



United States Department of Agriculture

Colorado Snow Surveys

# Water Availability Task Force Meeting

## August 26<sup>th</sup>, 2019

### NRCS Snow Survey and Water Supply Forecasting Program

Karl Wetlaufer

Hydrologist

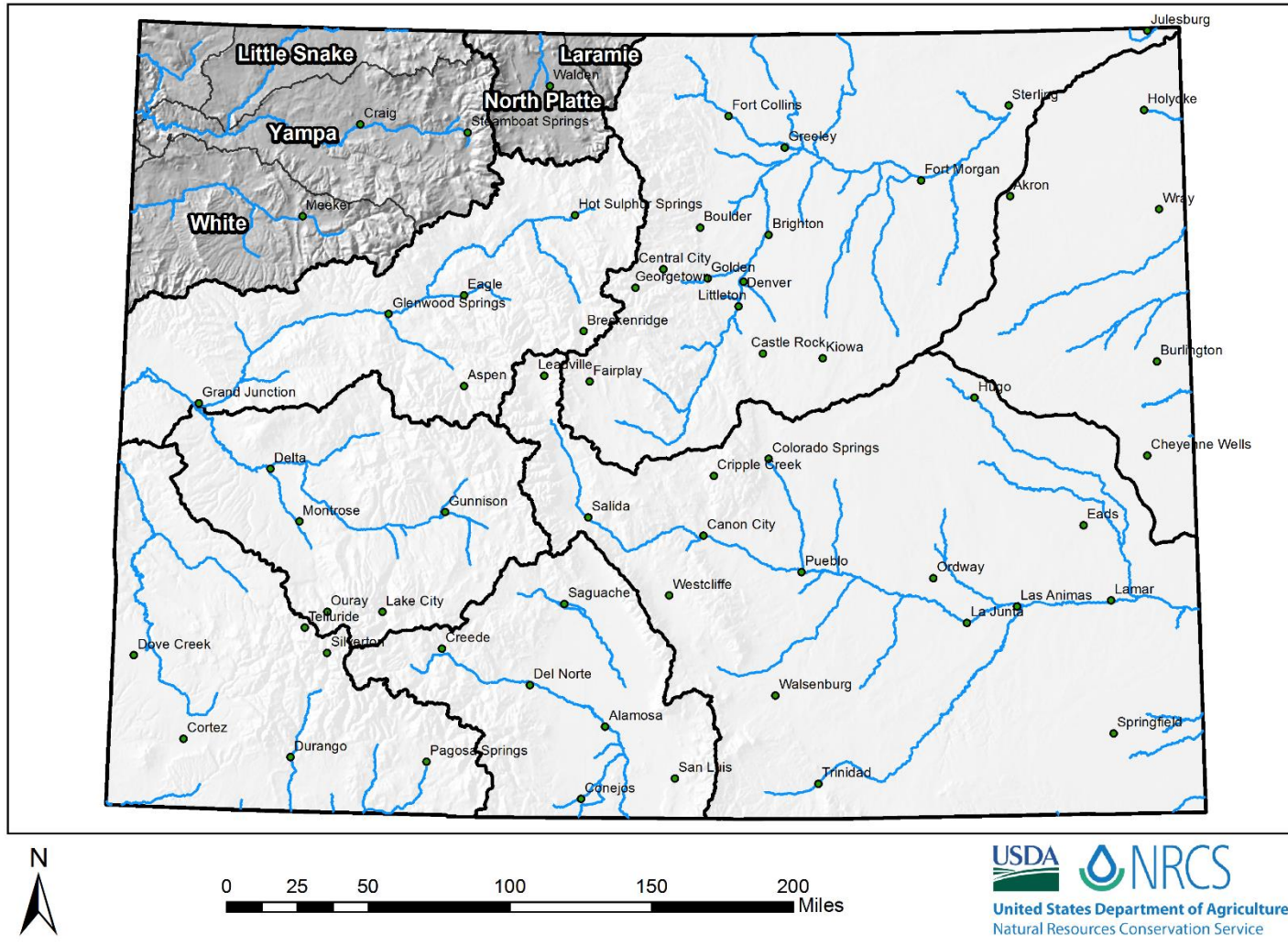
Asst. Snow Survey Supervisor

720-544-2853

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

## Major Basin Summary

Yampa, White, and North Platte River Basins

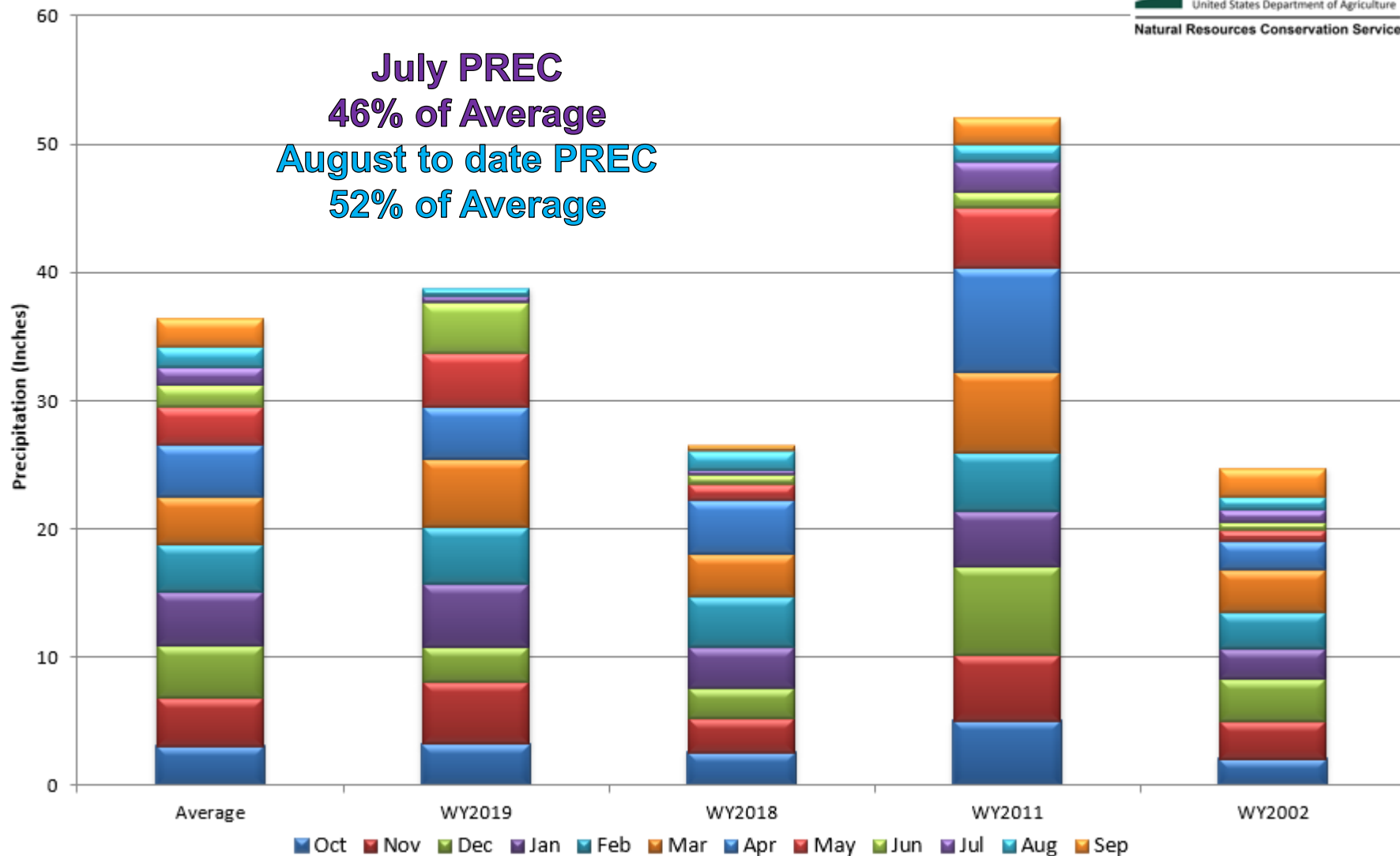


## Yampa and White River Basins High/Low Monthly Precipitation Summary

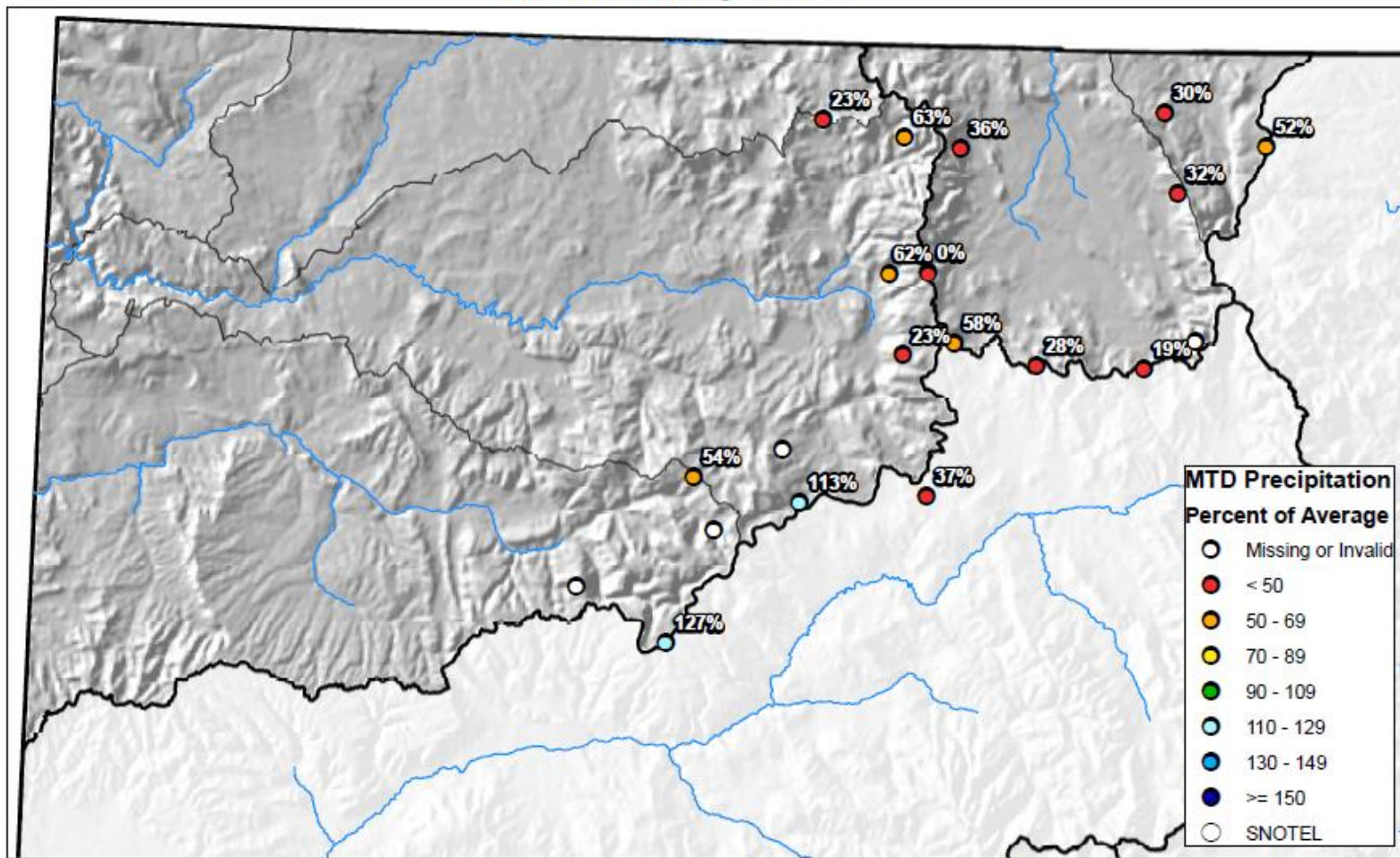
*Based on Provisional SNOTEL data as of Aug 26, 2019*



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## Yampa, White, and North Platte River Basins Month to Date Precipitation Summary Current as of Aug 26, 2019



0 10 20 40 60 80 Miles



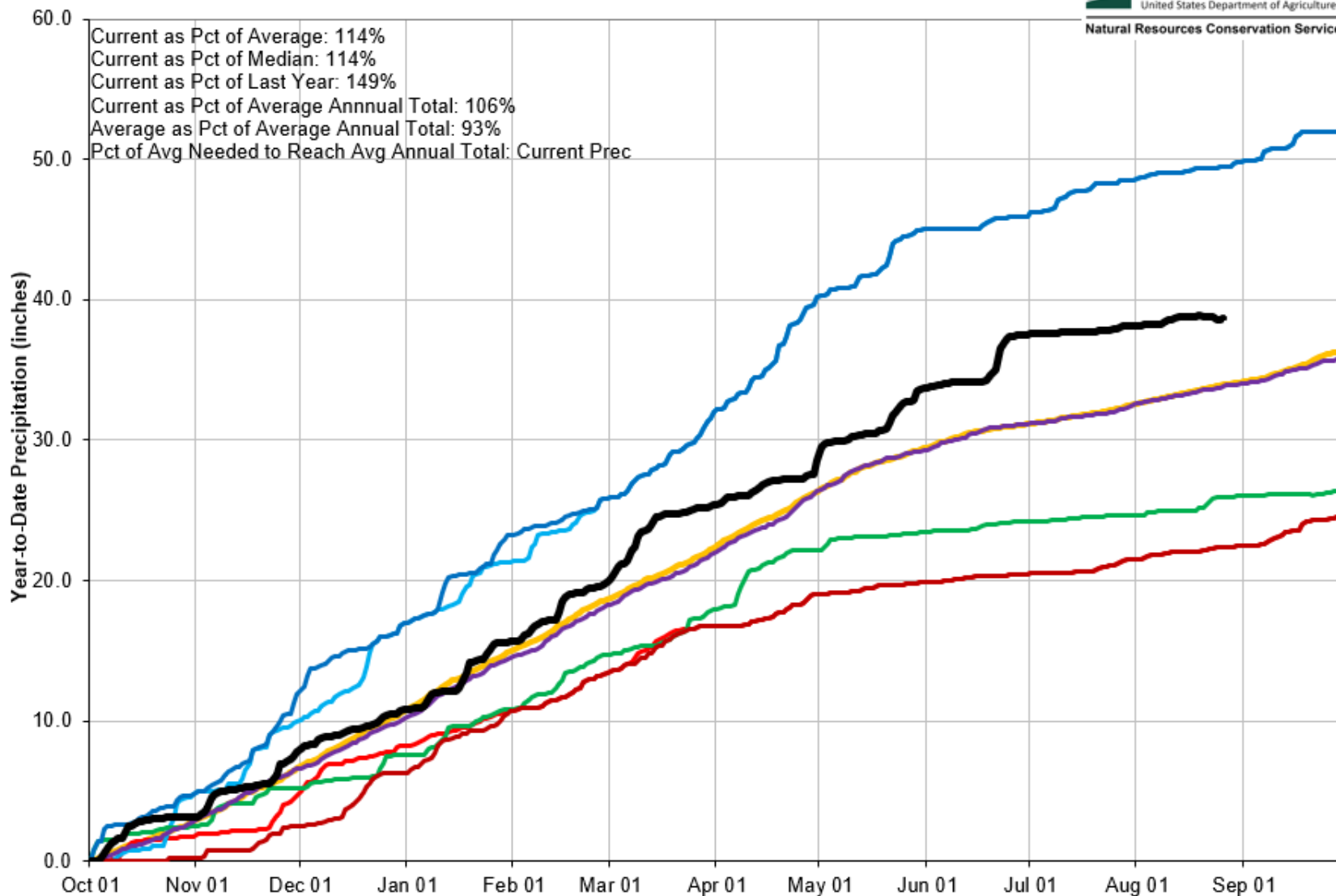
## Yampa and White River Basins High/Low Year-to-Date Precipitation Summary

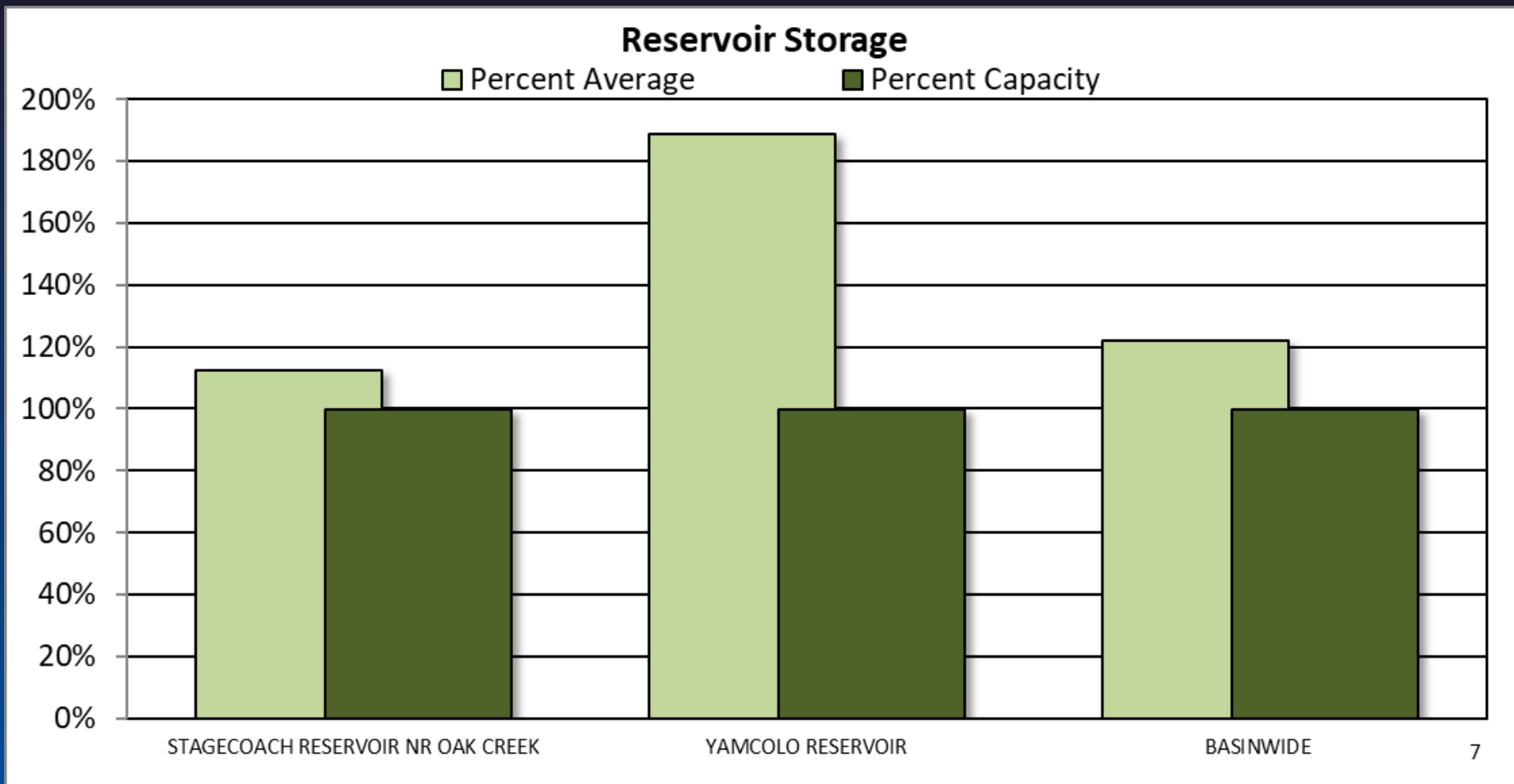
*Based on Provisional SNOTEL data as of Aug 26, 2019*



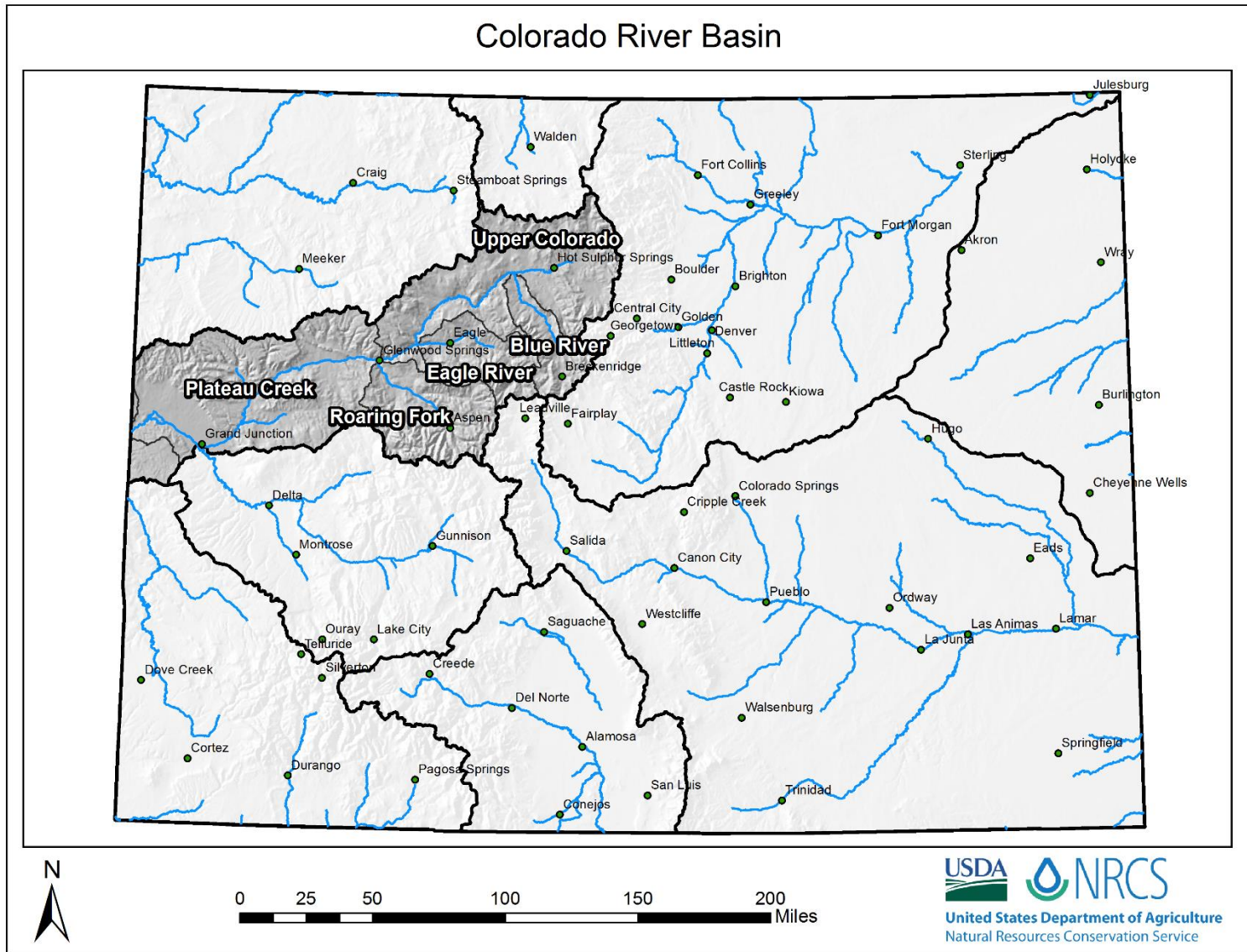
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## Major Basin Summary



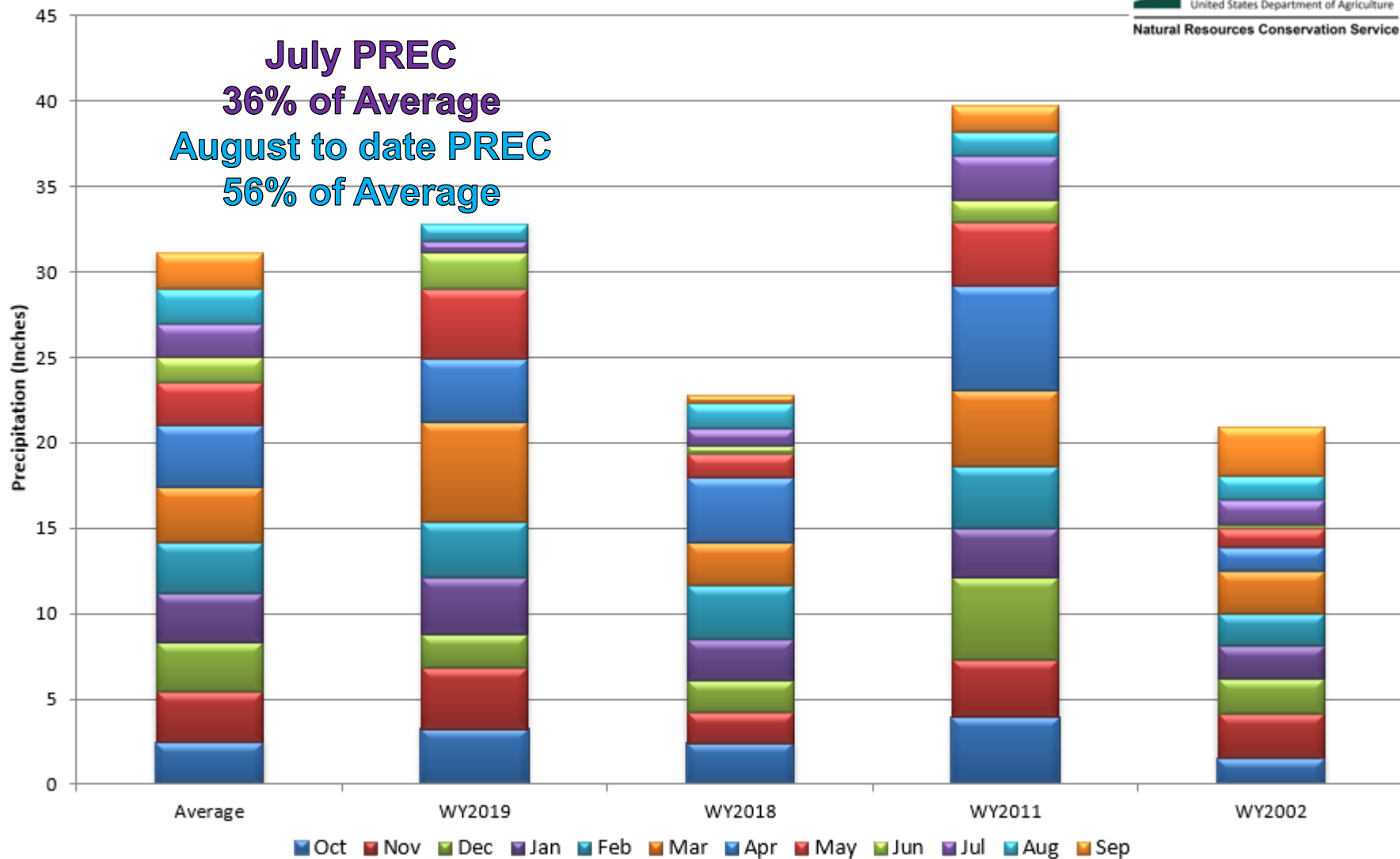
## Upper Colorado River Basin High/Low Monthly Precipitation Summary

*Based on Provisional SNOTEL data as of Aug 26, 2019*



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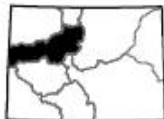
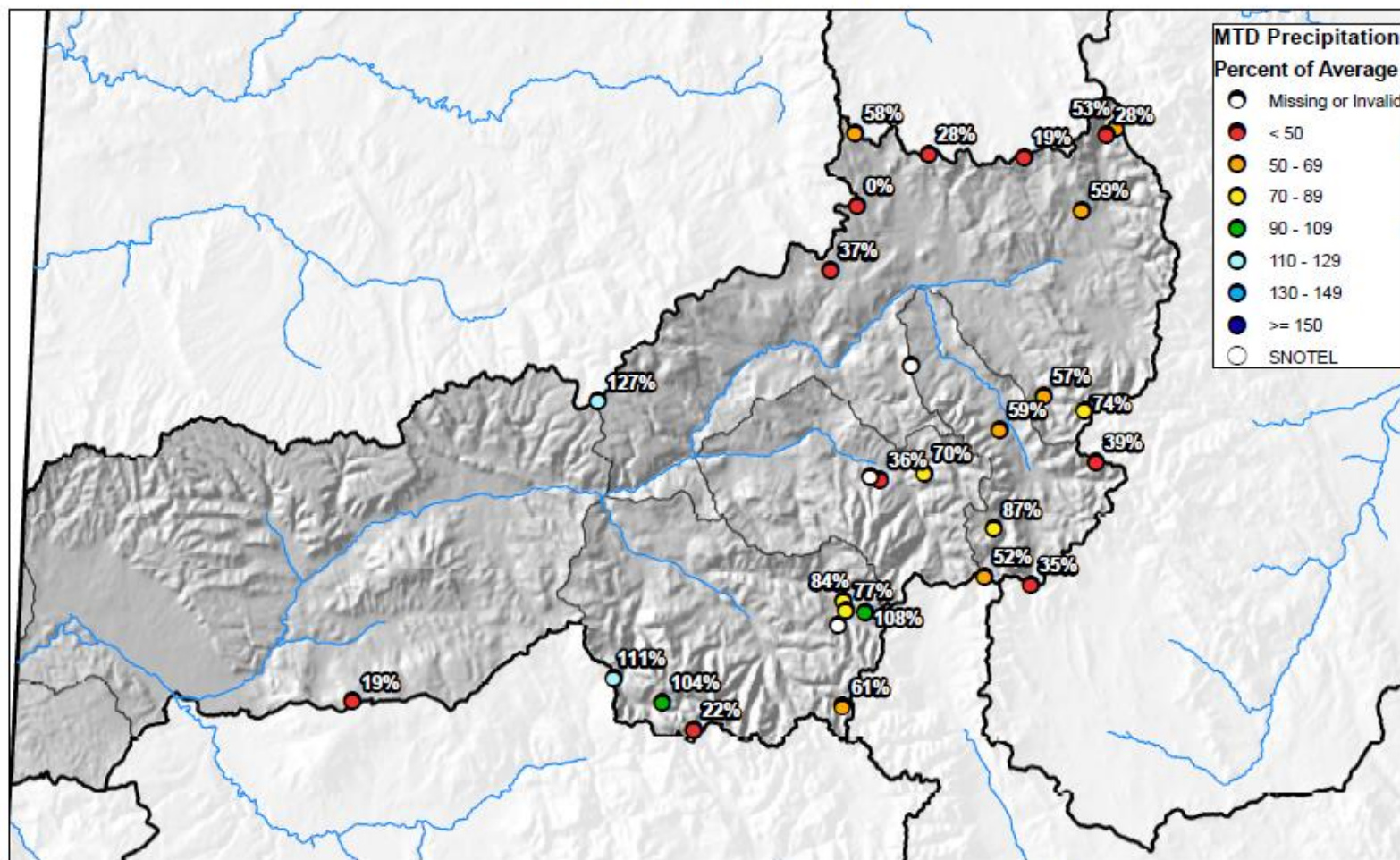
Natural Resources Conservation Service





## Upper Colorado River Basin Month to Date Precipitation Summary

Current as of Aug 26, 2019



0 10 20 40 60 80 Miles

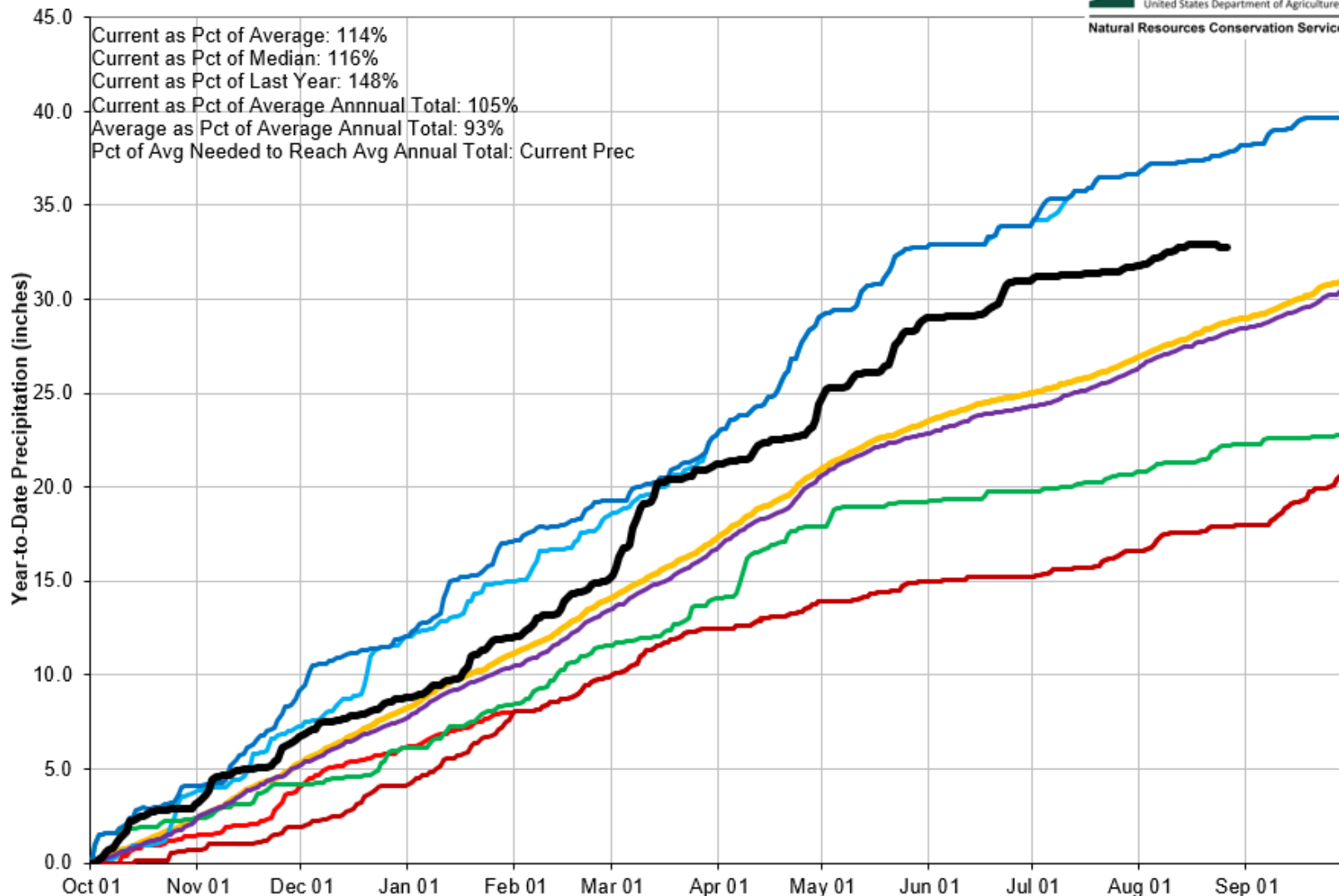
## Upper Colorado River Basin High/Low Year-to-Date Precipitation Summary

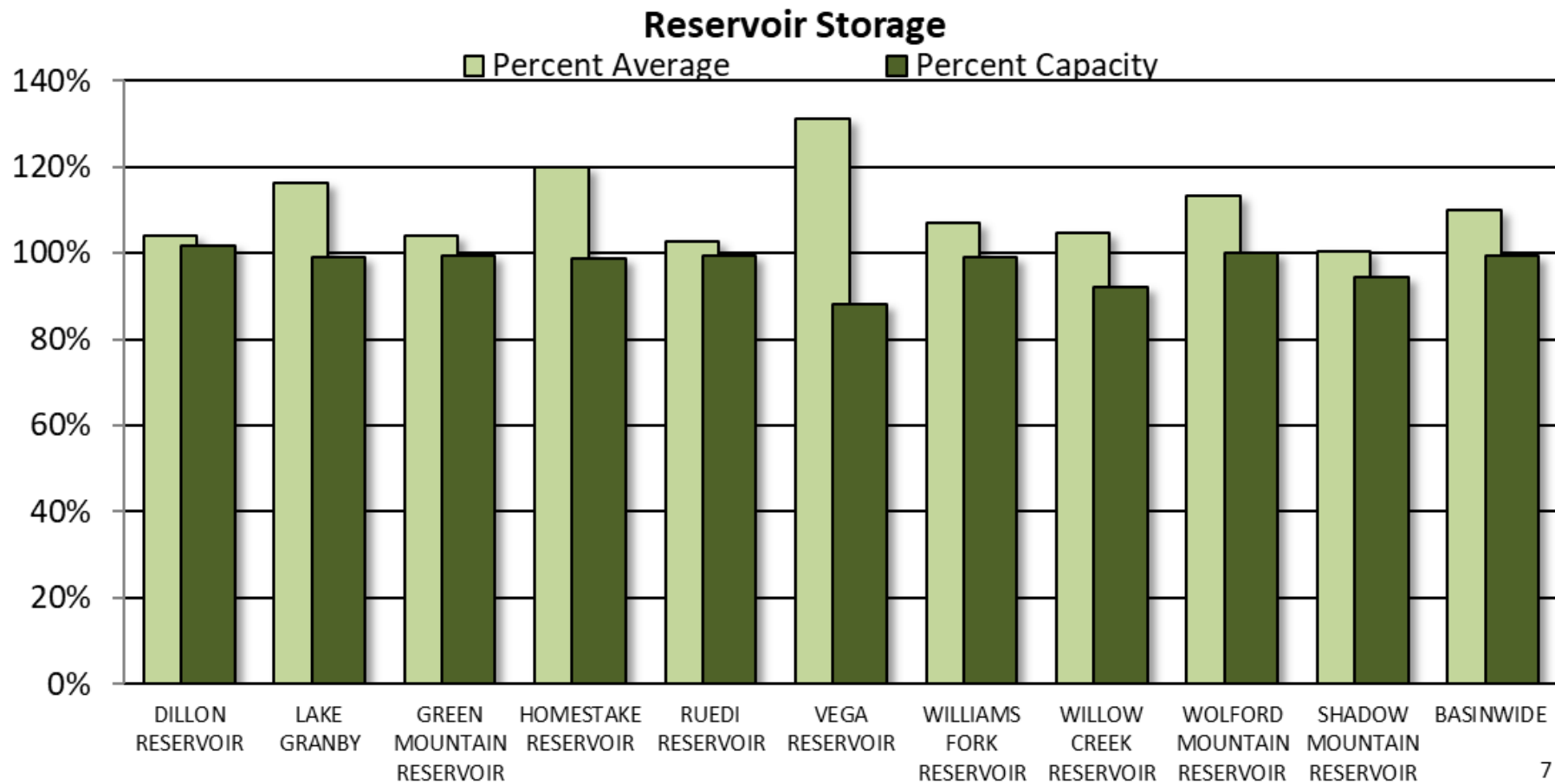
*Based on Provisional SNOTEL data as of Aug 26, 2019*



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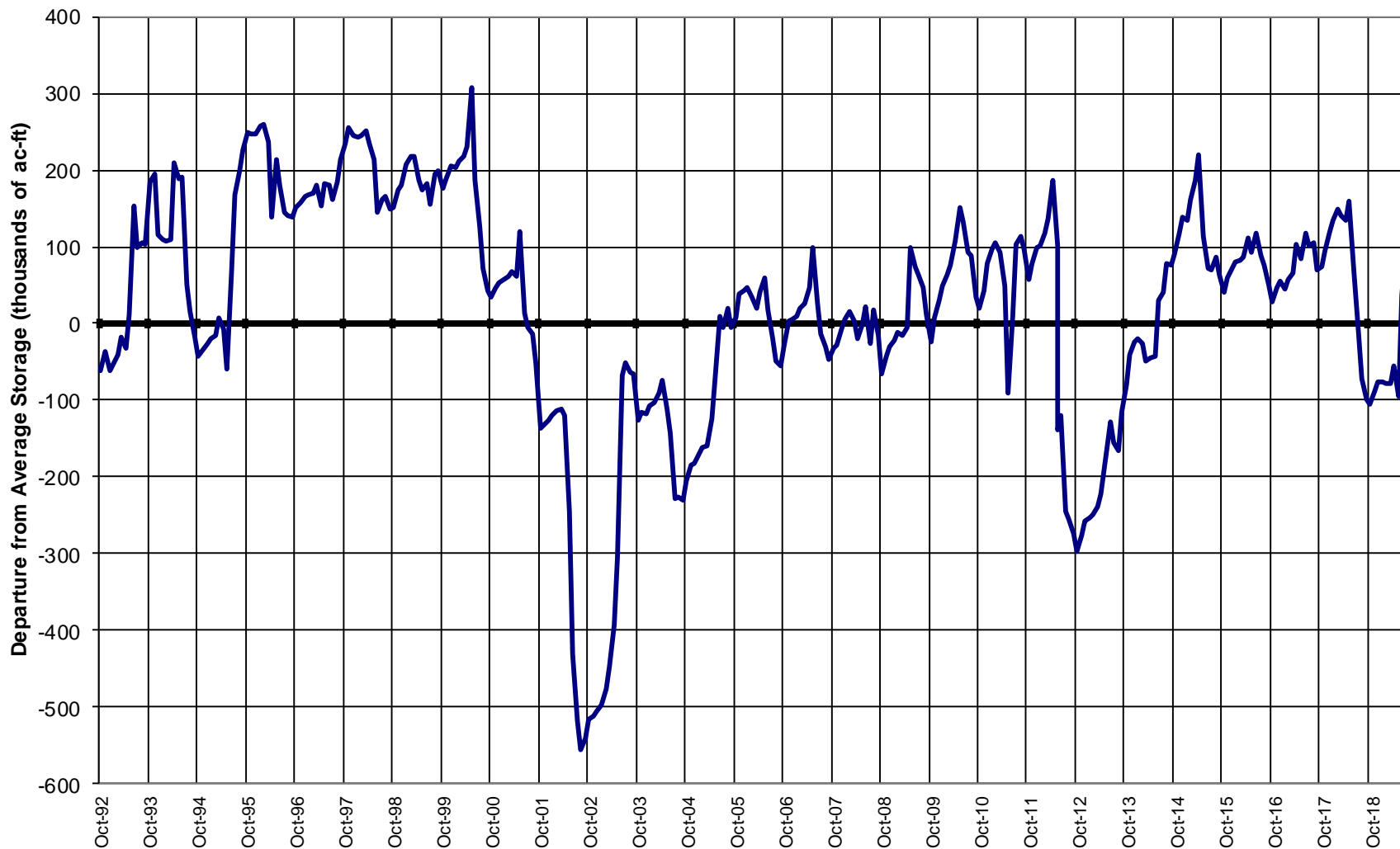
Natural Resources Conservation Service







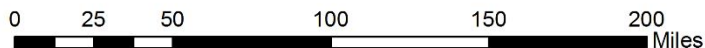
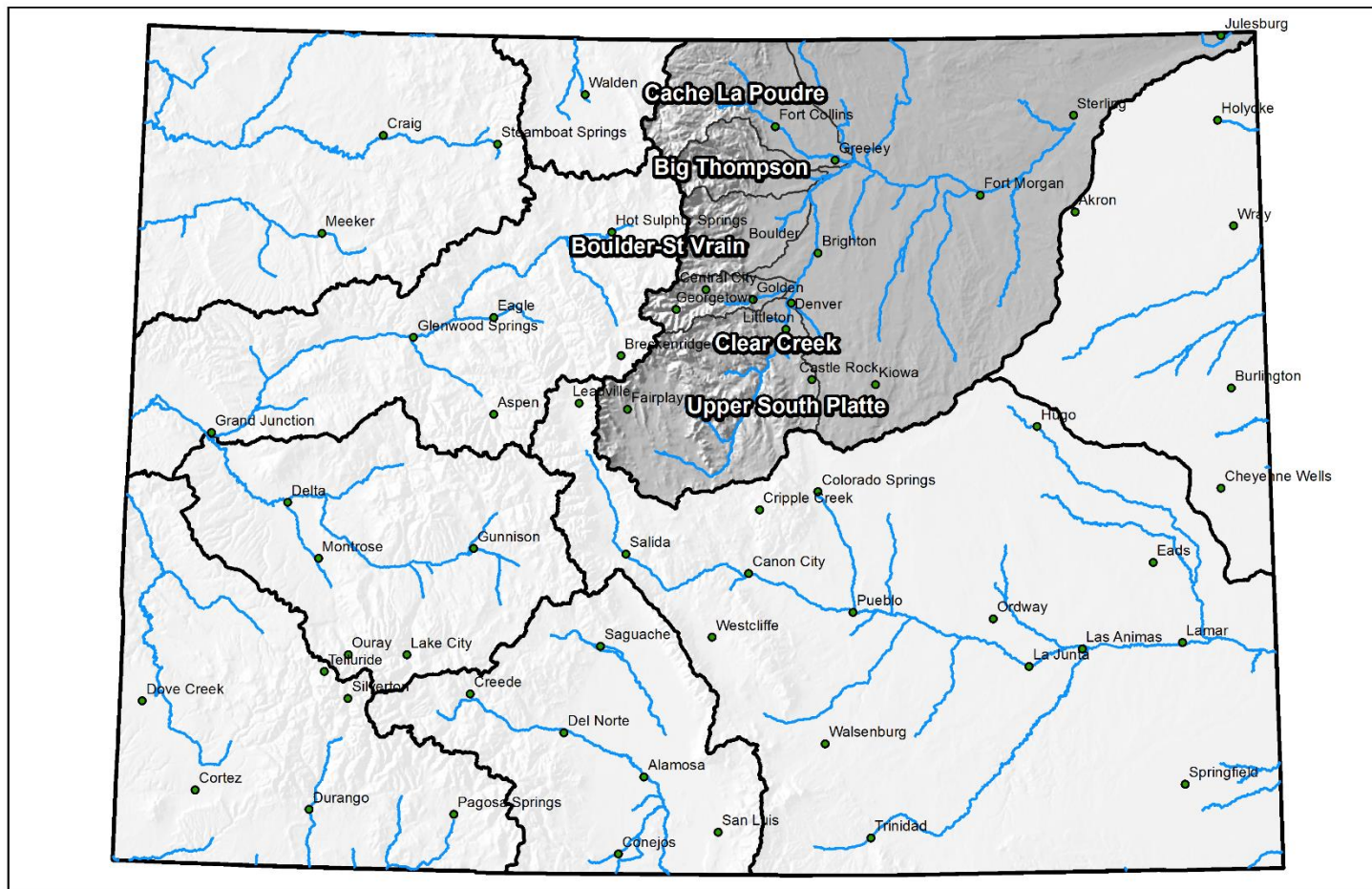
## COLORADO RIVER BASIN Reservoir Storage Departure from Average





## Major Basin Summary

South Platte River Basin



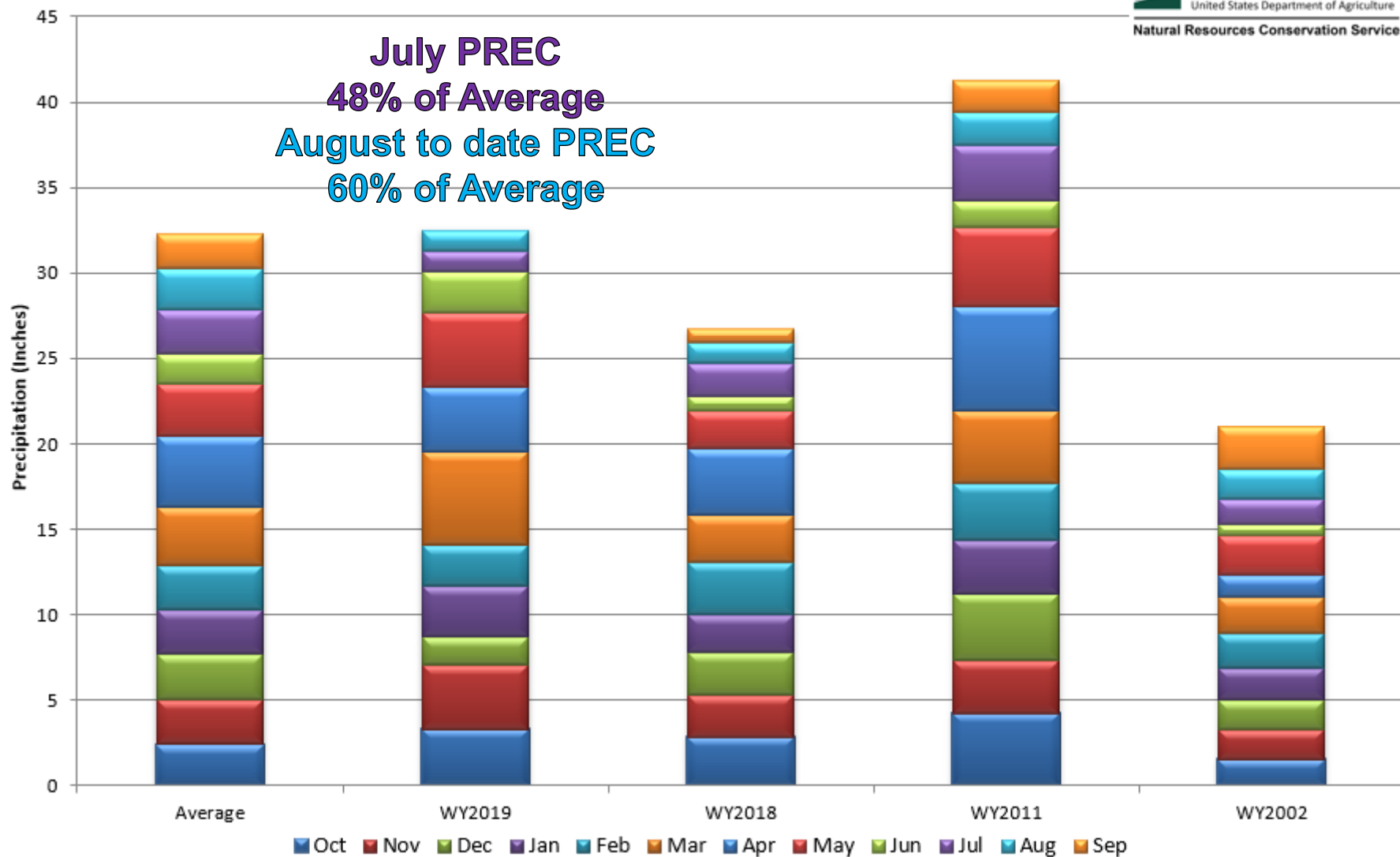
## South Platte River Basin High/Low Monthly Precipitation Summary

*Based on Provisional SNOTEL data as of Aug 26, 2019*



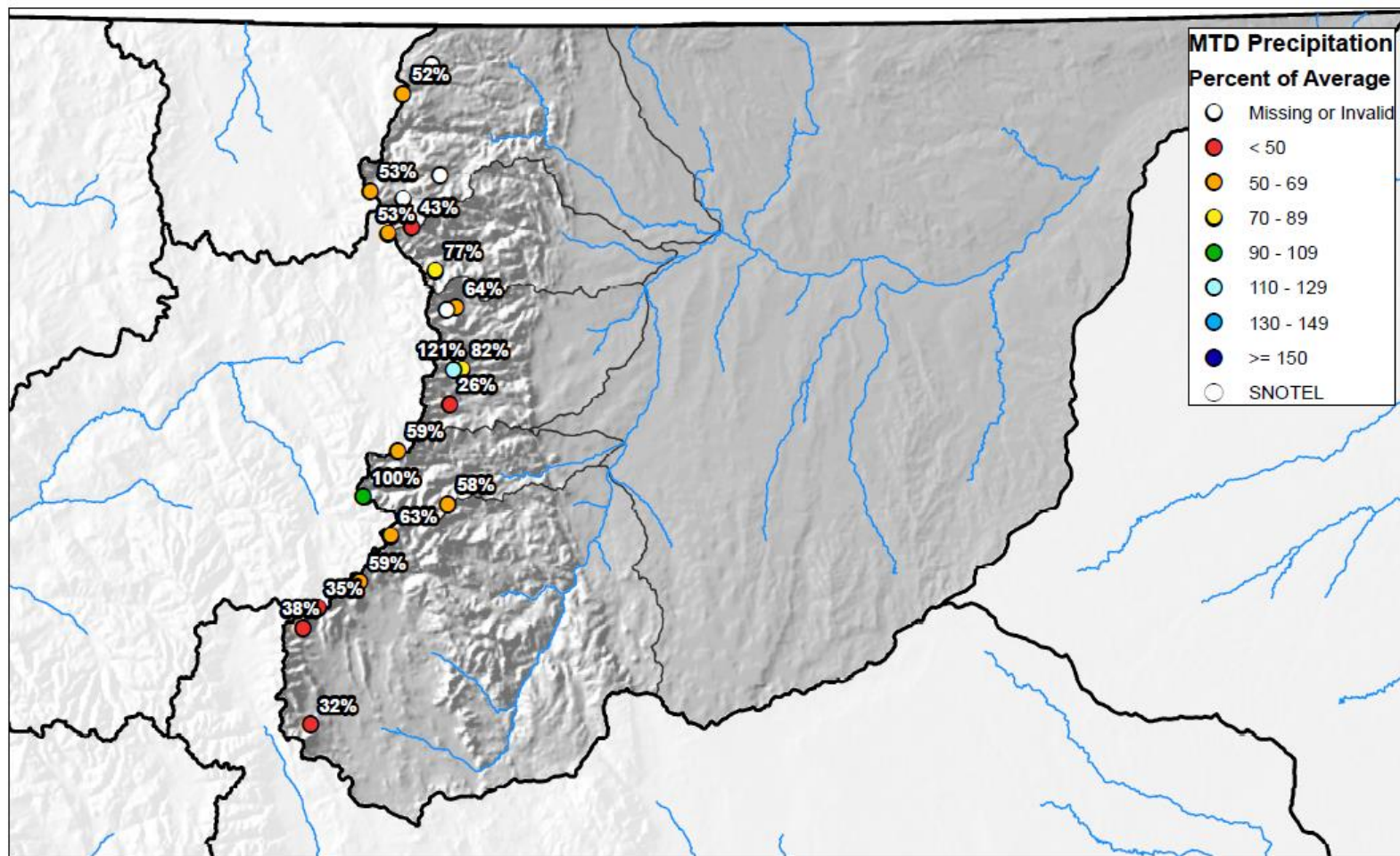
United States Department of Agriculture

Natural Resources Conservation Service



## South Platte River Basin Month to Date Precipitation Summary

Current as of Aug 26, 2019

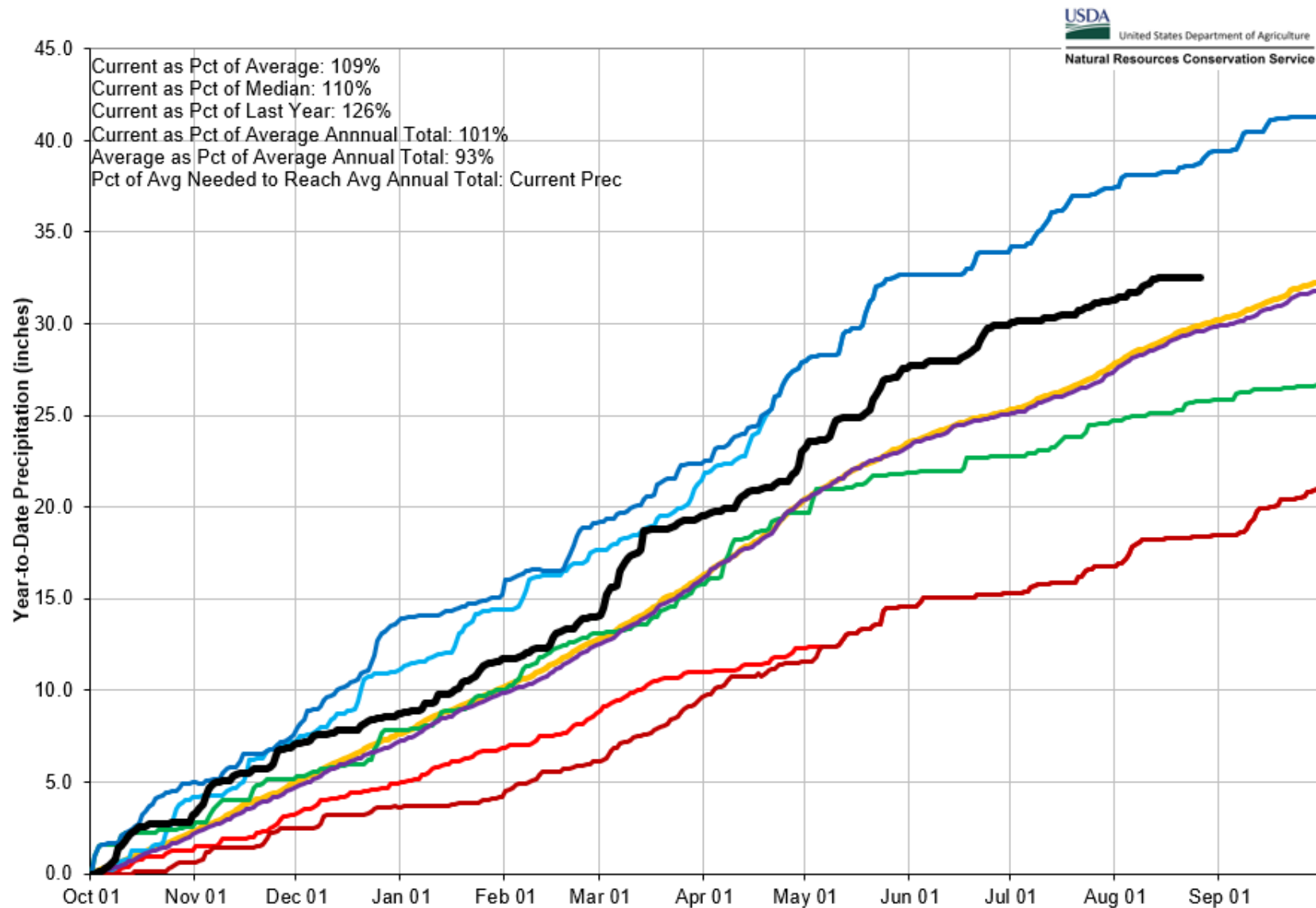


0 10 20 40 60 80 Miles

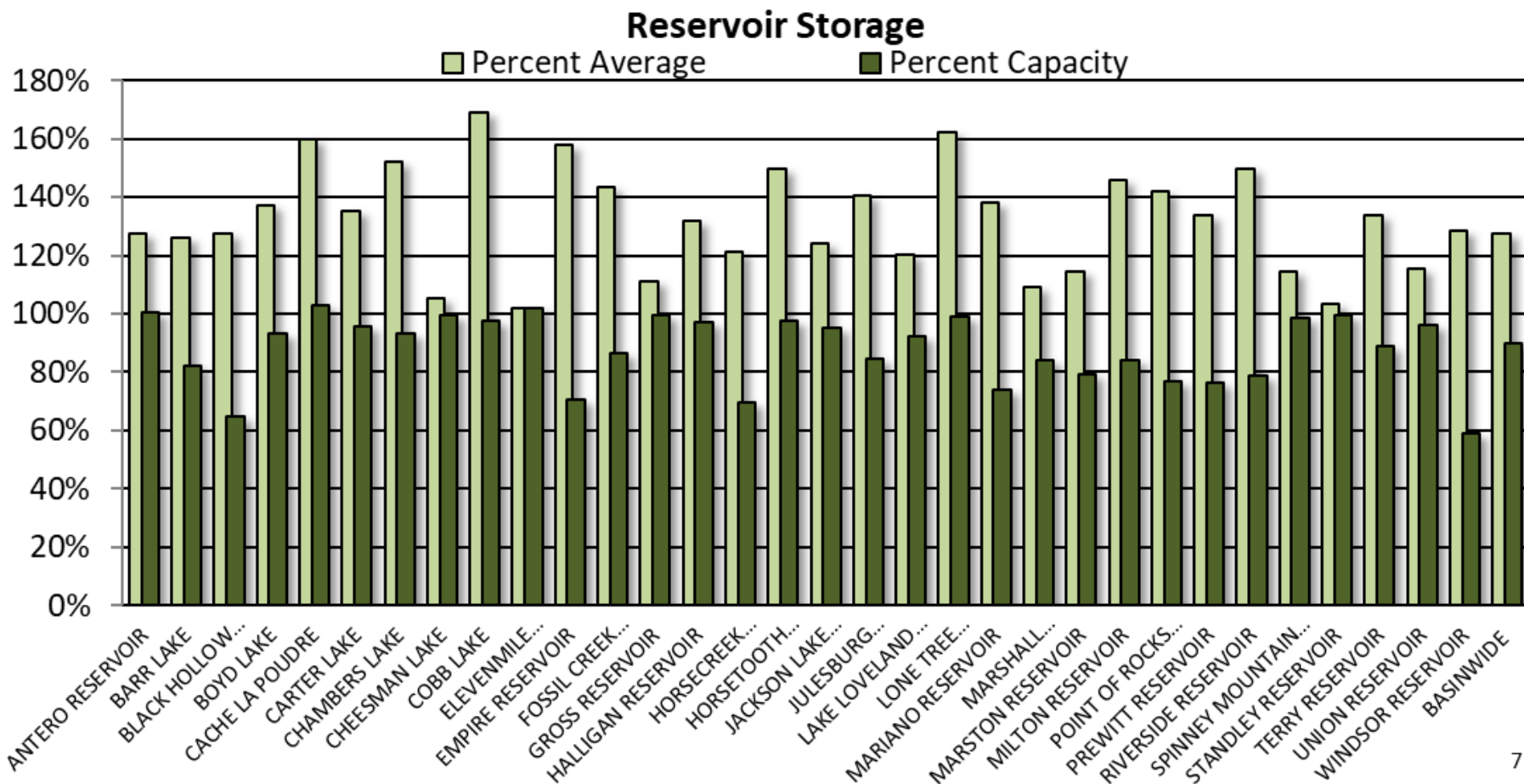


## South Platte River Basin High/Low Year-to-Date Precipitation Summary

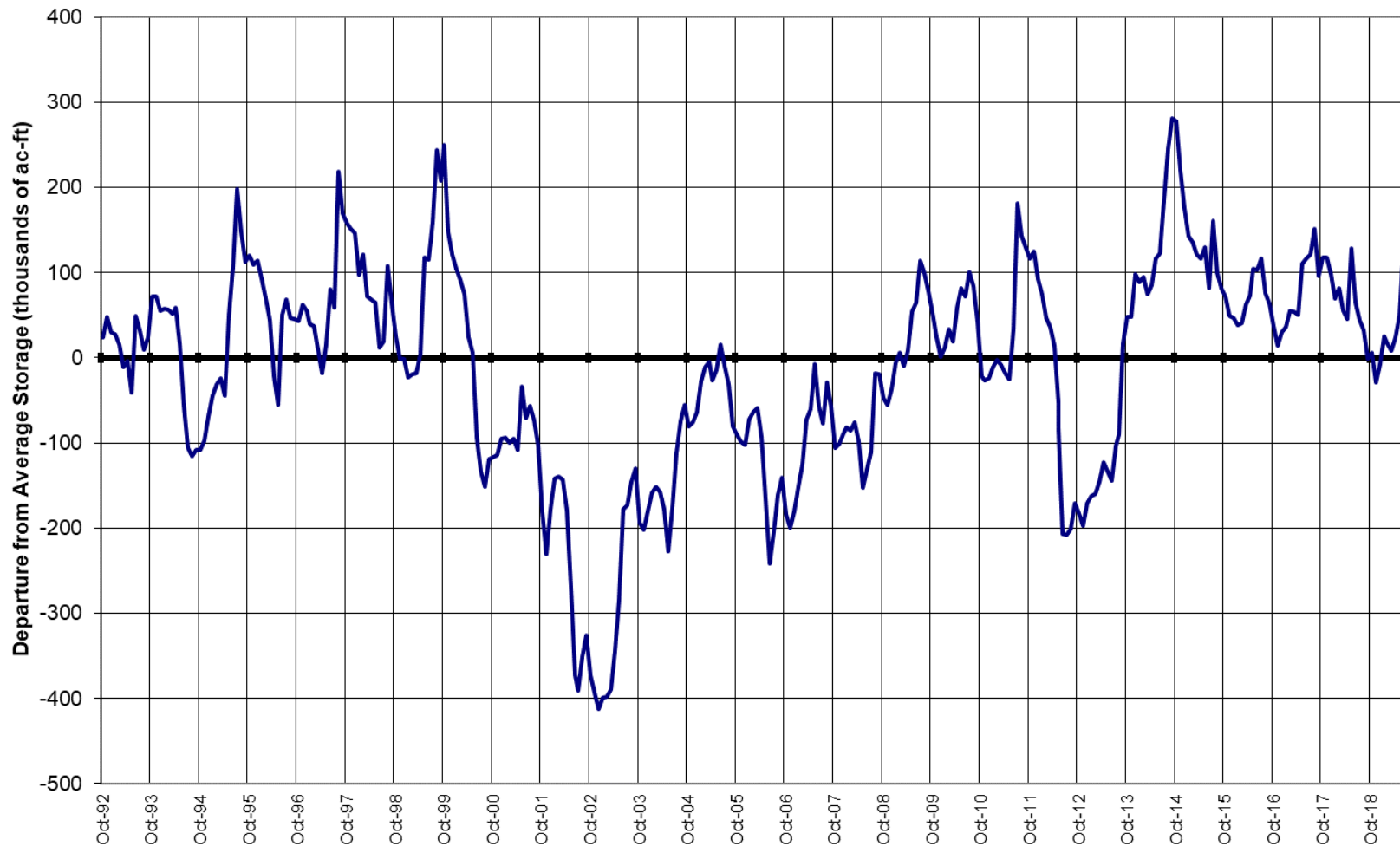
*Based on Provisional SNOTEL data as of Aug 26, 2019*





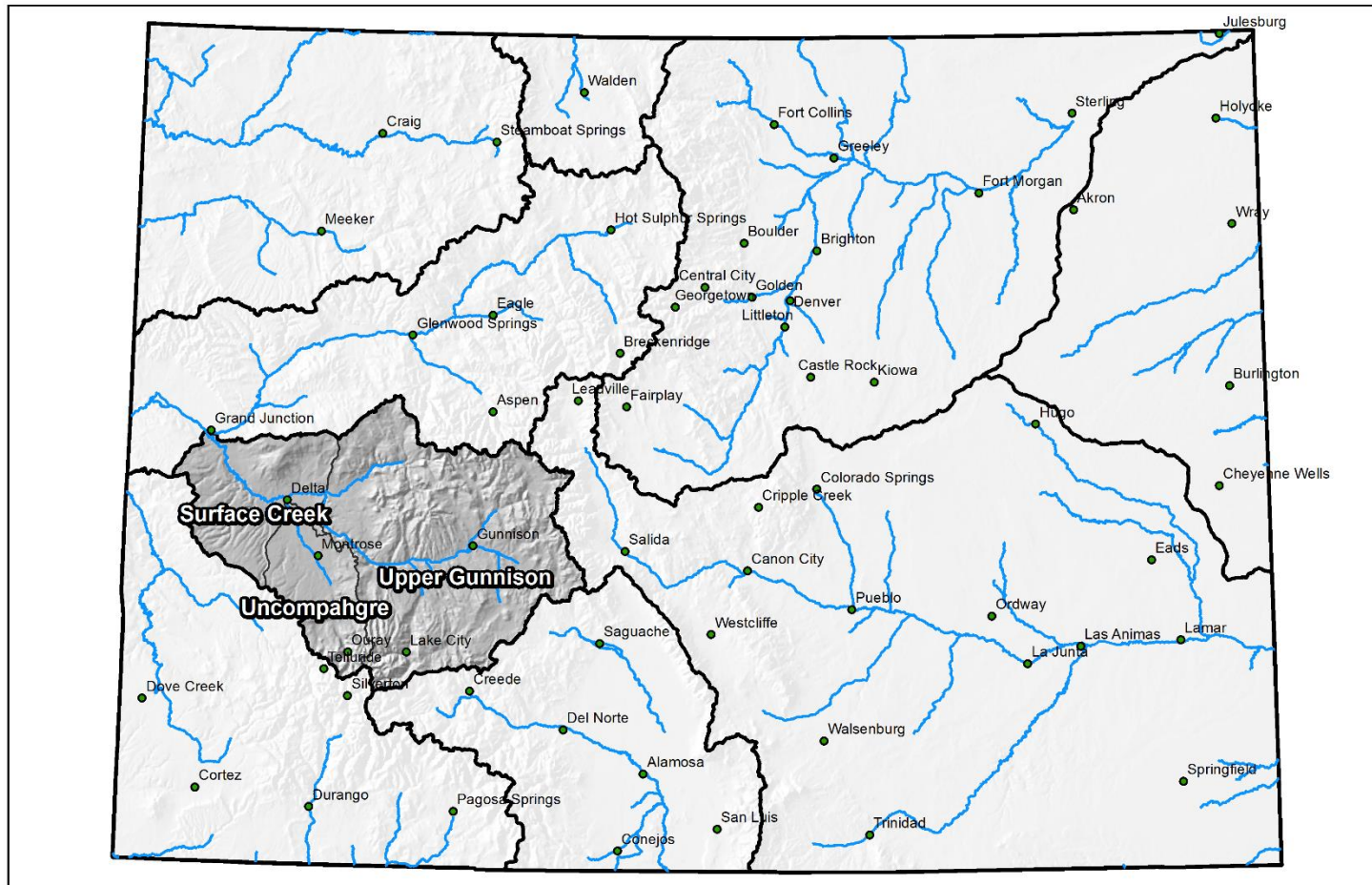


## SOUTH PLATTE RIVER BASIN Reservoir Storage Departure from Average



## Major Basin Summary

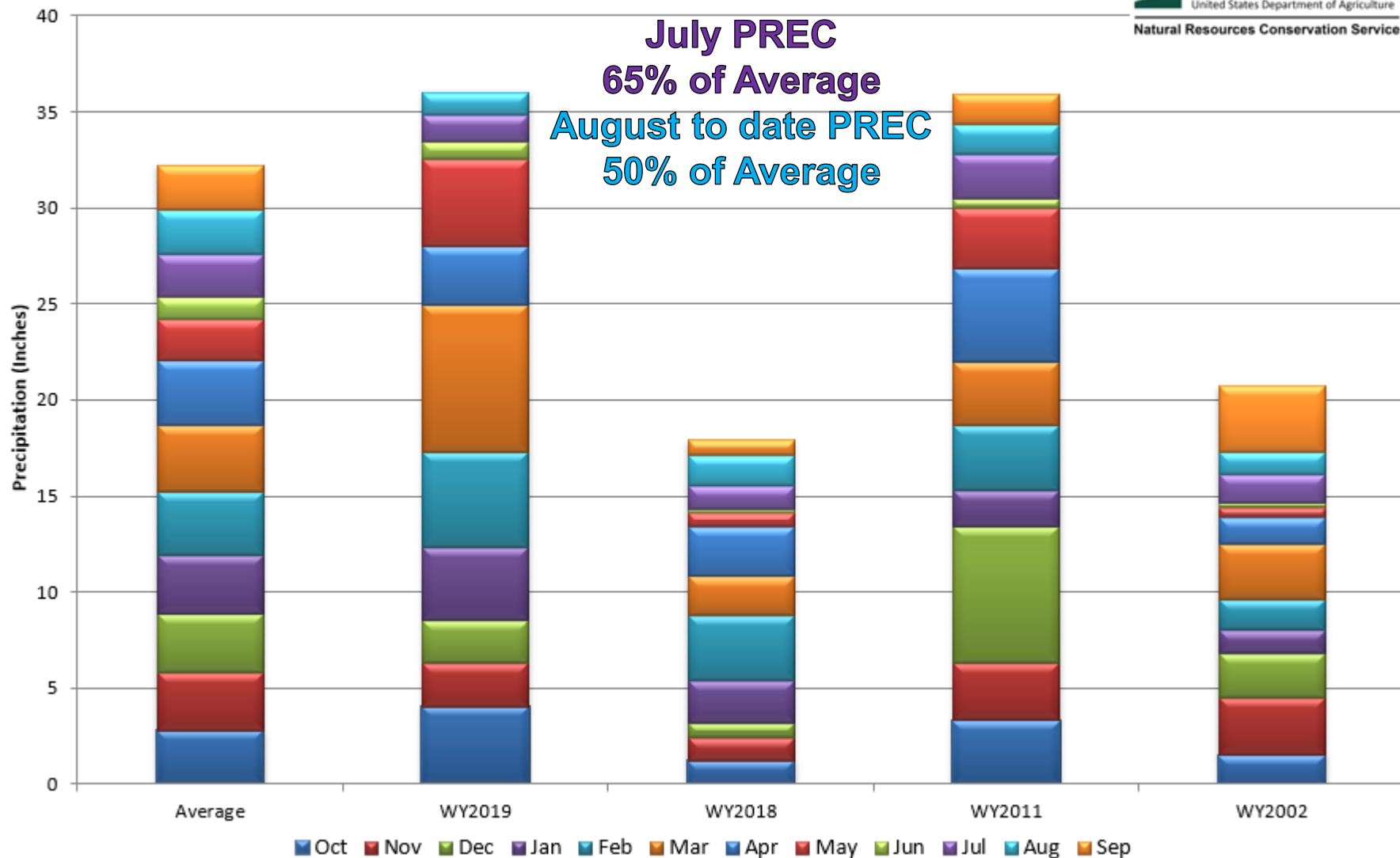
### Gunnison River Basin



0 25 50 100 150 200 Miles

## Gunnison River Basin High/Low Monthly Precipitation Summary

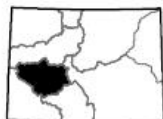
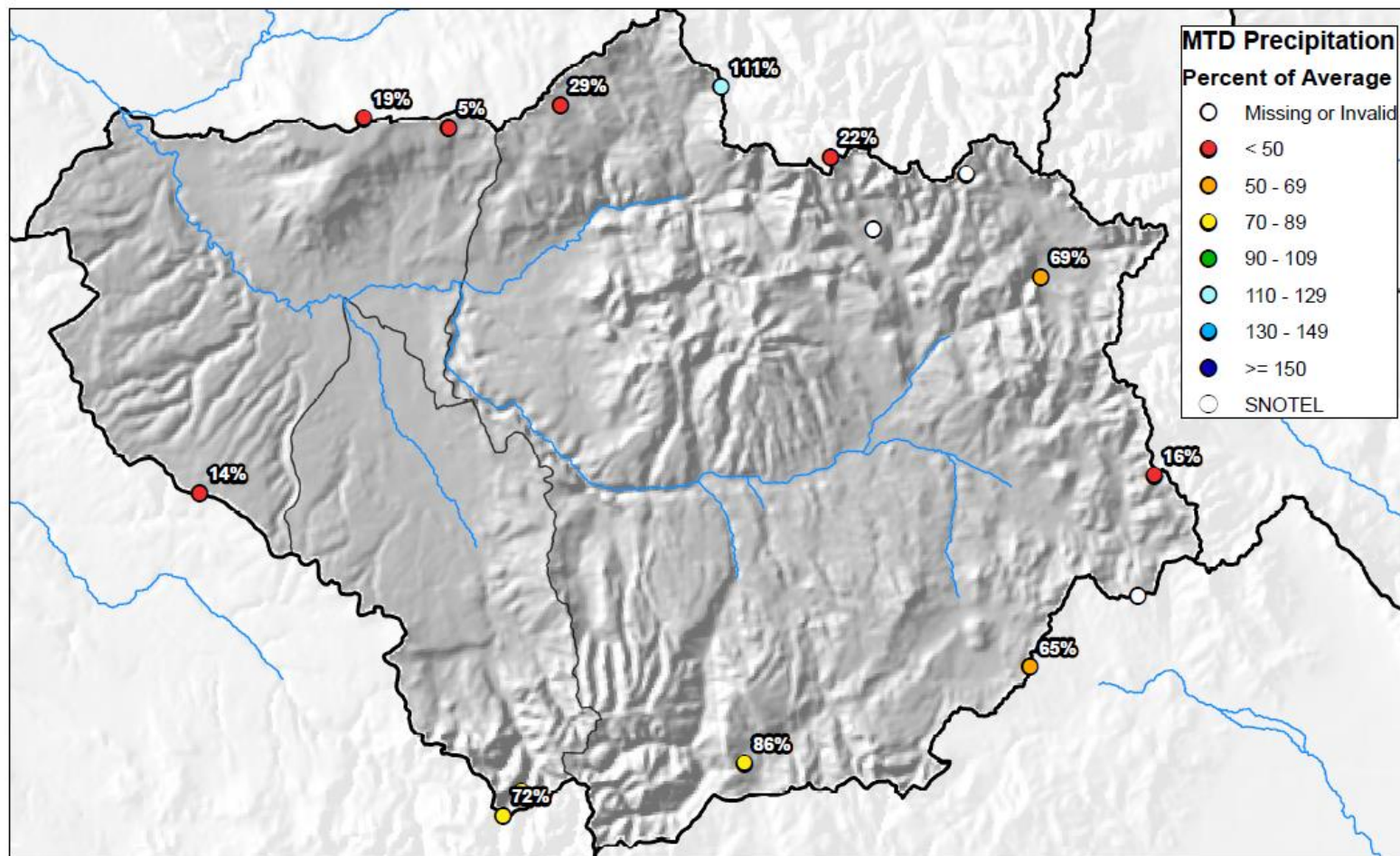
*Based on Provisional SNOTEL data as of Aug 26, 2019*





## Gunnison River Basin Month to Date Precipitation Summary

Current as of Aug 26, 2019



0 5 10 20 30 40 Miles



United States Department of Agriculture

Natural Resources Conservation Service

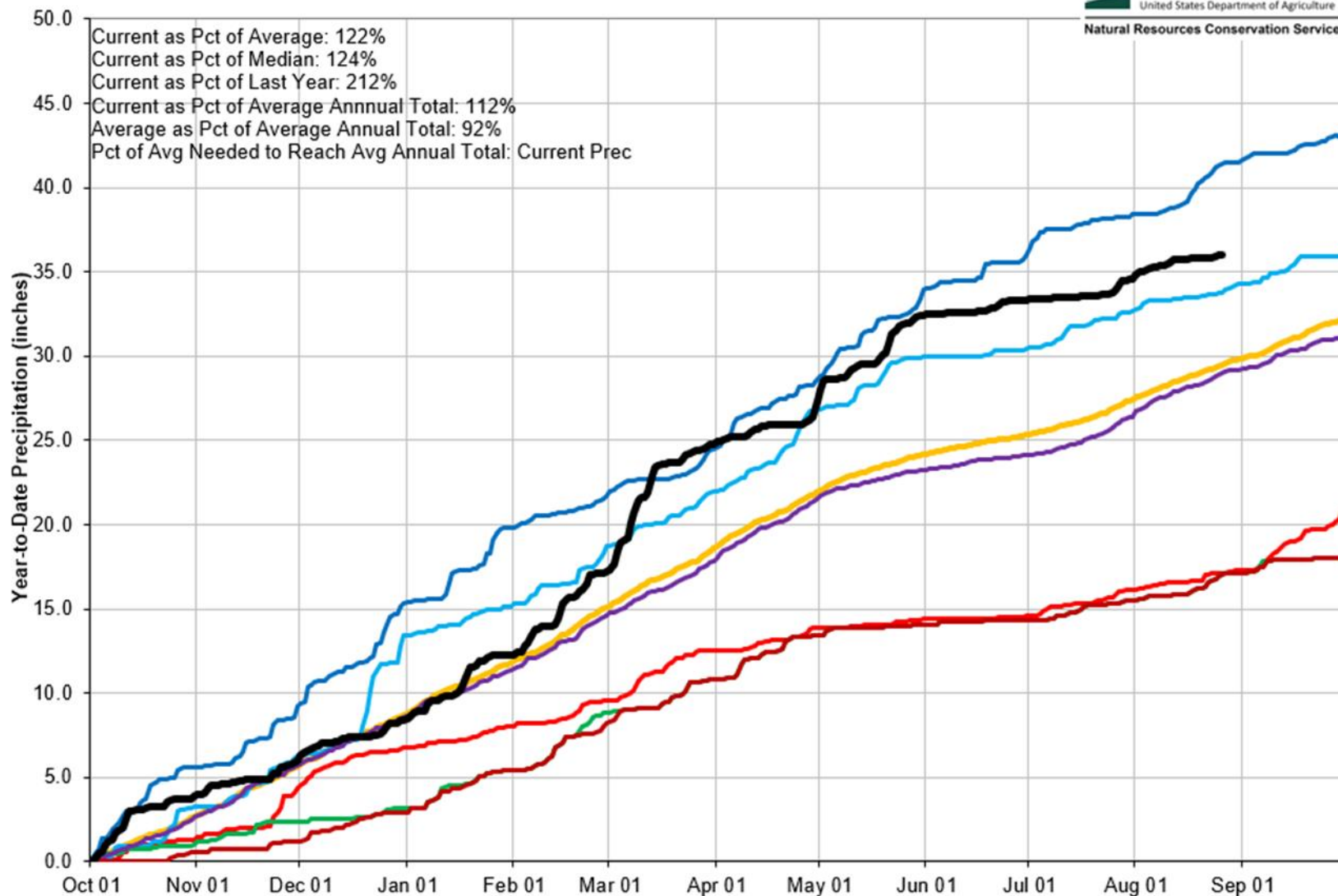
## Gunnison River Basin High/Low Year-to-Date Precipitation Summary

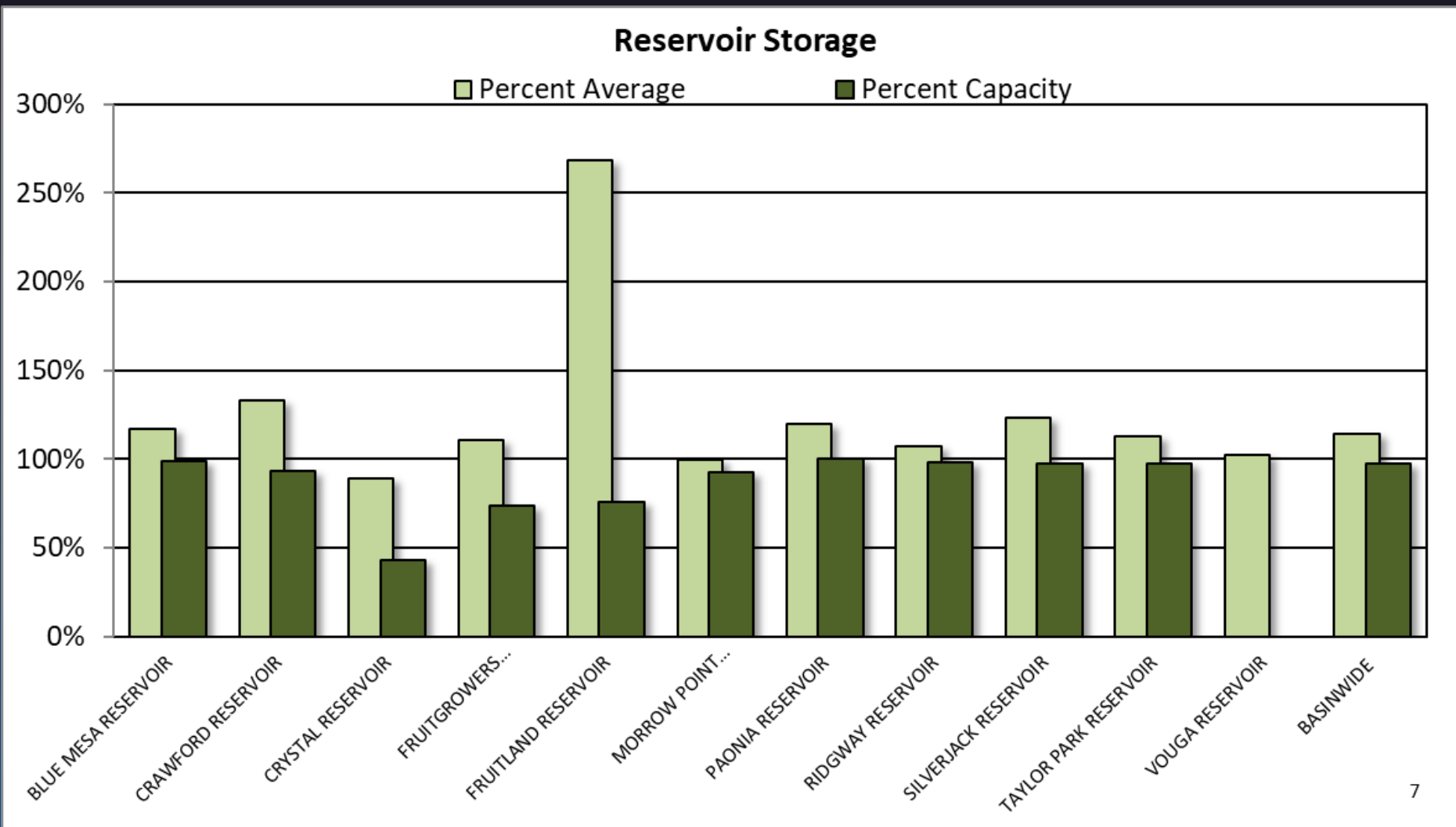
*Based on Provisional SNOTEL data as of Aug 26, 2019*



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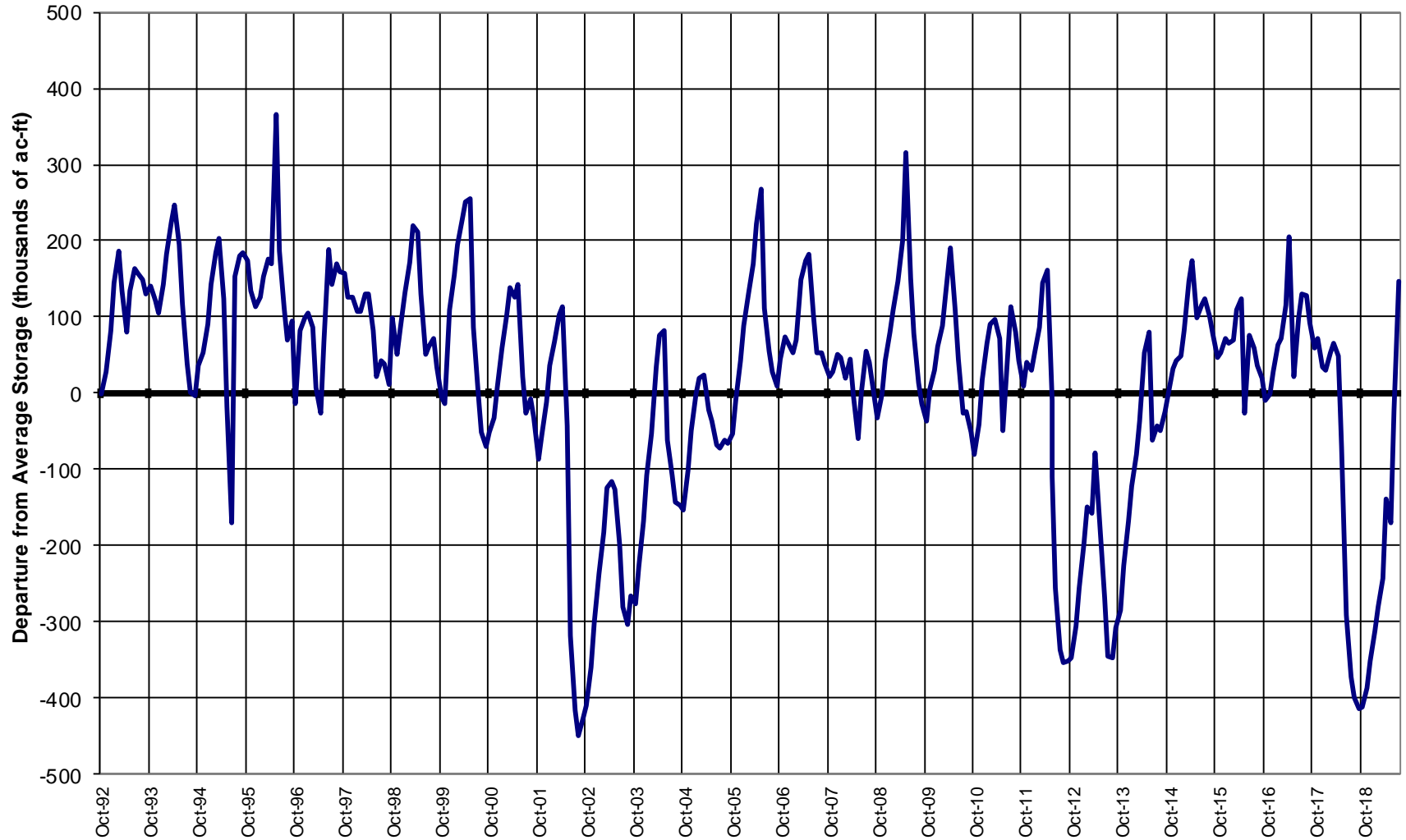
Natural Resources Conservation Service







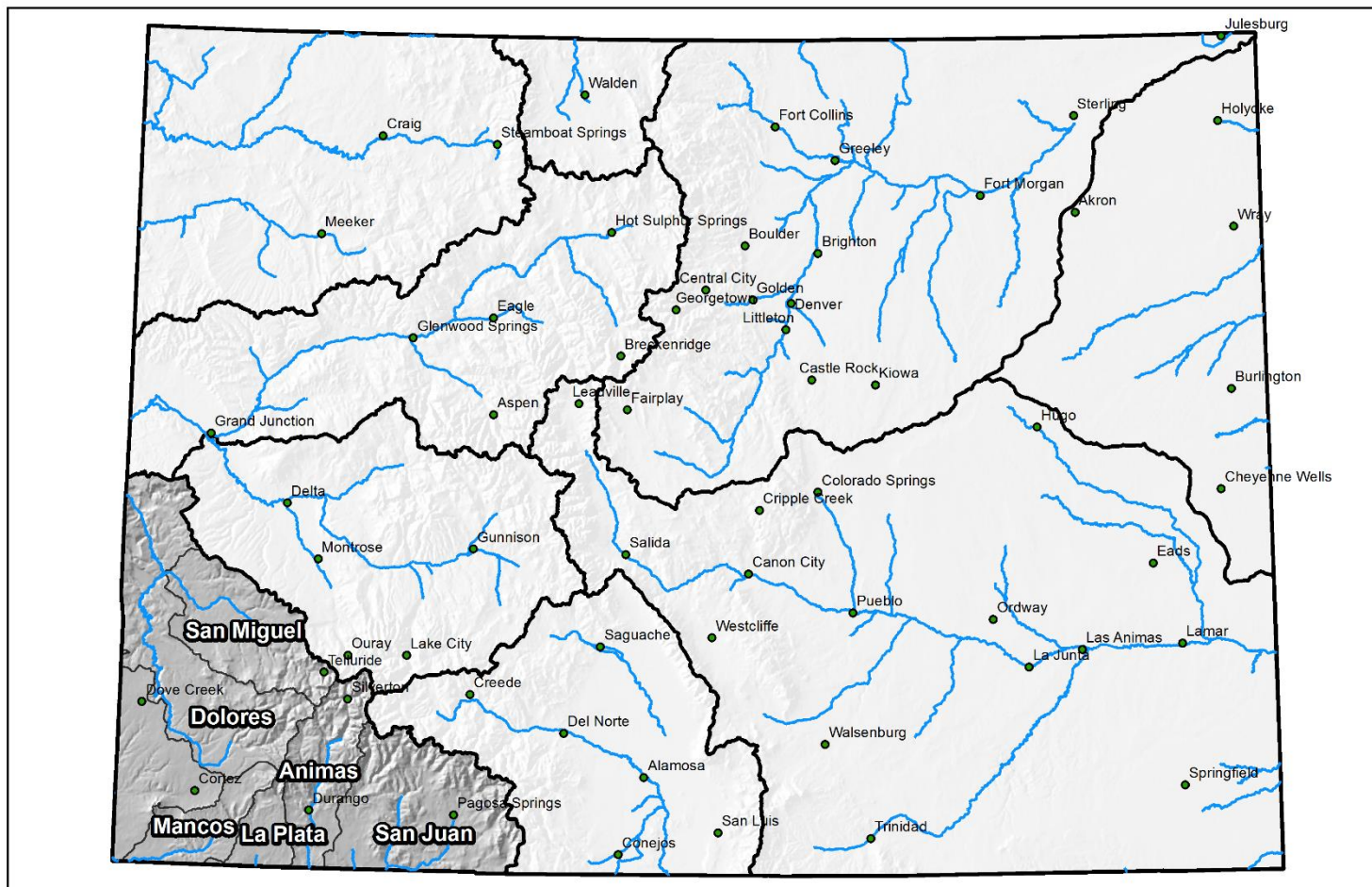
## GUNNISON RIVER BASIN Reservoir Storage Departure from Average





## 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 Monthly Precipitation Summary

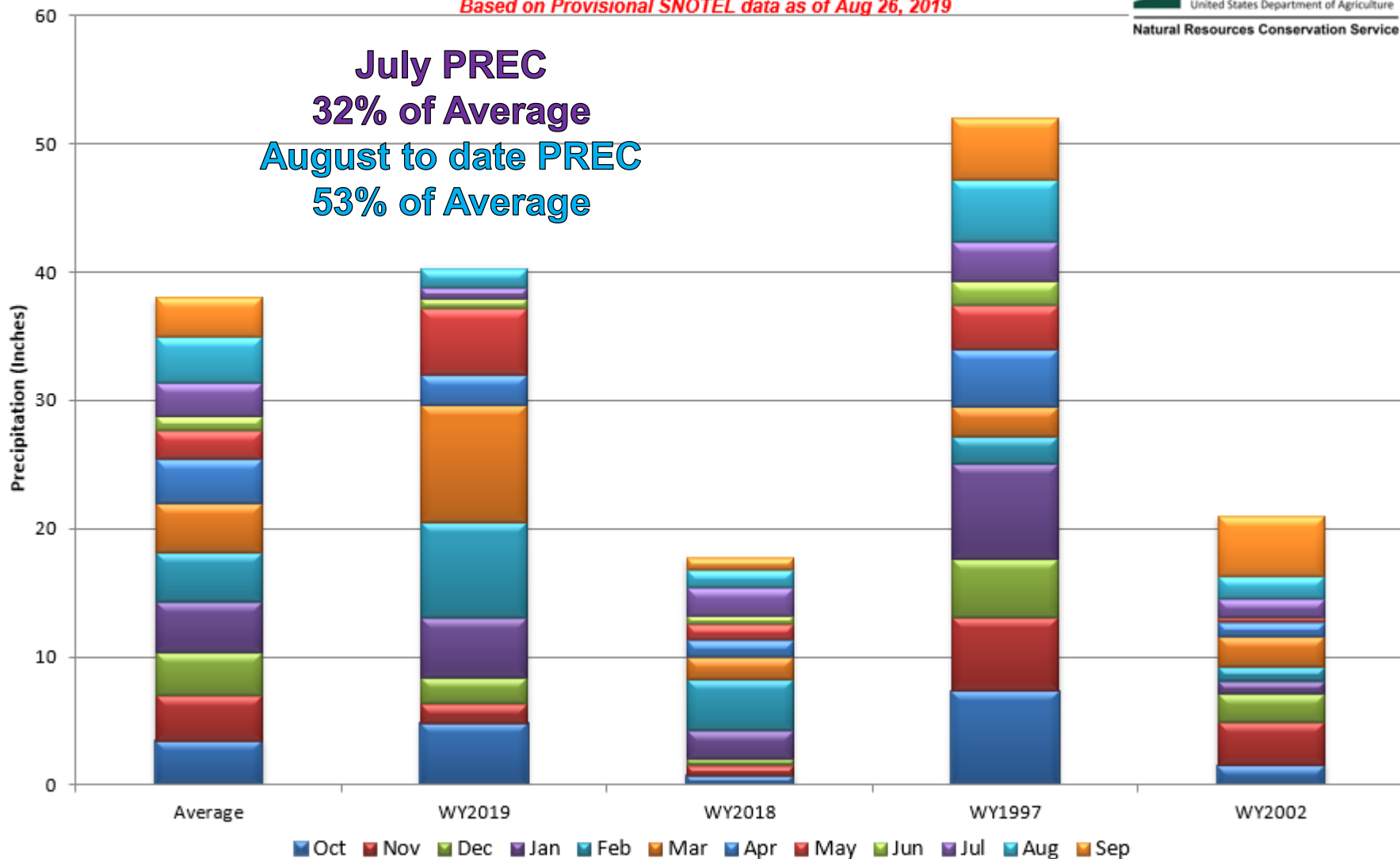
*Based on Provisional SNOTEL data as of Aug 26, 2019*



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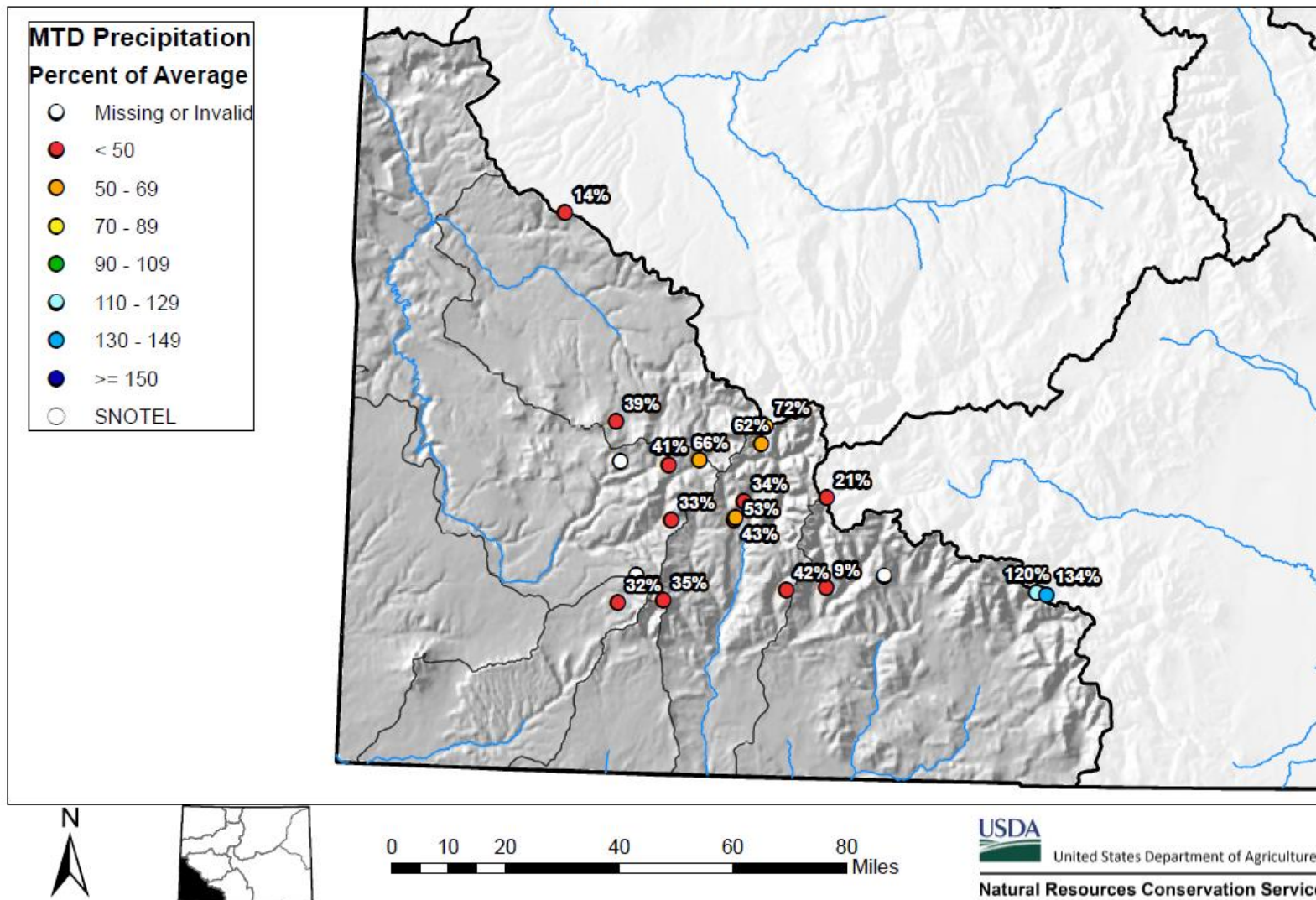
Natural Resources Conservation Service

**July PREC**  
**32% of Average**  
**August to date PREC**  
**53% of Average**



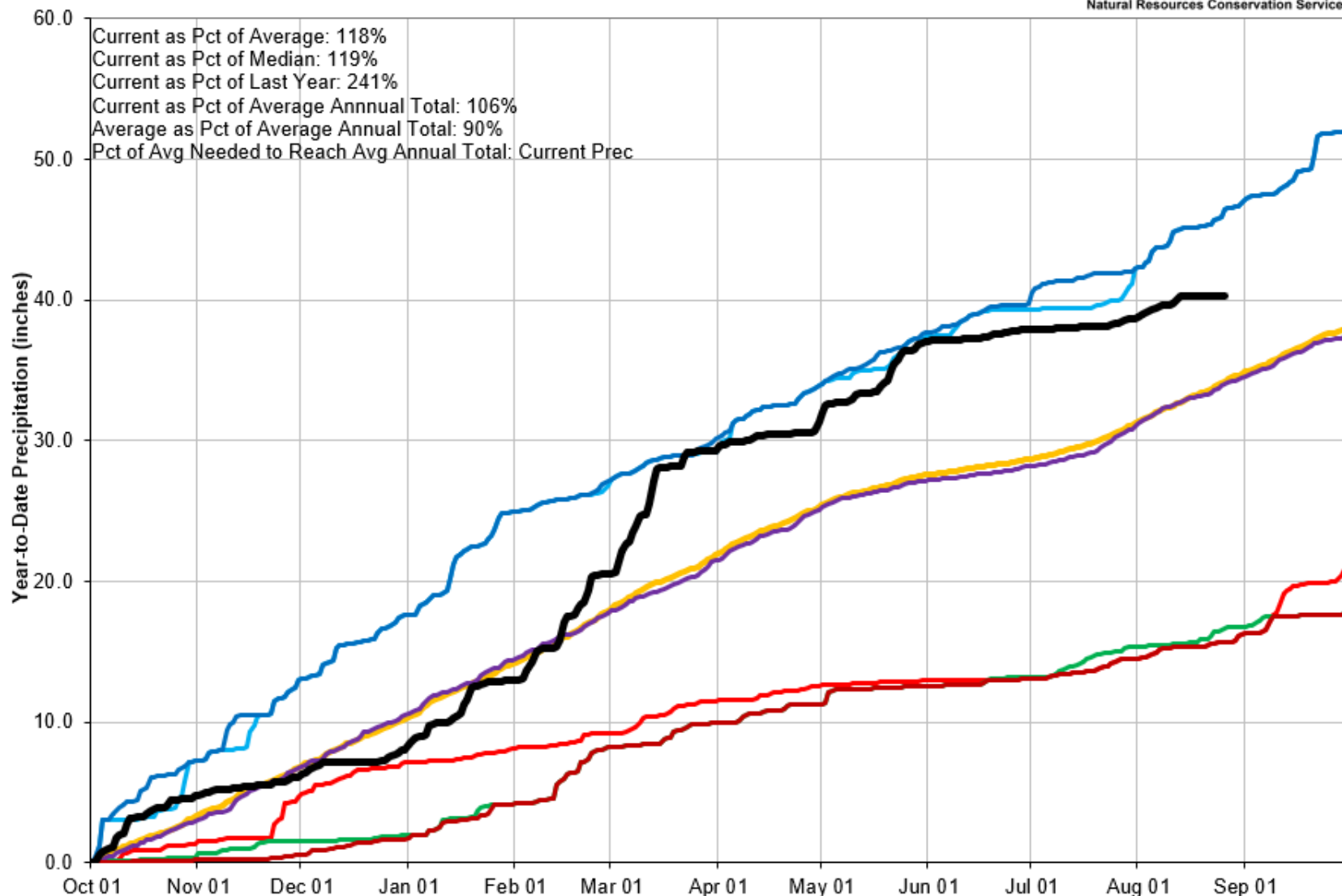
## San Miguel, Dolores, Animas, and San Juan River Basins Month to Date Precipitation Summary

Current as of Aug 26, 2019

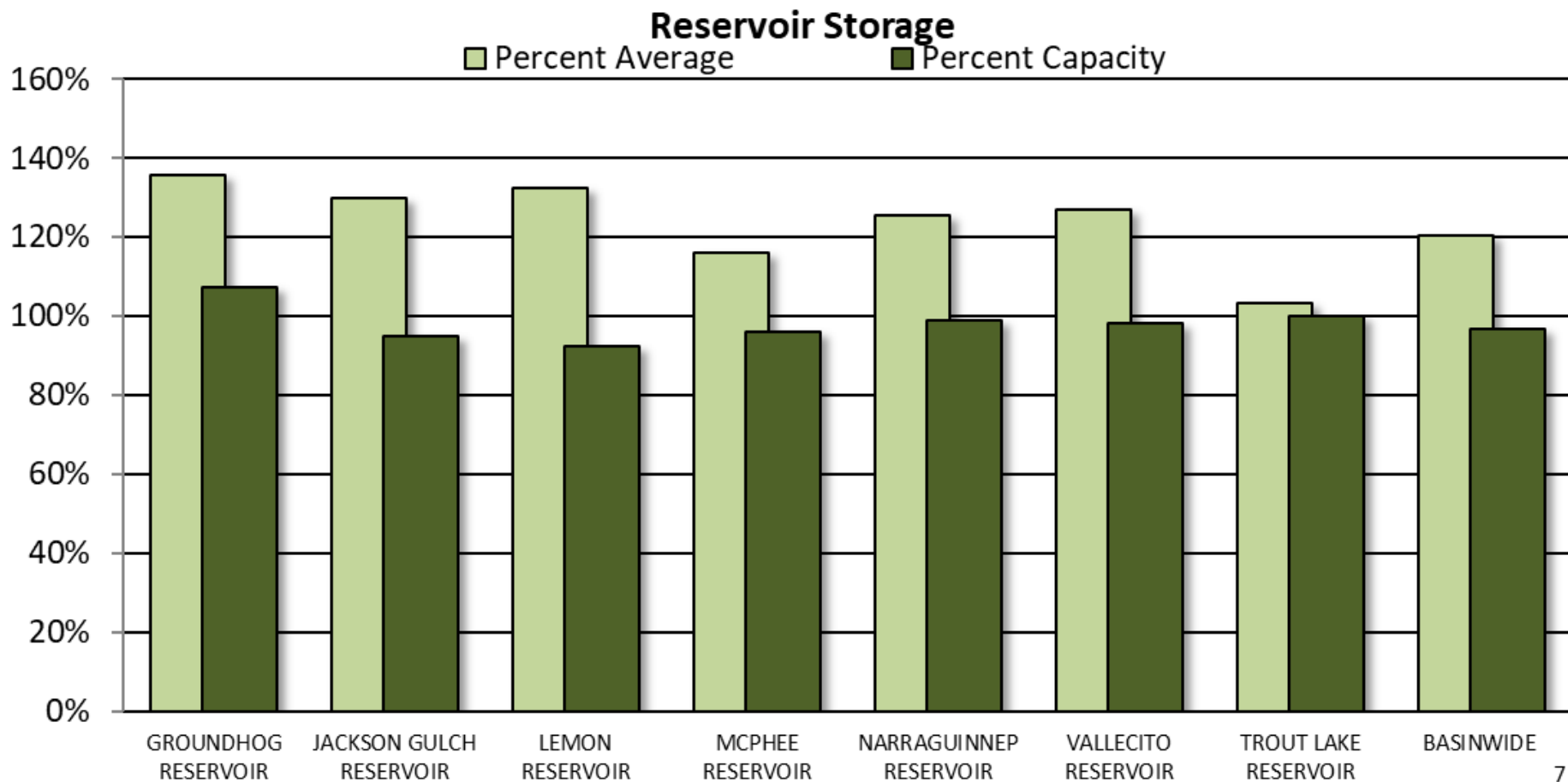


## San Miguel, Dolores, Animas and San Juan River Basins High/Low Year-to-Date Precipitation Summary

*Based on Provisional SNOTEL data as of Aug 26, 2019*





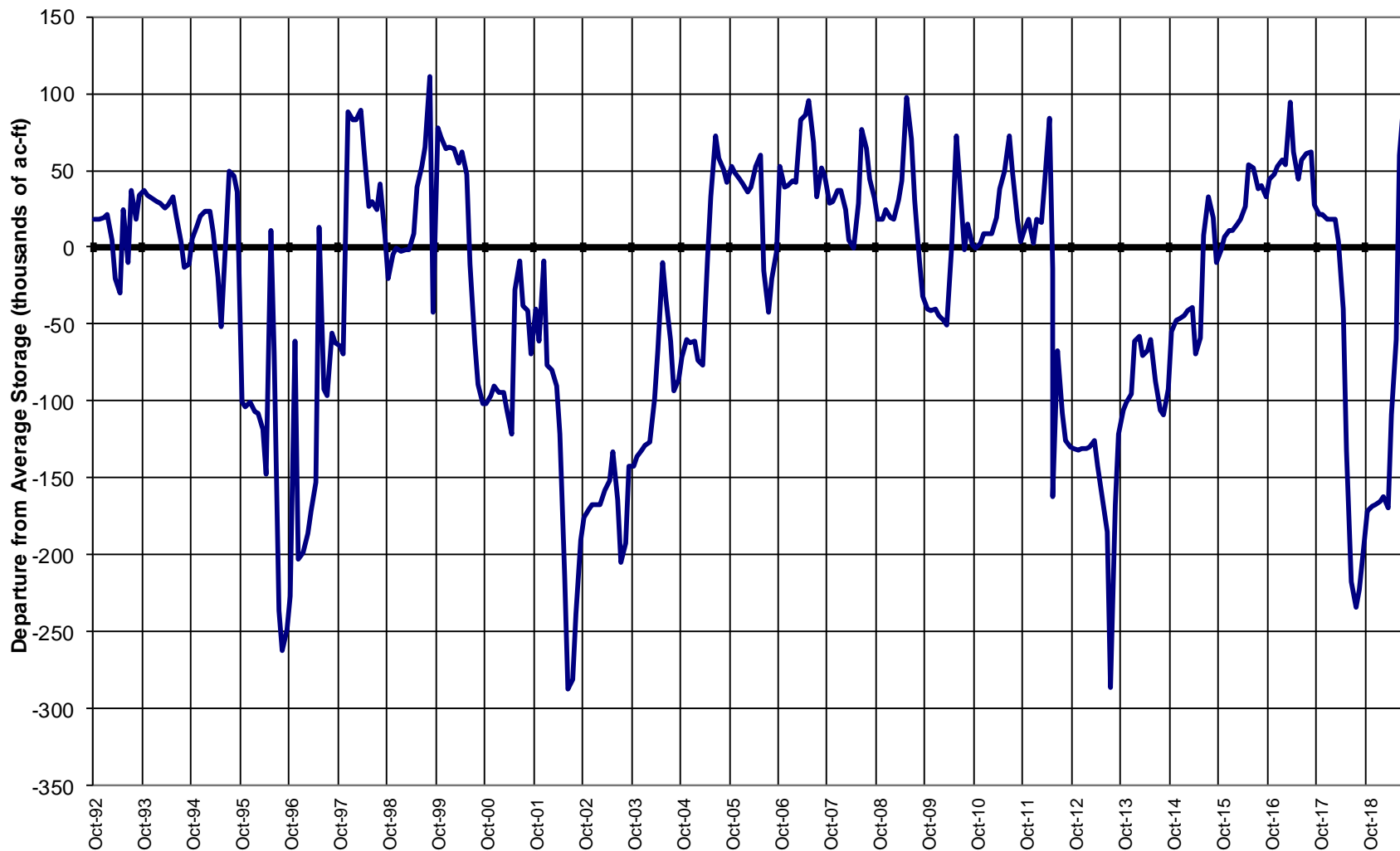




## SAN MIGUEL, DOLORES, ANIMAS AND SAN JUAN RIVER BASINS

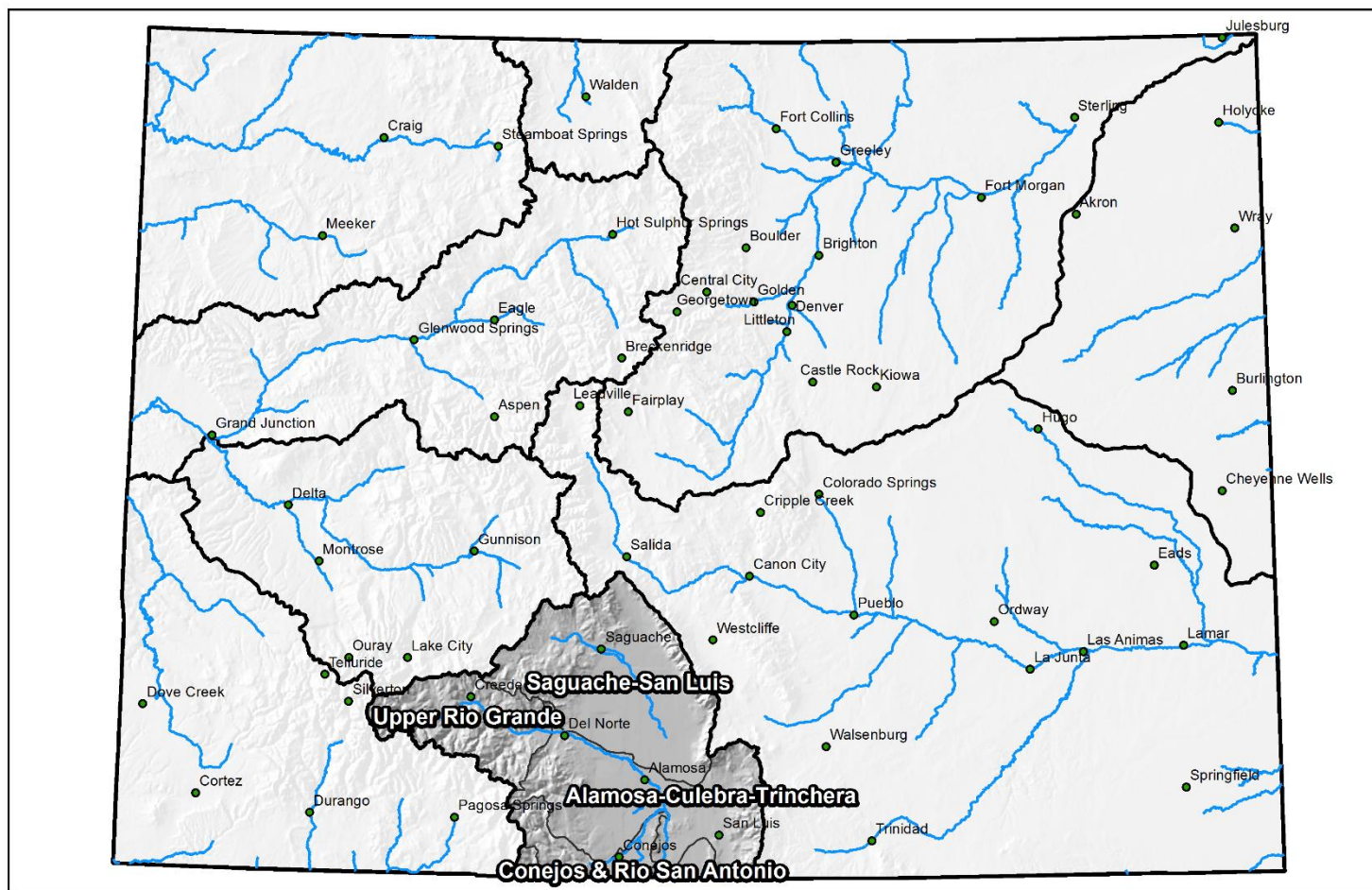
### Reservoir Storage

### Departure from Average



## Major Basin Summary

### Upper Rio Grande River Basin



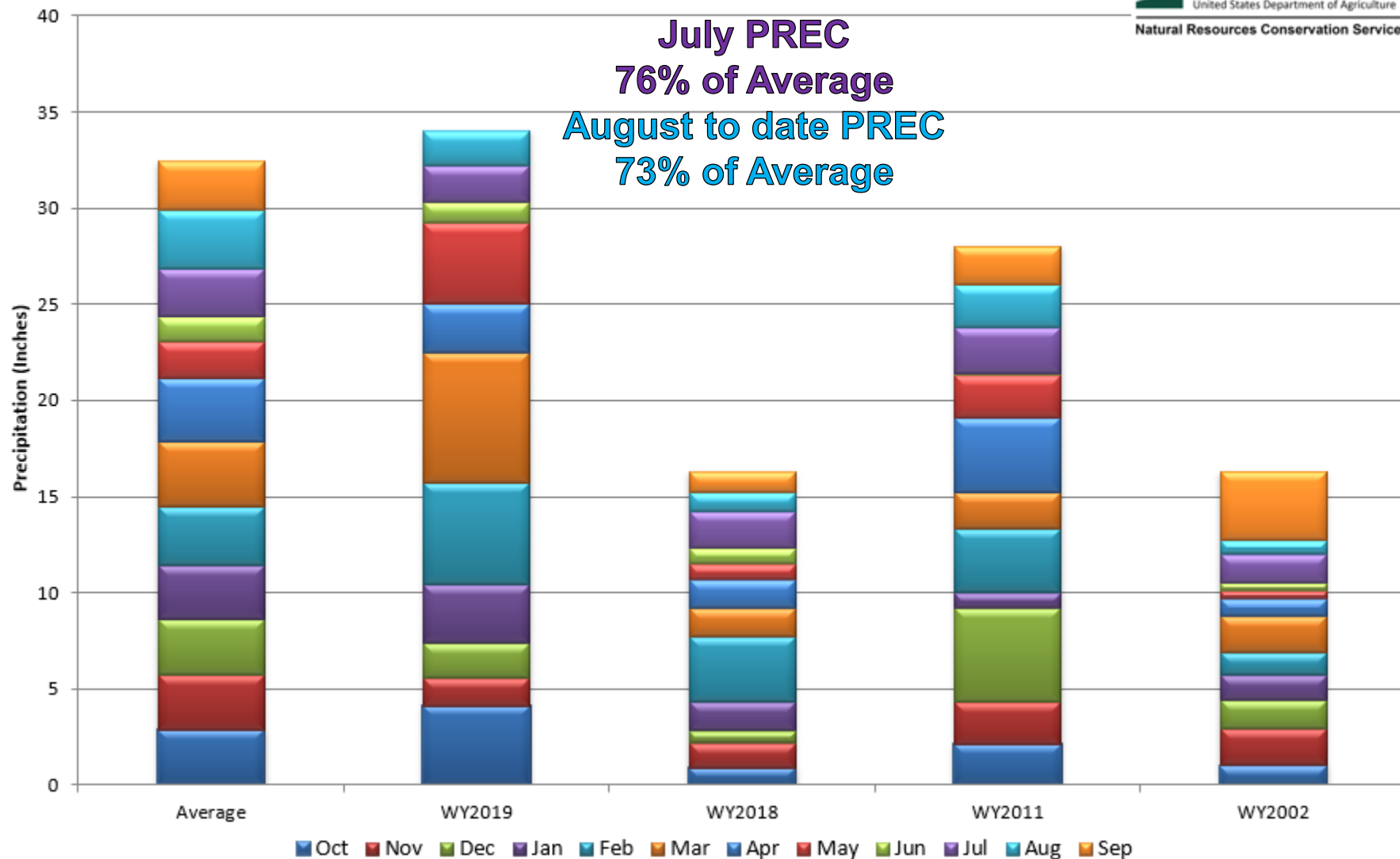
## Upper Rio Grande River Basin High/Low Monthly Precipitation Summary

*Based on Provisional SNOTEL data as of Aug 26, 2019*



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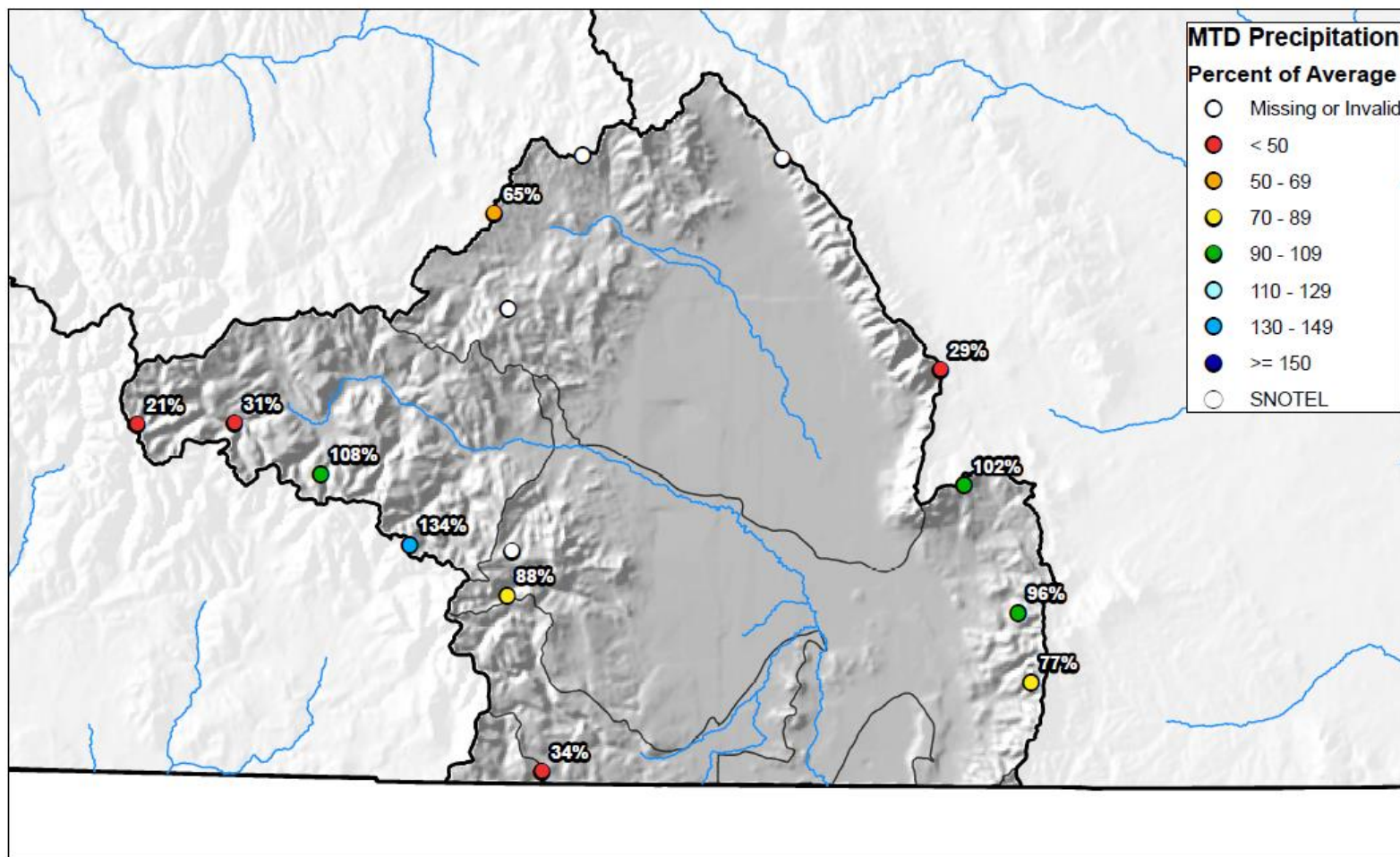
Natural Resources Conservation Service





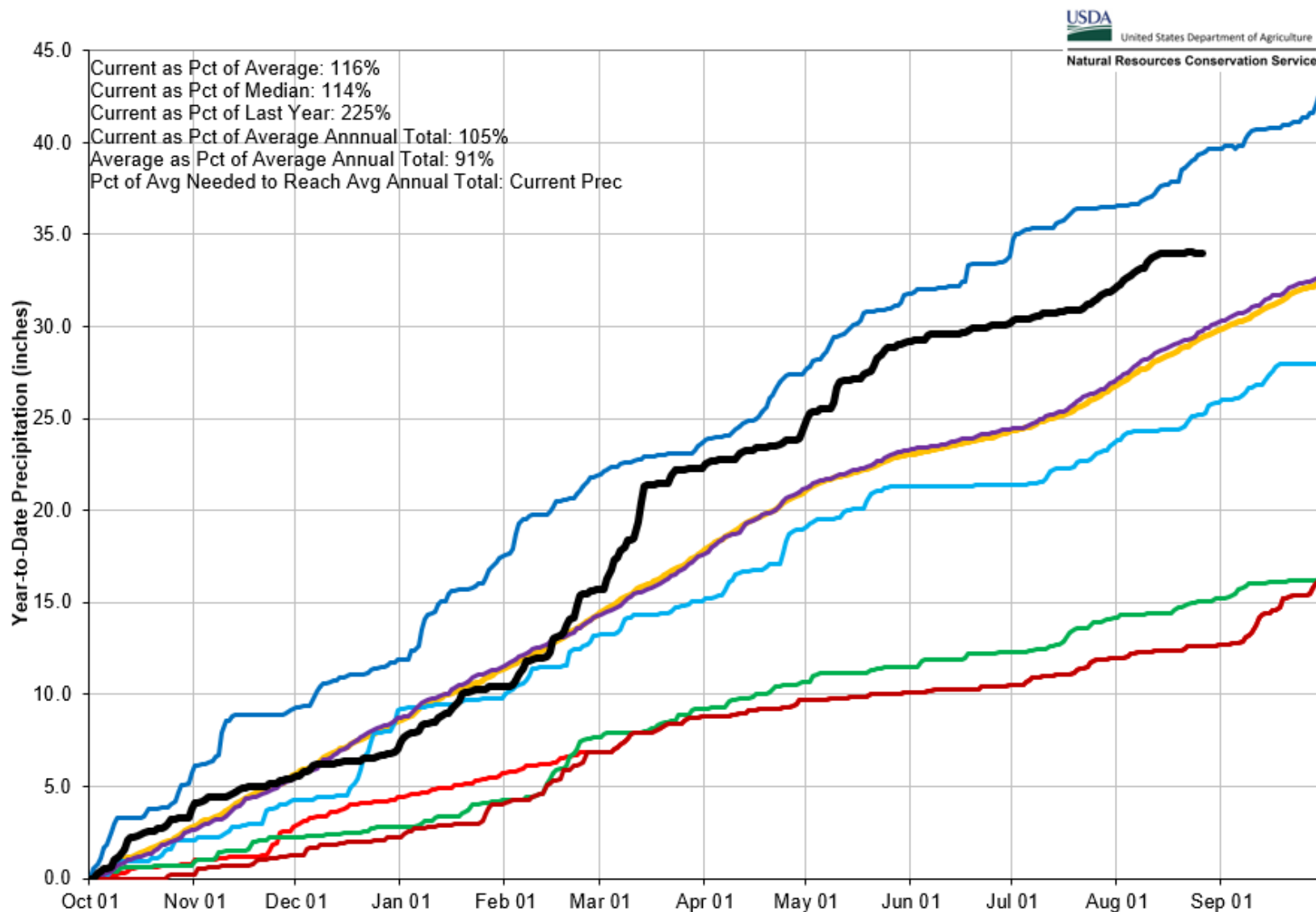
## Upper Rio Grande River Basin Month to Date Precipitation Summary

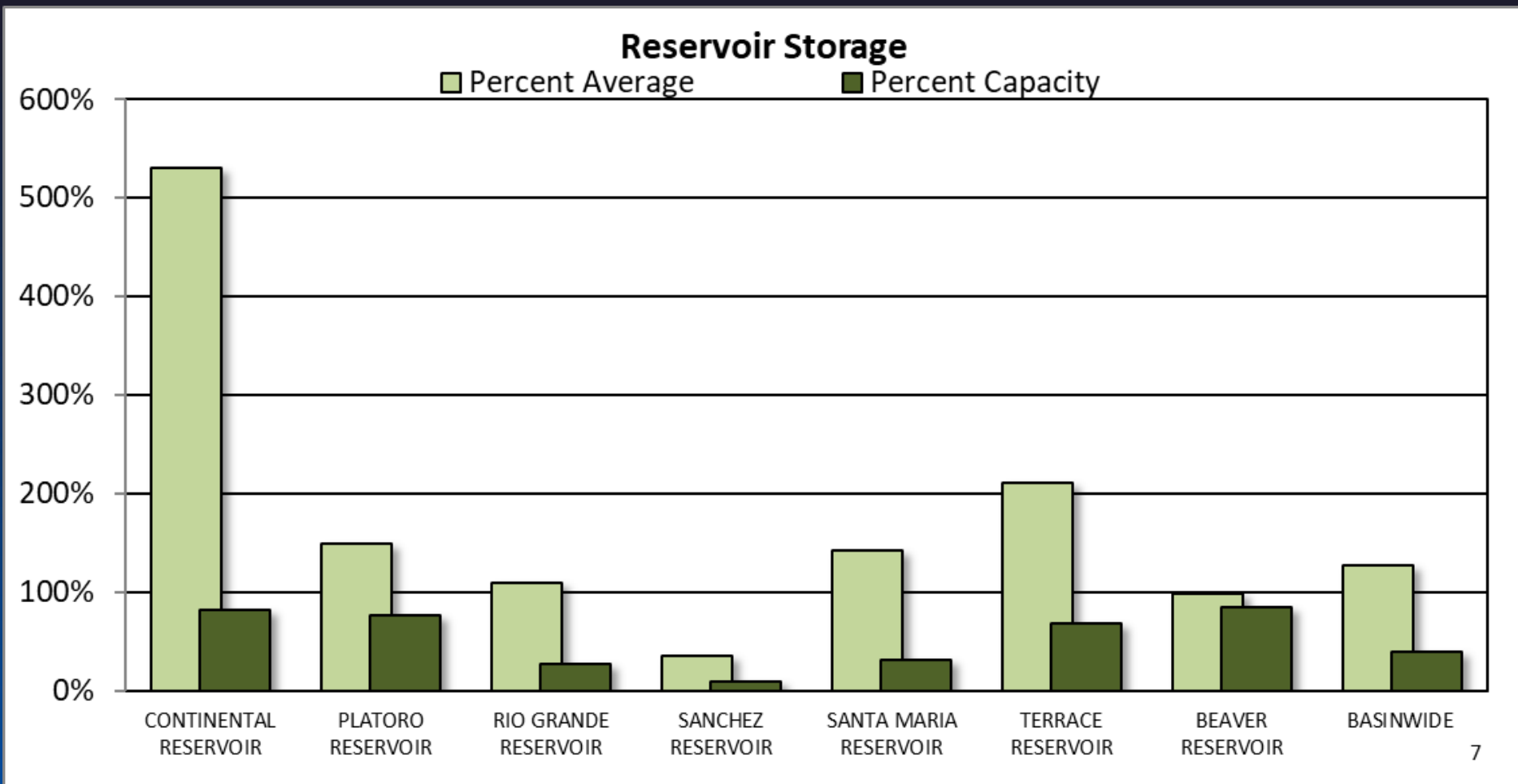
Current as of Aug 26, 2019



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

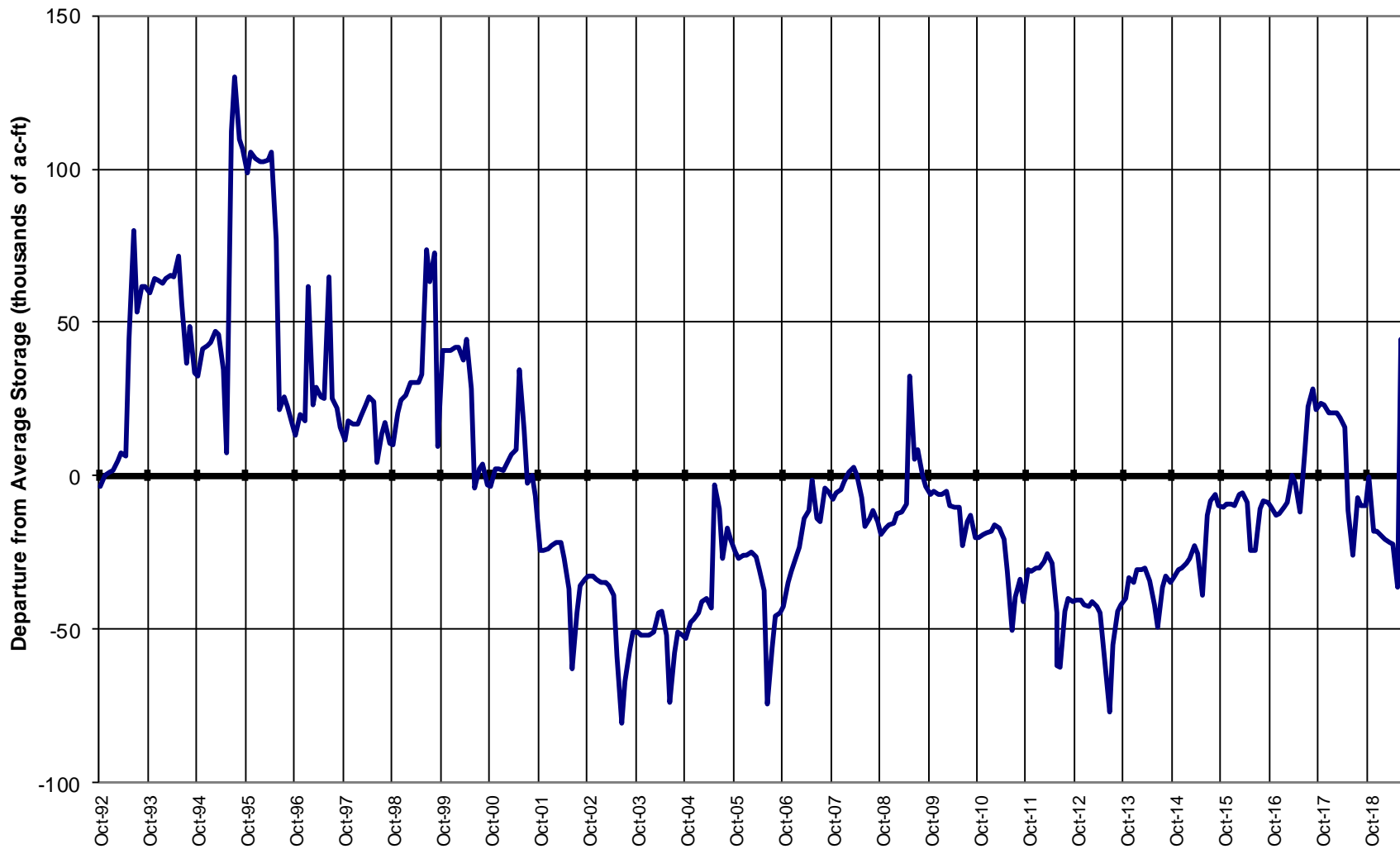
*Based on Provisional SNOTEL data as of Aug 26, 2019*







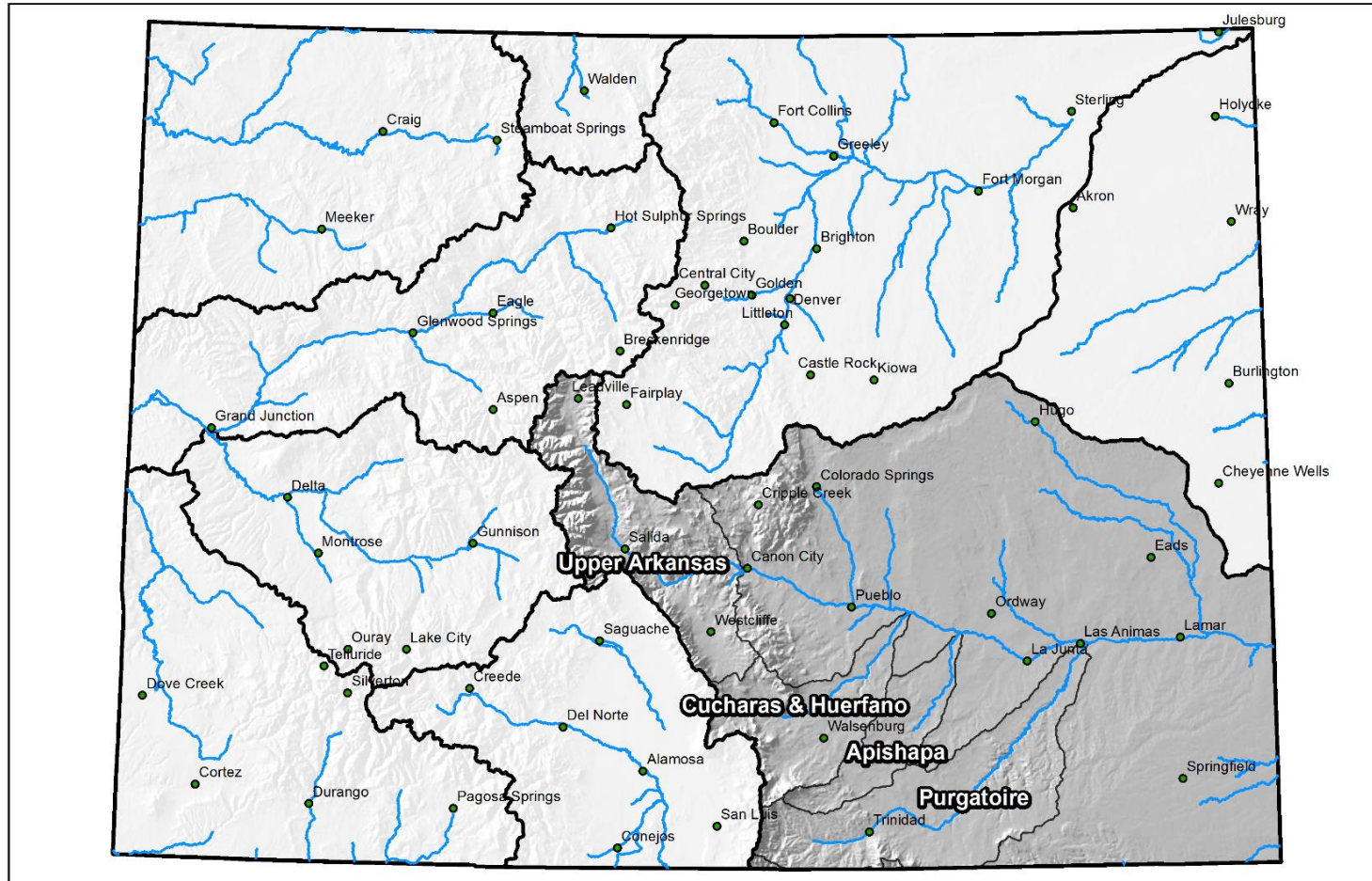
## UPPER RIO GRANDE BASIN Reservoir Storage Departure from Average





## Major Basin Summary

### Arkansas River Basin



0 25 50 100 150 200 Miles

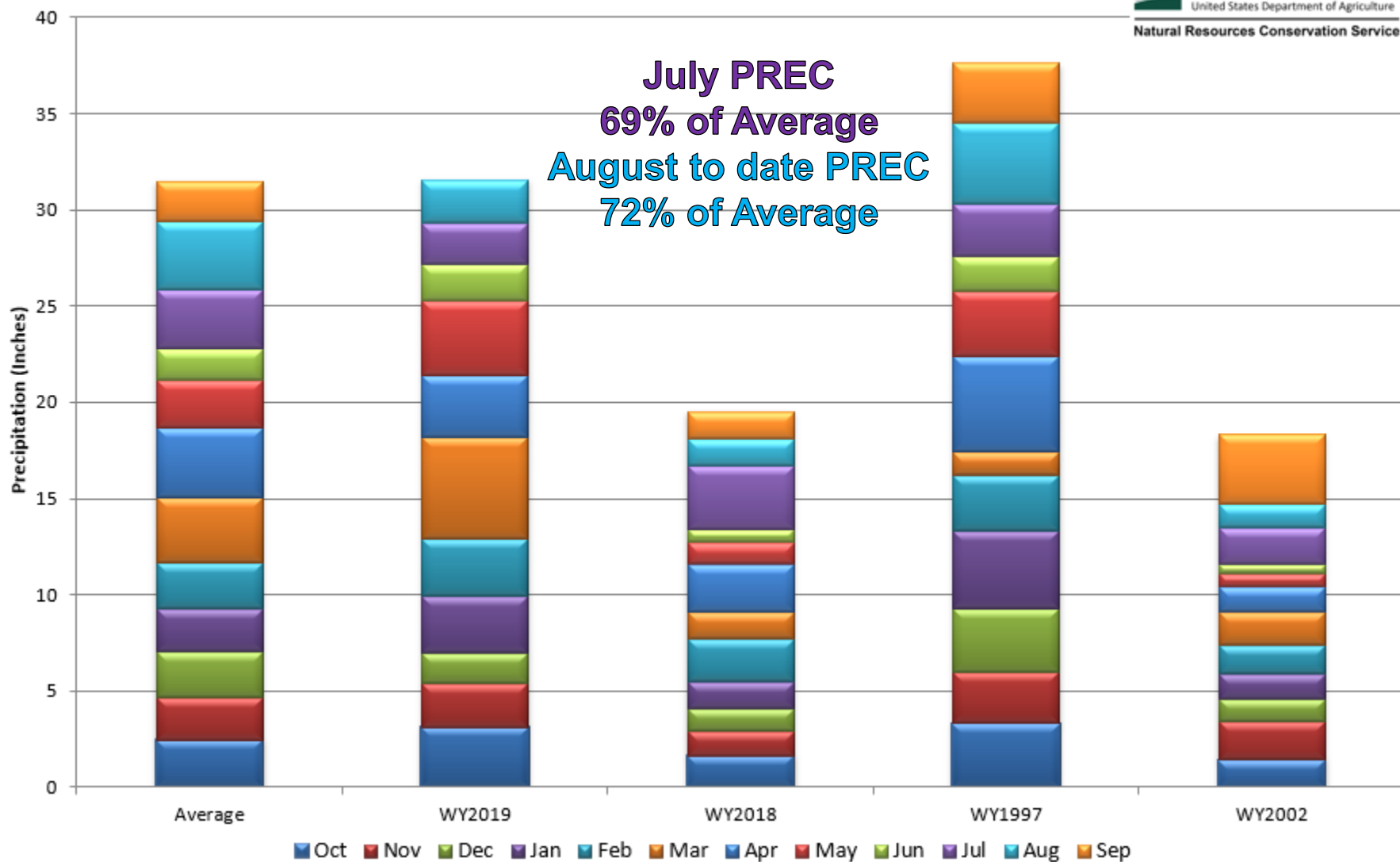
## Arkansas River Basin High/Low Monthly Precipitation Summary

*Based on Provisional SNOTEL data as of Aug 26, 2019*



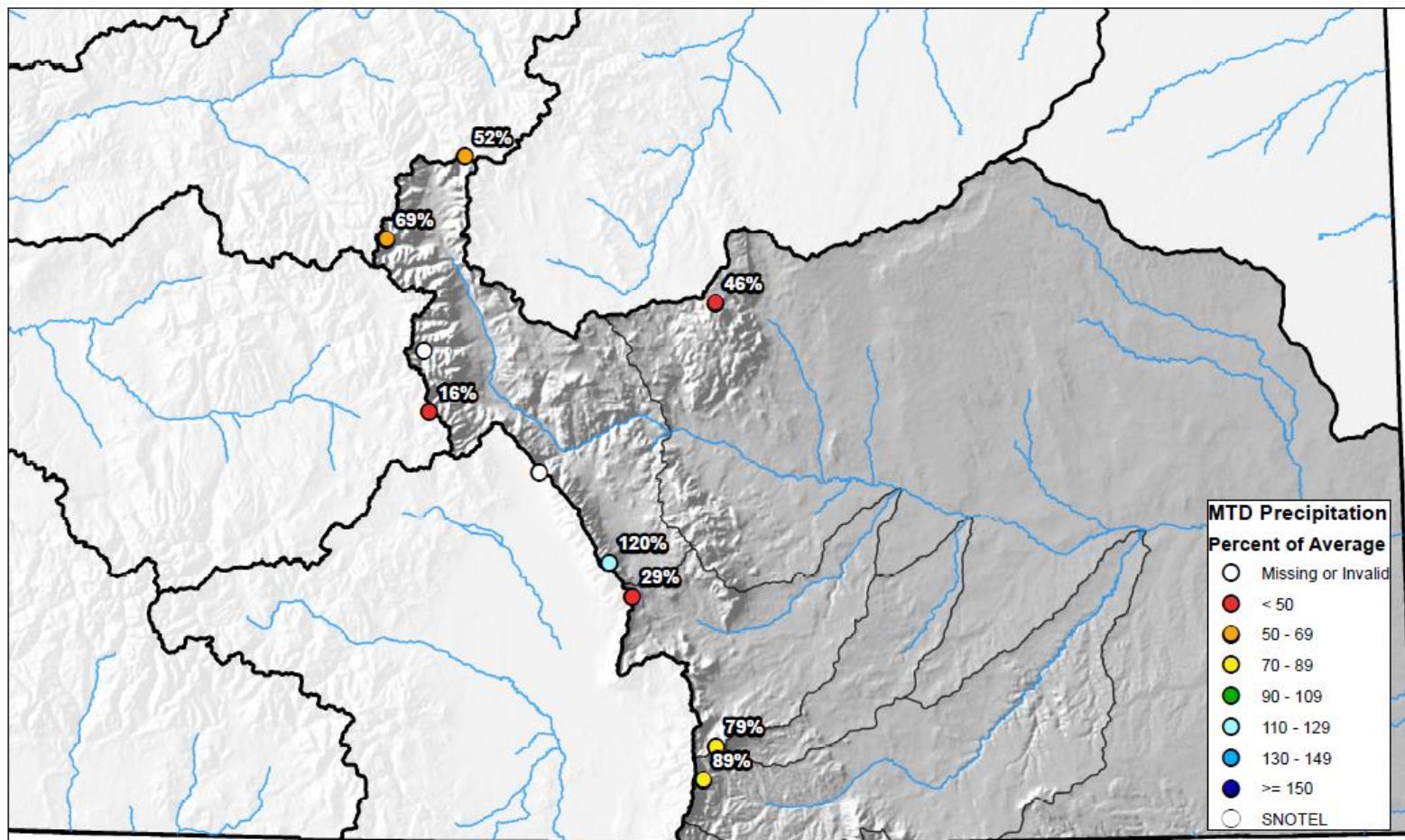
United States Department of Agriculture

Natural Resources Conservation Service



## Arkansas River Basin Month to Date Precipitation Summary

Current as of Aug 26, 2019



0 10 20 40 60 80 Miles



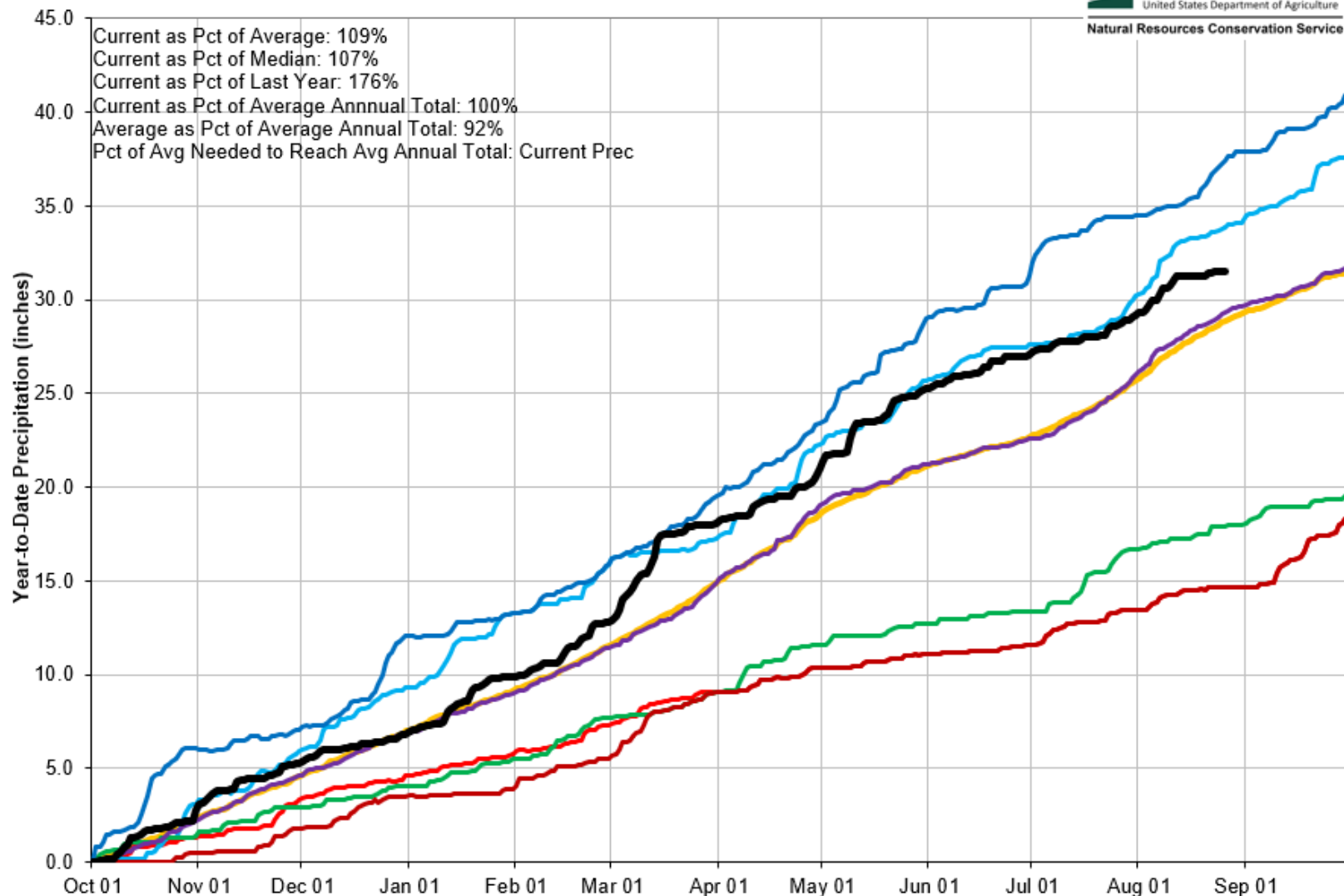
## Arkansas River Basin High/Low Year-to-Date Precipitation Summary

*Based on Provisional SNOTEL data as of Aug 26, 2019*

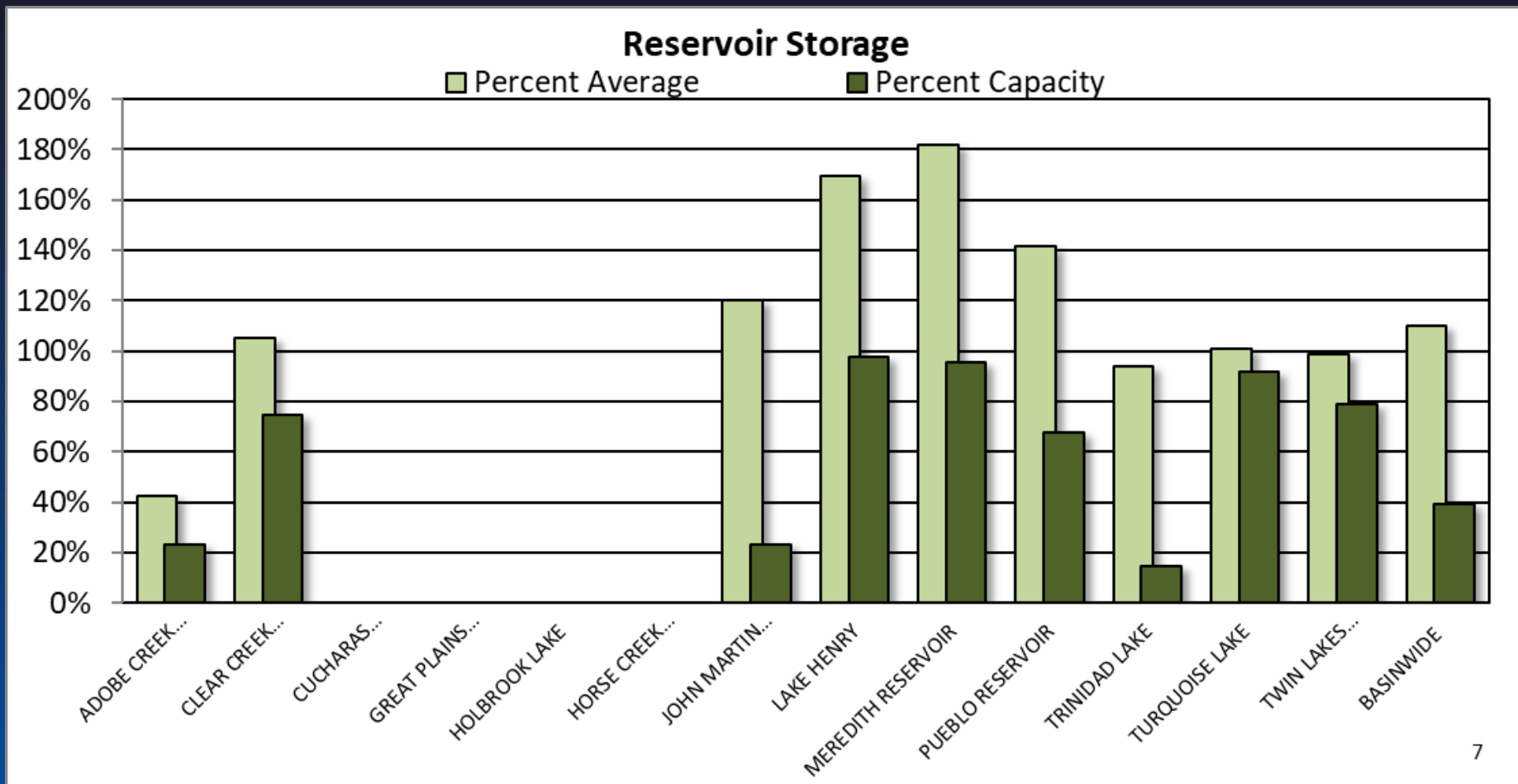


United States Department of Agriculture

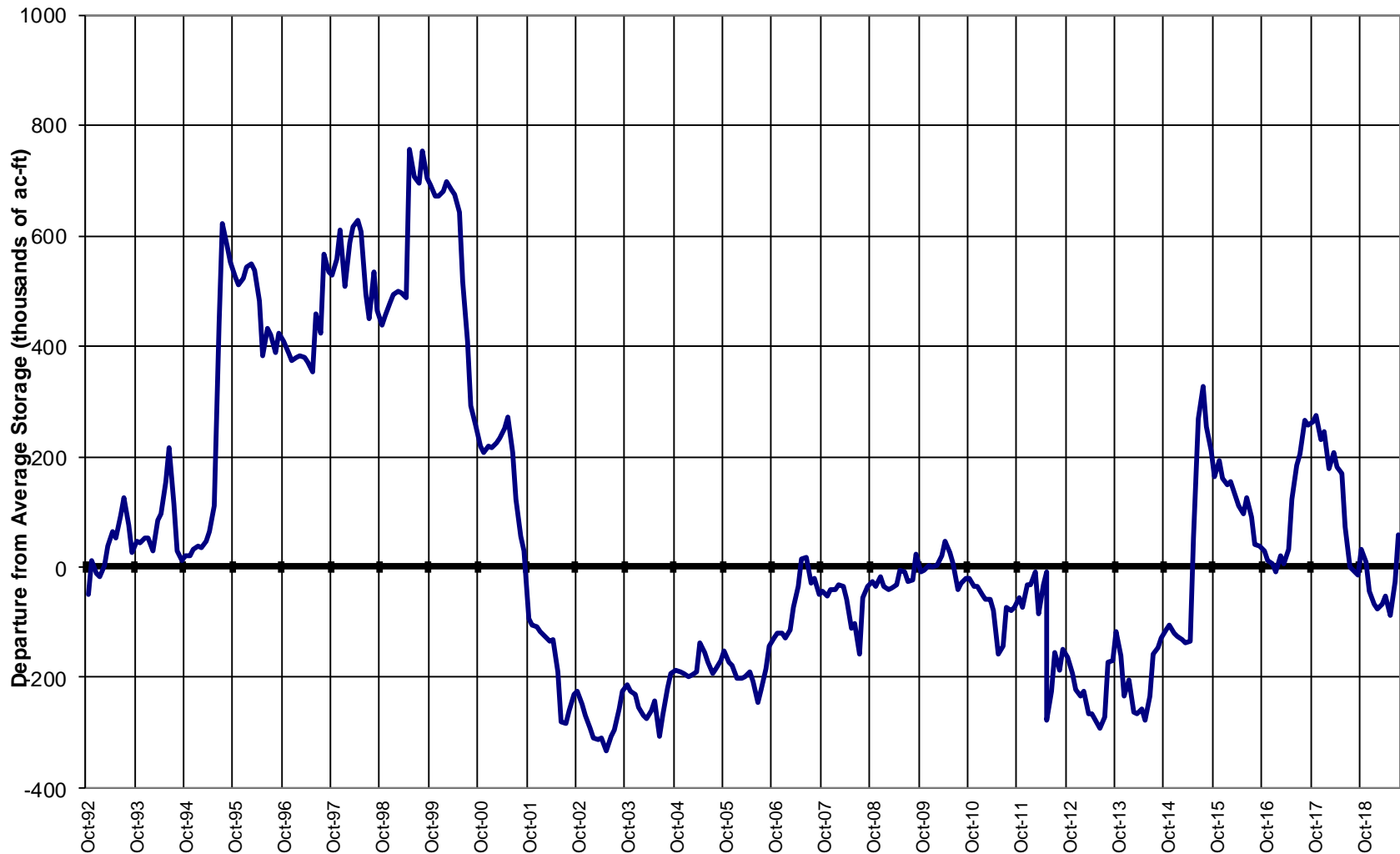
Natural Resources Conservation Service





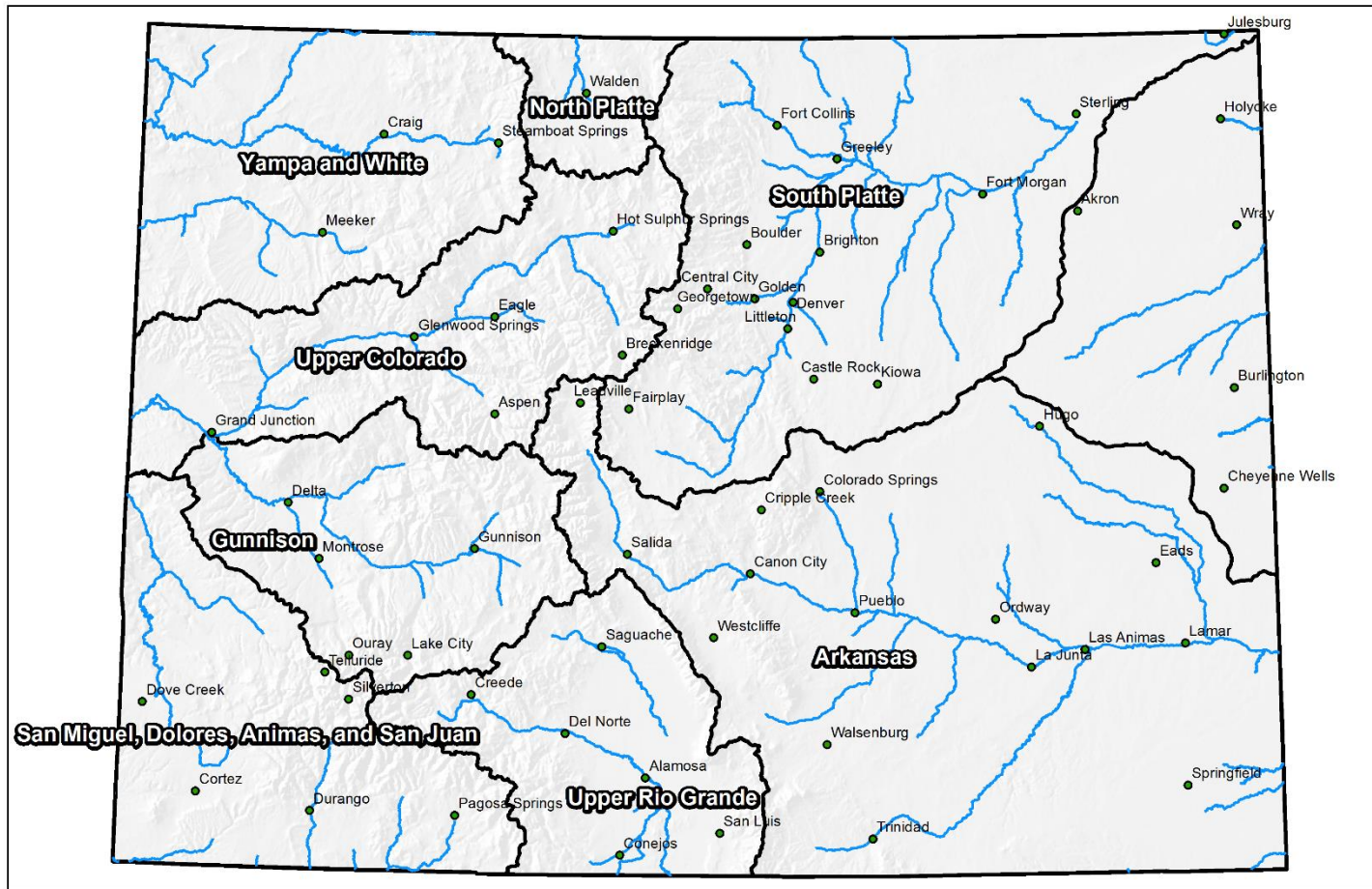


## ARKANSAS RIVER BASIN Reservoir Storage Departure from Average



## Colorado Statewide Summary

Colorado Major Basins



0 25 50 100 150 200 Miles

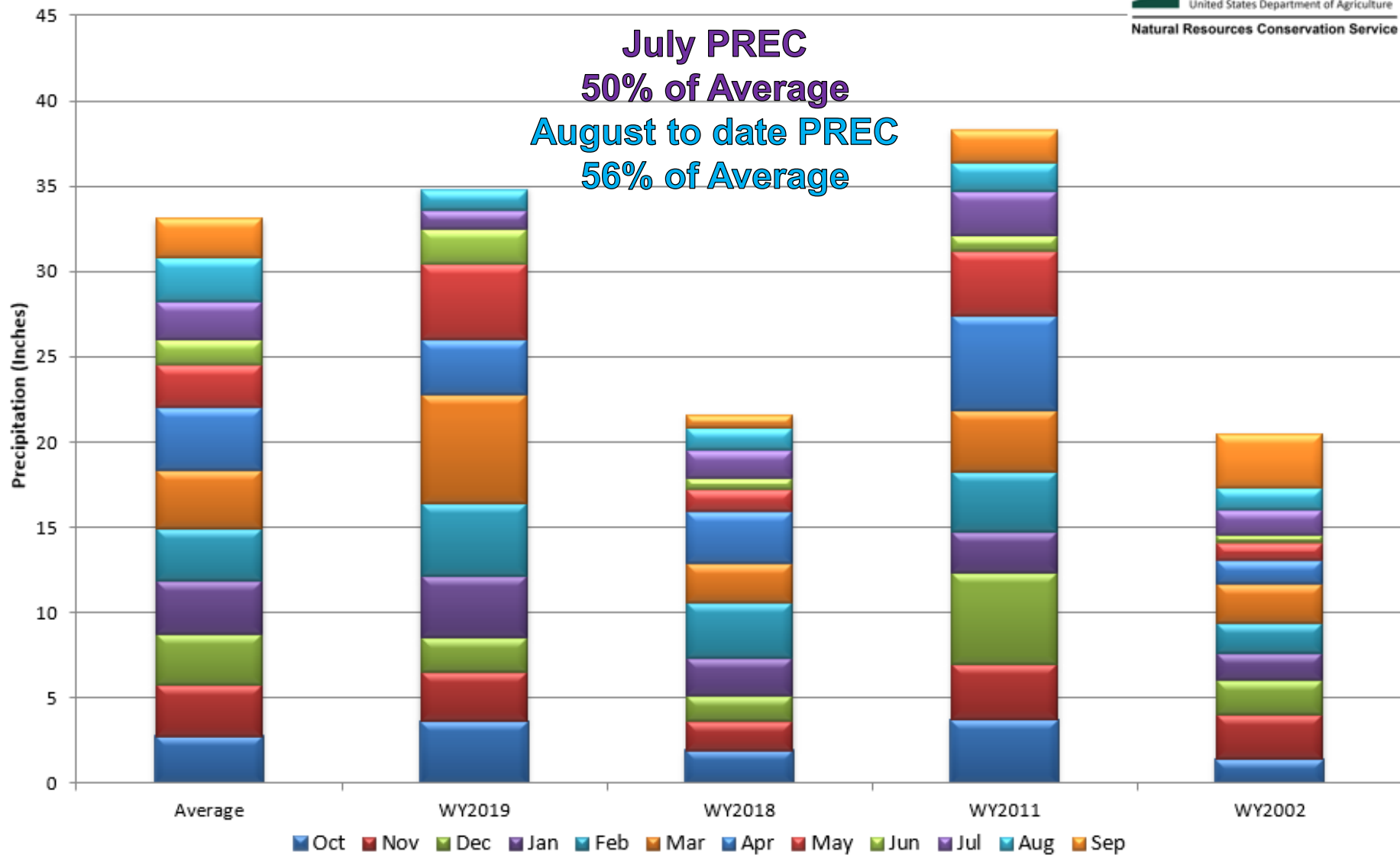
## Colorado Statewide High/Low Monthly Precipitation Summary

*Based on Provisional SNOTEL data as of Aug 26, 2019*



United States Department of Agriculture

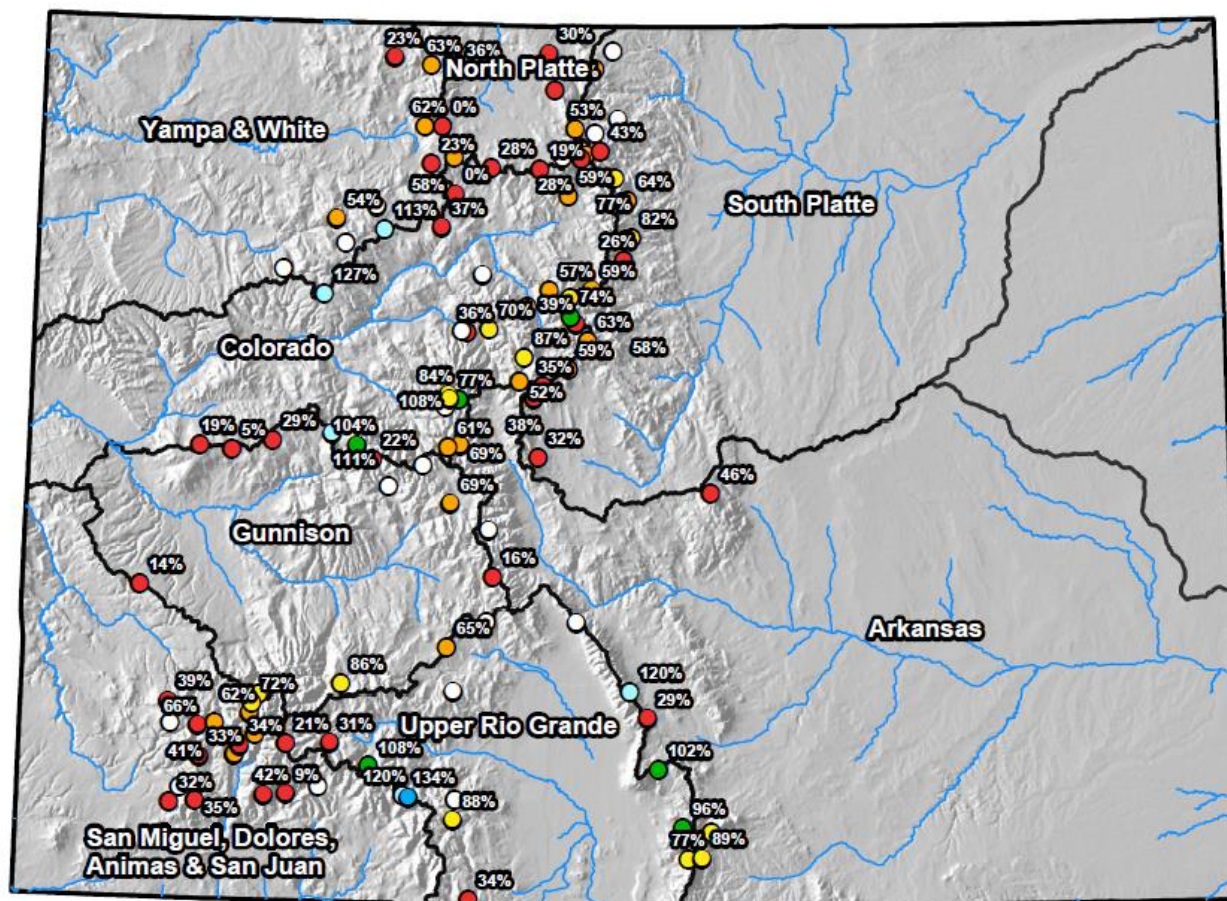
Natural Resources Conservation Service





## Colorado SNOTEL Month-to-Date Precipitation

Current as of Aug 26, 2019



### MTD Precipitation Percent of Average

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

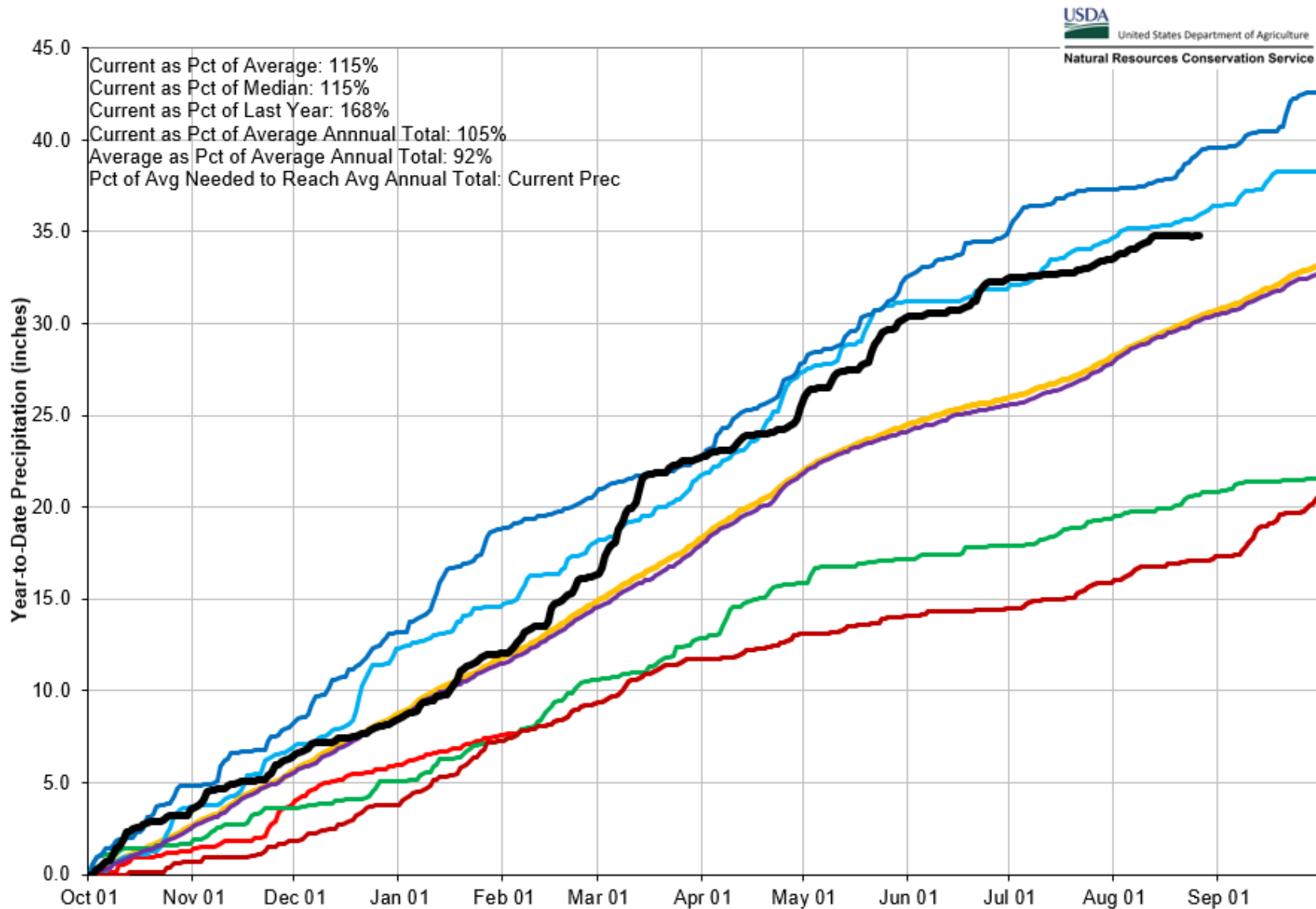


0 25 50 100 150 200 Miles



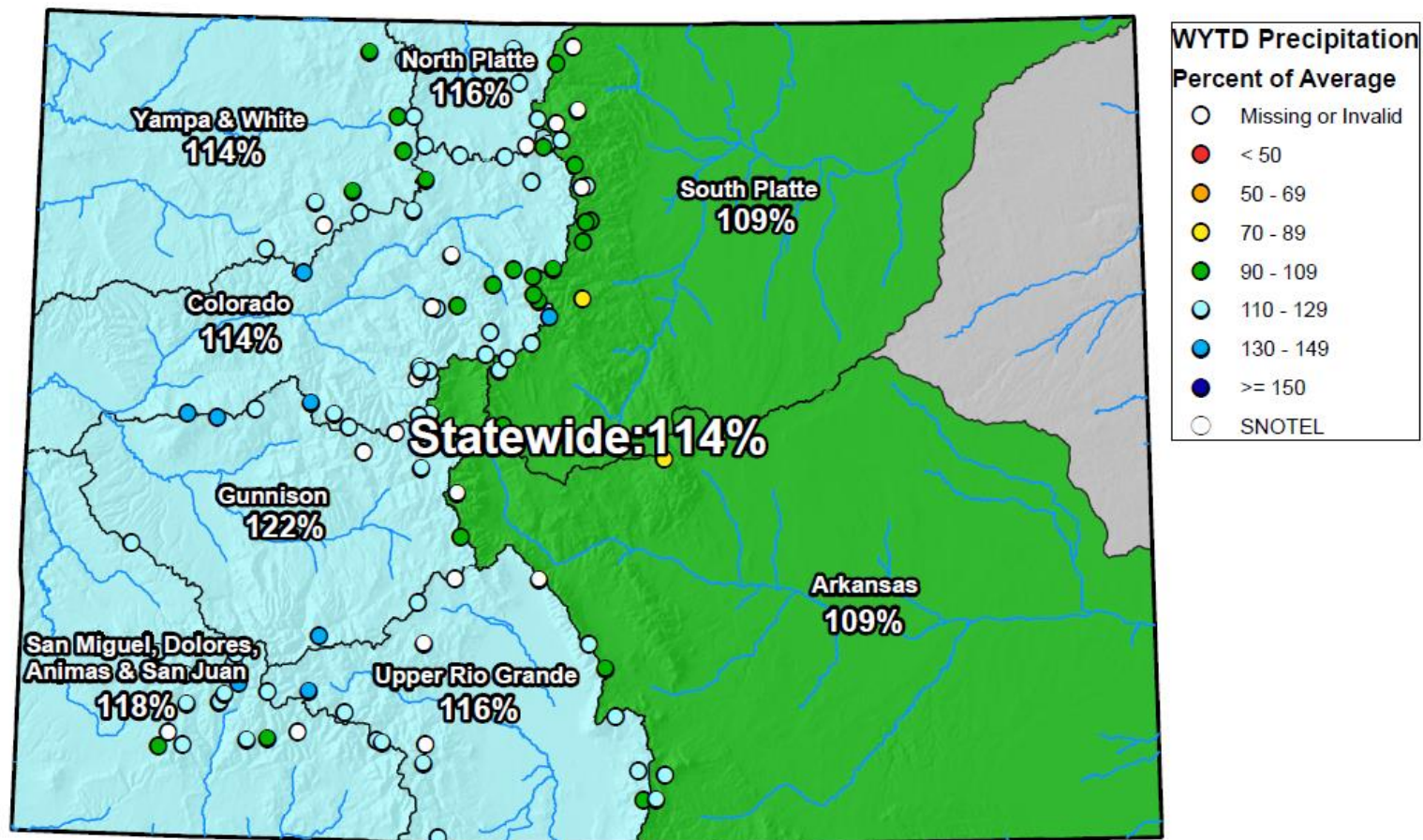
## Colorado Statewide High/Low Year-to-Date Precipitation Summary

*Based on Provisional SNOTEL data as of Aug 26, 2019*



## Colorado SNOTEL Water Year to Date Precipitation

Current as of Aug 26, 2019

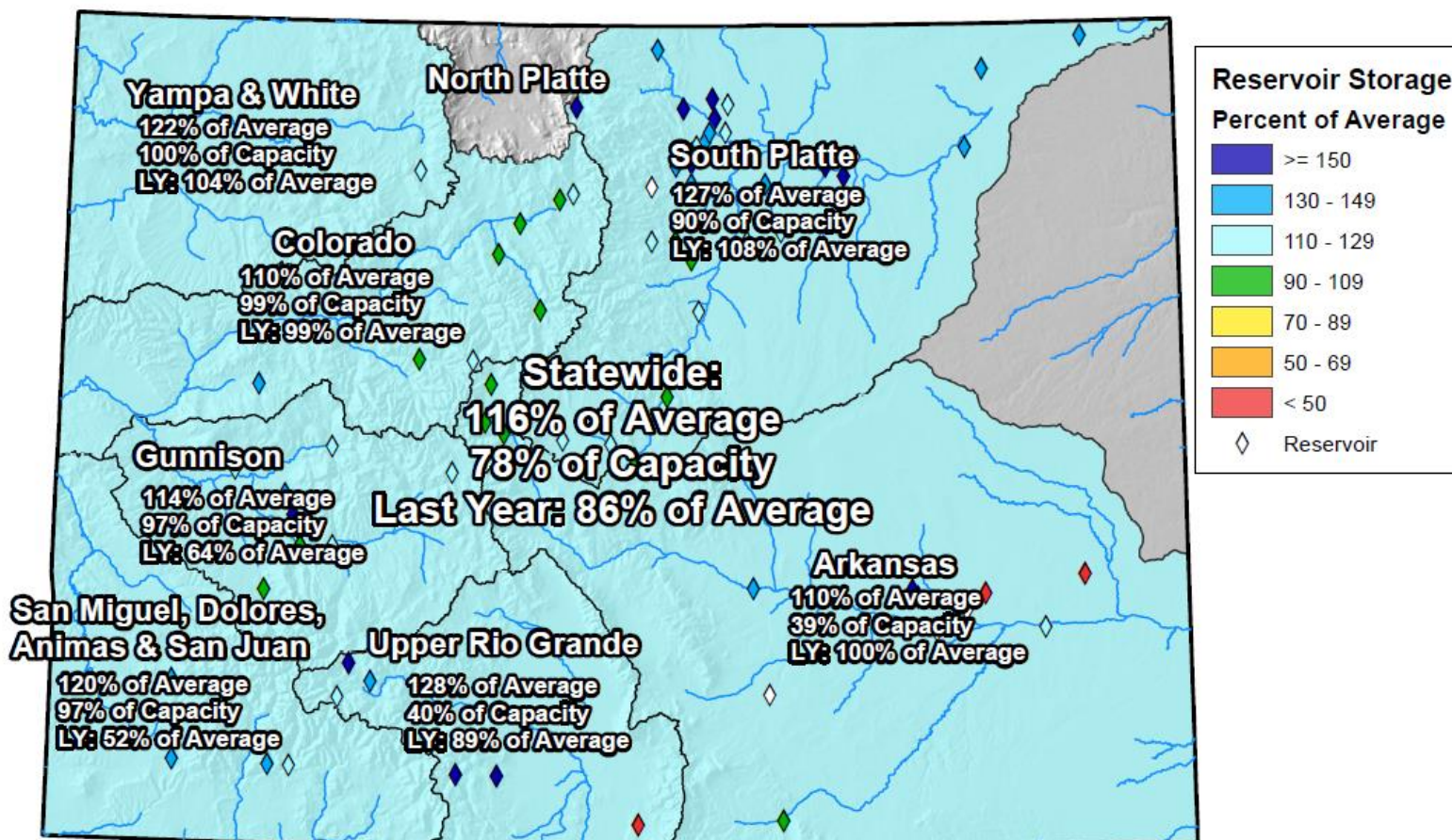


0 25 50 100 150 200 Miles



## Colorado Monthly Reservoir Storage Summary

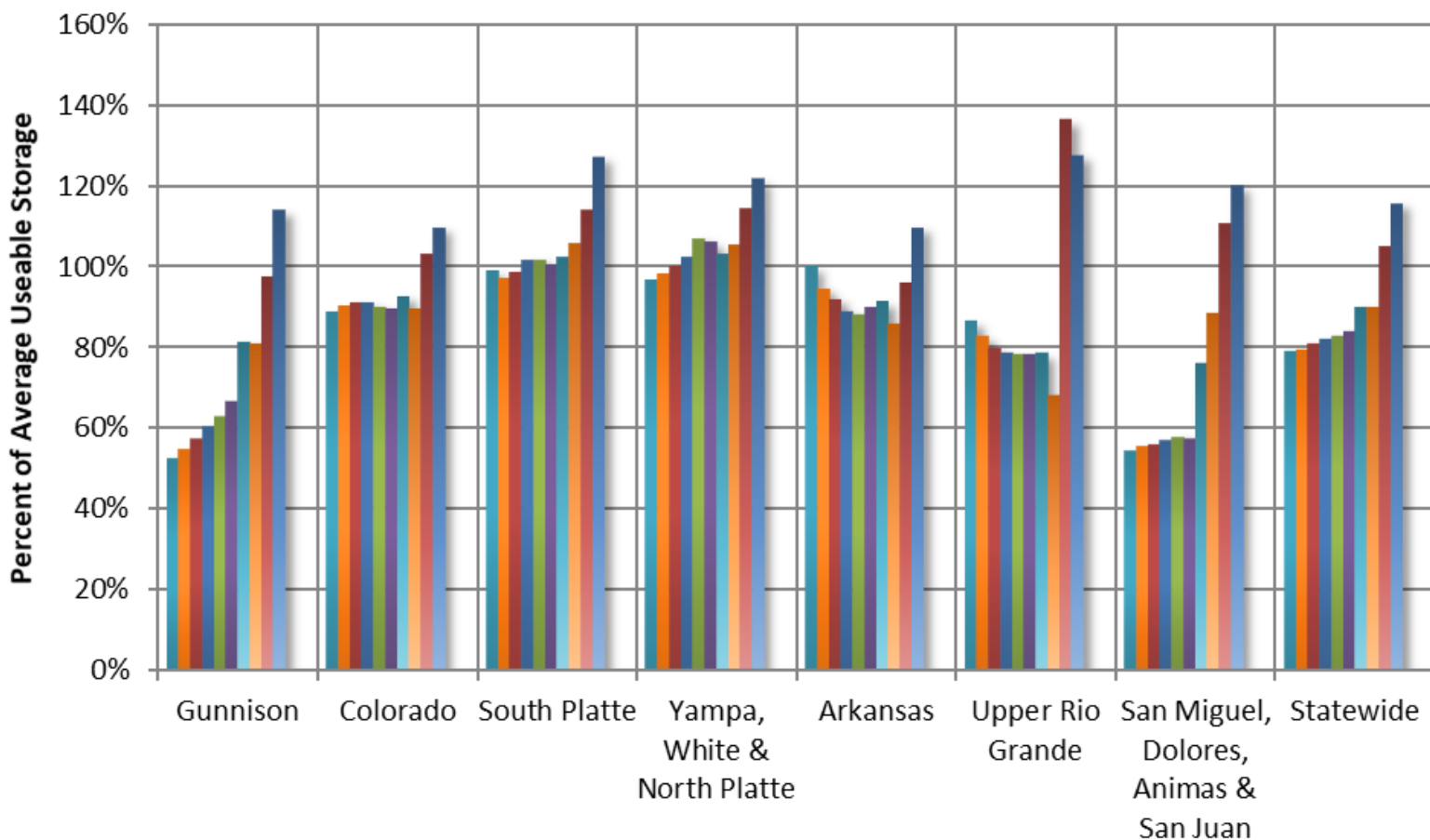
End of July 2019



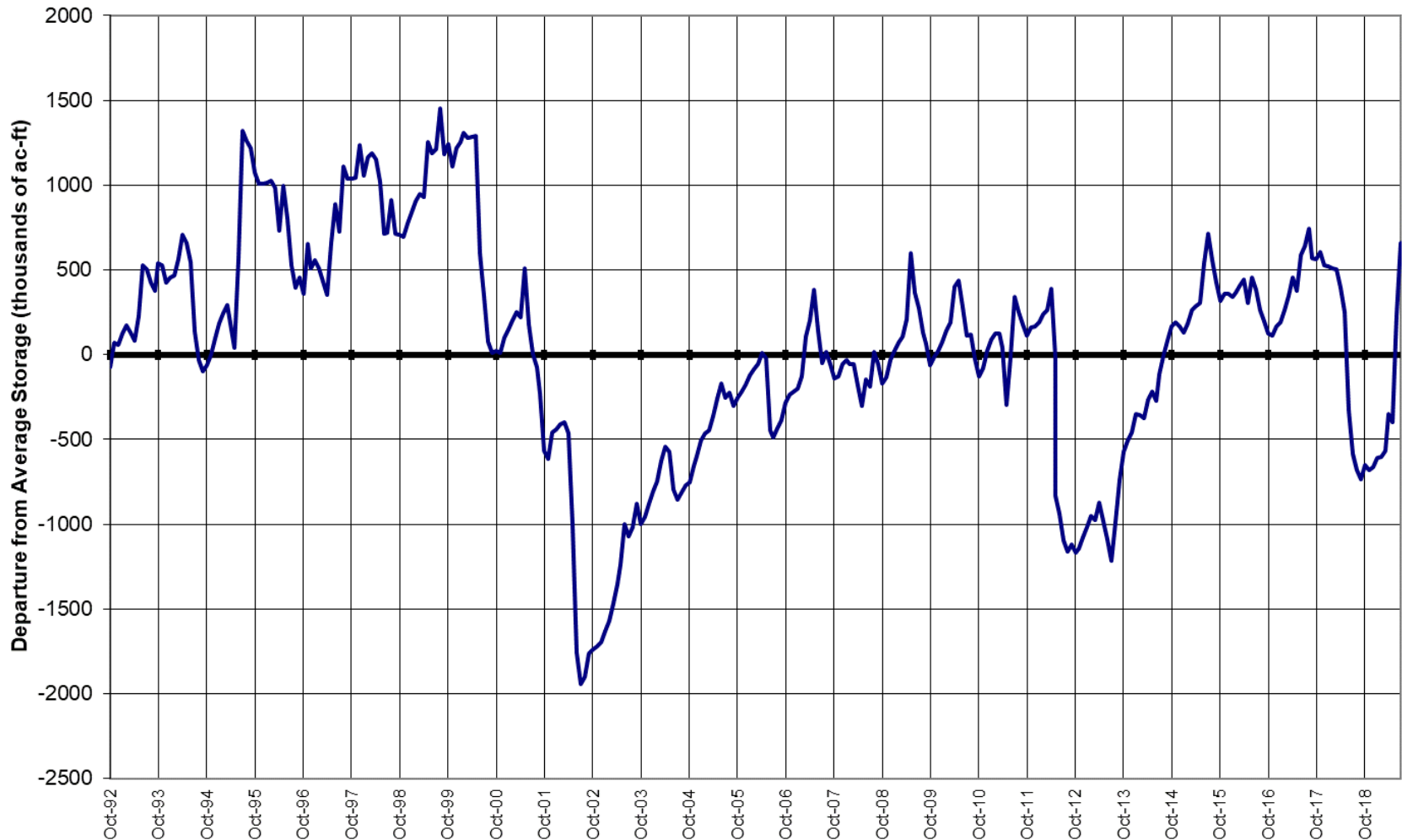
0 25 50 100 150 200 Miles

## 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







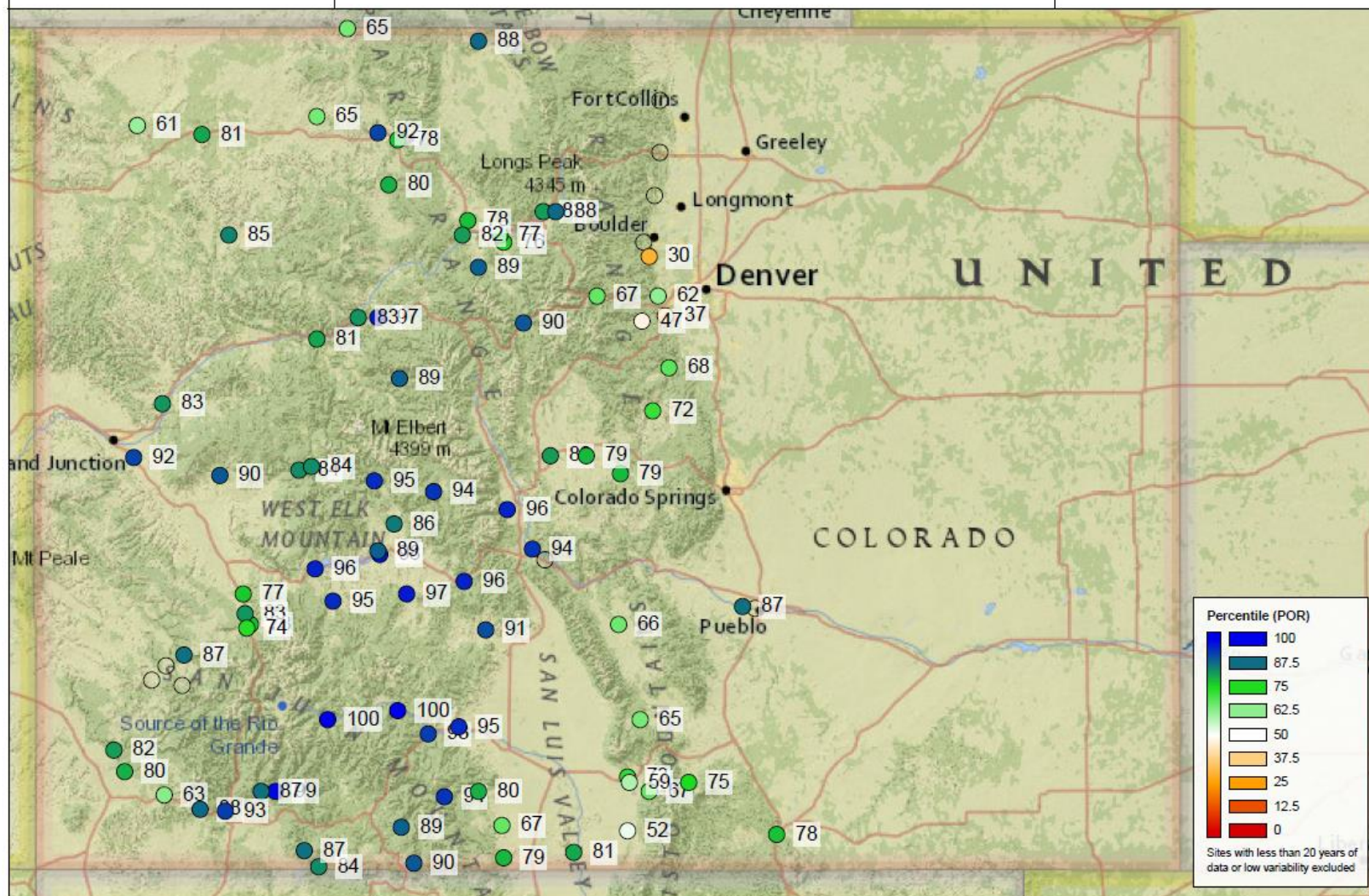
United States Department of Agriculture

# Colorado Snow Surveys

4 month Adjusted Volume, Observed

Percentile (POR)

April 1, 2019 - July 31, 2019



Natural Resources  
Conservation Service  
United States Department of Agriculture



0 10 20 40 60 80 100 Miles  
Created 8-27-2019

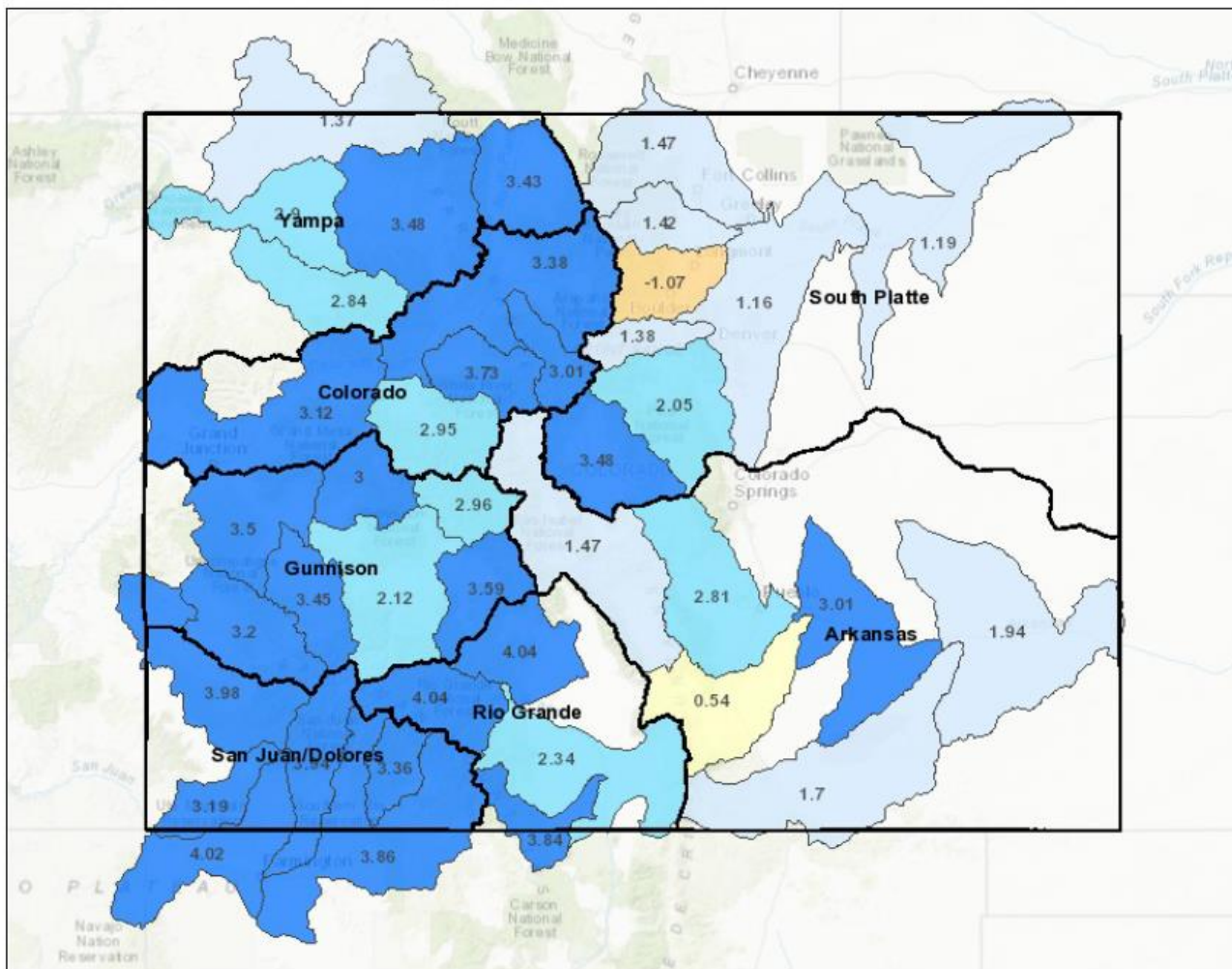
July 1, 2019 SWSI



**CDSS**

Colorado's Decision Support Systems

**SWSI July 1, 2019**



**Legend**

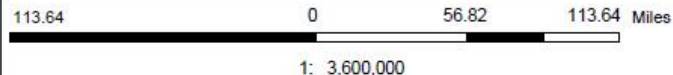
**SWSI - Current Report**

- SWSI Not Applicable (-99.99)
- Extremely Dry (-3.0 to -4.2)
- Moderately Dry (-2.0 to -2.9)
- Slightly Dry (-1.0 to -1.9)
- Near Average (-0.9 to 0.9)
- Slightly Wet (1.0 to 1.9)
- Moderately Wet (2.0 to 2.9)
- Extremely Wet (3.0 to 4.2)
- Water Division

**Location**



**Notes**

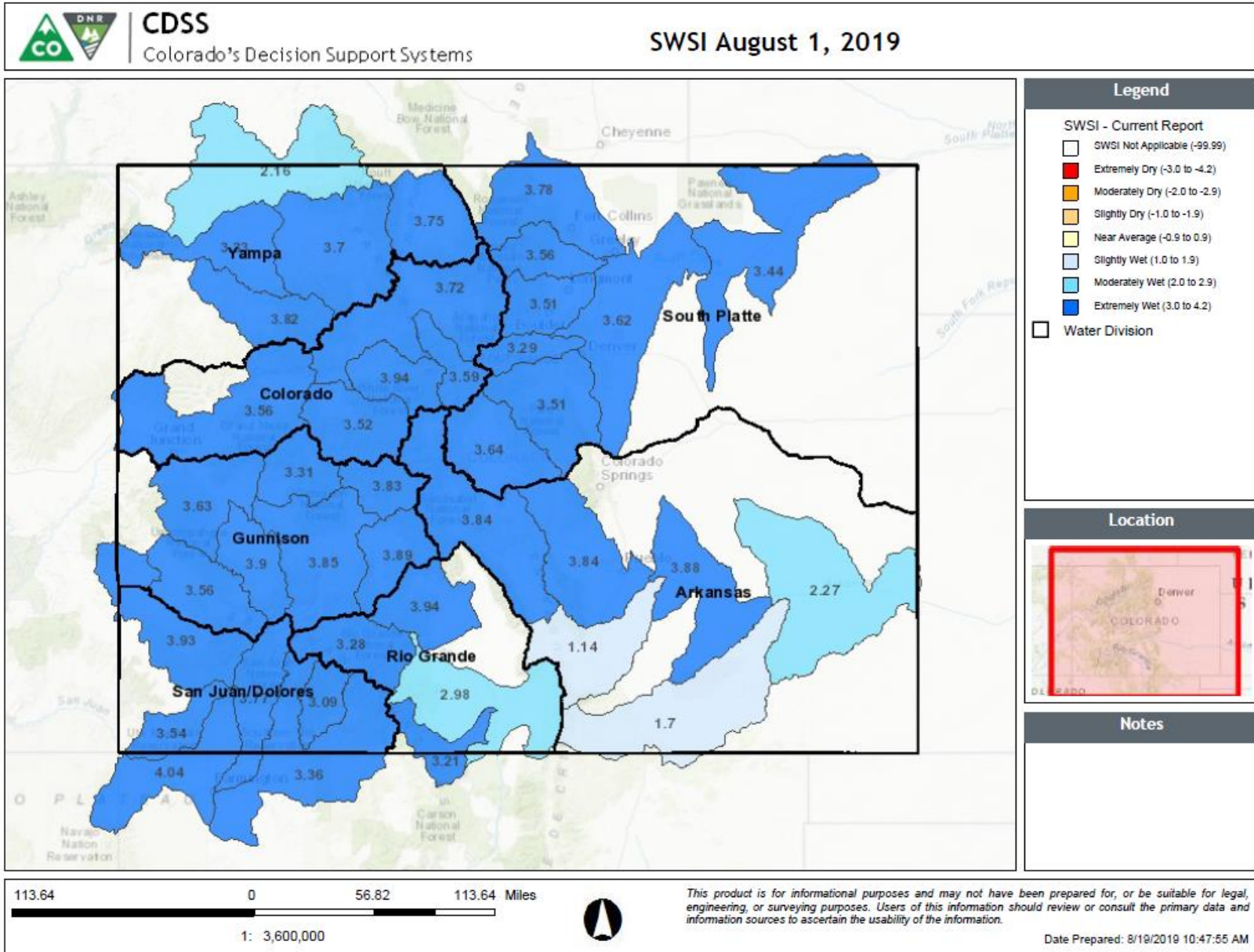


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Date Prepared: 7/19/2019 8:28:25 AM



August 1, 2019 SWSI



# Summary

- **Precipitation Statewide**

- All of July and August to date have remained dry with below average precipitation in all major basins
- Only a handful of individual SNOTEL sites have received above average August-to-date precipitation

- **Reservoir storage is now above average in all major basins**

- Storage ranges from 110-128 percent of average in the basins as is 116 percent of average statewide

- **62 out of 83 streamflow forecast points in the state ranked in at least the 75<sup>th</sup> percentile for observed April-July streamflow**



United States Department of Agriculture

Colorado Snow Surveys

# Water Availability Task Force Meeting

## August 26<sup>th</sup>, 2019

### 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/>





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