

NRCS – Snow Survey & Water Supply Forecasting

Mike Gillespie

Water Availability Task Force Meeting

February 25, 2010

The 2010 Water Year

October – Cold statewide with slightly above normal mountain precipitation. Good start to the winter snowpack.

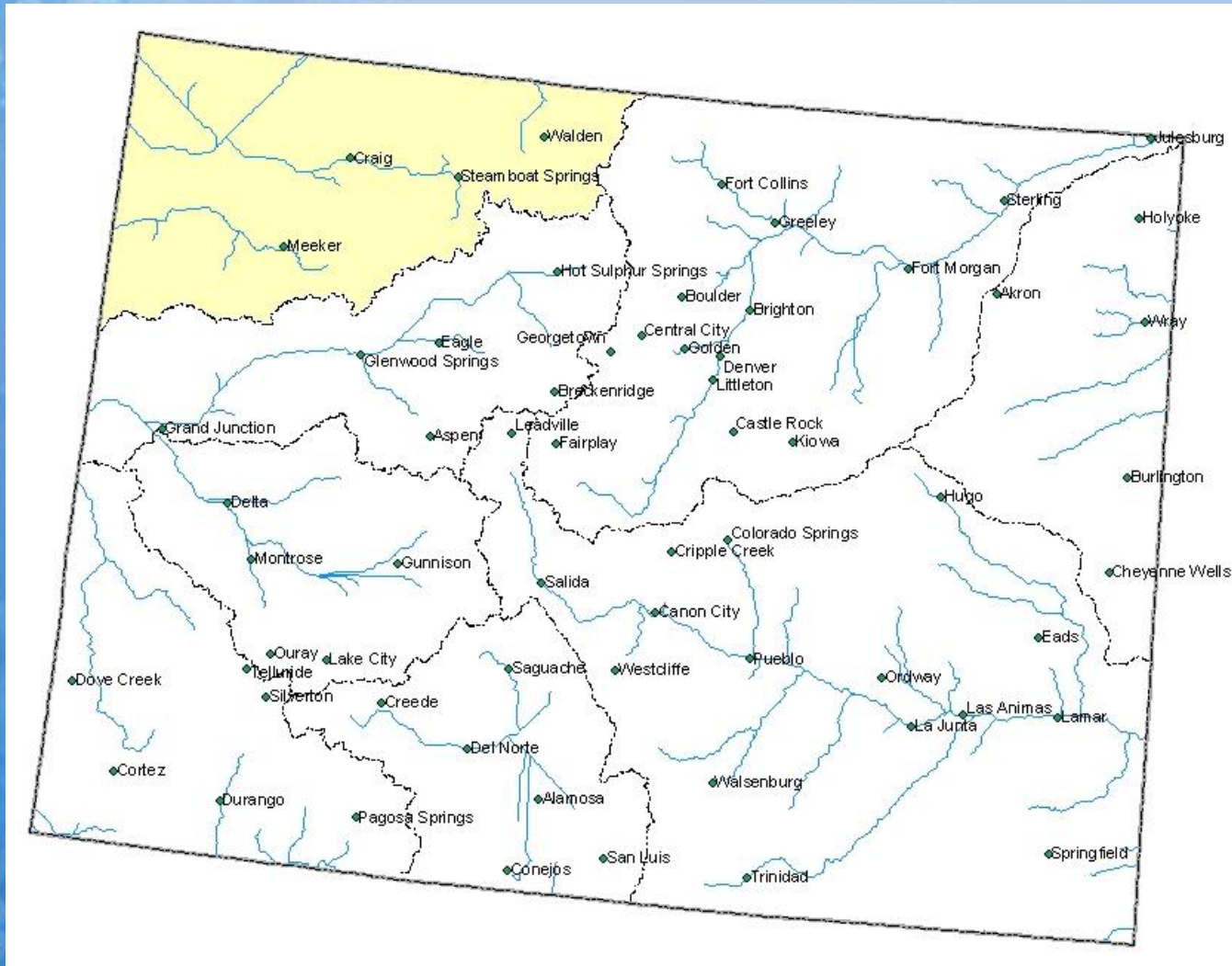
November – Warm and dry conditions statewide. Mountain snowpack put on hold.

December – Cold again with improved snowfall especially across southern basins.

January – Warm and dry with a comeback during the last 10 days

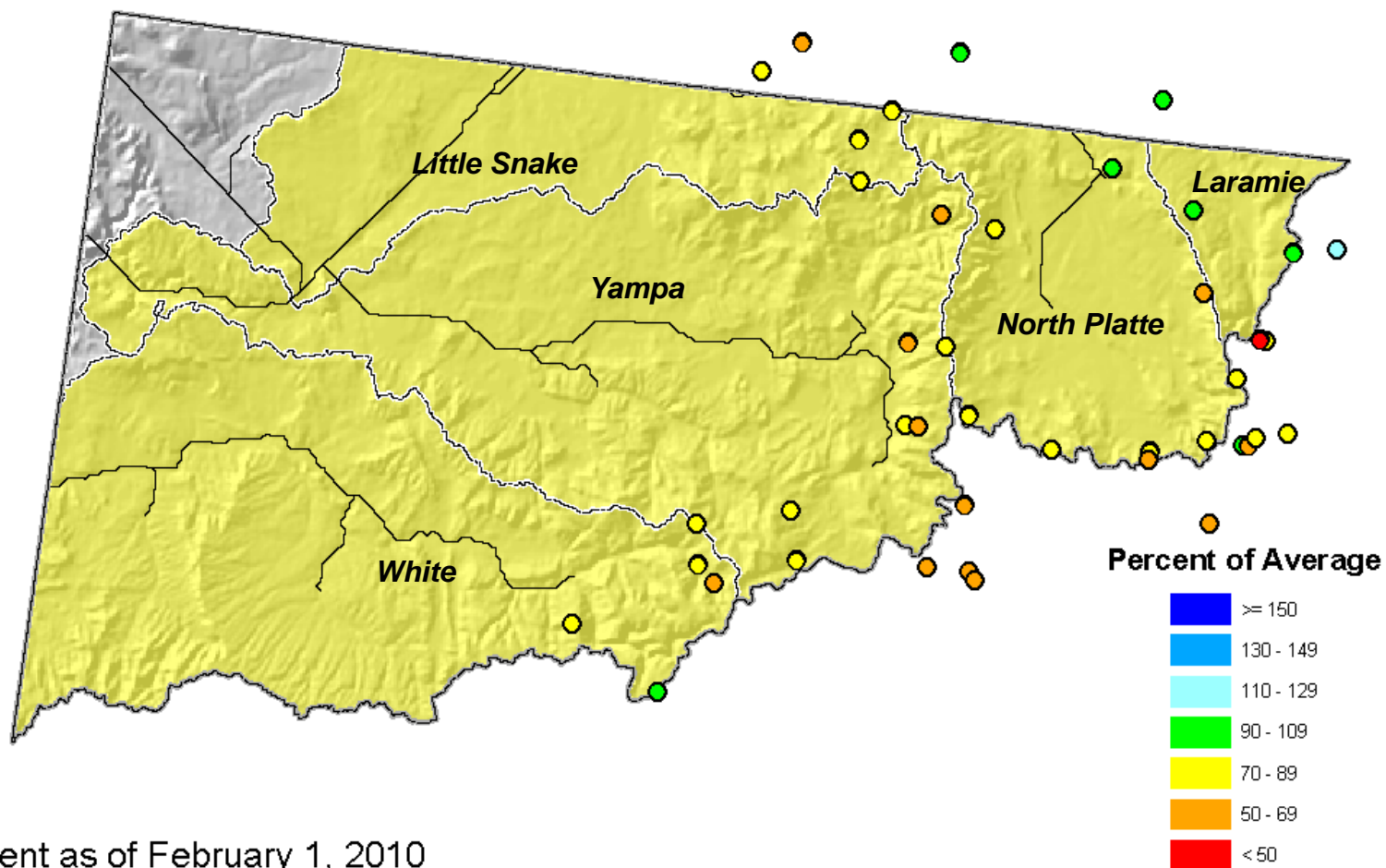
February – El Nino pattern continues...

Yampa, White & North Platte River Basins Summary



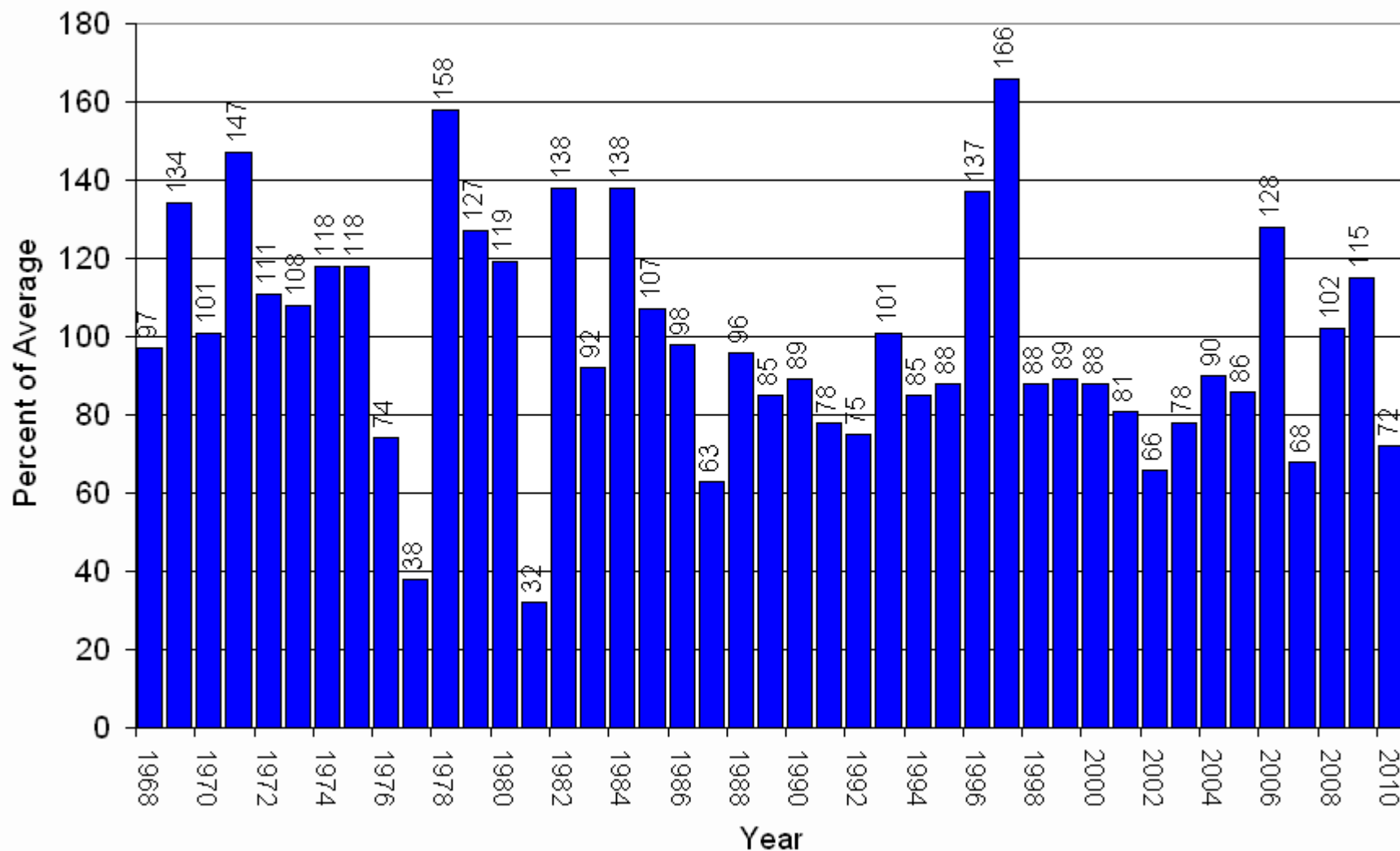
Yampa, White and North Platte River Basins Snowpack Map

*Provisional Data
Subject to Revision*



Current as of February 1, 2010

February 1 Total Yampa & White River Basins Snowpack

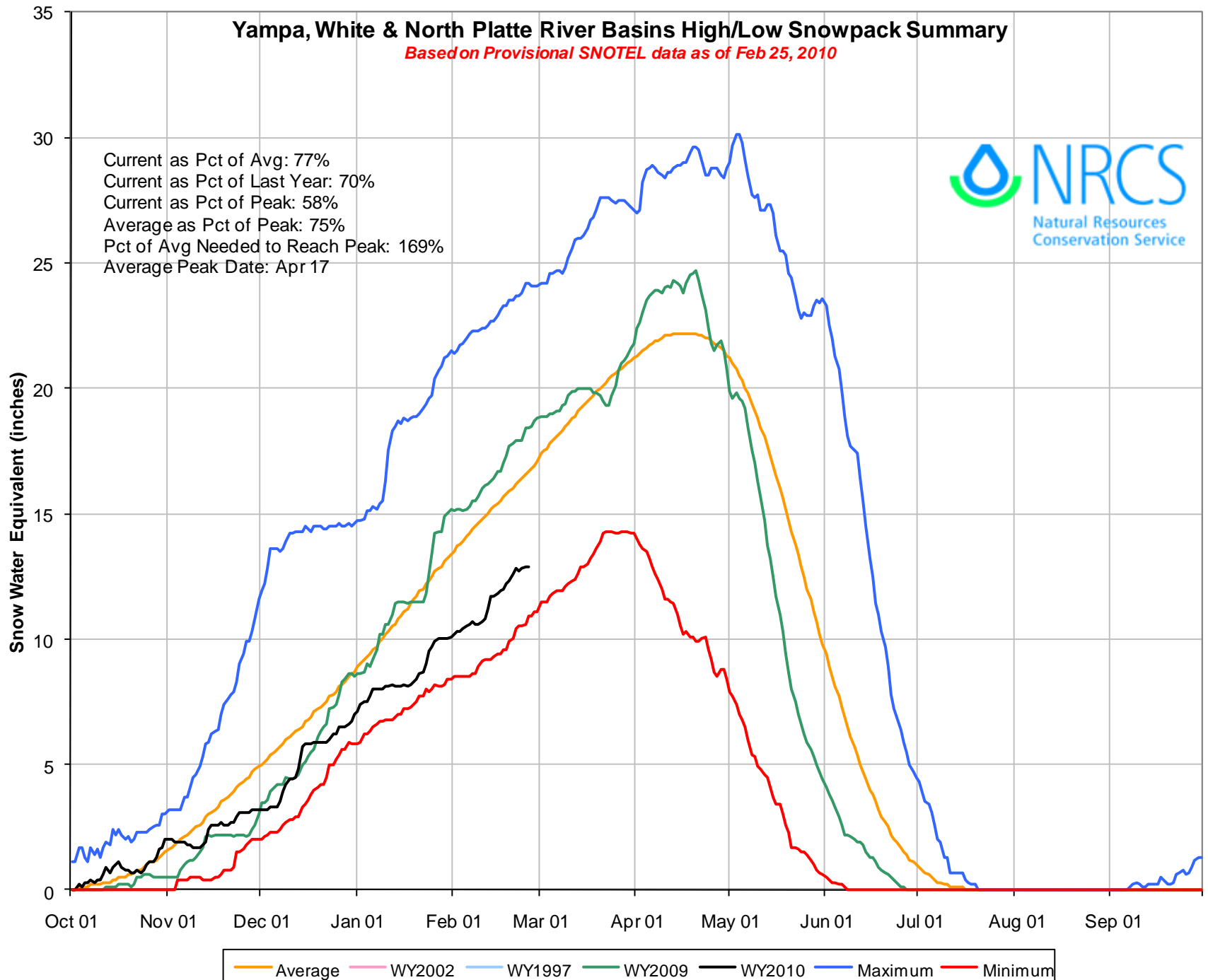


Yampa, White & North Platte River Basins High/Low Snowpack Summary

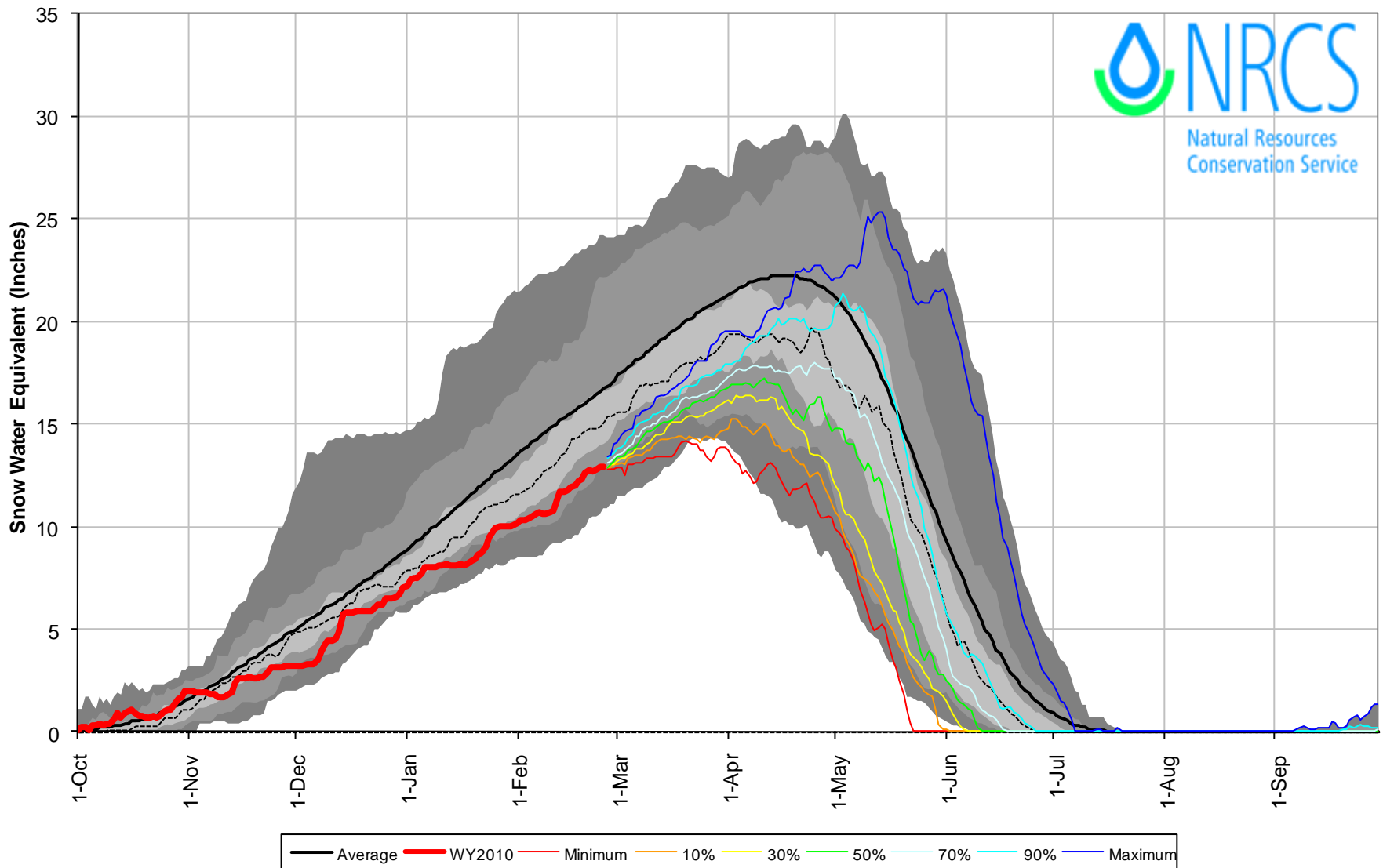
Based on Provisional SNOTEL data as of Feb 25, 2010



Current as Pct of Avg: 77%
Current as Pct of Last Year: 70%
Current as Pct of Peak: 58%
Average as Pct of Peak: 75%
Pct of Avg Needed to Reach Peak: 169%
Average Peak Date: Apr 17

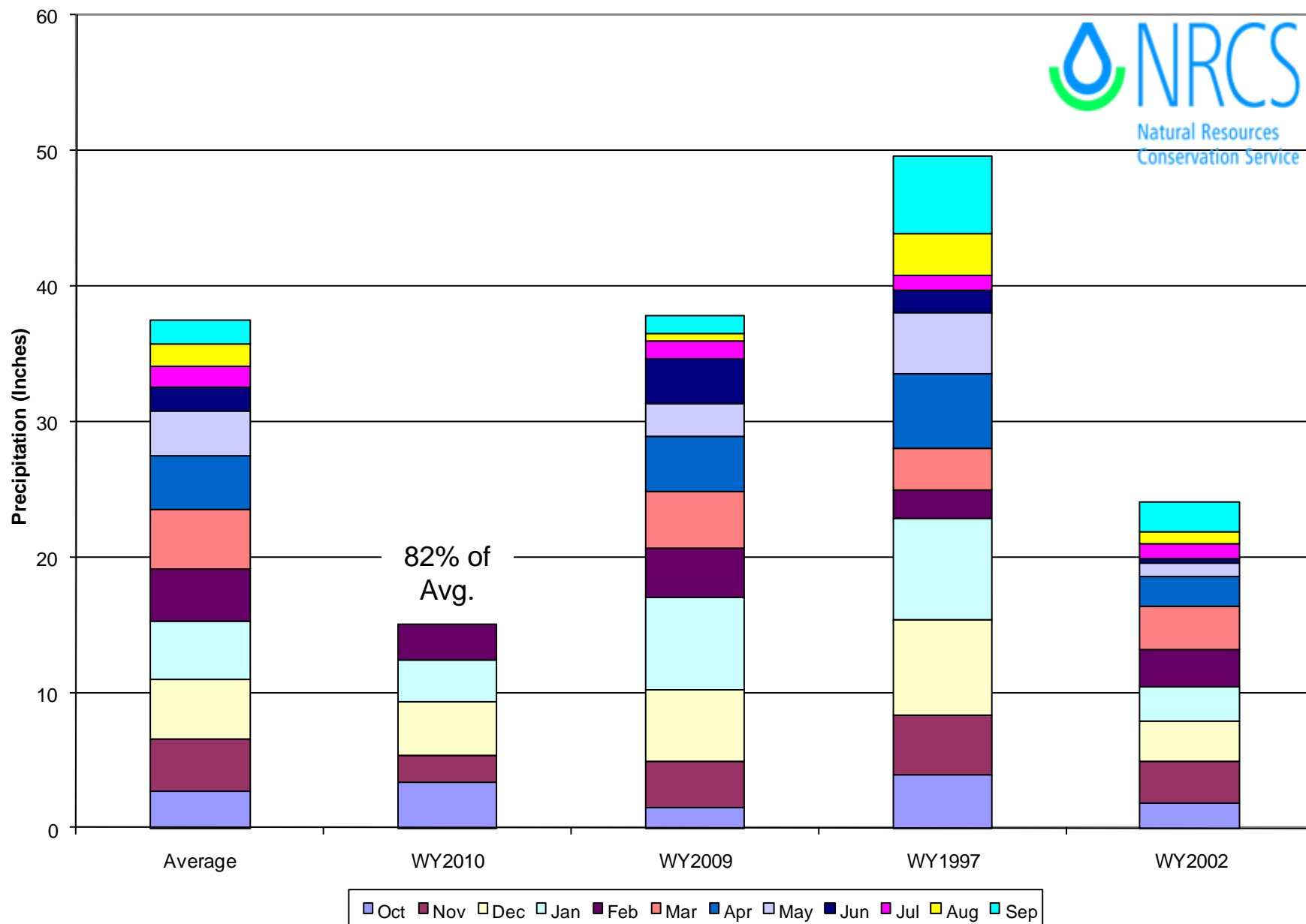


Based on Provisional SNOTEL Data as of Feb 25, 2010



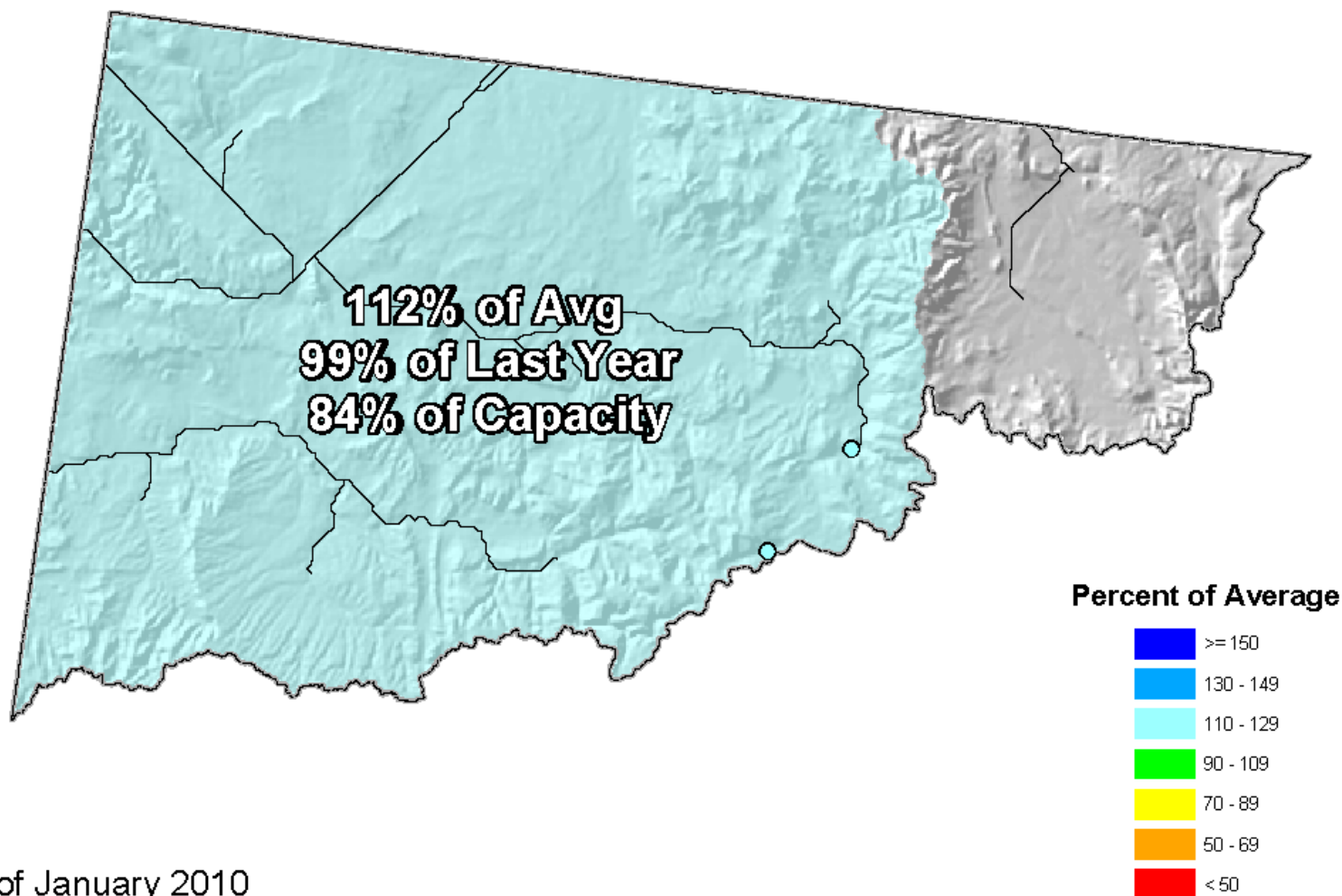
Yampa and White River Basins High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Feb 25, 2010



Yampa & White River Basins Reservoir Storage Map

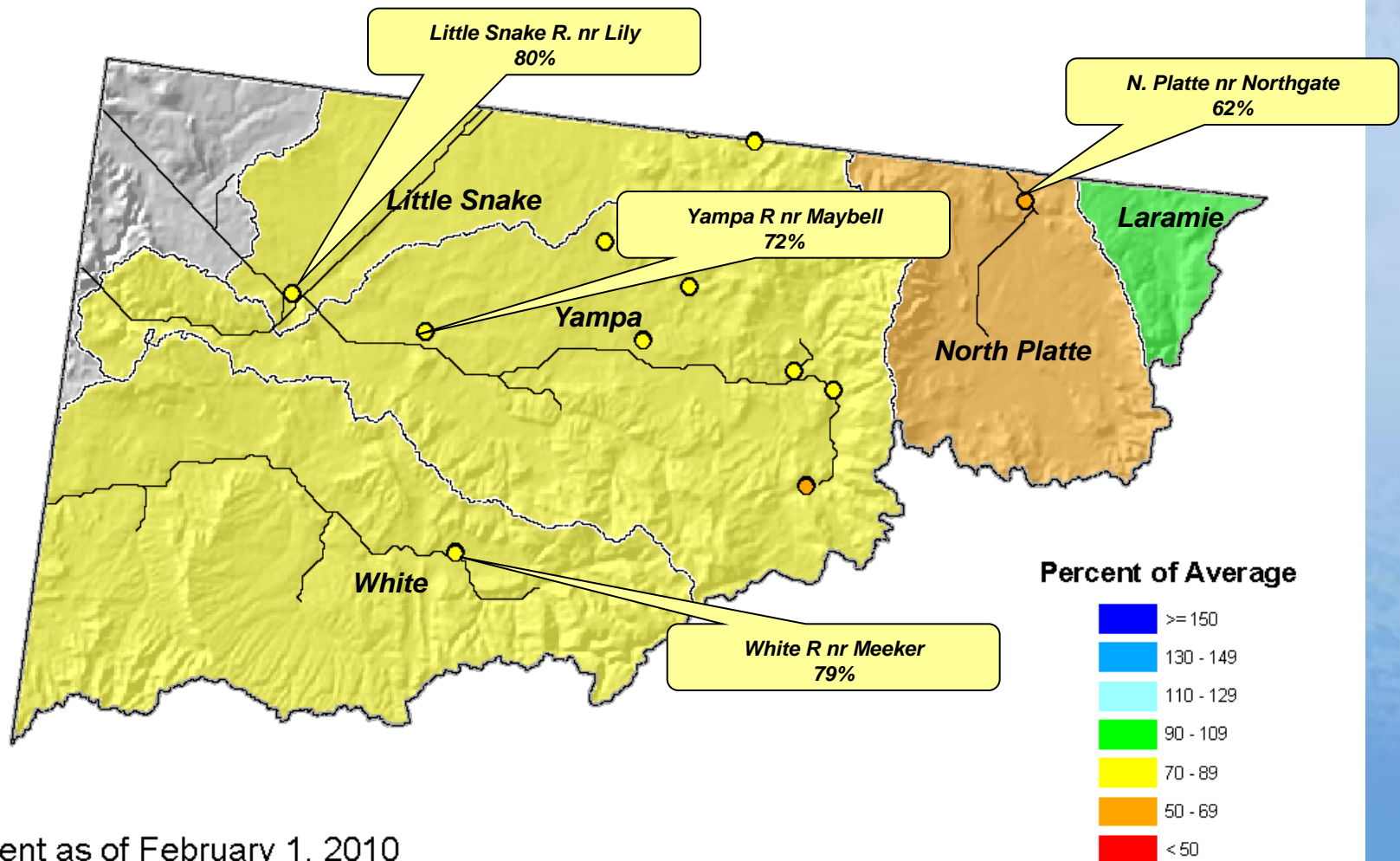
*Provisional Data
Subject to Revision*



End of January 2010

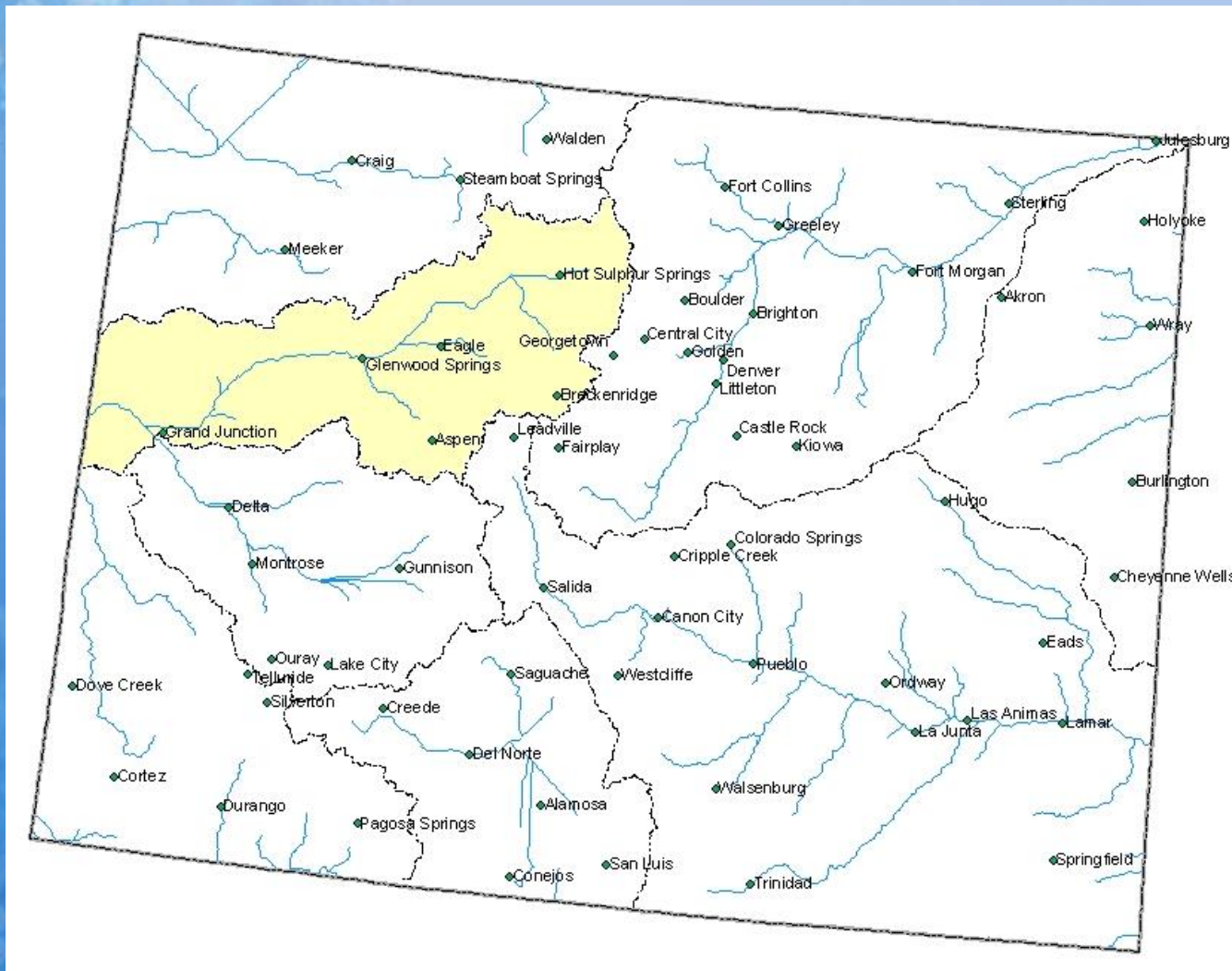
Yampa, White and North Platte River Basins Streamflow Map

*Provisional Data
Subject to Revision*



Current as of February 1, 2010

Colorado River Basin Summary

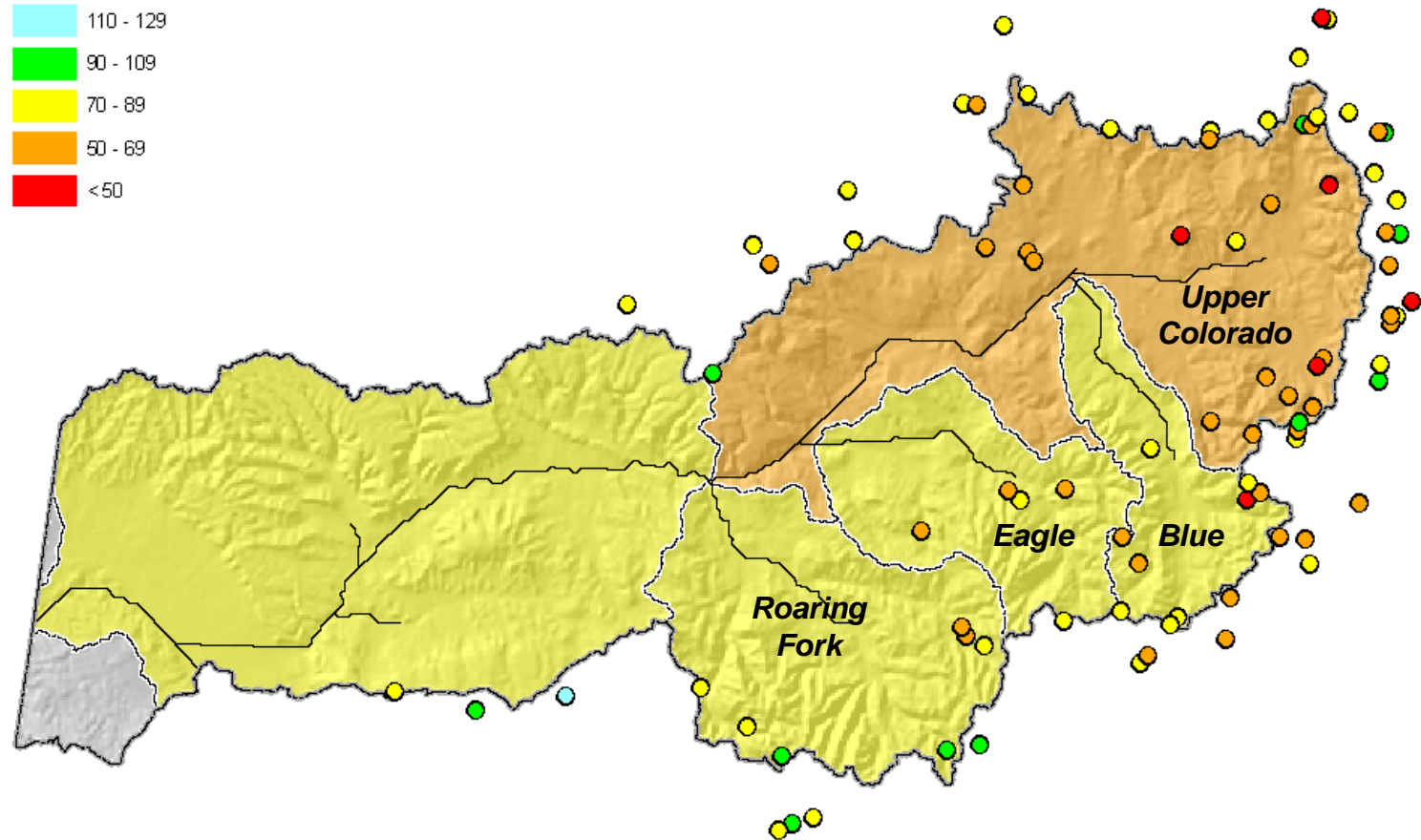


Colorado River Basin Snowpack Map

Percent of Average

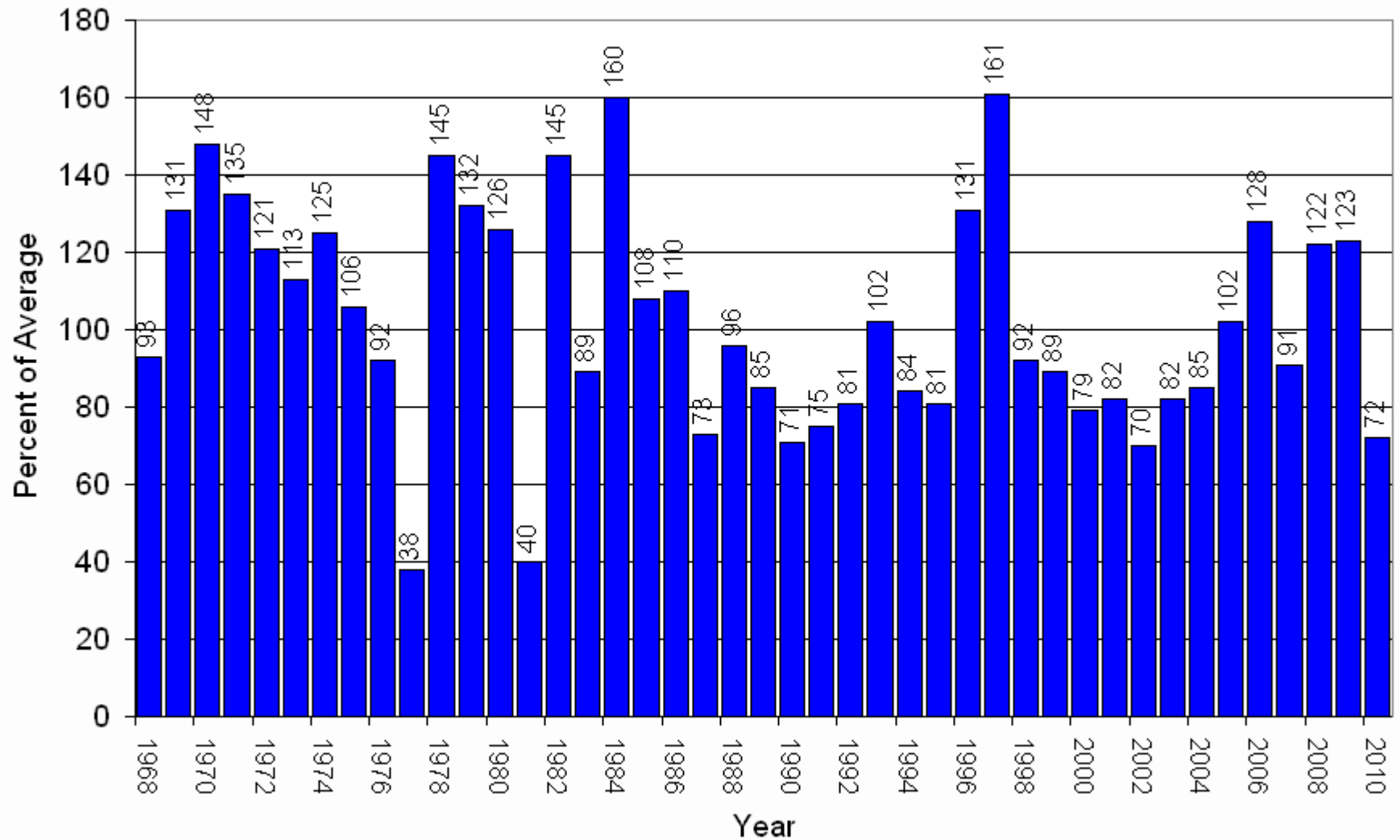


*Provisional Data
Subject to Revision*



Current as of February 1, 2010

February 1 Total Colorado River Basin Snowpack

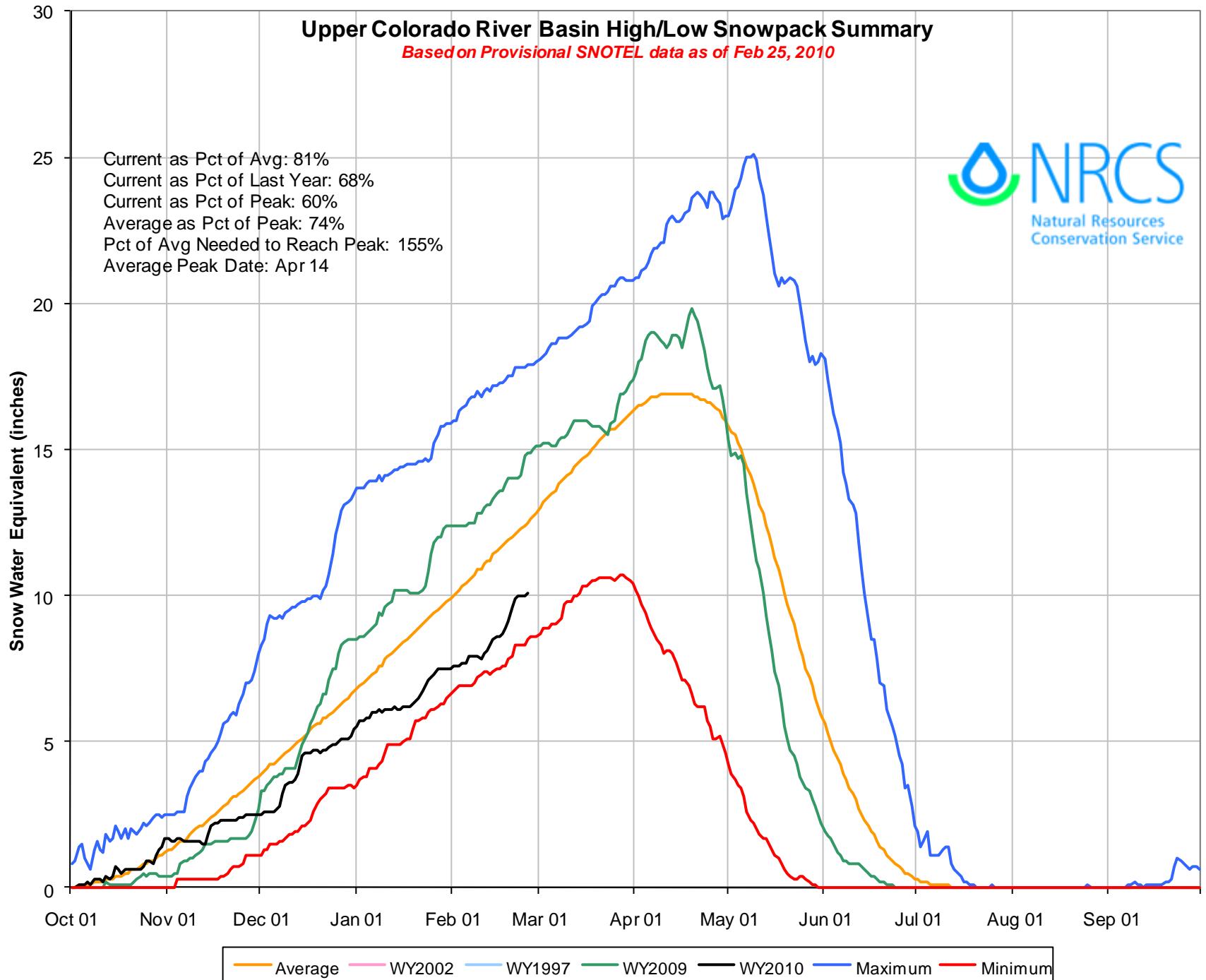


Upper Colorado River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Feb 25, 2010

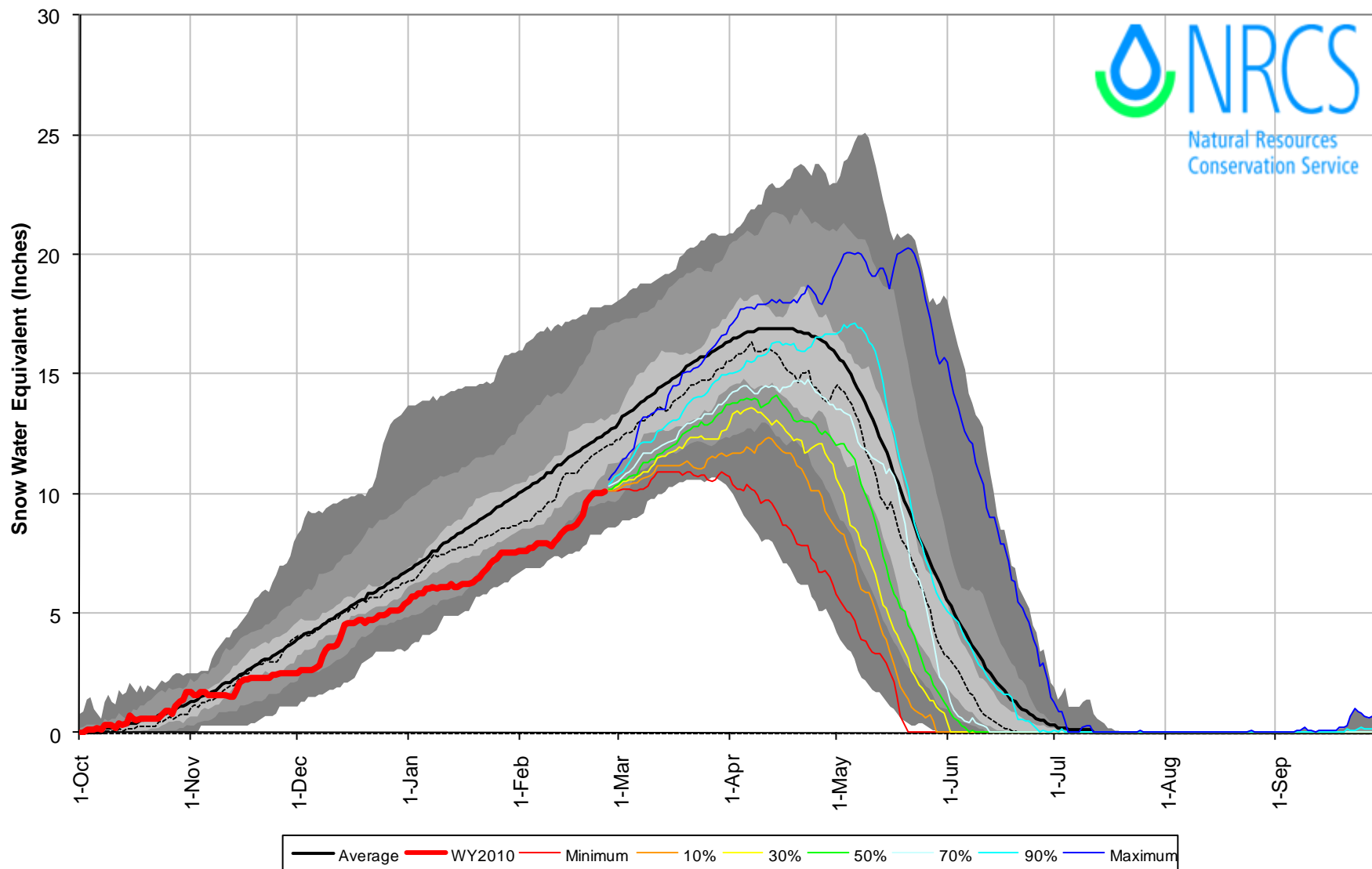


Current as Pct of Avg: 81%
Current as Pct of Last Year: 68%
Current as Pct of Peak: 60%
Average as Pct of Peak: 74%
Pct of Avg Needed to Reach Peak: 155%
Average Peak Date: Apr 14



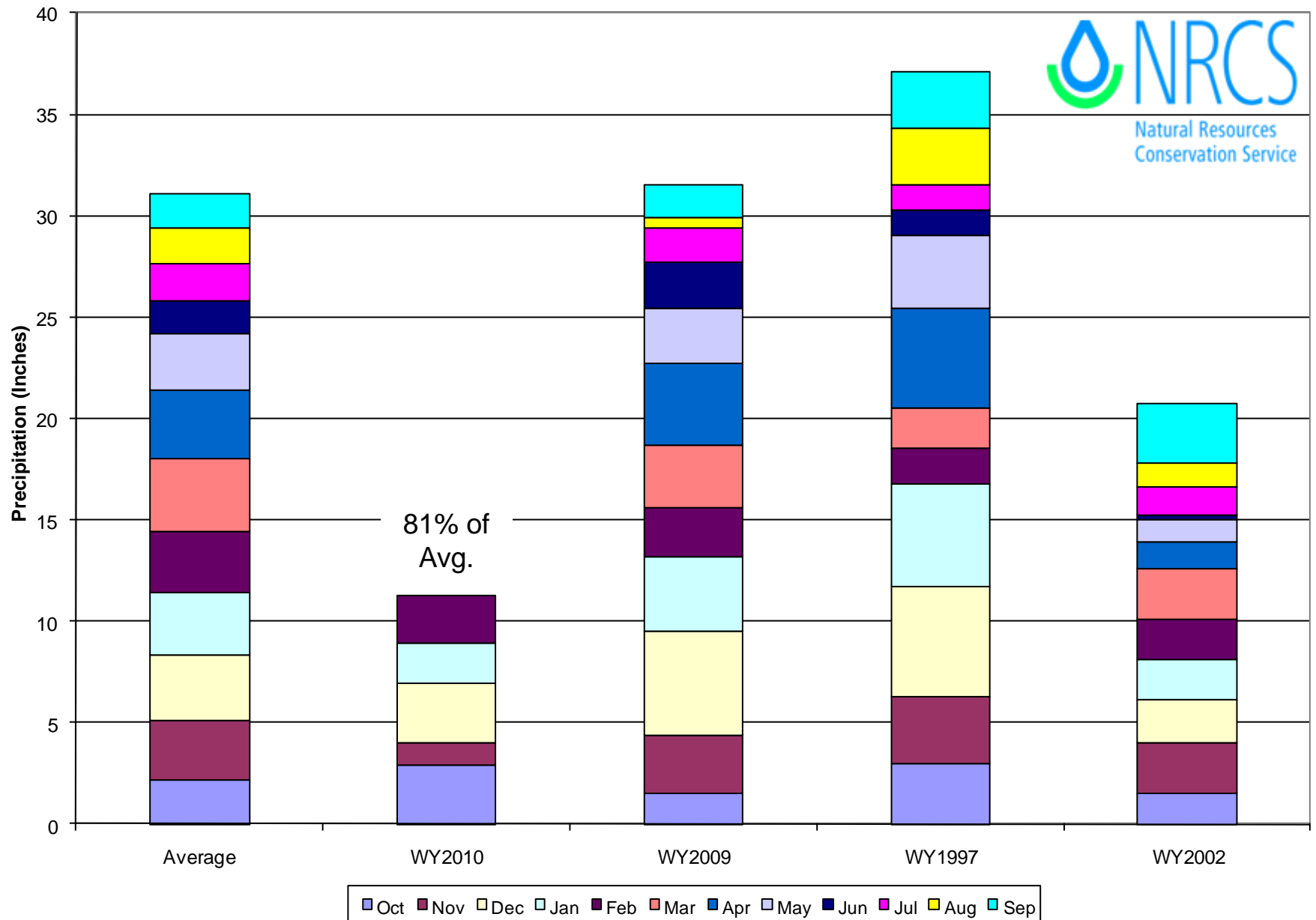
Colorado River Basin with Non-Exceedence Projections

Based on Provisional SNOTEL Data as of Feb 25, 2010



Upper Colorado River Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Feb 25, 2010

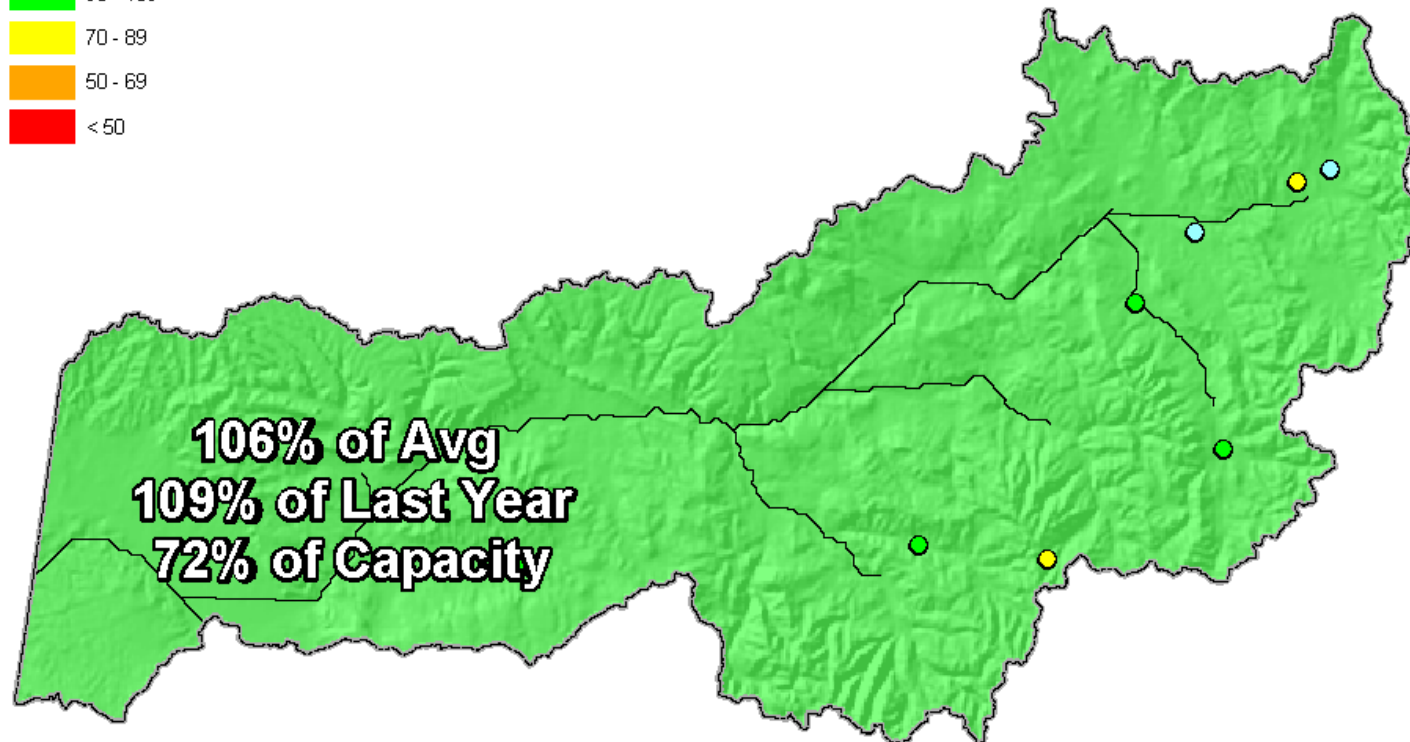


Colorado River Basin Reservoir Storage Map

Percent of Average



*Provisional Data
Subject to Revision*



End of January 2010

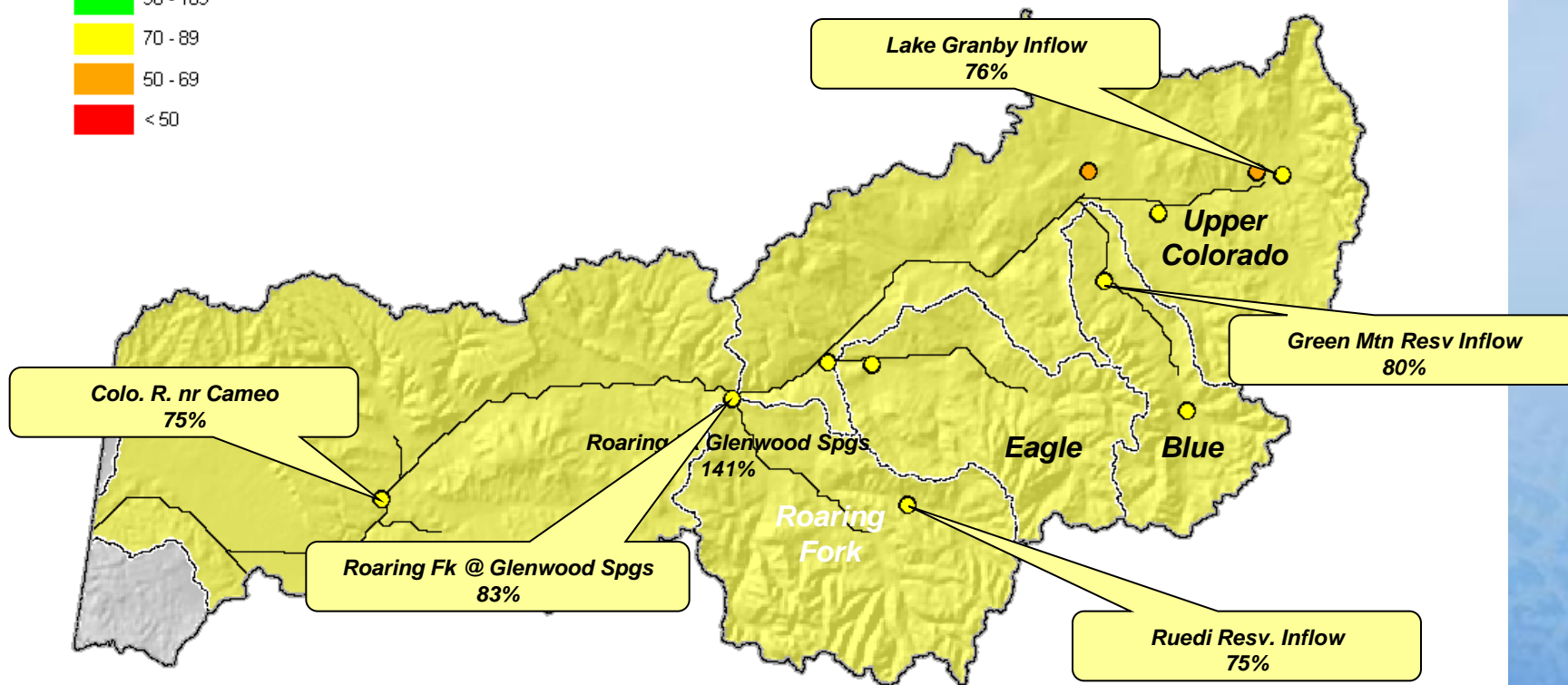
Lake Powell Storage: 58% of Capacity, 76% of Average, 107% of Last Year

Colorado River Basin Streamflow Forecast Map

Percent of Average



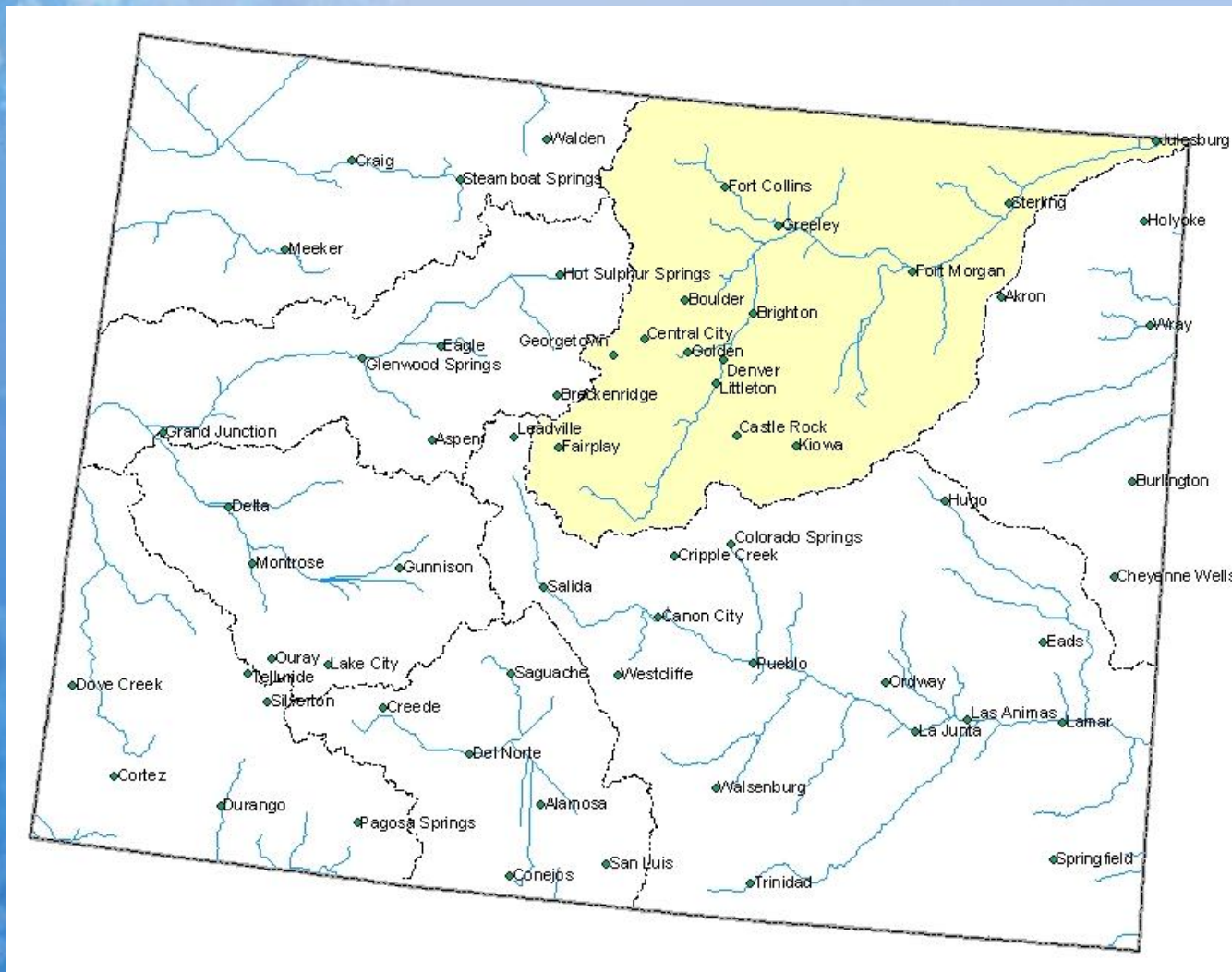
*Provisional Data
Subject to Revision*



Current as of February 1, 2010

Lake Powell April-July Inflow Forecast: 5.6 million acre feet, 76% of average.

South Platte River Basin Summary

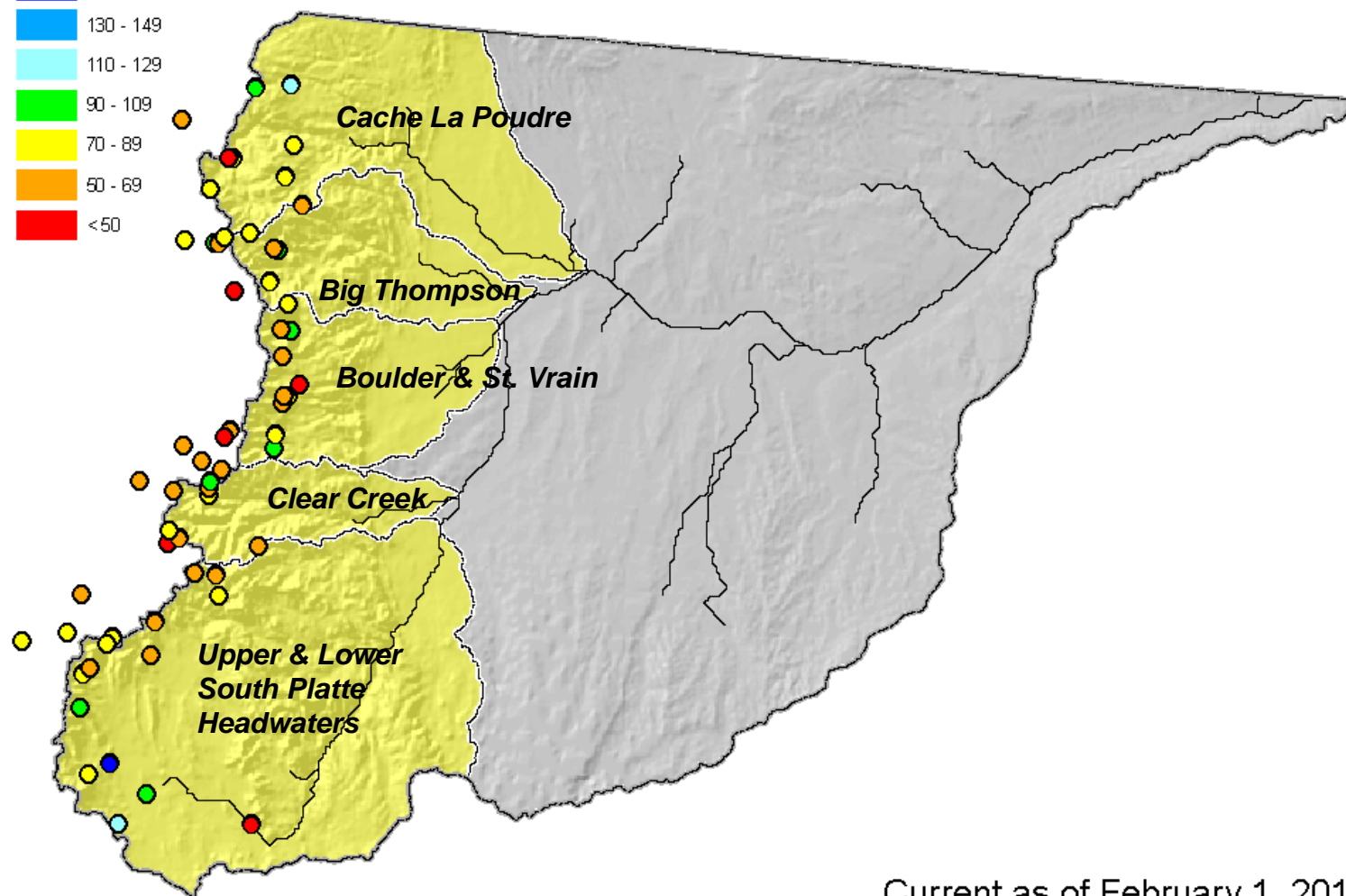


South Platte River Basin Snowpack Map

Percent of Average

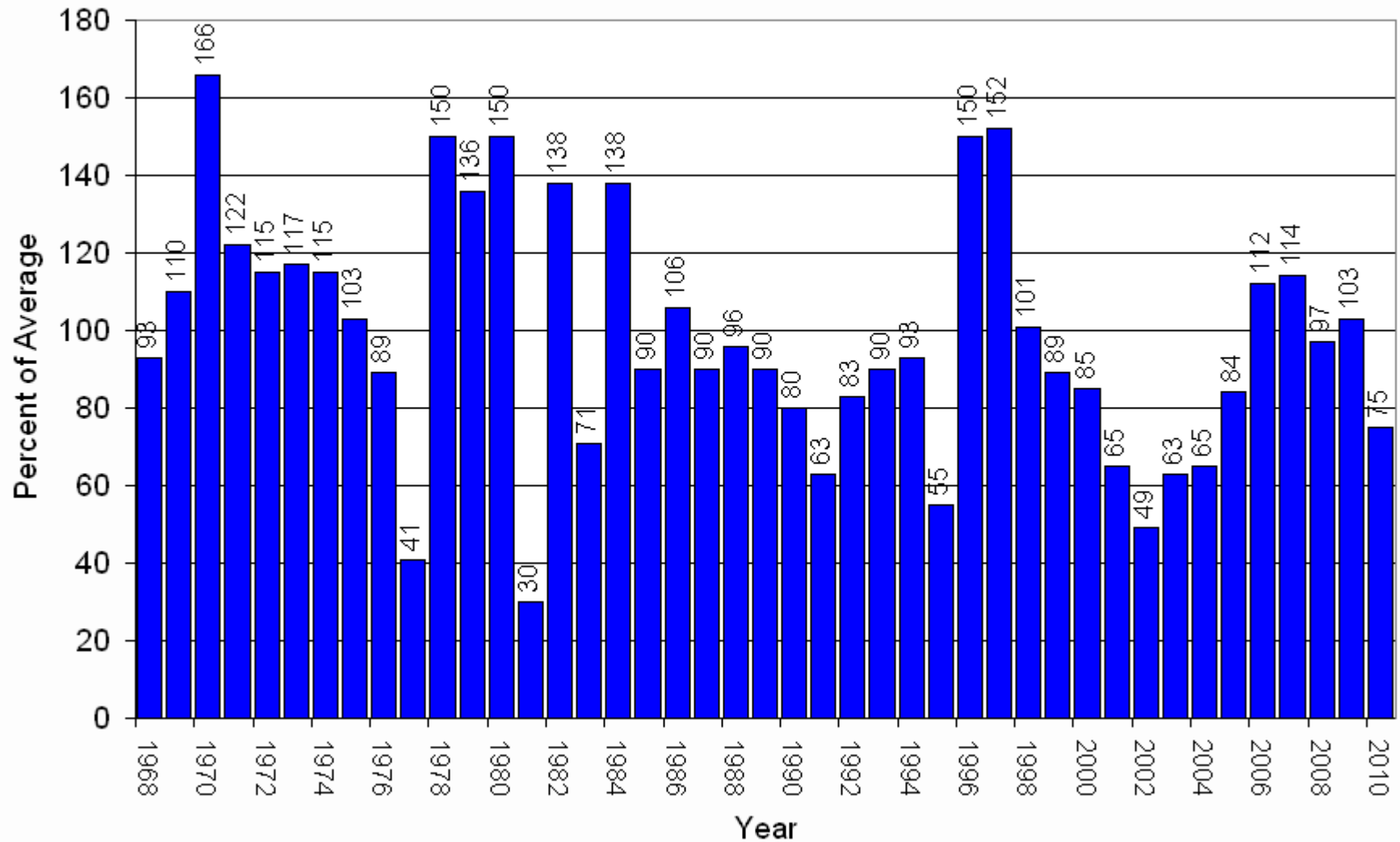


*Provisional Data
Subject to Revision*



Current as of February 1, 2010

February 1 Total South Platte River Basin Snowpack

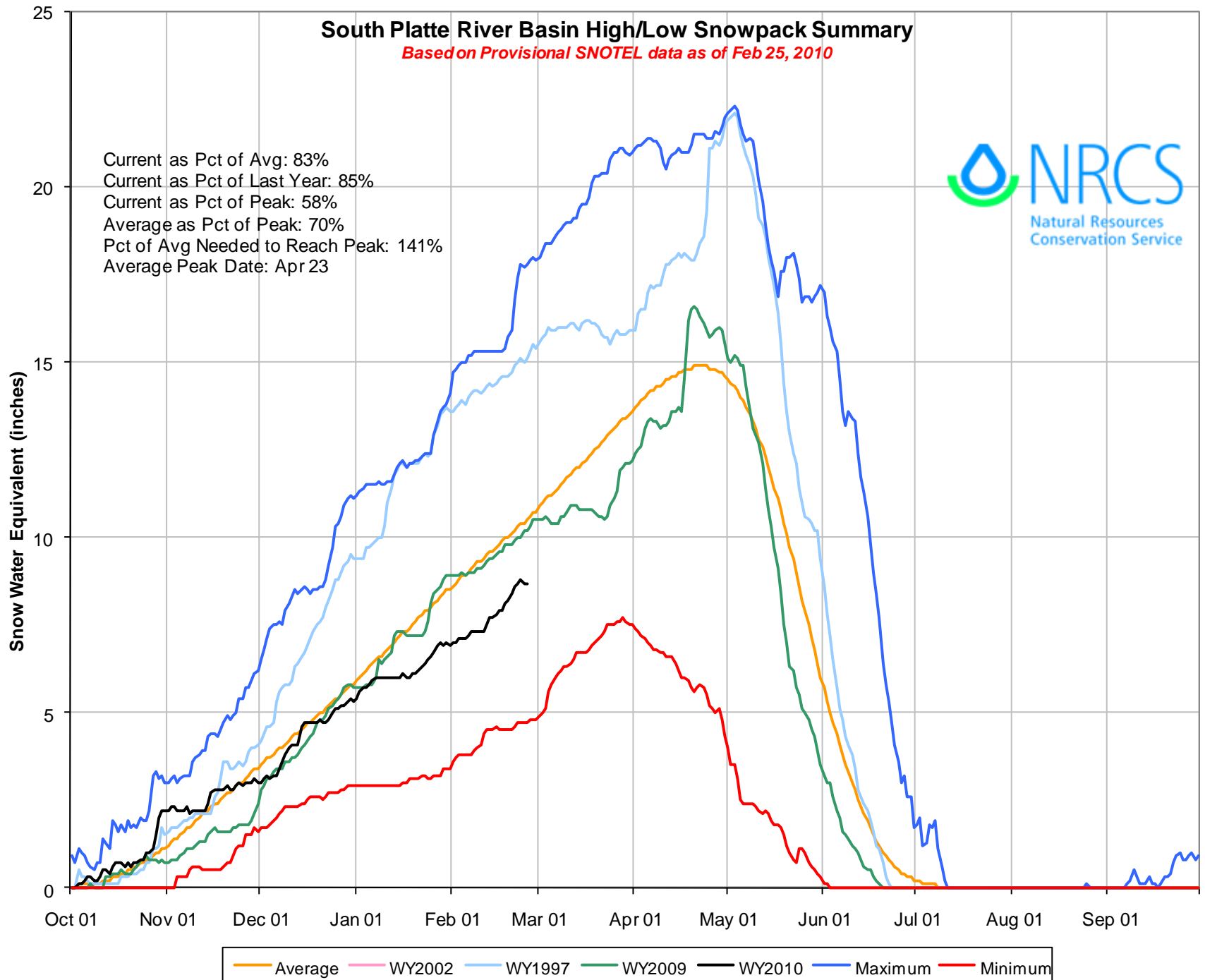


South Platte River Basin High/Low Snowpack Summary

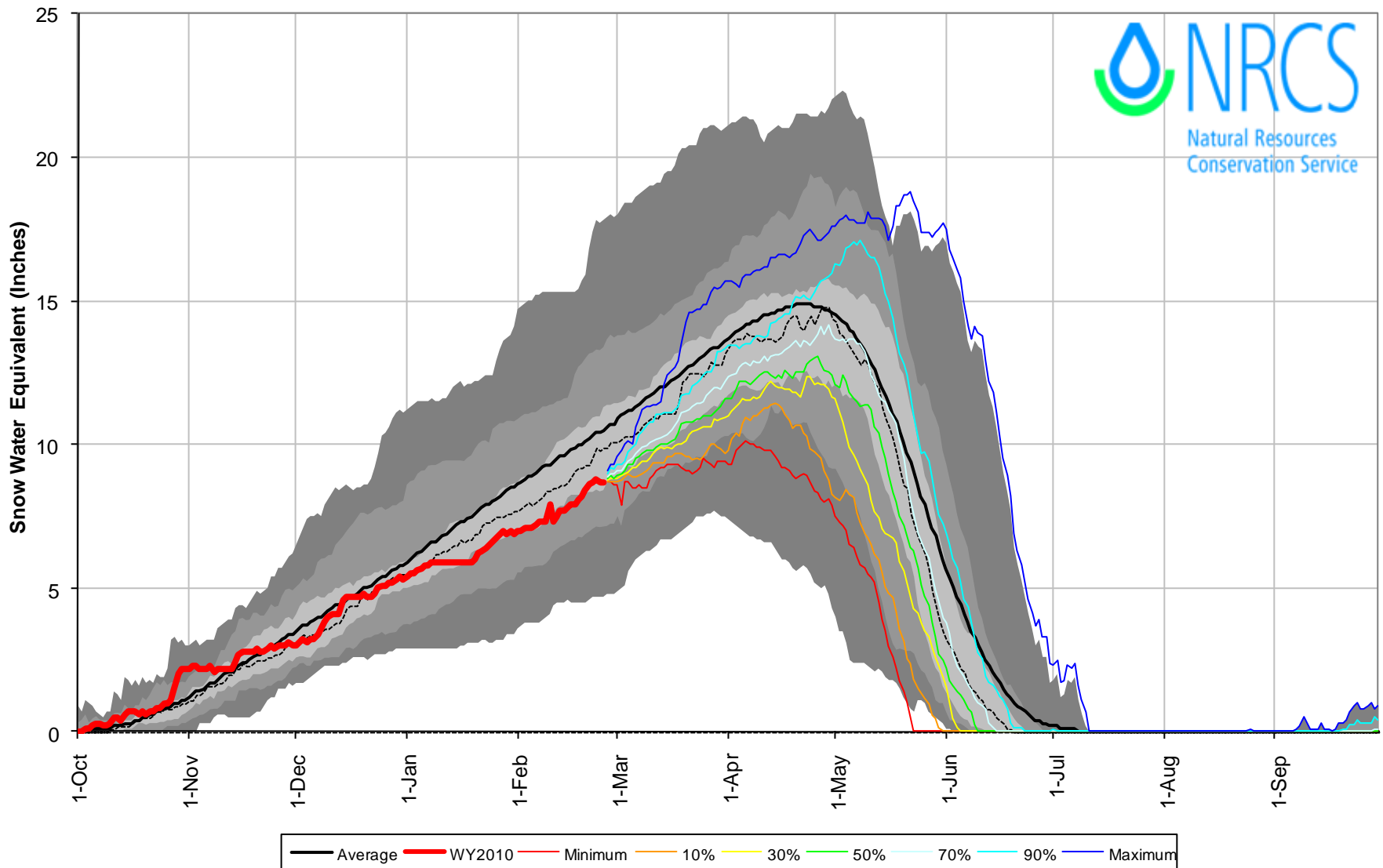
Based on Provisional SNOTEL data as of Feb 25, 2010



Current as Pct of Avg: 83%
Current as Pct of Last Year: 85%
Current as Pct of Peak: 58%
Average as Pct of Peak: 70%
Pct of Avg Needed to Reach Peak: 141%
Average Peak Date: Apr 23

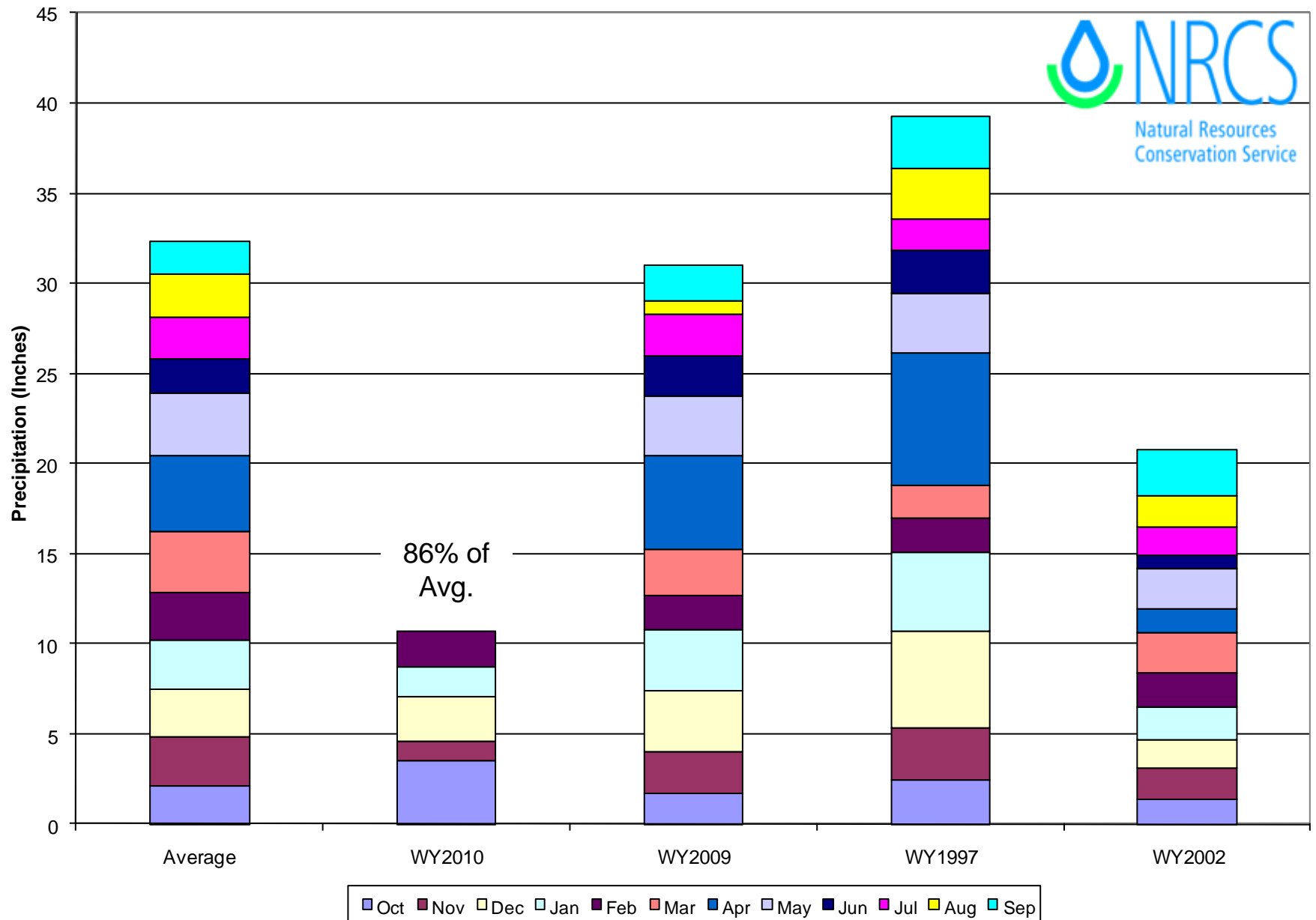


Based on Provisional SNOTEL Data as of Feb 25, 2010



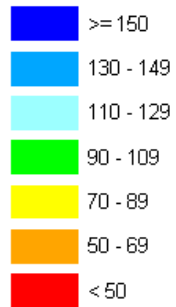
South Platte River Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Feb 25, 2010

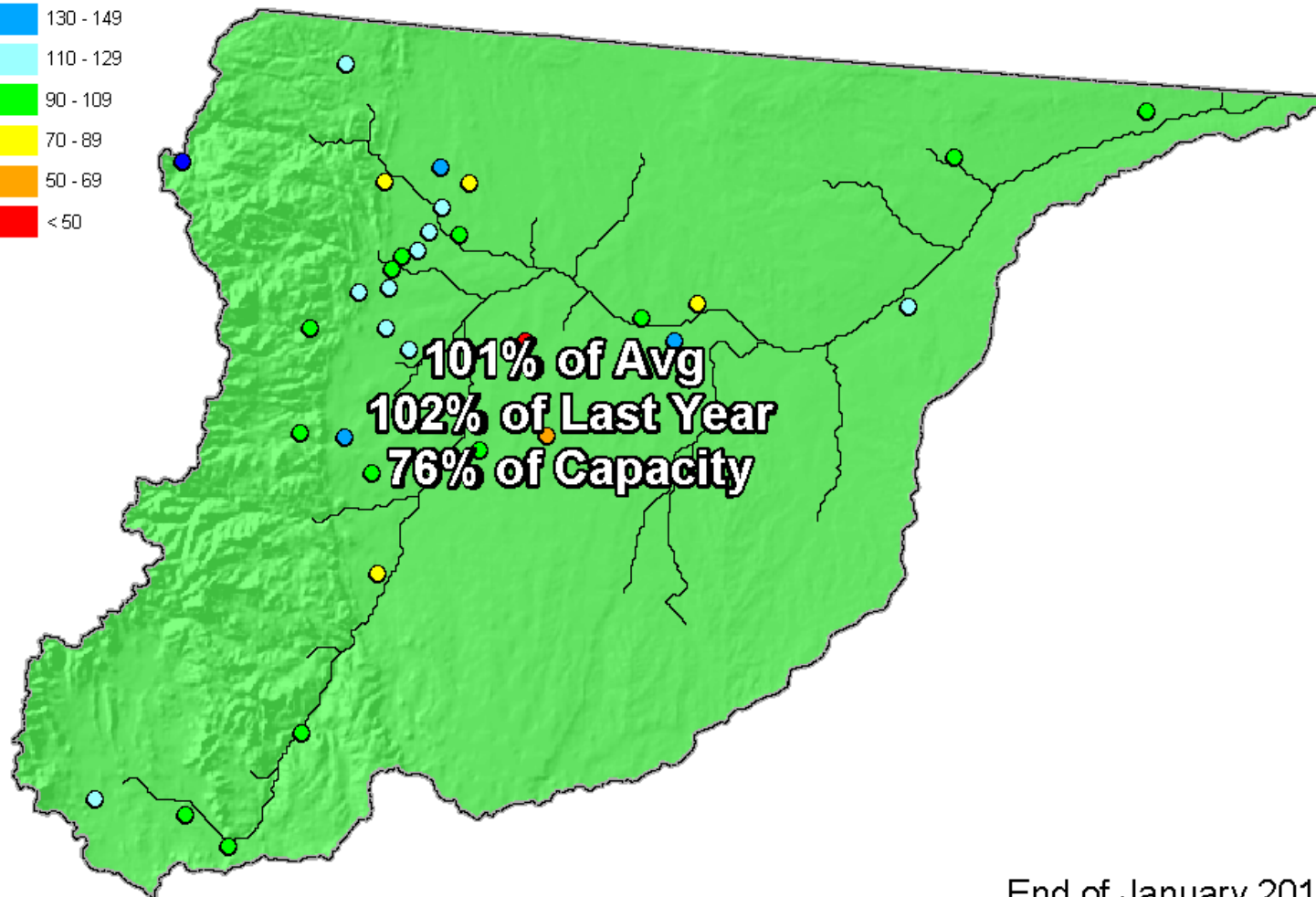


South Platte River Basin Reservoir Storage Map

Percent of Average



*Provisional Data
Subject to Revision*



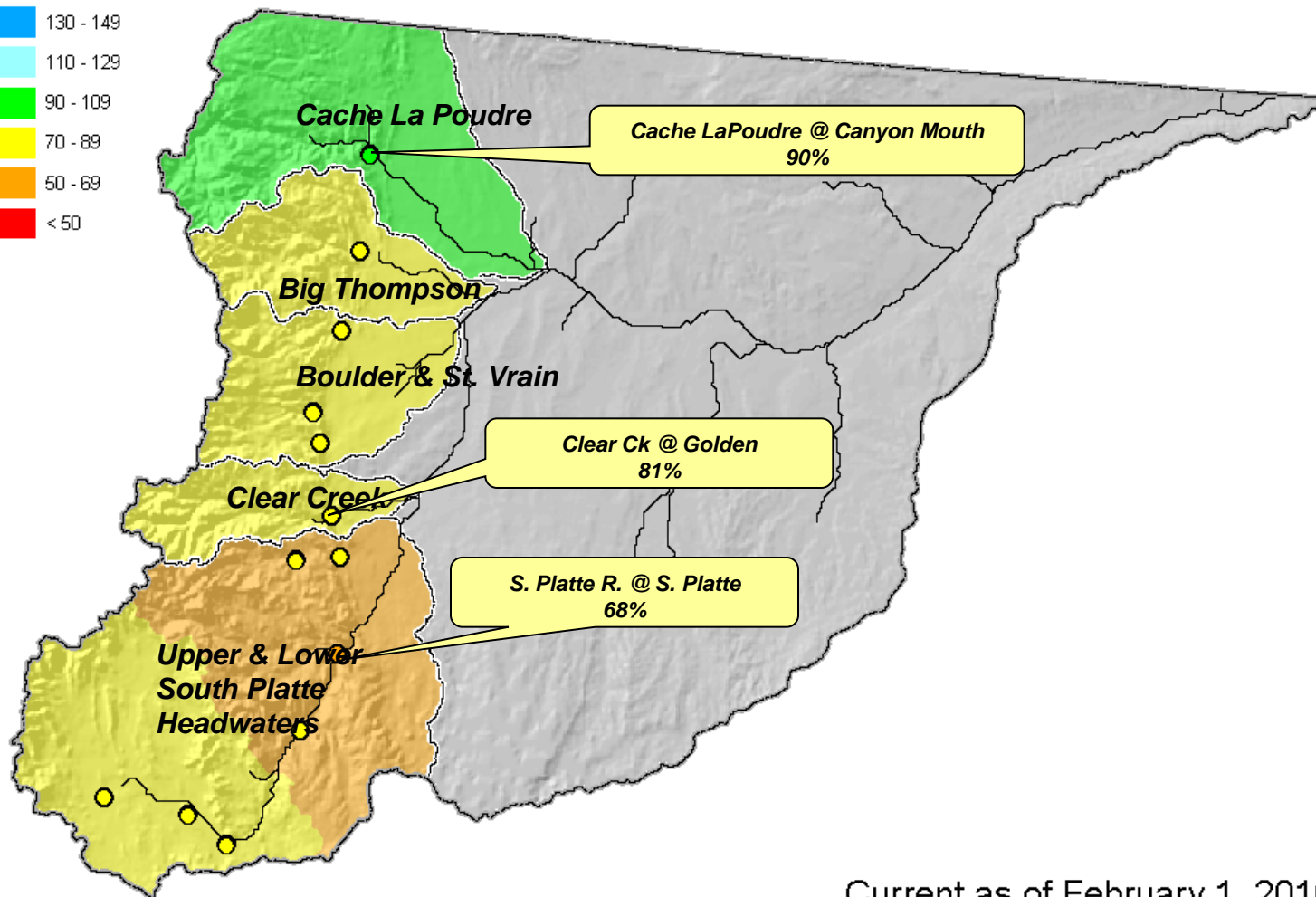
End of January 2010

South Platte River Basin Streamflow Forecast Map

Percent of Average

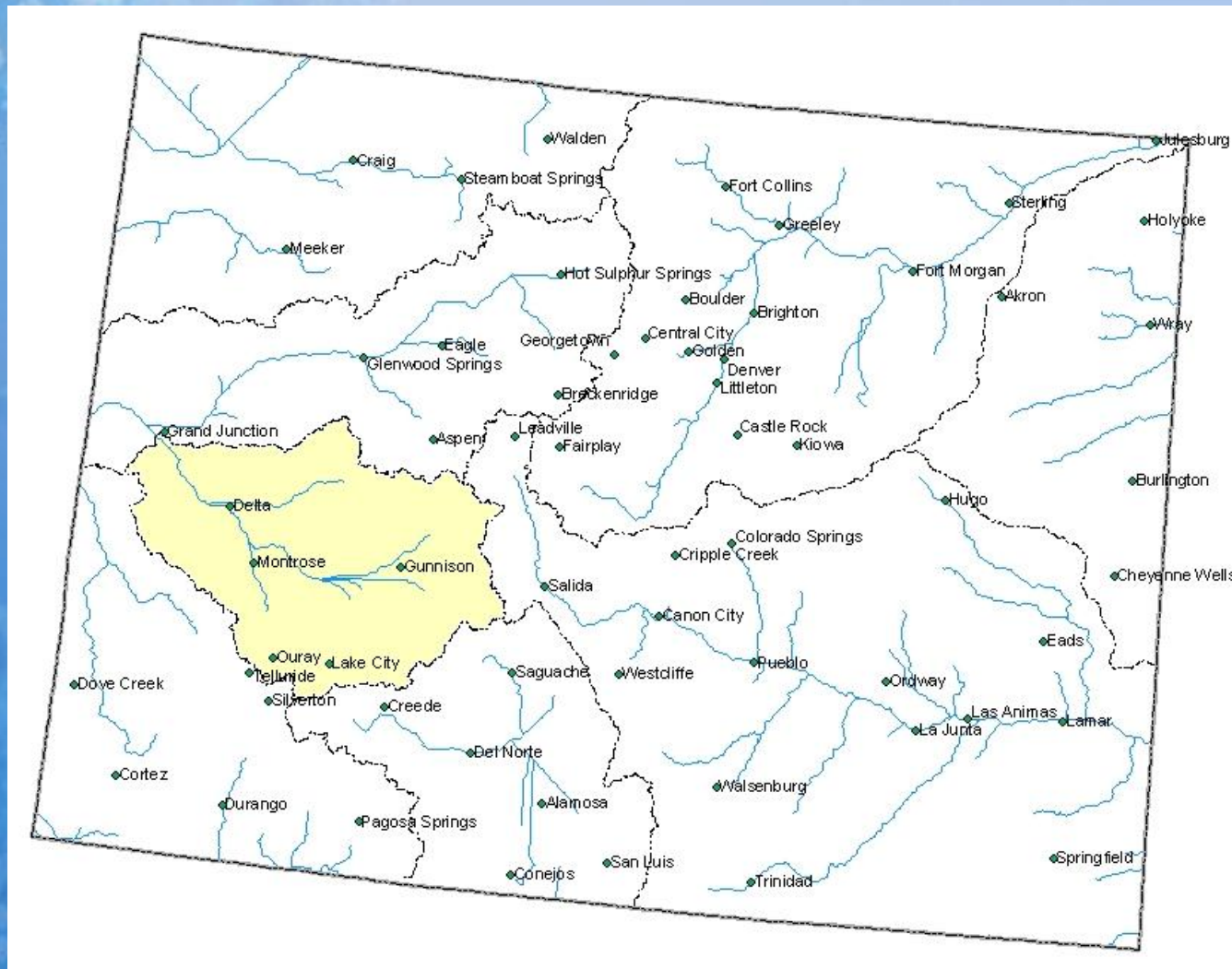


*Provisional Data
Subject to Revision*



Current as of February 1, 2010

Gunnison River Basin Summary

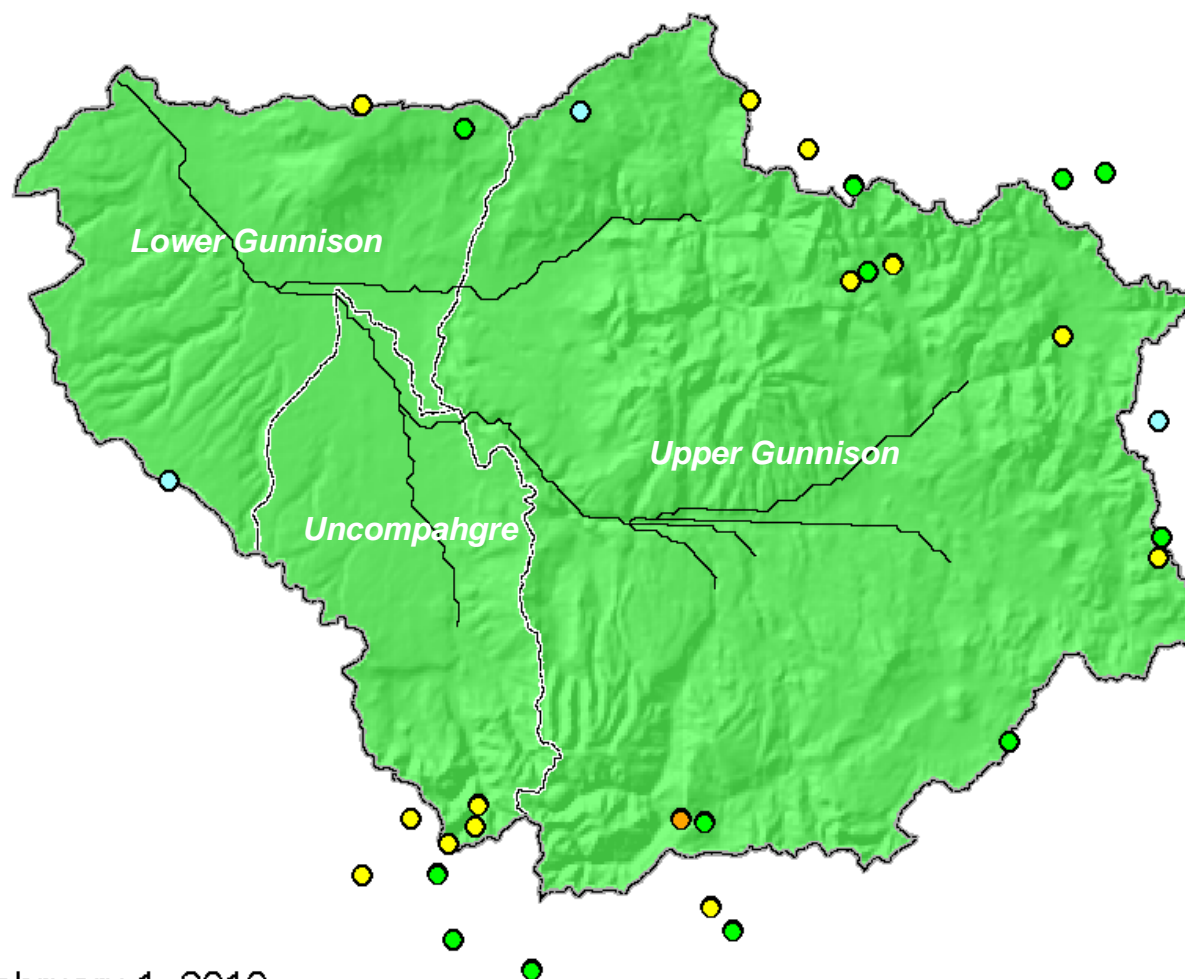


Gunnison River Basin Snowpack Map

Percent of Average

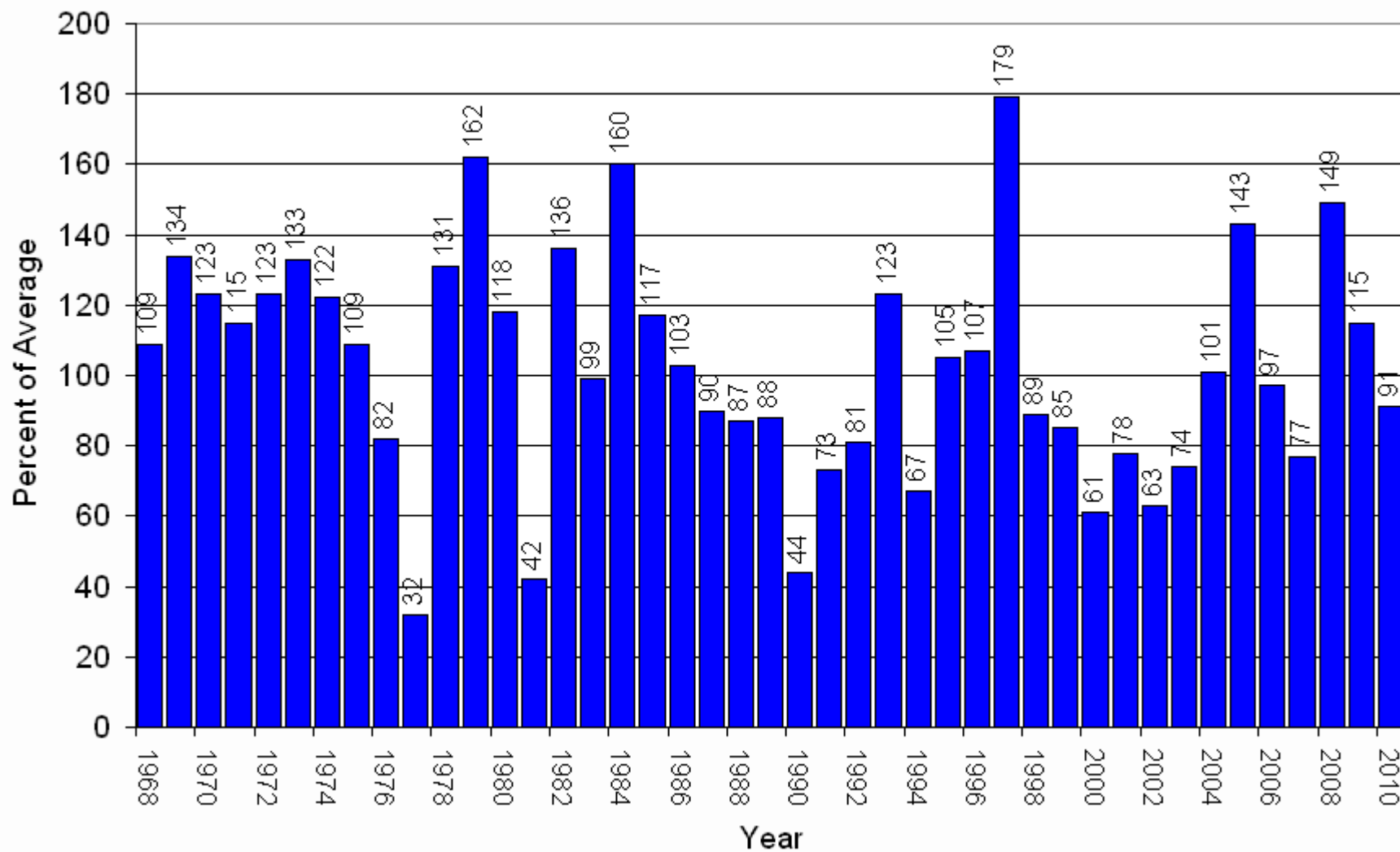


*Provisional Data
Subject to Revision*



Current as of February 1, 2010

February 1 Total Gunnison River Basin Snowpack

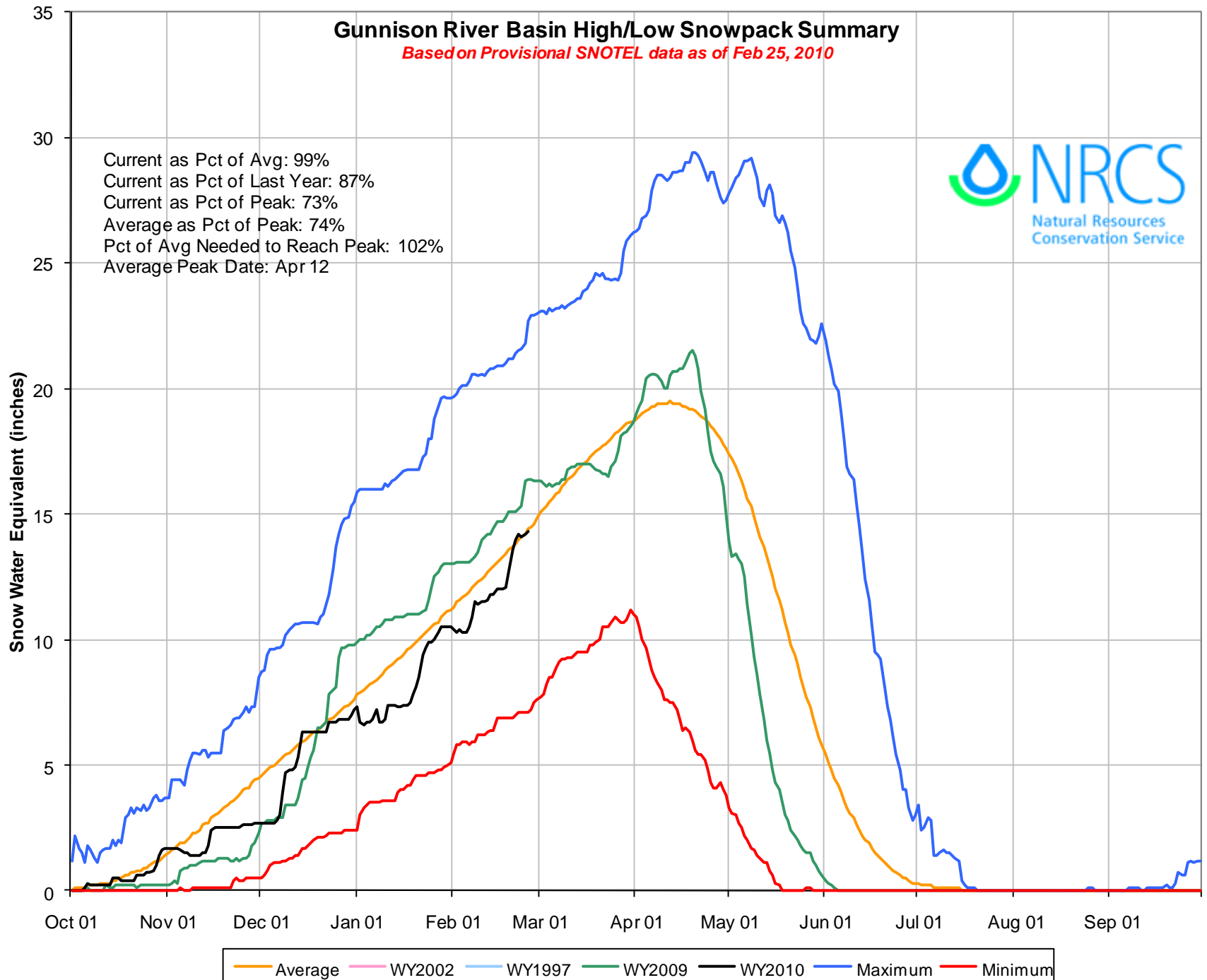


Gunnison River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Feb 25, 2010

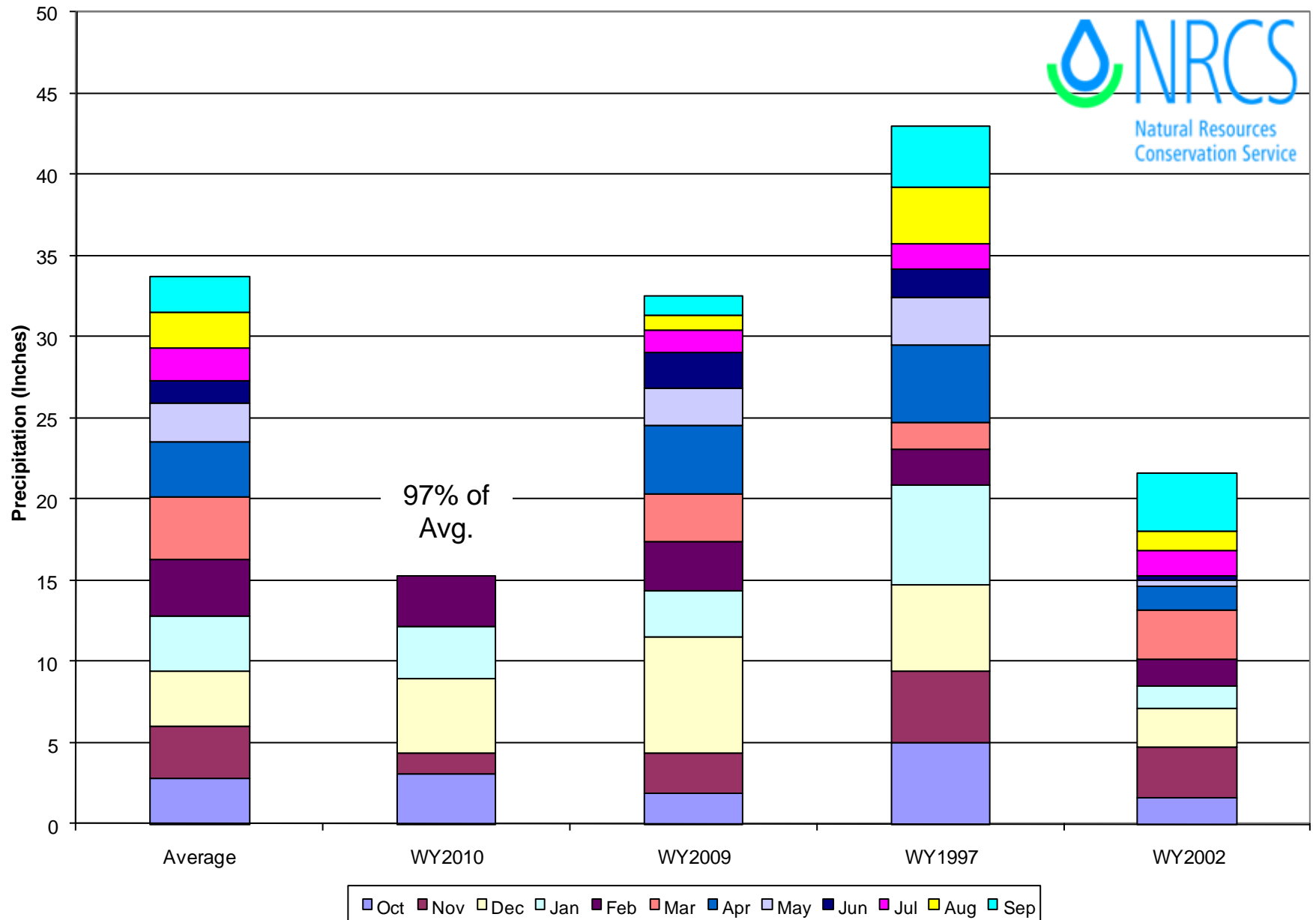


Current as Pct of Avg: 99%
Current as Pct of Last Year: 87%
Current as Pct of Peak: 73%
Average as Pct of Peak: 74%
Pct of Avg Needed to Reach Peak: 102%
Average Peak Date: Apr 12



Gunnison River Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Feb 25, 2010

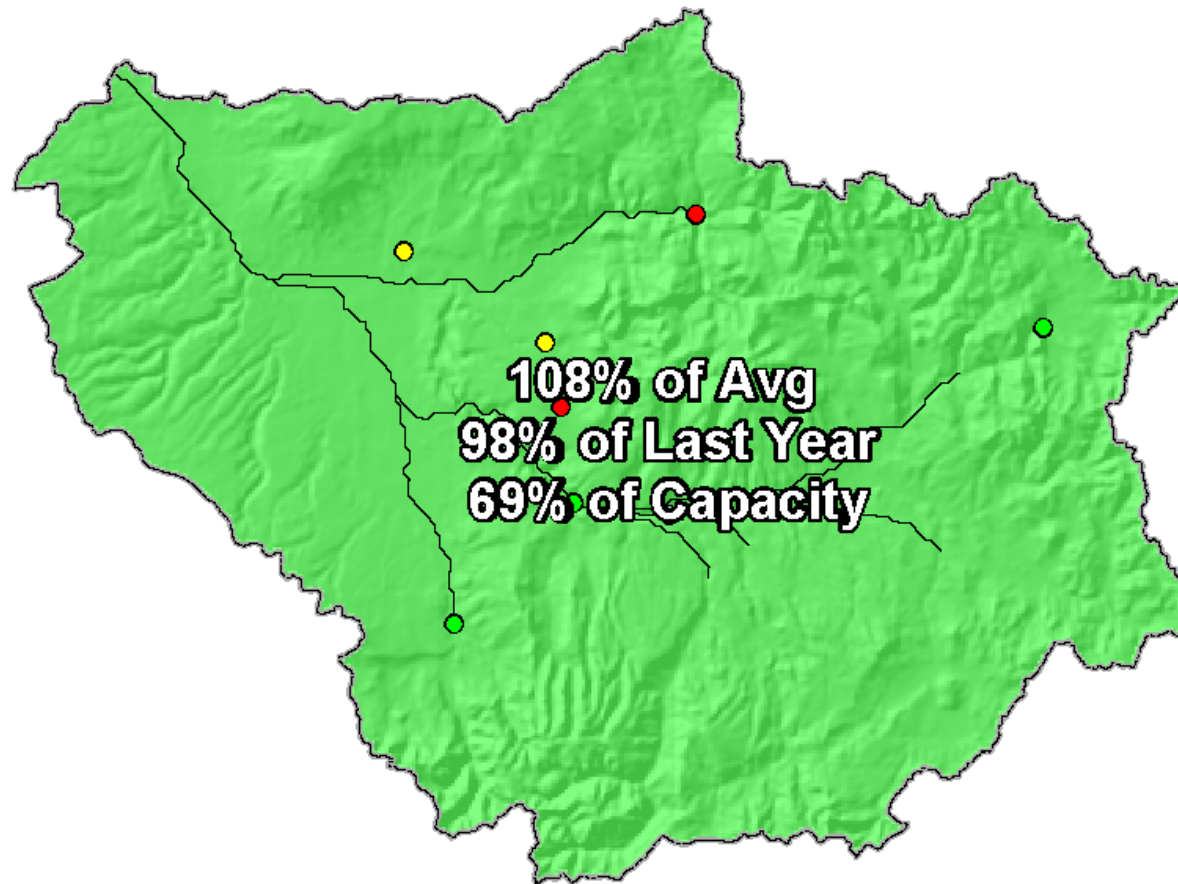


Gunnison River Basin Reservoir Storage Map

Percent of Average



*Provisional Data
Subject to Revision*



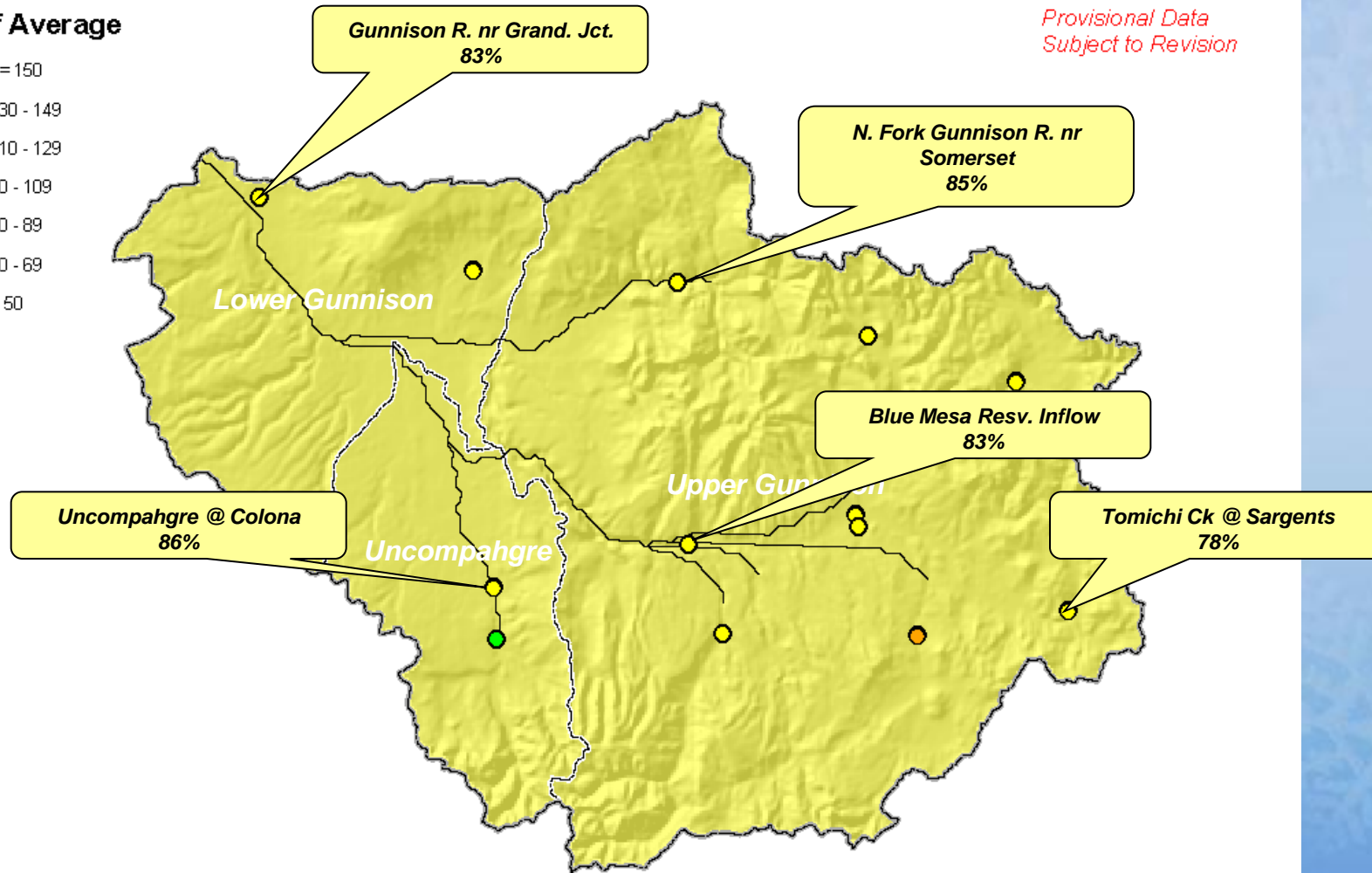
End of January 2010

Gunnison River Basin Streamflow Forecast Map

Percent of Average

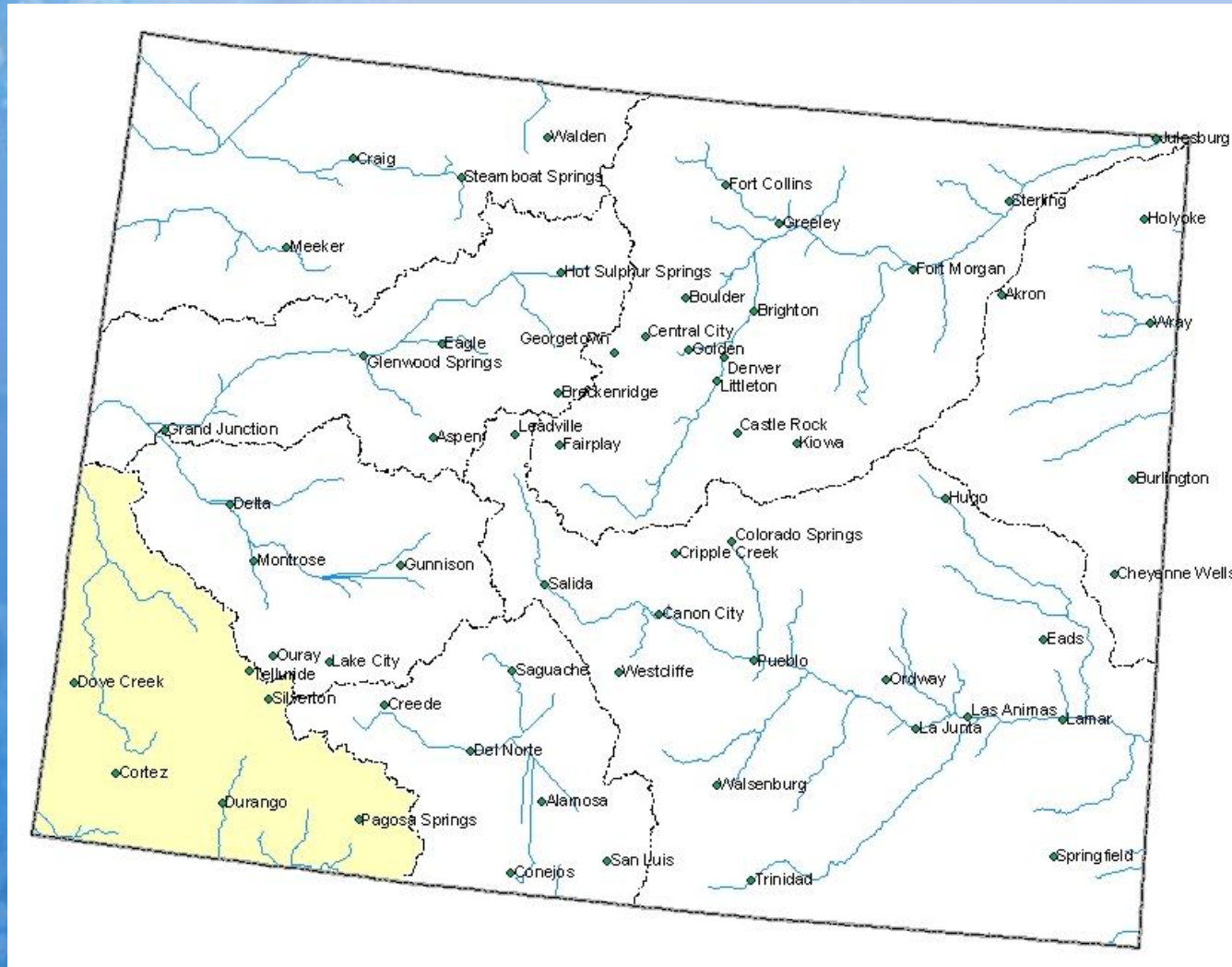


*Provisional Data
Subject to Revision*



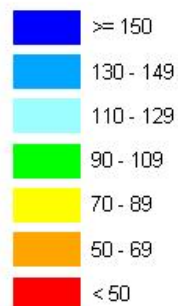
Current as of February 1, 2010

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

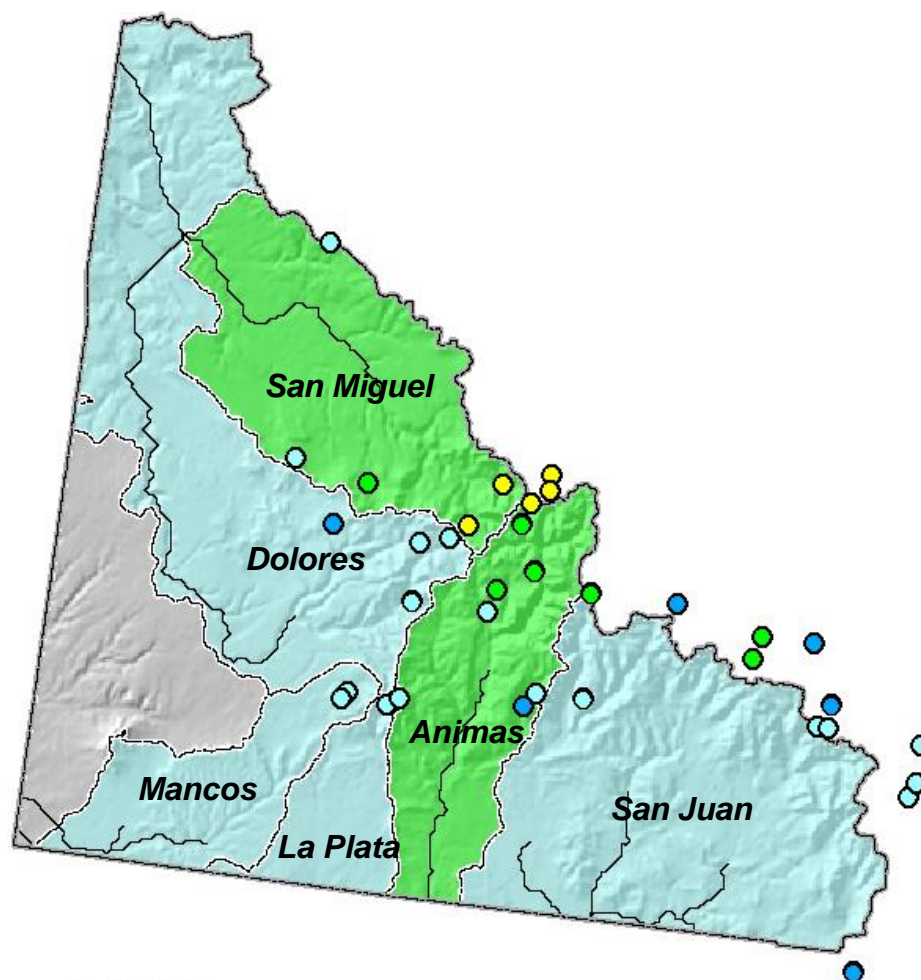


San Miguel, Dolores, Animas and San Juan River Basins Snowpack Map

Percent of Average

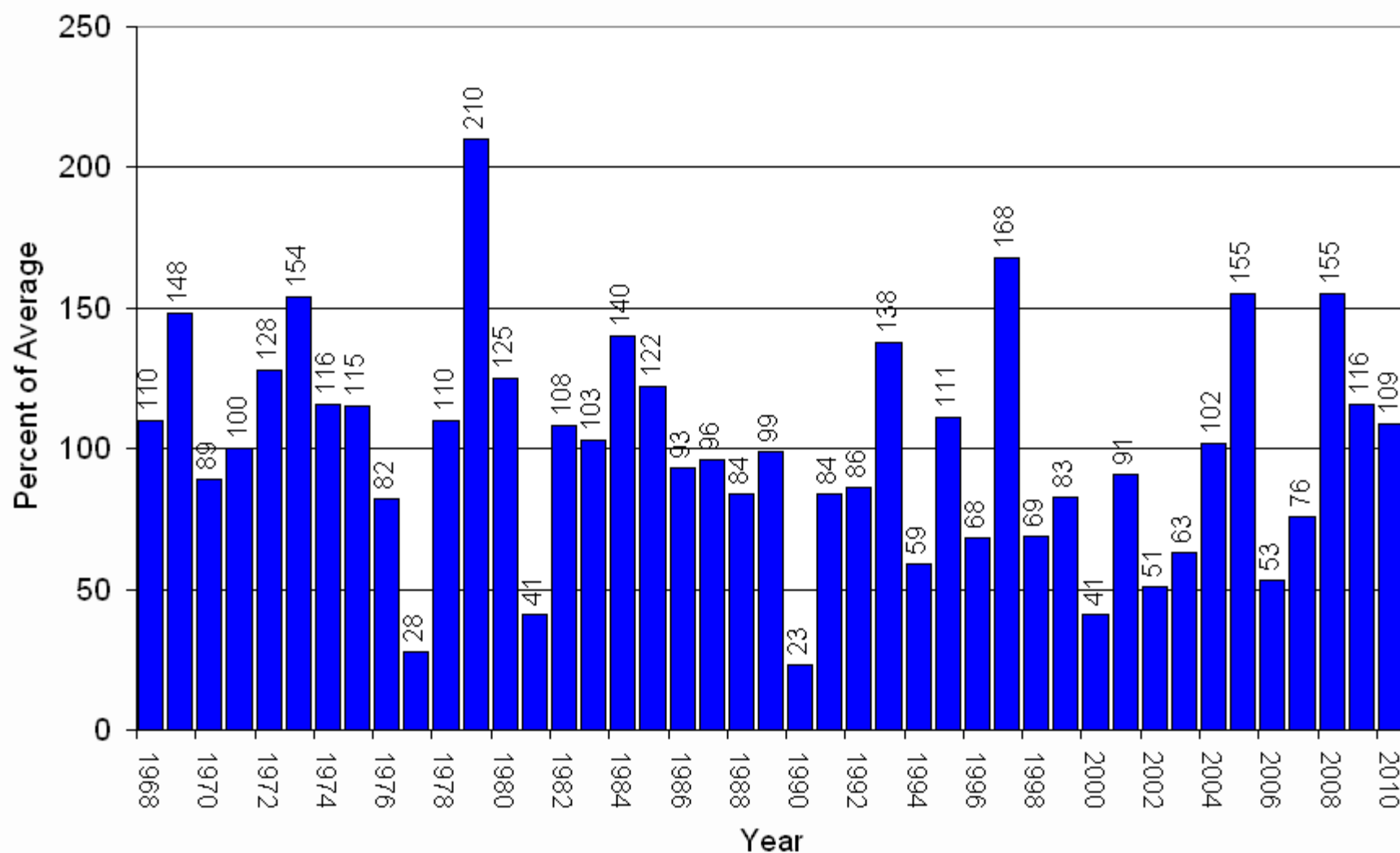


*Provisional Data
Subject to Revision*



Current as of February 1, 2010

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

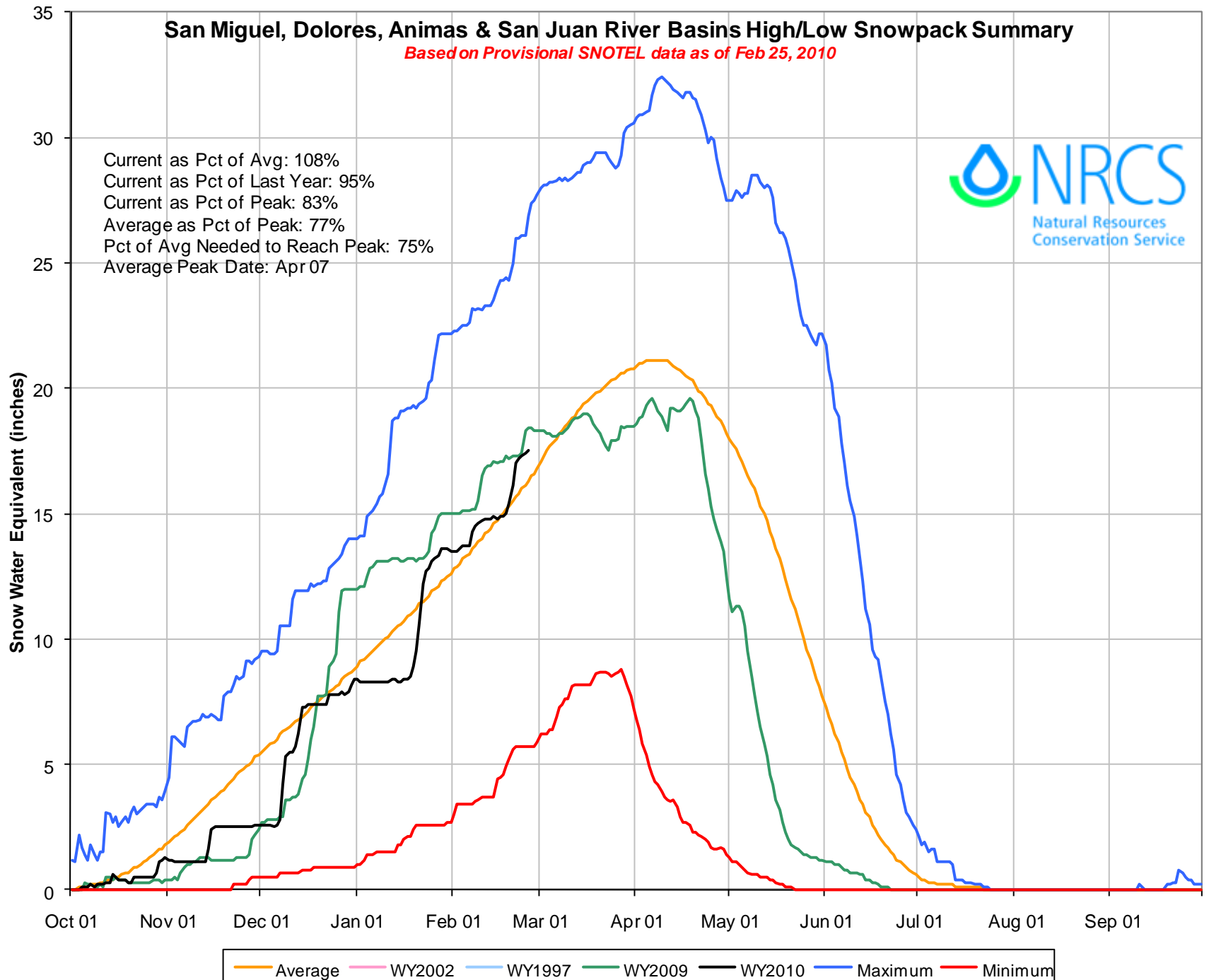


San Miguel, Dolores, Animas & San Juan River Basins High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Feb 25, 2010

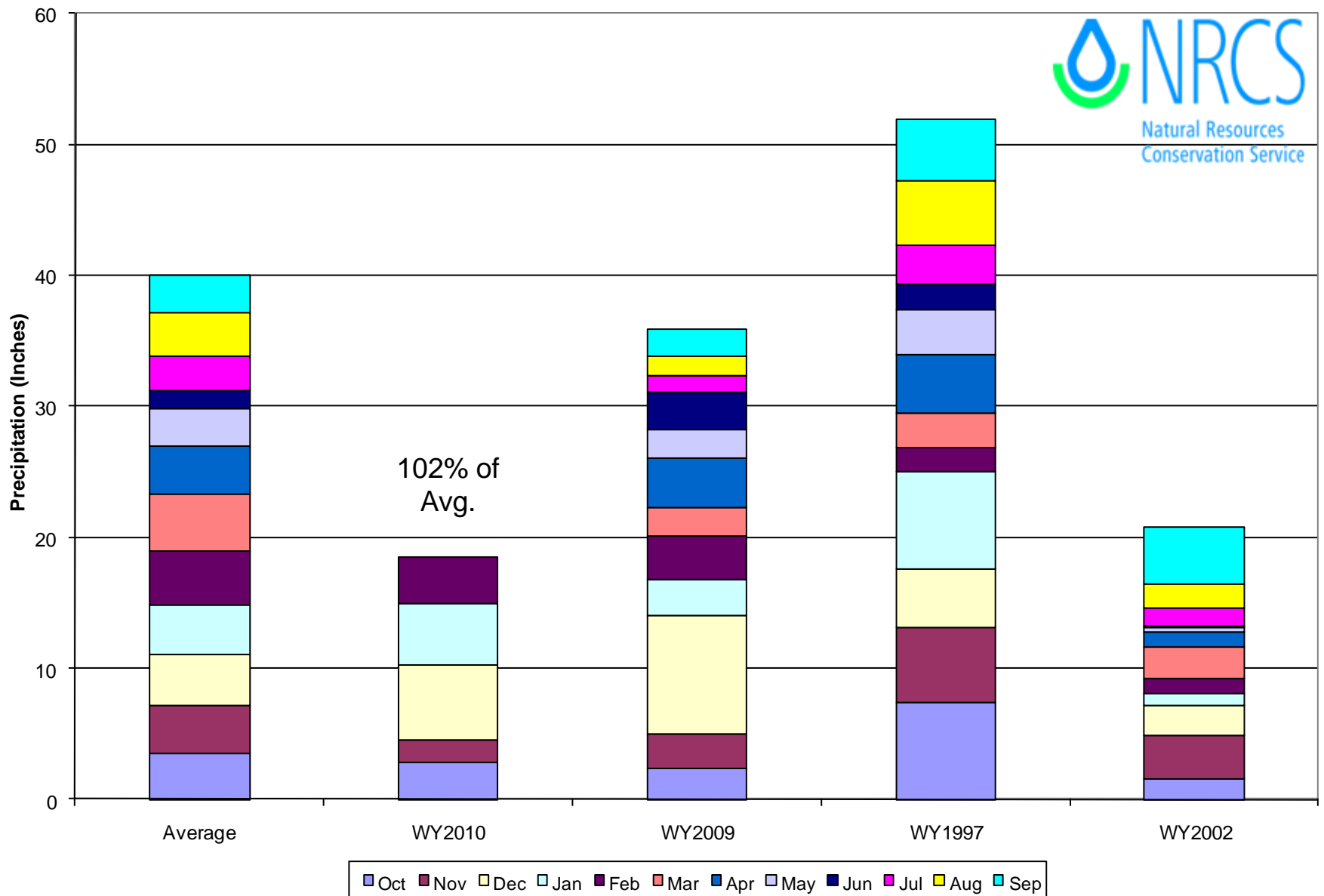


Current as Pct of Avg: 108%
Current as Pct of Last Year: 95%
Current as Pct of Peak: 83%
Average as Pct of Peak: 77%
Pct of Avg Needed to Reach Peak: 75%
Average Peak Date: Apr 07



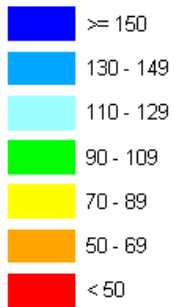
San Miguel, Dolores, Animas and San Juan River Basins High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Feb 25, 2010

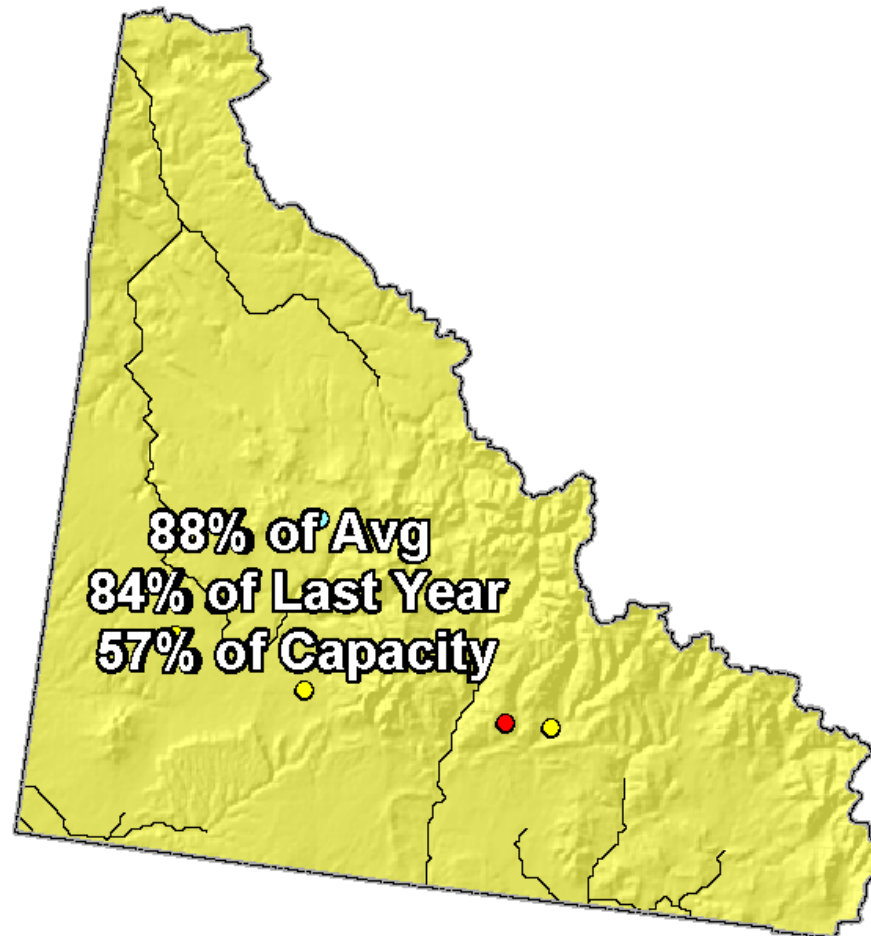


San Miguel, Dolores, Animas and San Juan River Basins Reservoir Storage Map

Percent of Average



*Provisional Data
Subject to Revision*



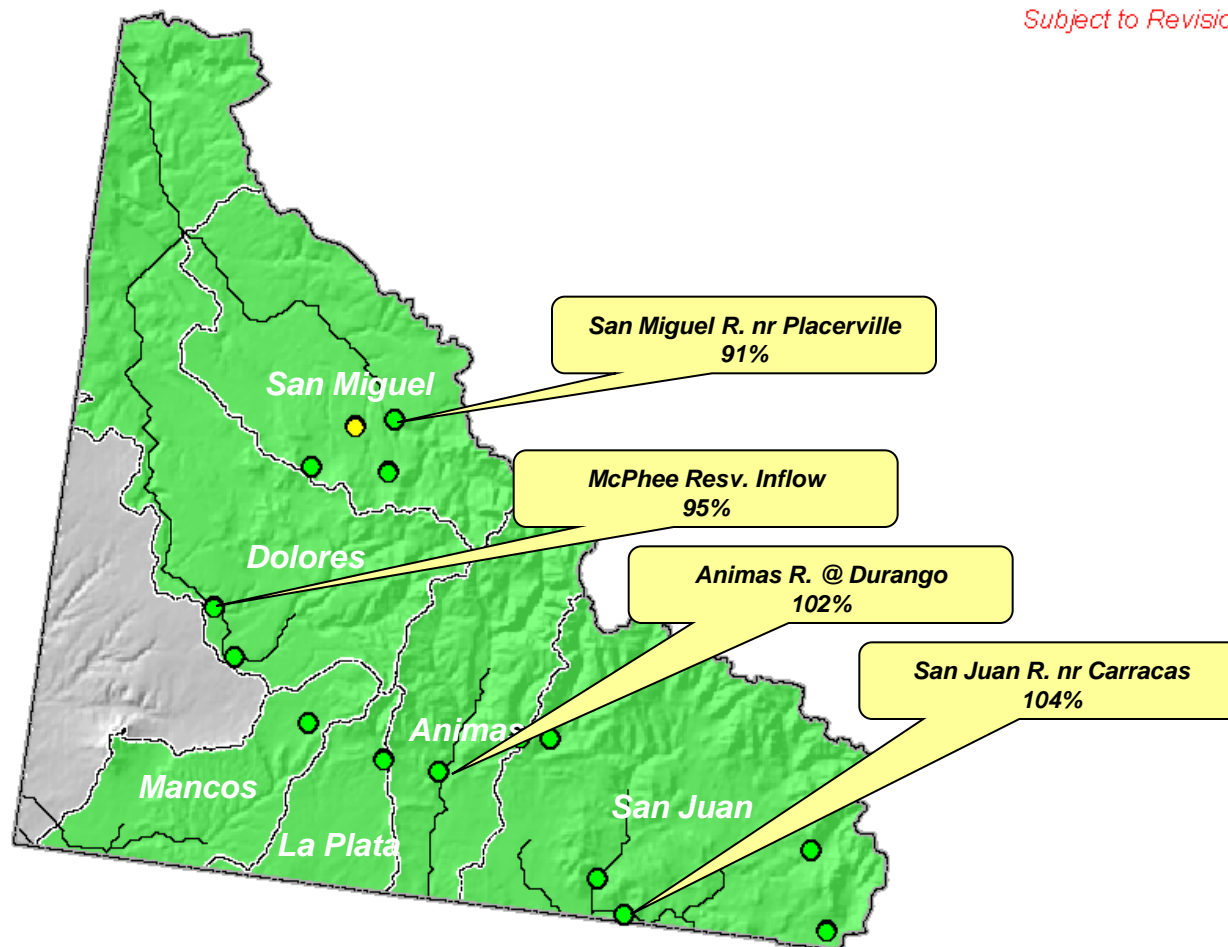
End of January 2010

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

Percent of Average

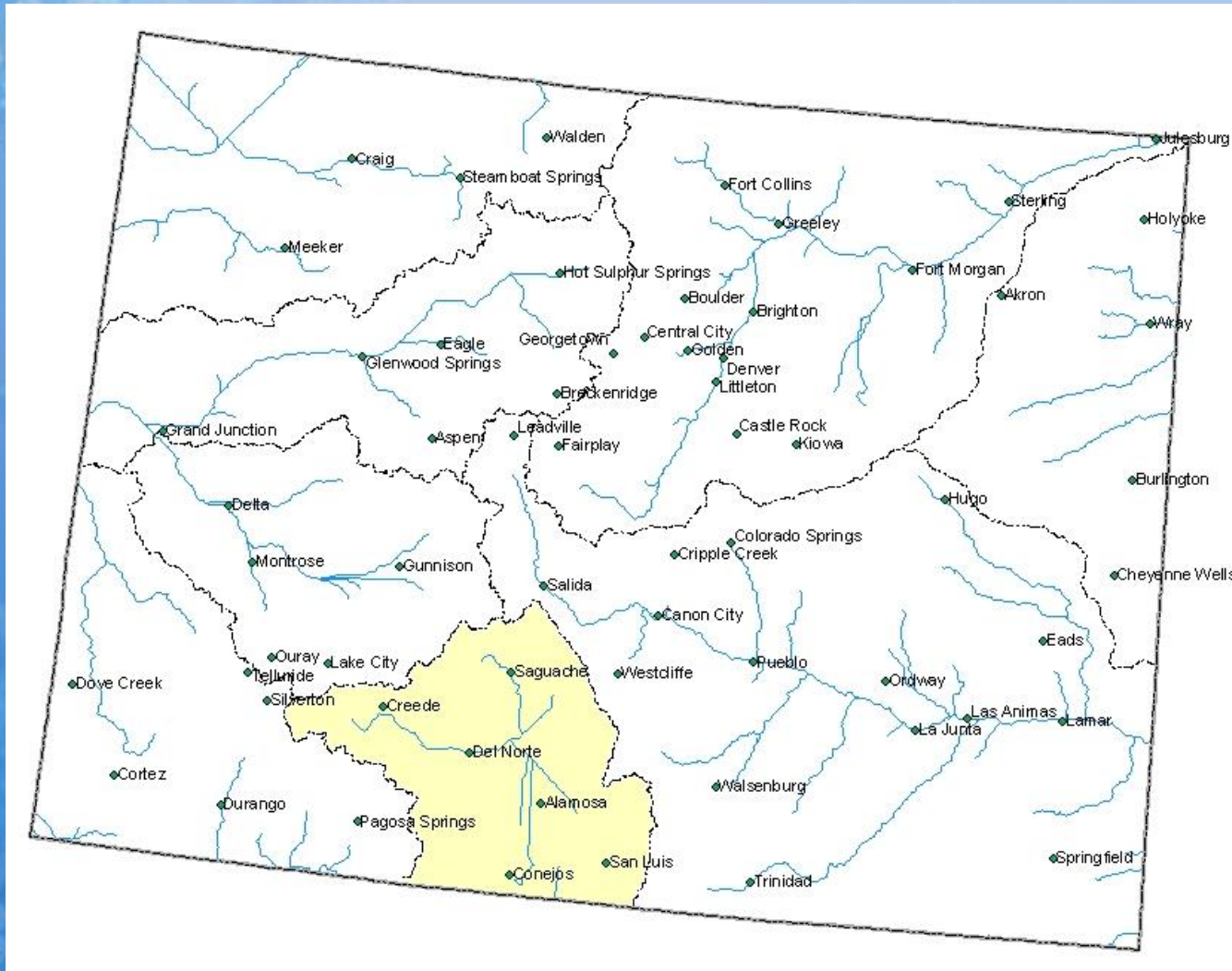


*Provisional Data
Subject to Revision*



Current as of February 1, 2010

Upper Rio Grande Basin Summary

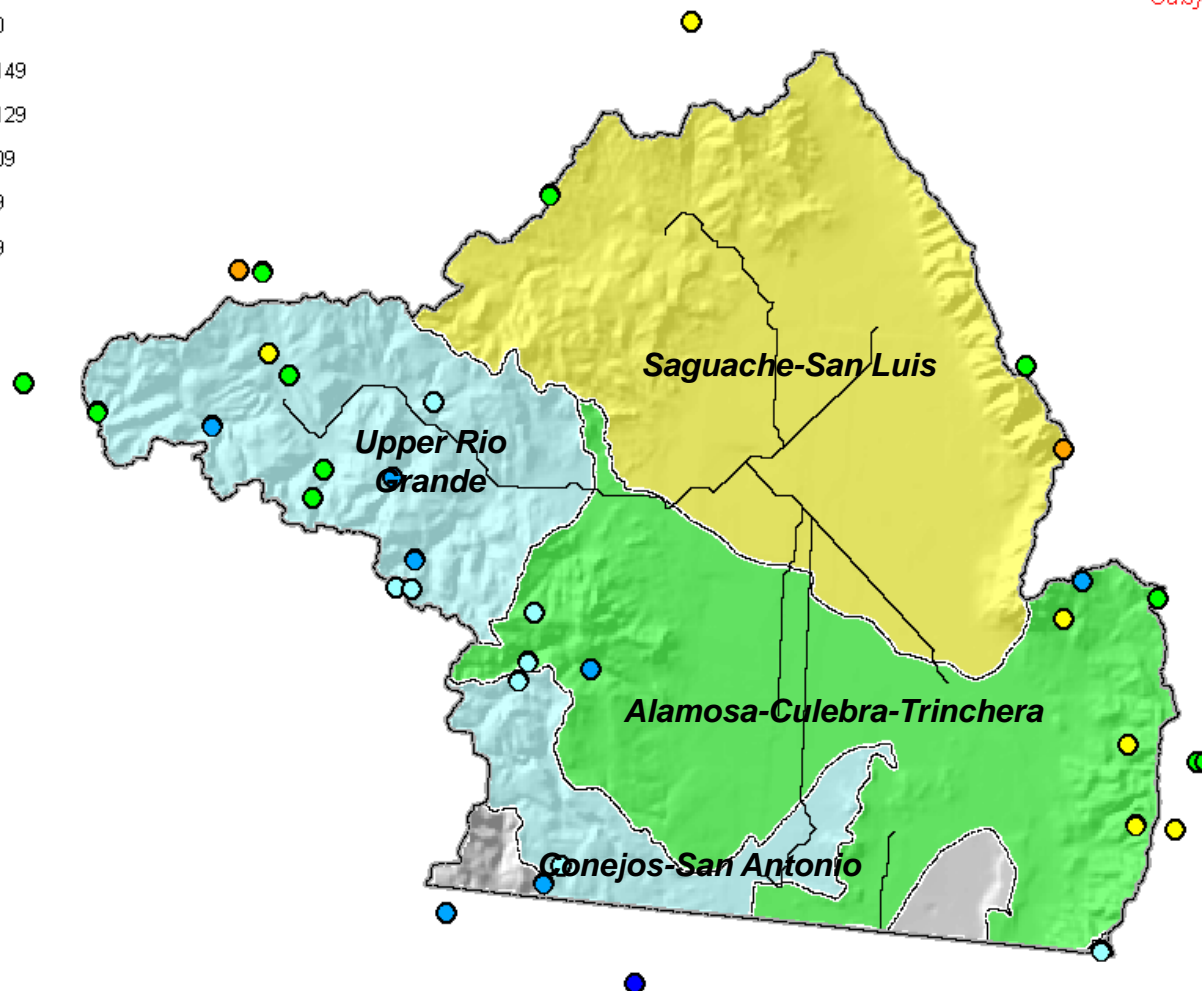


Upper Rio Grande Basin Snowpack Map

Percent of Average

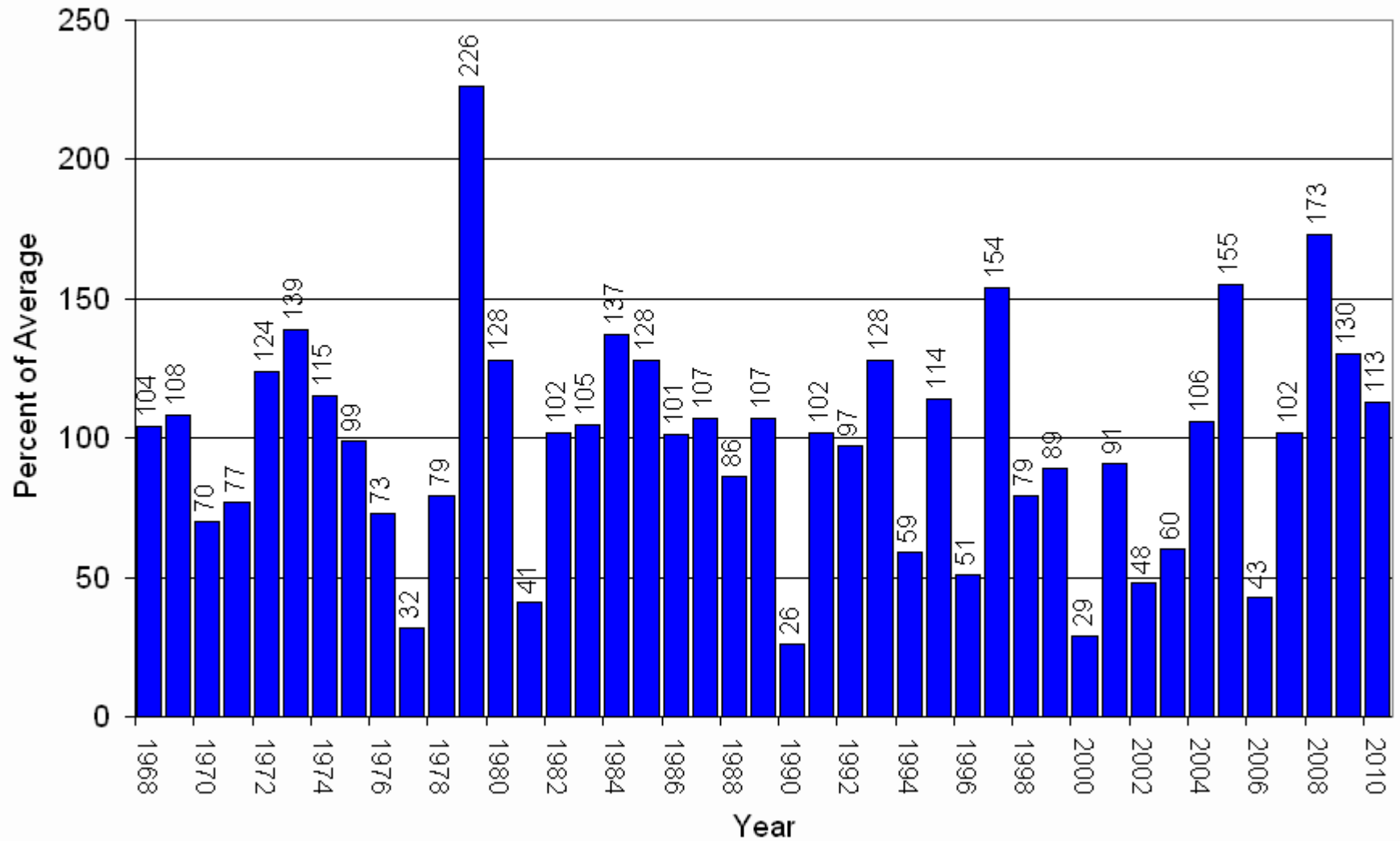


*Provisional Data
Subject to Revision*



Current as of February 1, 2010

February 1 Total Upper Rio Grande Basin Snowpack

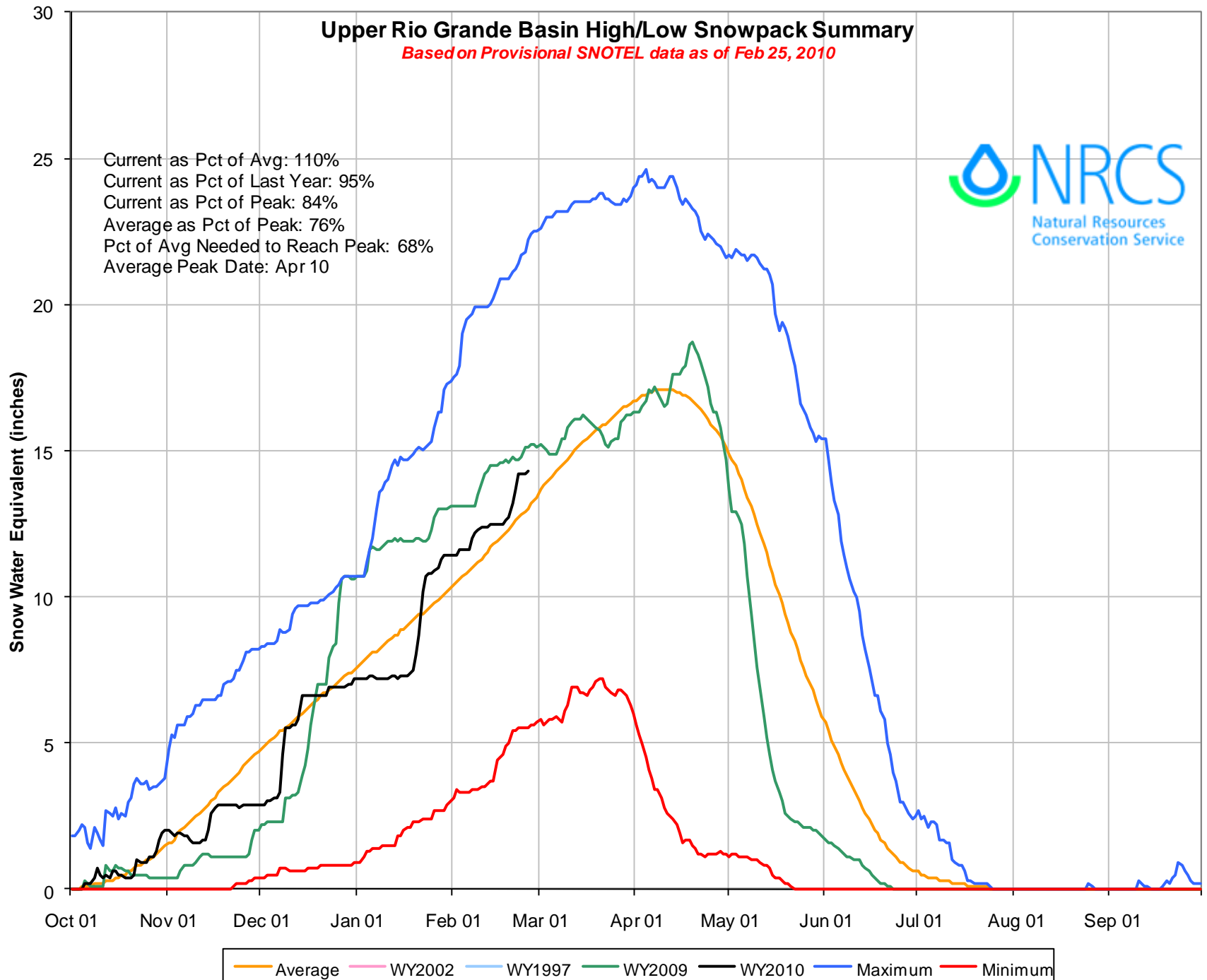


Upper Rio Grande Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Feb 25, 2010

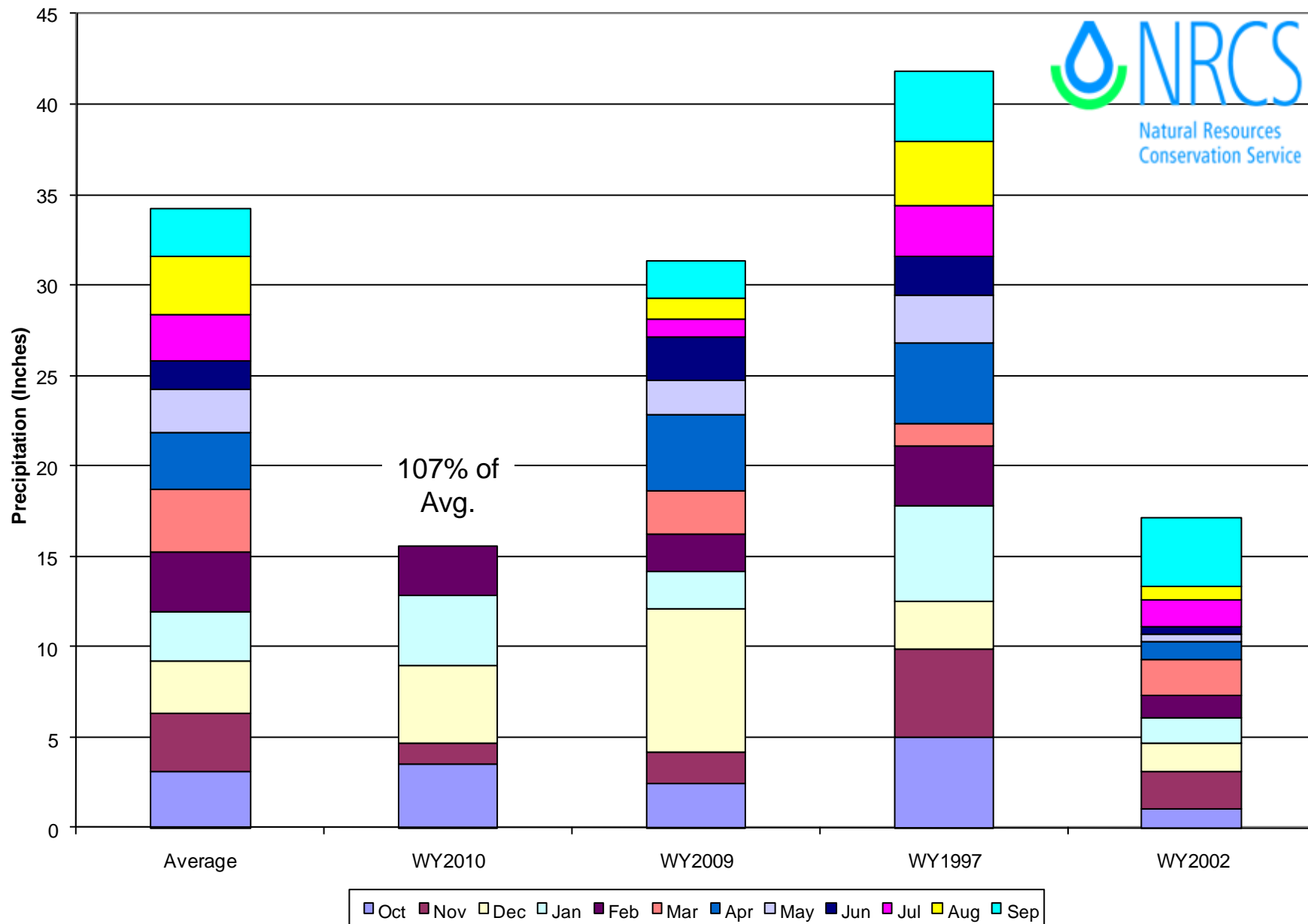


Current as Pct of Avg: 110%
Current as Pct of Last Year: 95%
Current as Pct of Peak: 84%
Average as Pct of Peak: 76%
Pct of Avg Needed to Reach Peak: 68%
Average Peak Date: Apr 10



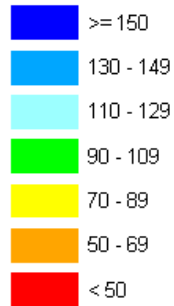
Upper Rio Grande Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Feb 25, 2010

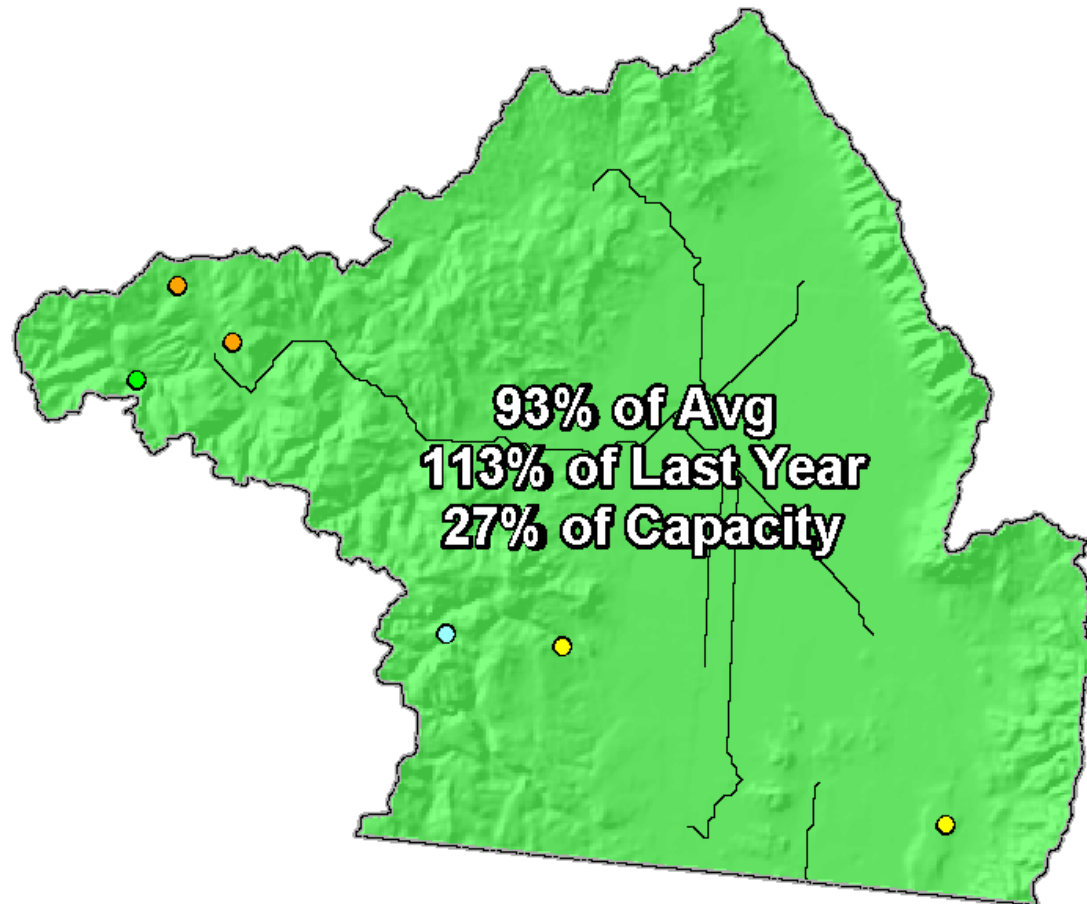


Upper Rio Grande Basin Reservoir Storage Map

Percent of Average



*Provisional Data
Subject to Revision*



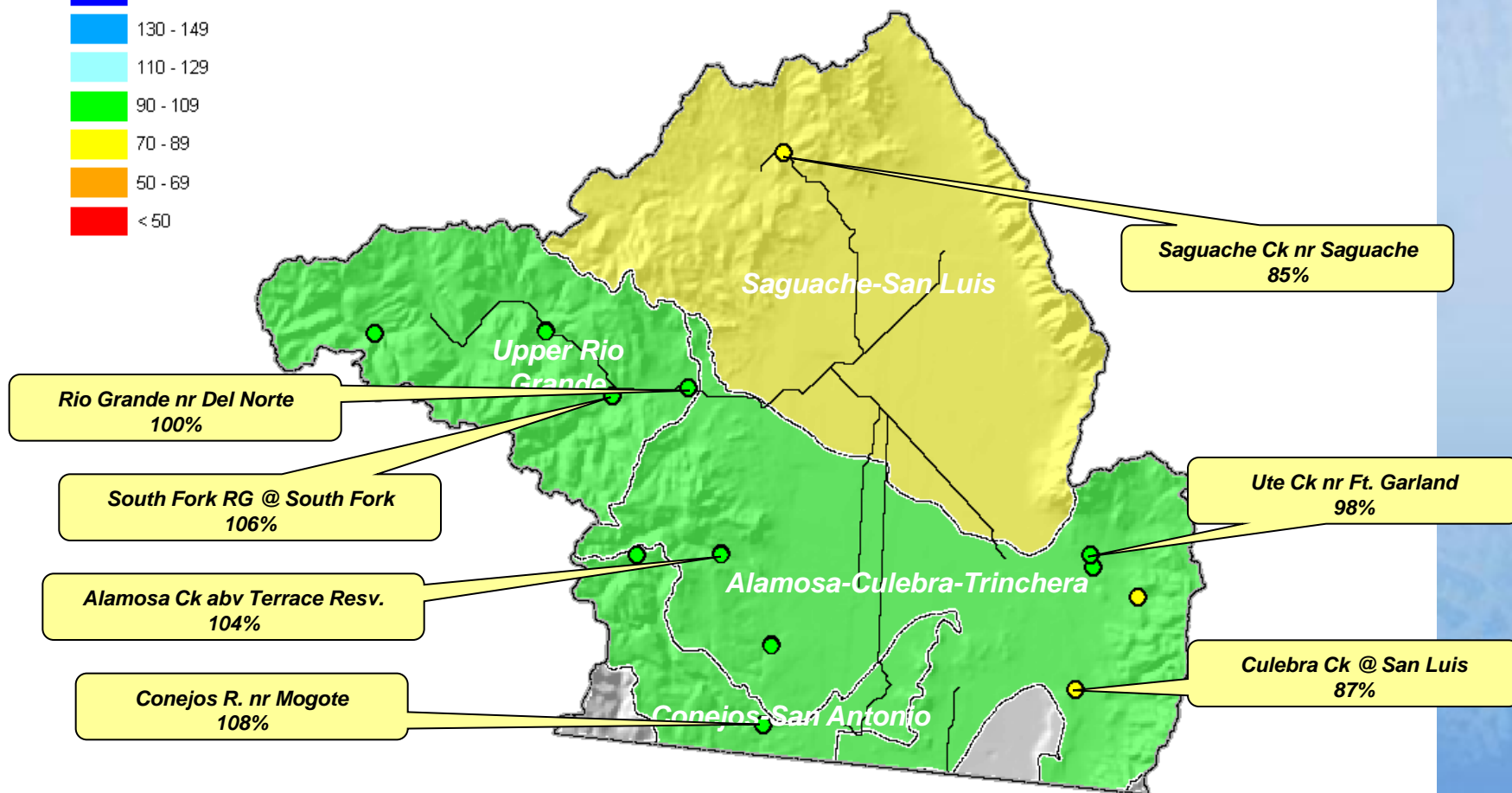
End of January 2010

Upper Rio Grande Basin Streamflow Forecast Map

Percent of Average

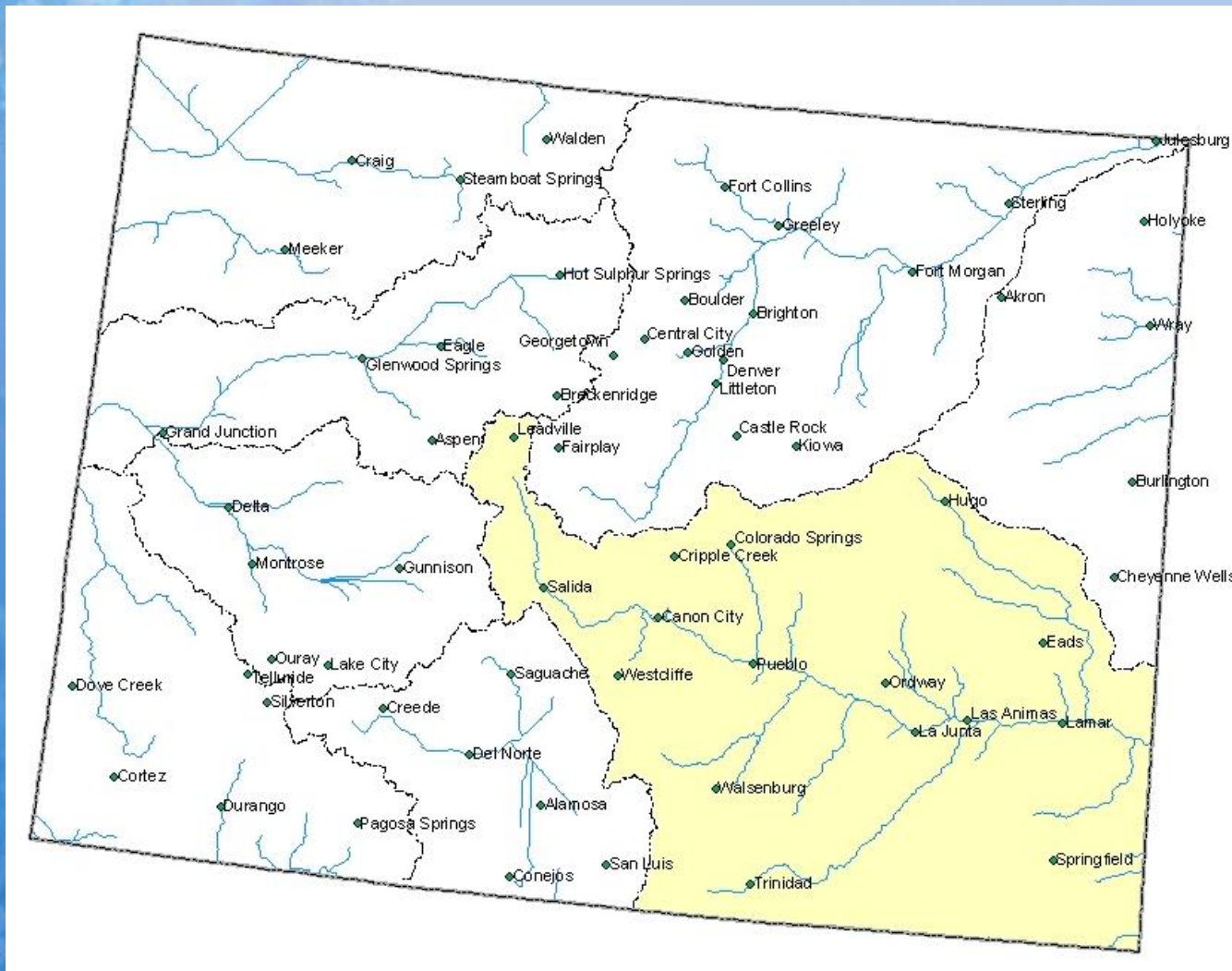


*Provisional Data
Subject to Revision*



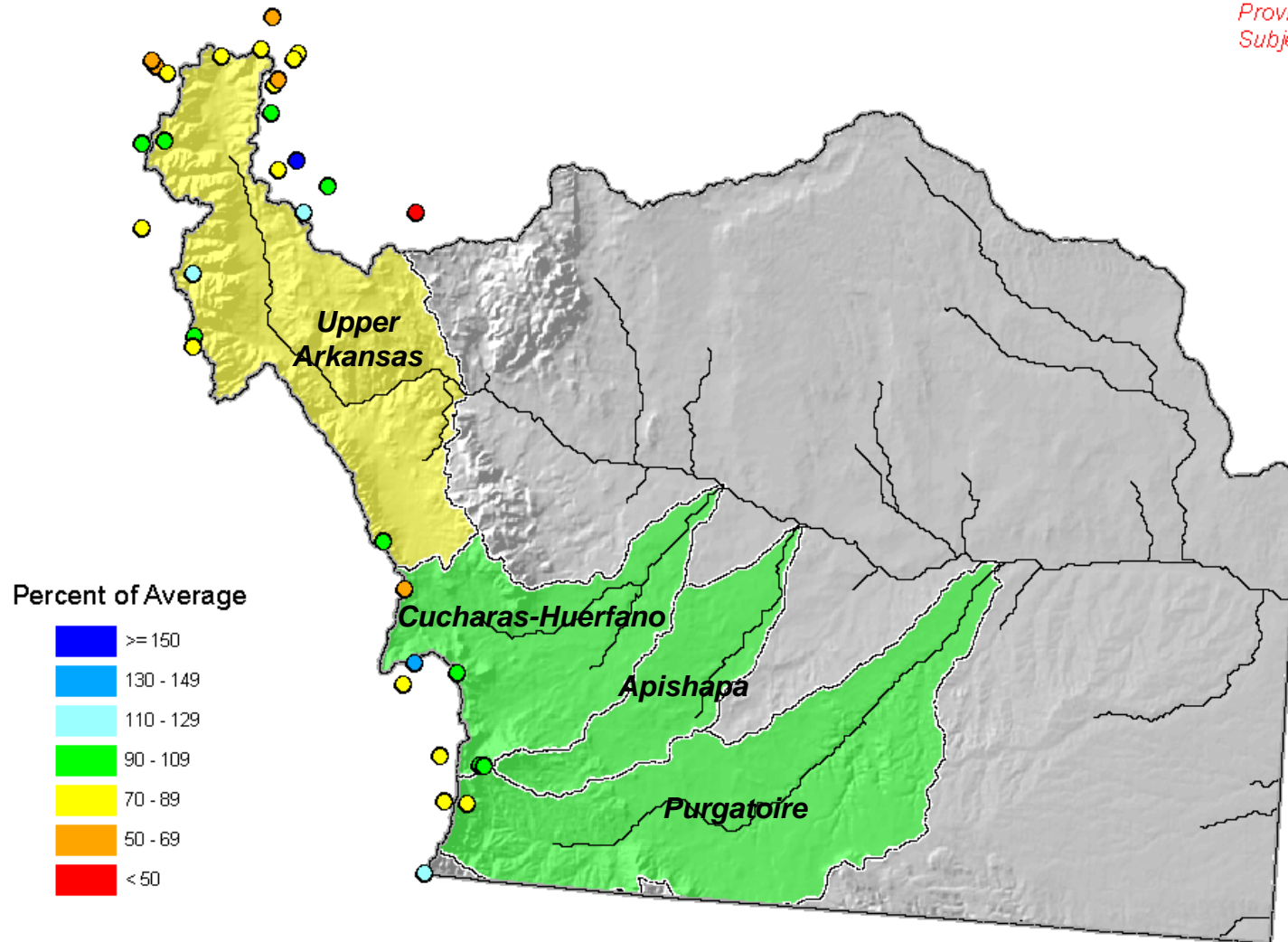
Current as of February 1, 2010

Arkansas River Basin Summary



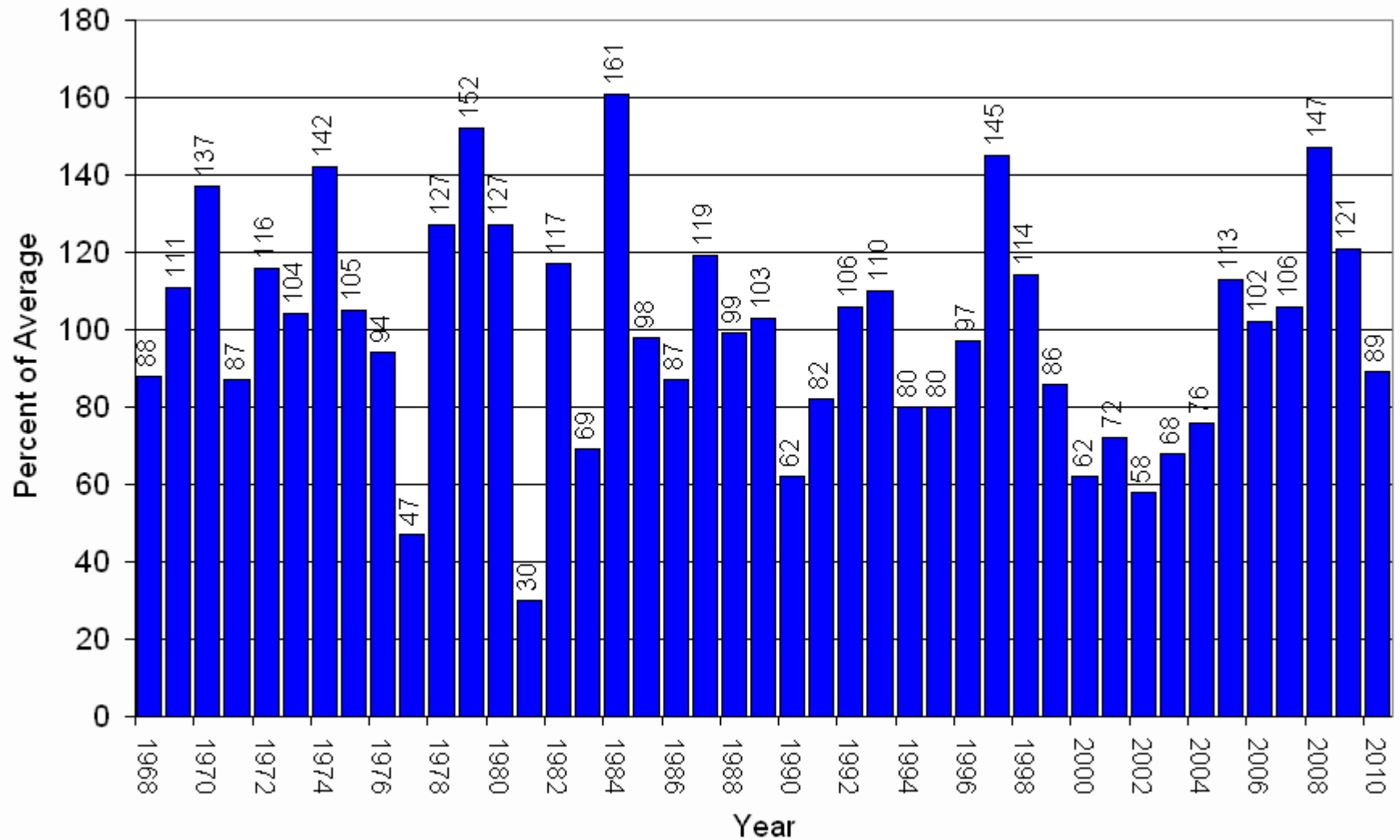
Arkansas River Basin Snowpack Map

*Provisional Data
Subject to Revision*



Current as of February 1, 2010

February 1 Total Arkansas River Basin Snowpack

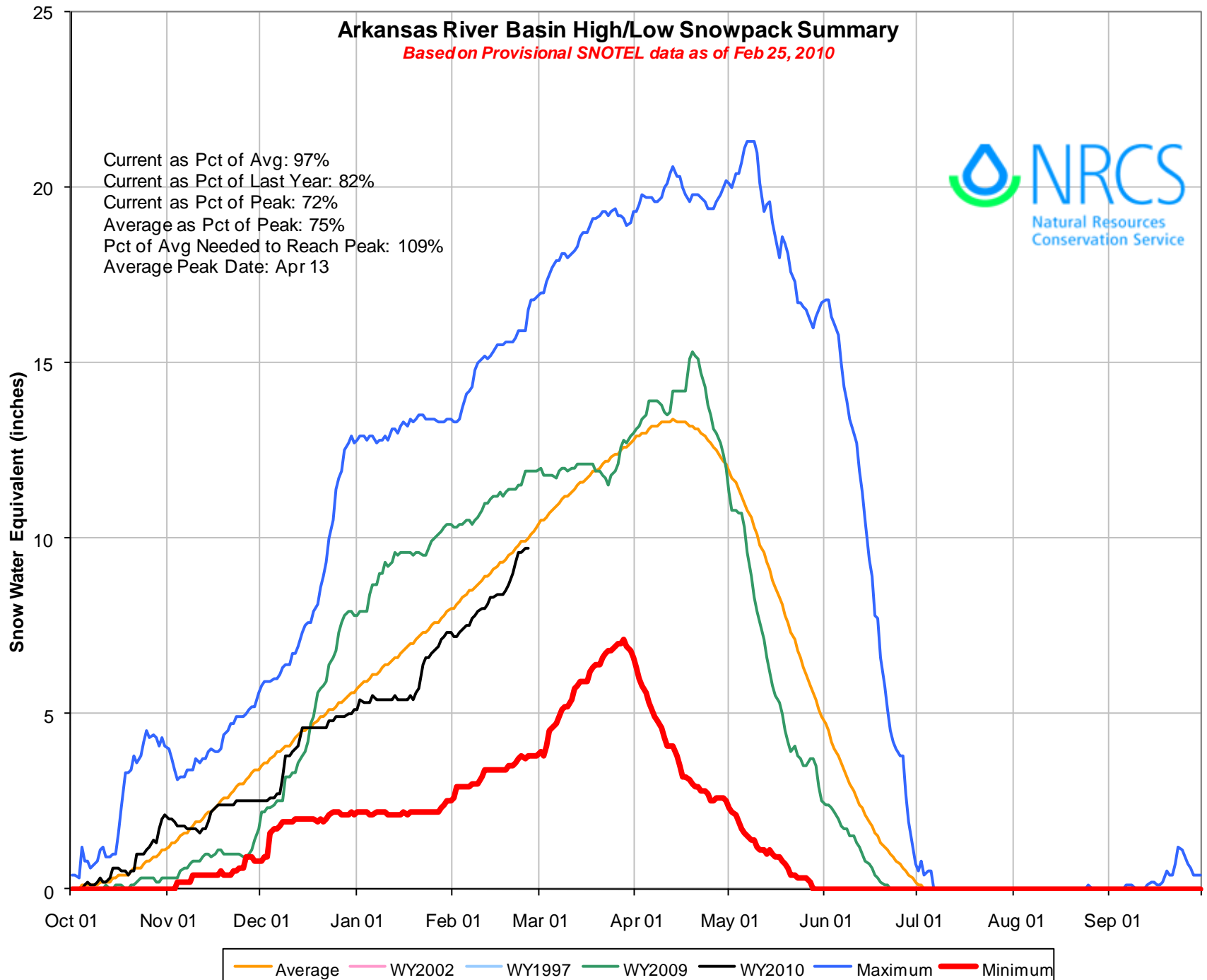


Arkansas River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Feb 25, 2010

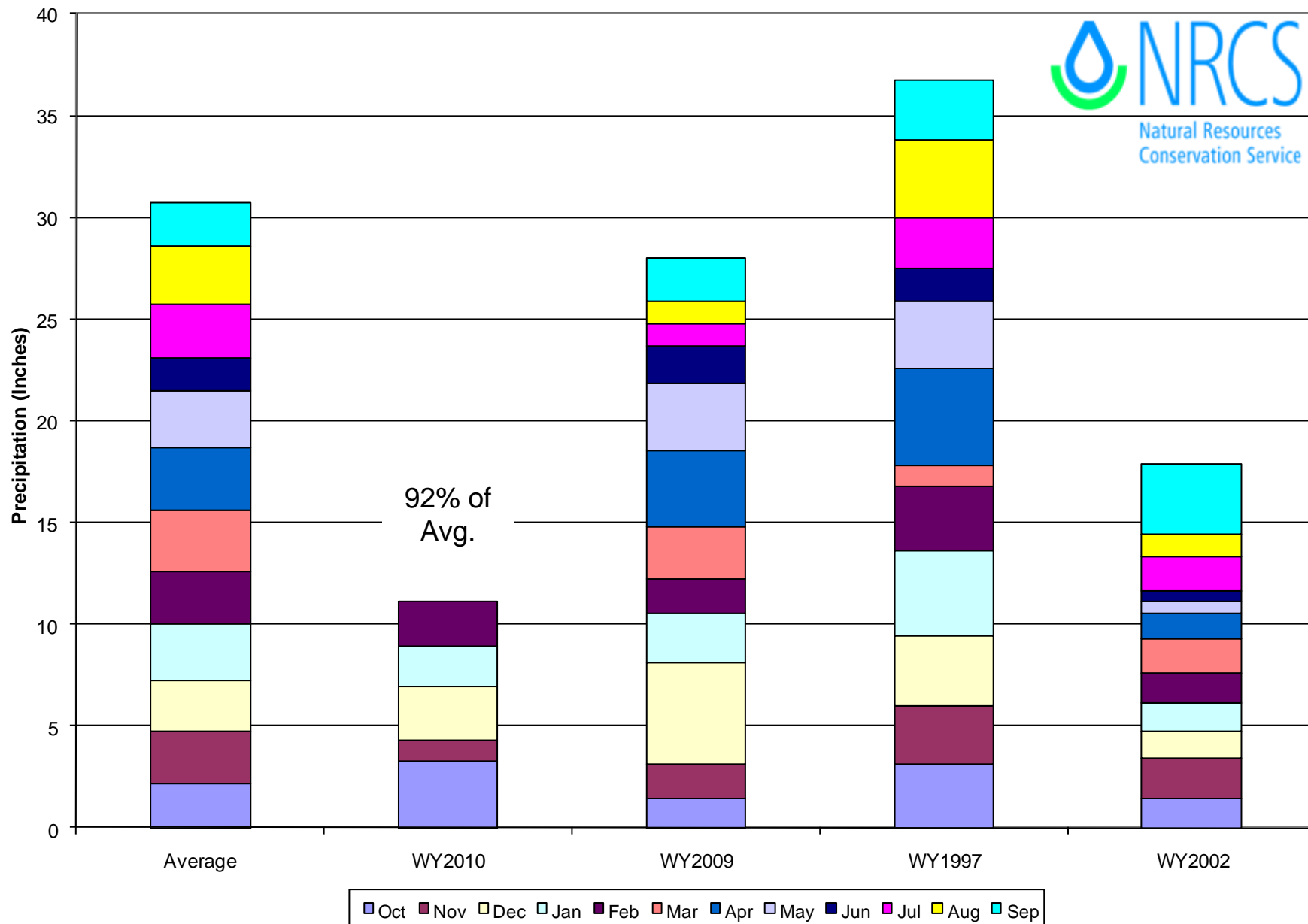


Current as Pct of Avg: 97%
Current as Pct of Last Year: 82%
Current as Pct of Peak: 72%
Average as Pct of Peak: 75%
Pct of Avg Needed to Reach Peak: 109%
Average Peak Date: Apr 13



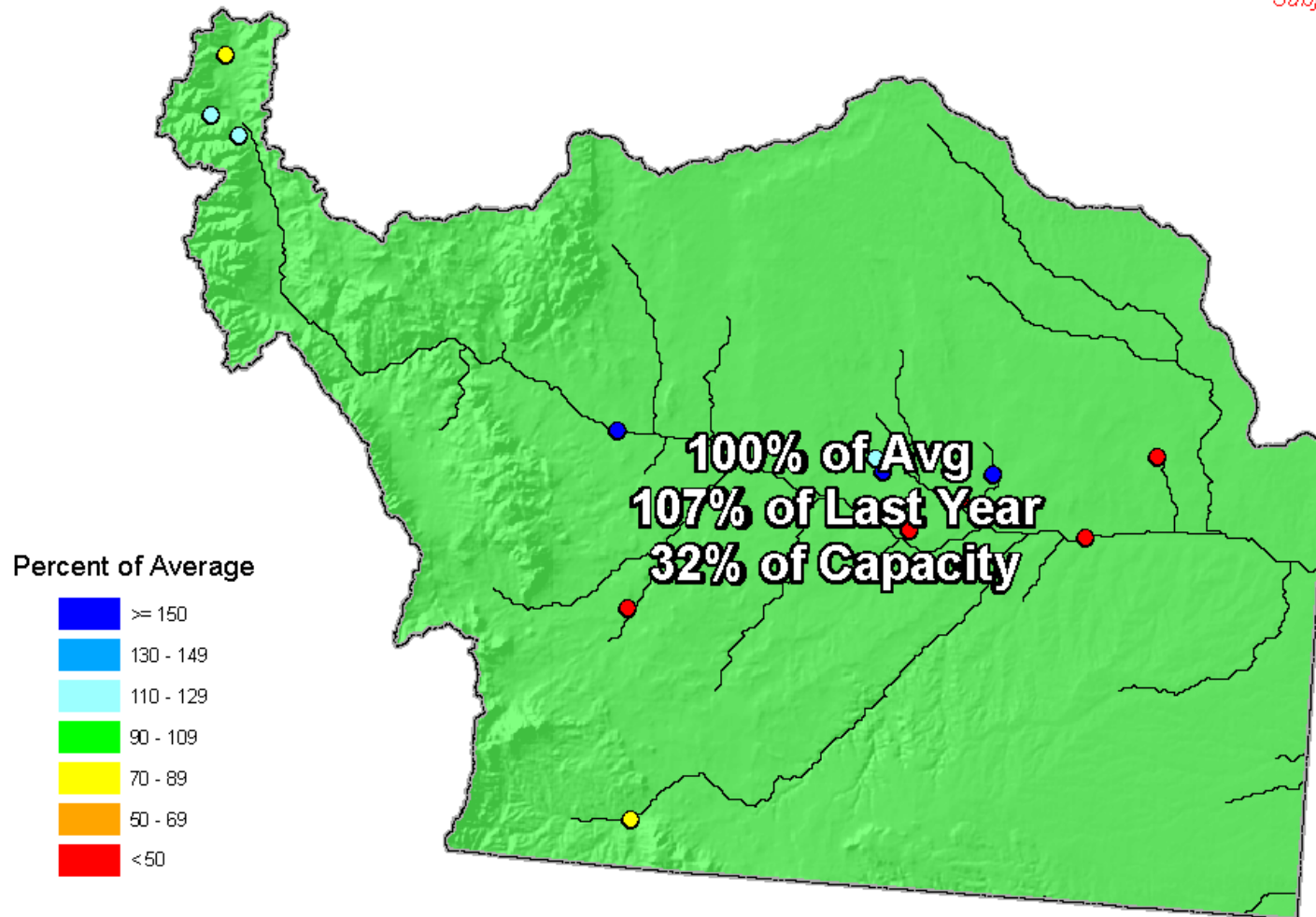
Arkansas River Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Feb 25, 2010



Arkansas River Basin Reservoir Storage Map

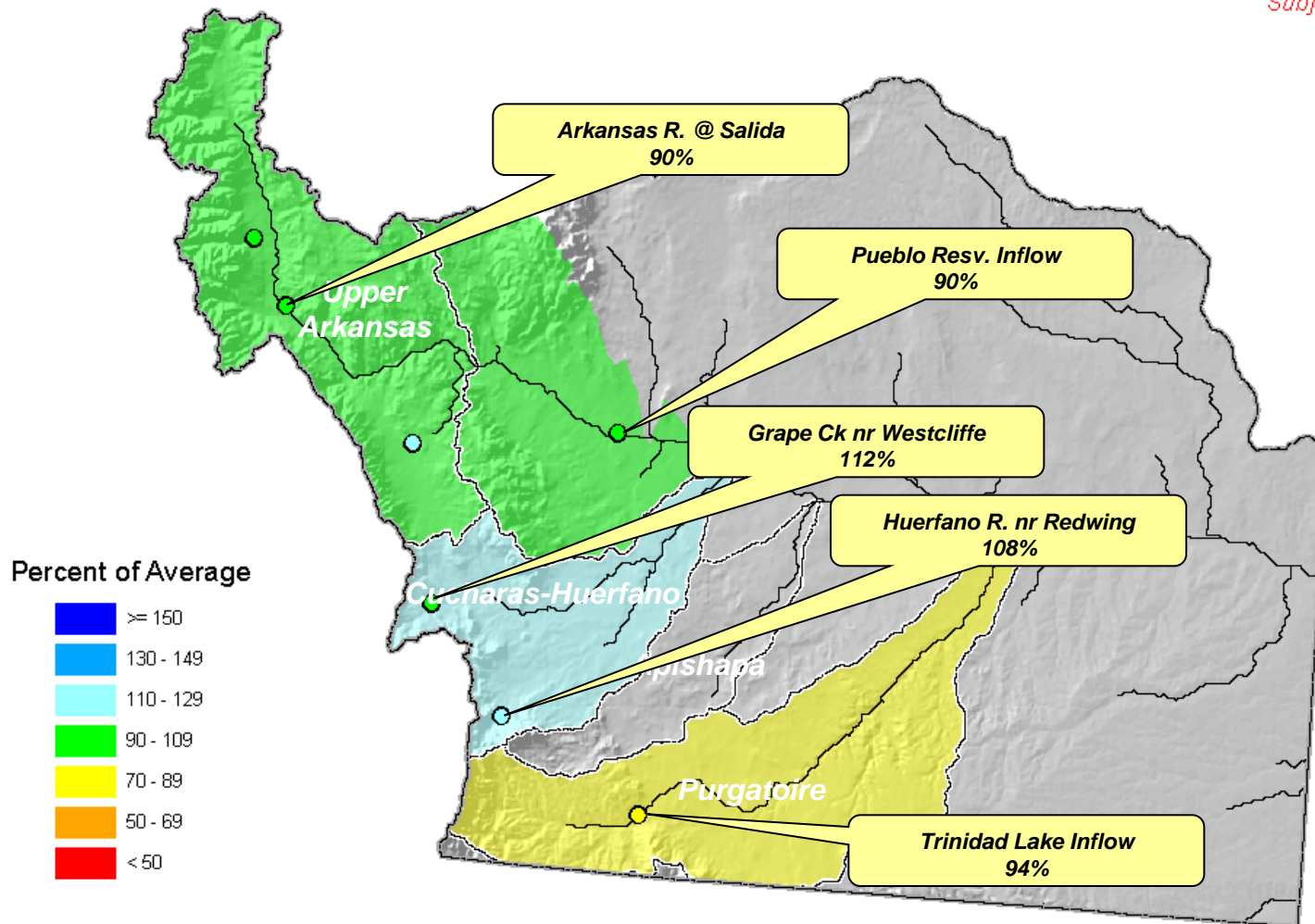
*Provisional Data
Subject to Revision*



End of January 2010

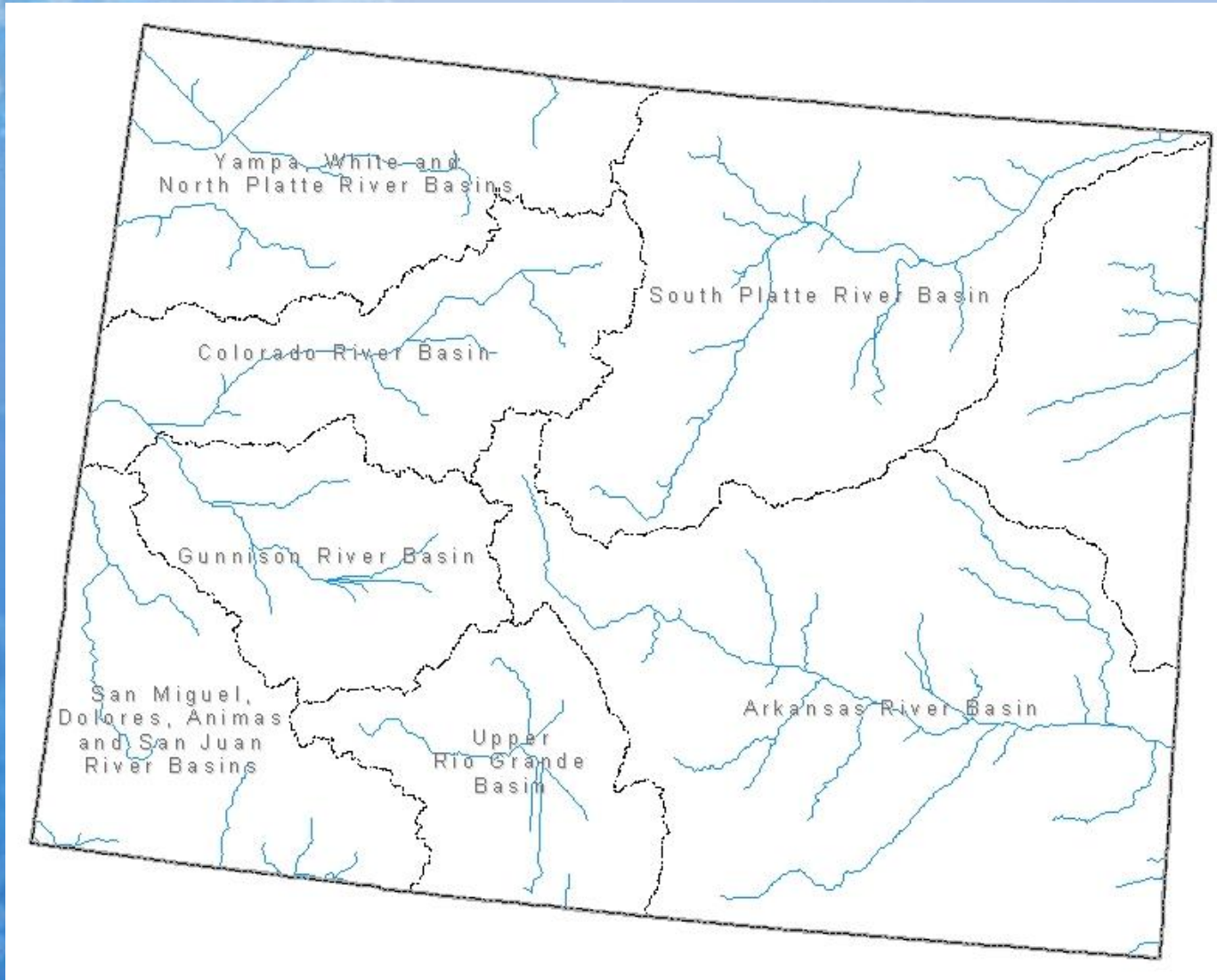
Arkansas River Basin Streamflow Forecast Map

*Provisional Data
Subject to Revision*



Current as of February 1, 2010

Colorado Statewide Summary

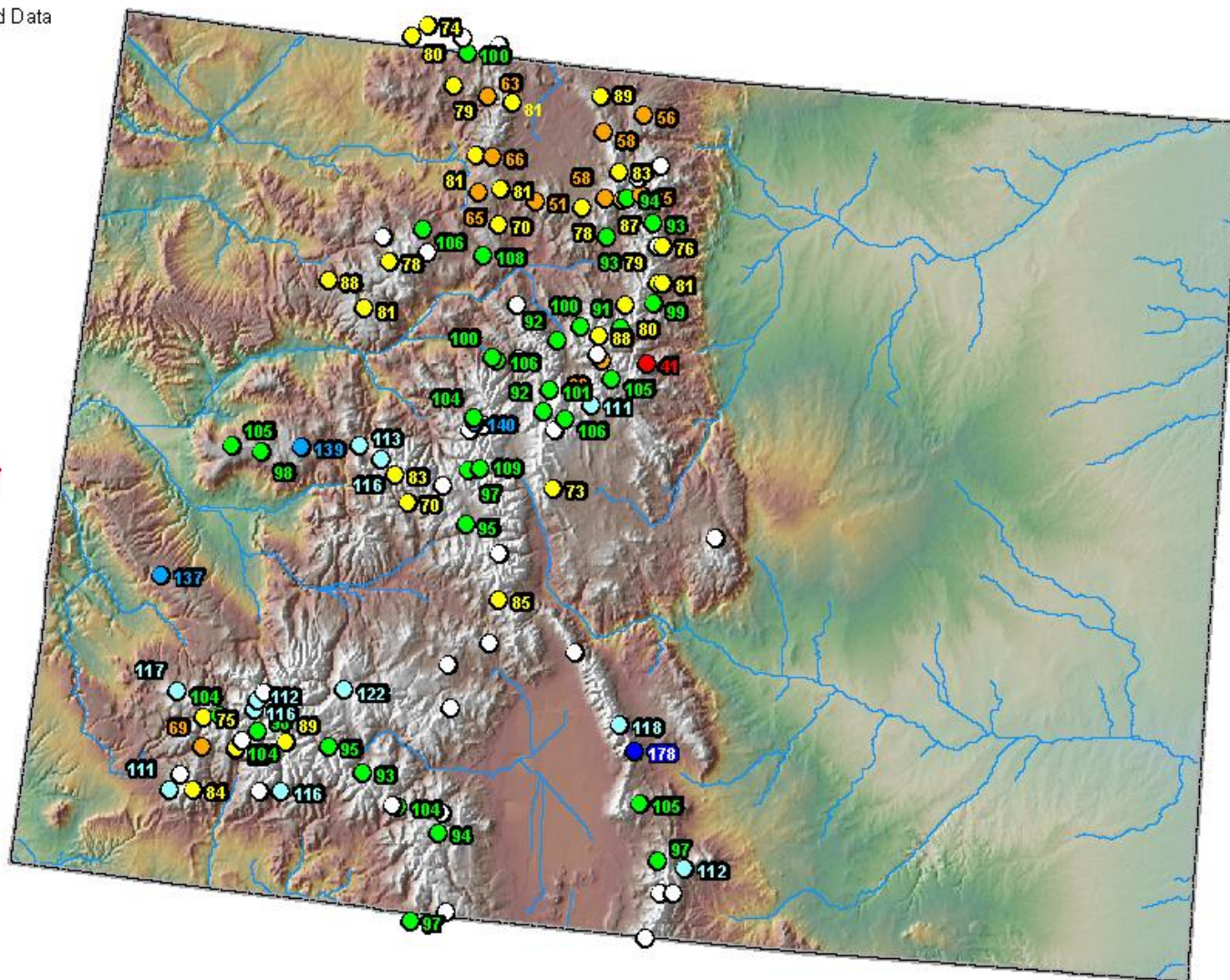


Colorado SNOTEL Month-to-Date Precipitation

Percent of Average

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

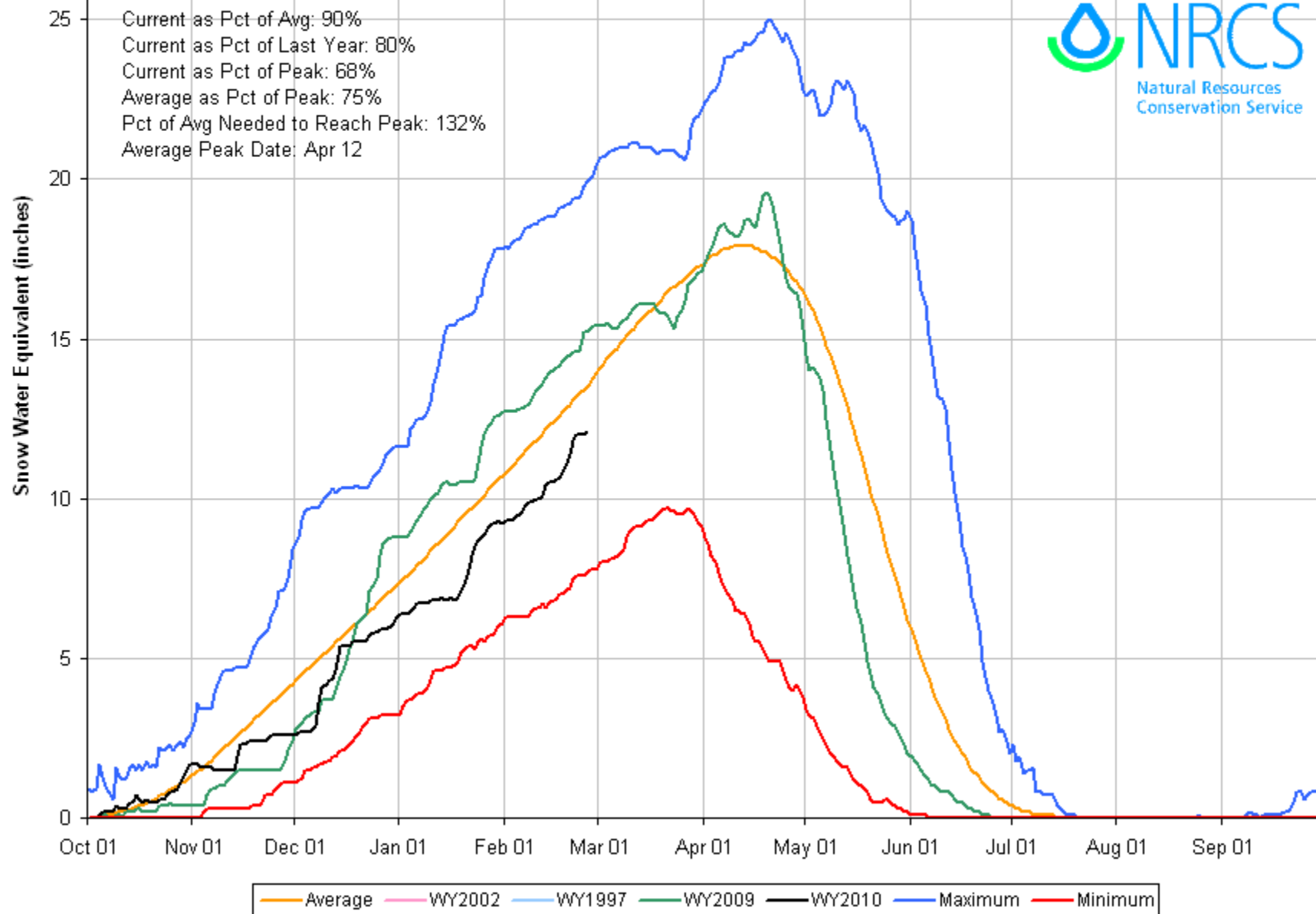
*Provisional Data
Subject to Revision*



Current as of Feb 25, 2010

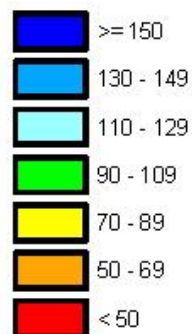
Colorado Statewide High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Feb 25, 2010

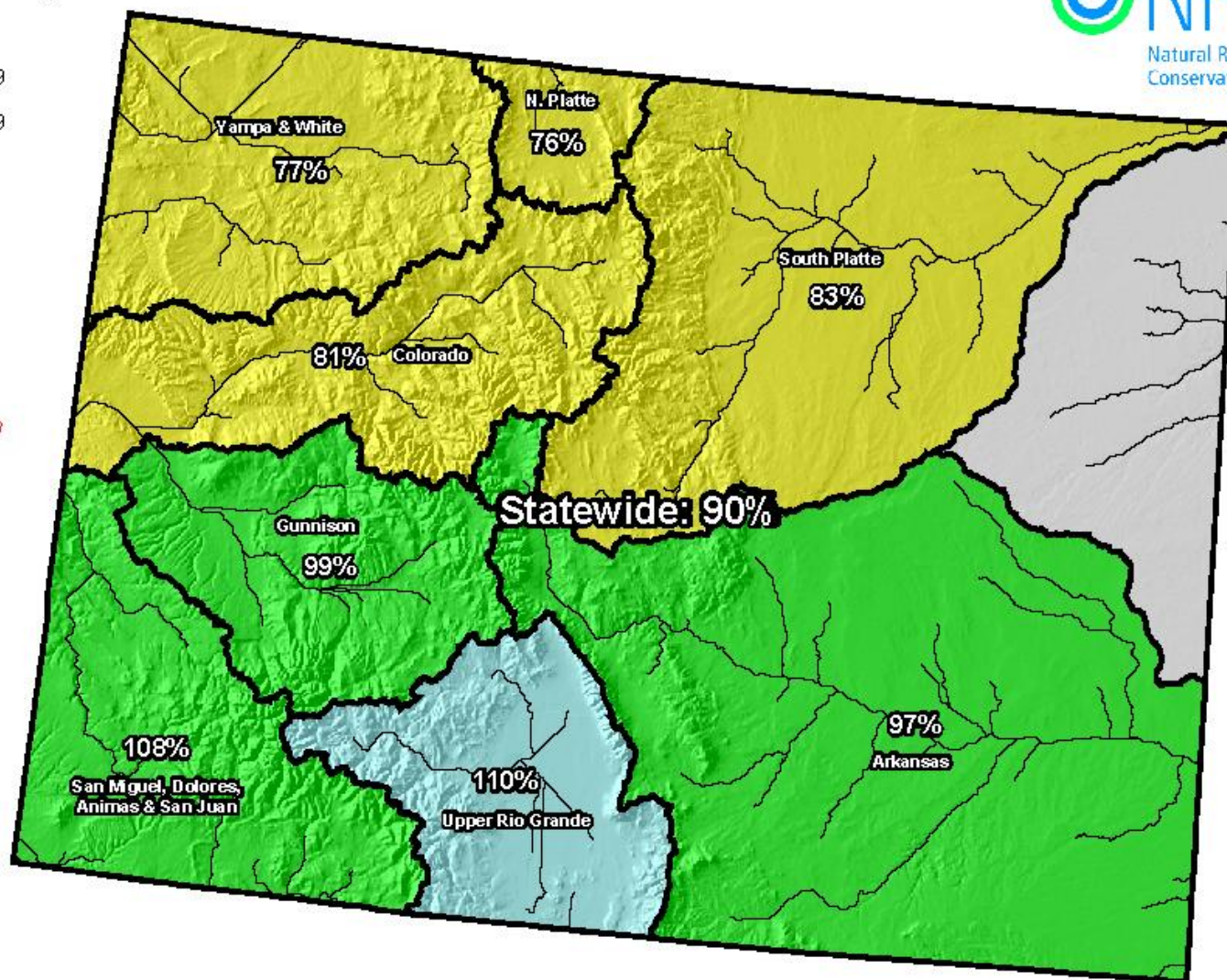


Colorado SNOTEL Snowpack Update Map

Percent of Average



*Provisional Data
Subject to Revision*

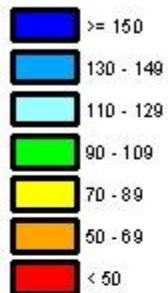


Current as of Feb 25, 2010

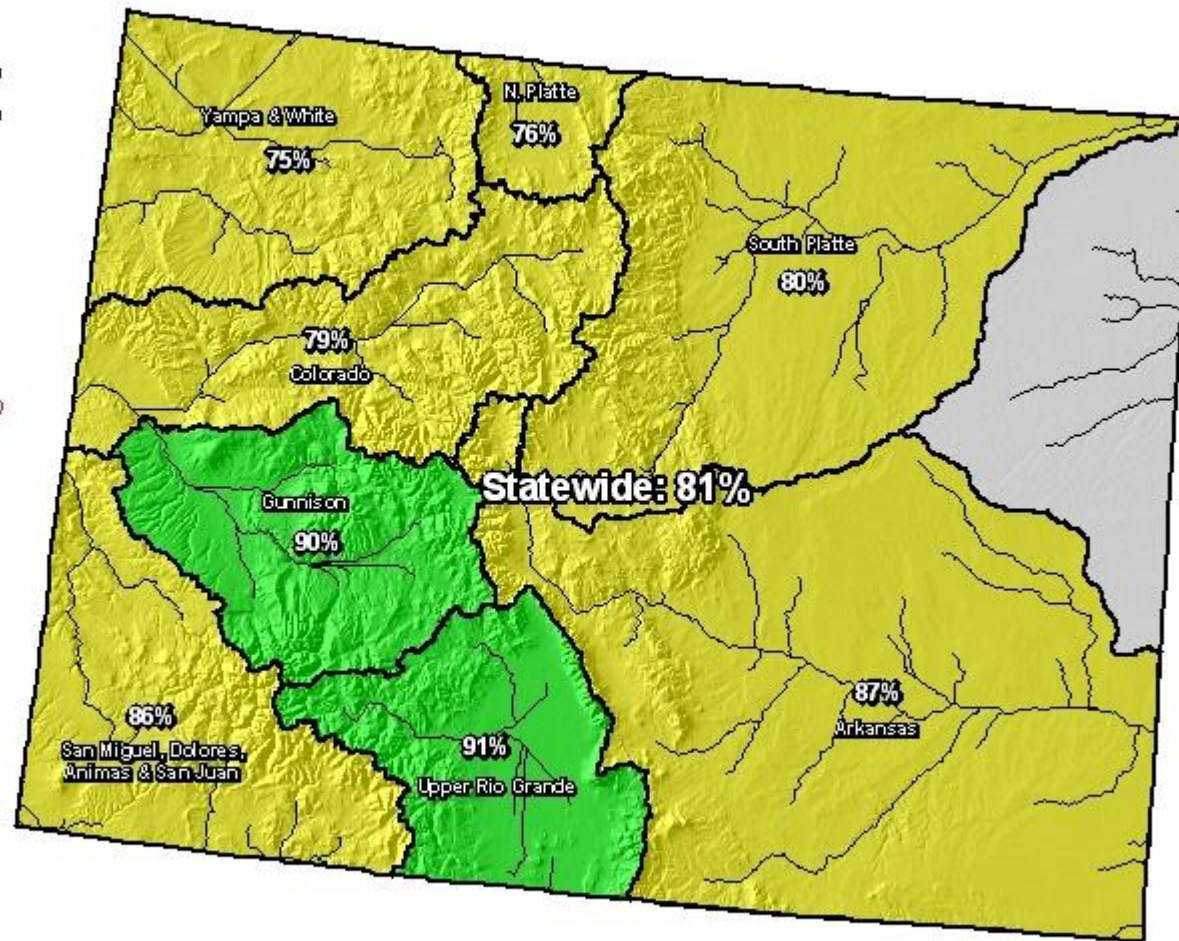
*Data may not provide a valid measure of conditions

Colorado SNOTEL April 1 Snowpack Projection Map*

Percent of Average



*Provisional Data
Subject to Revision*

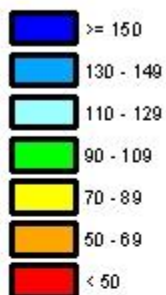


Current as of Feb 25, 2010

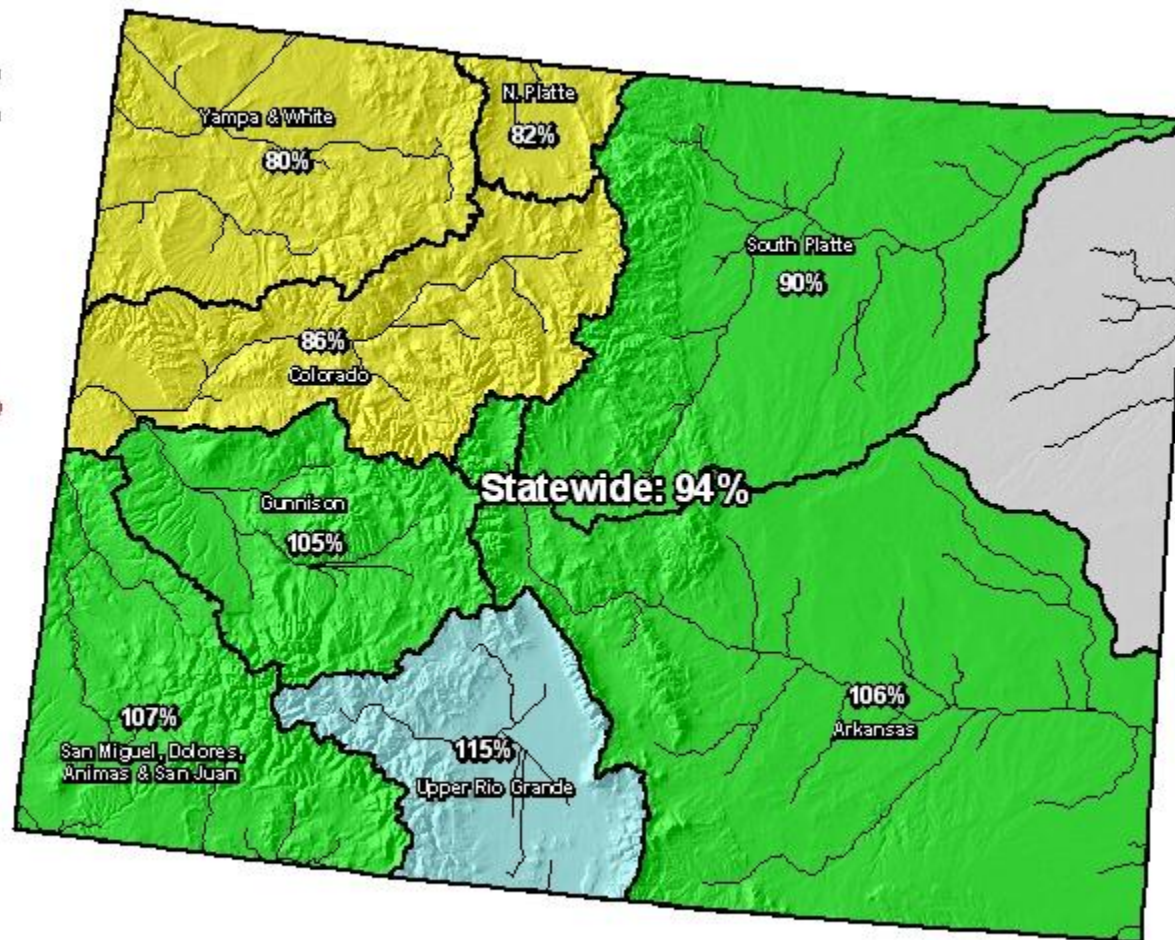
*Based on 30% Non-Exceedence Projections

Colorado SNOTEL April 1 Snowpack Projection Map*

Percent of Average



*Provisional Data
Subject to Revision*

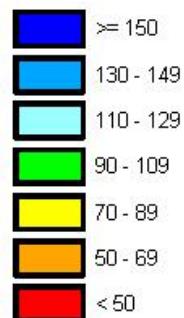


Current as of Feb 25, 2010

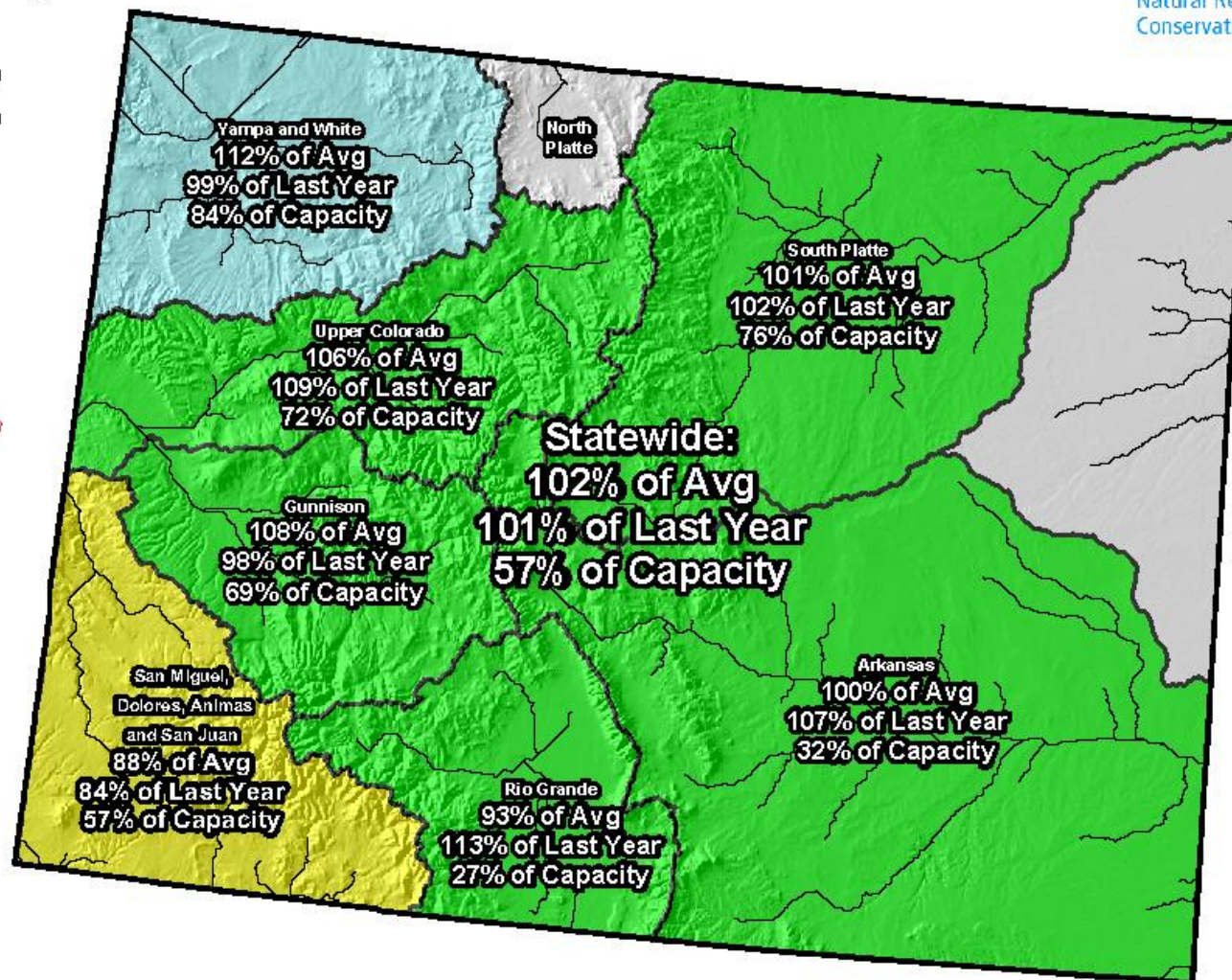
*Based on 70% Non-Exceedence Projections

Colorado Reservoir Storage Map

Percent of Average



*Provisional Data
Subject to Revision*

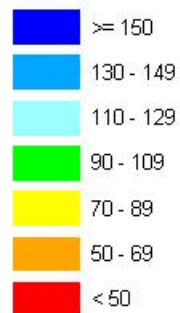


End of January 2010

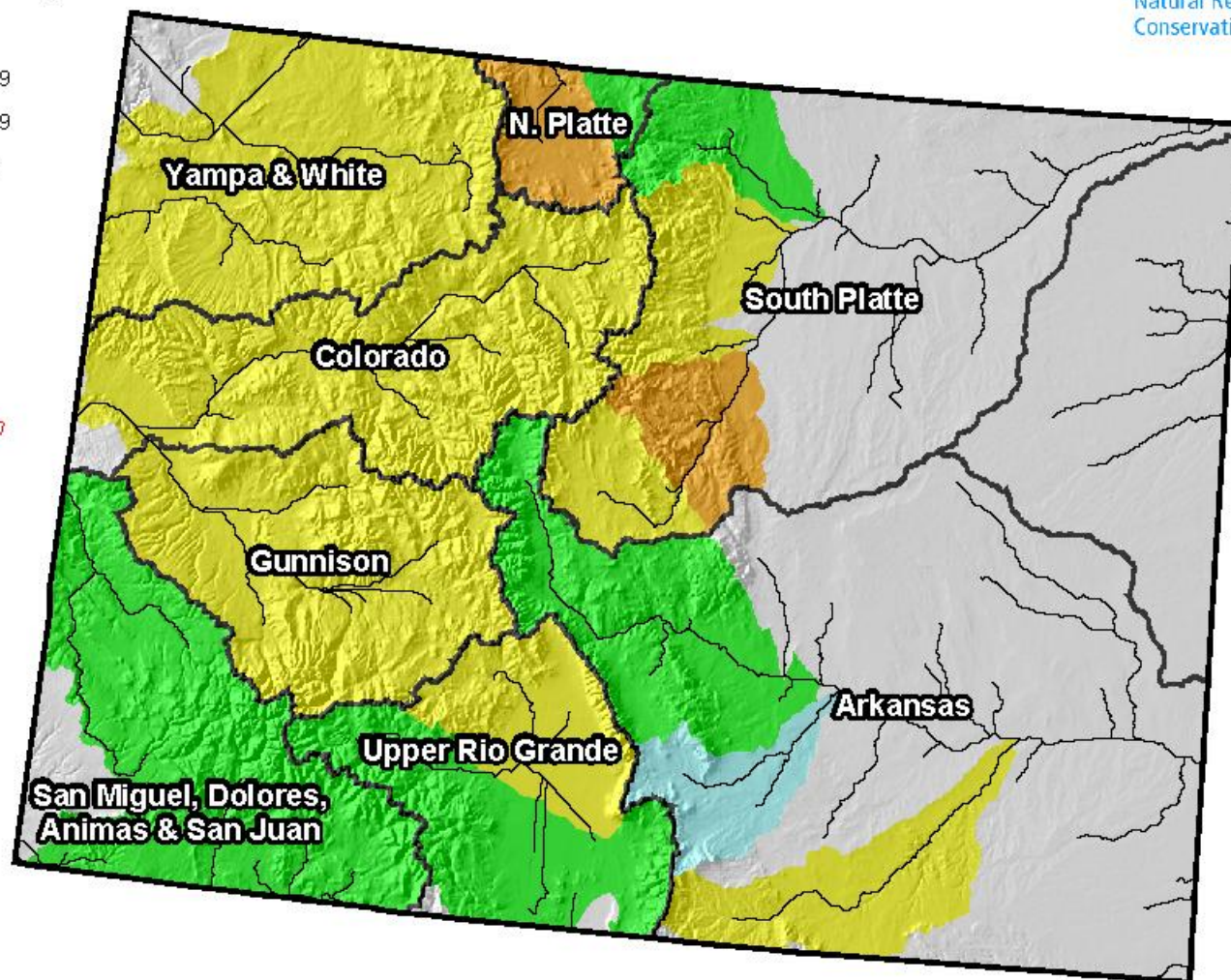
Colorado Streamflow Forecast Map



Percent of Average



*Provisional Data
Subject to Revision*

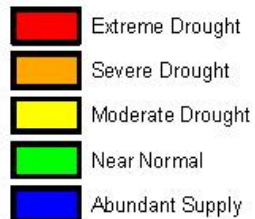


Current as of February 1, 2010

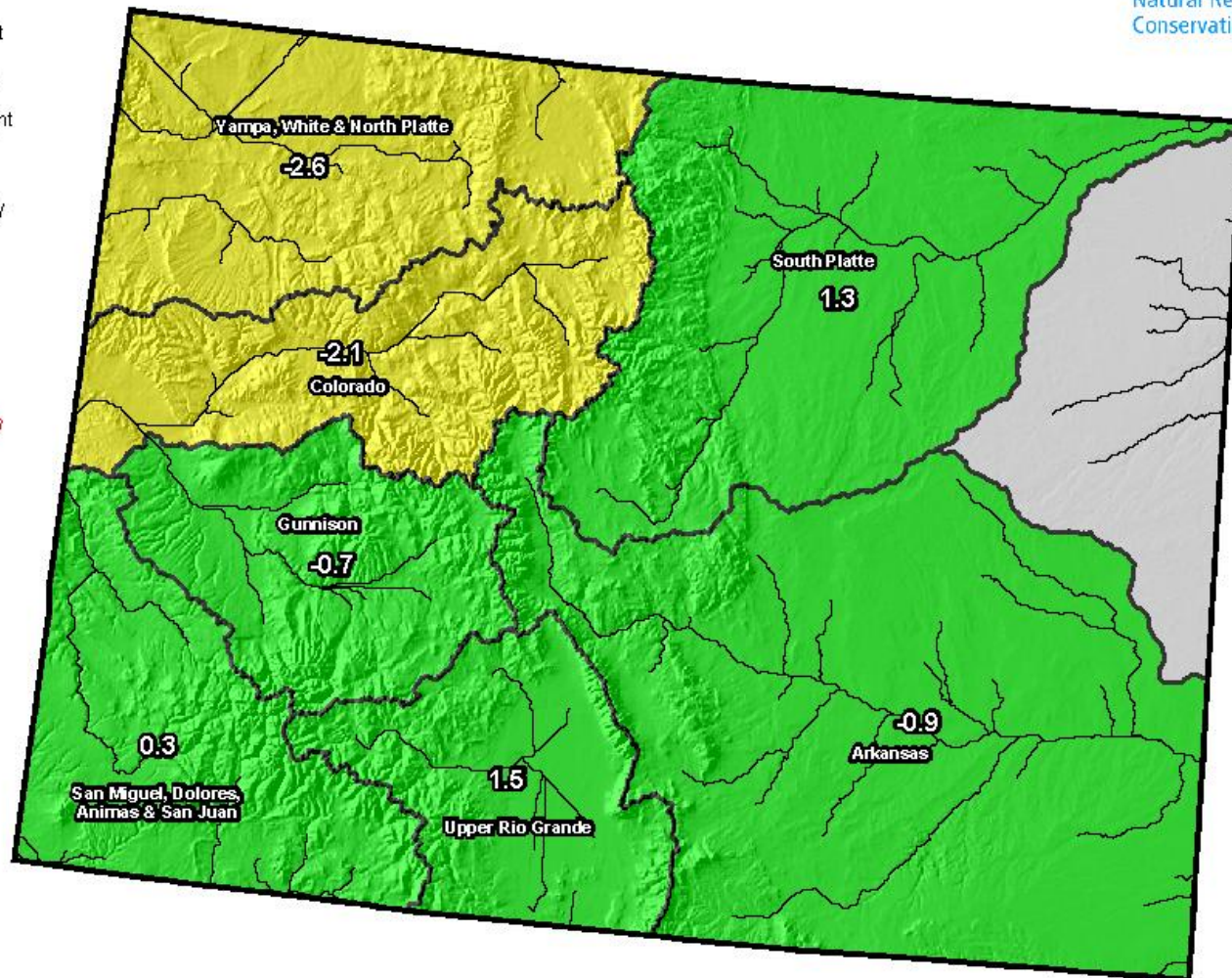
Colorado Surface Water Supply Index (SWSI) Map



Legend



*Provisional Data
Subject to Revision*



Current as of February 1, 2010