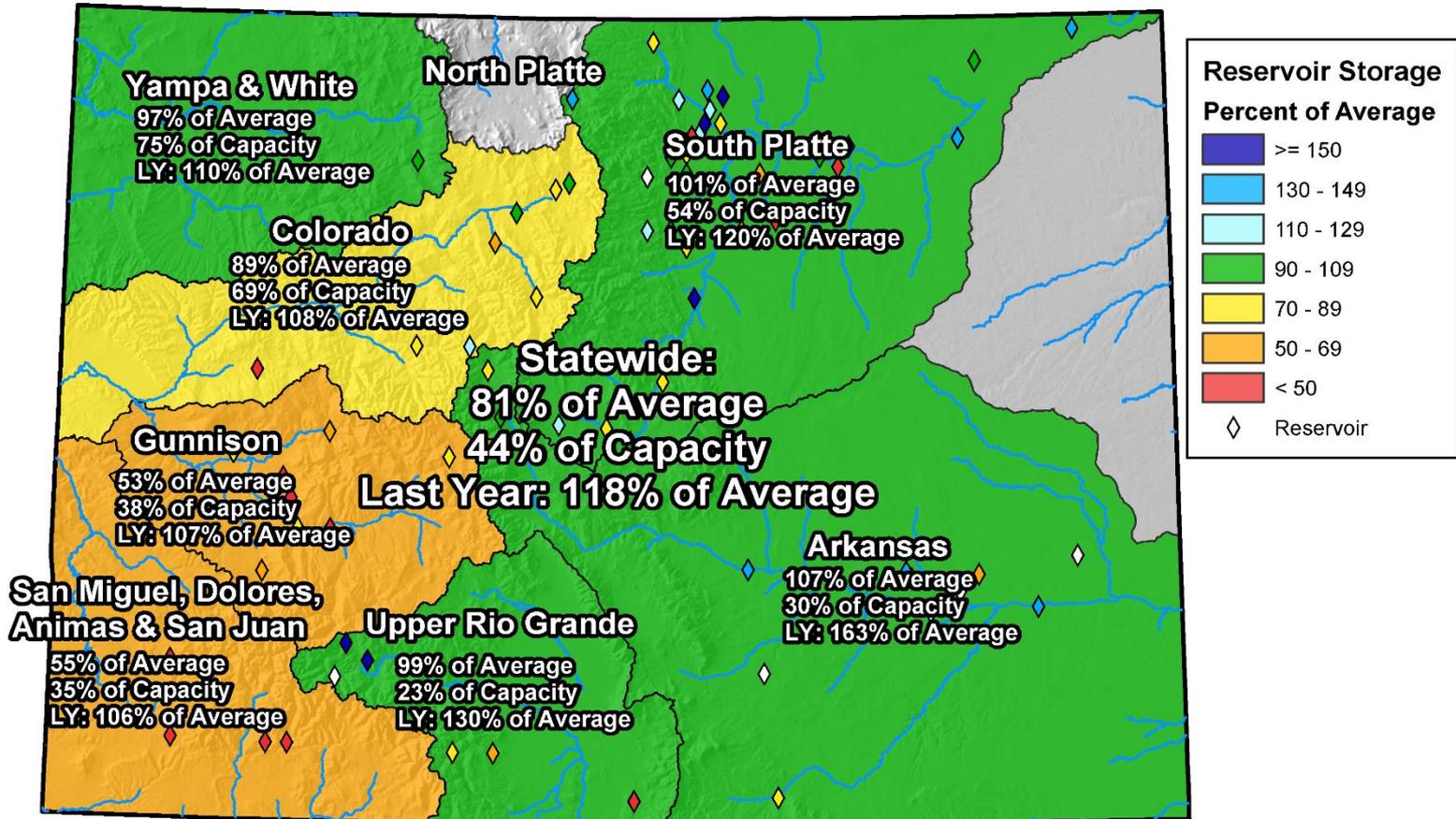
Percent NRCS 1981-2010 Average

April 1, 2018 - July 31, 2018



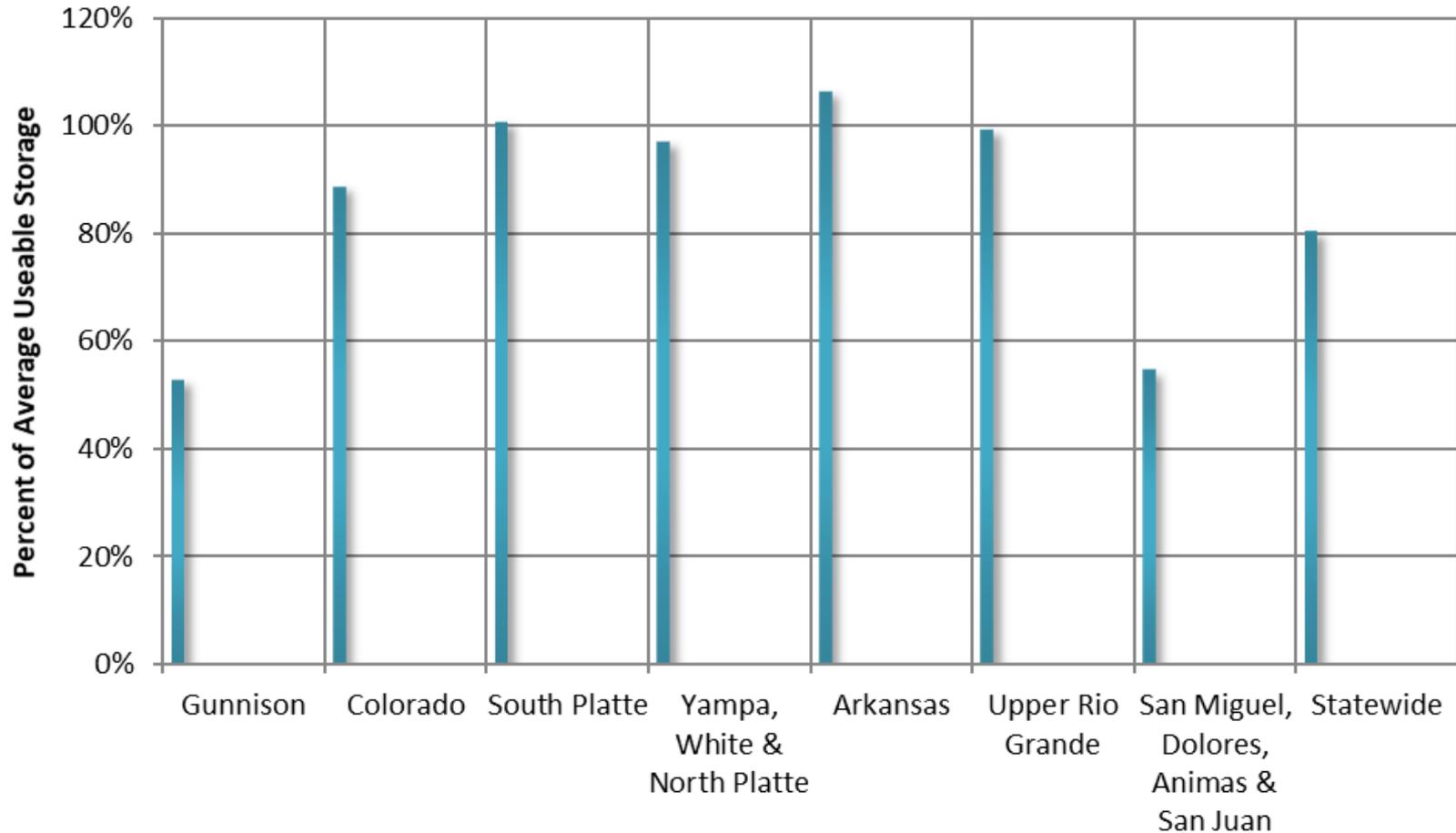
Colorado Monthly Reservoir Storage Summary

End of October 2018



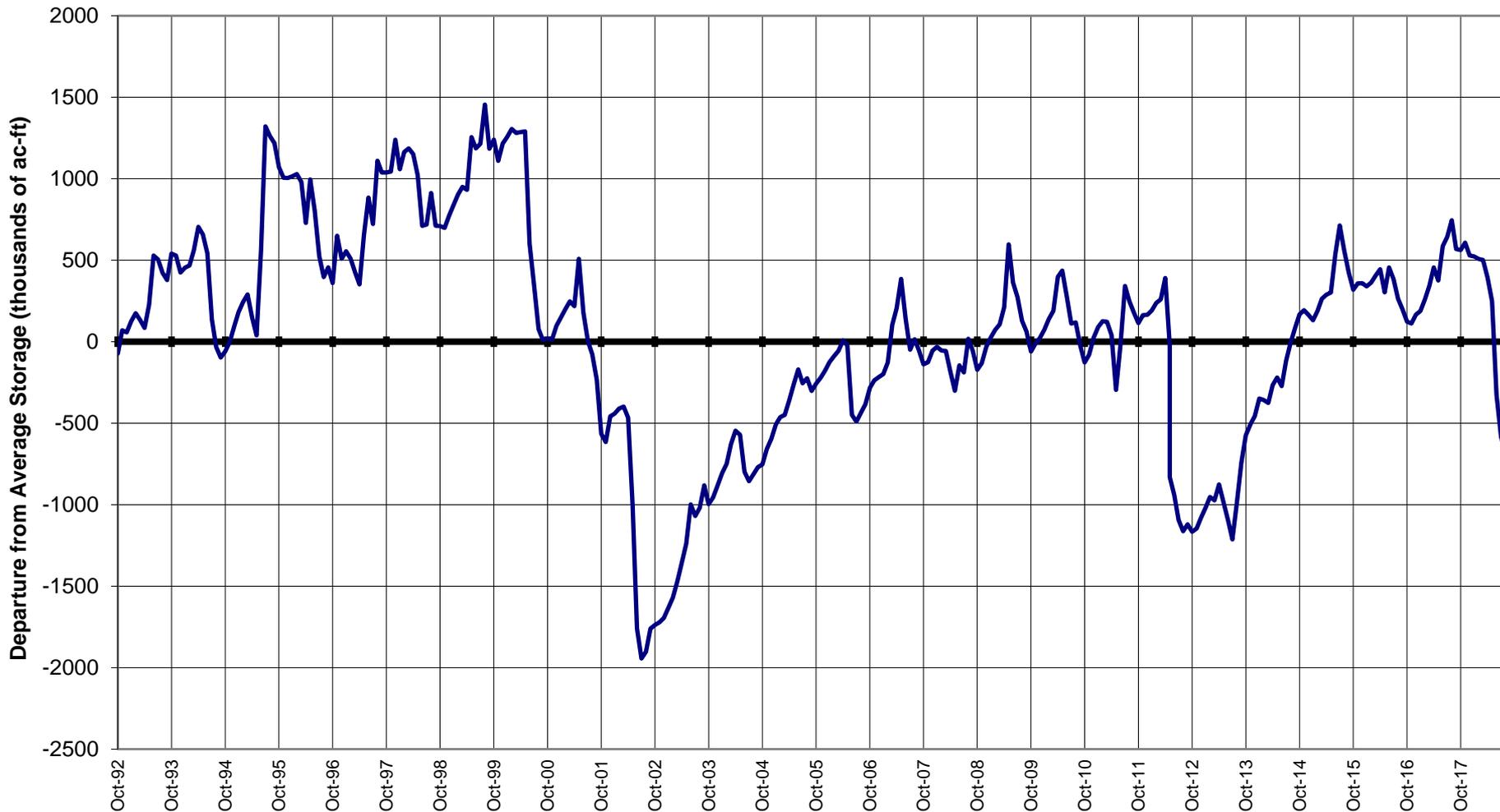
Colorado Reservoir Storage

- Oct-18
- Nov-18
- Dec-18
- Jan-19
- Feb-19
- Mar-19
- Apr-19
- May-19
- Jun-19
- Jul-19
- Aug-19
- Sep-19





COLORADO STATEWIDE Reservoir Storage Departure from Average



Summary

- Water Year 2018 ended up with record low precipitation at most SNOTEL sites in southern Colorado
- Many summer streamflow volumes were some of the lowest on record- often with over 100 years of data
- Reservoir storage is currently extremely low in southern and Western Colorado
- Water Year 2019 has been off to a great start so far
 - Early snowfall across the state much of which has remained to start the seasonal snowpack
 - Recently more dry in southern Colorado but the central and northern mountains have continued to receive steady accumulations
- Hopefully the current trend of precipitation keeps going and especially in Southern Colorado



Water Availability Task Force Meeting

November 13th, 2018

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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