



United States Department of Agriculture

Colorado Snow Surveys

# Water Availability Task Force Meeting

## November 20<sup>th</sup>, 2020

### NRCS Snow Survey and Water Supply Forecasting Program

Karl Wetlaufer

Hydrologist

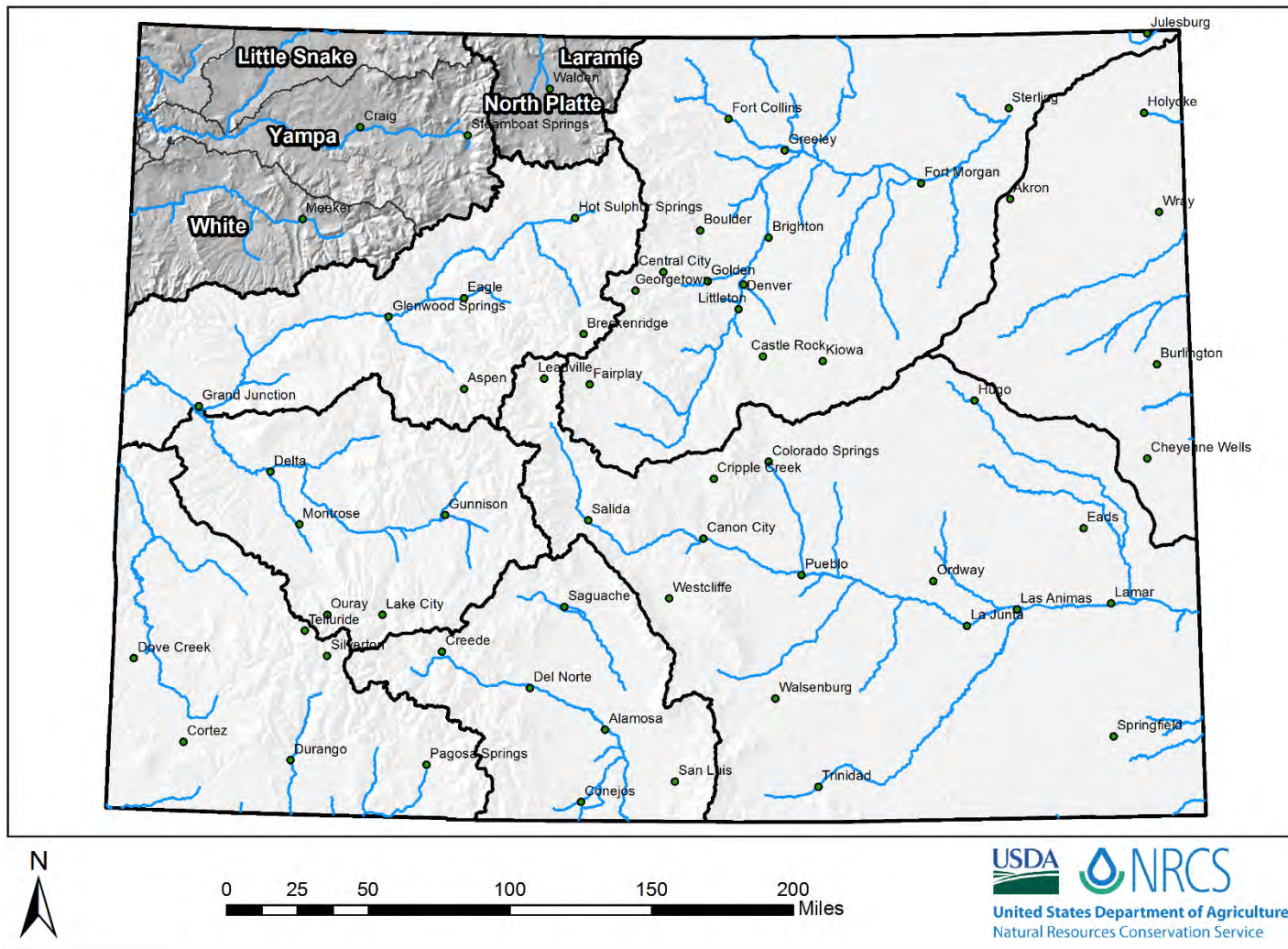
Asst. Snow Survey Supervisor

720-544-2853

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

## Major Basin Summary

Yampa, White, and North Platte River Basins



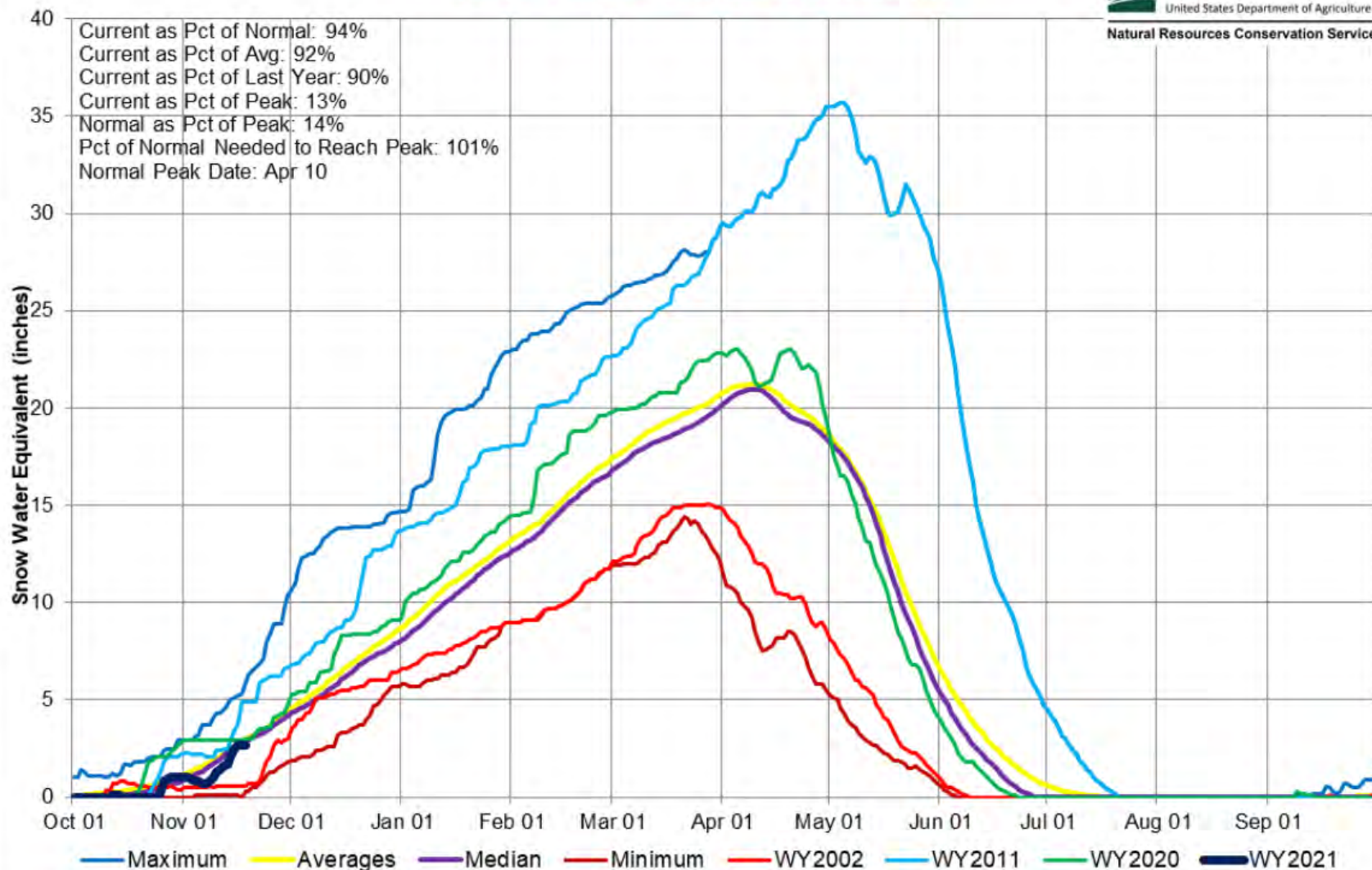
## Yampa and White River Basins High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Nov 18, 2020*



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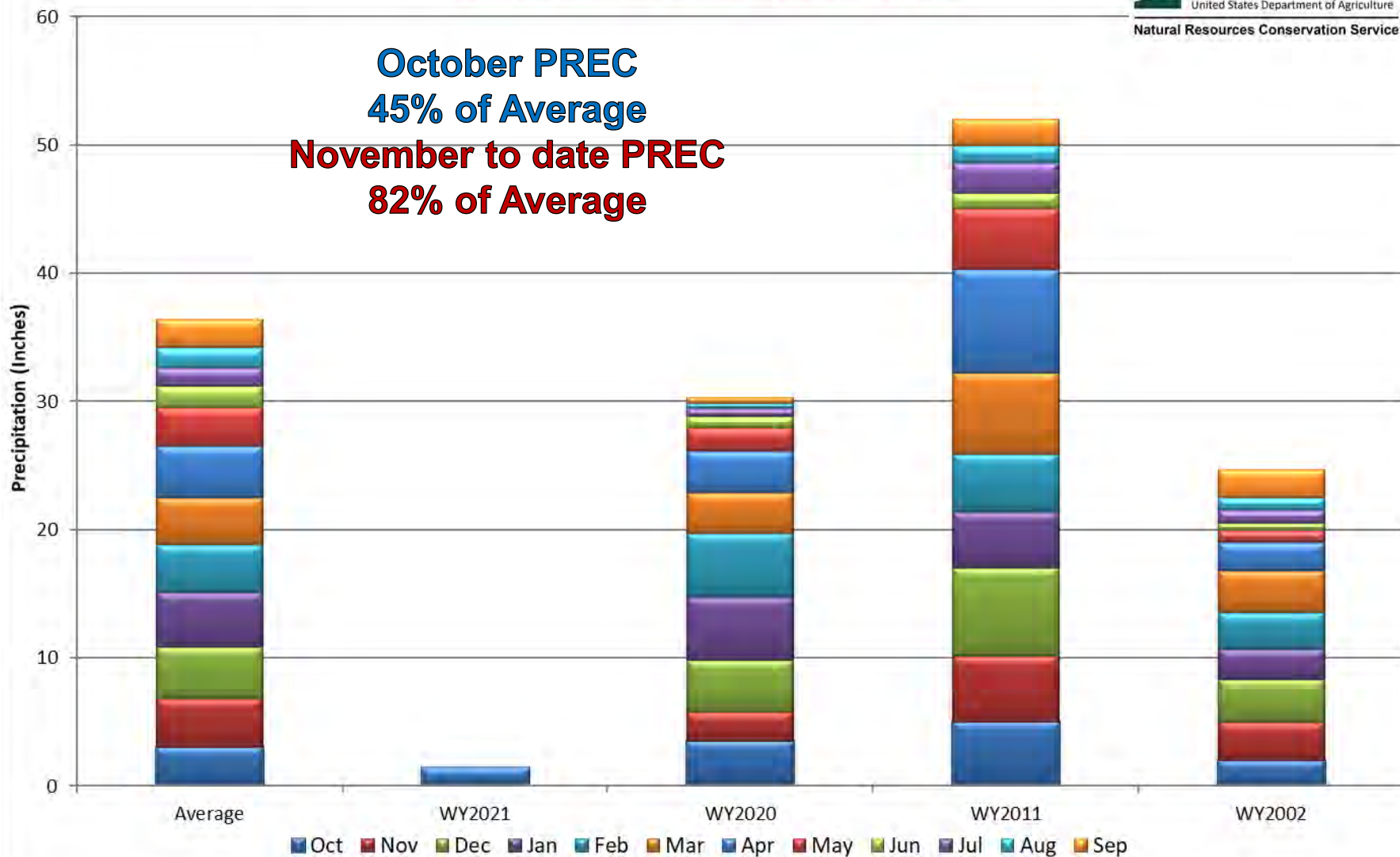
Natural Resources Conservation Service



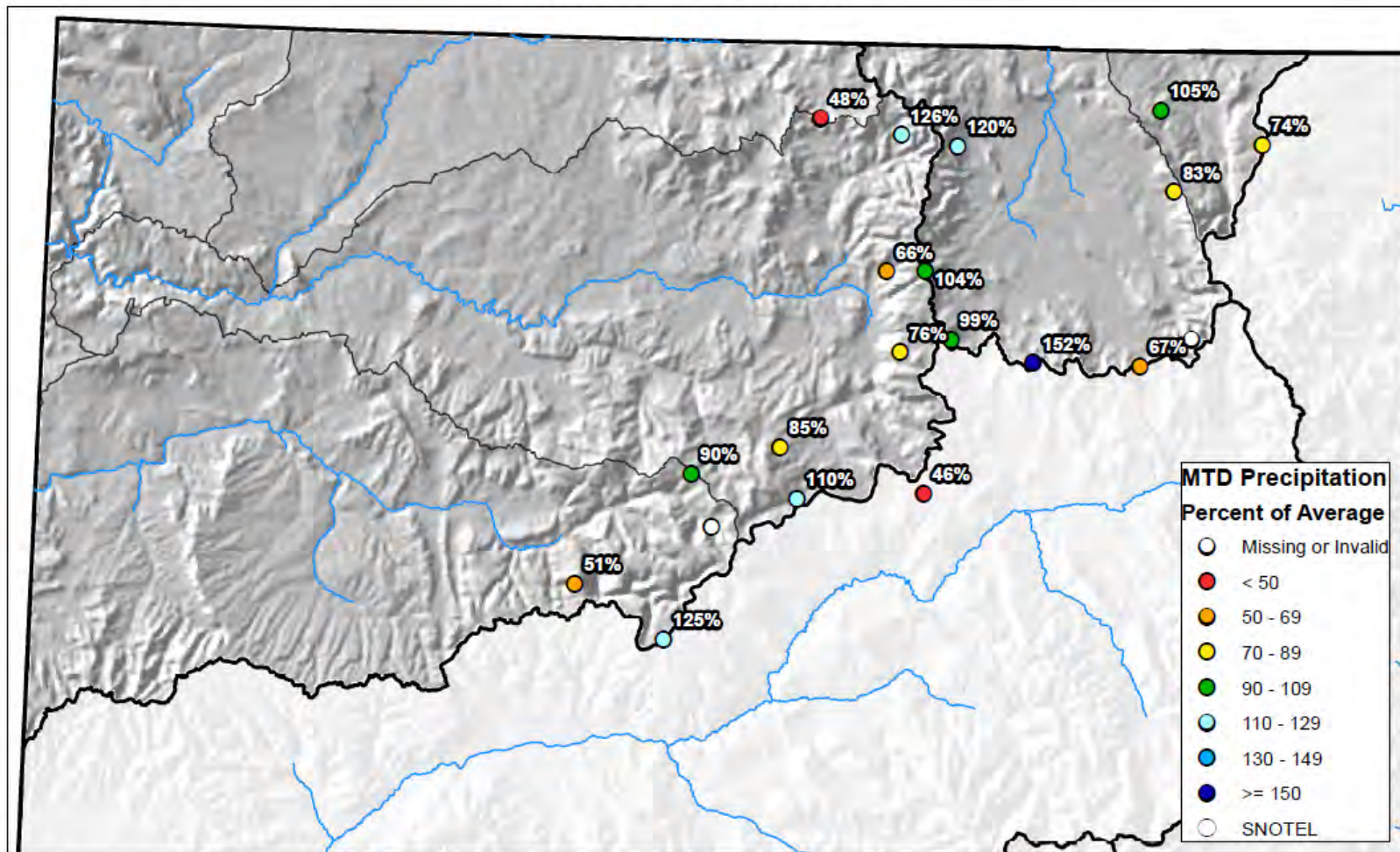


## Yampa and White River Basins High/Low Monthly Precipitation Summary

*Based on Provisional SNOTEL data as of Nov 18, 2020*



## Yampa, White, and North Platte River Basins Month to Date Precipitation Summary Current as of Nov 18, 2020

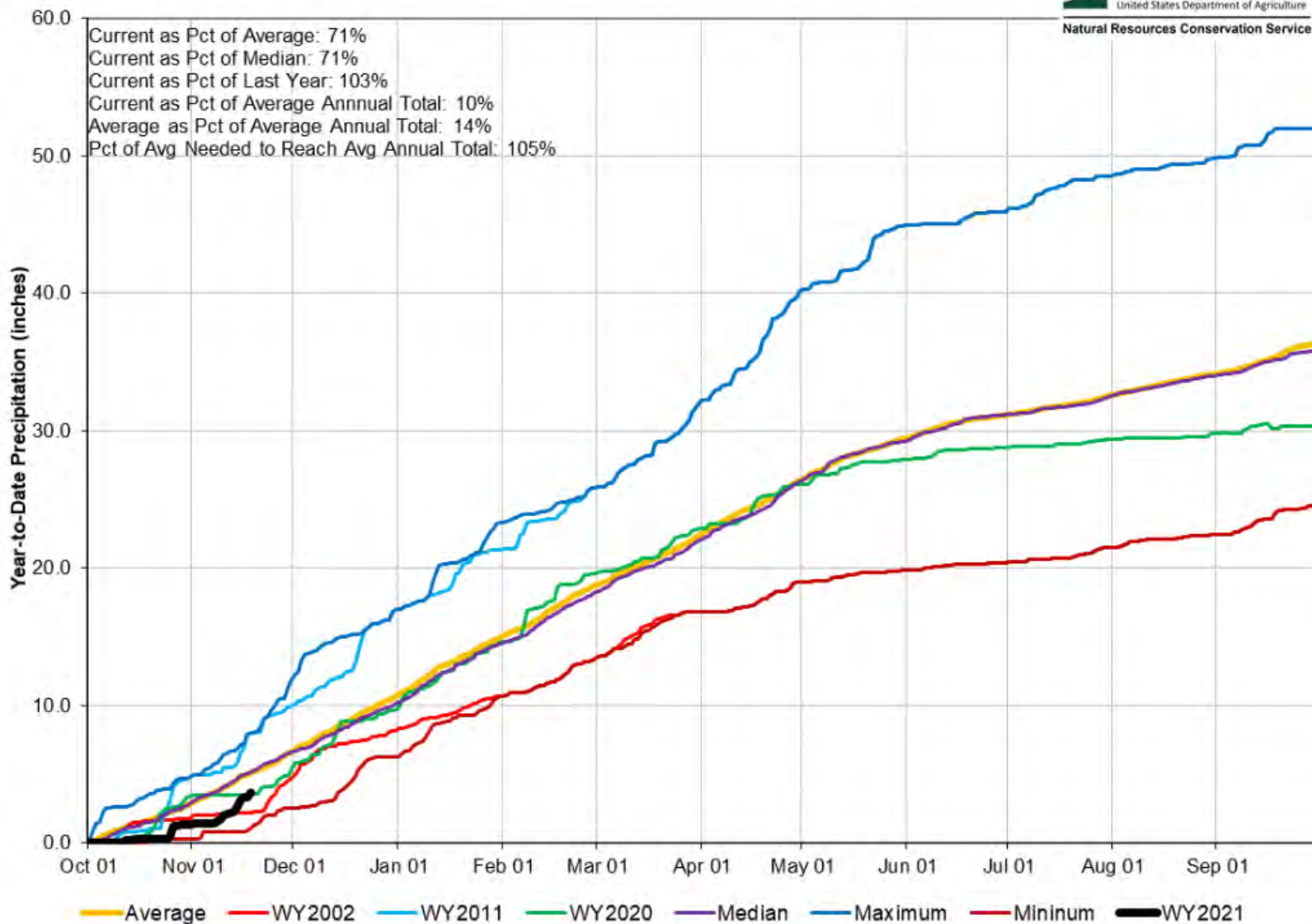
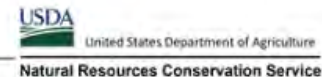


0 10 20 40 60 80 Miles



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

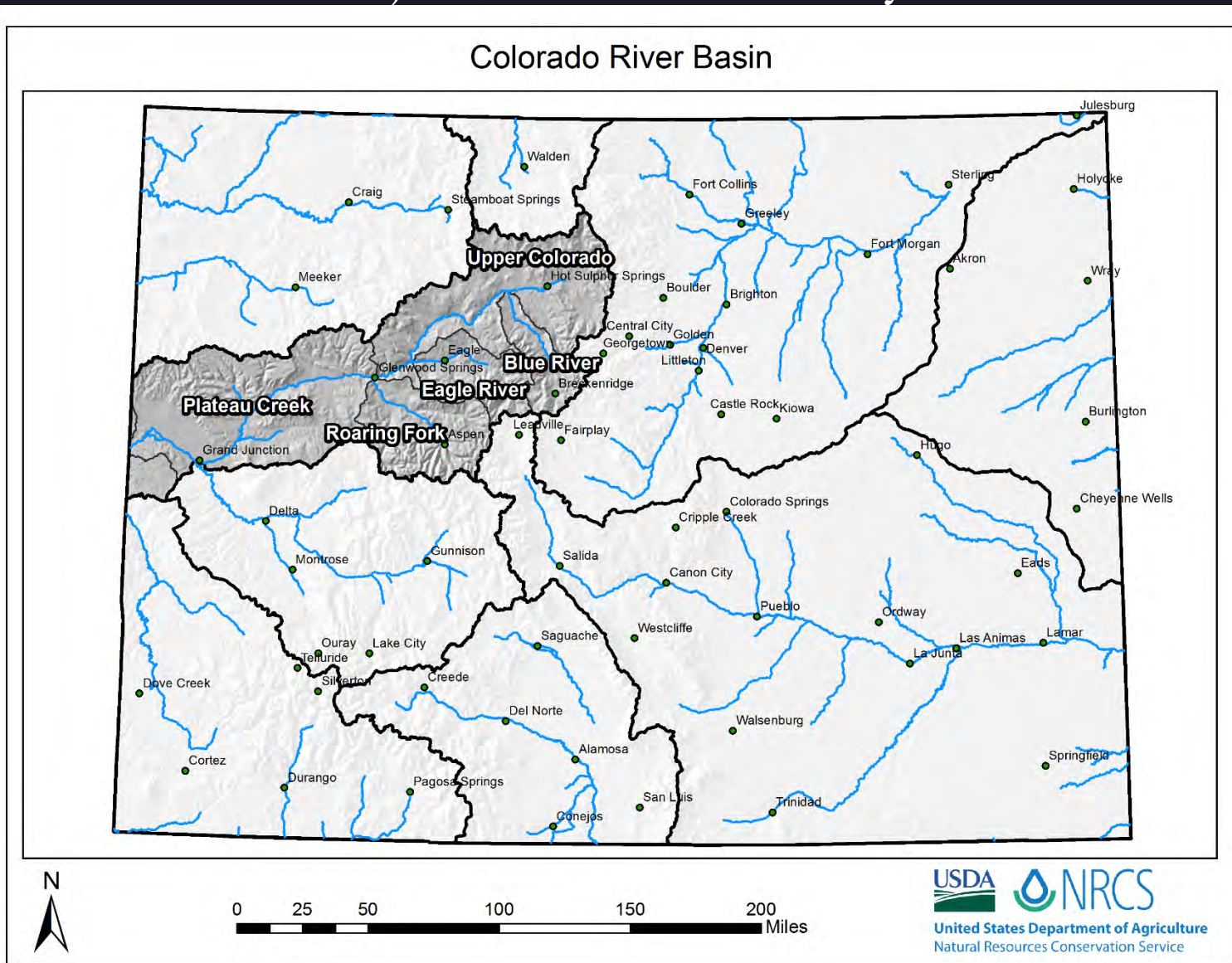
*Based on Provisional SNOTEL data as of Nov 18, 2020*







## Major Basin Summary





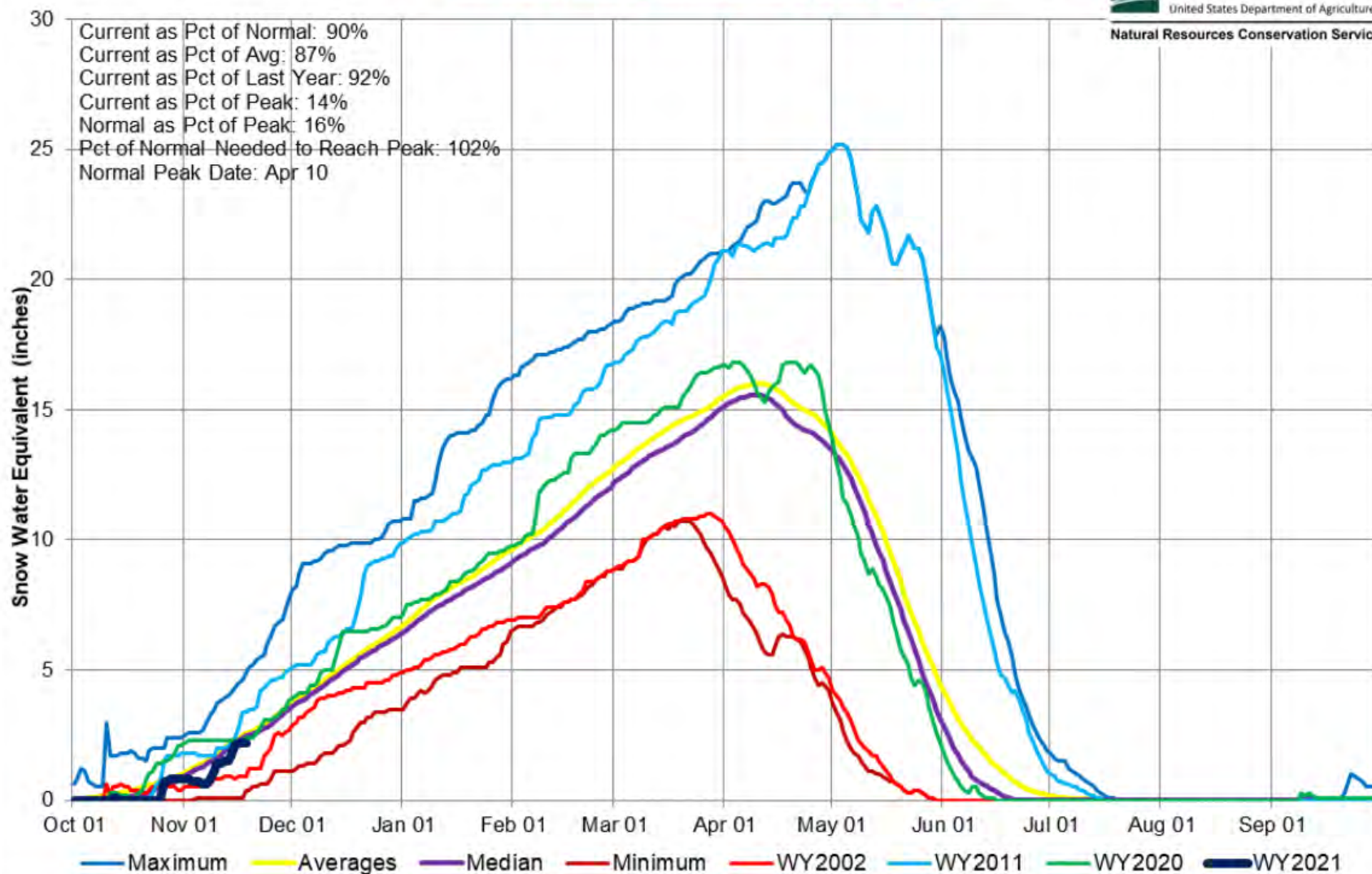
## Upper Colorado River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Nov 18, 2020



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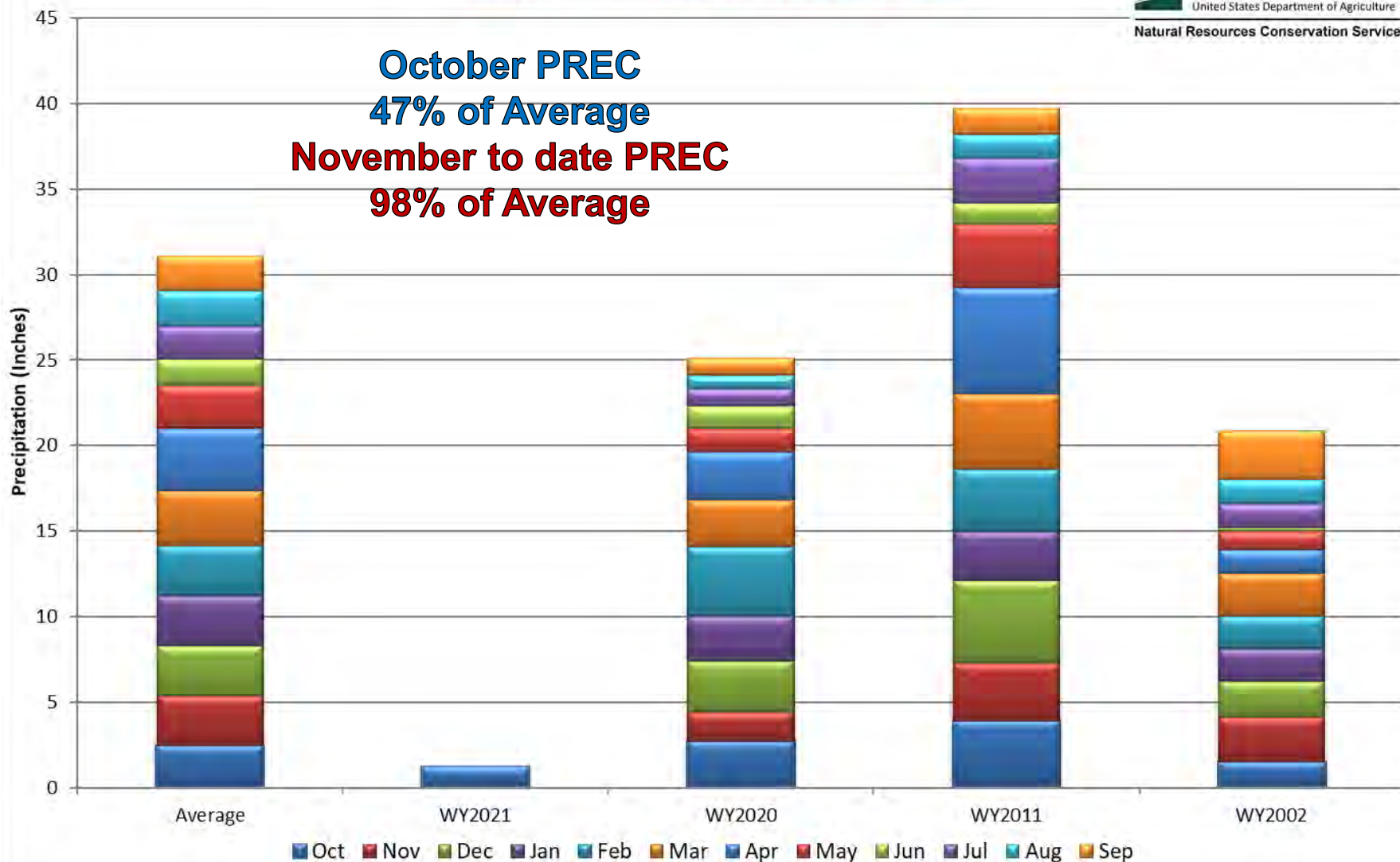
## Upper Colorado River Basin High/Low Monthly Precipitation Summary

*Based on Provisional SNOTEL data as of Nov 18, 2020*



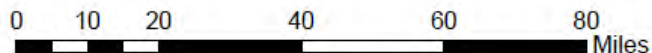
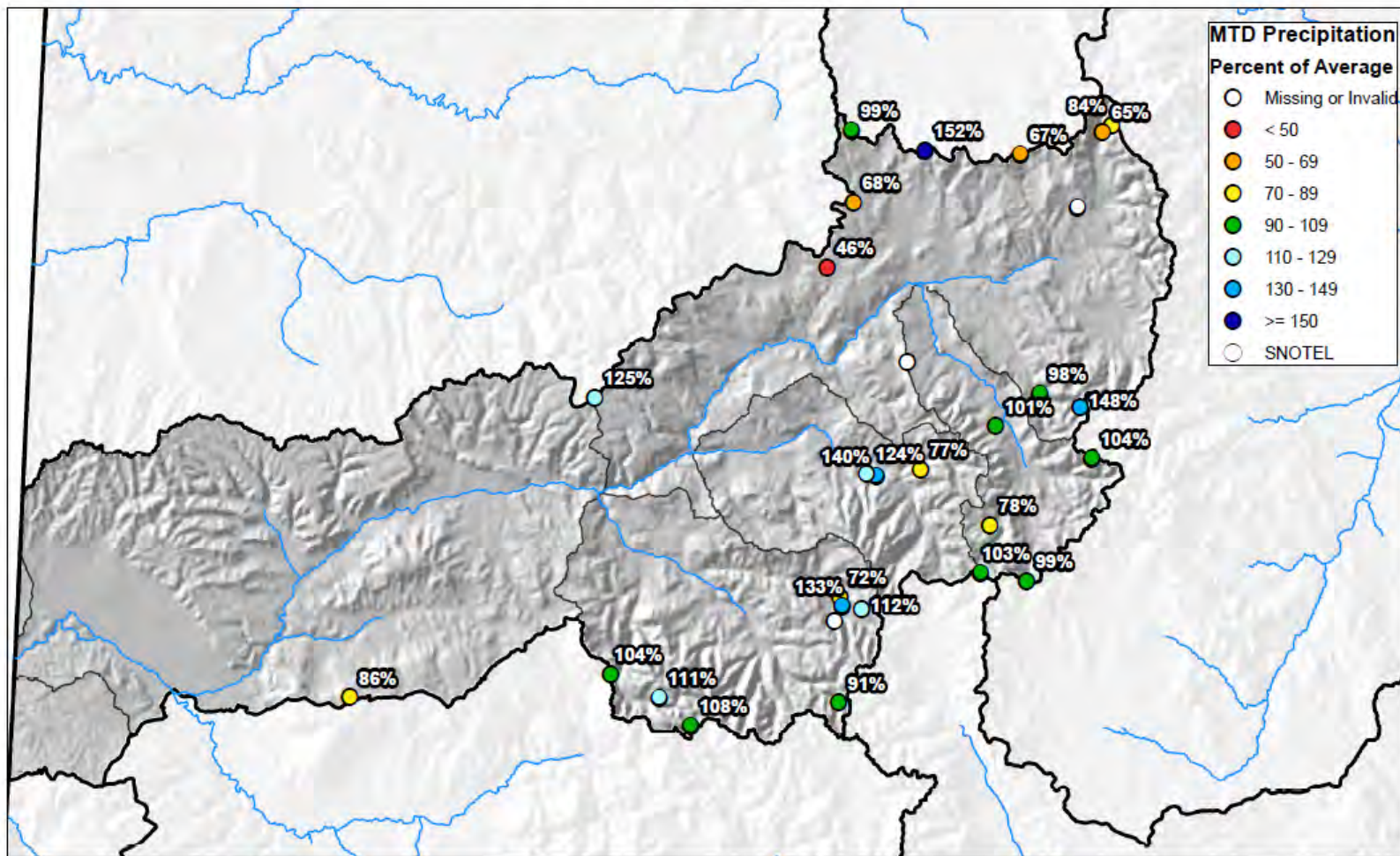
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## Upper Colorado River Basin Month to Date Precipitation Summary Current as of Nov 18, 2020



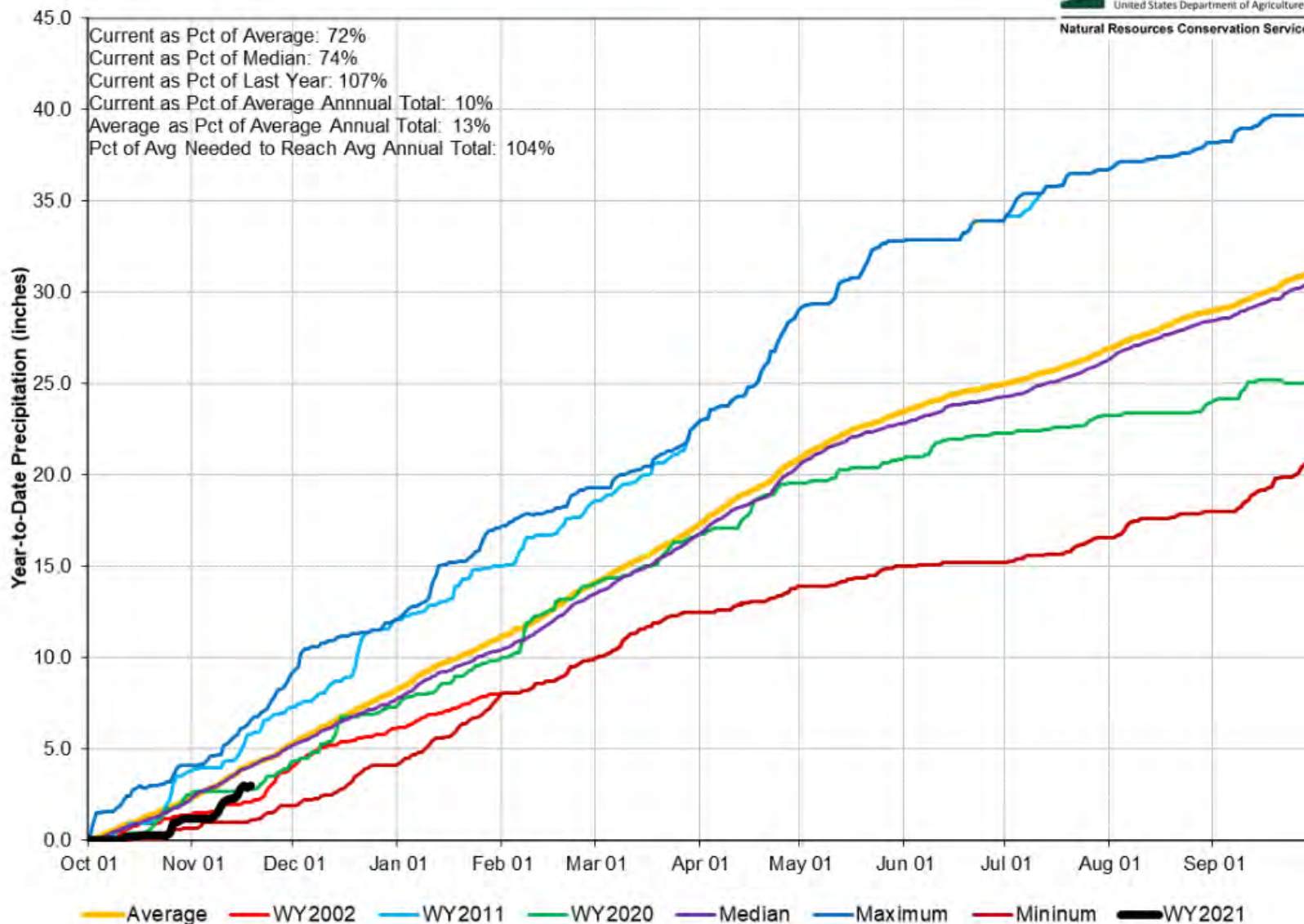
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## Upper Colorado River Basin High/Low Year-to-Date Precipitation Summary

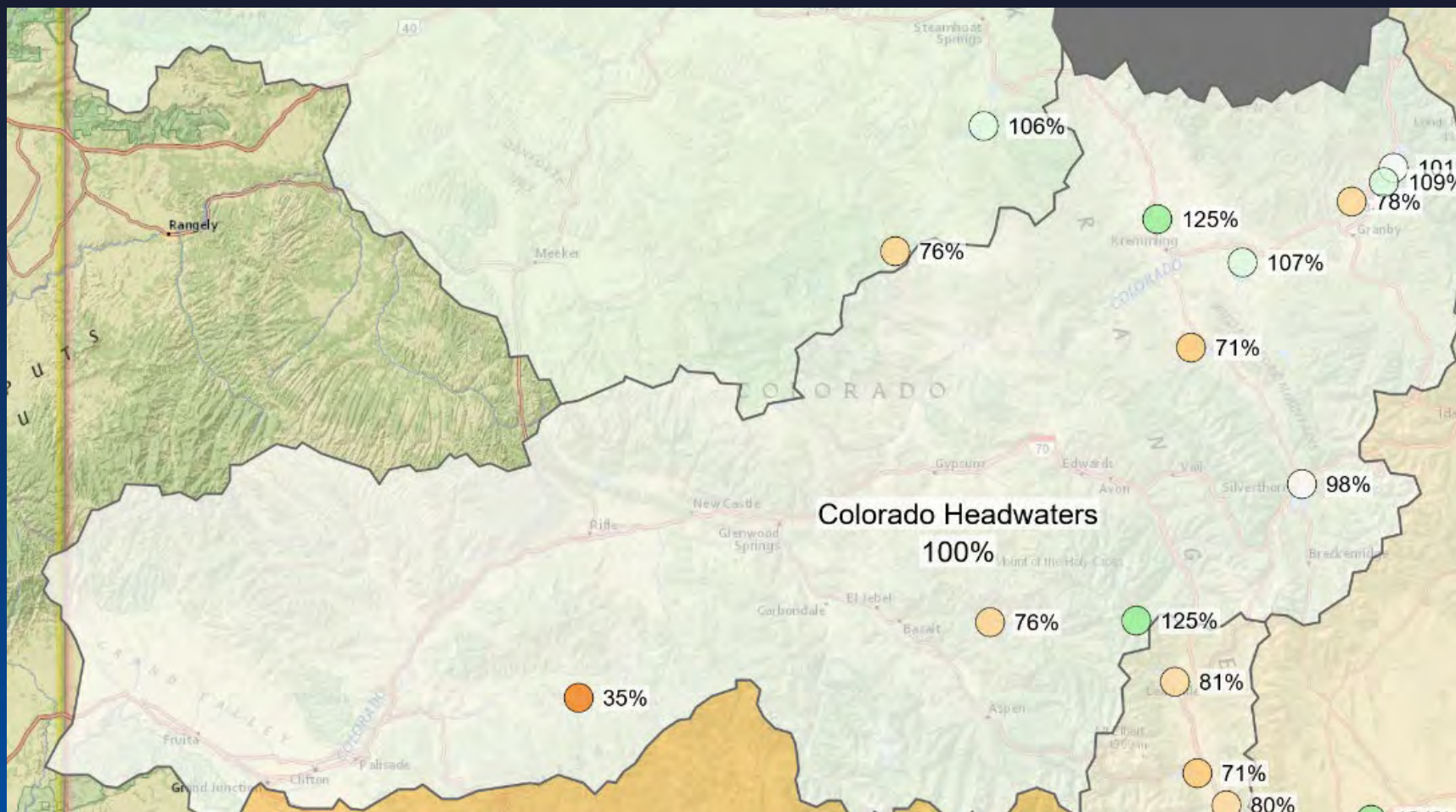
*Based on Provisional SNOTEL data as of Nov 18, 2020*

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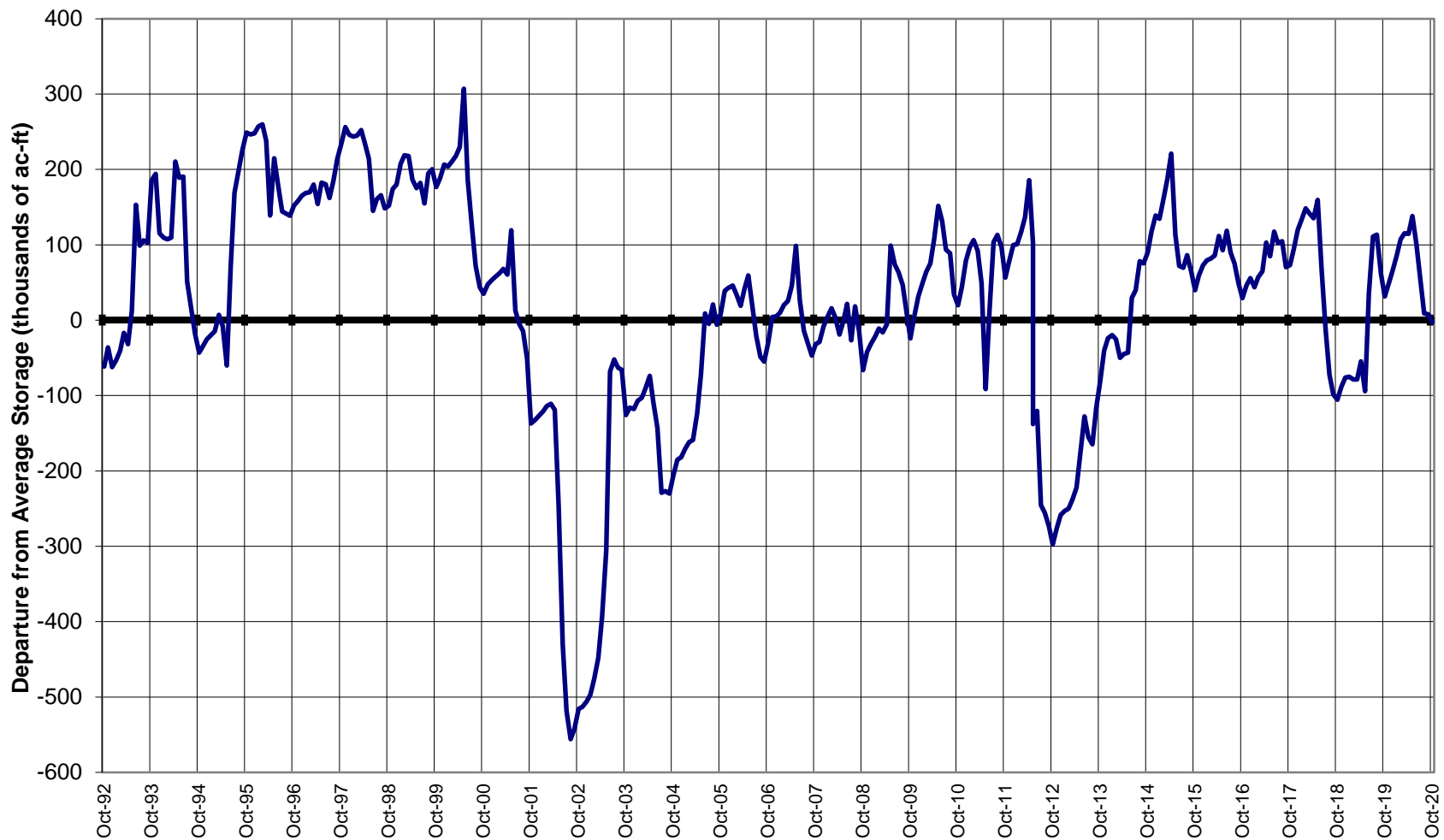




# Colorado Snow Surveys



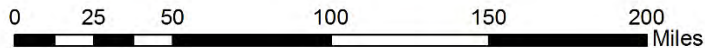
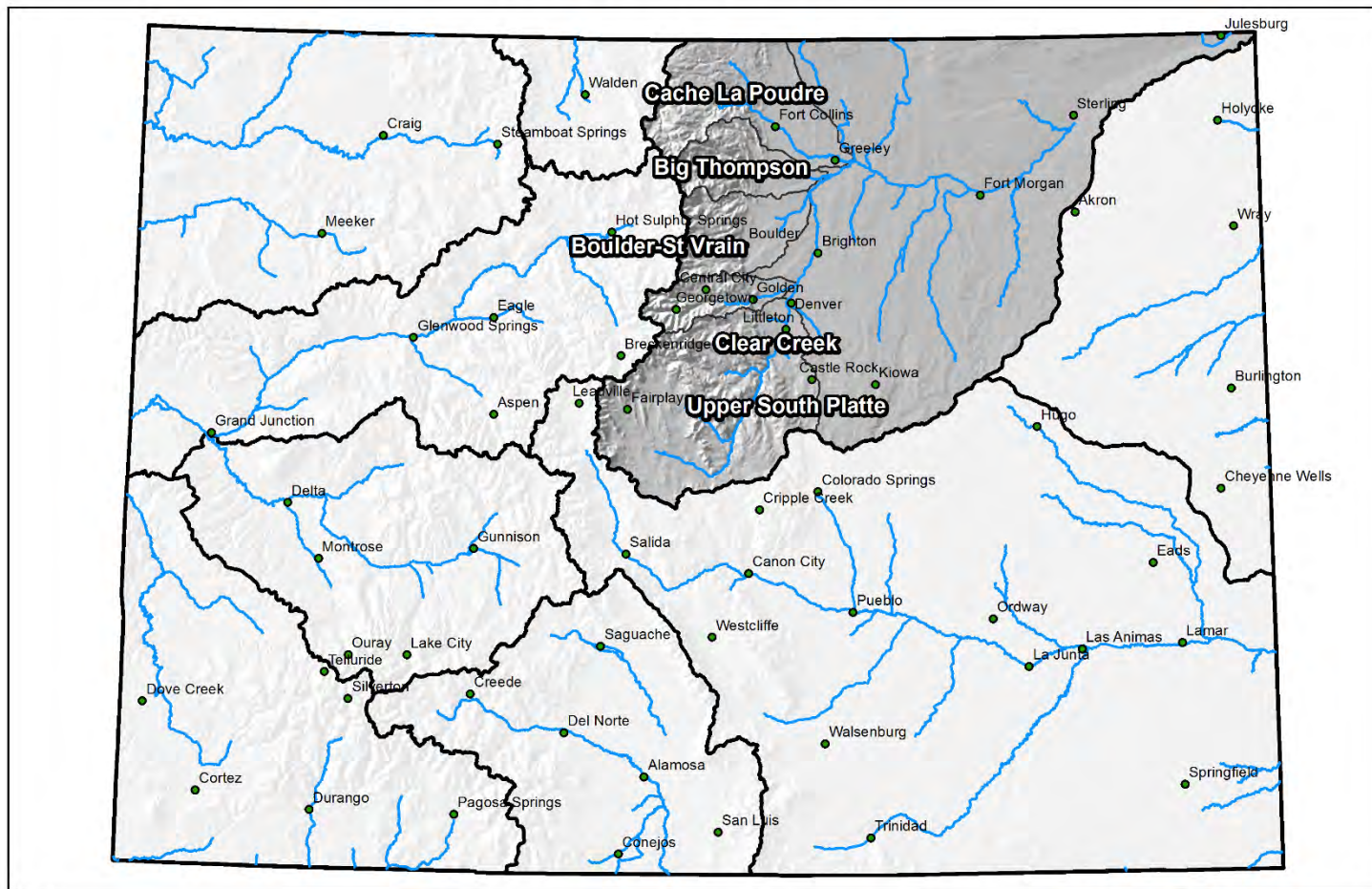
## COLORADO RIVER BASIN Reservoir Storage Departure from Average





## Major Basin Summary

### South Platte River Basin



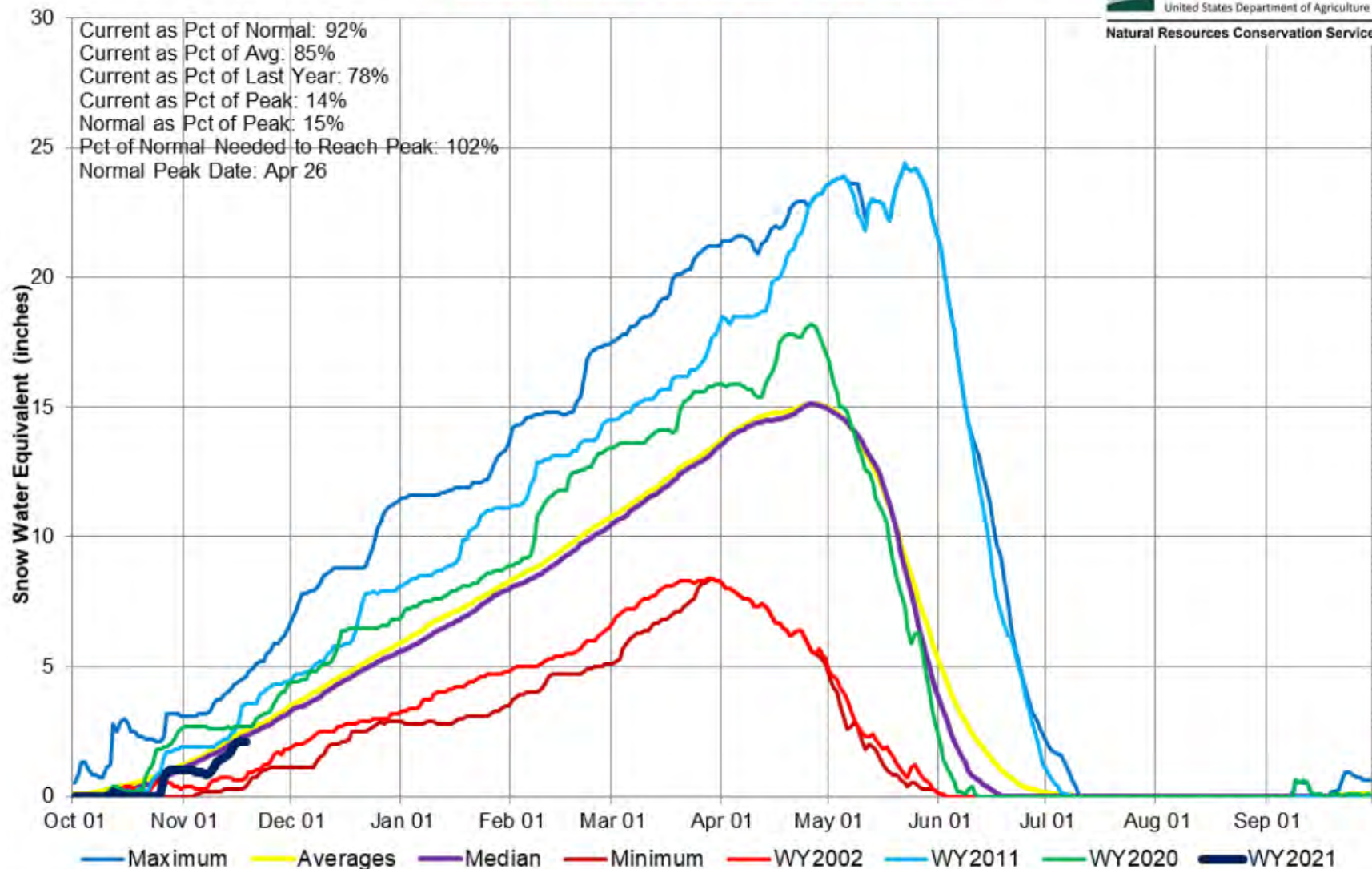
## South Platte River Basin High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Nov 18, 2020*



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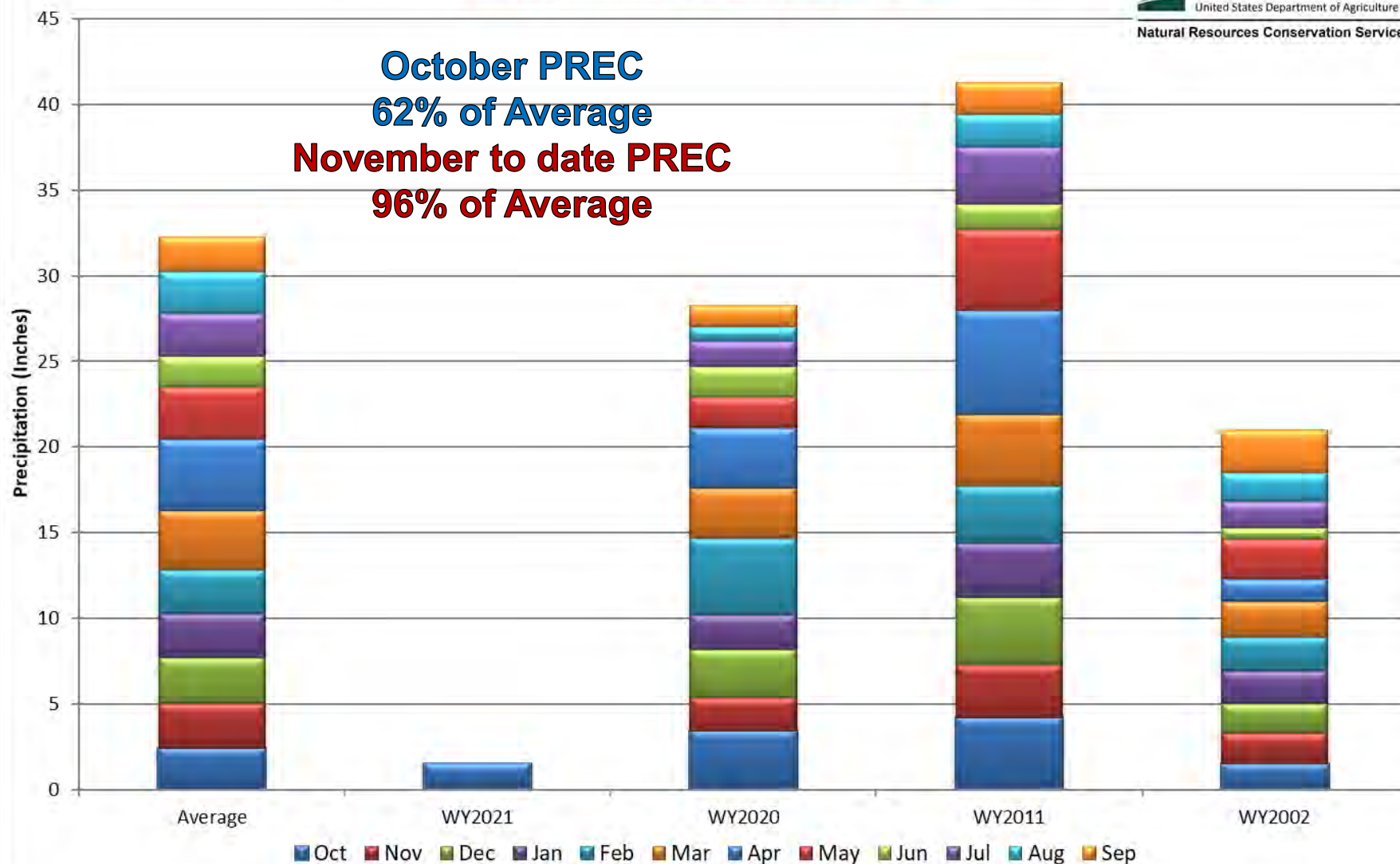
### South Platte River Basin High/Low Monthly Precipitation Summary

**Based on Provisional SNOTEL data as of Nov 18, 2020**



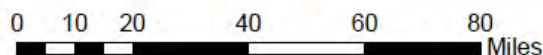
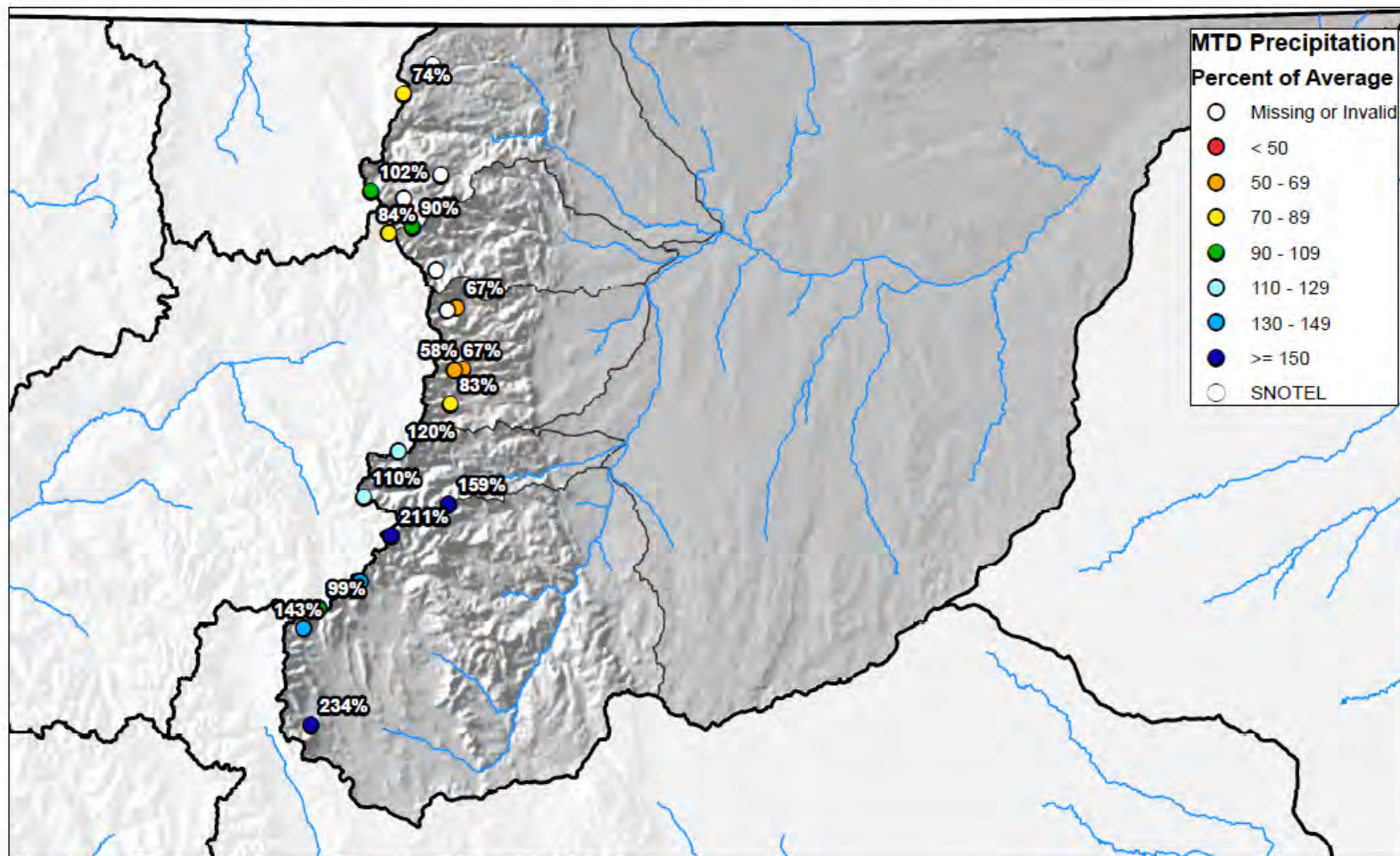
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## South Platte River Basin Month to Date Precipitation Summary

Current as of Nov 18, 2020

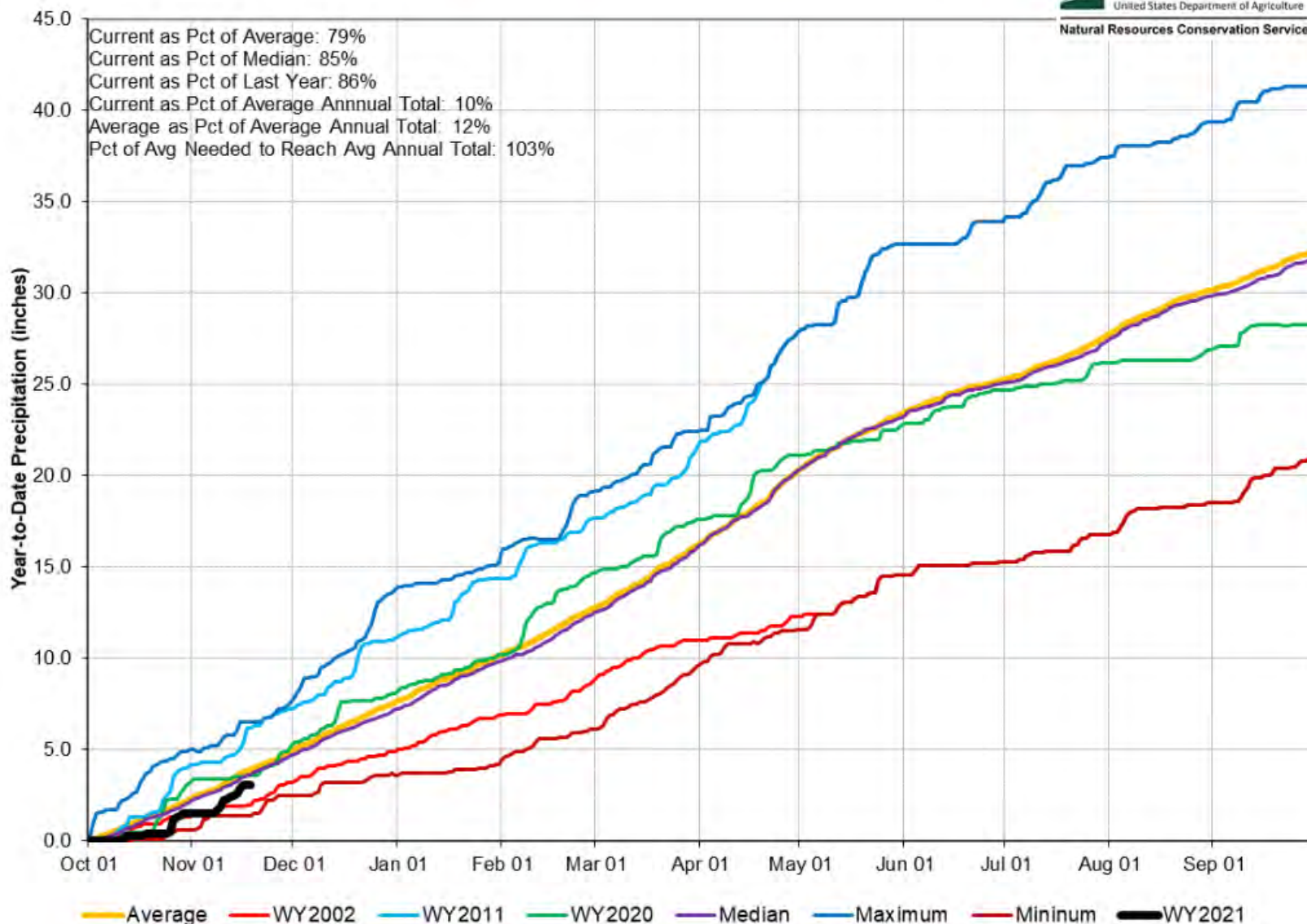




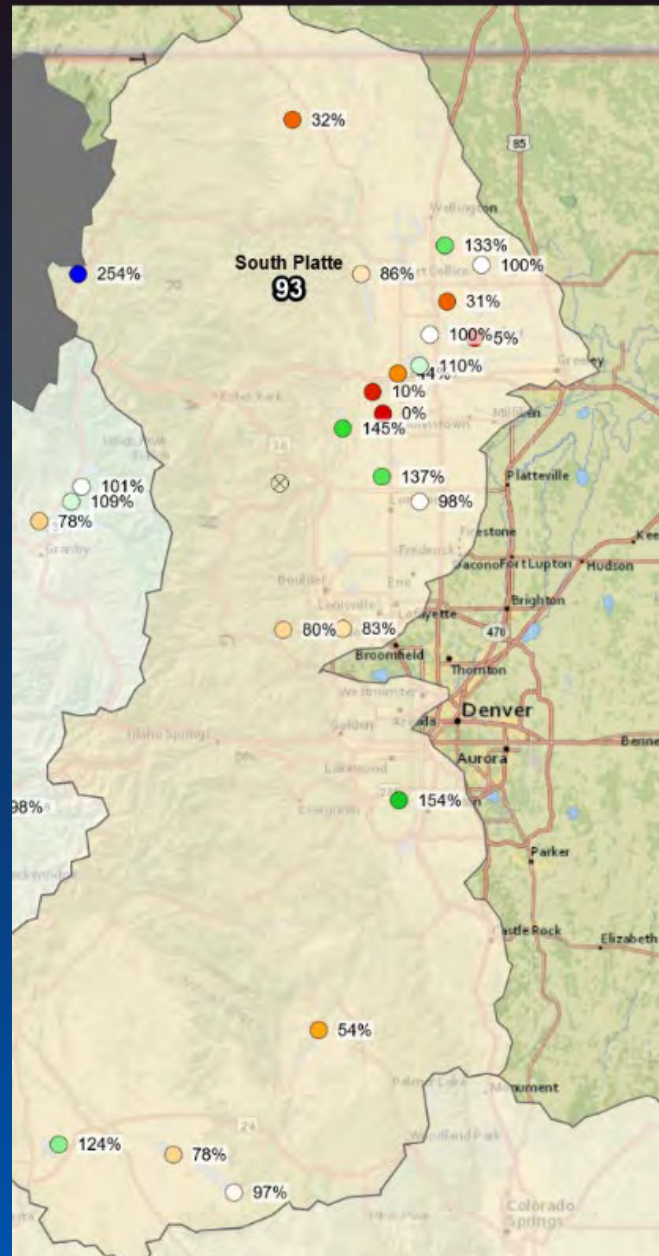
## South Platte River Basin High/Low Year-to-Date Precipitation Summary

*Based on Provisional SNOTEL data as of Nov 18, 2020*

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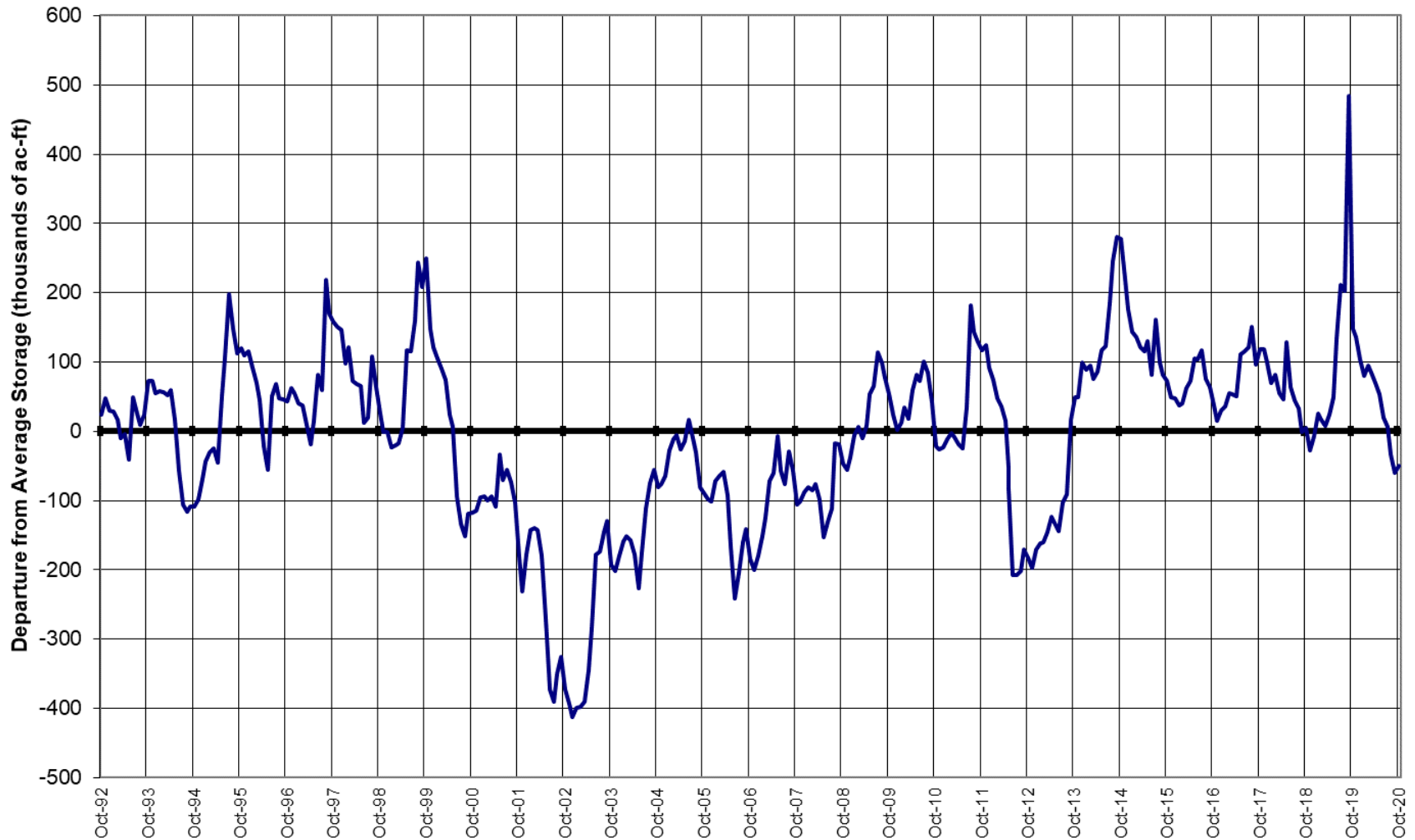


# Colorado Snow Surveys



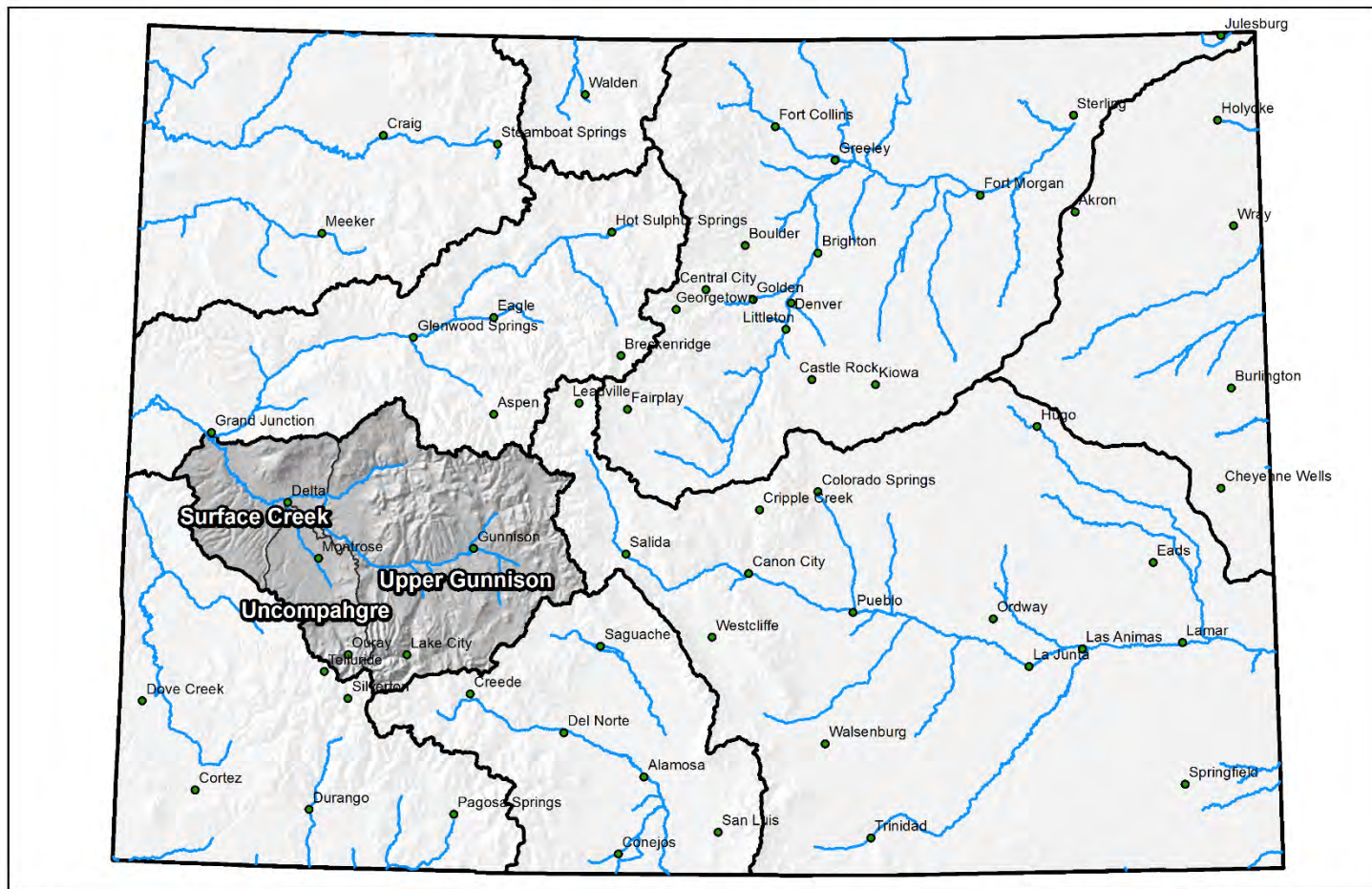


## SOUTH PLATTE RIVER BASIN Reservoir Storage Departure from Average



## Major Basin Summary

Gunnison River Basin



0 25 50 100 150 200 Miles



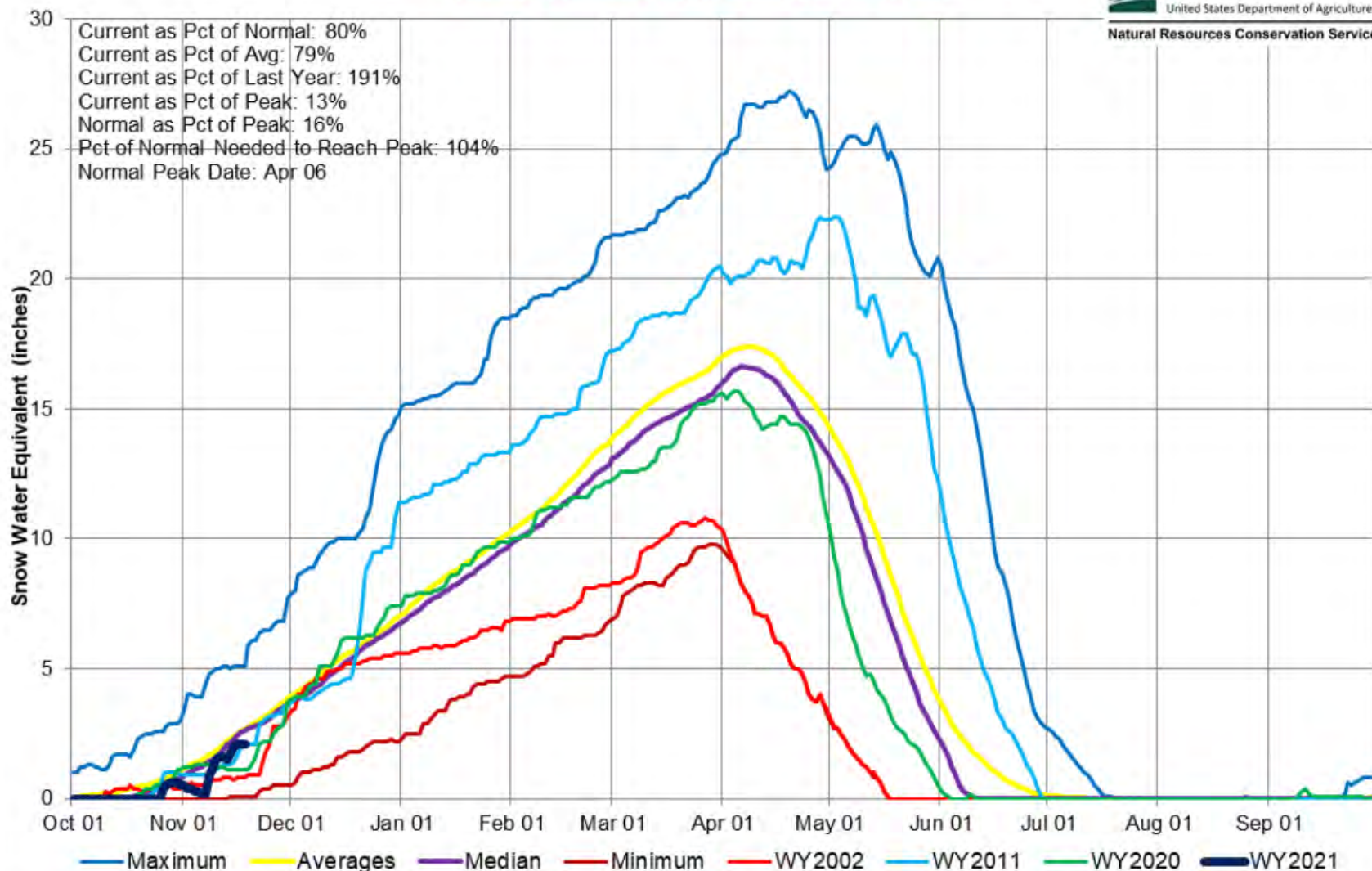
## Gunnison River Basin High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Nov 18, 2020*



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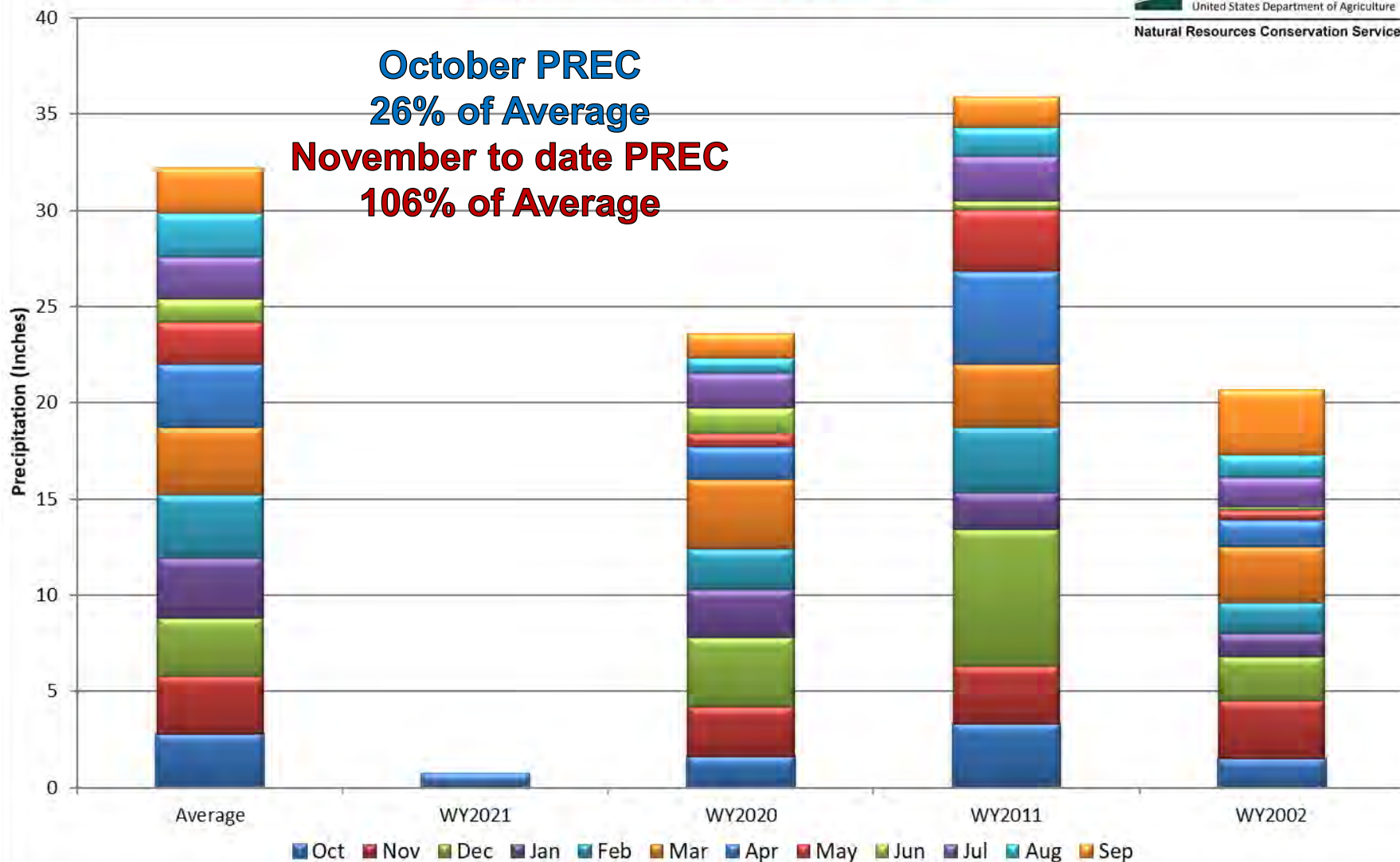
## Gunnison River Basin High/Low Monthly Precipitation Summary

*Based on Provisional SNOTEL data as of Nov 18, 2020*



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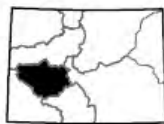
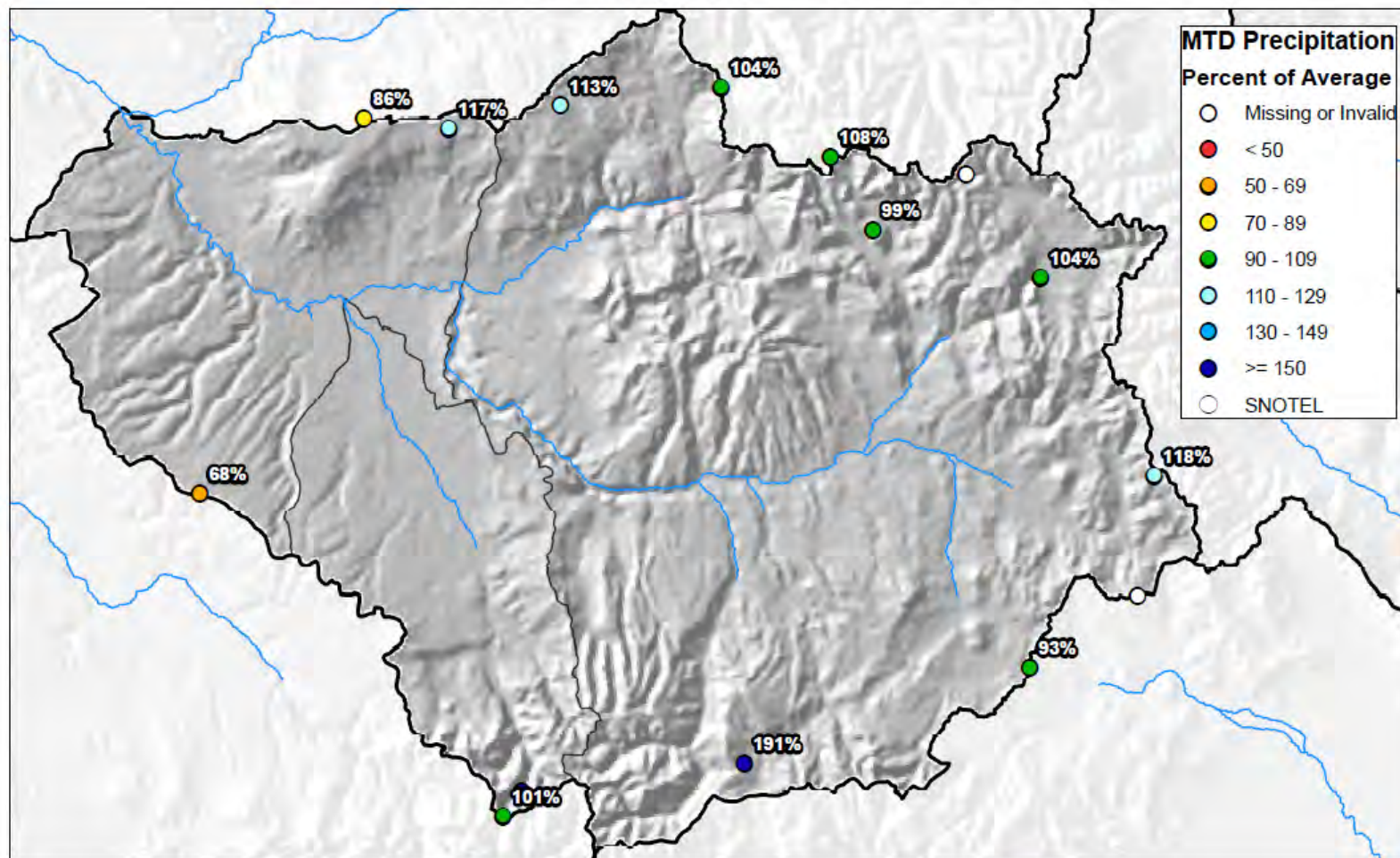
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## Gunnison River Basin Month to Date Precipitation Summary

Current as of Nov 18, 2020



0 5 10 20 30 40 Miles



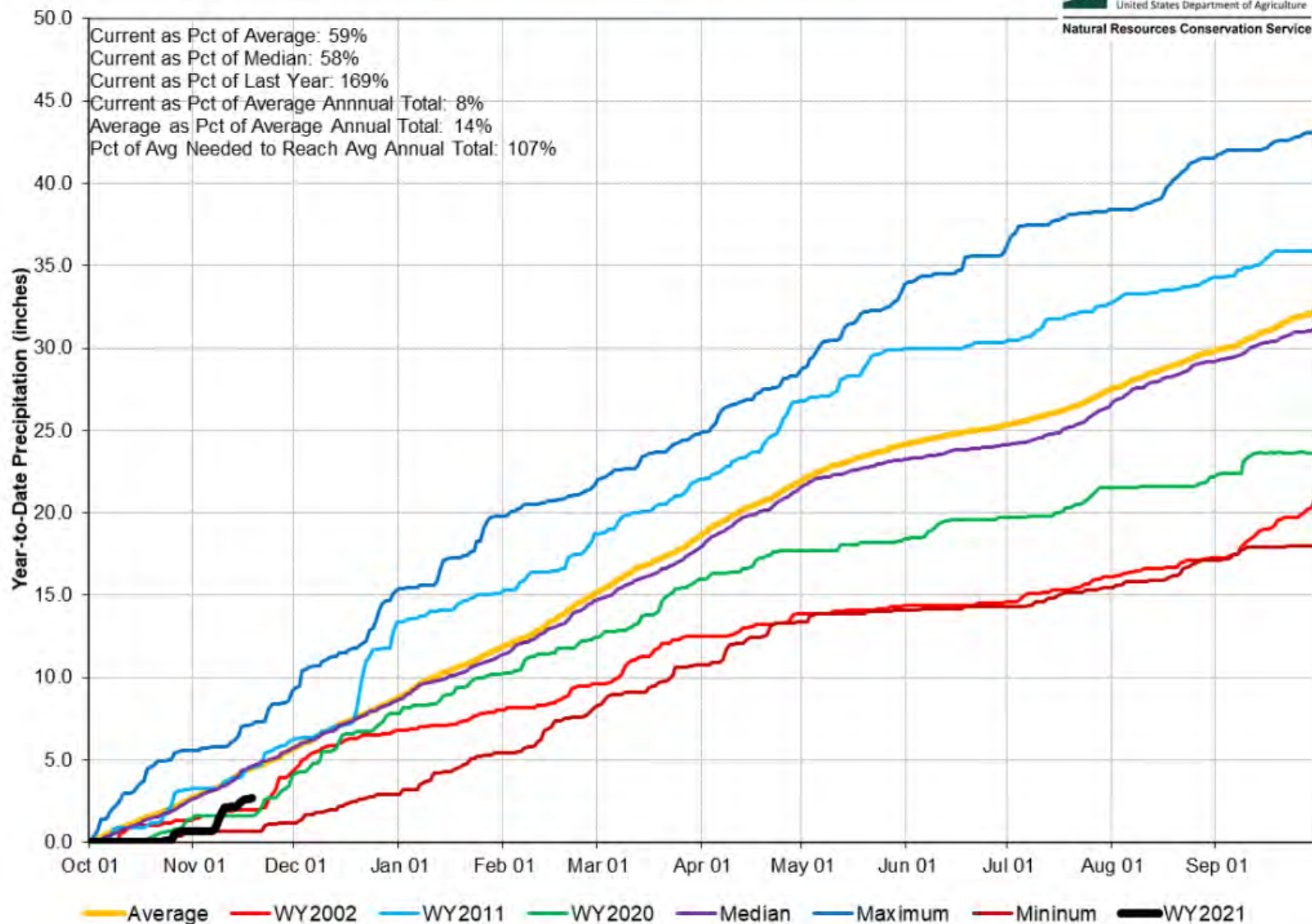
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## Gunnison River Basin High/Low Year-to-Date Precipitation Summary

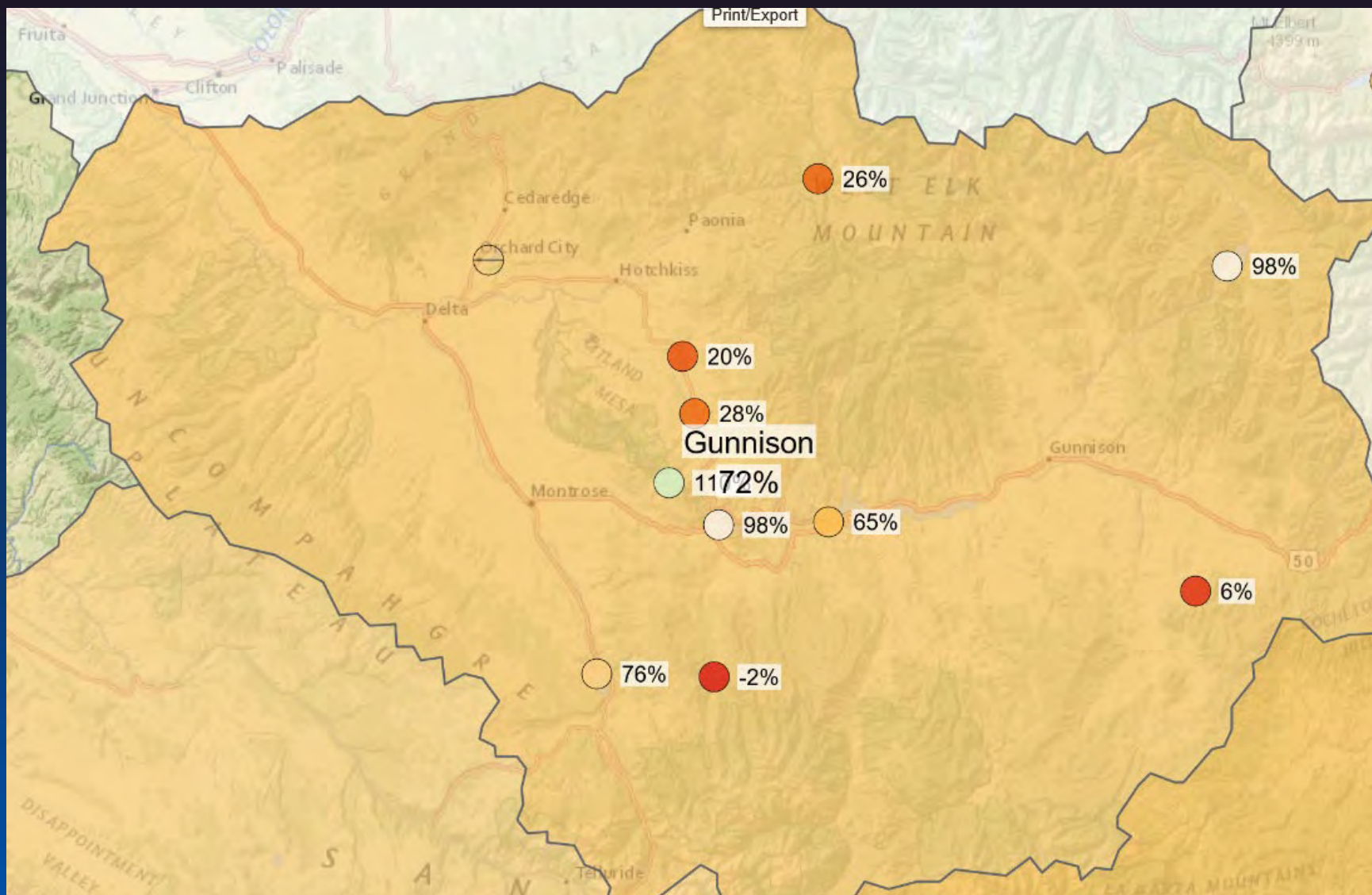
*Based on Provisional SNOTEL data as of Nov 18, 2020*

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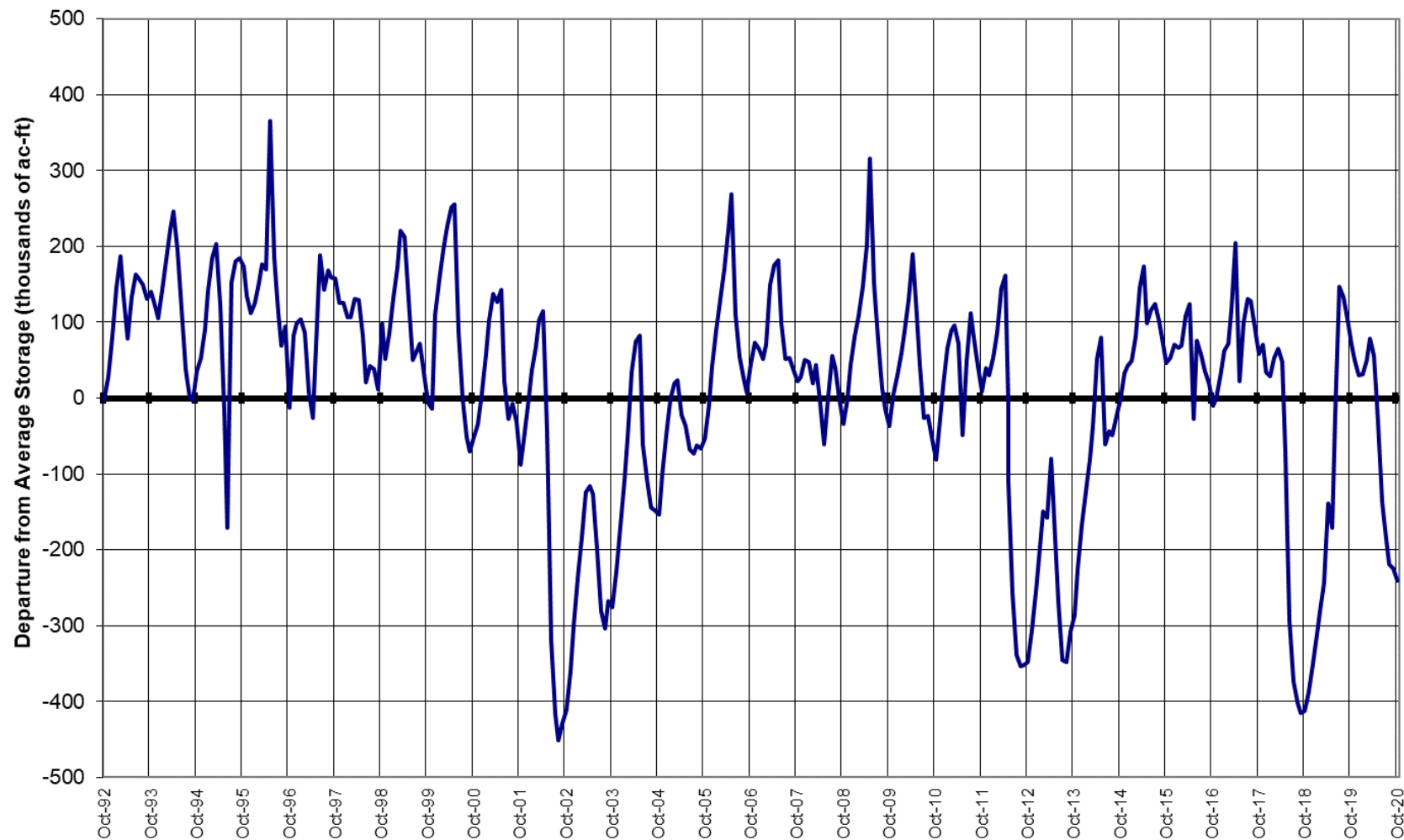




# Colorado Snow Surveys



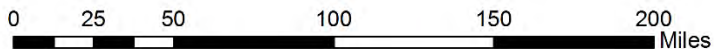
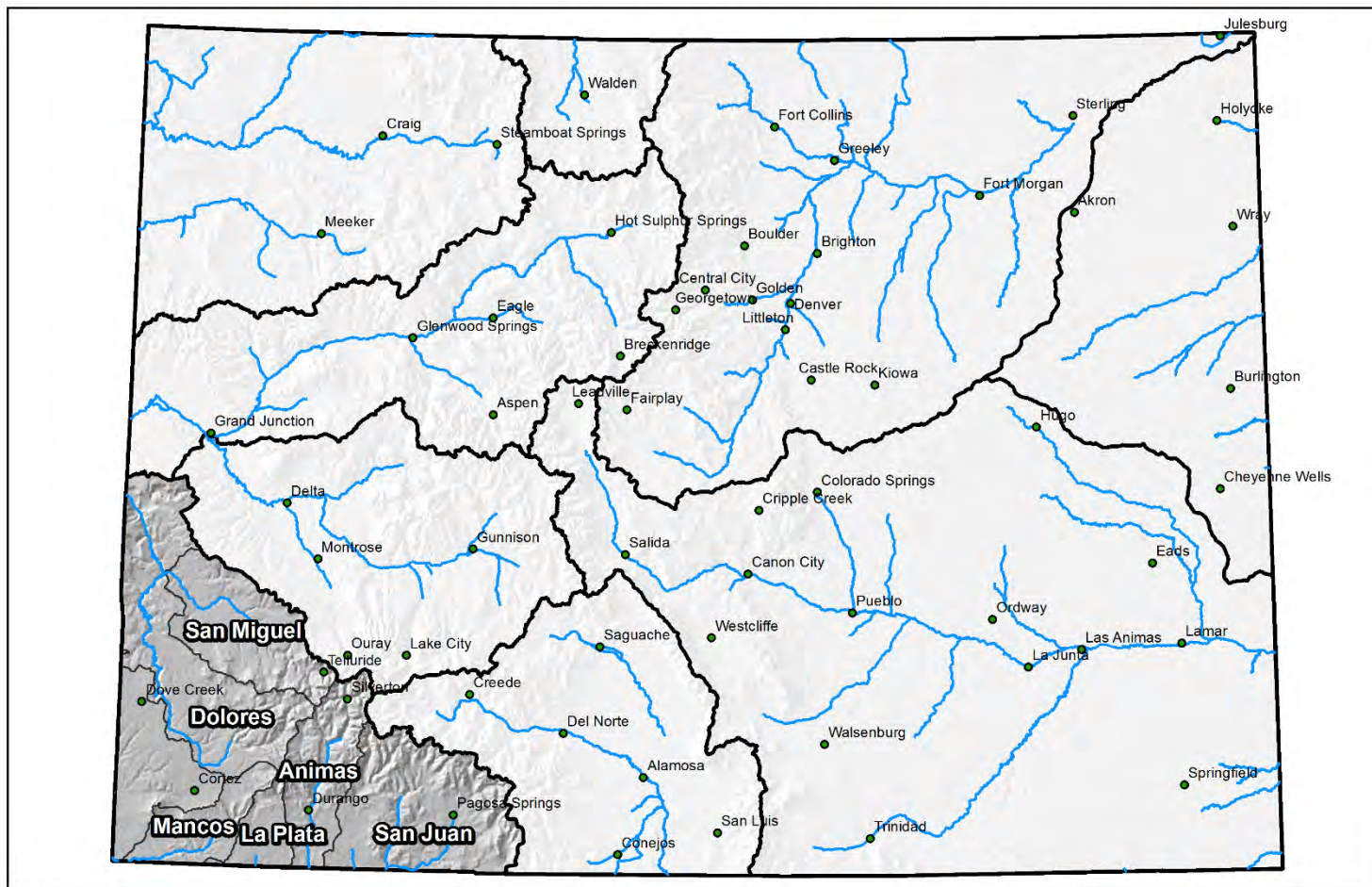
## GUNNISON RIVER BASIN Reservoir Storage Departure from Average





## Major Basin Summary

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



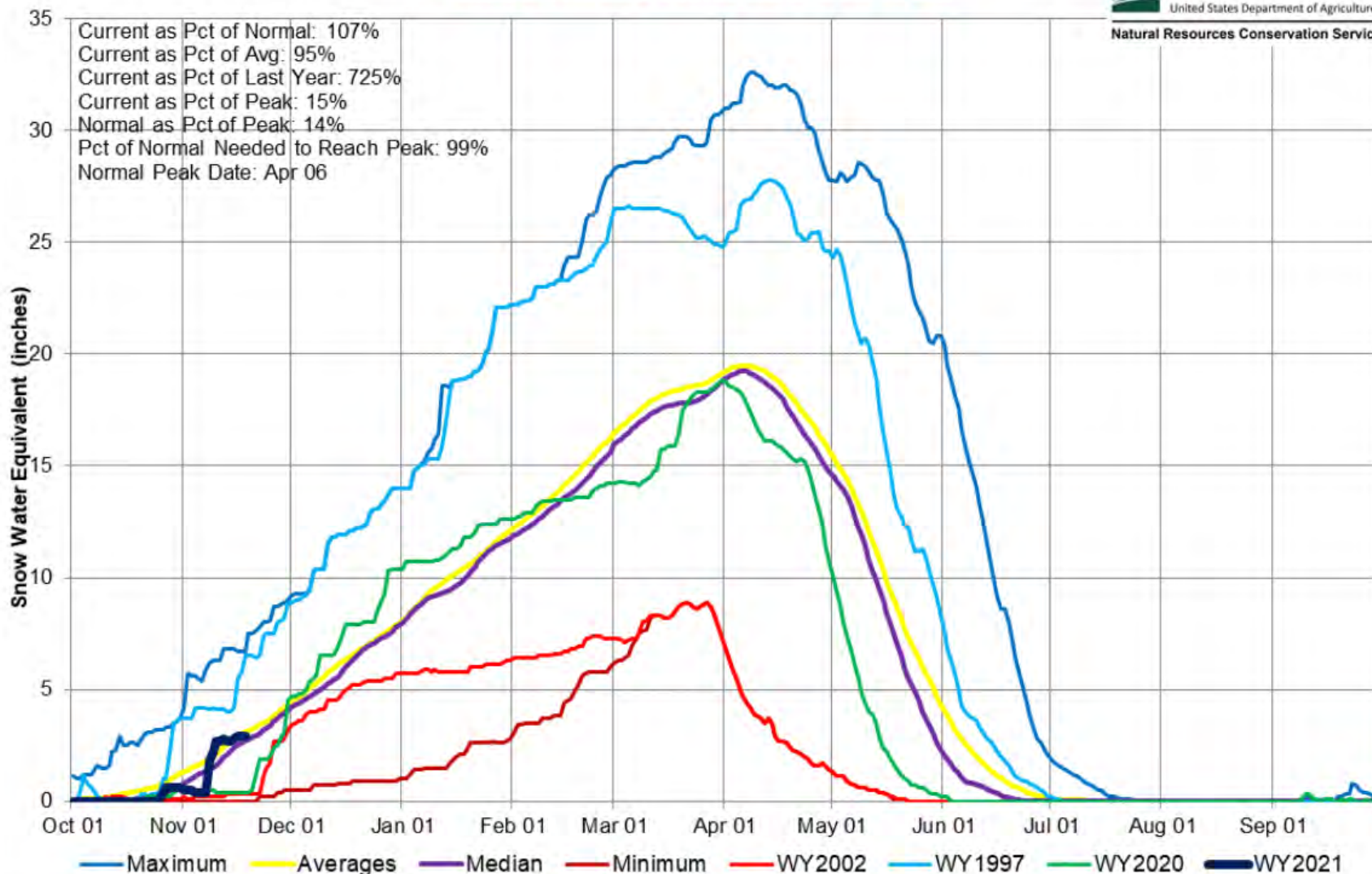
## San Miguel, Dolores, Animas and San Juan River Basins High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Nov 18, 2020*



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

### High/Low Monthly Precipitation Summary

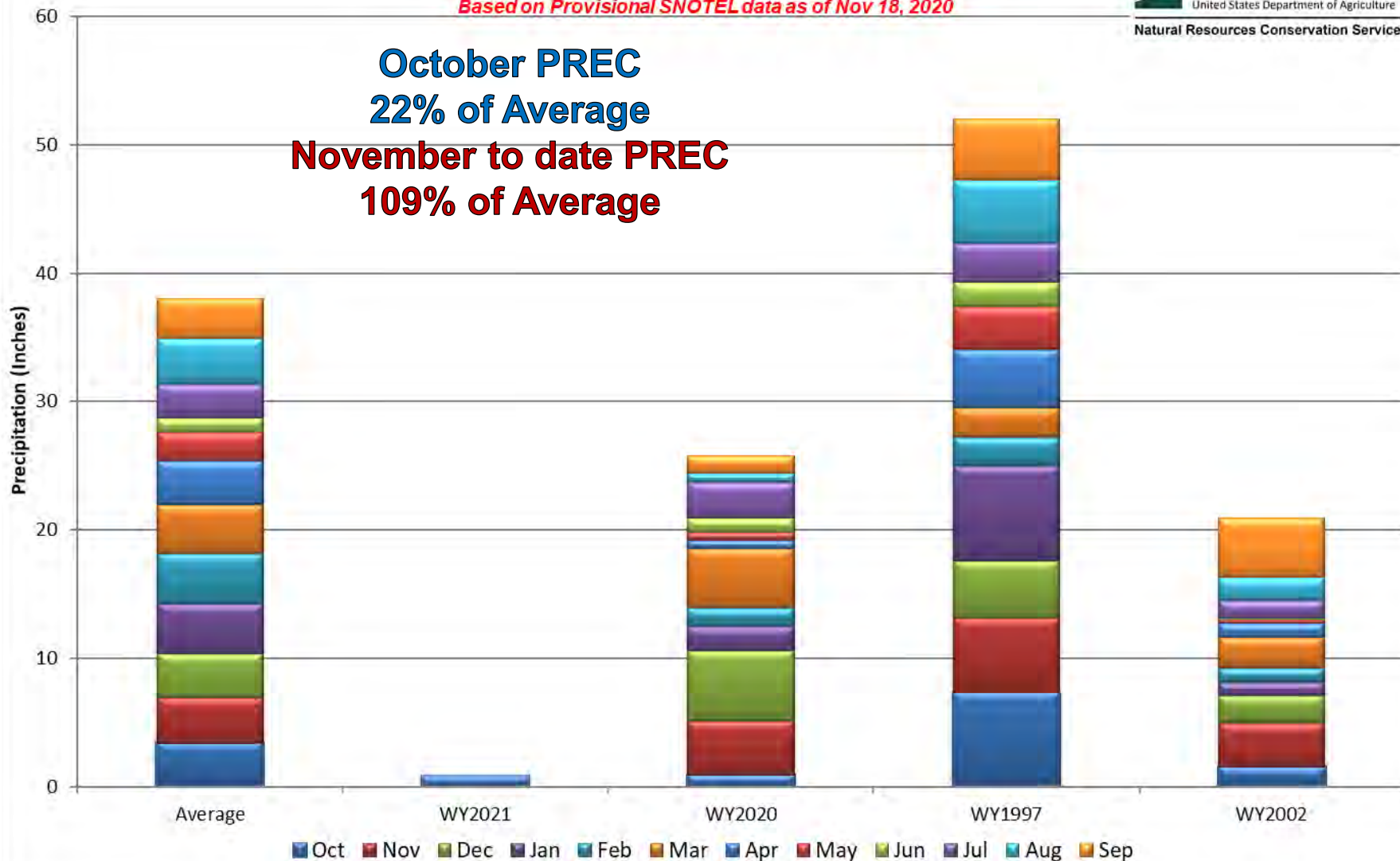
*Based on Provisional SNOTEL data as of Nov 18, 2020*



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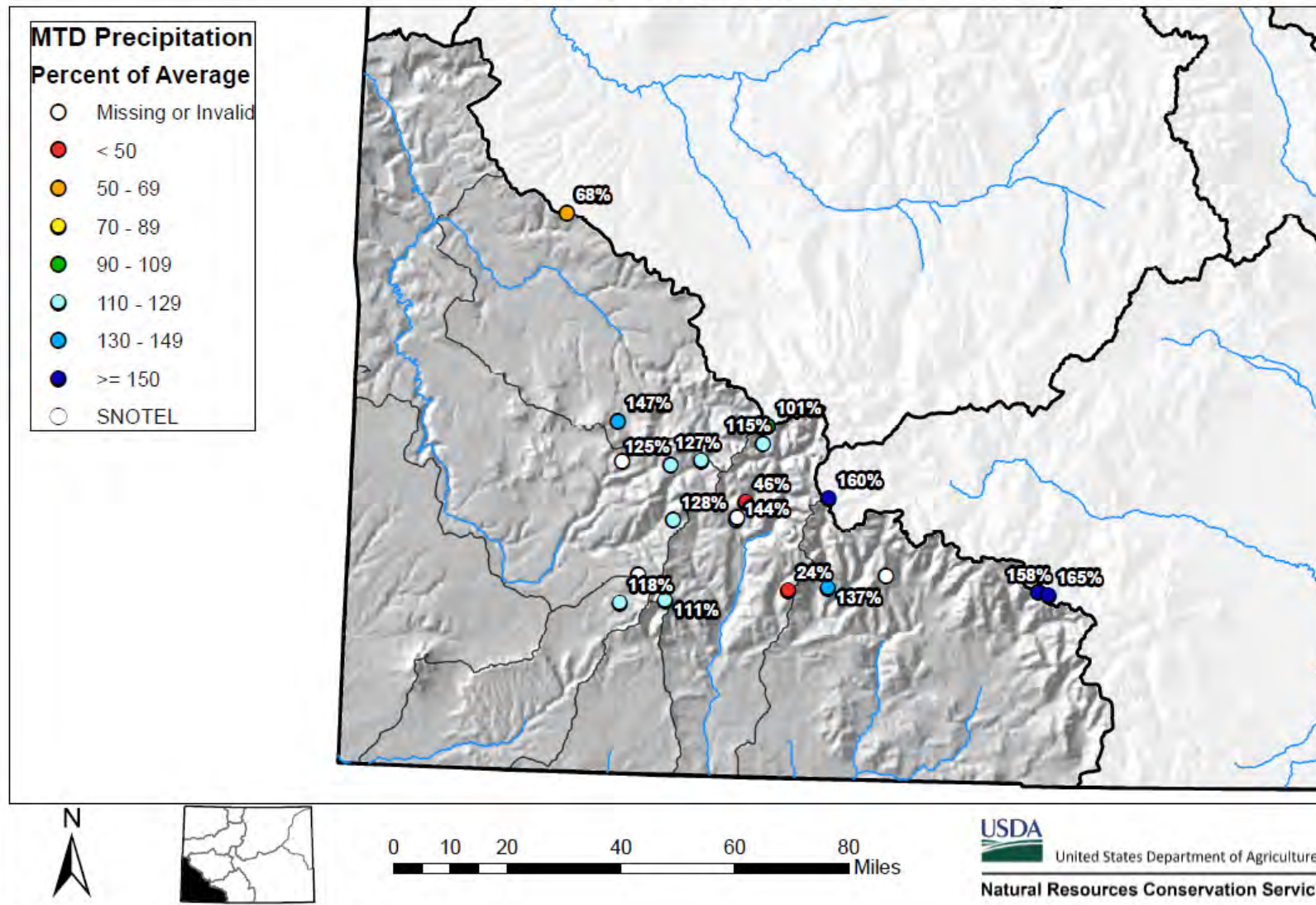
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**October PREC**  
**22% of Average**  
**November to date PREC**  
**109% of Average**



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

Current as of Nov 18, 2020





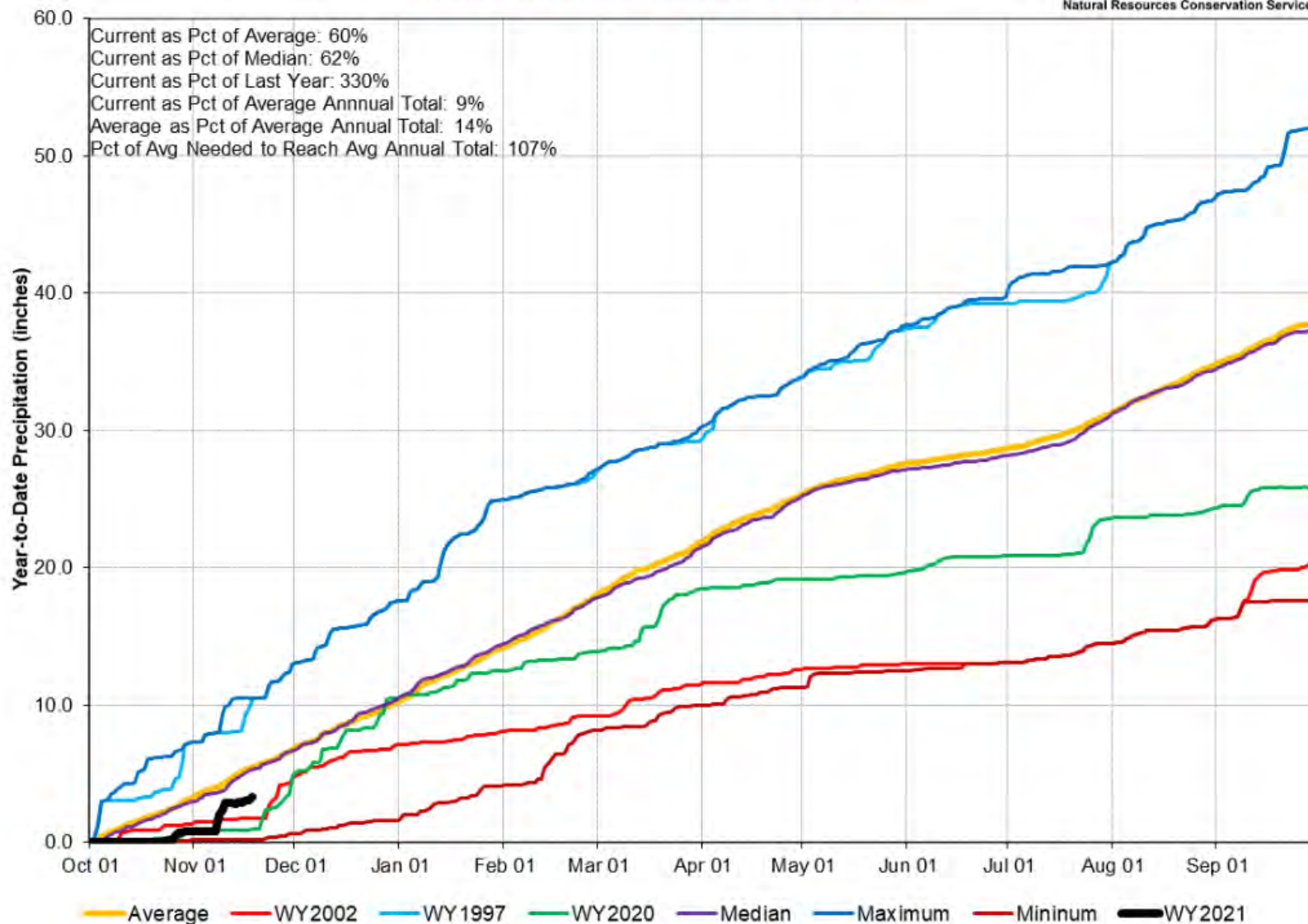
## San Miguel, Dolores, Animas and San Juan River Basins High/Low Year-to-Date Precipitation Summary

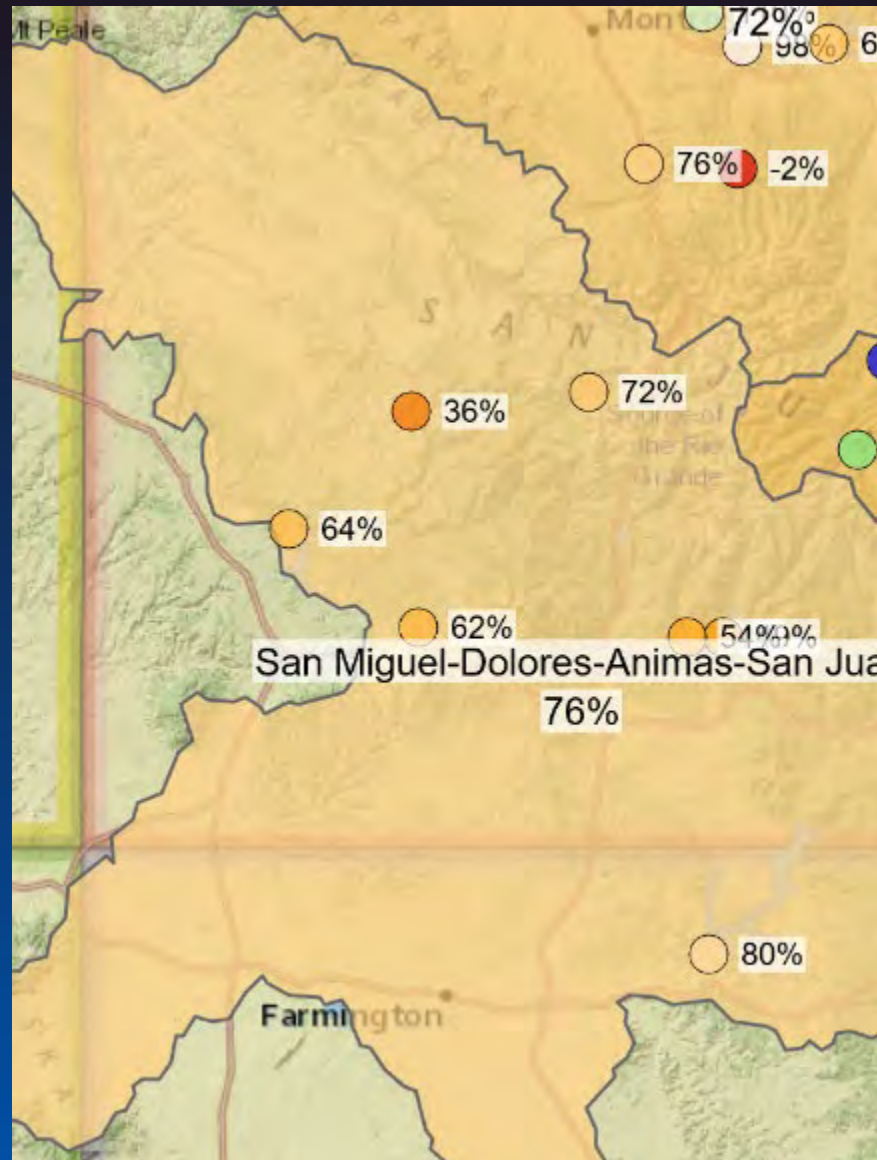
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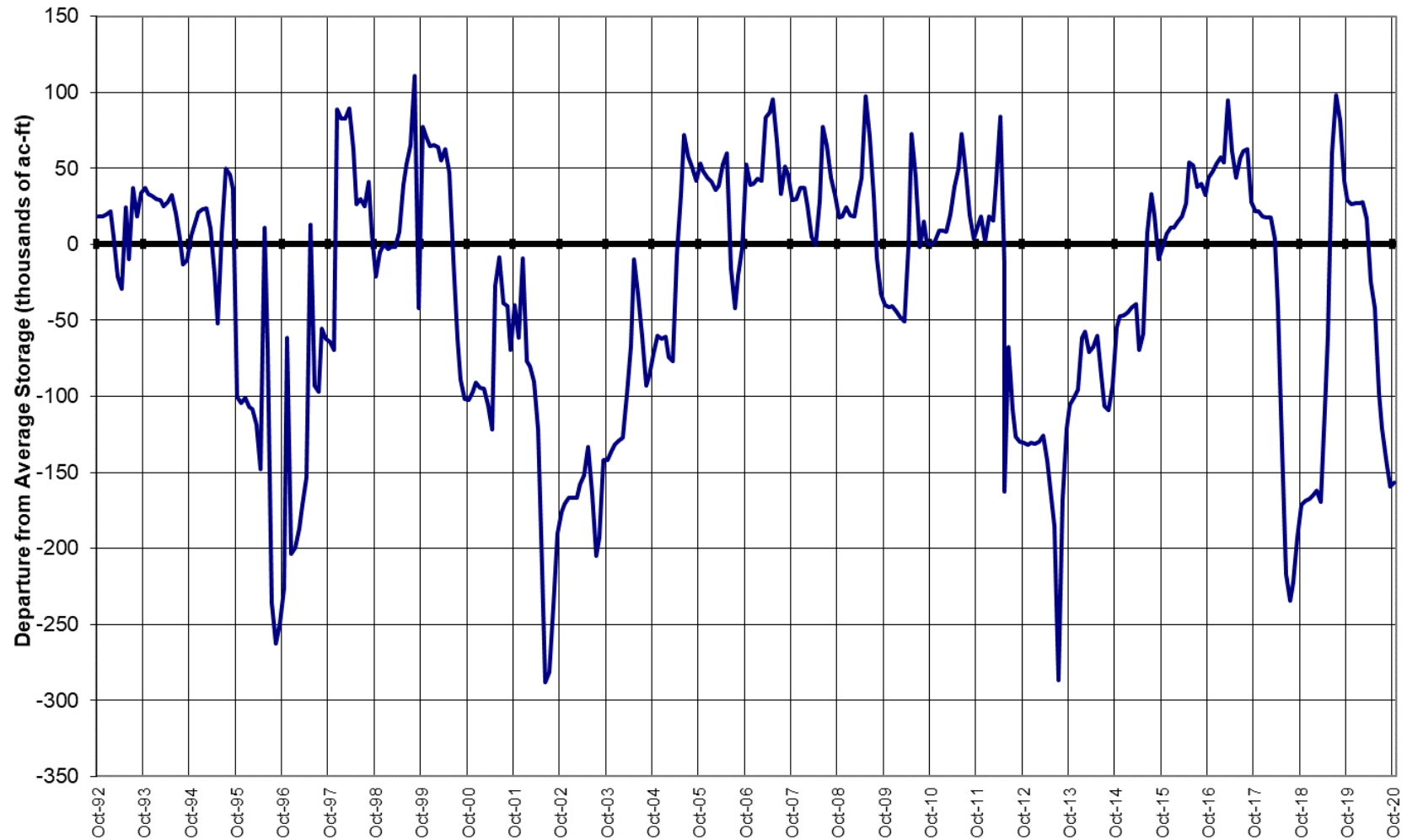






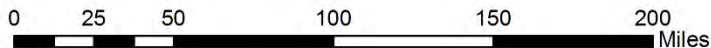
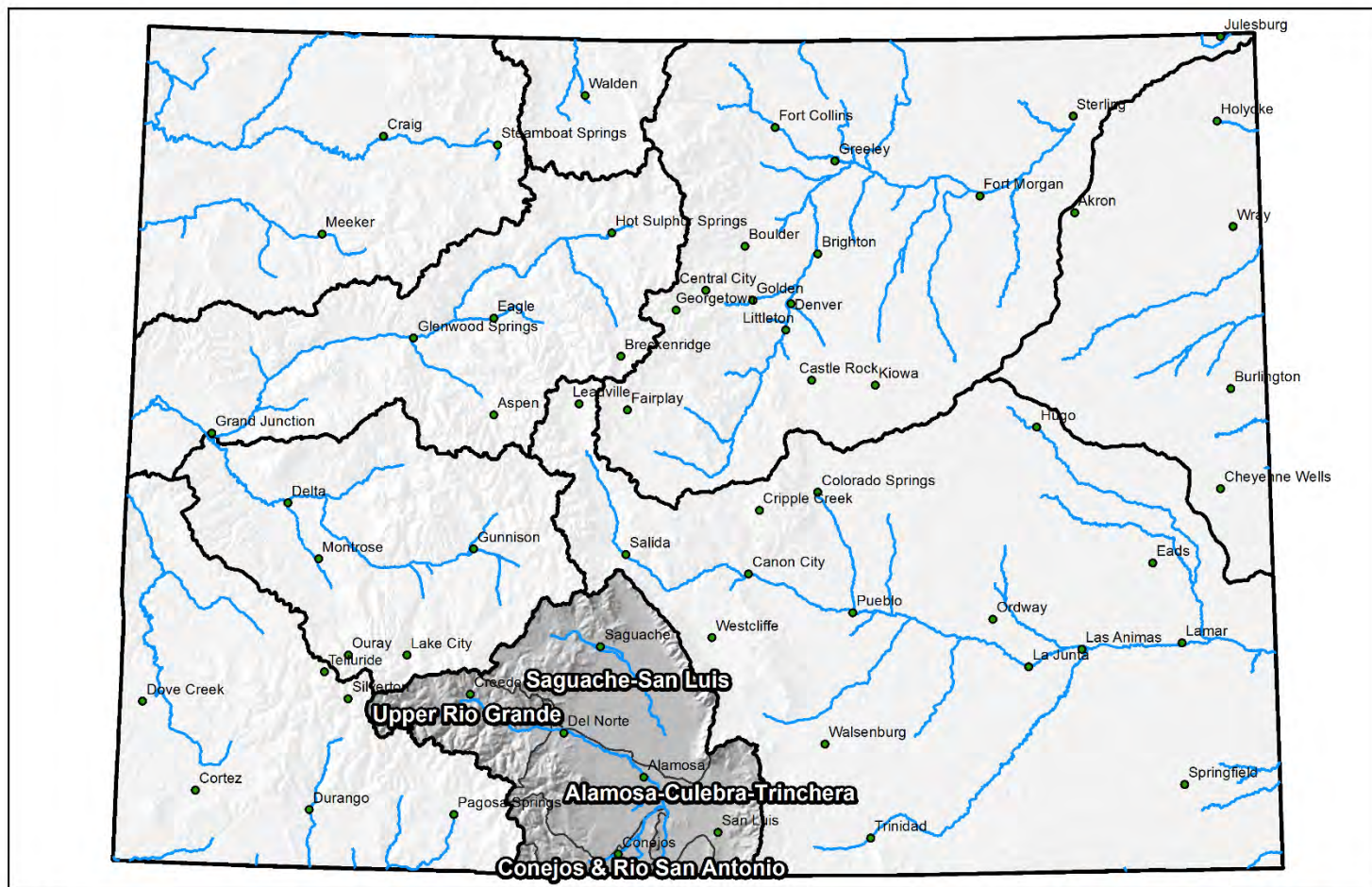
## SAN MIGUEL, DOLORES, ANIMAS AND SAN JUAN RIVER BASINS

Reservoir Storage  
Departure from Average



## Major Basin Summary

### Upper Rio Grande River Basin





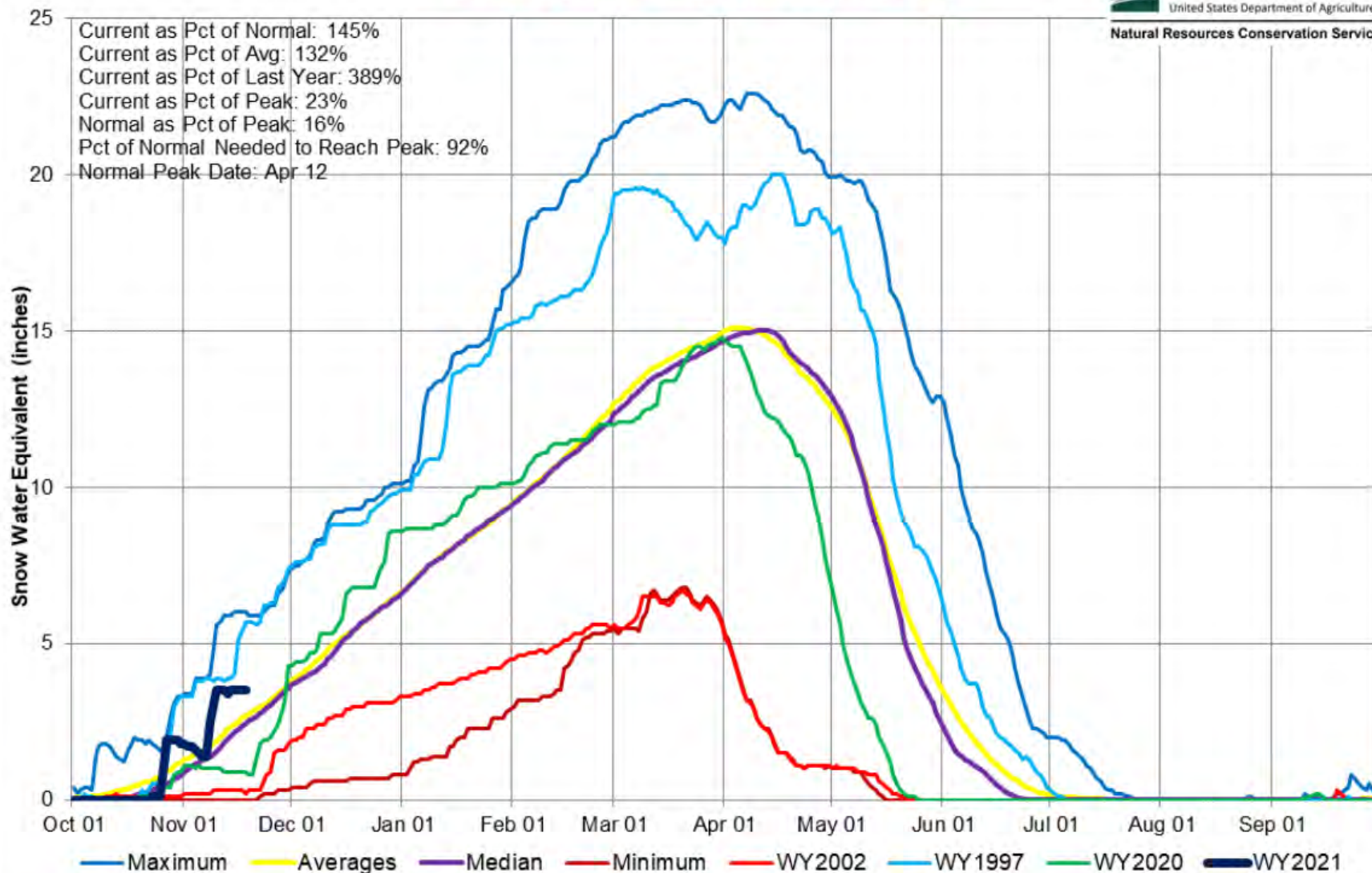
## Upper Rio Grande Basin High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Nov 18, 2020*



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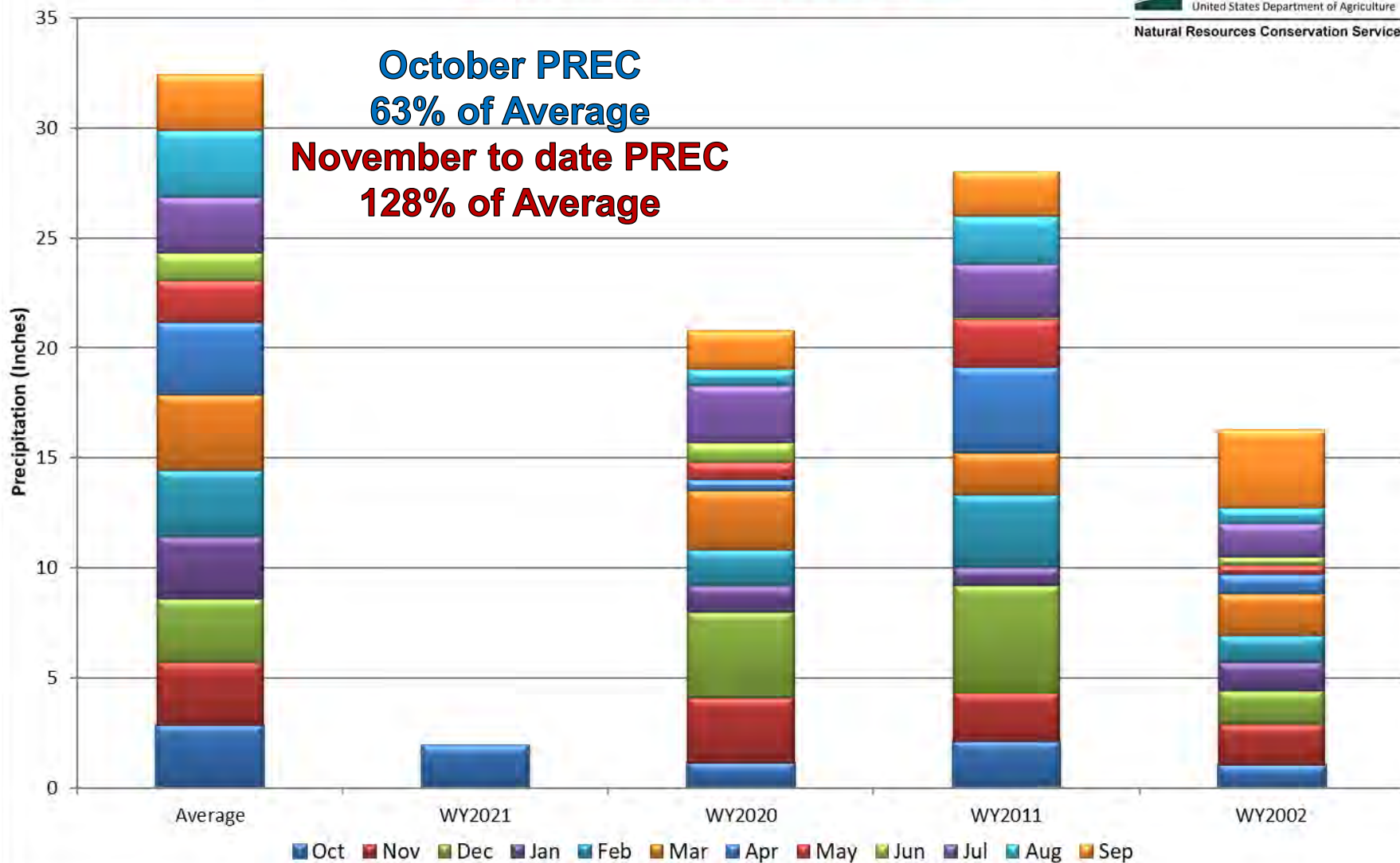
## Upper Rio Grande River Basin High/Low Monthly Precipitation Summary

*Based on Provisional SNOTEL data as of Nov 18, 2020*



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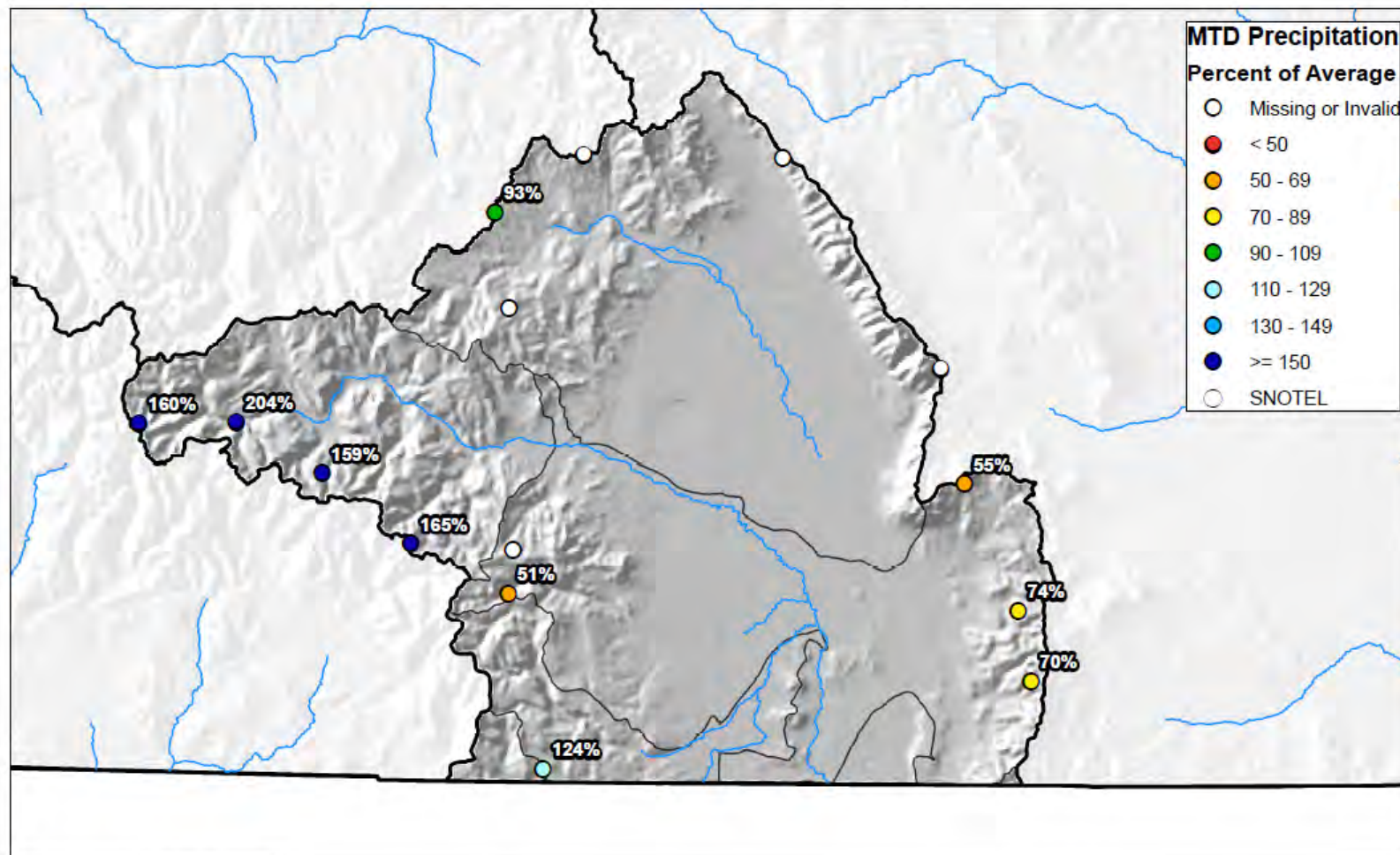
Natural Resources Conservation Service





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

Current as of Nov 18, 2020

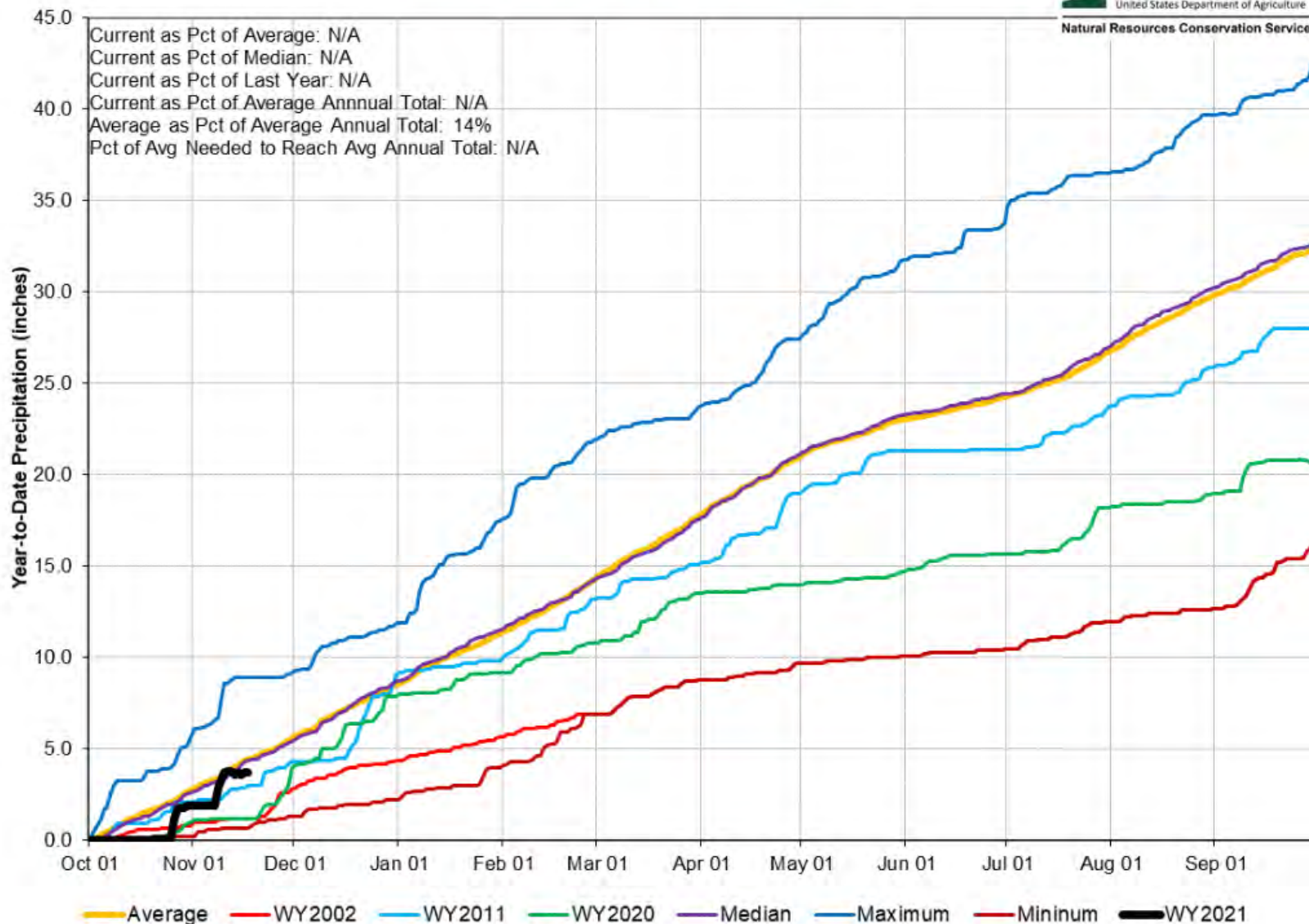


0 10 20 40 60 80 Miles

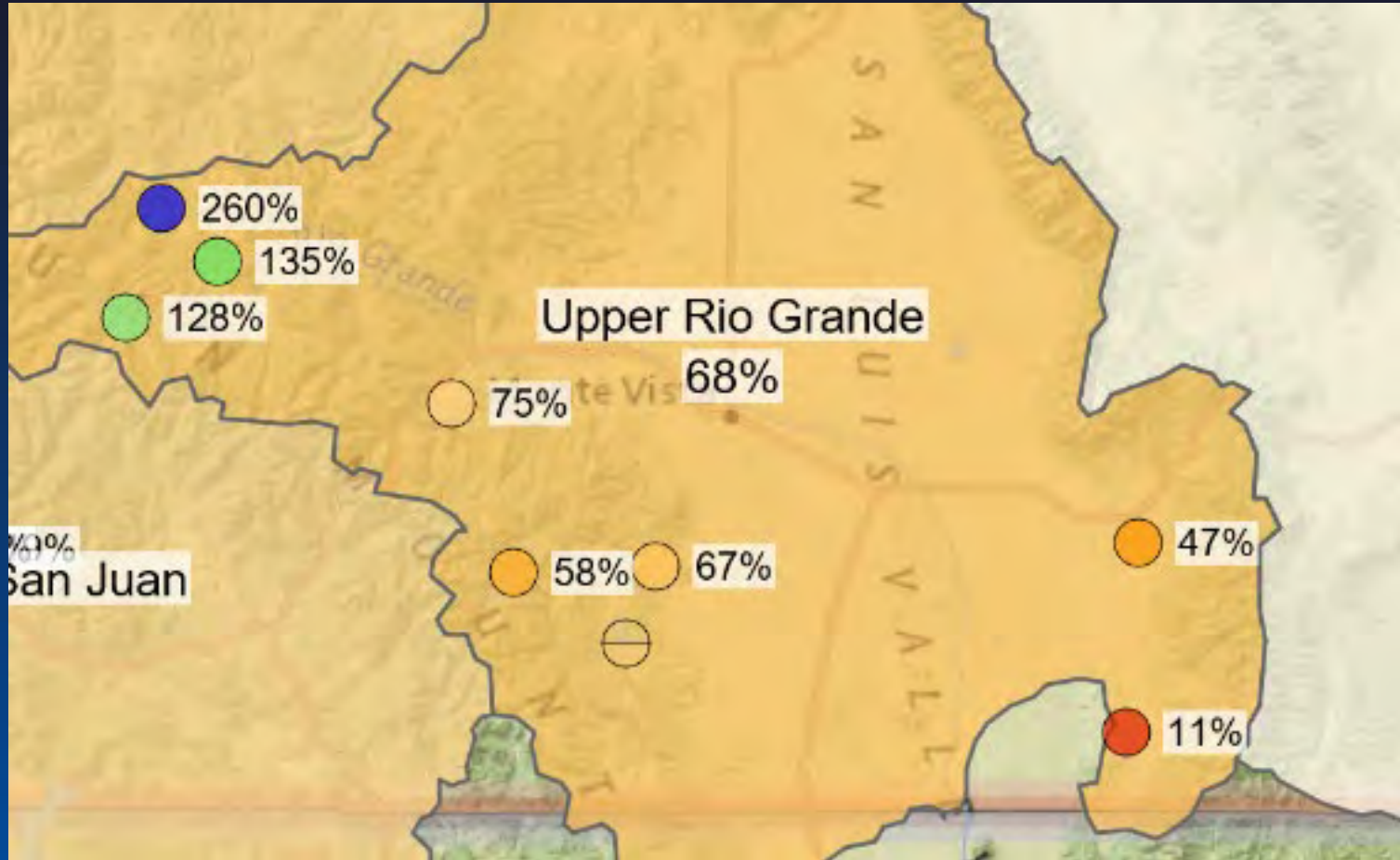
## Upper Rio Grande River Basin High/Low Year-to-Date Precipitation Summary

*Based on Provisional SNOTEL data as of Nov 18, 2020*

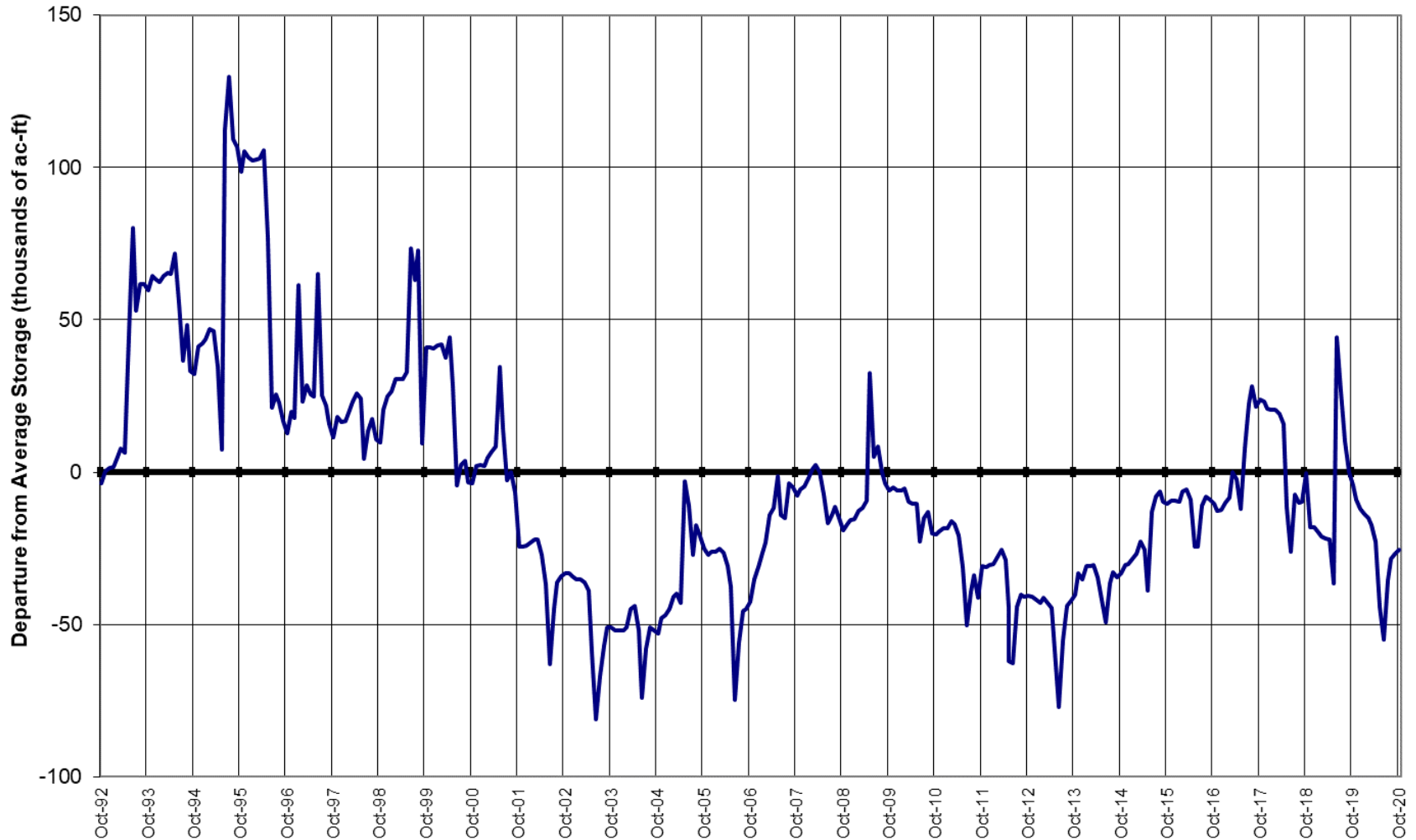
USDA  
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Natural Resources Conservation Service







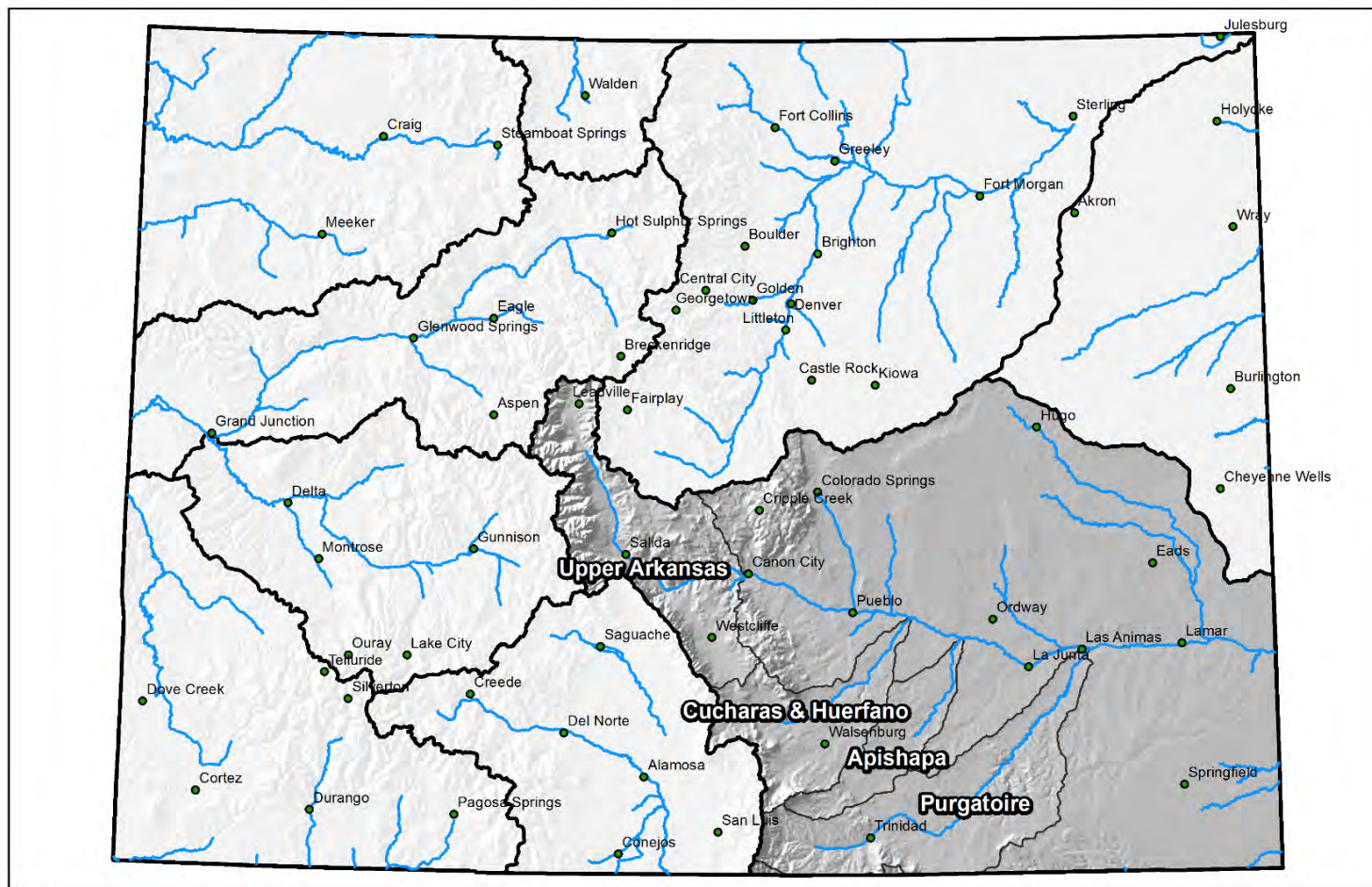
## UPPER RIO GRANDE BASIN Reservoir Storage Departure from Average





## Major Basin Summary

### Arkansas River Basin



0 25 50 100 150 200 Miles

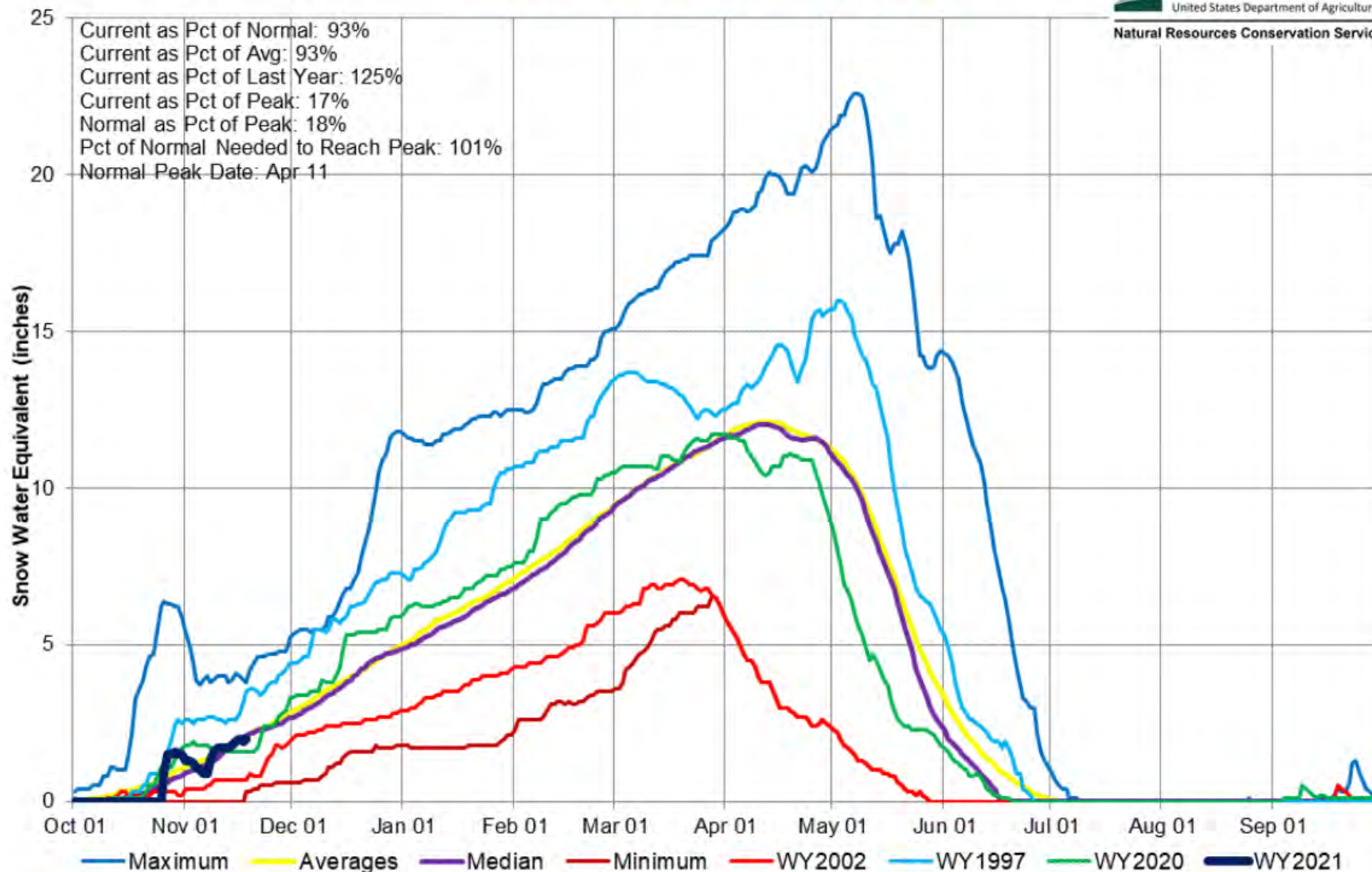
## Arkansas River Basin High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Nov 18, 2020*



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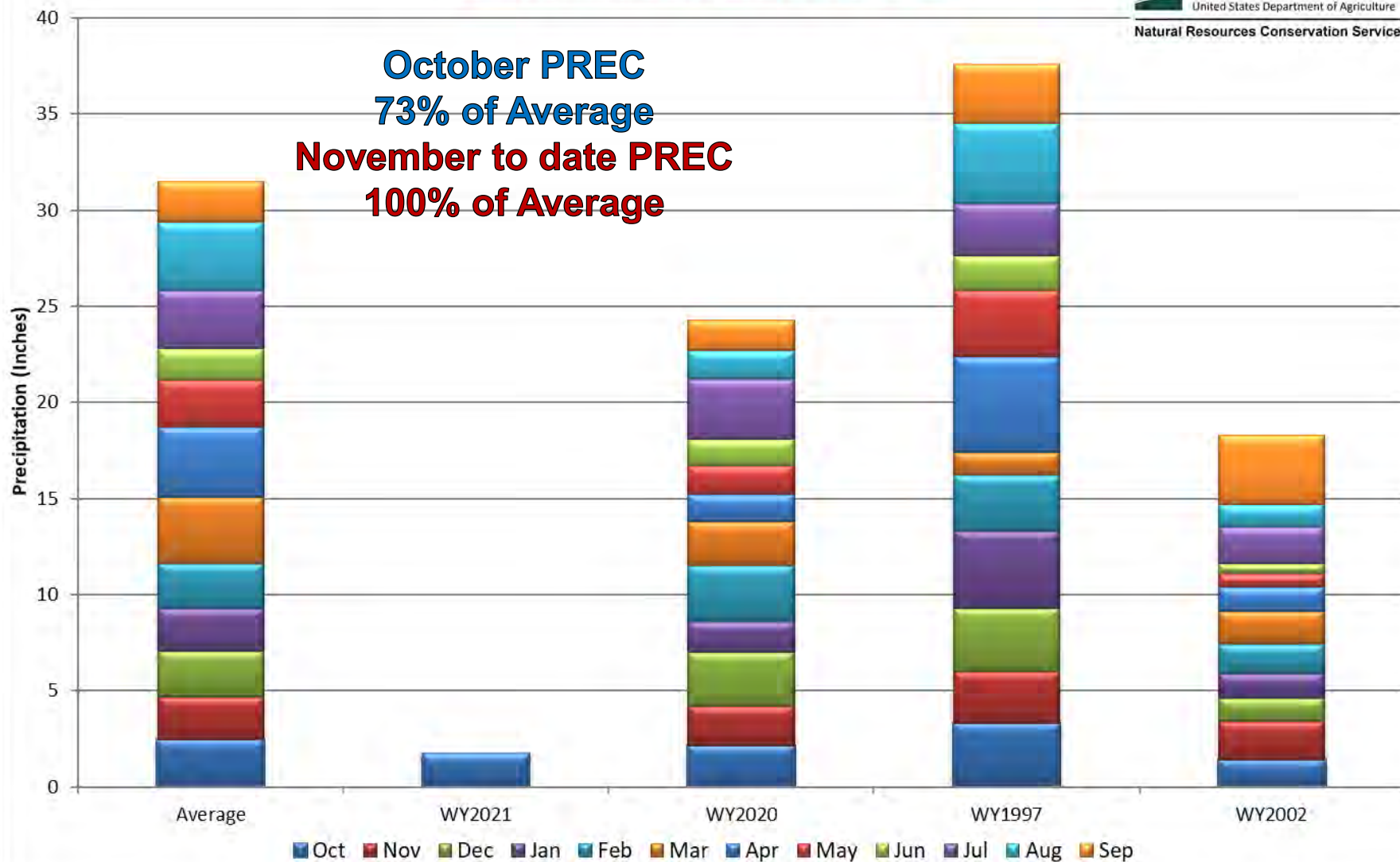
## Arkansas River Basin High/Low Monthly Precipitation Summary

*Based on Provisional SNOTEL data as of Nov 18, 2020*



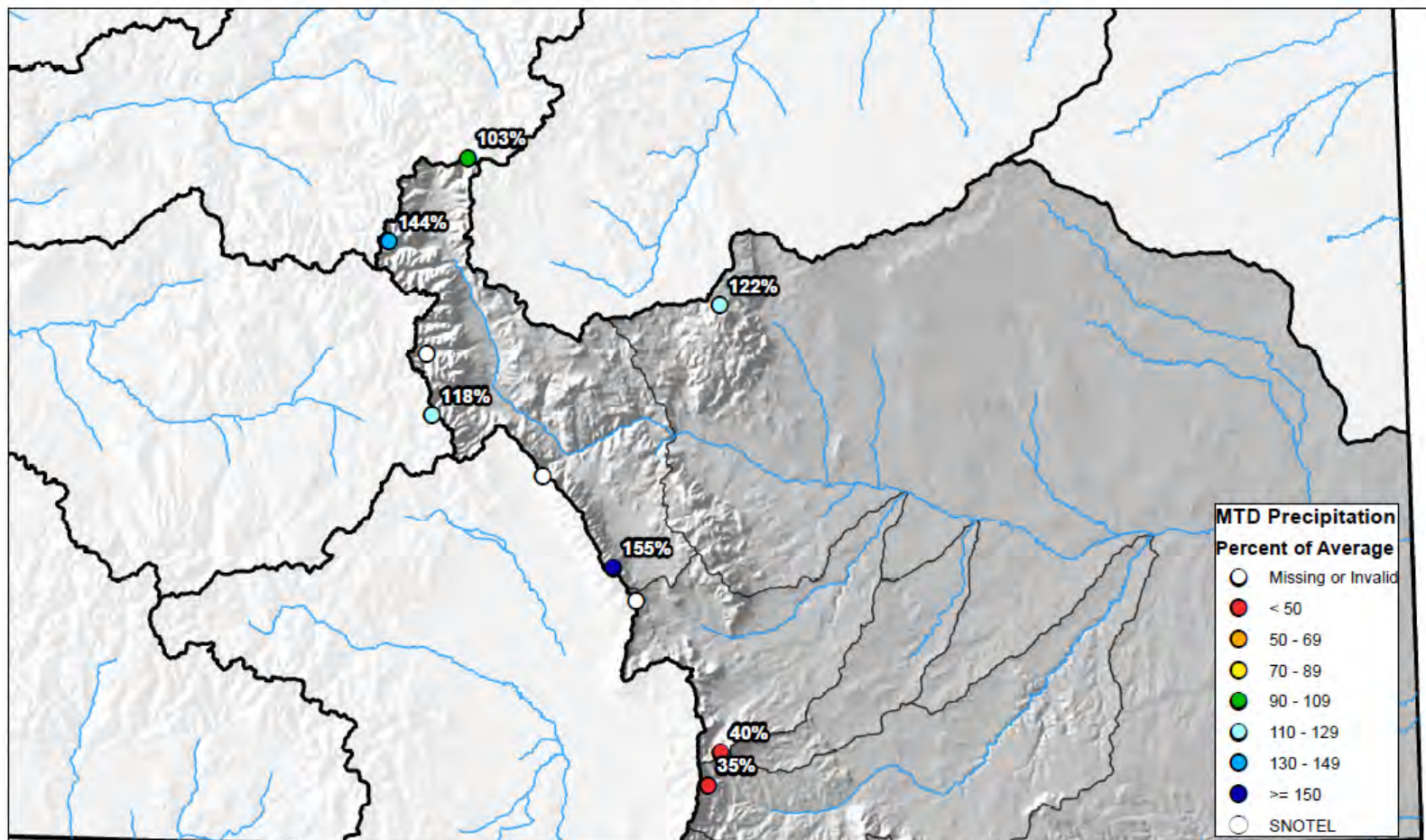
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## Arkansas River Basin Month to Date Precipitation Summary

Current as of Nov 18, 2020



0 10 20 40 60 80 Miles



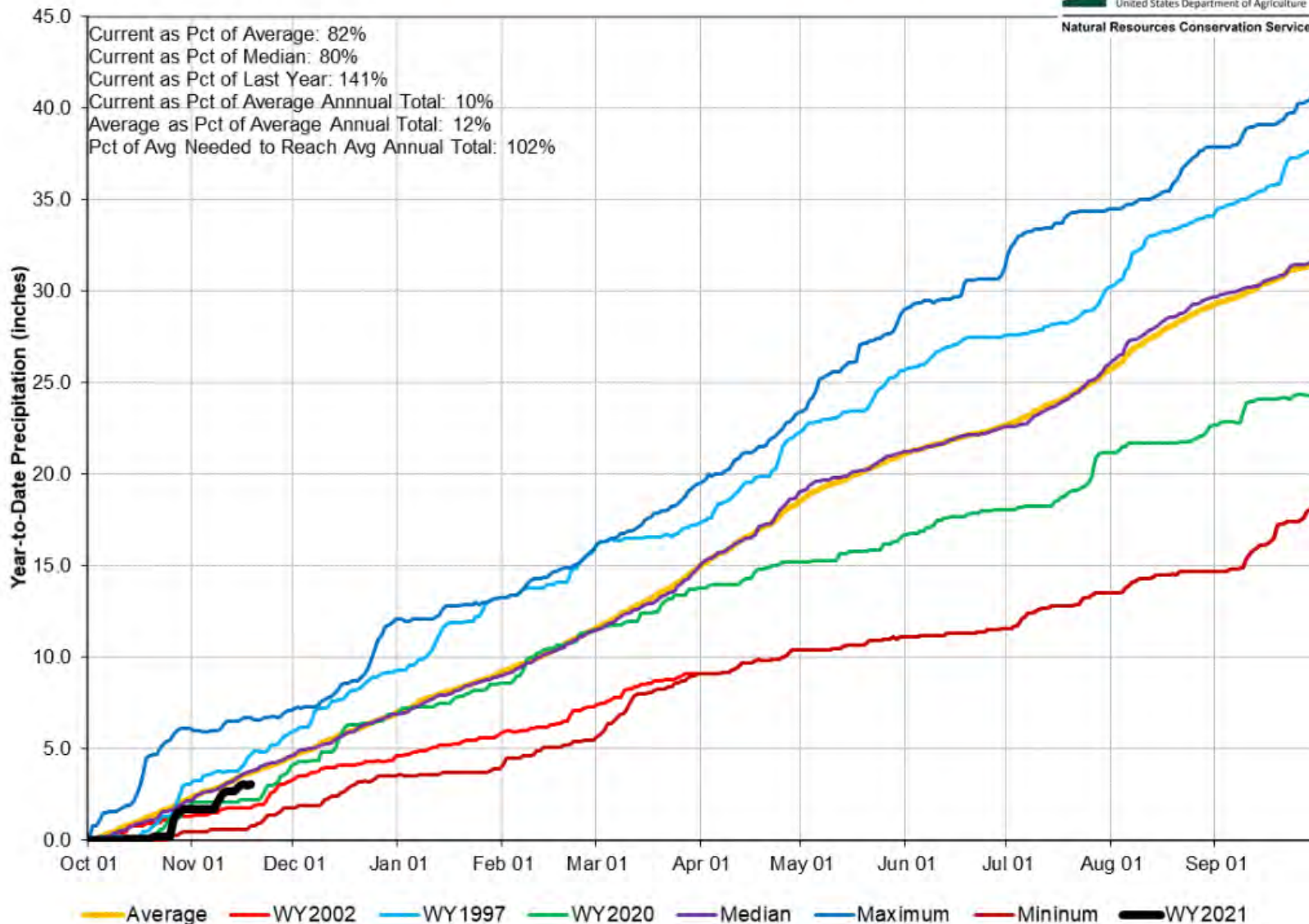
## Arkansas River Basin High/Low Year-to-Date Precipitation Summary

*Based on Provisional SNOTEL data as of Nov 18, 2020*



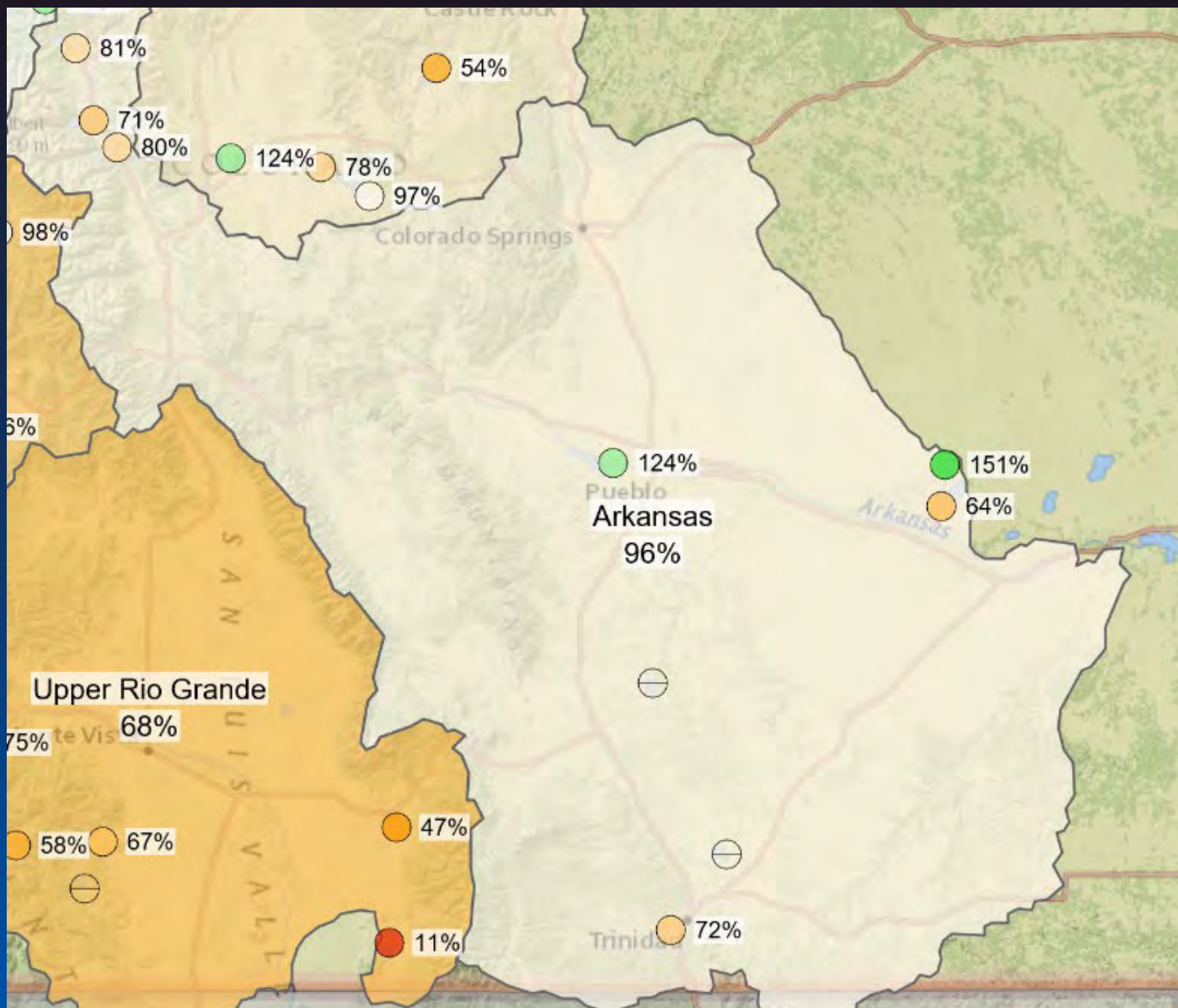
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Natural Resources Conservation Service

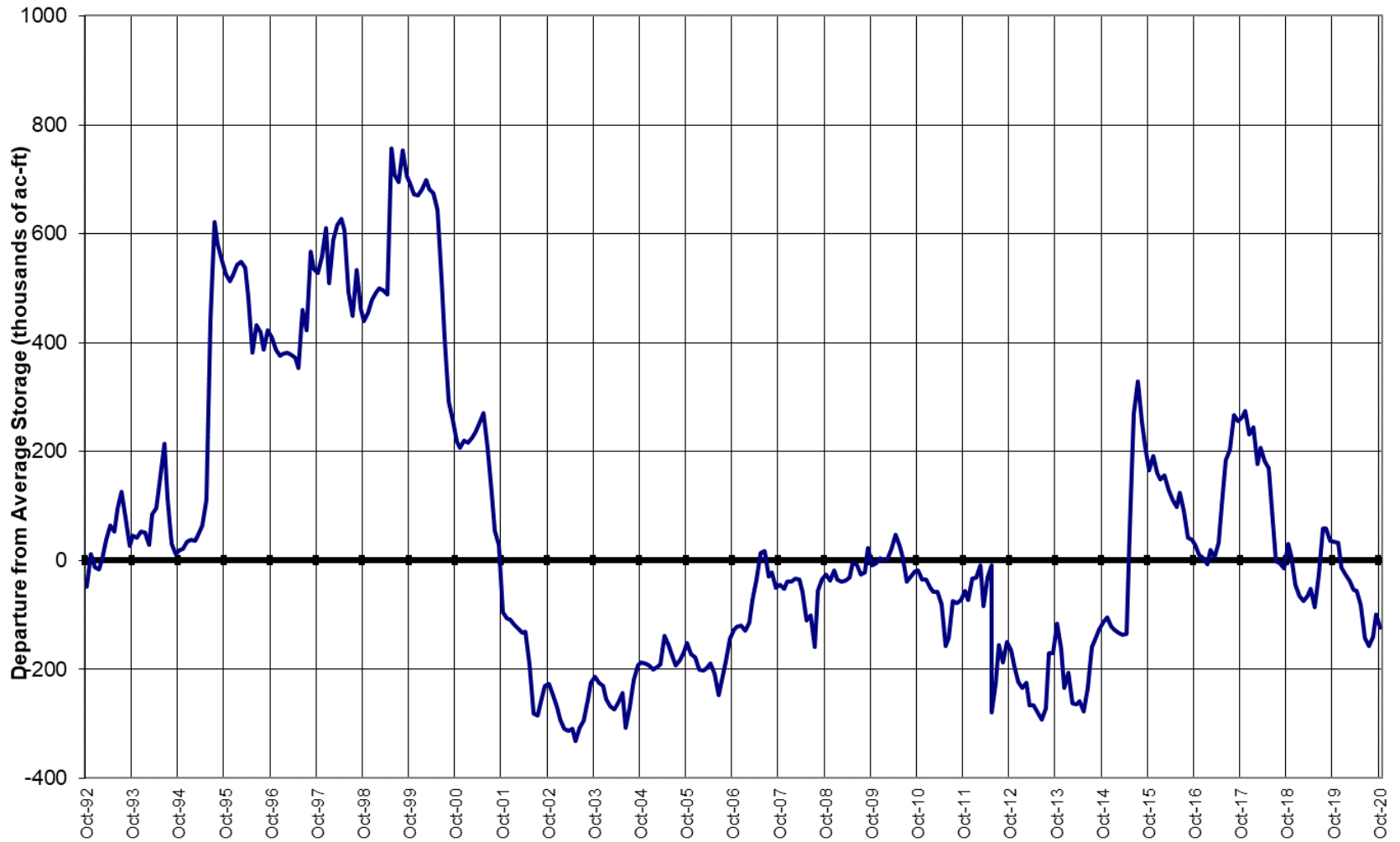




# Colorado Snow Surveys

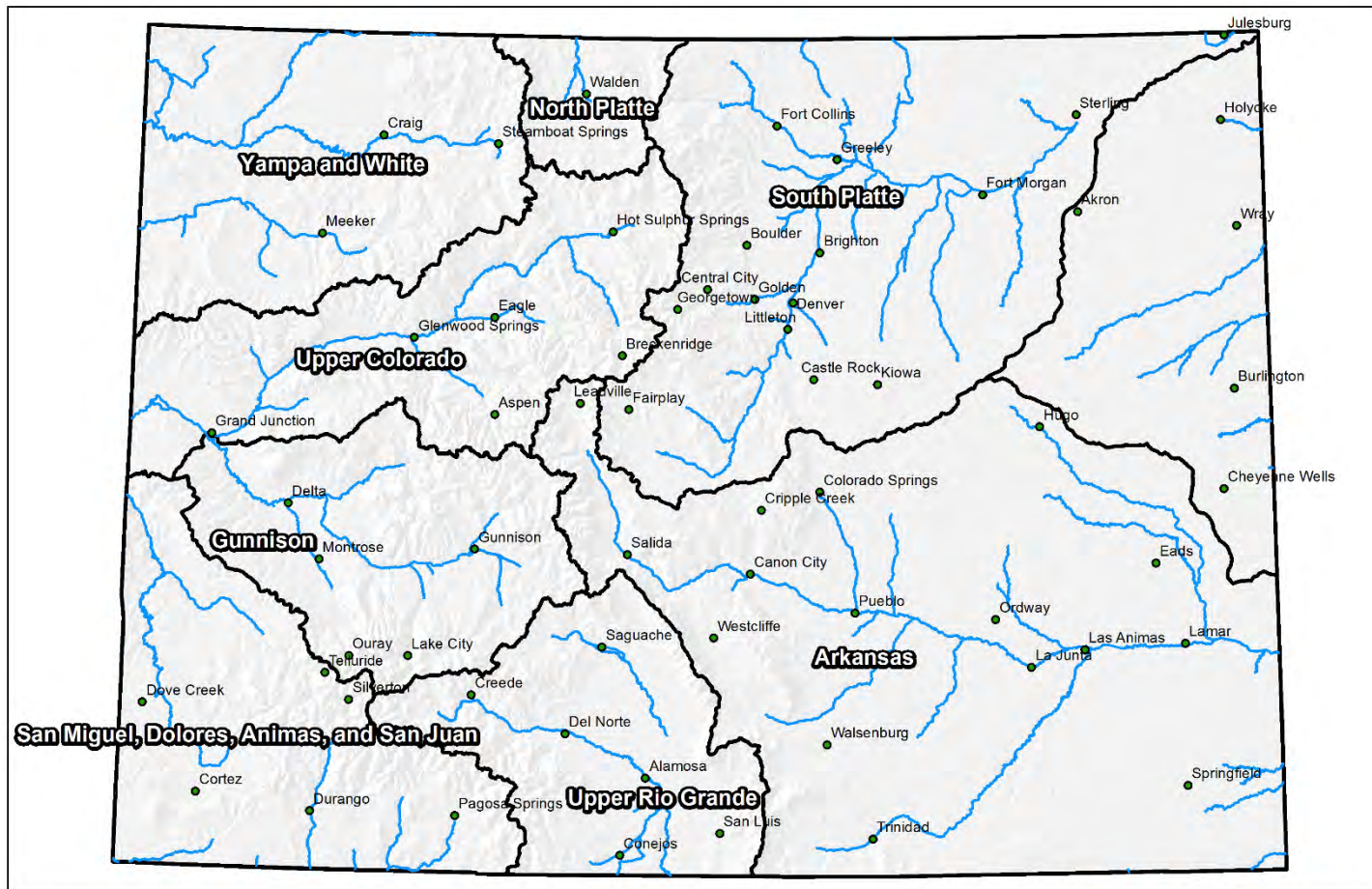


## ARKANSAS RIVER BASIN Reservoir Storage Departure from Average



## Colorado Statewide Summary

Colorado Major Basins

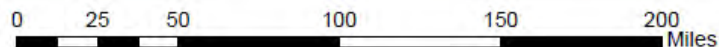
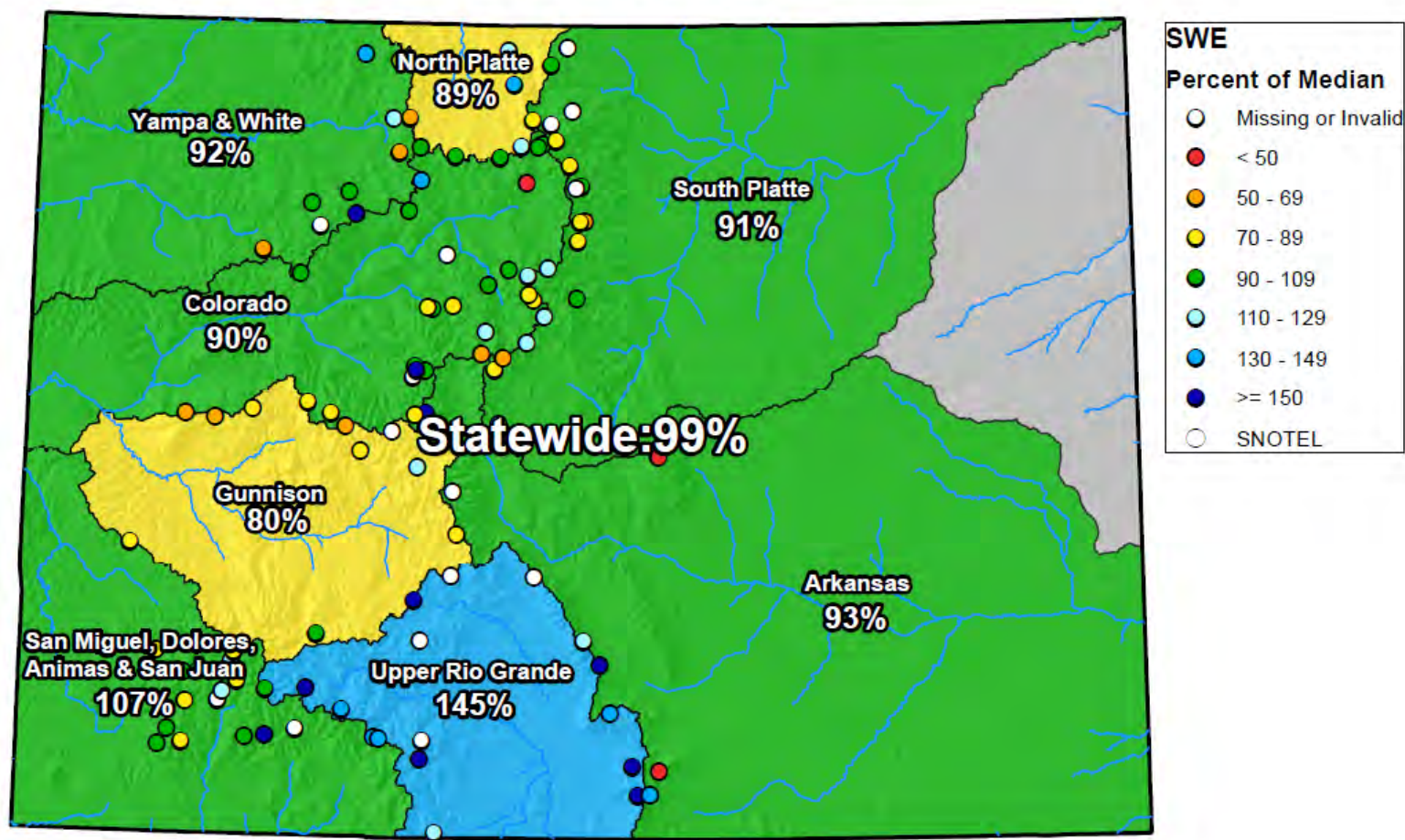


0 25 50 100 150 200 Miles



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

Current as of Nov 18, 2020



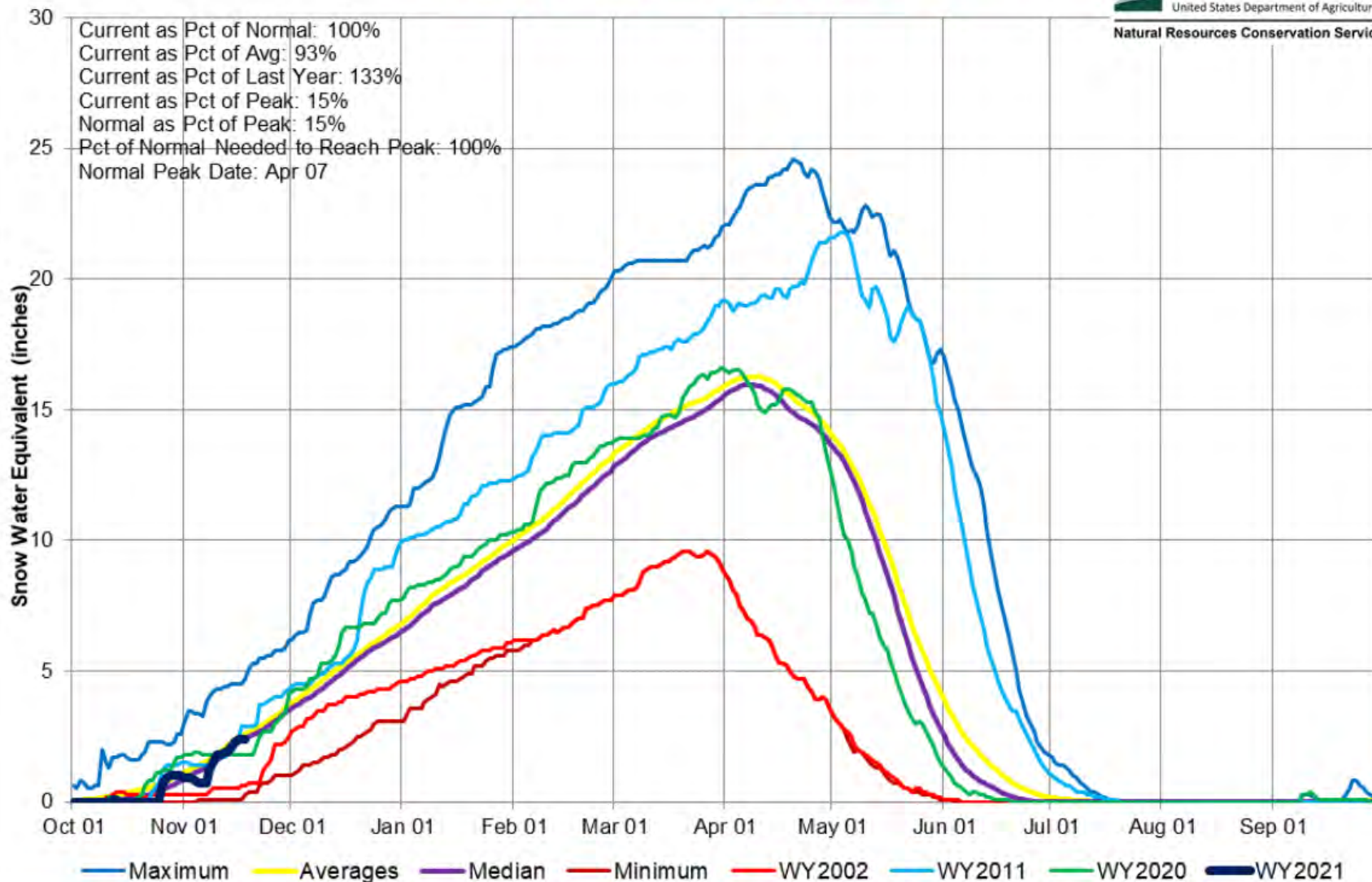
## Colorado Statewide High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Nov 18, 2020*



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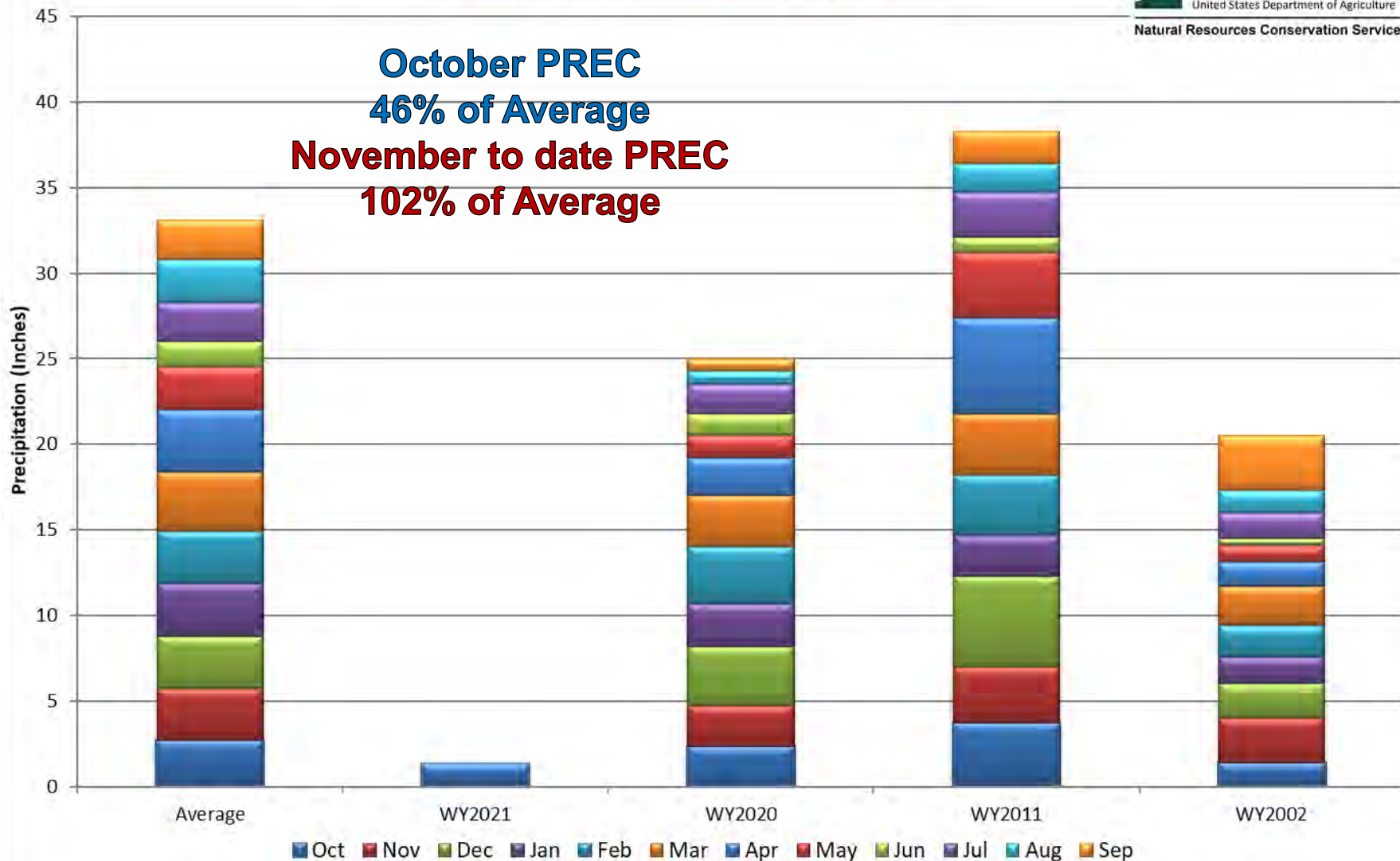
## Colorado Statewide High/Low Monthly Precipitation Summary

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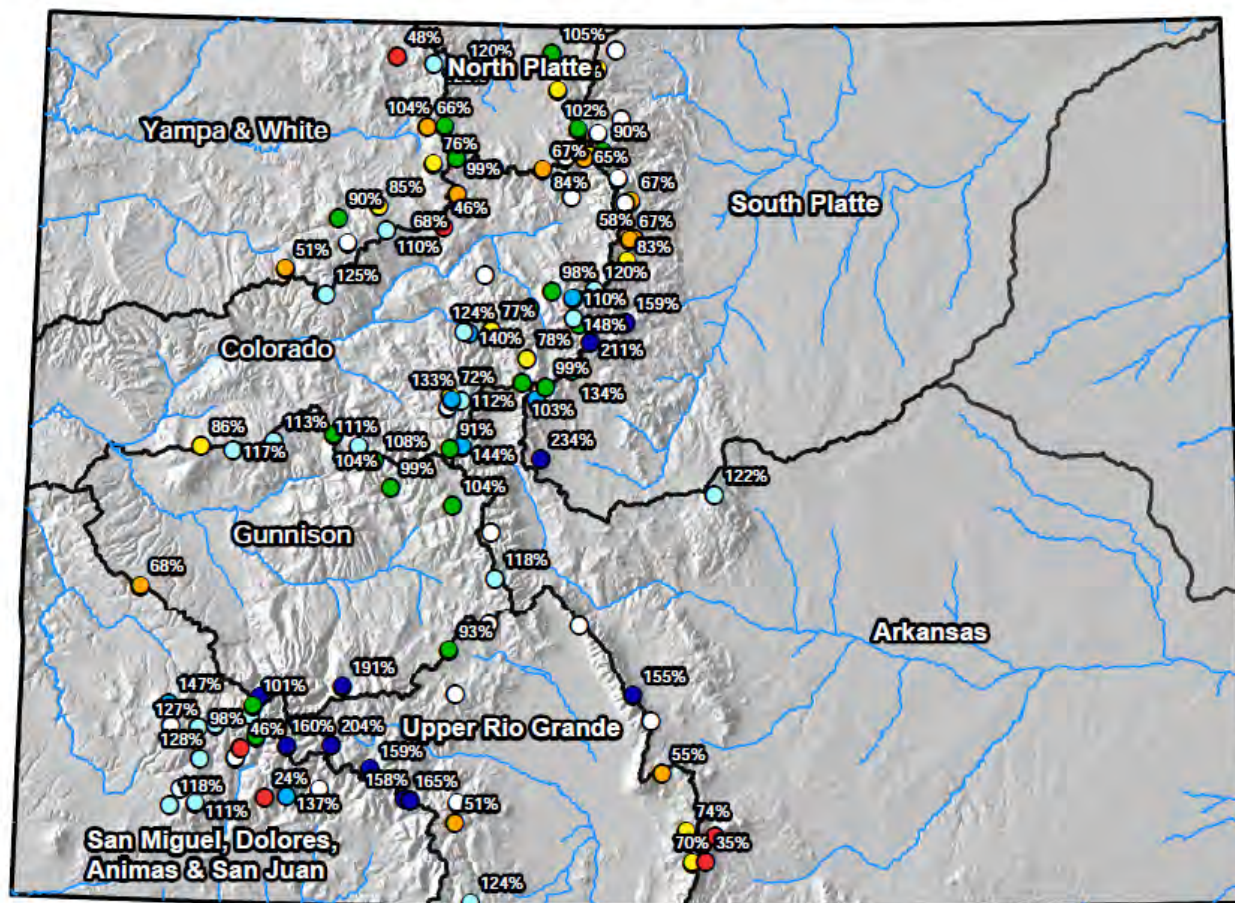
Natural Resources Conservation Service





## Colorado SNOTEL Month-to-Date Precipitation

Current as of Nov 18, 2020



0 25 50 100 150 200 Miles

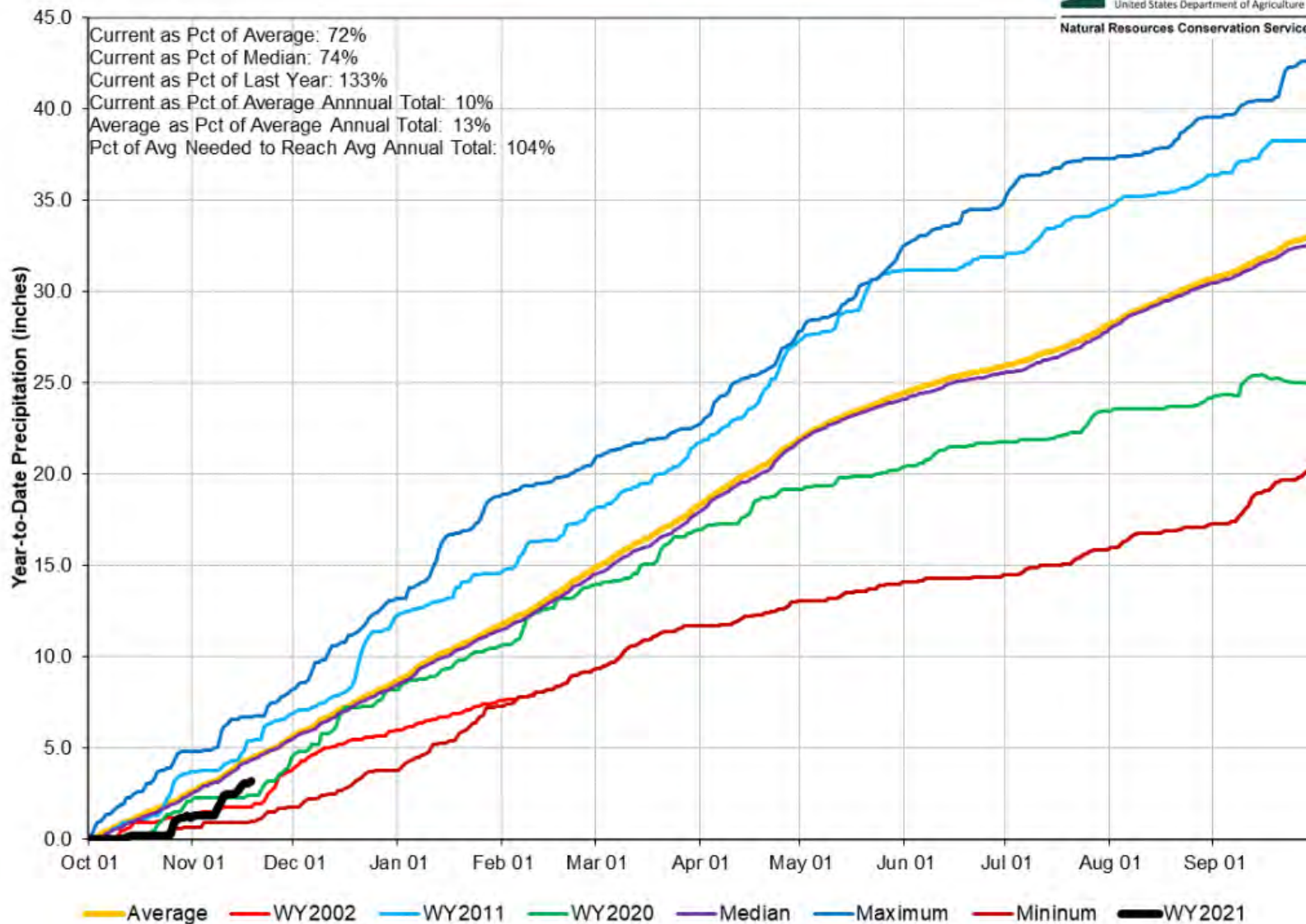
## Colorado Statewide High/Low Year-to-Date Precipitation Summary

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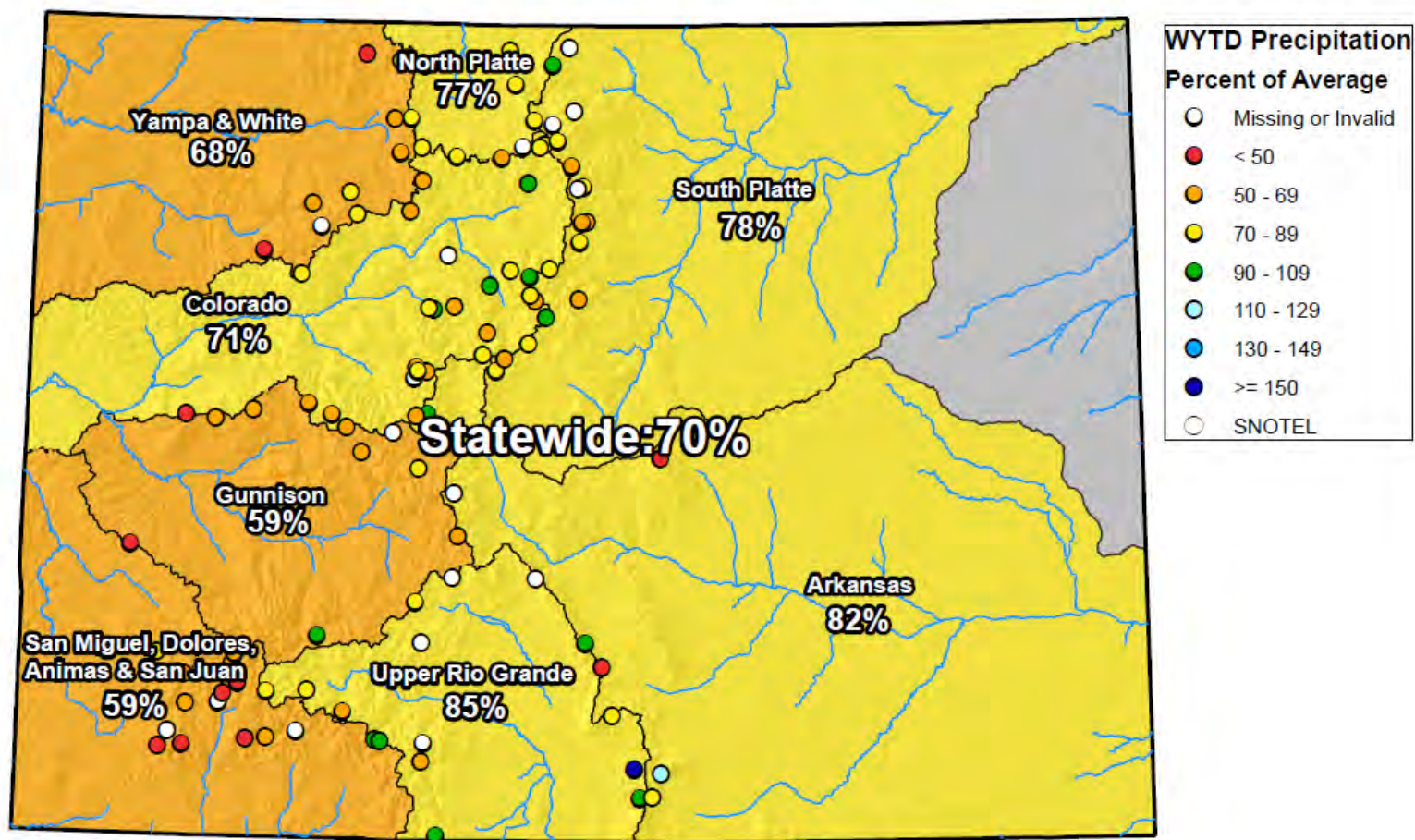
Natural Resources Conservation Service





## Colorado SNOTEL Water Year to Date Precipitation

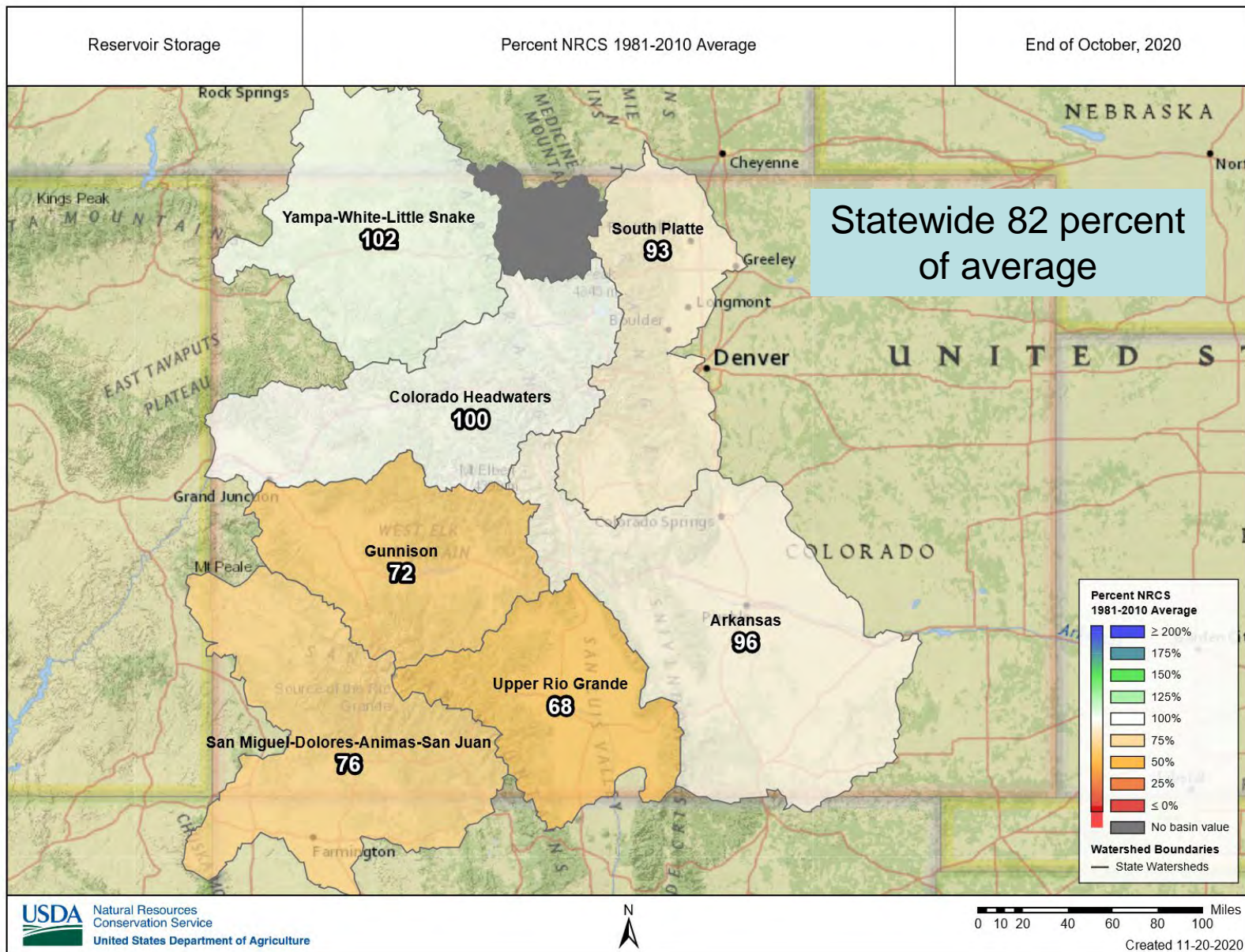
Current as of Nov 18, 2020



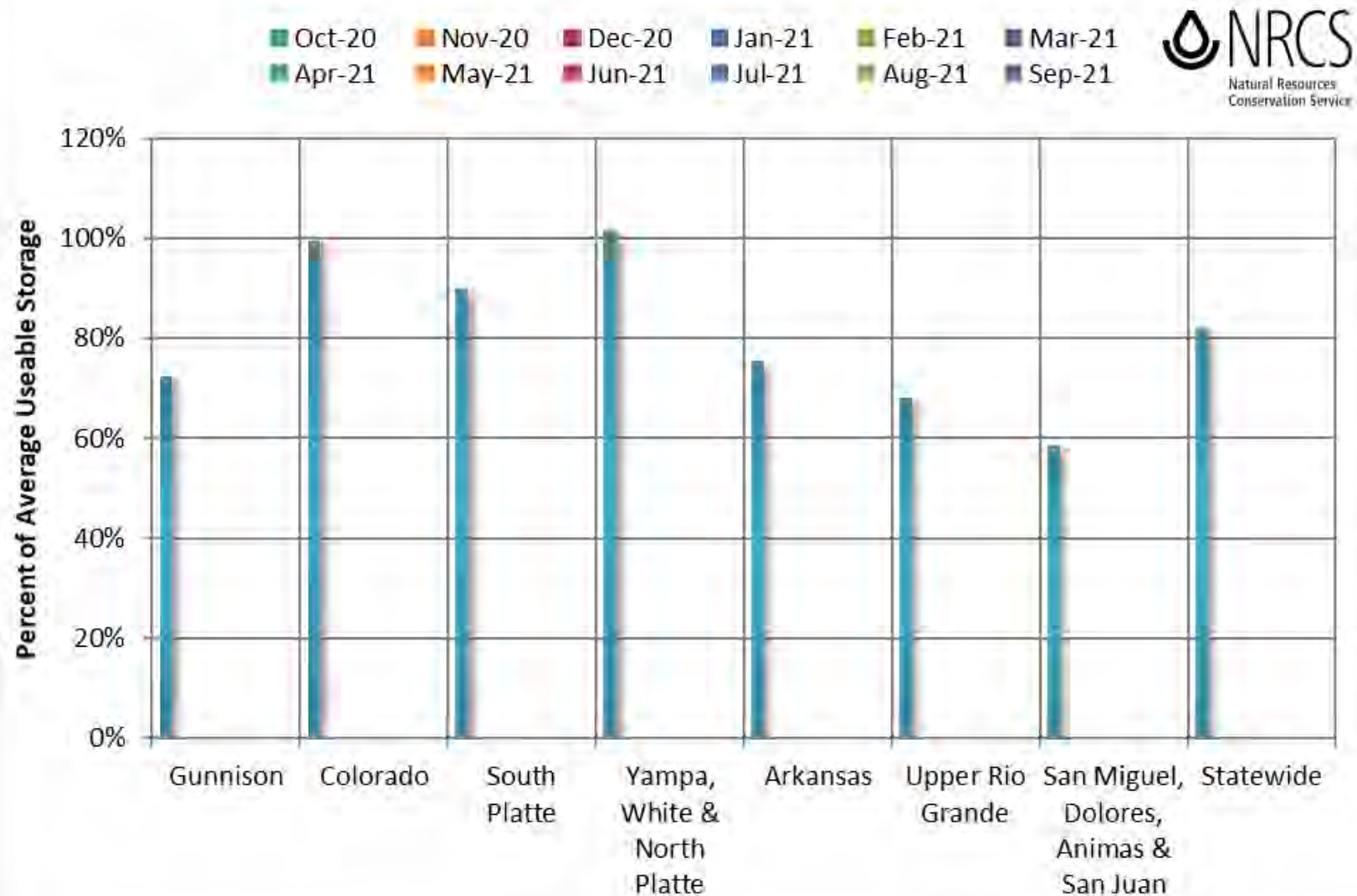
0 25 50 100 150 200 Miles



# Colorado Snow Surveys

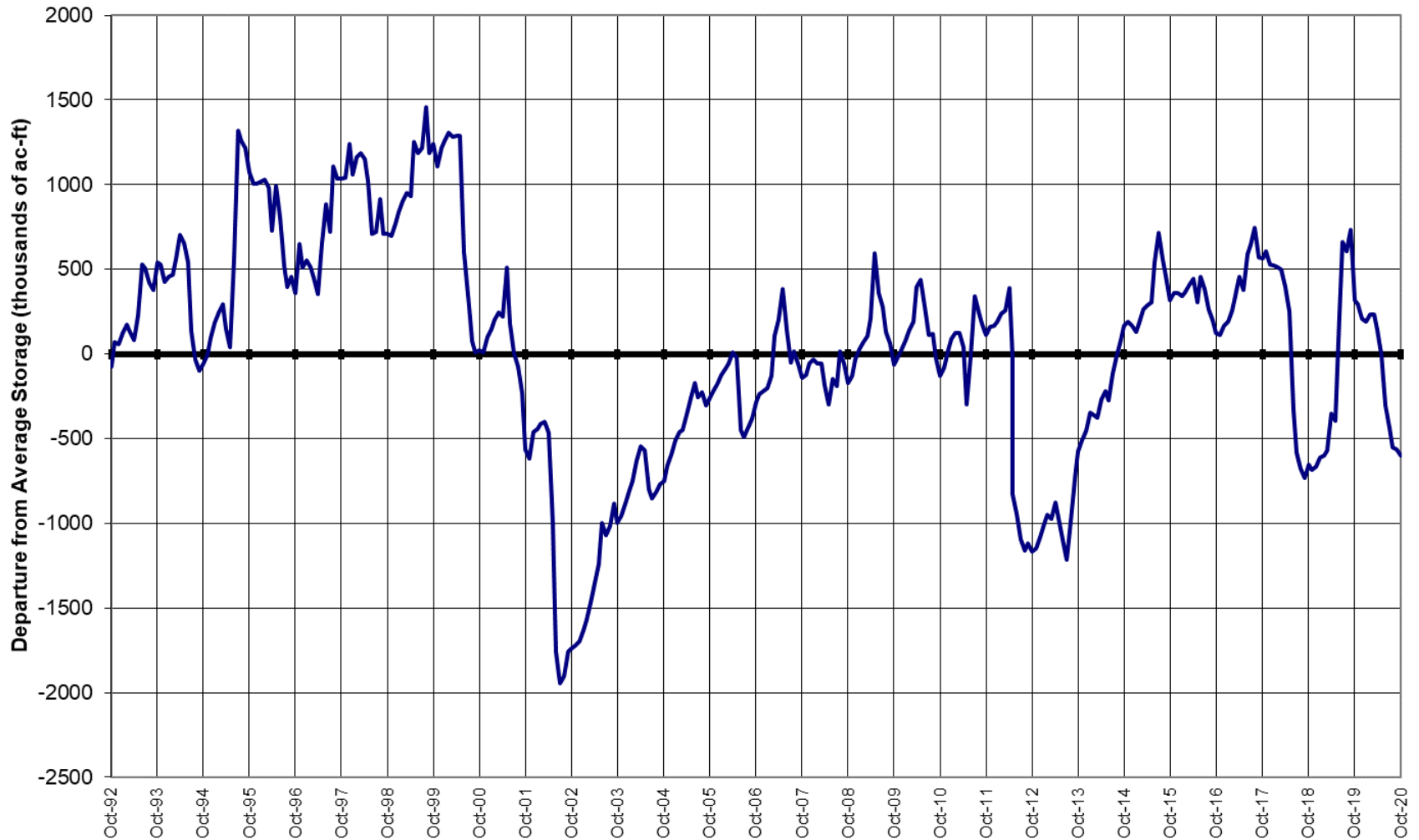


## Colorado Reservoir Storage

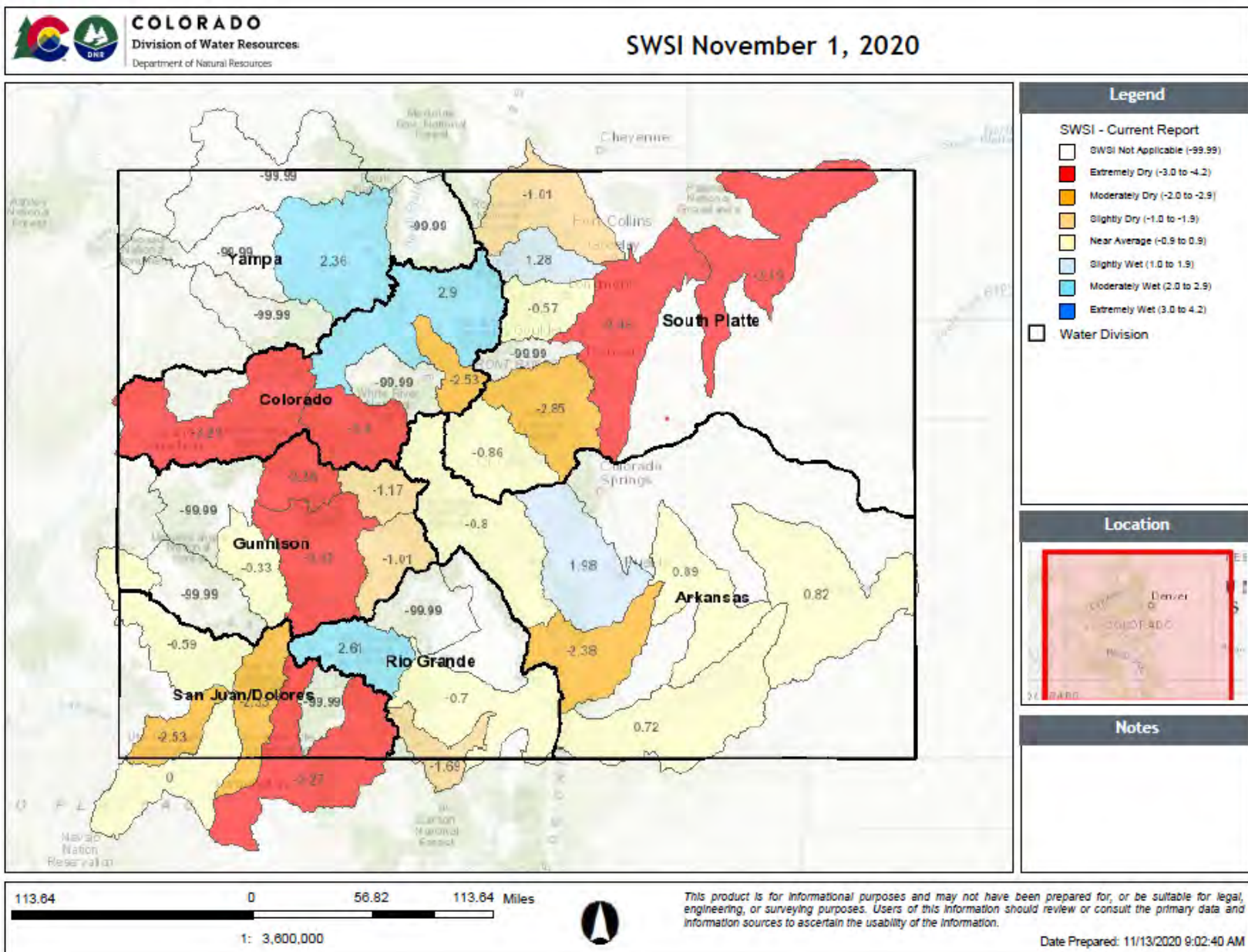




## COLORADO STATEWIDE Reservoir Storage Departure from Average



November 1, 2020 SWSI



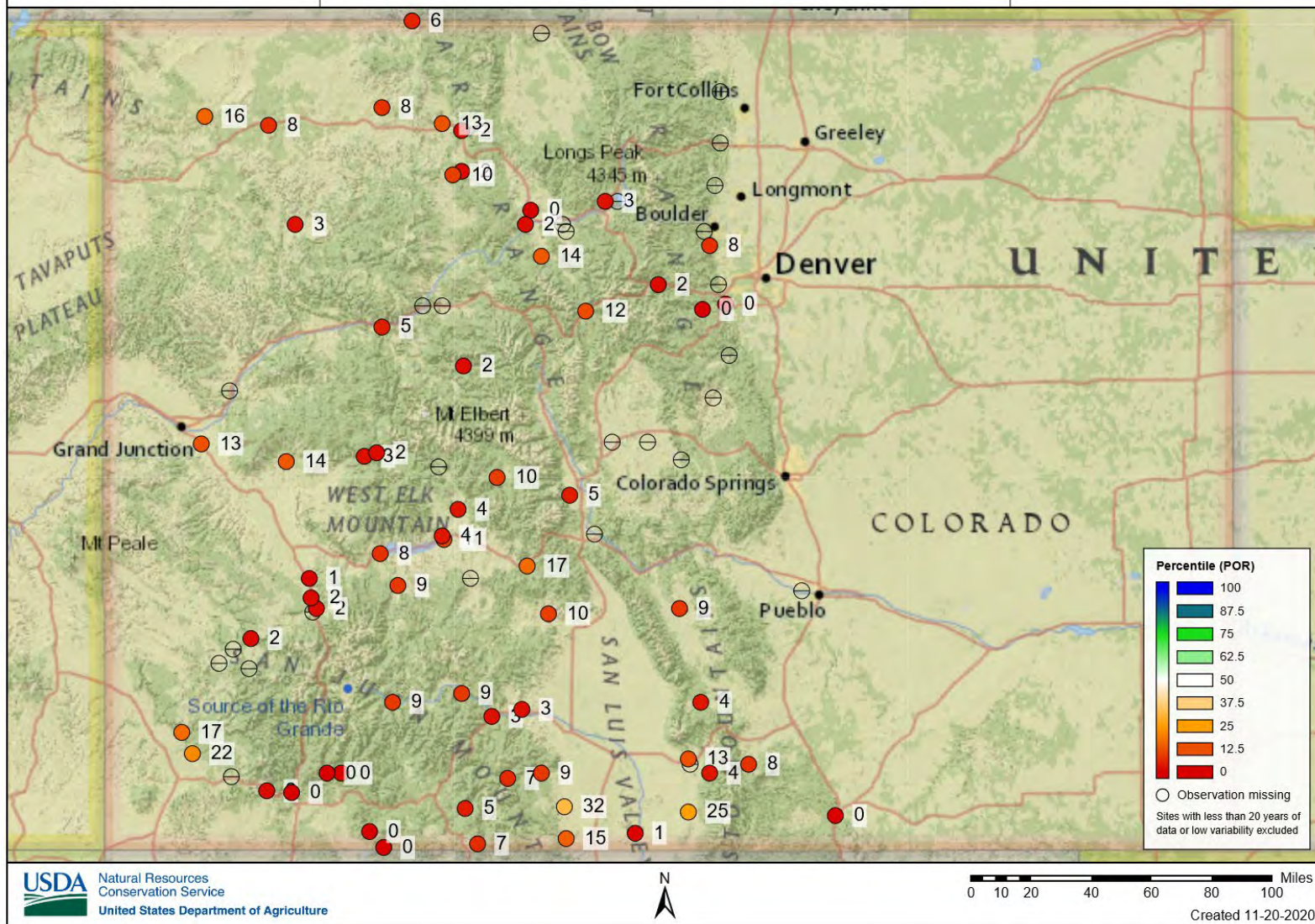


# Colorado Snow Surveys

3 month Adjusted Volume, Observed

Percentile (POR)

August 1, 2020 - October 31, 2020



## Summary

### •Precipitation Statewide

- October precipitation remained well below average statewide
- November precipitation has been near normal but still leaving a deficit for the water year to date

### •Reservoir storage is near normal in several basins but below in several others, particularly in southwest

- Ranges from 68 to 102 percent of average across the state
- Statewide storage is 82 percent of average

### •Statewide snowpack is 99 percent of average but it is still very early in the season

- We have received 15 percent of the normal peak snowpack which commonly occurs in mid-April

### •Extremely low fall baseflows in rivers across the state





United States Department of Agriculture

Colorado Snow Surveys

# Water Availability Task Force Meeting

## November 20<sup>th</sup>, 2020

### 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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