



United States Department of Agriculture

Colorado Snow Surveys

# Water Availability Task Force Meeting

## April 18<sup>th</sup>, 2016

### NRCS Snow Survey and Water Supply Forecasting Program

Karl Wetlaufer

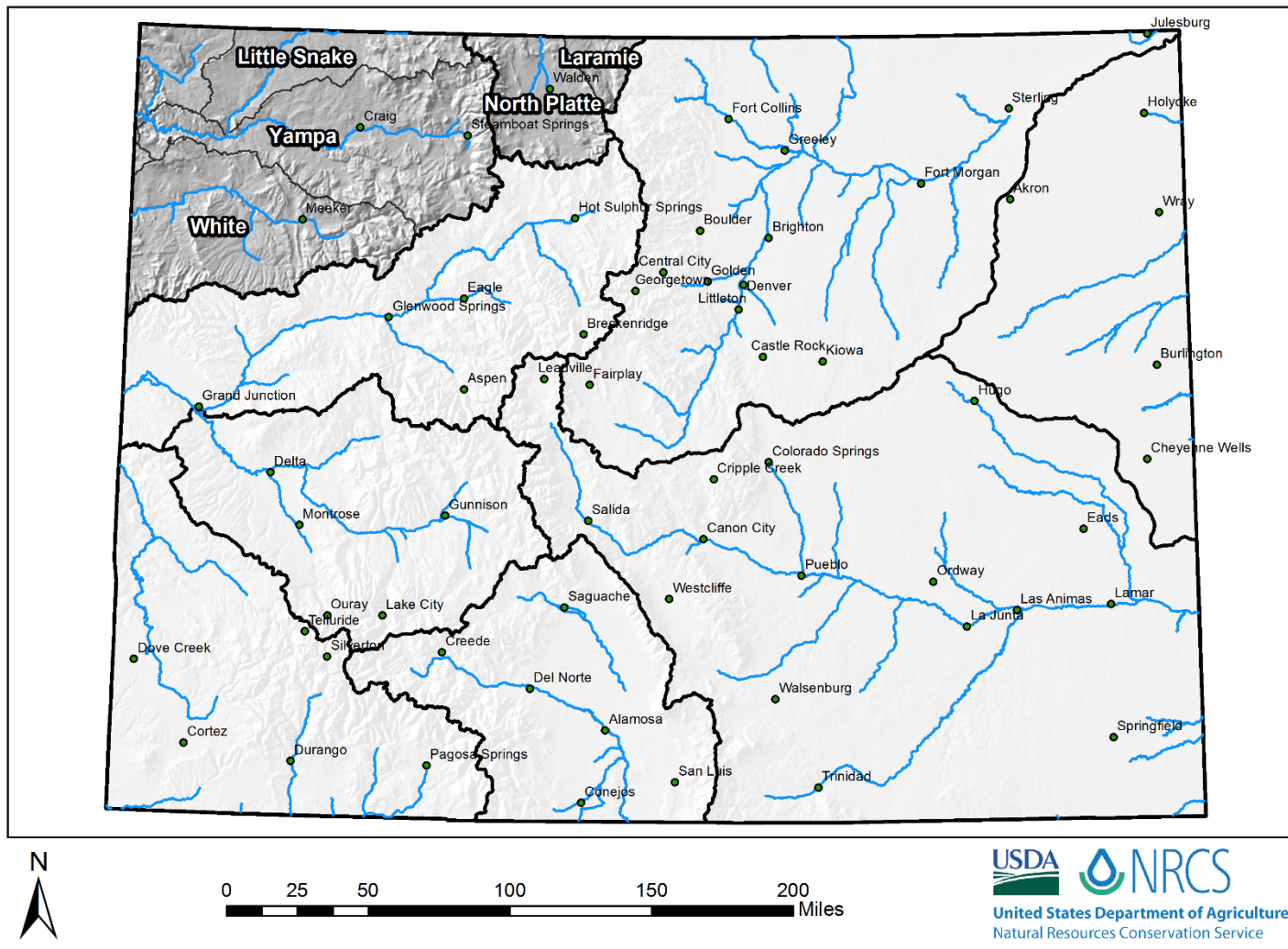
Hydrologist

720-544-2853

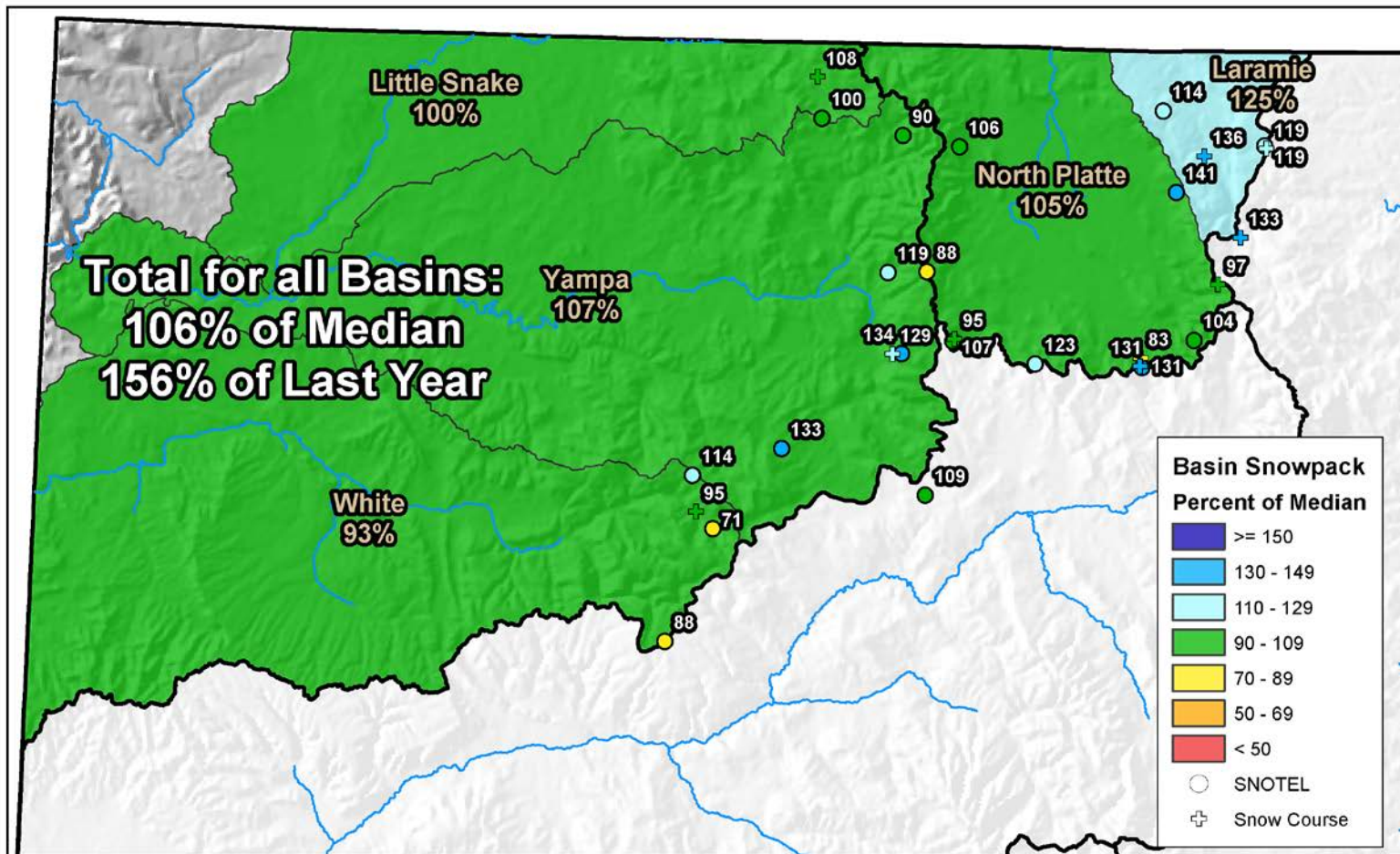
<http://www.nrcs.usda.gov/wps/portal/nrcs/main/co/snow/>

## Major Basin Summary

Yampa, White, and North Platte River Basins



## Yampa, White, and North Platte River Basins Monthly Snowpack Summary April 1, 2016

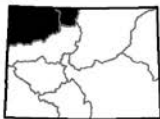
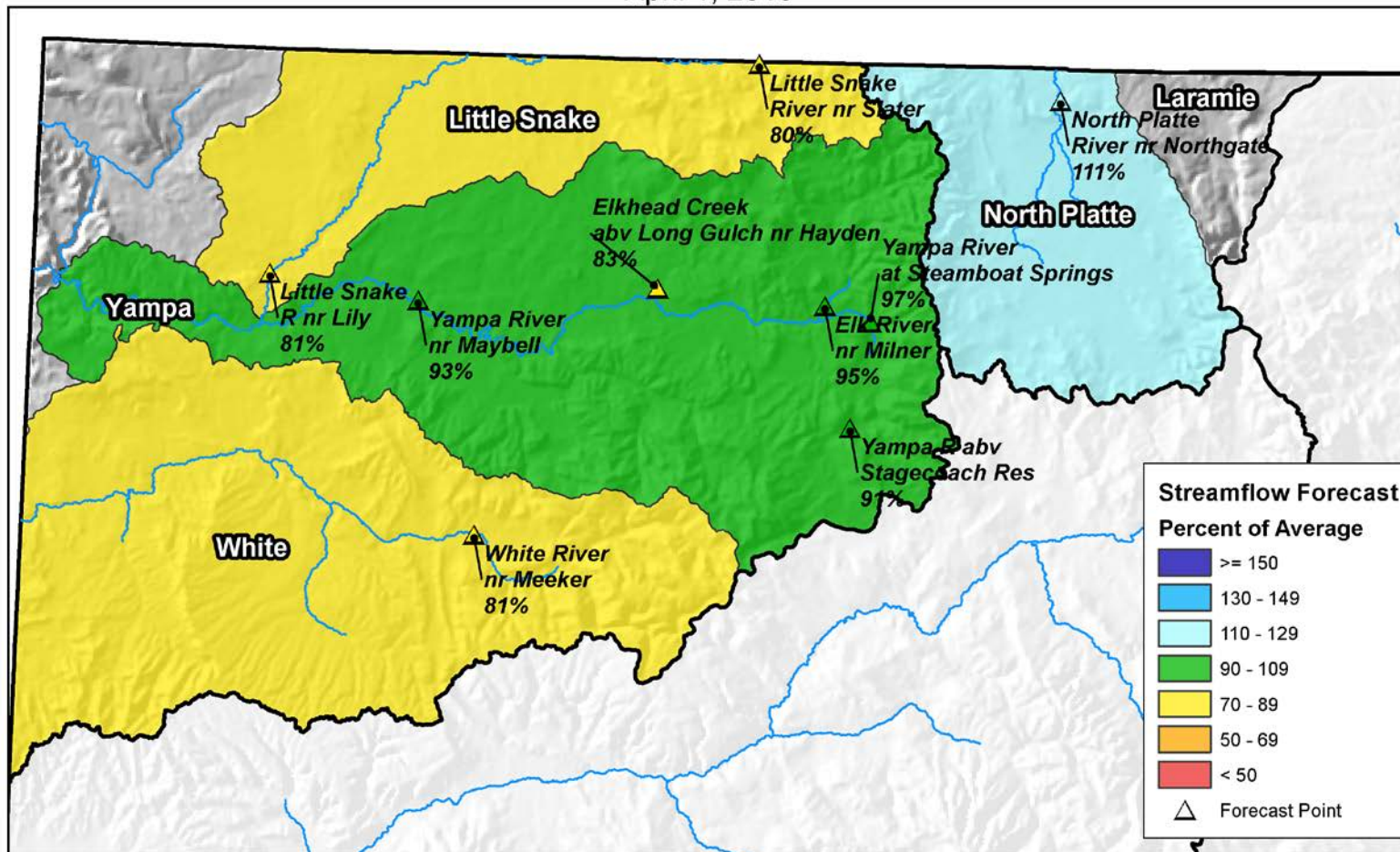


0 10 20 40 60 80 Miles



## Yampa, White, and North Platte River Basins Streamflow Forecast Summary

April 1, 2016



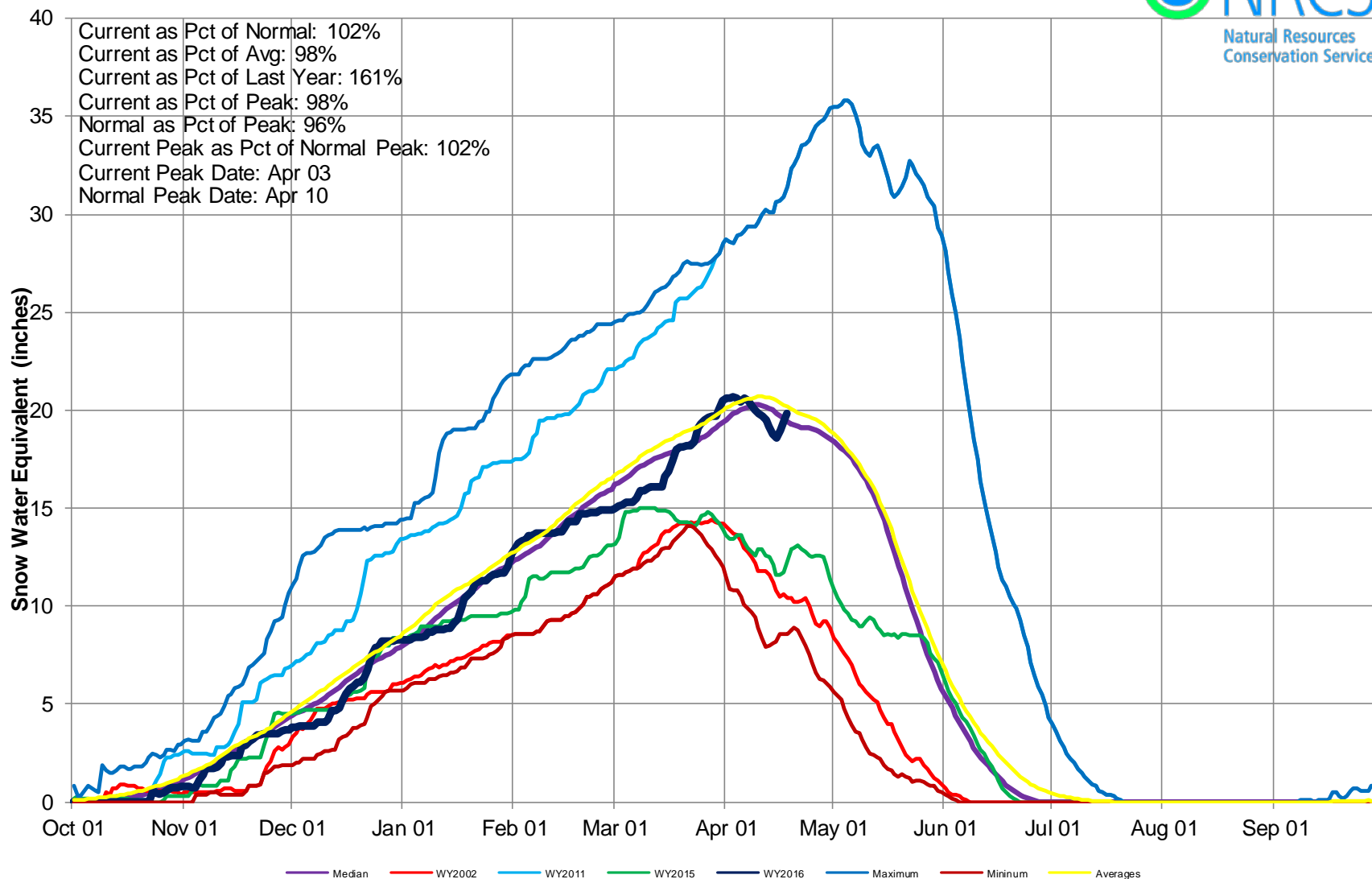
0 10 20 40 60 80 Miles





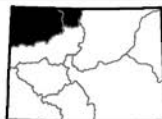
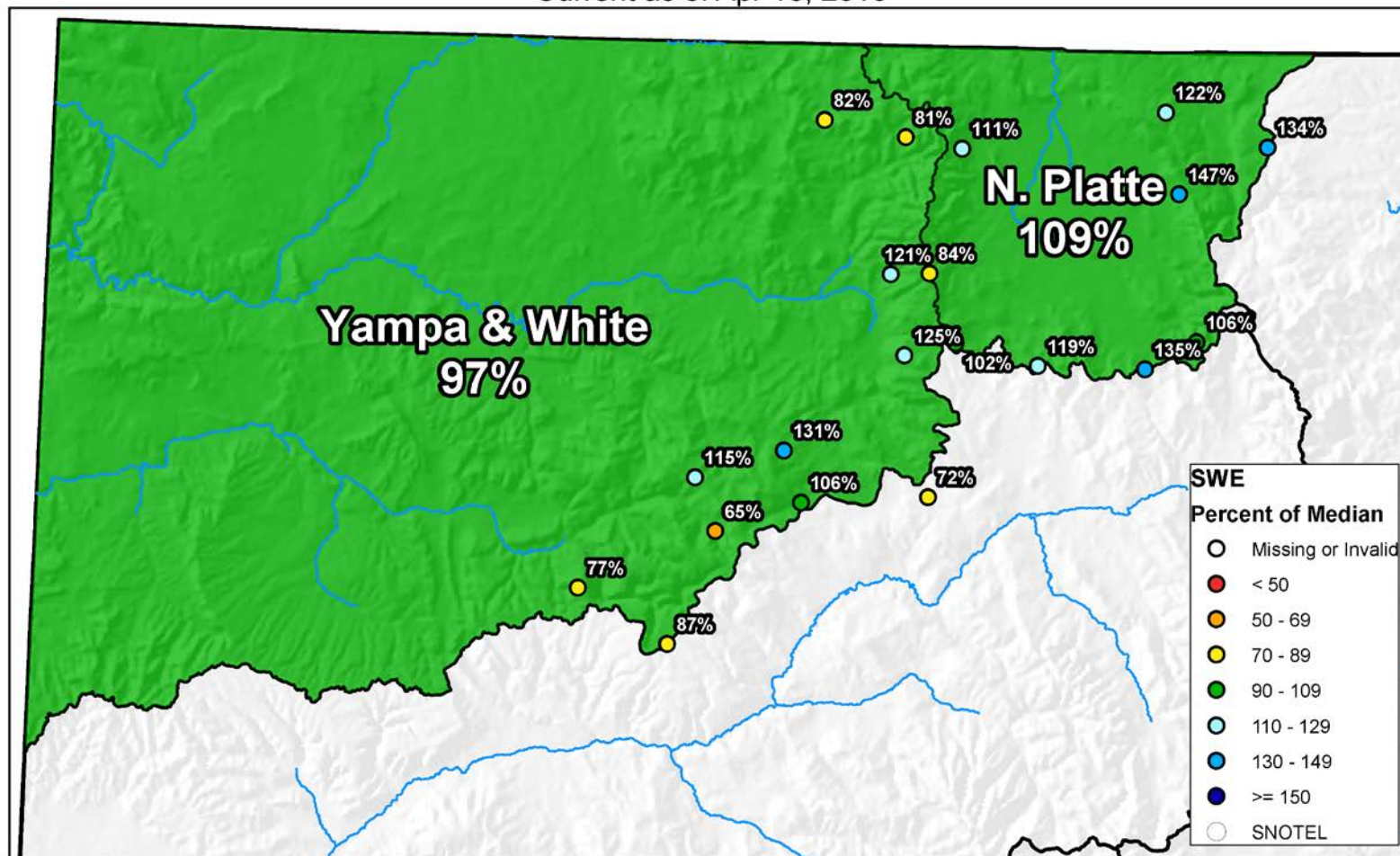
## Yampa, White & North Platte River Basins High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Apr 18, 2016*



## Yampa, White, and North Platte River Basins Snow Water Equivalent (SWE) Summary

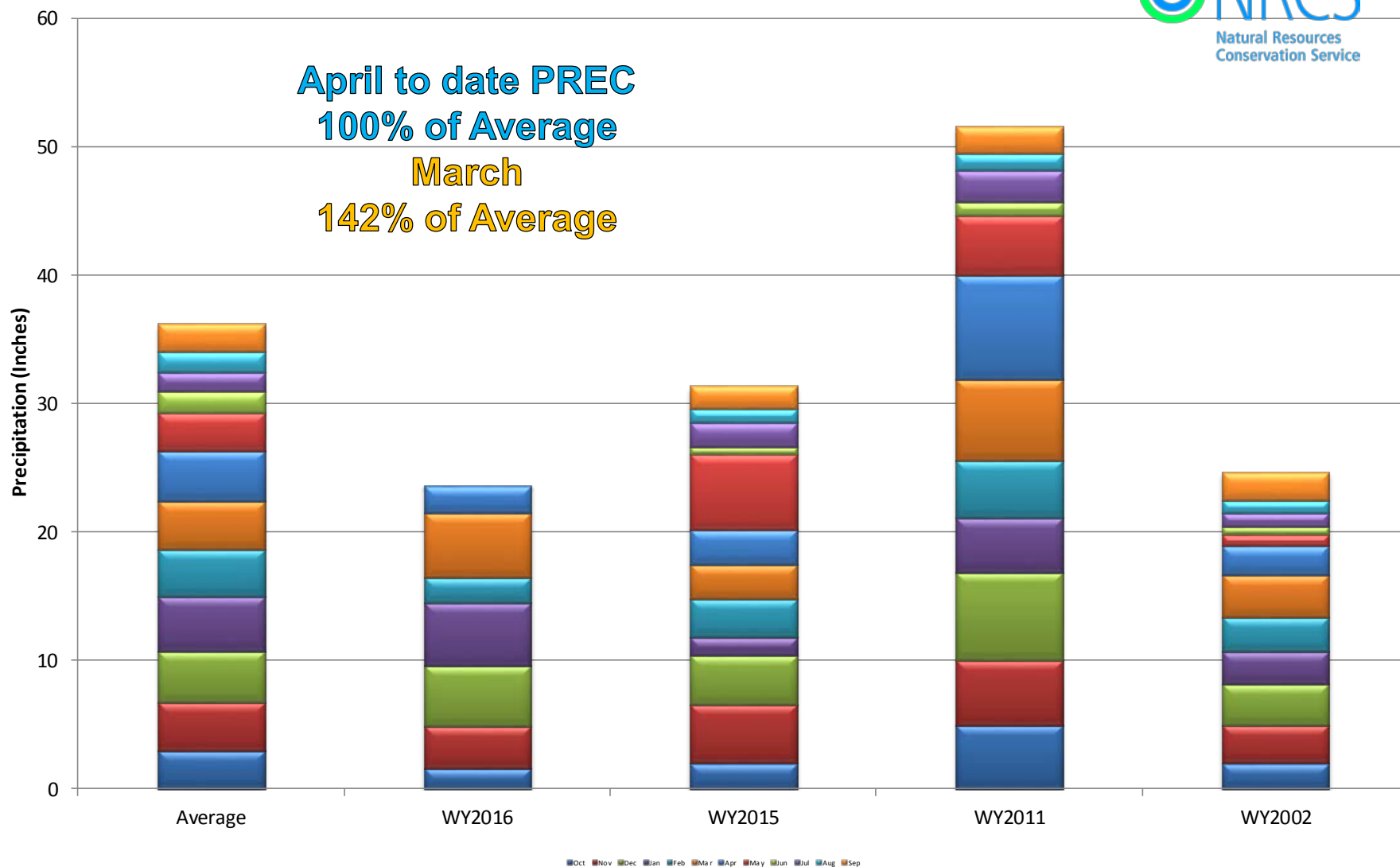
Current as of Apr 18, 2016



0 10 20 40 60 80 Miles

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

**Based on Provisional SNOTEL data as of Apr 18, 2016**

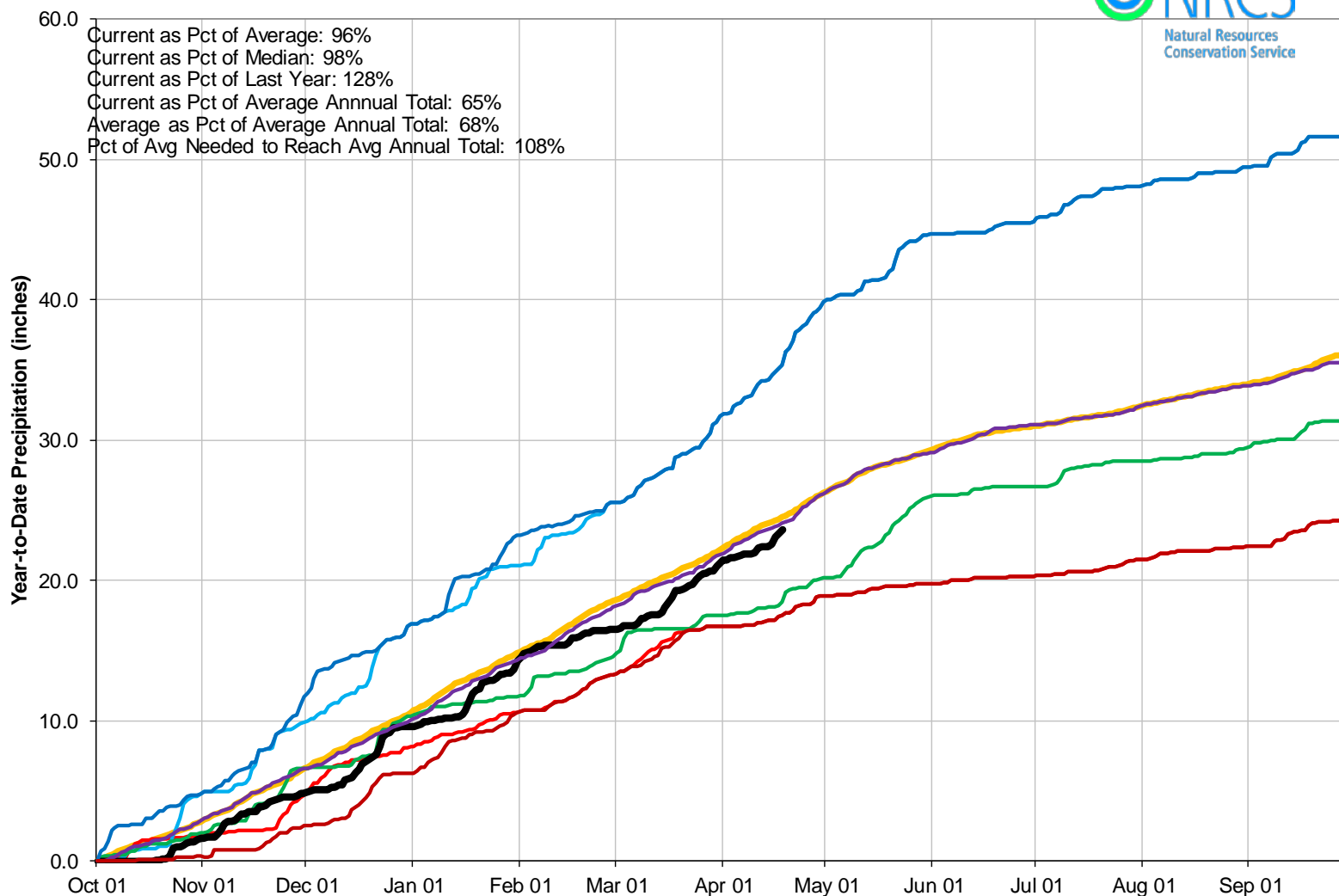


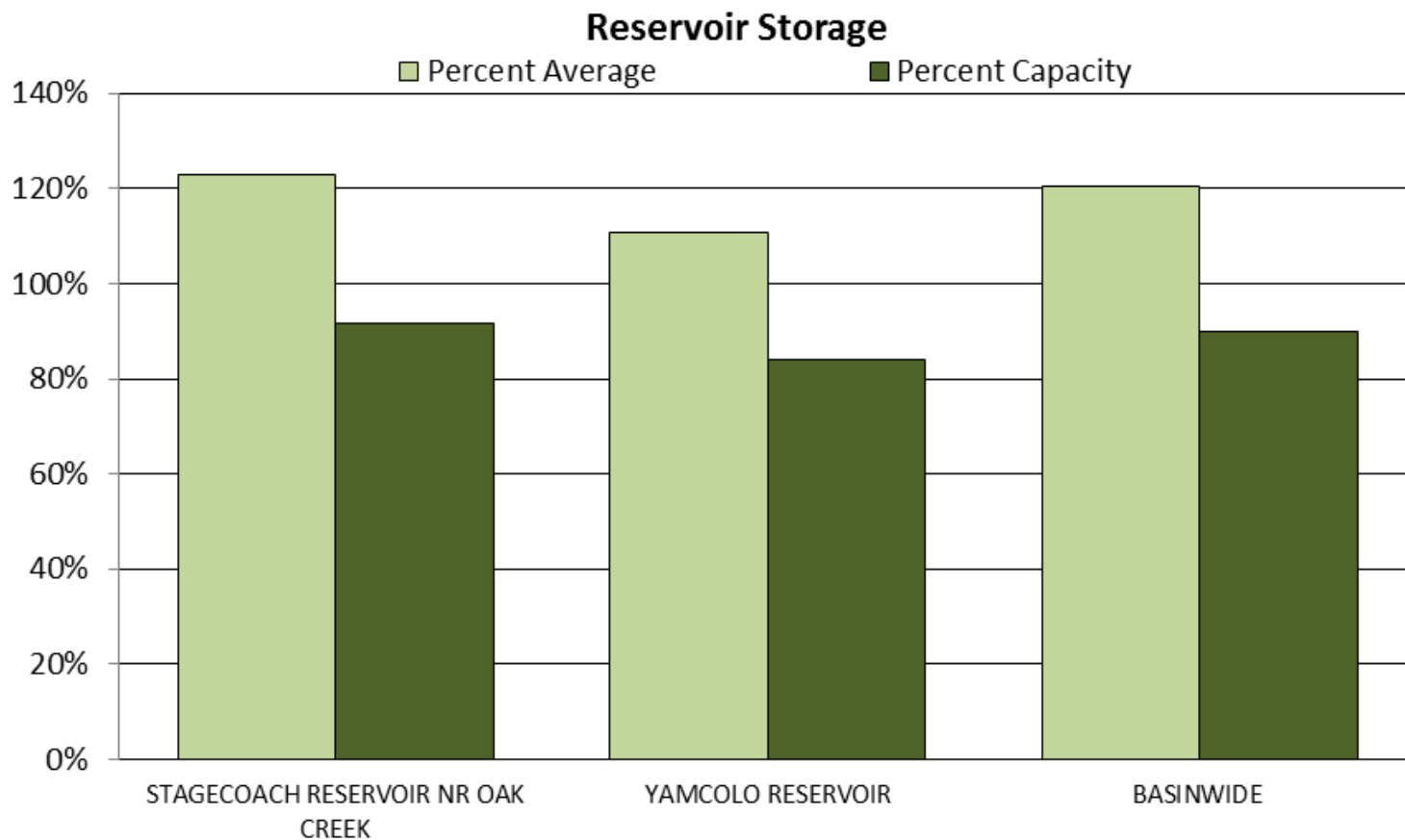




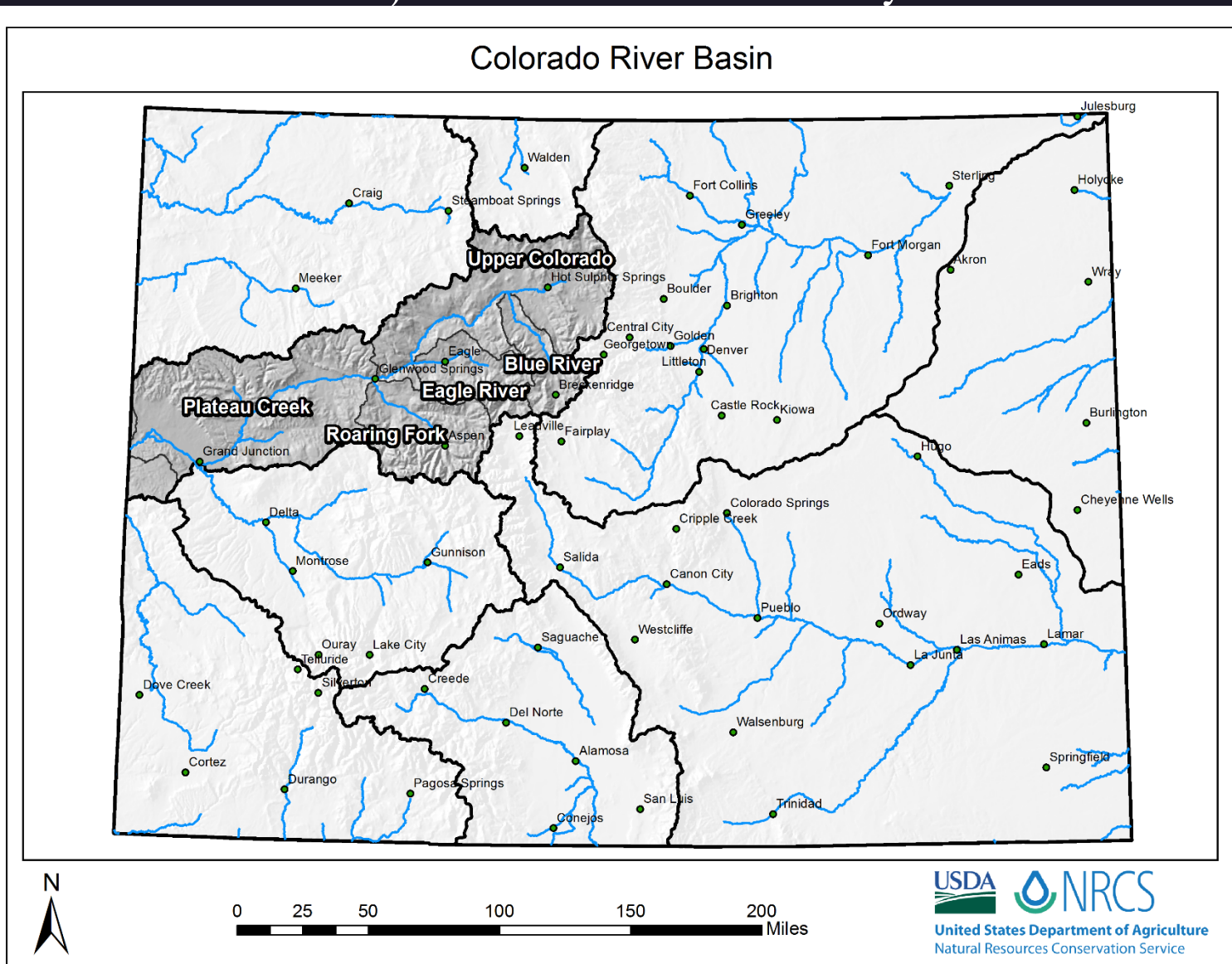
## Yampa & White River Basins High/Low Year-to-Date Precipitation Summary

*Based on Provisional SNOTEL data as of Apr 18, 2016*



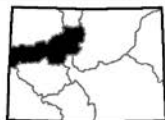
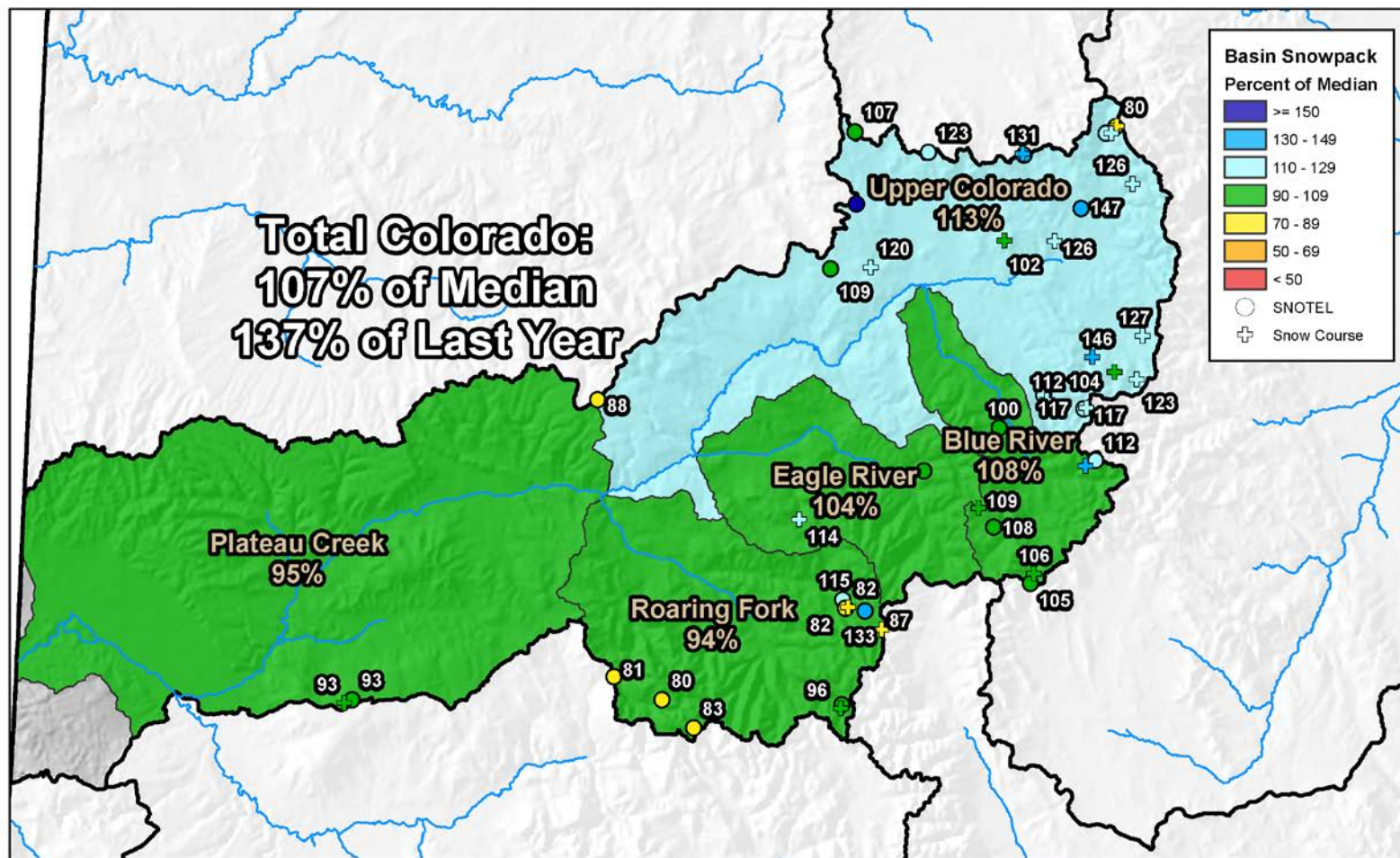


## Major Basin Summary



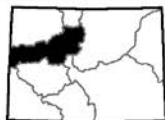
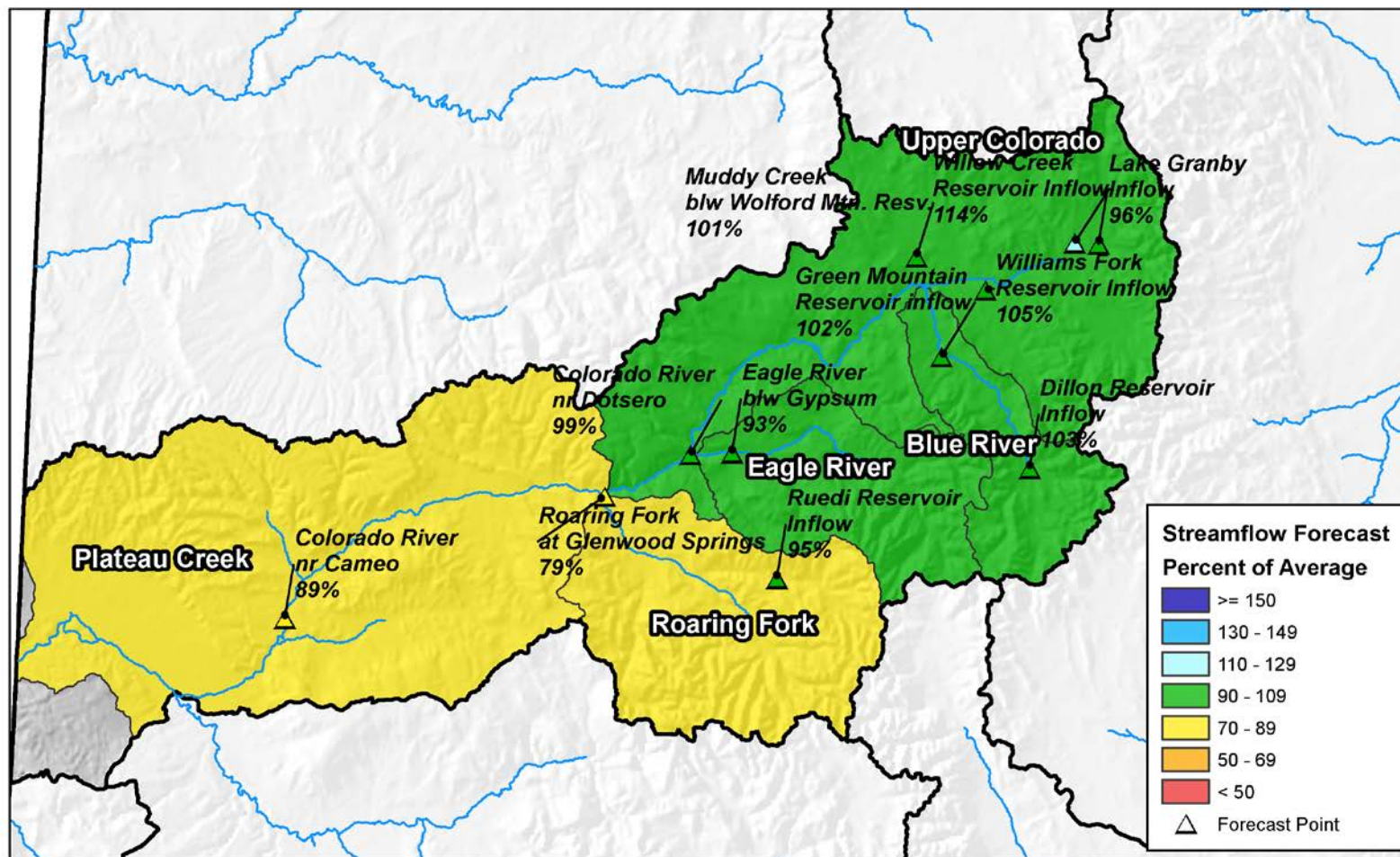


## Upper Colorado River Basin Monthly Snowpack Summary April 1, 2016



## Upper Colorado River Basin Streamflow Forecast Summary

April 1, 2016

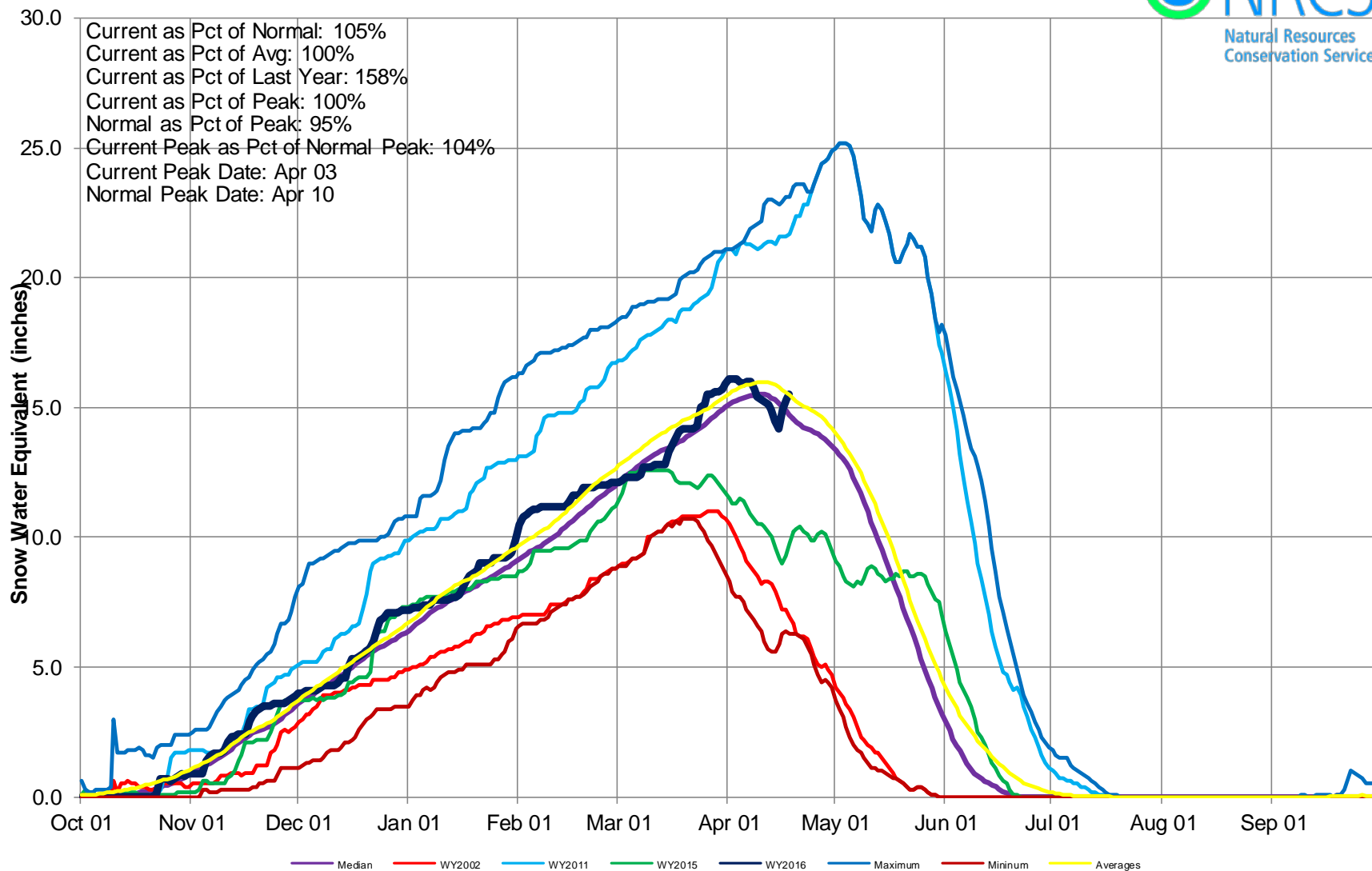


0 10 20 40 60 80 Miles



## Upper Colorado River Basin High/Low Snowpack Summary

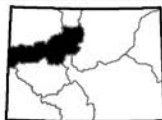
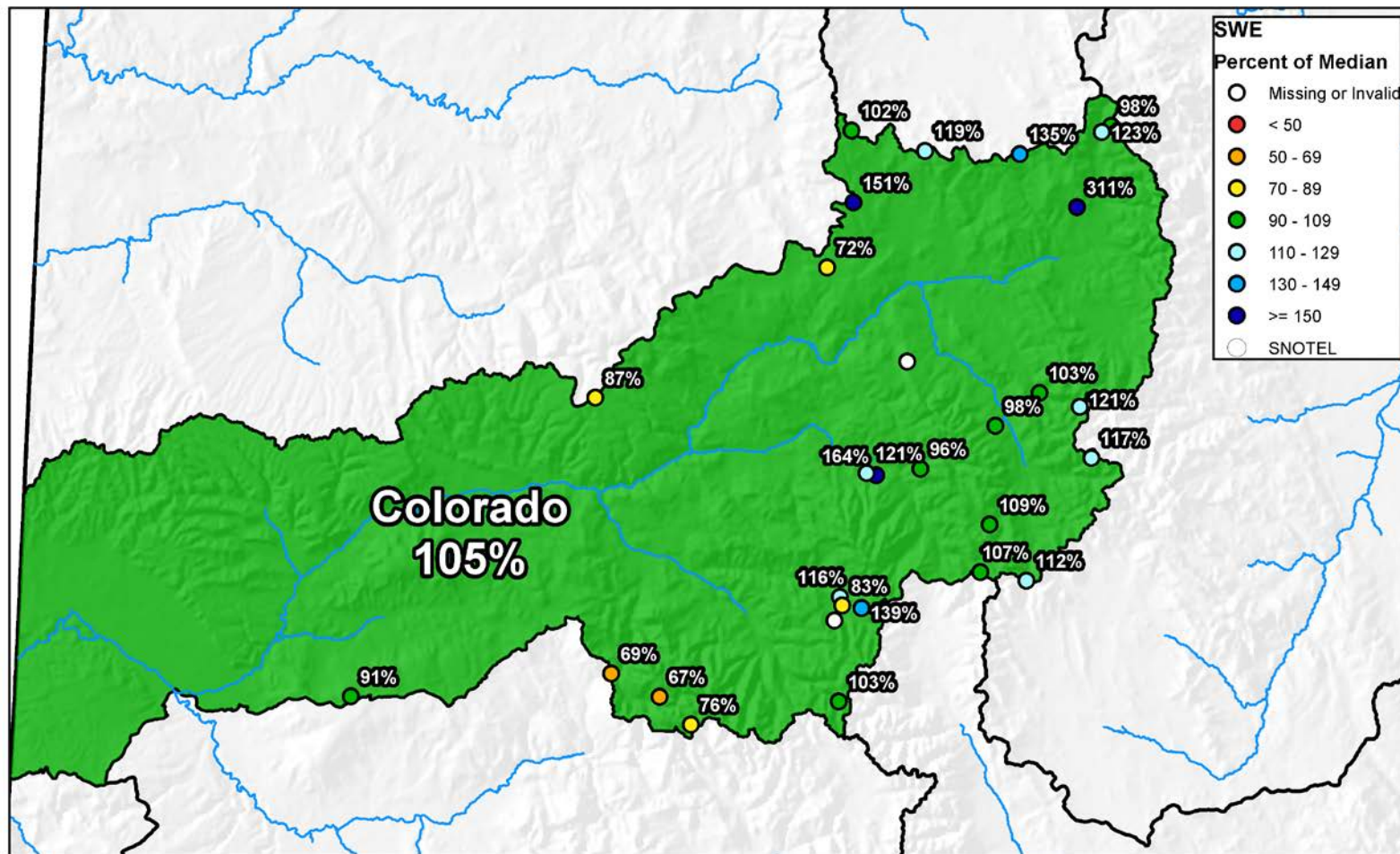
*Based on Provisional SNOTEL data as of Apr 18, 2016*





## Upper Colorado River Basin Snow Water Equivalent (SWE) Summary

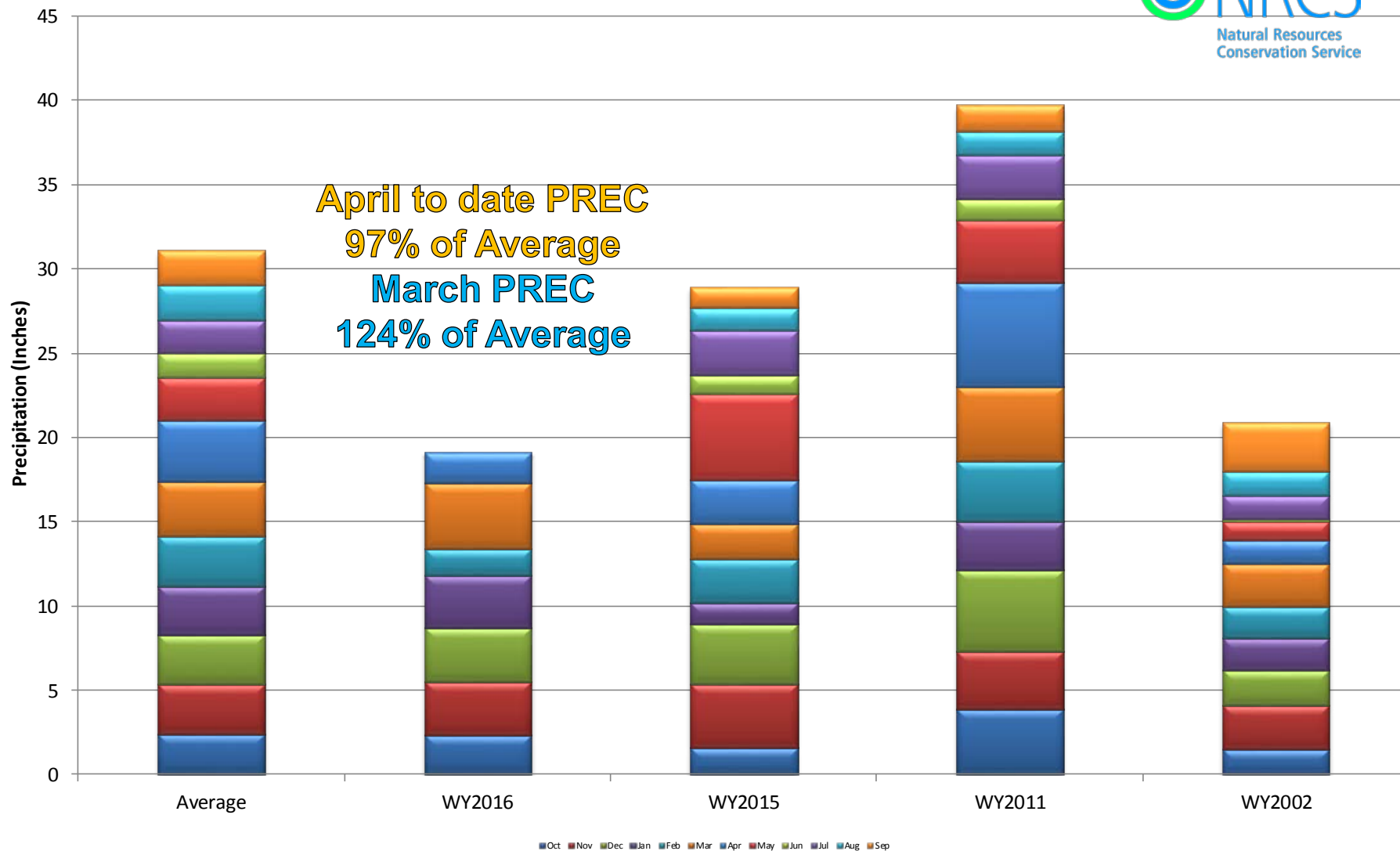
Current as of Apr 18, 2016



0 10 20 40 60 80 Miles

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

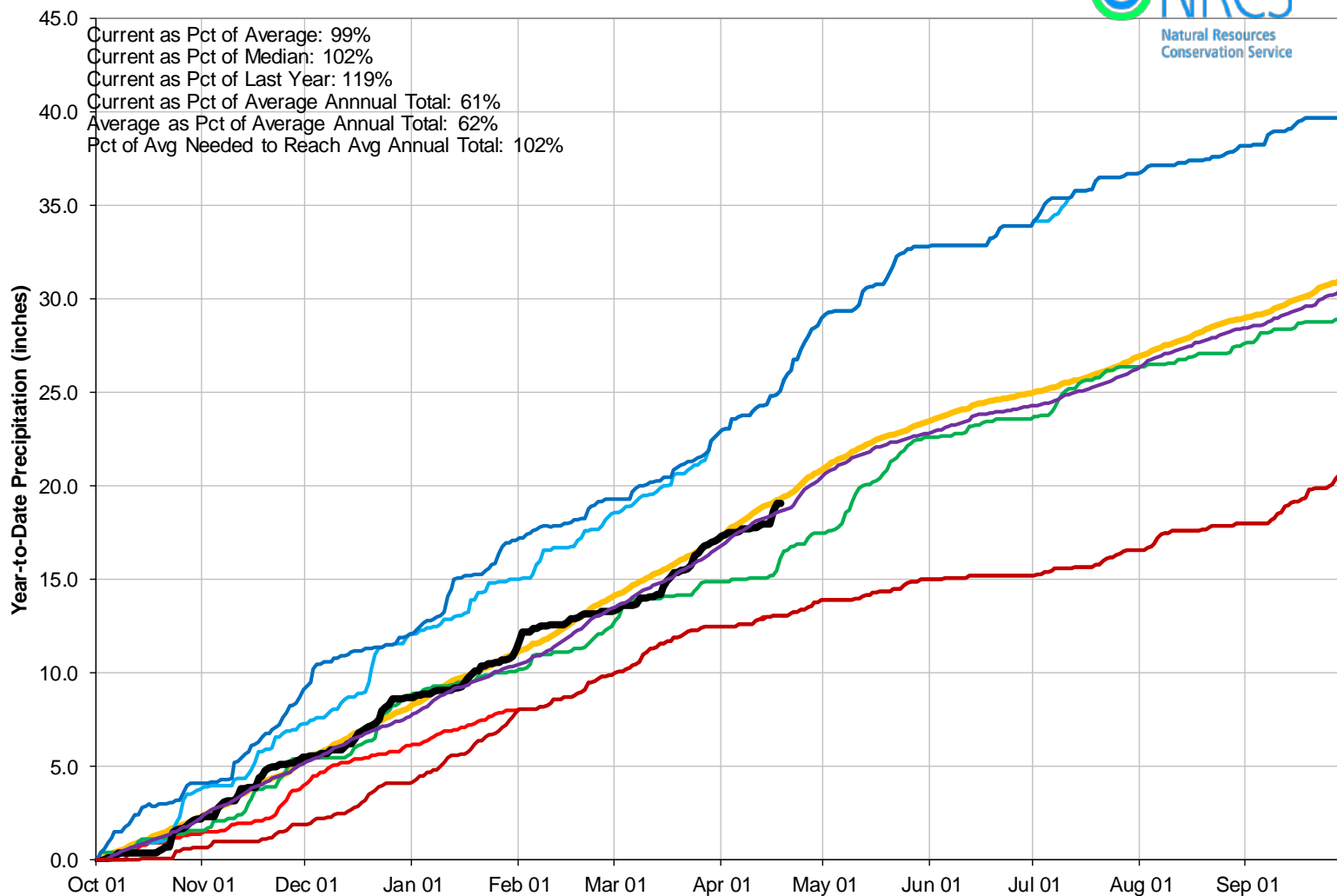
**Based on Provisional SNOTEL data as of Apr 18, 2016**



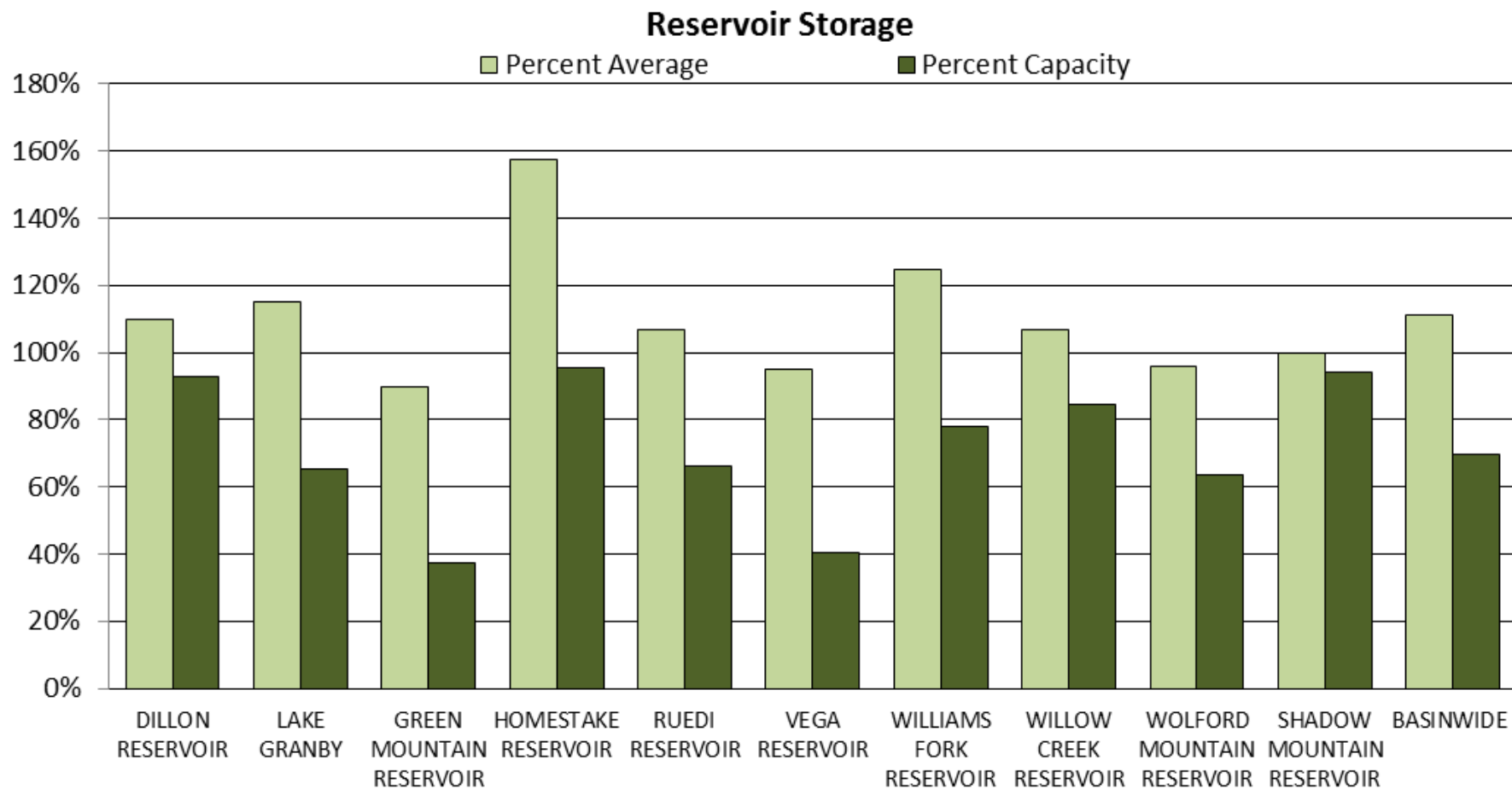


## Upper Colorado River Basin High/Low Year-to-Date Precipitation Summary

*Based on Provisional SNOTEL data as of Apr 18, 2016*

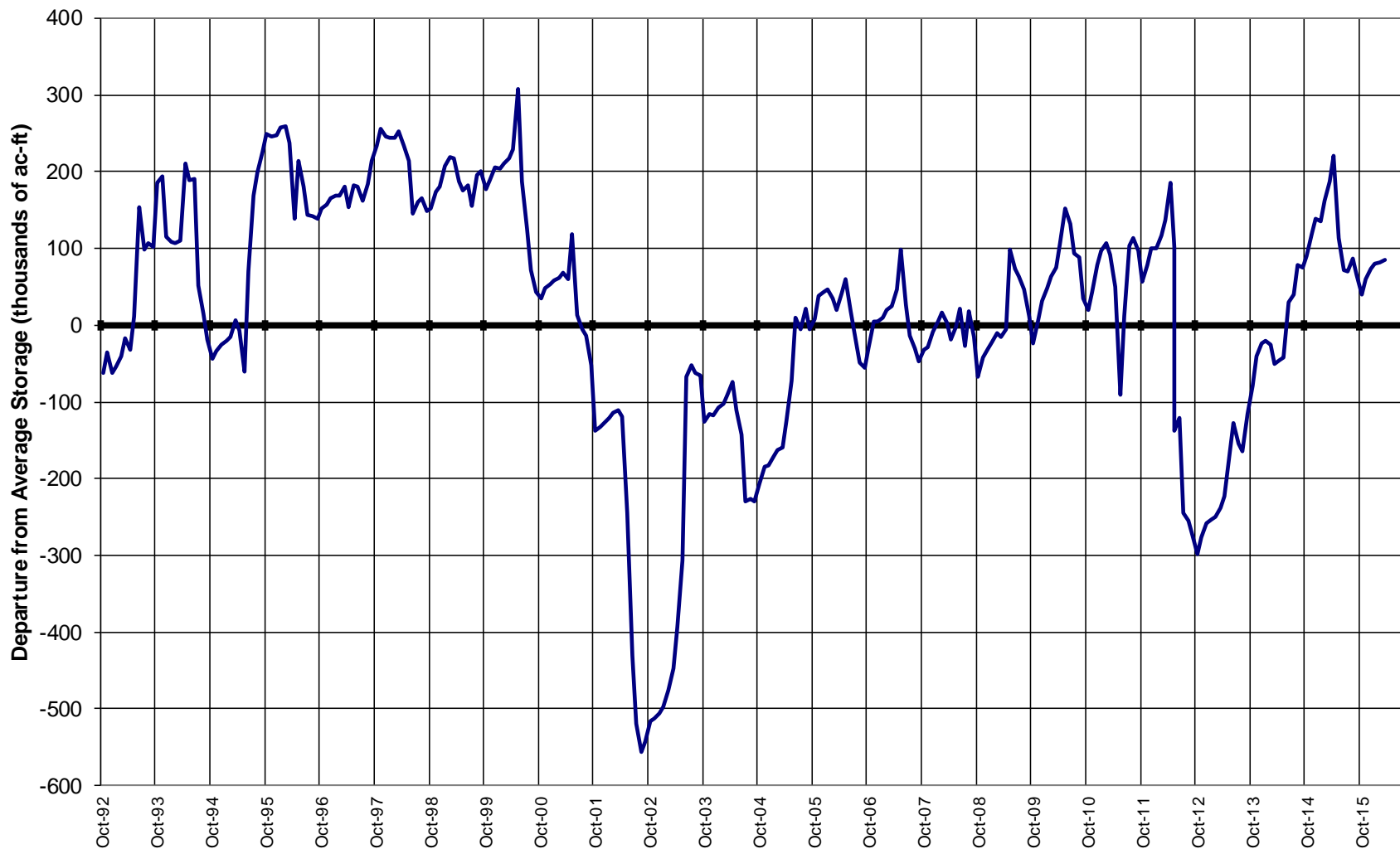






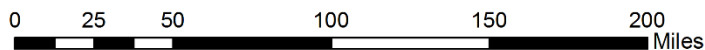
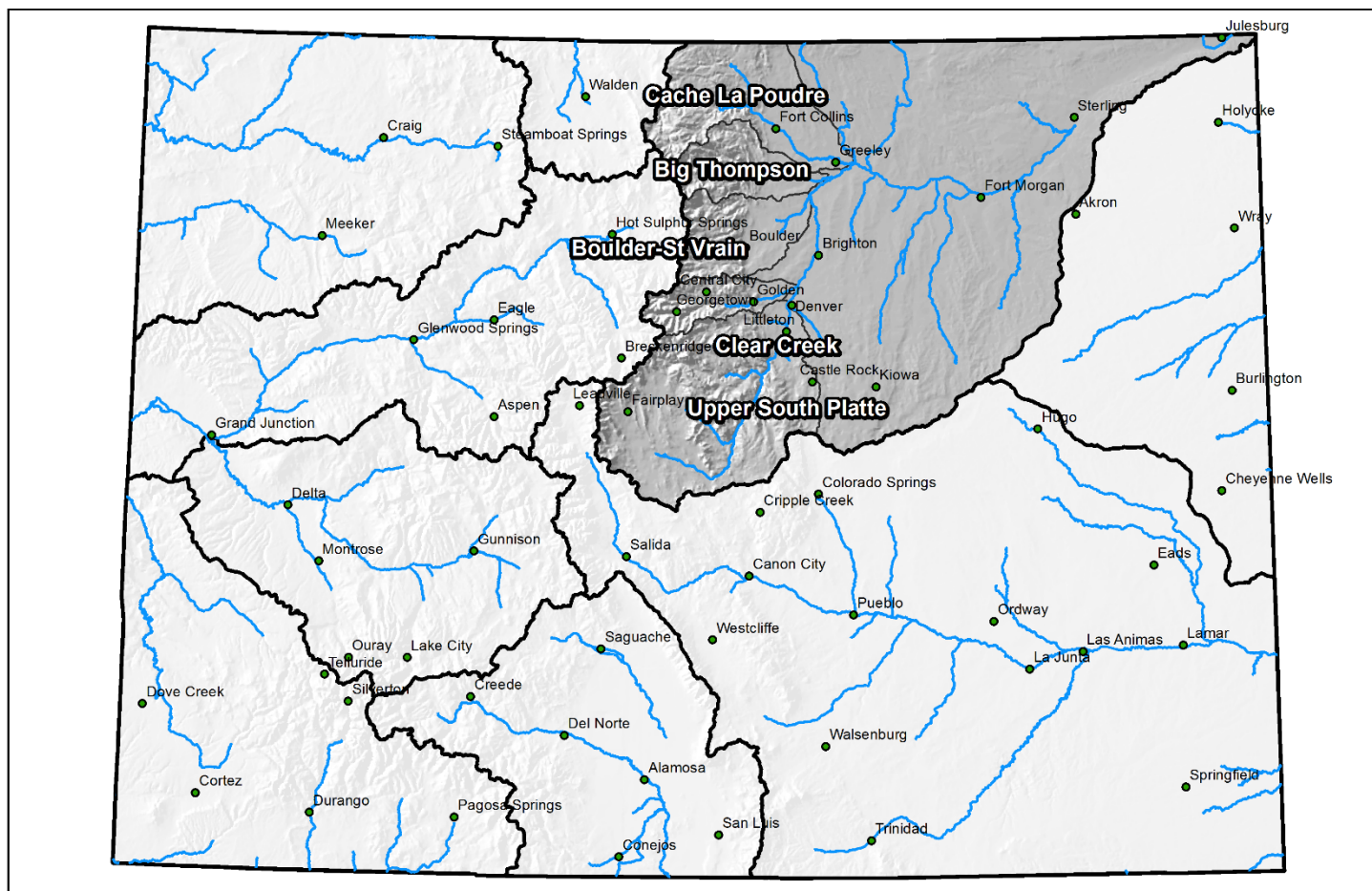


## COLORADO RIVER BASIN Reservoir Storage Departure from Average

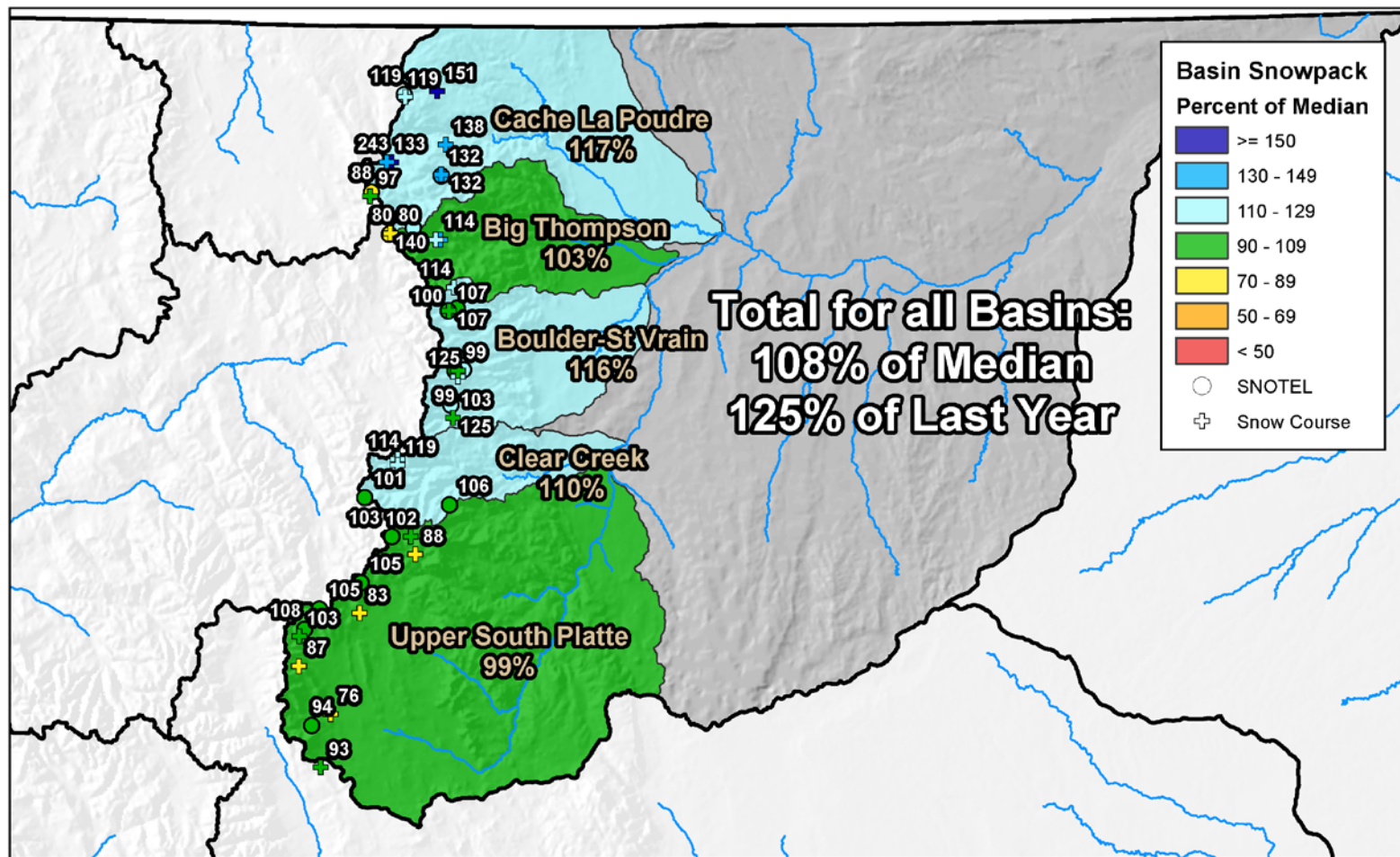


## Major Basin Summary

### South Platte River Basin



## South Platte River Basin Monthly Snowpack Summary April 1, 2016

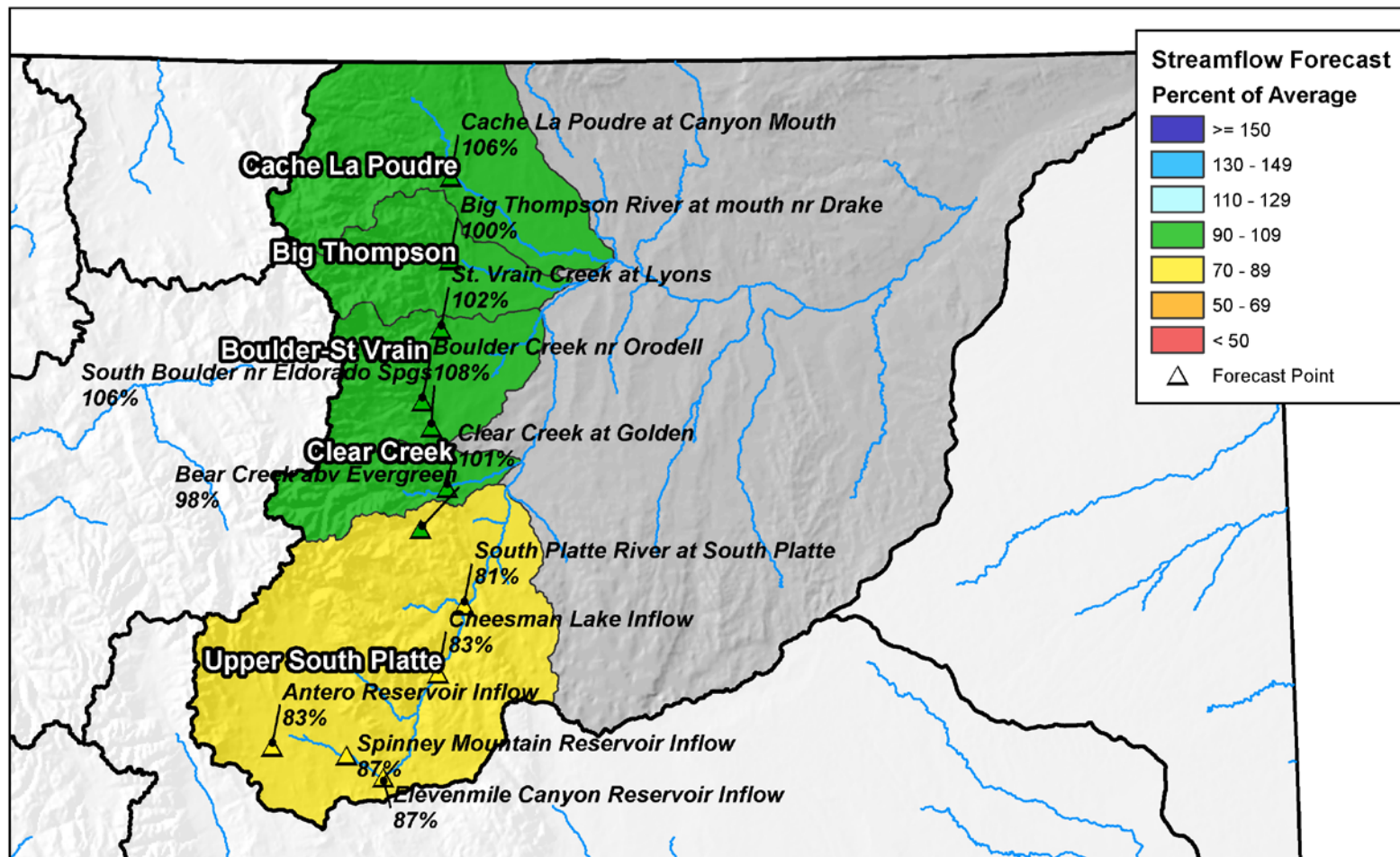


0 10 20 40 60 80 Miles



## South Platte River Basin Streamflow Forecast Summary

April 1, 2016

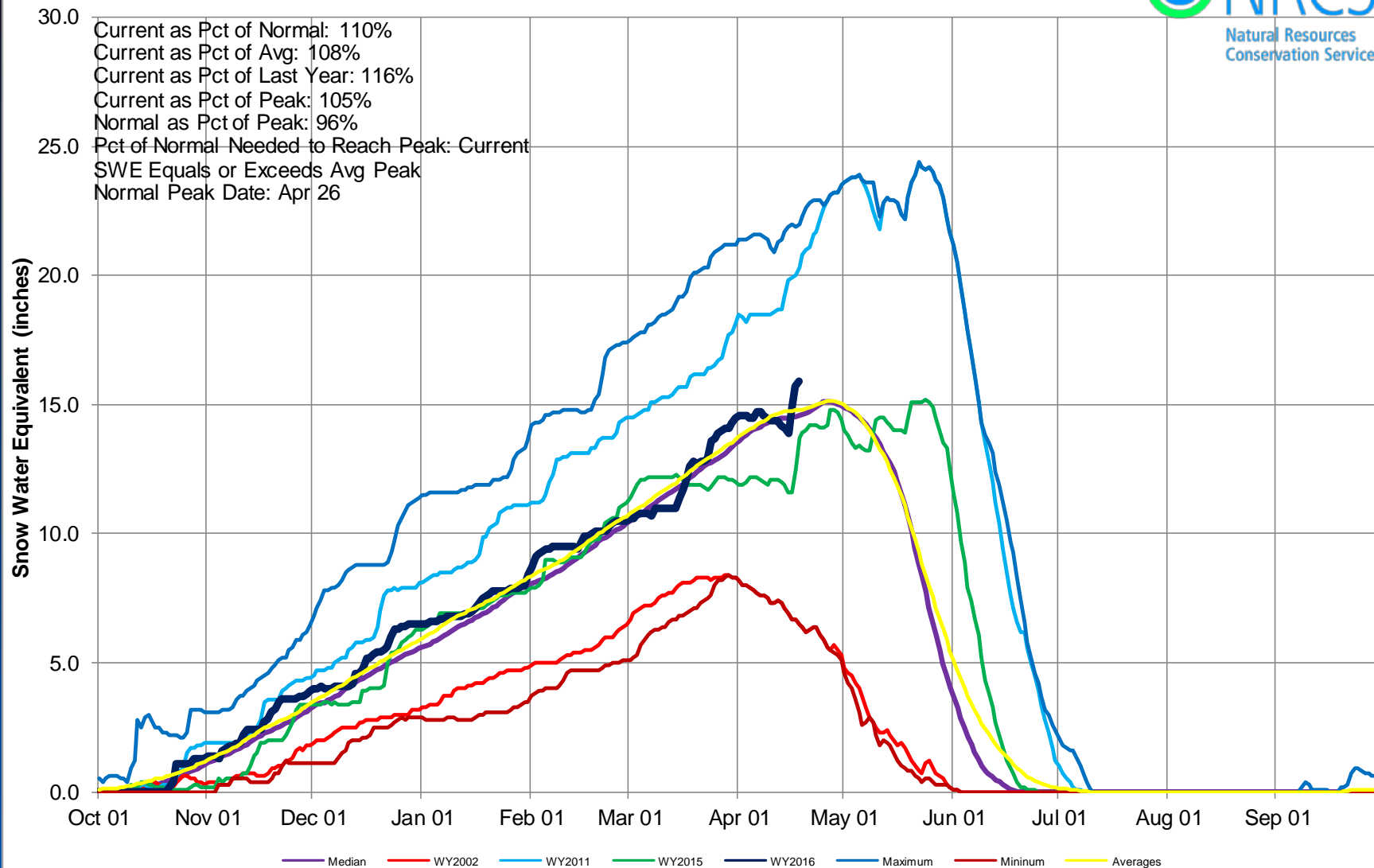


0 12.5 25 50 75 100 Miles



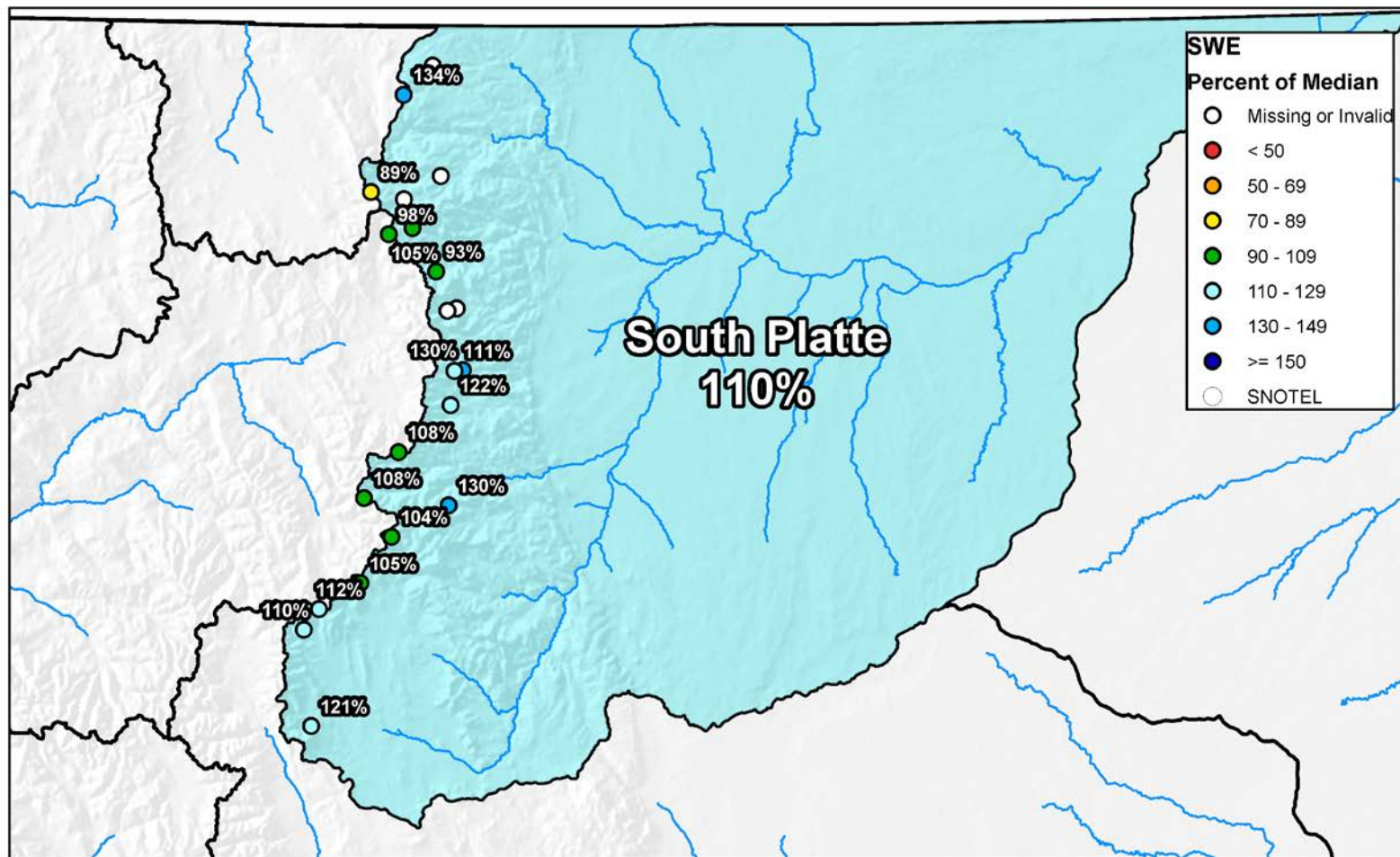
## South Platte River Basin High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Apr 18, 2016*



## South Platte River Basin Snow Water Equivalent (SWE) Summary

Current as of Apr 18, 2016

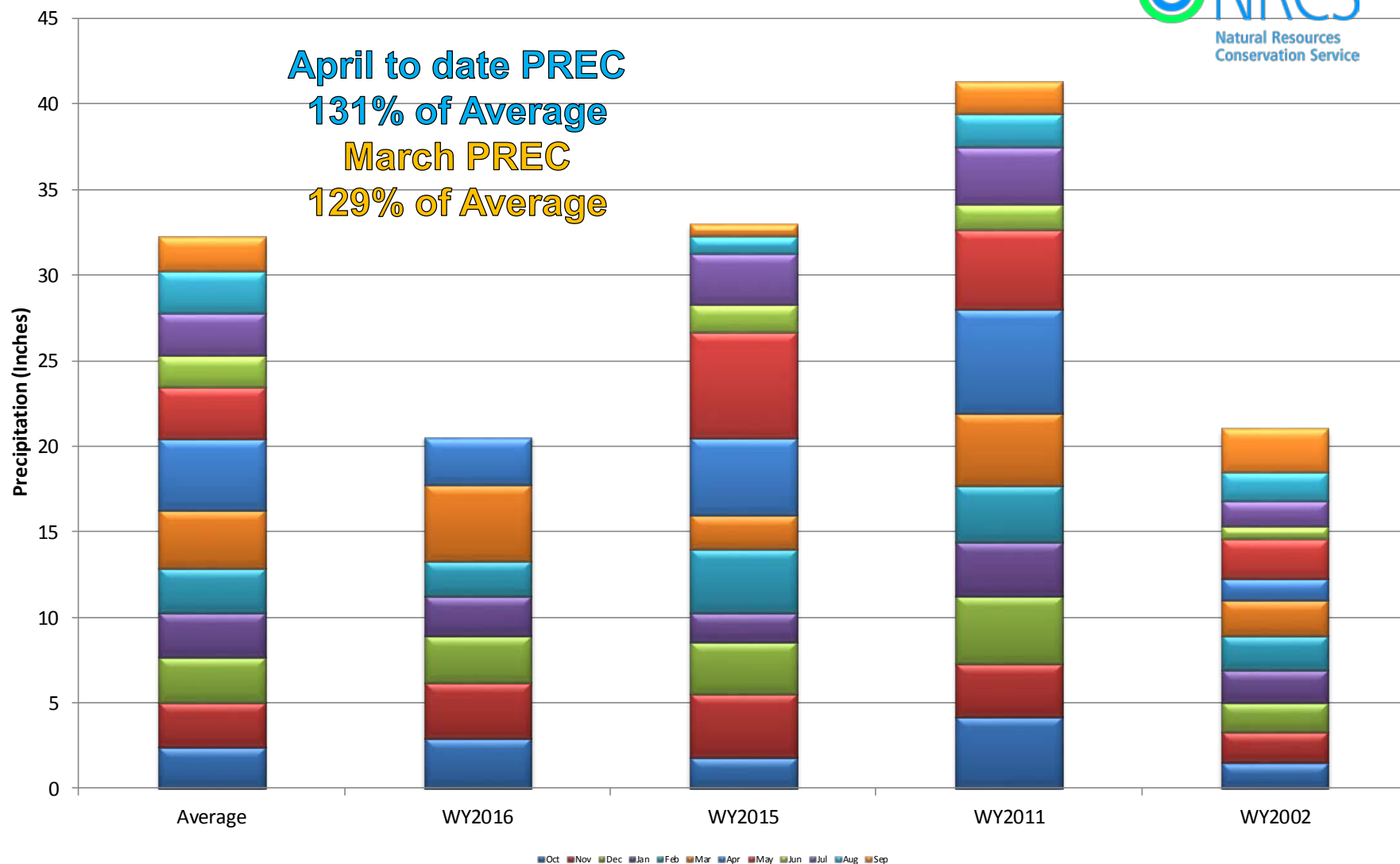


0 10 20 40 60 80 Miles



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

*Based on Provisional SNOTEL data as of Apr 18, 2016*

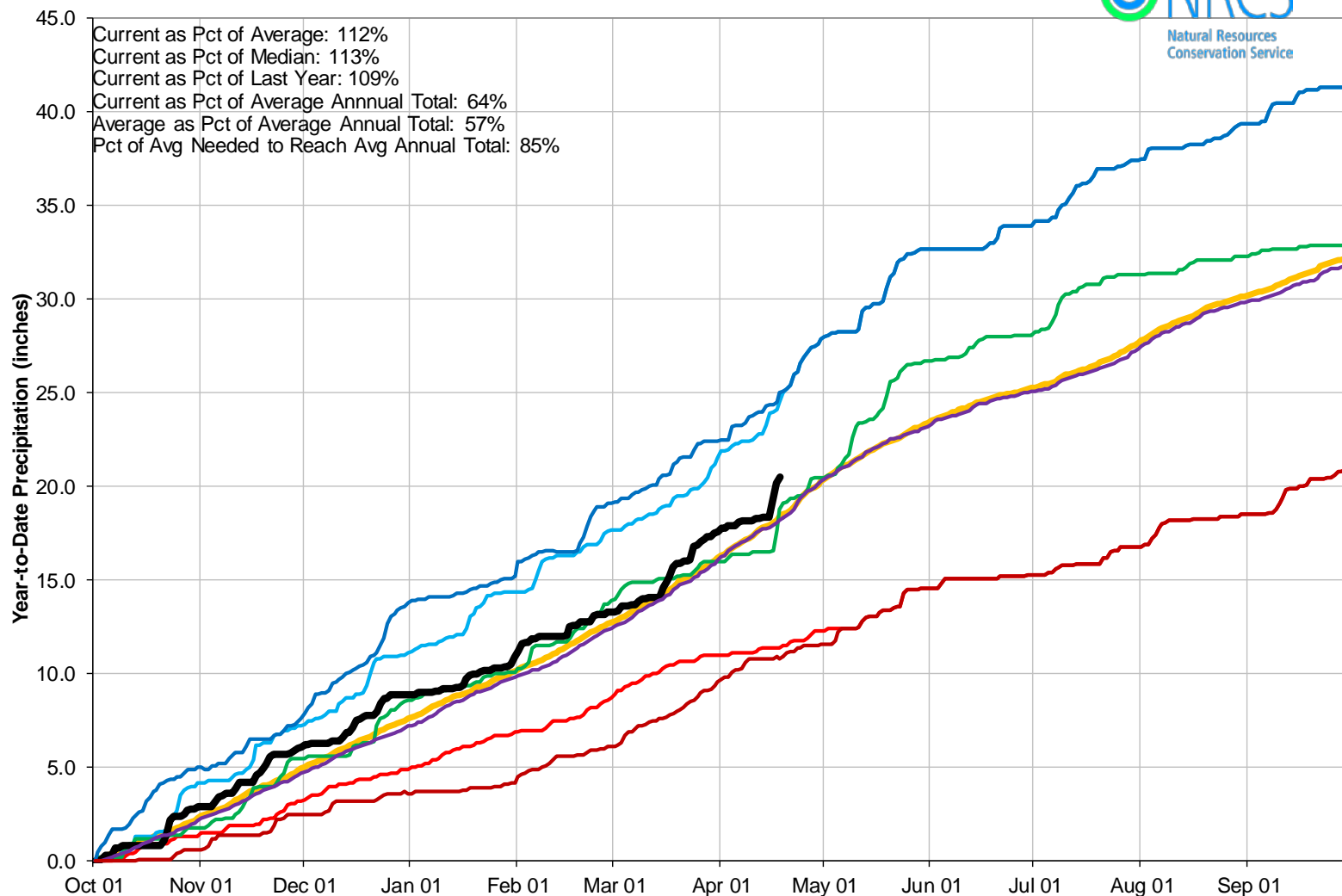






## South Platte River Basin High/Low Year-to-Date Precipitation Summary

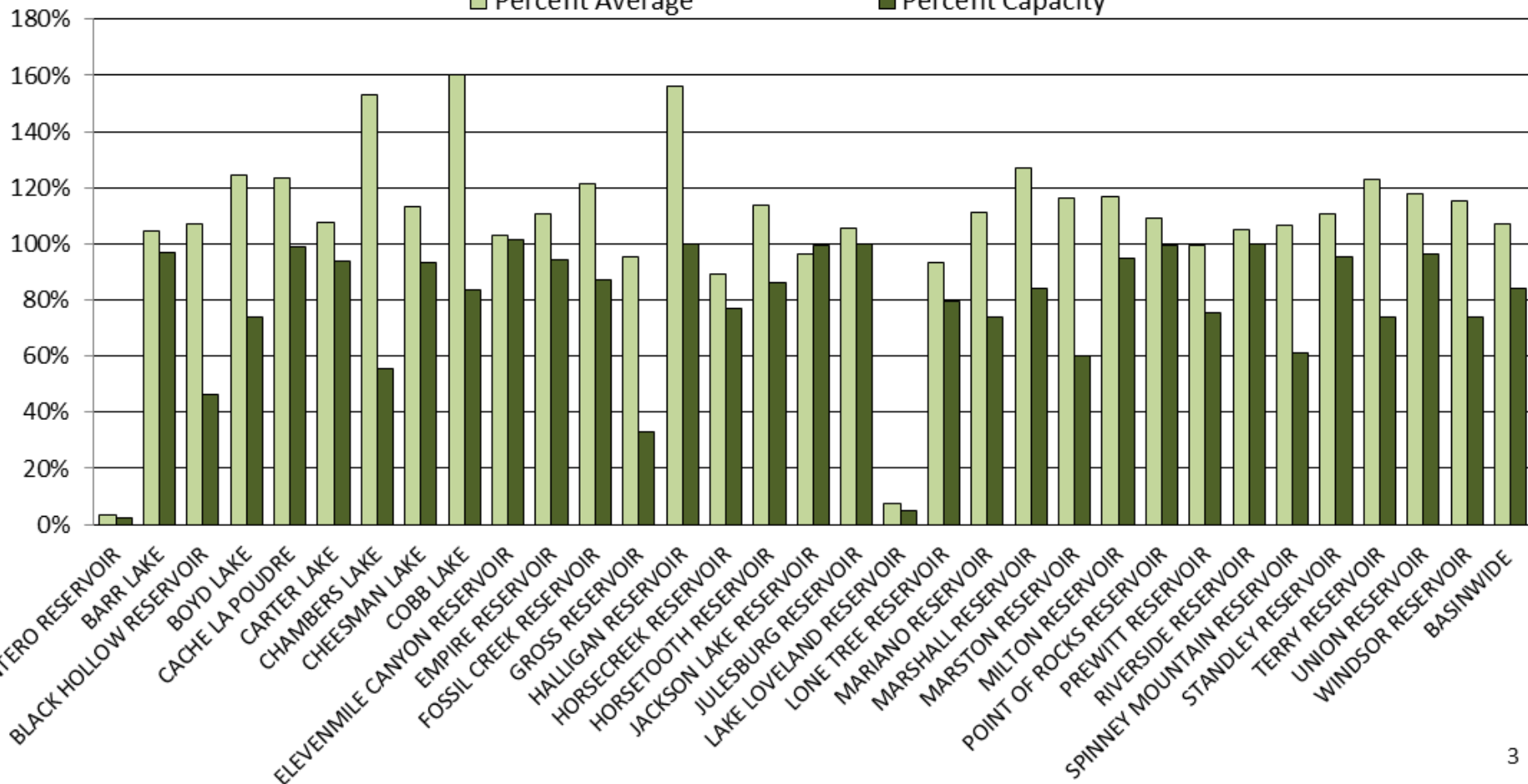
*Based on Provisional SNOTEL data as of Apr 18, 2016*



## Reservoir Storage

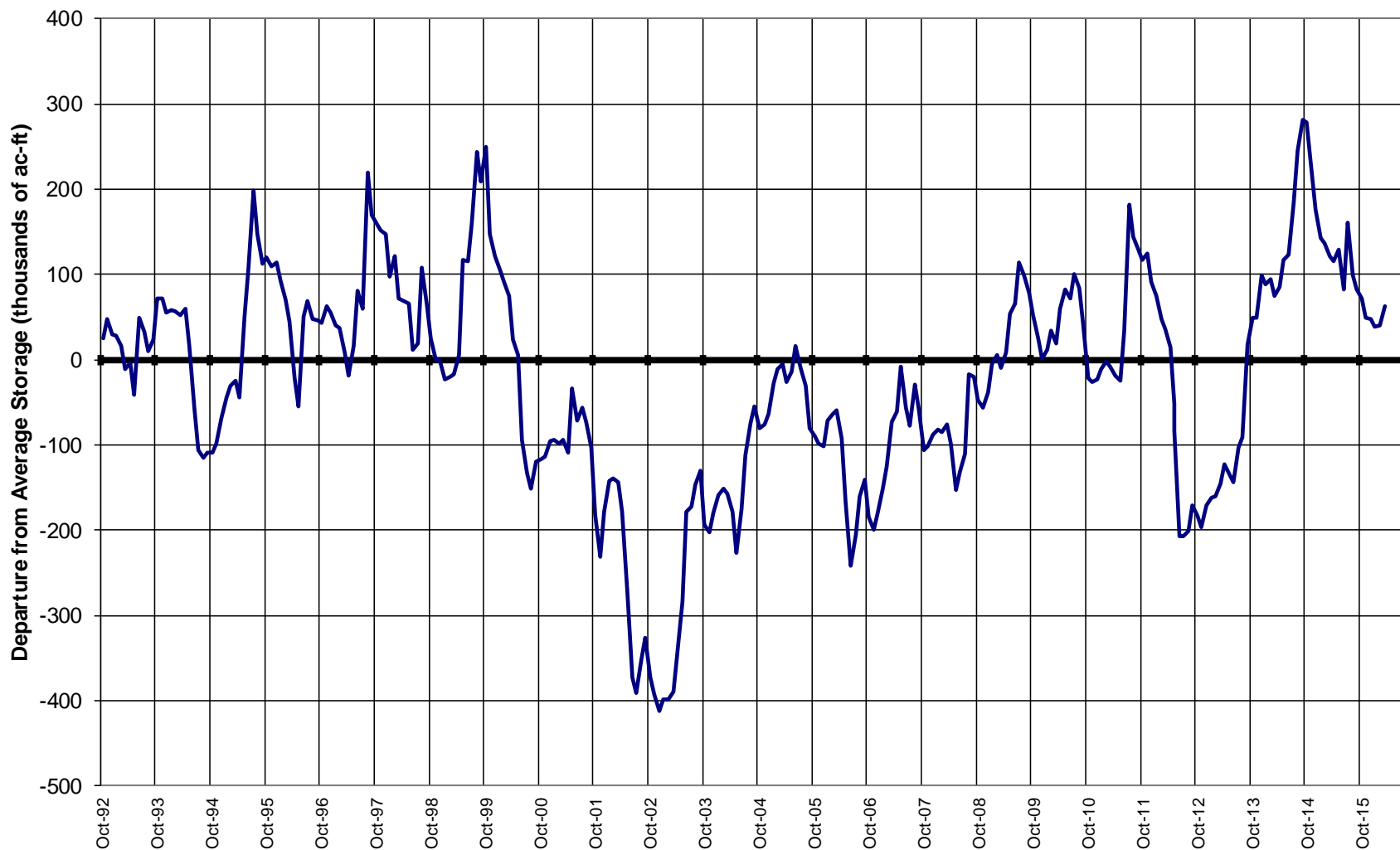
■ Percent Average

■ Percent Capacity





## SOUTH PLATTE RIVER BASIN Reservoir Storage Departure from Average



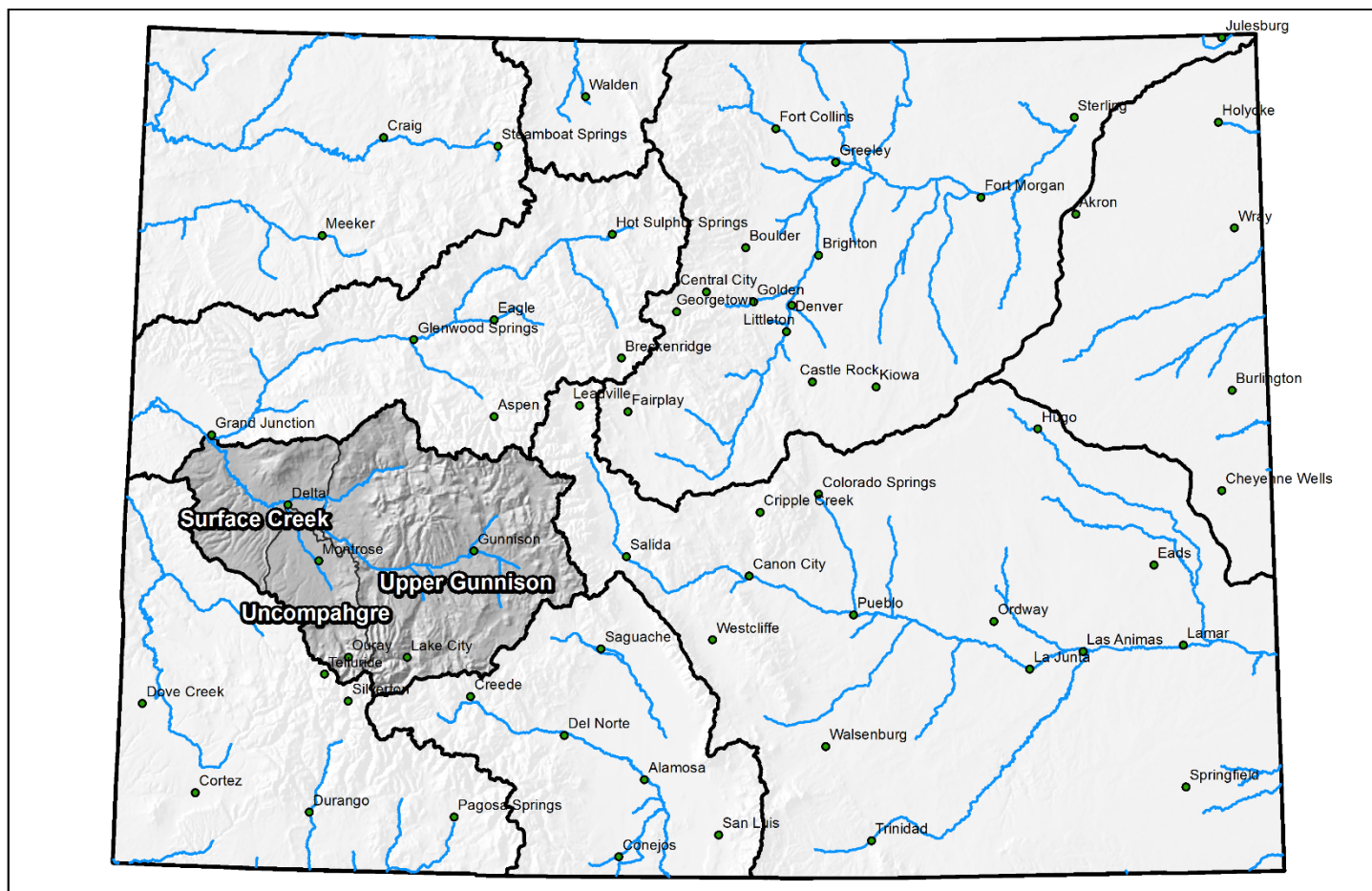


United States Department of Agriculture

# Colorado Snow Surveys

## Major Basin Summary

### Gunnison River Basin



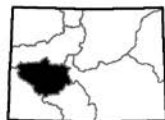
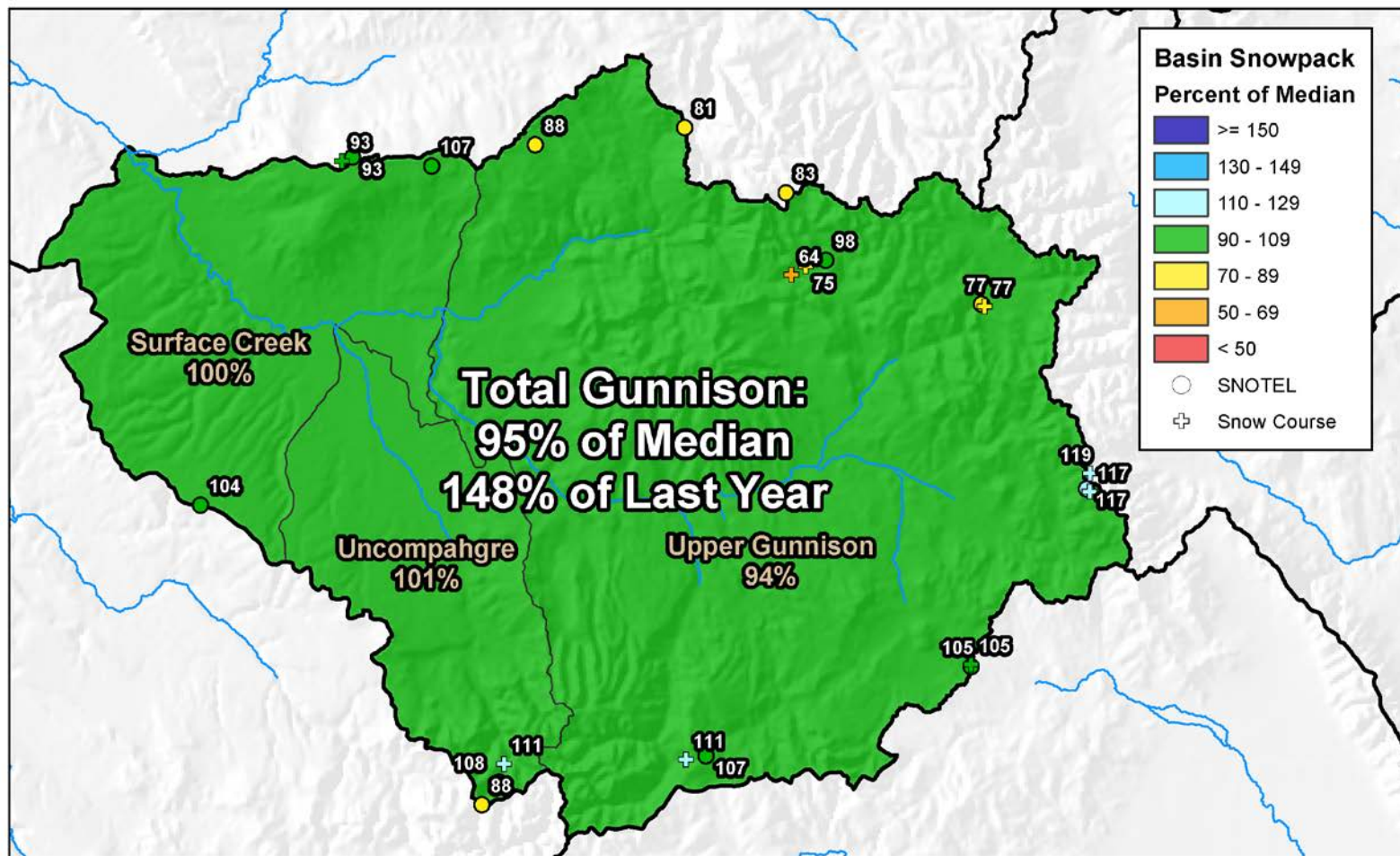
0 25 50 100 150 200 Miles



United States Department of Agriculture  
Natural Resources Conservation Service



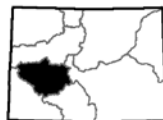
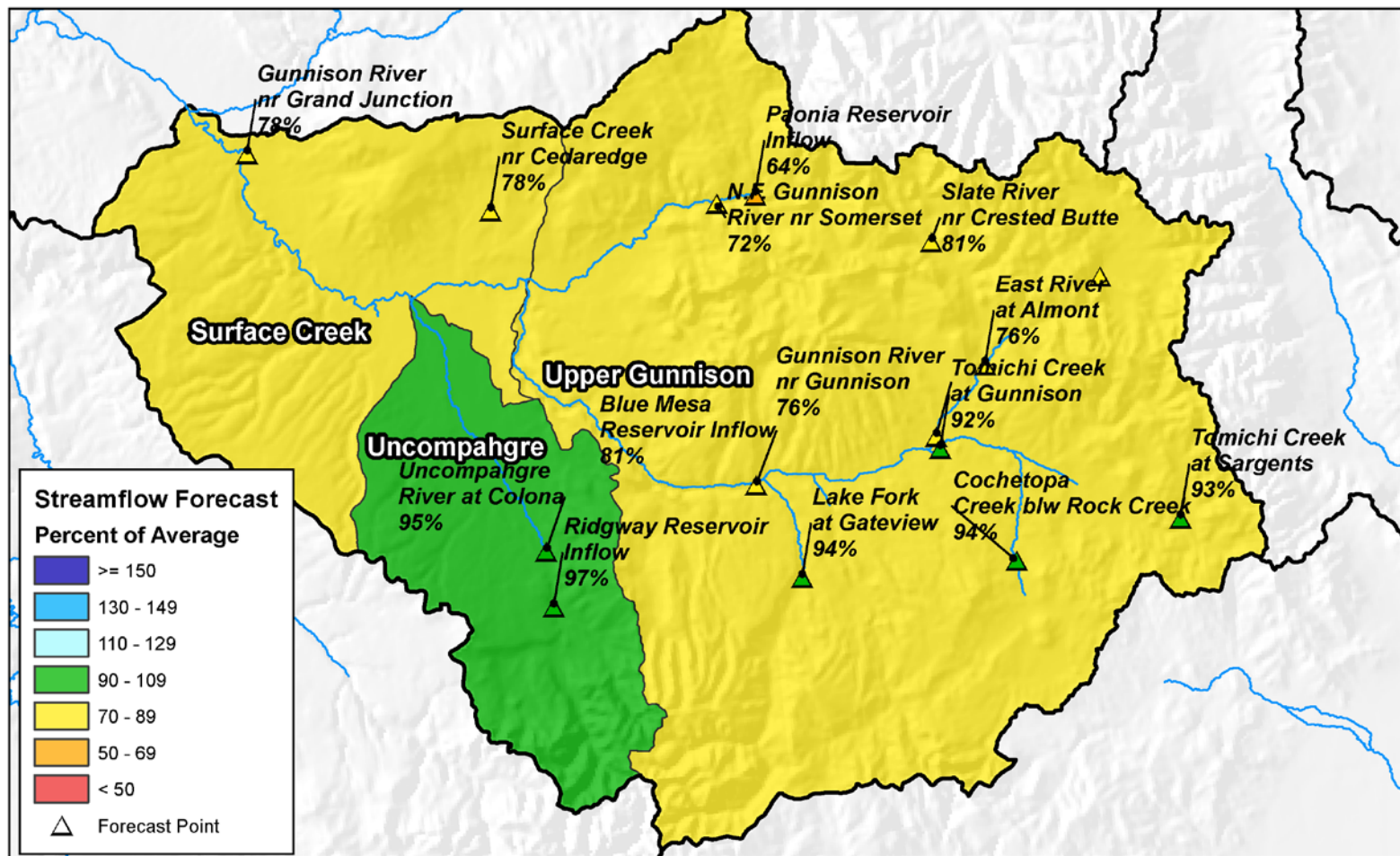
## Gunnison River Basin Monthly Snowpack Summary April 1, 2016



0 5 10 20 30 40  
Miles

## Gunnison River Basin Water Supply Forecast Summary

April 1, 2016

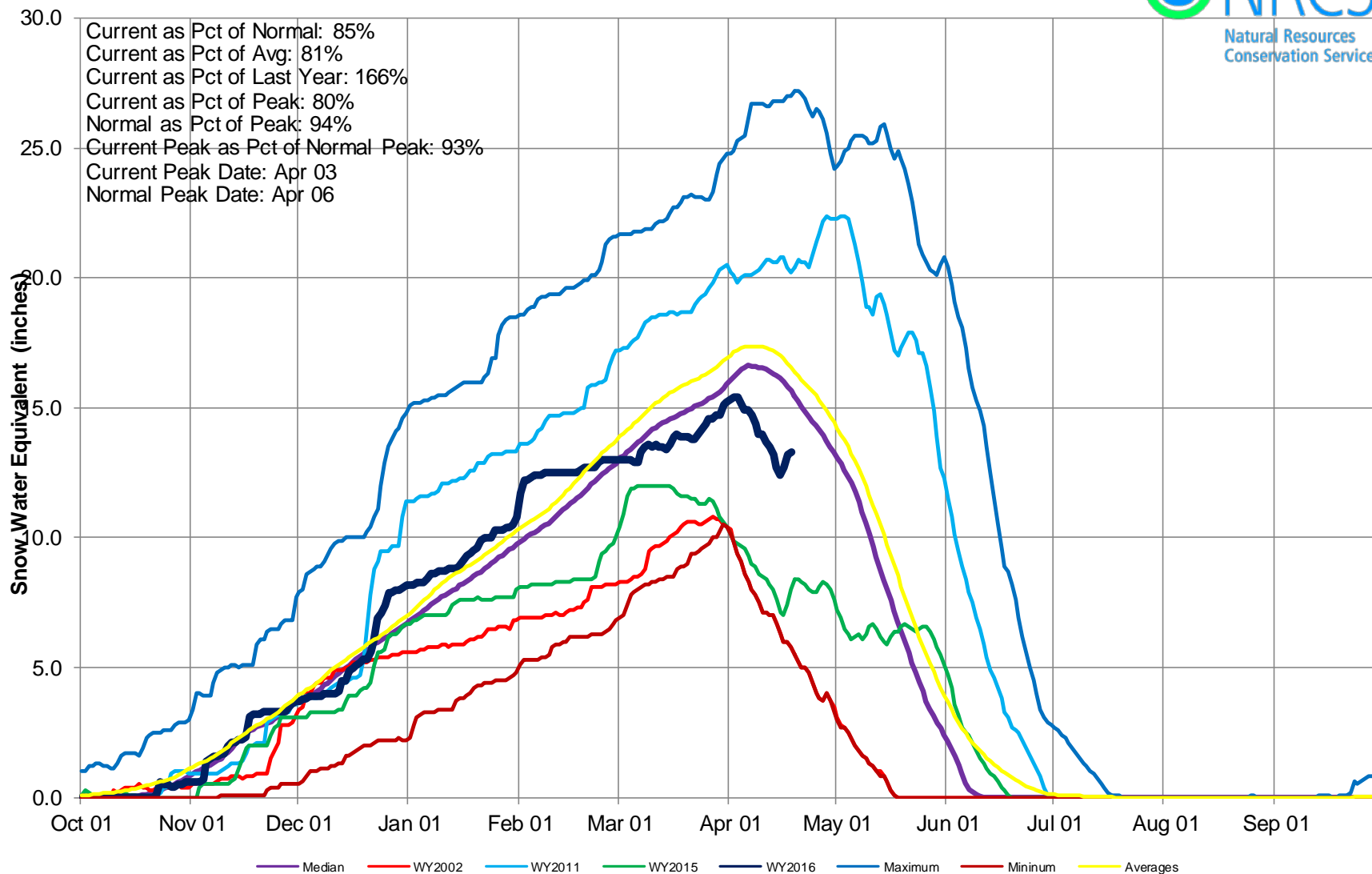


0 5 10 20 30 40 Miles



## Gunnison River Basin High/Low Snowpack Summary

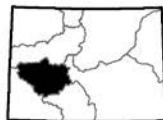
*Based on Provisional SNOTEL data as of Apr 18, 2016*





## Gunnison River Basin Snow Water Equivalent (SWE) Summary

Current as of Apr 18, 2016



0 5 10 20 30 40 Miles



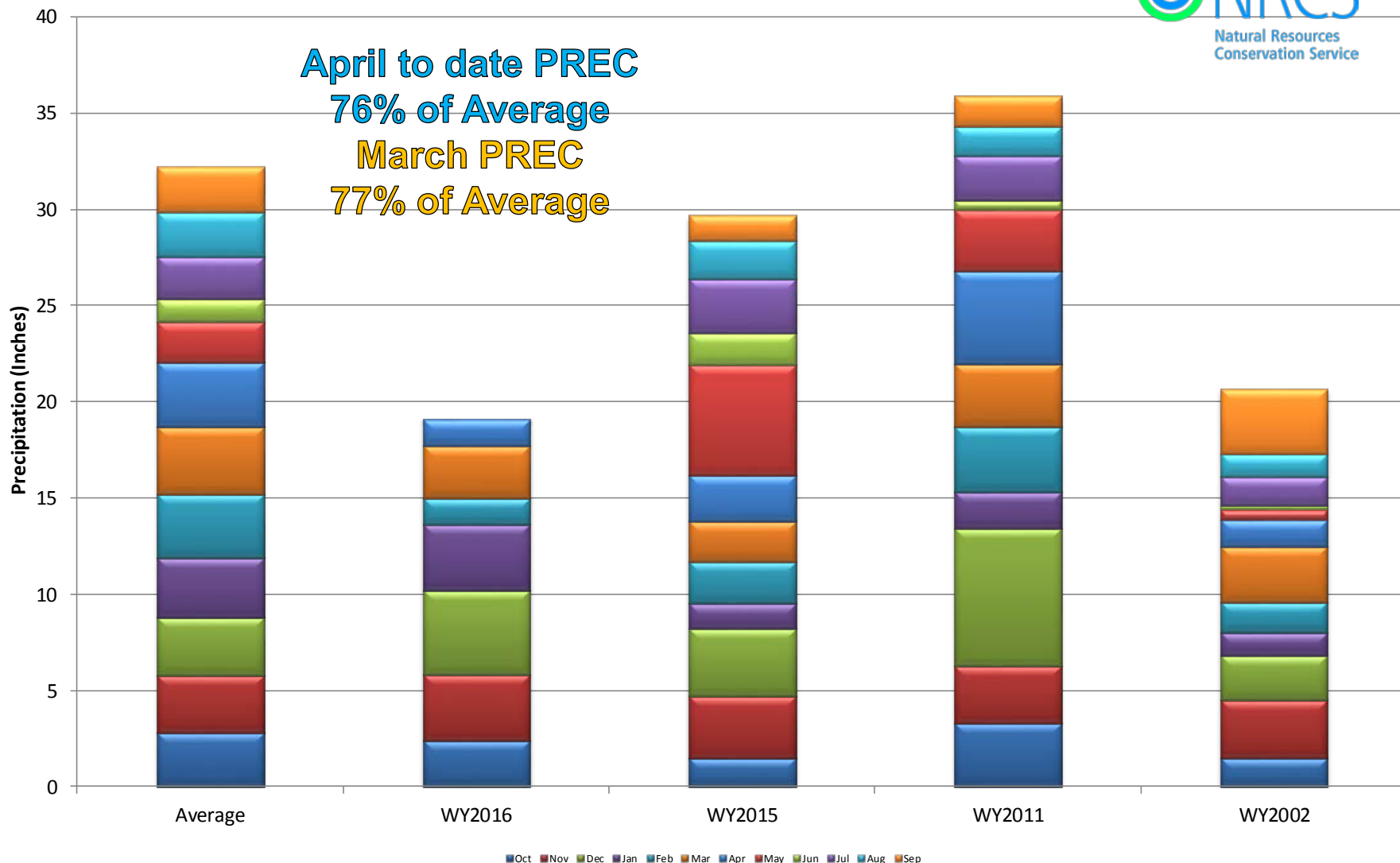


## Gunnison River Basin High/Low Monthly Precipitation Summary

*Based on Provisional SNOTEL data as of Apr 18, 2016*



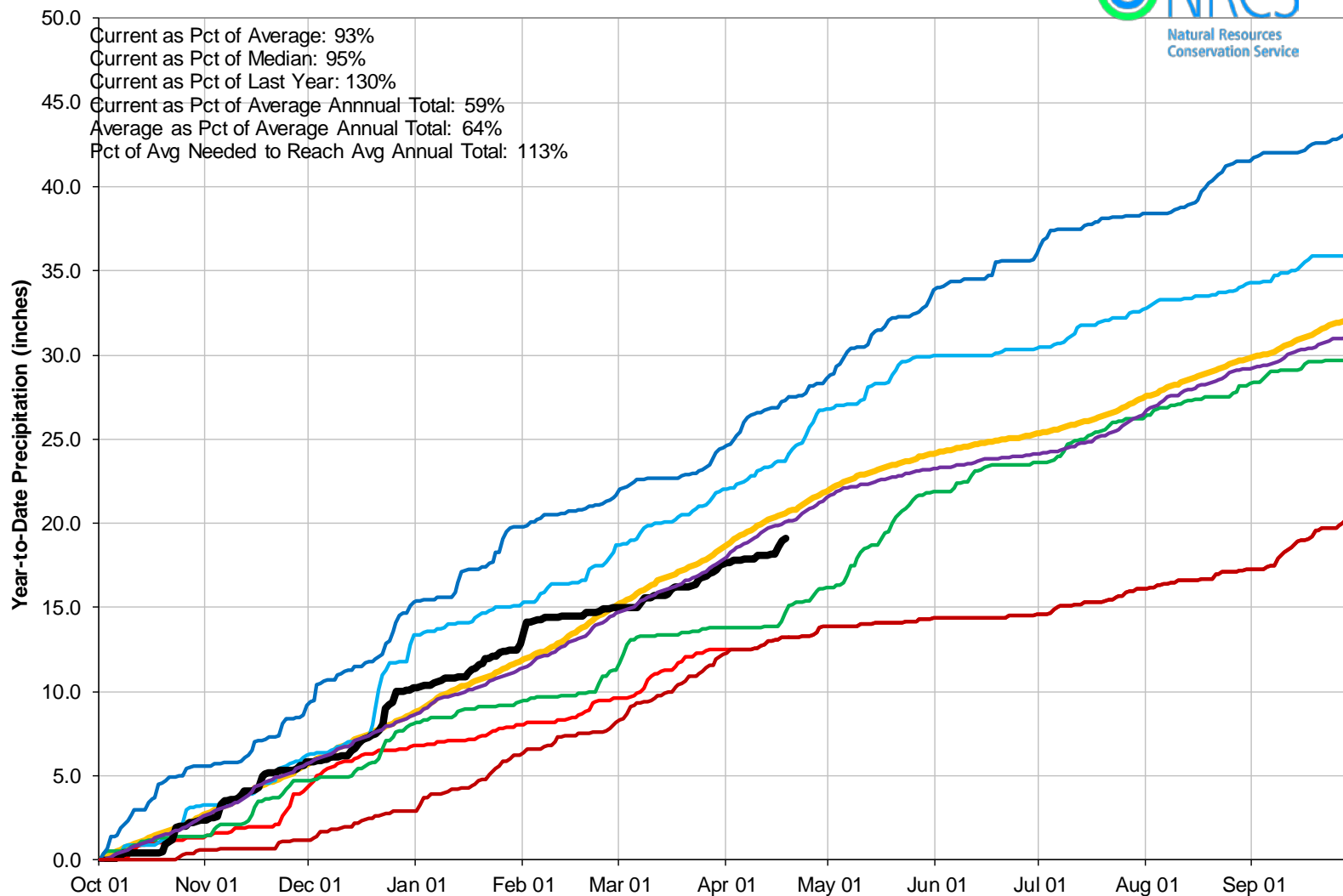
**April to date PREC**  
**76% of Average**  
**March PREC**  
**77% of Average**

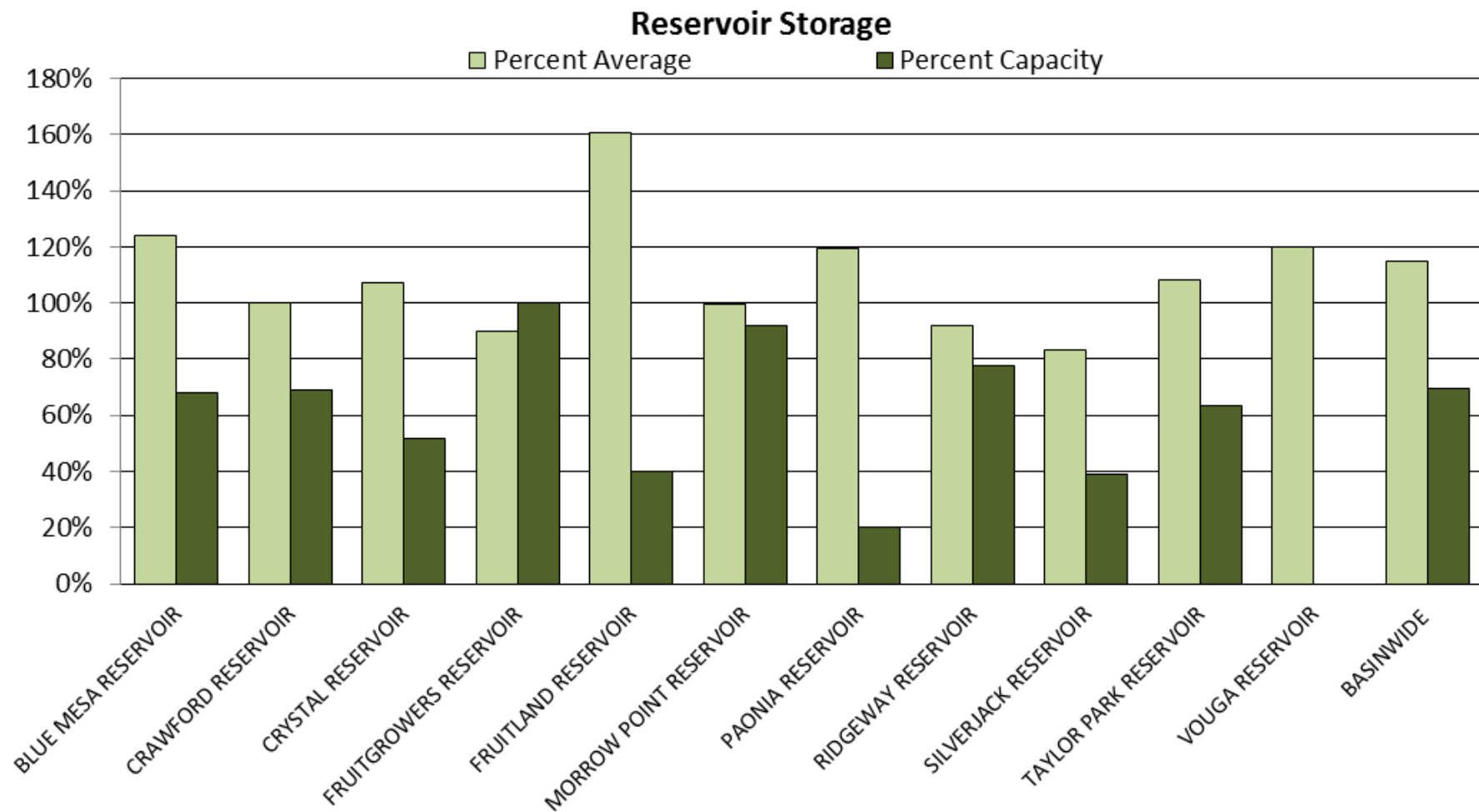




## Gunnison River Basin High/Low Year-to-Date Precipitation Summary

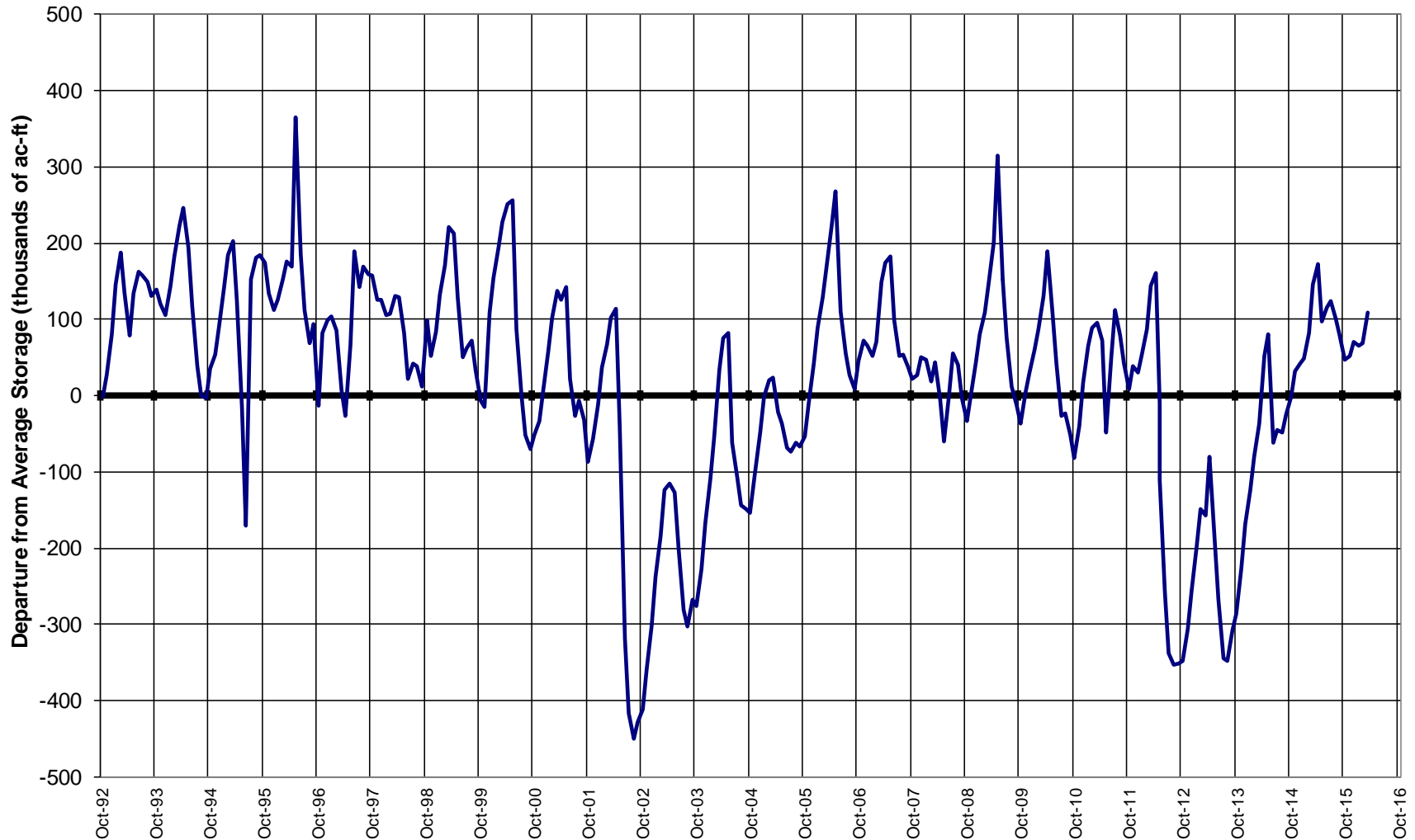
*Based on Provisional SNOTEL data as of Apr 18, 2016*







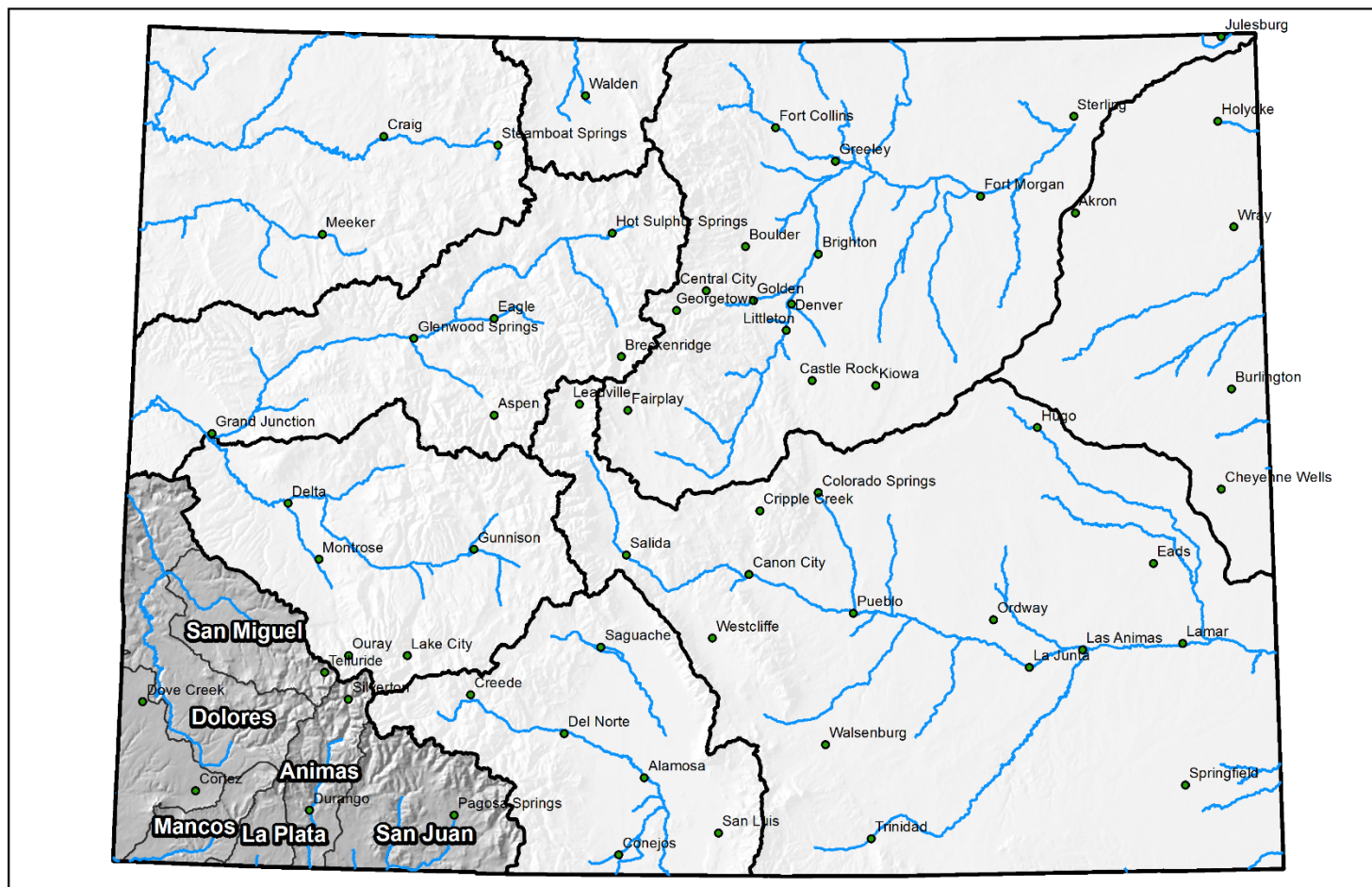
## GUNNISON RIVER BASIN Reservoir Storage Departure from Average





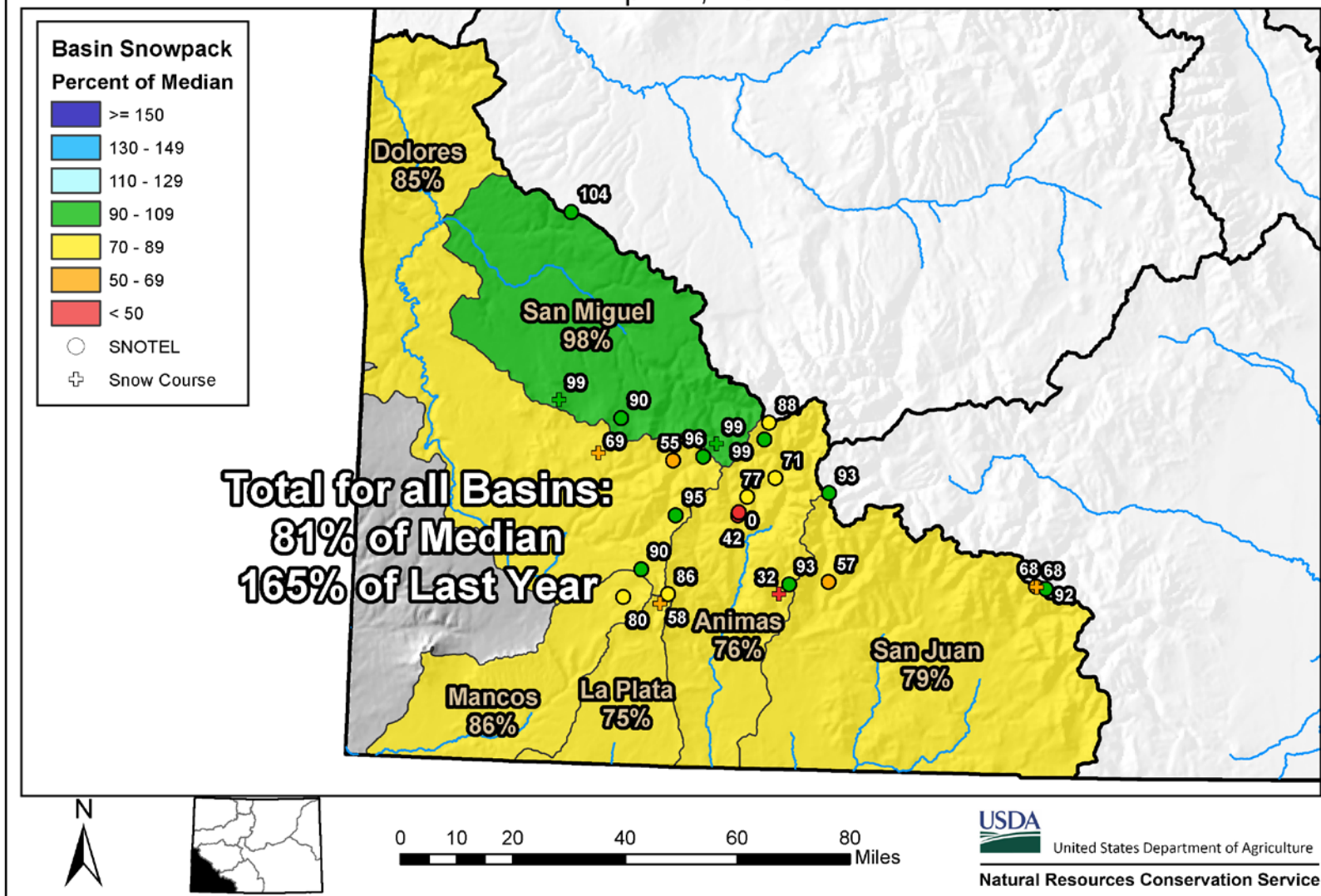
## Major Basin Summary

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



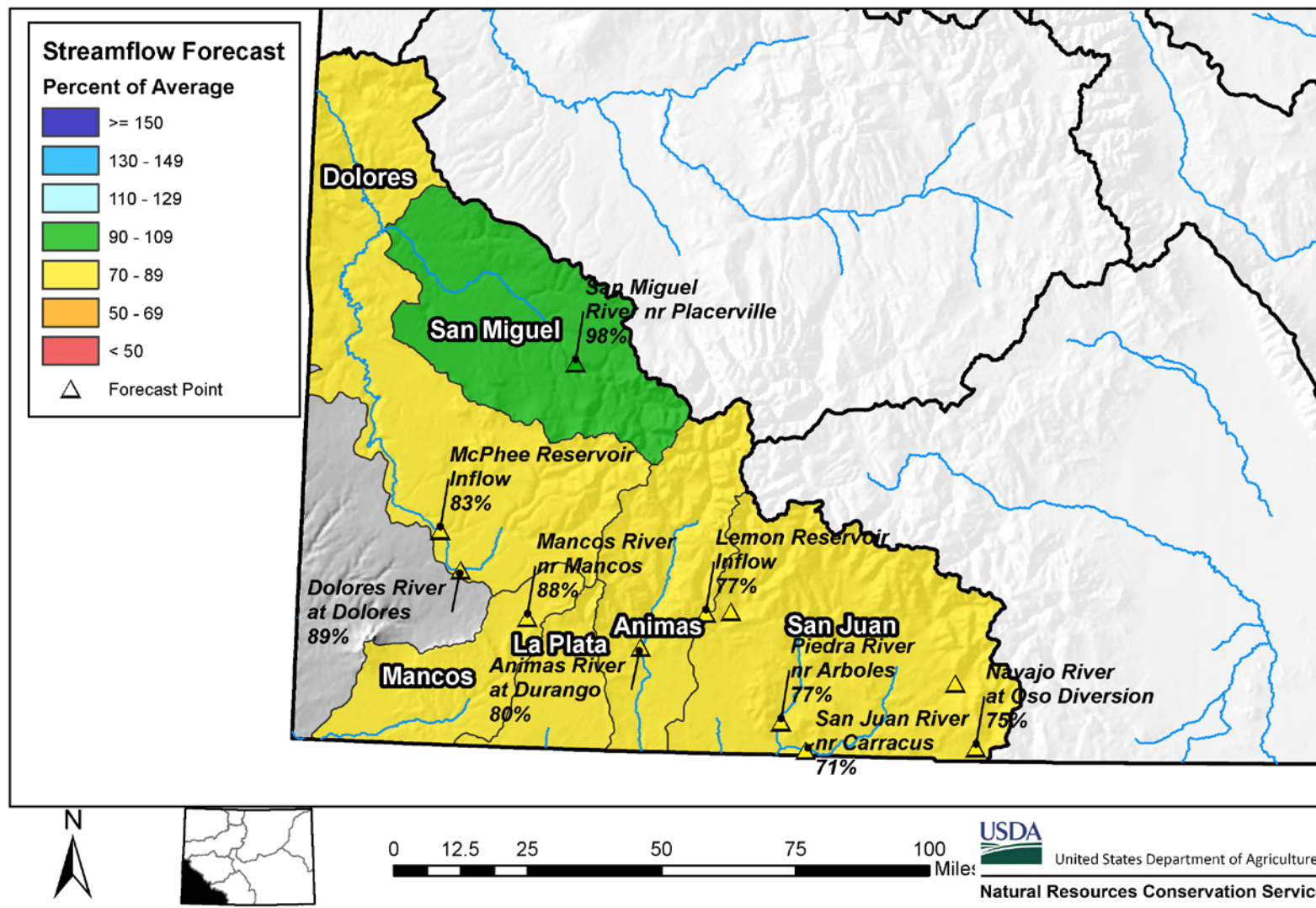
0 25 50 100 150 200 Miles

San Miguel, Dolores, Animas, and San Juan River Basins  
Monthly Snowpack Summary  
April 1, 2016



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

April 1, 2016

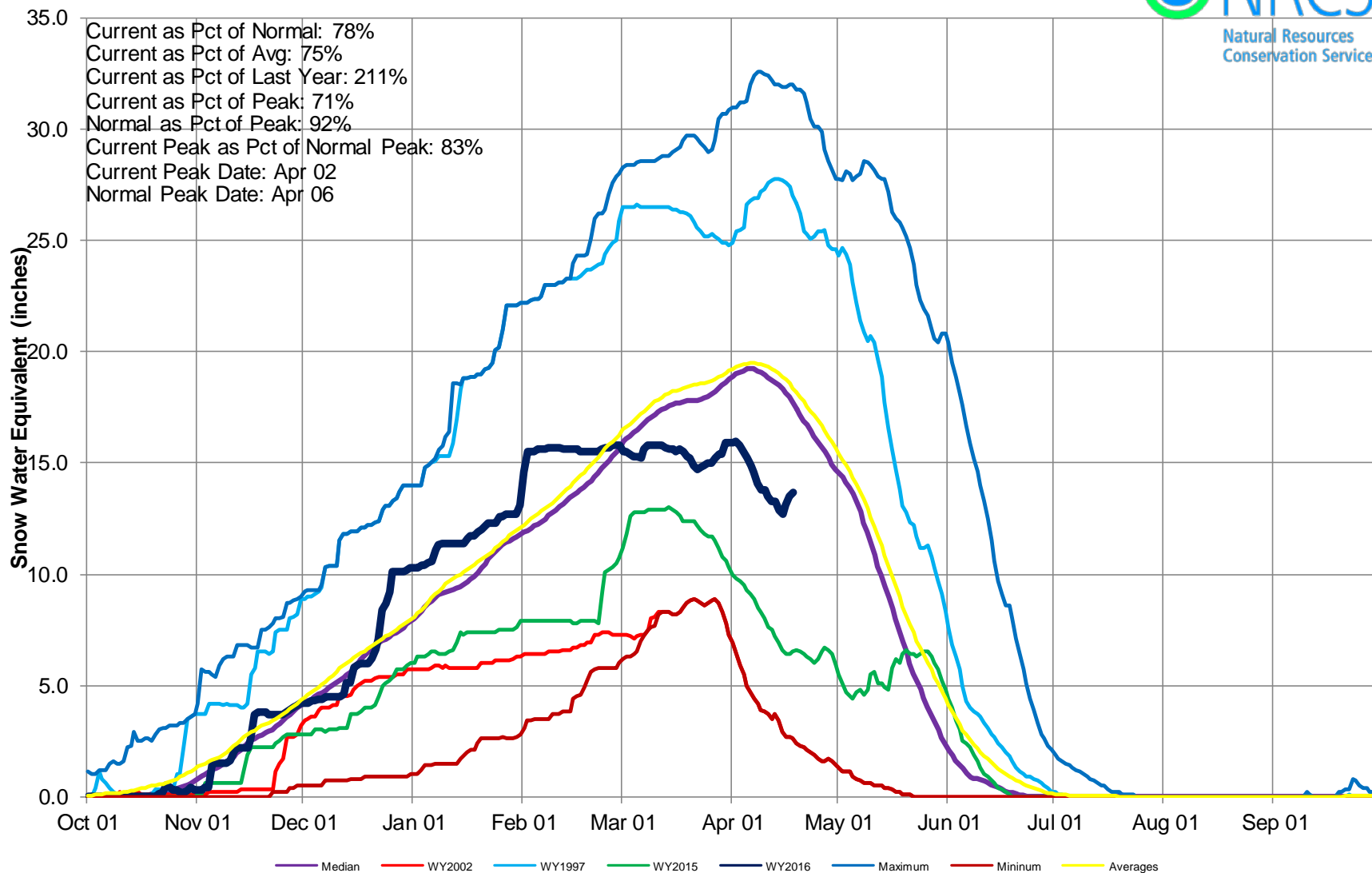






## San Miguel, Dolores, Animas and San Juan River Basins High/Low Snowpack Summary

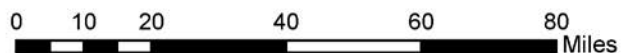
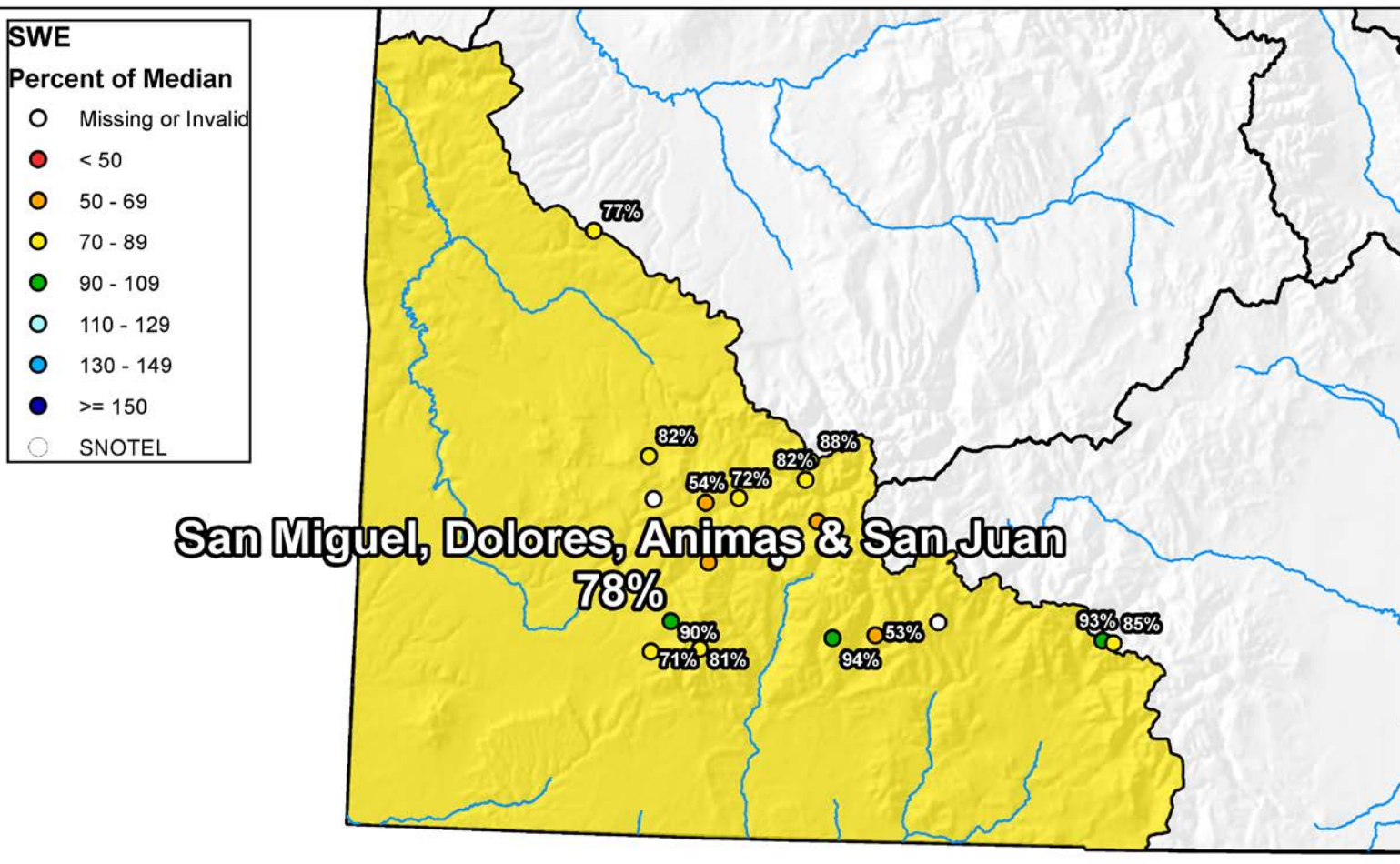
*Based on Provisional SNOTEL data as of Apr 18, 2016*





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

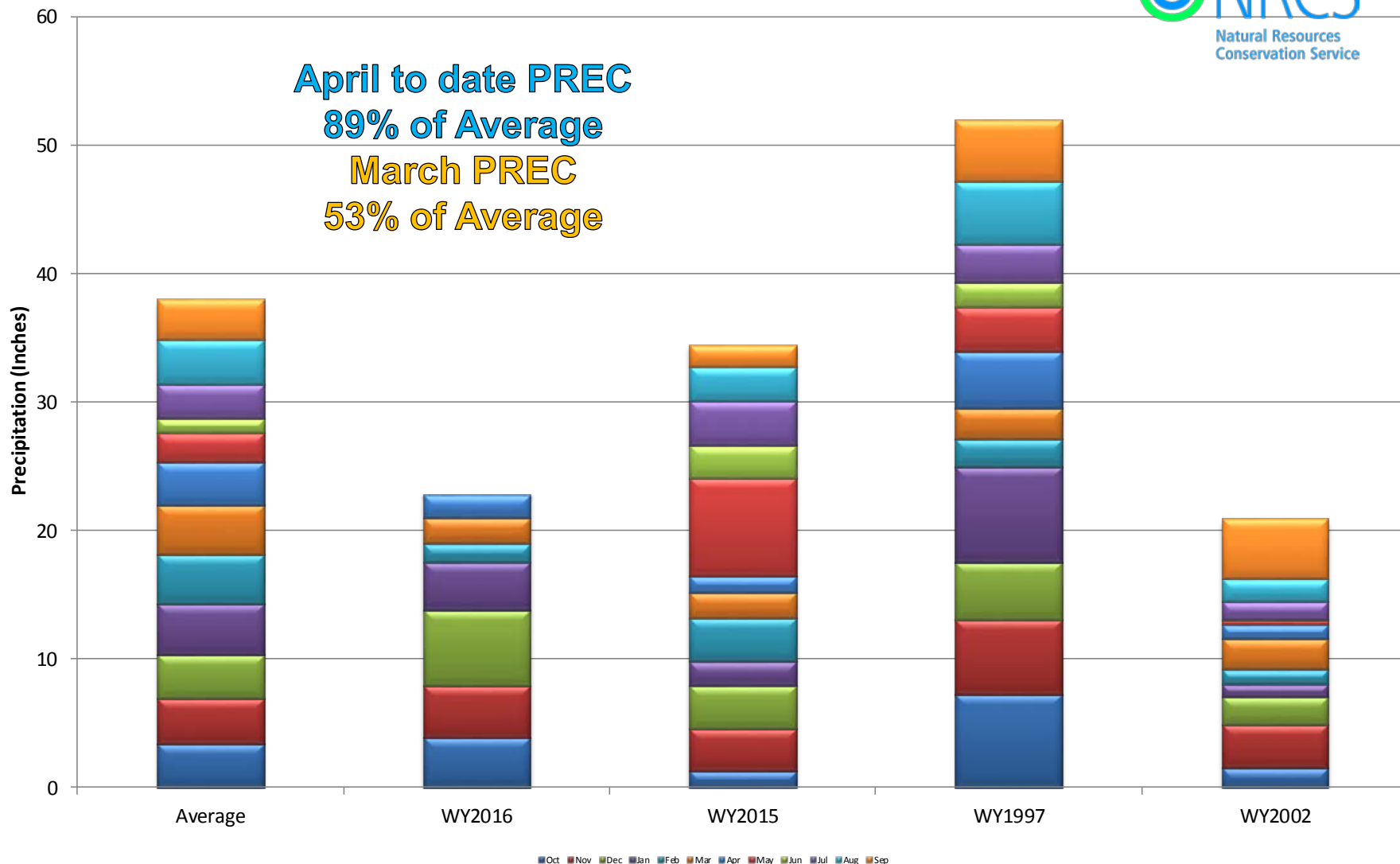
Current as of Apr 18, 2016



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



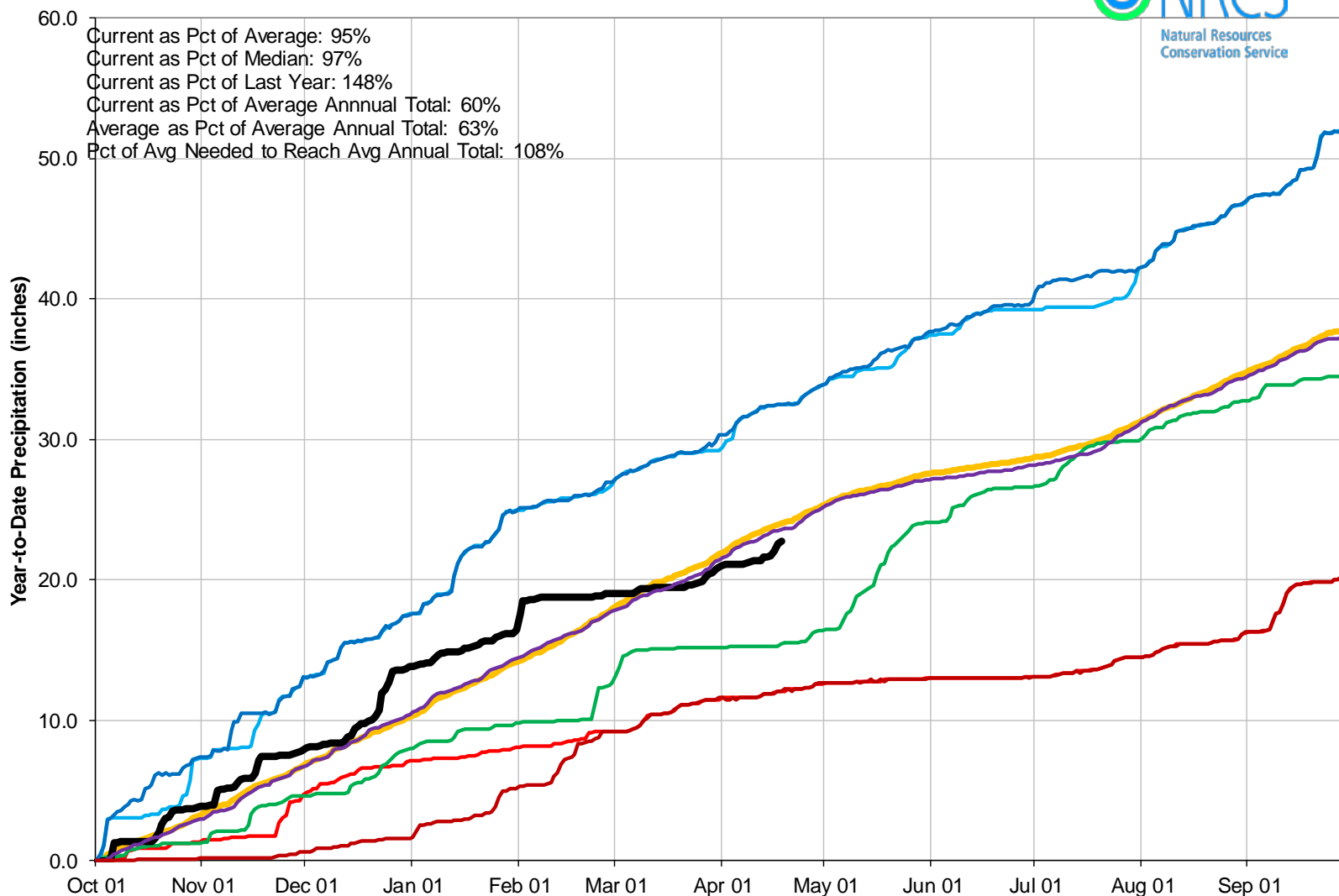
**April to date PREC**  
**89% of Average**  
**March PREC**  
**53% of Average**



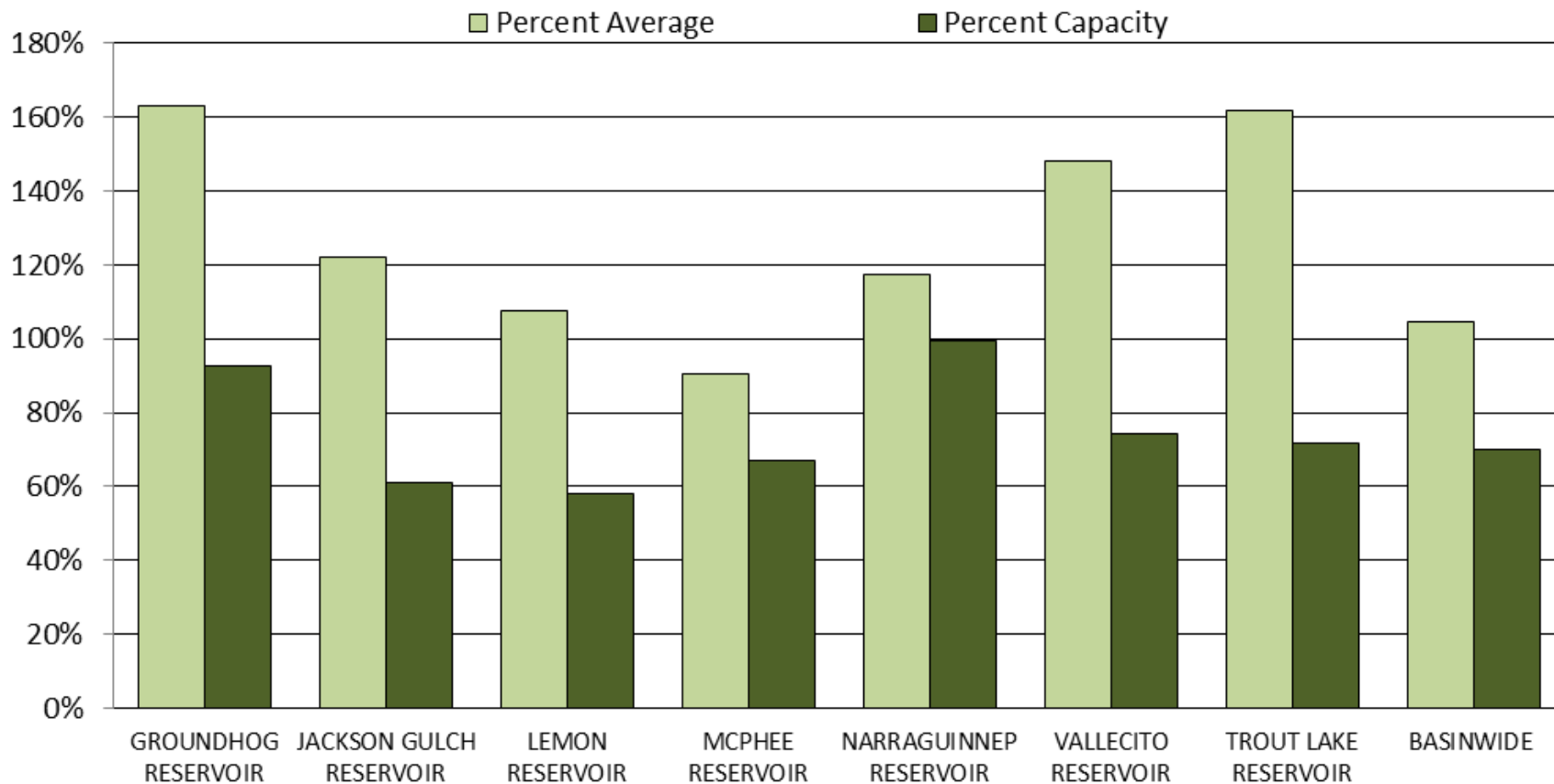


## San Miguel, Dolores, Animas & San Juan River Basins High/Low Year-to-Date Precipitation Summary

*Based on Provisional SNOTEL data as of Apr 18, 2016*



## Reservoir Storage



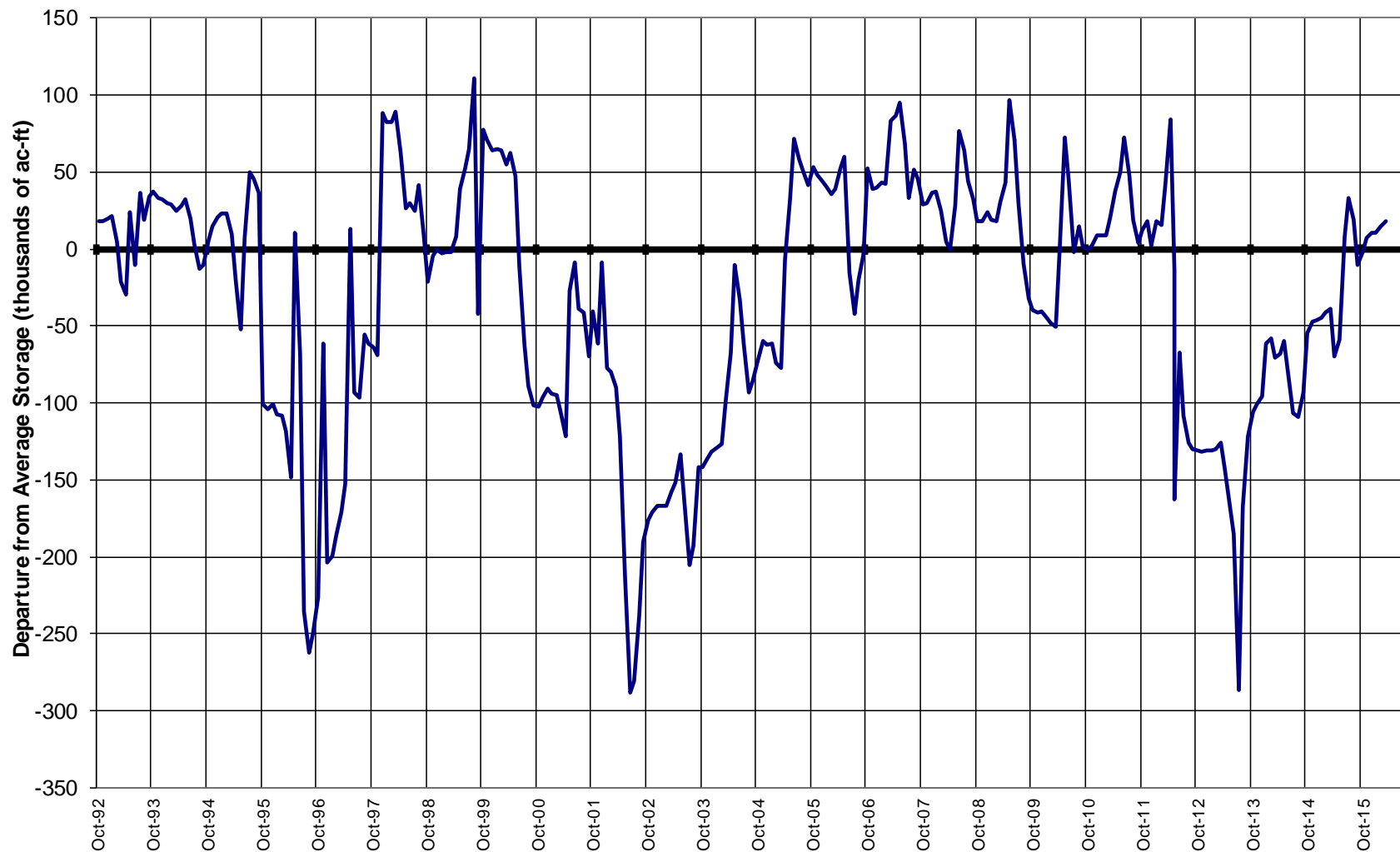




## SAN MIGUEL, DOLORES, ANIMAS AND SAN JUAN RIVER BASINS

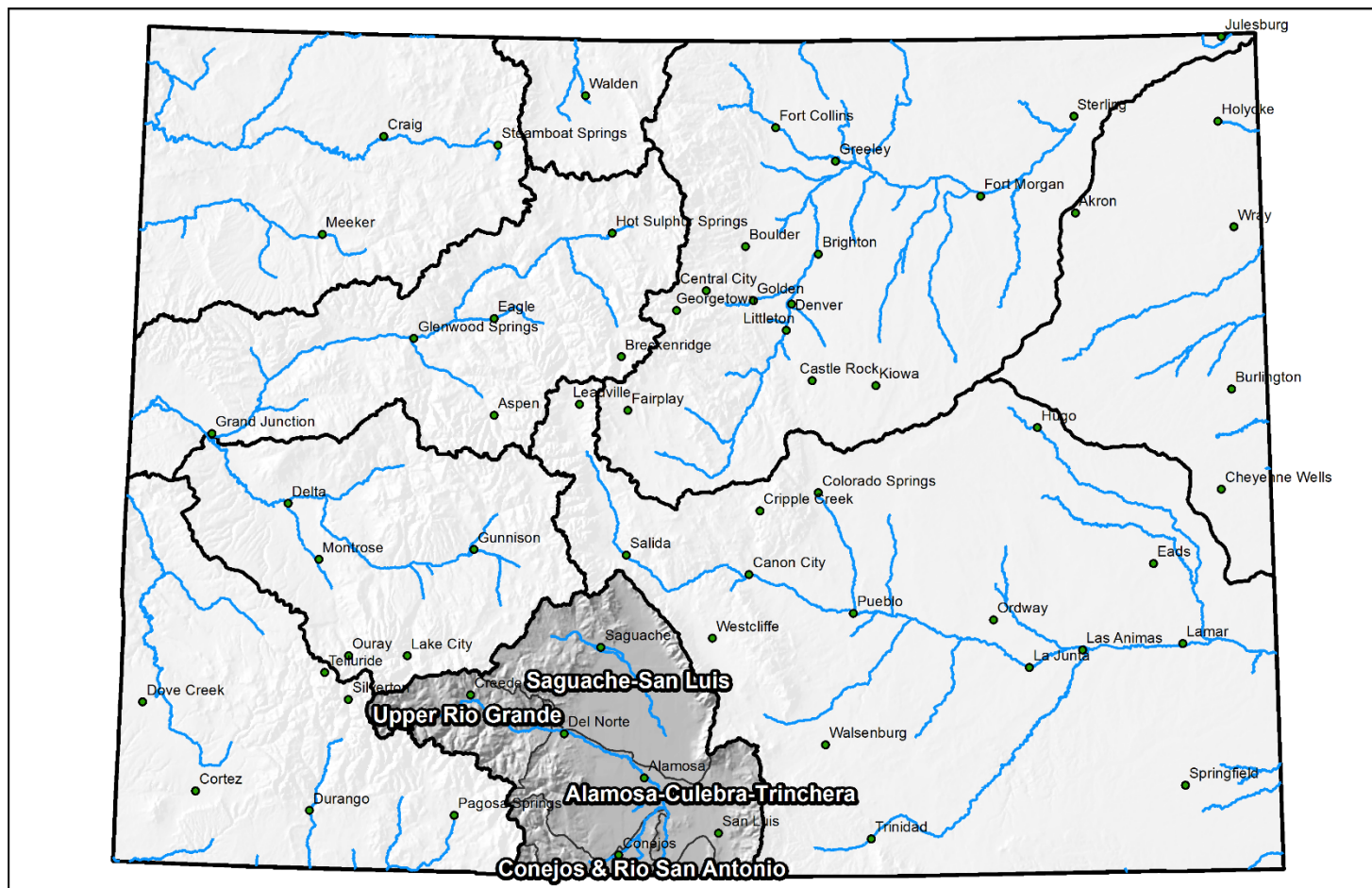
Reservoir Storage

Departure from Average



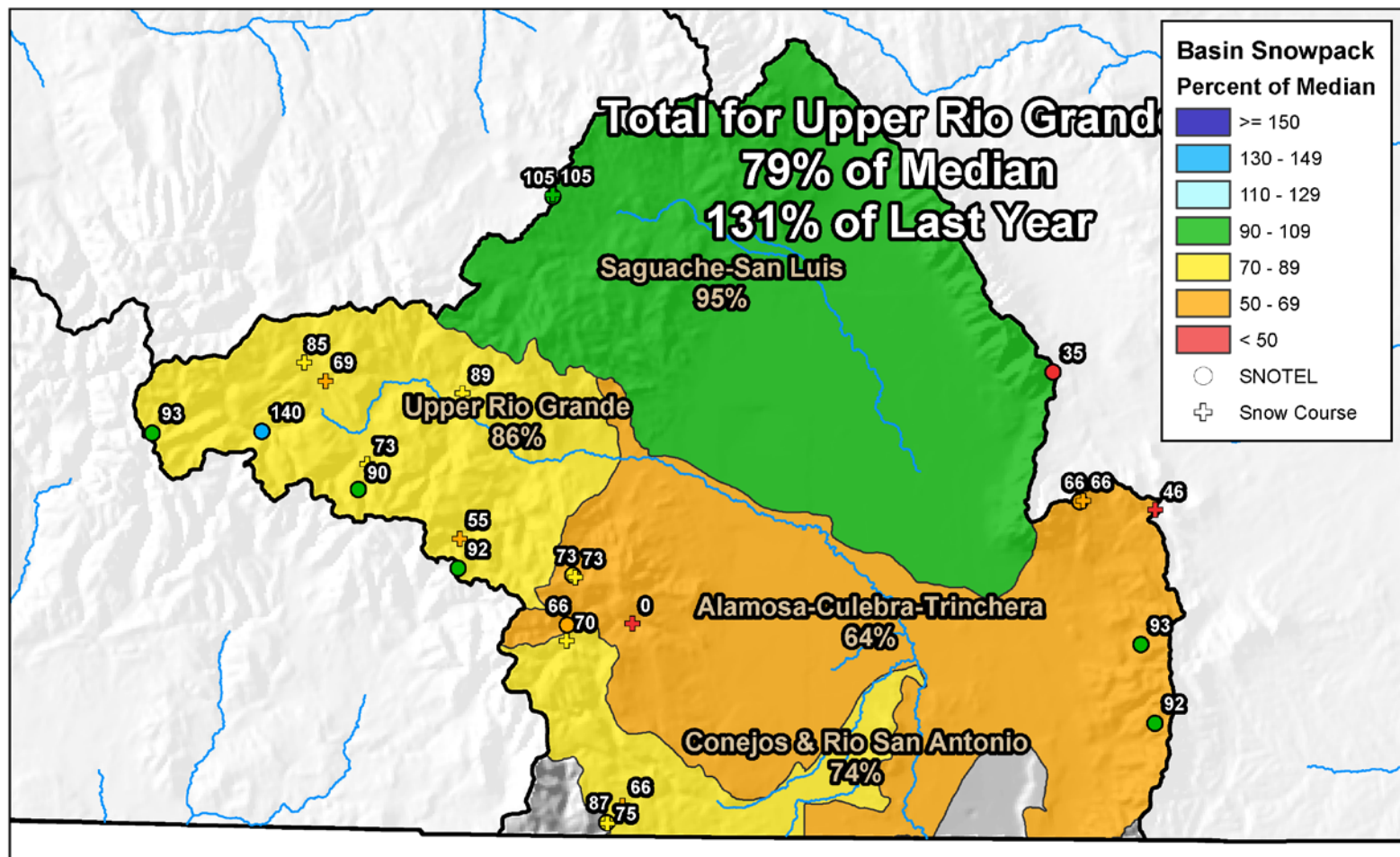
## Major Basin Summary

### Upper Rio Grande River Basin



0 25 50 100 150 200 Miles

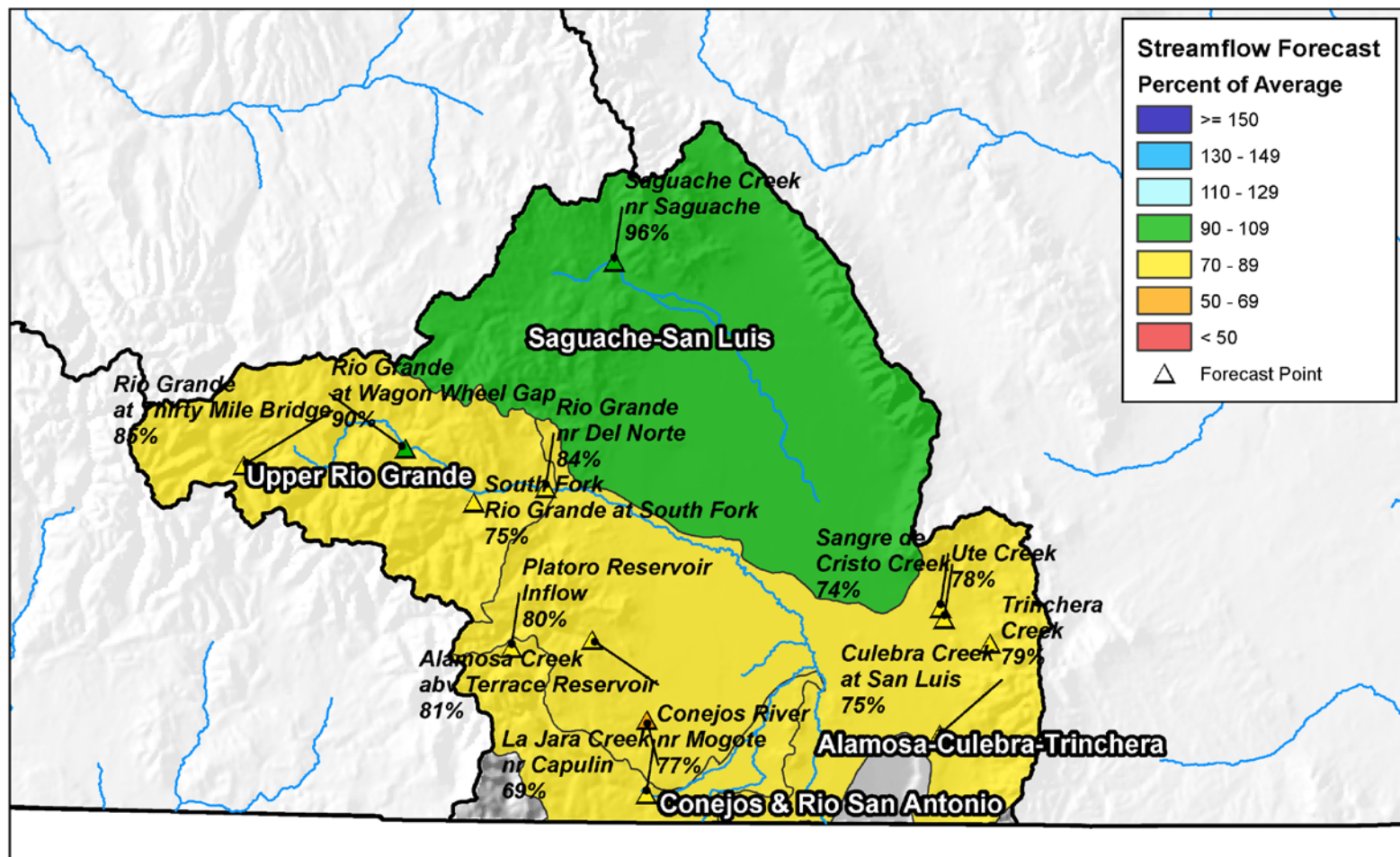
## Upper Rio Grande River Basin Monthly Snowpack Summary April 1, 2016



0 5 10 20 30 40 Miles

## Upper Rio Grande River Basin Streamflow Forecast Summary

April 1, 2016



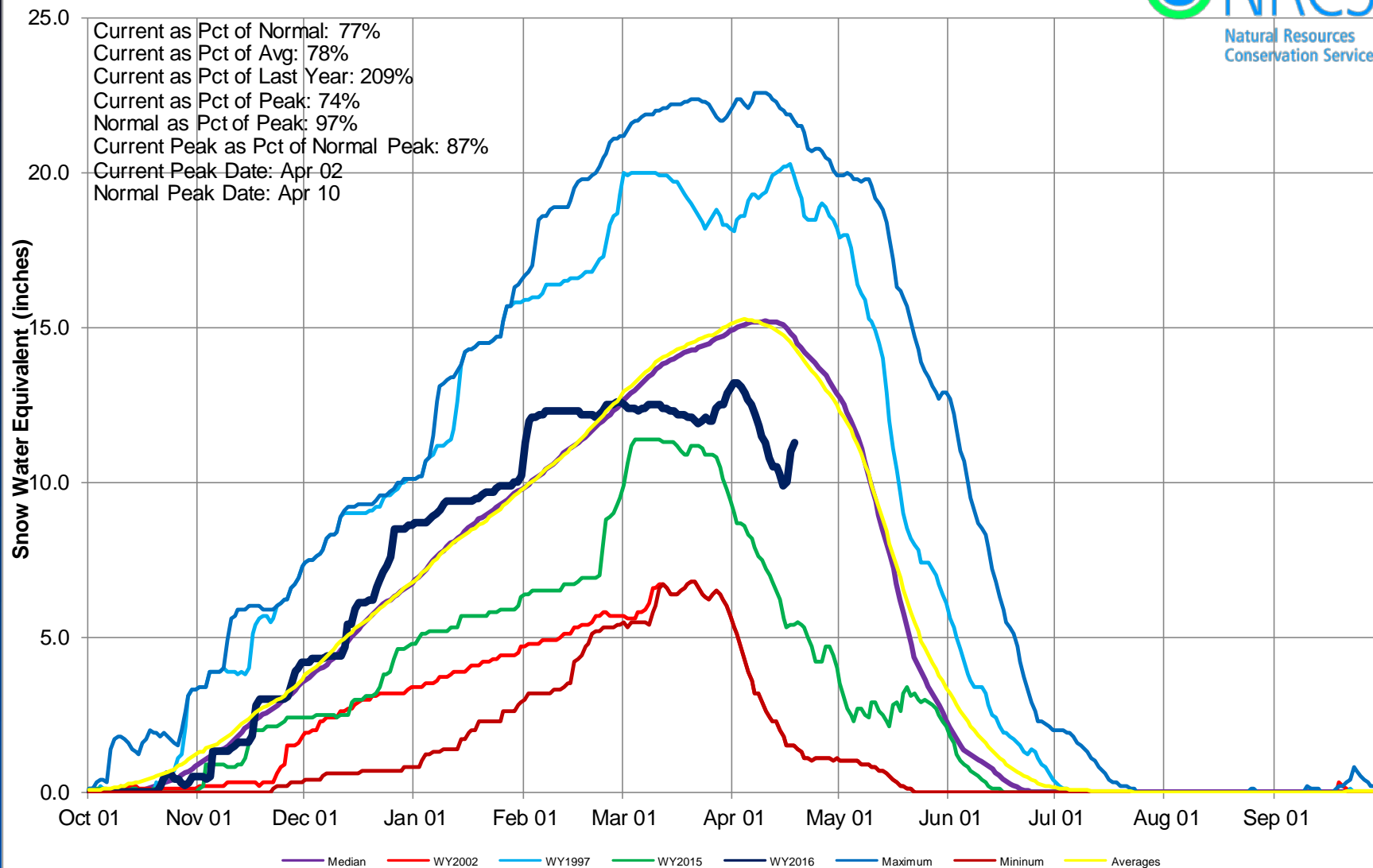
0 10 20 40 60 80 Miles





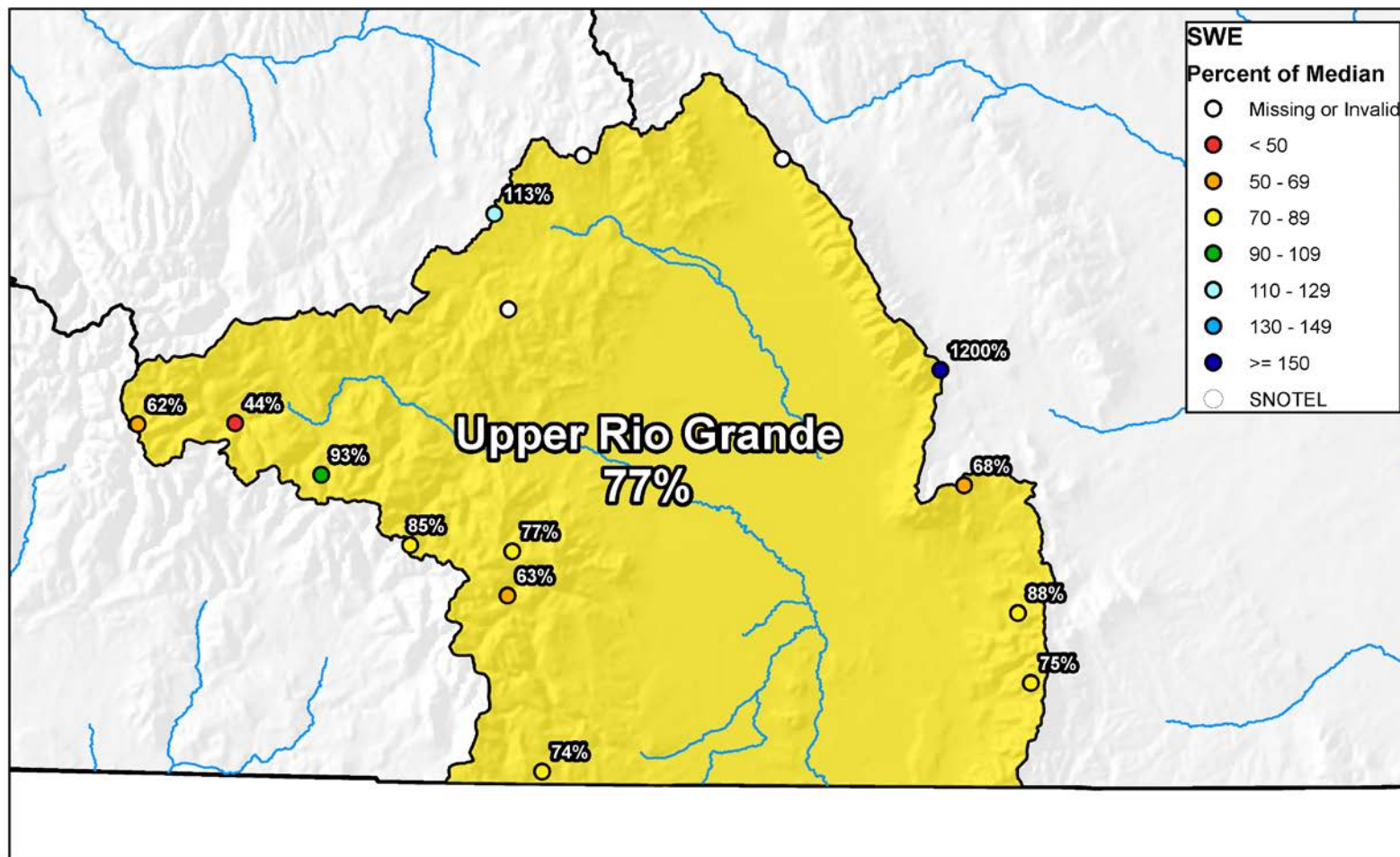
## Upper Rio Grande Basin High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Apr 18, 2016*



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

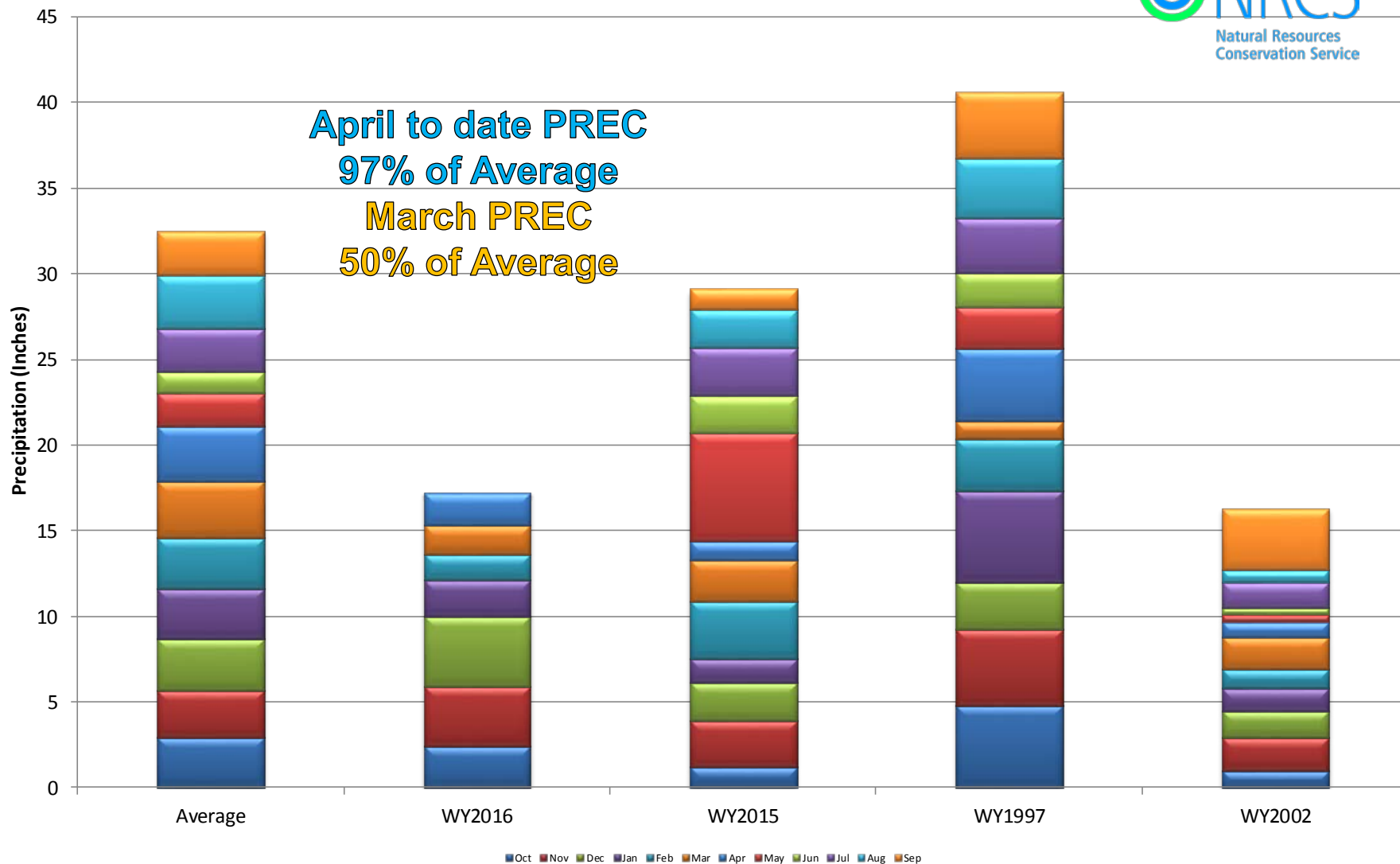
Current as of Apr 18, 2016





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

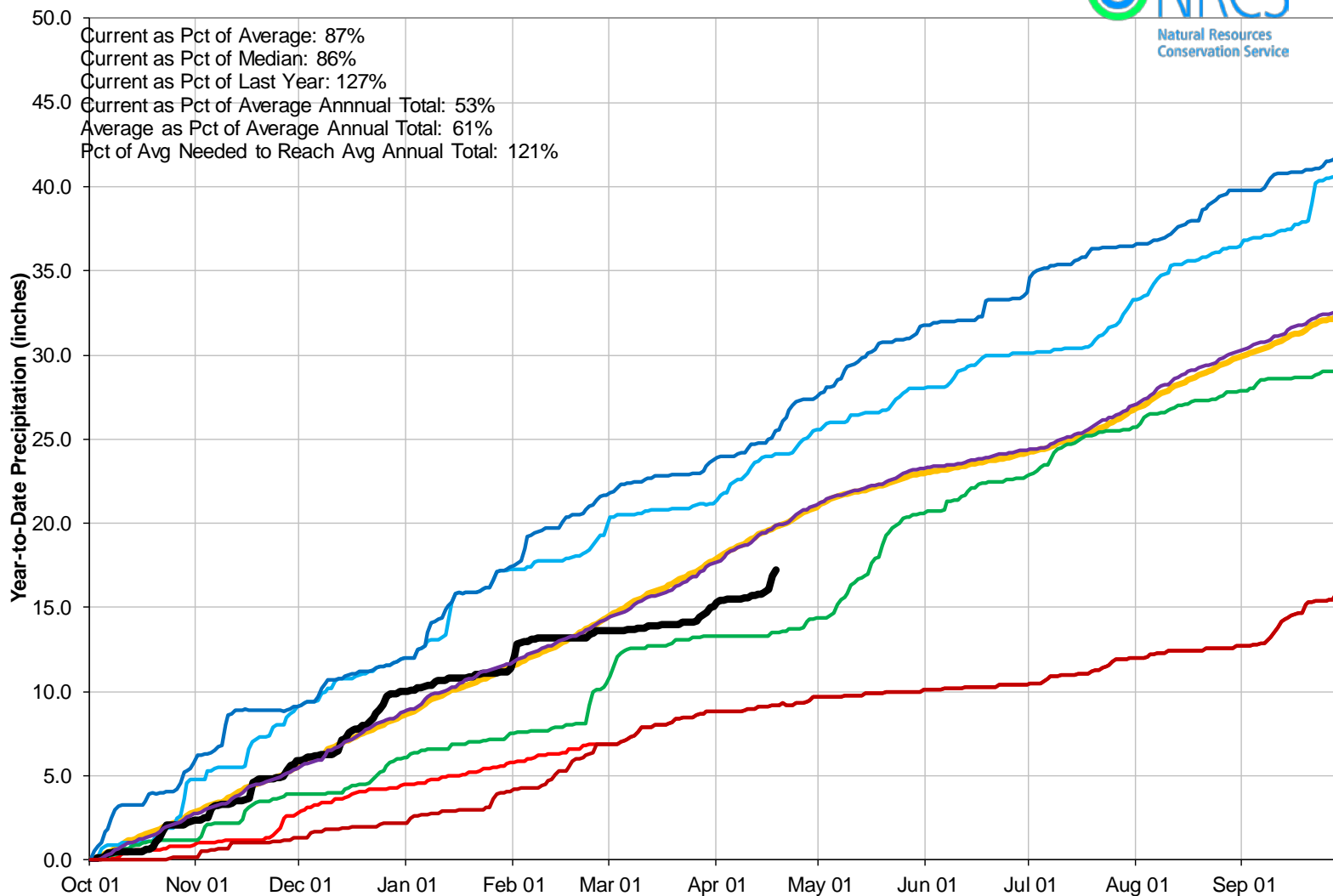
*Based on Provisional SNOTEL data as of Apr 18, 2016*





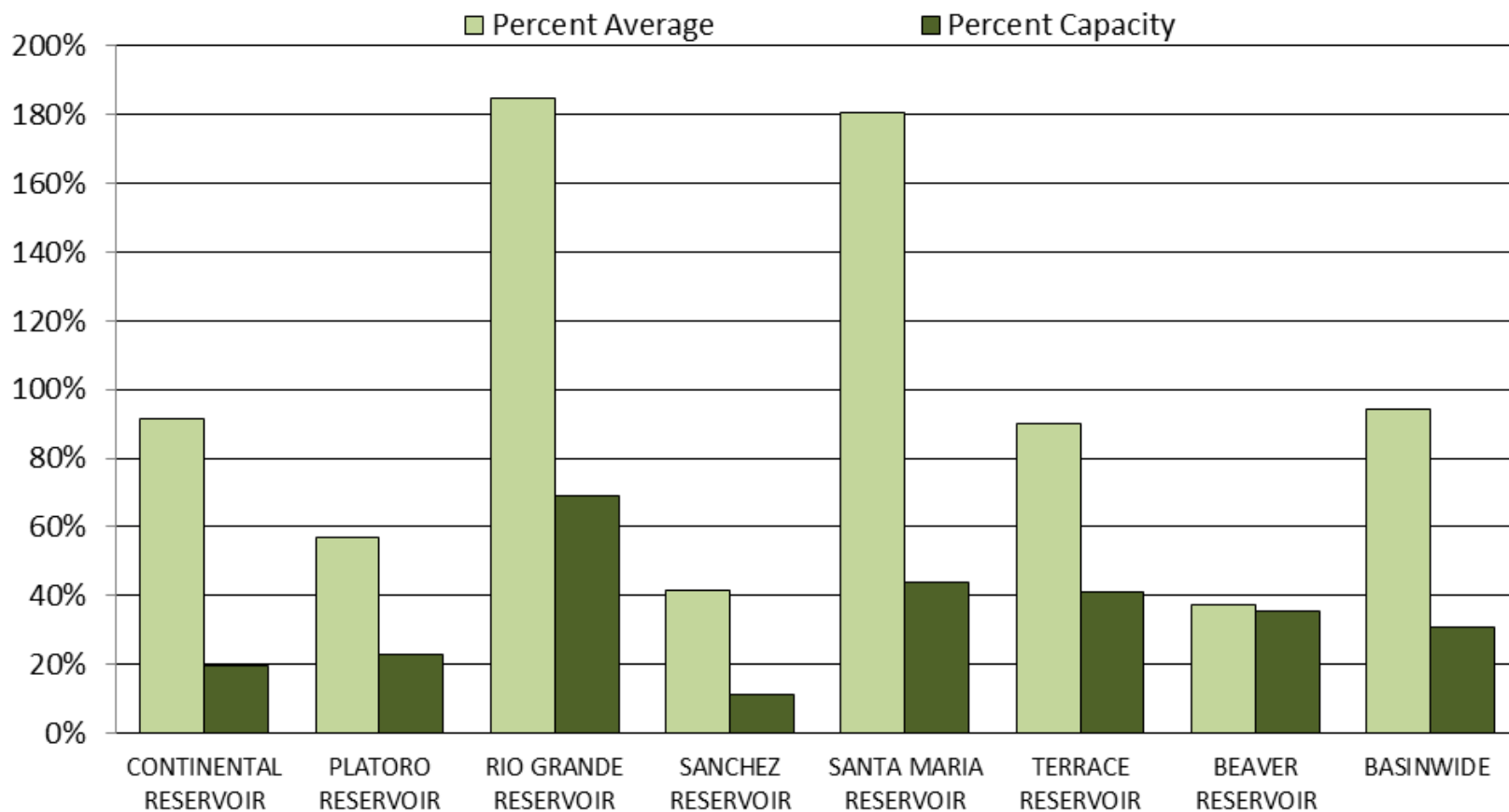
## Upper Rio Grande Basin High/Low Year-to-Date Precipitation Summary

*Based on Provisional SNOTEL data as of Apr 18, 2016*



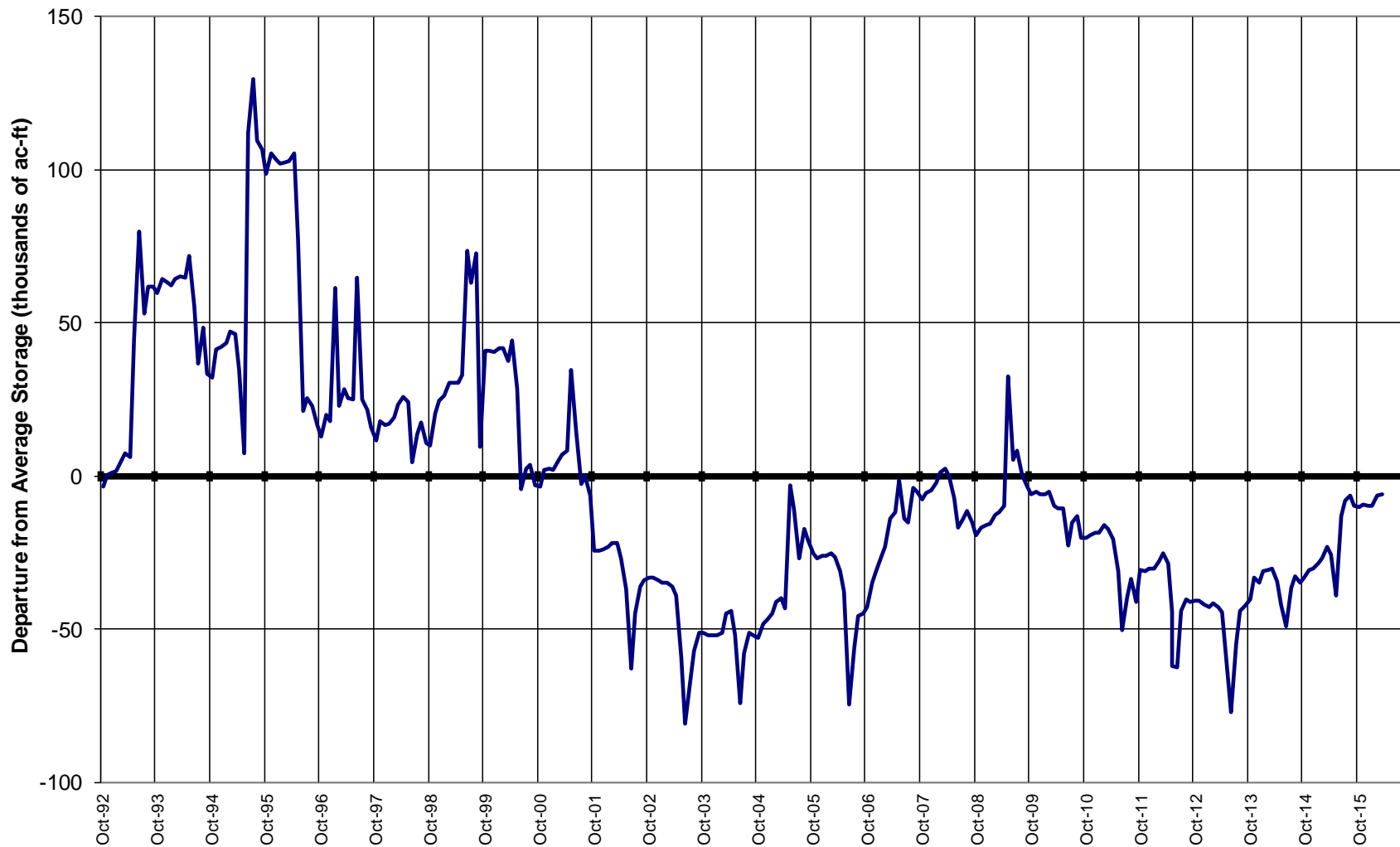


## Reservoir Storage



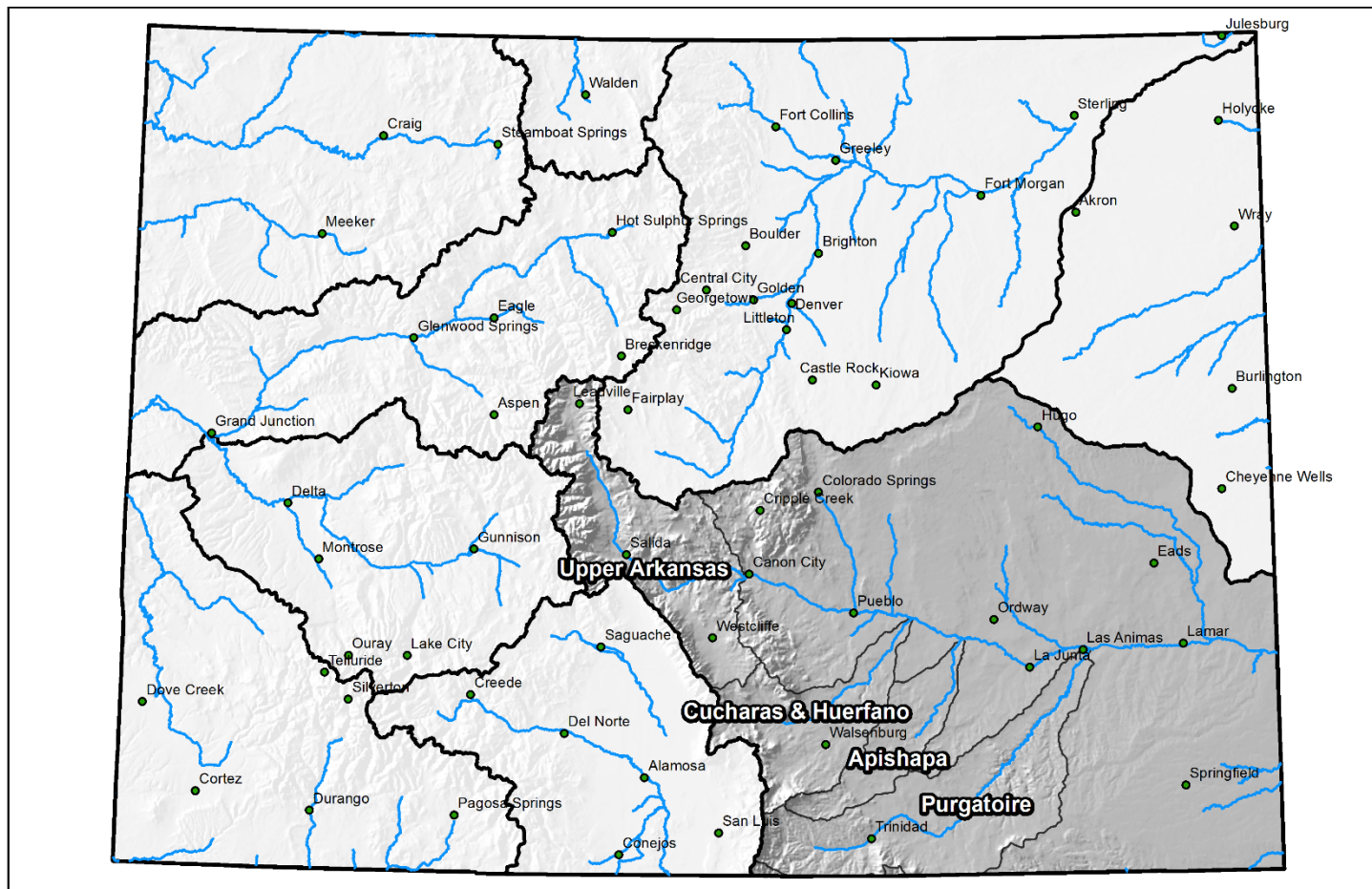


## UPPER RIO GRANDE BASIN Reservoir Storage Departure from Average



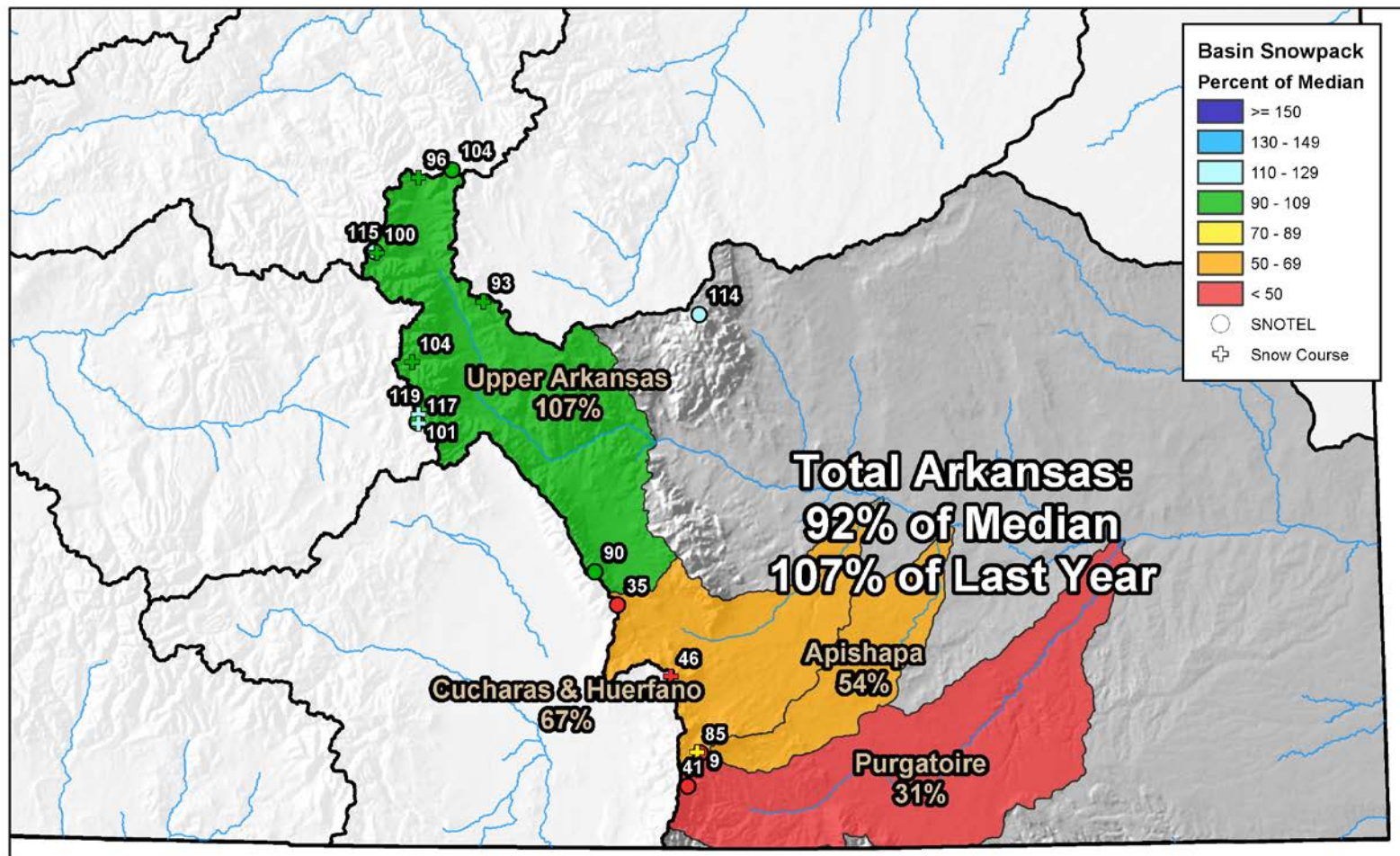
## Major Basin Summary

### Arkansas River Basin



0 25 50 100 150 200 Miles

## Arkansas River Basin Monthly Snowpack Summary April 1, 2016

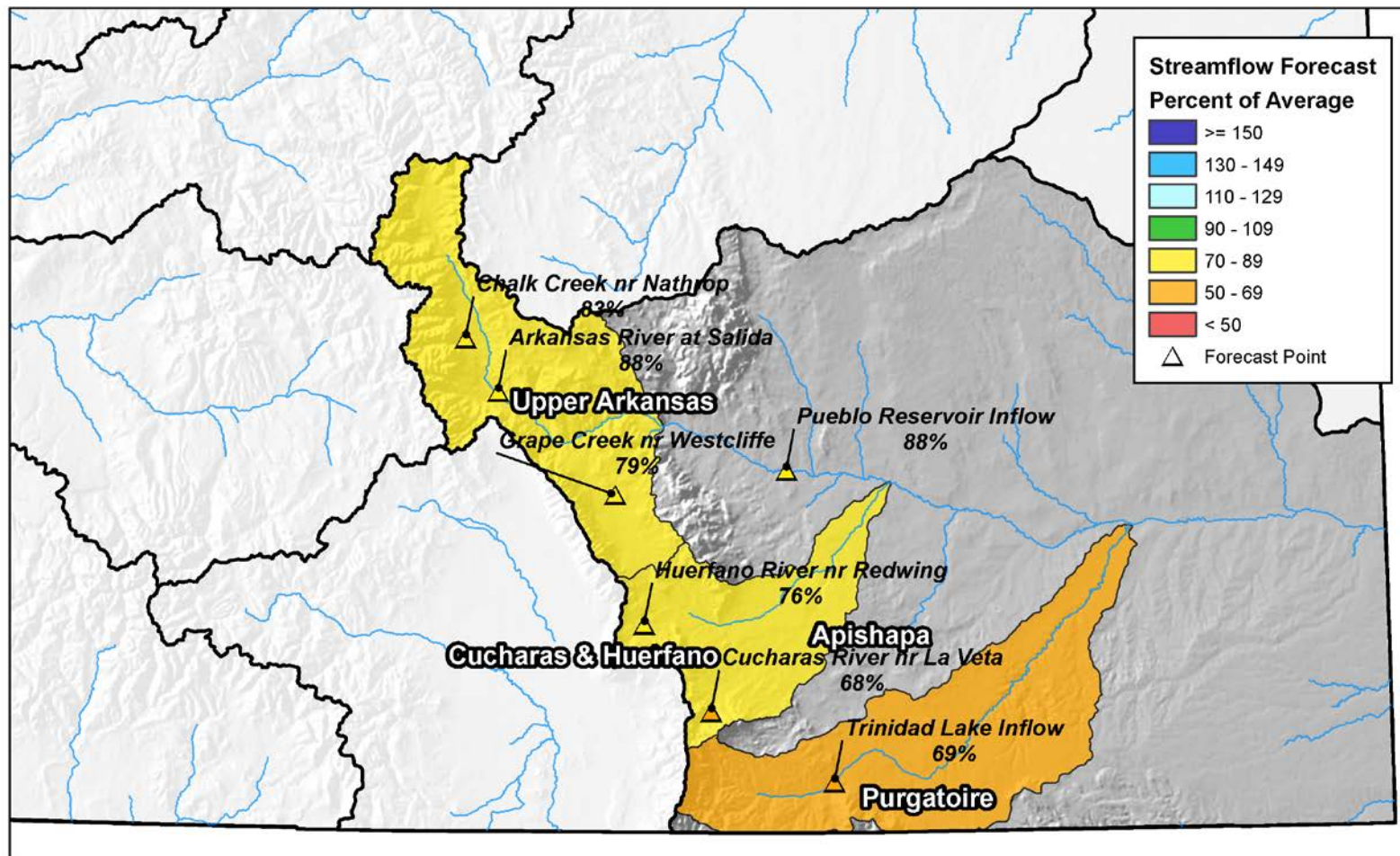


0 10 20 40 60 80 Miles



## Arkansas River Basin Streamflow Forecast Summary

April 1, 2016

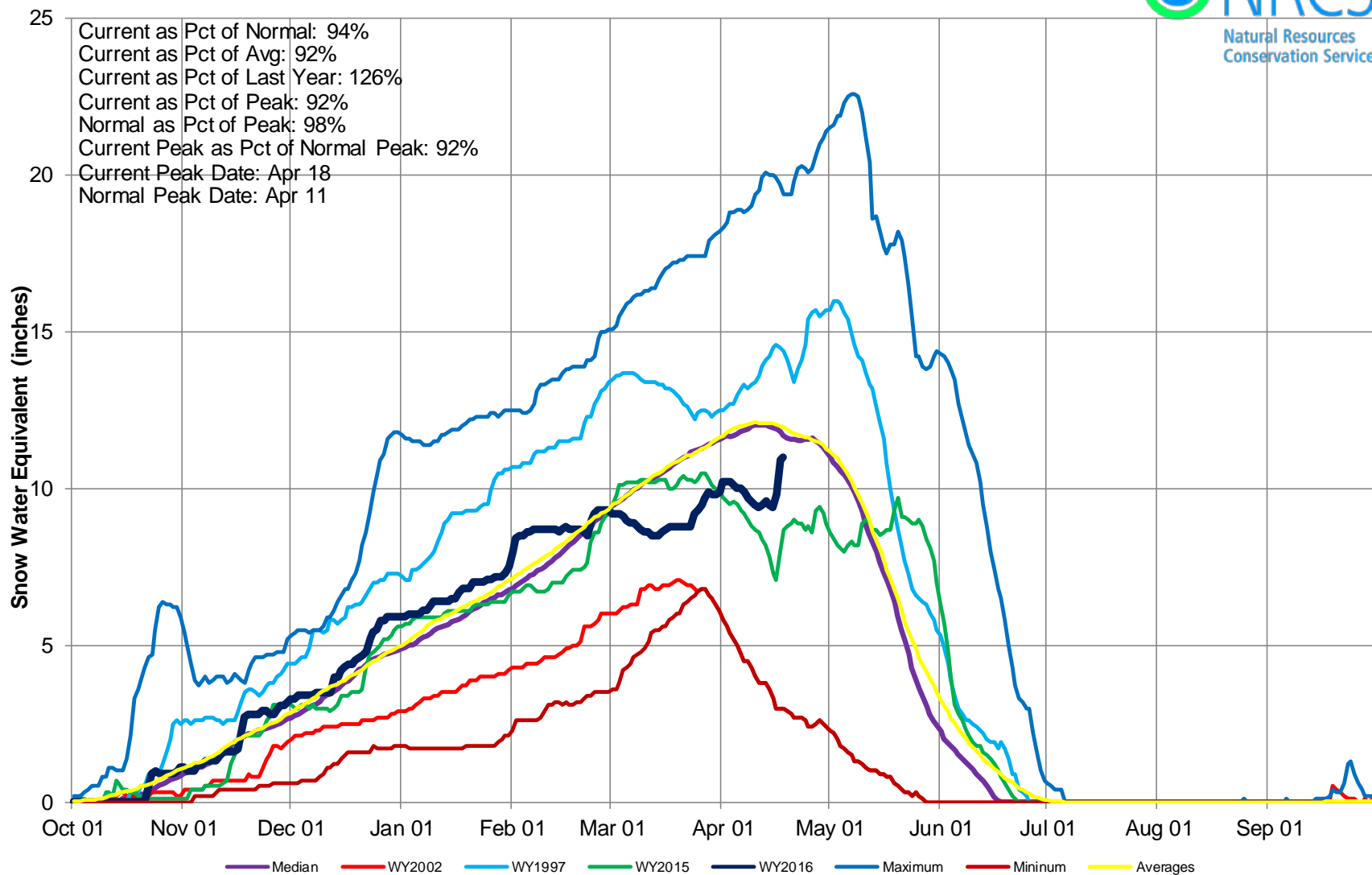


0 10 20 40 60 80 Miles



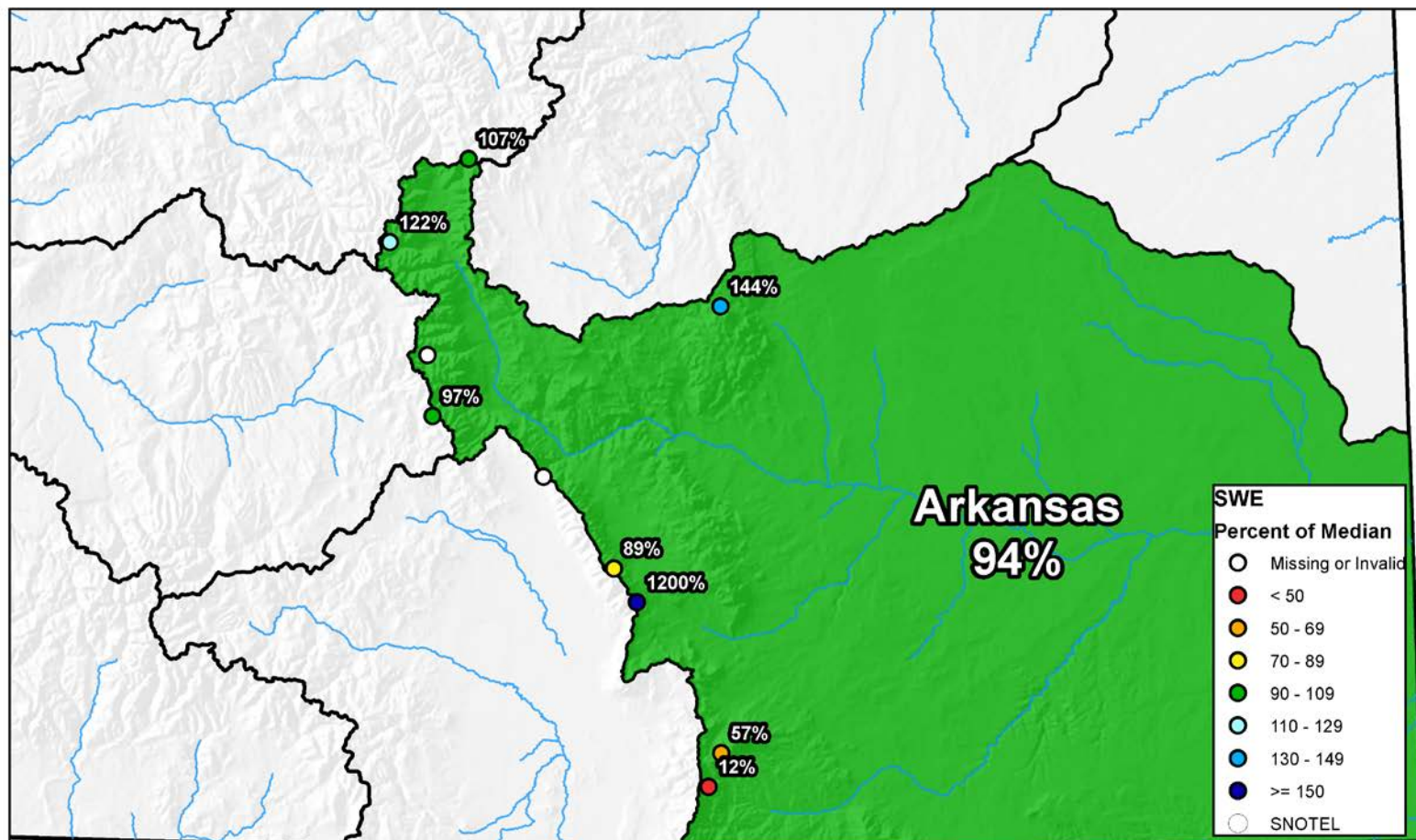
## Arkansas River Basin High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Apr 18, 2016*



## Arkansas River Basin Snow Water Equivalent (SWE) Summary

Current as of Apr 18, 2016



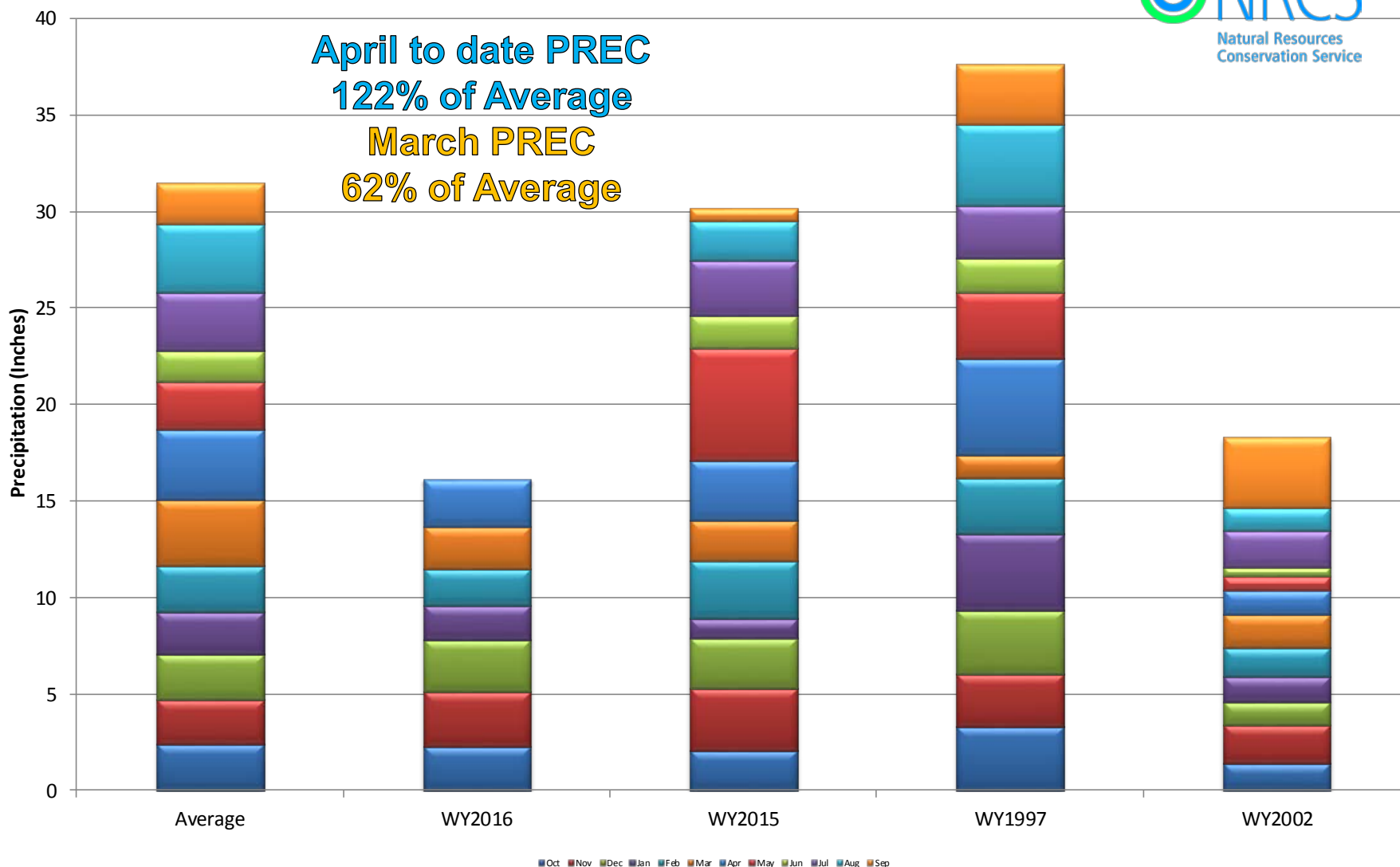
0 10 20 40 60 80 Miles





## Arkansas River Basin High/Low Monthly Precipitation Summary

*Based on Provisional SNOTEL data as of Apr 18, 2016*

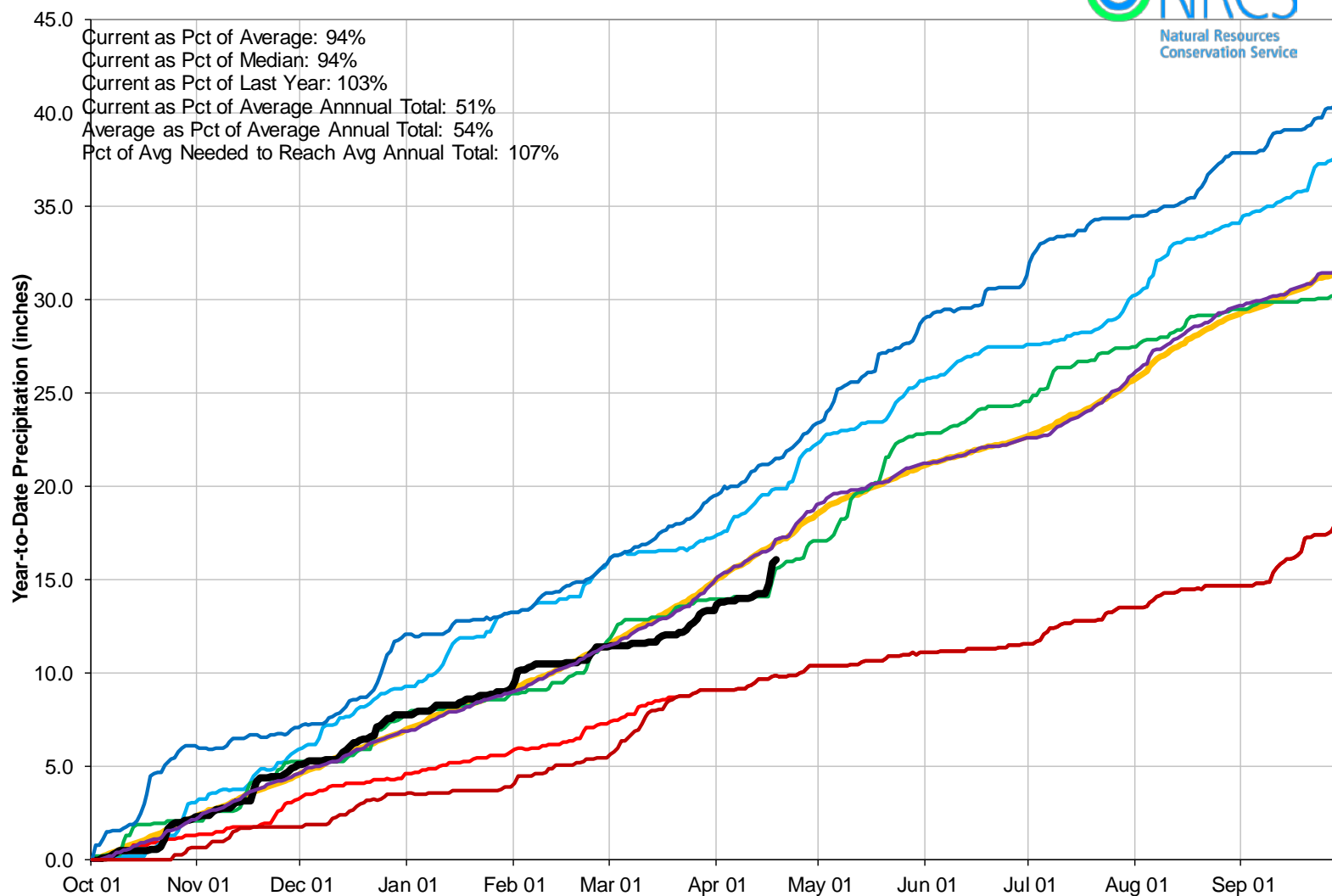


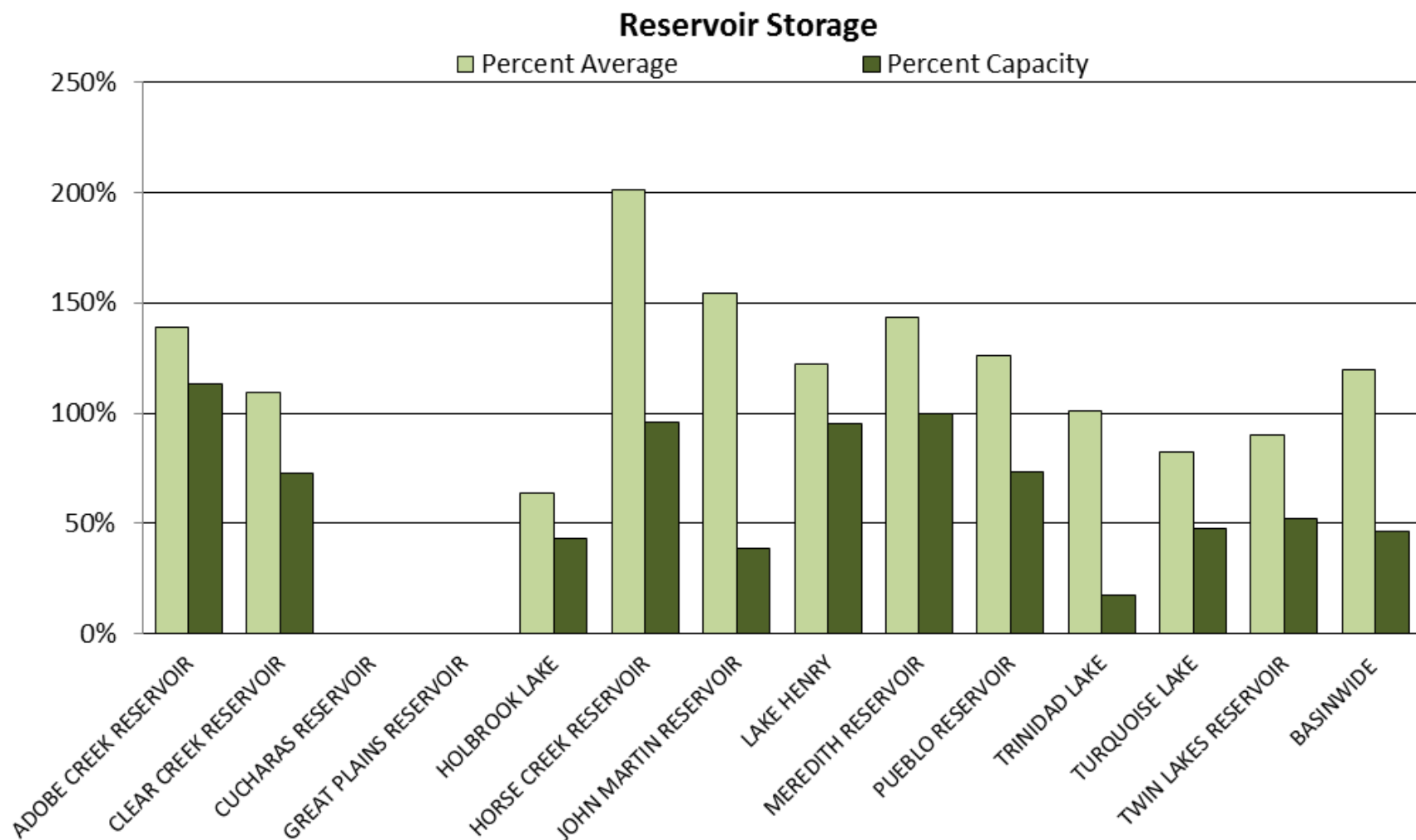




## Arkansas River Basin High/Low Year-to-Date Precipitation Summary

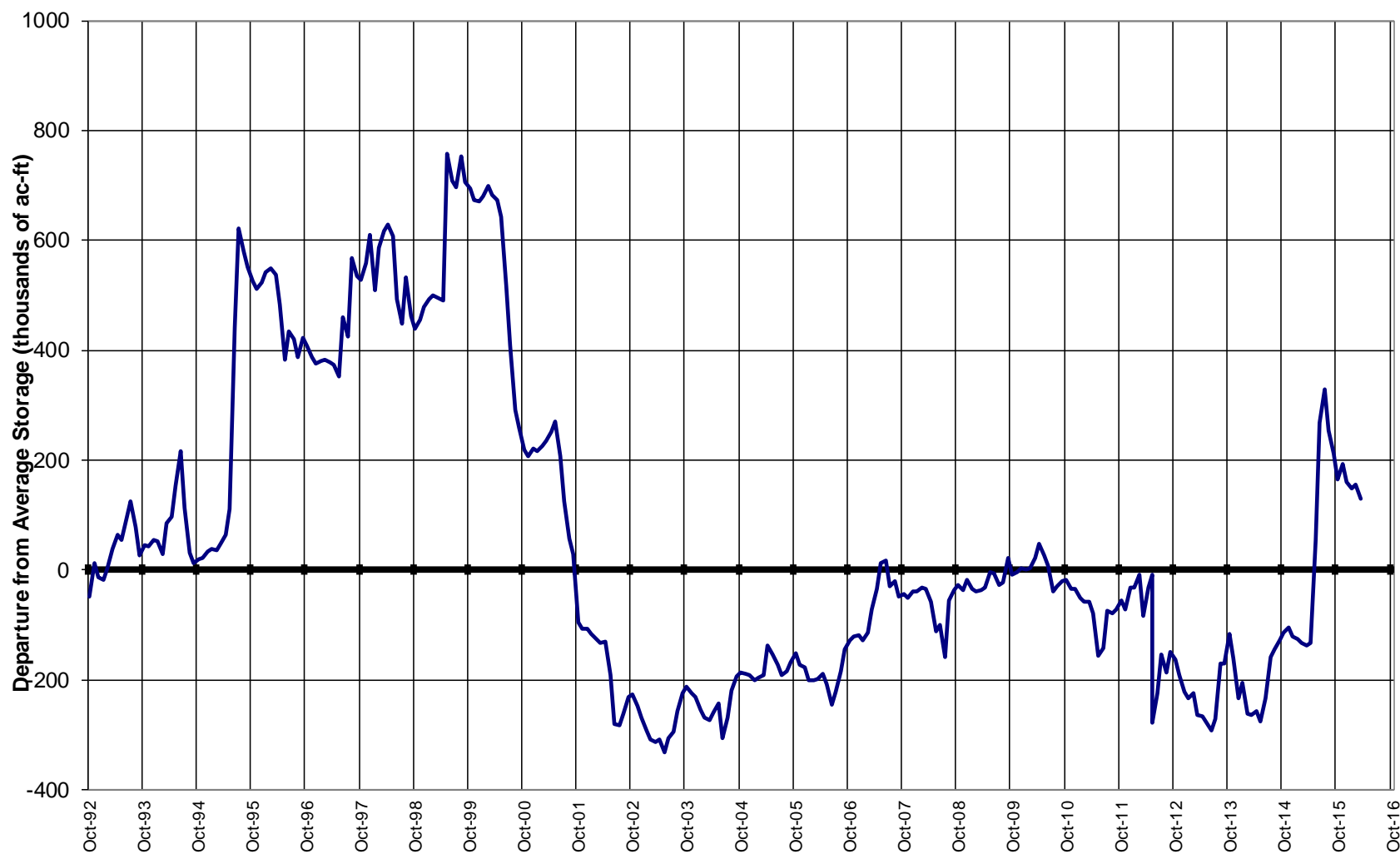
*Based on Provisional SNOTEL data as of Apr 18, 2016*





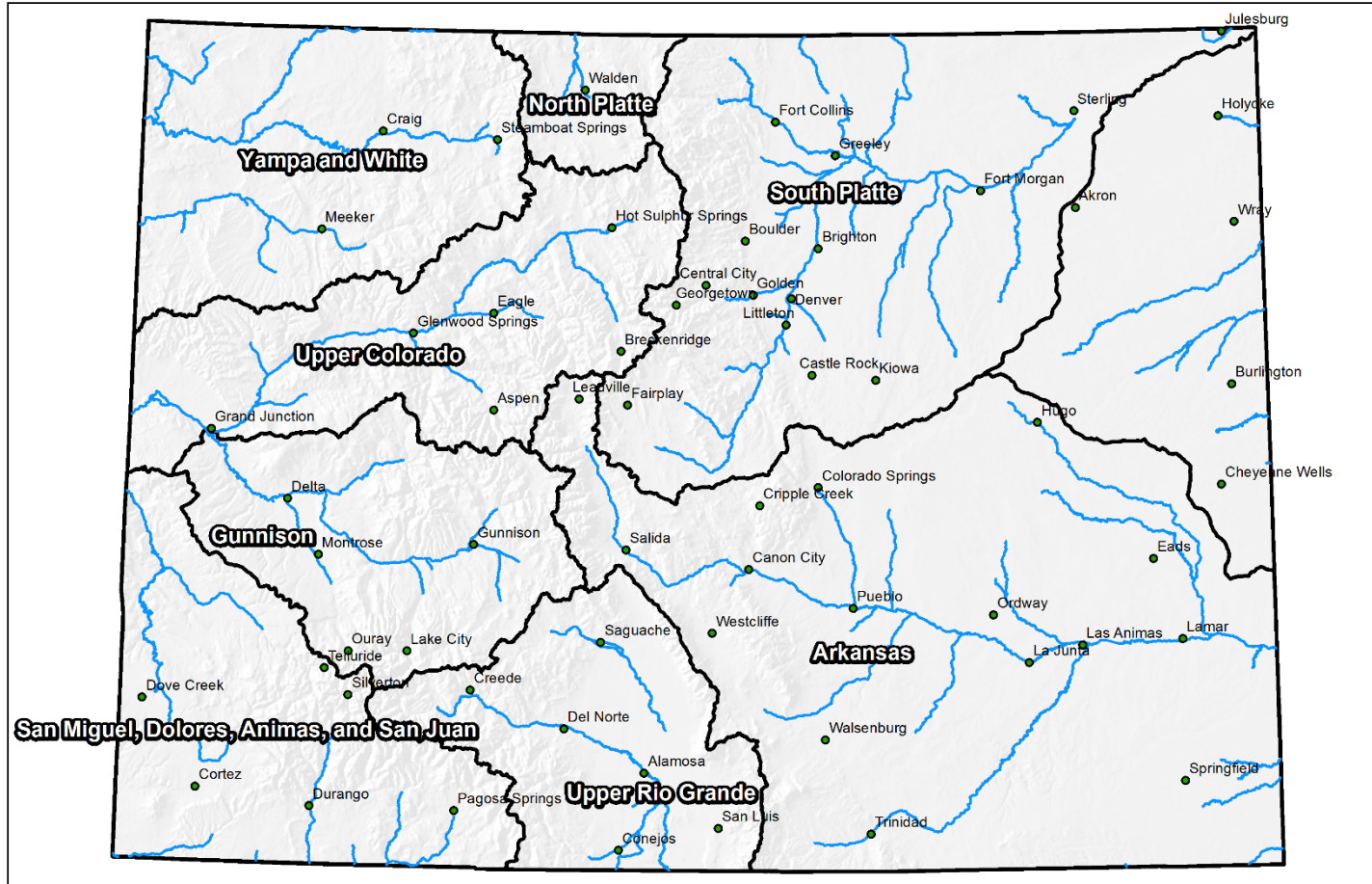


## ARKANSAS RIVER BASIN Reservoir Storage Departure from Average



## Colorado Statewide Summary

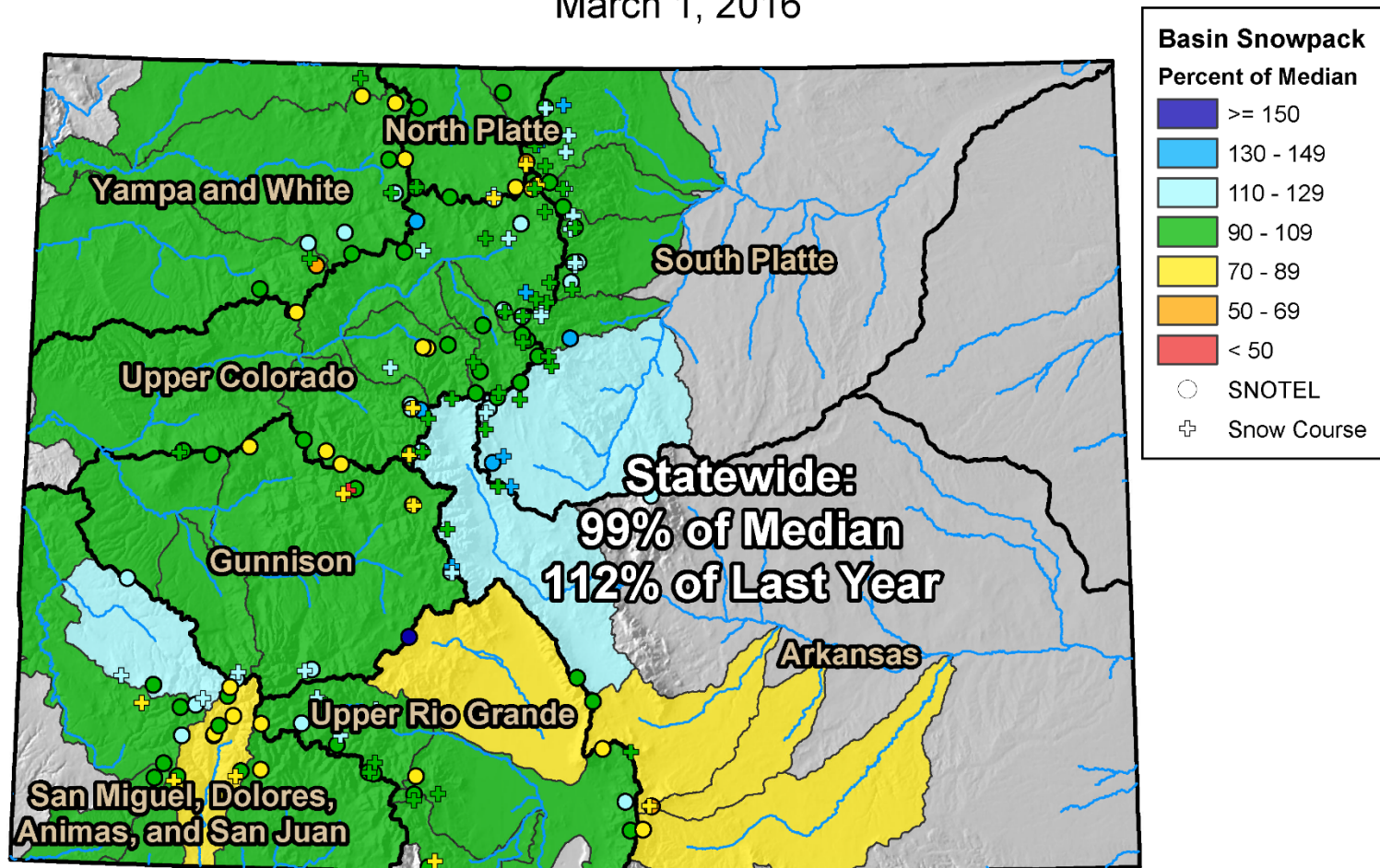
Colorado Major Basins



0 25 50 100 150 200 Miles

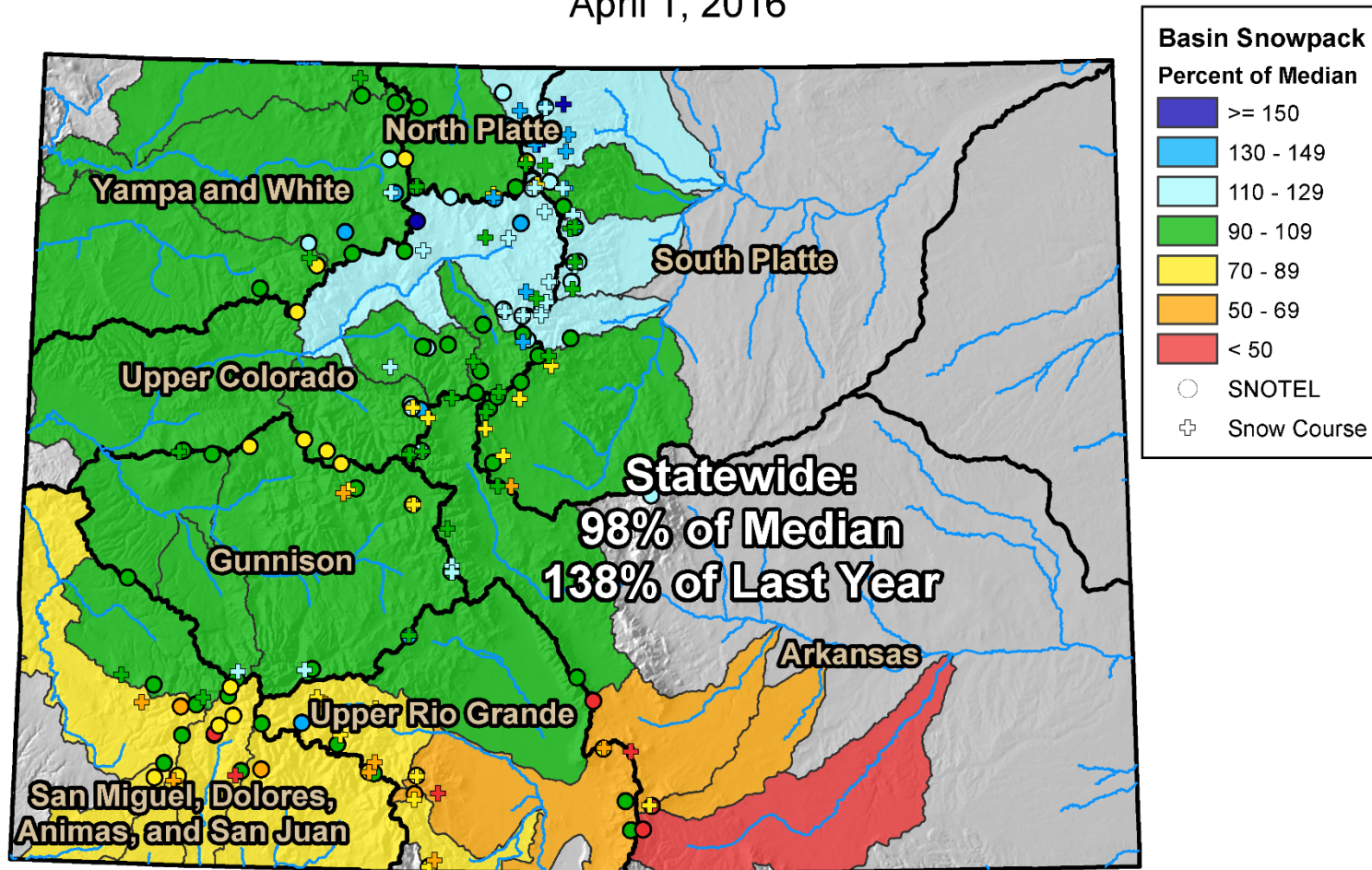


## Colorado Monthly Snowpack Summary March 1, 2016



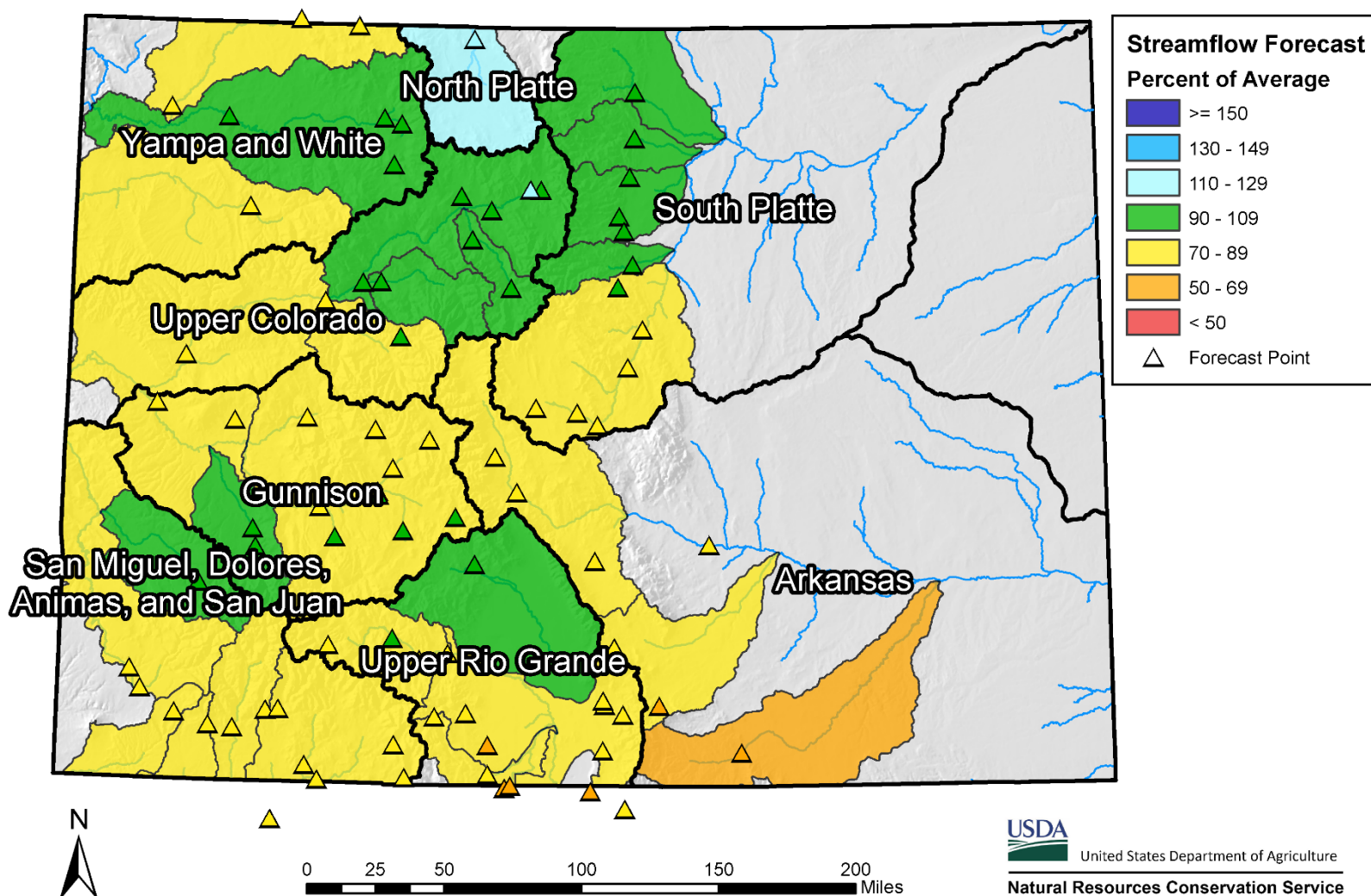
0 25 50 100 150 200 Miles

## Colorado Monthly Snowpack Summary April 1, 2016



0 25 50 100 150 200 Miles

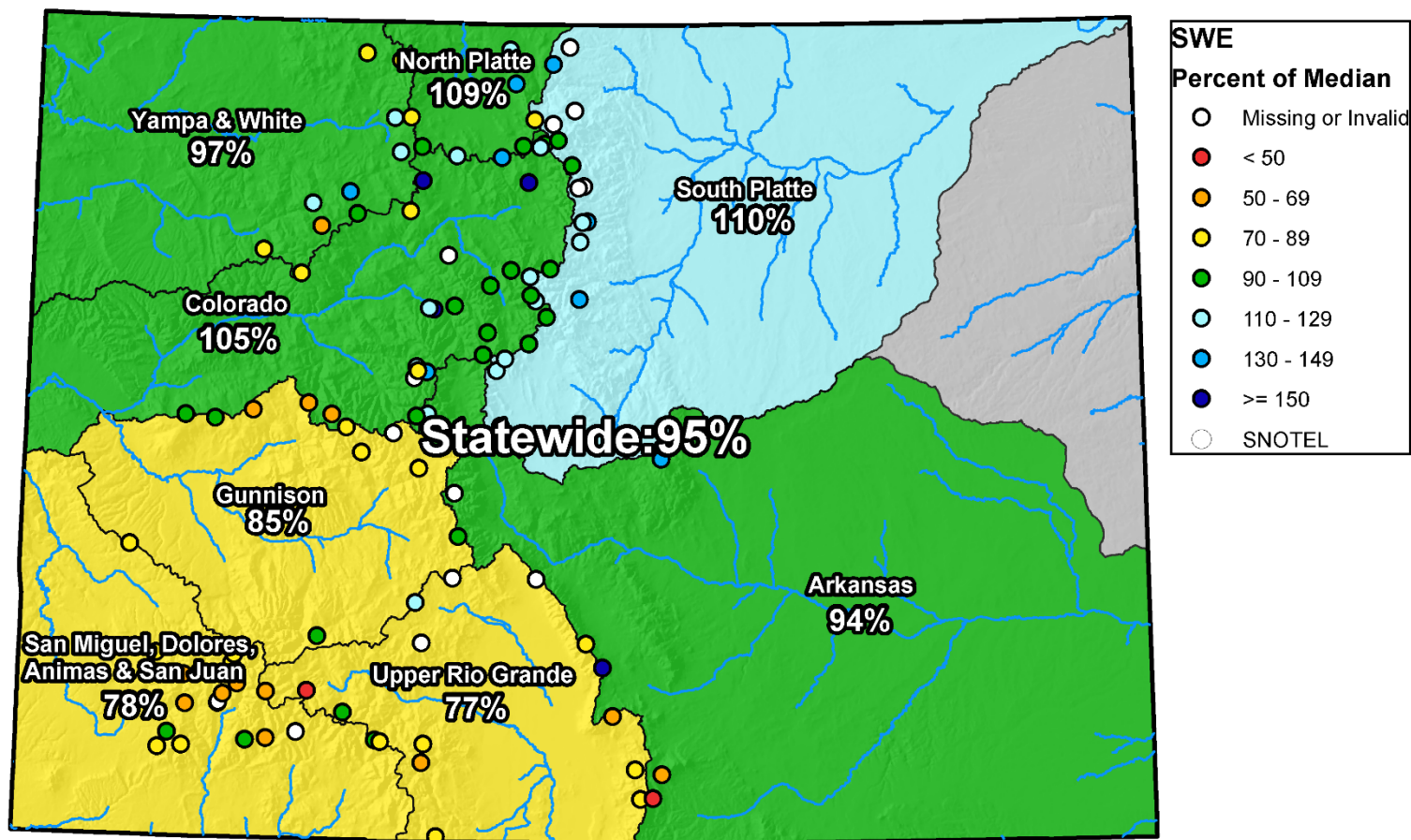
## Colorado Streamflow Forecasts Summary April 1, 2016





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

Current as of Apr 18, 2016



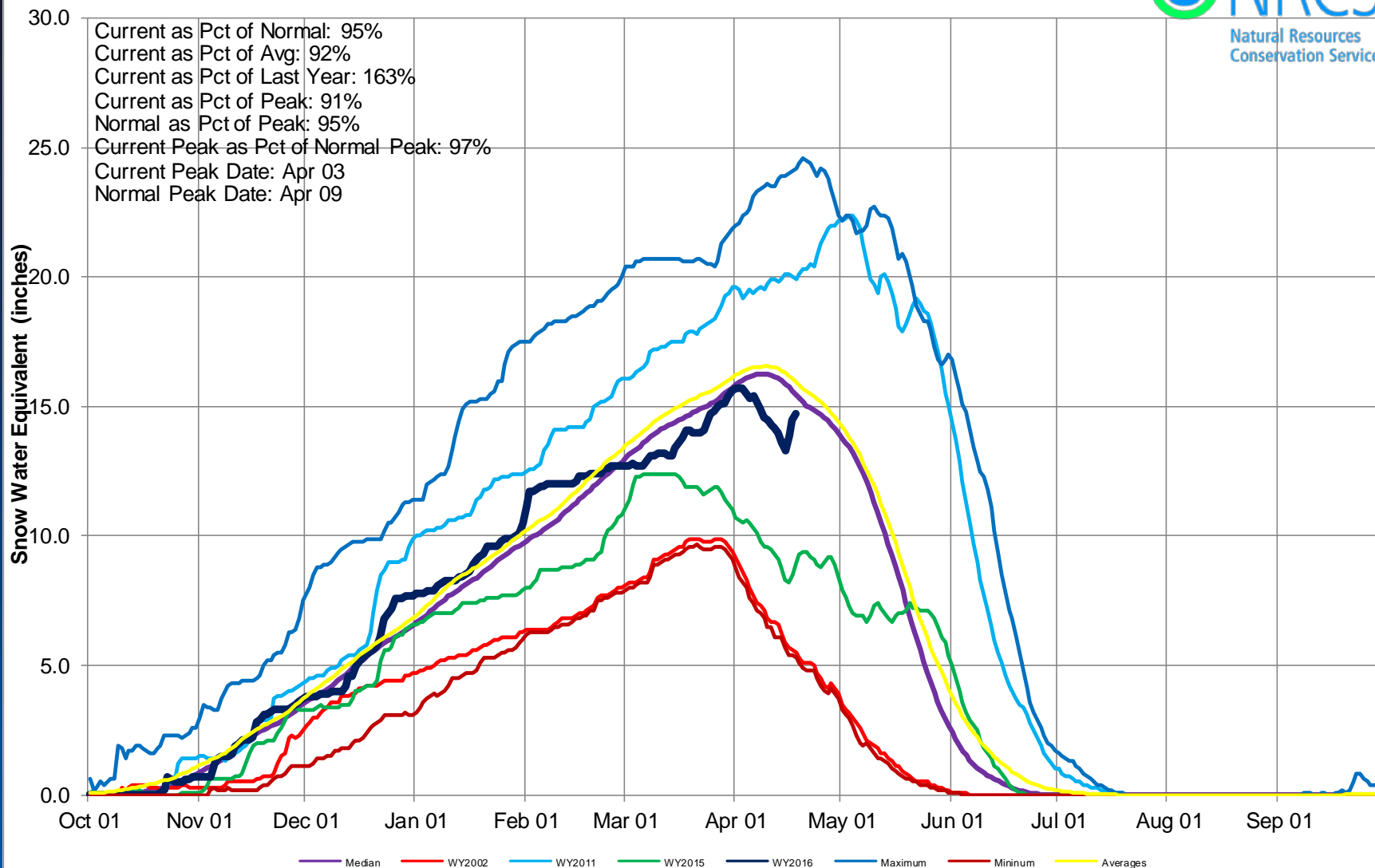
0 25 50 100 150 200 Miles





## Colorado Statewide High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Apr 18, 2016*





## Colorado Statewide High/Low Monthly Precipitation Summary

*Based on Provisional SNOTEL data as of Apr 18, 2016*

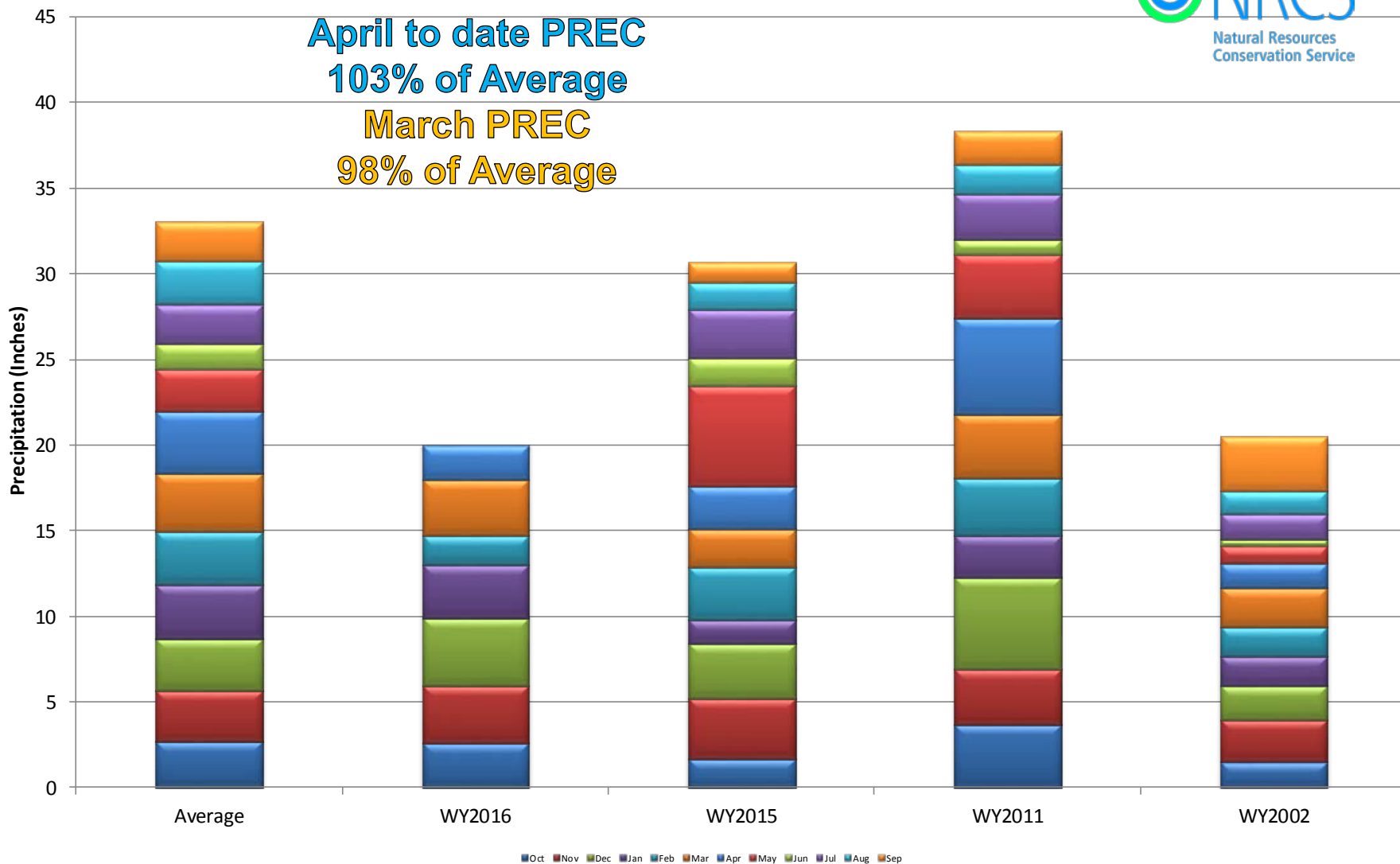


**April to date PREC**

**103% of Average**

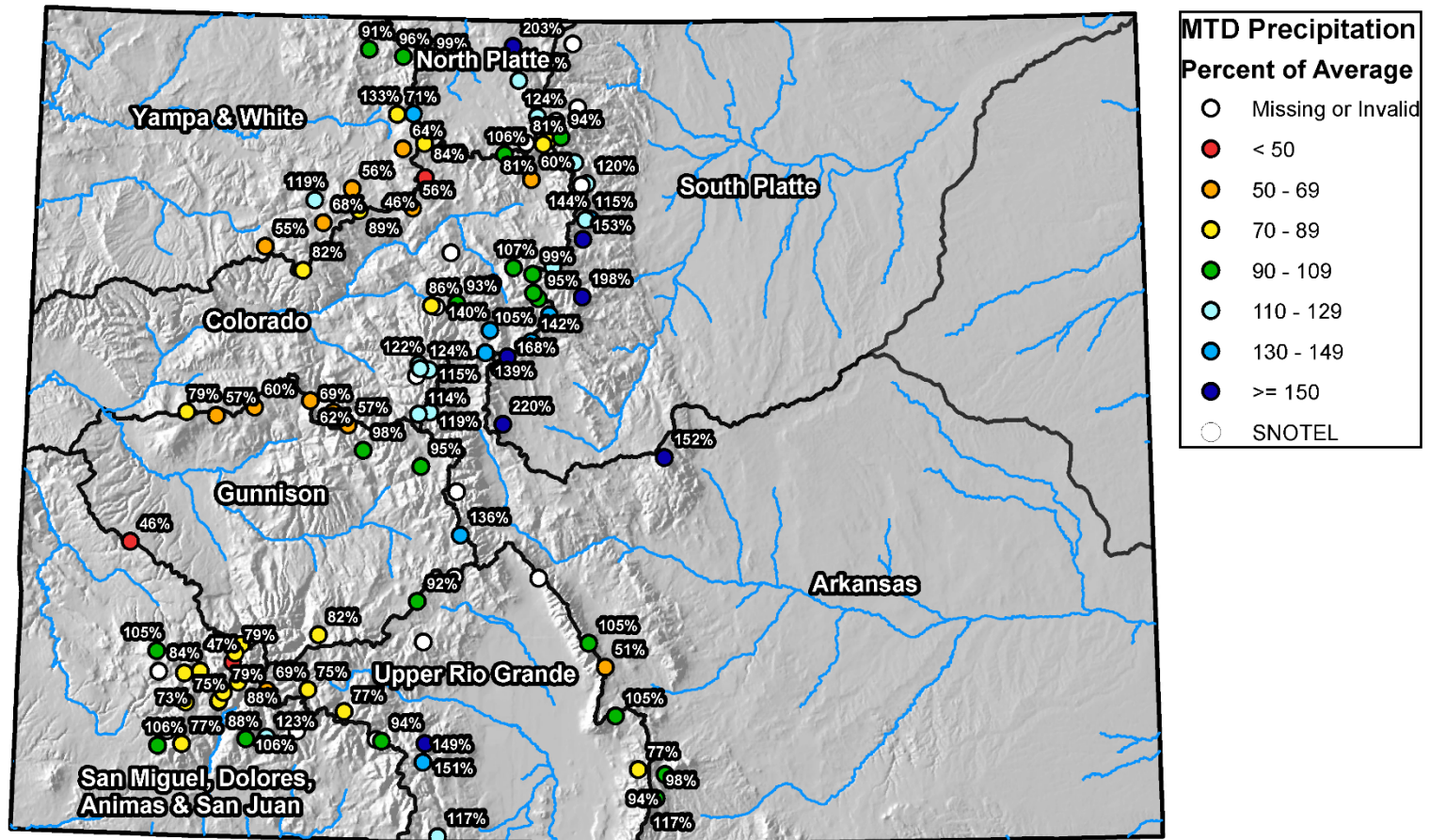
**March PREC**

**98% of Average**



## Colorado SNOTEL Month-to-Date Precipitation

Current as of Apr 18, 2016

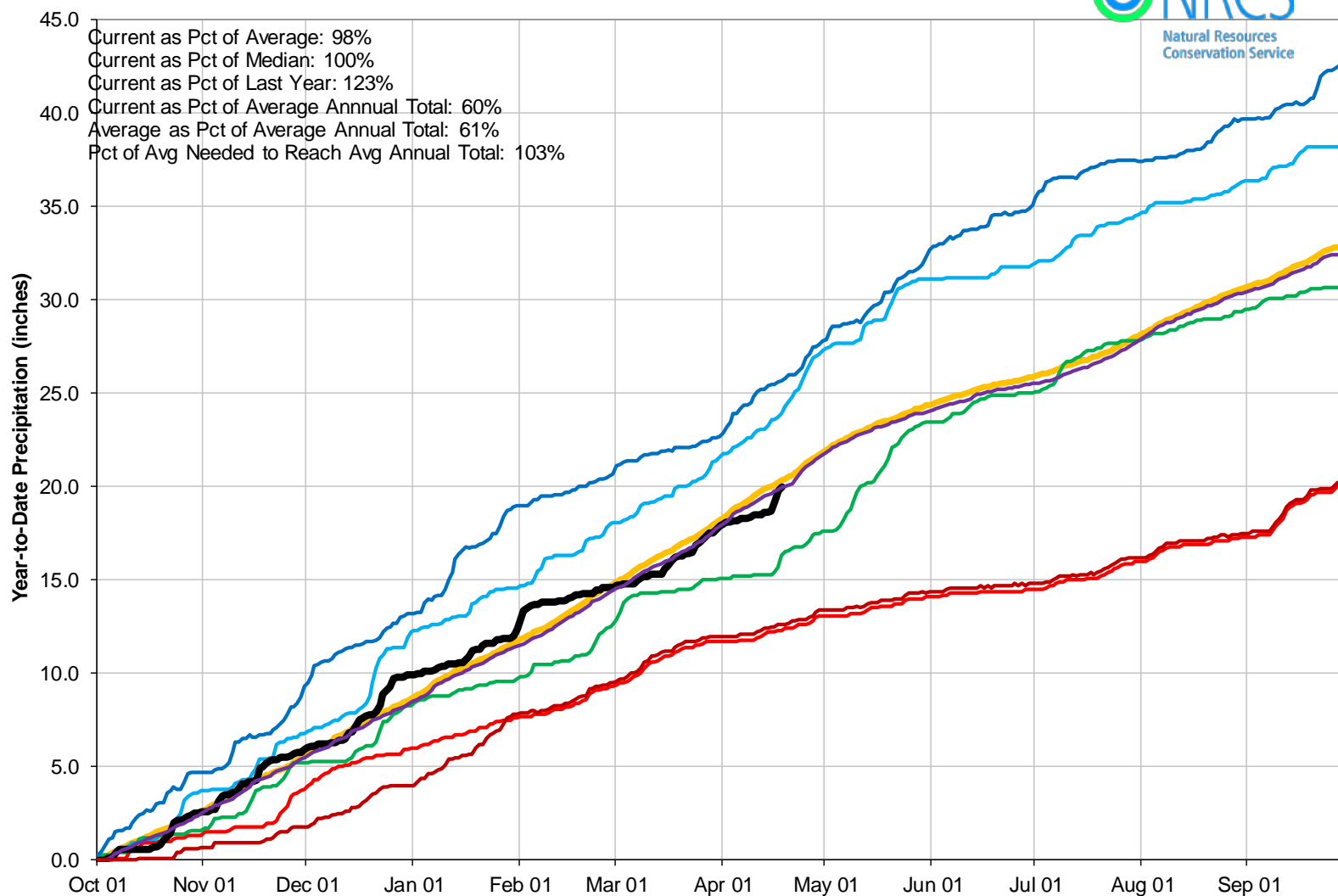


0 25 50 100 150 200 Miles



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

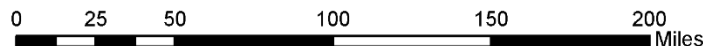
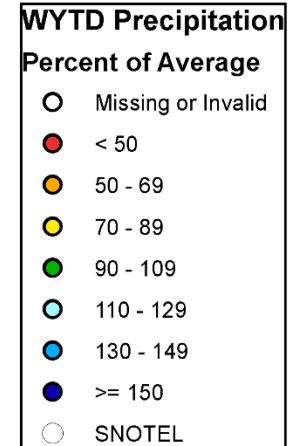
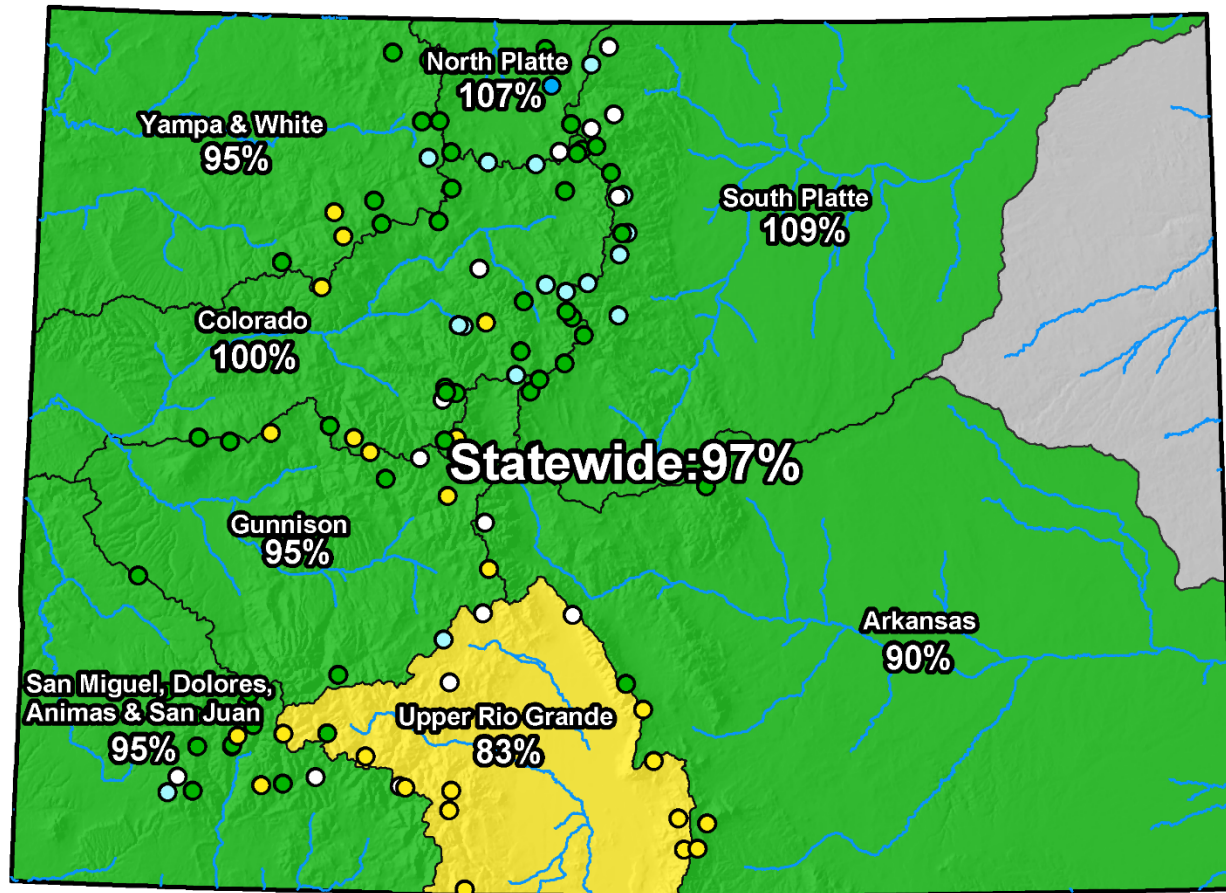
*Based on Provisional SNOTEL data as of Apr 18, 2016*





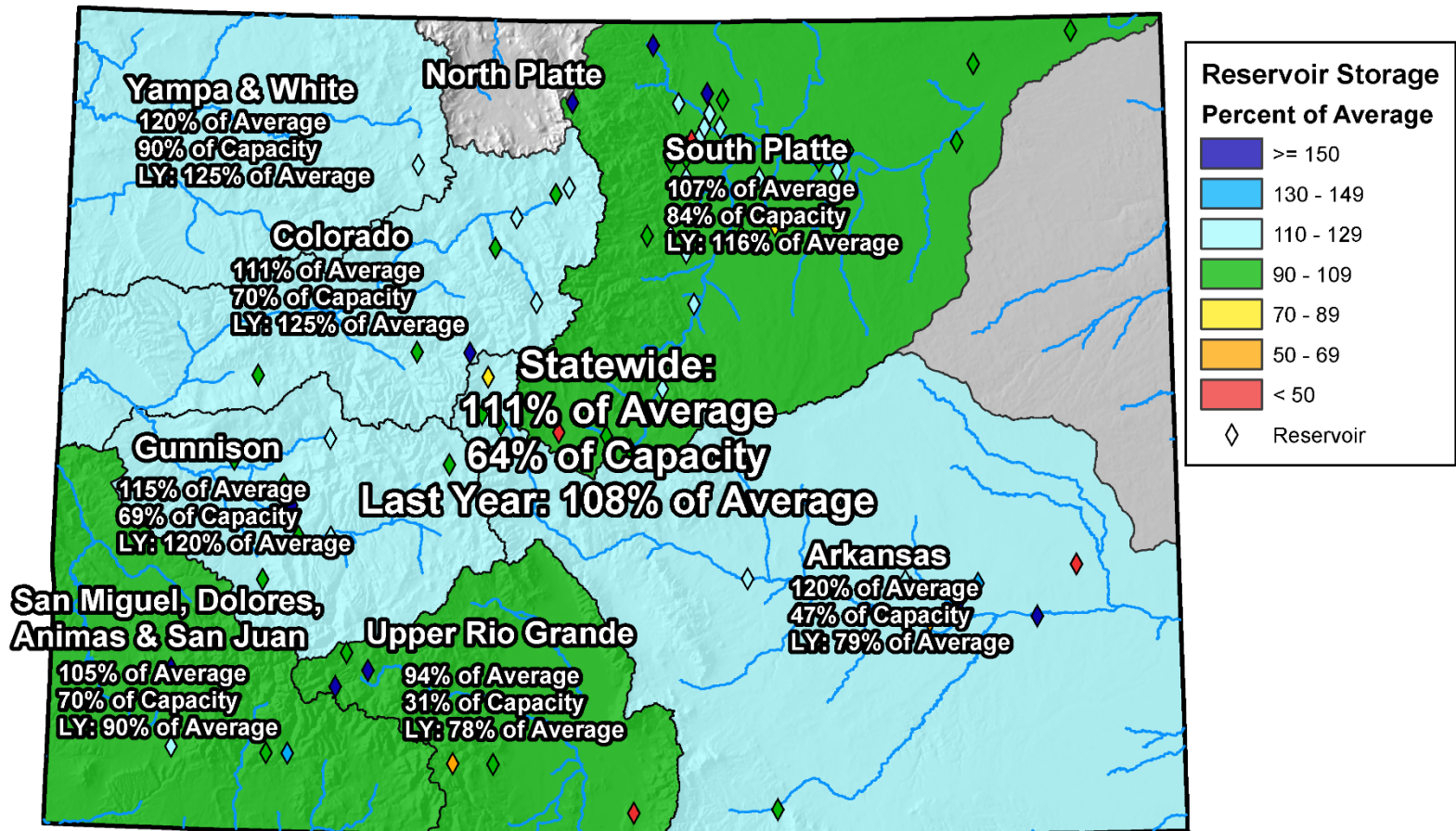
## Colorado SNOTEL Water Year to Date Precipitation

Current as of Mar 25, 2016



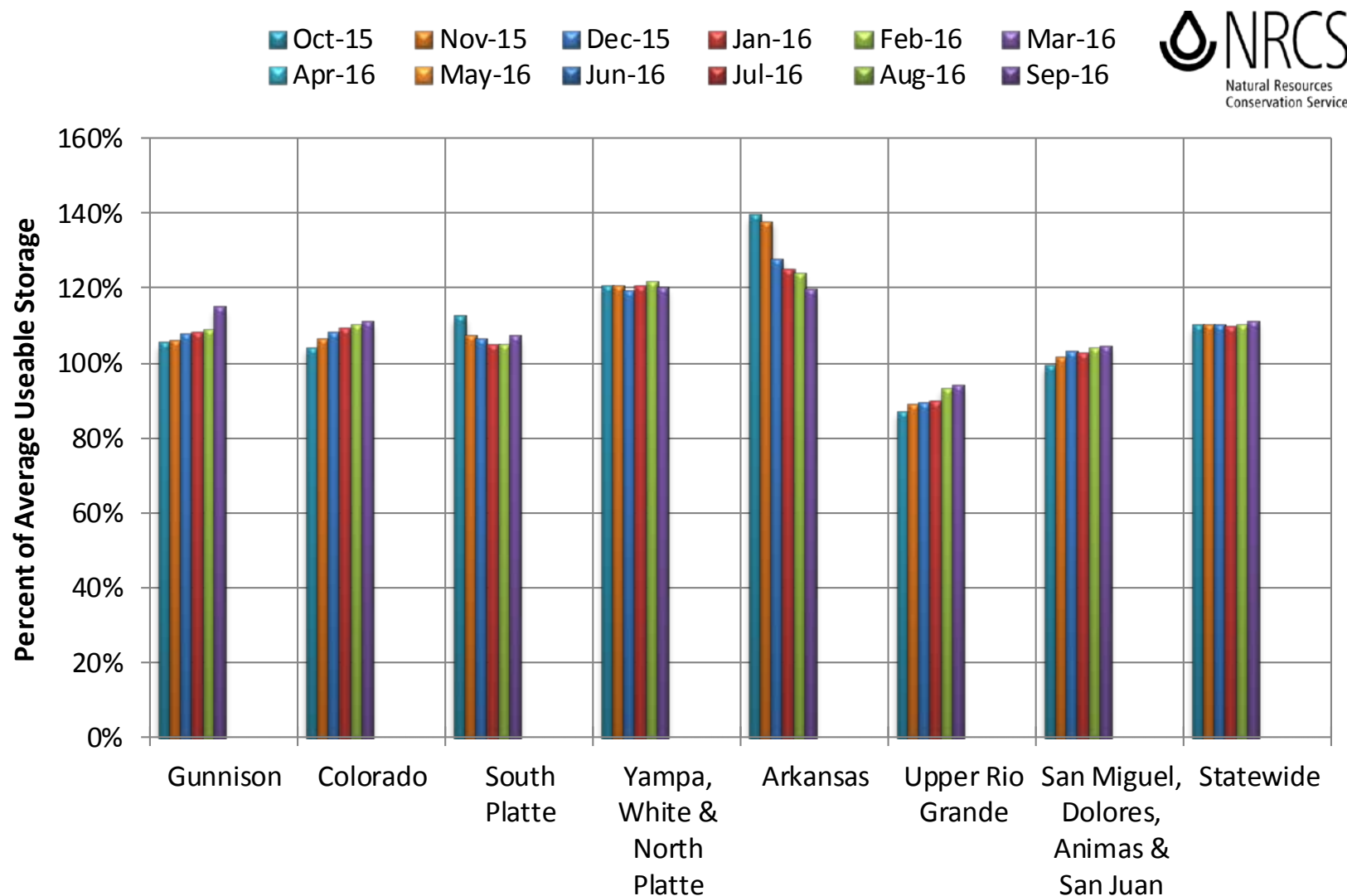
## Colorado Monthly Reservoir Storage Summary

End of March 2016



0 25 50 100 150 200 Miles

# Colorado Reservoir Storage

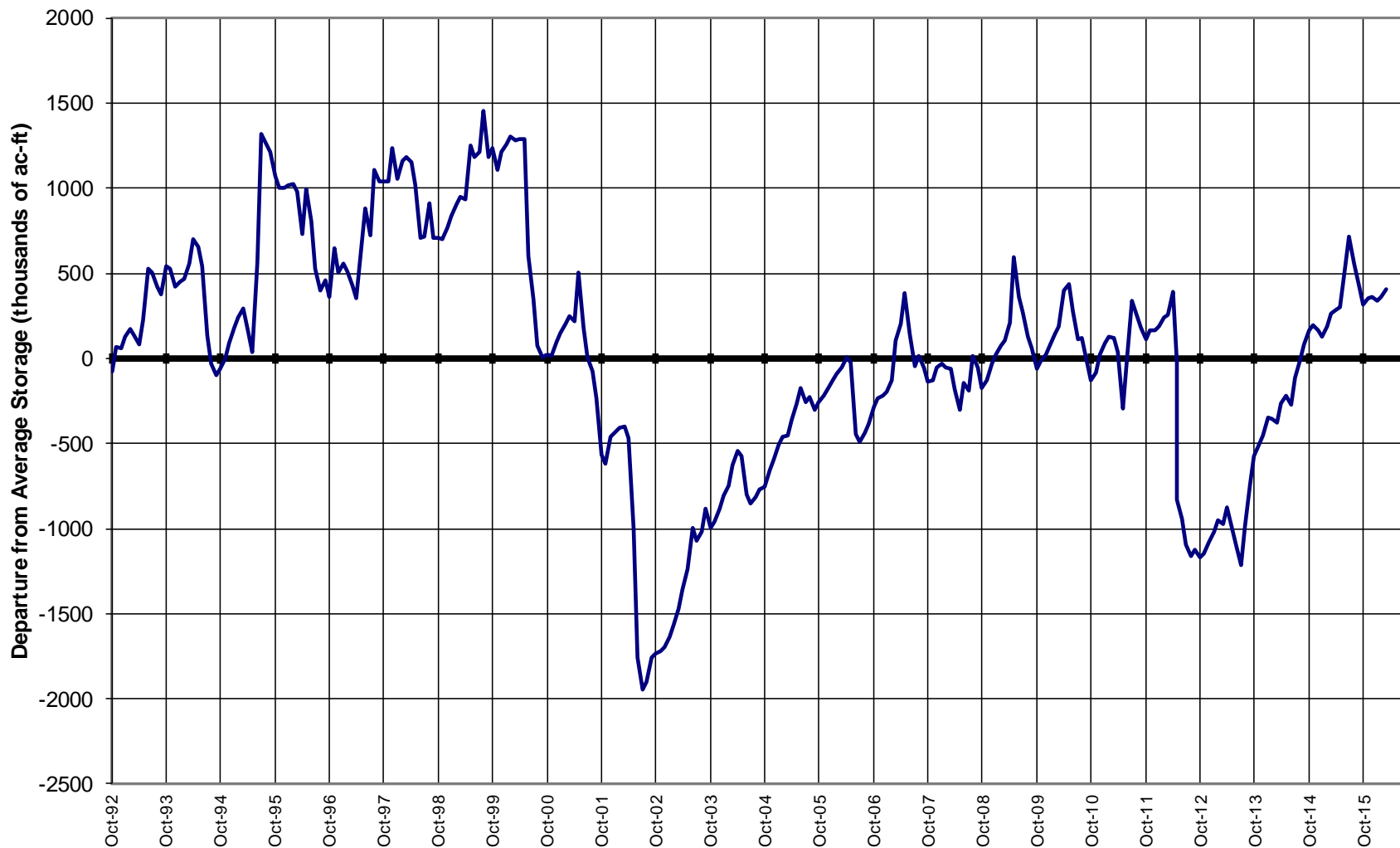




United States Department of Agriculture

# Colorado Snow Surveys

## COLORADO STATEWIDE Reservoir Storage Departure from Average



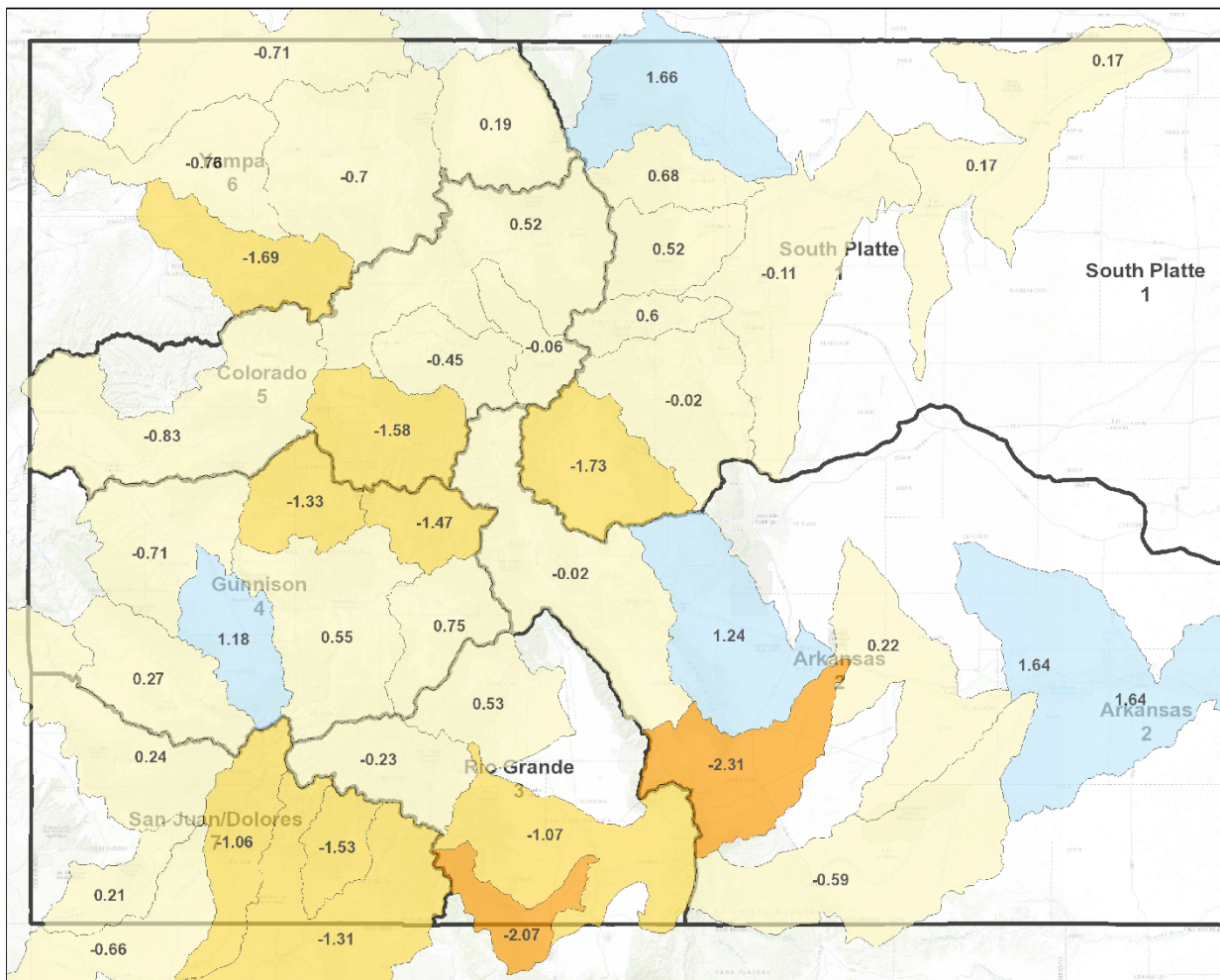




**CDSS**

Colorado's Decision Support Systems

## Map Viewer



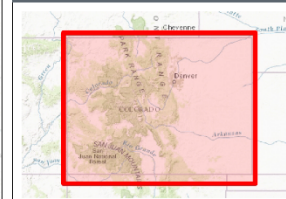
### Legend

SWSI - Current (April 2016)

- SWSI Not Applicable (-99.99)
- Extremely Dry (-3.0 - -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)

Division

### Location



### Notes

93.22 0 46.61 93.22 Miles

1: 2,953,155



*This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.*

Date Prepared: 4/16/2016 10:23:52 AM

# Summary

- Snowpack statewide is now near normal
- March precipitation was well below average in southern Colorado and well above average in Central and North
- Statewide we have remained at near normal WY precip
- Along with the precipitation patterns streamflow forecasts dropped in the south and rose in the north
- Reservoirs statewide remain in relatively good standing at 111% of normal, similar to last month
- SWSIs are becoming more widely dispersed but don't vary greatly; general near to slightly below normal across the state



United States Department of Agriculture

Colorado Snow Surveys

# Water Availability Task Force Meeting

## April 18<sup>th</sup>, 2016

### NRCS Snow Survey and Water Supply Forecasting Program

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