

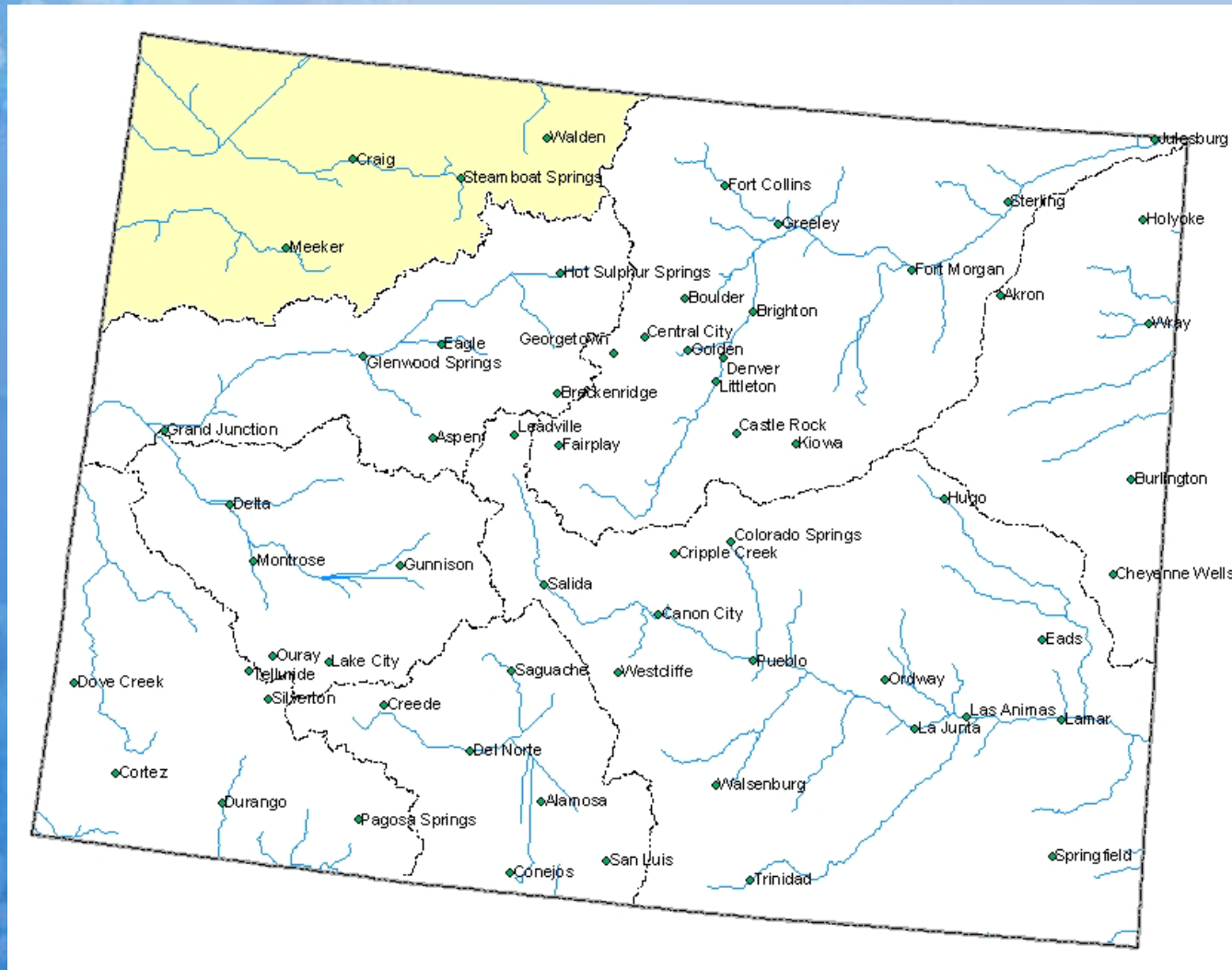
# NRCS – Snow Survey & Water Supply Forecasting

Mage Hultstrand

Water Availability Task Force Meeting

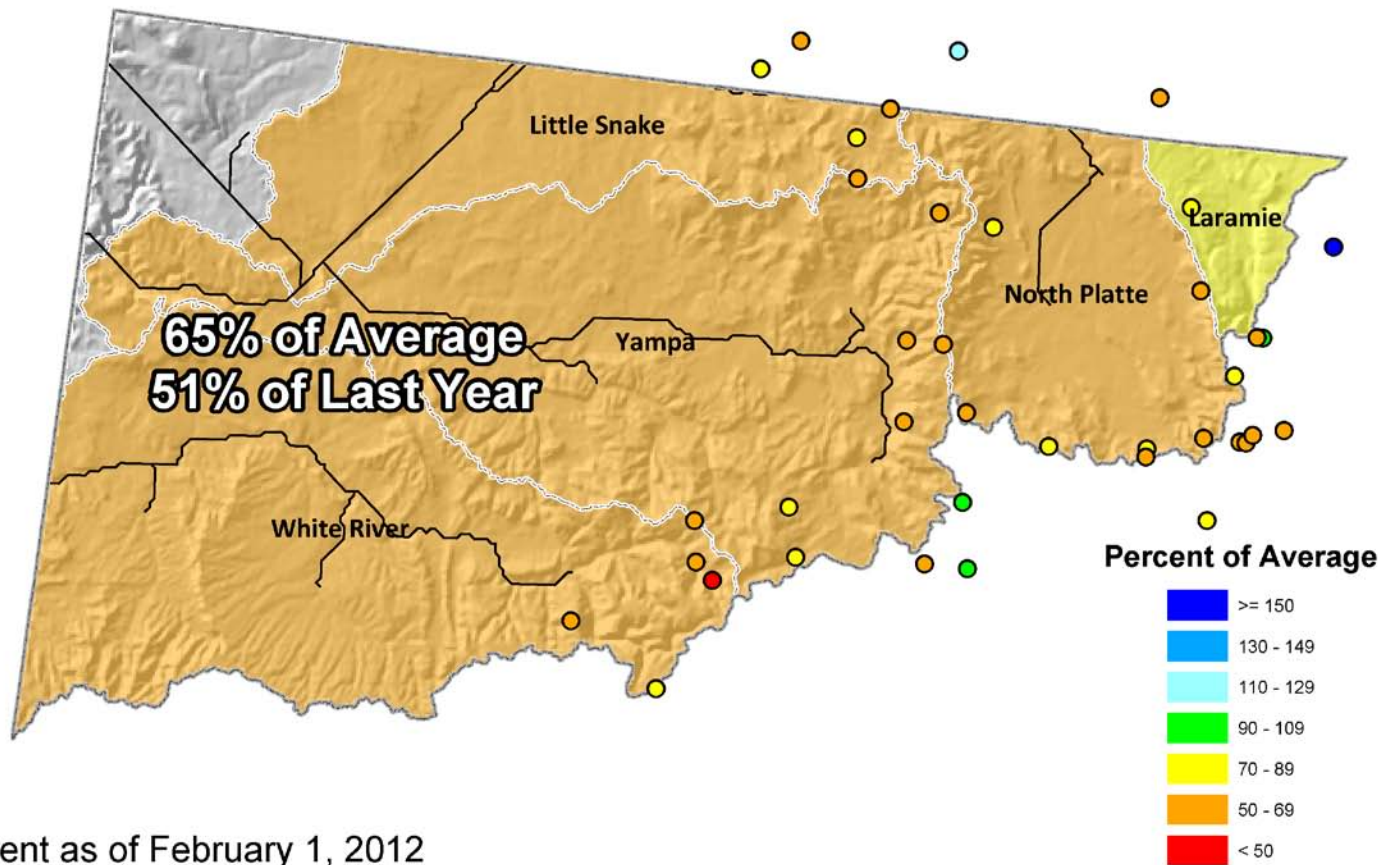
February 16, 2012

# Yampa, White & North Platte River Basins Summary



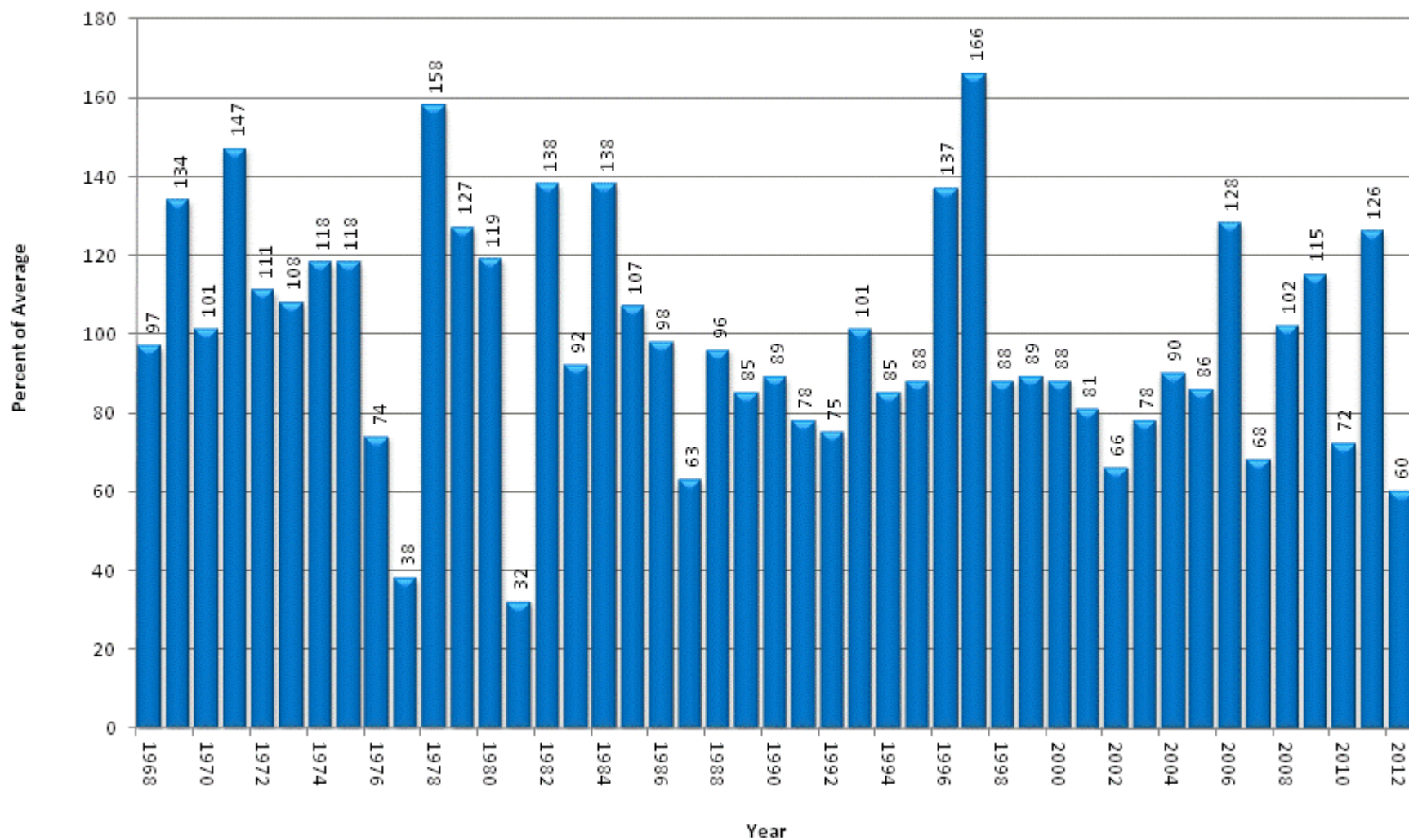
# Yampa, White and North Platte River Basins Snowpack Map

*Provisional Data  
Subject to Revision*



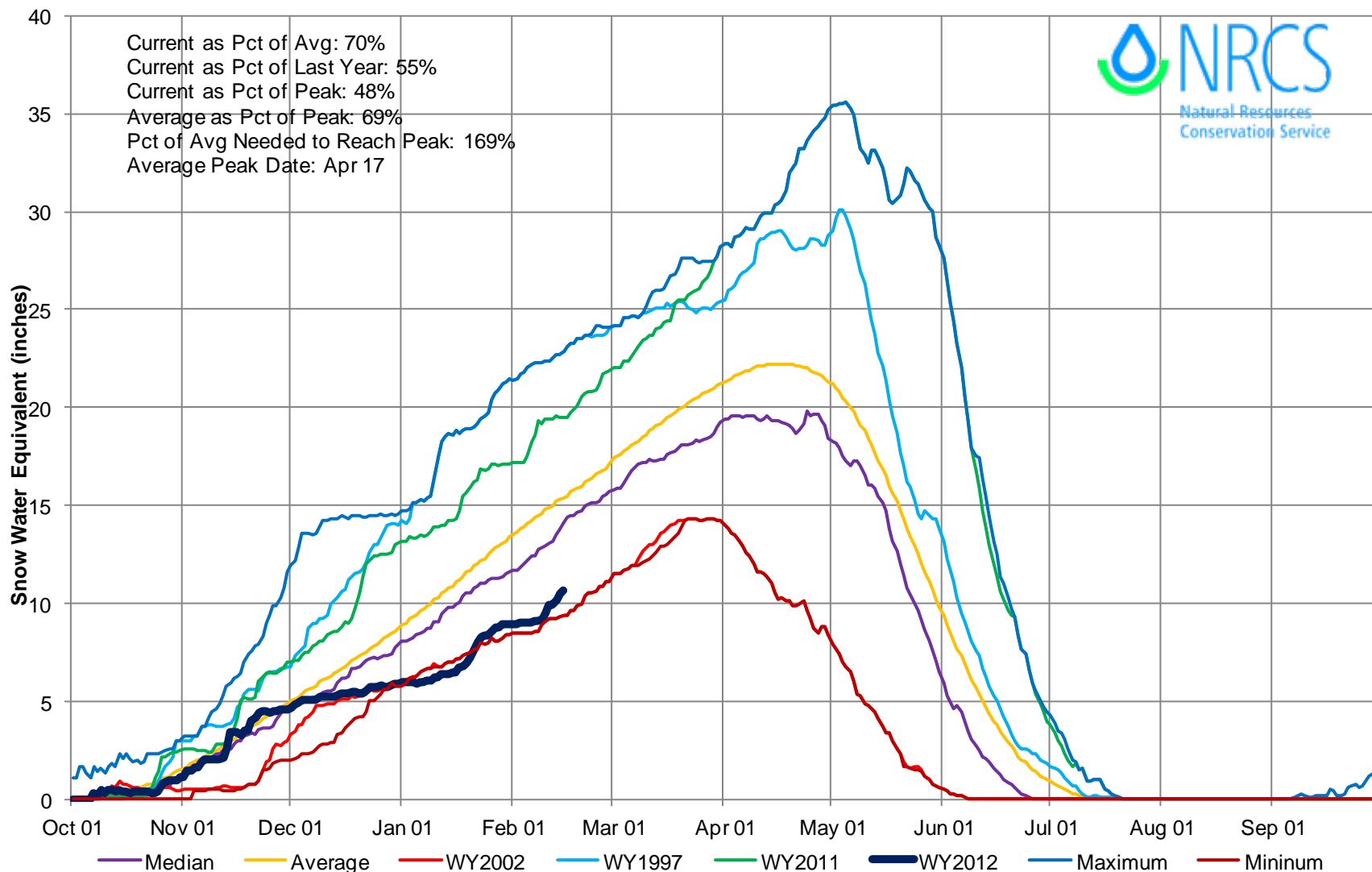
Current as of February 1, 2012

## February 1 Total Yampa & White River Basins Snowpack



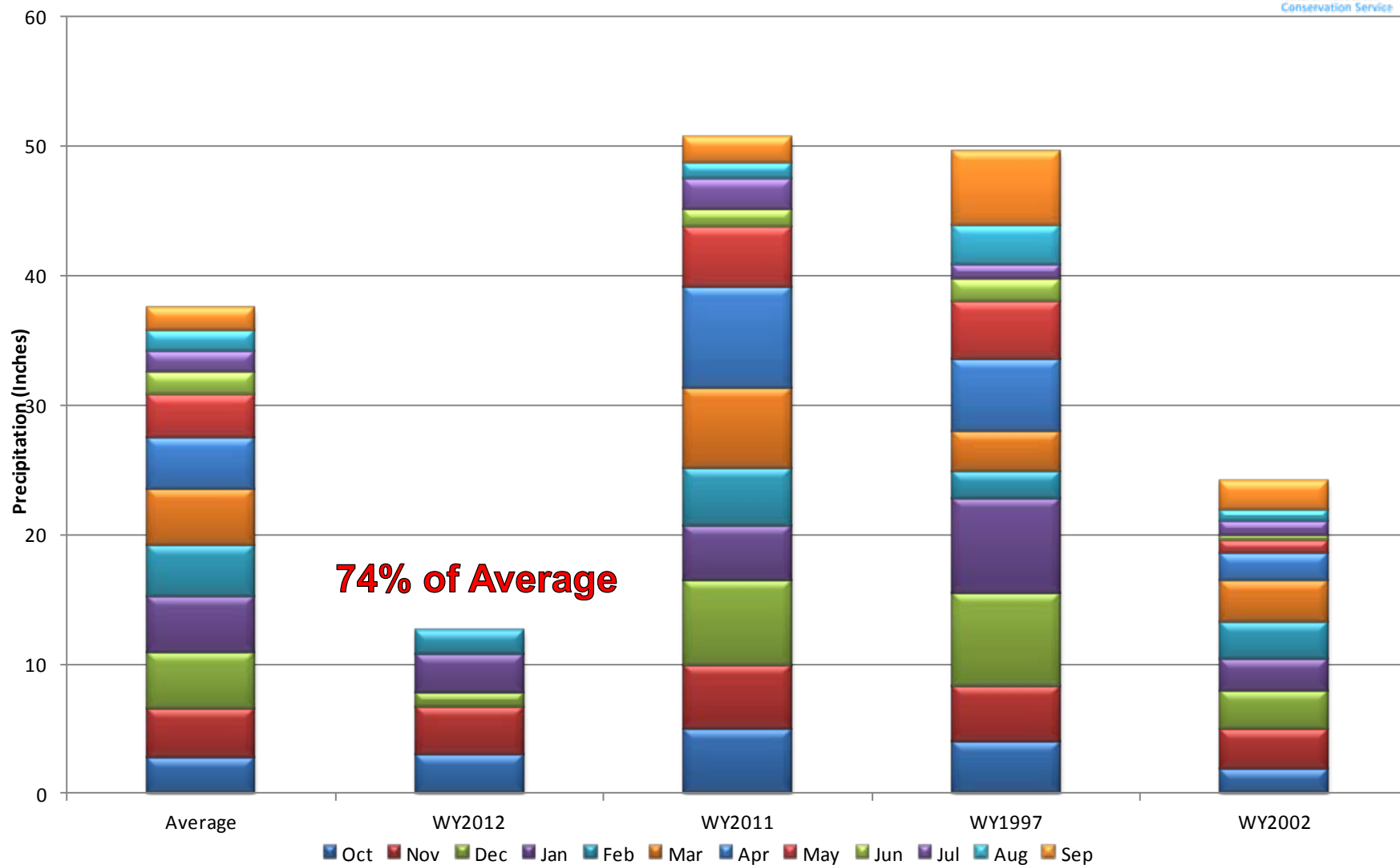
## Yampa, White and North Platte River Basins High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Feb 15, 2012*



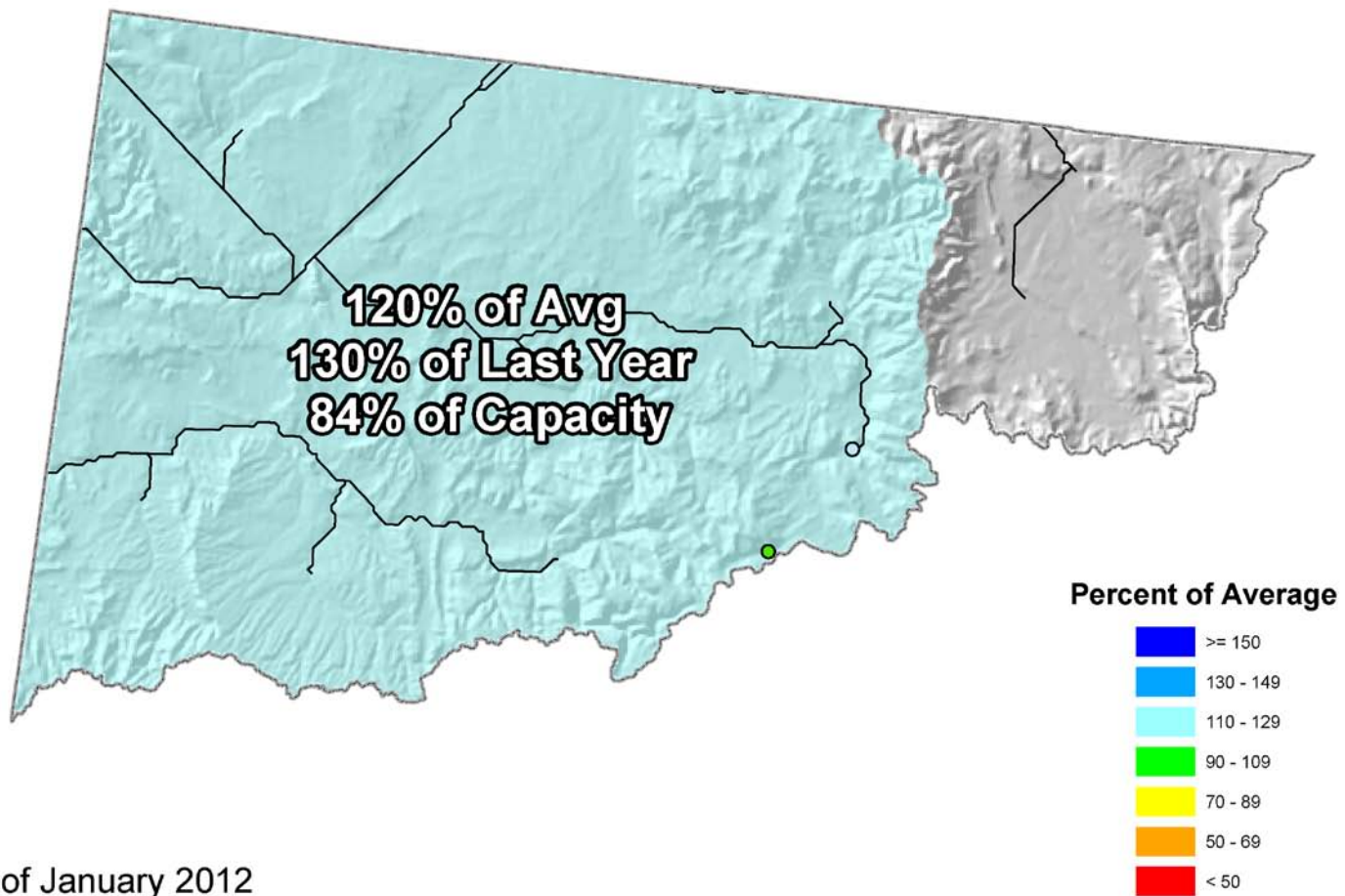
## Yampa and White River Basins High/Low Monthly Precipitation Summary

*Based on Provisional SNOTEL data as of Feb 15, 2012*



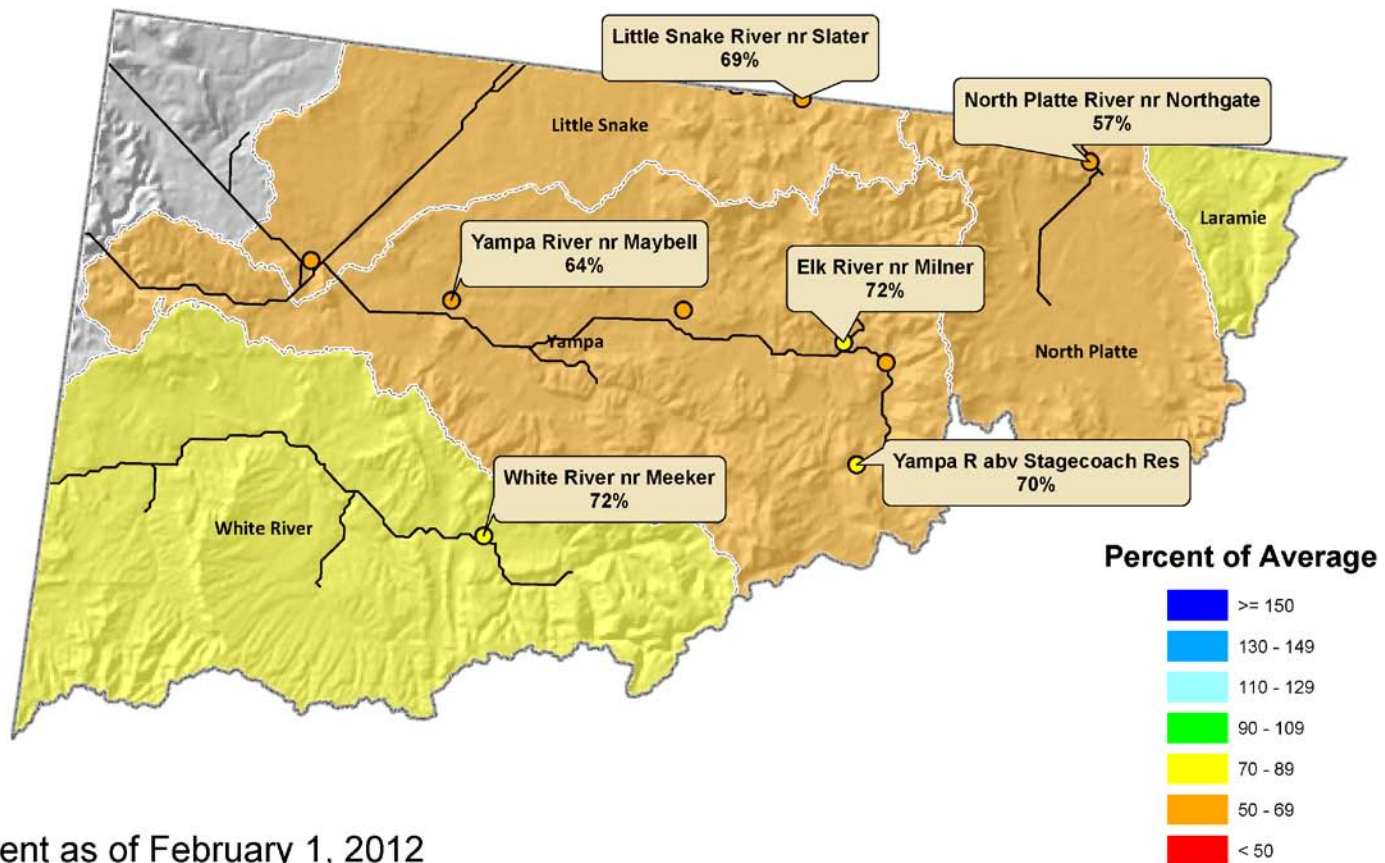
# Yampa & White River Basins Reservoir Storage Map

*Provisional Data  
Subject to Revision*



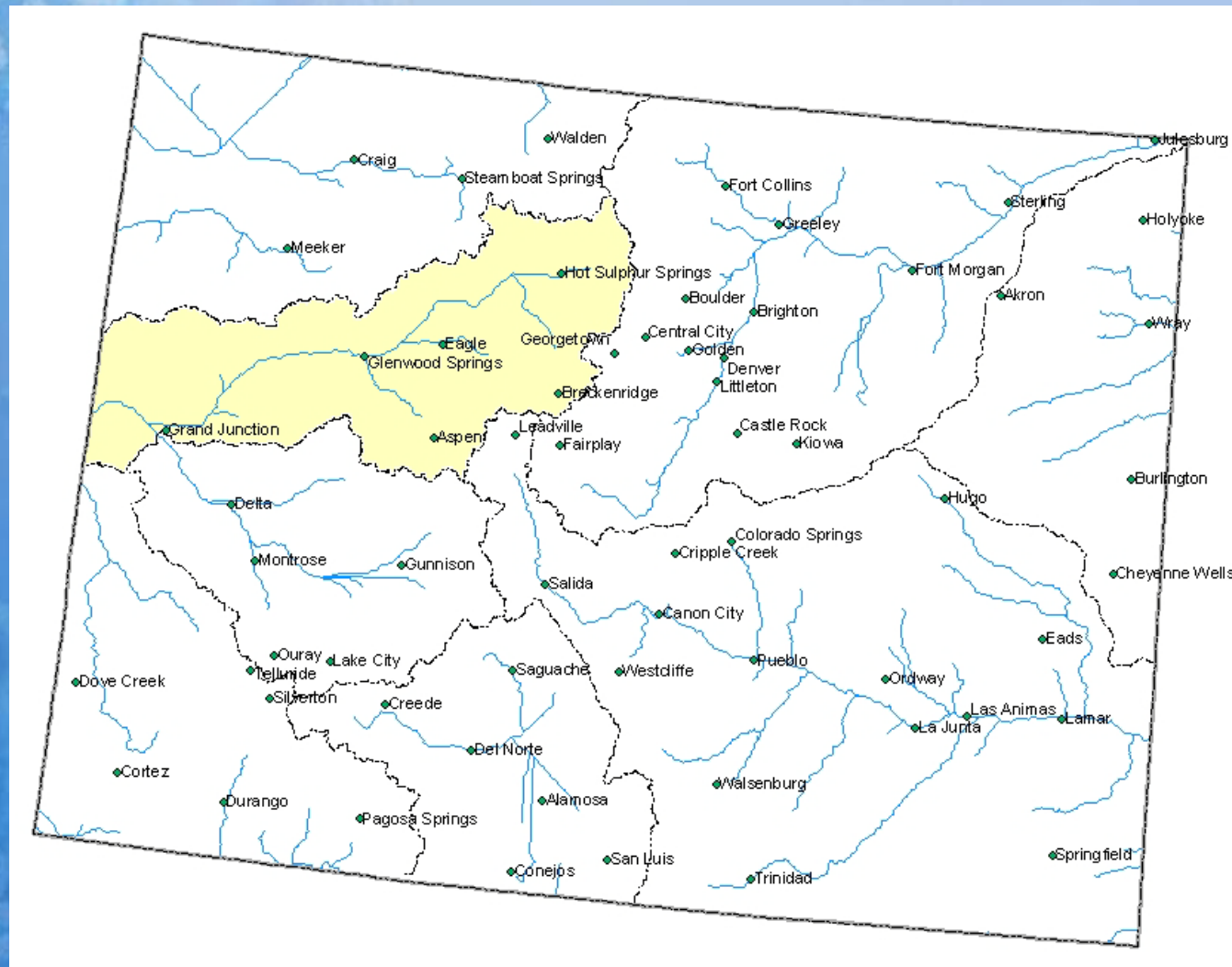
# Yampa, White and North Platte River Basins Streamflow Map

*Provisional Data  
Subject to Revision*



Current as of February 1, 2012

# Colorado River Basin Summary

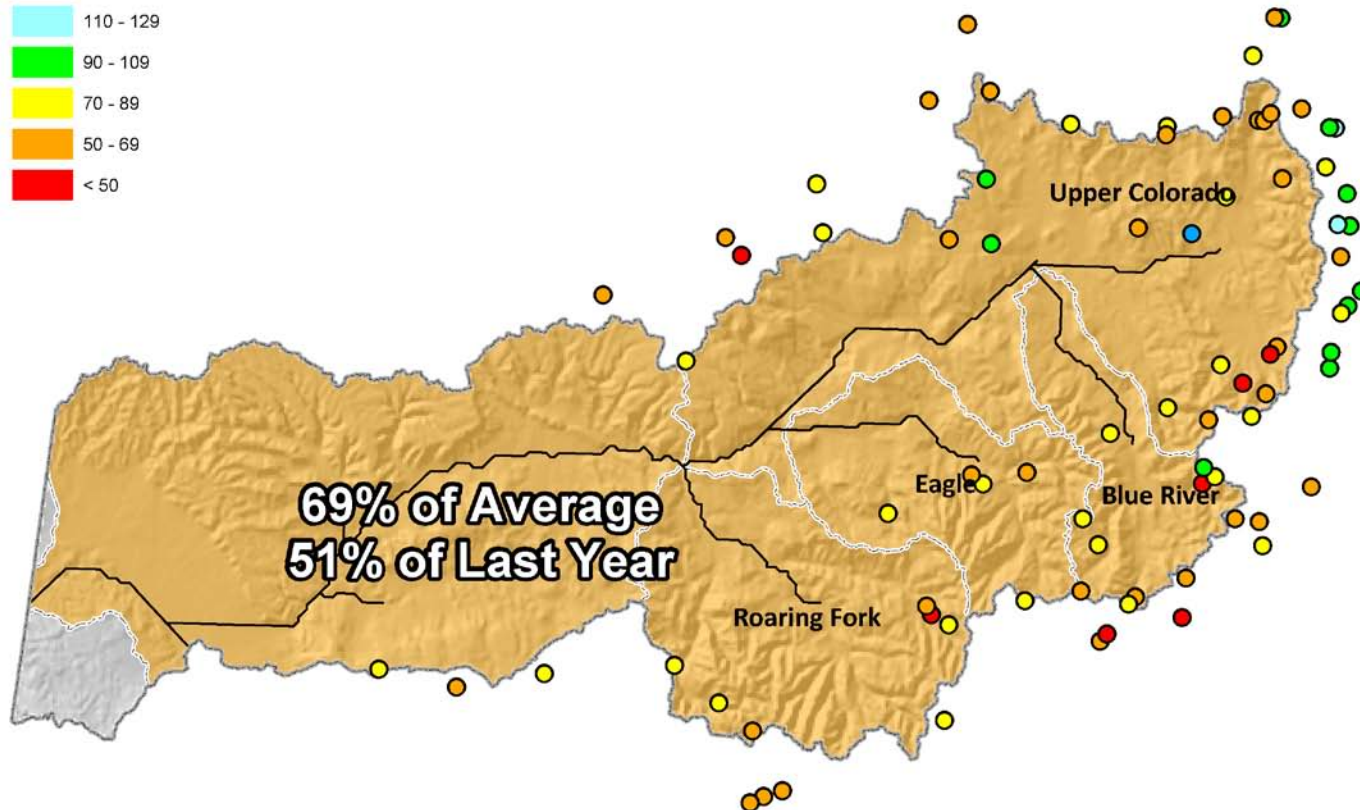


# Colorado River Basin Snowpack Map

## Percent of Average

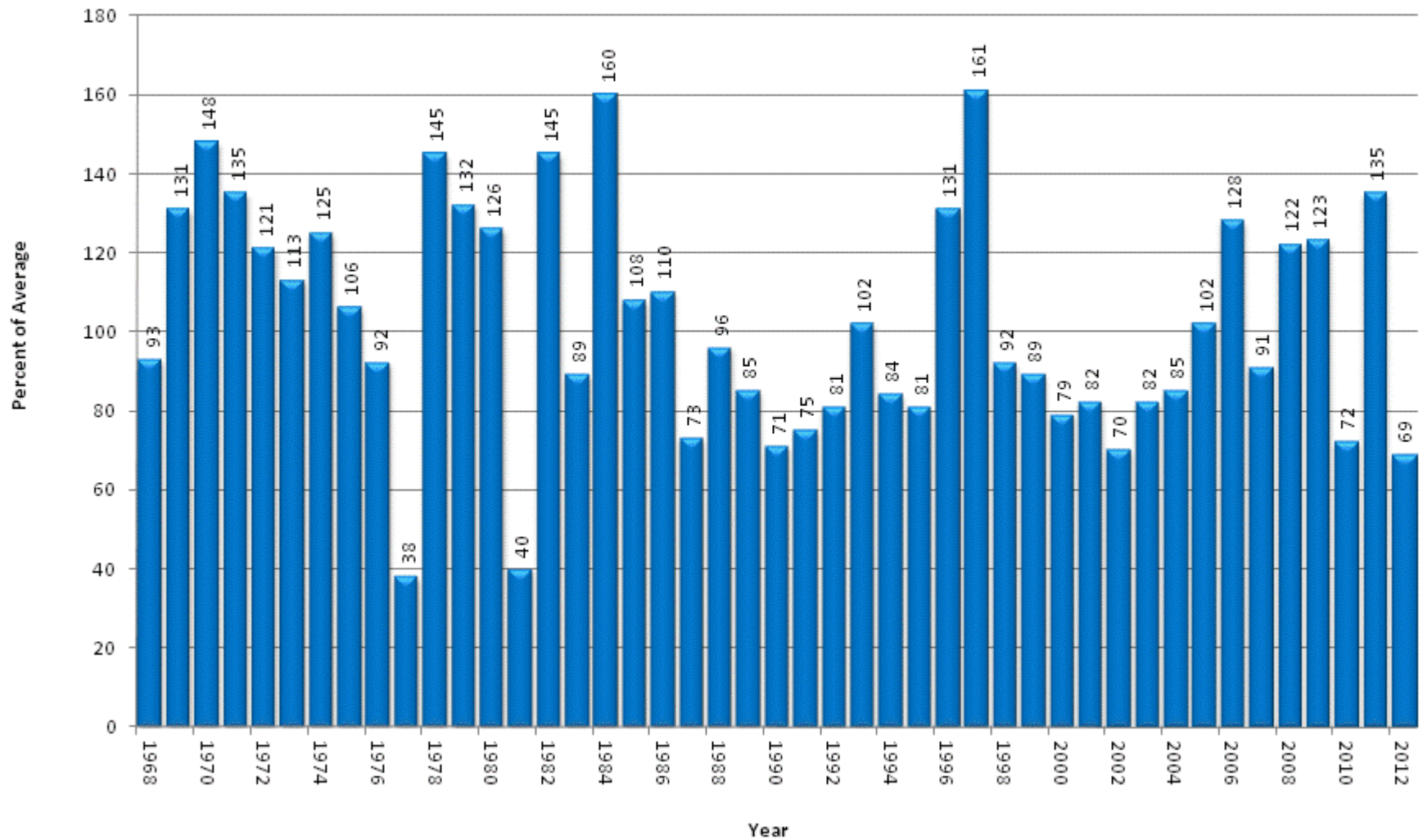


*Provisional Data  
Subject to Revision*



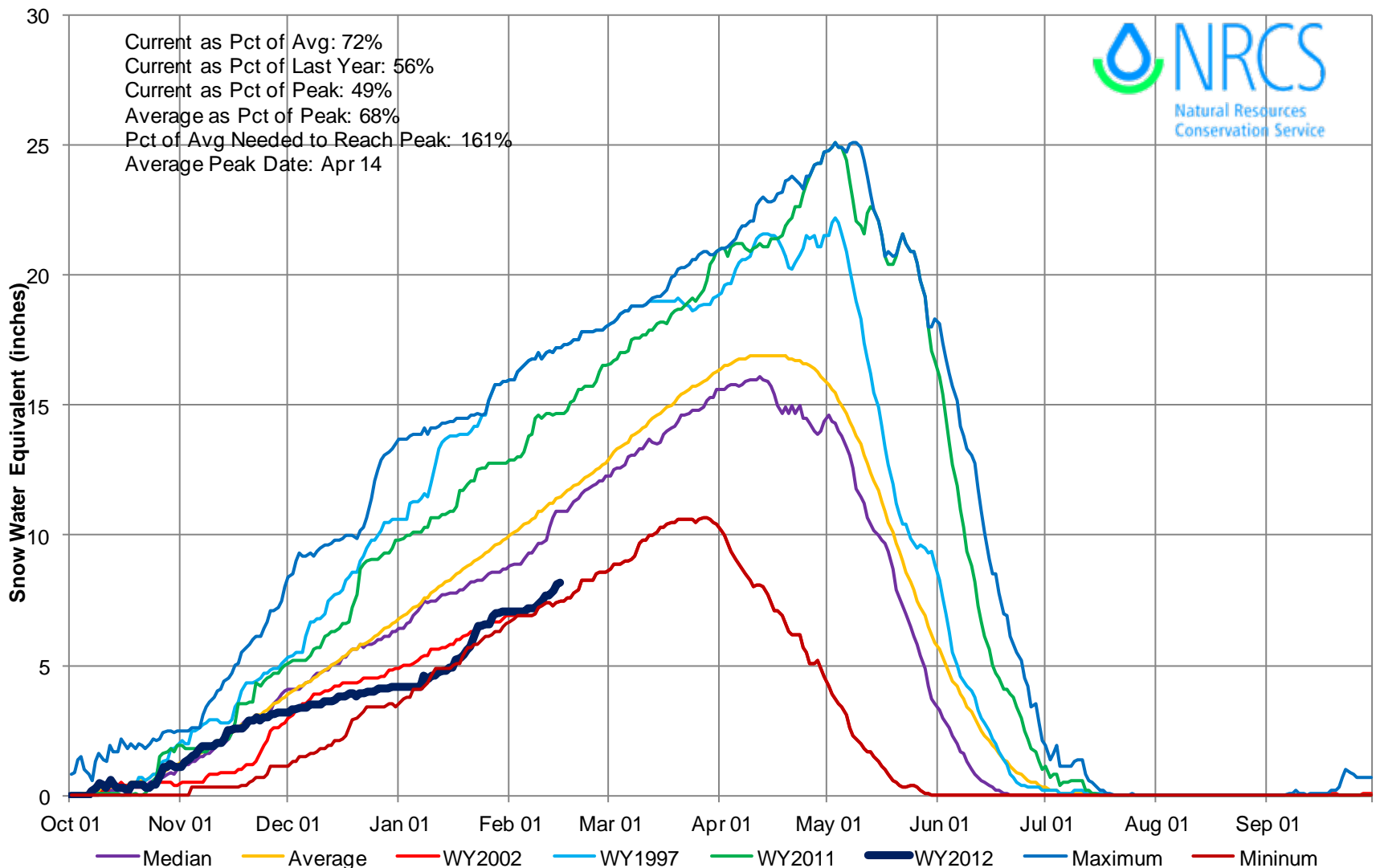
Current as of February 1, 2012

## February 1 Total Colorado River Basin Snowpack



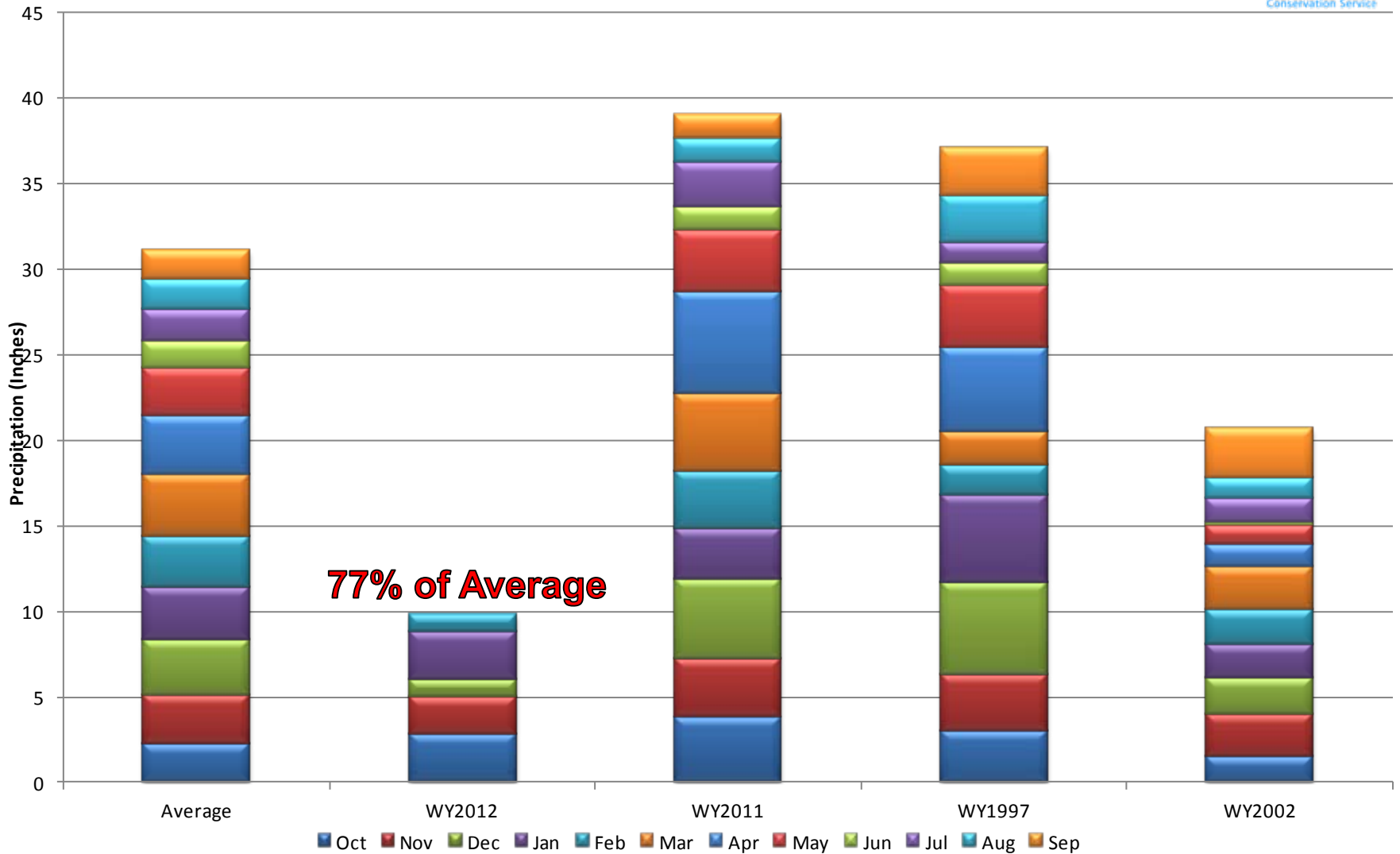
## Upper Colorado River Basin High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Feb 15, 2012*



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

*Based on Provisional SNOTEL data as of Feb 15, 2012*

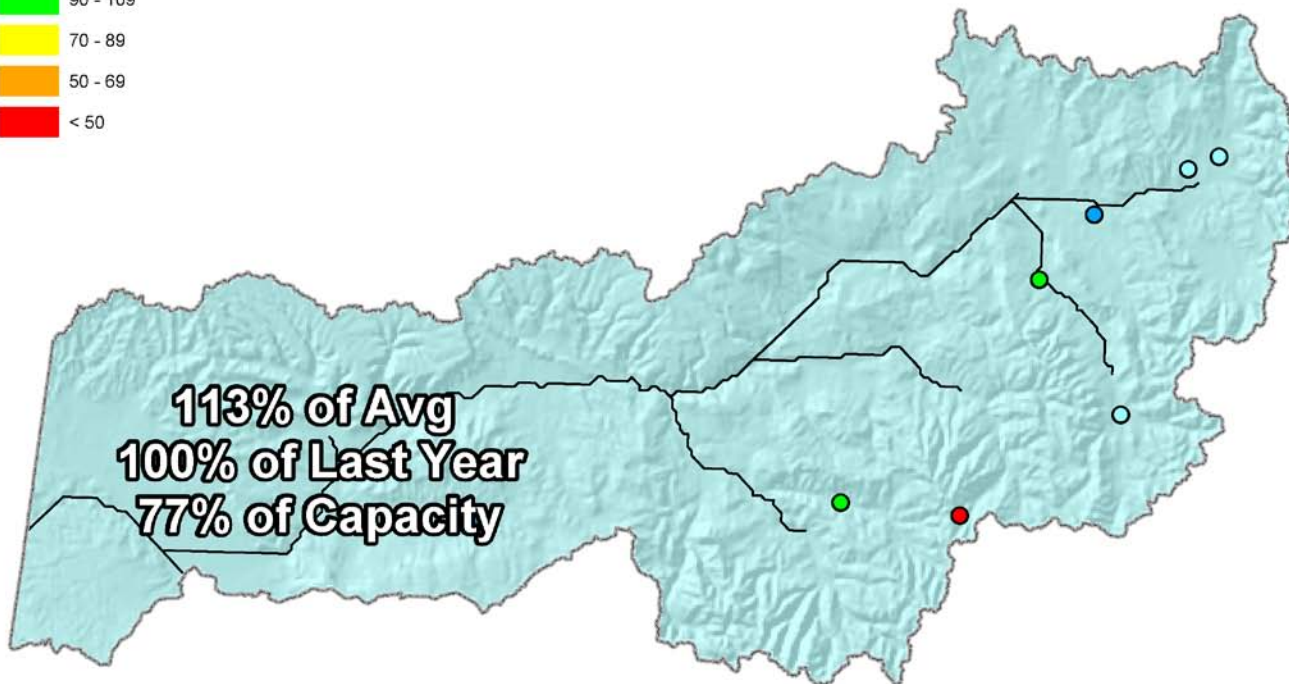


# Colorado River Basin Reservoir Storage Map

## Percent of Average



*Provisional Data  
Subject to Revision*



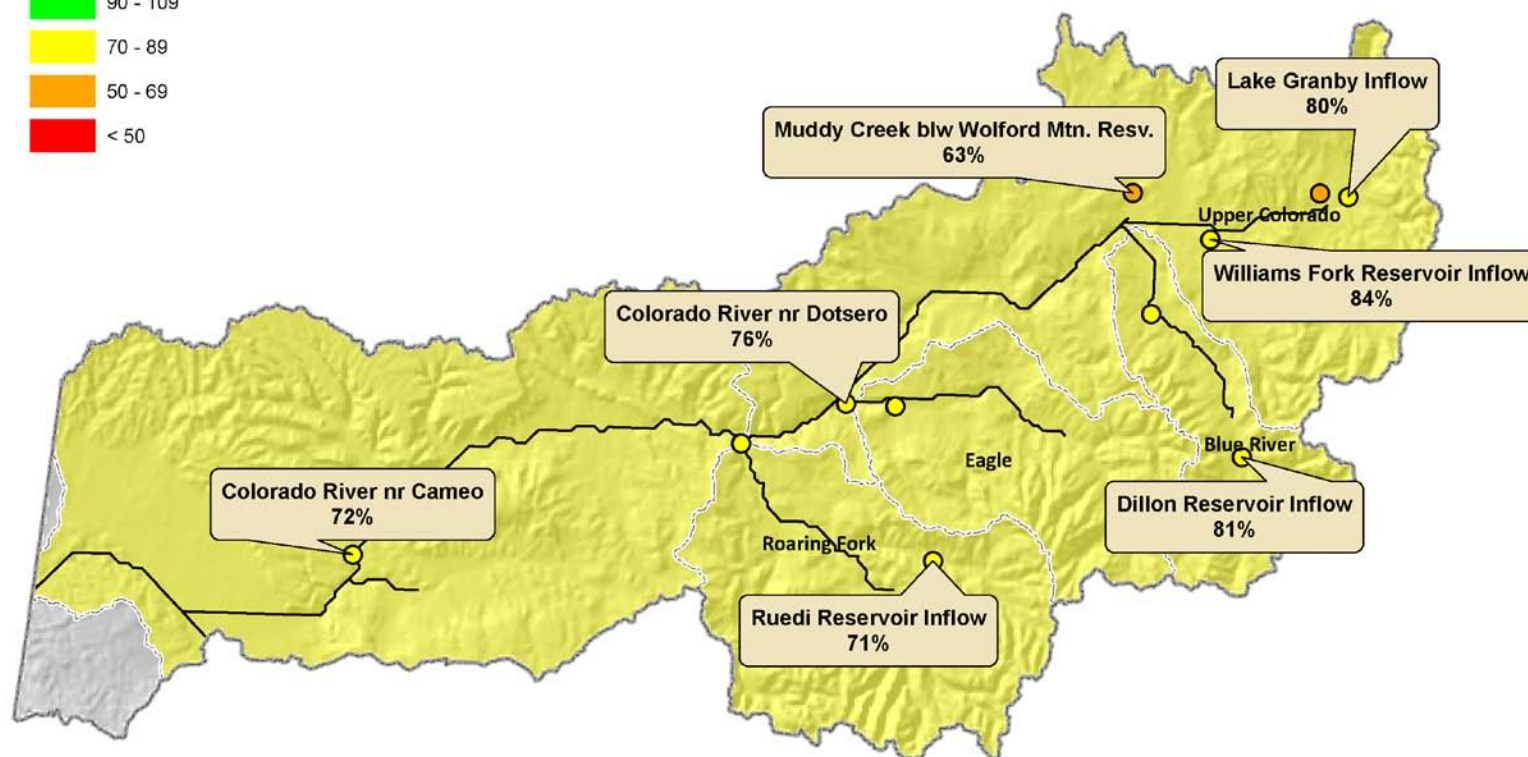
End of January 2012

# Colorado River Basin Streamflow Forecast Map

## Percent of Average

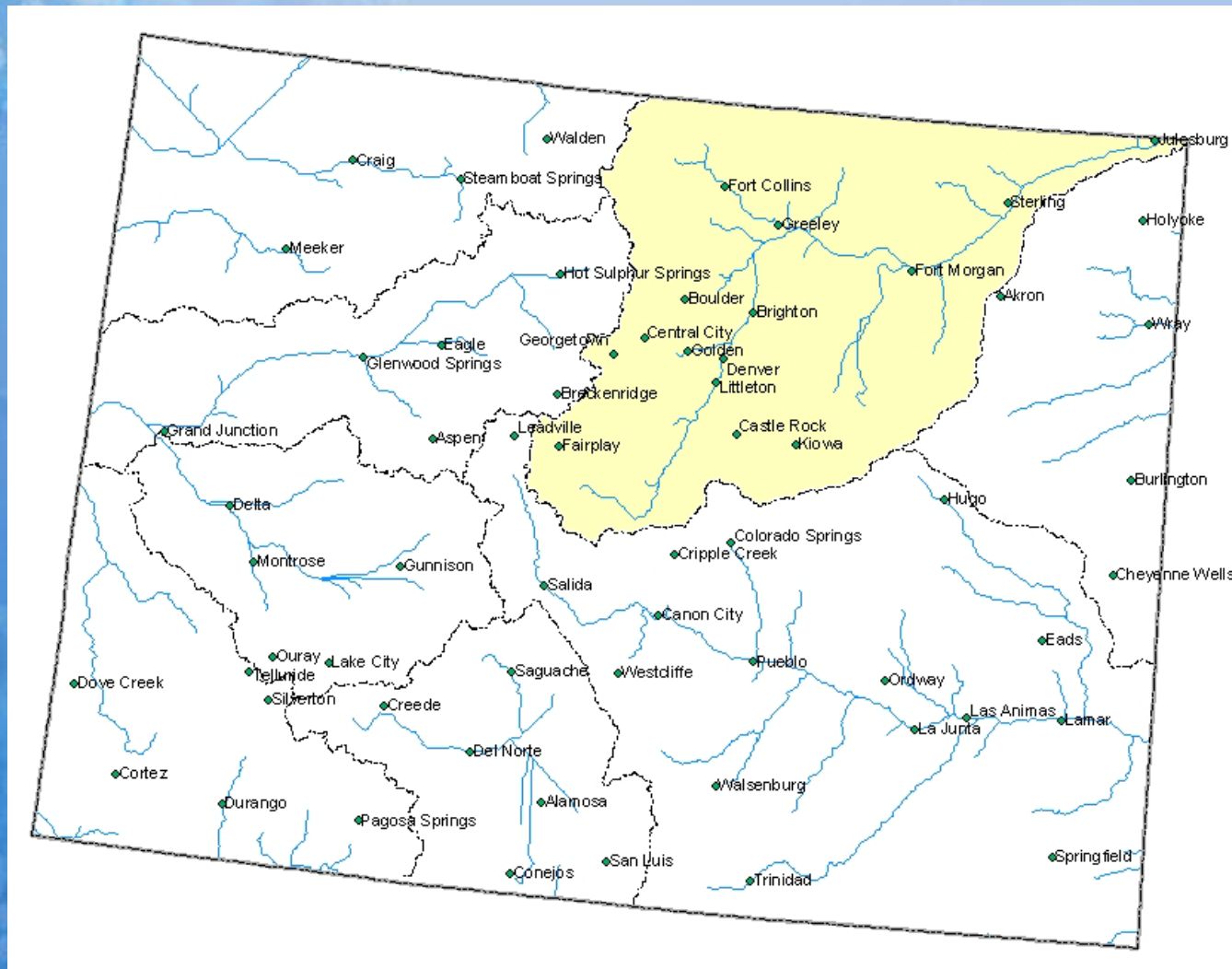


*Provisional Data  
Subject to Revision*



Current as of February 1, 2012

# South Platte River Basin Summary

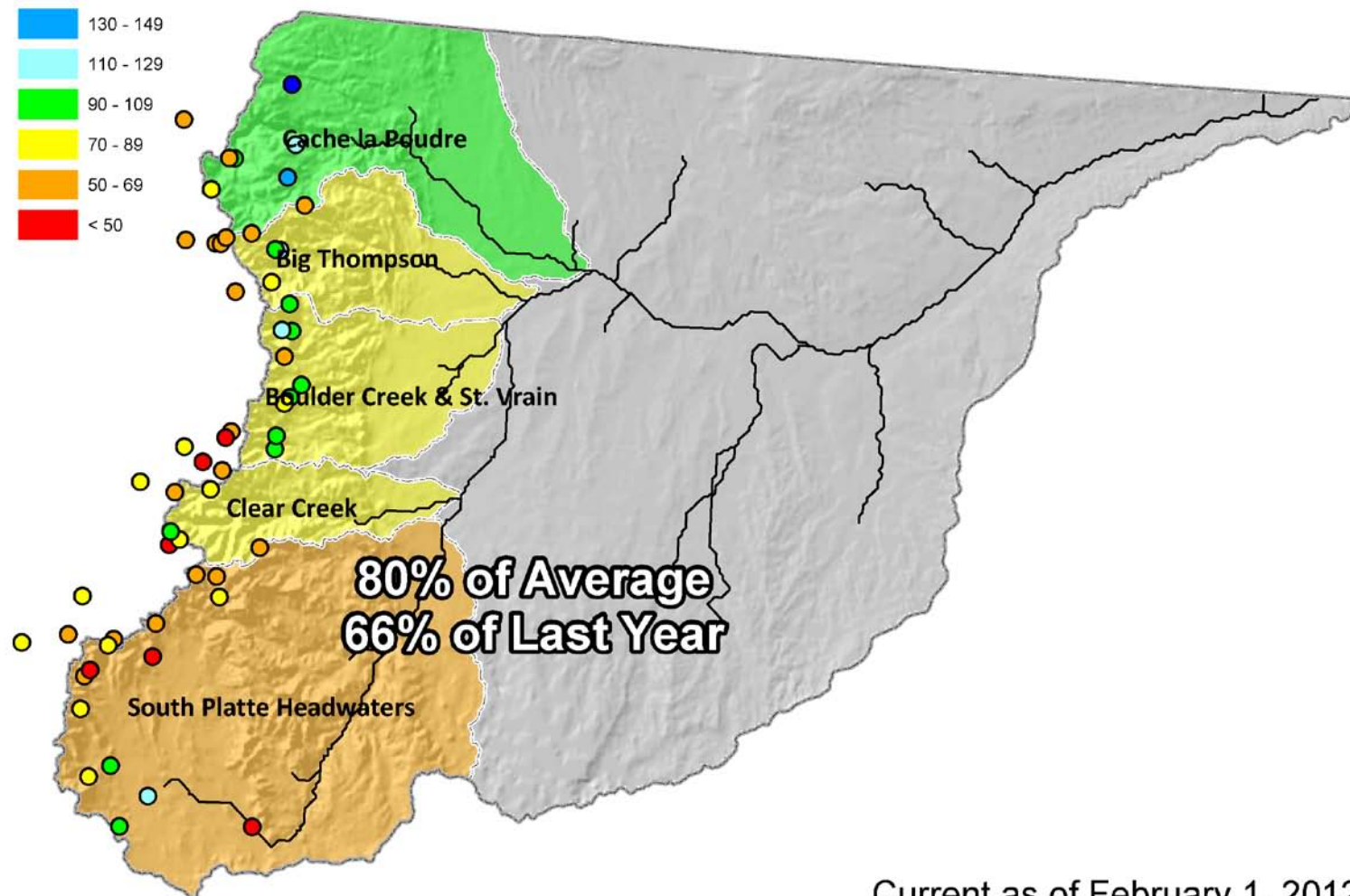


# South Platte River Basin Snowpack Map

## Percent of Average

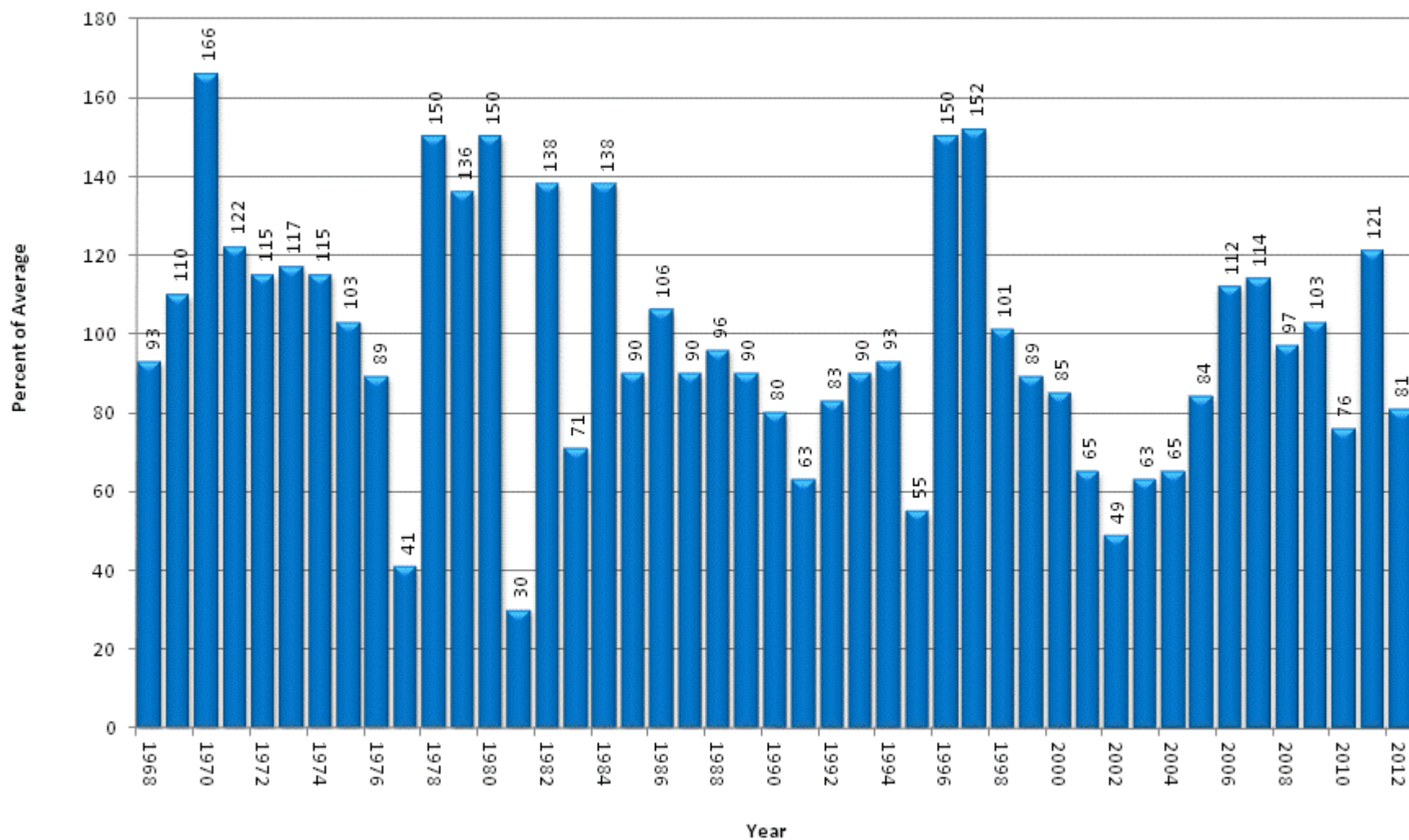


*Provisional Data  
Subject to Revision*



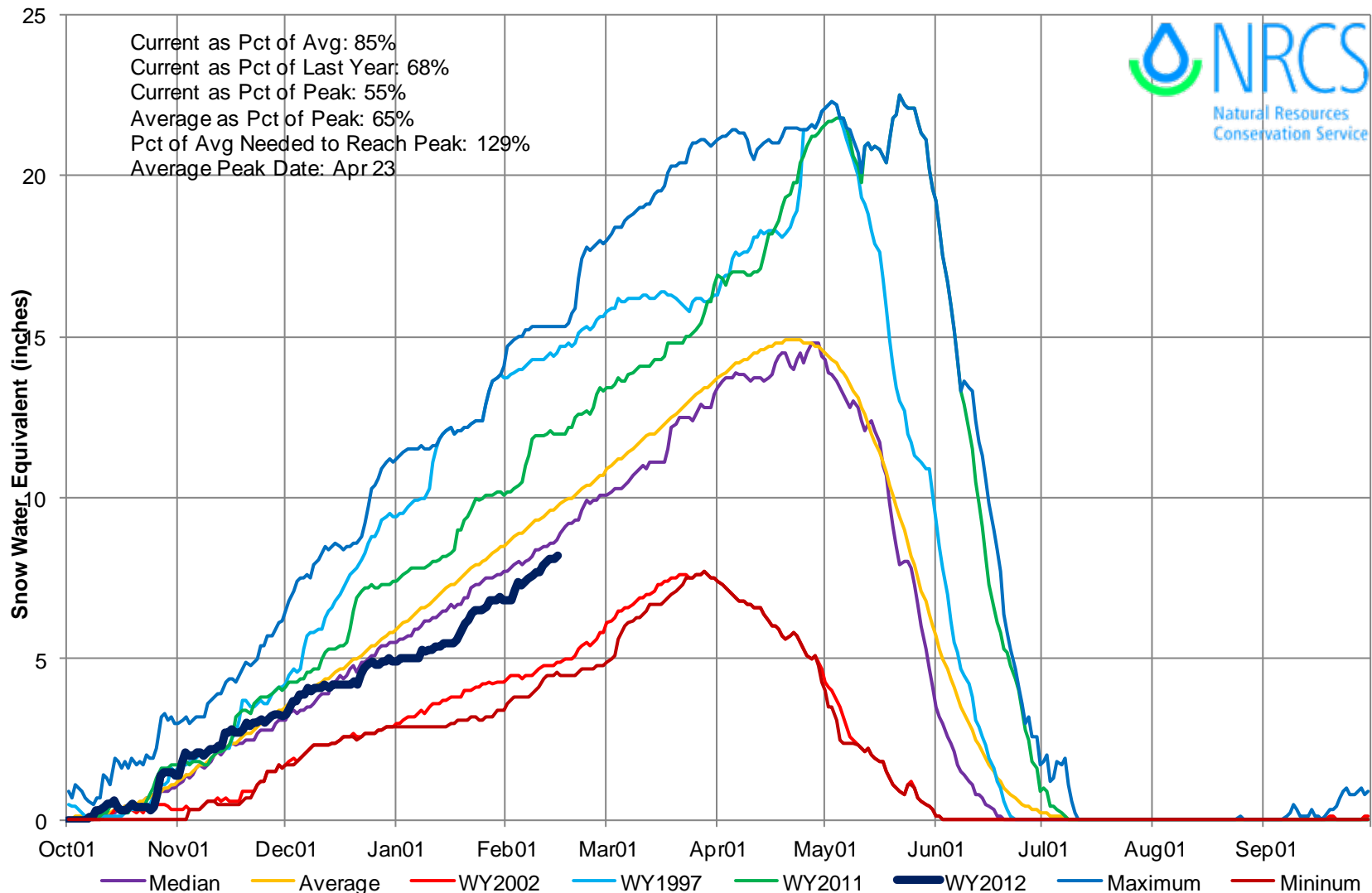
Current as of February 1, 2012

## February 1 Total South Platte River Basin Snowpack



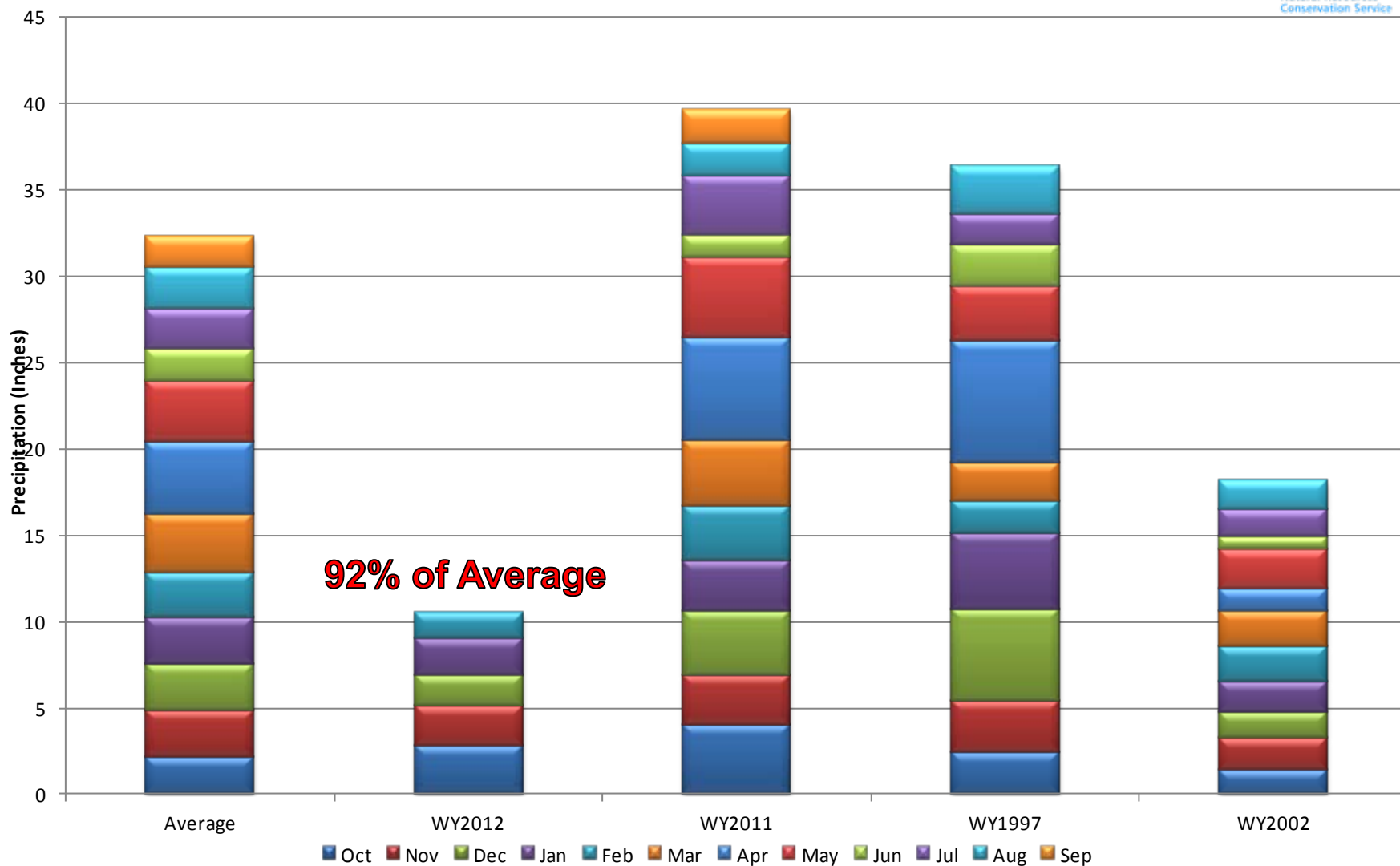
## South Platte River Basin High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Feb 15, 2012*



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

*Based on Provisional SNOTEL data as of Feb 15, 2012*

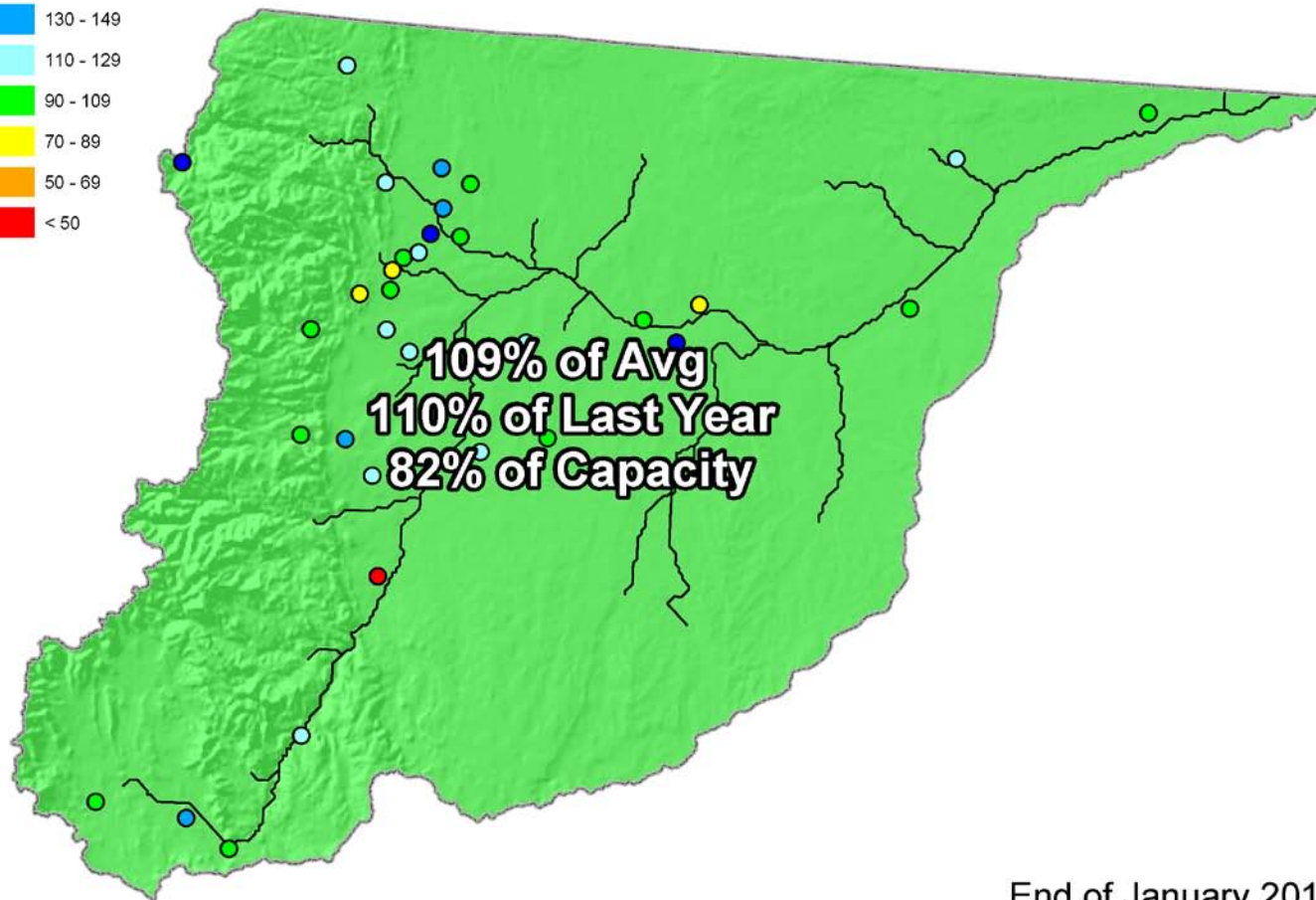


## South Platte River Basin Reservoir Storage Map

Percent of Average



*Provisional Data  
Subject to Revision*



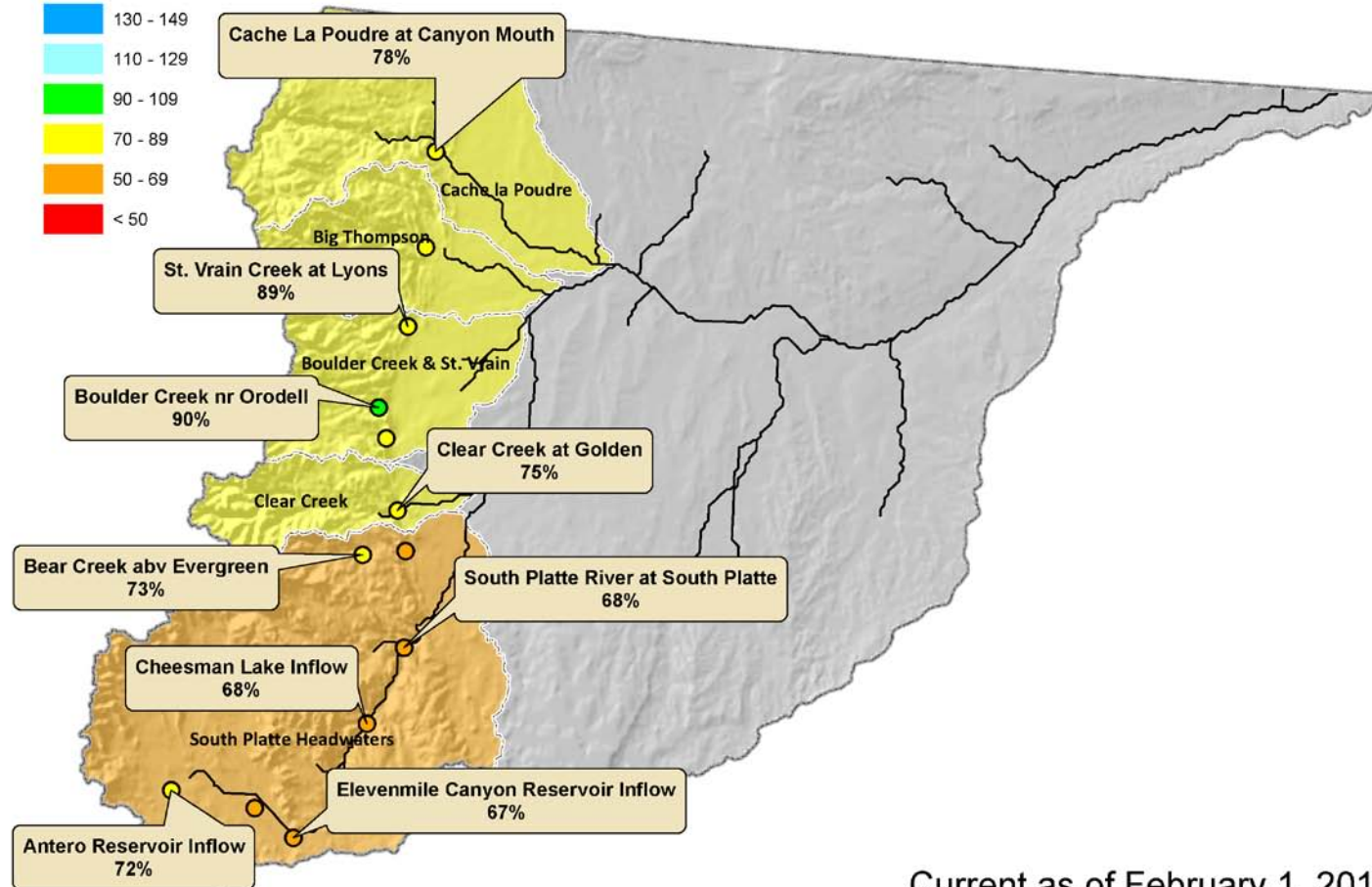
End of January 2012

# South Platte River Basin Streamflow Forecast Map

Percent of Average

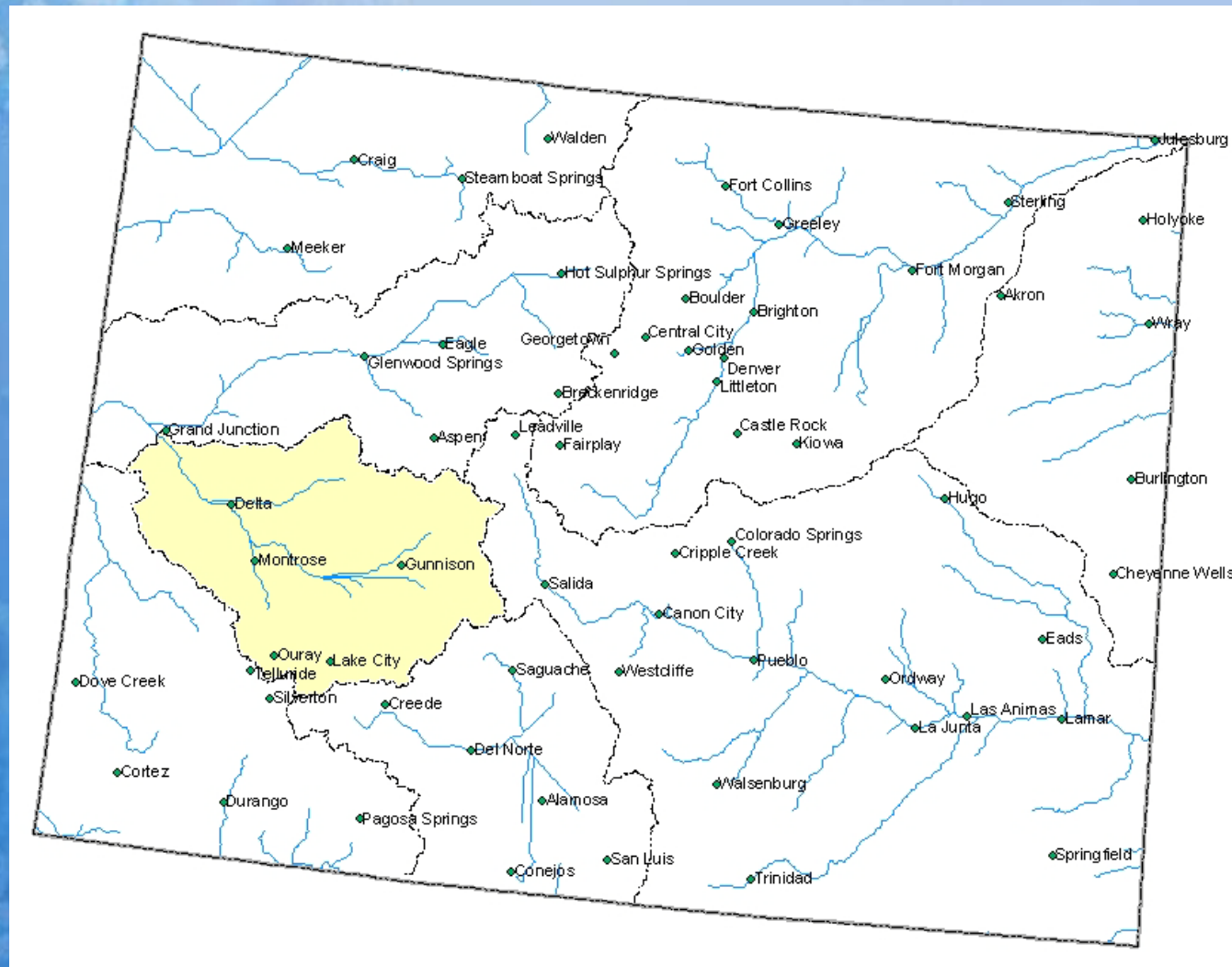


*Provisional Data  
Subject to Revision*



Current as of February 1, 2012

# Gunnison River Basin Summary

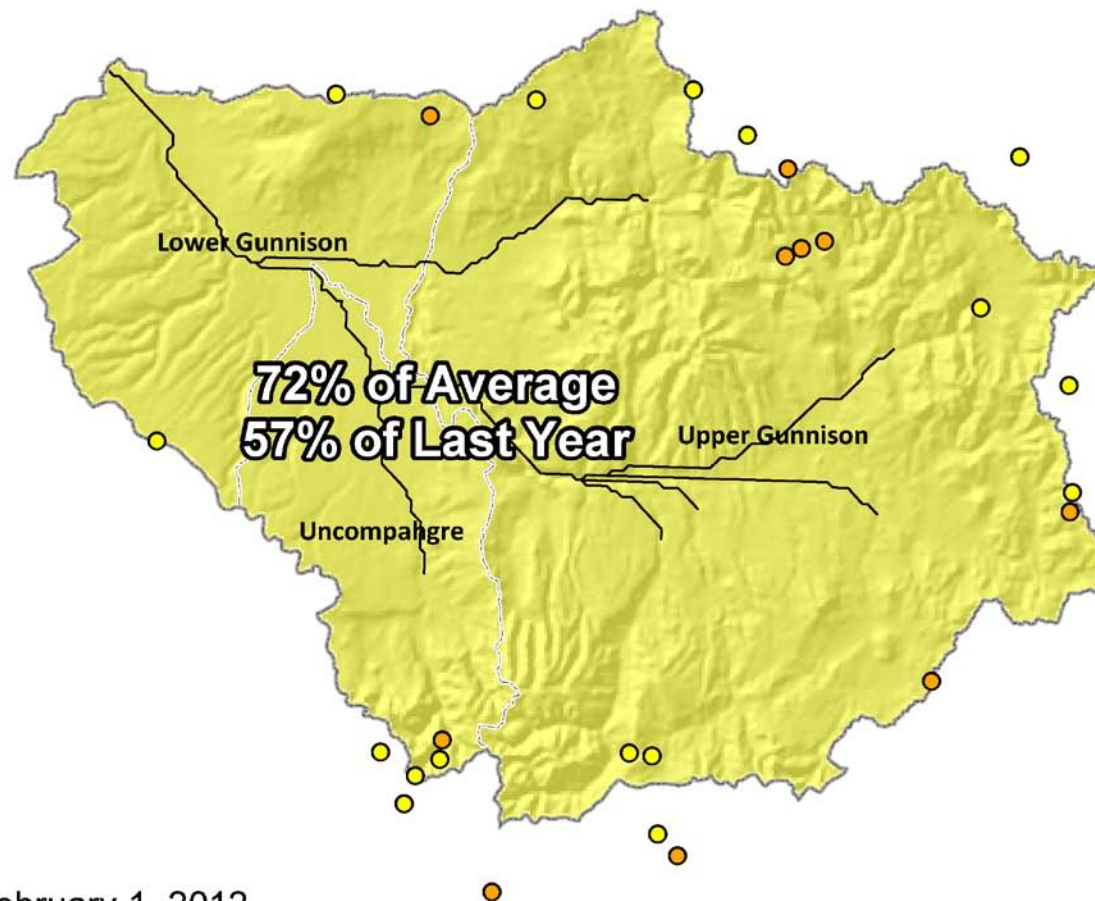


# Gunnison River Basin Snowpack Map

## Percent of Average

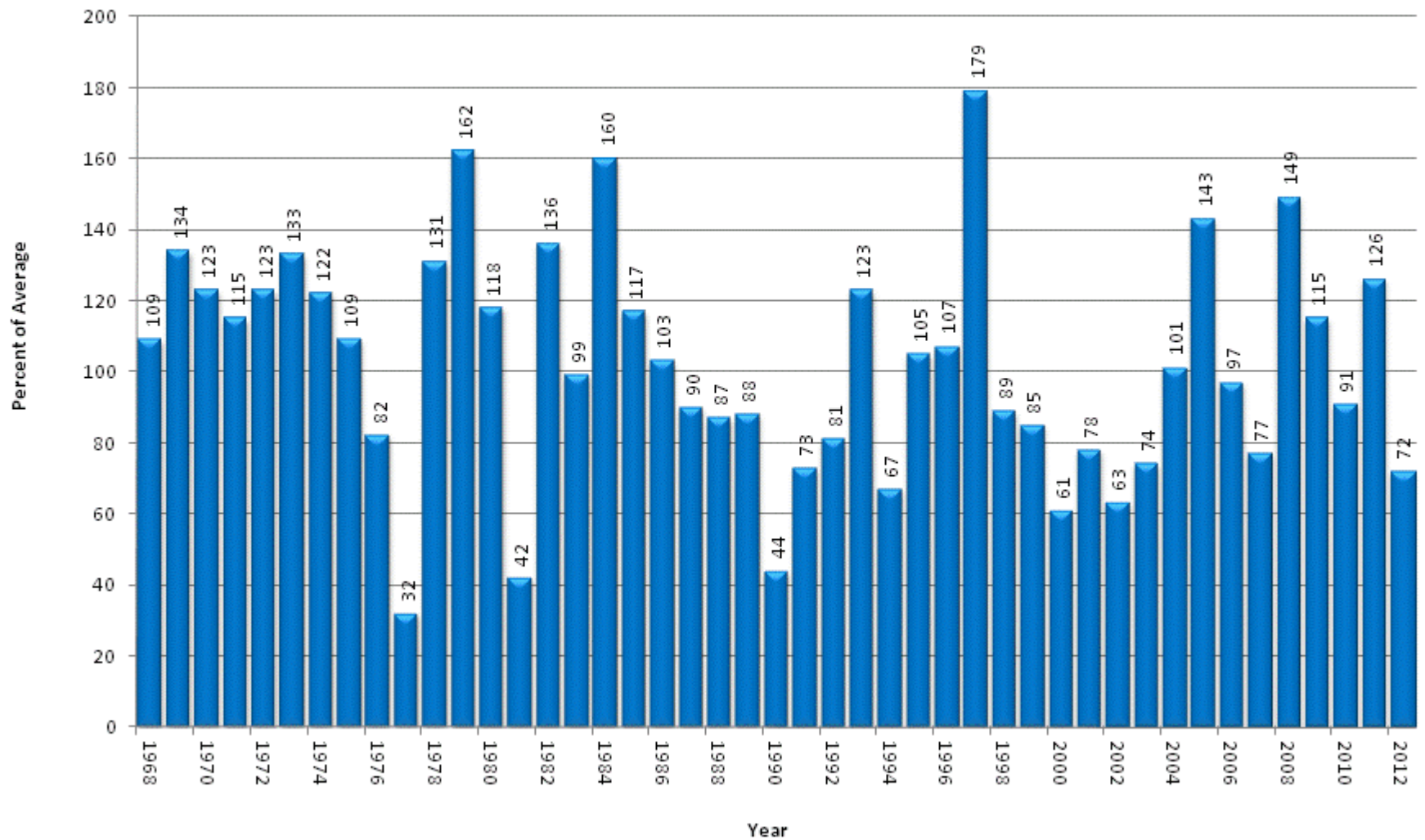


*Provisional Data  
Subject to Revision*



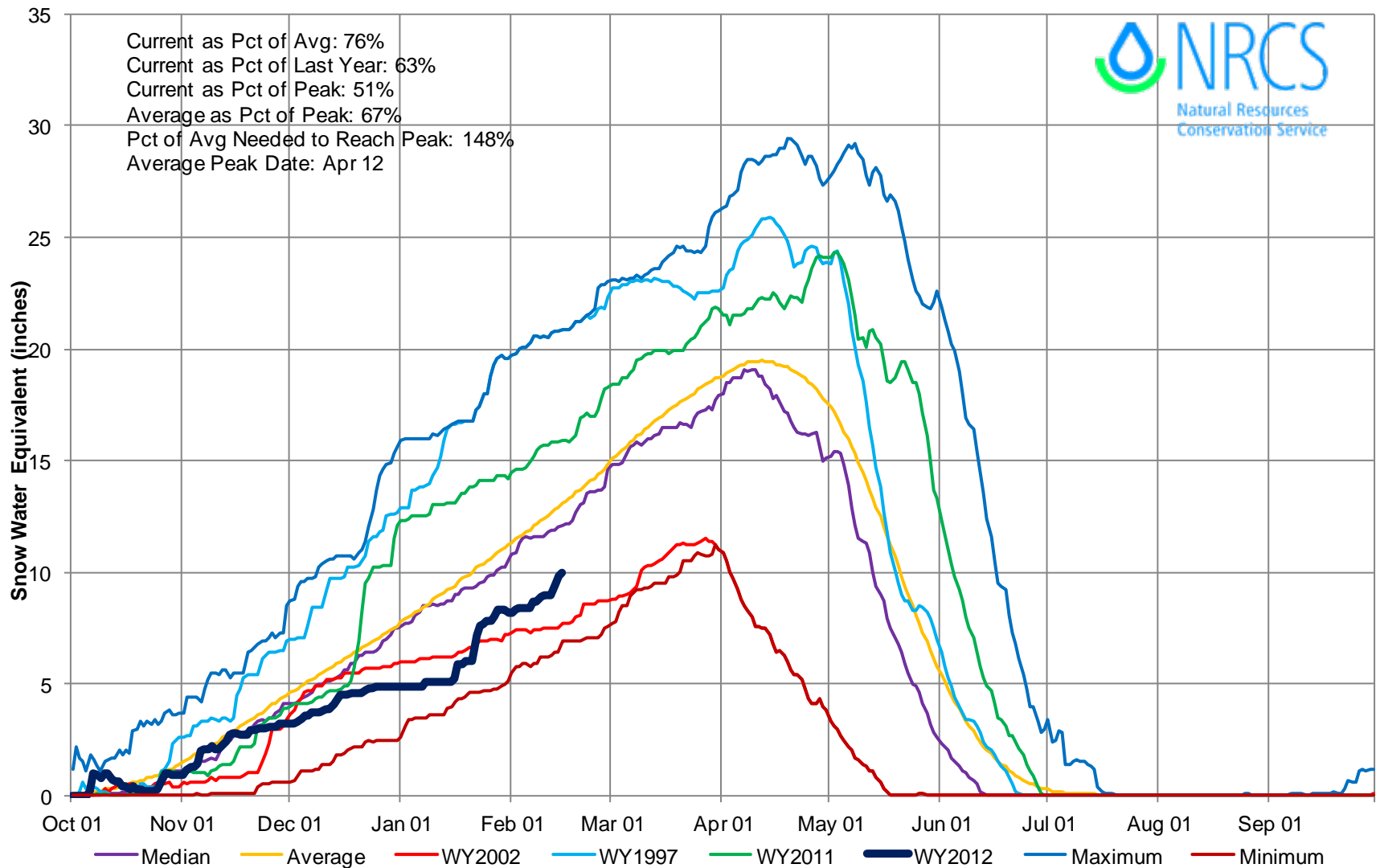
Current as of February 1, 2012

## February 1 Total Gunnison River Basin Snowpack



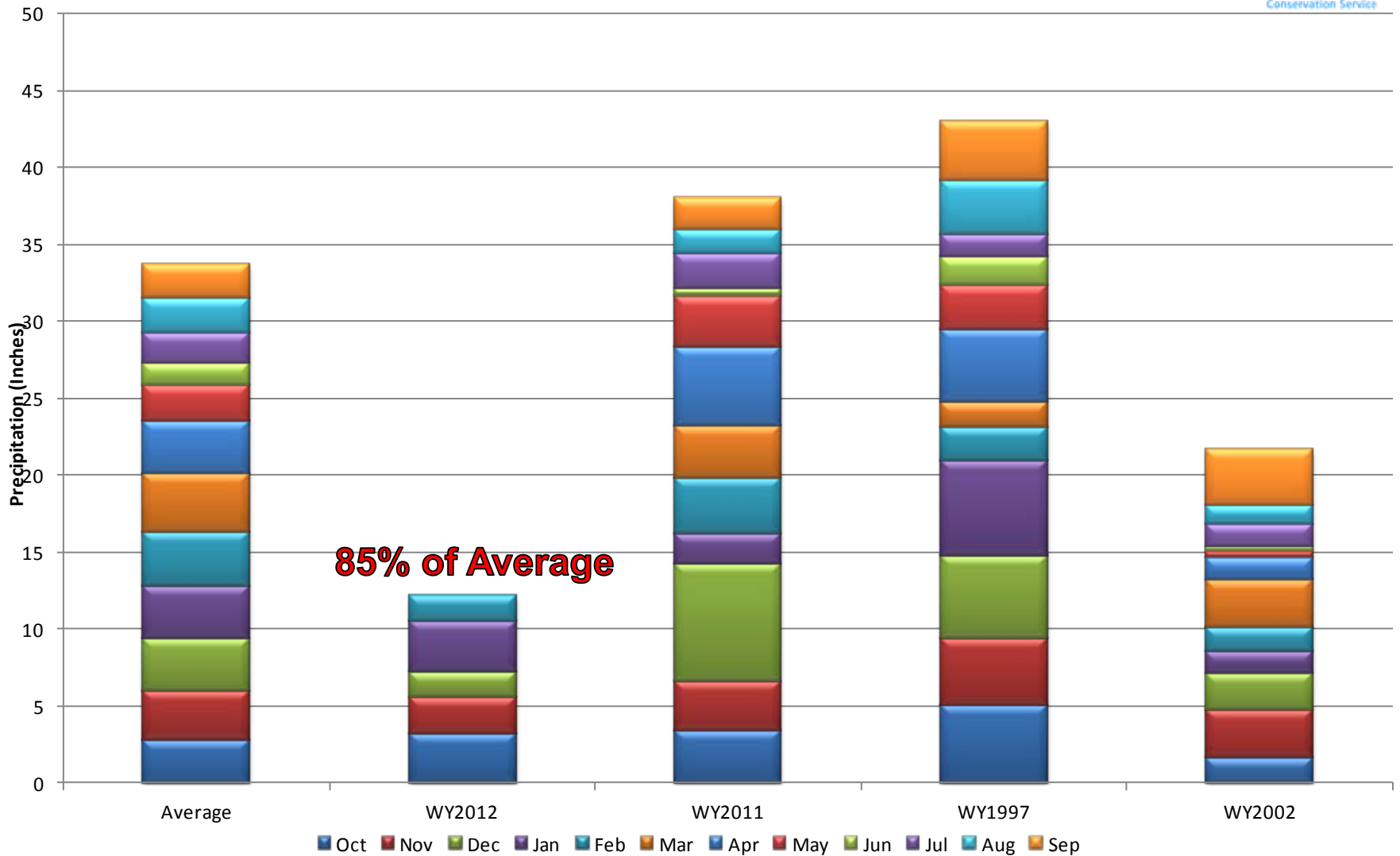
## Gunnison River Basin High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Feb 15, 2012*



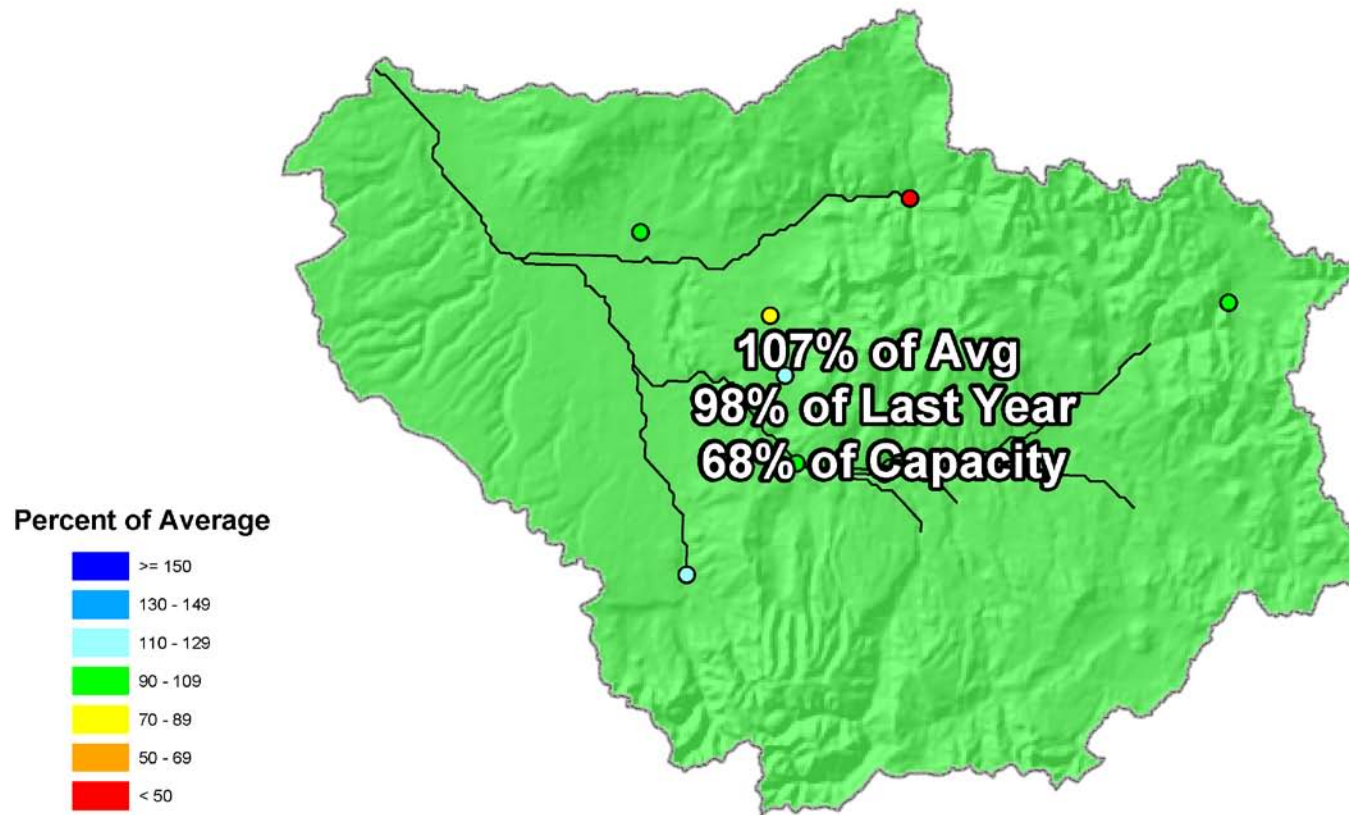
## Gunnison River Basin High/Low Monthly Precipitation Summary

*Based on Provisional SNOTEL data as of Feb 15, 2012*



# Gunnison River Basin Reservoir Storage Map

*Provisional Data  
Subject to Revision*



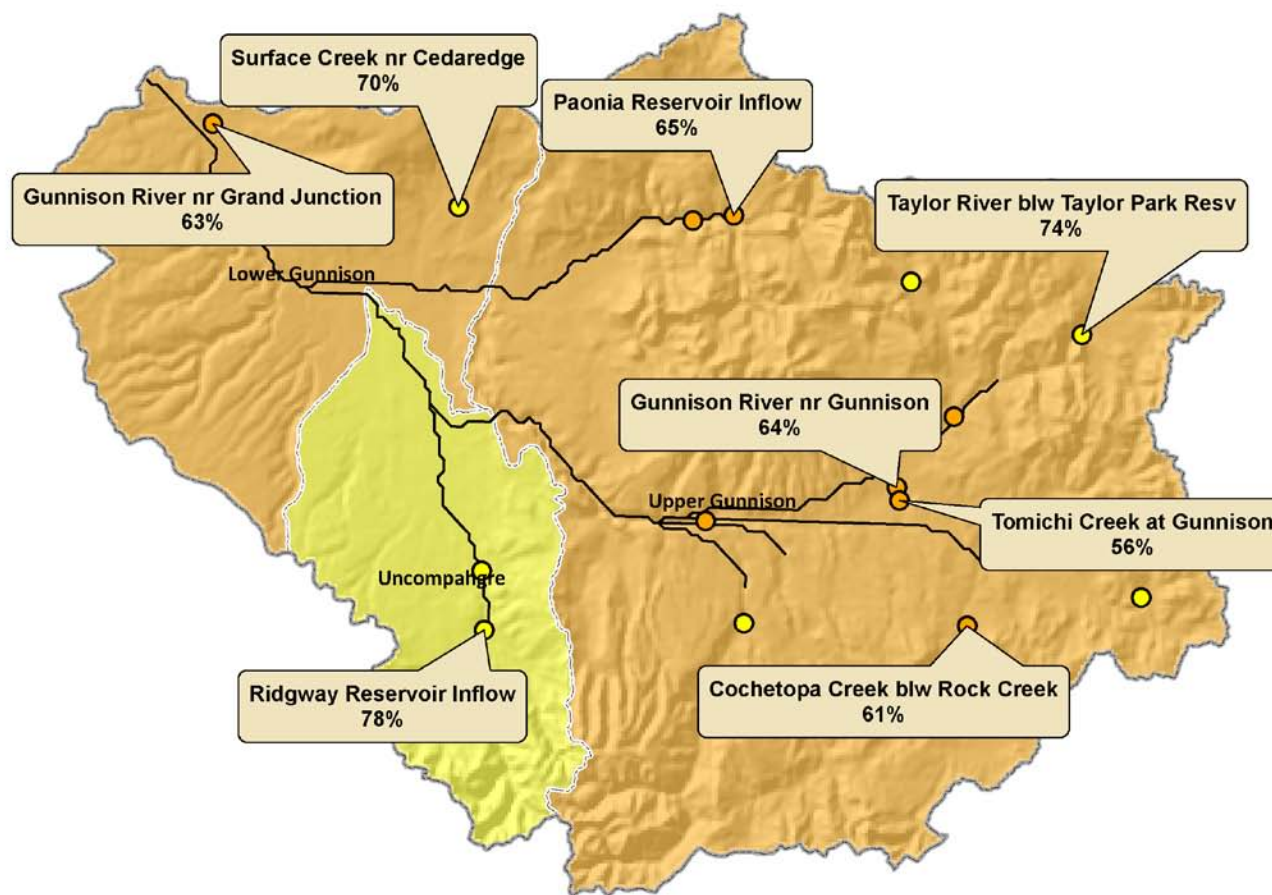
End of January 2012

# Gunnison River Basin Streamflow Forecast Map

## Percent of Average

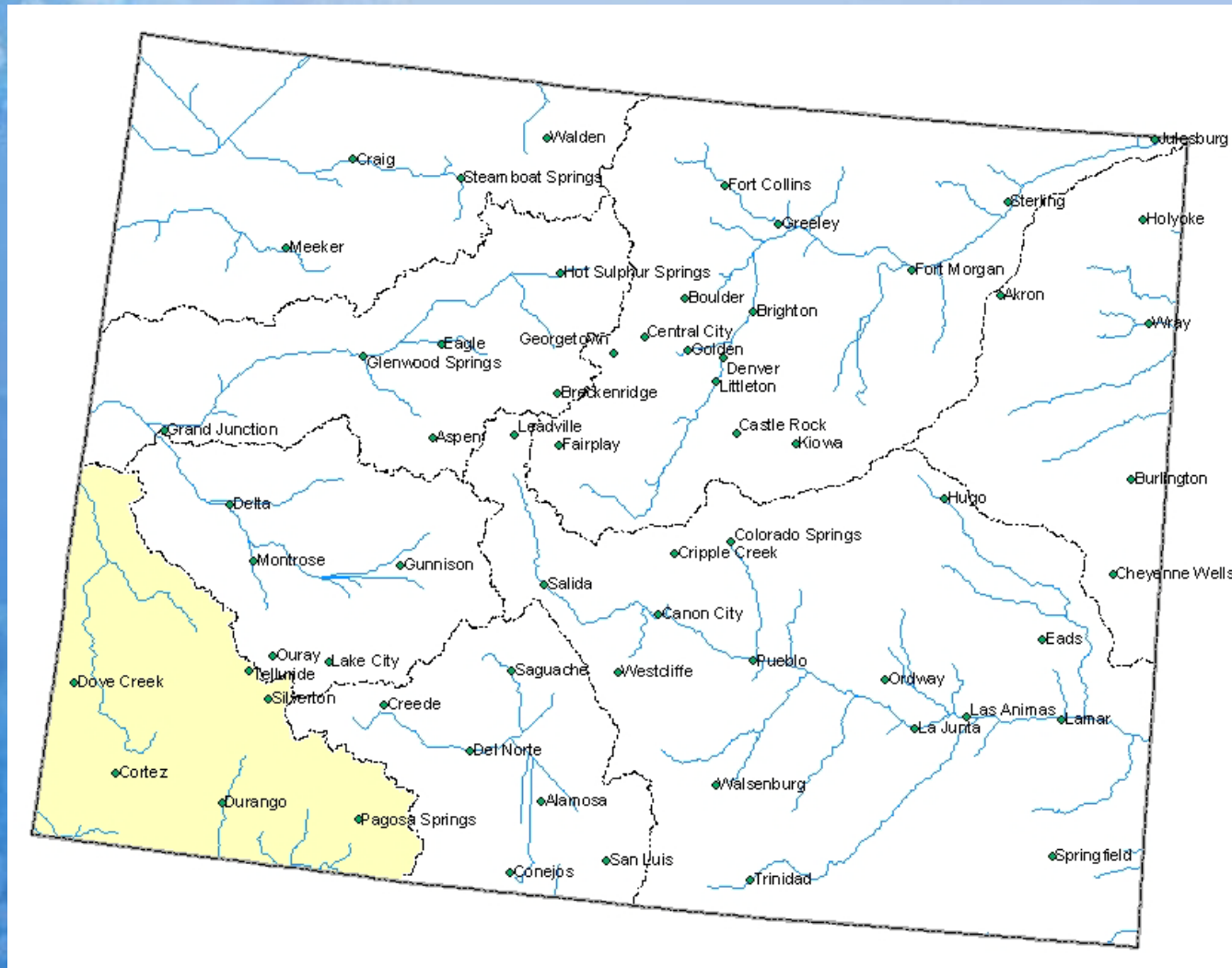


*Provisional Data  
Subject to Revision*



Current as of February 1, 2012

# San Miguel, Dolores, Animas & San Juan River Basins Summary

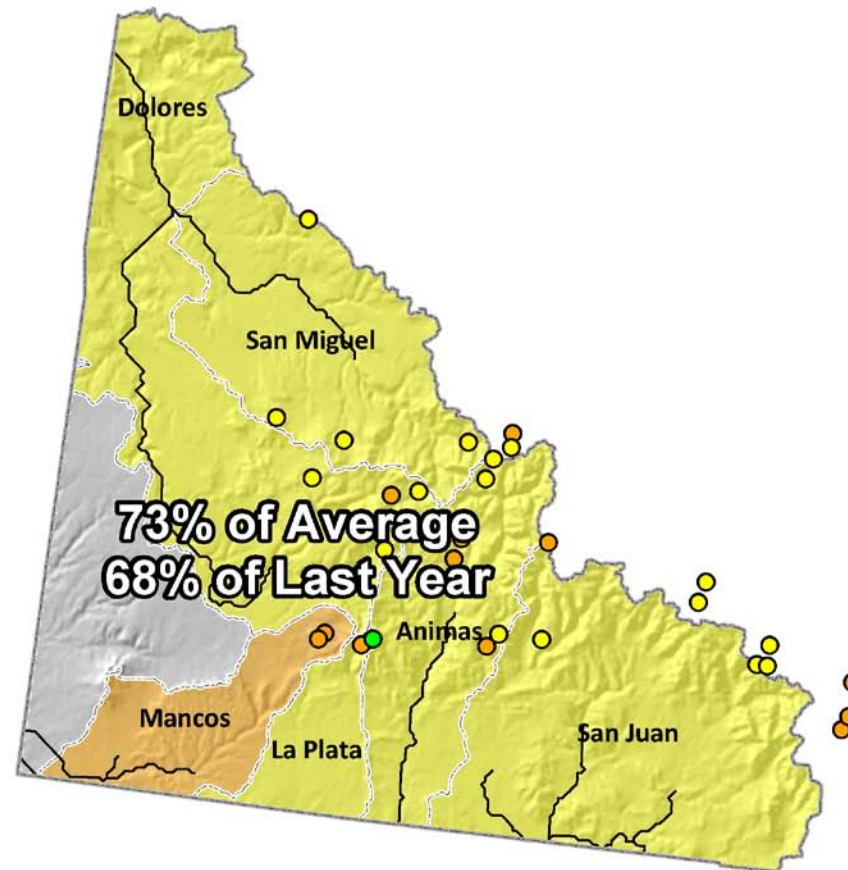


# San Miguel, Dolores, Animas and San Juan River Basins Snowpack Map

Percent of Average

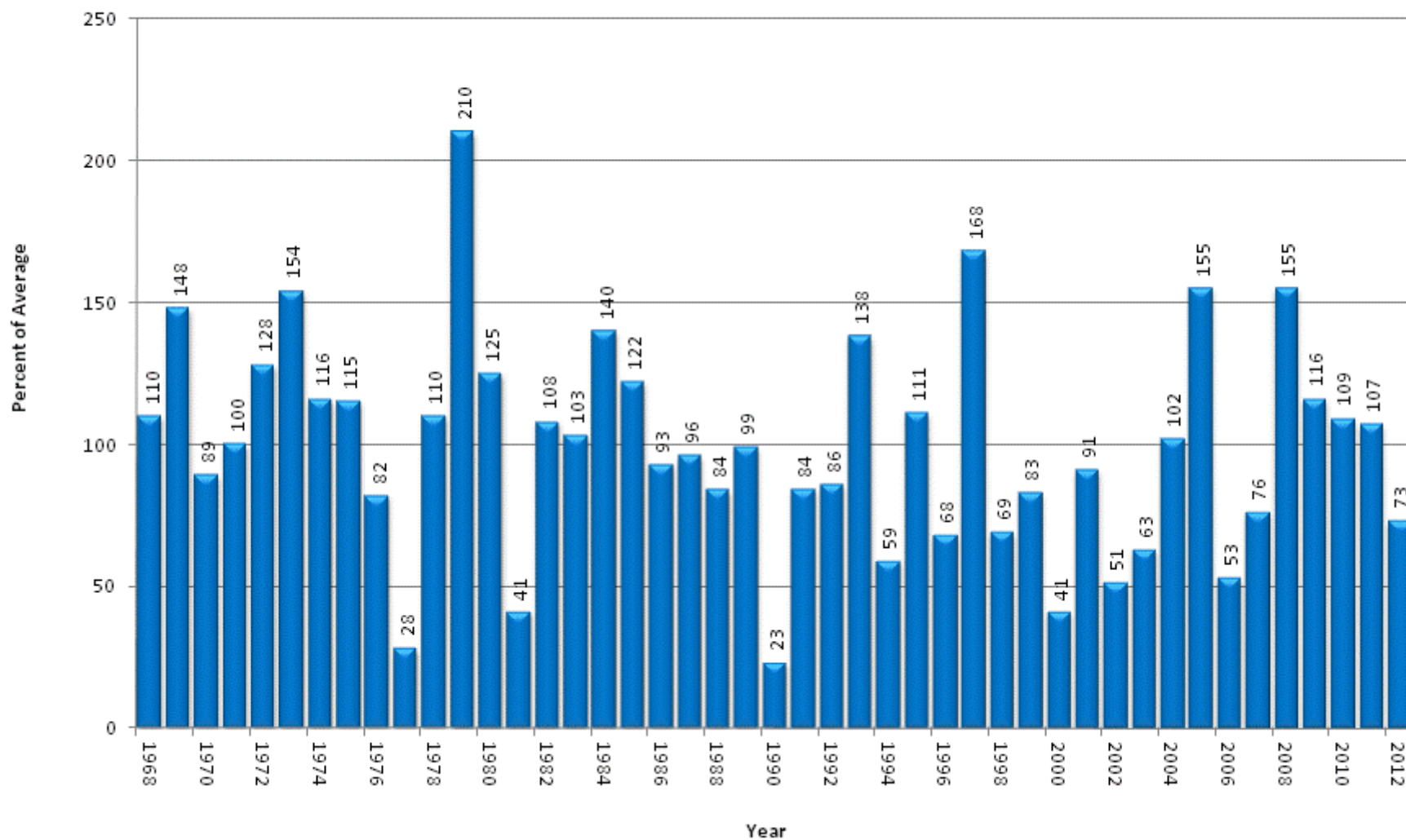


*Provisional Data  
Subject to Revision*



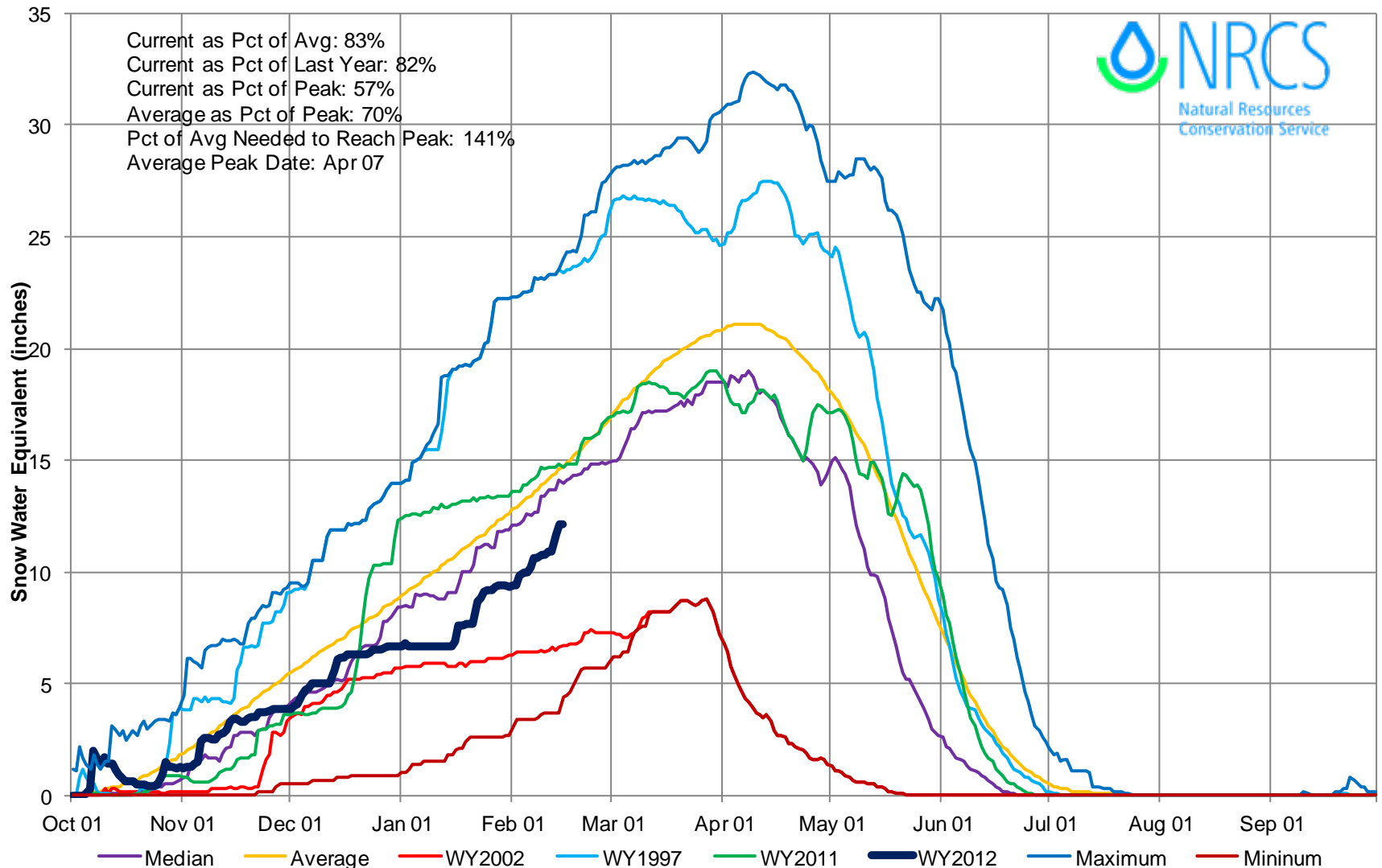
Current as of February 1, 2012

## February 1 Total San Miguel, Dolores, Animas & San Juan River Basins Snowpack



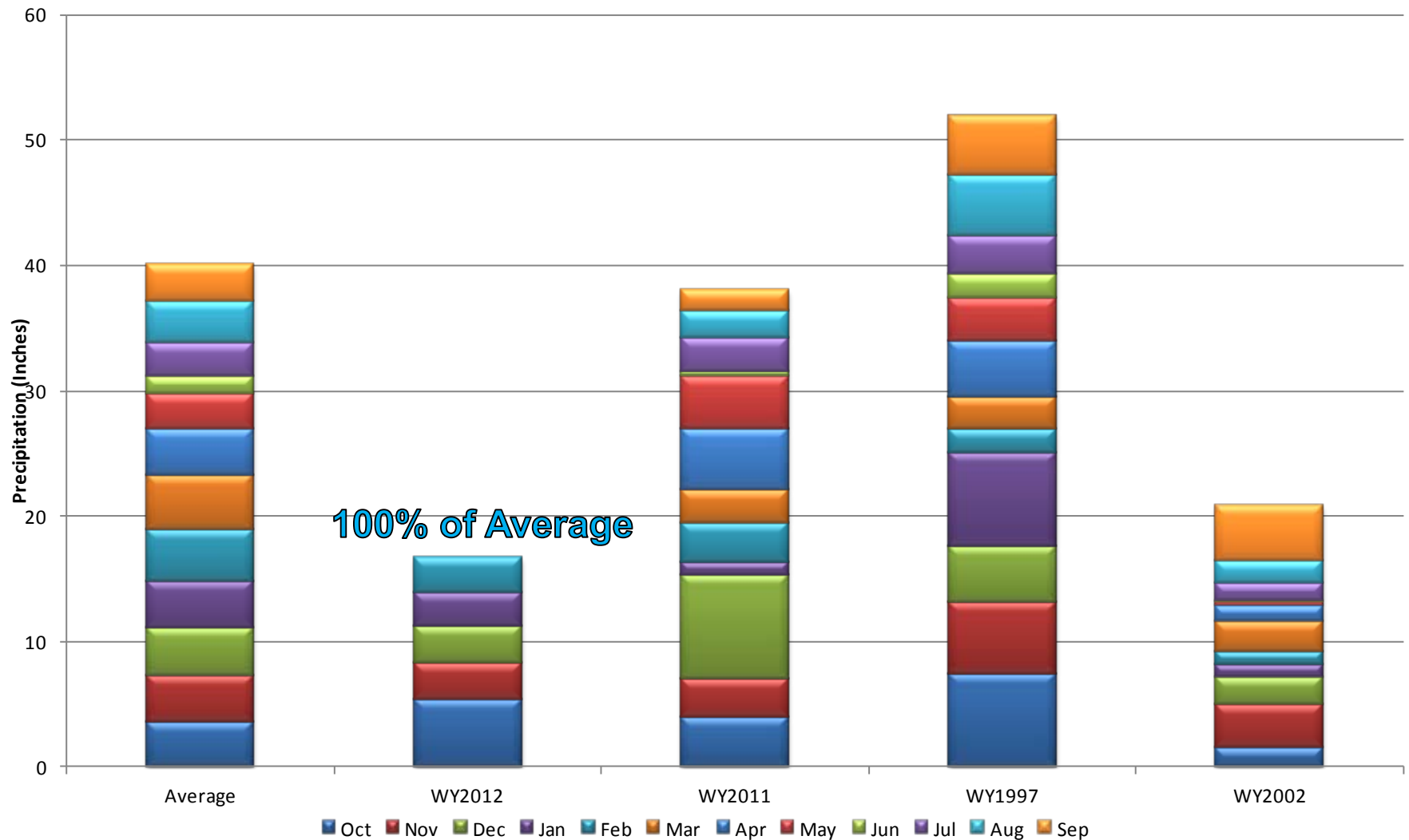
## San Miguel, Dolores, Animas & San Juan River Basins High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Feb 15, 2012*



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

*Based on Provisional SNOTEL data as of Feb 15, 2012*

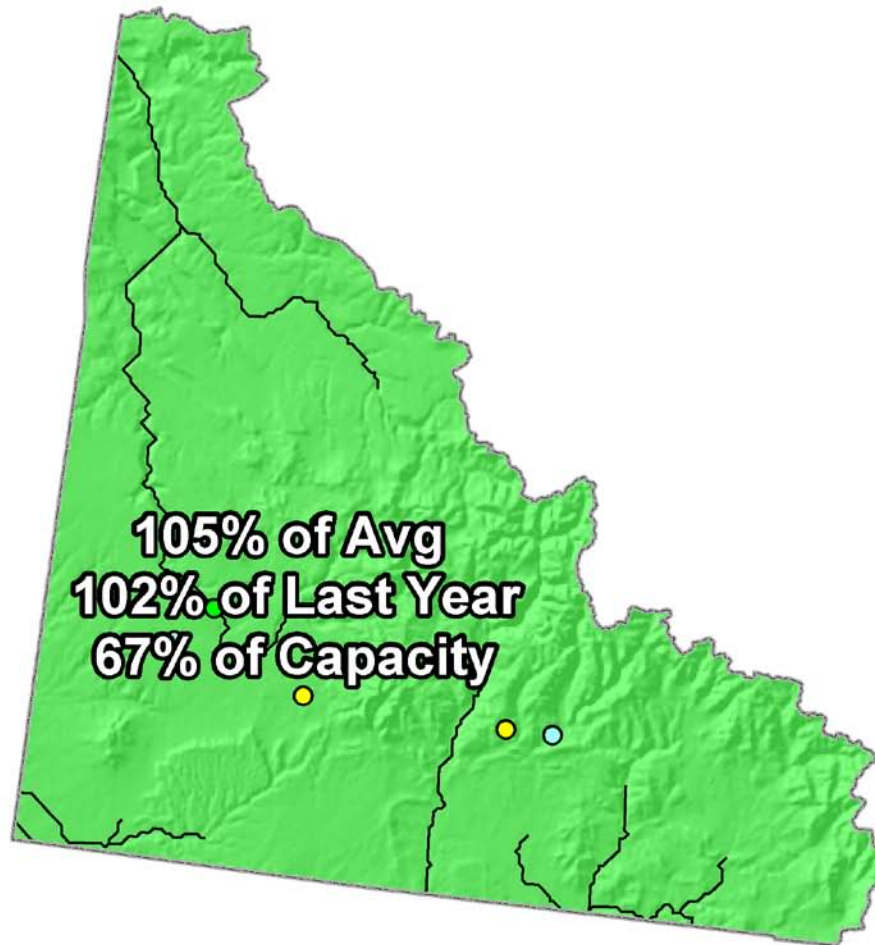


# San Miguel, Dolores, Animas and San Juan River Basins Reservoir Storage Map

Percent of Average



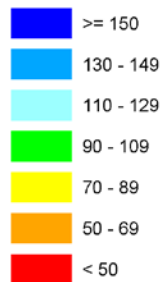
*Provisional Data  
Subject to Revision*



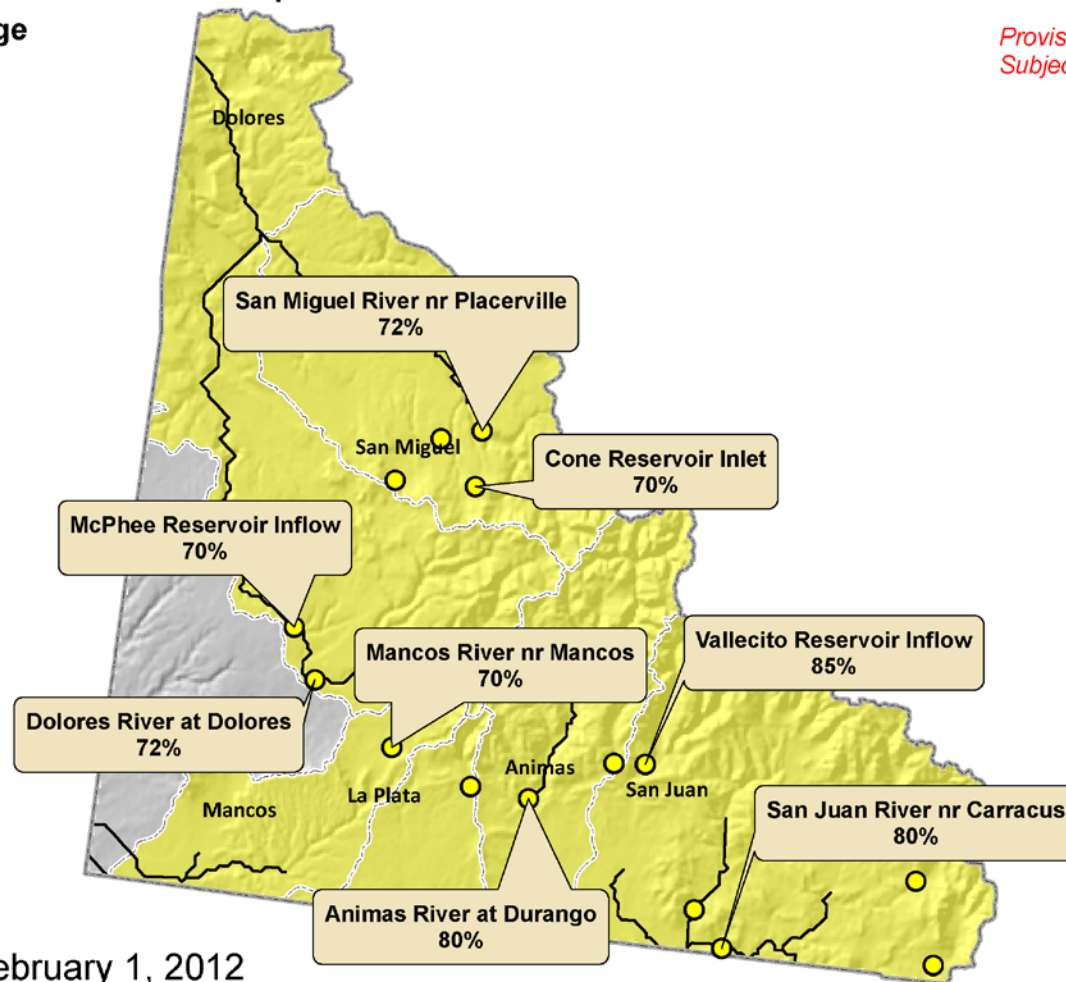
End of January 2012

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

Percent of Average

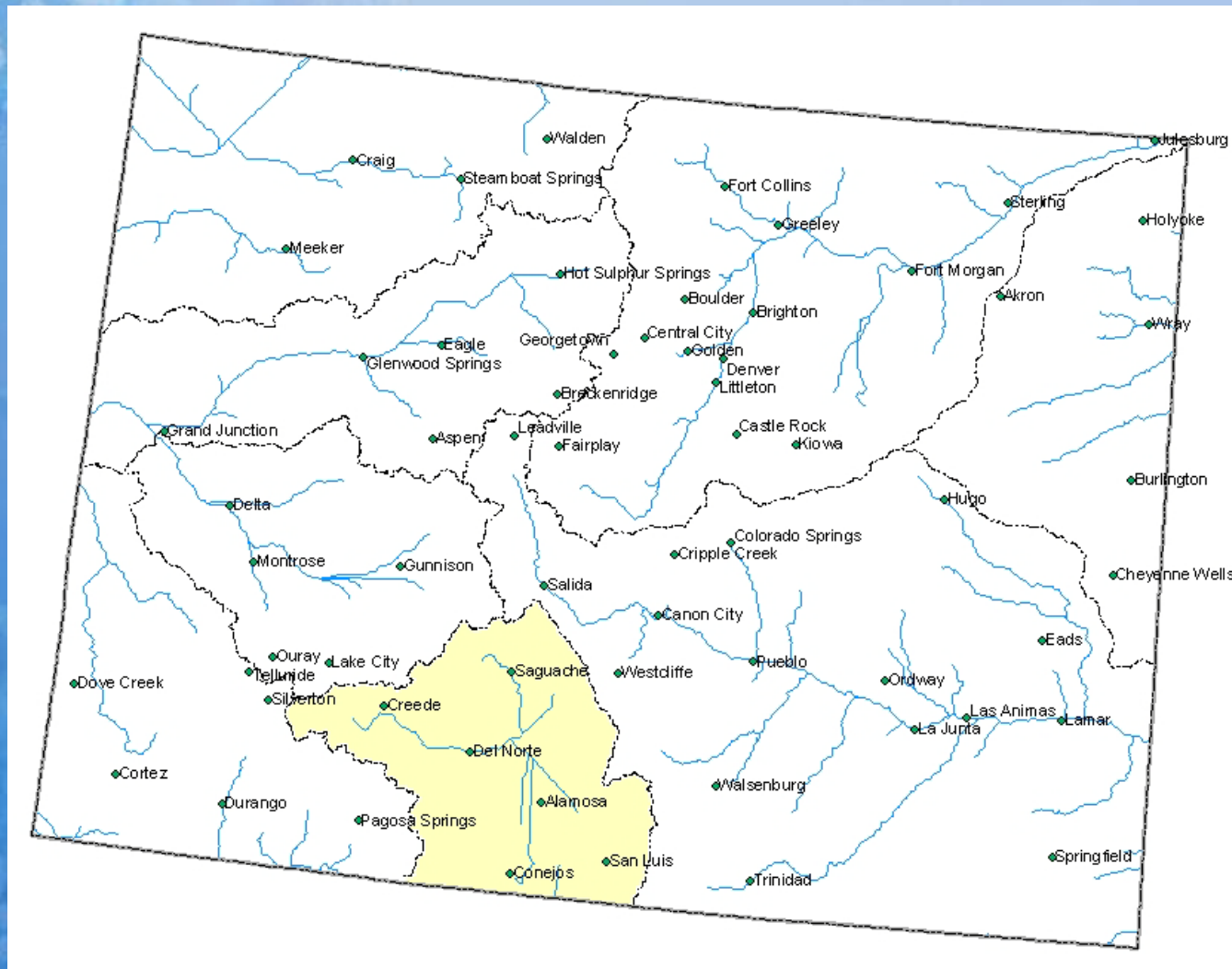


*Provisional Data  
Subject to Revision*



Current as of February 1, 2012

# Upper Rio Grande Basin Summary

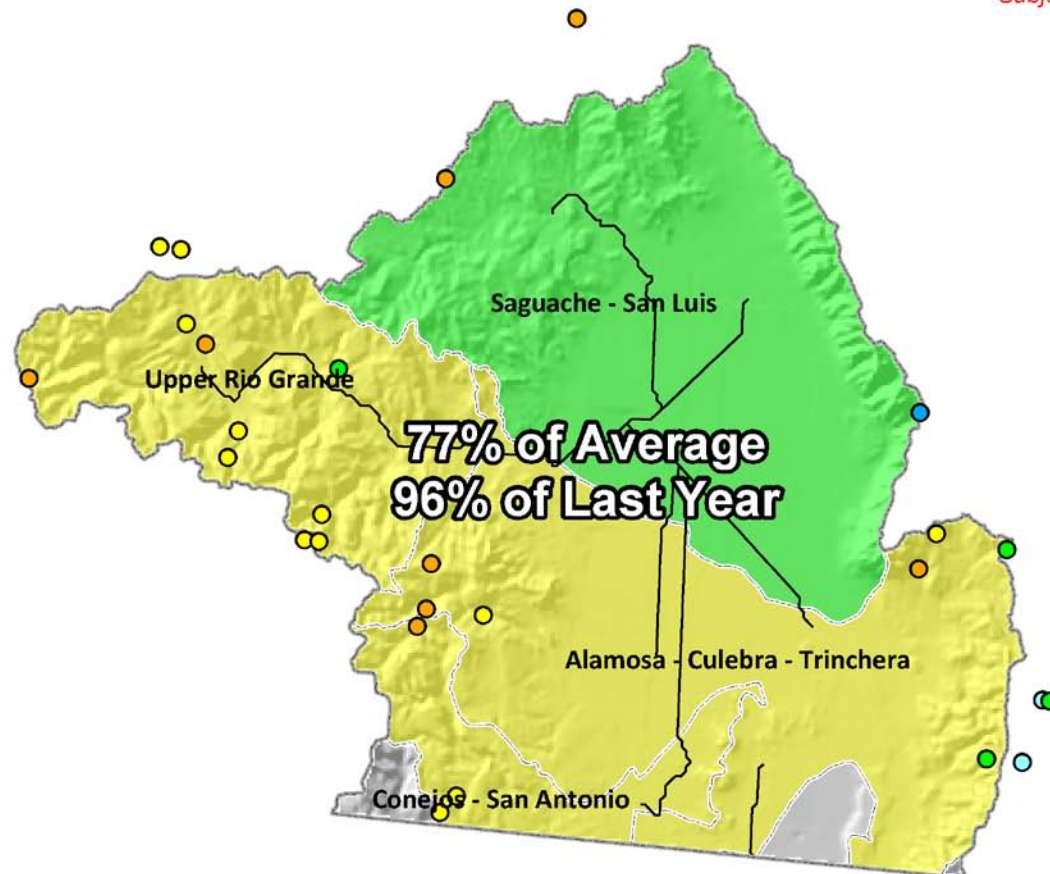


# Upper Rio Grande Basin Snowpack Map

## Percent of Average

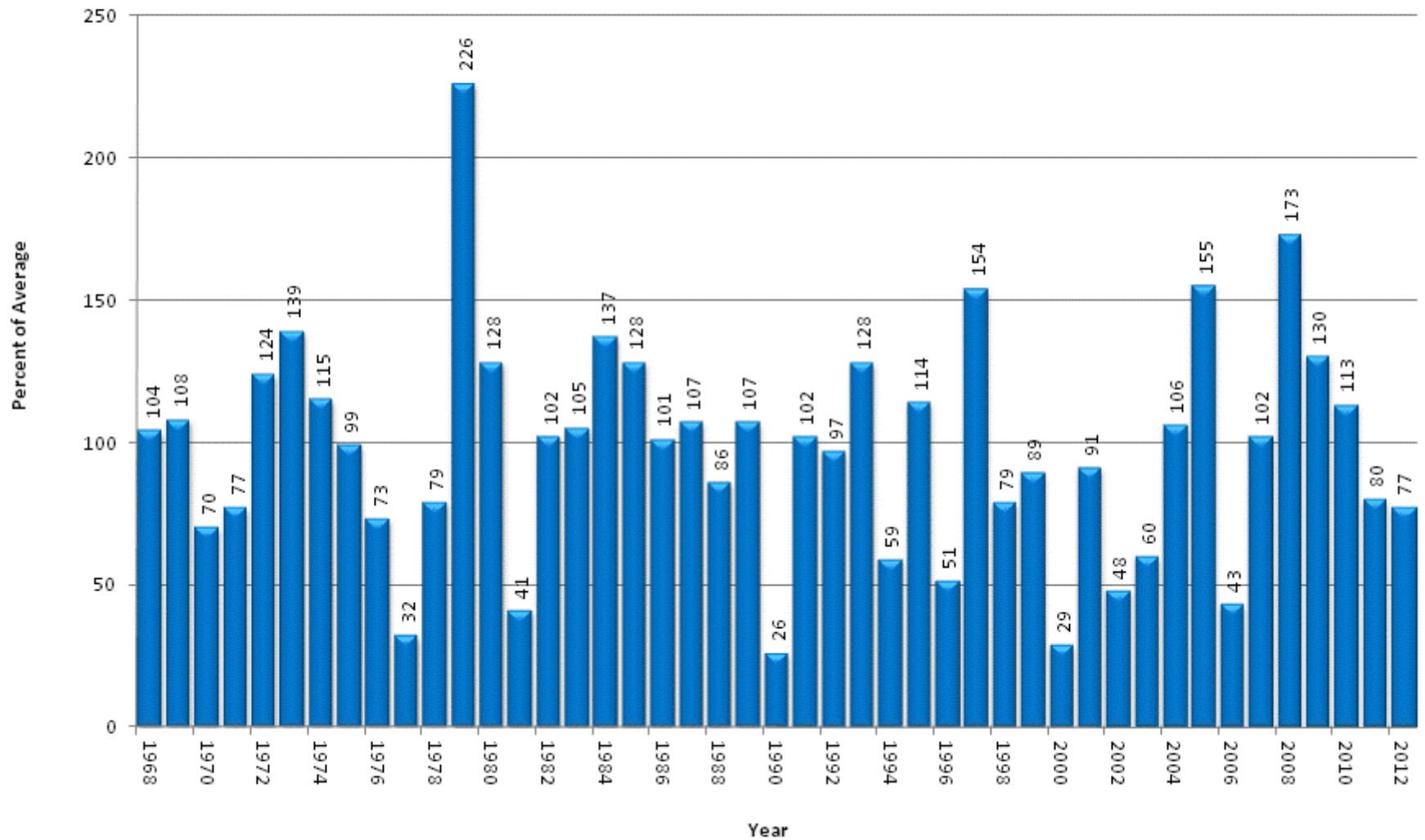


*Provisional Data  
Subject to Revision*



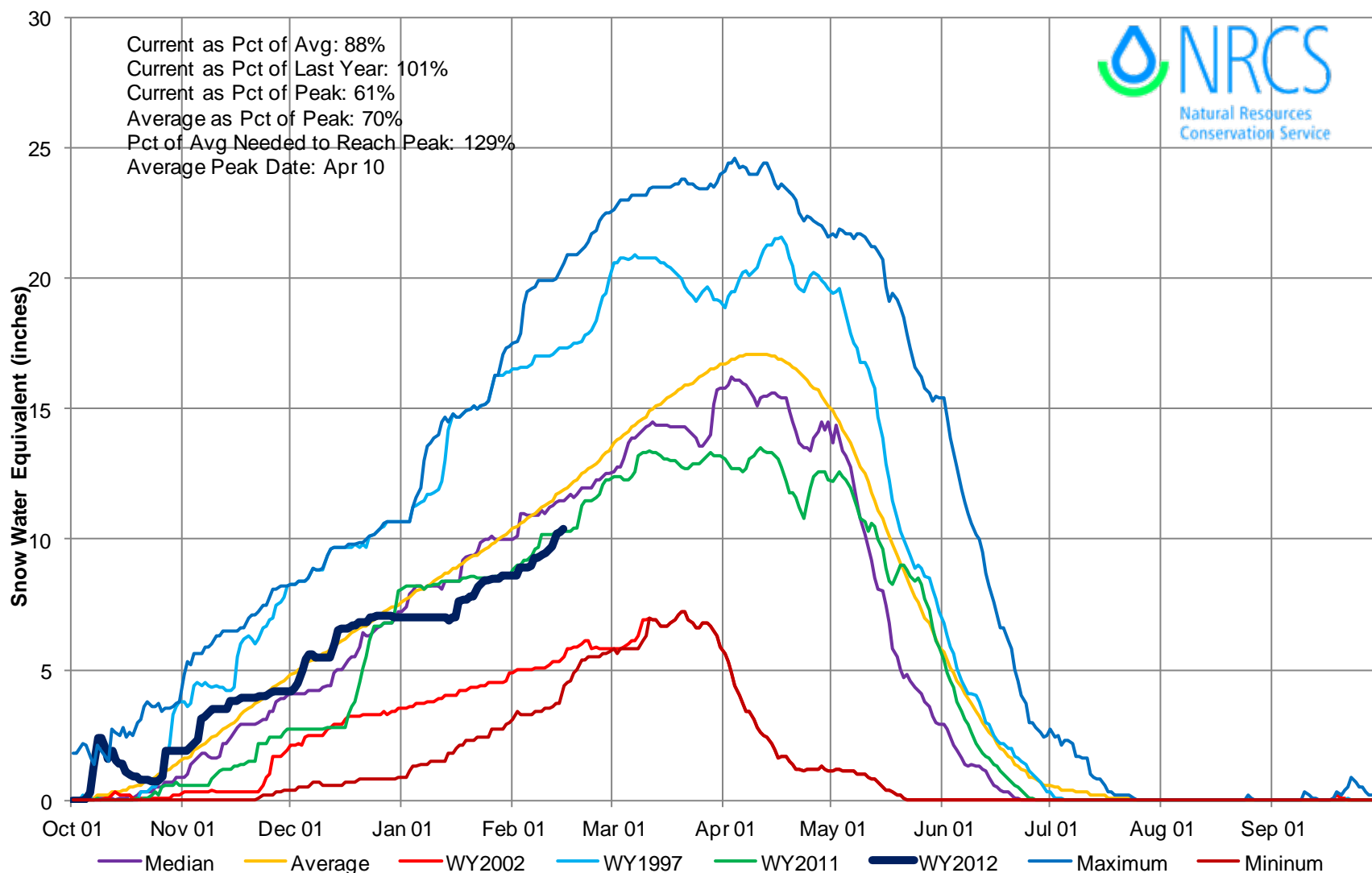
Current as of February 1, 2012

## February 1 Total Upper Rio Grande Basin Snowpack



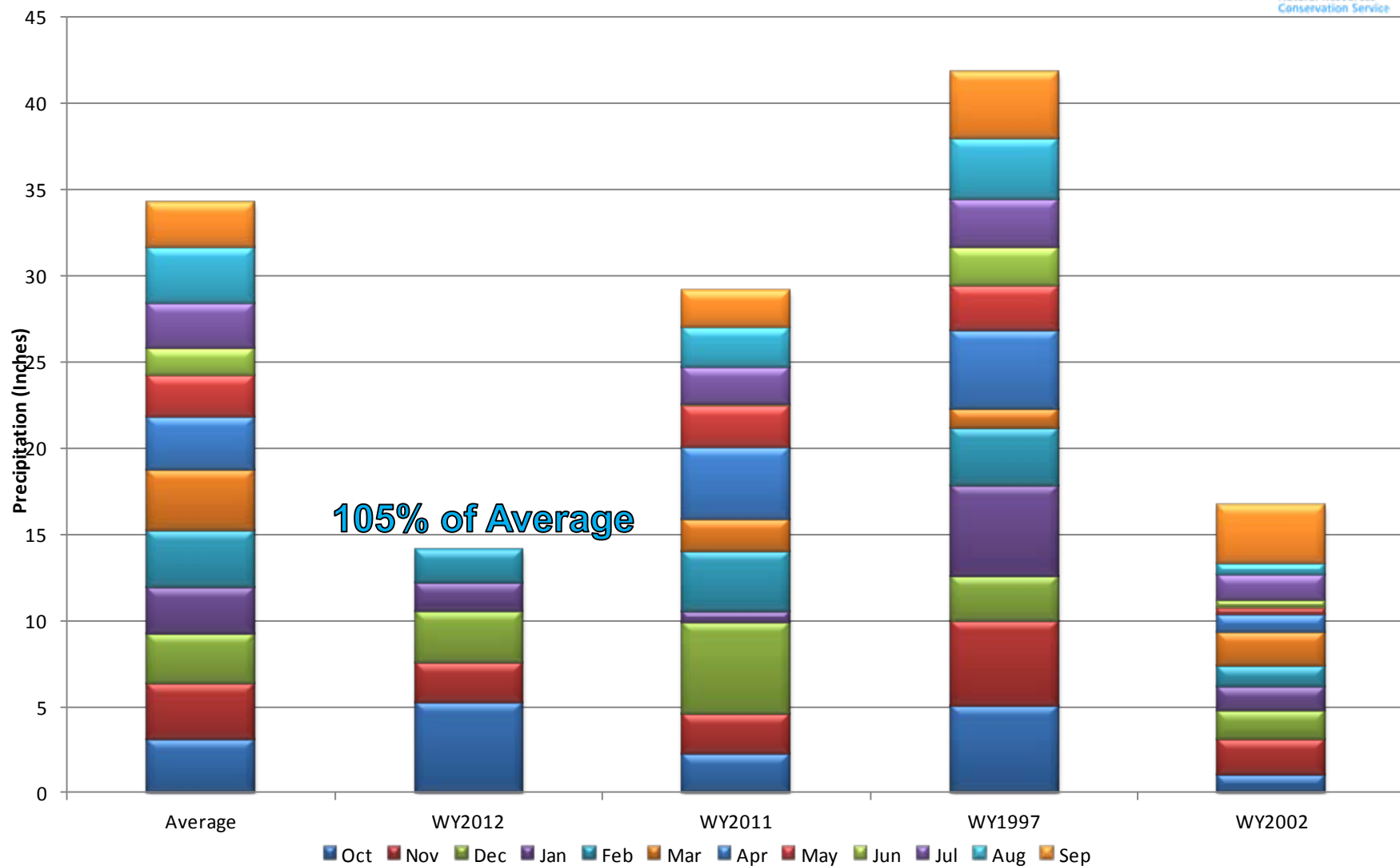
## Upper Rio Grande Basin High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Feb 15, 2012*



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

*Based on Provisional SNOTEL data as of Feb 15, 2012*

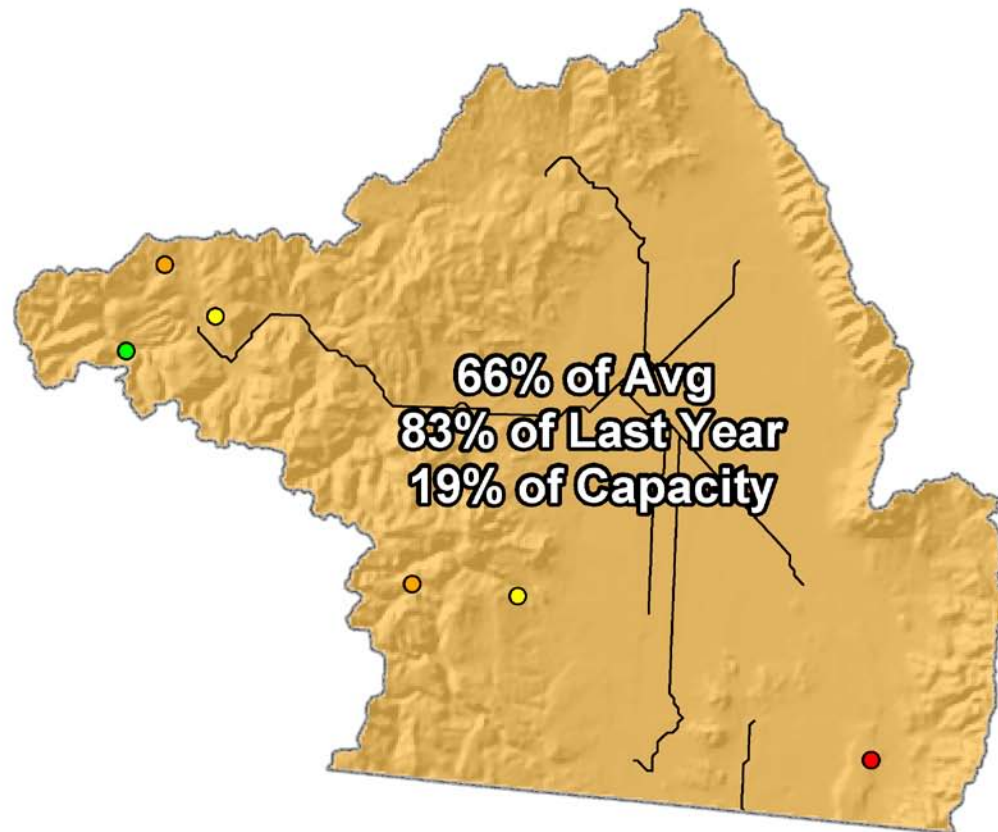


# Upper Rio Grande Basin Reservoir Storage Map

## Percent of Average



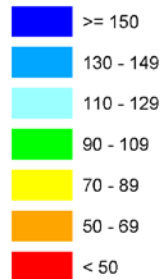
*Provisional Data  
Subject to Revision*



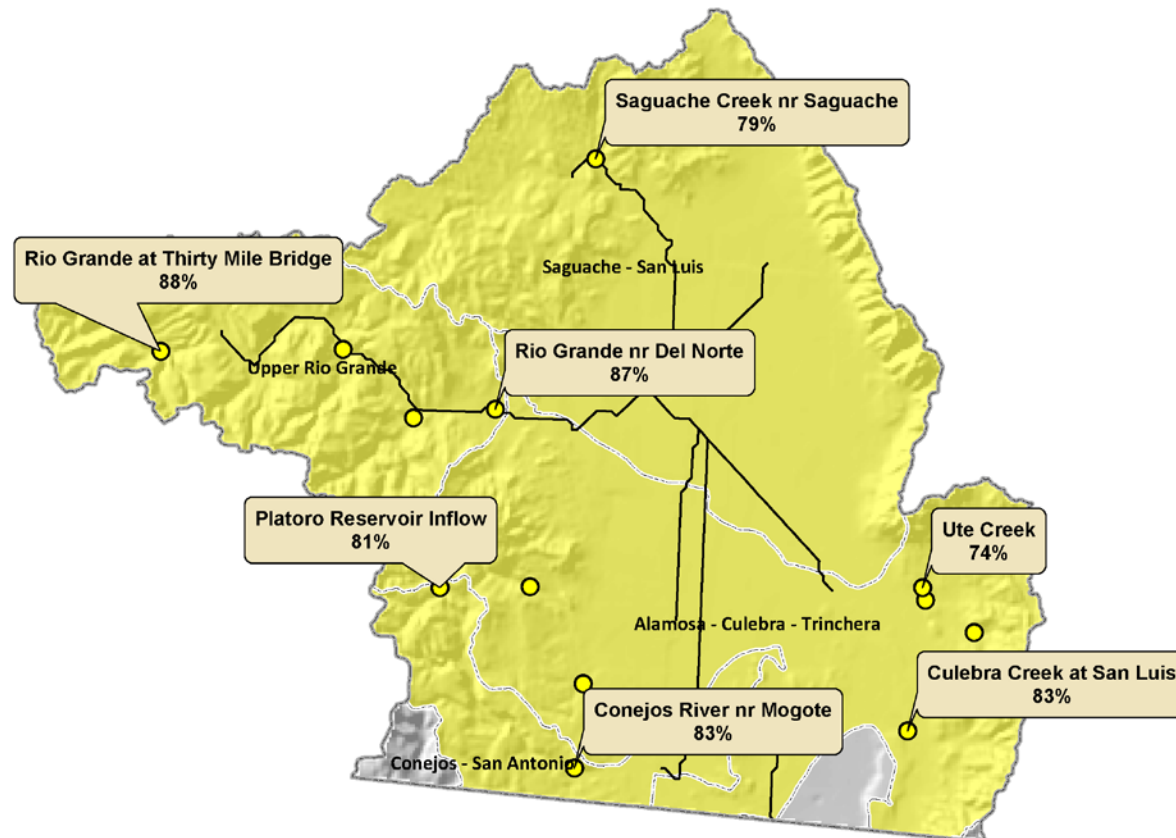
End of January 2012

# Upper Rio Grande Basin Streamflow Forecast Map

## Percent of Average

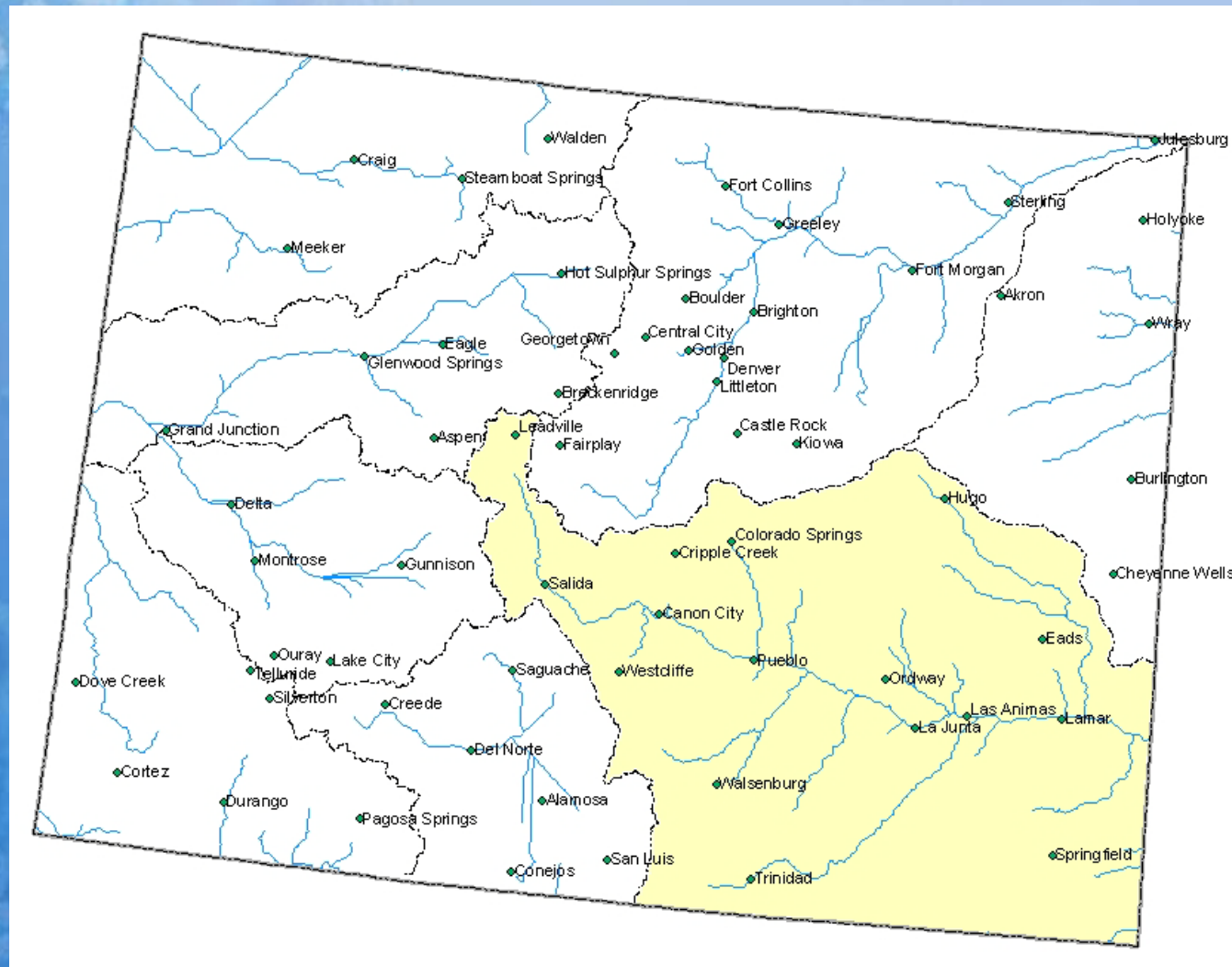


*Provisional Data  
Subject to Revision*



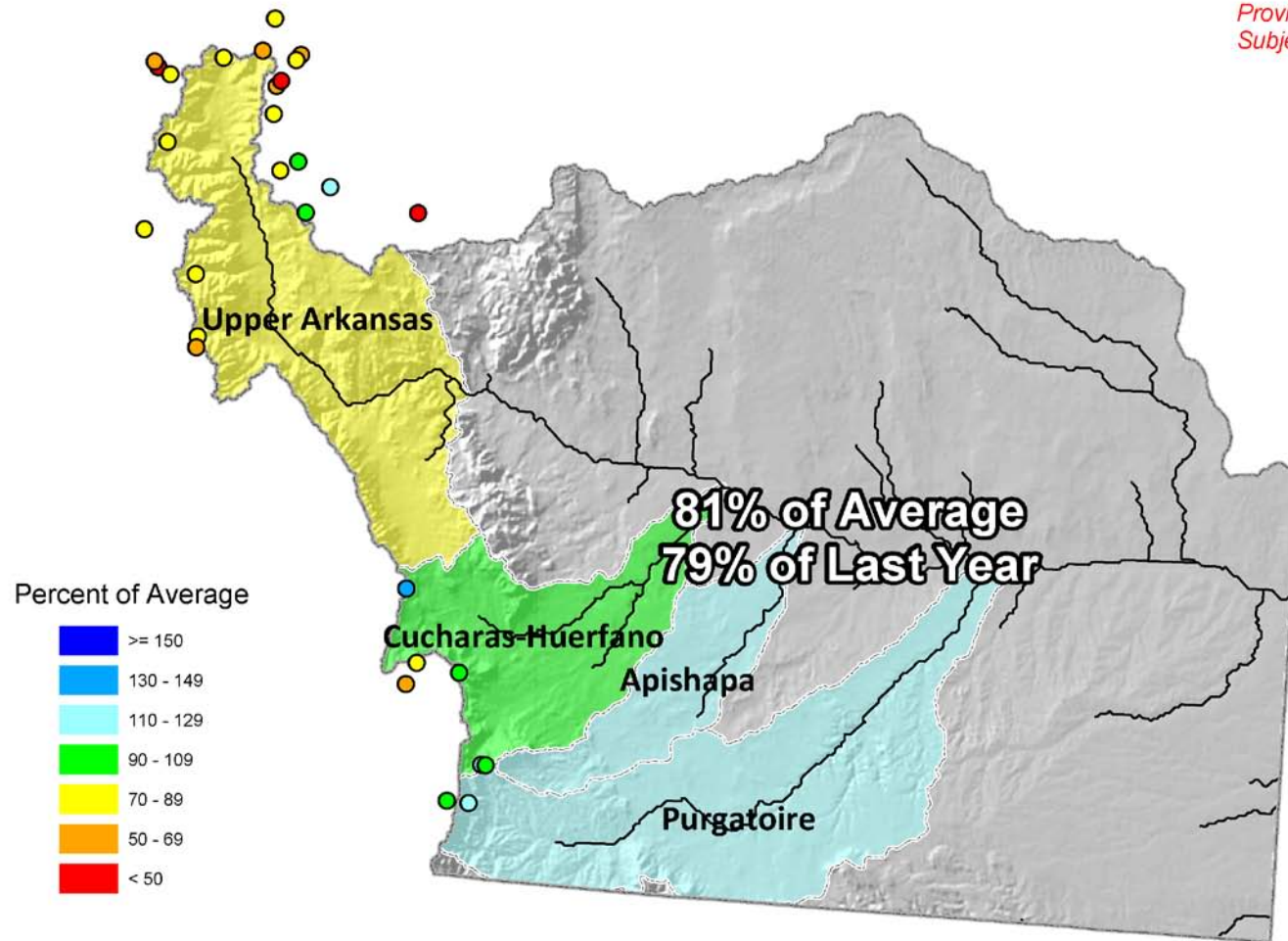
Current as of February 1, 2012

# Arkansas River Basin Summary



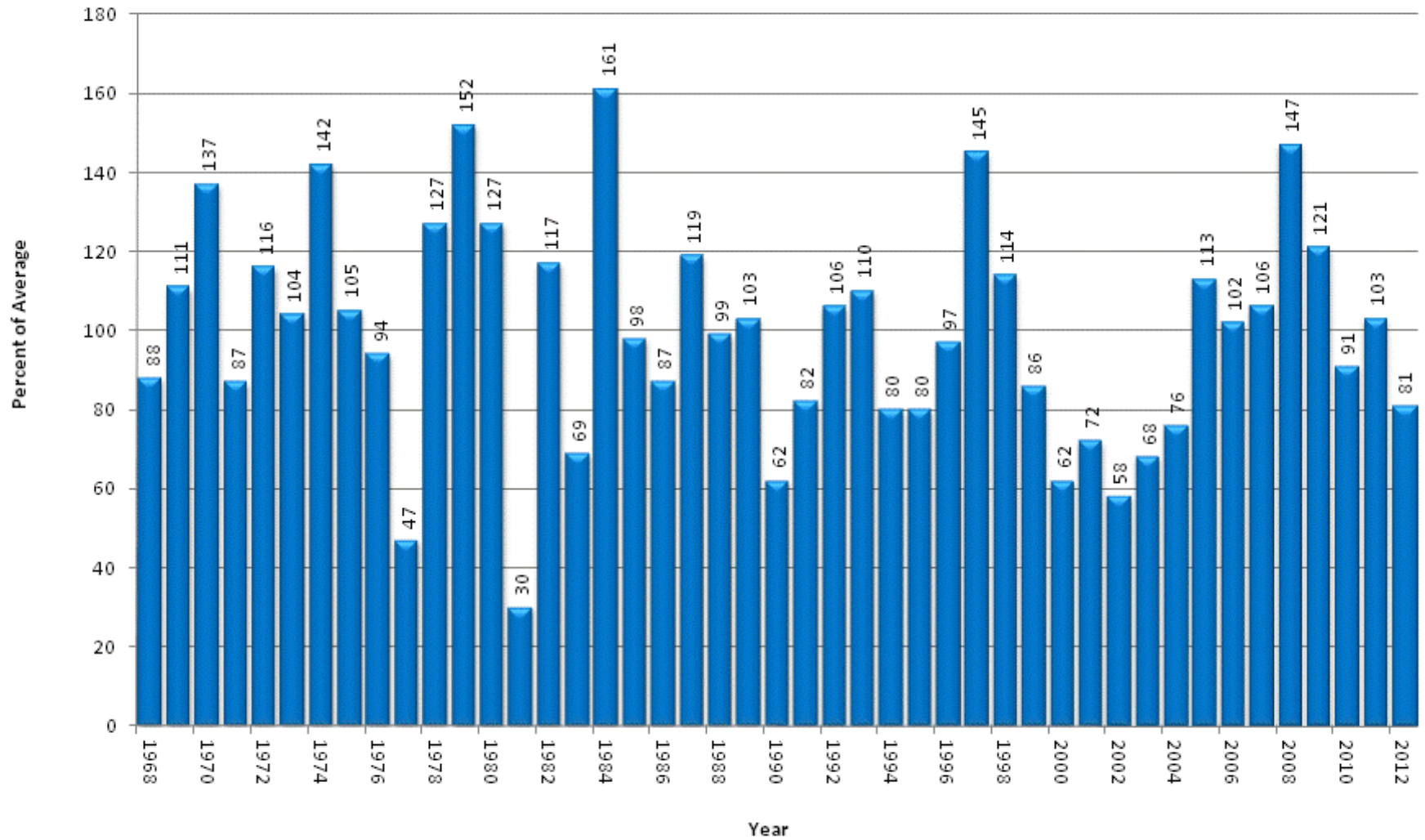
## Arkansas River Basin Snowpack Map

*Provisional Data  
Subject to Revision*



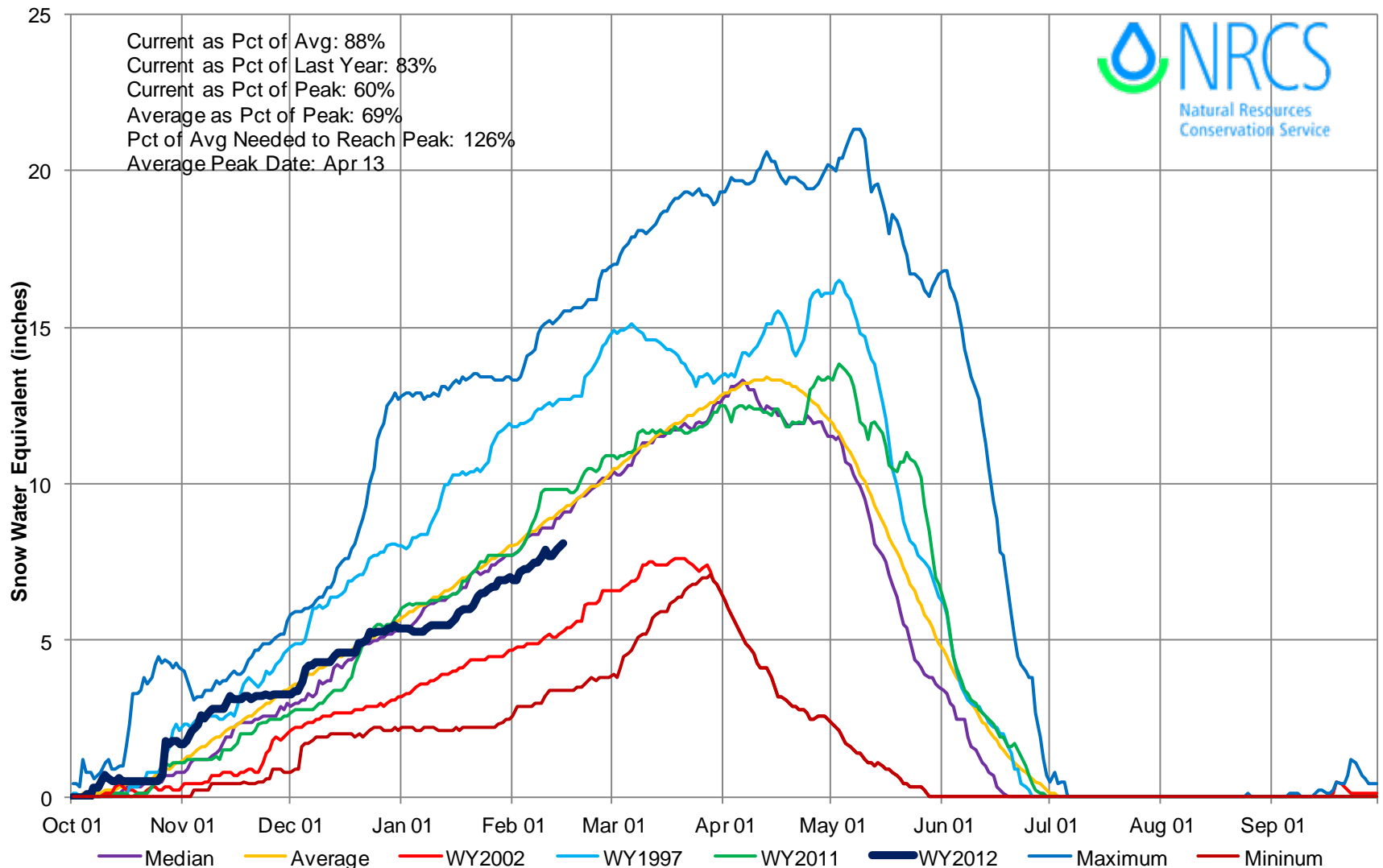
Current as of February 1, 2012

## February 1 Total Arkansas River Basin Snowpack



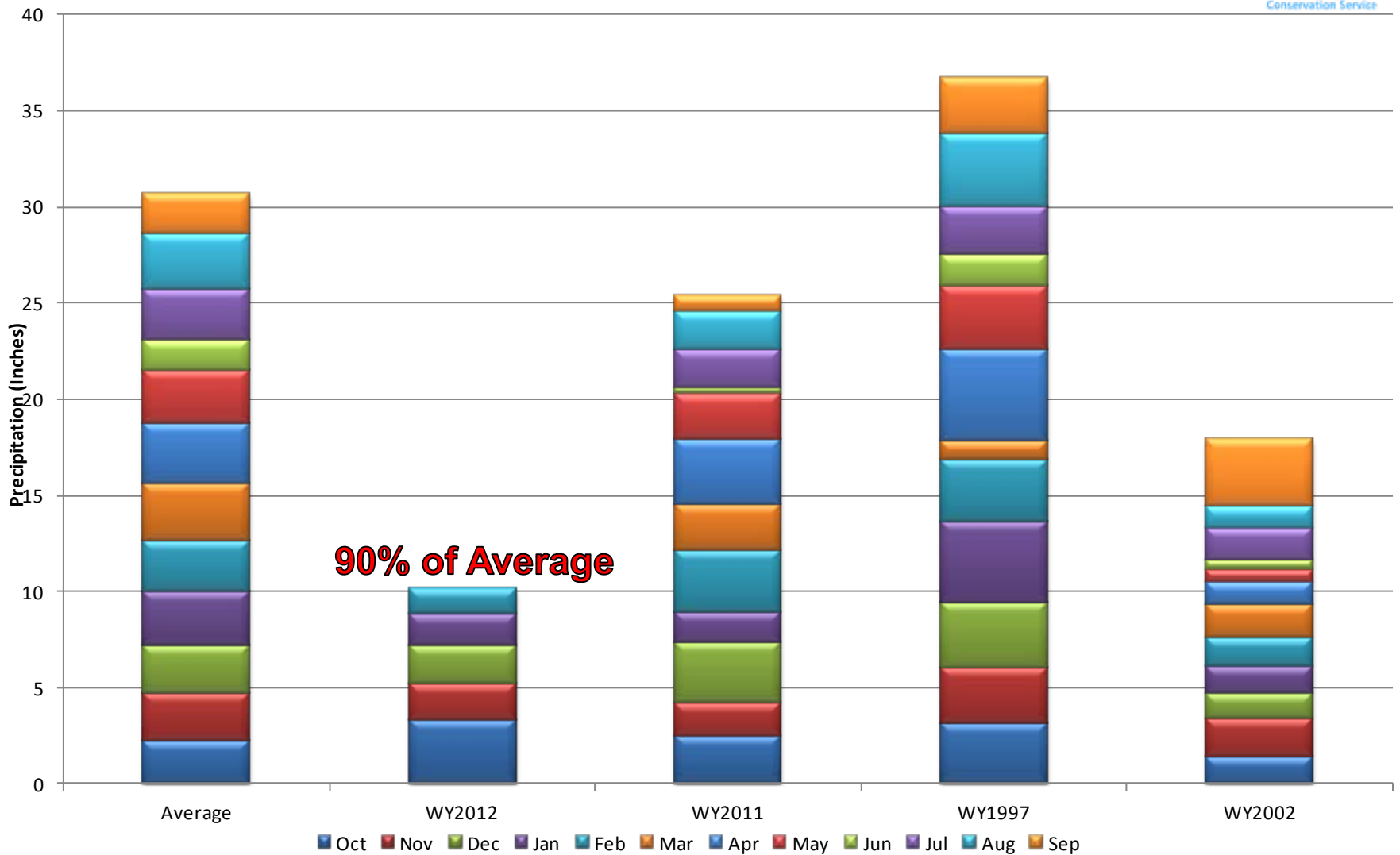
## Arkansas River Basin High/Low Snowpack Summary

*Based on Provisional SNOTEL data as of Feb 15, 2012*



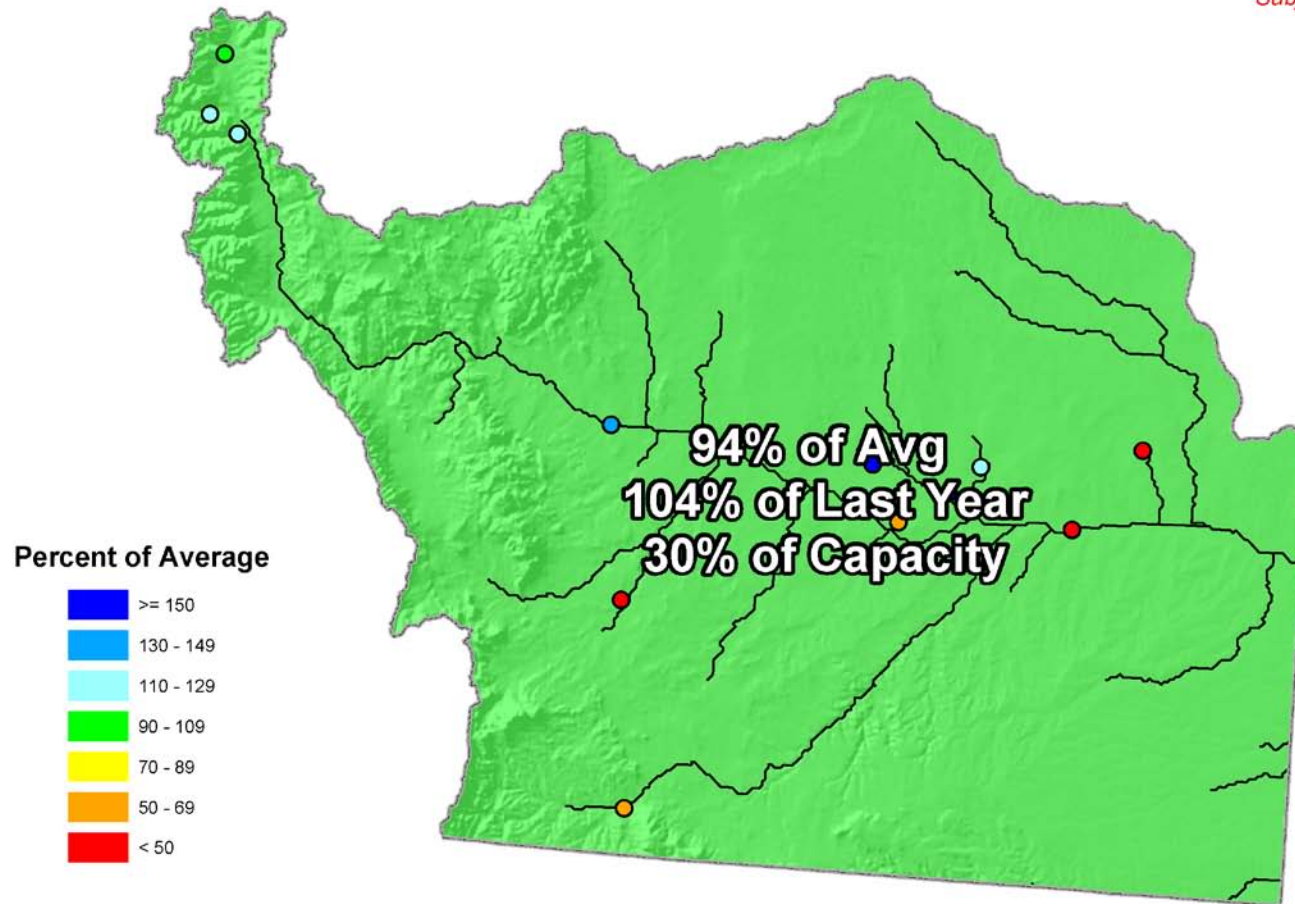
## Arkansas River Basin High/Low Monthly Precipitation Summary

*Based on Provisional SNOTEL data as of Feb 15, 2012*



# Arkansas River Basin Reservoir Storage Map

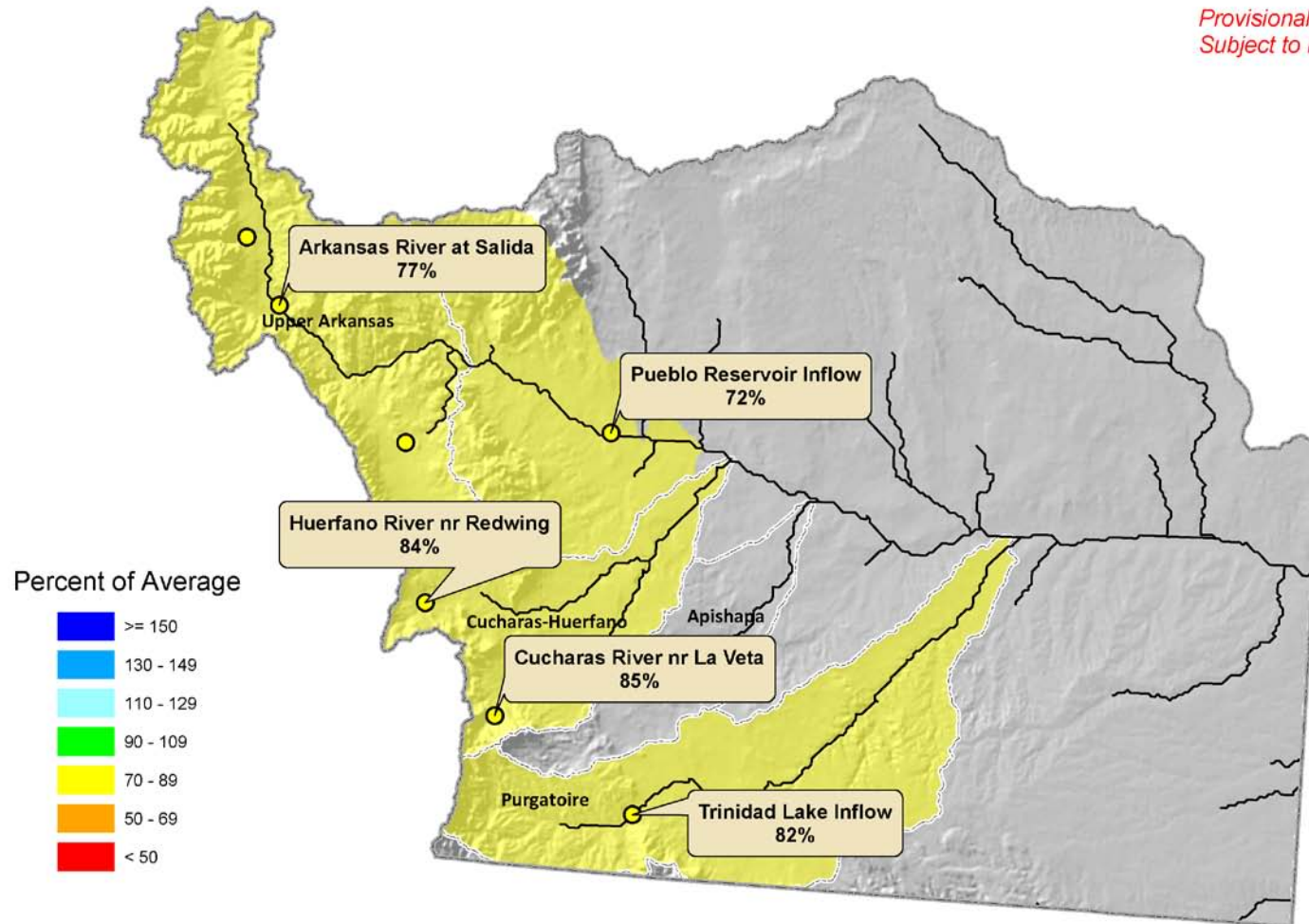
*Provisional Data  
Subject to Revision*



End of January 2012

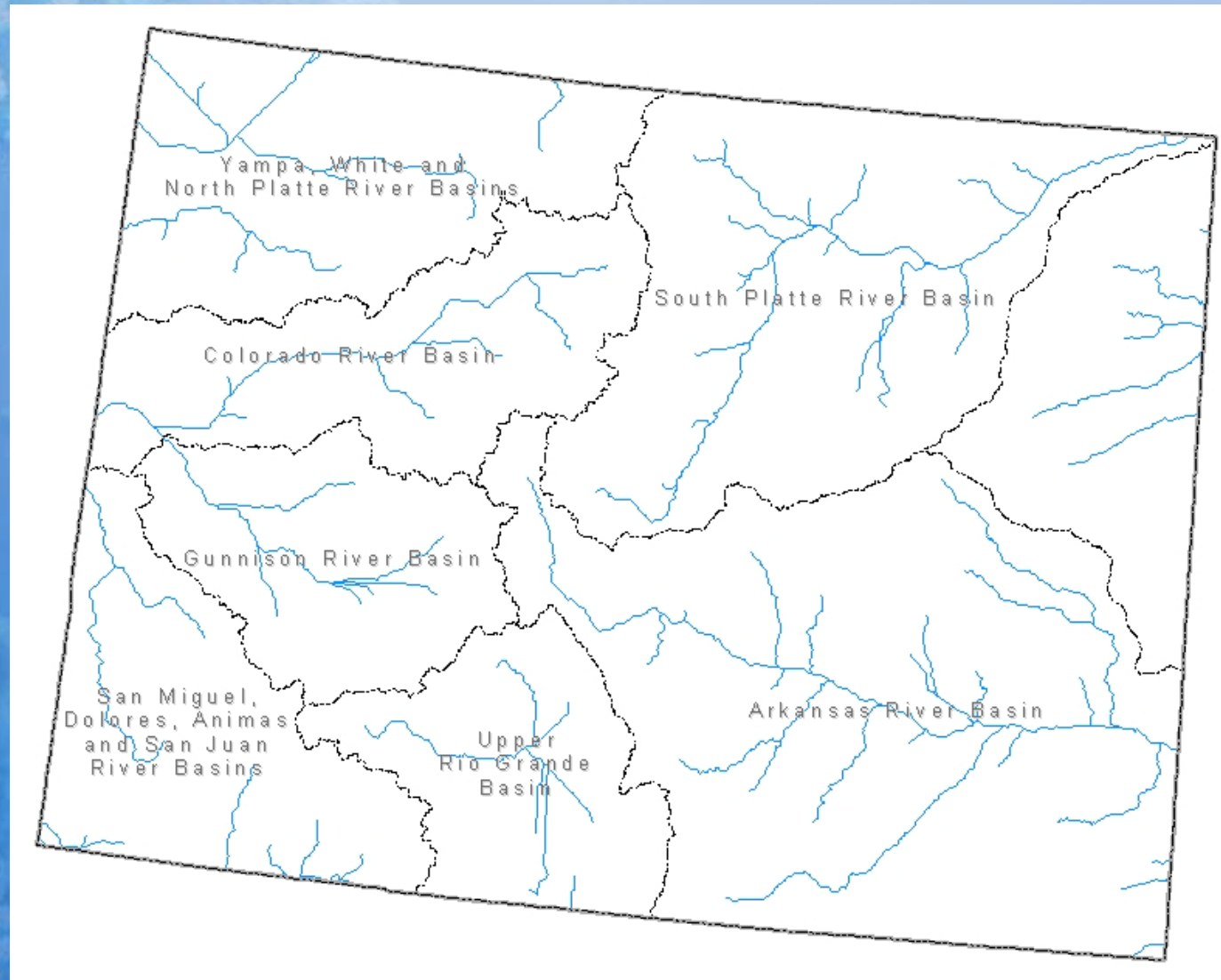
# Arkansas River Basin Streamflow Forecast Map

*Provisional Data  
Subject to Revision*



Current as of February 1, 2012

# Colorado Statewide Summary

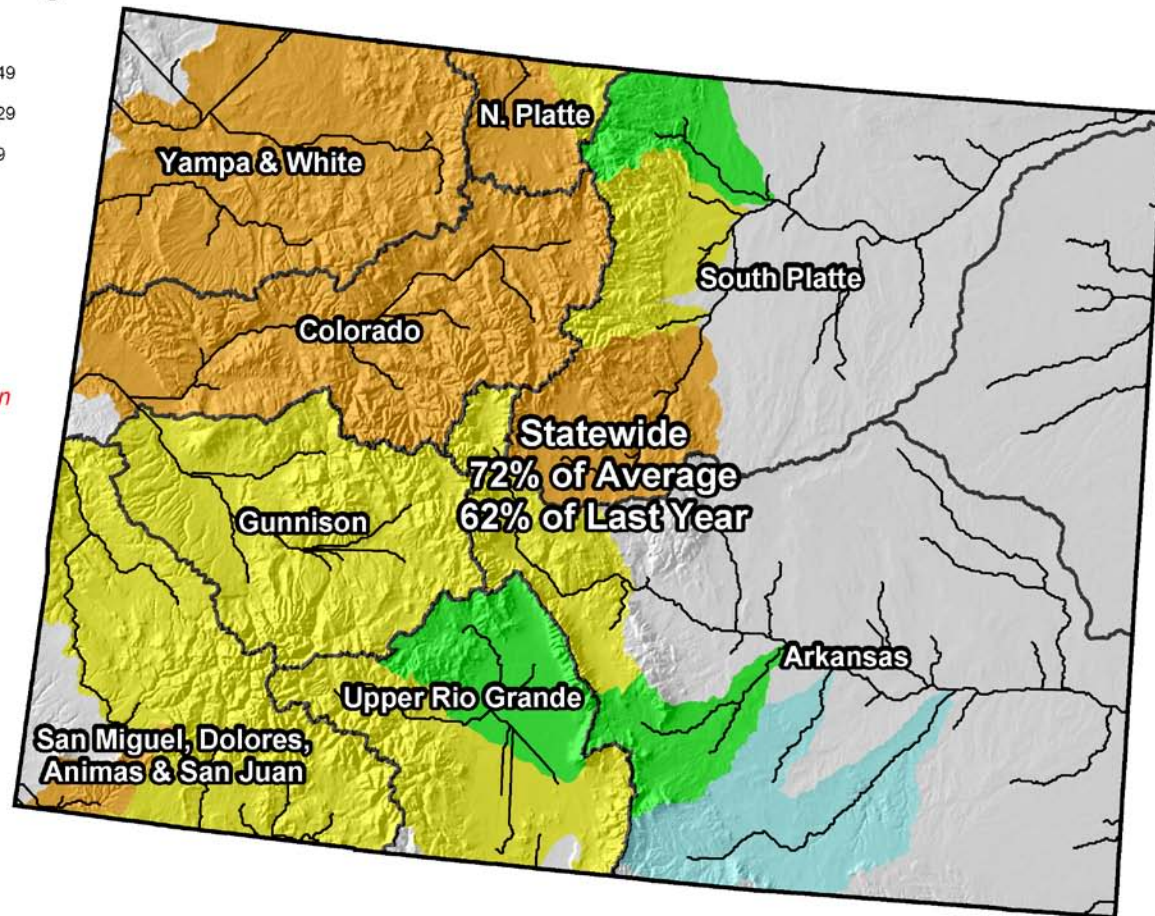


# Colorado Snowpack Map

Percent of Average



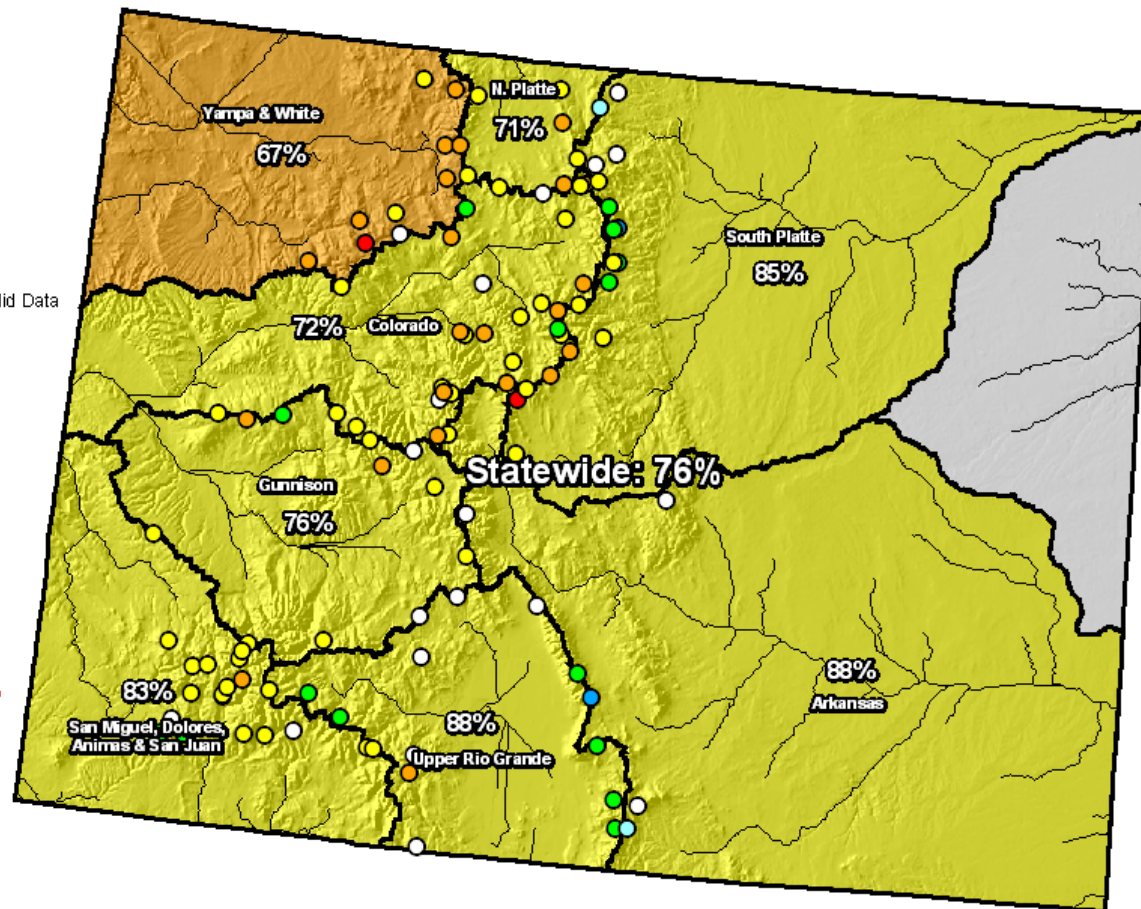
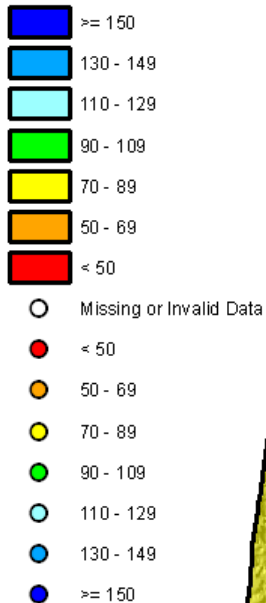
*Provisional Data  
Subject to Revision*



Current as of February 1, 2012

# Colorado SNOTEL Snowpack Update Map with Site Data

Percent of Average



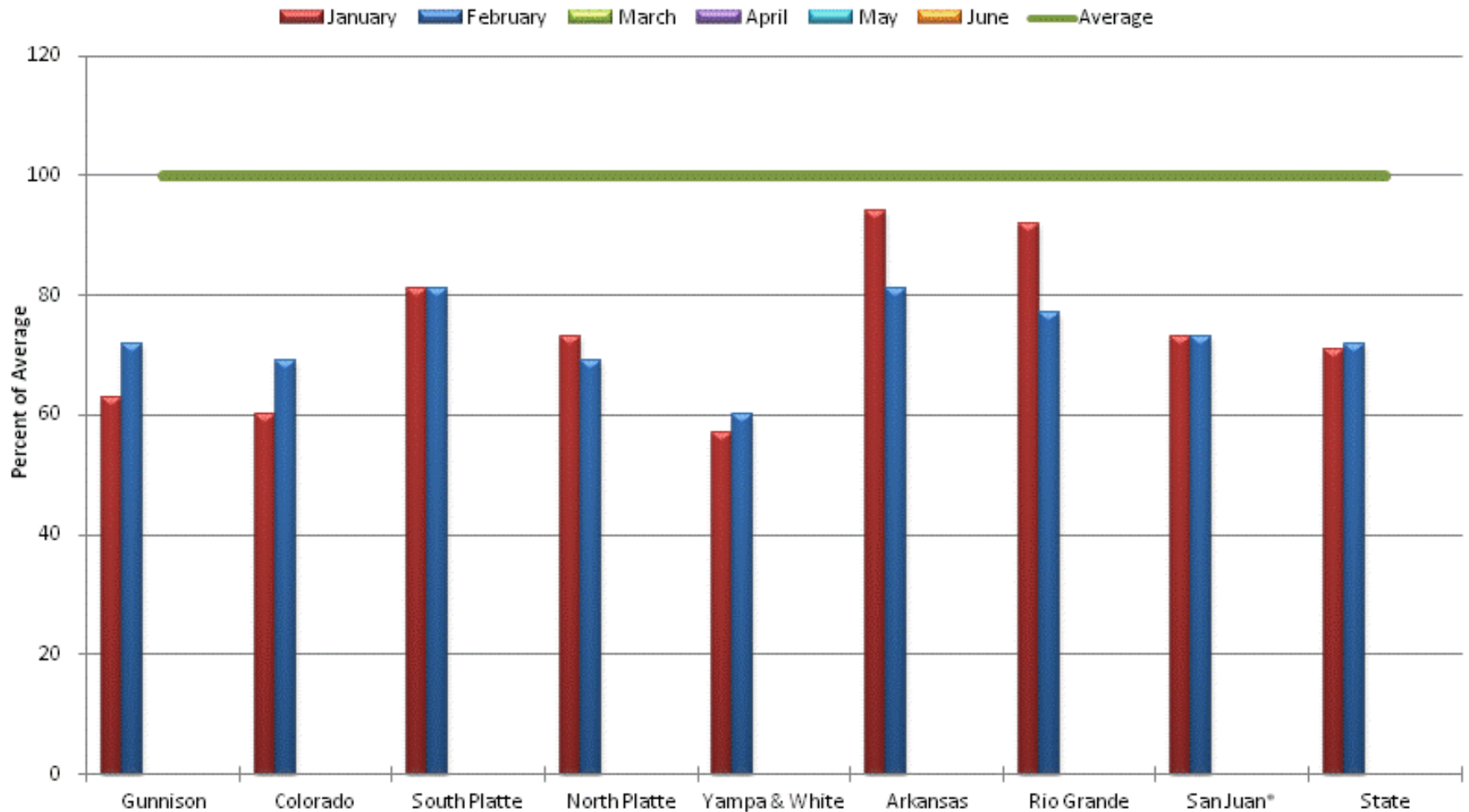
*Provisional Data  
Subject to Revision*

Current as of Feb 15, 2012

\*Data may not provide a valid measure of conditions

# Colorado Snowpack Summary for 2012

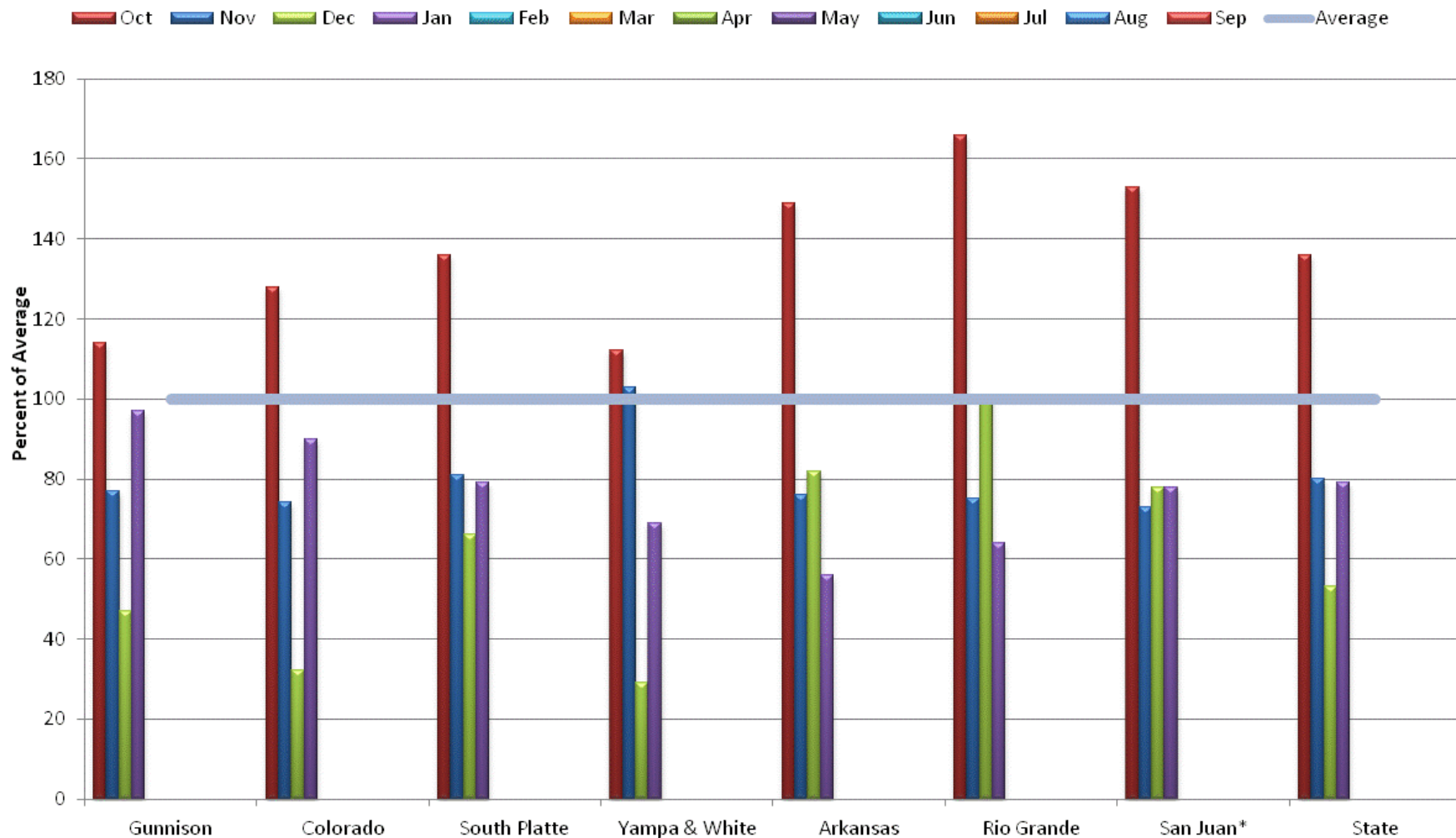
USDA Natural Resources Conservation Service



\*Includes Animas, Dolores, San Miguel Basins

# Colorado Monthly Precipitation Summary for WY2012

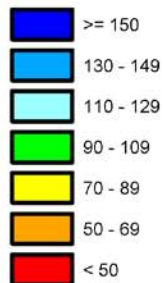
USDA Natural Resources Conservation Service



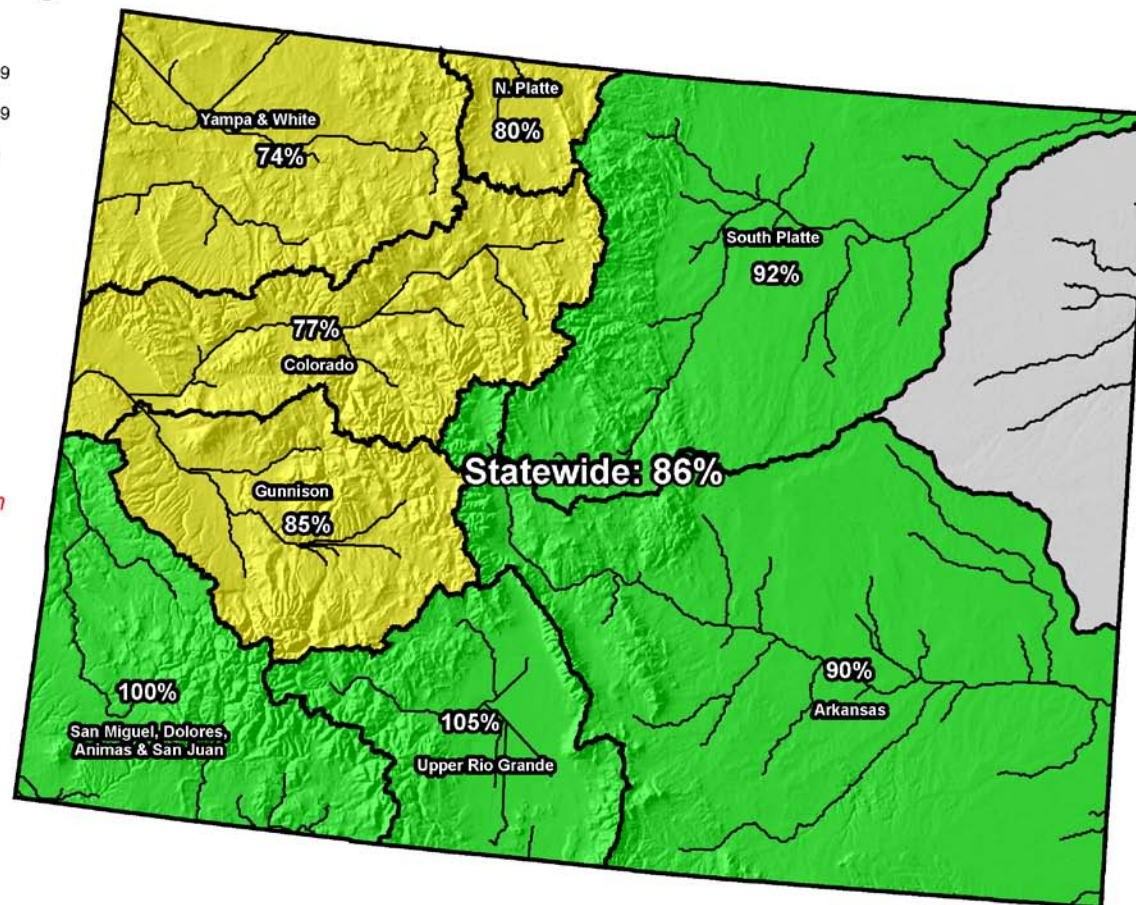
\*Includes Animas, Dolores, San Miguel Basins

# Colorado SNOTEL Water Year-to-Date Precipitation Update Map

Percent of Average



*Provisional Data  
Subject to Revision*



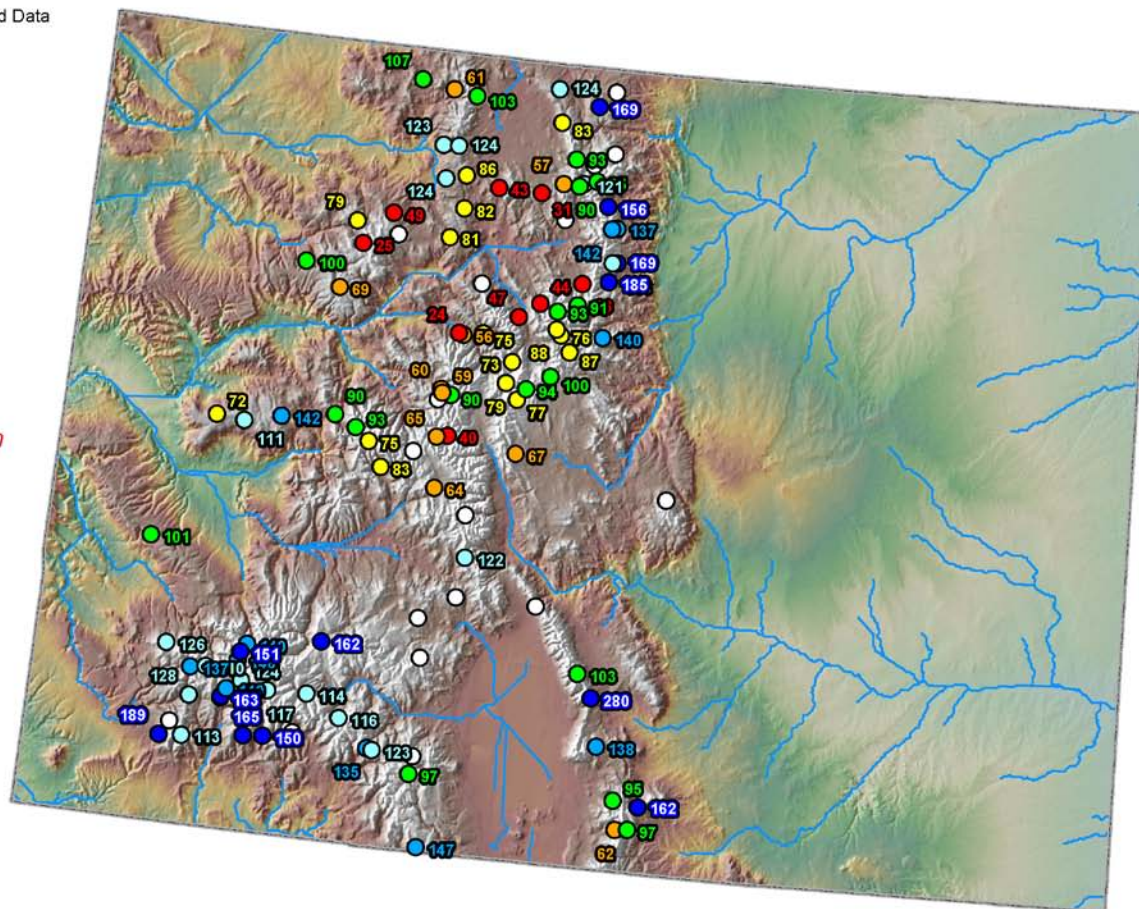
Current as of Feb 15, 2012

# Colorado SNOTEL Month-to-Date Precipitation

Percent of Average

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

*Provisional Data  
Subject to Revision*



Current as of Feb 15, 2012

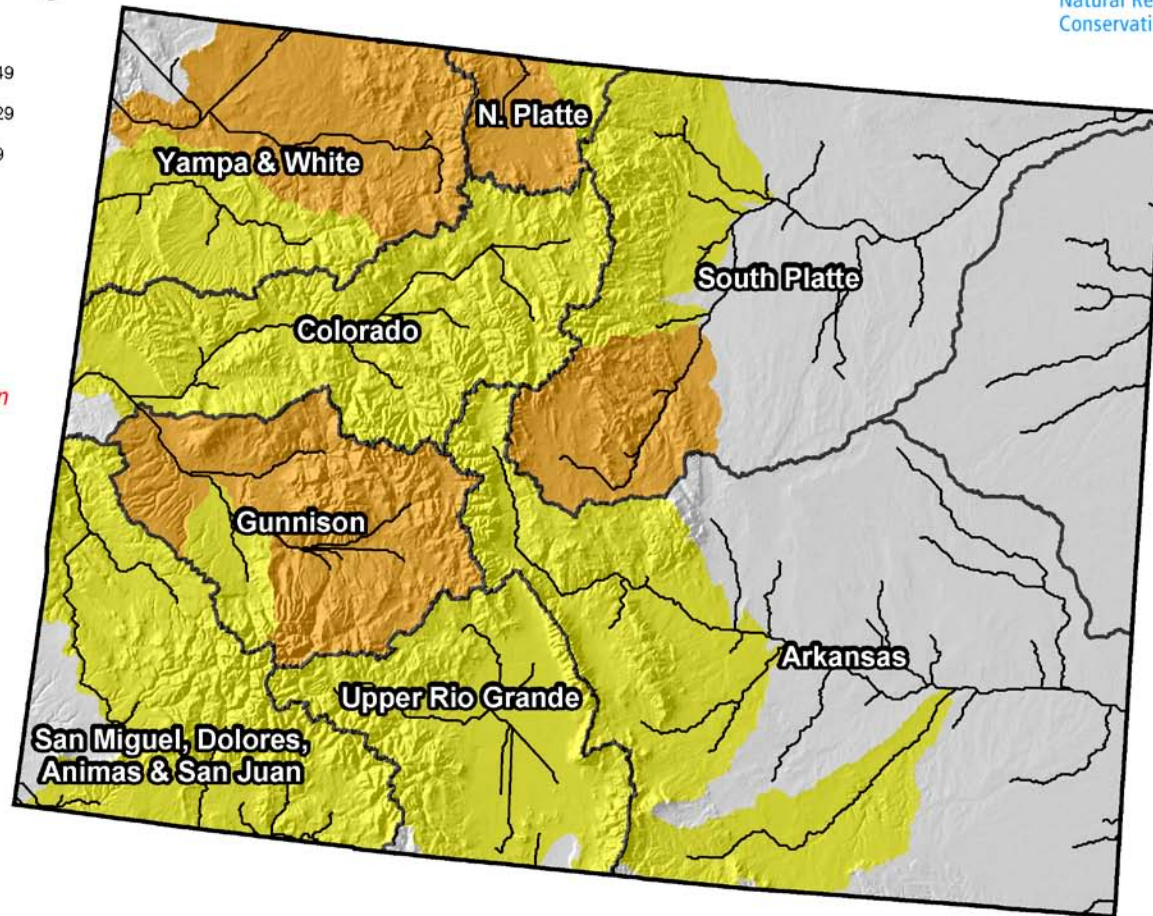
# Colorado Streamflow Forecast Map



## Percent of Average



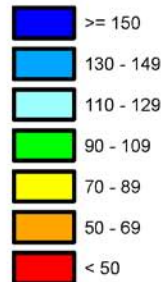
*Provisional Data  
Subject to Revision*



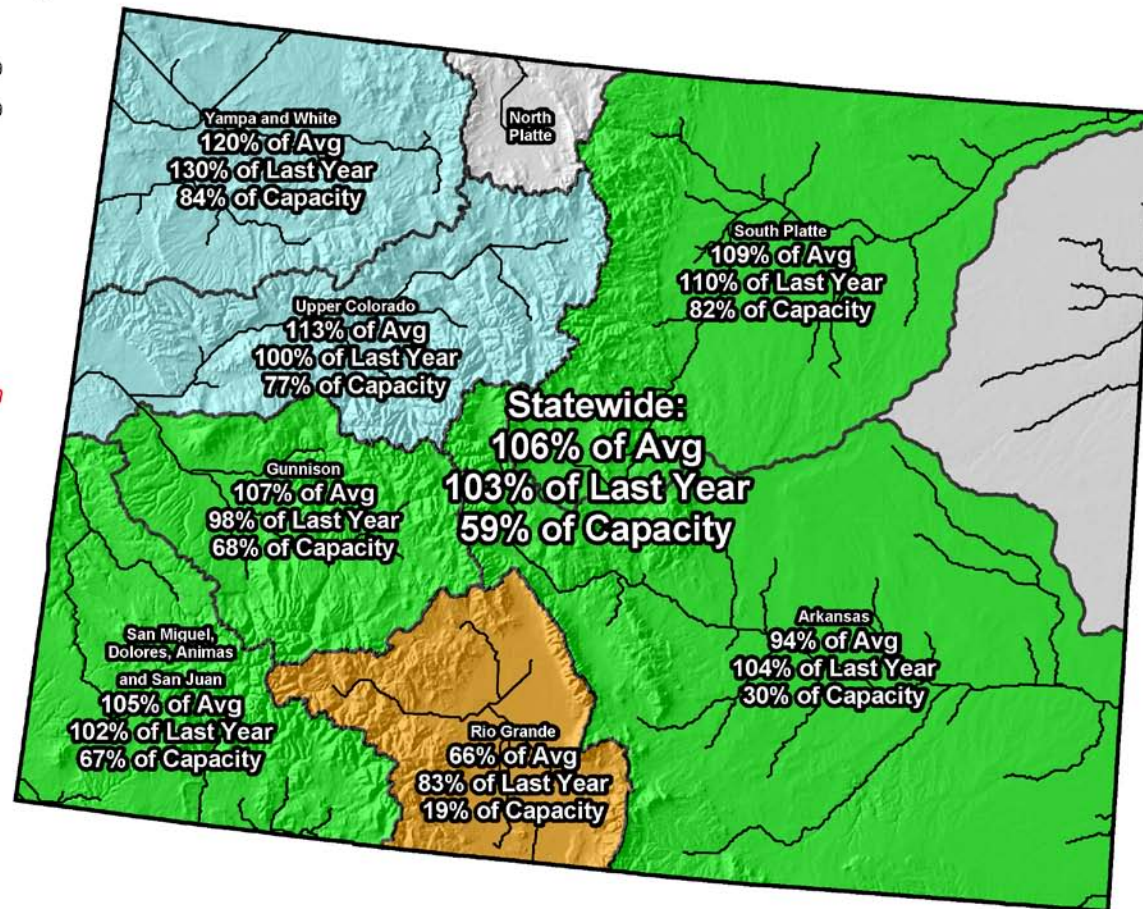
Current as of February 1, 2012

# Colorado Reservoir Storage Map

## Percent of Average

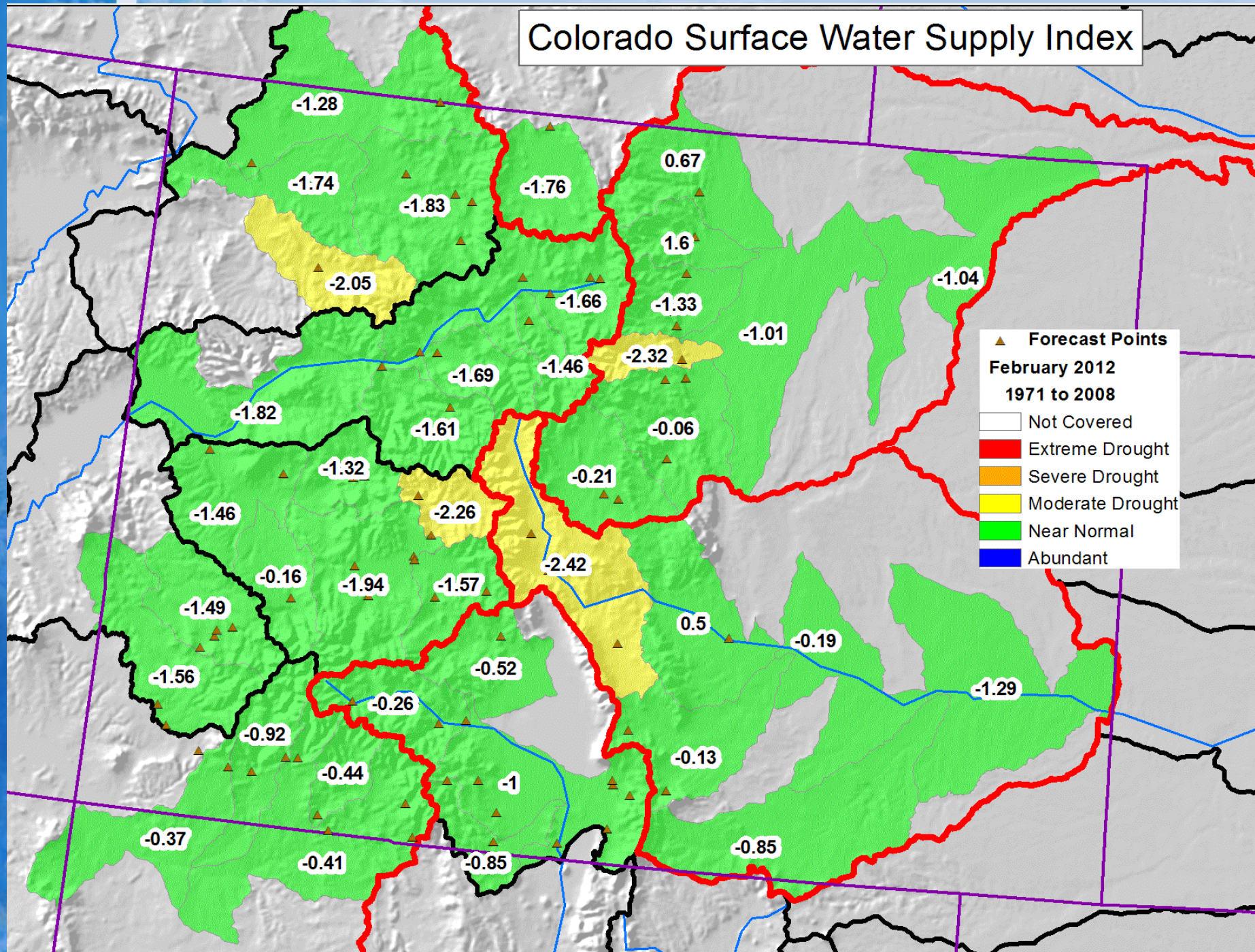


*Provisional Data  
Subject to Revision*



End of January 2012

# Colorado Surface Water Supply Index



# The 2012 Water Year

- **October** - Well above average precipitation in all basins. Upper Rio Grande, Arkansas and South Platte basins had above average SWE also. All other basins had below average SWE.
- **November** - Cumulative precipitation was near or above average in all basins. November was drier than average across the state, except for in the Yampa/White. Statewide, SWE was tracking along at average until the last week in Nov when things dried up and ended Nov below average.
- **December** - DRY across the state. The only basin to see average precip during Dec was Upper Rio Grande. The Yampa/White recorded just 29% of average precip. SWE as of Jan 1 was below average in all basins. The Arkansas & Upper Rio basins were near average (~90%). Yampa/White was at just 57%.
- **January** - Dry until ~16<sup>th</sup> across the state. The Gunnison and Colorado basins saw well above average snowfall the last half of Jan. All other basins returned to typical accumulation. Feb 1 measured SWE was still below average in all basins. Southern basins had dropped 13 -15 percentage point since Jan 1. Precip in Gunnison and Colorado basins was near average in Jan all other basins were below average.
- **February** – Statewide we have had average snowfall this month. Colorado basin is the only basin recording below average SWE so far this month. We need well above average conditions to boost the snowpack to normal