



United States Department of Agriculture

Colorado Snow Surveys

Water Availability Task Force Meeting

May 17th, 2018

NRCS Snow Survey and Water Supply Forecasting Program

Karl Wetlaufer

Hydrologist

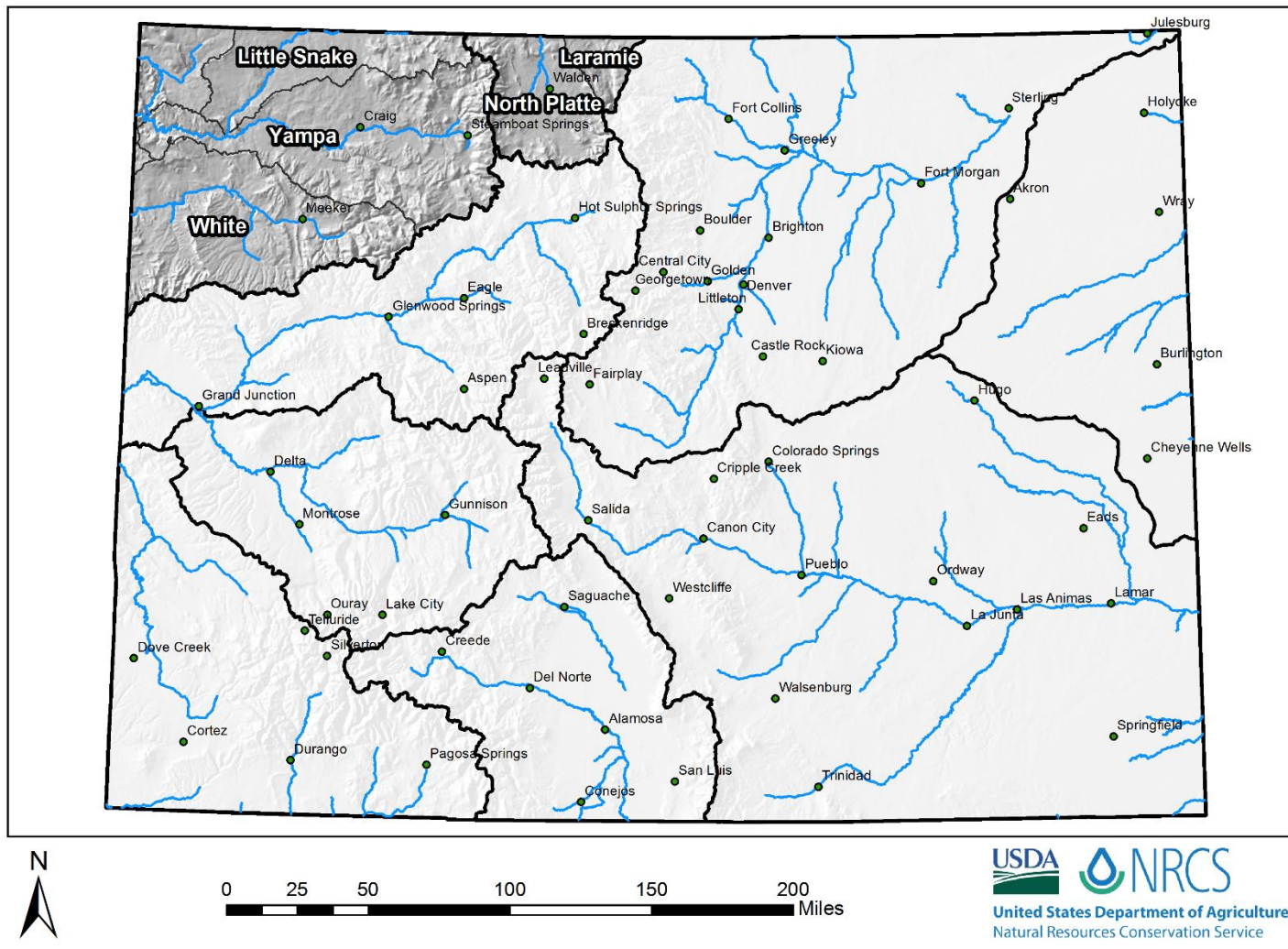
Asst. Snow Survey Supervisor

720-544-2853

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

Major Basin Summary

Yampa, White, and North Platte River Basins





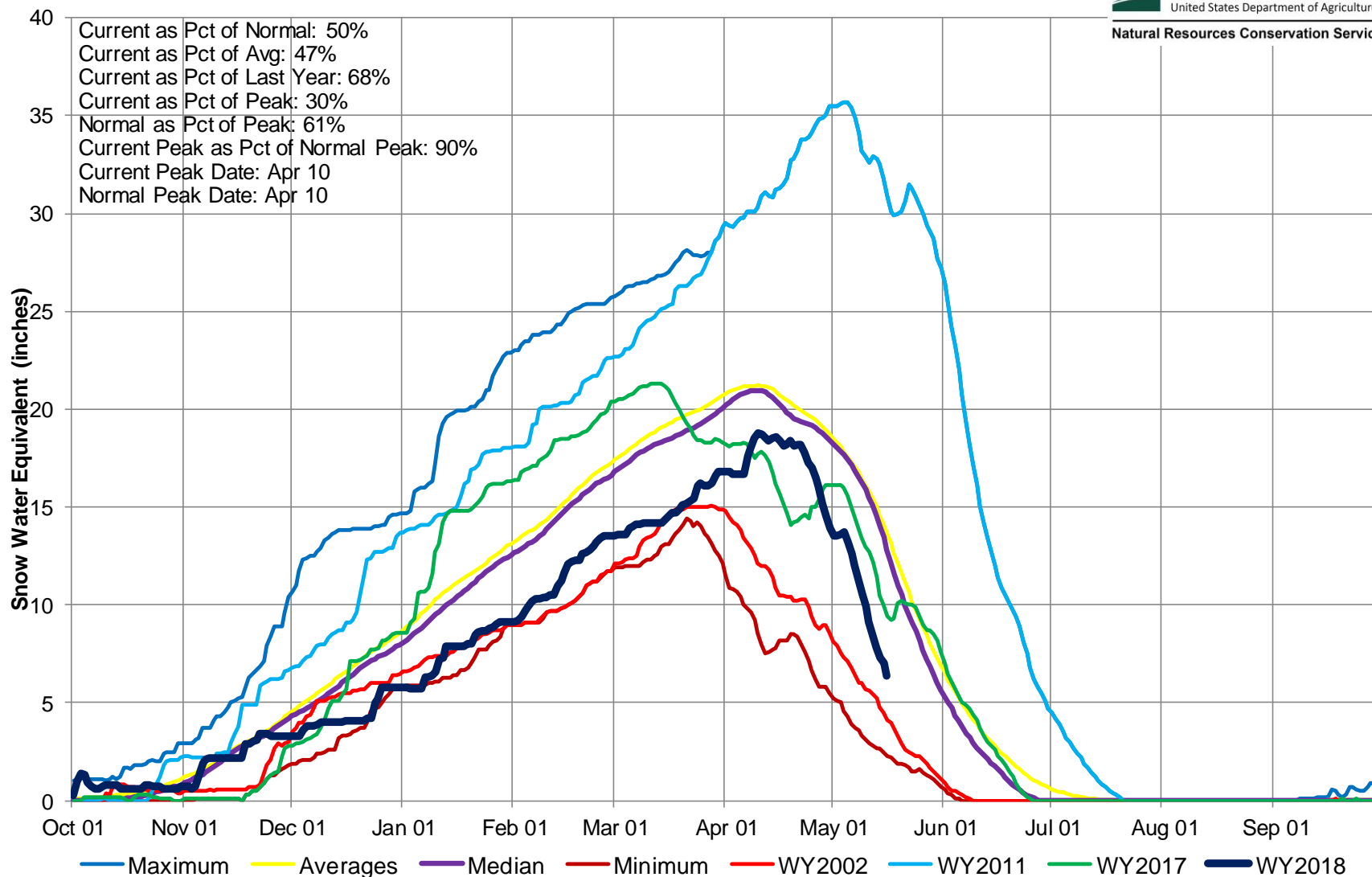
Yampa and White River Basins High/Low Snowpack Summary

Based on Provisional SNOTEL data as of May 16, 2018



United States Department of Agriculture

Natural Resources Conservation Service



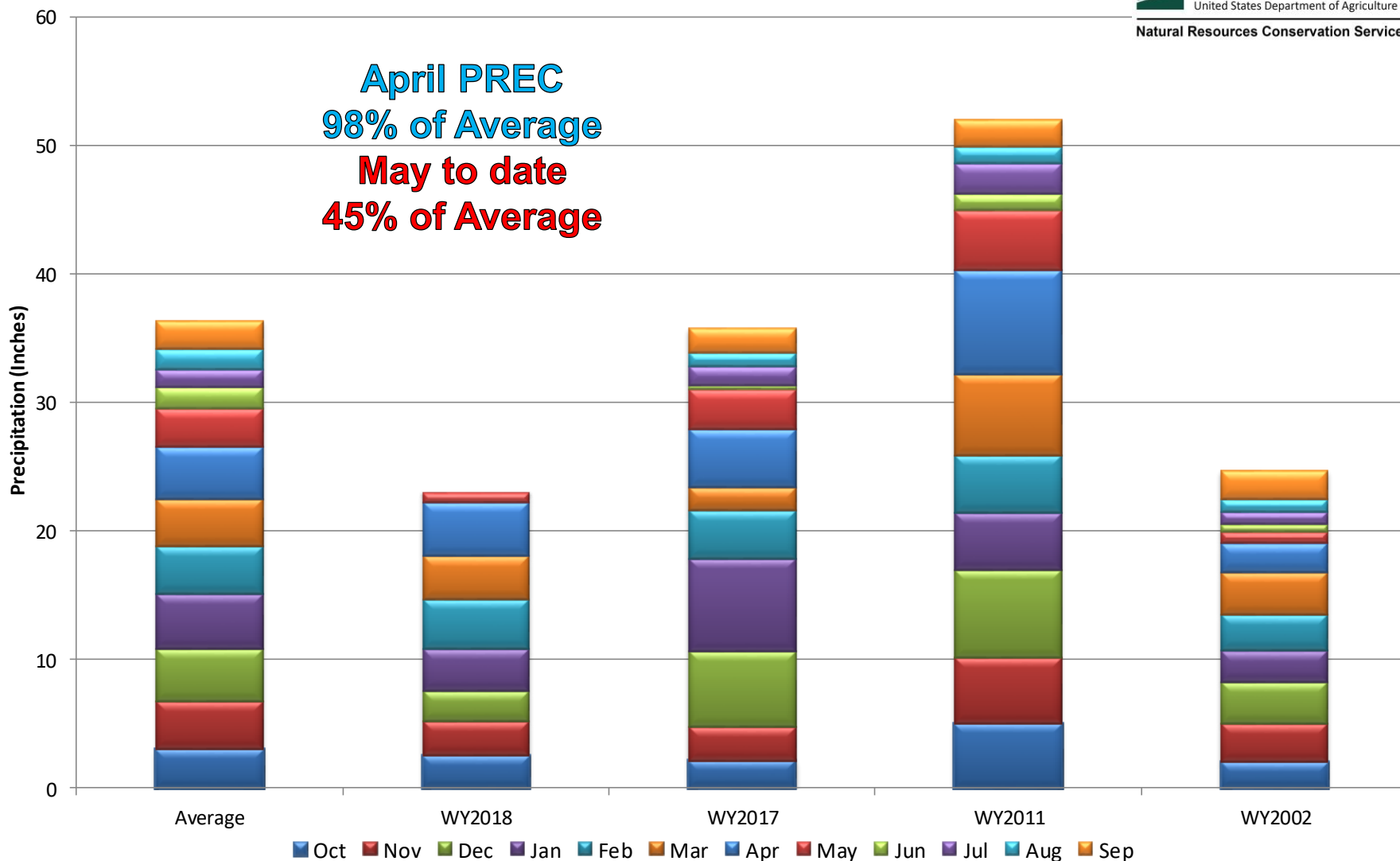
Yampa and White River Basins High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of May 16, 2018

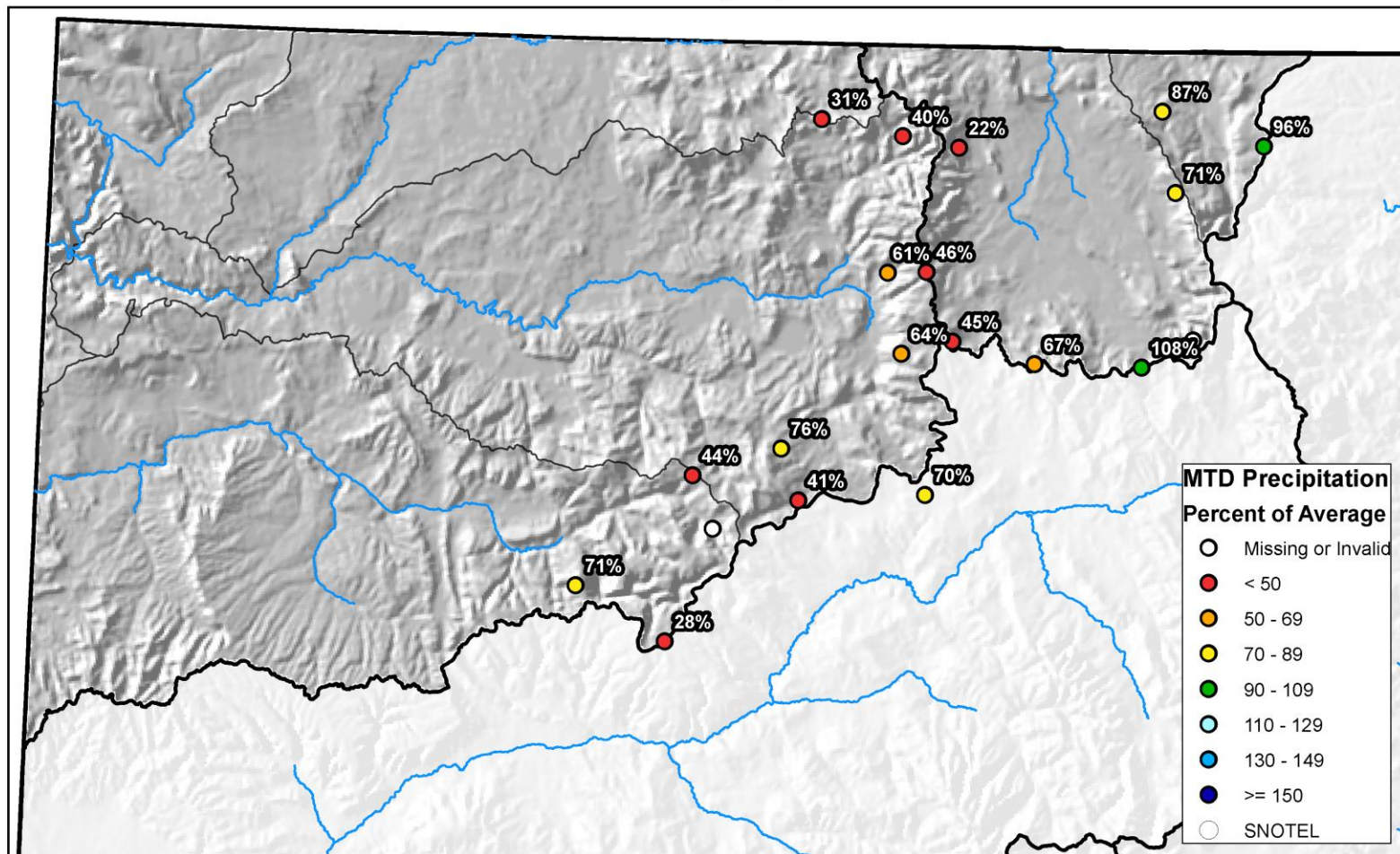


United States Department of Agriculture

Natural Resources Conservation Service



Yampa, White, and North Platte River Basins Month to Date Precipitation Summary Current as of May 16, 2018



0 10 20 40 60 80 Miles

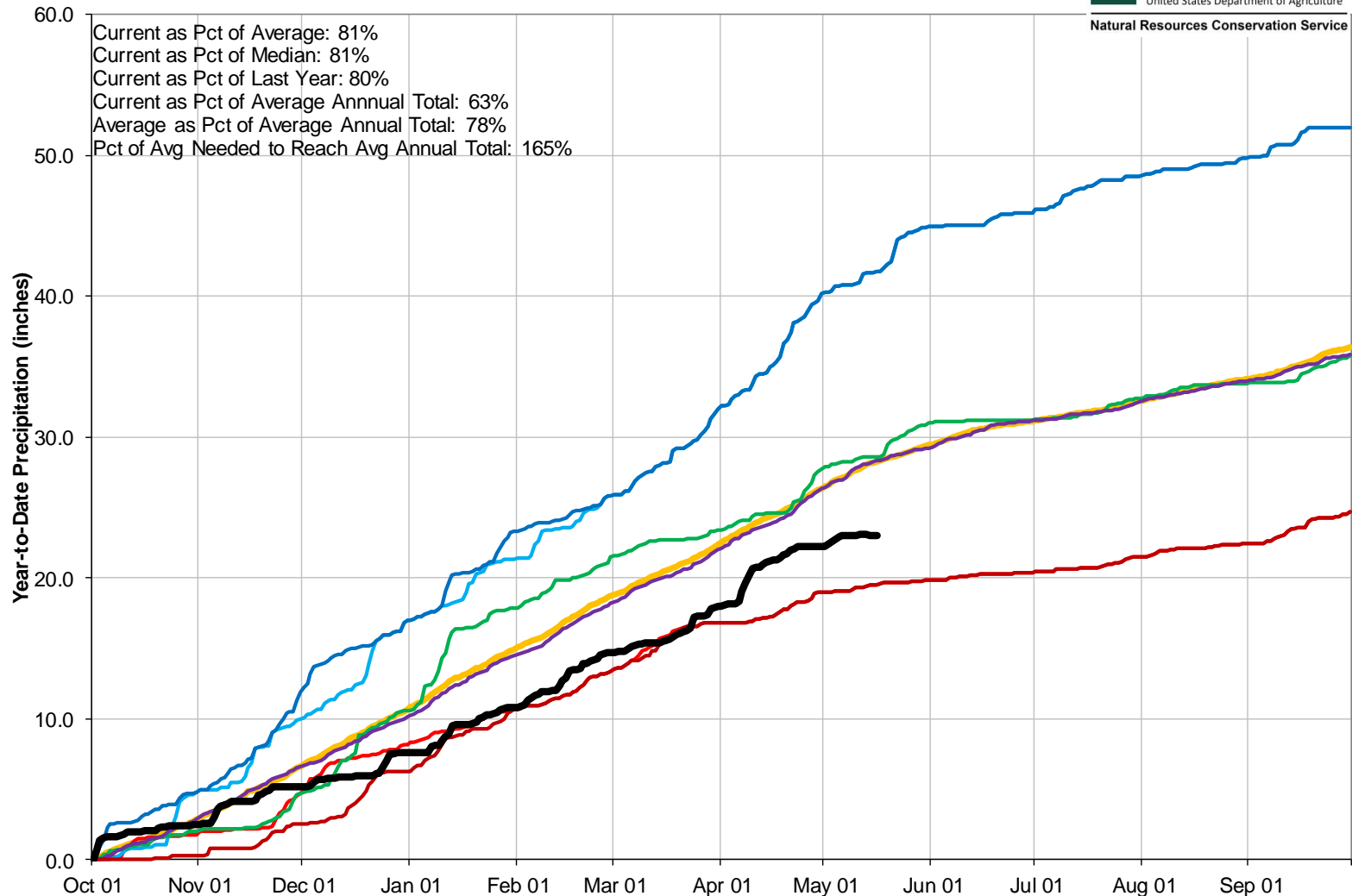
Yampa and White River Basins High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of May 16, 2018

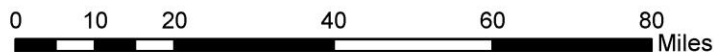
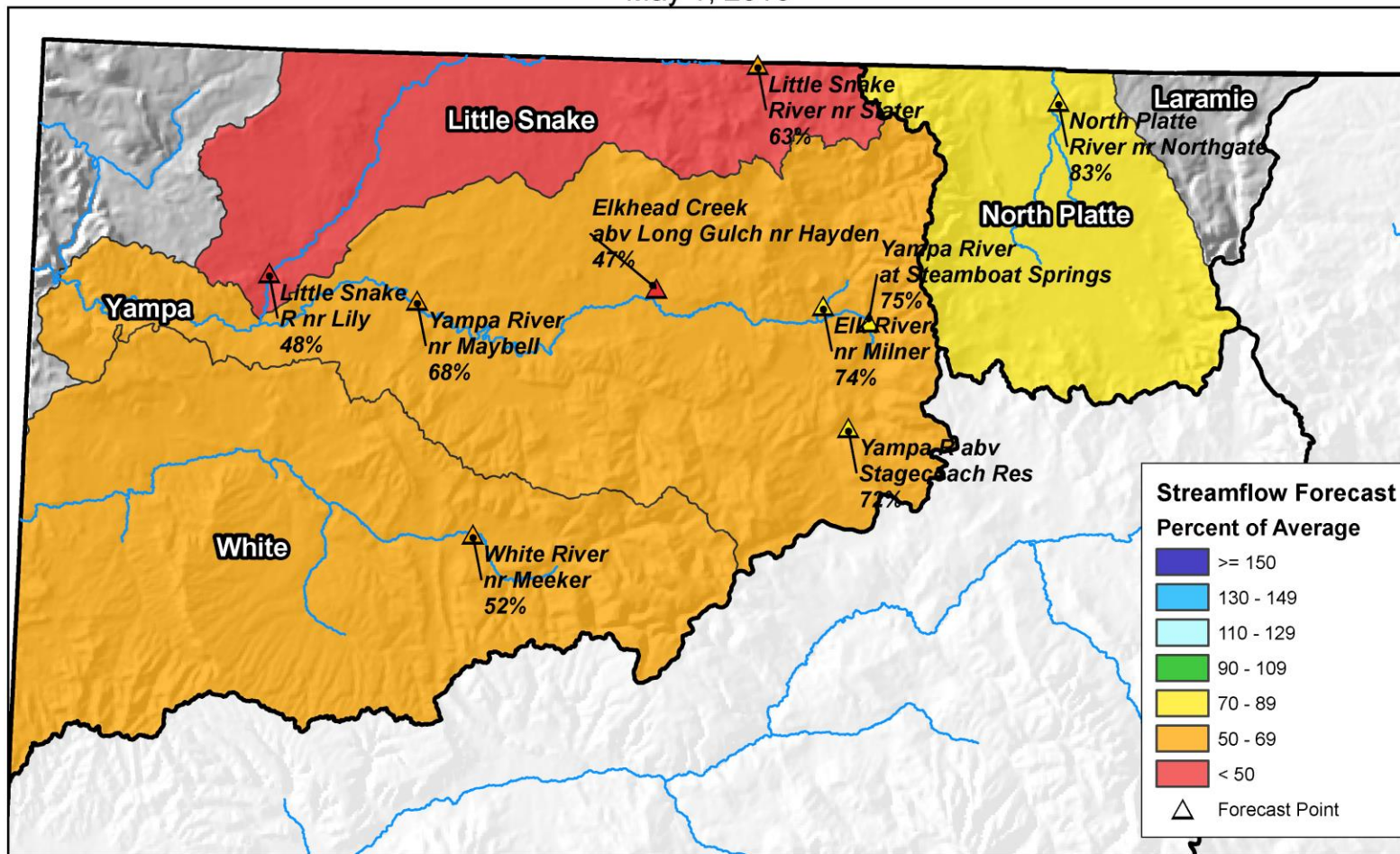


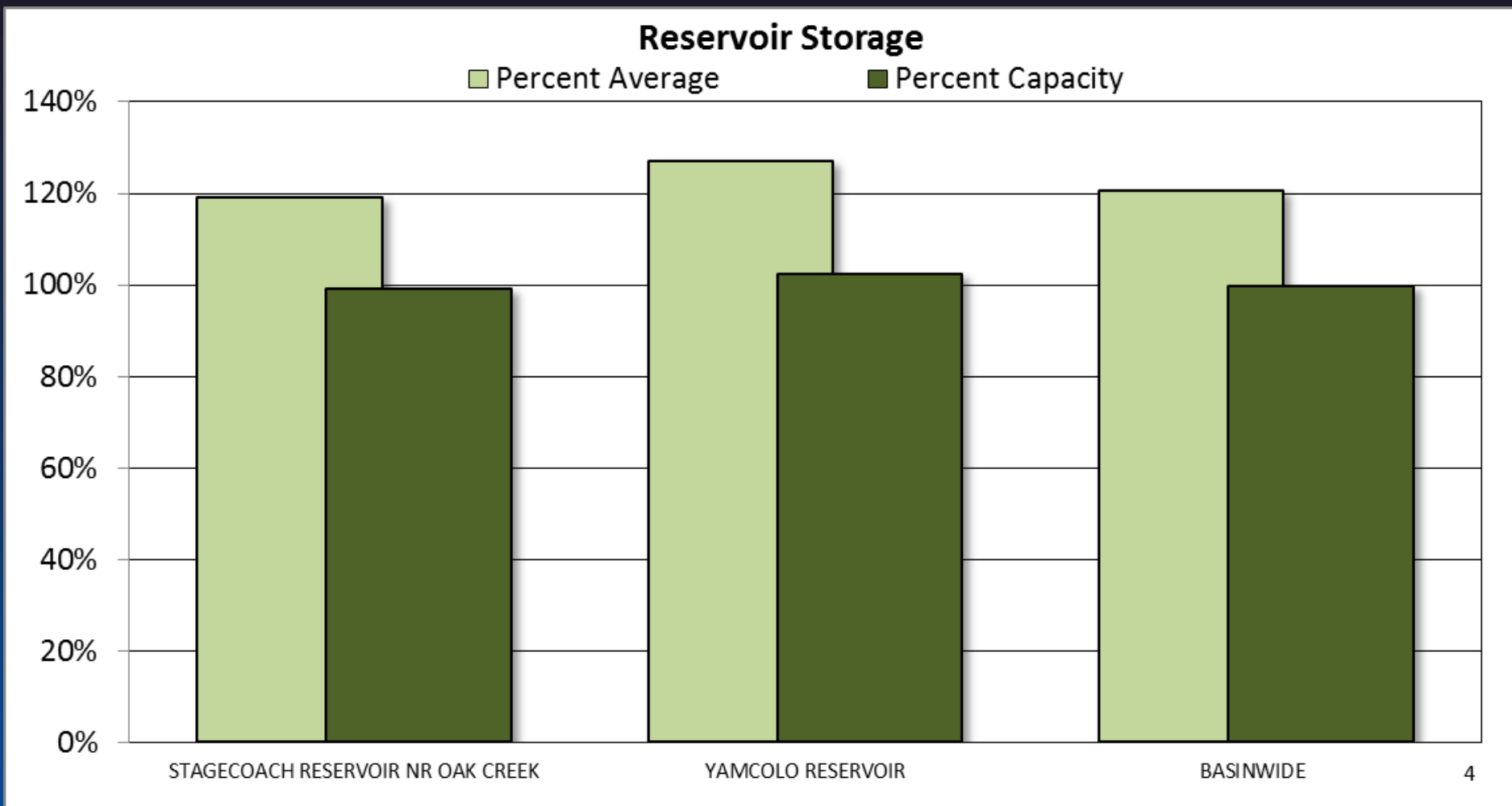
United States Department of Agriculture

Natural Resources Conservation Service

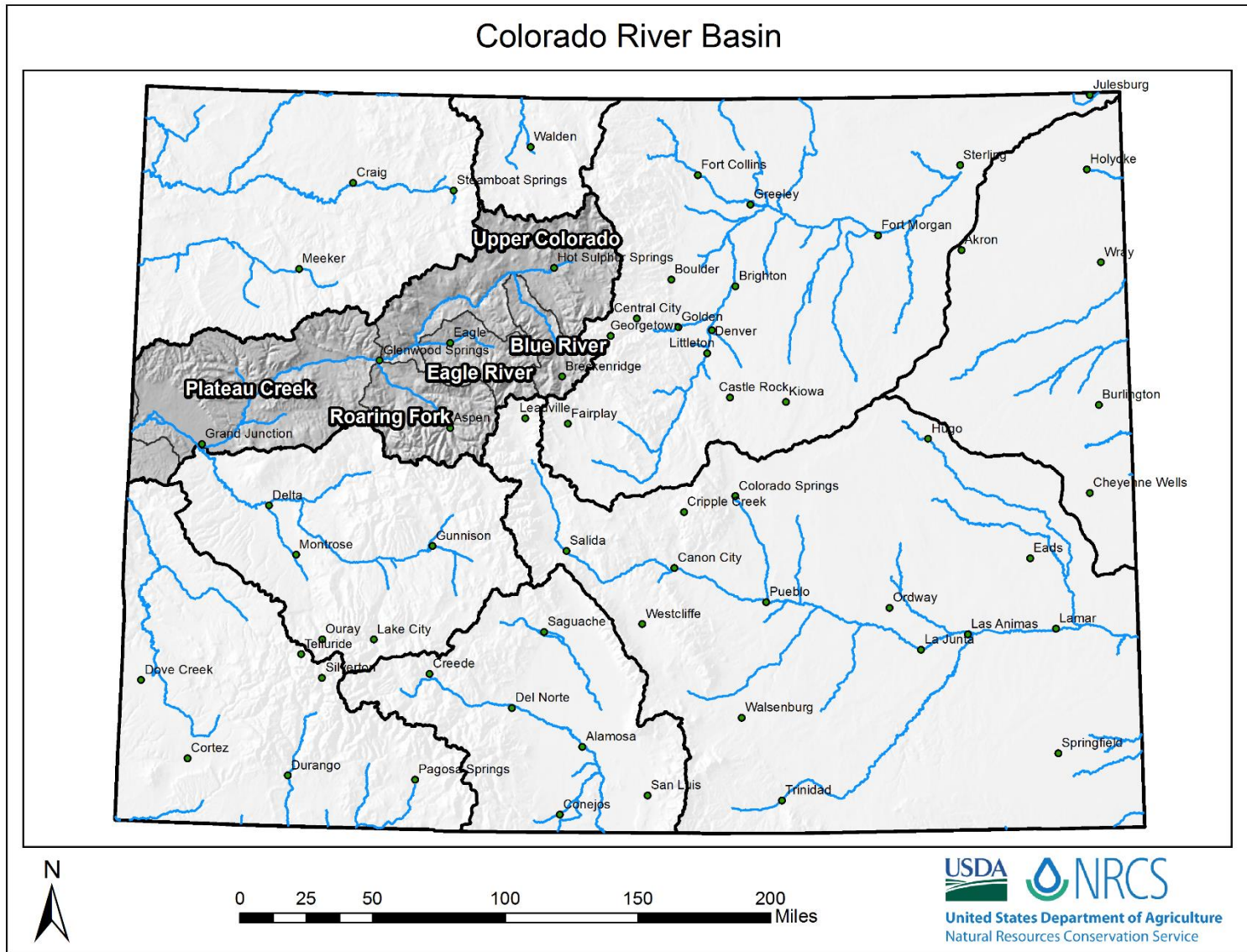


Yampa, White, and North Platte River Basins Streamflow Forecast Summary May 1, 2018





Major Basin Summary



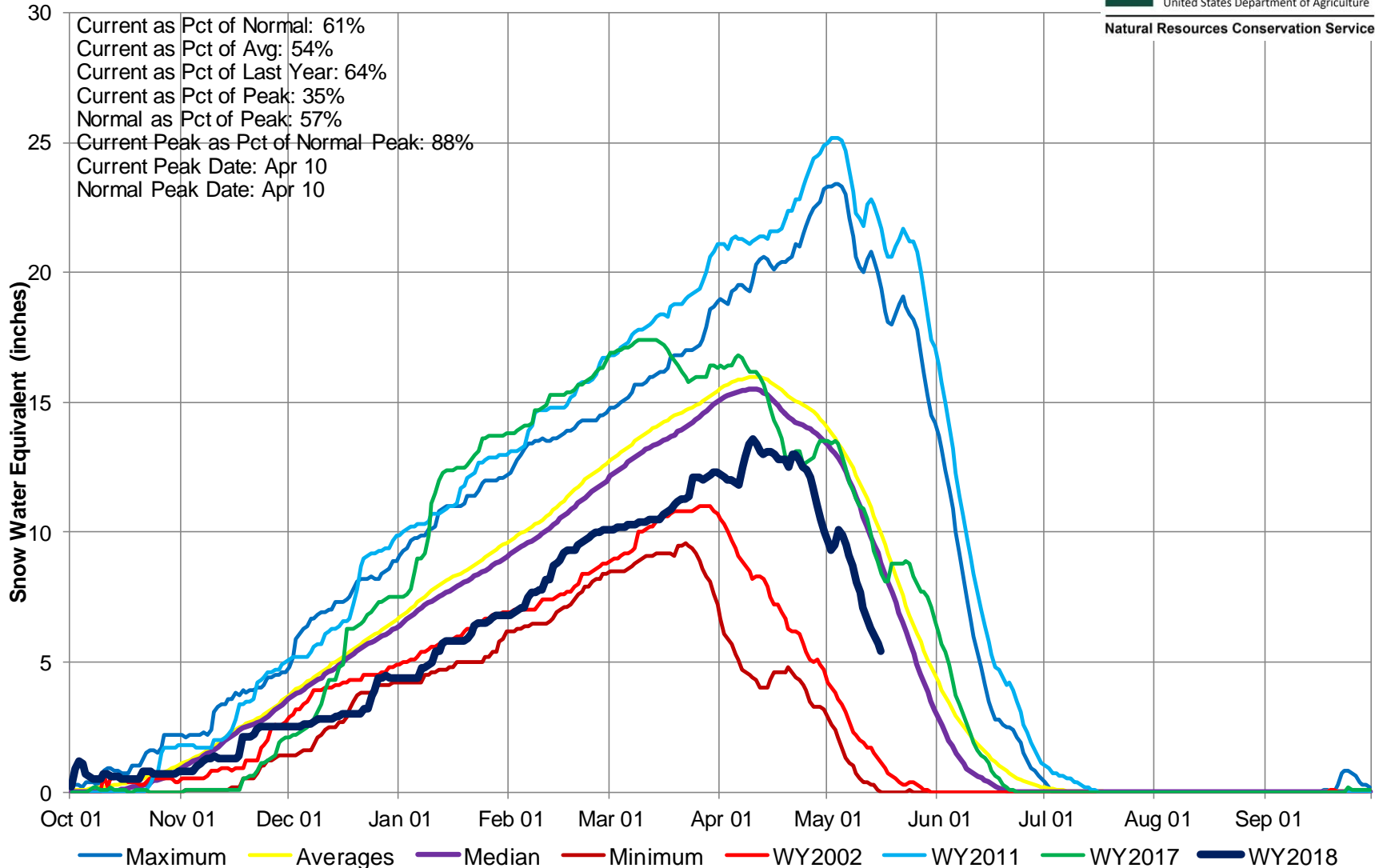
Upper Colorado River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of May 16, 2018



United States Department of Agriculture

Natural Resources Conservation Service



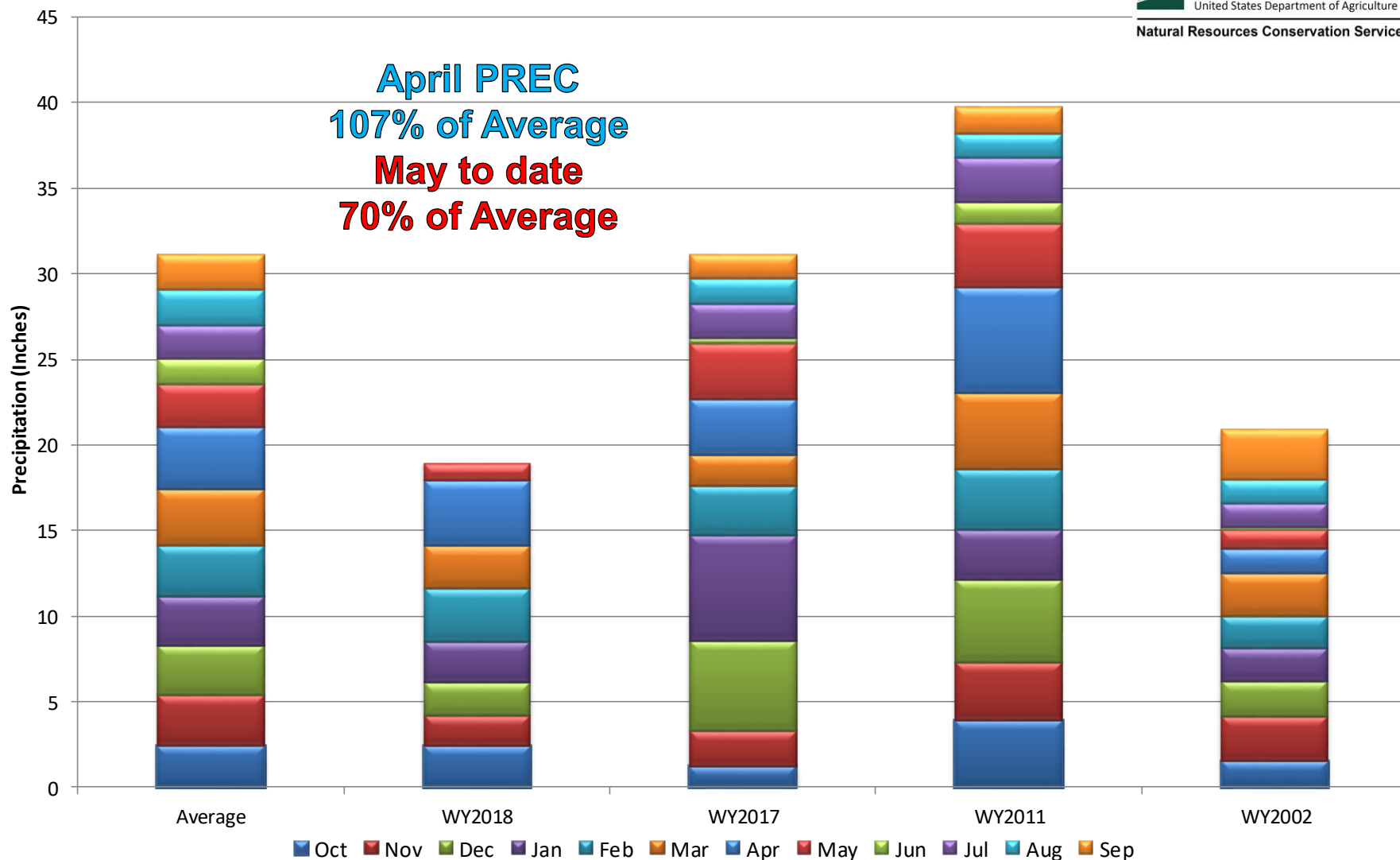
Upper Colorado River Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of May 16, 2018



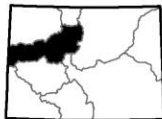
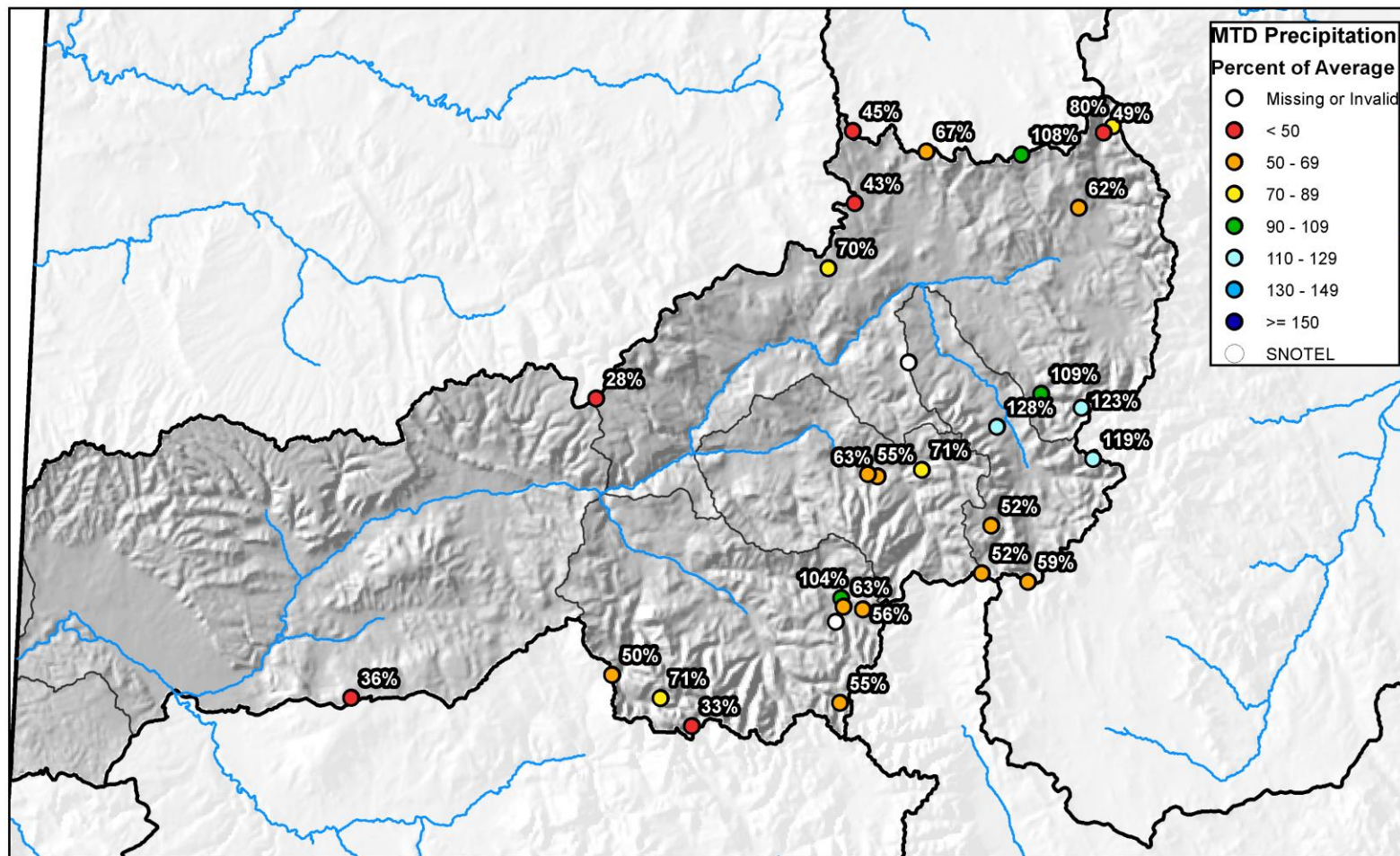
United States Department of Agriculture

Natural Resources Conservation Service



Upper Colorado River Basin Month to Date Precipitation Summary

Current as of May 16, 2018



0 10 20 40 60 80 Miles



United States Department of Agriculture

Natural Resources Conservation Service



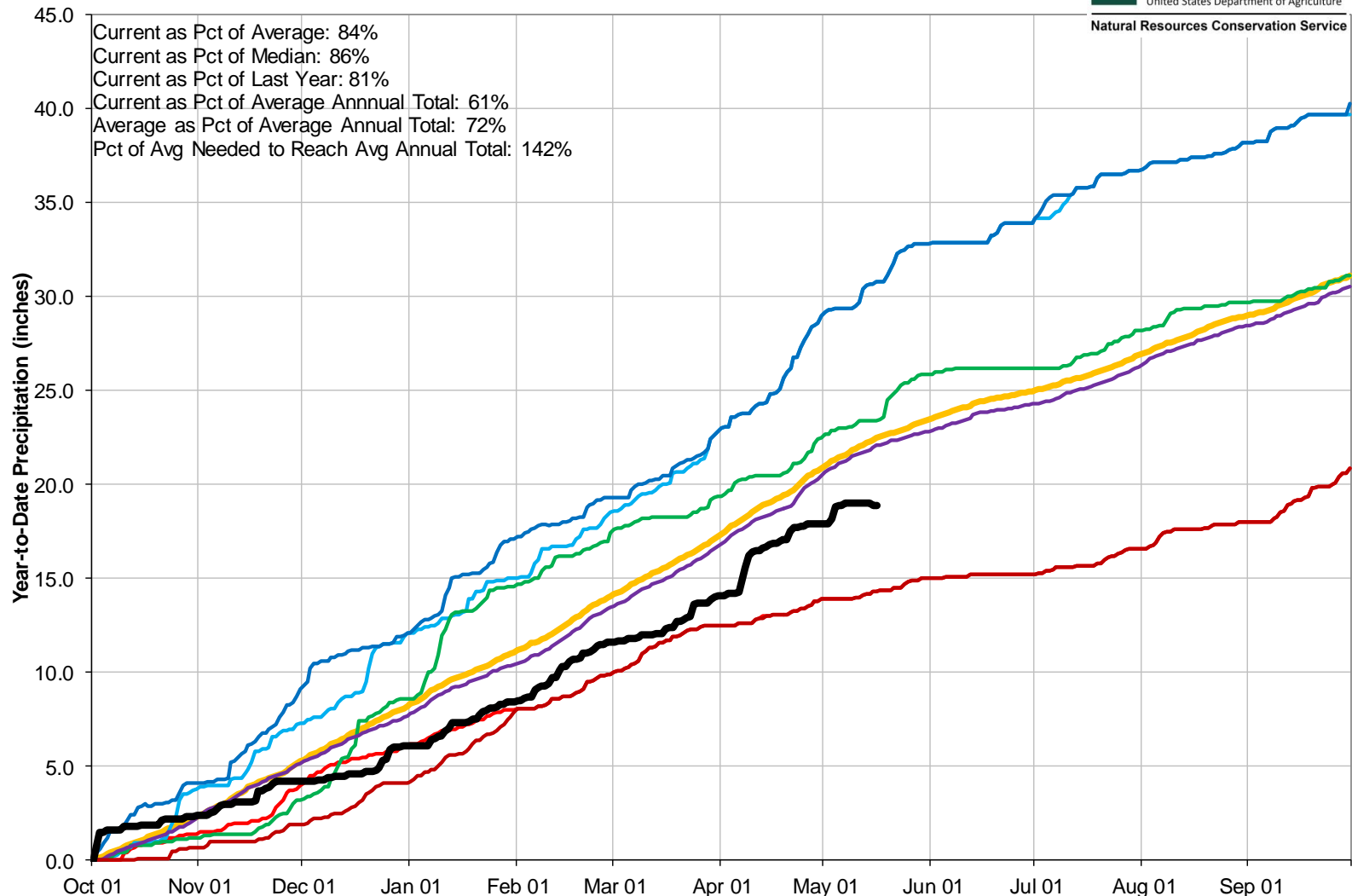
Upper Colorado River Basin High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of May 16, 2018



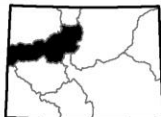
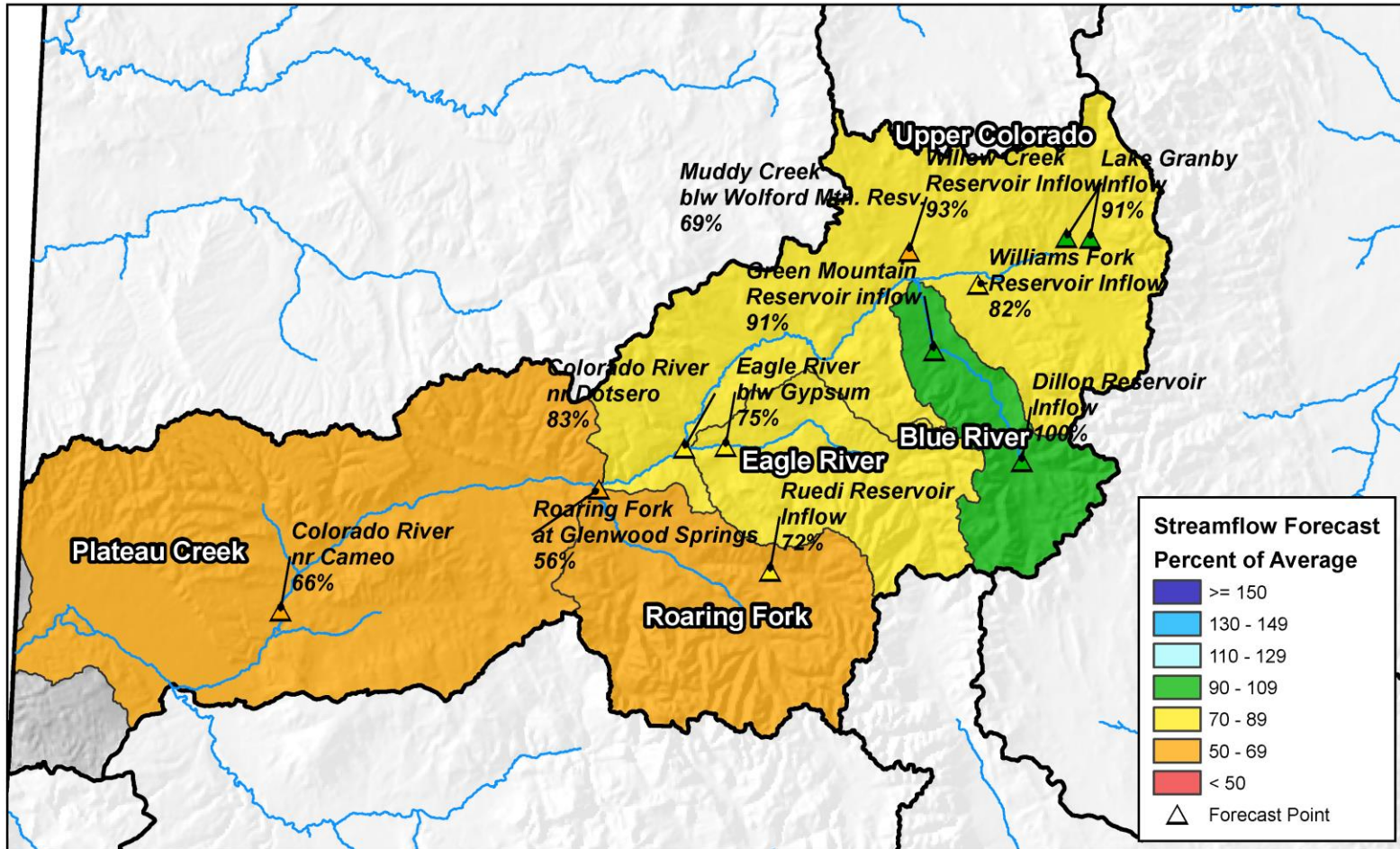
United States Department of Agriculture

Natural Resources Conservation Service

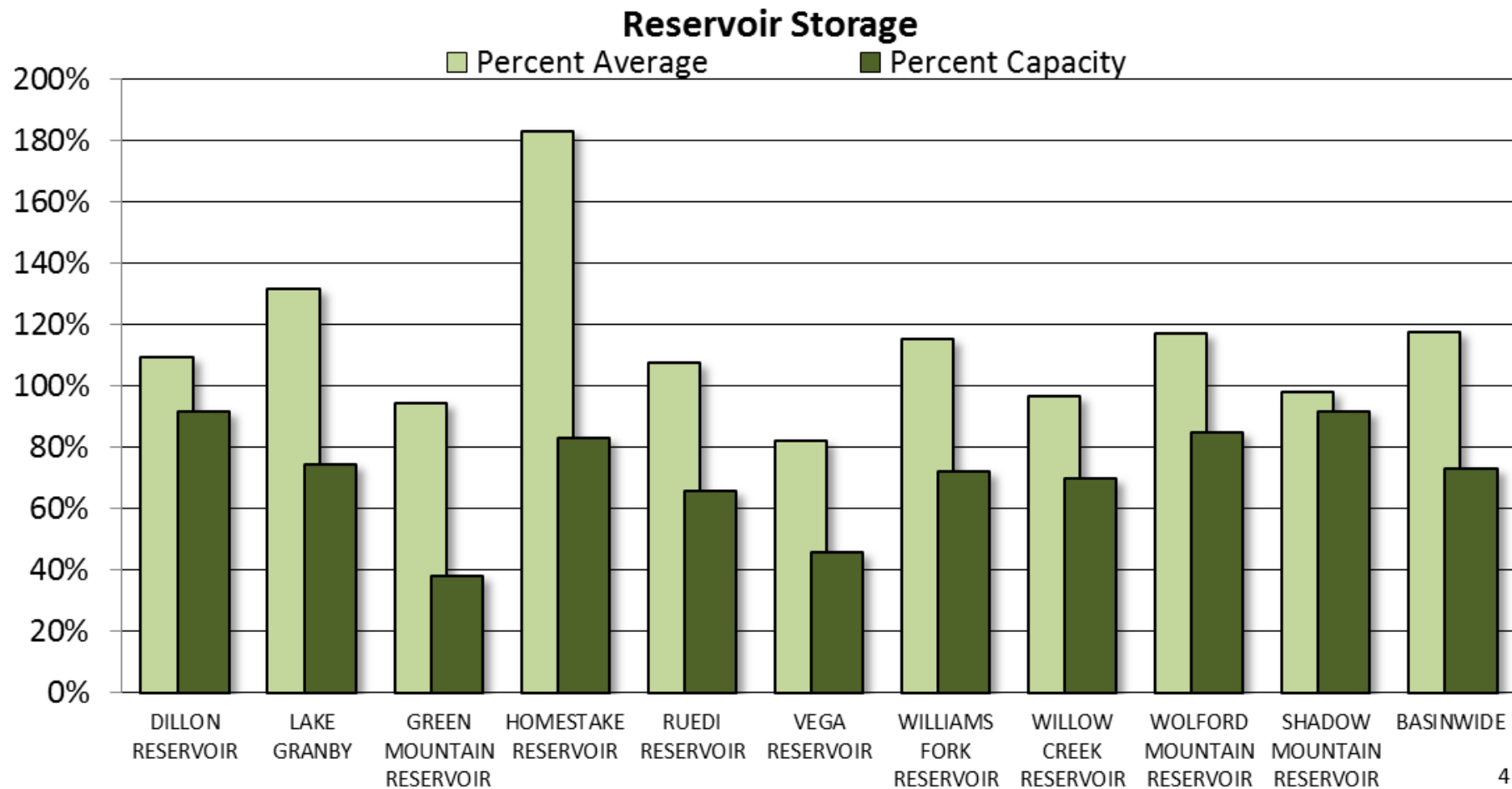


Upper Colorado River Basin Streamflow Forecast Summary

May 1, 2018

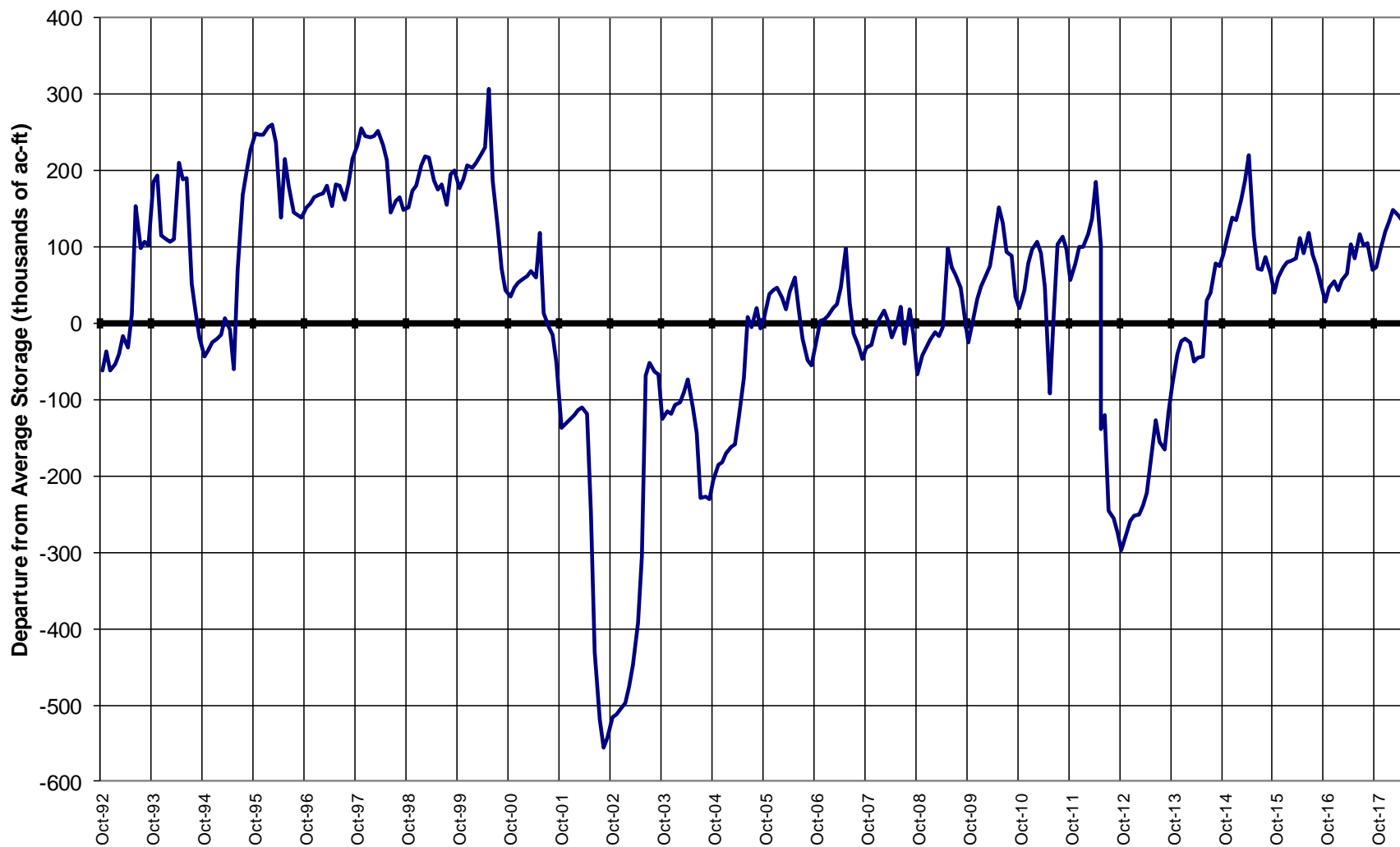


0 10 20 40 60 80 Miles



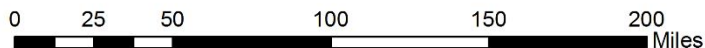
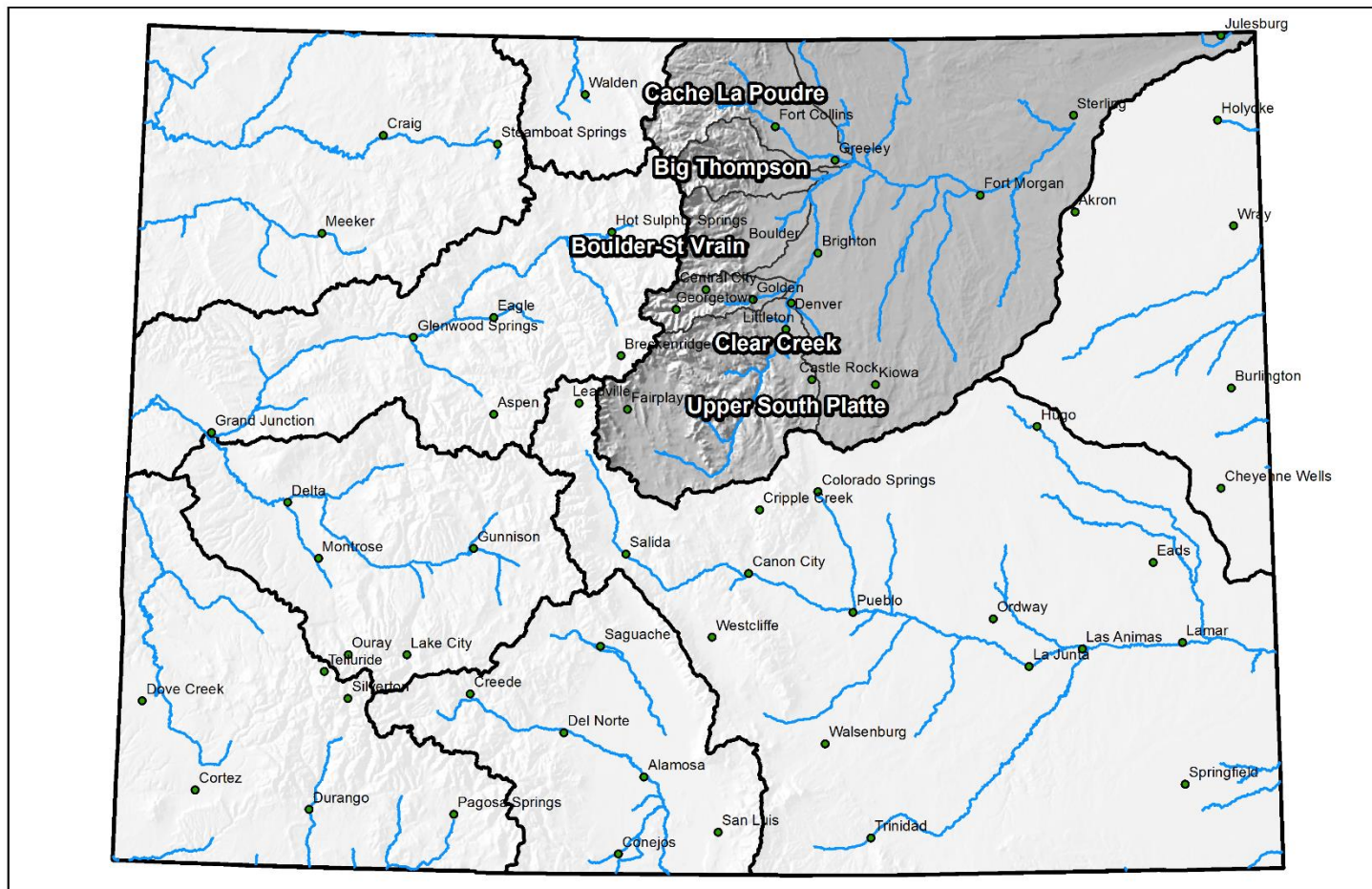


COLORADO RIVER BASIN Reservoir Storage Departure from Average



Major Basin Summary

South Platte River Basin



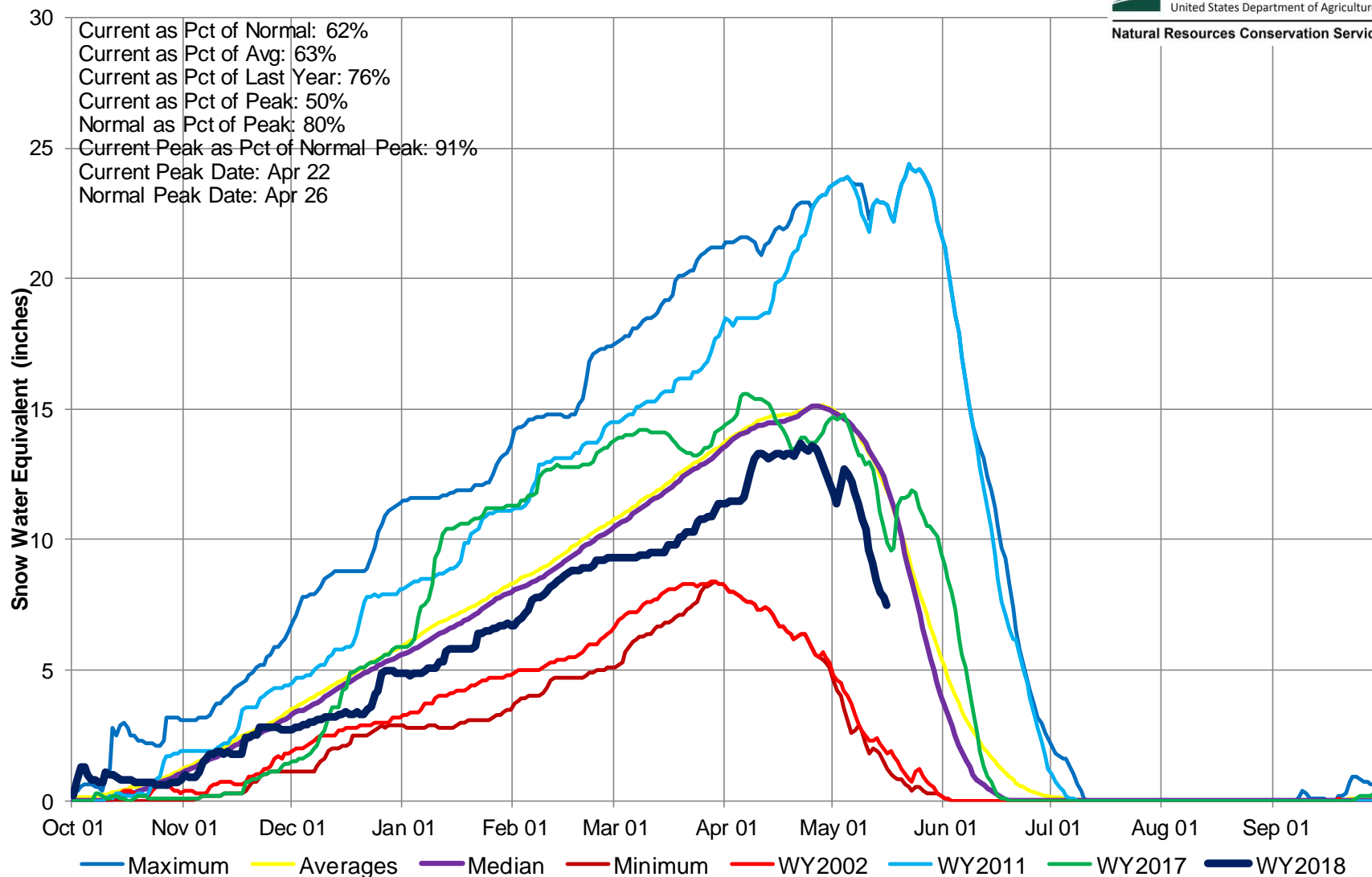
South Platte River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of May 16, 2018



United States Department of Agriculture

Natural Resources Conservation Service



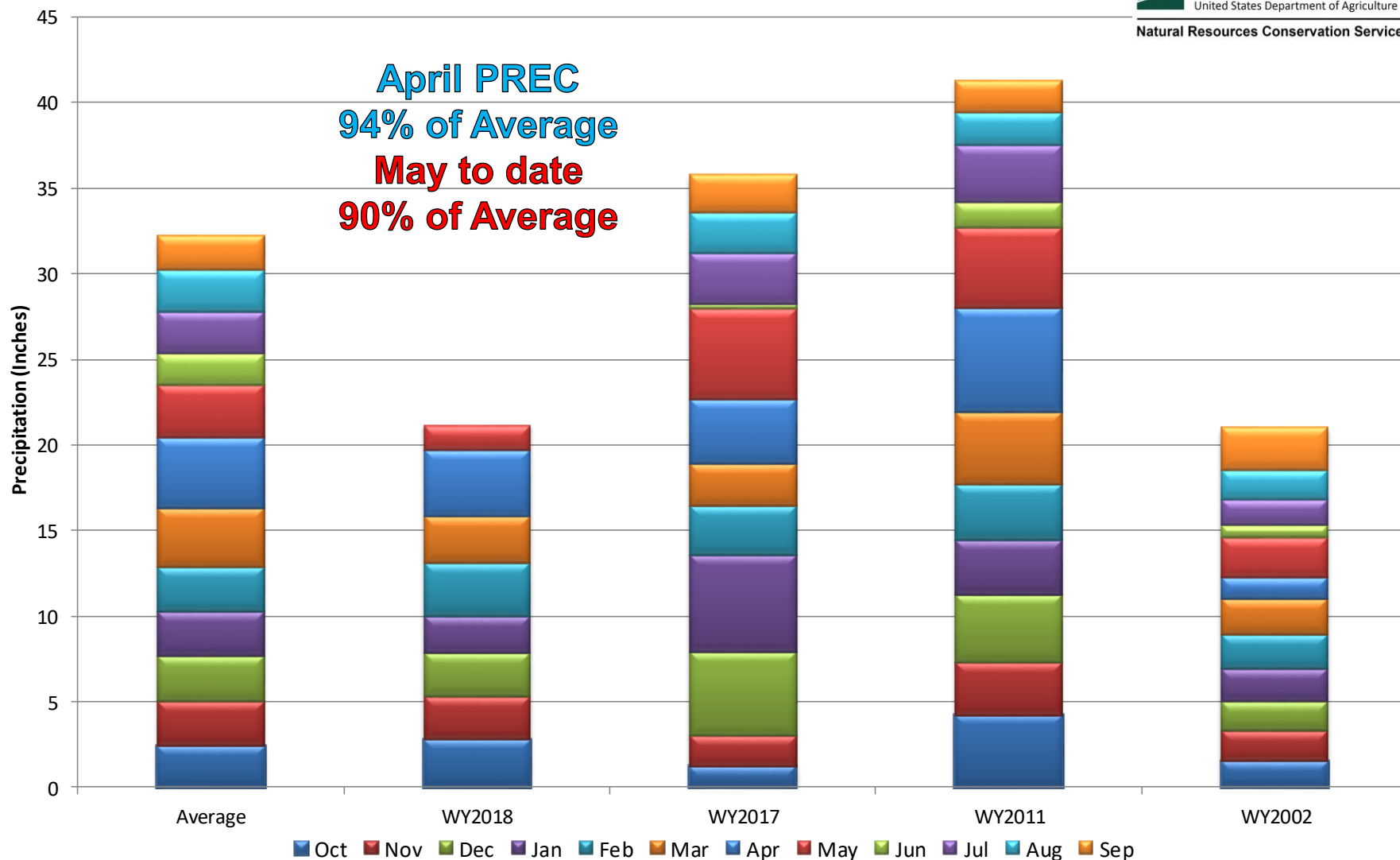
South Platte River Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of May 16, 2018



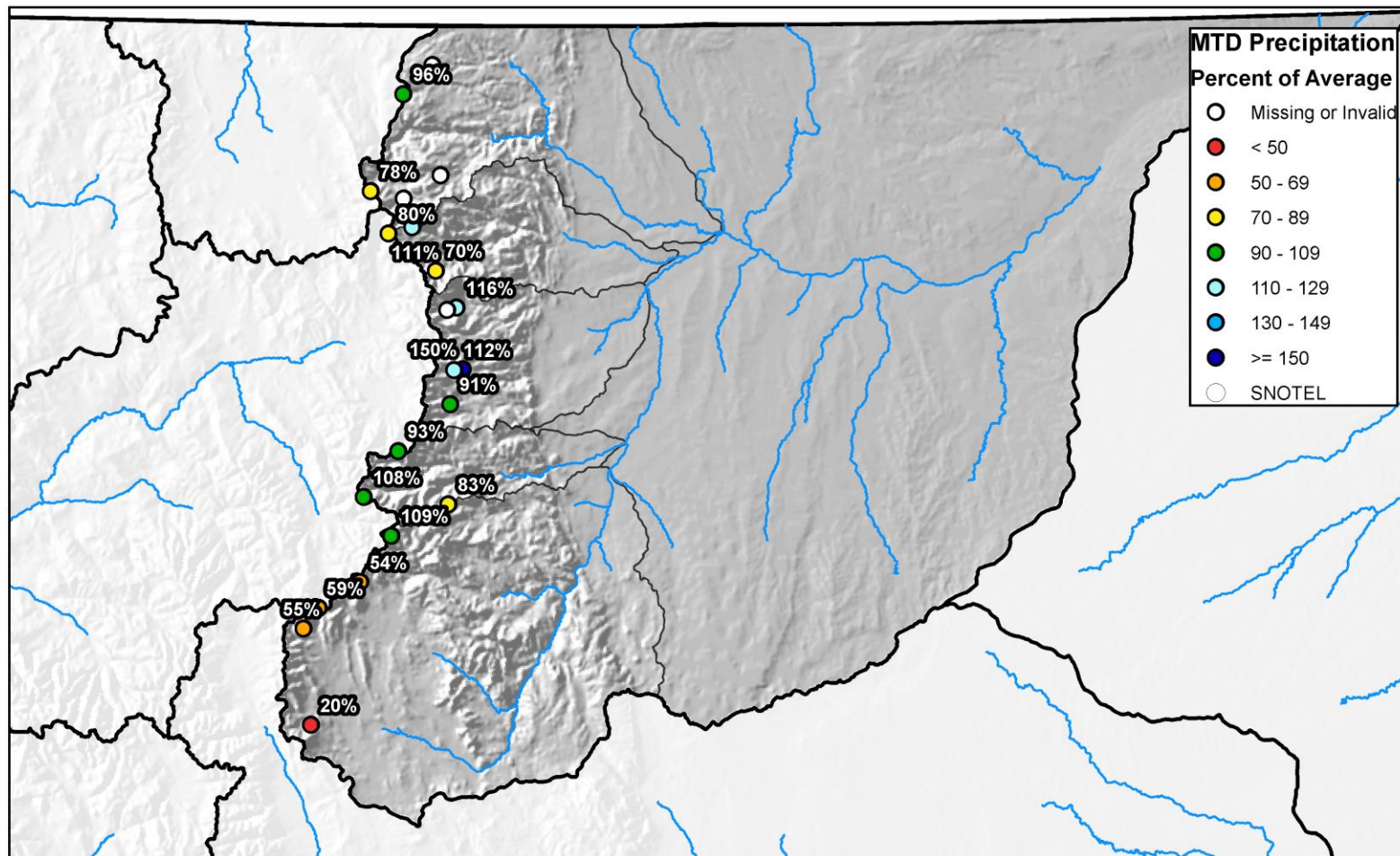
United States Department of Agriculture

Natural Resources Conservation Service



South Platte River Basin Month to Date Precipitation Summary

Current as of May 16, 2018



0 10 20 40 60 80 Miles

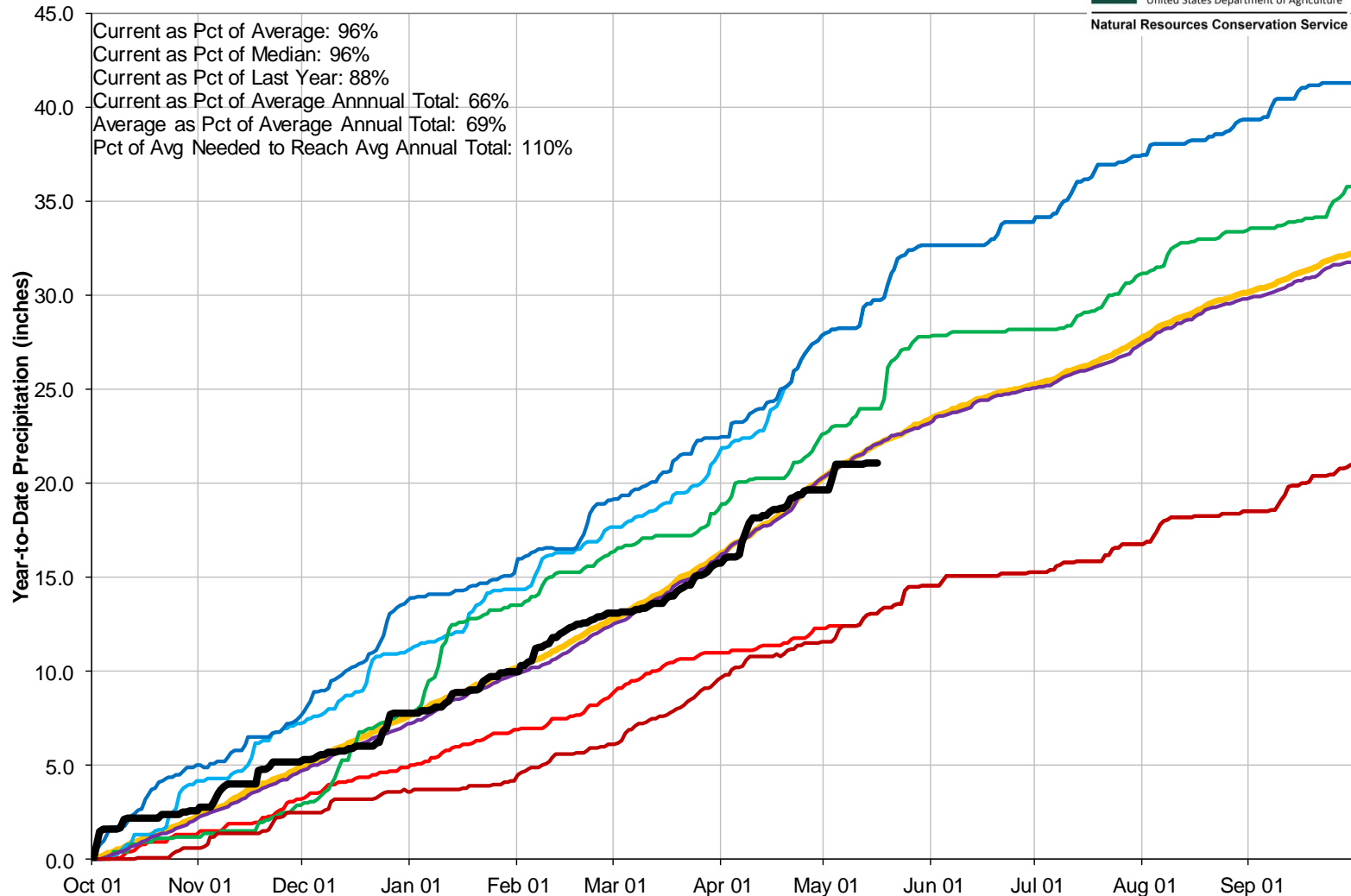
South Platte River Basin High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of May 16, 2018



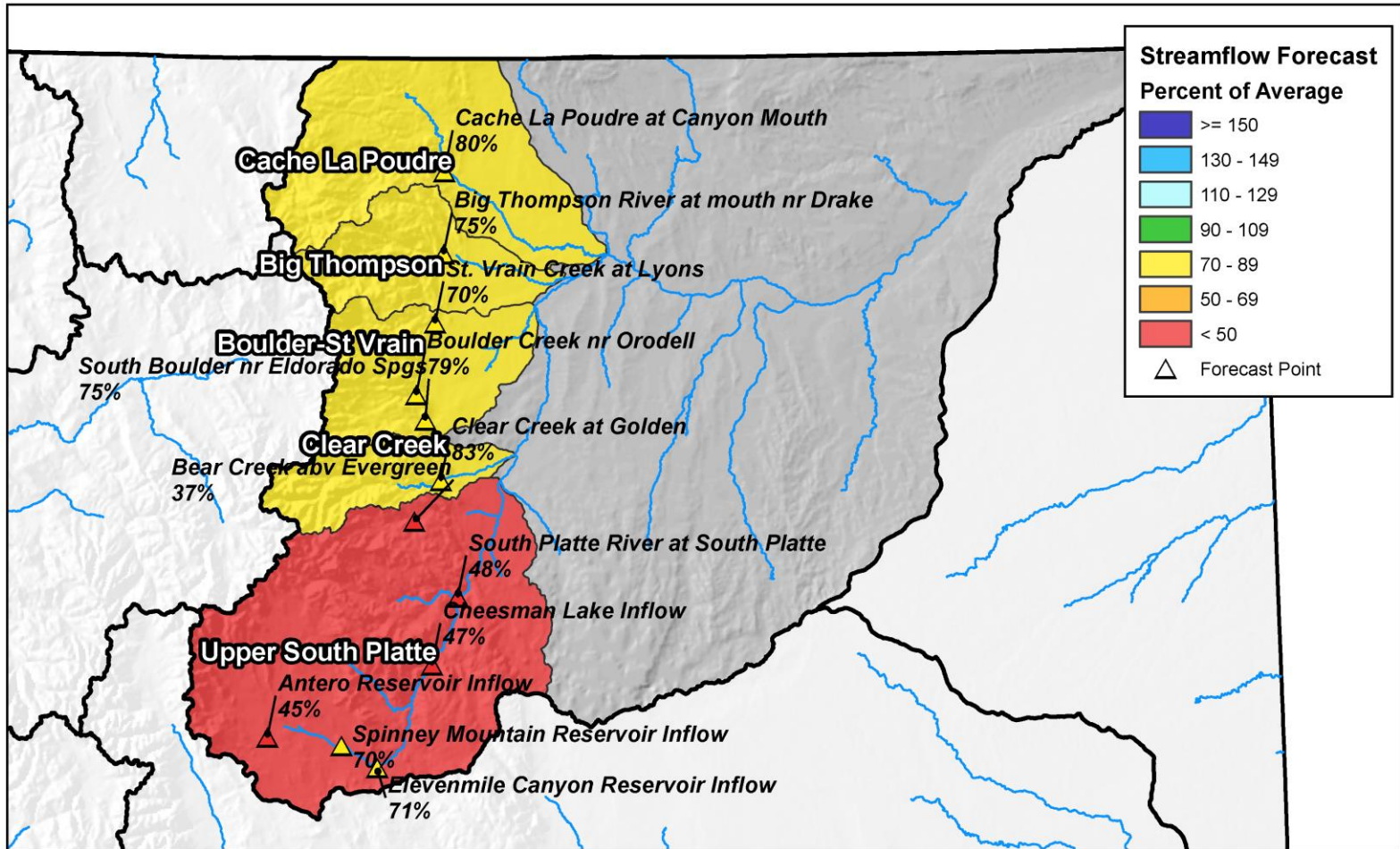
United States Department of Agriculture

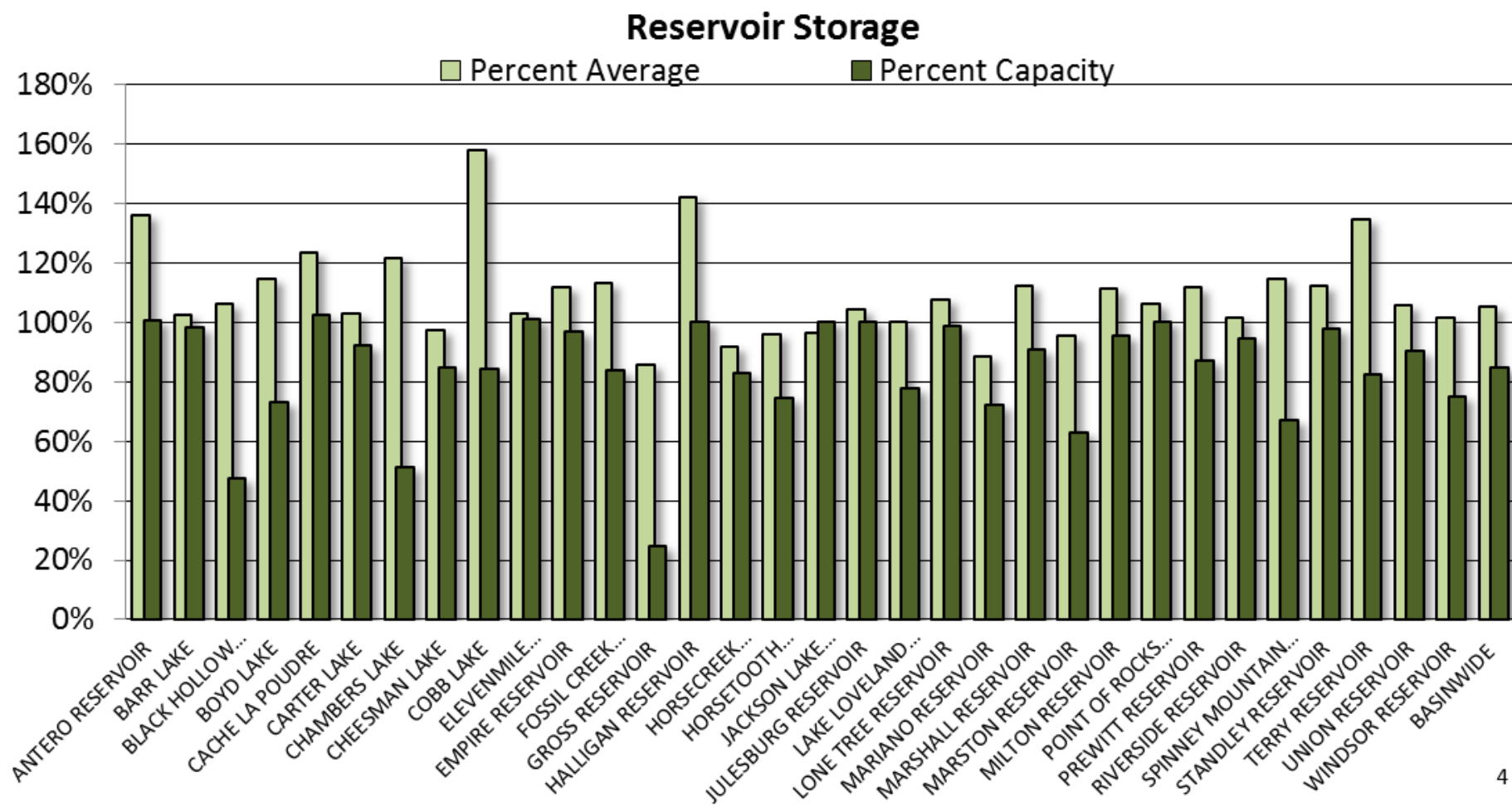
Natural Resources Conservation Service



South Platte River Basin Streamflow Forecast Summary

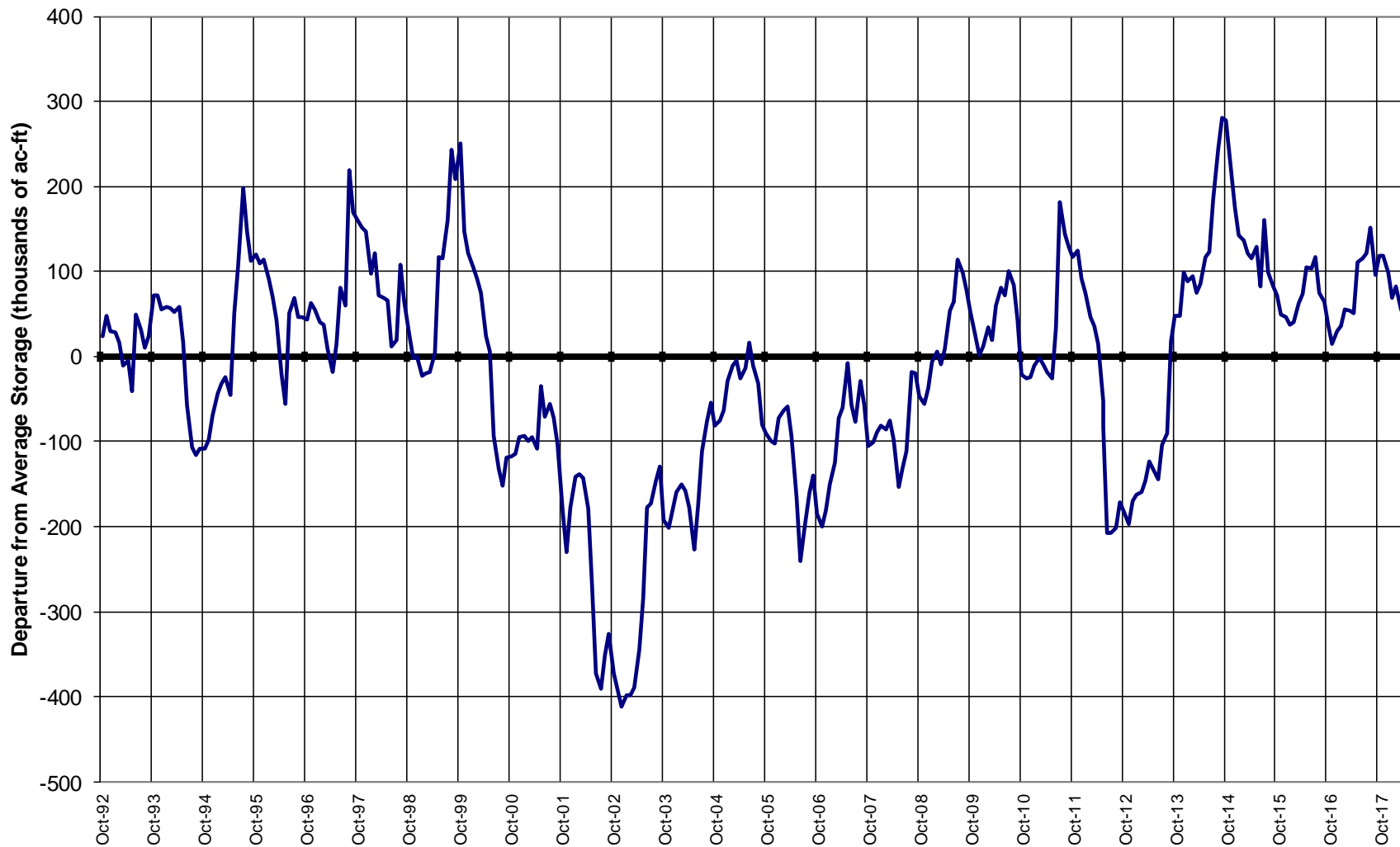
May 1, 2018





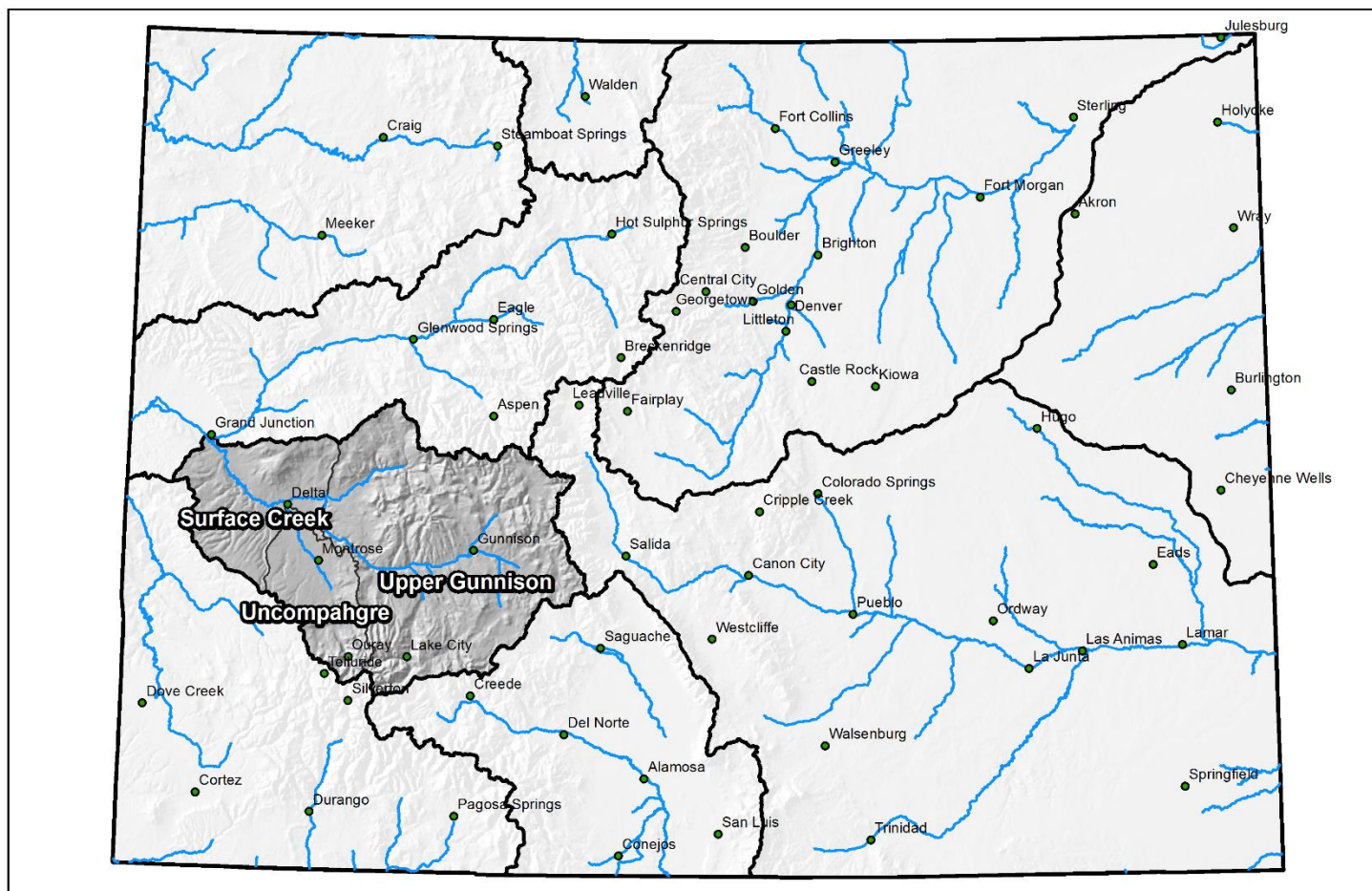


SOUTH PLATTE RIVER BASIN Reservoir Storage Departure from Average



Major Basin Summary

Gunnison River Basin



0 25 50 100 150 200 Miles



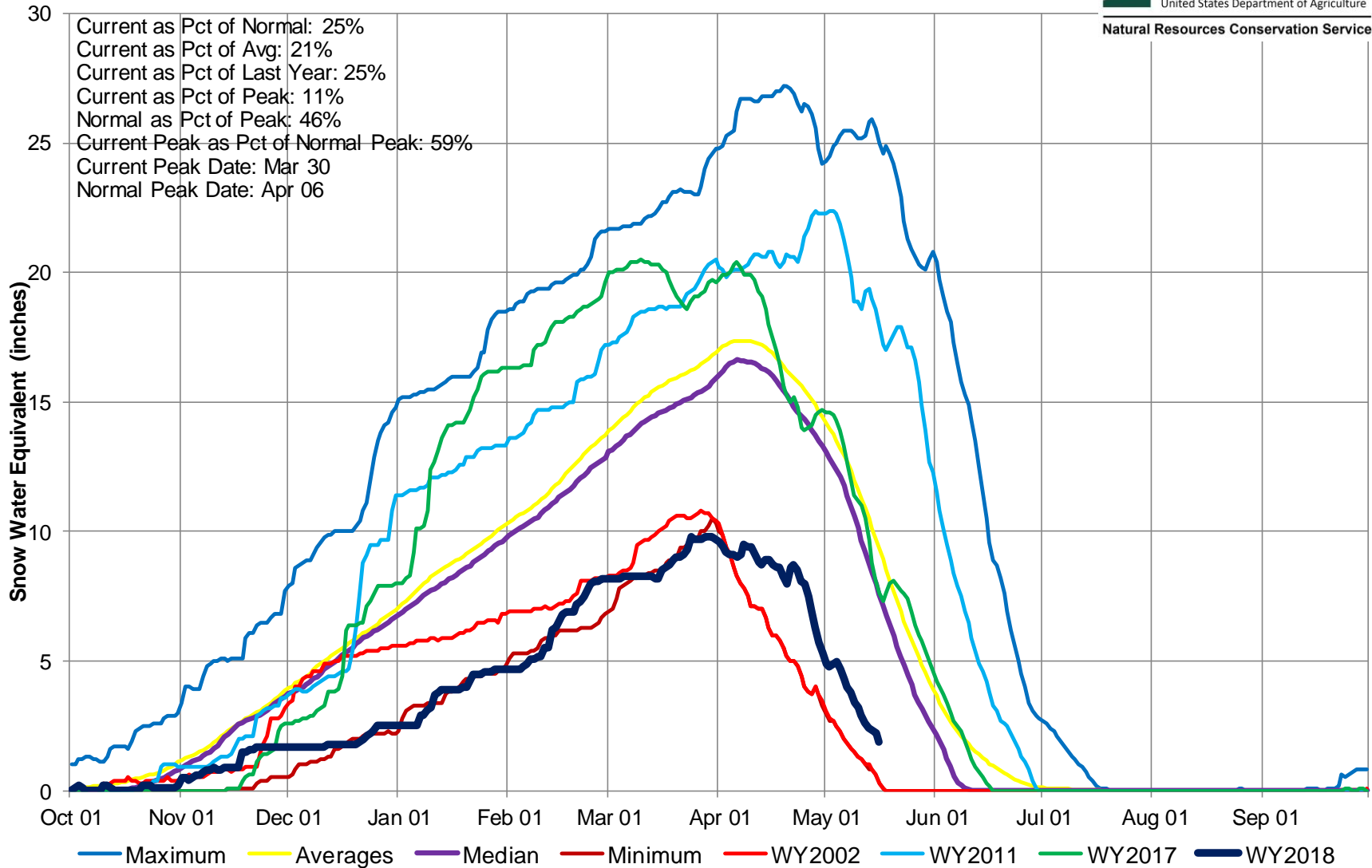
Gunnison River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of May 16, 2018



United States Department of Agriculture

Natural Resources Conservation Service



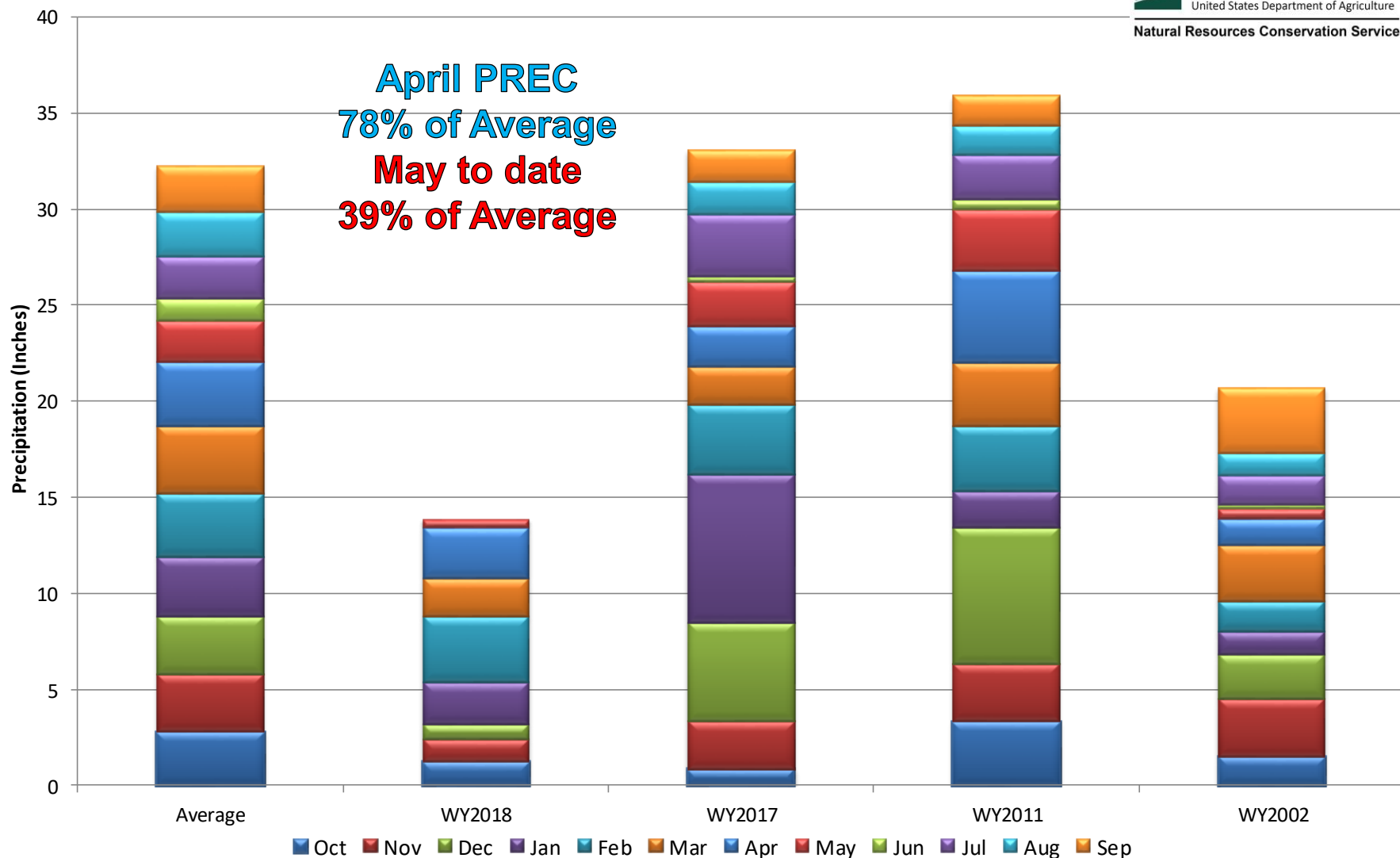
Gunnison River Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of May 16, 2018



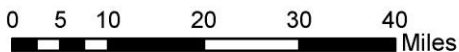
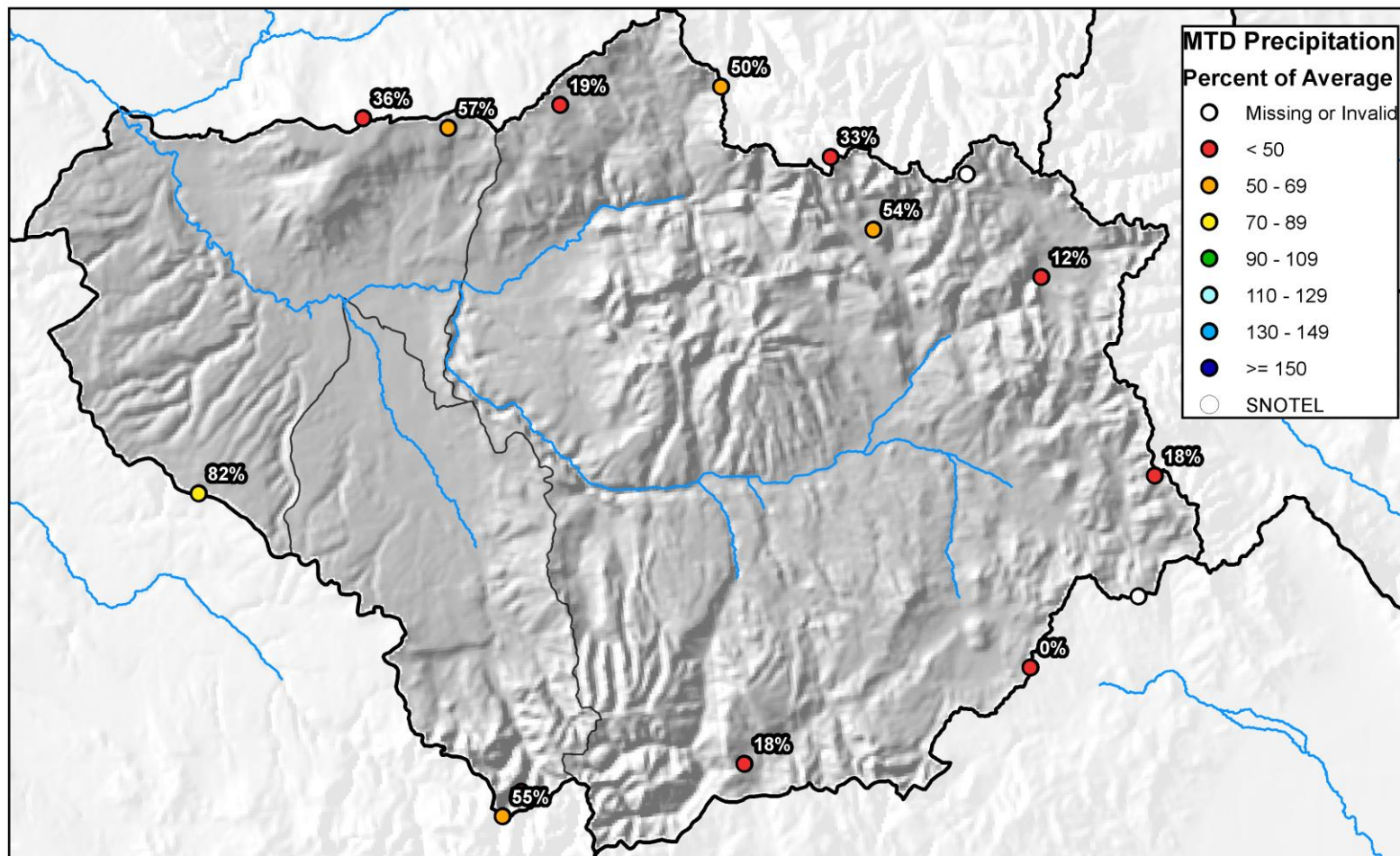
United States Department of Agriculture

Natural Resources Conservation Service



Gunnison River Basin Month to Date Precipitation Summary

Current as of May 16, 2018





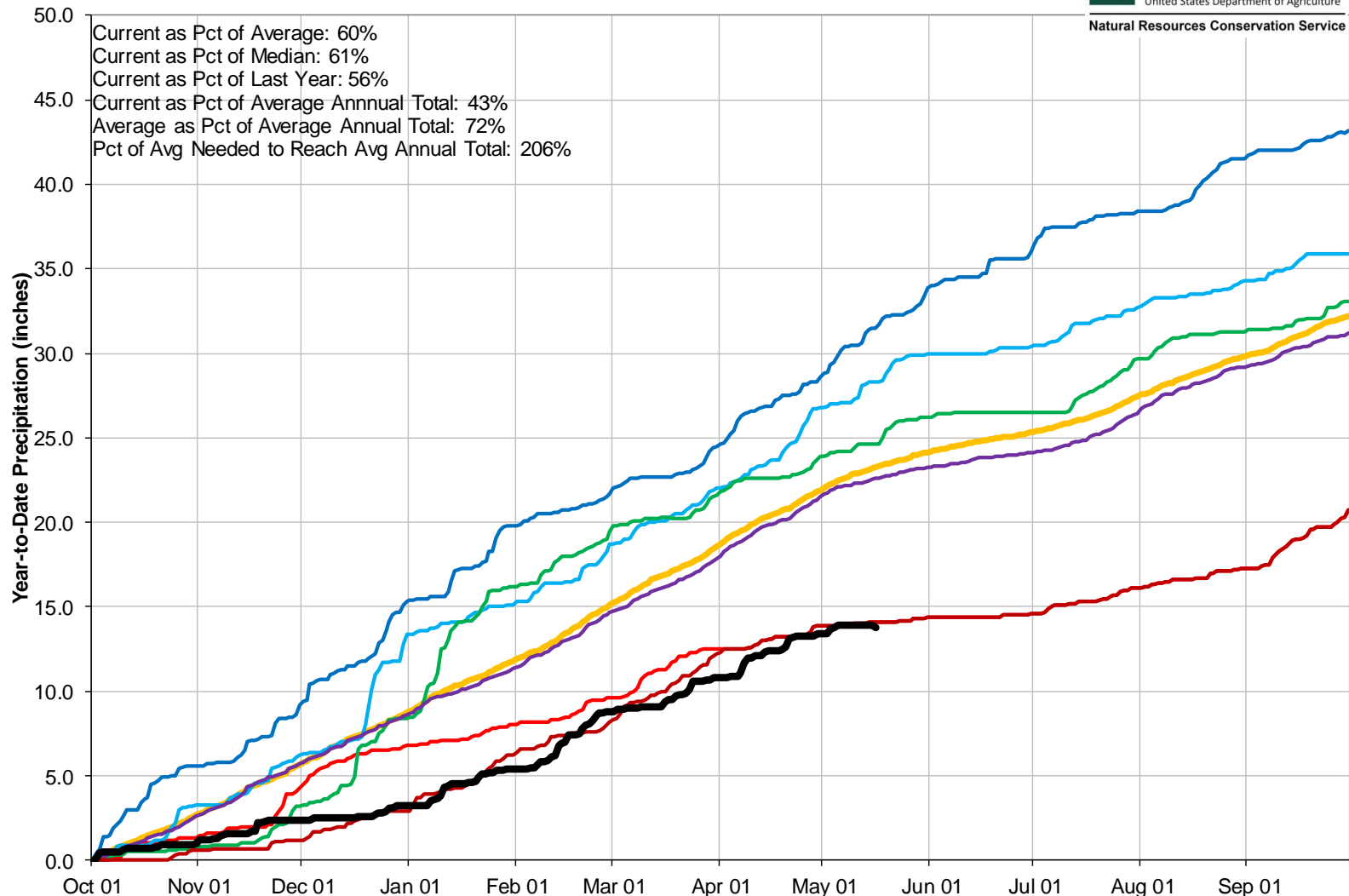
Gunnison River Basin High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of May 16, 2018



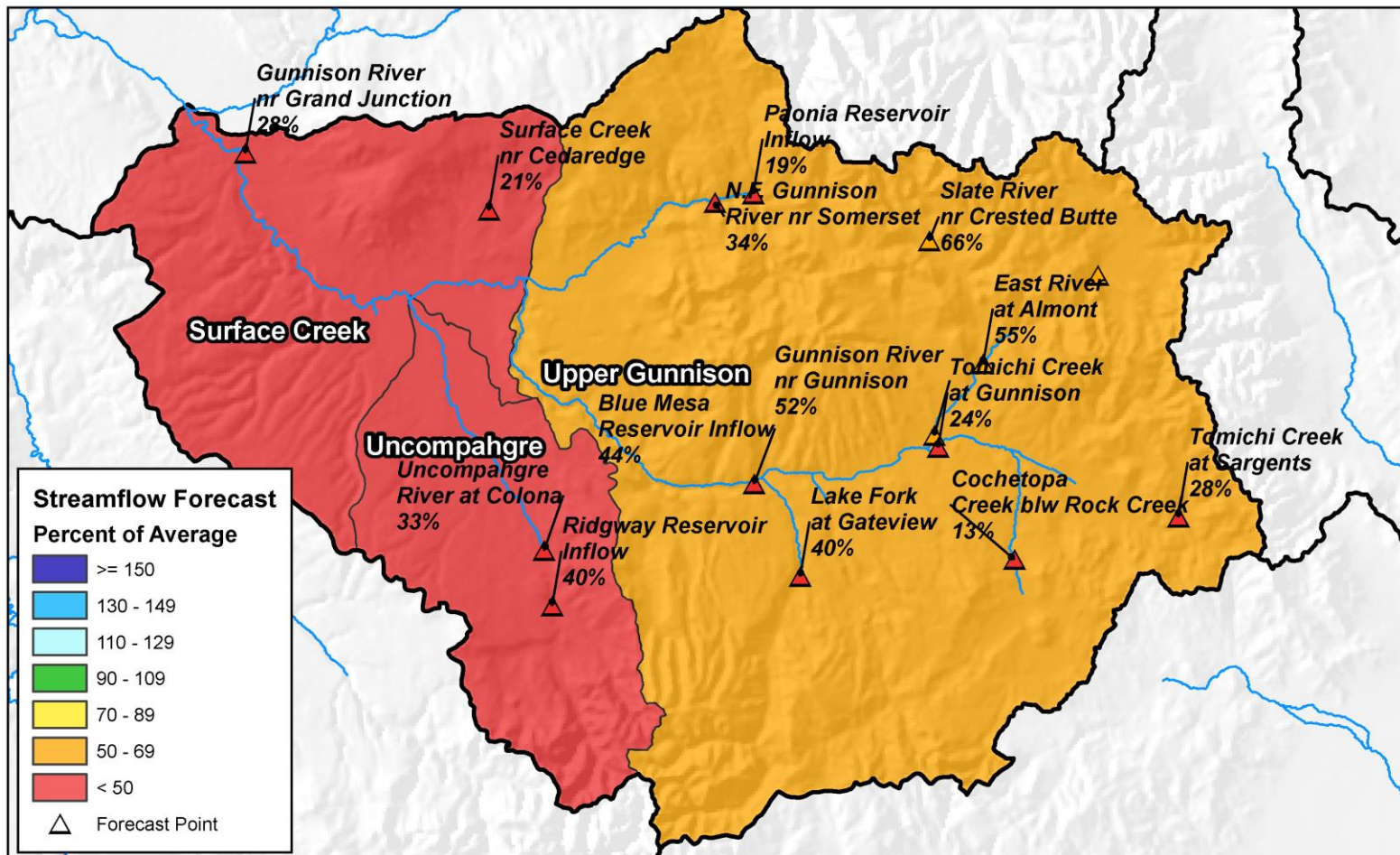
United States Department of Agriculture

Natural Resources Conservation Service



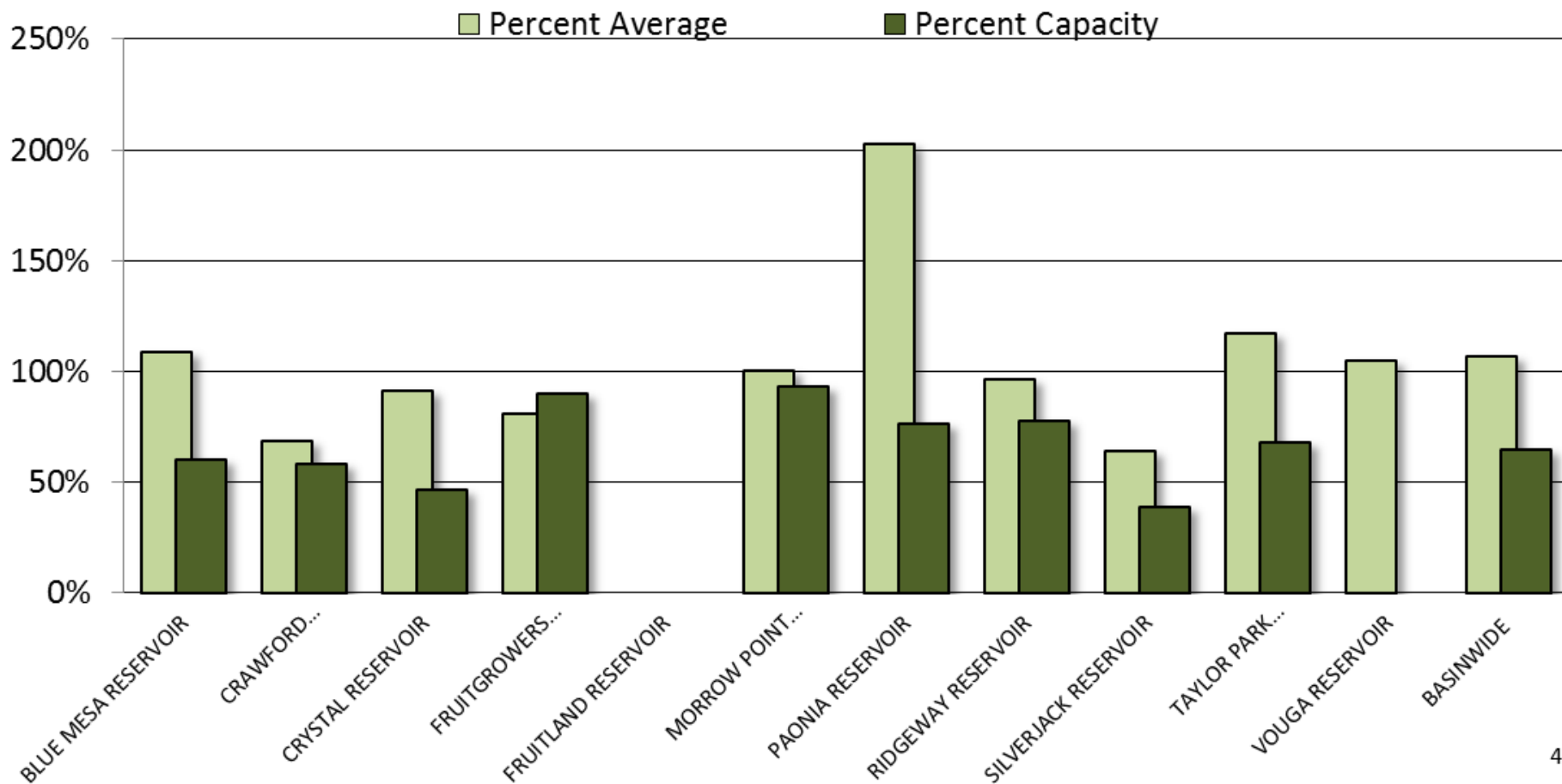
Gunnison River Basin Water Supply Forecast Summary

May 1, 2018



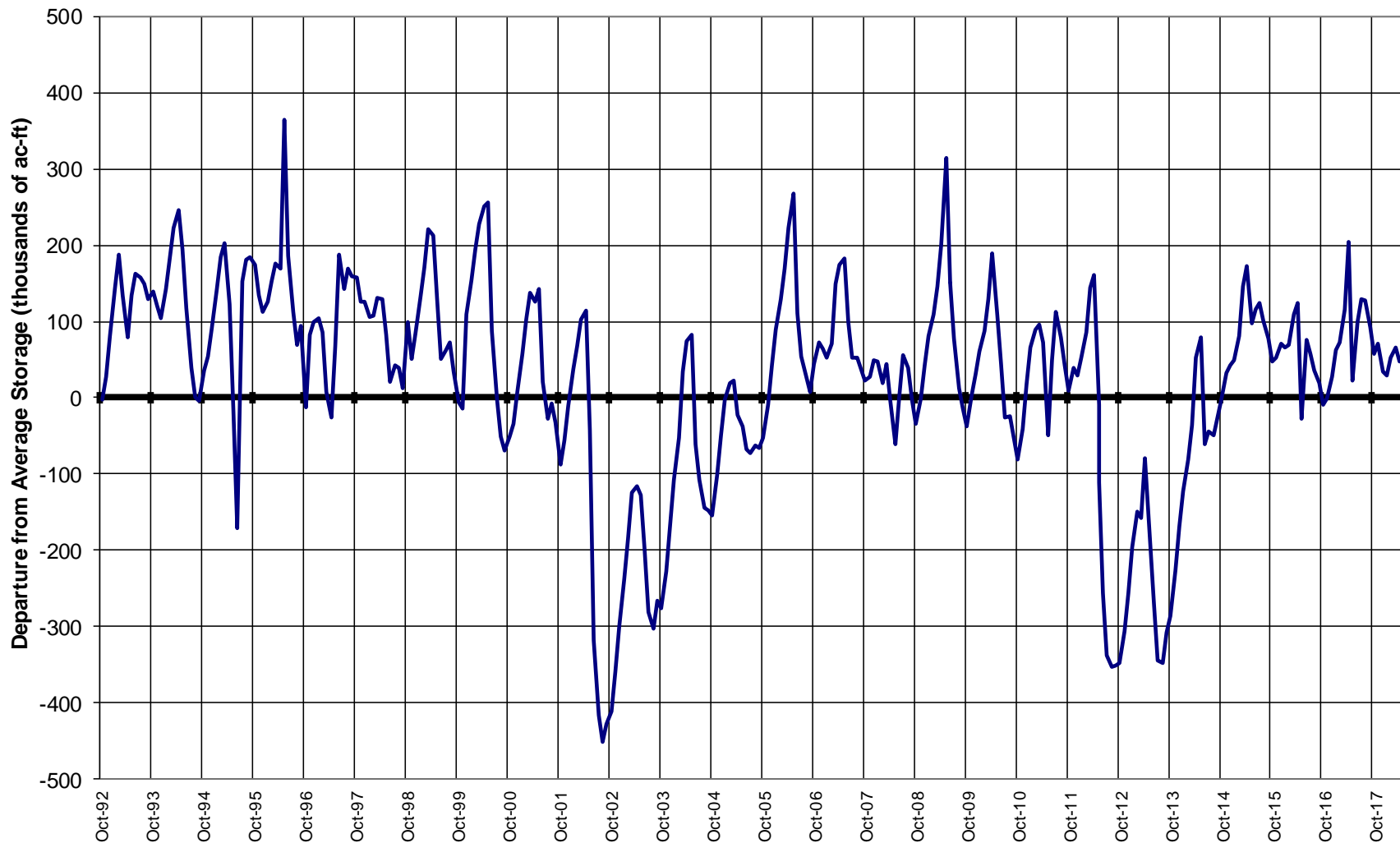
0 5 10 20 30 40 Miles

Reservoir Storage



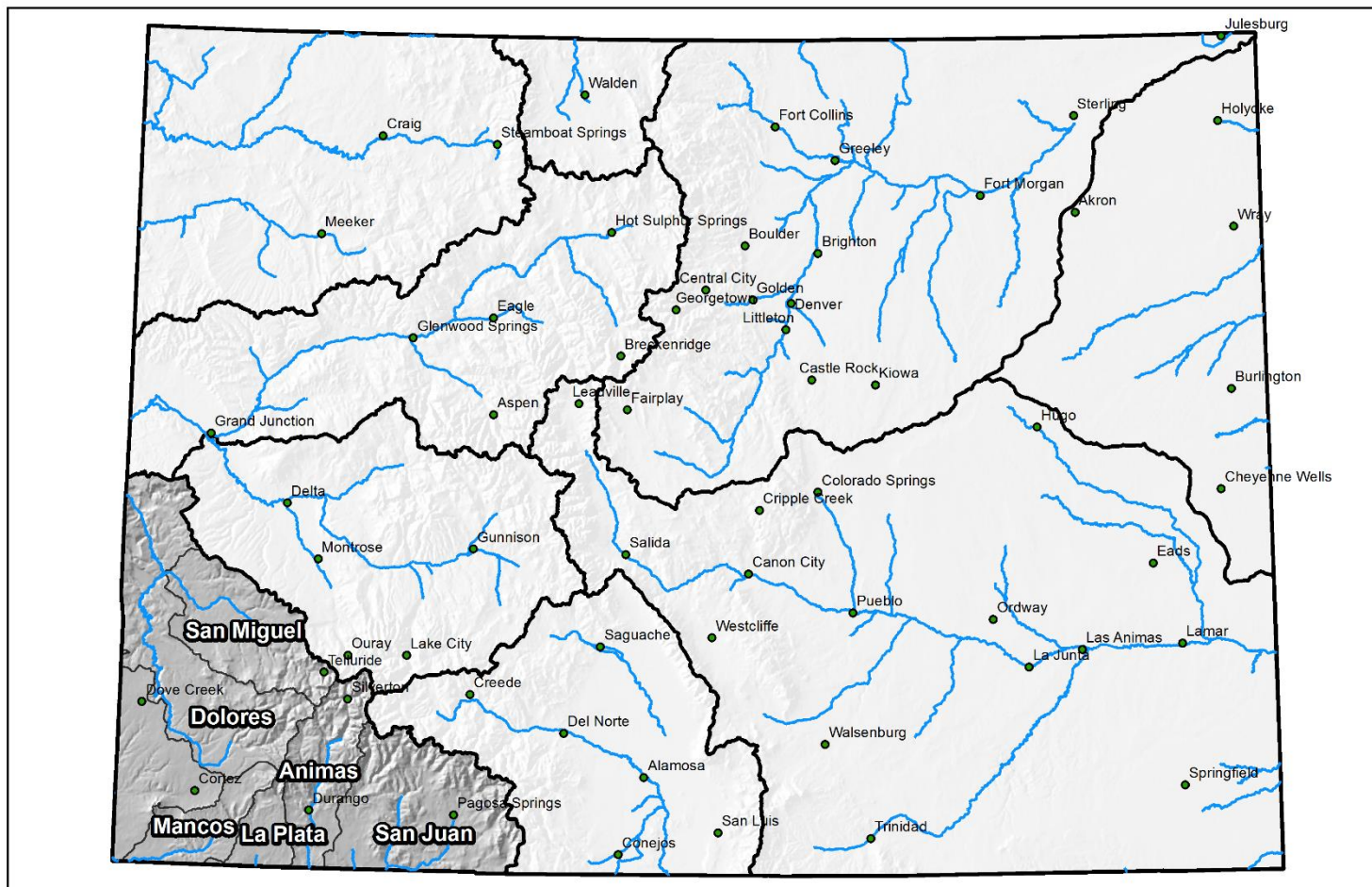


GUNNISON RIVER BASIN Reservoir Storage Departure from Average



Major Basin Summary

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



0 25 50 100 150 200 Miles



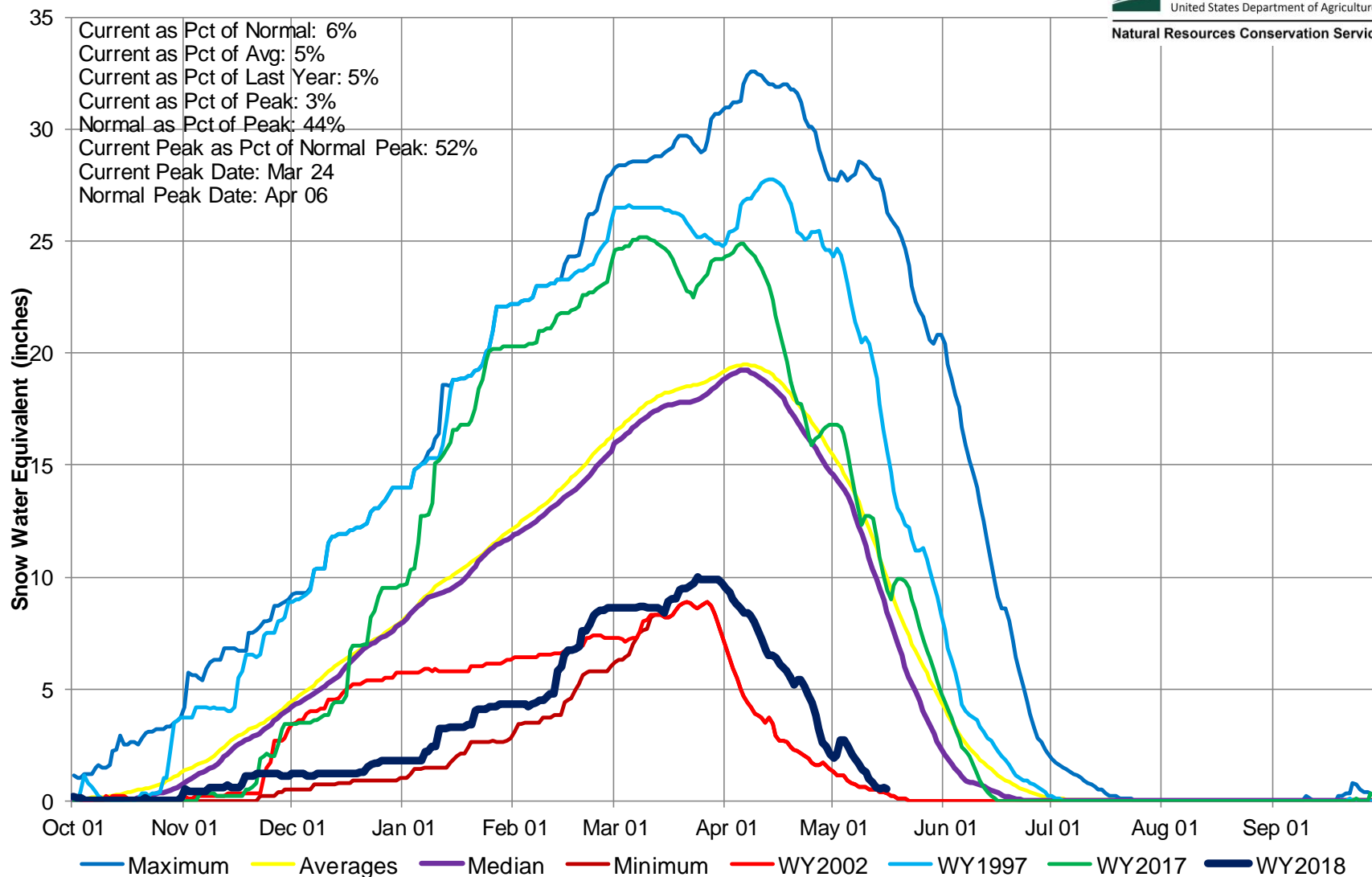
San Miguel, Dolores, Animas and San Juan River Basins High/Low Snowpack Summary

Based on Provisional SNOTEL data as of May 16, 2018



United States Department of Agriculture

Natural Resources Conservation Service



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

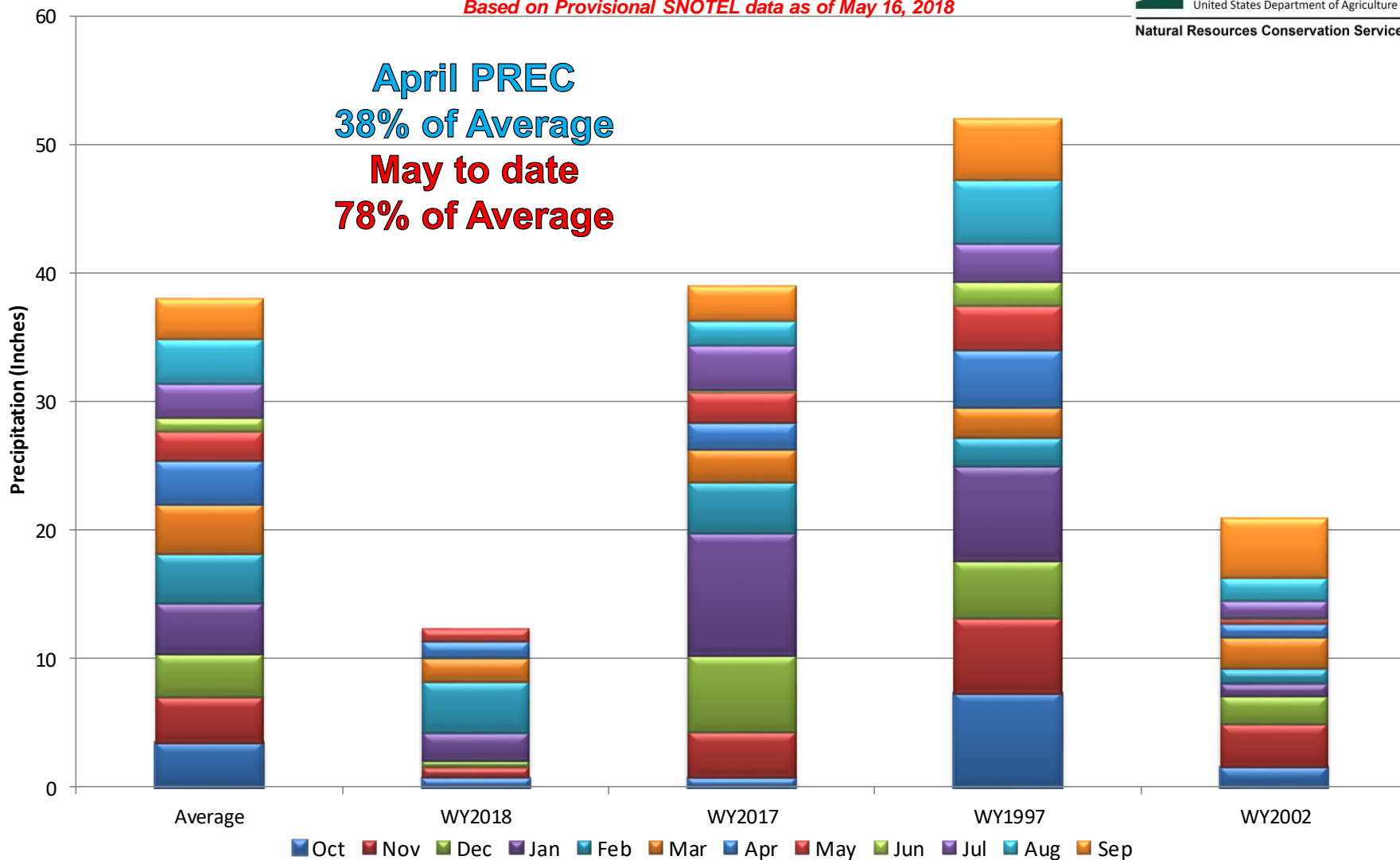
Based on Provisional SNOTEL data as of May 16, 2018



United States Department of Agriculture

Natural Resources Conservation Service

April PREC
38% of Average
May to date
78% of Average

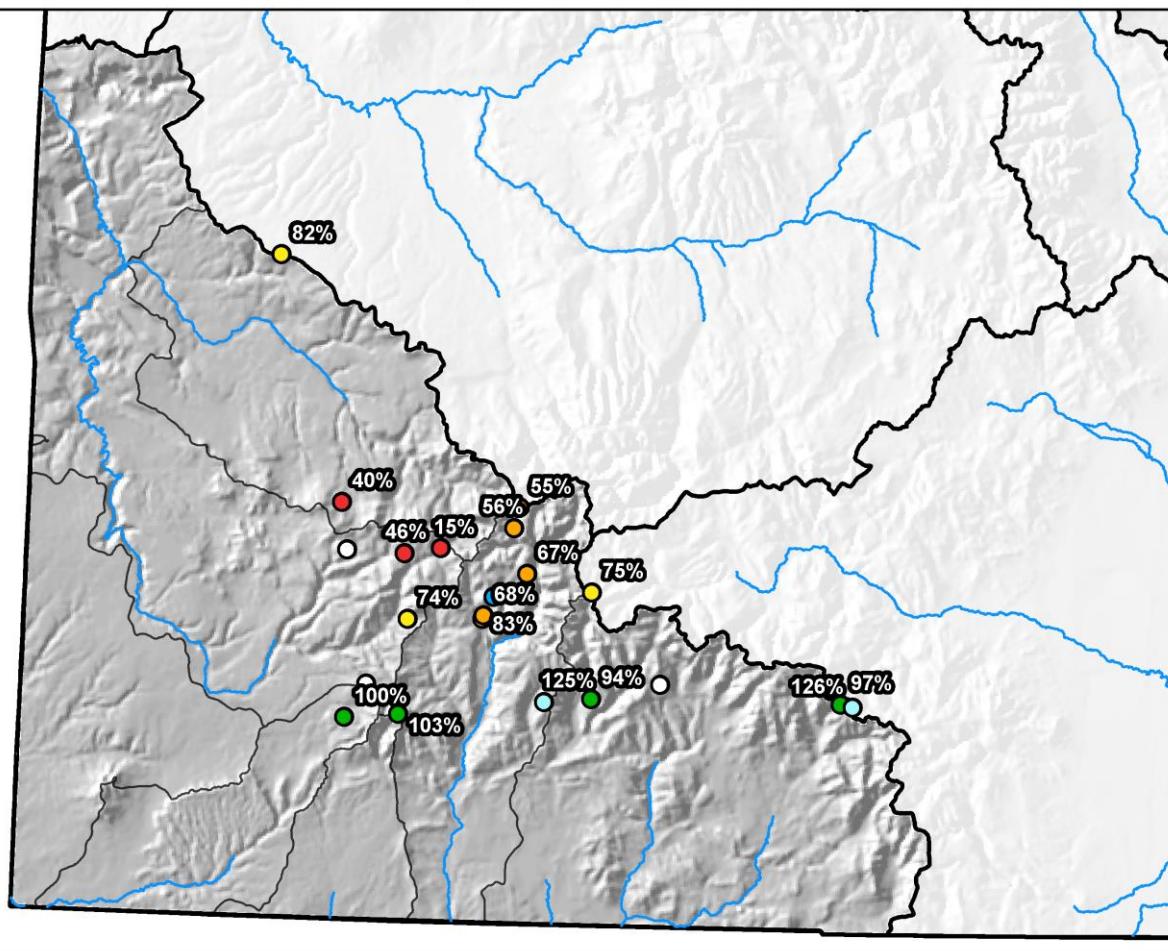


San Miguel, Dolores, Animas, and San Juan River Basins Month to Date Precipitation Summary

Current as of May 16, 2018

MTD Precipitation Percent of Average

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



0 10 20 40 60 80 Miles

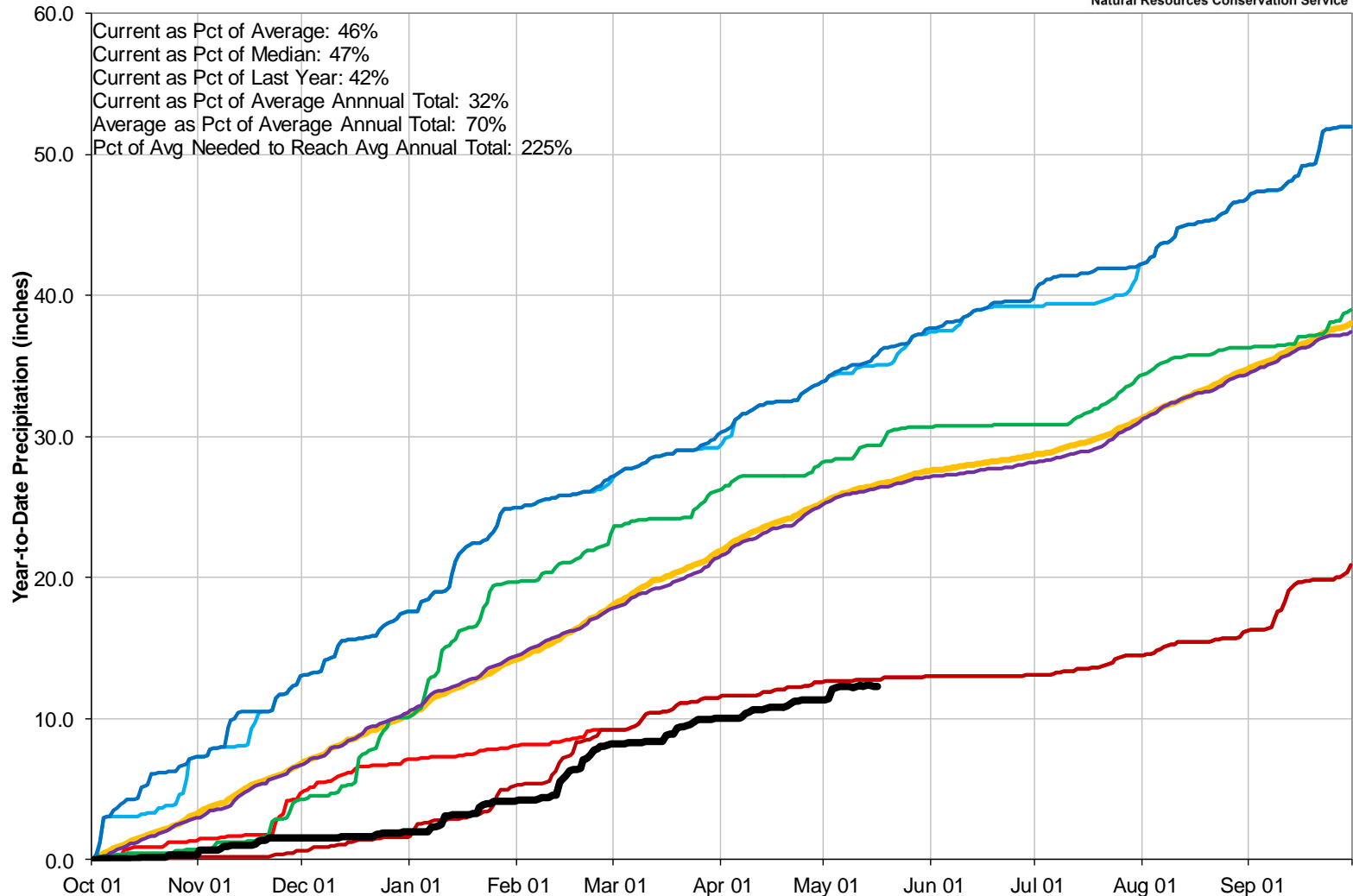
San Miguel, Dolores, Animas and San Juan River Basins High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of May 16, 2018



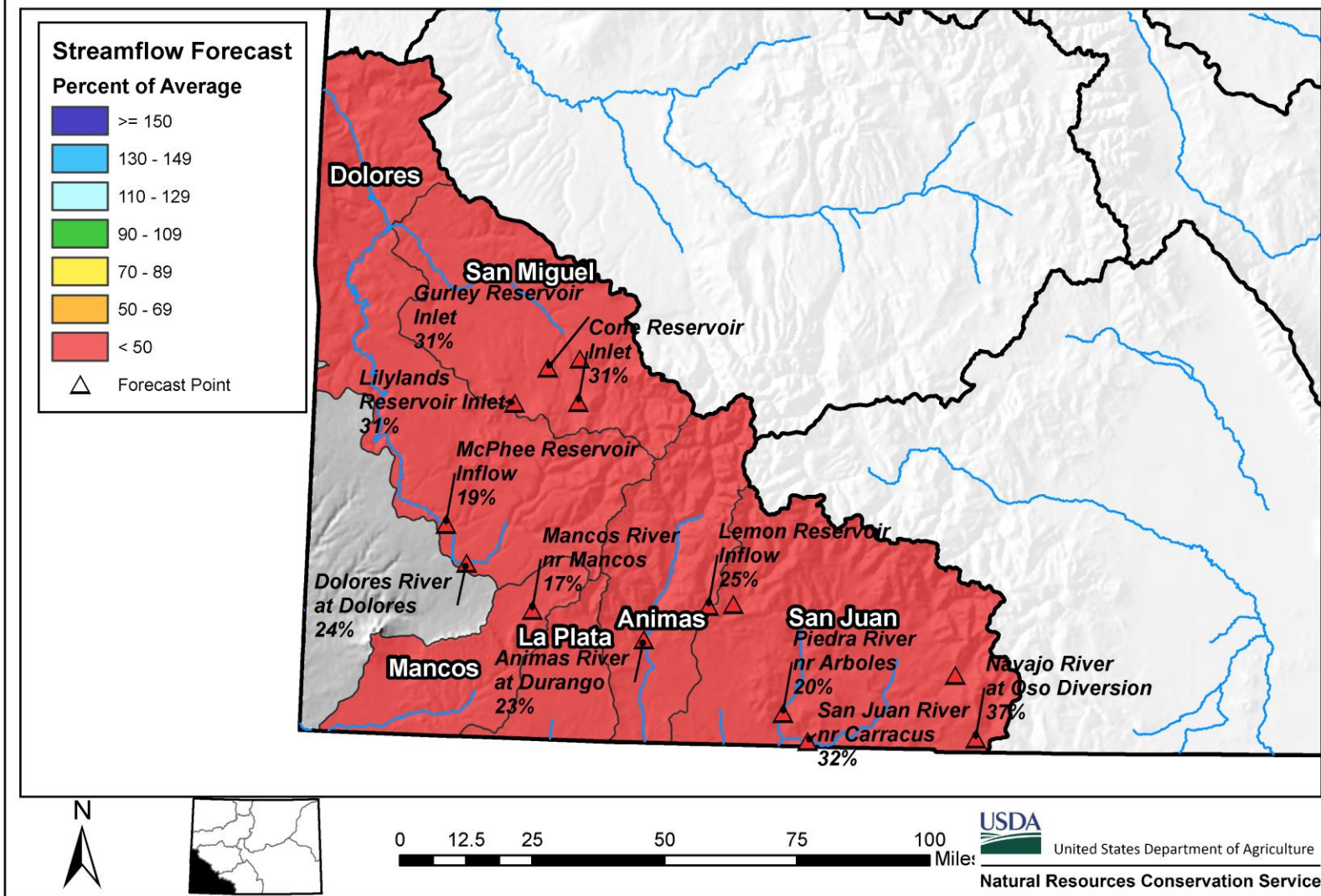
United States Department of Agriculture

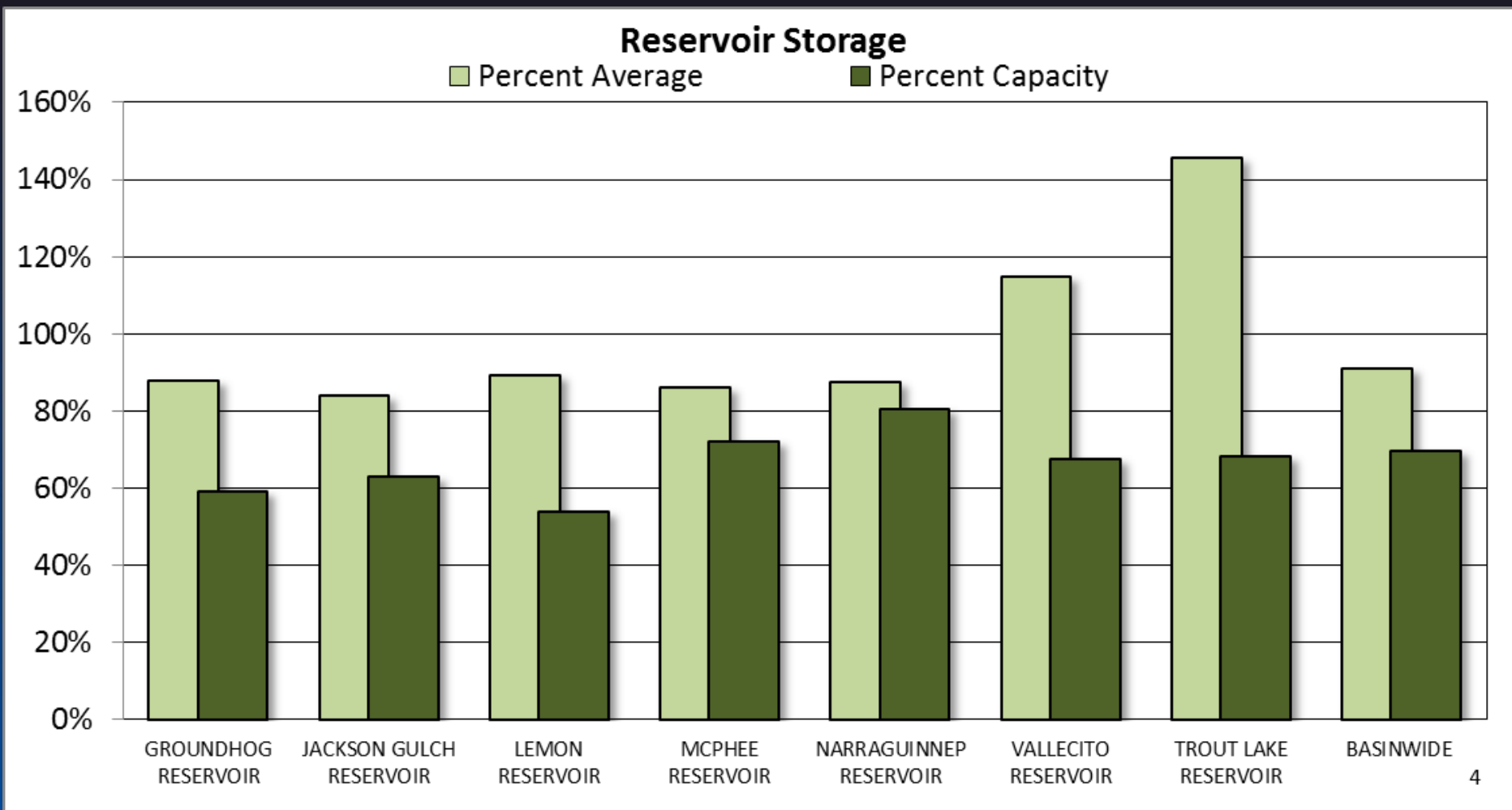
Natural Resources Conservation Service



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

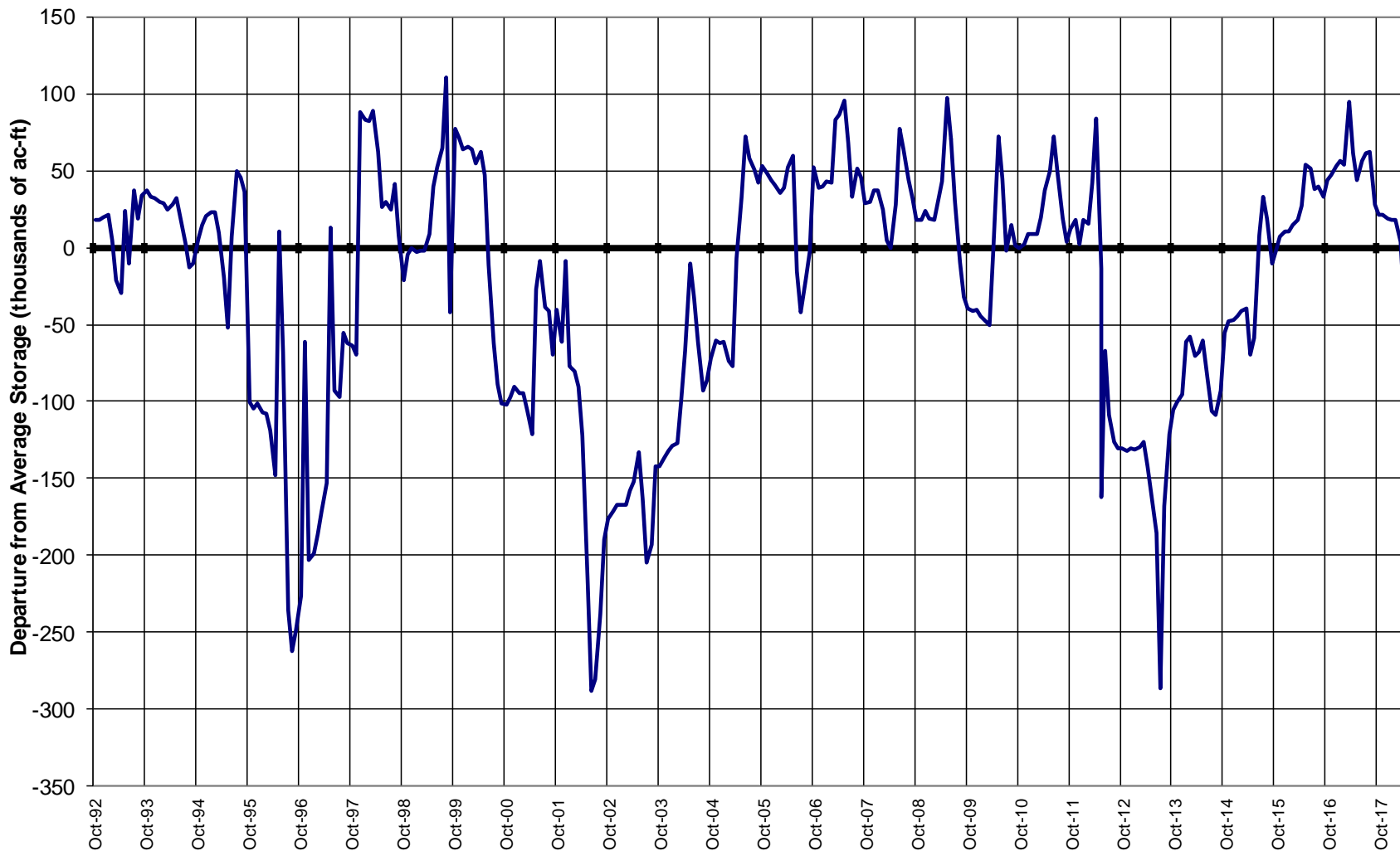
May 1, 2018





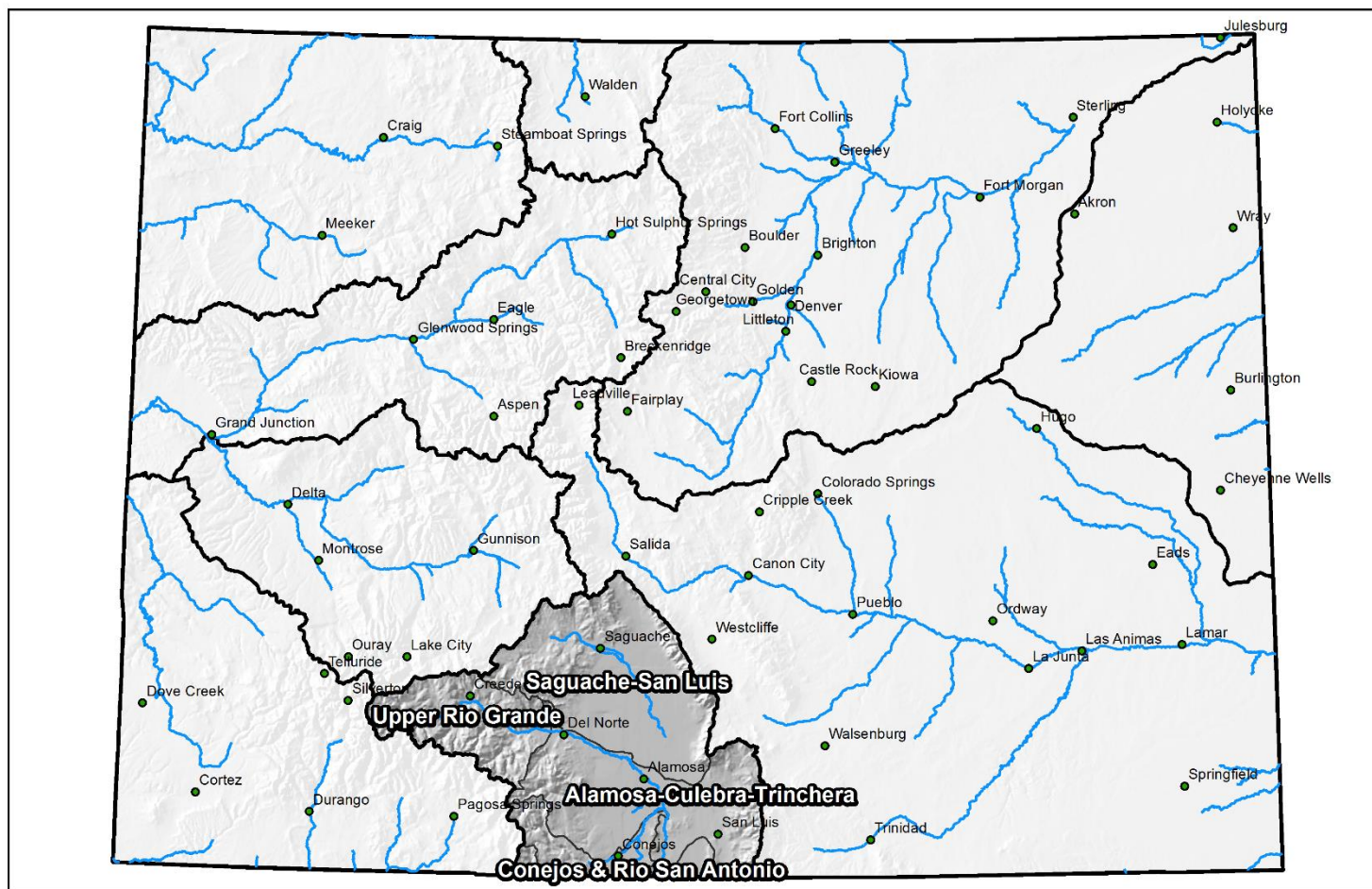
SAN MIGUEL, DOLORES, ANIMAS AND SAN JUAN RIVER BASINS

Reservoir Storage Departure from Average



Major Basin Summary

Upper Rio Grande River Basin



0 25 50 100 150 200 Miles



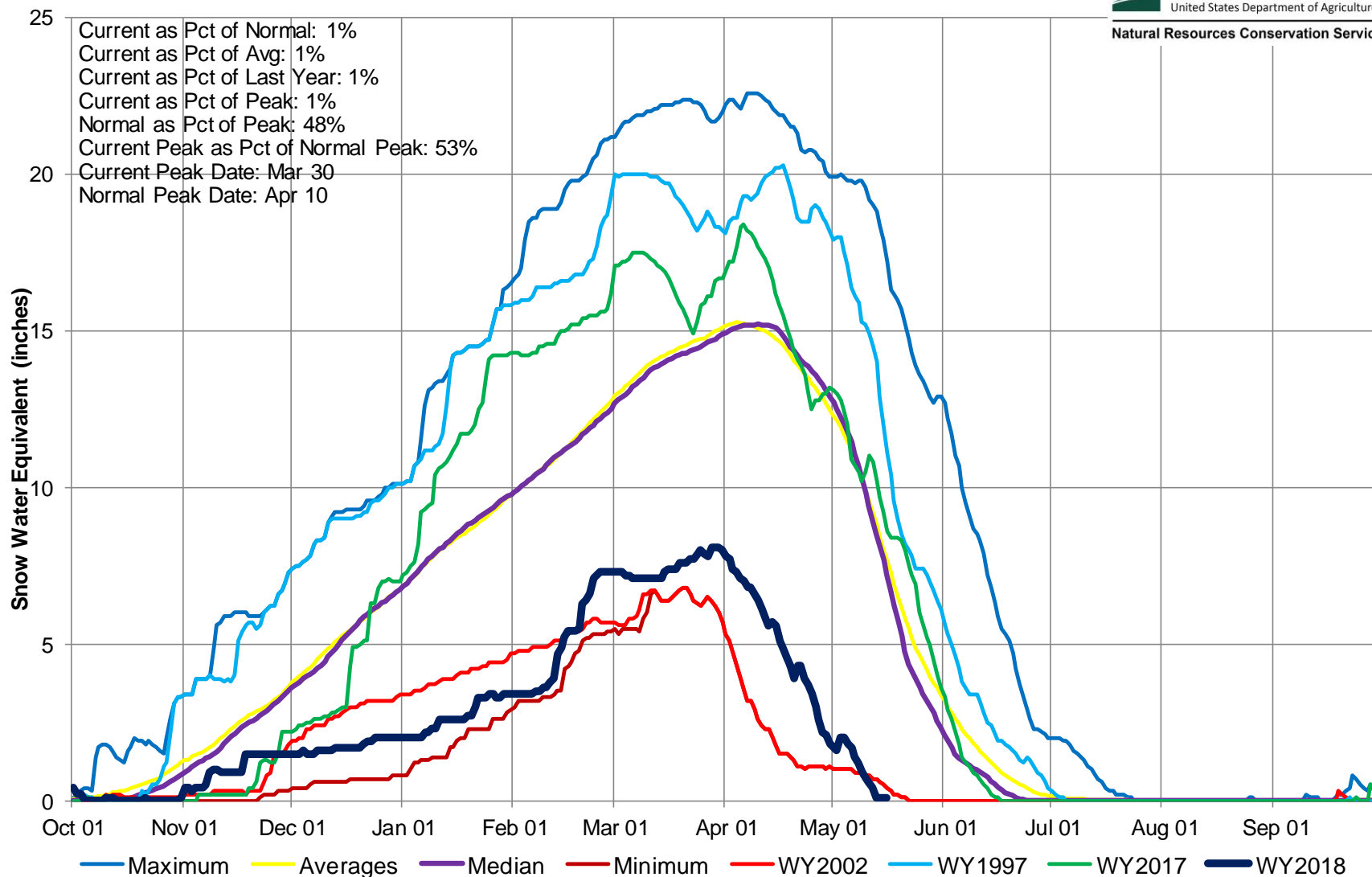
Upper Rio Grande Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of May 16, 2018



United States Department of Agriculture

Natural Resources Conservation Service



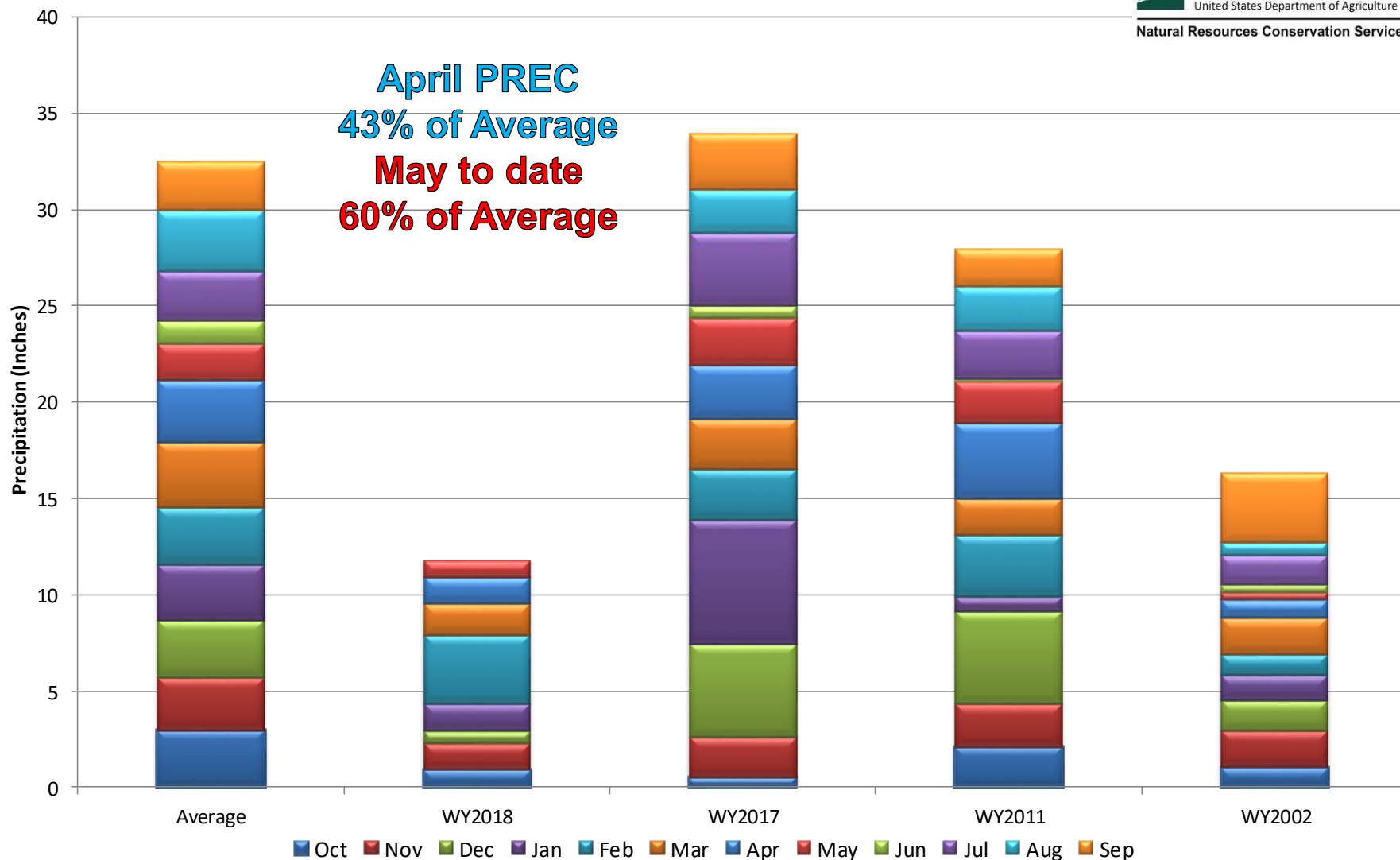
Upper Rio Grande River Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of May 16, 2018



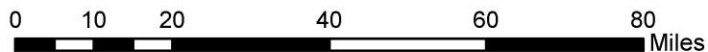
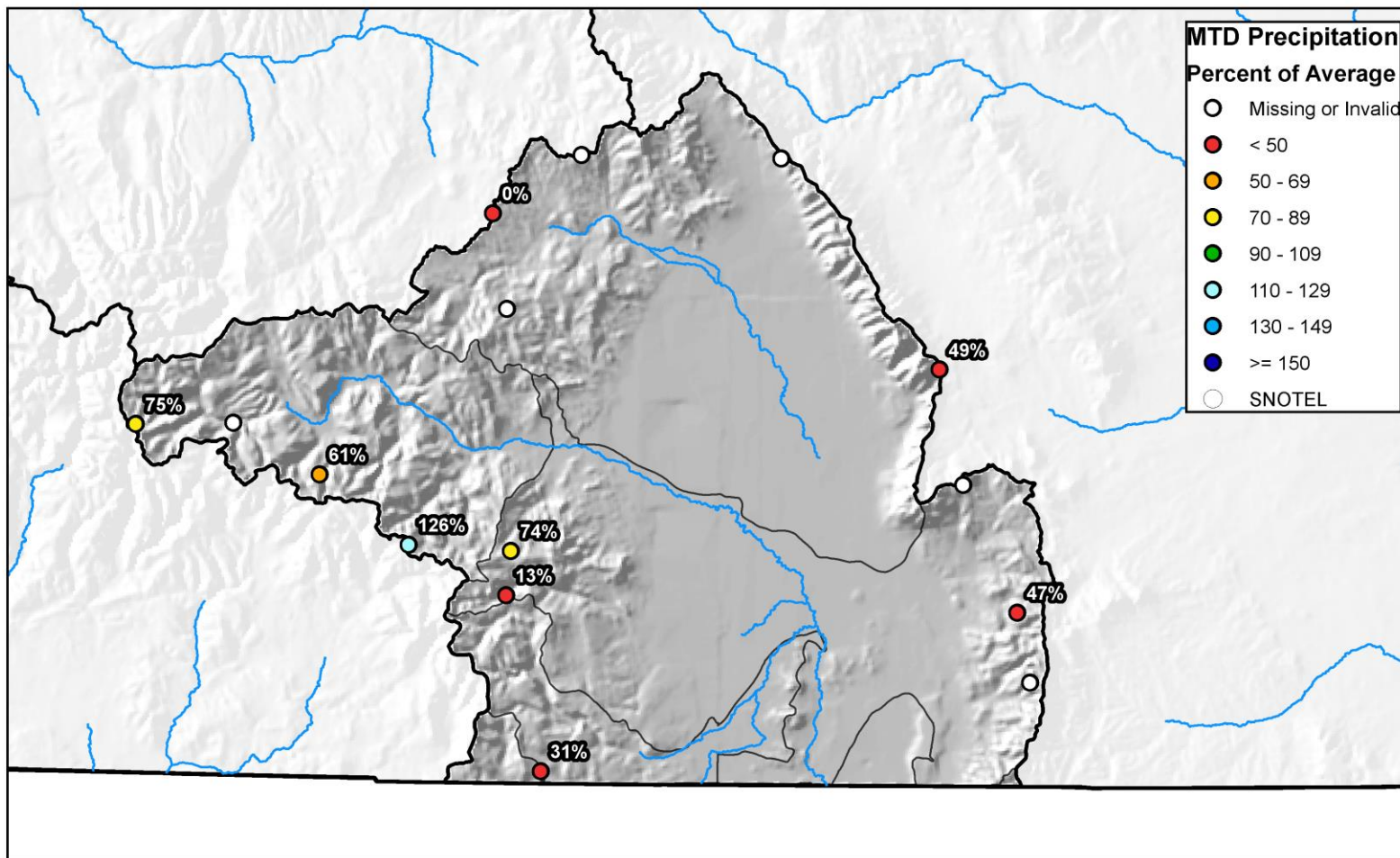
United States Department of Agriculture

Natural Resources Conservation Service



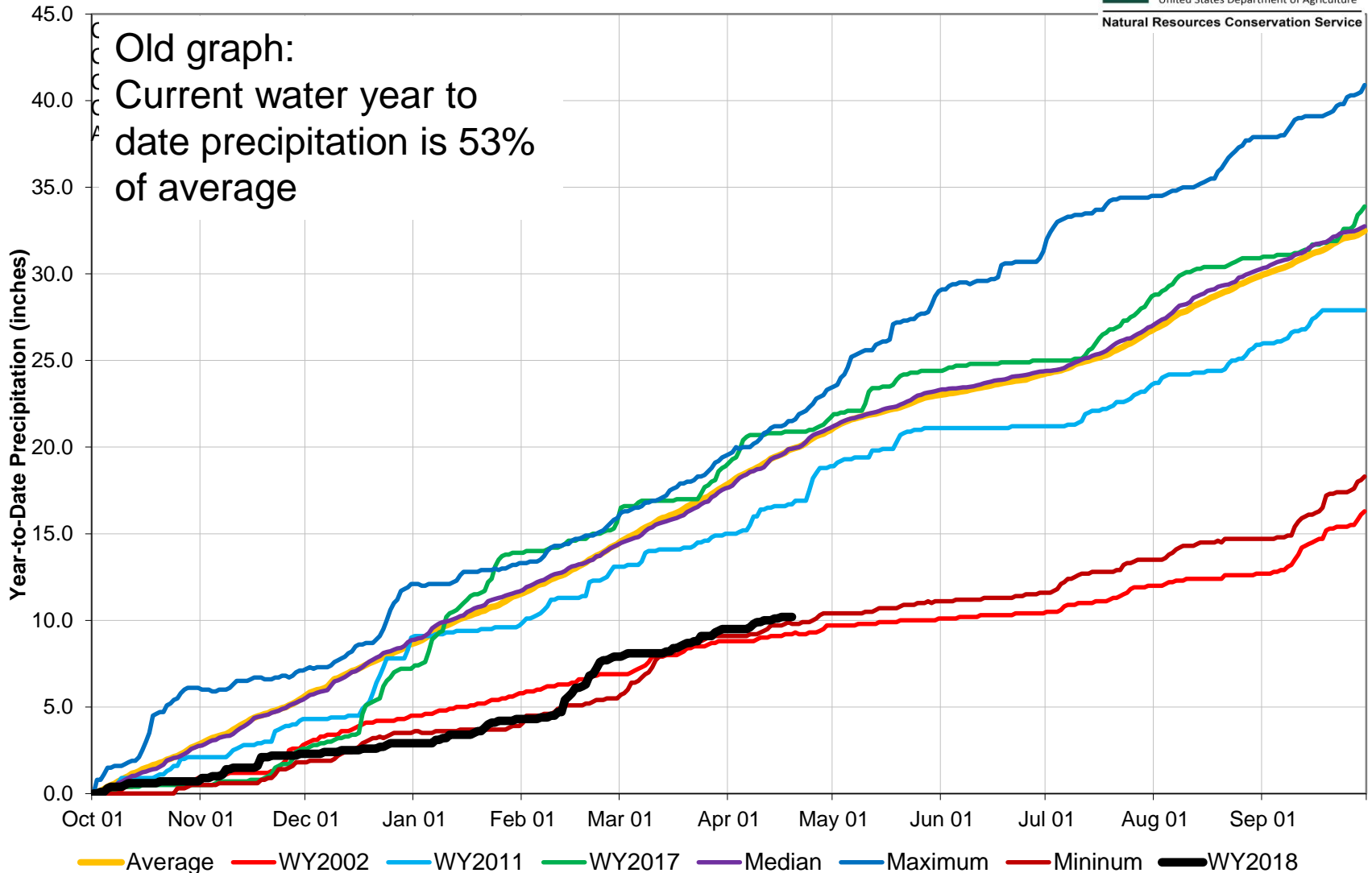
Upper Rio Grande River Basin Month to Date Precipitation Summary

Current as of May 16, 2018



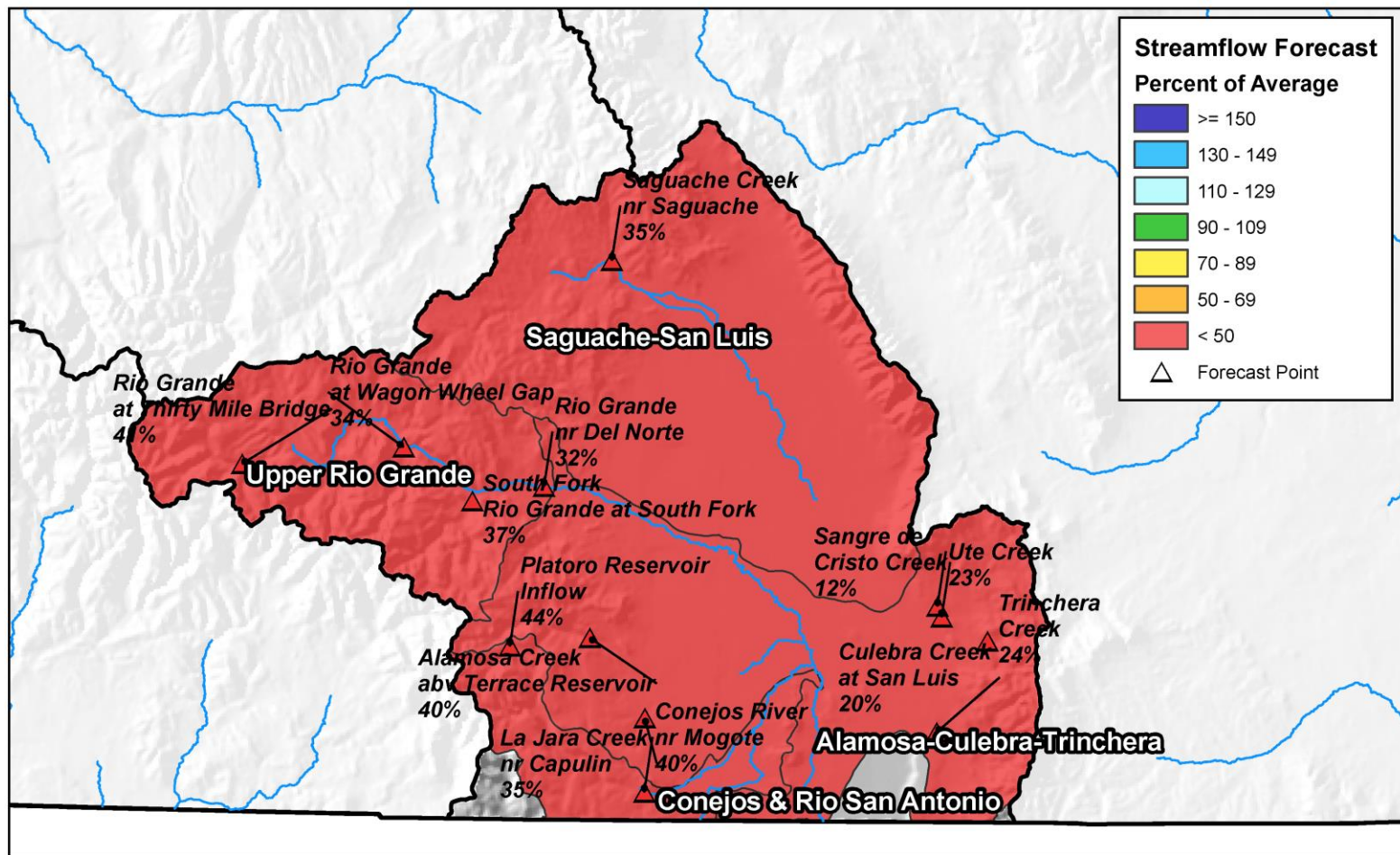
Upper Rio Grande River Basin High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of Apr 19, 2018



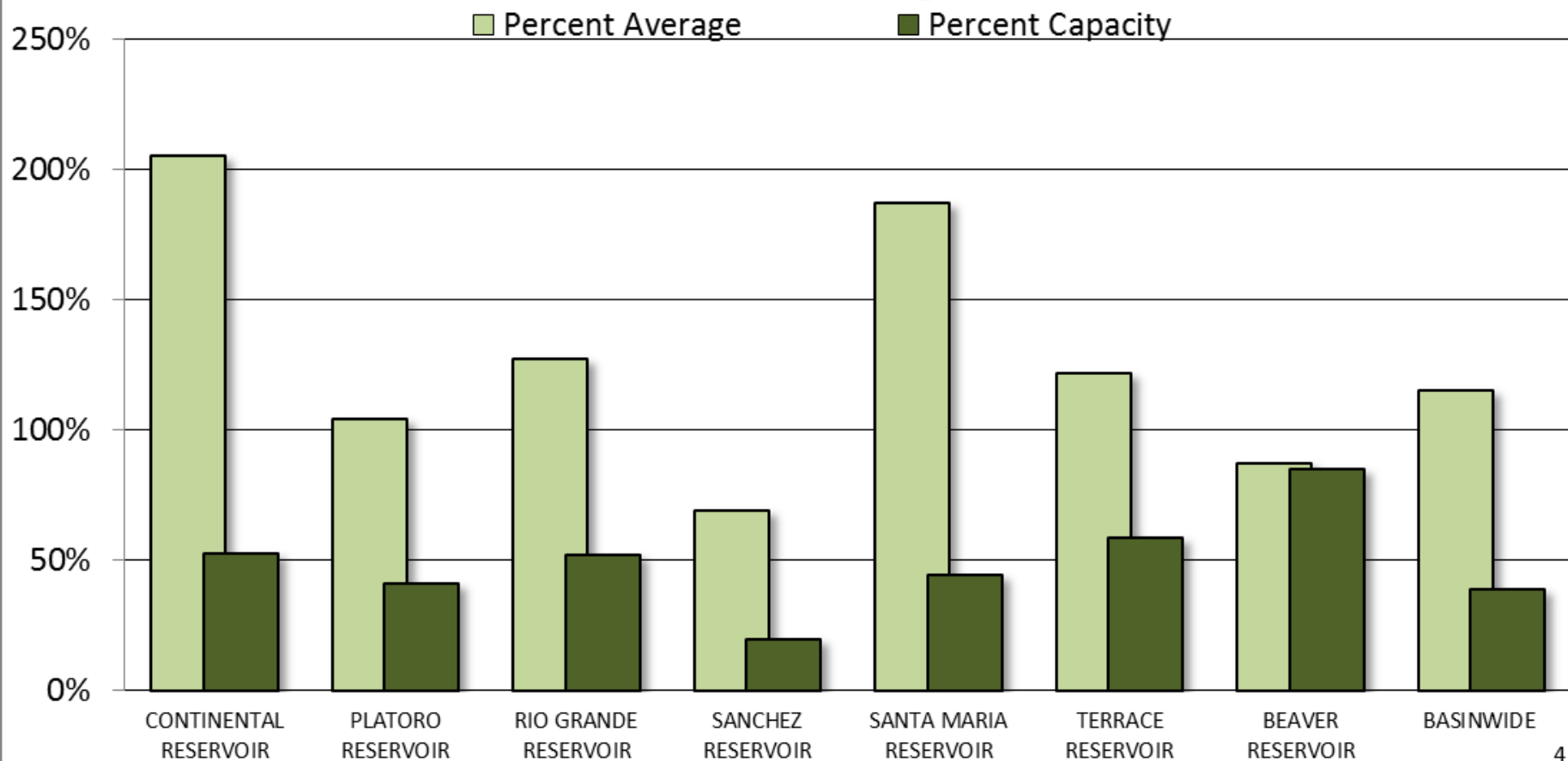
Upper Rio Grande River Basin Streamflow Forecast Summary

May 1, 2018

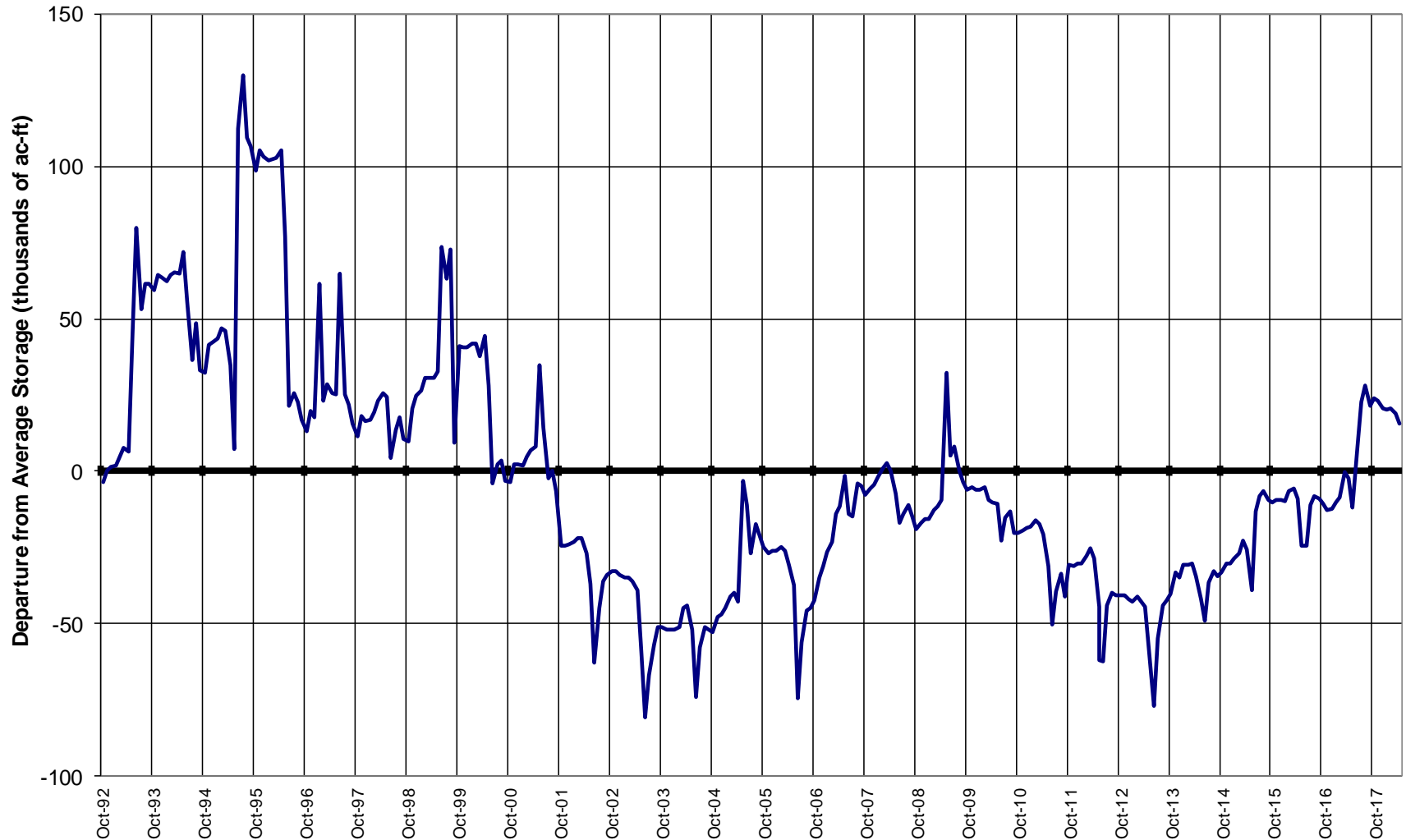


0 10 20 40 60 80 Miles

Reservoir Storage



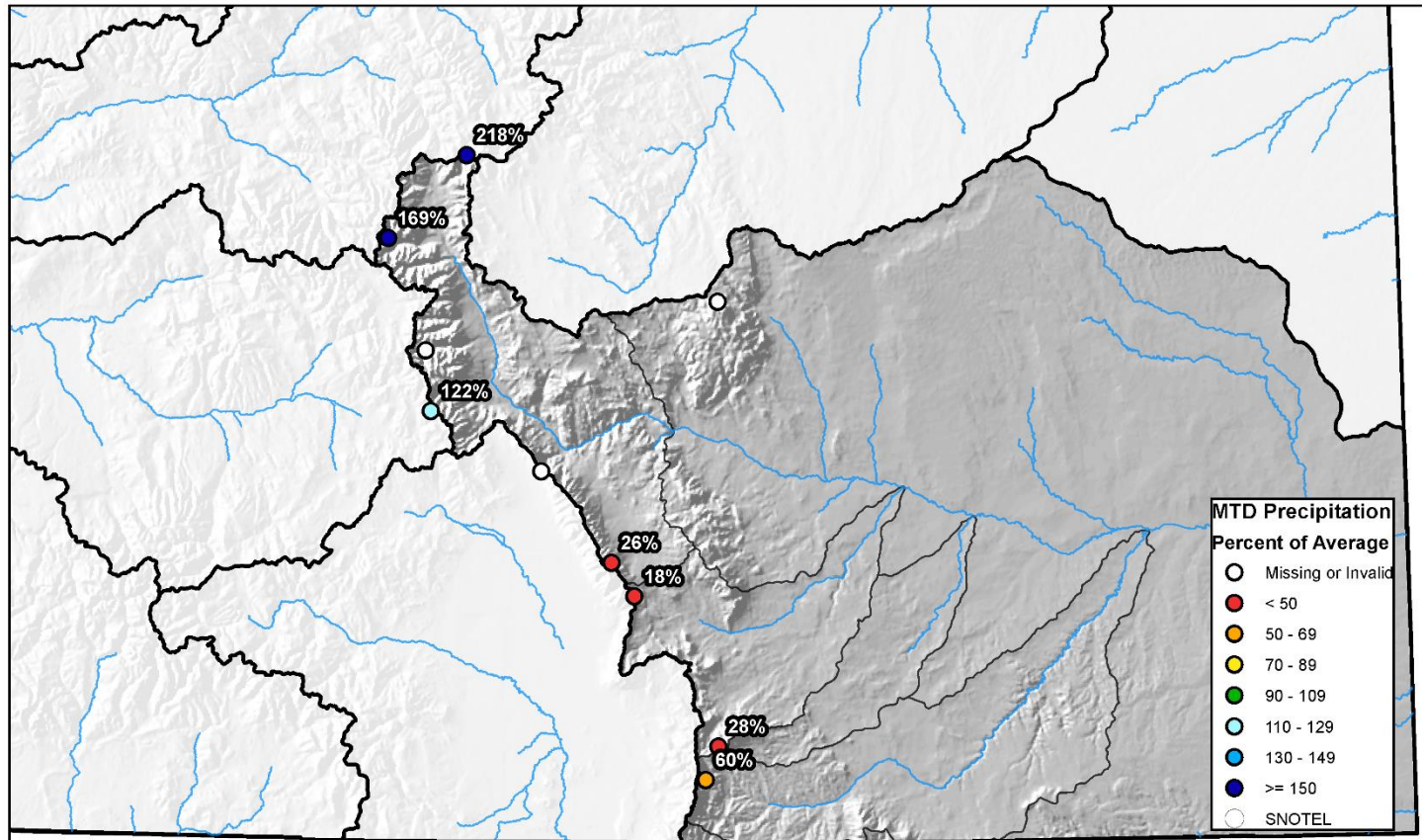
UPPER RIO GRANDE BASIN Reservoir Storage Departure from Average



Major Basin Summary

Arkansas River Basin Month to Date Precipitation Summary

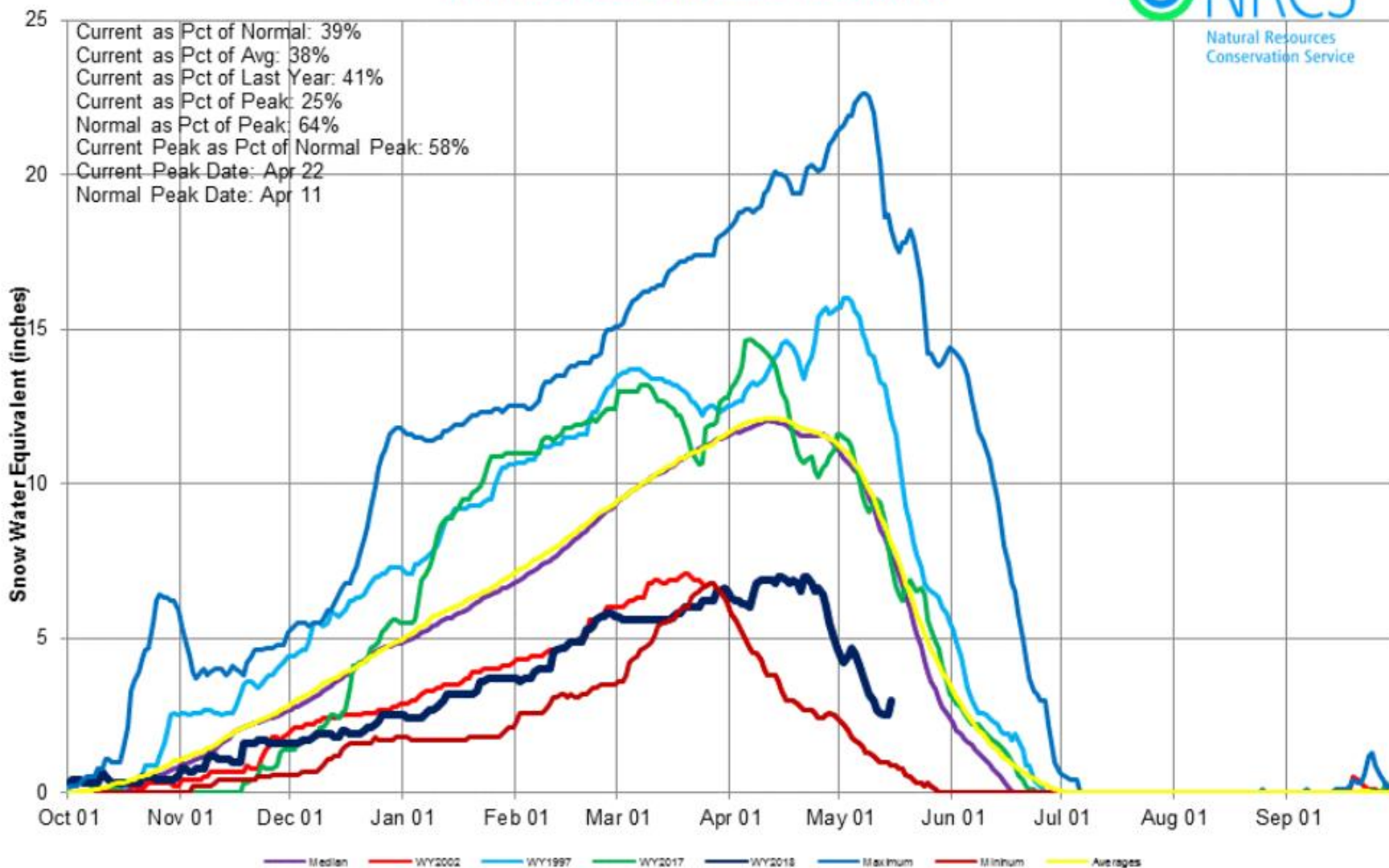
Current as of Apr 19, 2018



0 10 20 40 60 80 Miles

Arkansas River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of May 15, 2018



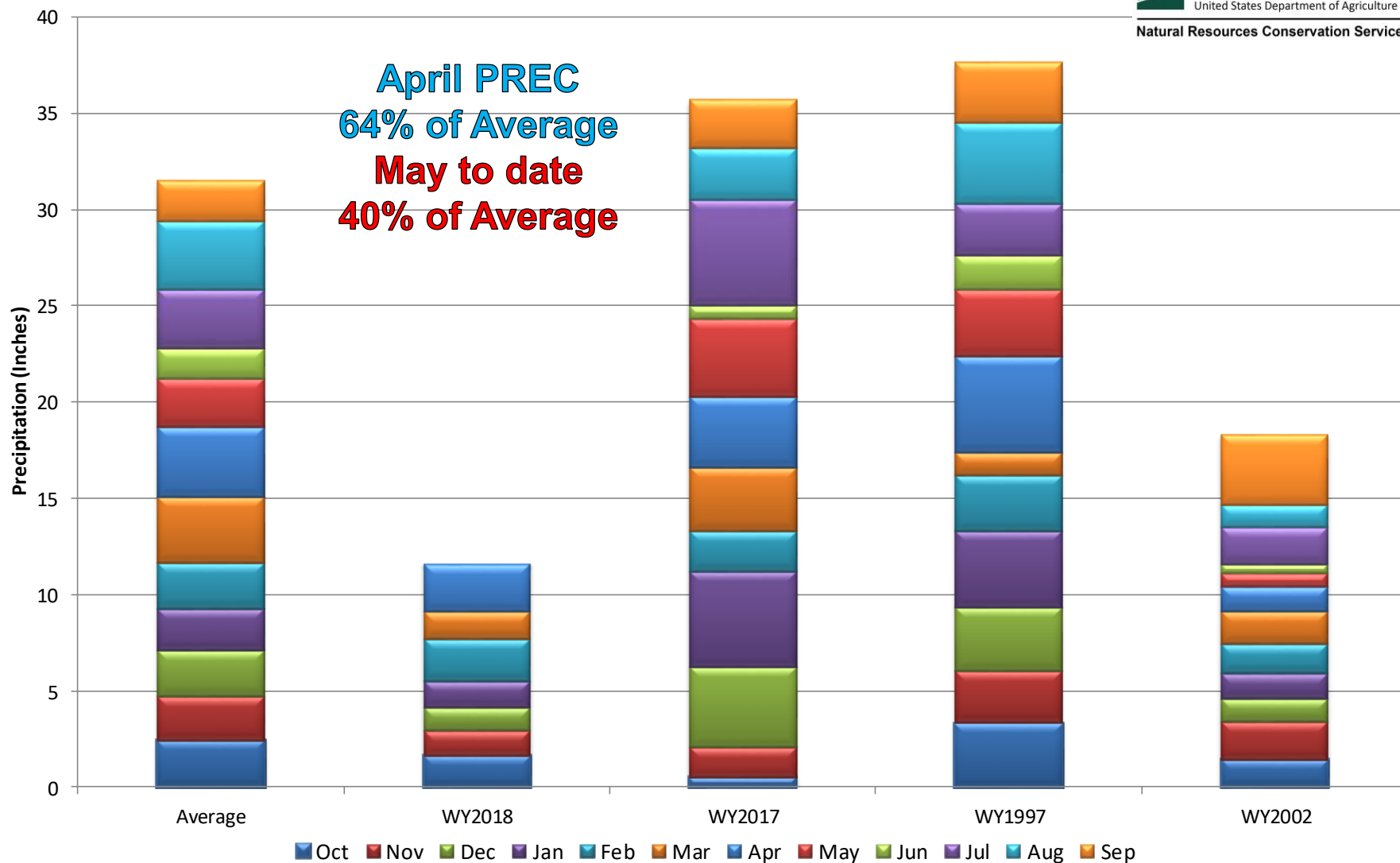
Arkansas River Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of May 16, 2018



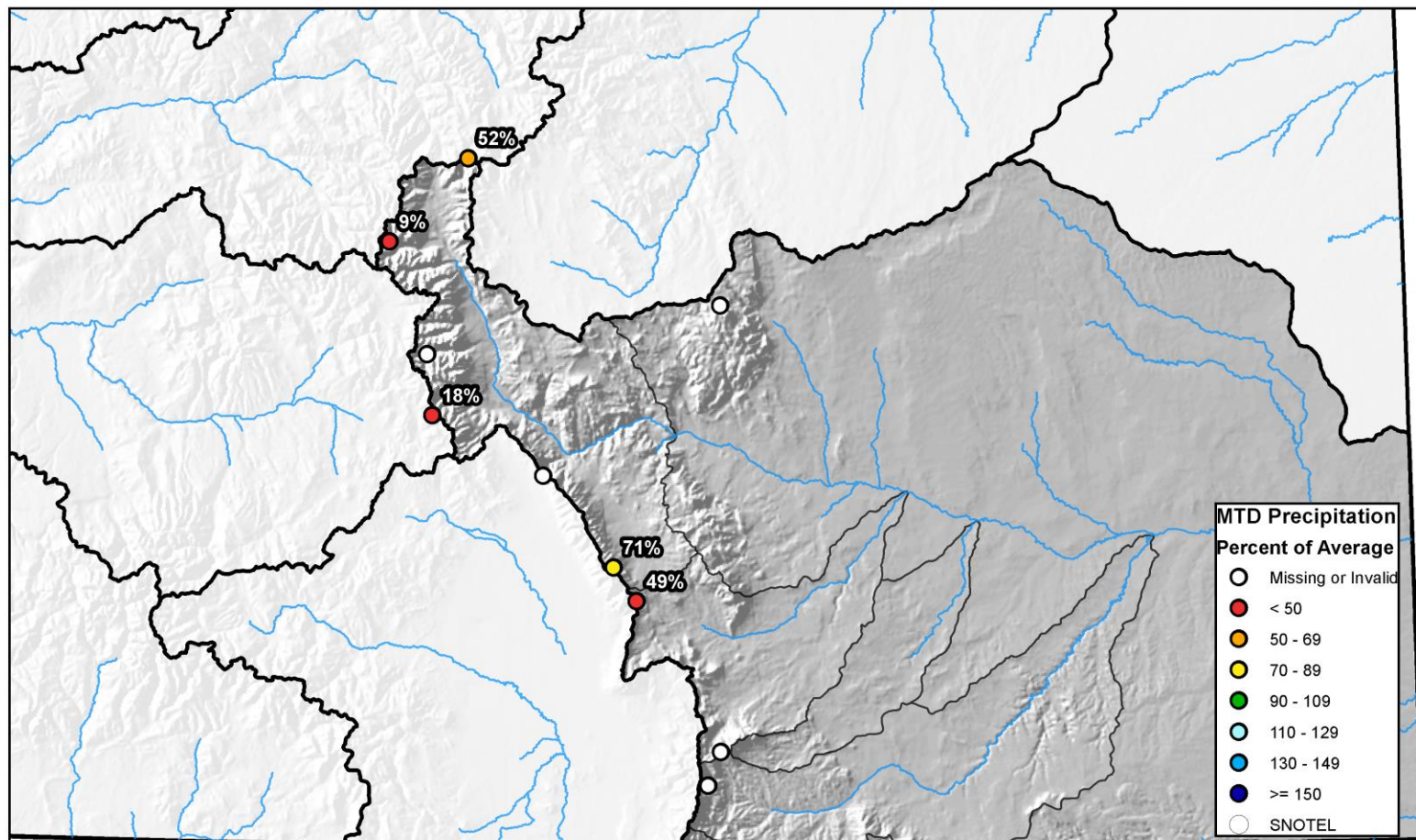
United States Department of Agriculture

Natural Resources Conservation Service



Arkansas River Basin Month to Date Precipitation Summary

Current as of May 16, 2018



0 10 20 40 60 80 Miles



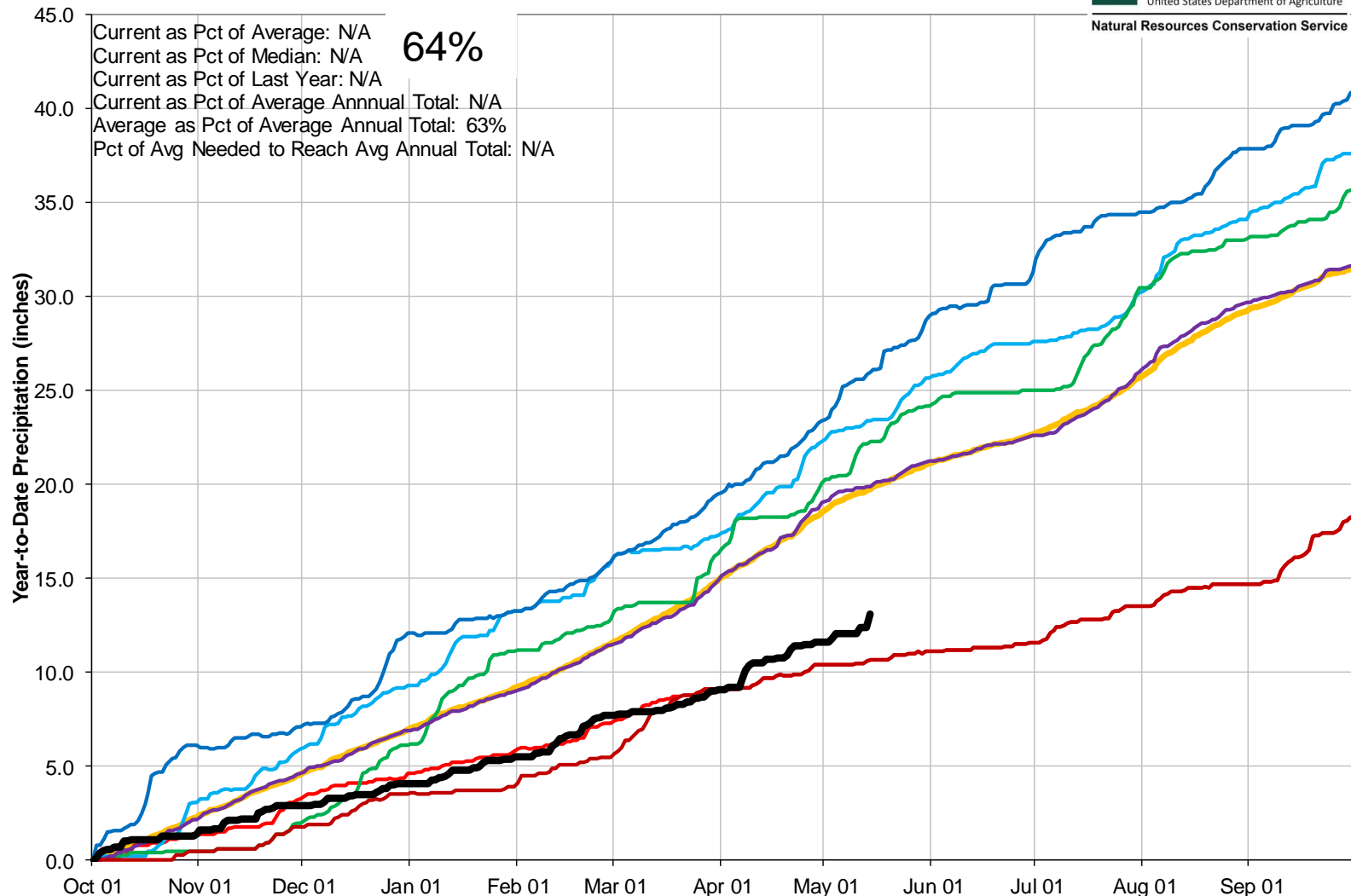
Arkansas River Basin High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of May 16, 2018



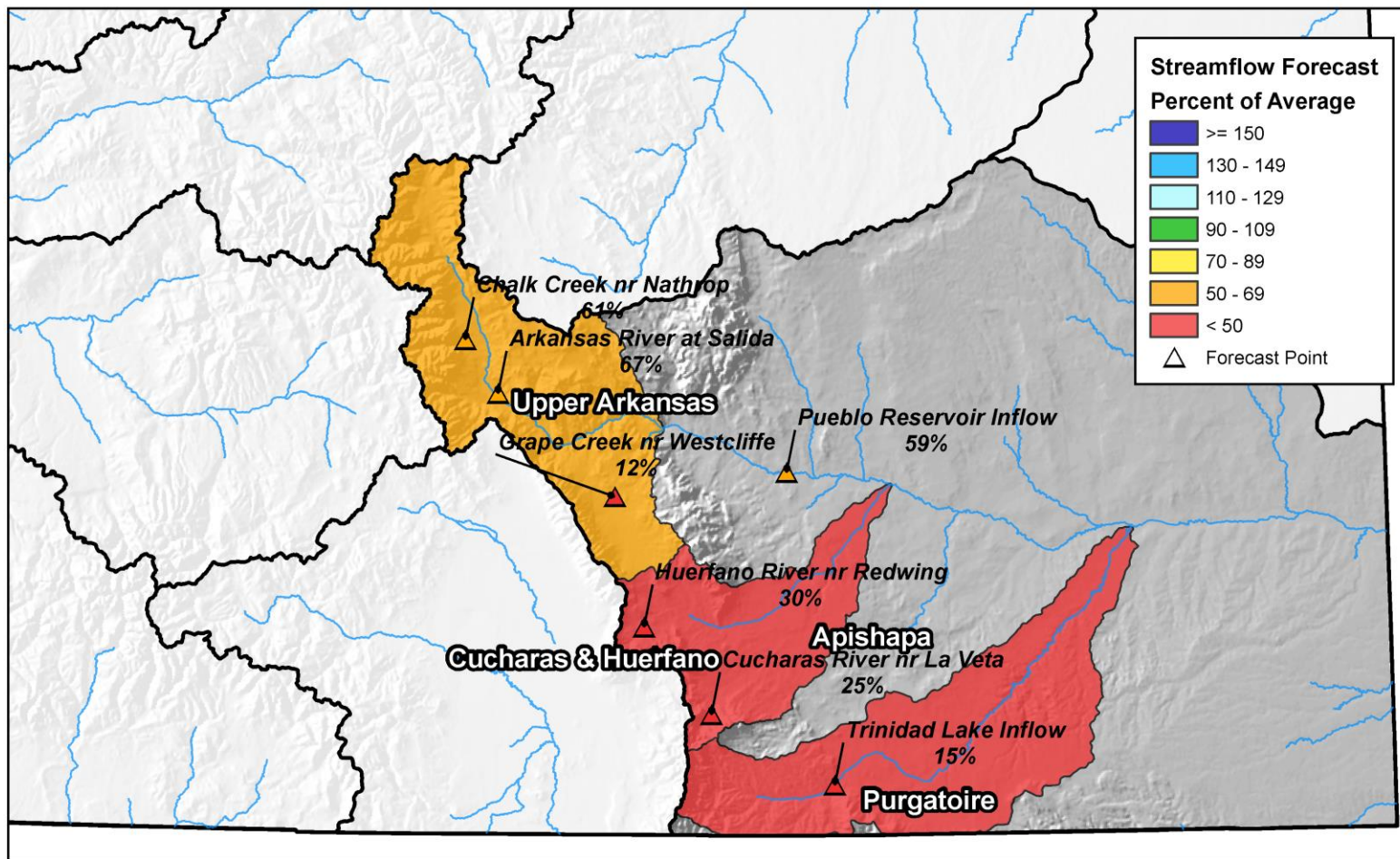
United States Department of Agriculture

Natural Resources Conservation Service



Arkansas River Basin Streamflow Forecast Summary

May 1, 2018

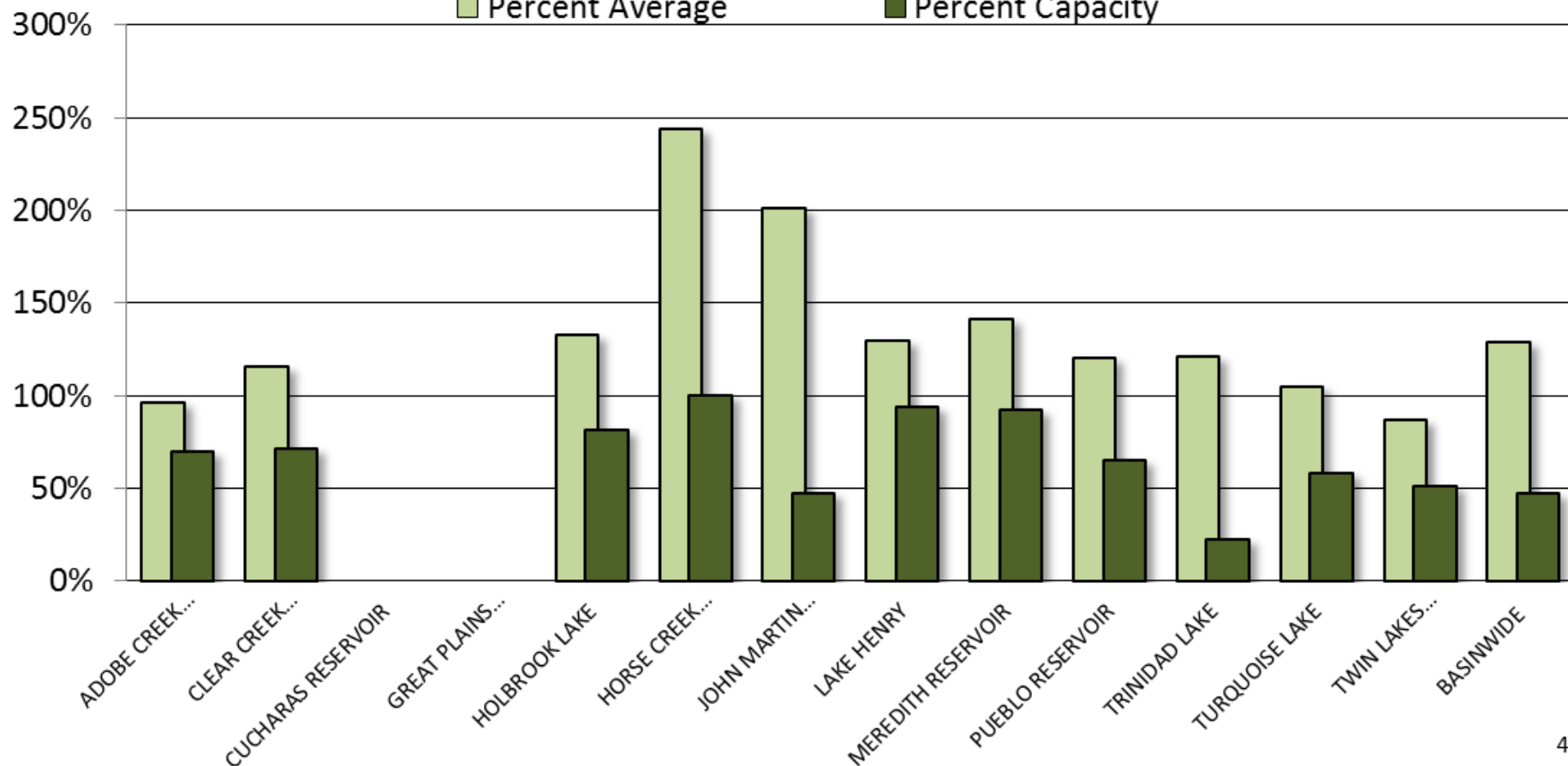


0 10 20 40 60 80 Miles

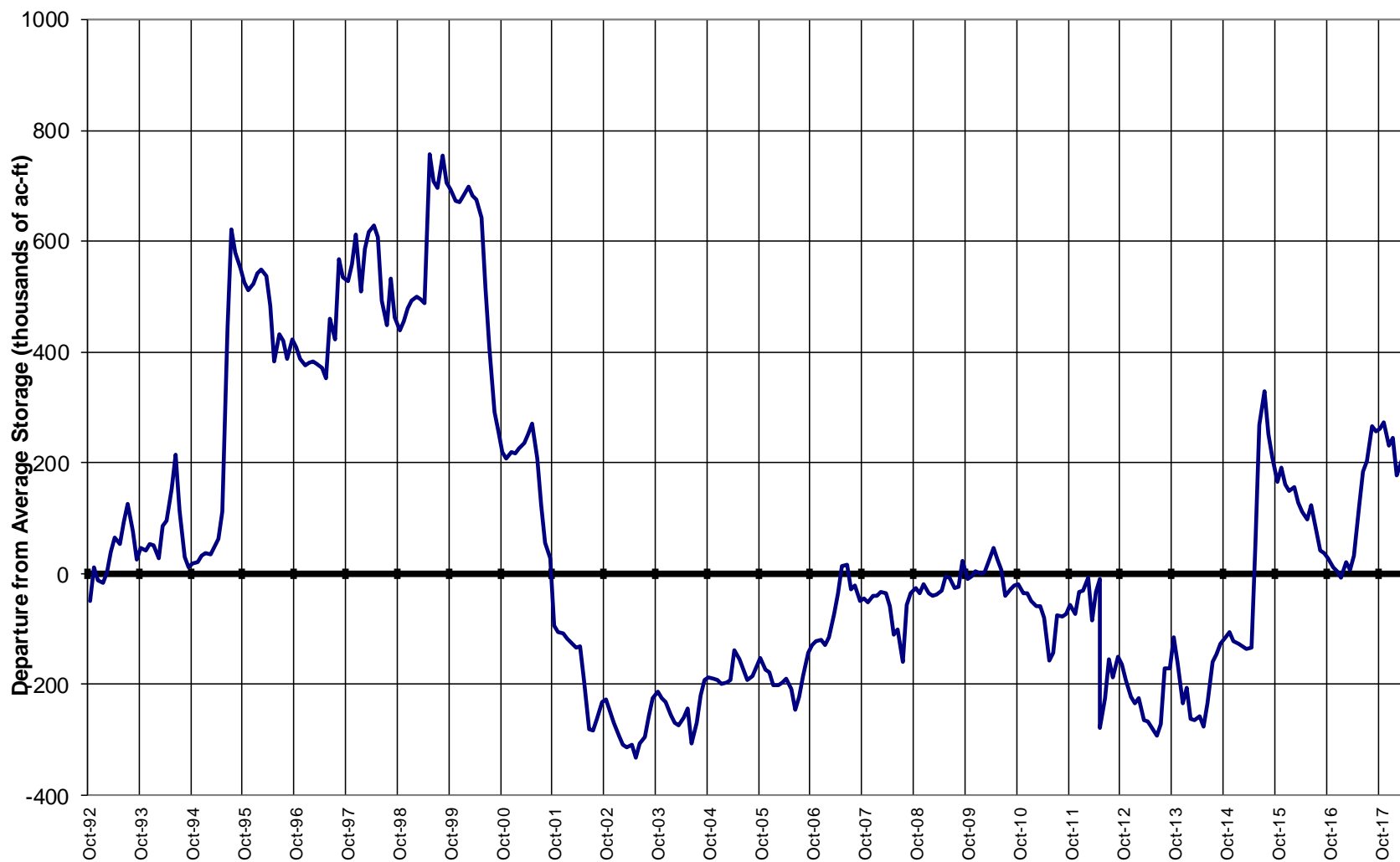
Reservoir Storage

■ Percent Average

■ Percent Capacity

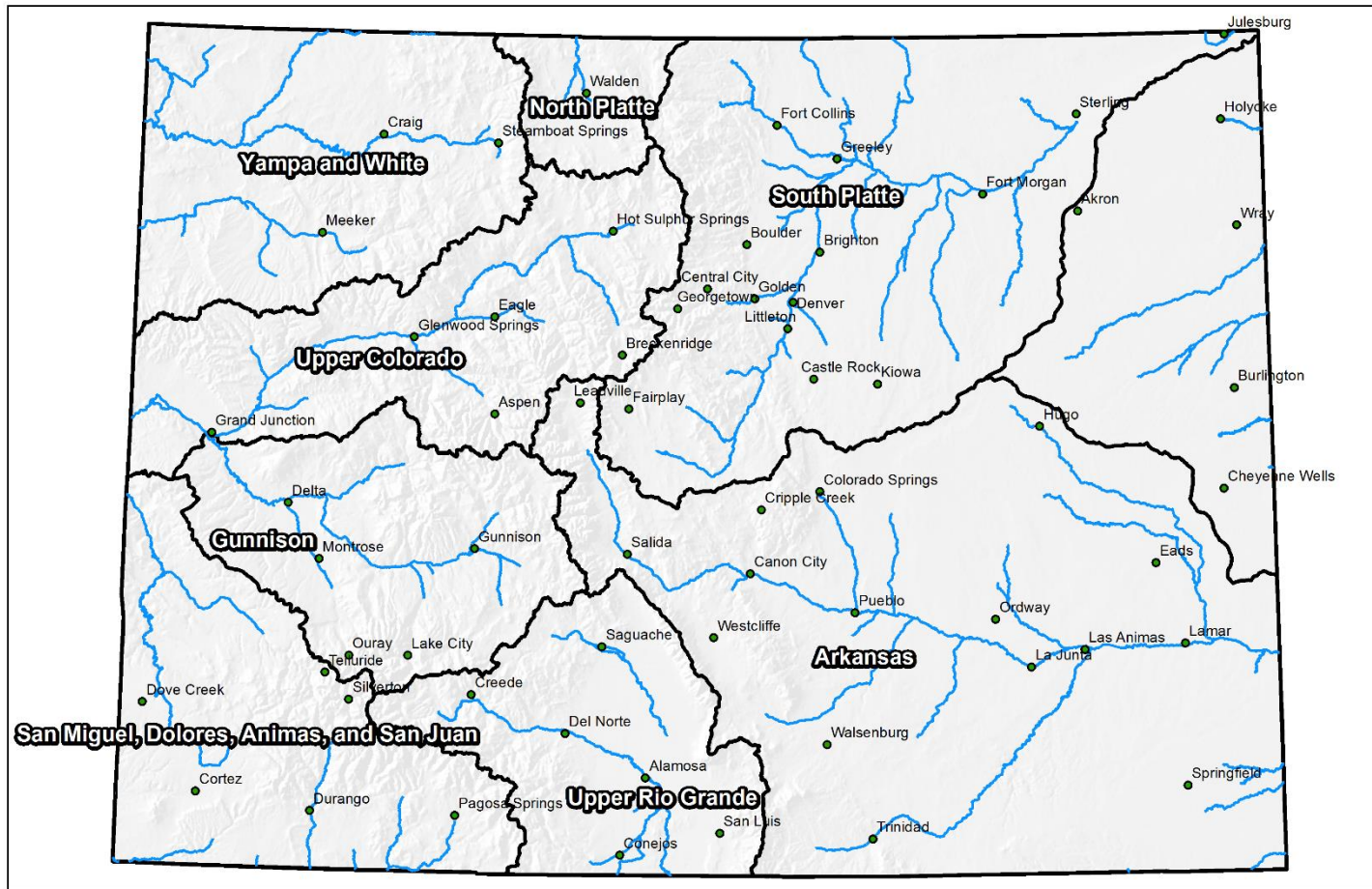


ARKANSAS RIVER BASIN Reservoir Storage Departure from Average



Colorado Statewide Summary

Colorado Major Basins



0 25 50 100 150 200 Miles



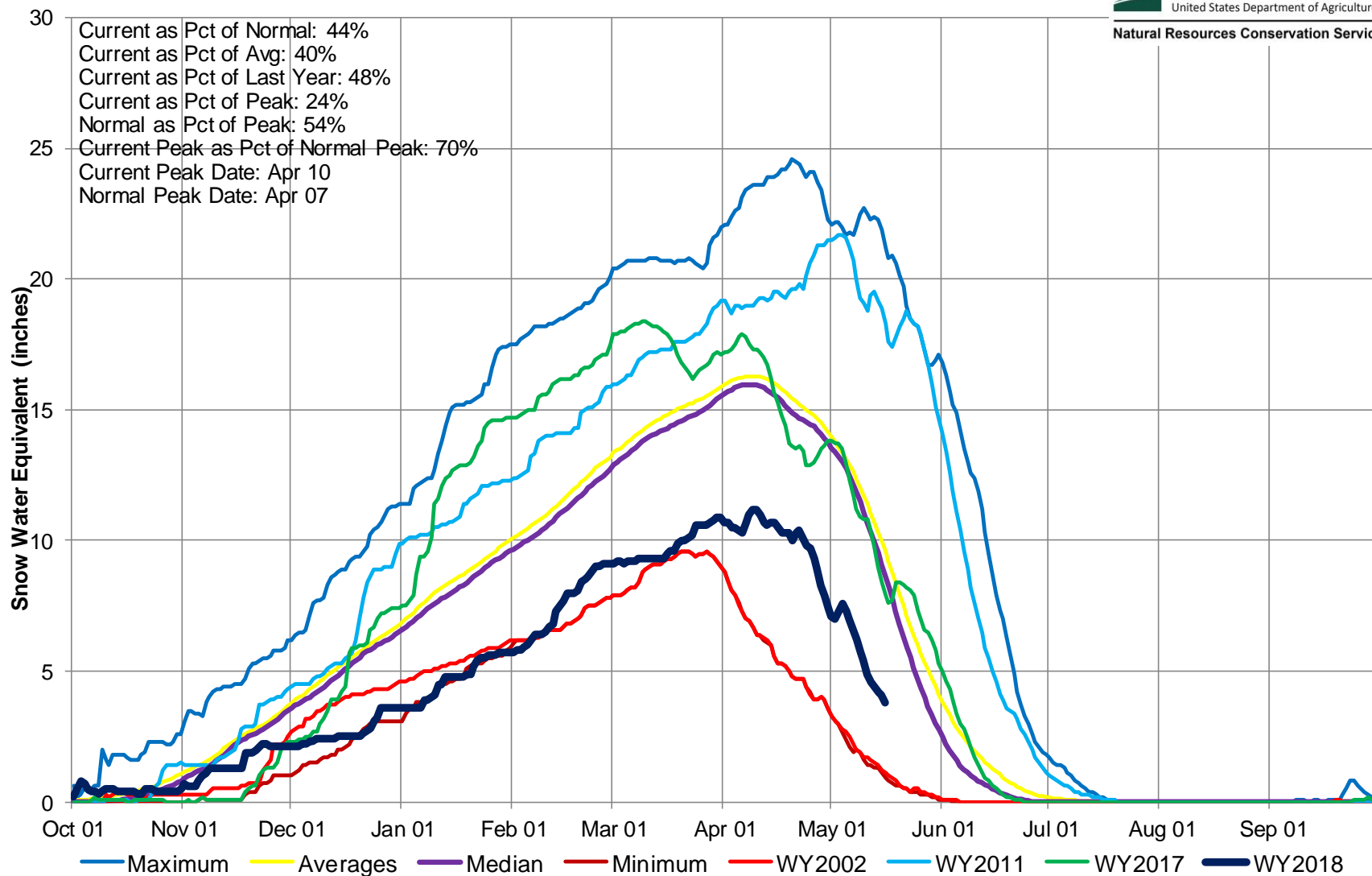
Colorado Statewide High/Low Snowpack Summary

Based on Provisional SNOTEL data as of May 16, 2018



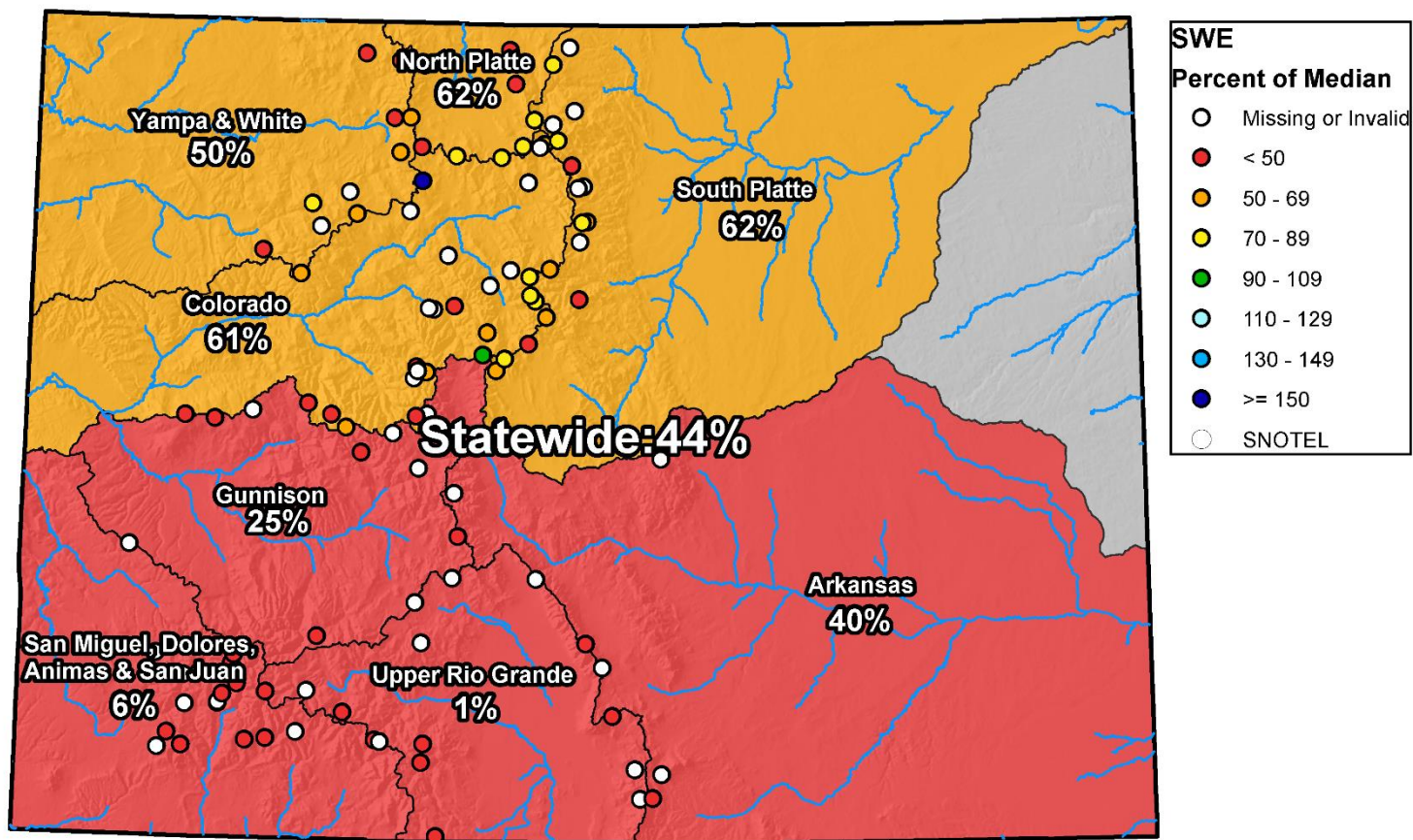
United States Department of Agriculture

Natural Resources Conservation Service



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

Current as of May 16, 2018



0 25 50 100 150 200 Miles

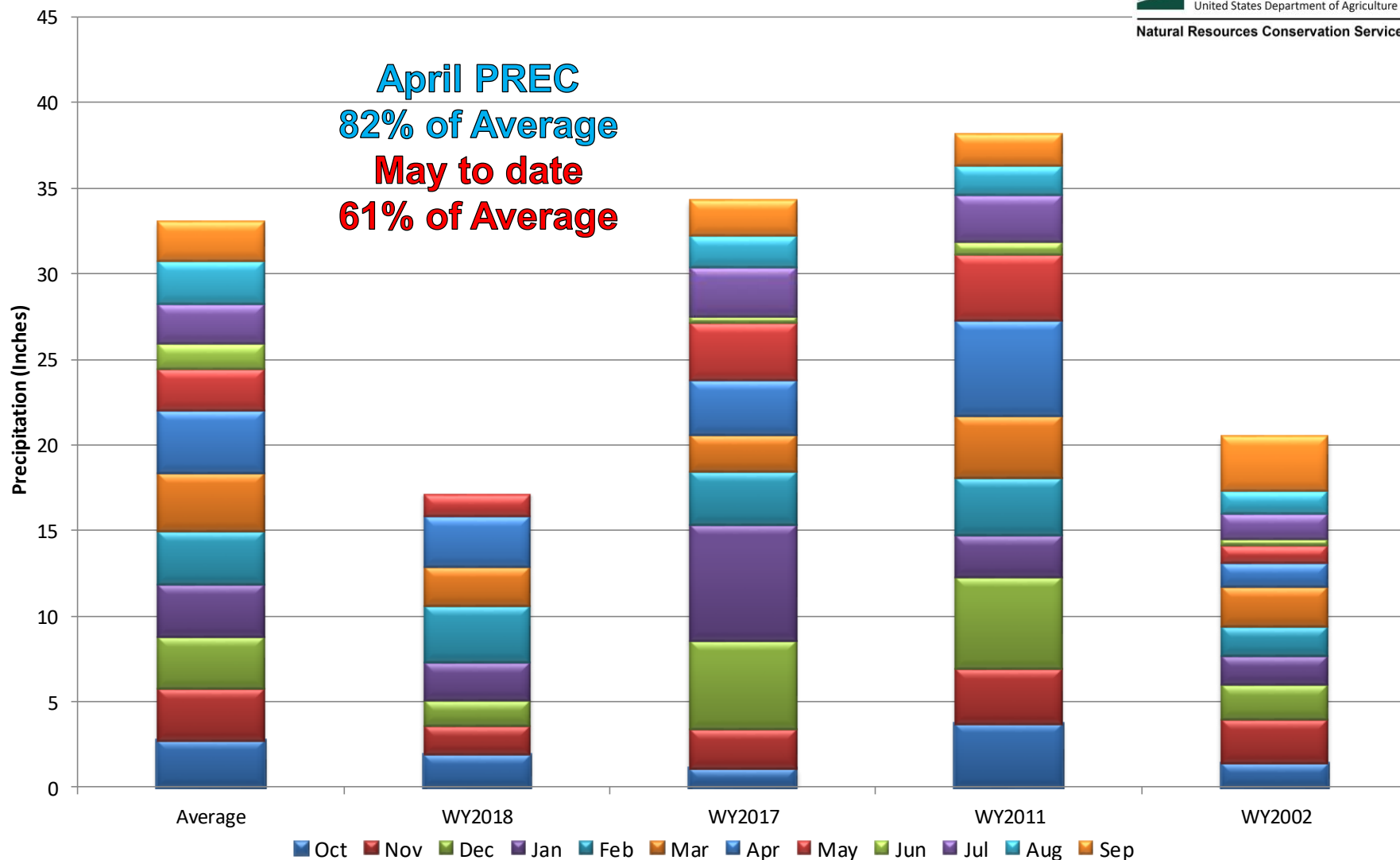
Colorado Statewide High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of May 16, 2018



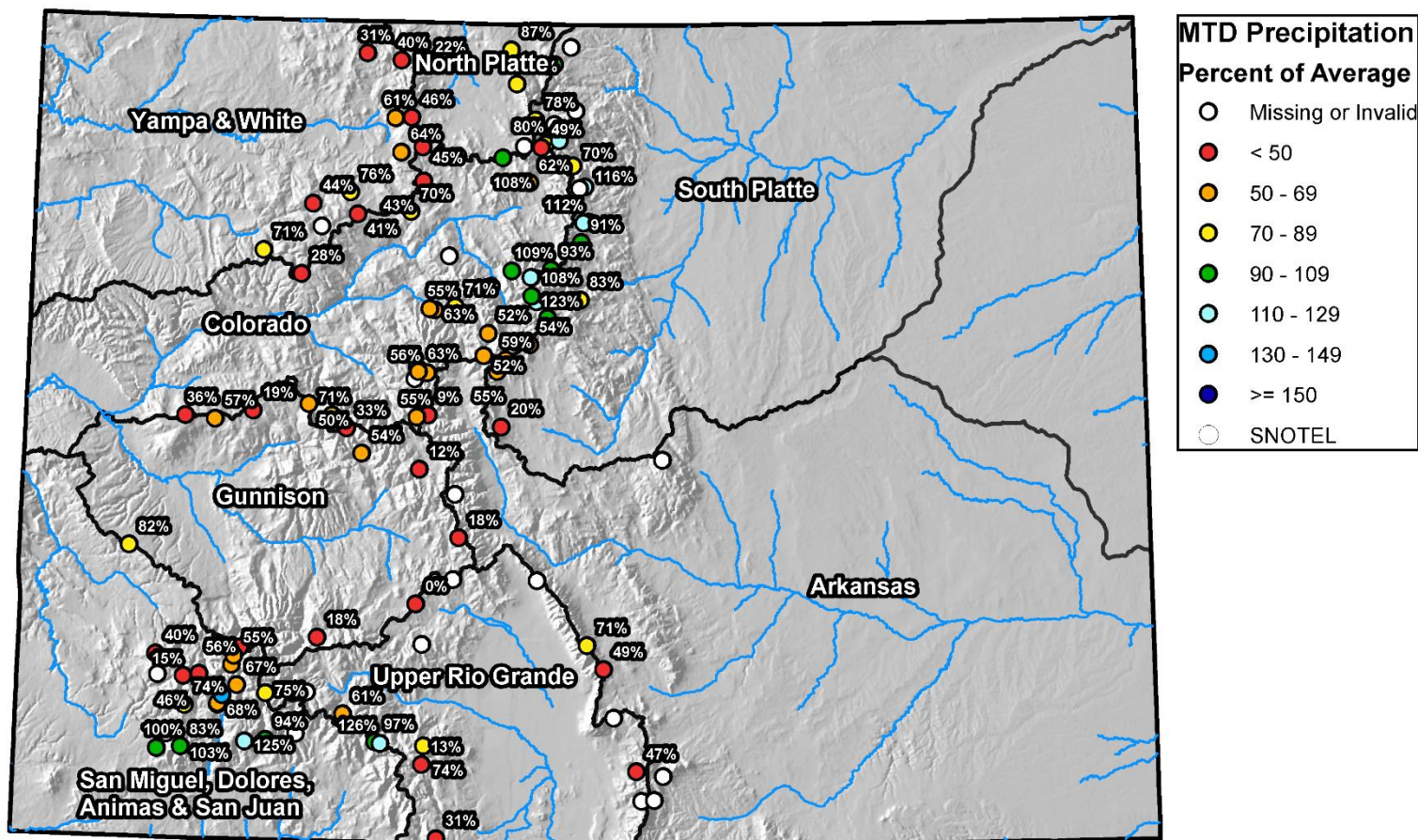
United States Department of Agriculture

Natural Resources Conservation Service



Colorado SNOTEL Month-to-Date Precipitation

Current as of May 16, 2018



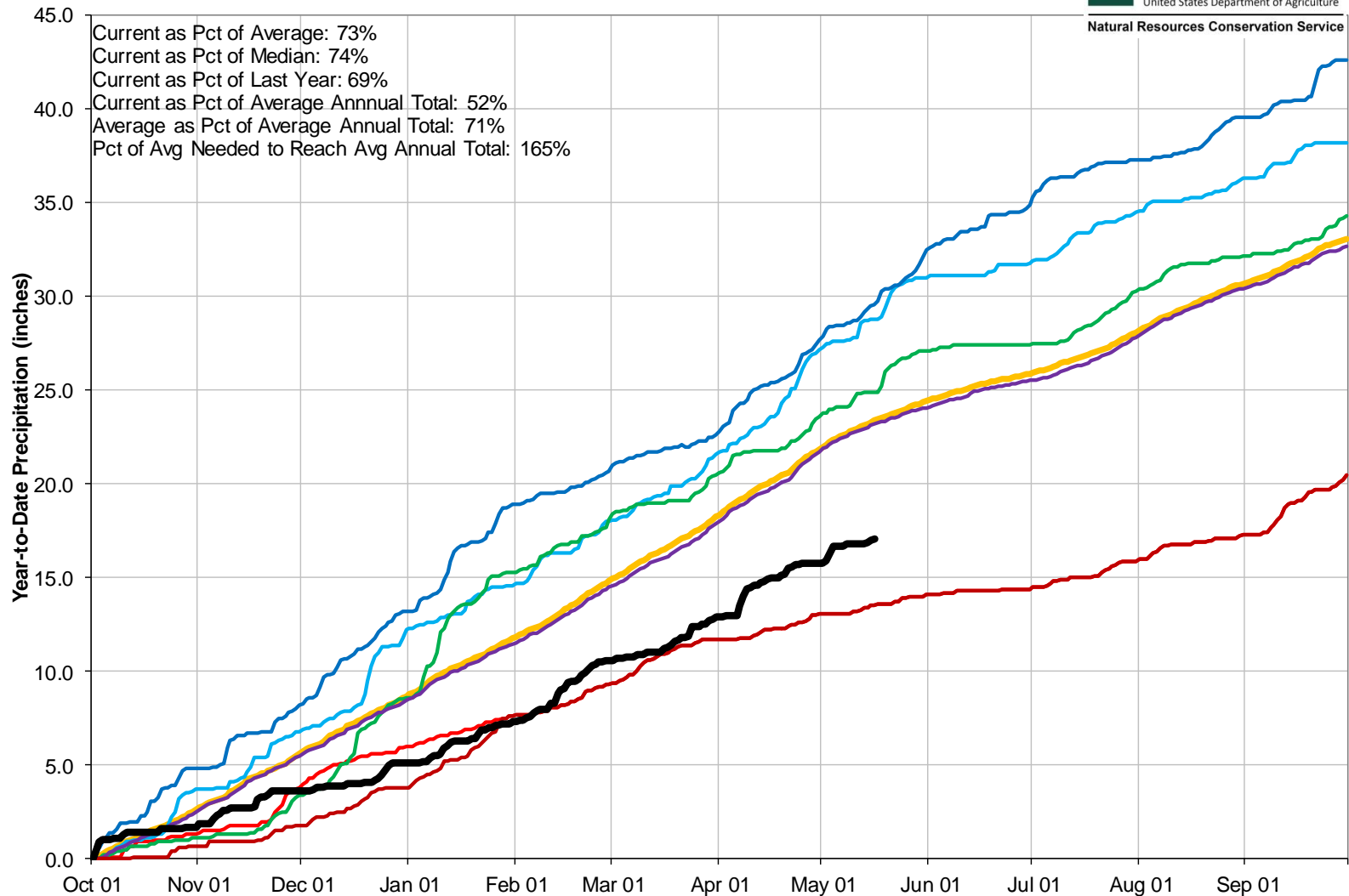
Colorado Statewide High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of May 16, 2018



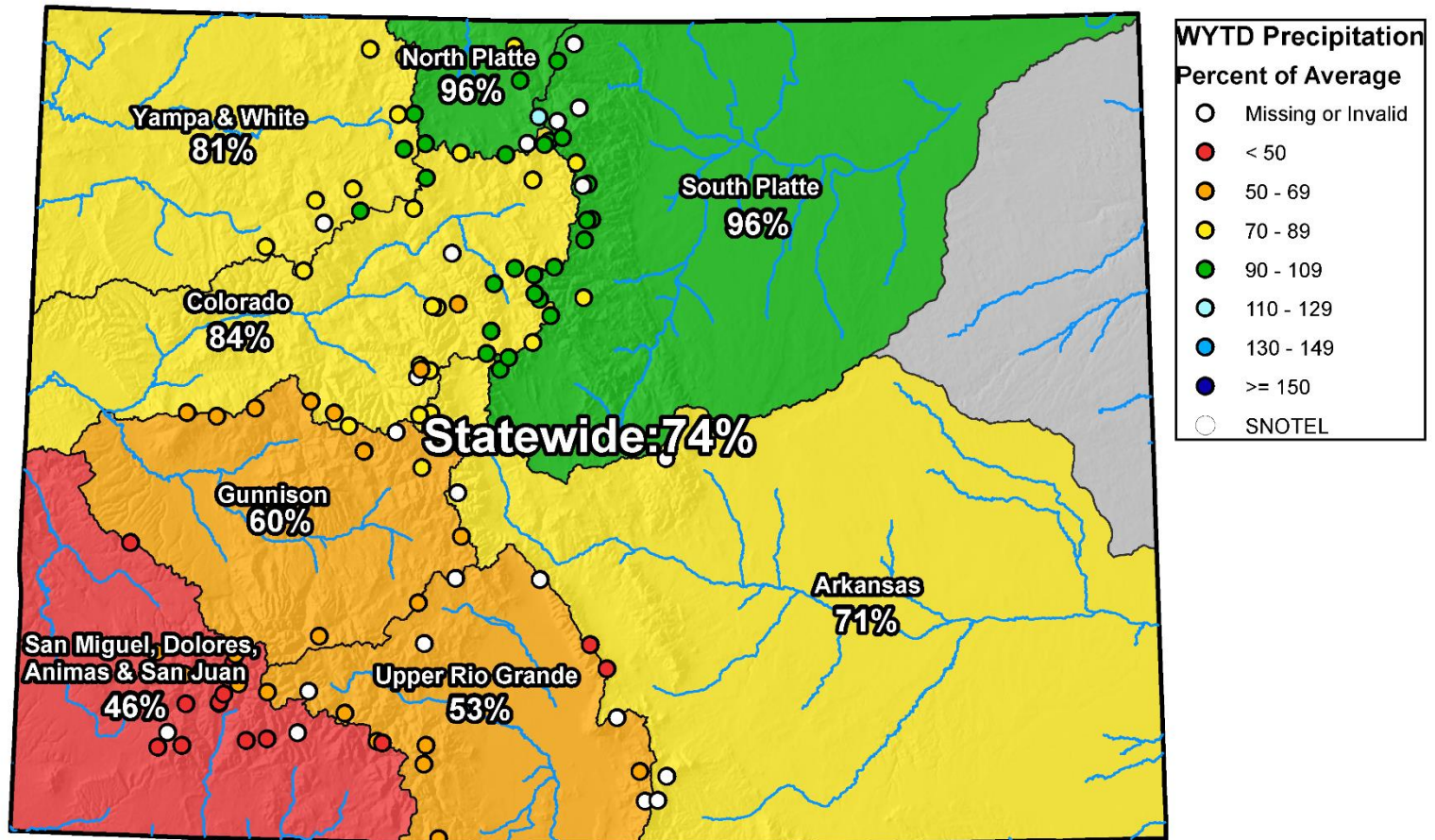
United States Department of Agriculture

Natural Resources Conservation Service



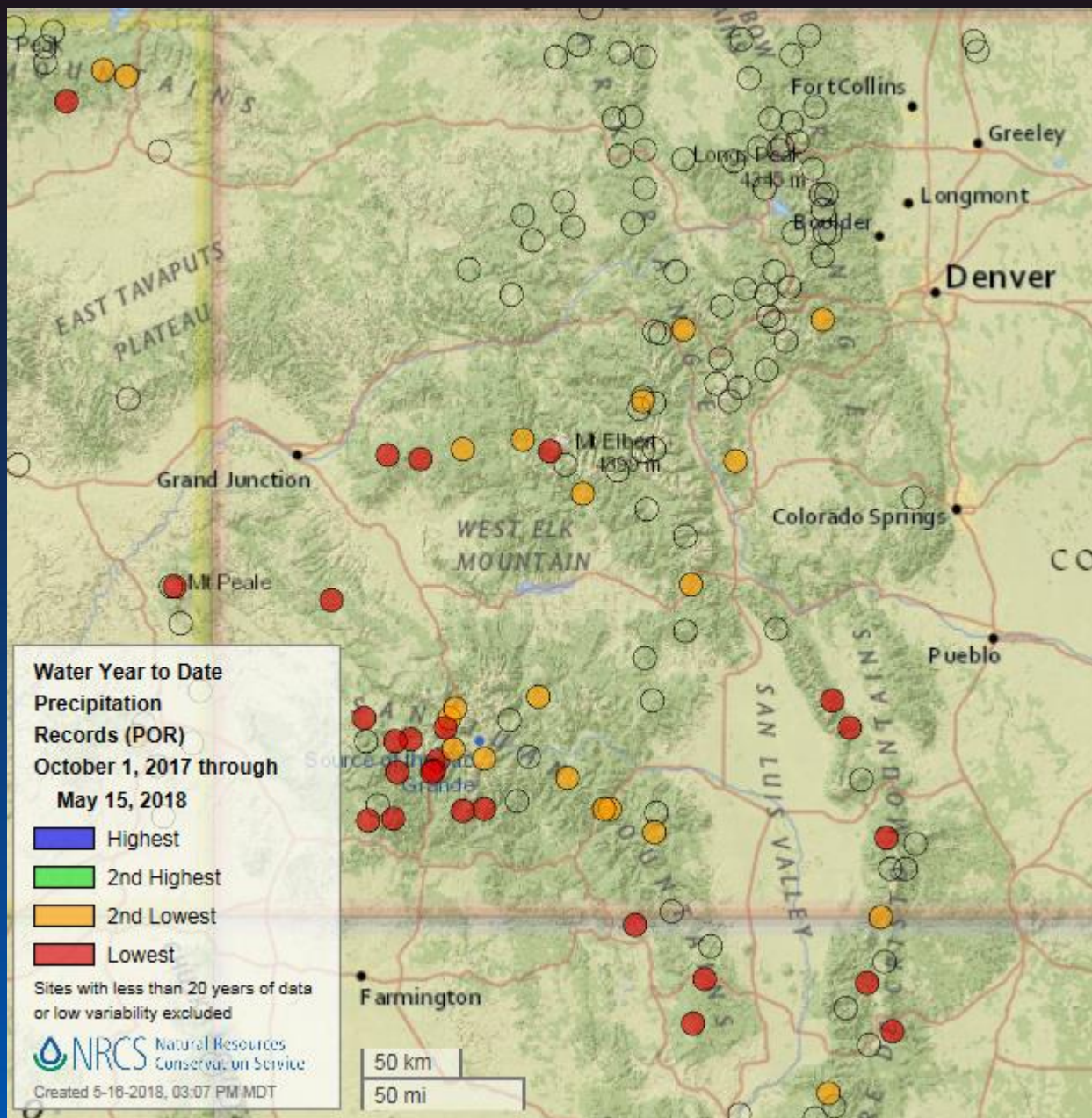
Colorado SNOTEL Water Year to Date Precipitation

Current as of May 16, 2018

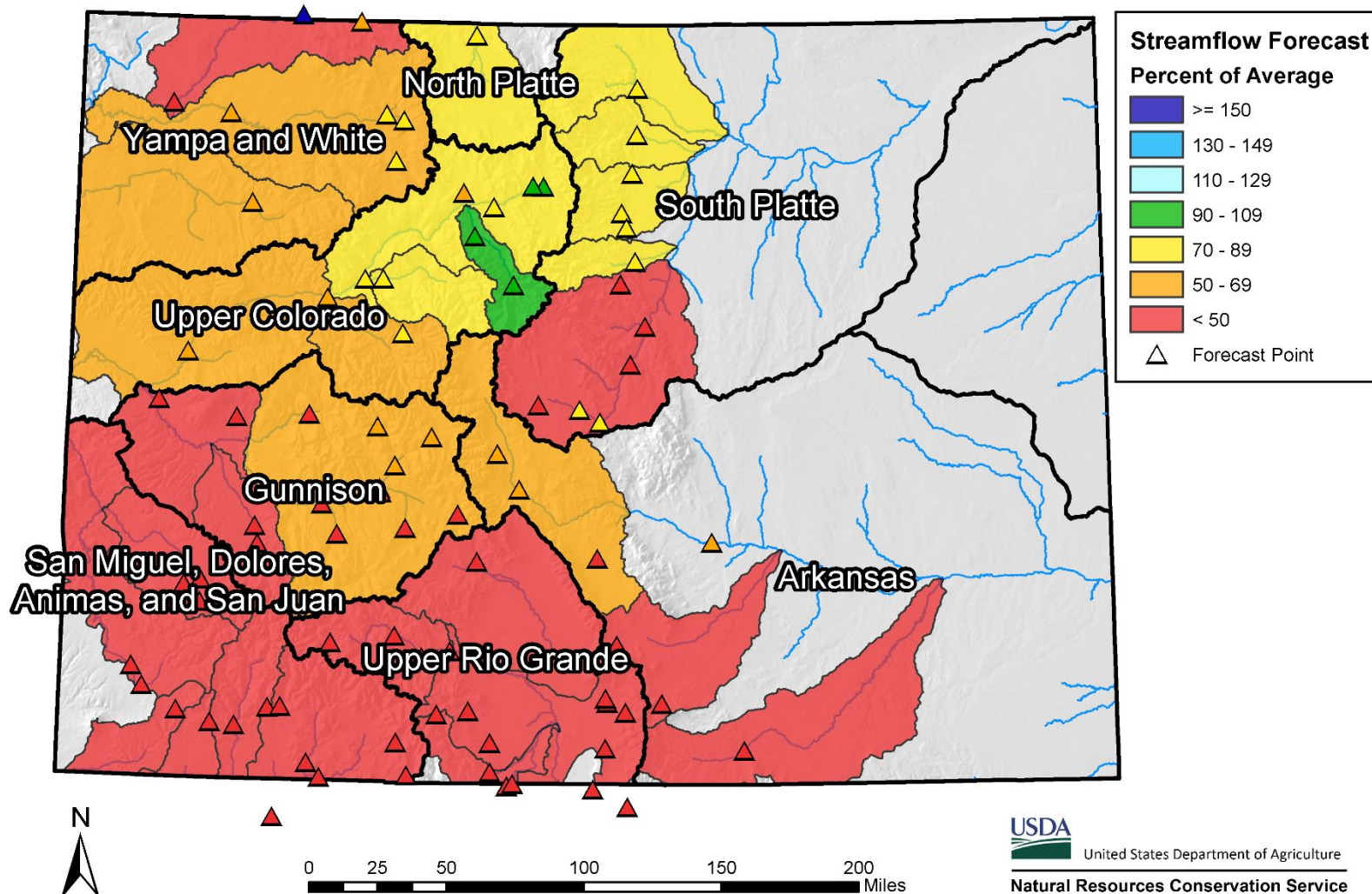


0 25 50 100 150 200 Miles

Colorado Snow Surveys

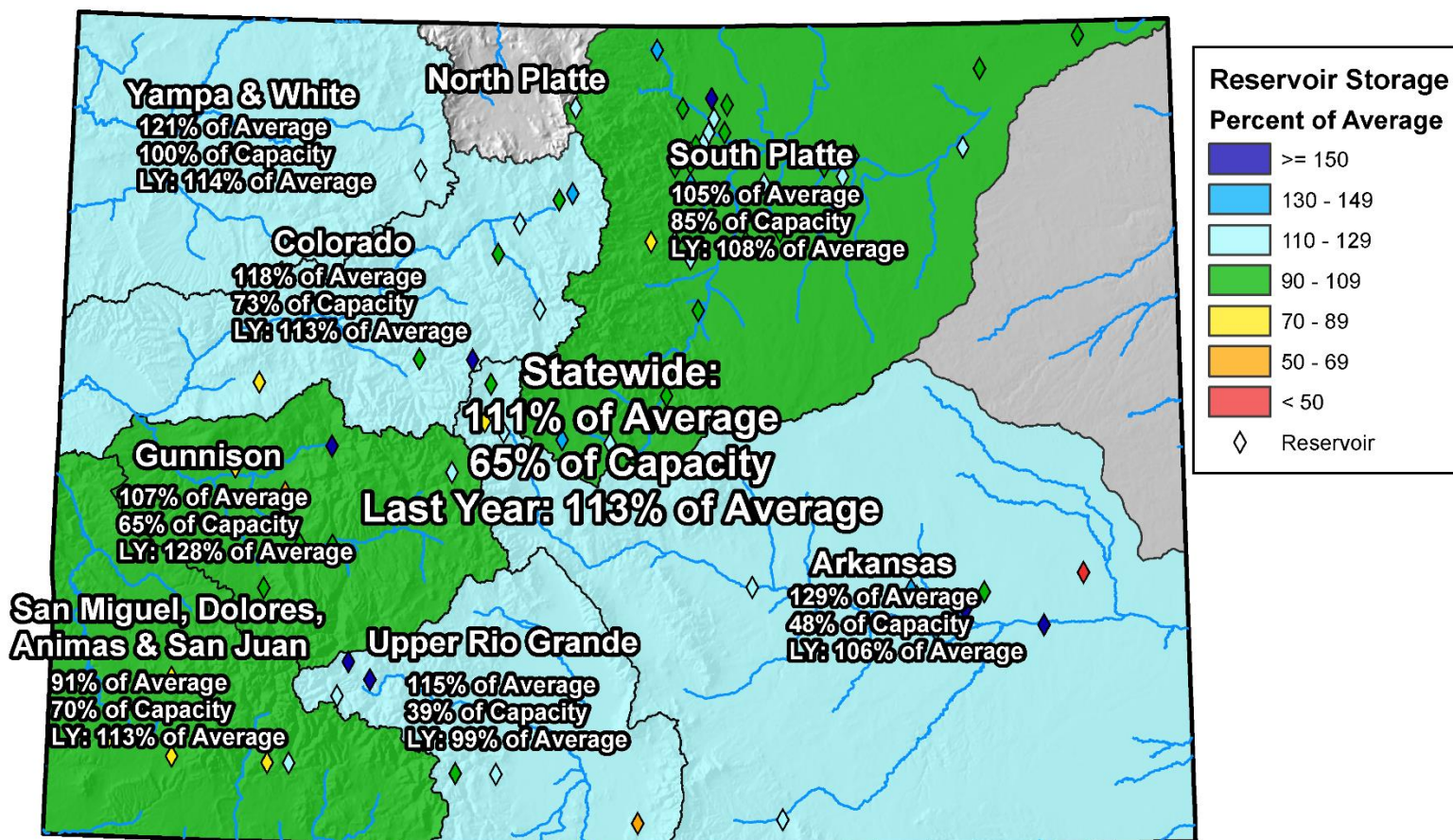


Colorado Streamflow Forecasts Summary May 1, 2018



Colorado Monthly Reservoir Storage Summary

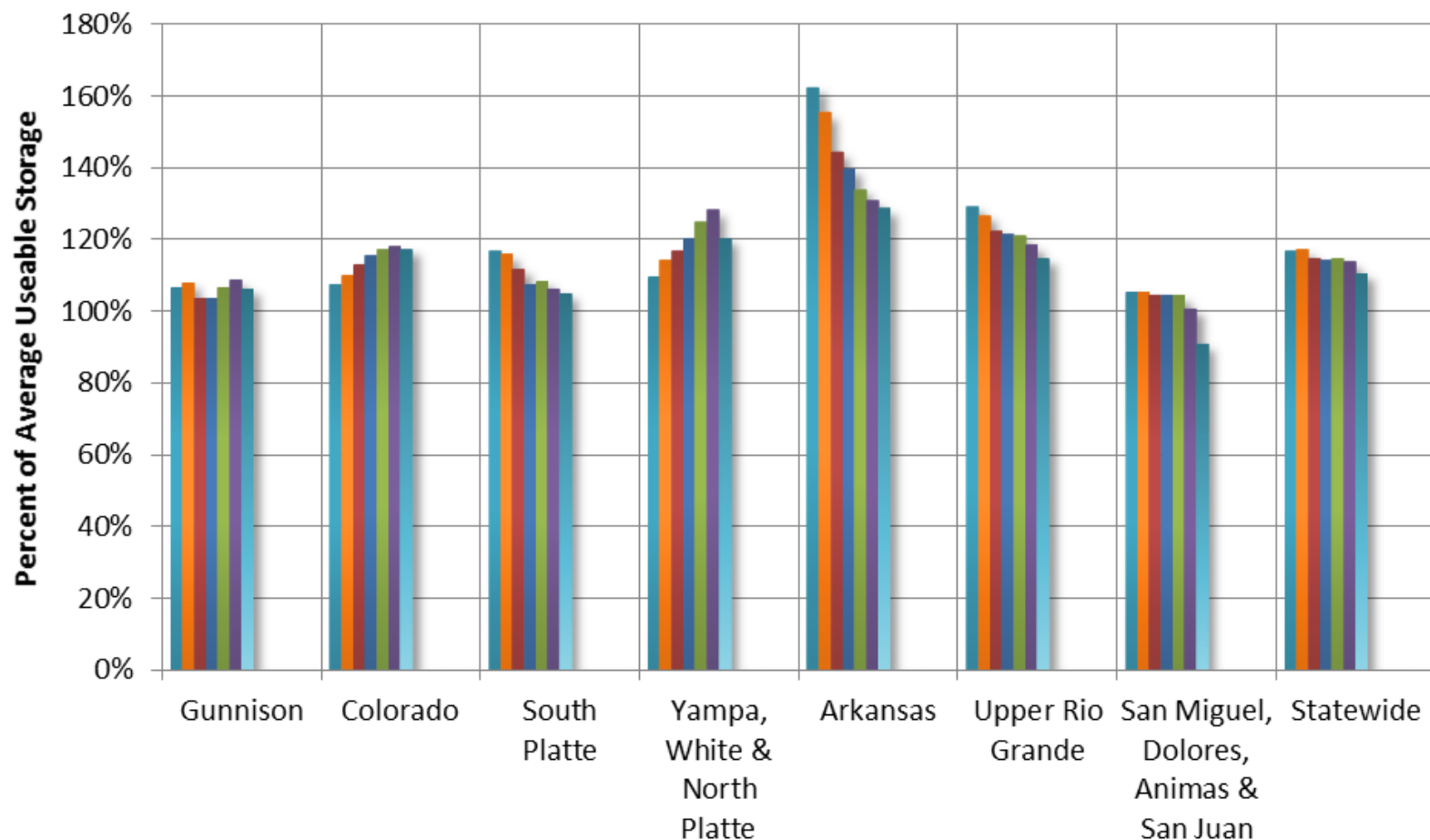
End of April 2018



0 25 50 100 150 200 Miles

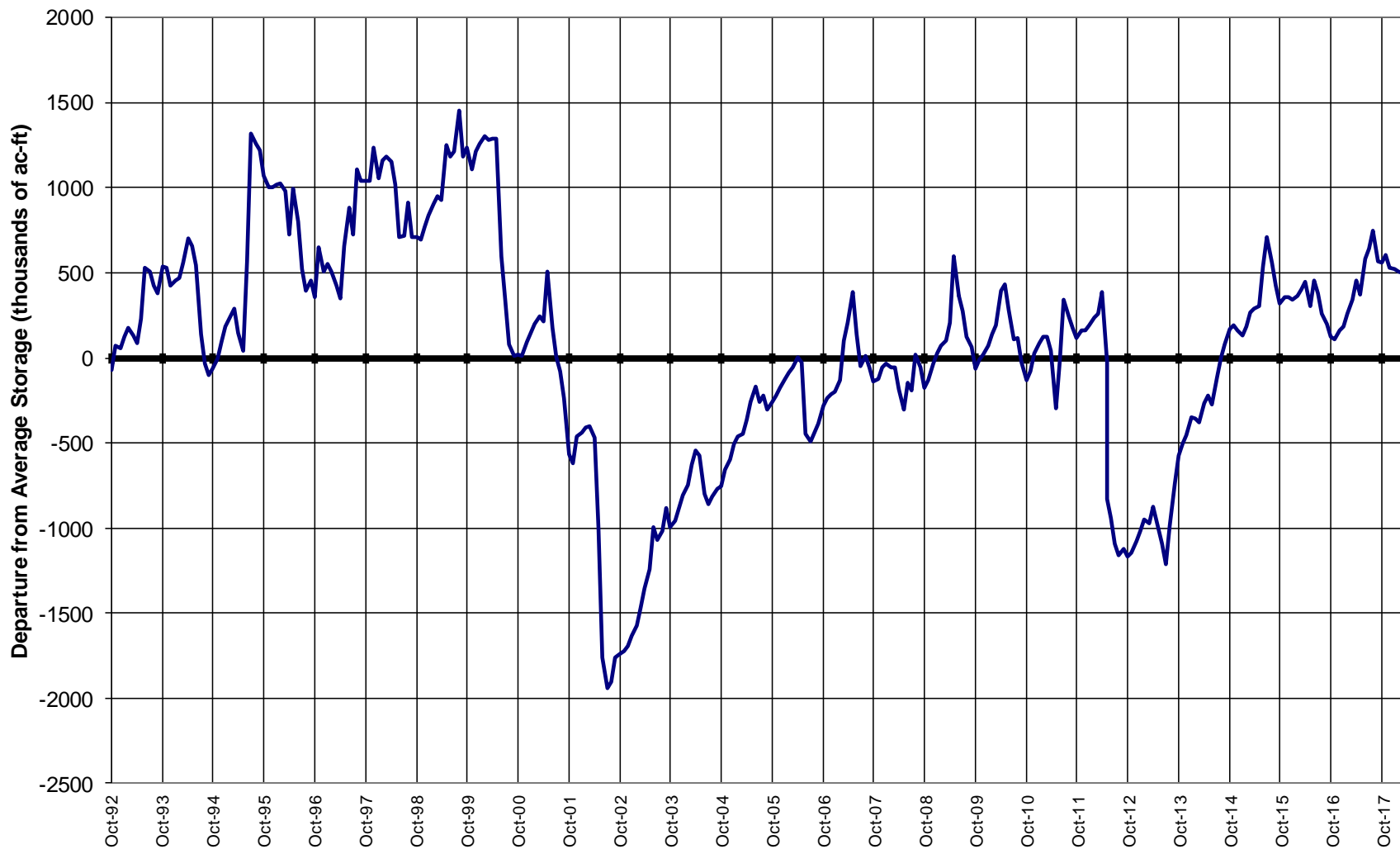
Colorado Reservoir Storage

Oct-17 Nov-17 Dec-17 Jan-18 Feb-18 Mar-18
 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18

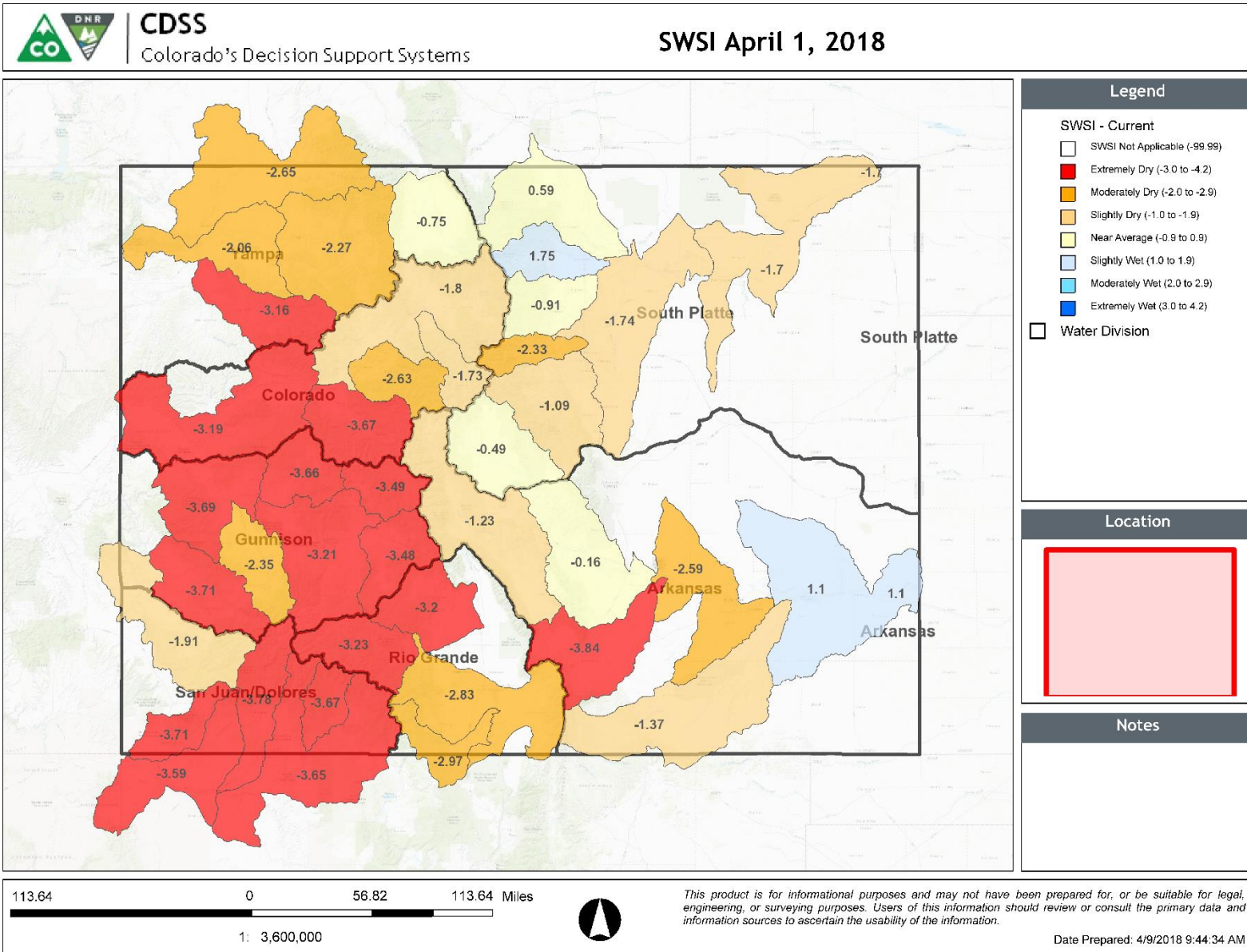




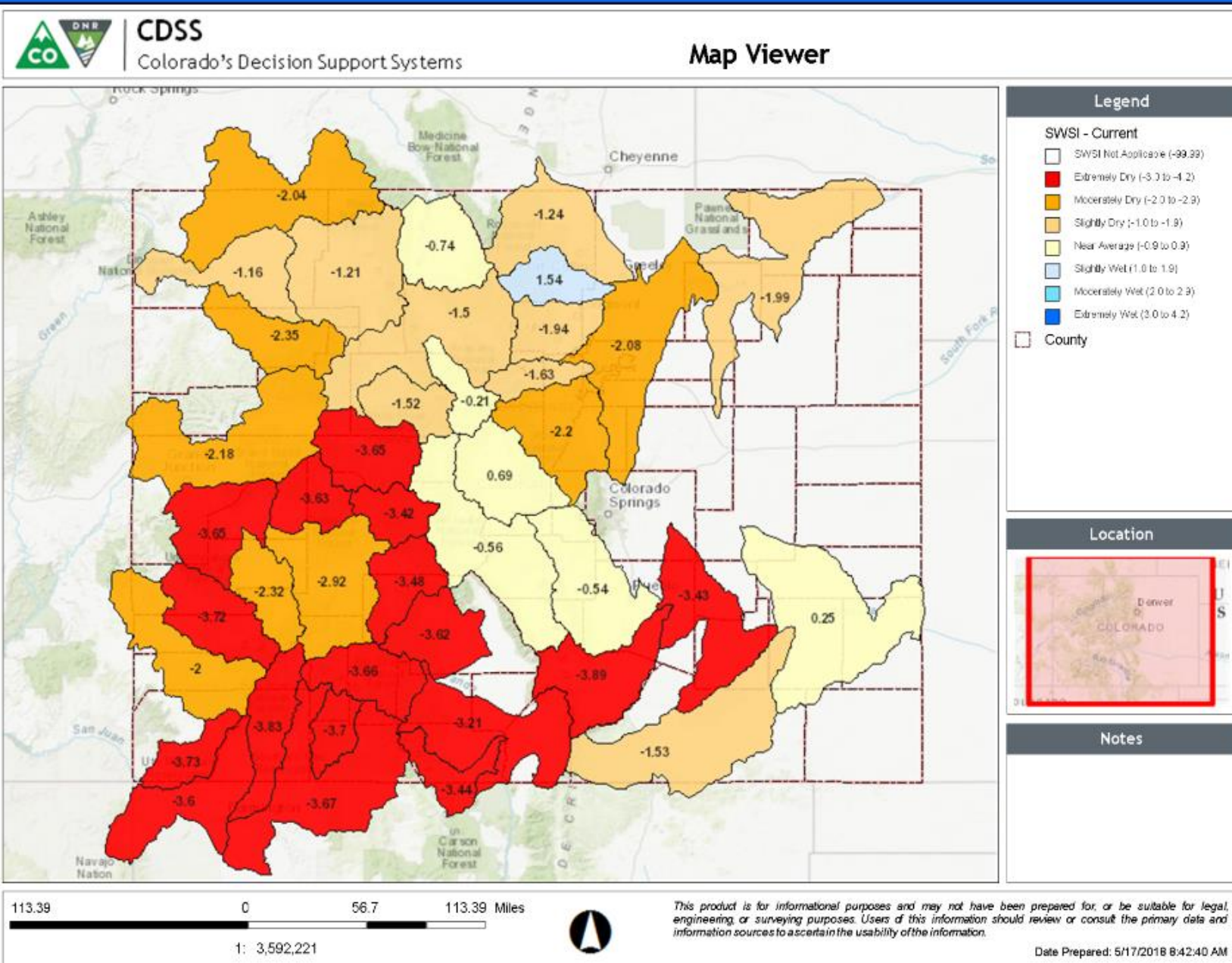
COLORADO STATEWIDE Reservoir Storage Departure from Average



April 1, 2018 SWSI



May 1, 2018 SWSI



Summary

- **Statewide snowpack is 44% of normal**
 - Northern Colorado reached near 90 percent of normal peak
 - Southern Colorado reached around 50 percent of normal peak and is melting out about three weeks earlier than usual
- **Precipitation trends have continued over the last month with the southern half of the state receiving notably less than the north**
- **Most SNOTEL sites in southern Colorado are recording record low or near record low water year precipitation values**
- **Streamflow forecasts are all below average**
 - Closer to normal in Northern basins
 - Well below normal in Southern basins- none above 40 percent of average for the San Juan and Sangre de Cristo Mountains
- **Reservoir storage is still above average in all major basins except for one**
- **Snowmelt is in full effect across the state with most SNOTEL sites in southern CO completely melted out**



United States Department of Agriculture

Colorado Snow Surveys

Water Availability Task Force Meeting

May 17th, 2018

NRCS Snow Survey and Water Supply Forecasting Program

Karl Wetlaufer

Hydrologist

Asst. Snow Survey Supervisor

720-544-2853

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