

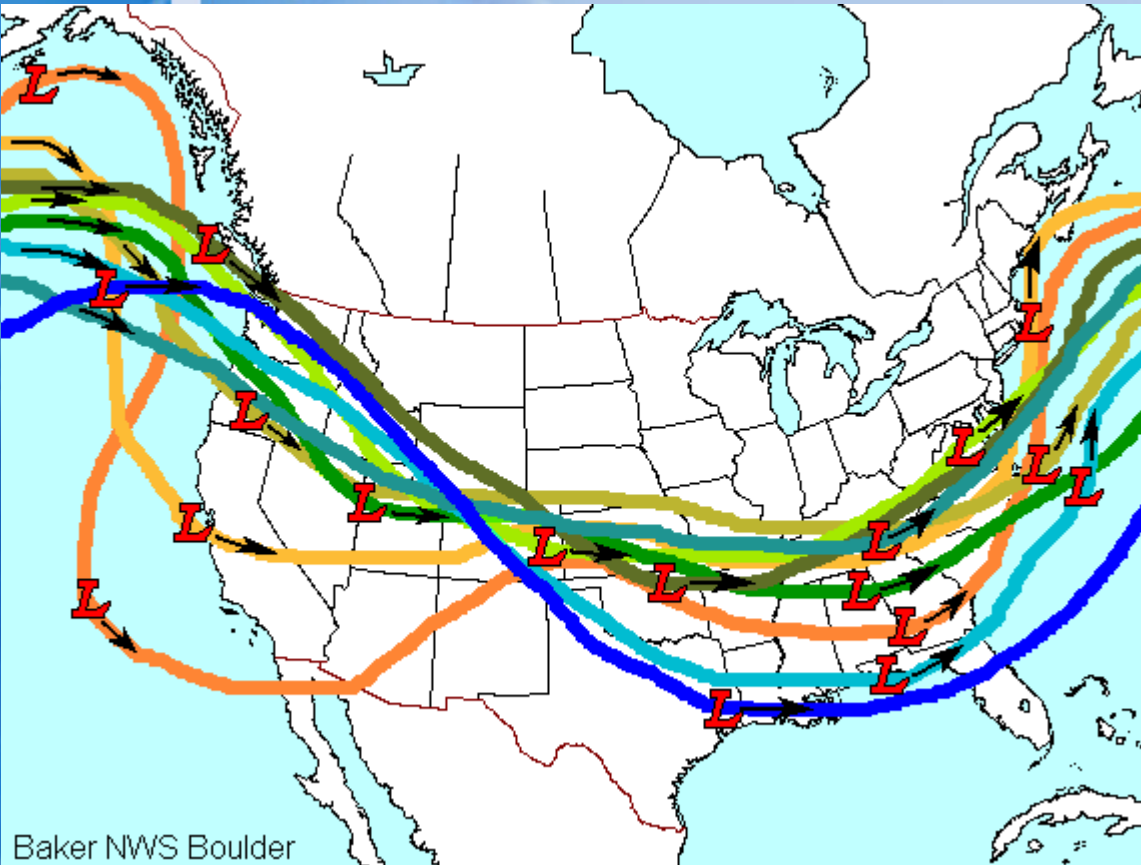
NRCS – Snow Survey & Water Supply Forecasting

Mike Gillespie

Water Availability Task Force Meeting
February 16, 2011

Weather Summary for WY 2011

Mean Weekly Trajectory of the Pacific Jet Mid-November 2010 to Mid-January 2011

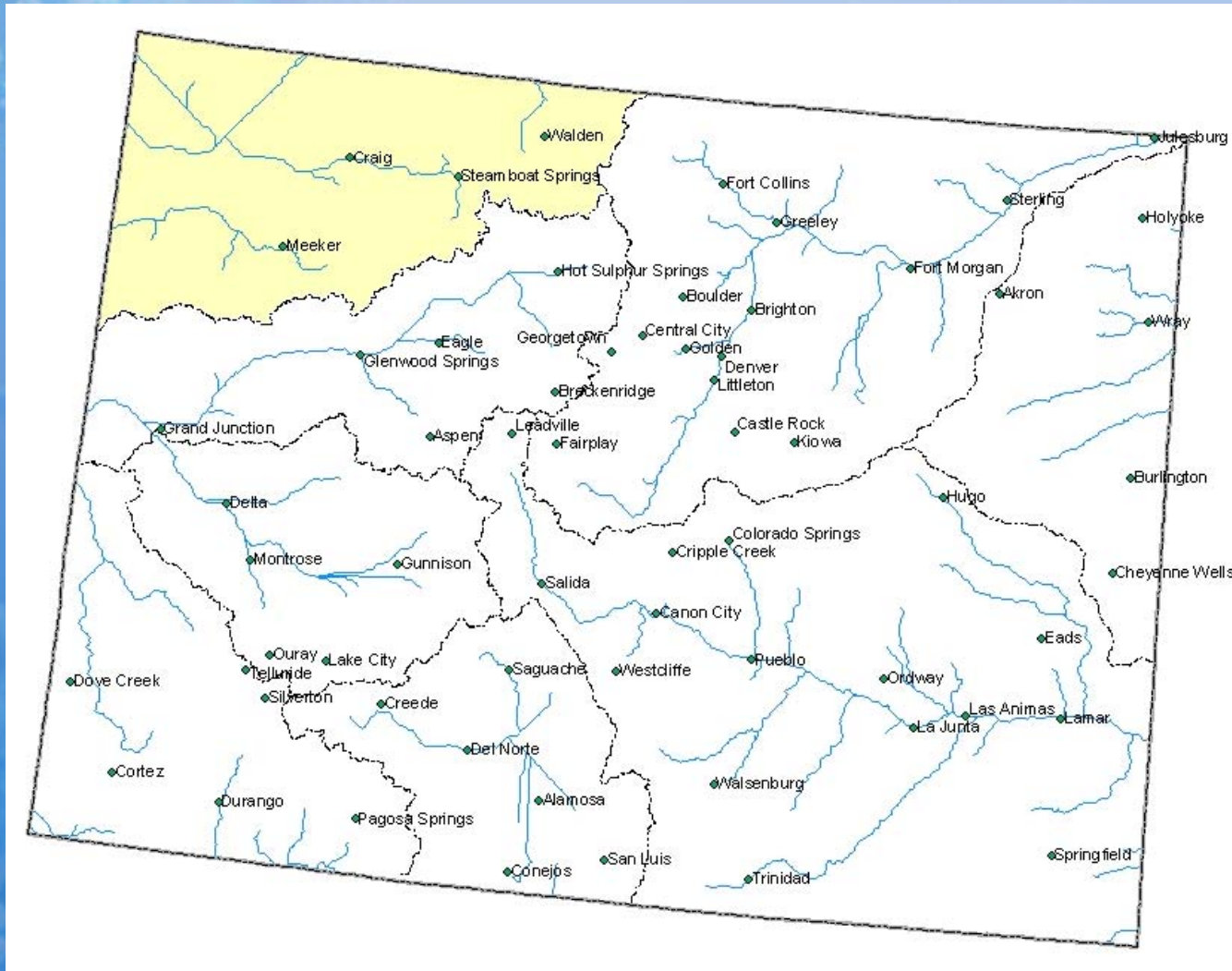


In the past couple of months the general path of the Pacific jet stream across the continental United States resembled a simple sine wave, with a ridge in the west and a trough in the east. This wave configuration in the Pacific jet stream is commonly observed during La Niña episodes.

However this past December, a large kink in the jet formed over the Gulf of Alaska, causing it to turn sharply southward along the west coast. Such a track is more often observed during the winters of El Niño events.

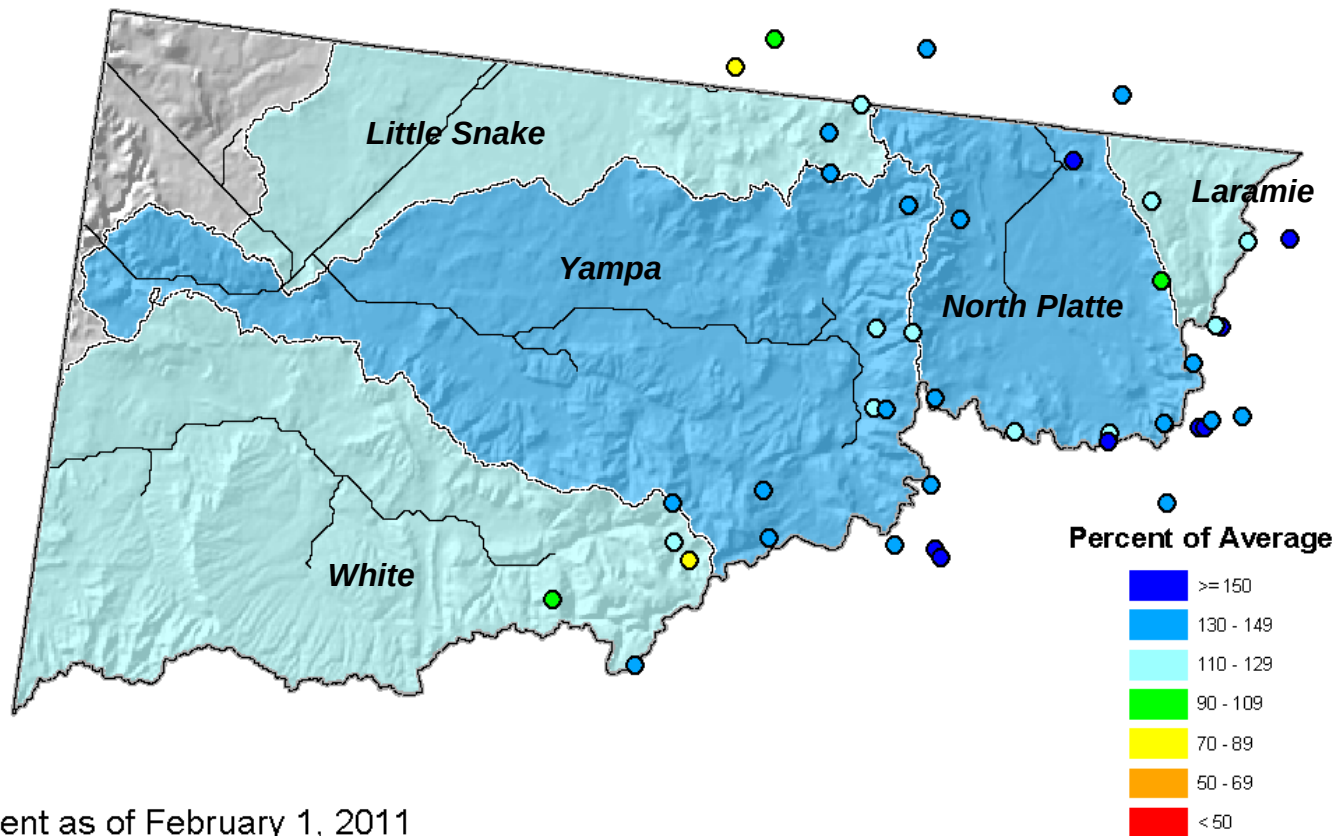
This southward shift in the jet, hence the storm track, resulted in extraordinary precipitation (rain and snow) amounts across southern California, the Desert Southwest and Four Corners regions, including southwest Colorado.

Yampa, White & North Platte River Basins Summary



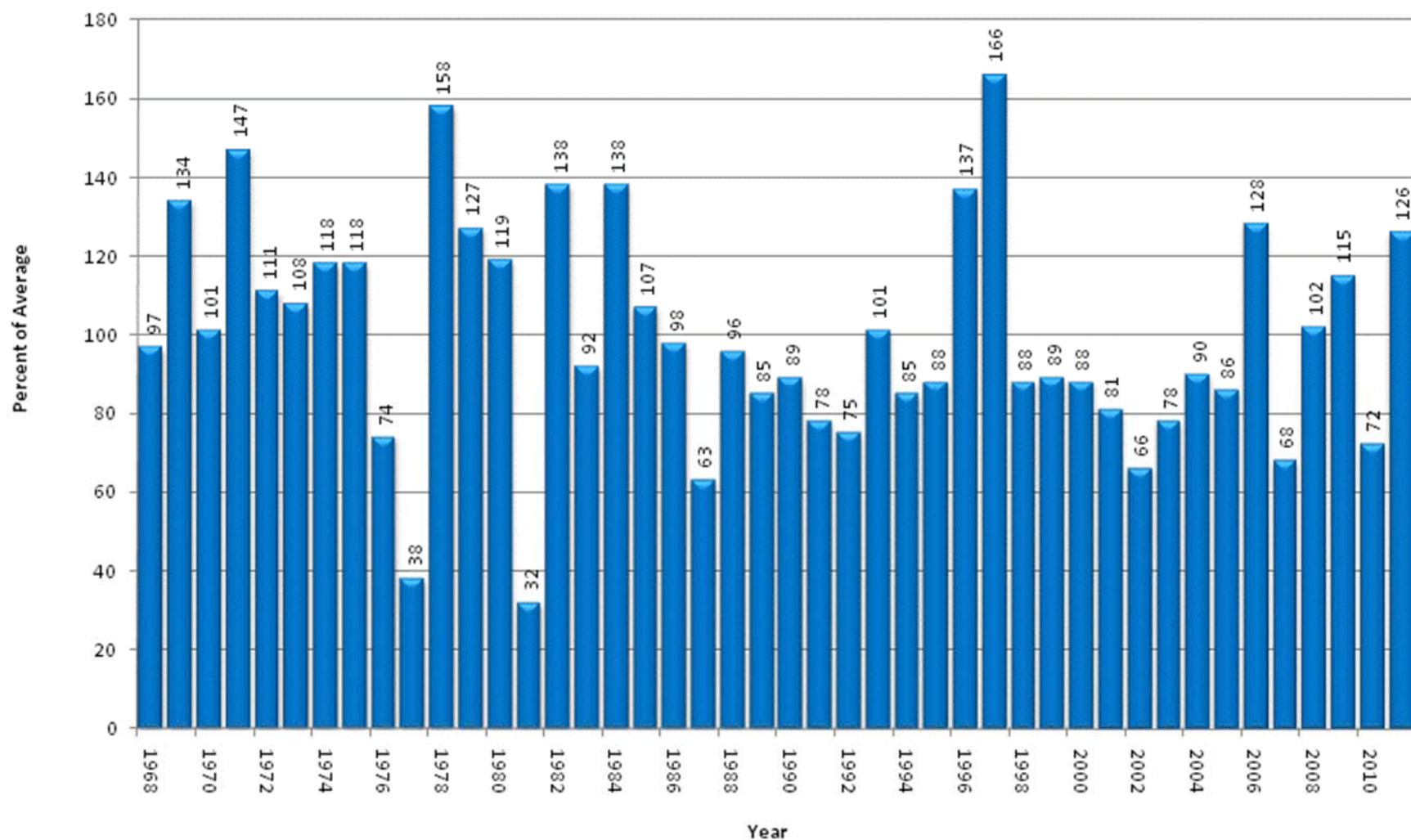
Yampa, White and North Platte River Basins Snowpack Map

*Provisional Data
Subject to Revision*



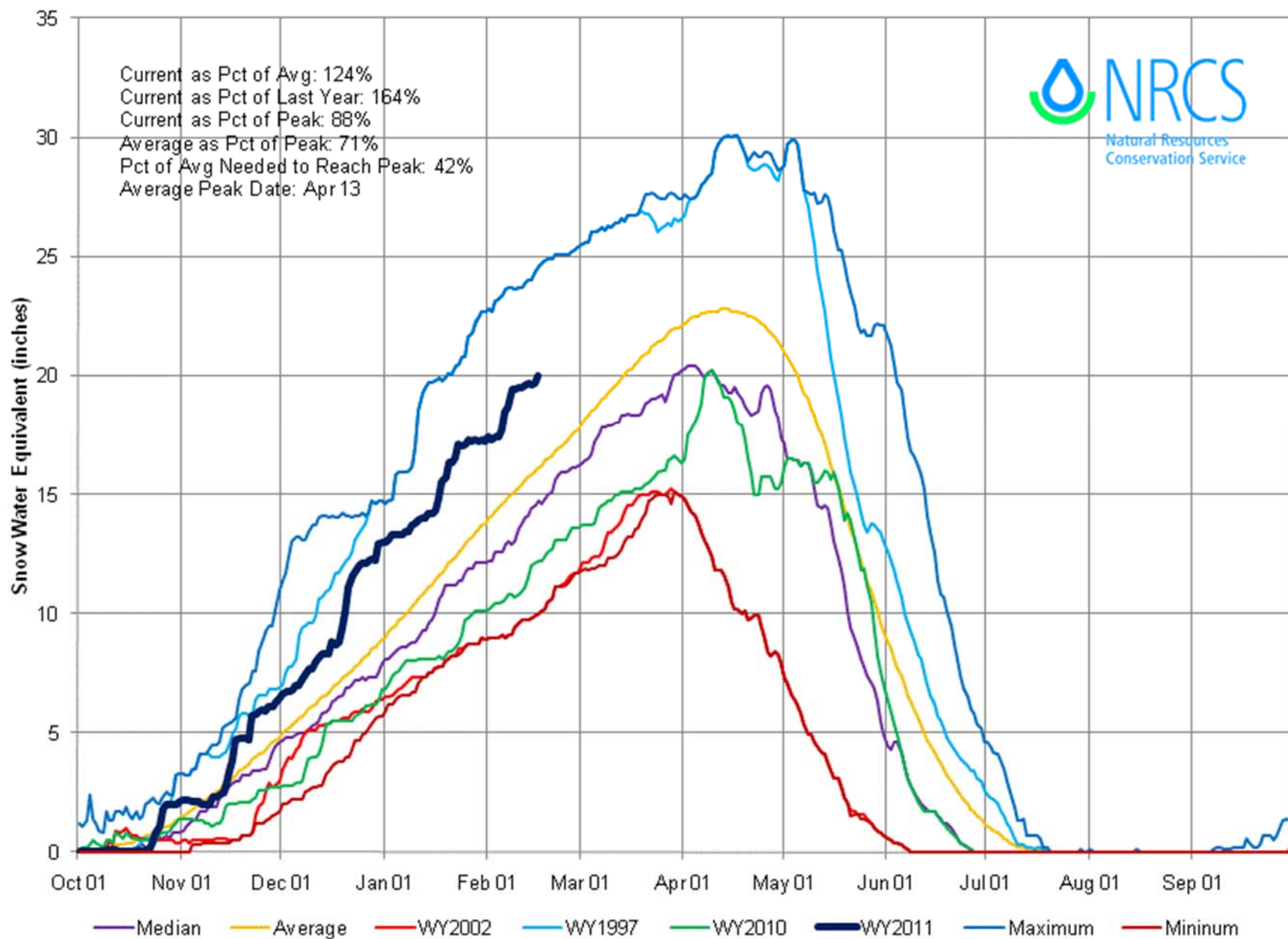
Current as of February 1, 2011

February 1 Total Yampa & White River Basins Snowpack



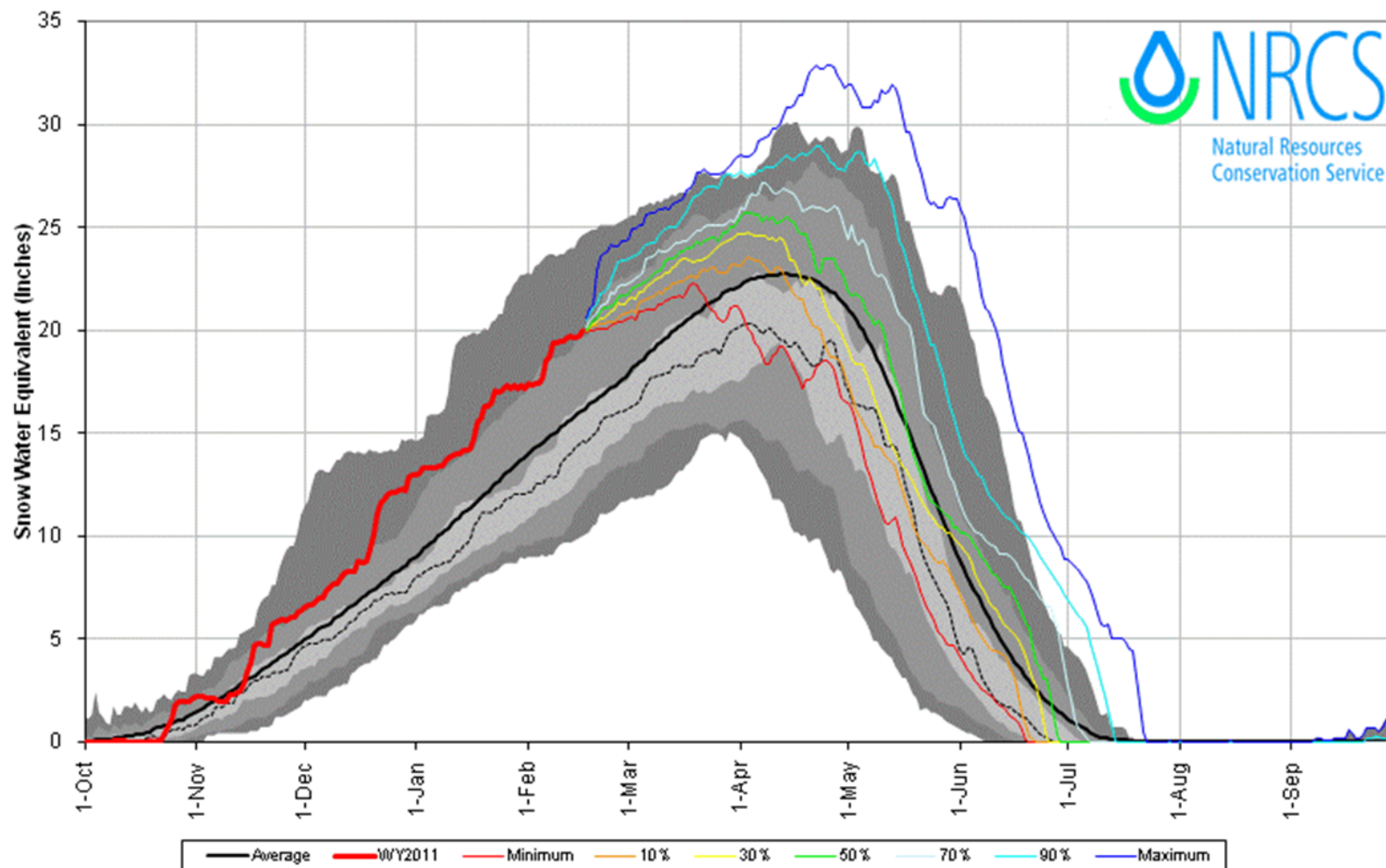
Yampa and White River Basins High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Feb 16, 2011



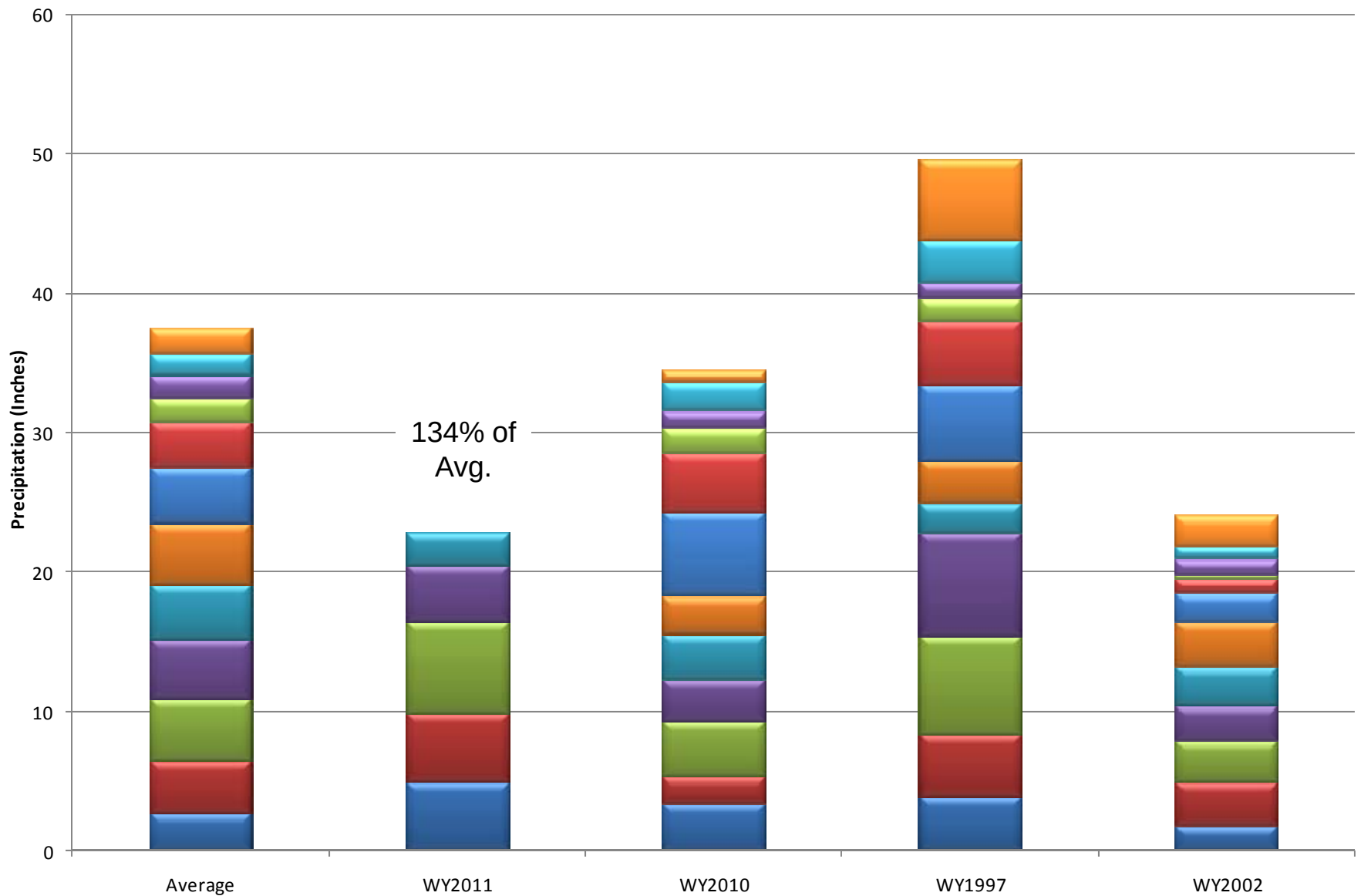
Yampa and White River Basins with Non-Exceedence Projections

Based on Provisional SNOTEL Data as of Feb 16, 2011



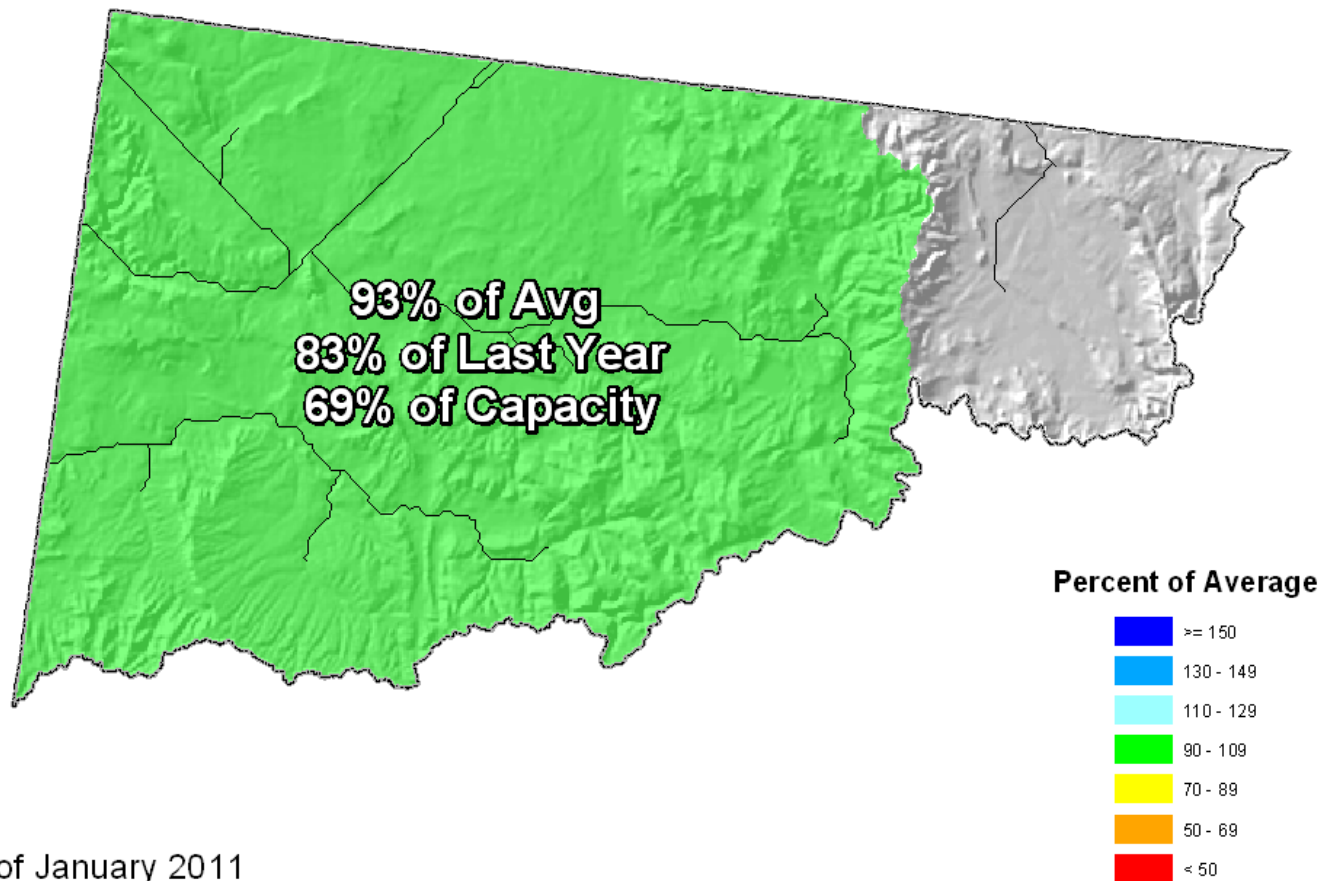
Yampa and White River Basins High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Feb 15, 2011



Yampa & White River Basins Reservoir Storage Map

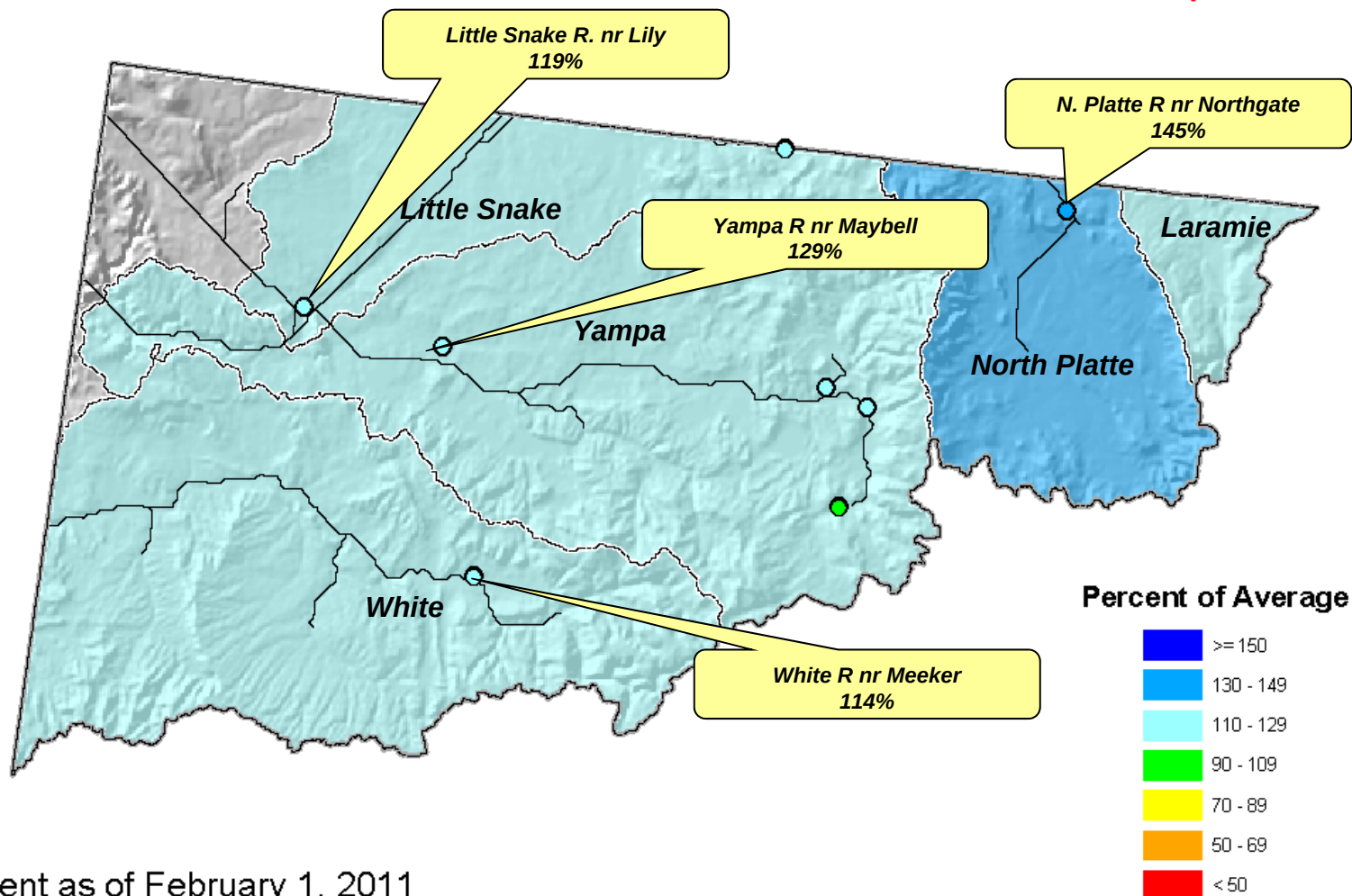
*Provisional Data
Subject to Revision*



End of January 2011

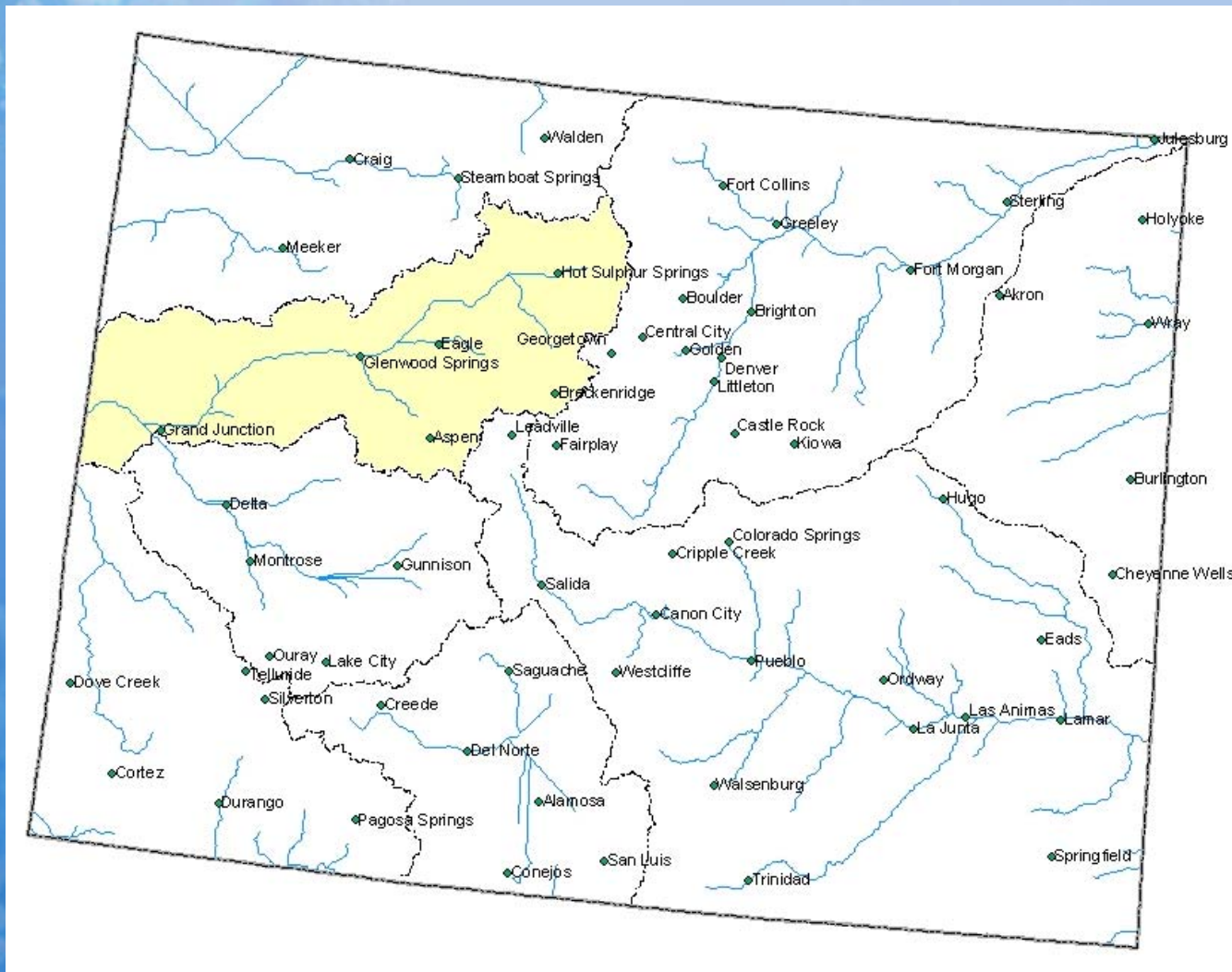
Yampa, White and North Platte River Basins Streamflow Map

*Provisional Data
Subject to Revision*



Current as of February 1, 2011

Colorado River Basin Summary

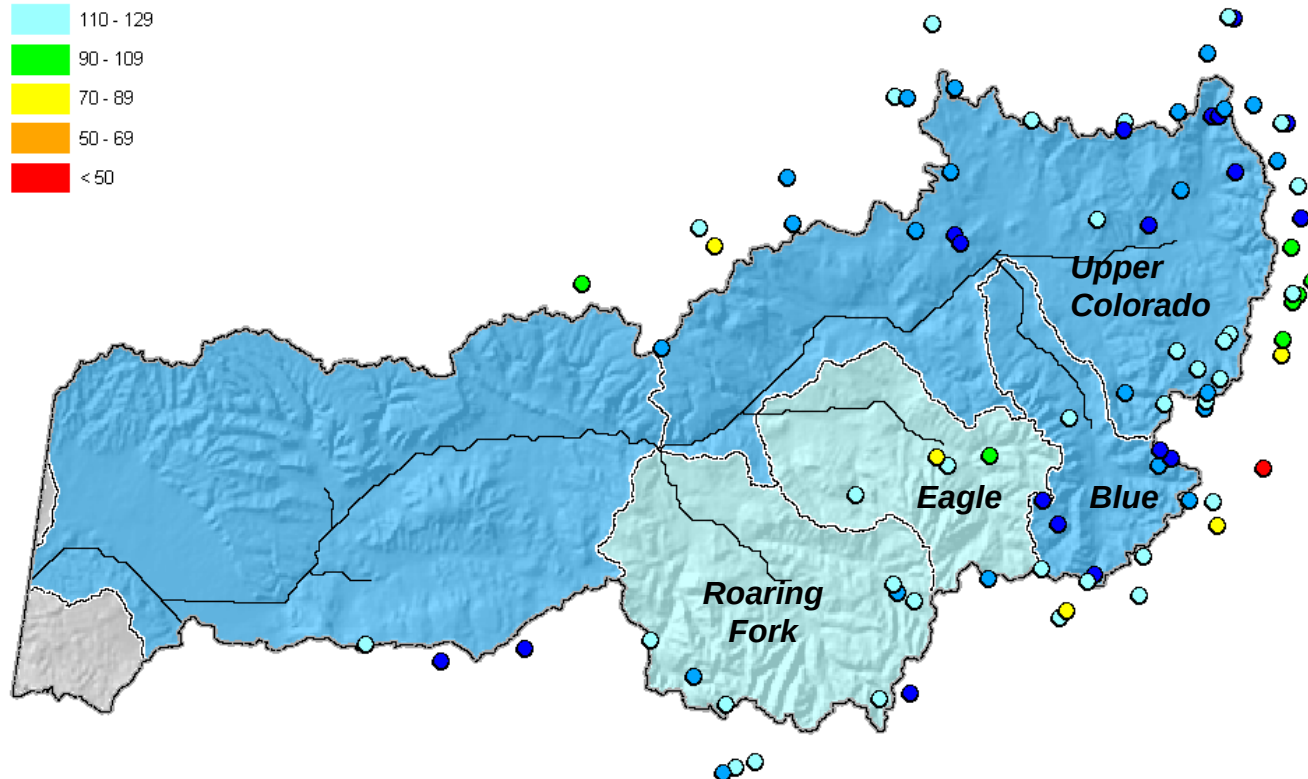


Colorado River Basin Snowpack Map

Percent of Average

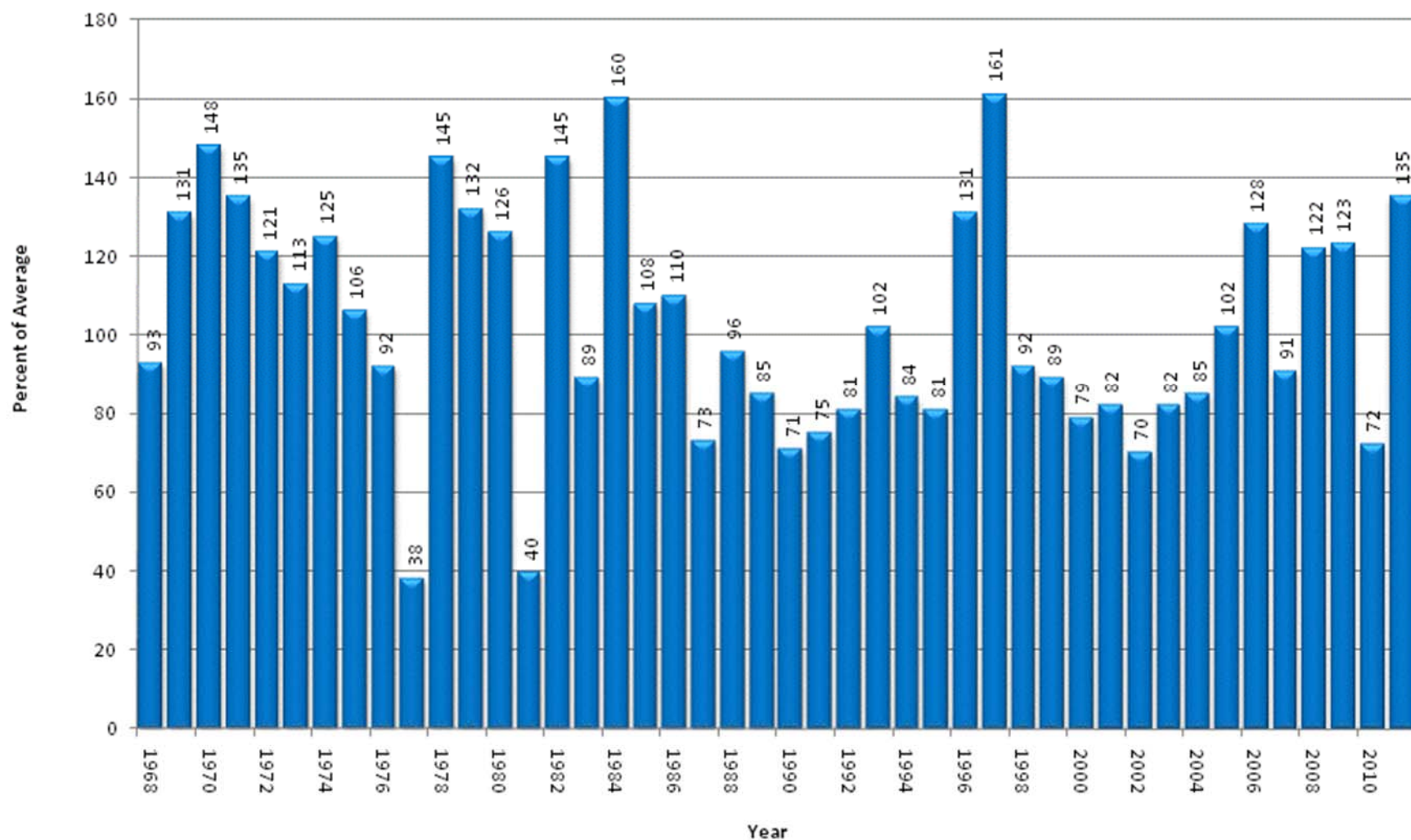


*Provisional Data
Subject to Revision*



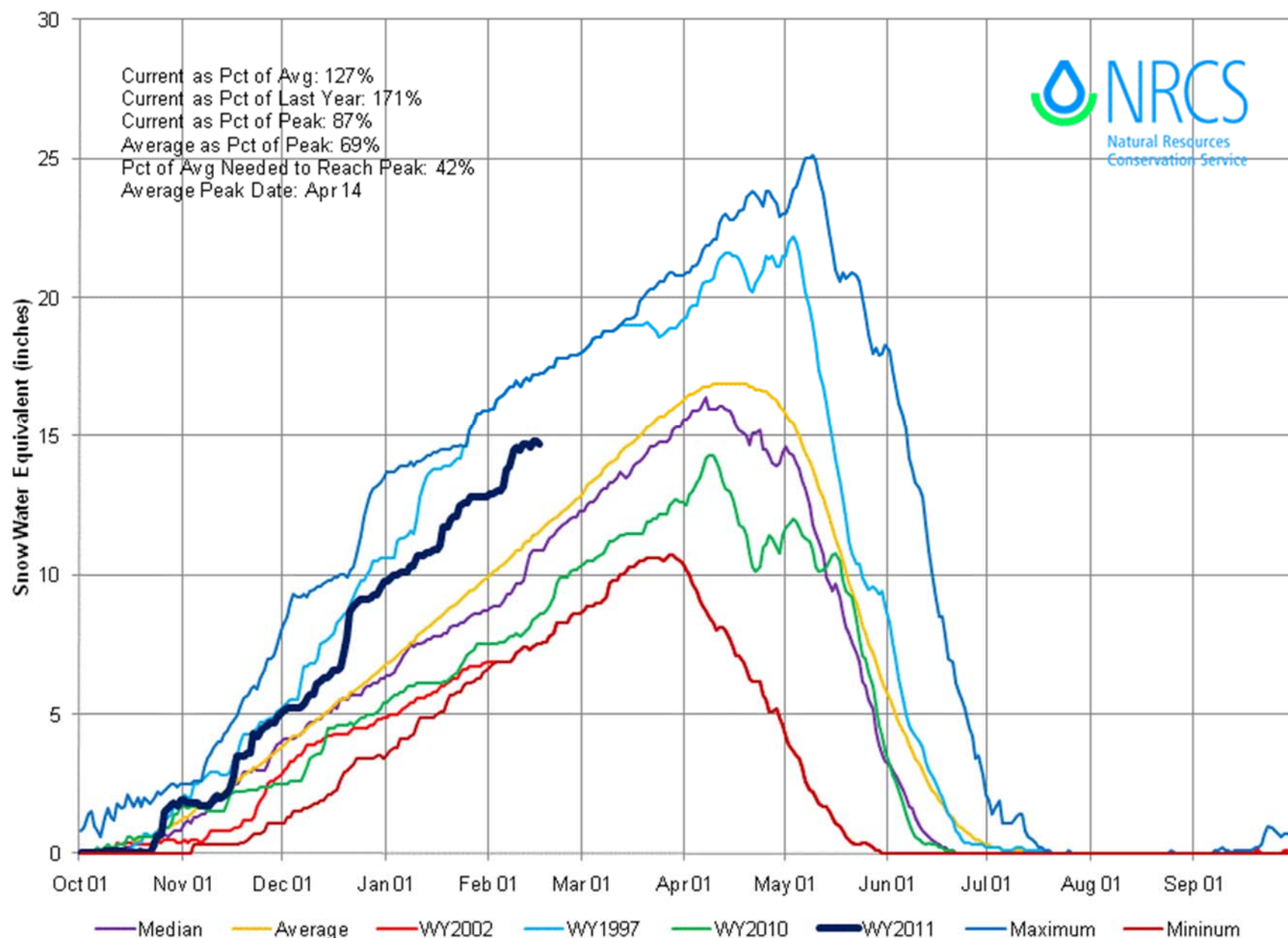
Current as of February 1, 2011

February 1 Total Colorado River Basin Snowpack



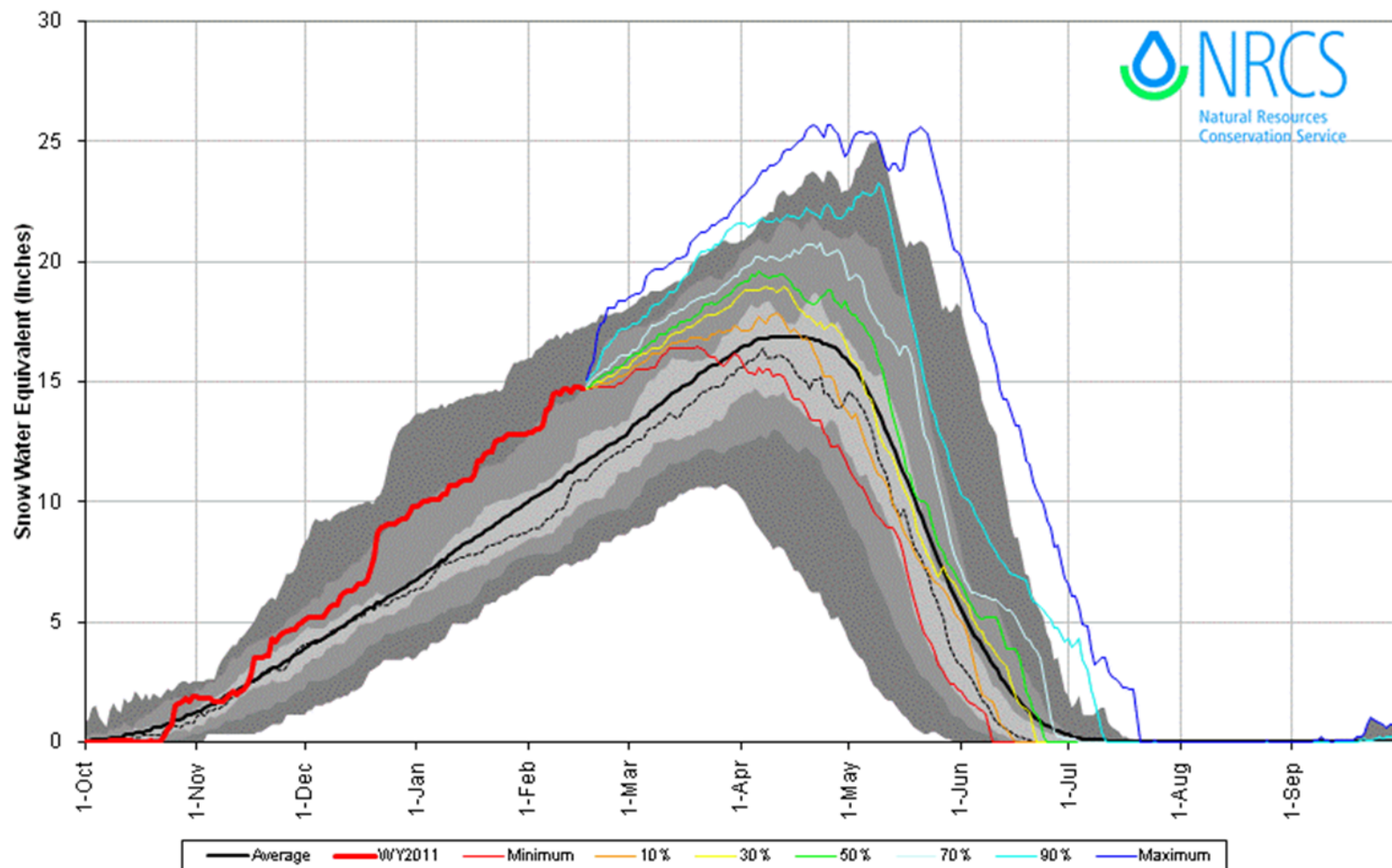
Upper Colorado River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Feb 16, 2011



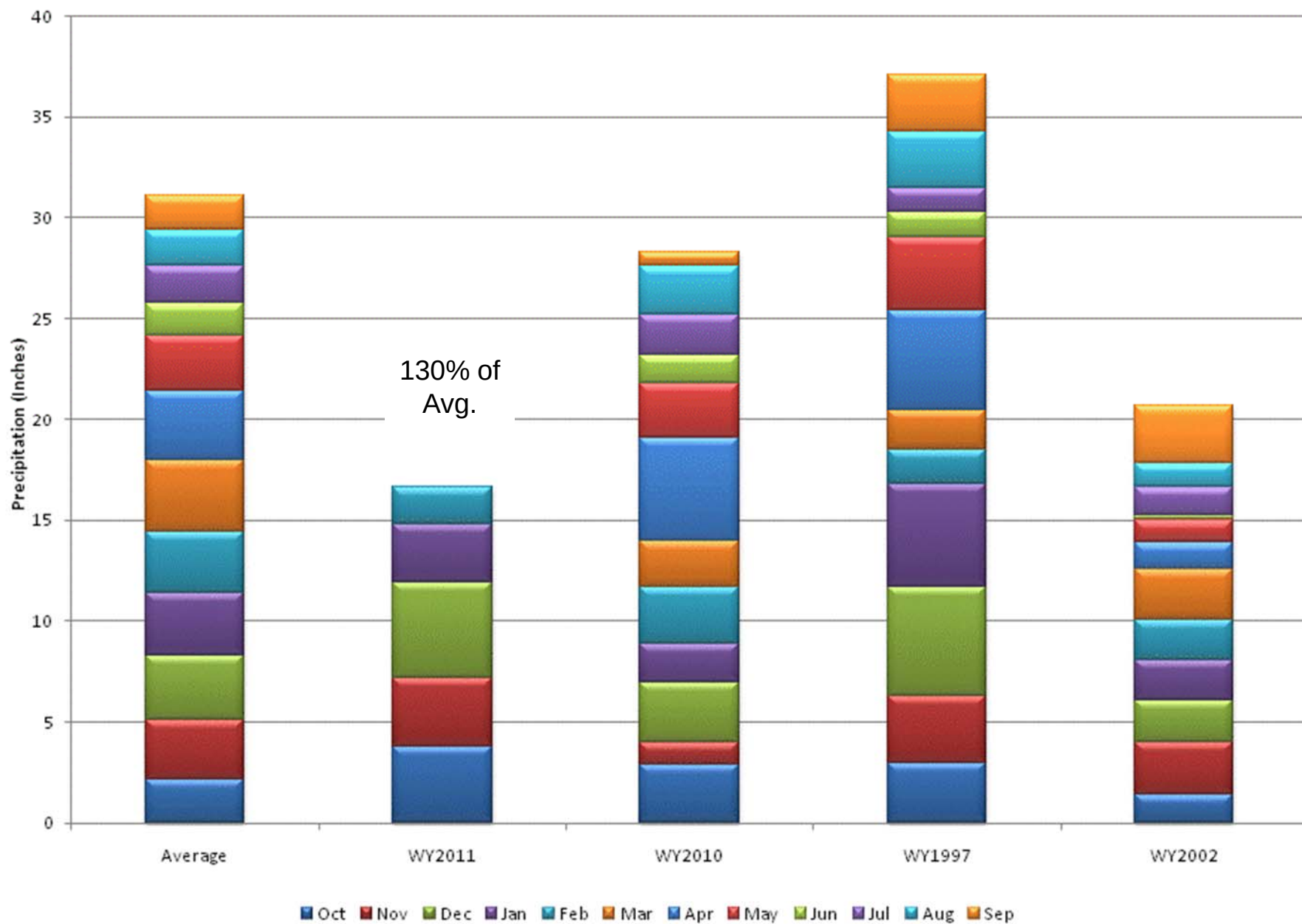
Colorado River Basin with Non-Exceedence Projections

Based on Provisional SNOTEL Data as of Feb 16, 2011



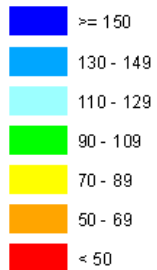
Upper Colorado River Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Feb 16, 2011

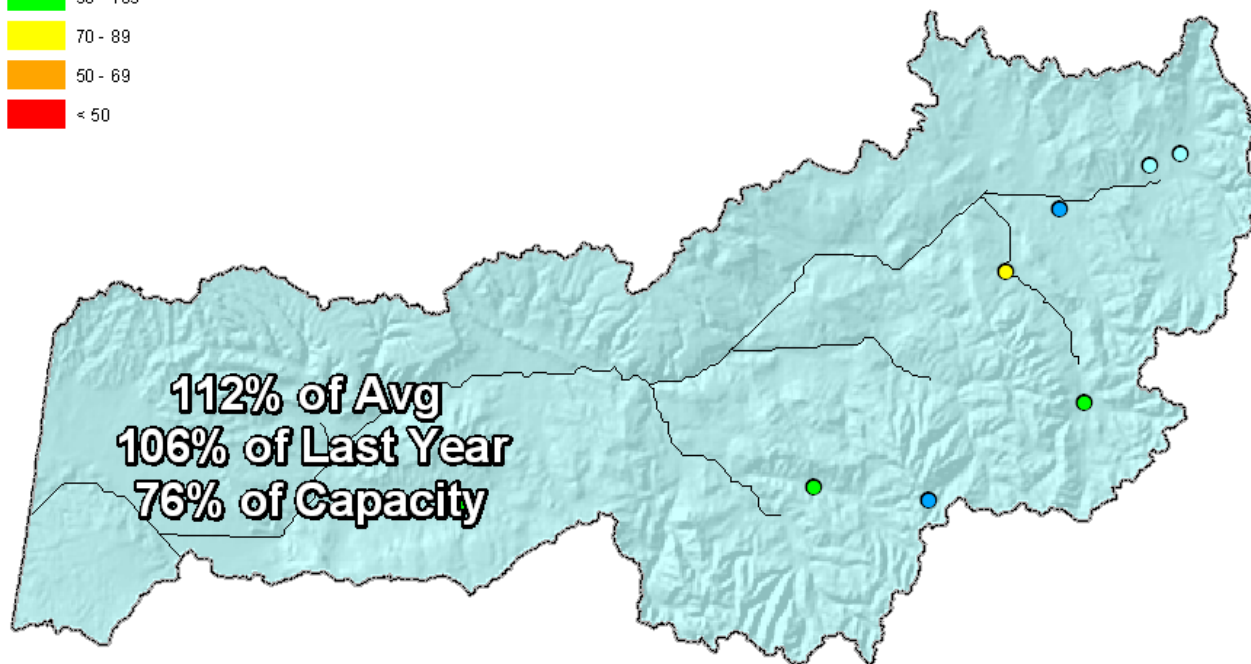


Colorado River Basin Reservoir Storage Map

Percent of Average

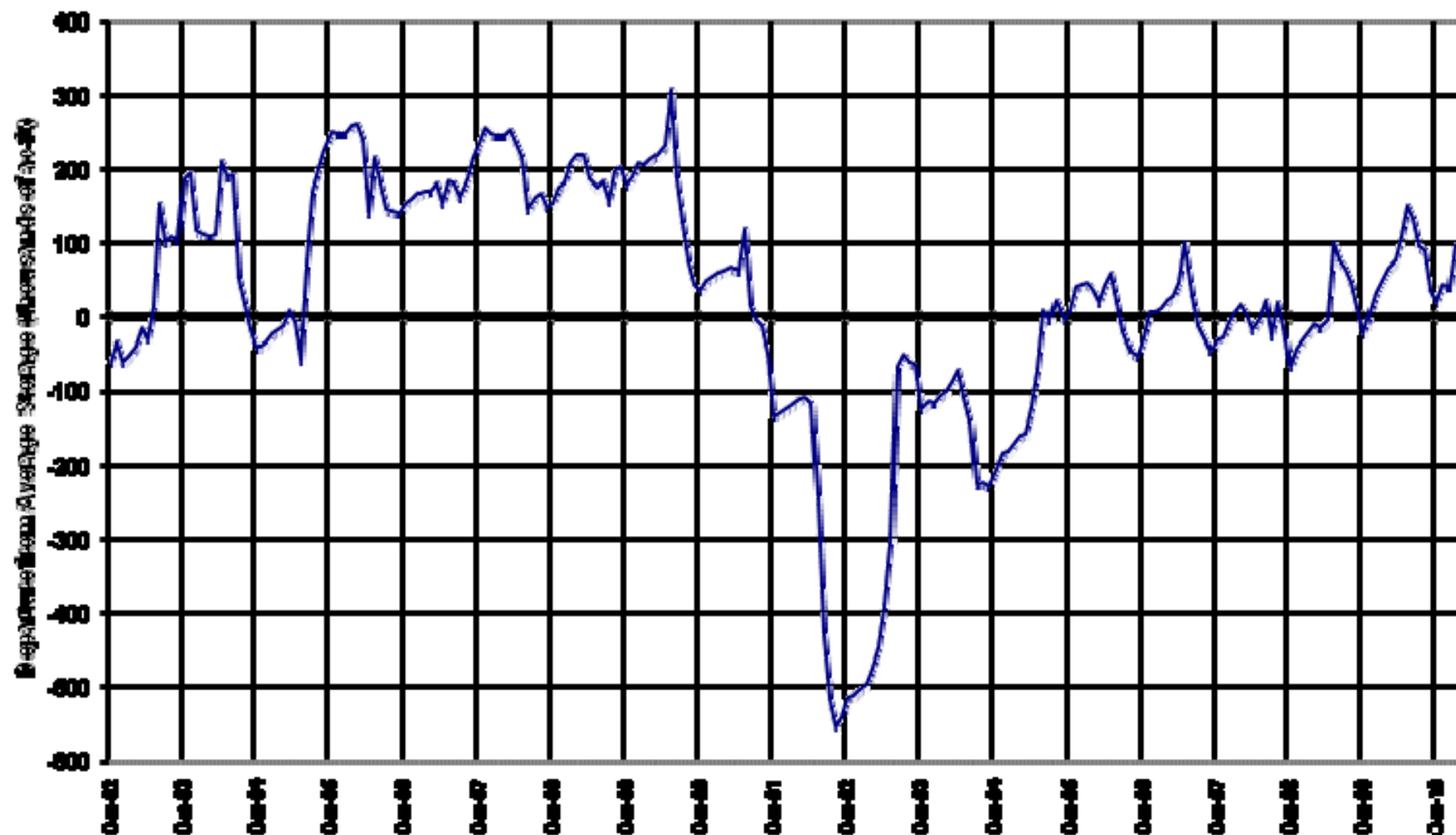


*Provisional Data
Subject to Revision*



End of January 2011

COLORADO RIVER BASIN Reservoir Storage Departure from Average

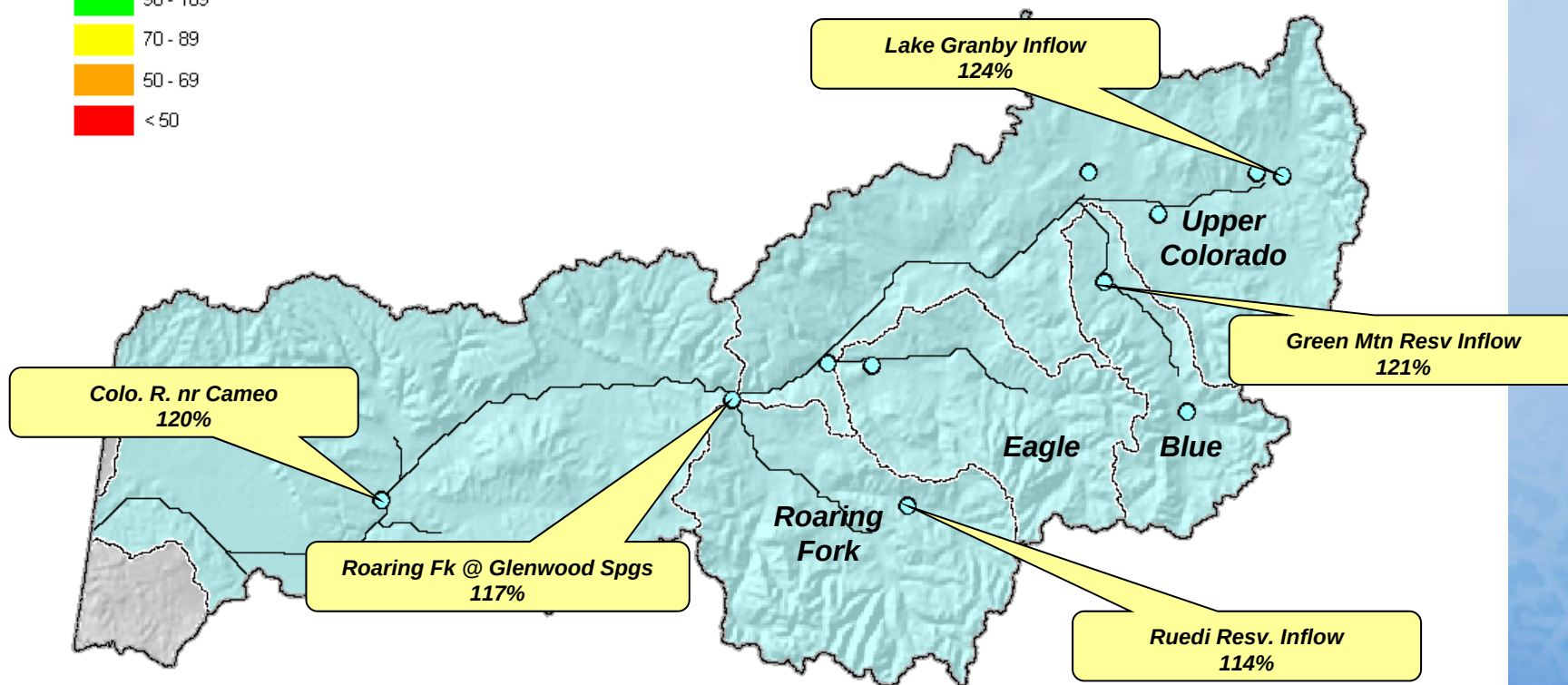


Colorado River Basin Streamflow Forecast Map

Percent of Average



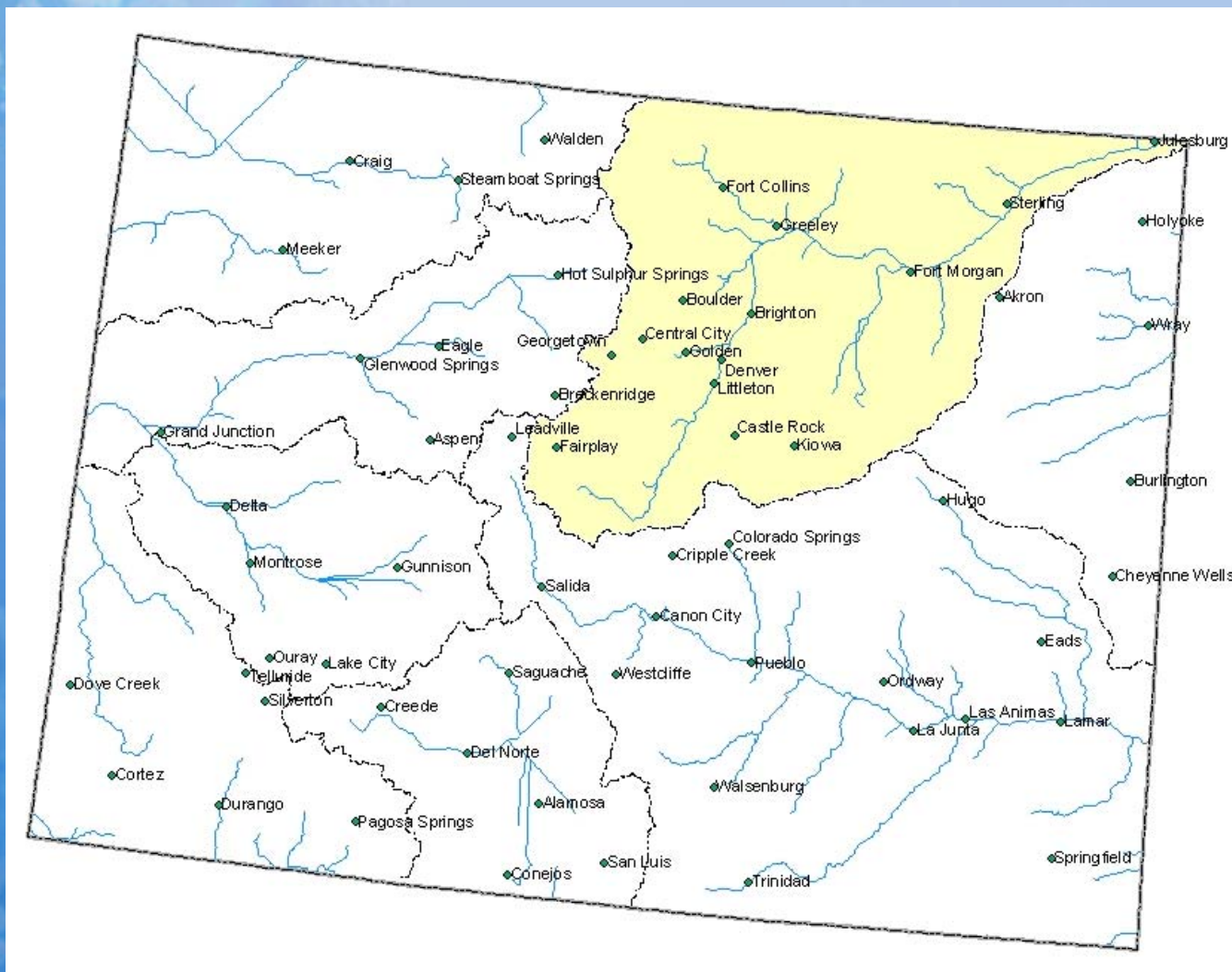
*Provisional Data
Subject to Revision*



Current as of February 1, 2011

Lake Powell Inflow: Apr-Jul 9.0 million ac-ft 113% avg.
As of 2/15/2011

South Platte River Basin Summary

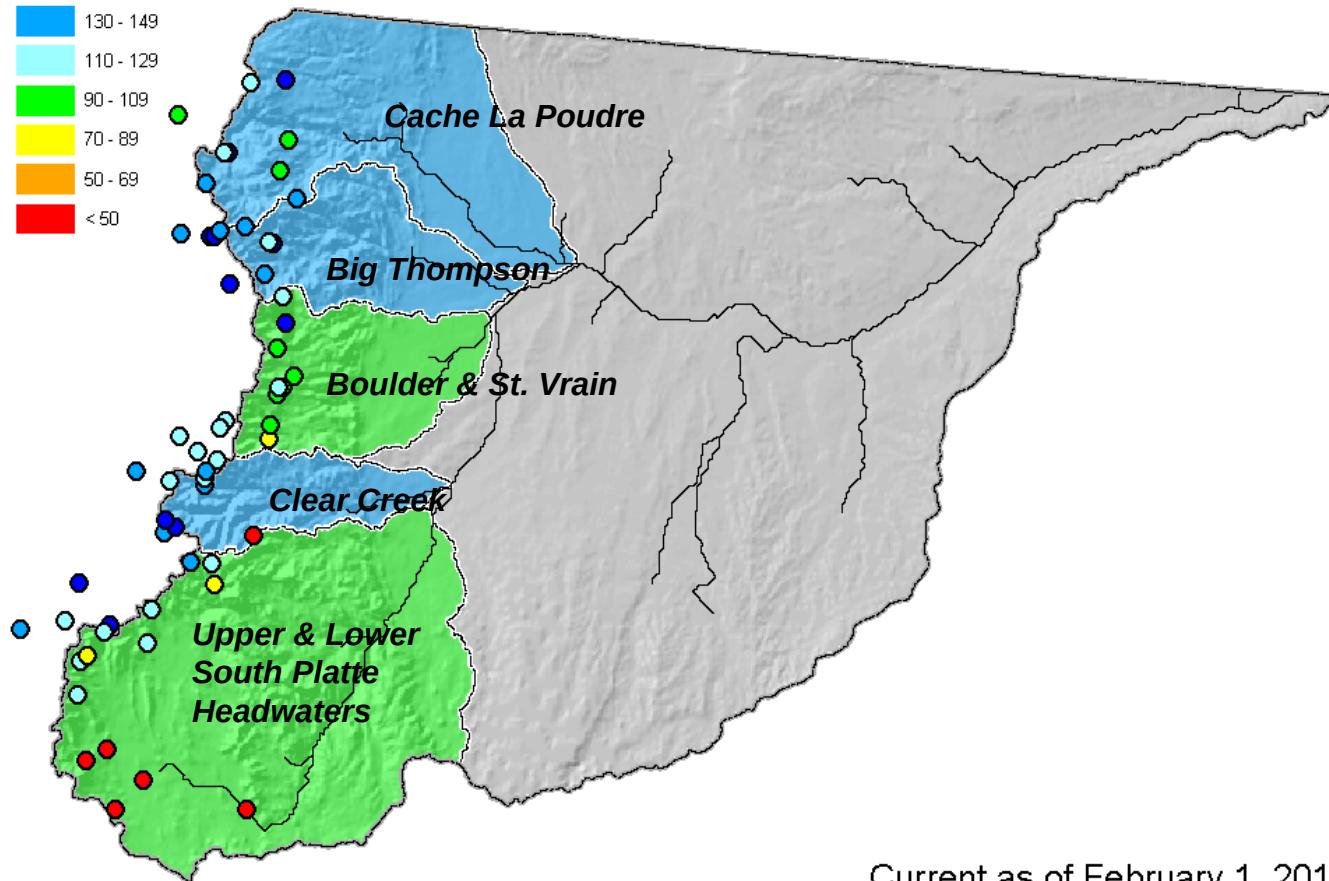


South Platte River Basin Snowpack Map

Percent of Average

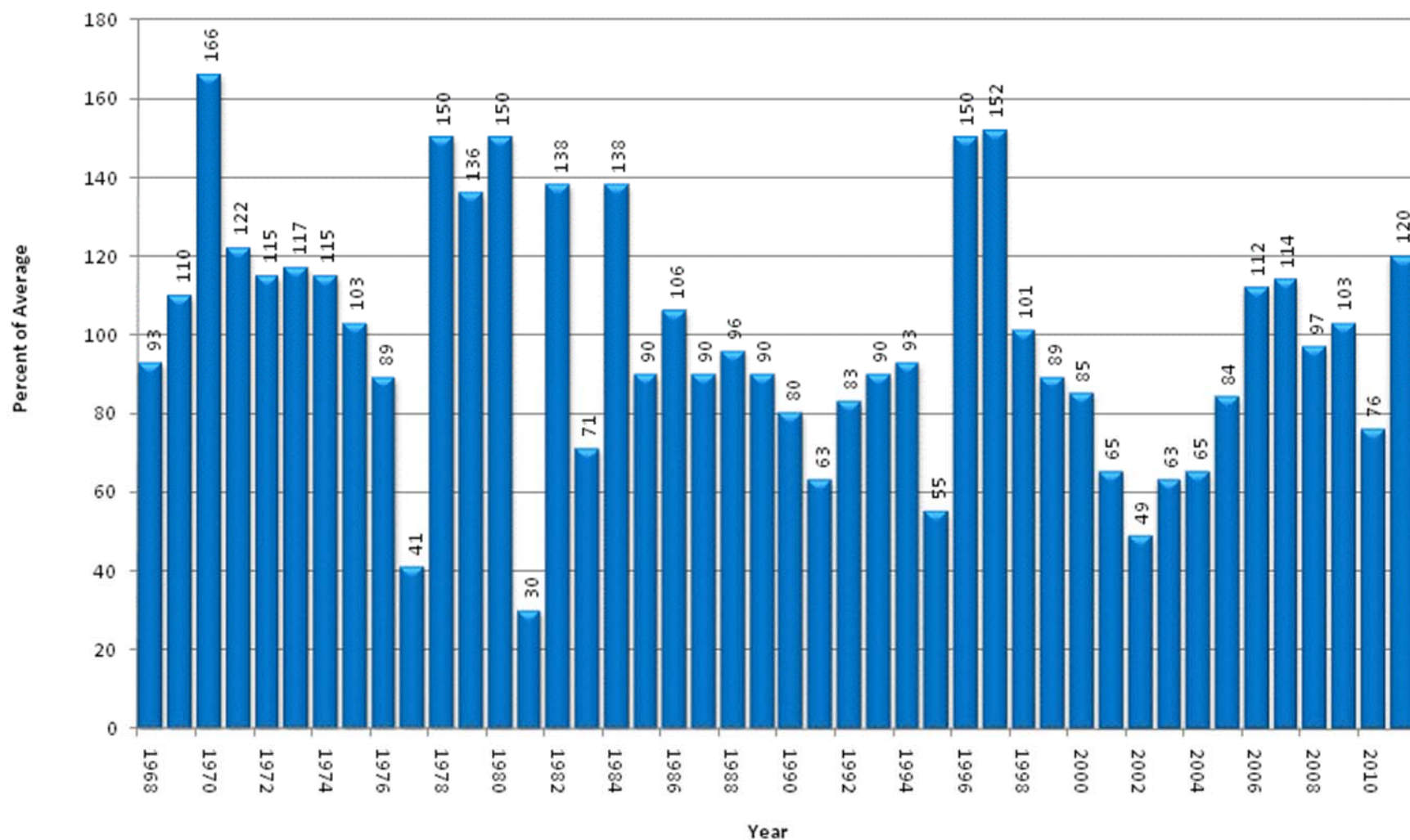


*Provisional Data
Subject to Revision*



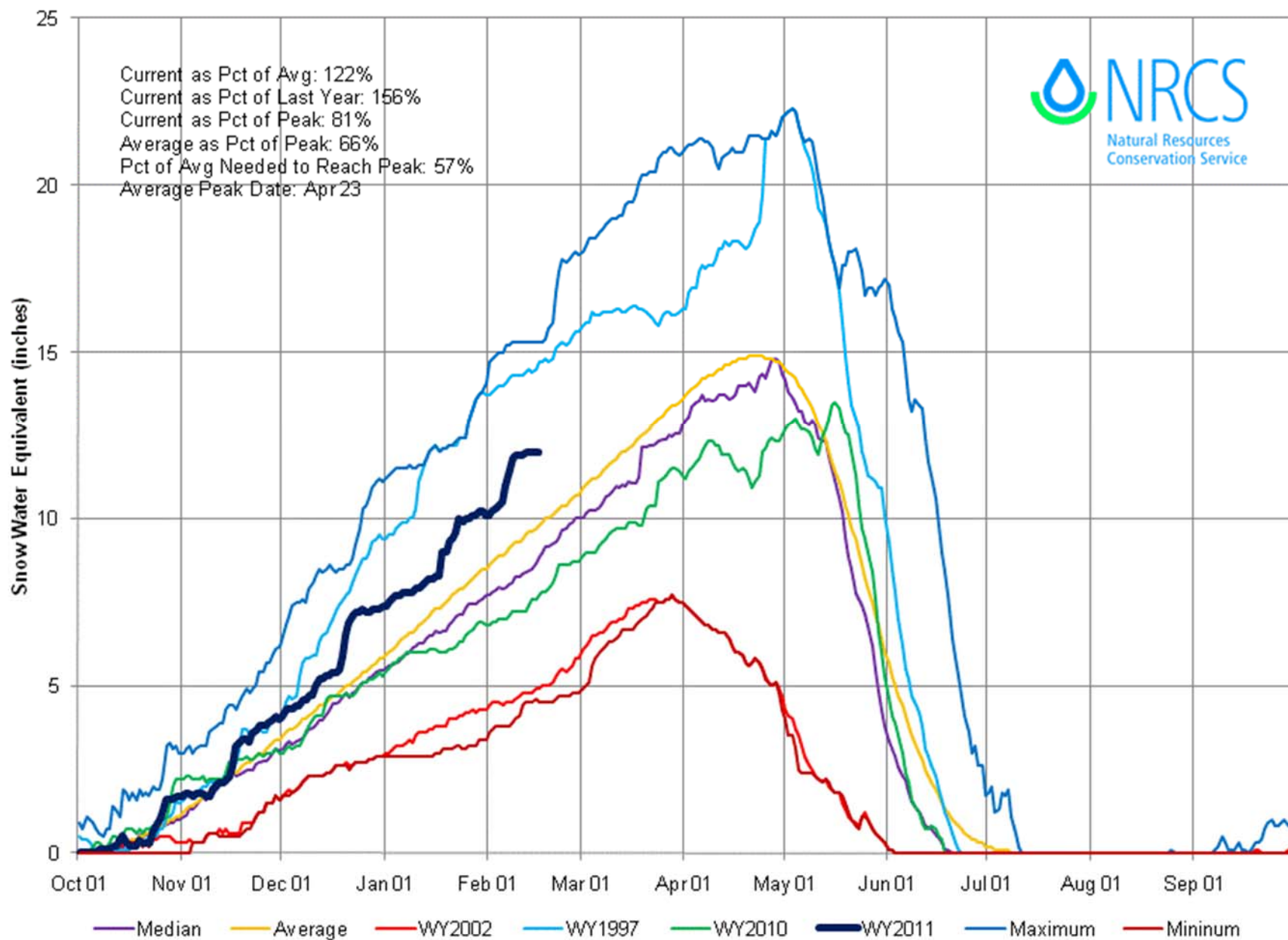
Current as of February 1, 2011

February 1 Total South Platte River Basin Snowpack



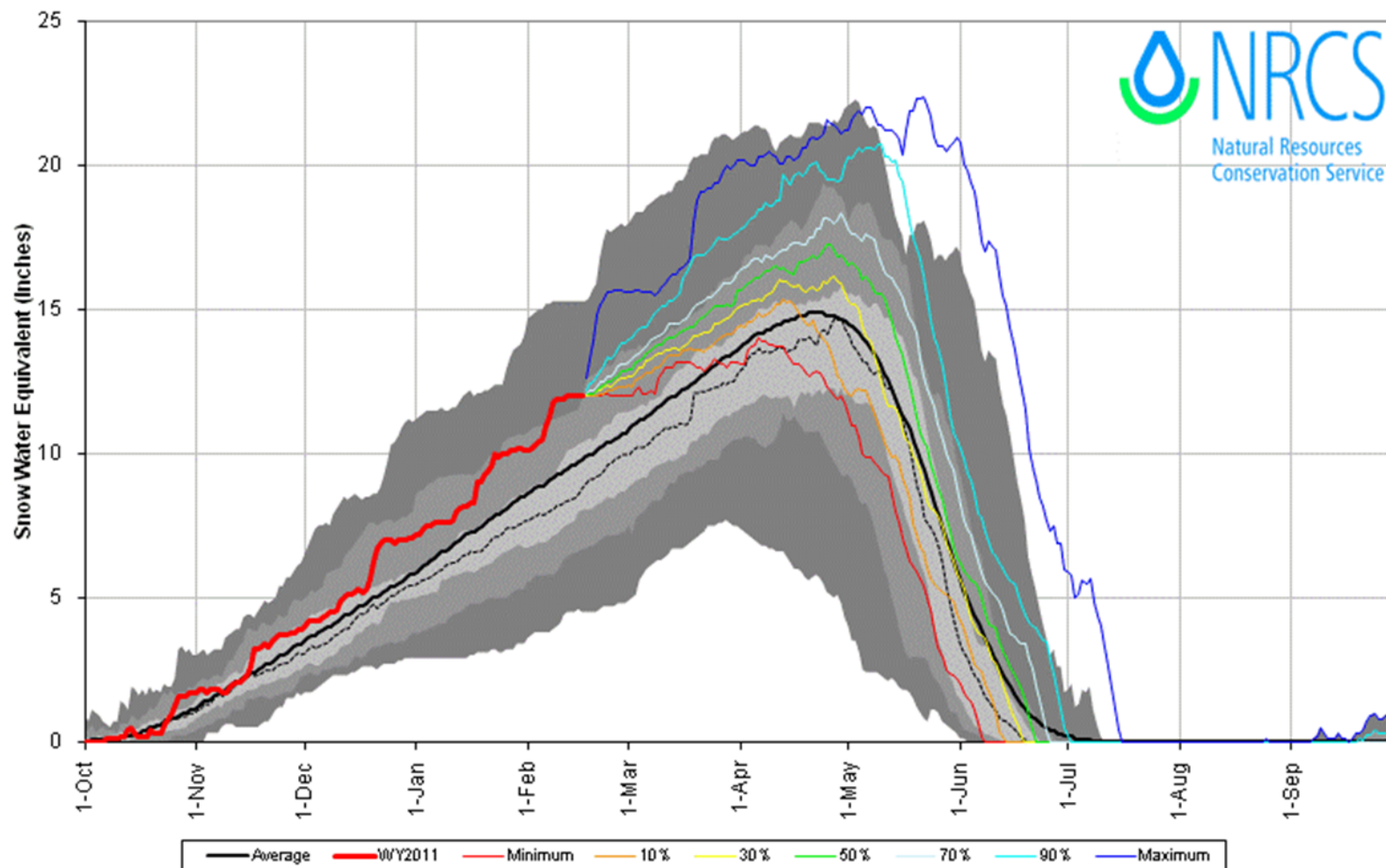
South Platte River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Feb 16, 2011



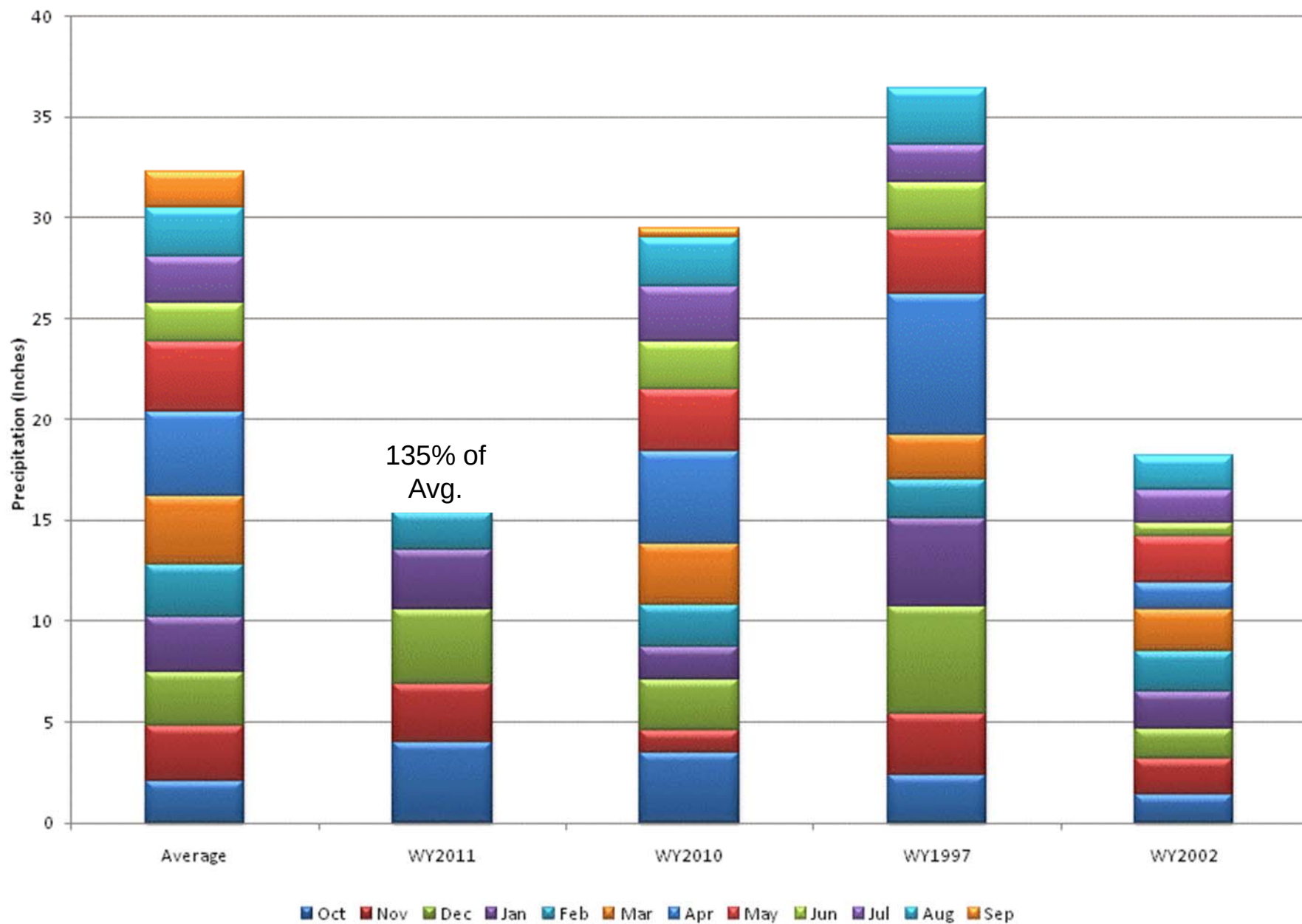
South Platte River Basin with Non-Exceedence Projections

Based on Provisional SNOTEL Data as of Feb 16, 2011



South Platte River Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Feb 16, 2011

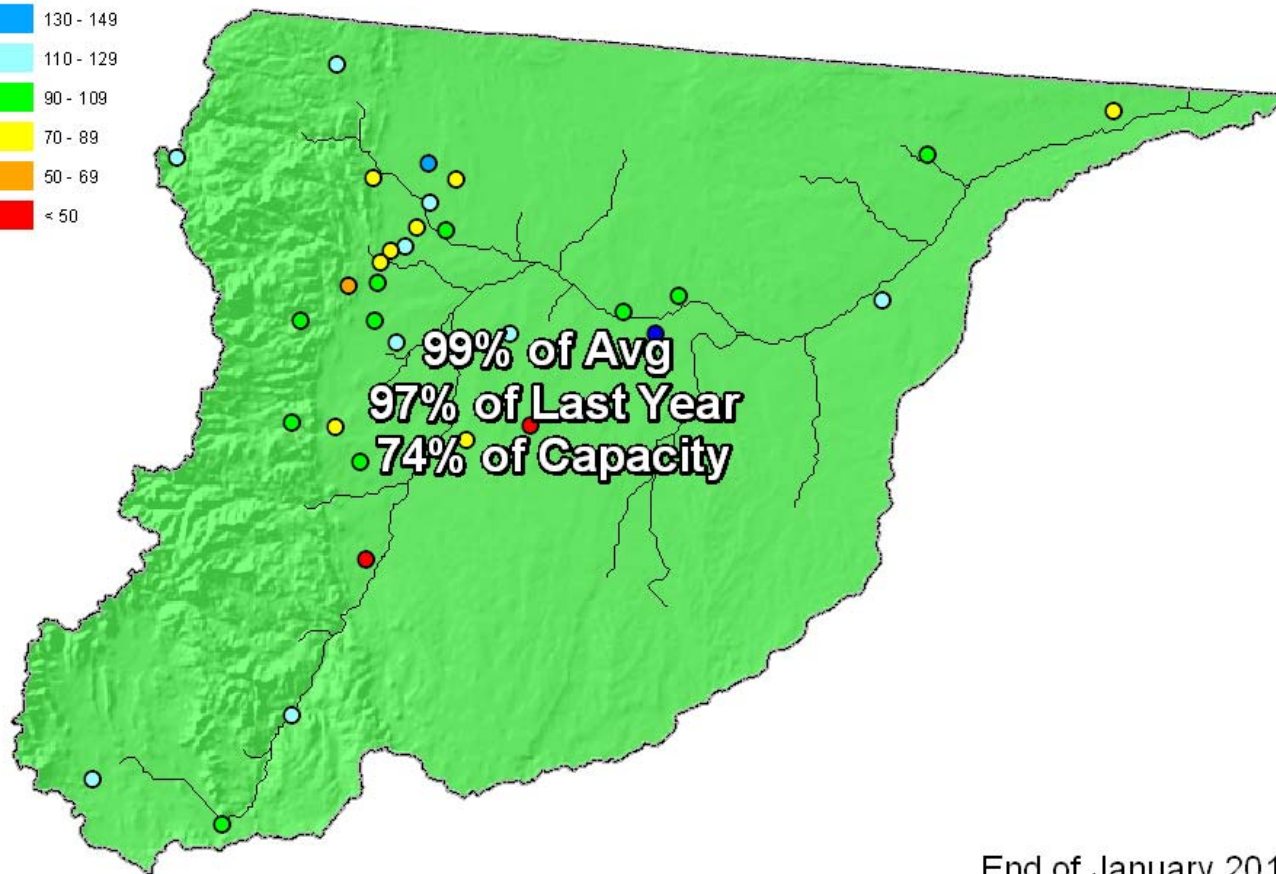


South Platte River Basin Reservoir Storage Map

Percent of Average

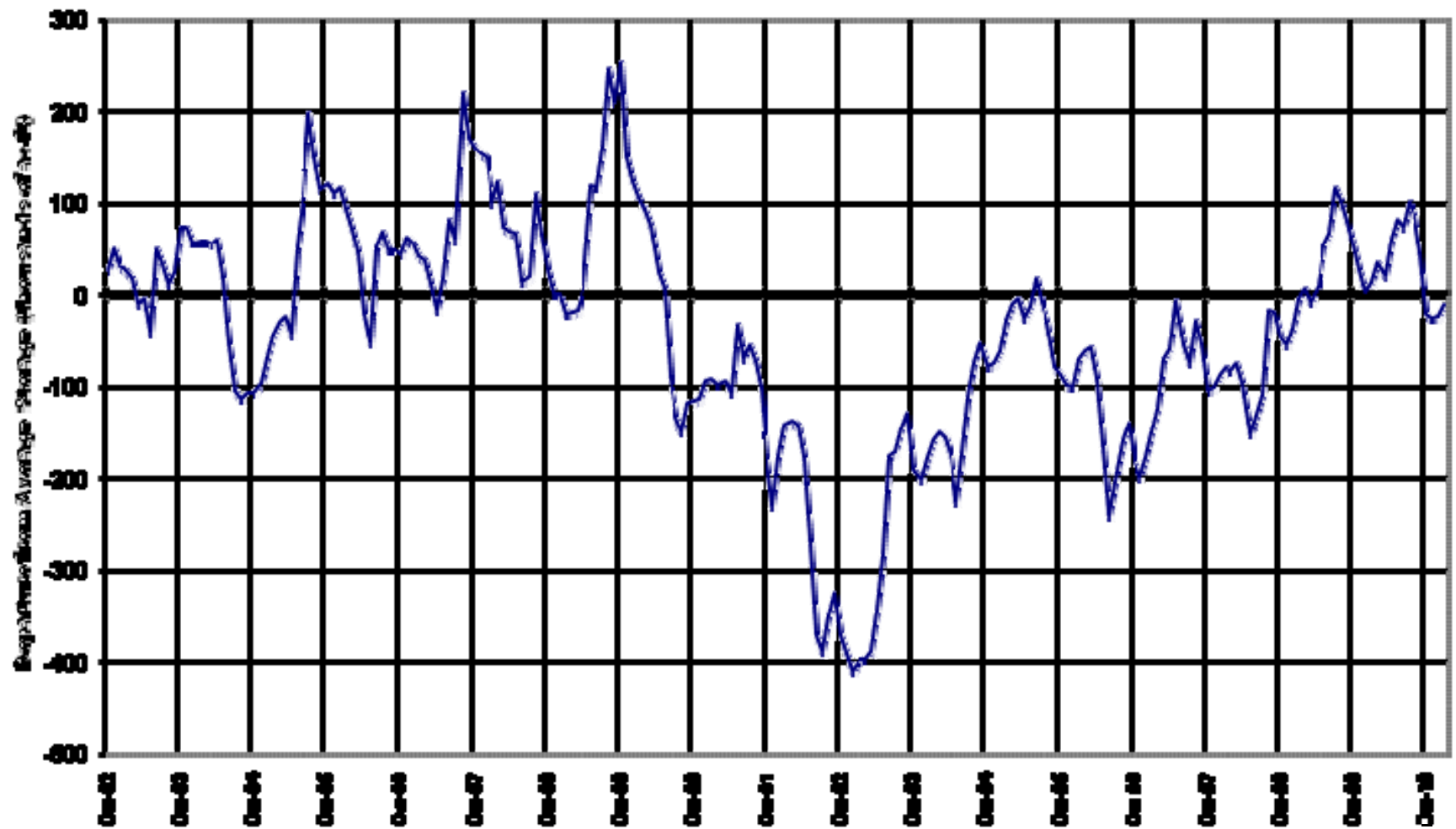


*Provisional Data
Subject to Revision*



End of January 2011

SOUTH PLATTE RIVER BASIN
Reservoir Storage
Departure from Average

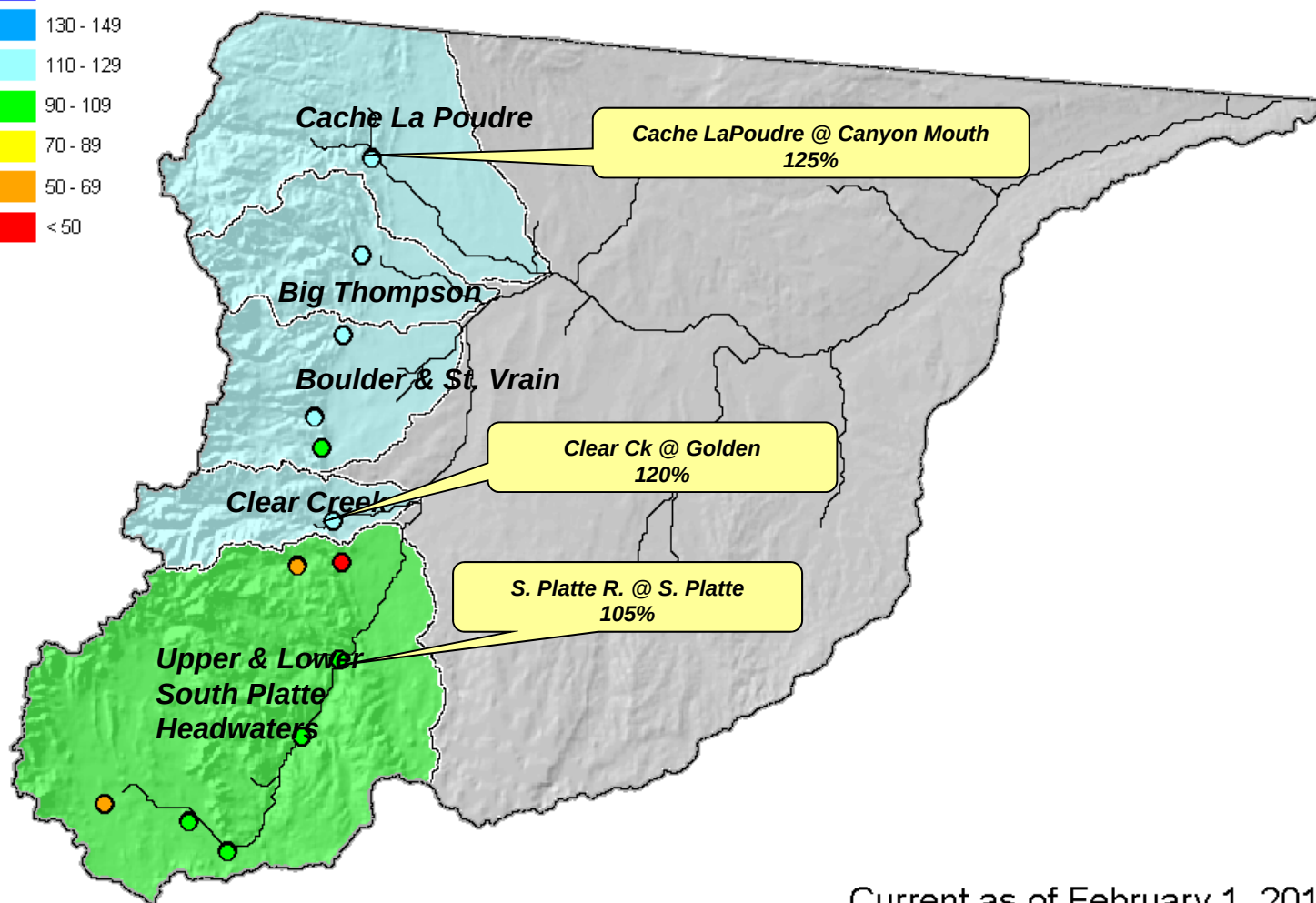


South Platte River Basin Streamflow Forecast Map

Percent of Average

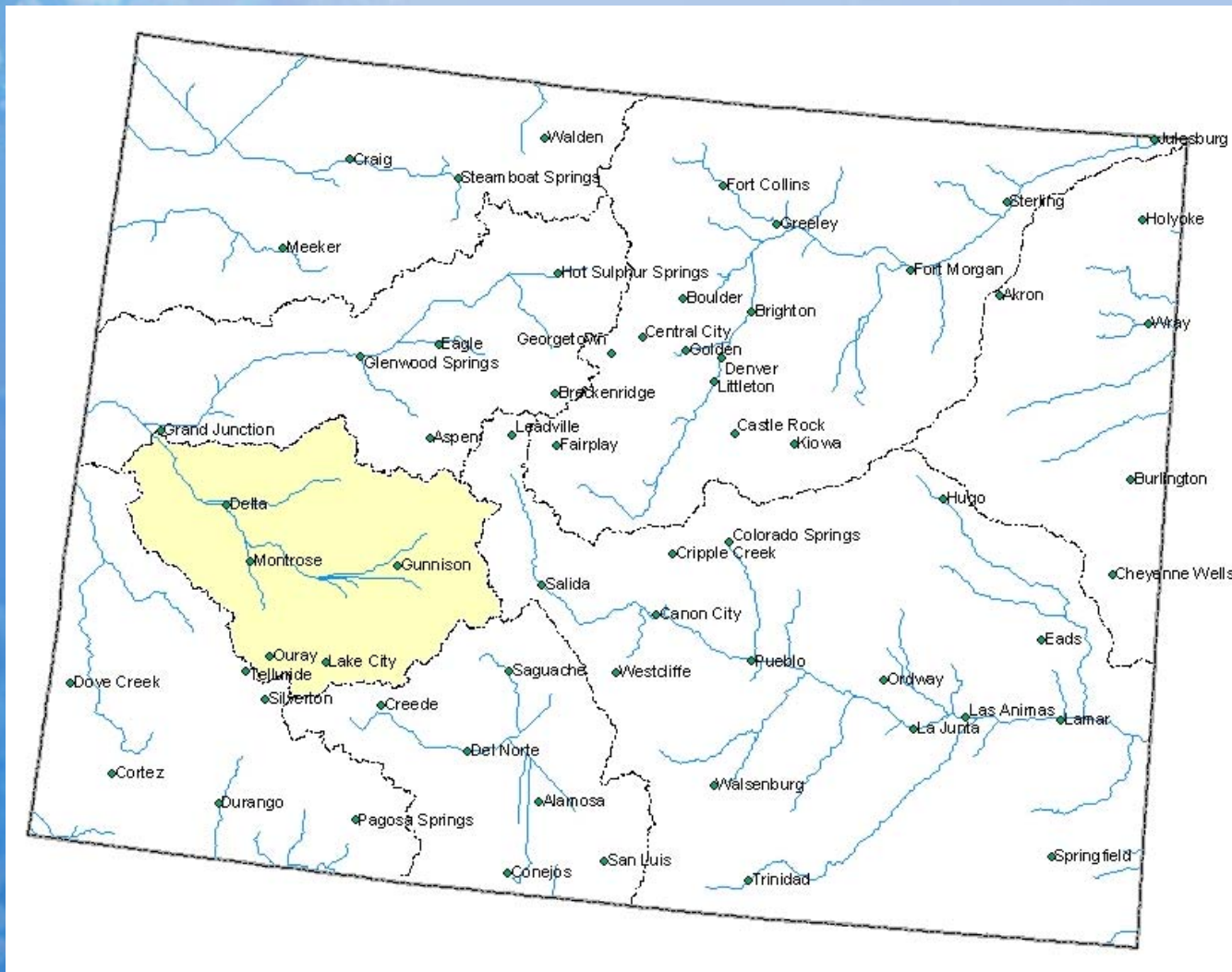


*Provisional Data
Subject to Revision*



Current as of February 1, 2011

Gunnison River Basin Summary

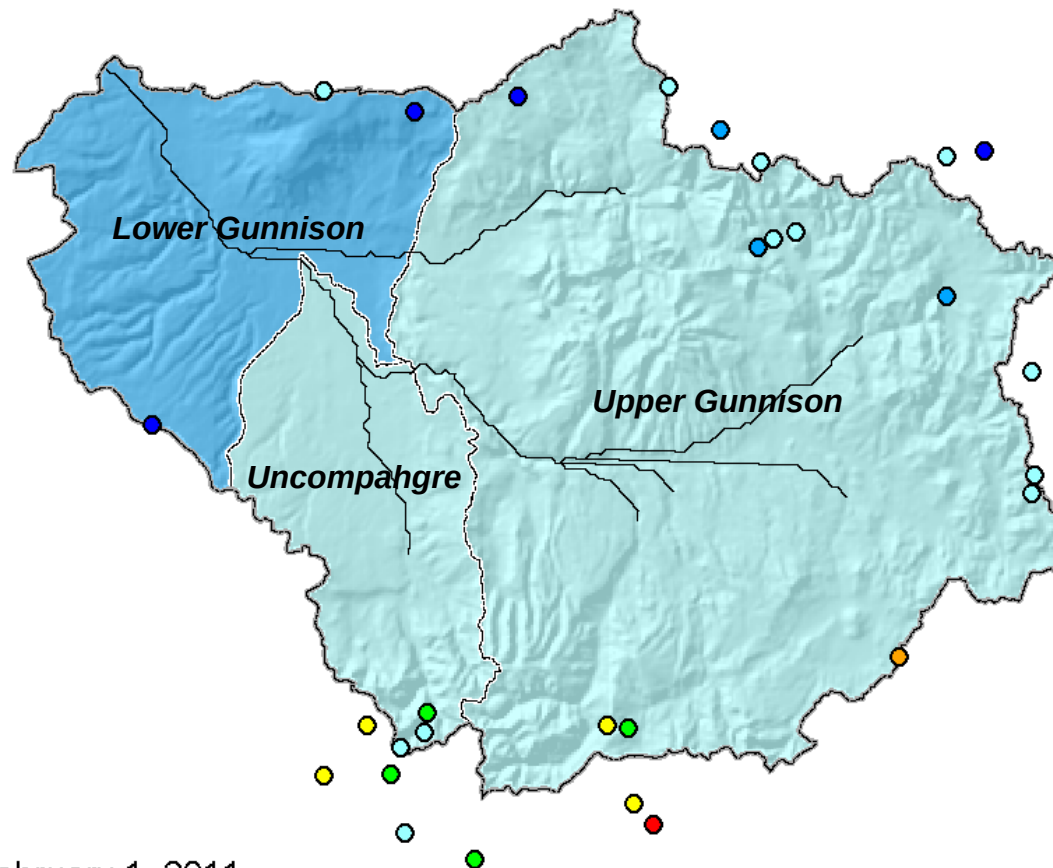


Gunnison River Basin Snowpack Map

Percent of Average

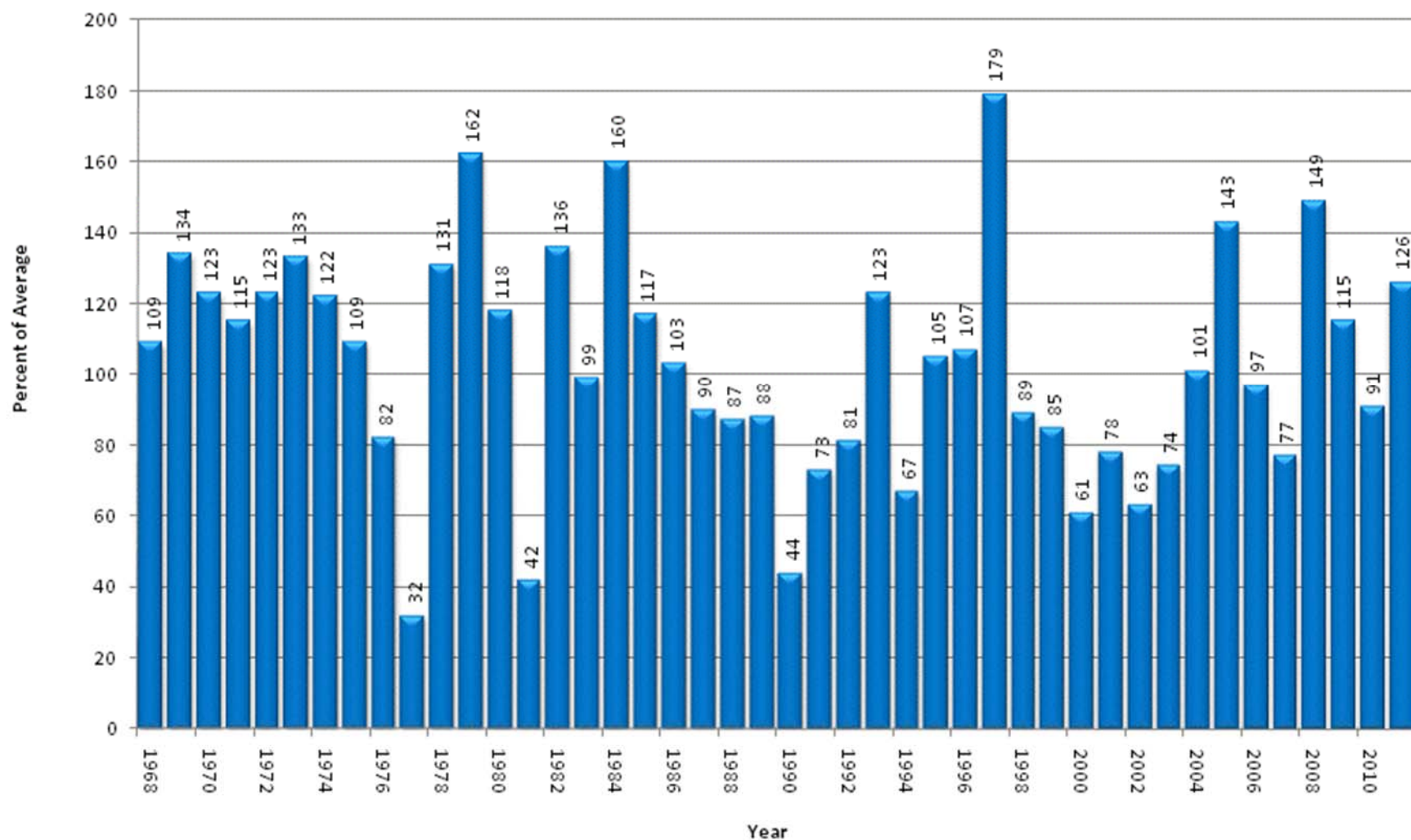


*Provisional Data
Subject to Revision*



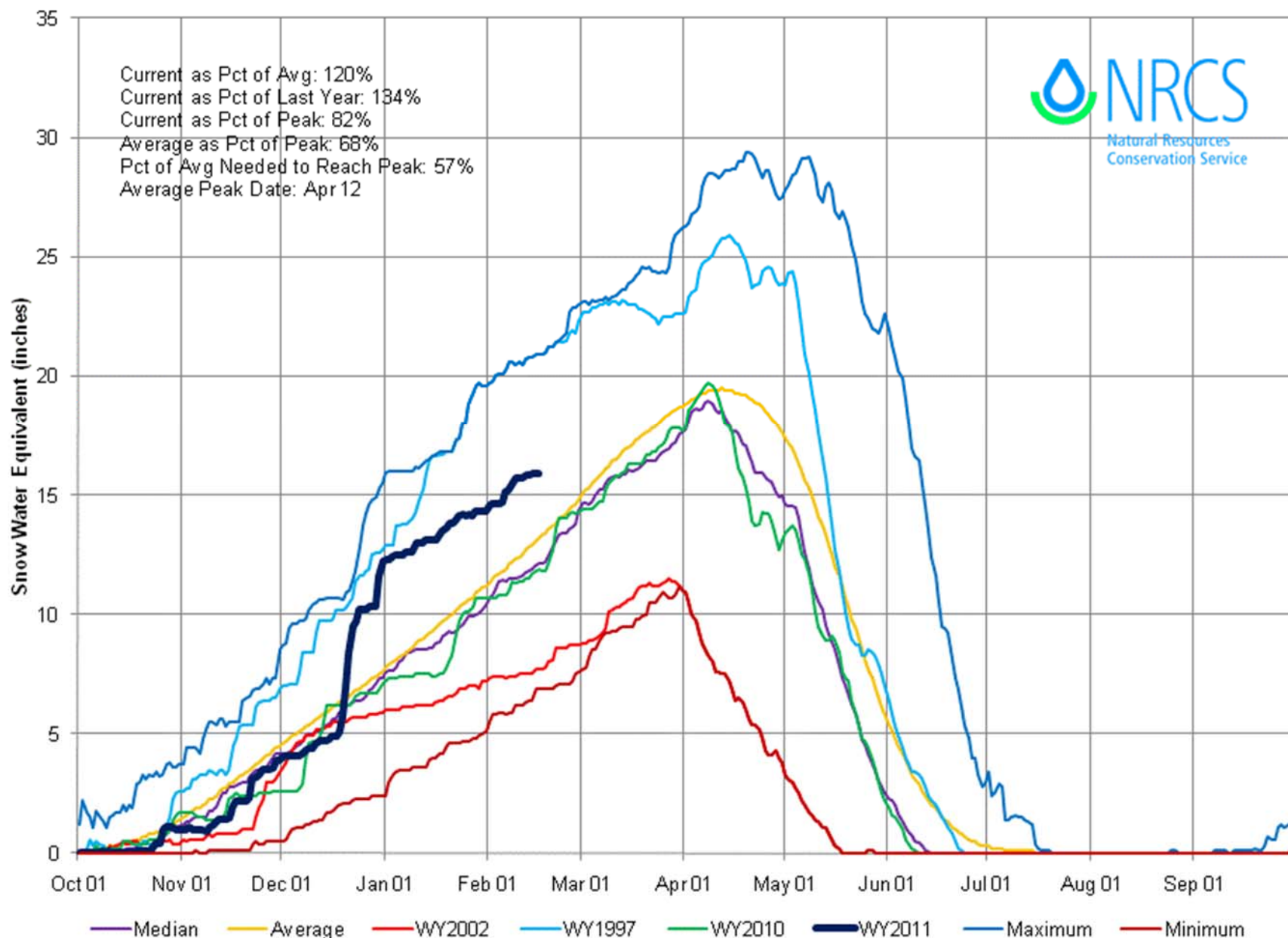
Current as of February 1, 2011

February 1 Total Gunnison River Basin Snowpack



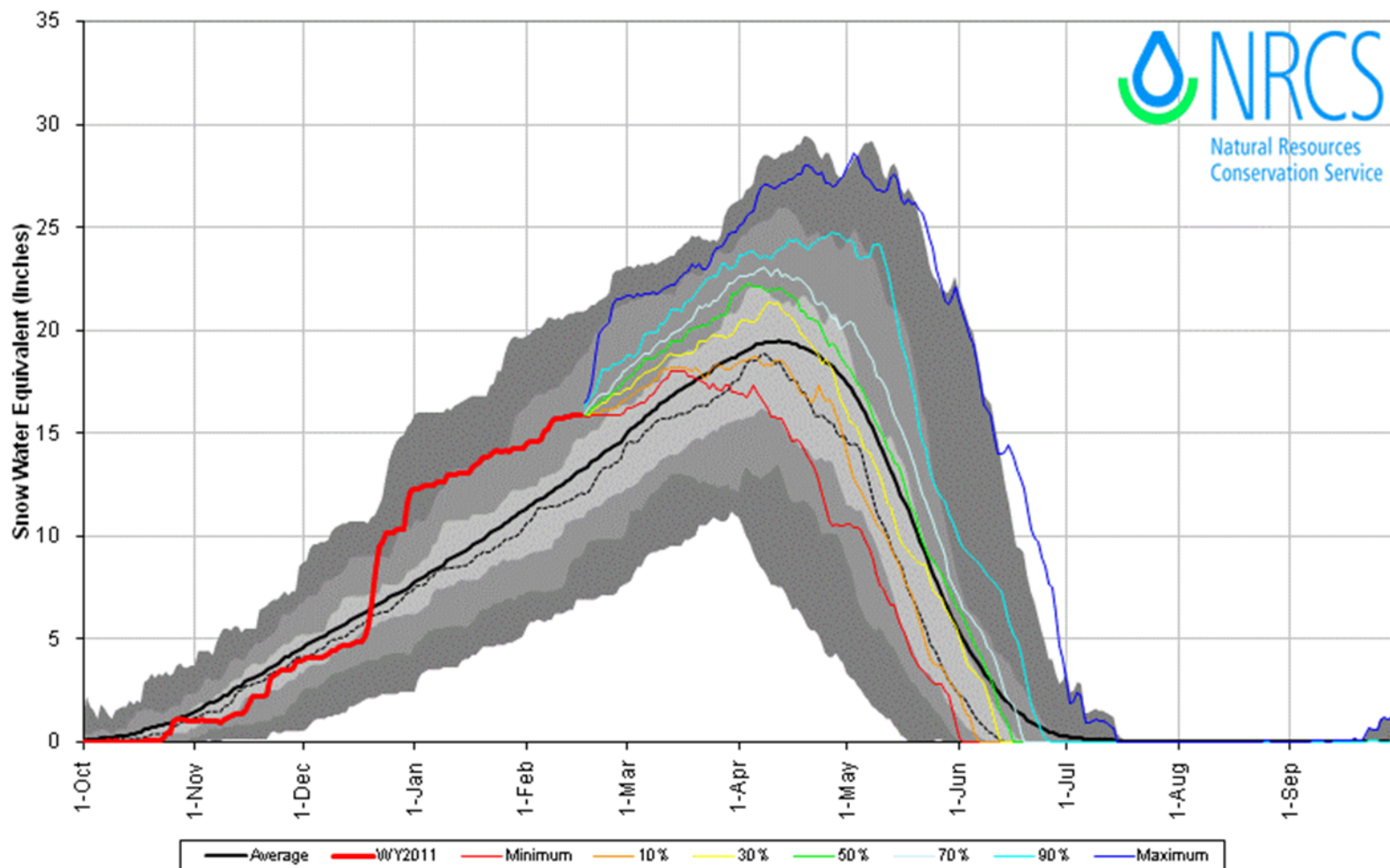
Gunnison River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Feb 16, 2011



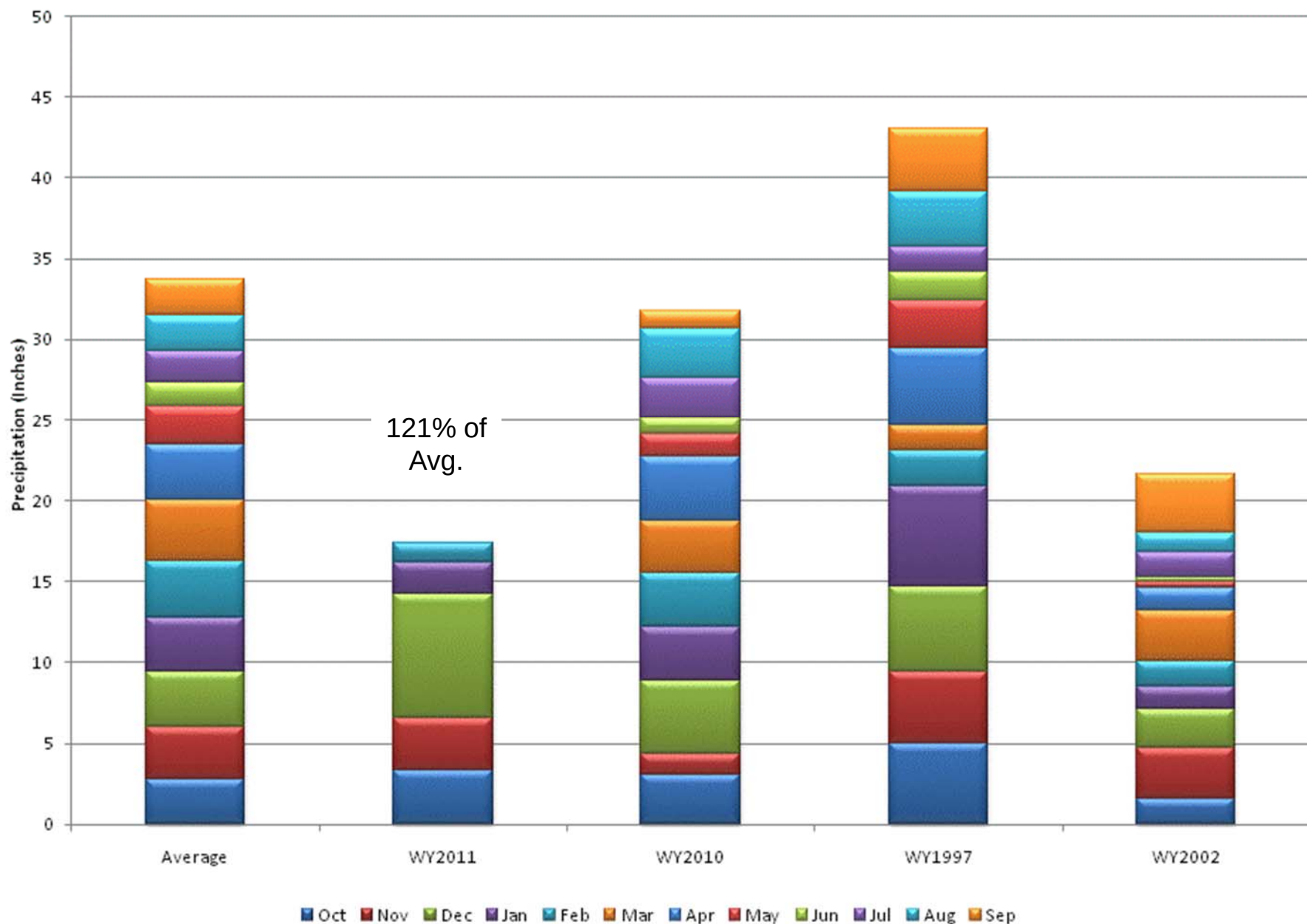
Gunnison River Basin with Non-Exceedence Projections

Based on Provisional SNOTEL Data as of Feb 16, 2011



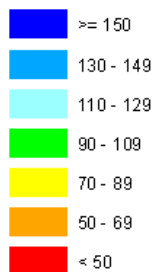
Gunnison River Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Feb 16, 2011

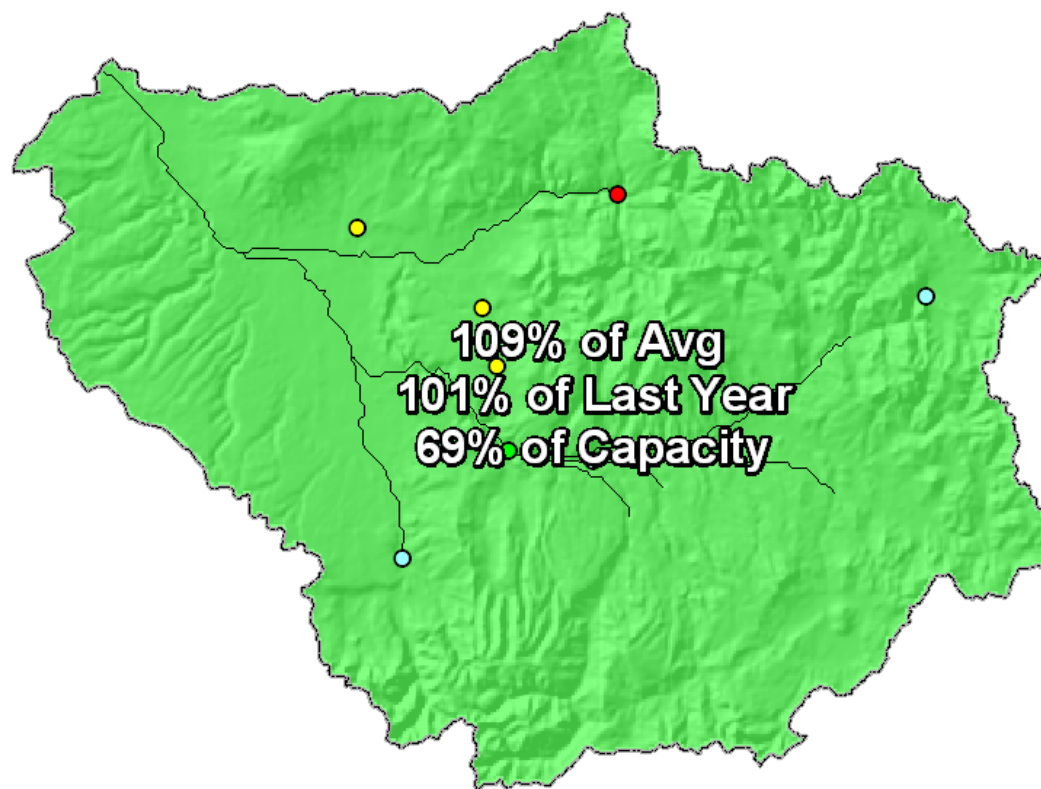


Gunnison River Basin Reservoir Storage Map

Percent of Average



*Provisional Data
Subject to Revision*

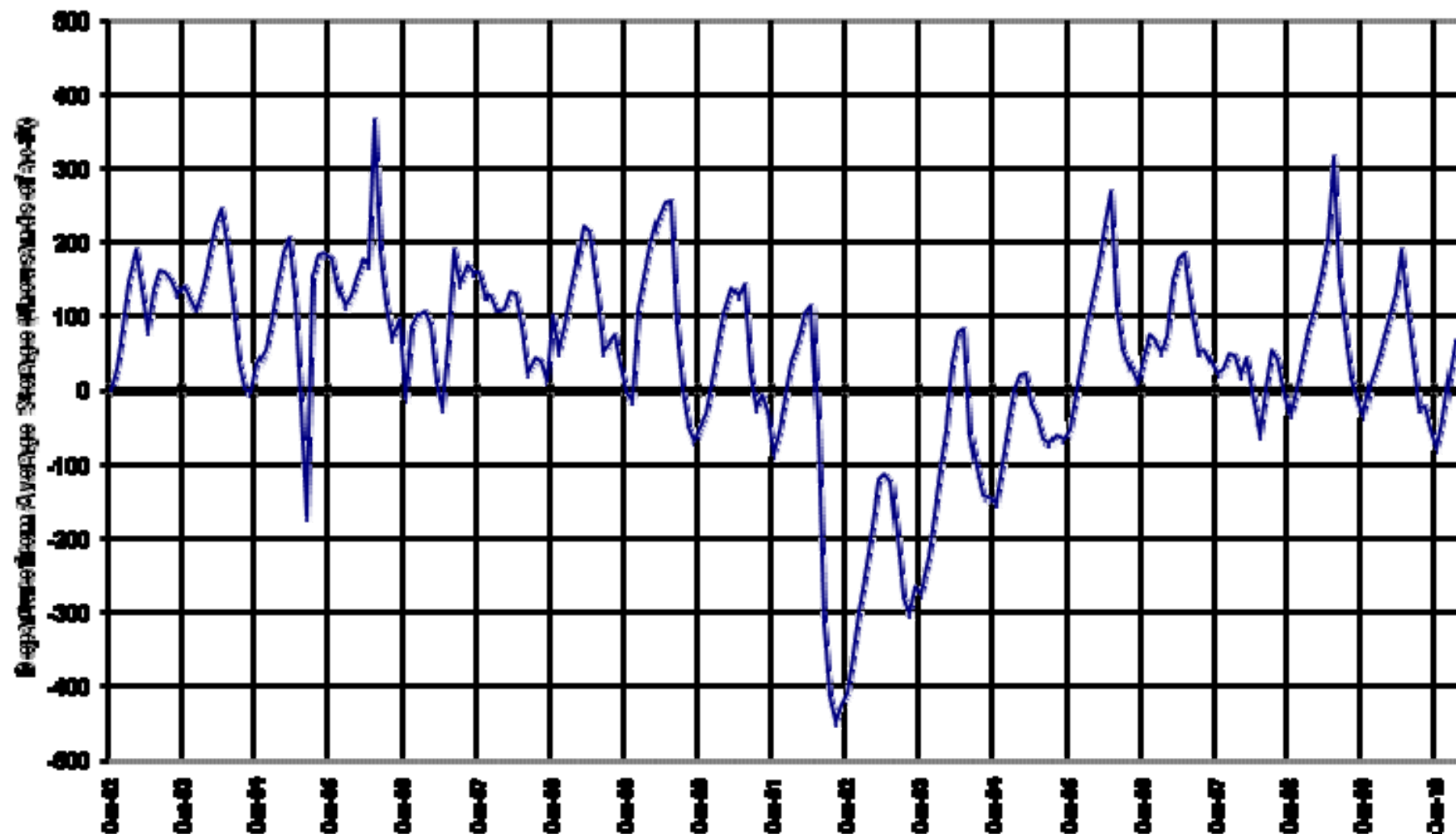


End of January 2011

GUNNISON RIVER BASIN

Reservoir Storage

Departure from Average

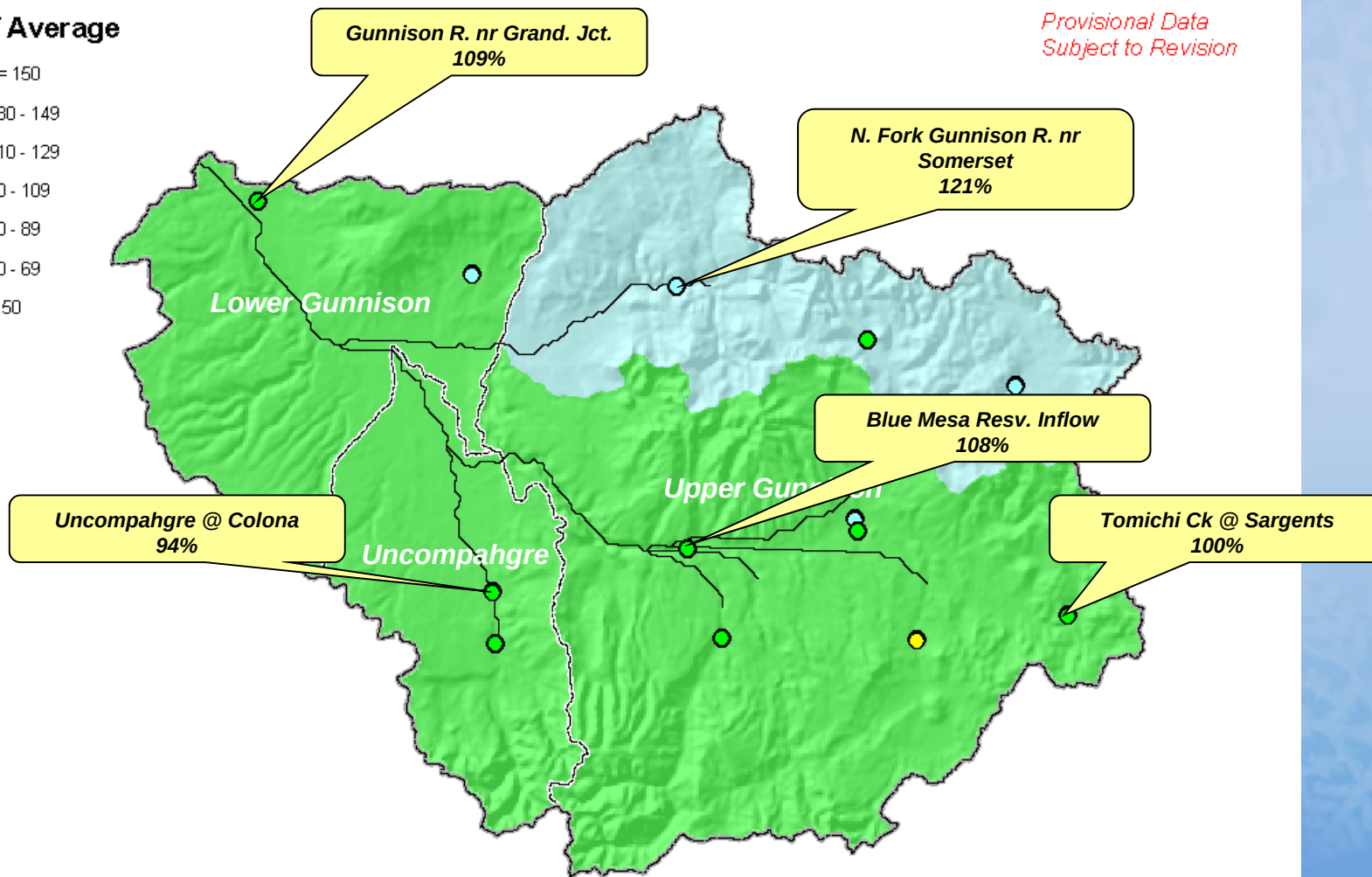


Gunnison River Basin Streamflow Forecast Map

Percent of Average

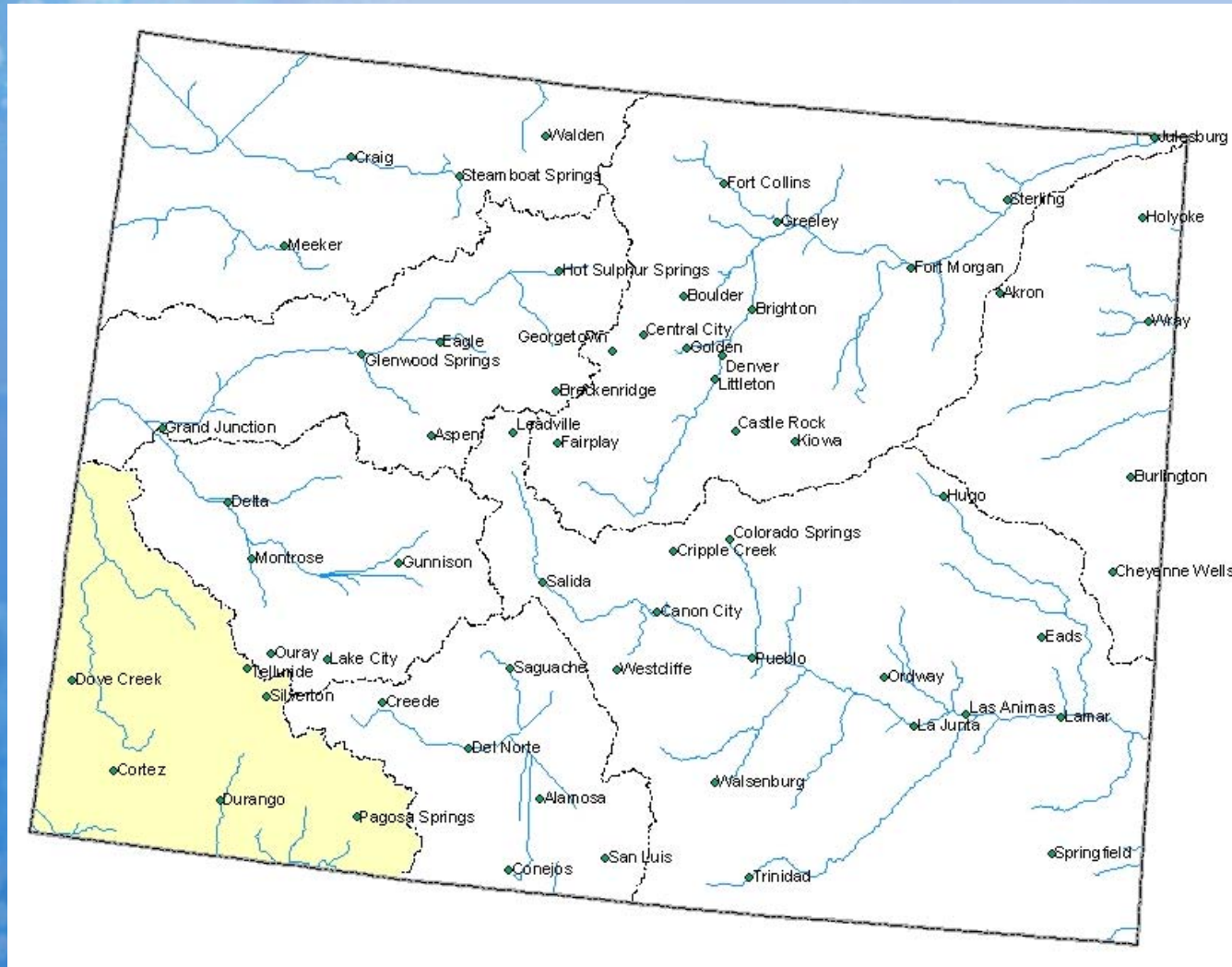


*Provisional Data
Subject to Revision*



Current as of February 1, 2011

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

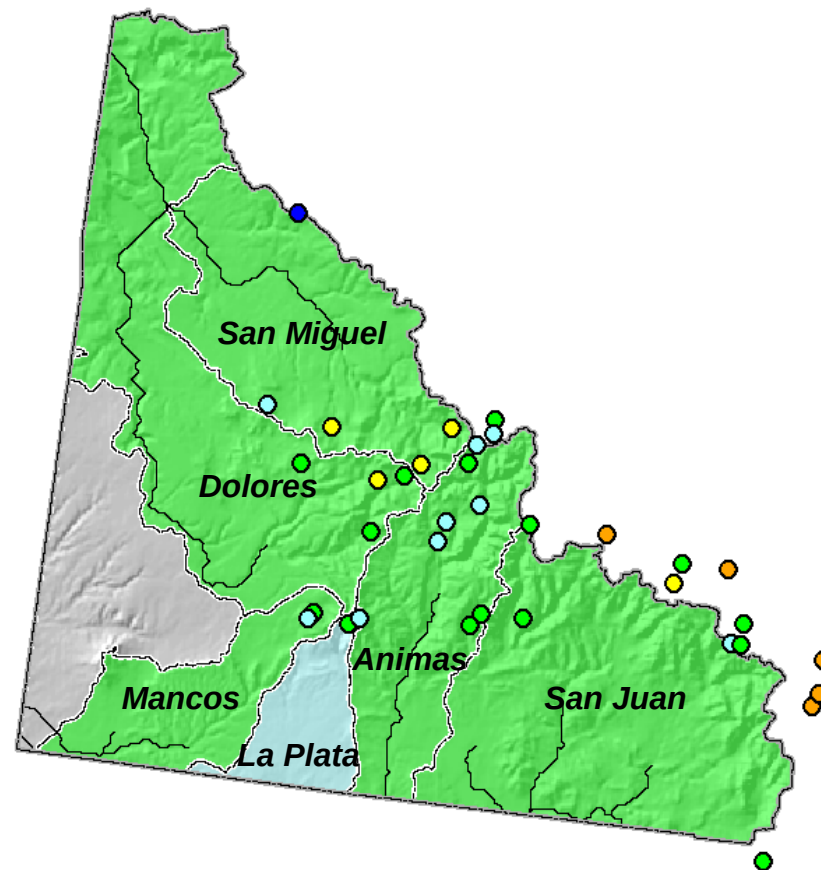


San Miguel, Dolores, Animas and San Juan River Basins Snowpack Map

Percent of Average

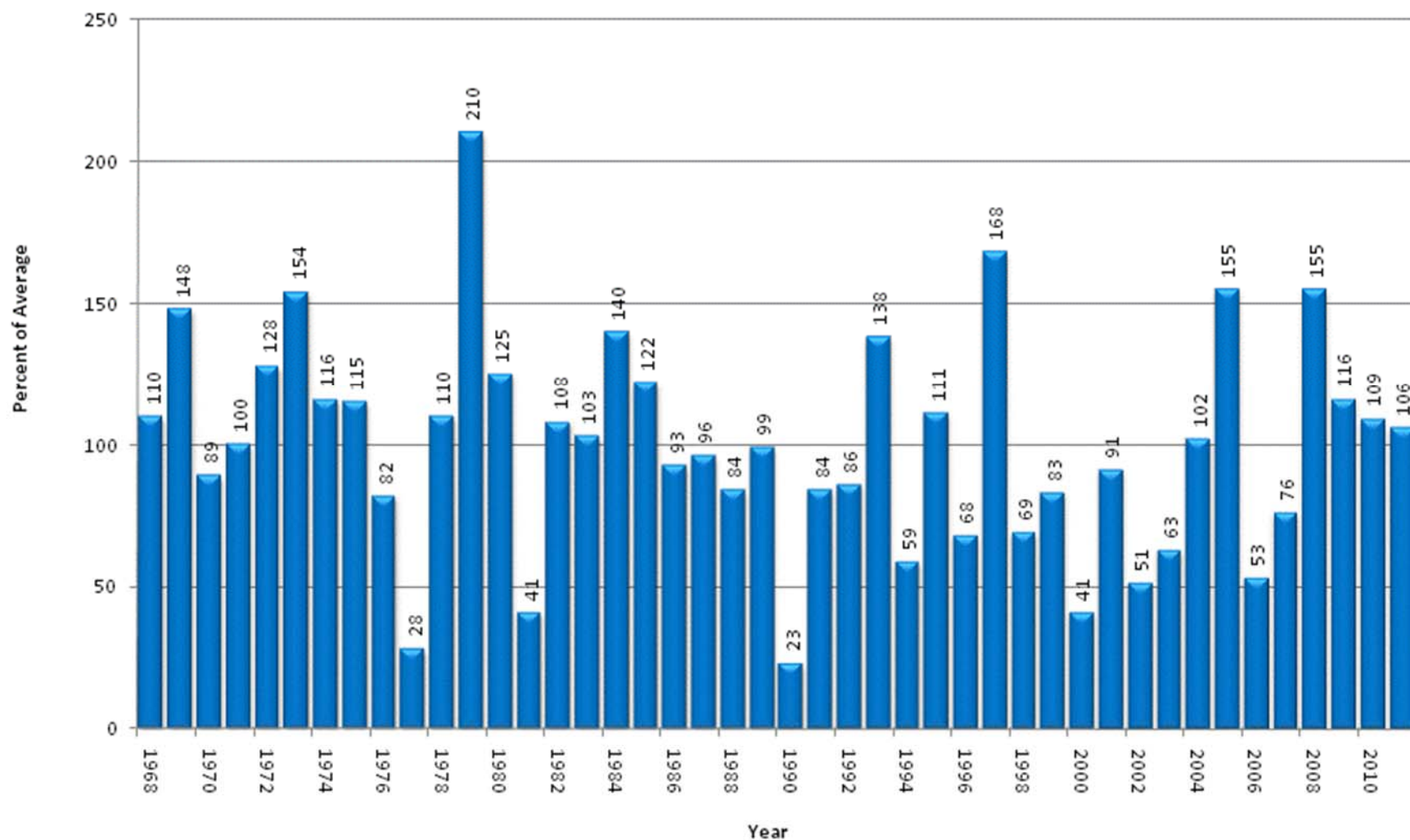


*Provisional Data
Subject to Revision*



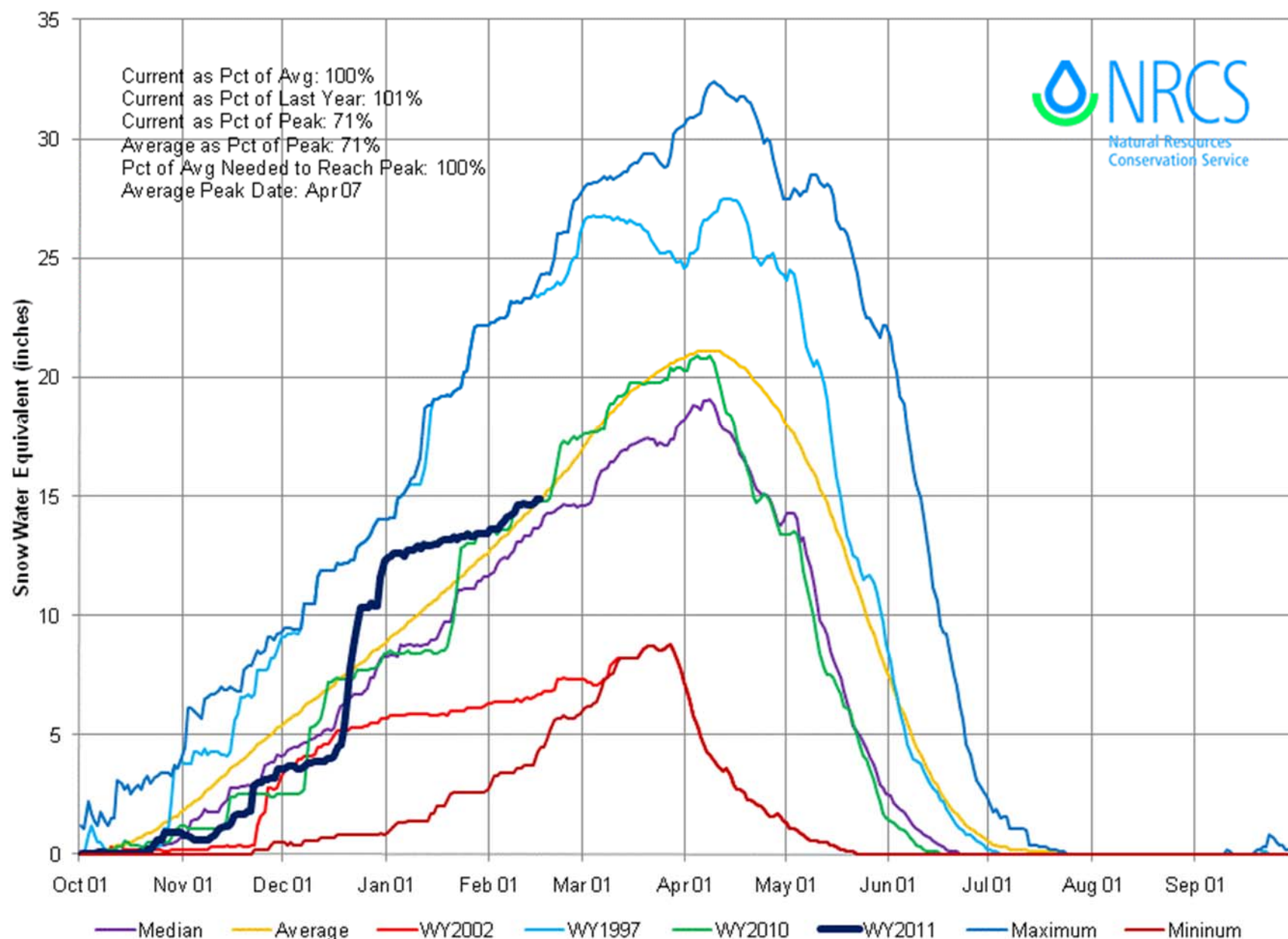
Current as of February 1, 2011

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



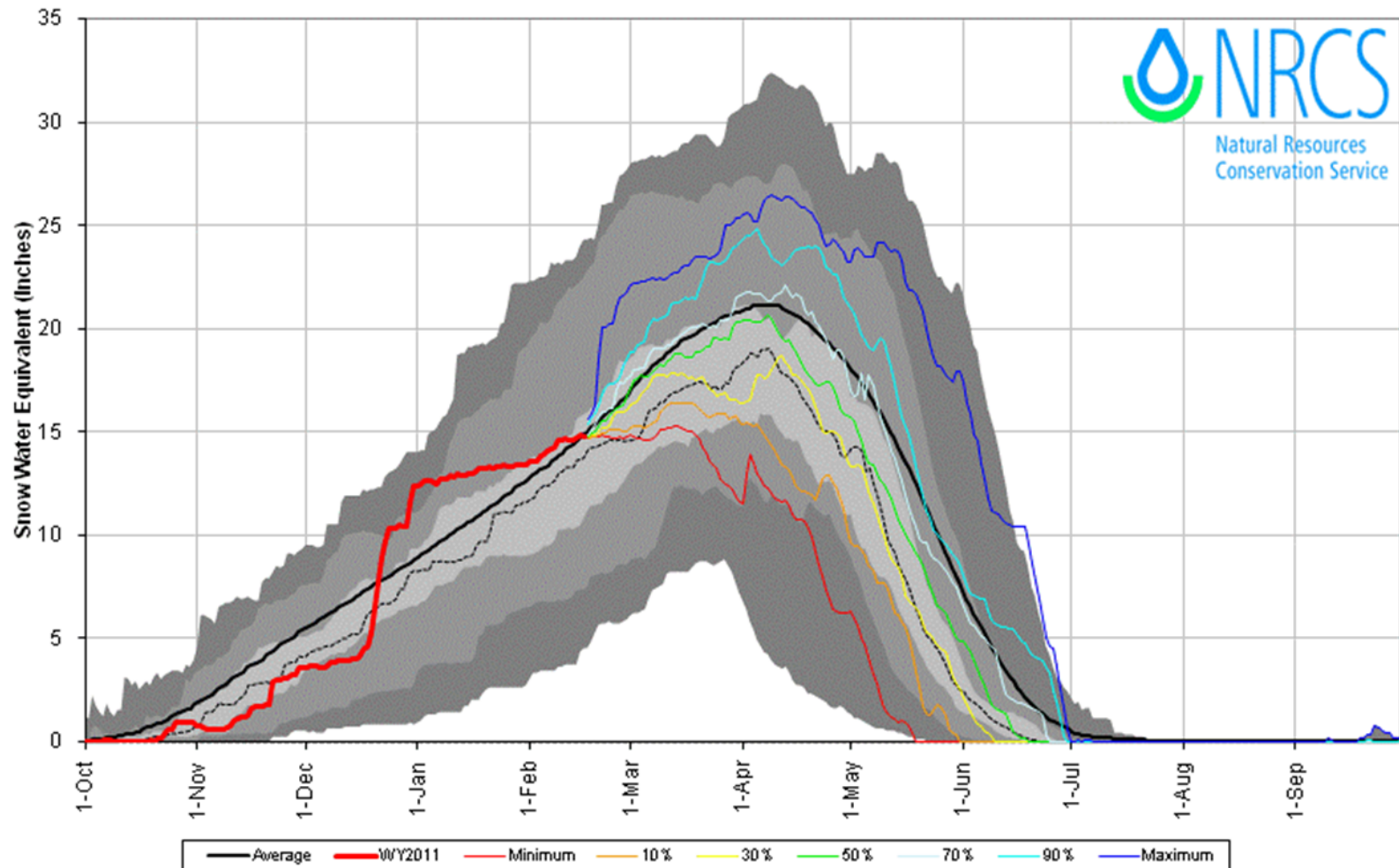
San Miguel, Dolores, Animas & San Juan River Basins High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Feb 16, 2011



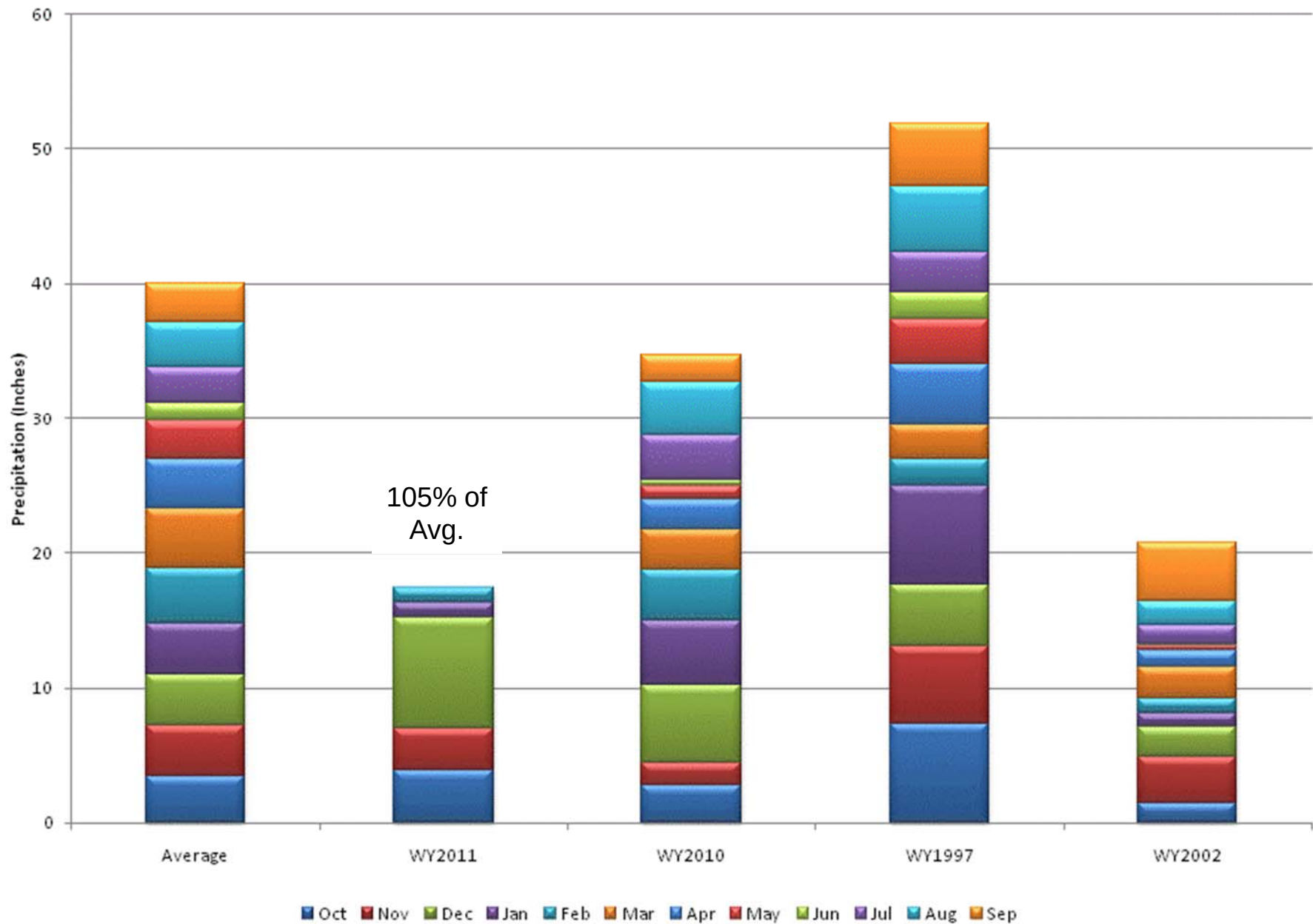
San Miguel, Dolores, Animas & San Juan River Basins with Non-Exceedence Projections

Based on Provisional SNOTEL Data as of Feb 16, 2011



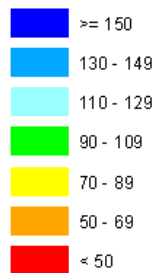
San Miguel, Dolores, Animas & San Juan River Basins High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Feb 16, 2011

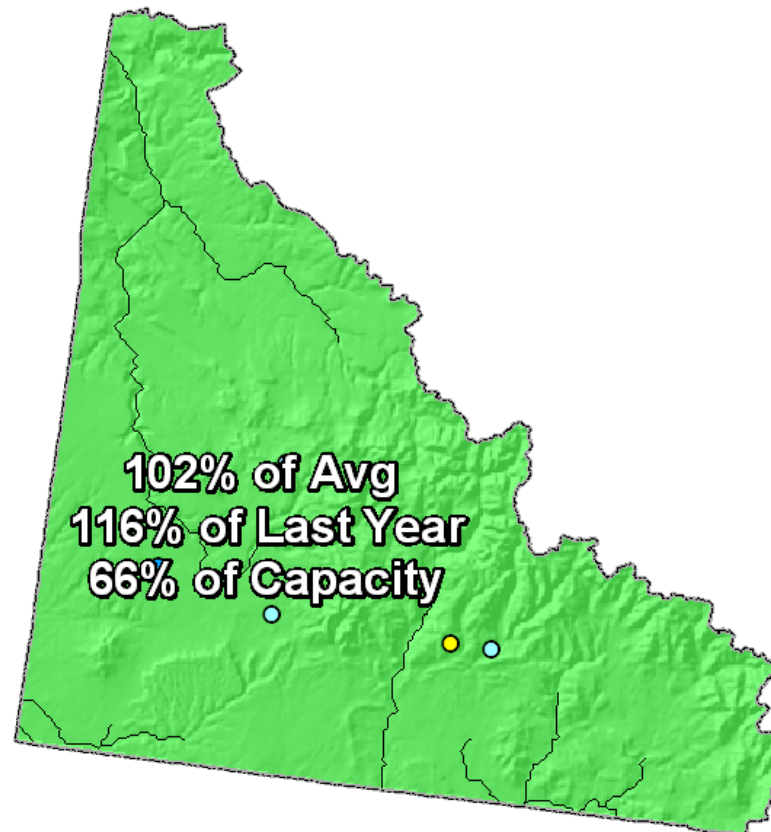


San Miguel, Dolores, Animas and San Juan River Basins Reservoir Storage Map

Percent of Average

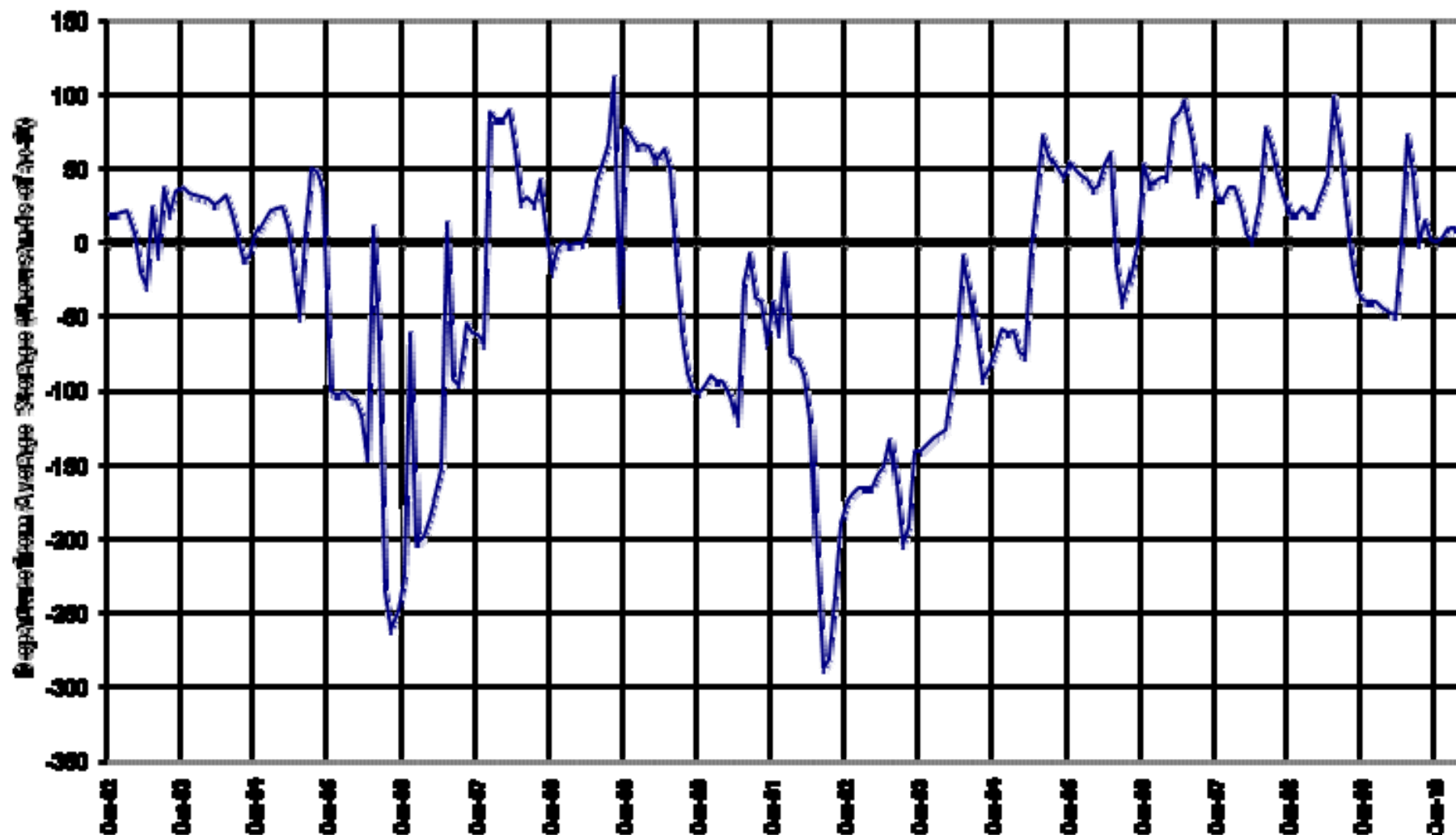


*Provisional Data
Subject to Revision*



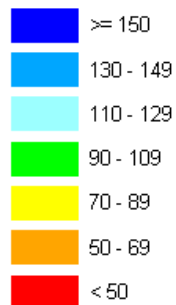
End of January 2011

SAN MIGUEL, DOLORES, ANIMAS AND SAN JUAN RIVER BASINS
Reservoir Storage
Departure from Average

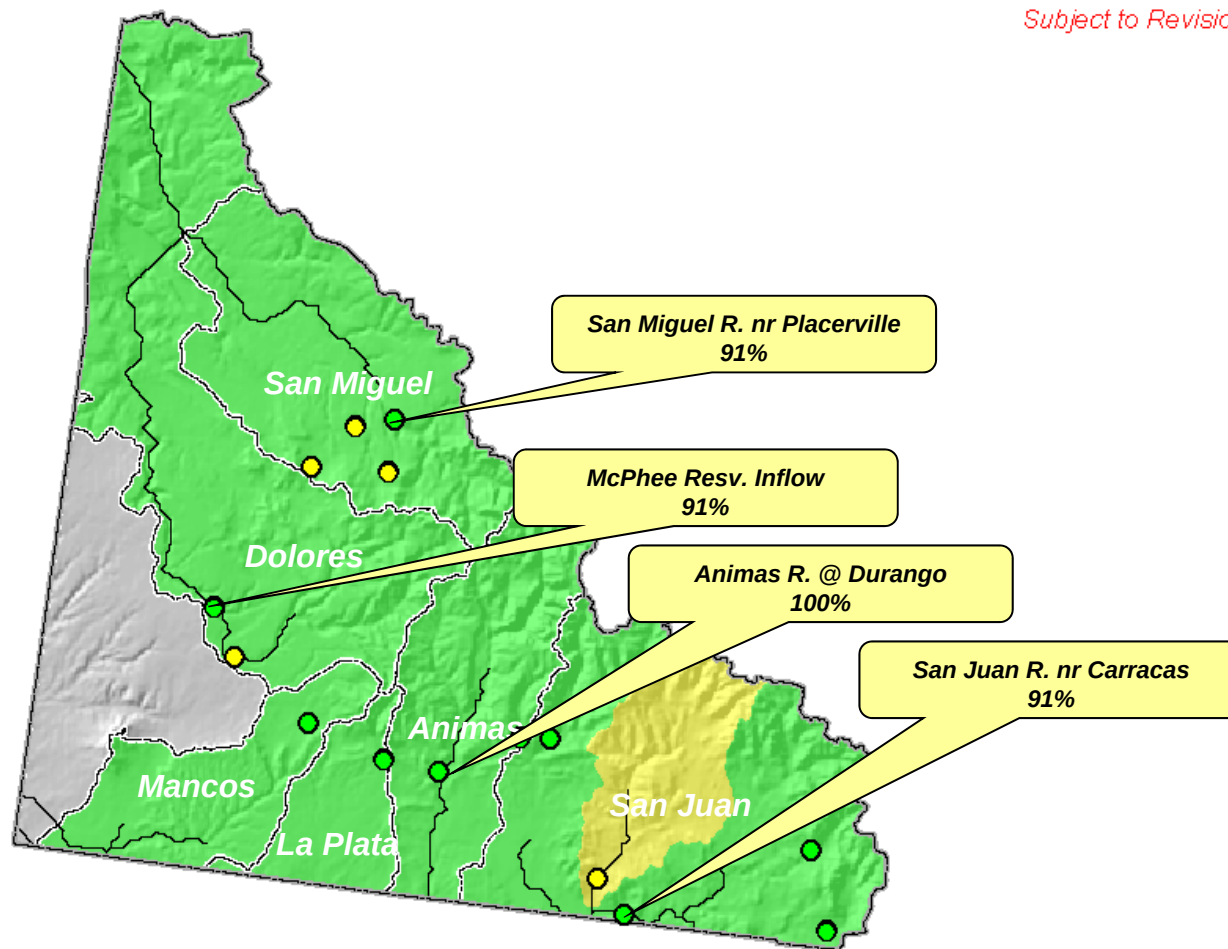


San Miguel, Dolores, Animas and San Juan River Basins Streamflow Forecast Map

Percent of Average

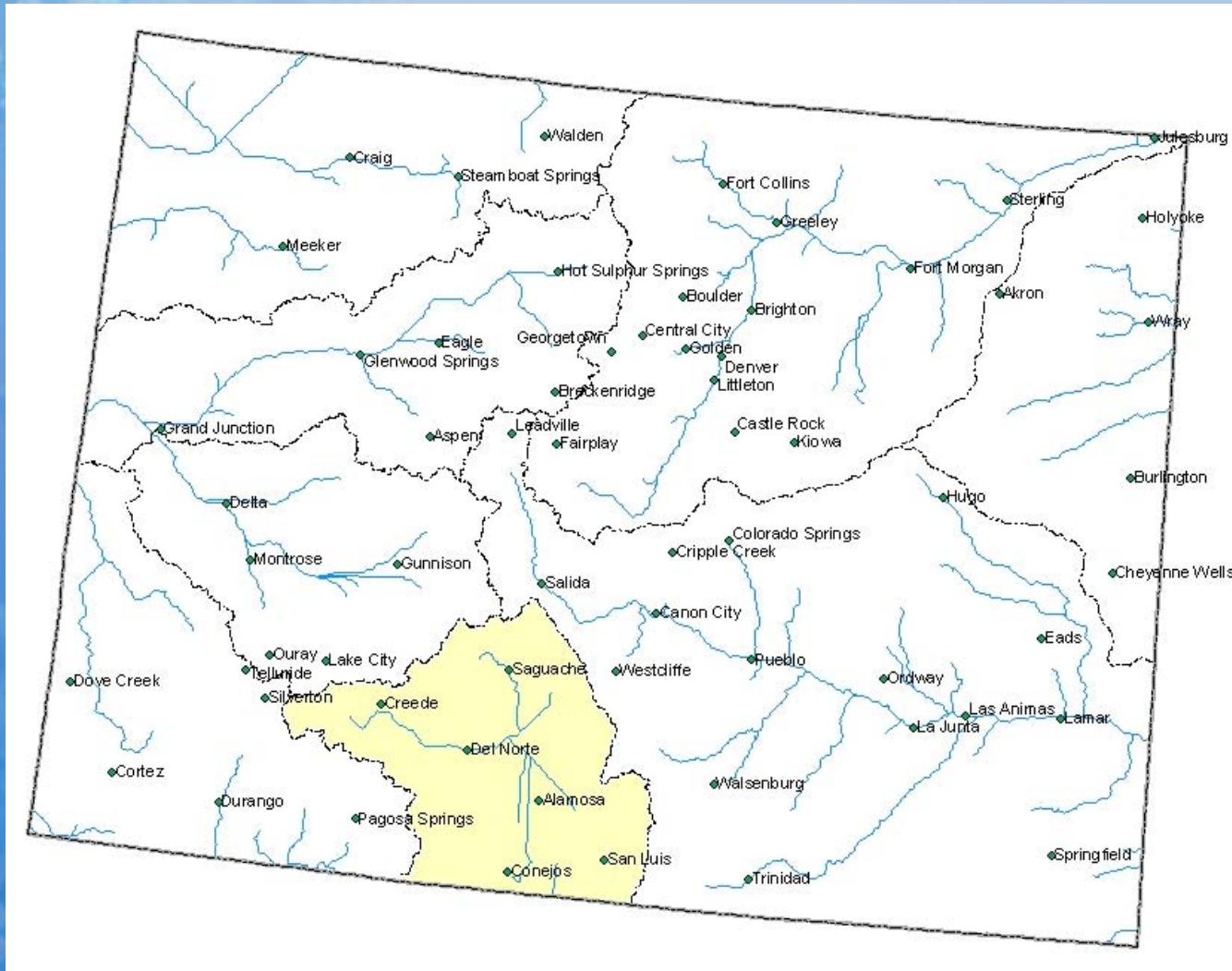


*Provisional Data
Subject to Revision*



Current as of February 1, 2011

Upper Rio Grande Basin Summary

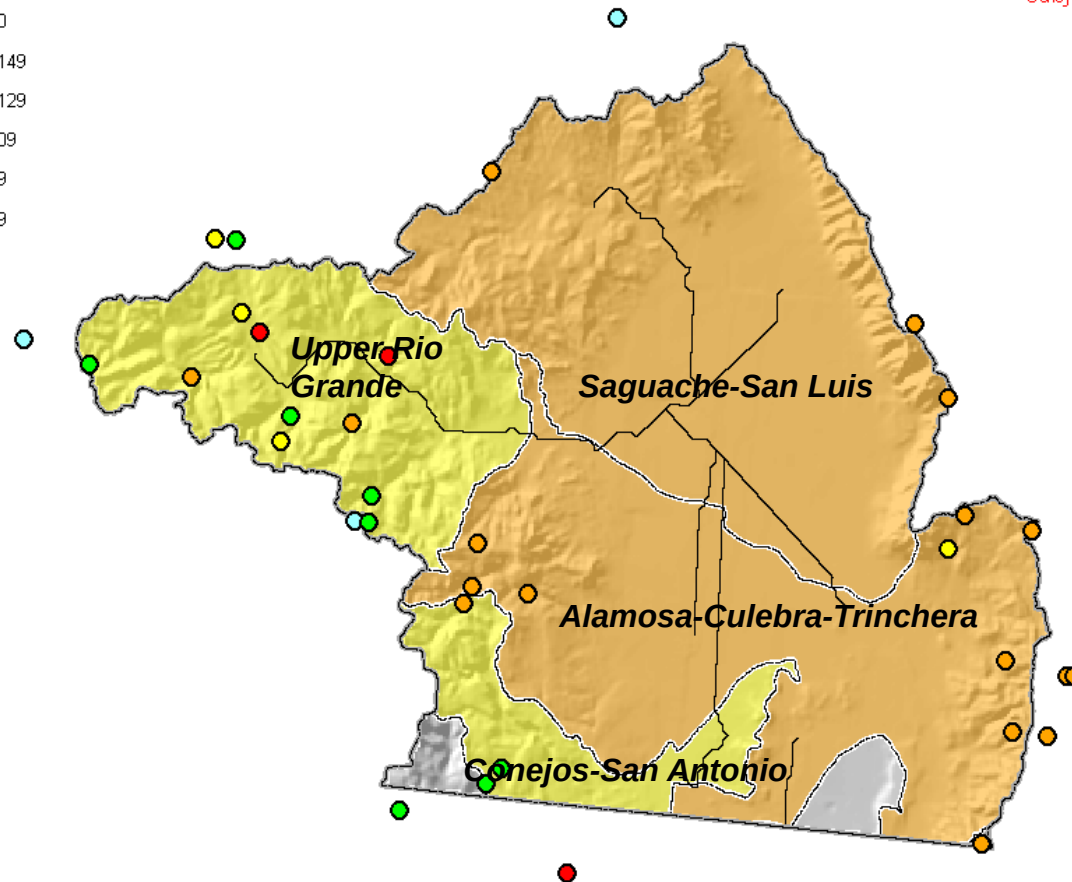


Upper Rio Grande Basin Snowpack Map

Percent of Average

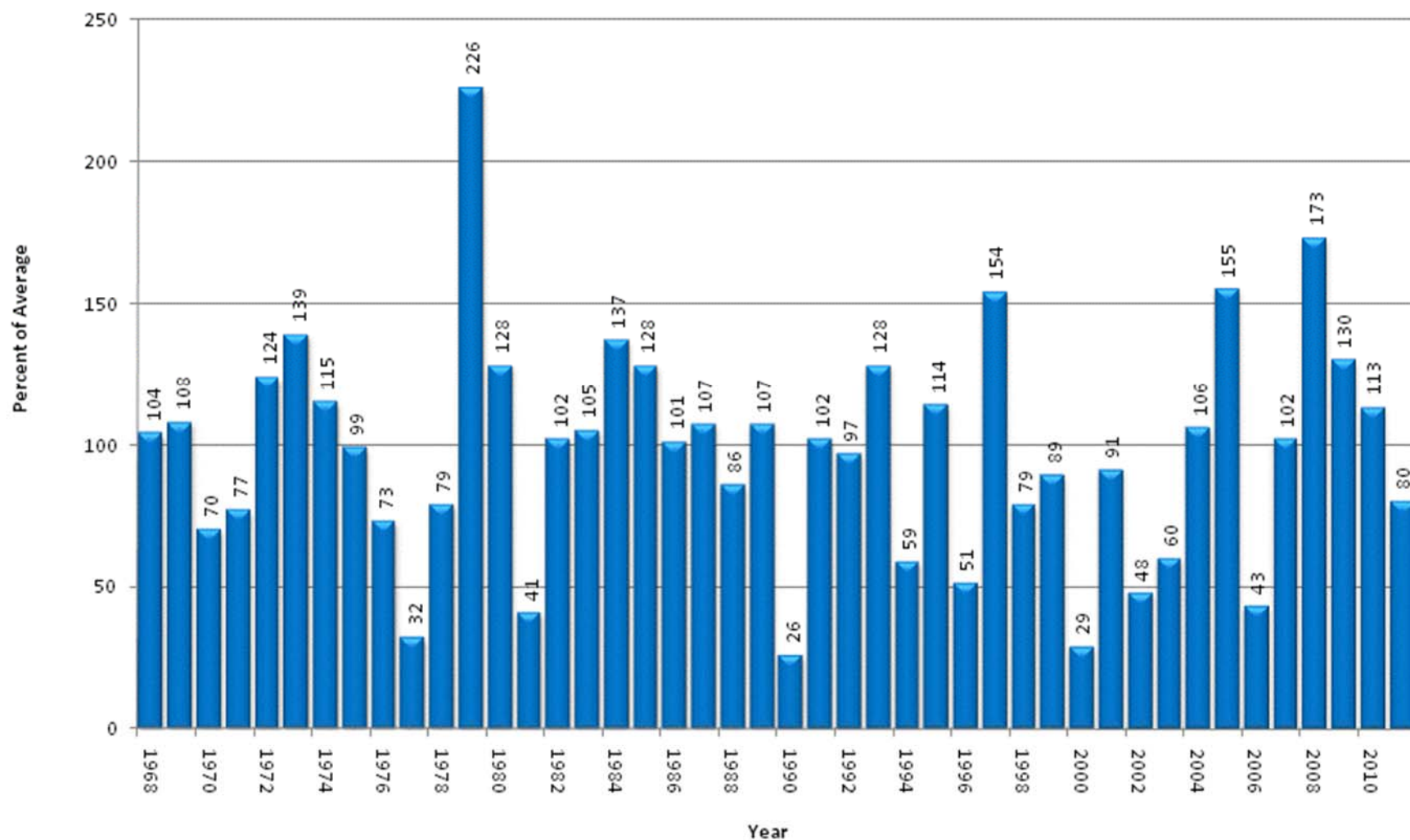


*Provisional Data
Subject to Revision*



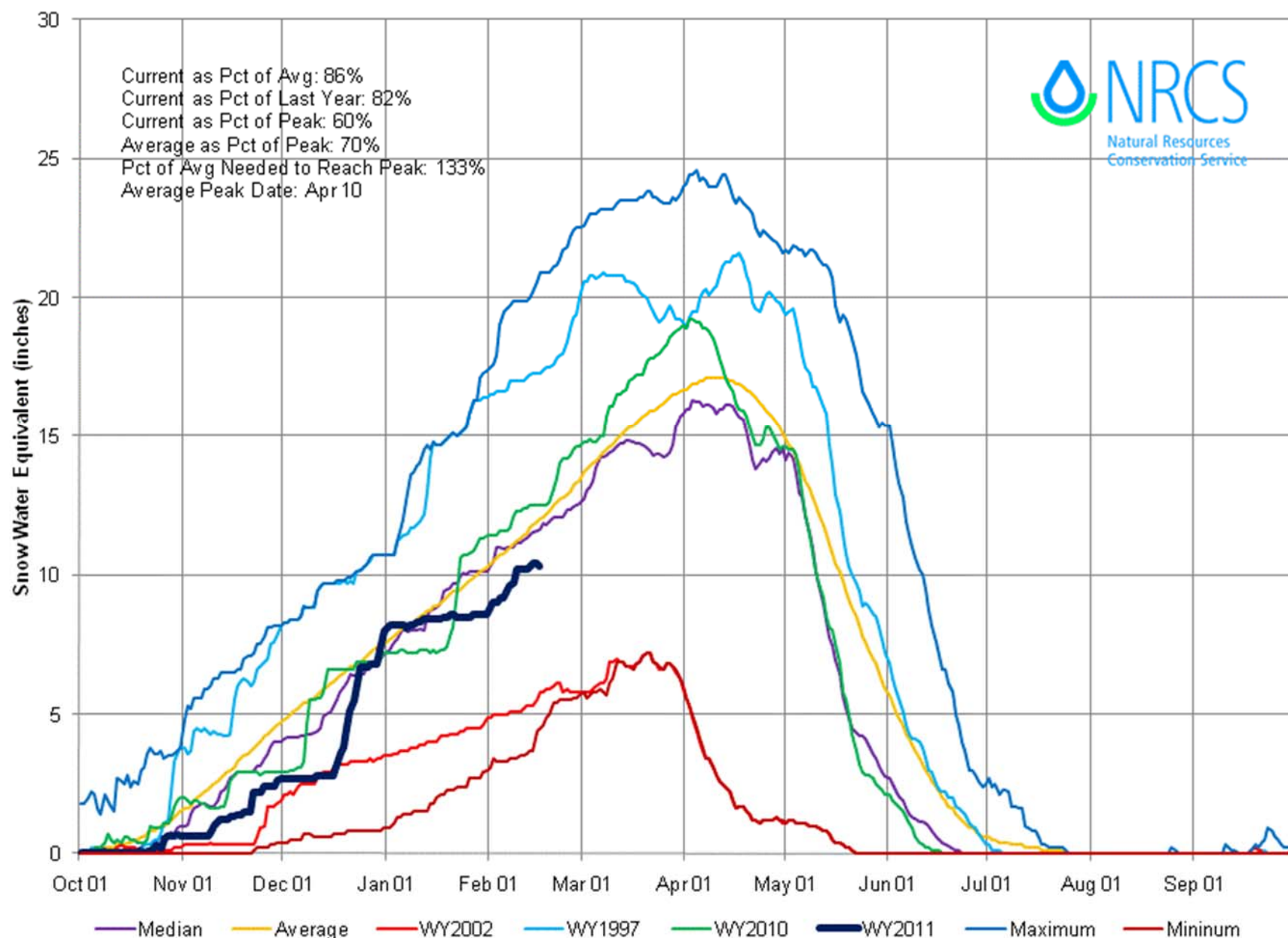
Current as of February 1, 2011

February 1 Total Upper Rio Grande Basin Snowpack

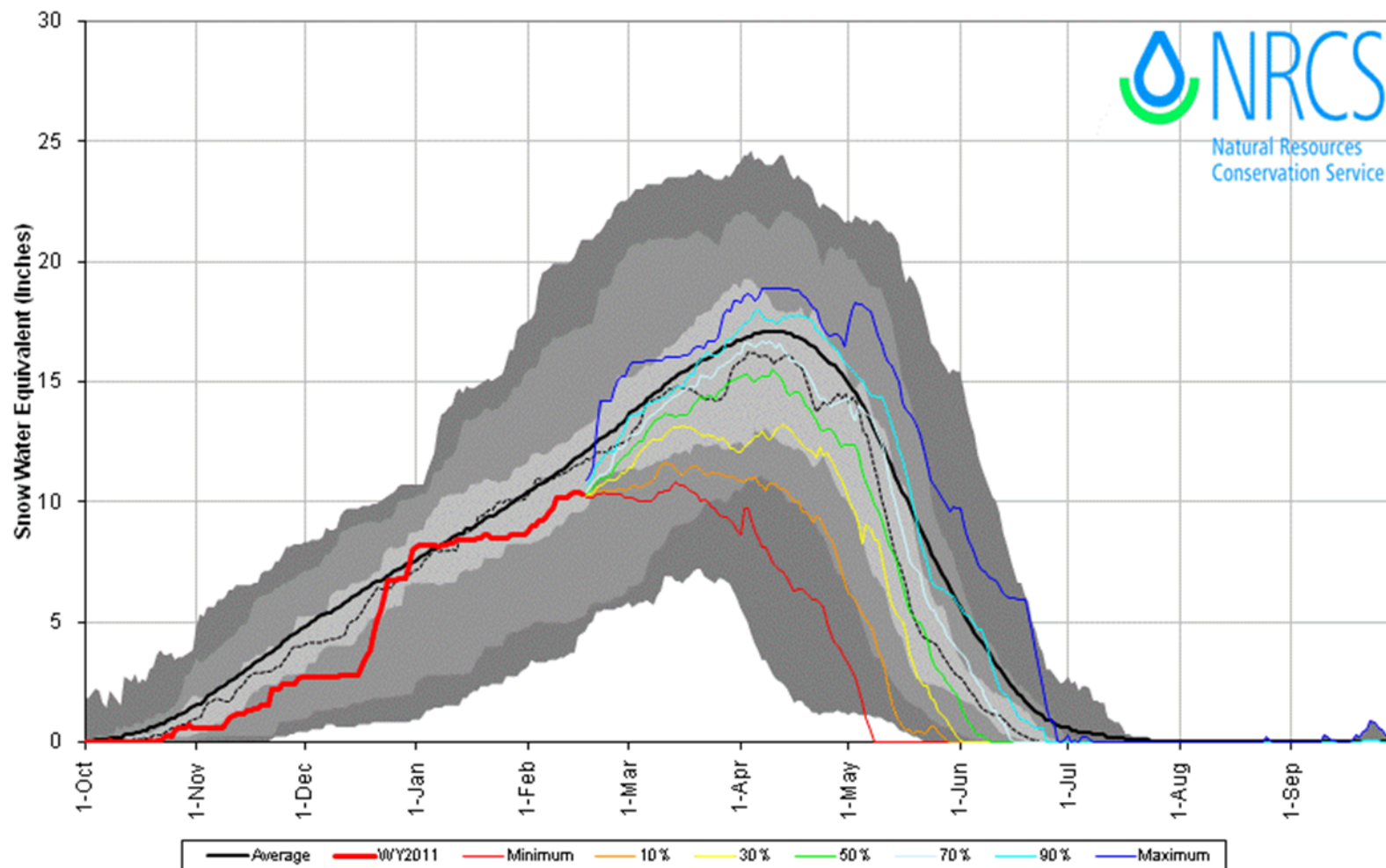


Upper Rio Grande Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Feb 16, 2011

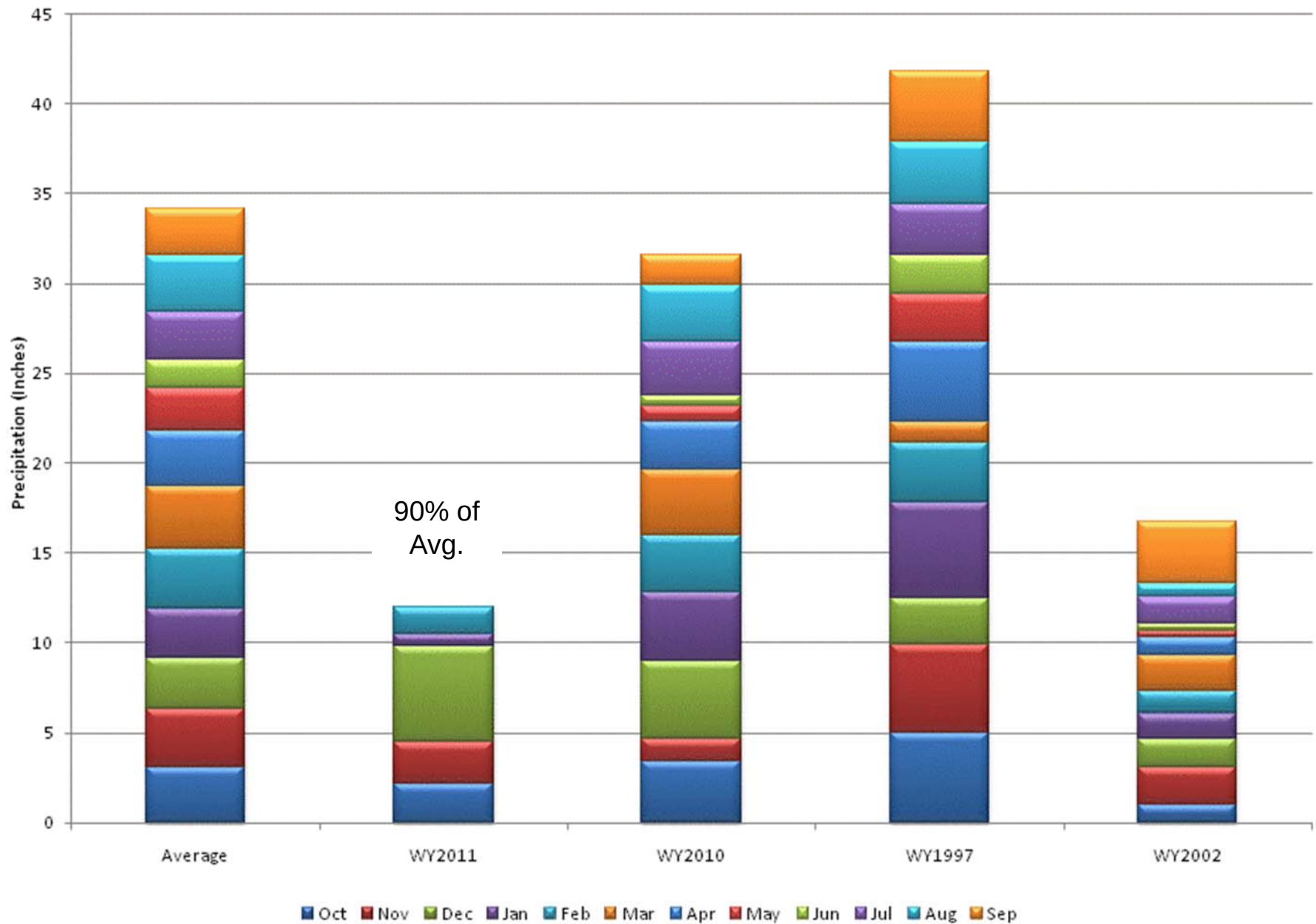


Based on Provisional SNOTEL Data as of Feb 16, 2011



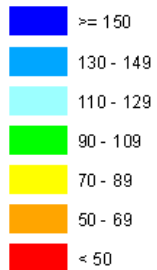
Upper Rio Grande Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Feb 16, 2011

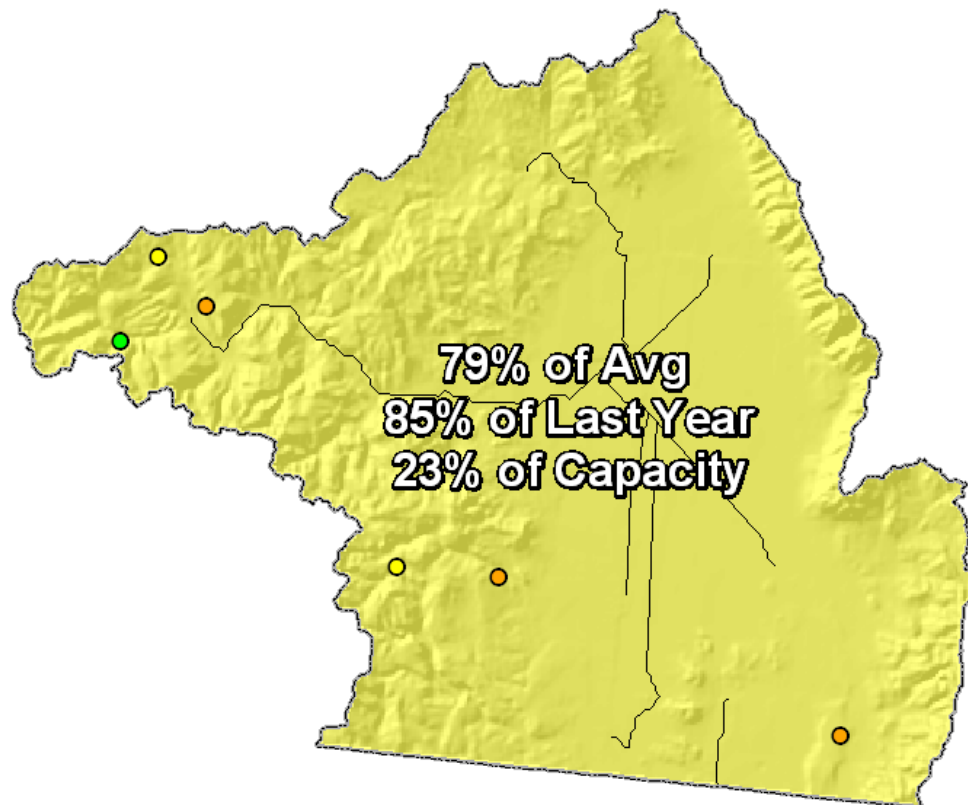


Upper Rio Grande Basin Reservoir Storage Map

Percent of Average

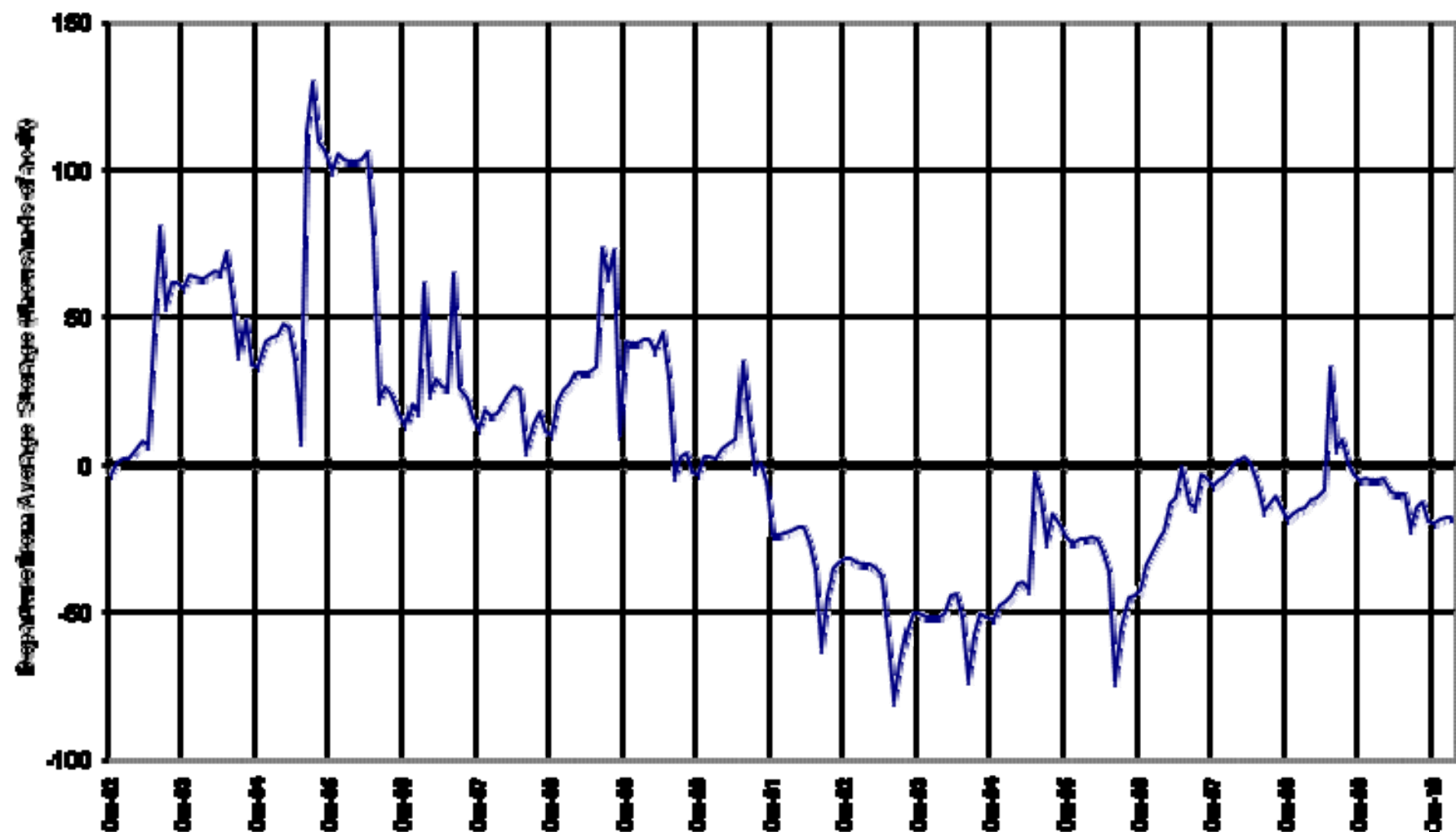


*Provisional Data
Subject to Revision*



End of January 2011

UPPER RIO GRANDE BASIN
Reservoir Storage
Departure from Average

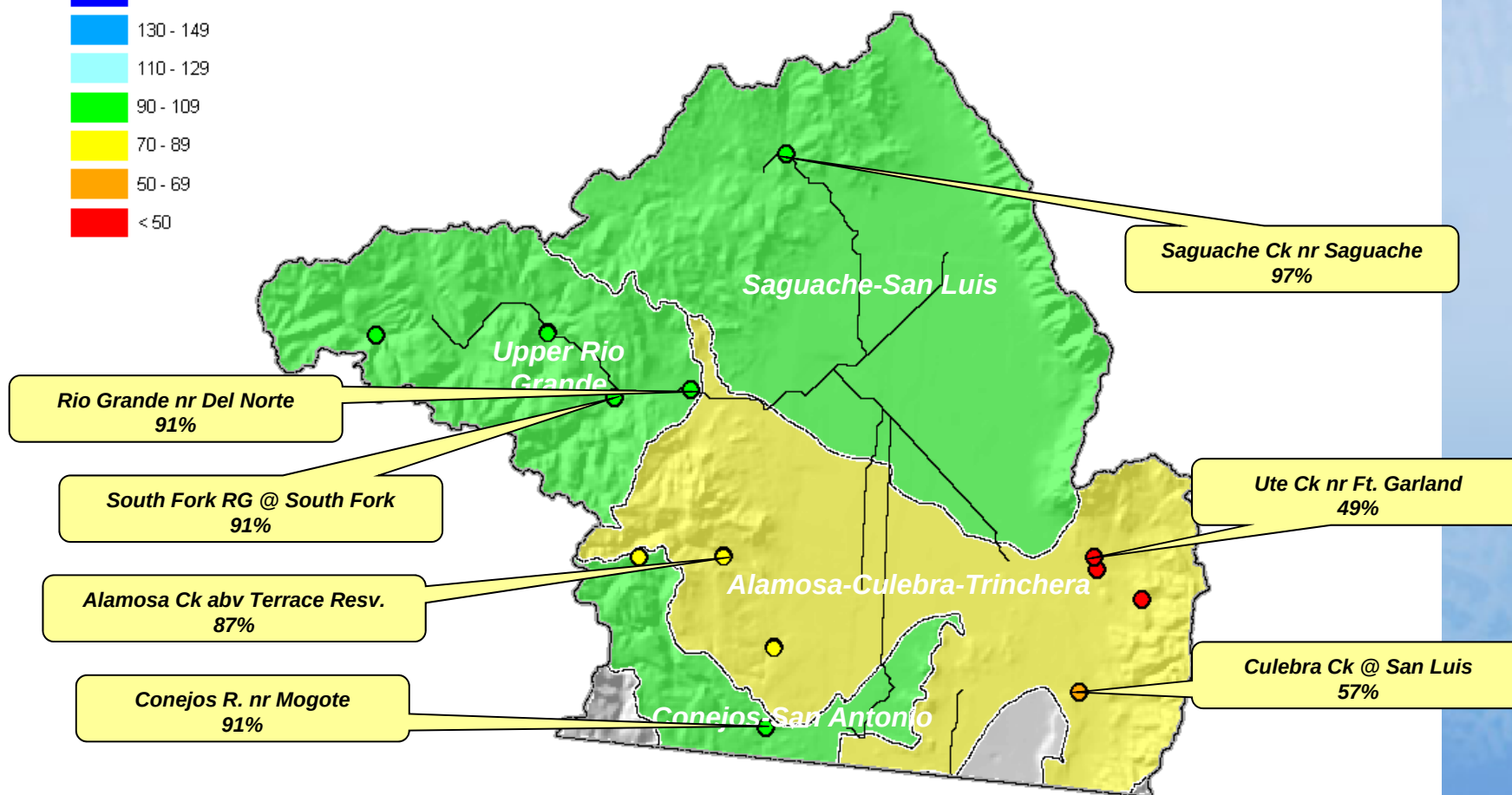


Upper Rio Grande Basin Streamflow Forecast Map

Percent of Average

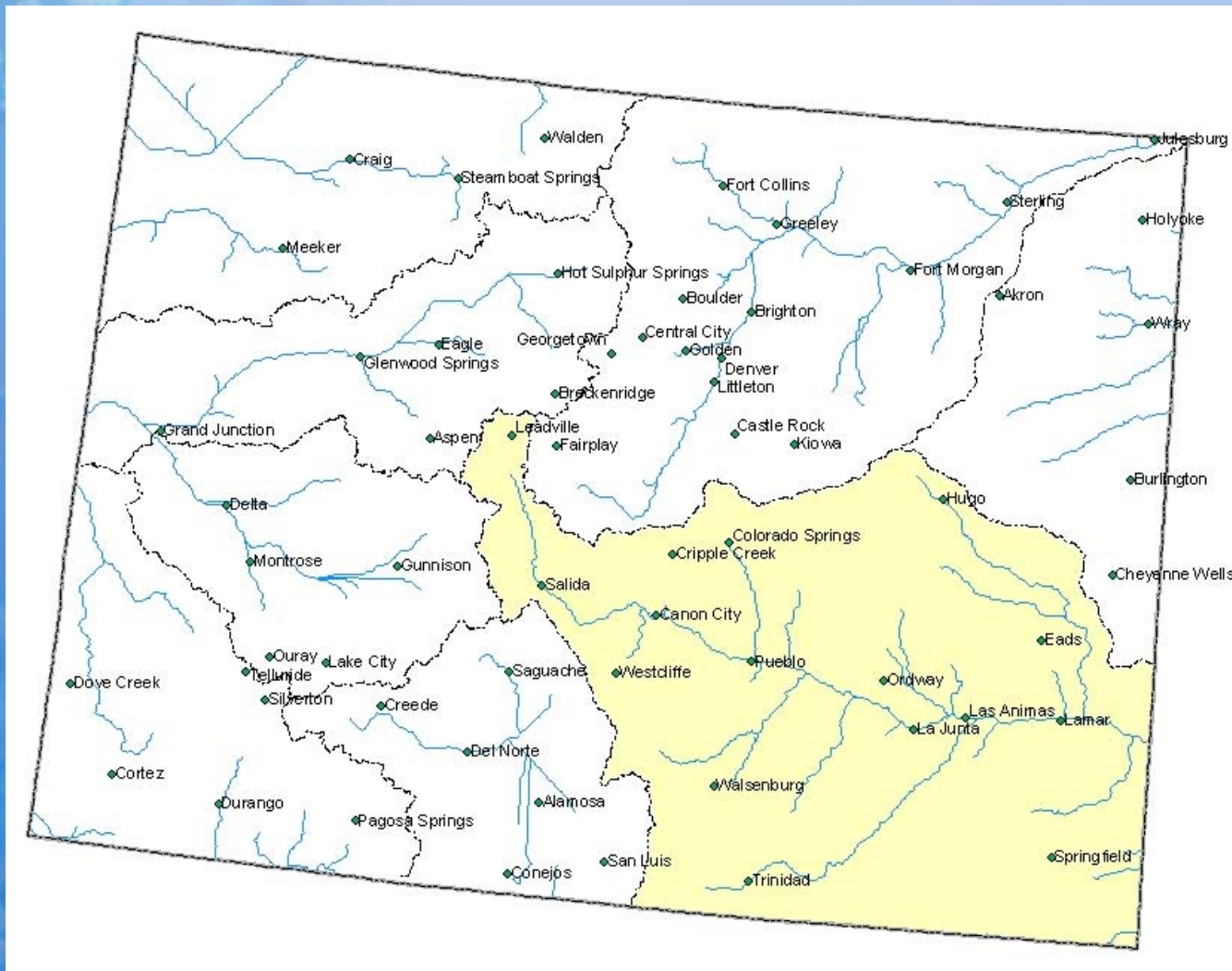


*Provisional Data
Subject to Revision*



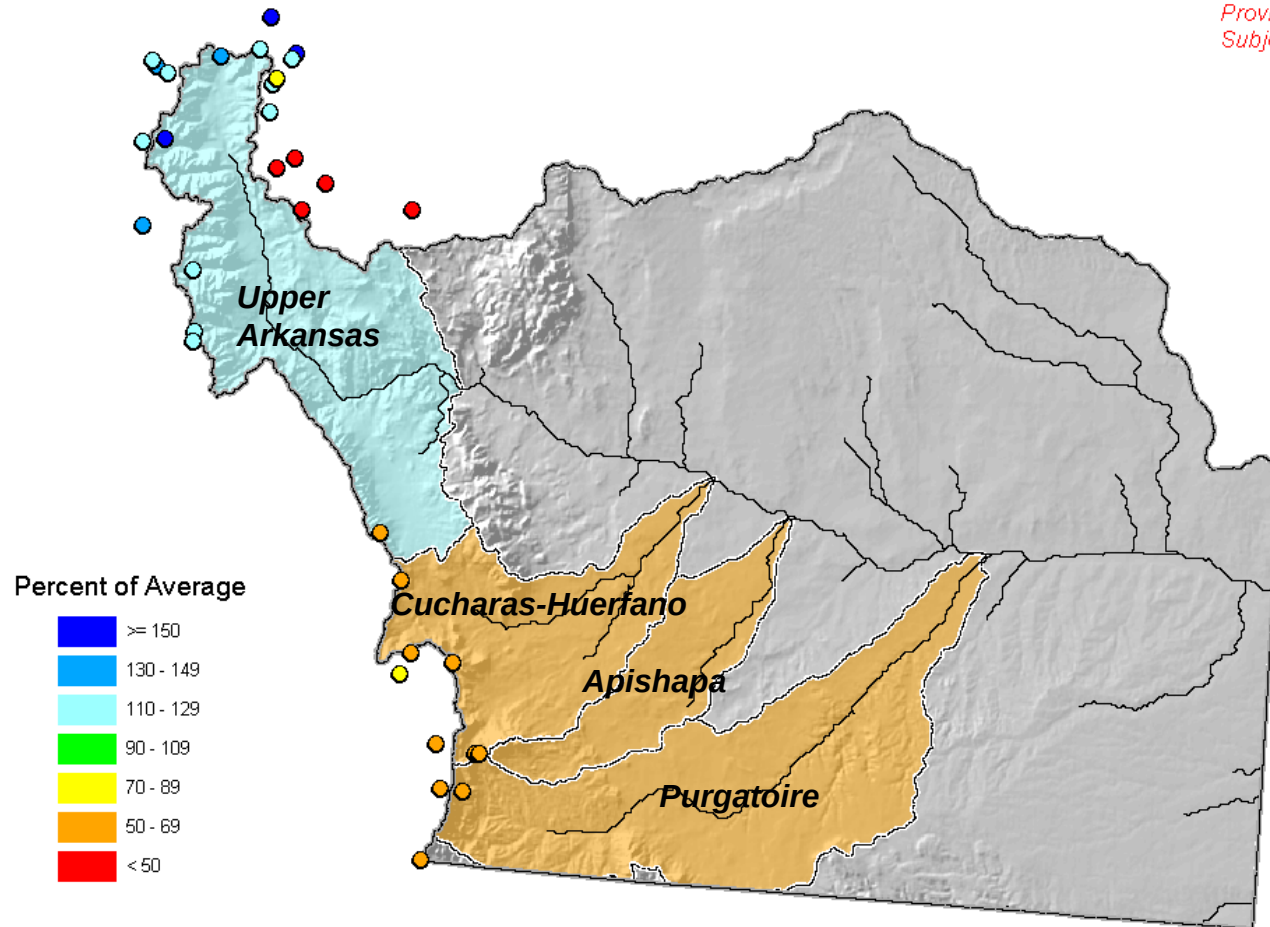
Current as of February 1, 2011

Arkansas River Basin Summary



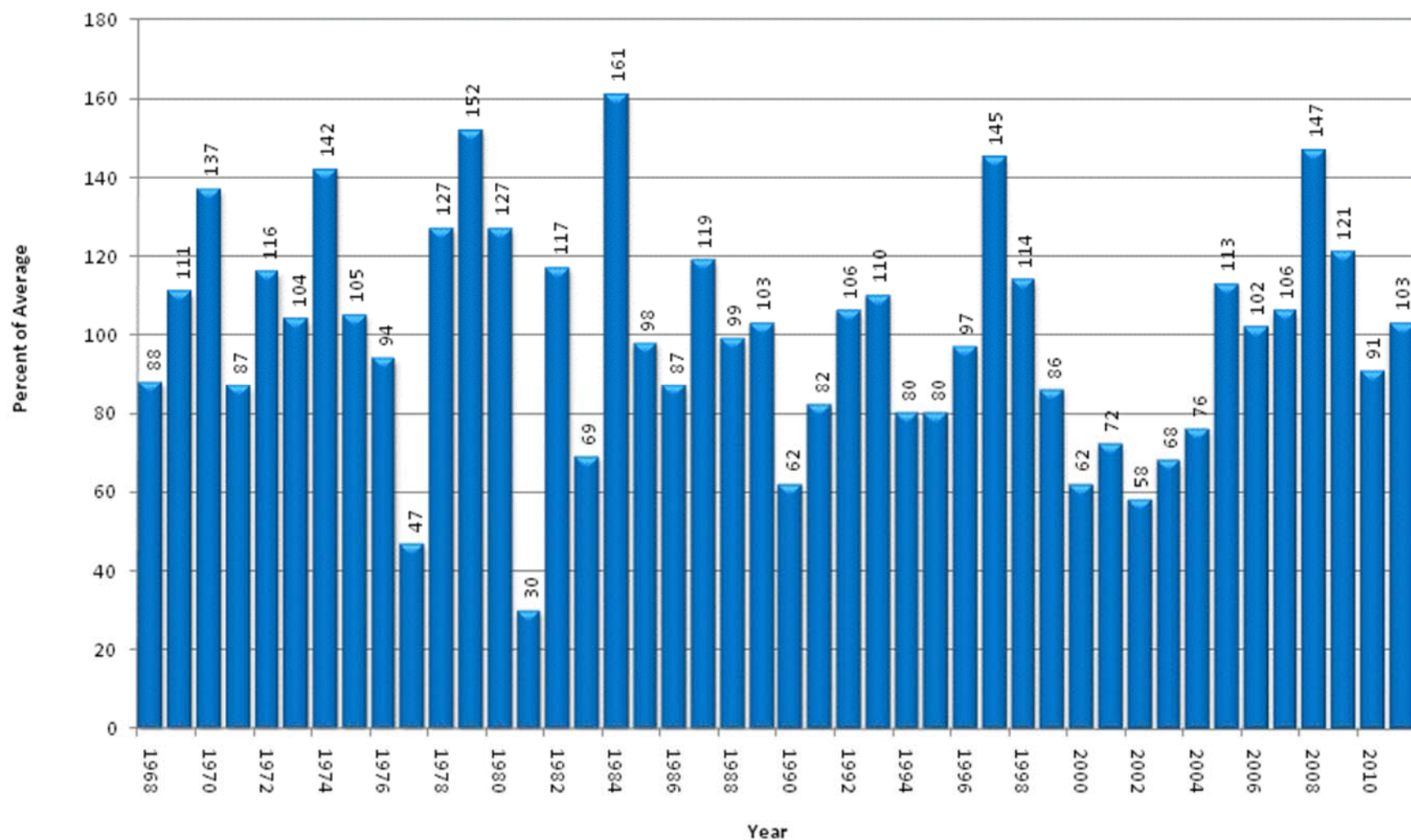
Arkansas River Basin Snowpack Map

*Provisional Data
Subject to Revision*



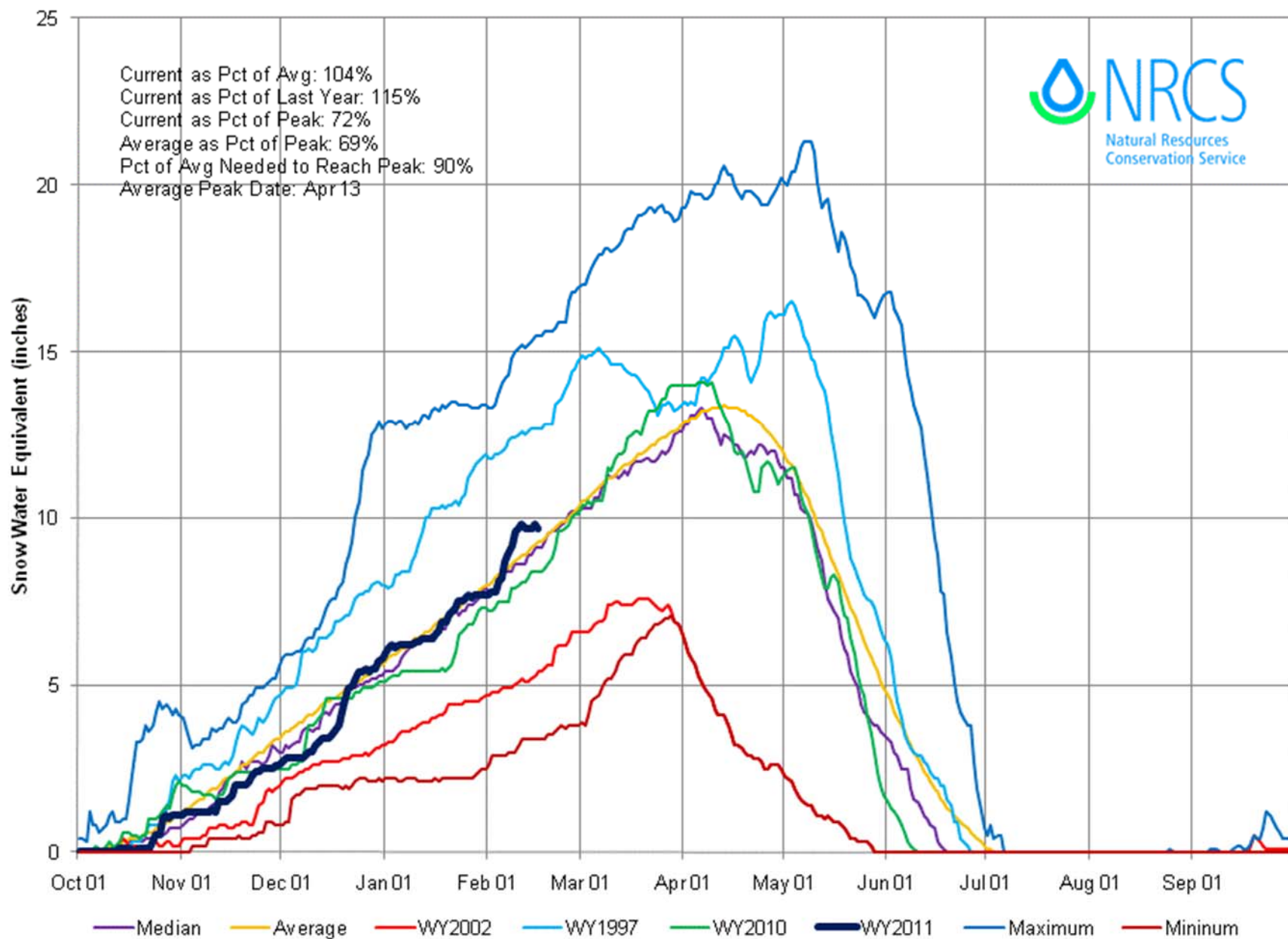
Current as of February 1, 2011

February 1 Total Arkansas River Basin Snowpack



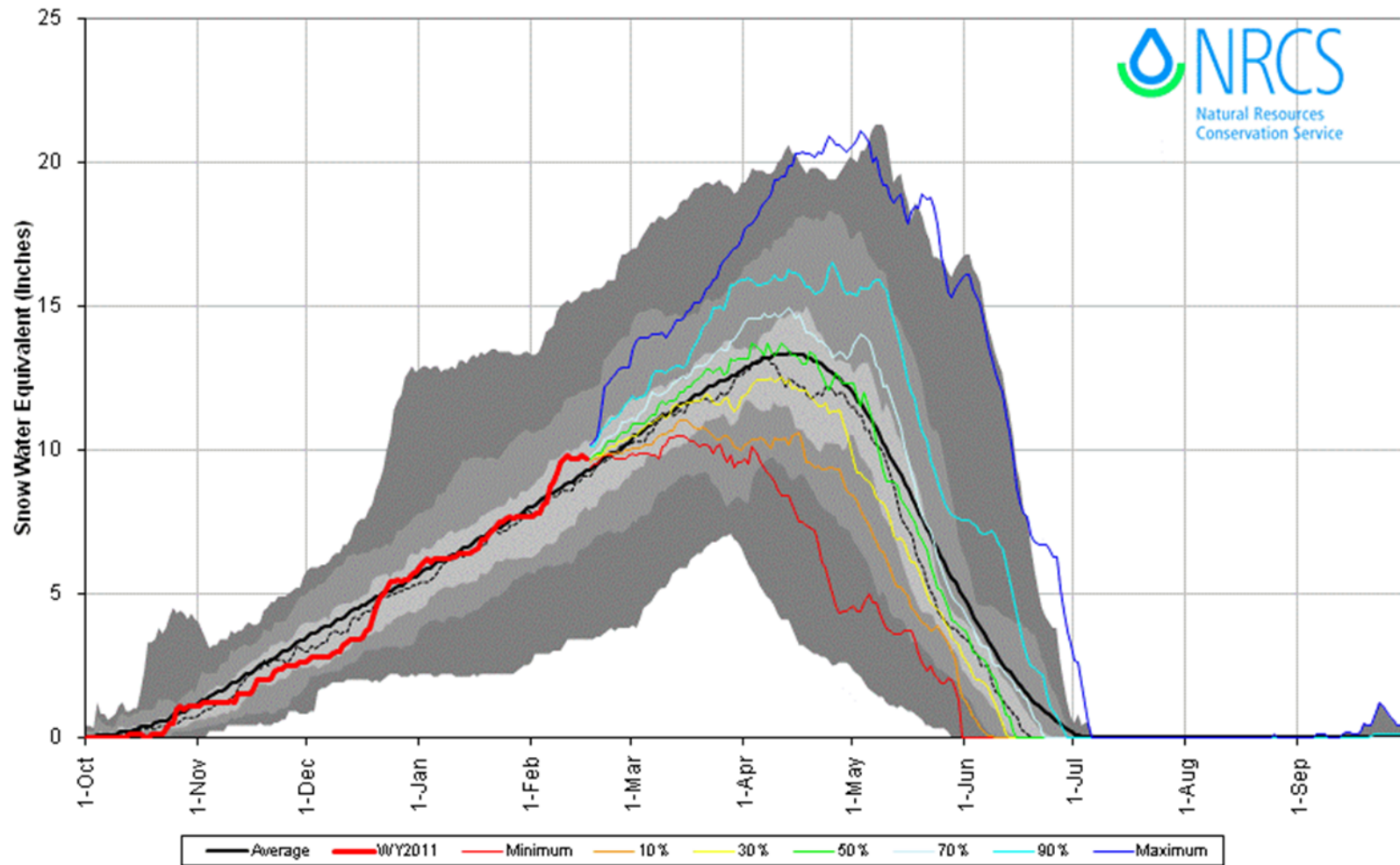
Arkansas River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Feb 16, 2011



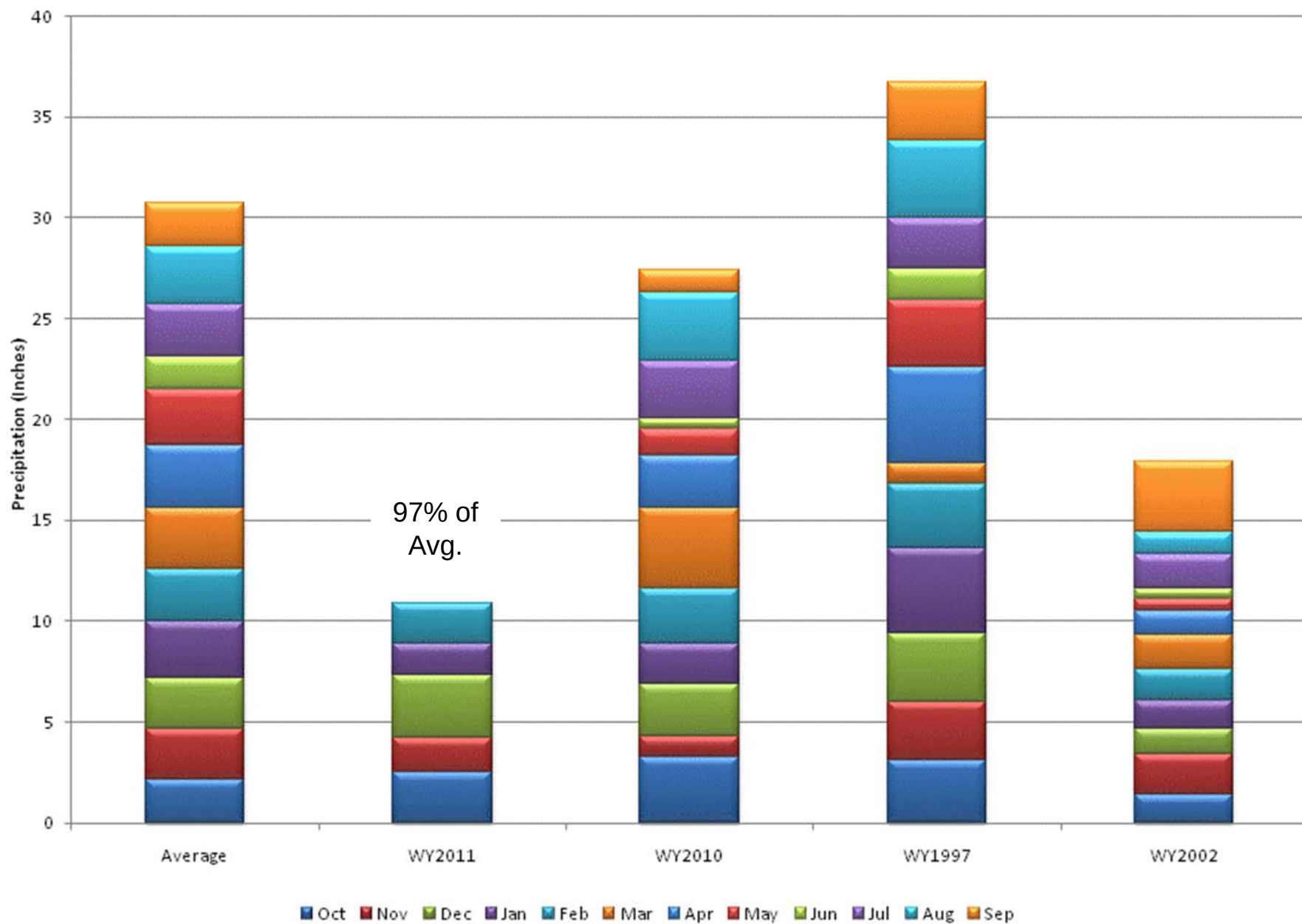
Arkansas River Basin with Non-Exceedence Projections

Based on Provisional SNOTEL Data as of Feb 16, 2011



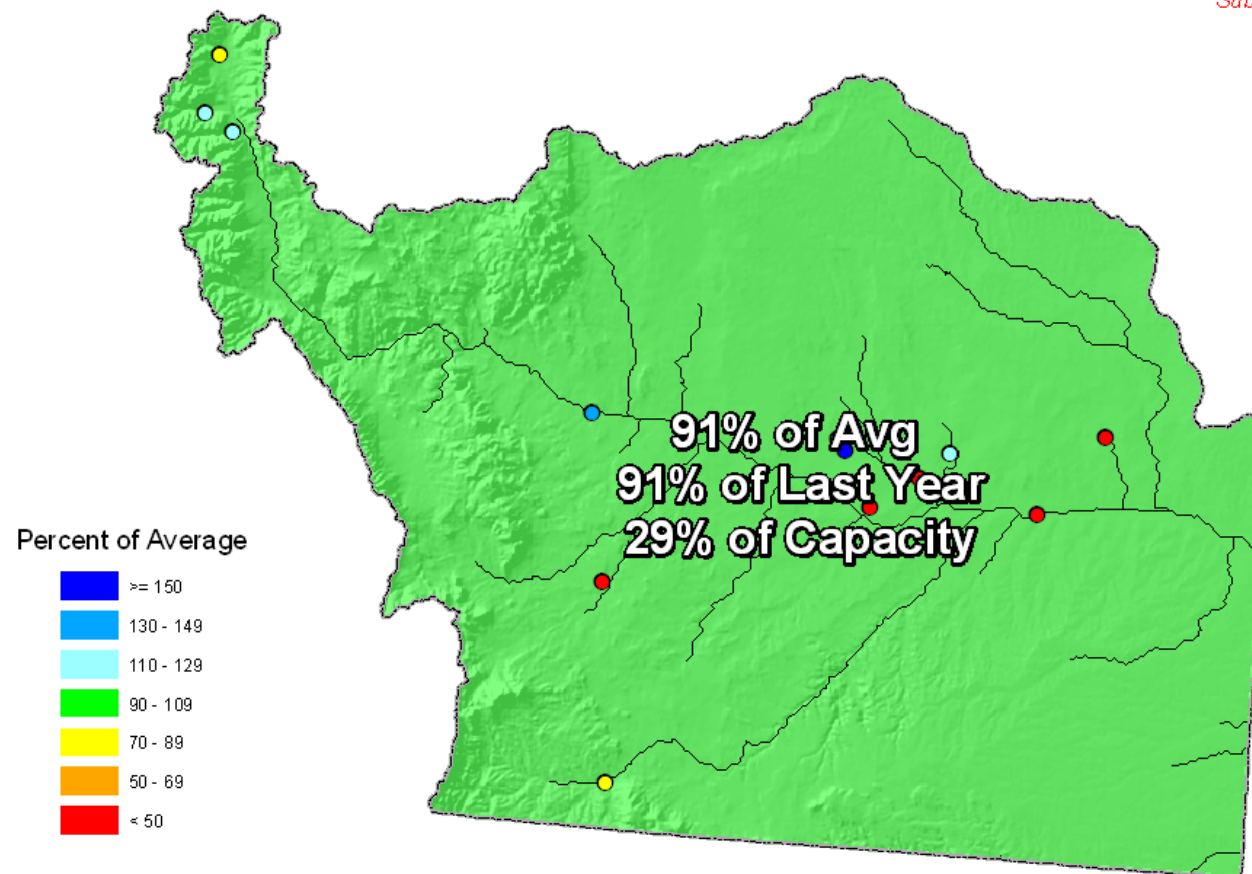
Arkansas River Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Feb 16, 2011



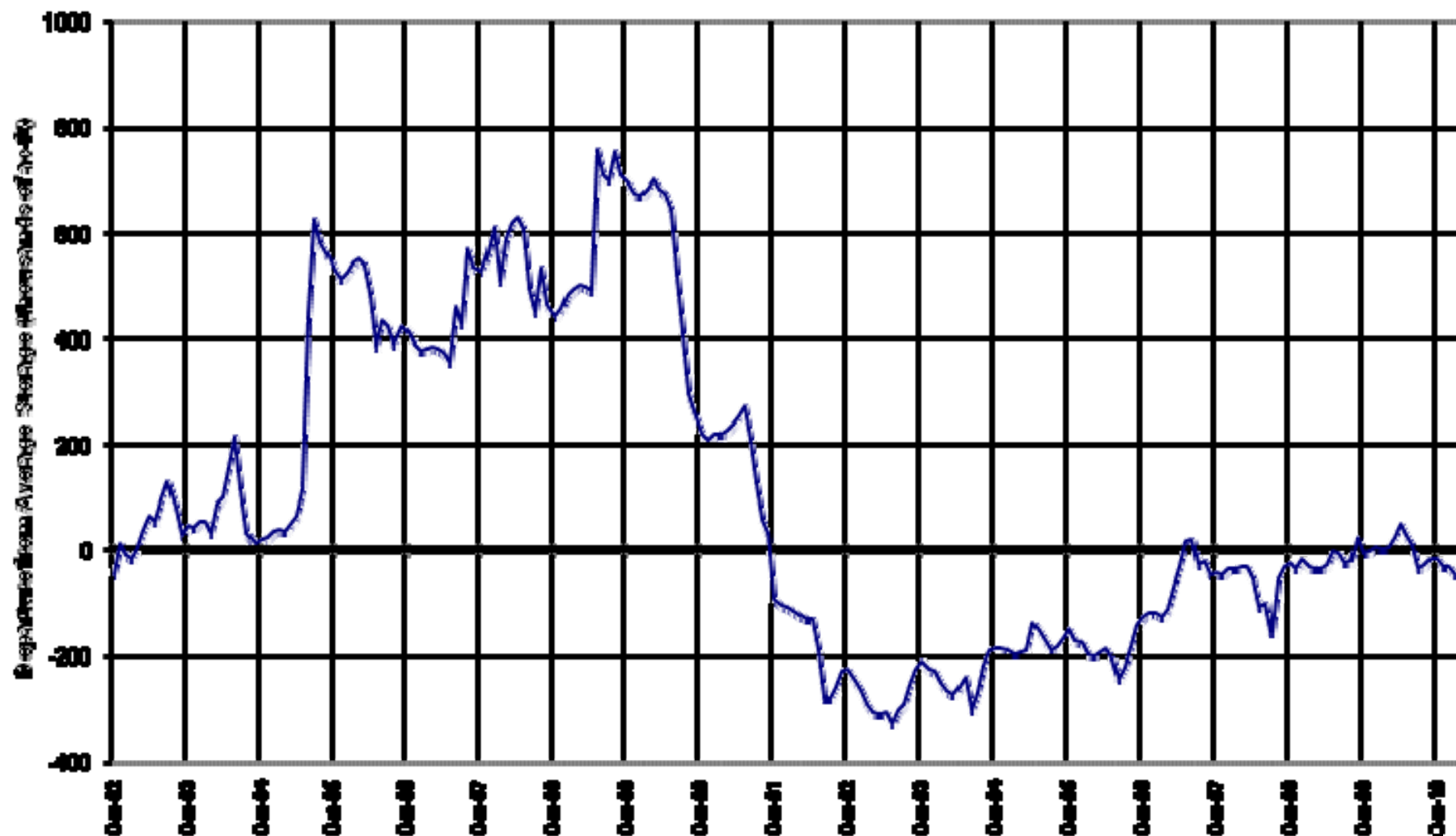
Arkansas River Basin Reservoir Storage Map

*Provisional Data
Subject to Revision*



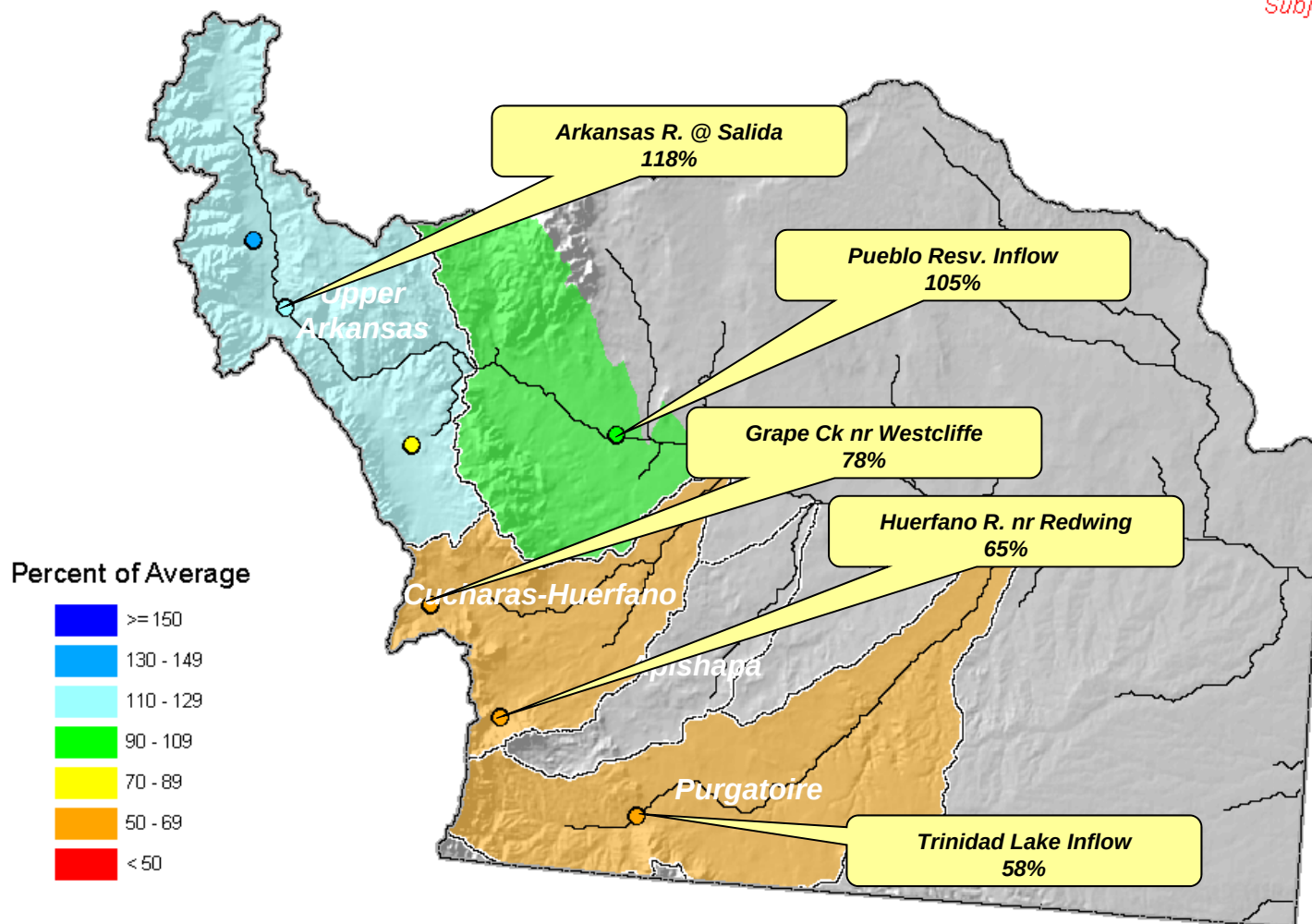
End of January 2011

ARKANSAS RIVER BASIN Reservoir Storage Departure from Average



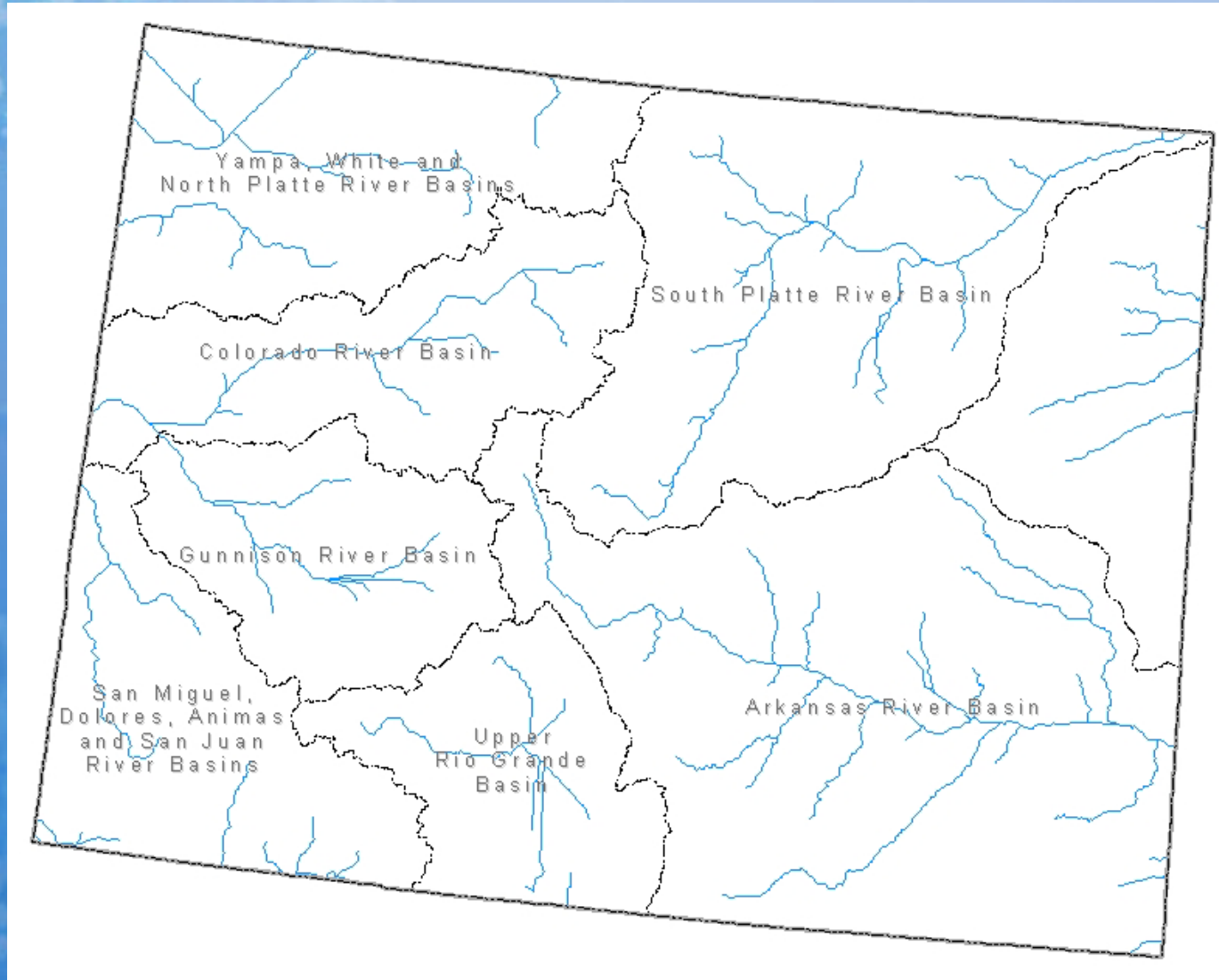
Arkansas River Basin Streamflow Forecast Map

*Provisional Data
Subject to Revision*



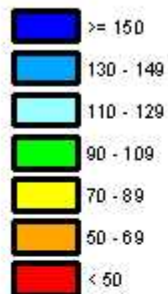
Current as of February 1, 2011

Colorado Statewide Summary

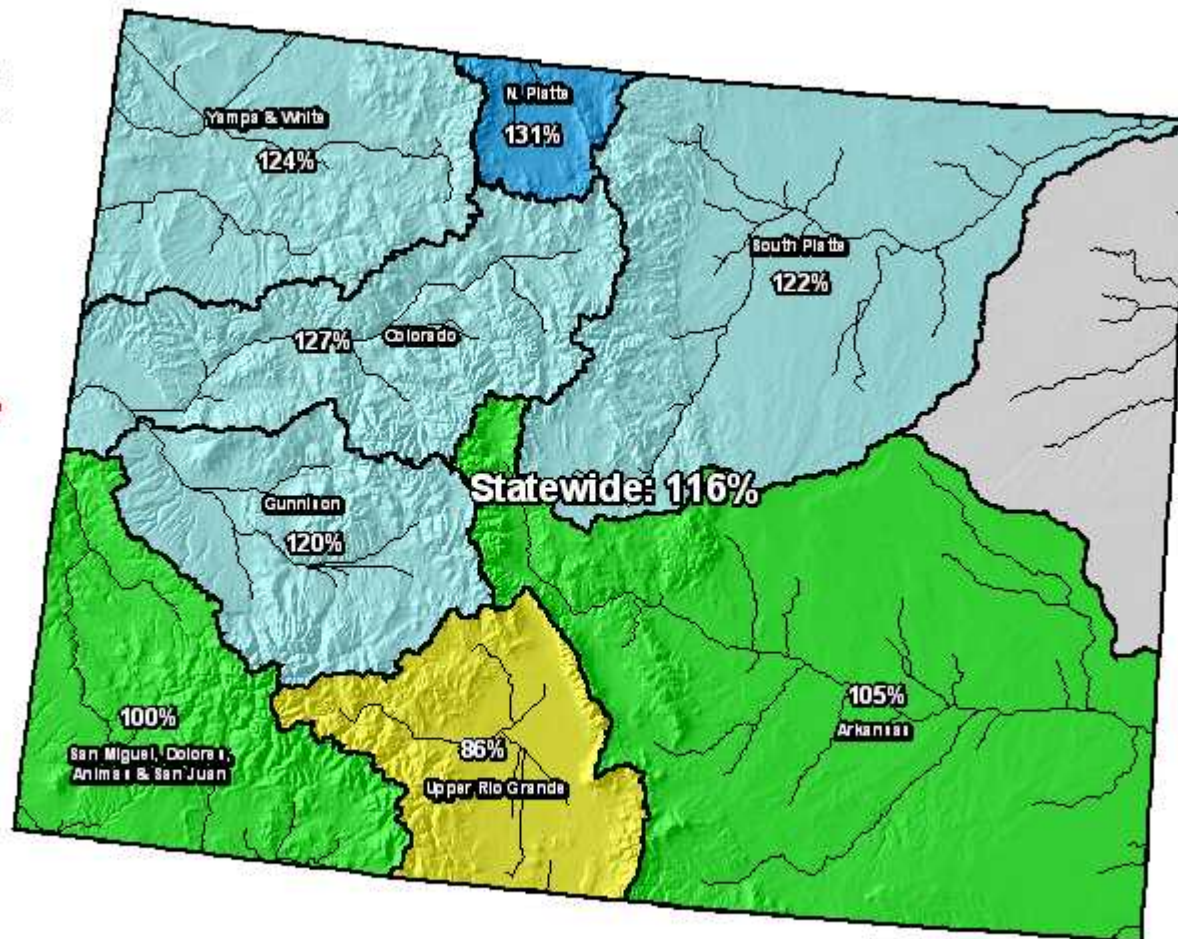


Colorado SNOTEL Current Snowpack Conditions

Percent of Average



*Provisional Data
Subject to Revision*



Current as of Feb 16, 2011

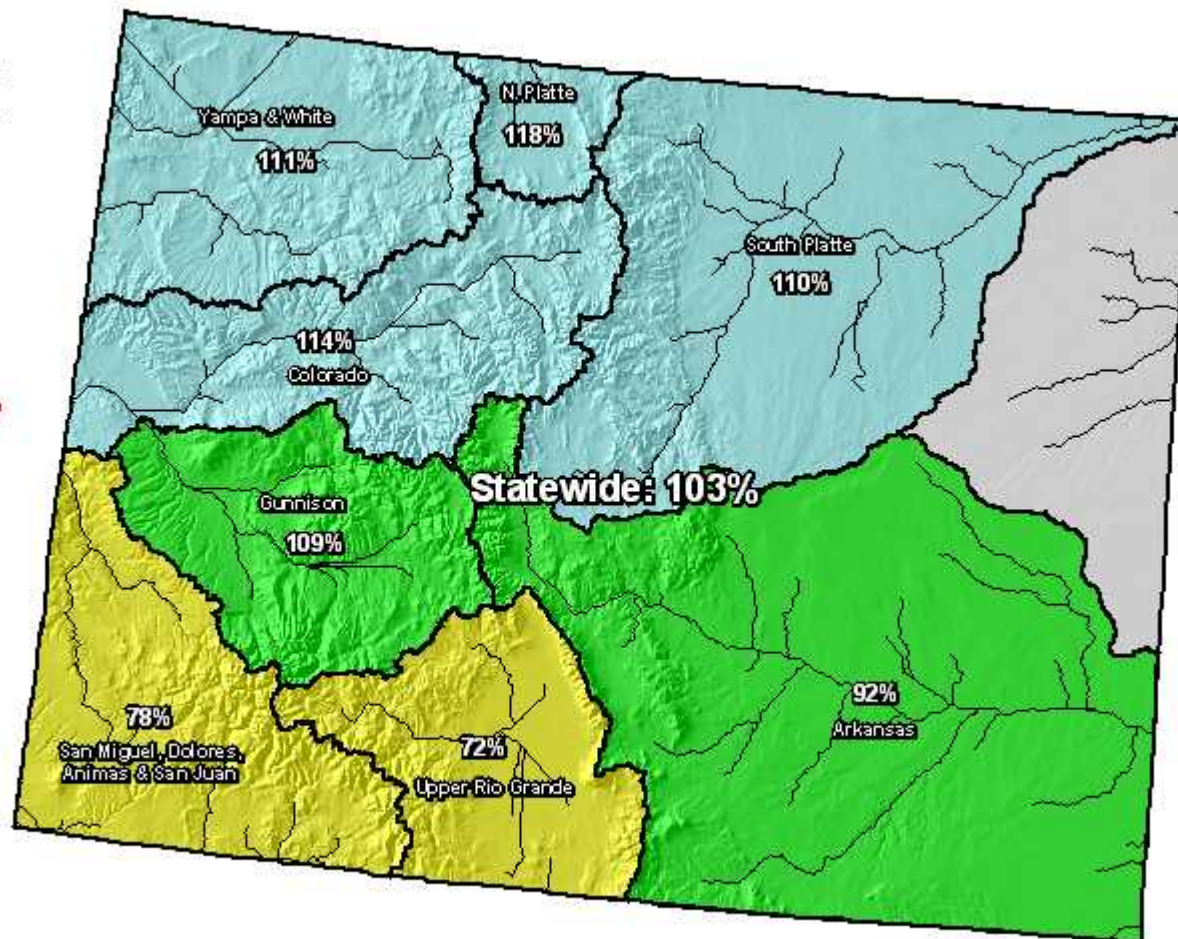
*Data may not provide a valid measure of conditions

Colorado SNOTEL April 1 Snowpack Projection Map*

Percent of Average



*Provisional Data
Subject to Revision*



Current as of Feb 16, 2011

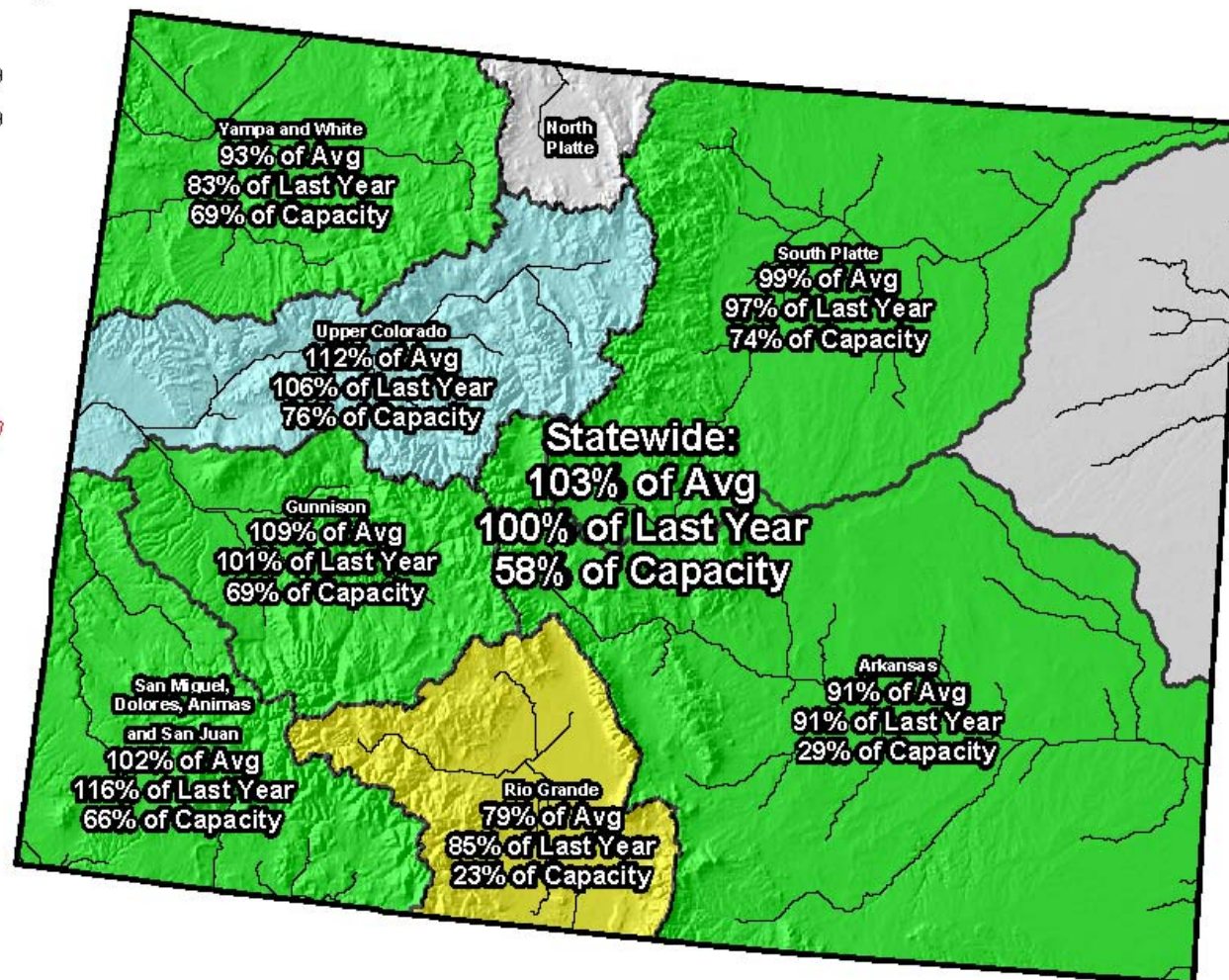
*Based on 30% Non-Exceedence Projections

Colorado Reservoir Storage Map

Percent of Average



*Provisional Data
Subject to Revision*



End of January 2011

Colorado SNOTEL Month-to-Date Precipitation

Percent of Average

○ Missing or Invalid Data

● < 50

● 50 - 69

● 70 - 89

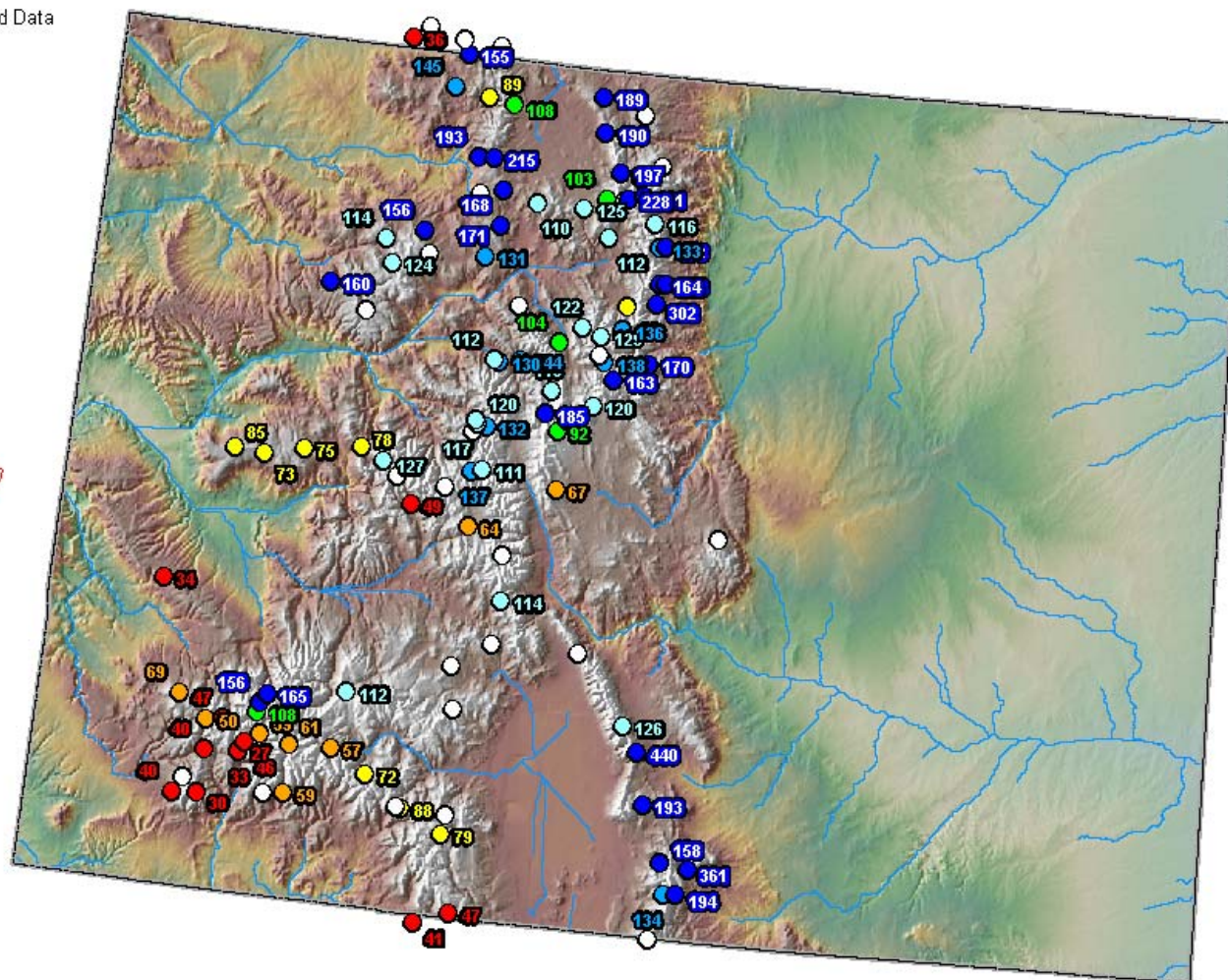
● 90 - 109

● 110 - 129

● 130 - 149

● ≥ 150

*Provisional Data
Subject to Revision*

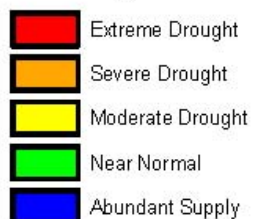


Current as of Feb 15, 2011

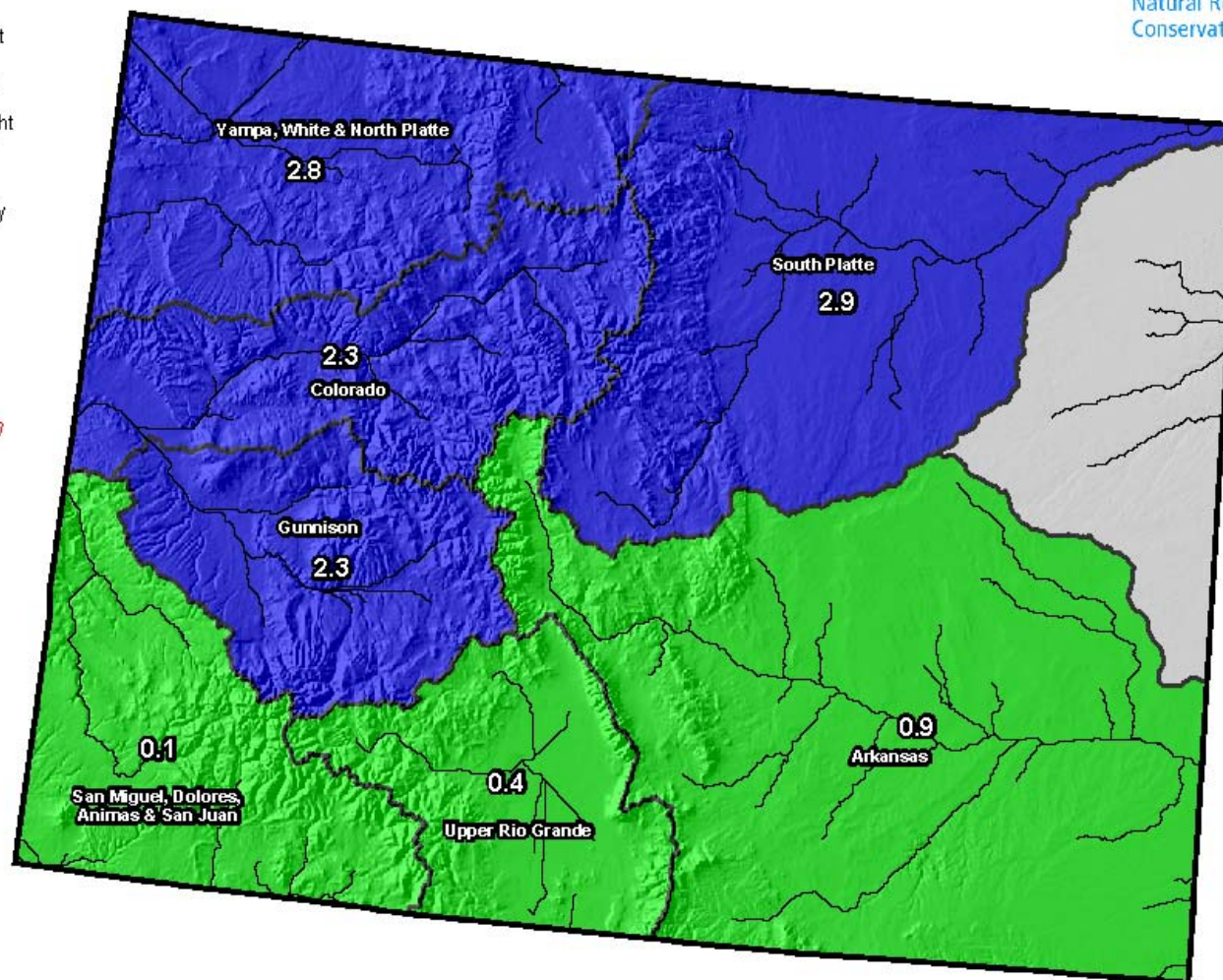
Colorado Surface Water Supply Index (SWSI) Map



Legend

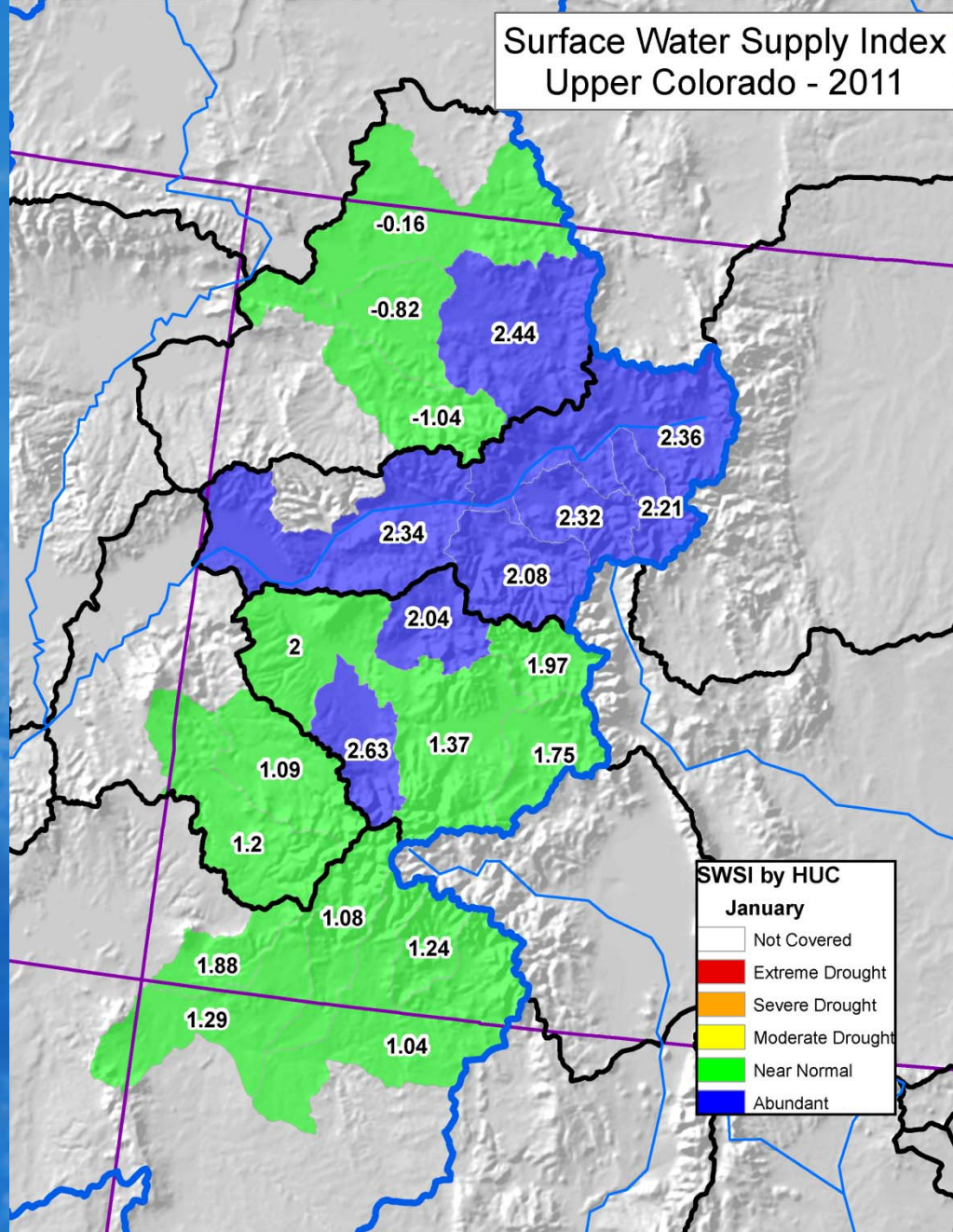


*Provisional Data
Subject to Revision*

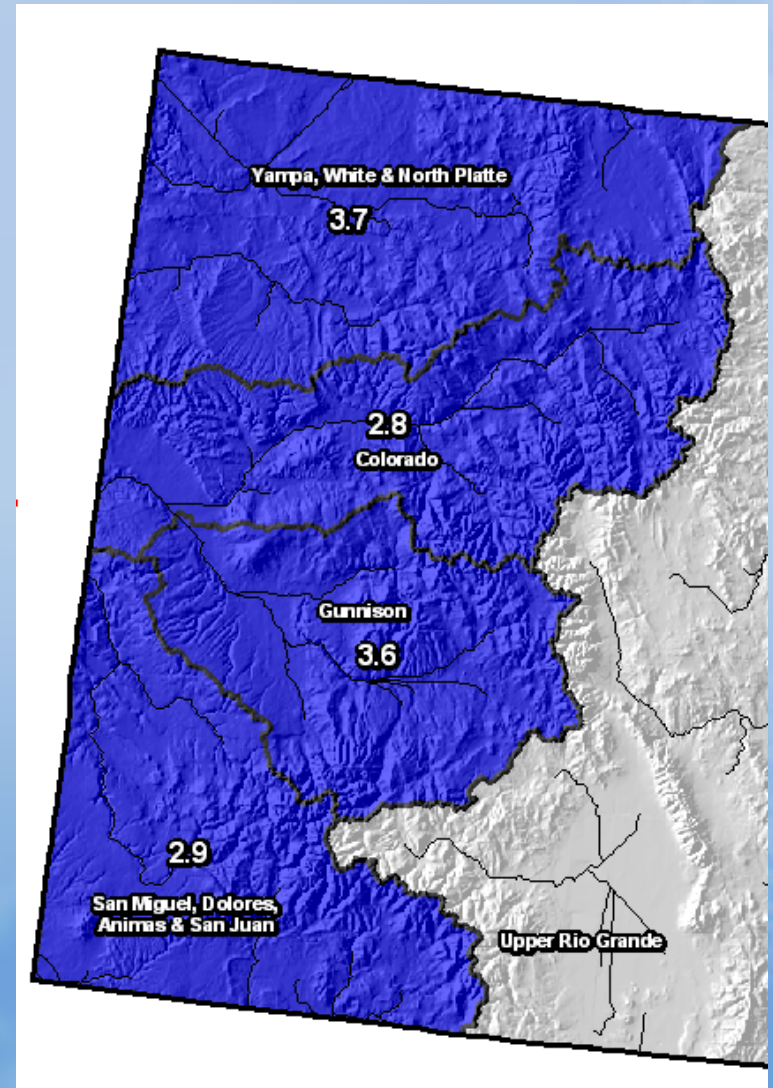


Current as of February 1, 2011

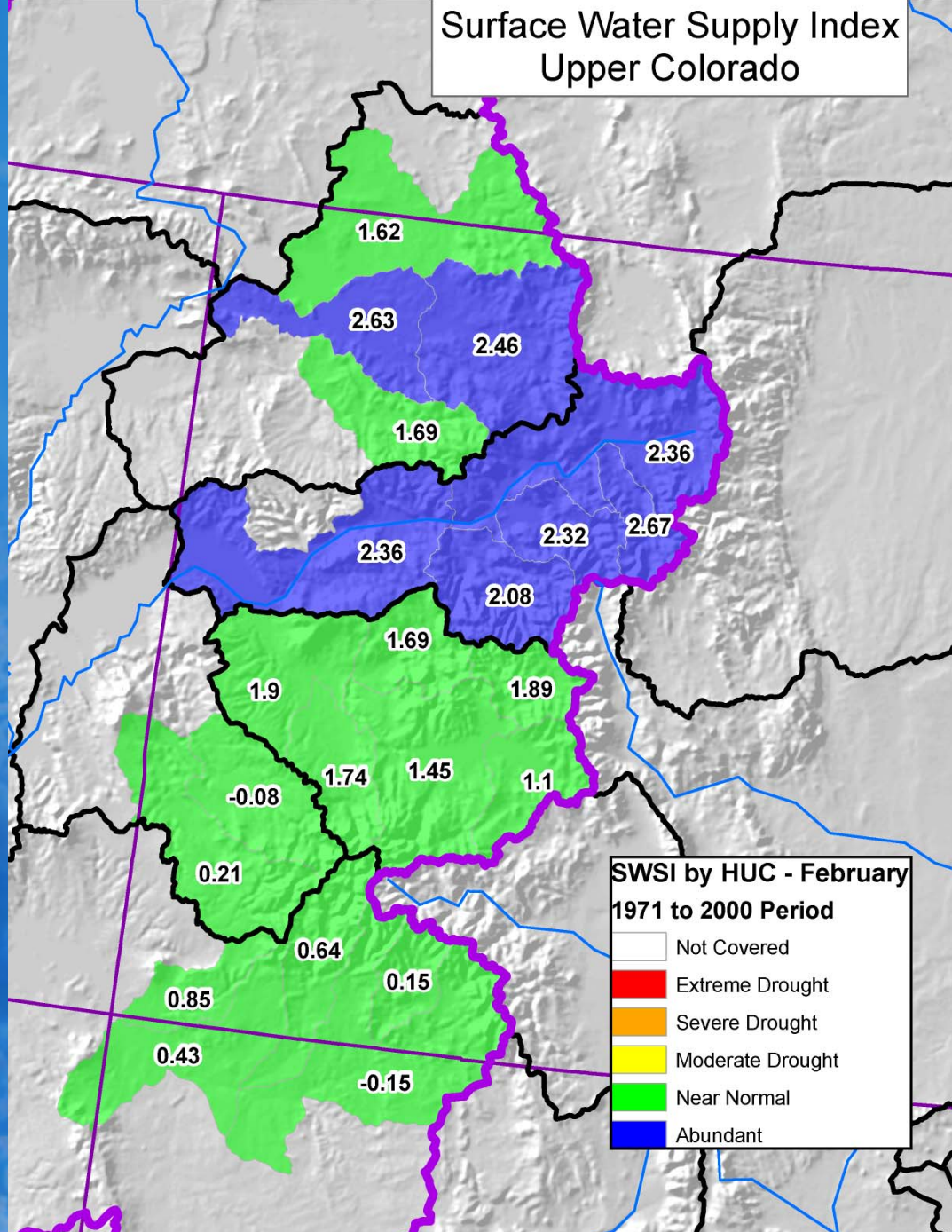
Surface Water Supply Index
Upper Colorado - 2011



Colorado SWSI
January 2011



Surface Water Supply Index Upper Colorado



Colorado SWSI February 2011

