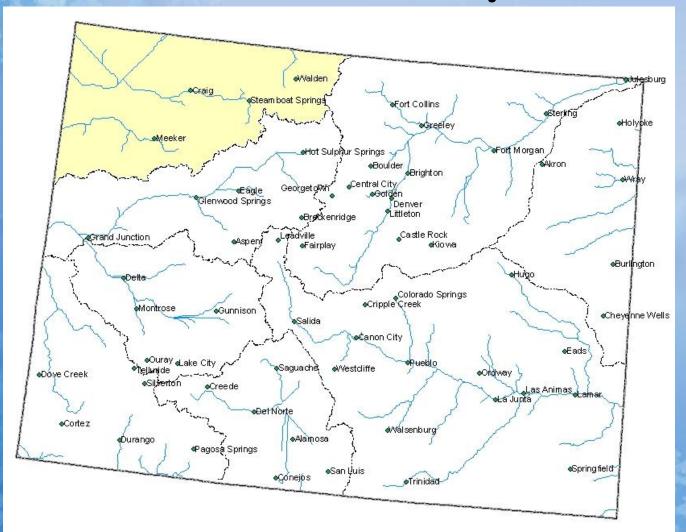
NRCS – Snow Survey & Water Supply Forecasting

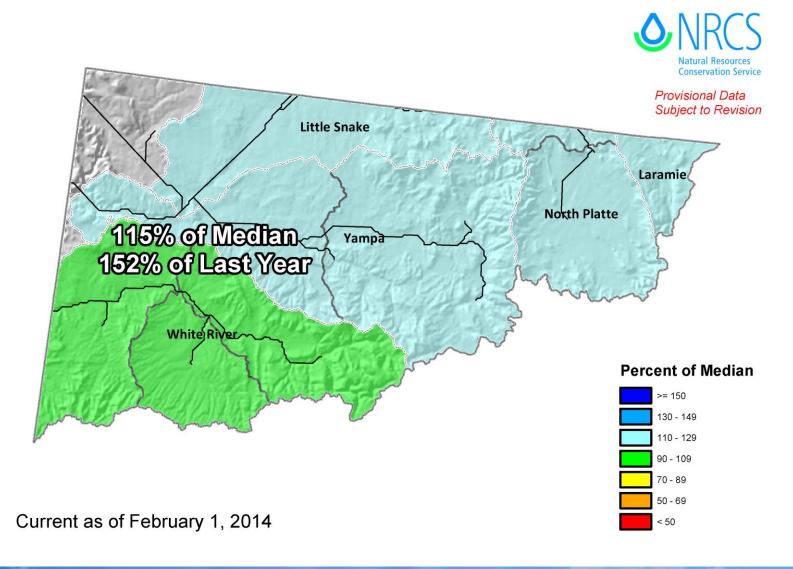
Water Availability Task Force Meeting February 13th, 2014

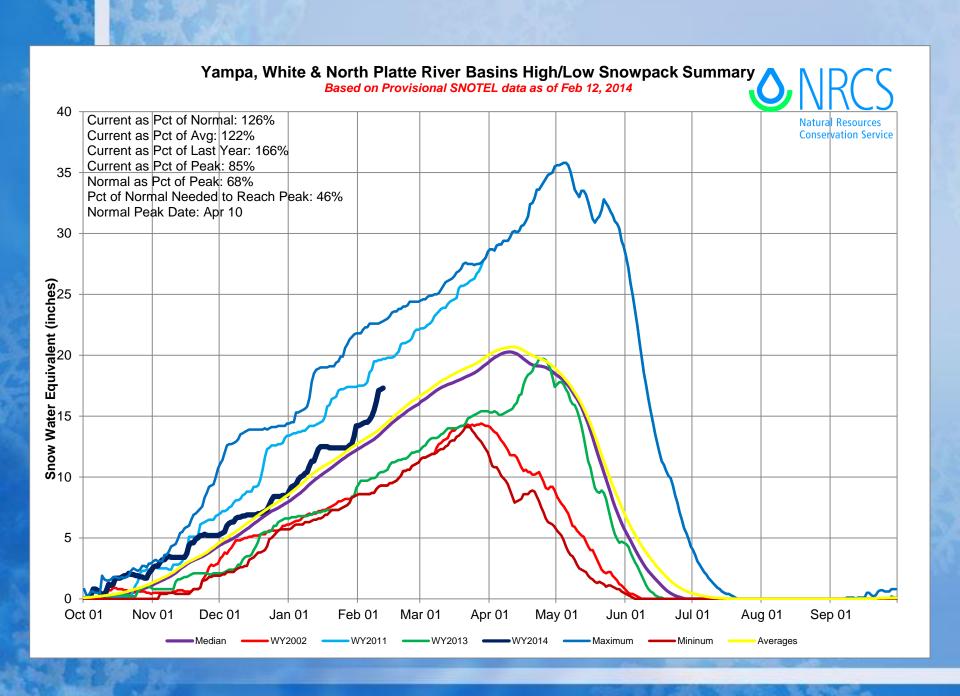
Mage Hultstrand
Assistant Snow Survey Supervisor
http://www.co.nrcs.usda.gov/snow/

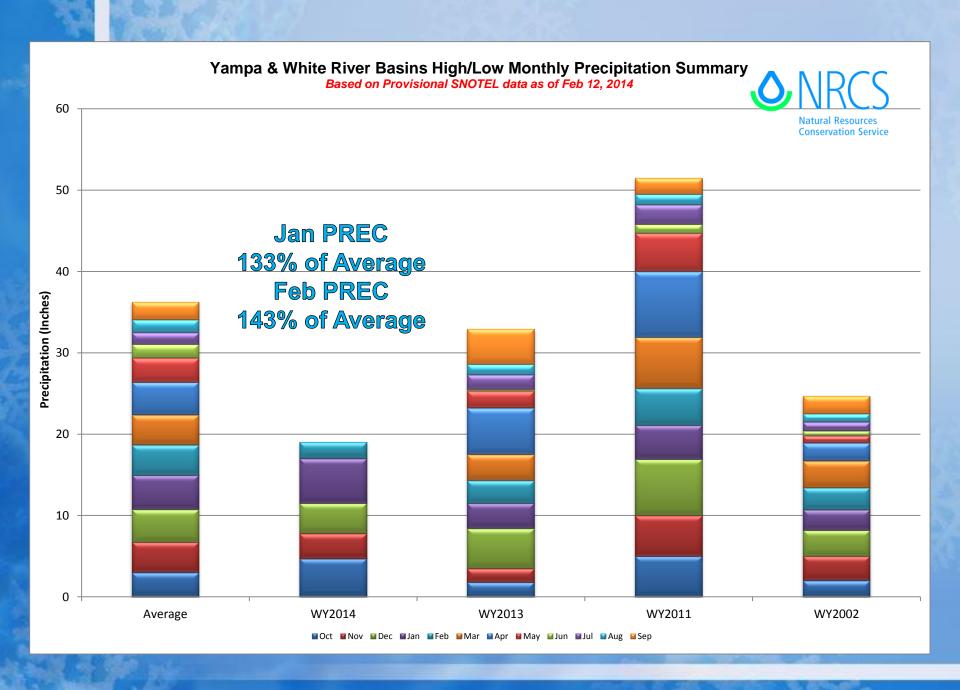
Yampa, White & North Platte River Basins Summary



Yampa, White and North Platte River Basins Snowpack Map



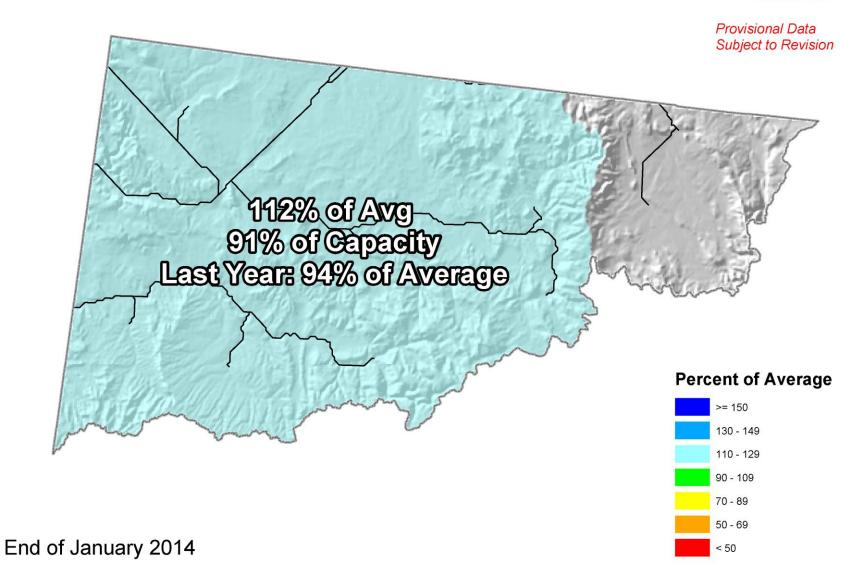




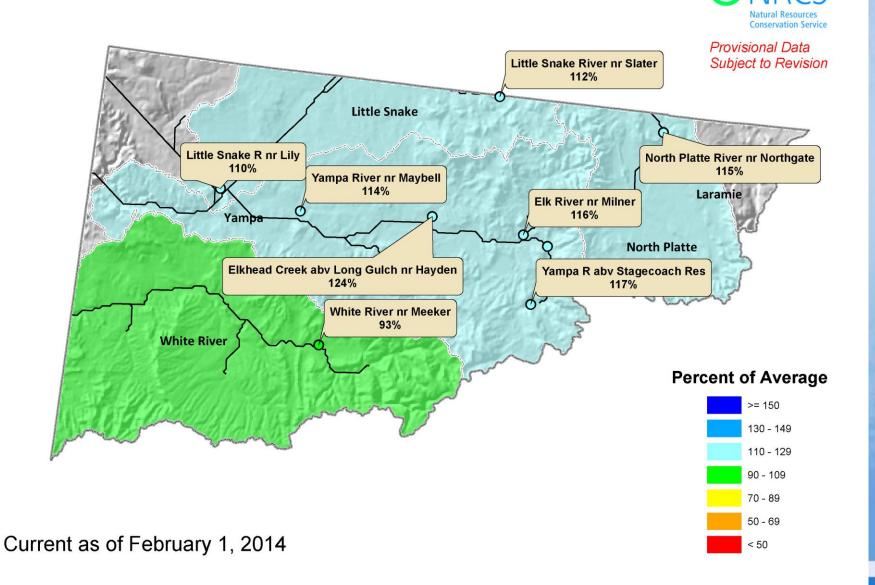
Yampa & White River Basins High/Low Year-to-Date Precipitation Summary Based on Provisional SNOTEL data as of Feb 12, 2014 60.0 Current as Pct of Average: 117% Conservation Service Current as Pct of Median: 120% Current as Pct of Last Year: 153% Current as Pct of Average Annnual Total: 52% Average as Pct of Average Annual Total: 45% 50.0 Pct of Avg Needed to Reach Avg Annual Total: 86% Year-to-Date Precipitation (inches) 40.0 30.0 20.0 10.0 Oct 01 Nov 01 Dec 01 Jan 01 Feb 01 Mar 01 Apr 01 May 01 Jun 01 Jul 01 Aug 01 Sep 01 Average WY2002 WY2011 WY2013 **-** WY2014 Median Maximum Mininum

Yampa & White River Basins Reservoir Storage Map





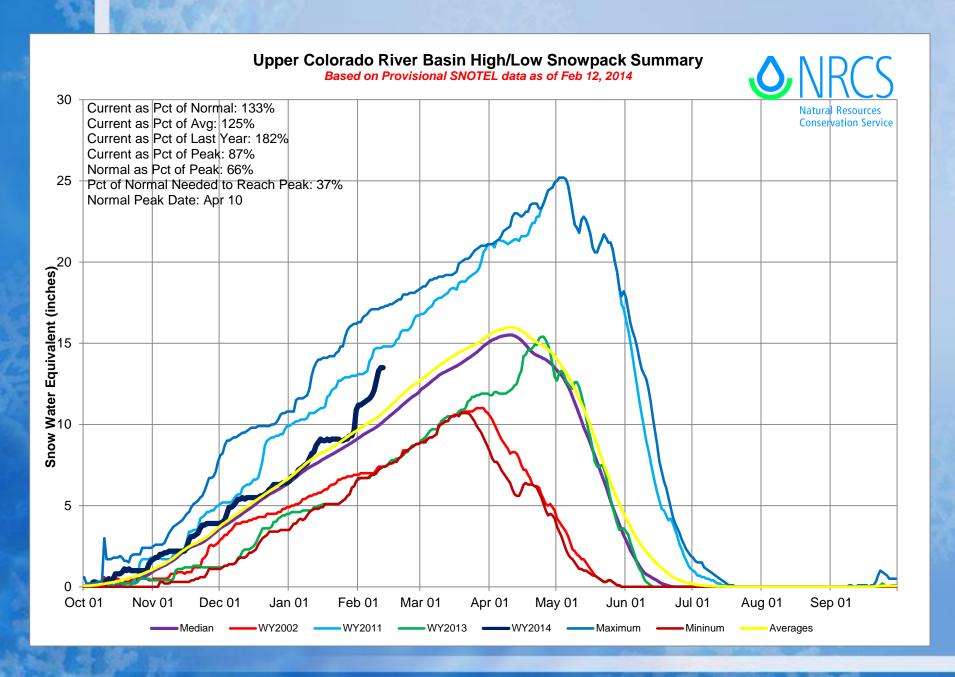
Yampa, White and North Platte River Basins Streamflow Map

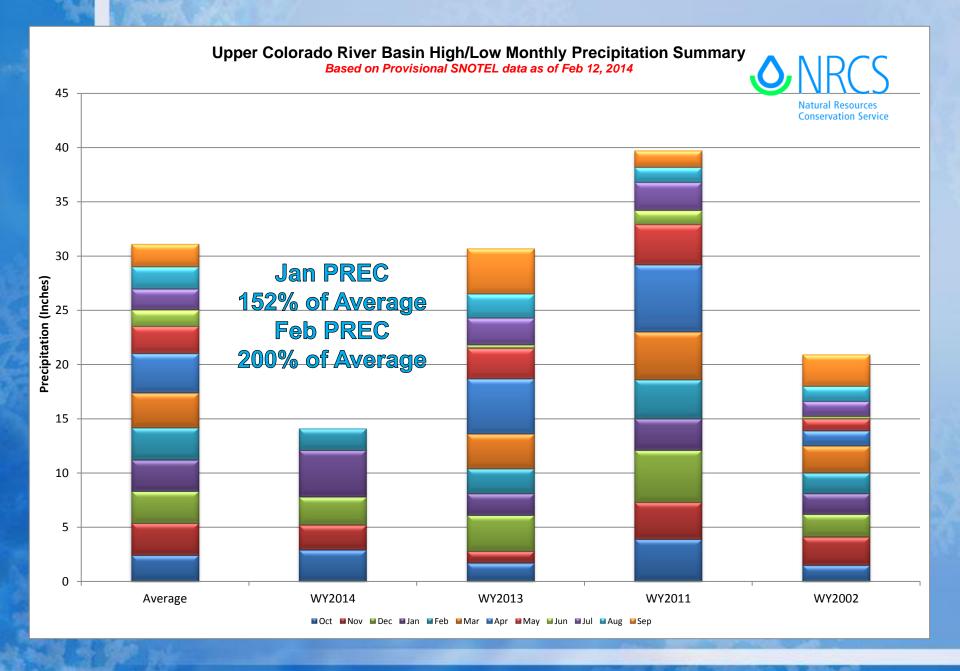


Colorado River Basin Summary



Colorado River Basin Snowpack Map **Percent of Median** >= 150 Provisional Data Subject to Revision 130 - 149 110 - 129 90 - 109 70 - 89 50 - 69 < 50 **Upper Colorado** Eagle 121% of Median \ 177% of Last Year Blue River **Roaring Fork**





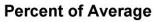
Upper Colorado River Basin High/Low Year-to-Date Precipitation Summary Based on Provisional SNOTEL data as of Feb 12, 2014 45.0 Current as Pct of Average: 116% **Conservation Service** Current as Pct of Median: 122% Current as Pct of Last Year: 160% 40.0 Current as Pct of Average Annnual Total: 45% Average as Pct of Average Annual Total: 39% Pct of Avg Needed to Reach Avg Annual Total: 90% 35.0 Year-to-Date Precipitation (inches) 10.0 5.0 Oct 01 Dec 01 Jan 01 Feb 01 Mar 01 Apr 01 May 01 Jun 01 Jul 01 Aug 01 Sep 01 Nov 01 Average WY2002 WY2011 WY2013 Median Maximum

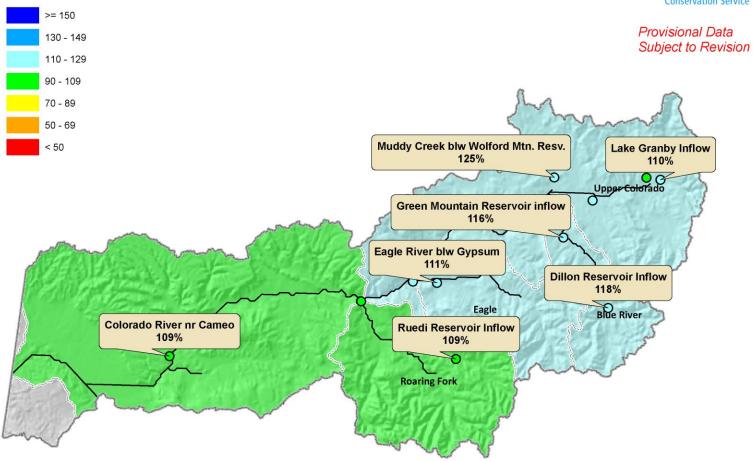
Colorado River Basin Reservoir Storage Map **Percent of Average Conservation Service** >= 150 Provisional Data 130 - 149 Subject to Revision 110 - 129 90 - 109 70 - 89 50 - 69 < 50 98% of Avg 71% of Capacity Last Year: 67% of Average

End of January 2014

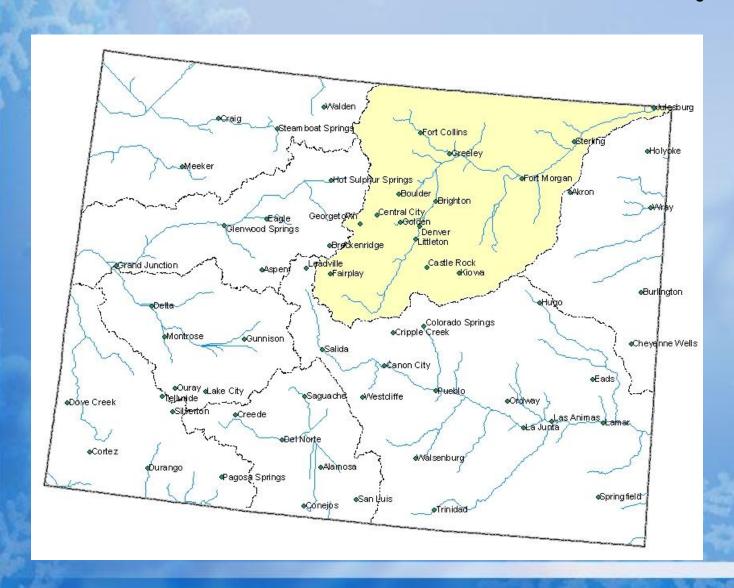
Colorado River Basin Streamflow Forecast Map







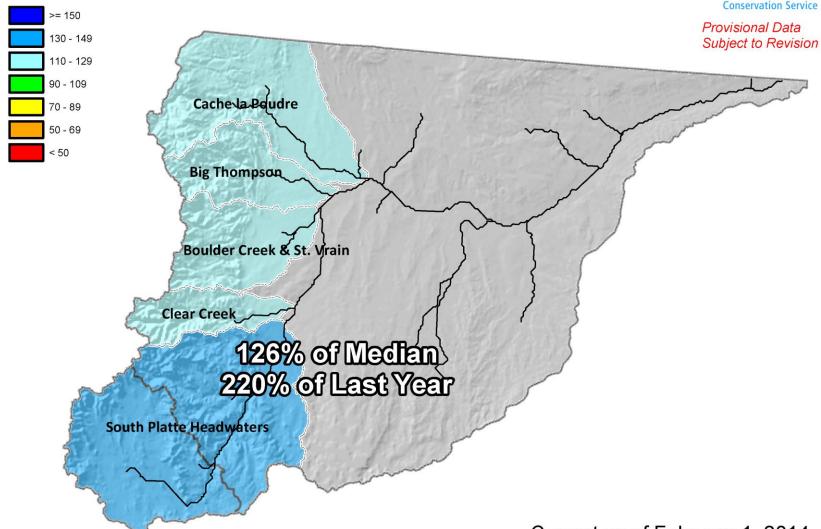
South Platte River Basin Summary



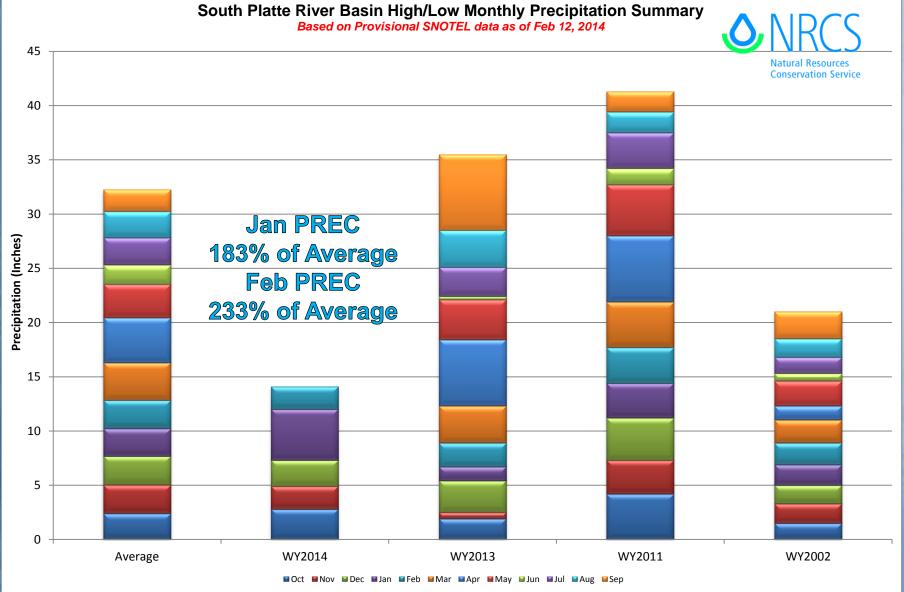
South Platte River Basin Snowpack Map

Percent of Median





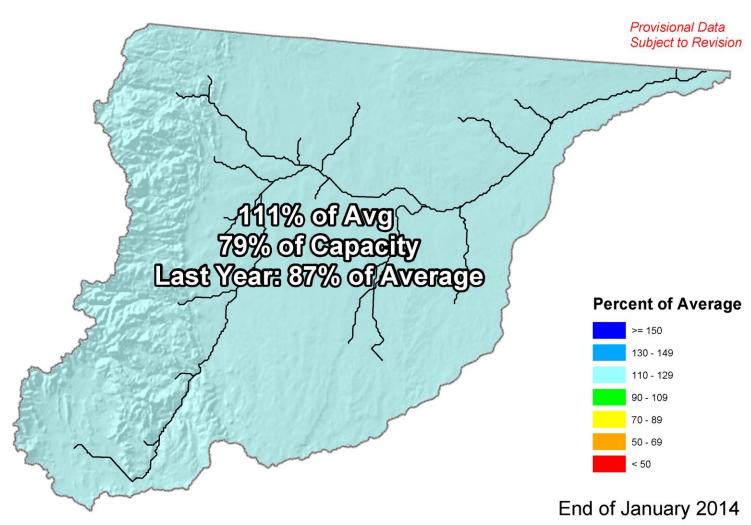
South Platte River Basin High/Low Snowpack Summary Based on Provisional SNOTEL data as of Feb 12, 2014 30 Current as Pct of Normal: 141% Current as Pct of Avg: 136% Conservation Service Current as Pct of Last Year: 223% Current as Pct of Peak: 83% Normal as Pct of Peak: 59% Pct of Normal Needed to Reach Peak: 42% Normal Peak Date: Apr 26 Snow Water Equivalent (inches) 5 Oct 01 Dec 01 Feb 01 Mar 01 May 01 Jun 01 Jul 01 Aug 01 Sep 01 Nov 01 Jan 01 Apr 01 **W**Y2002 -WY2011 -Maximum ---- Mininum **—**WY2013 **—**WY2014



South Platte River Basin High/Low Year-to-Date Precipitation Summary Based on Provisional SNOTEL data as of Feb 12, 2014 45.0 Current as Pct of Average: 126% **Conservation Service** Current as Pct of Median: 132% Current as Pct of Last Year: 191% Current as Pct of Average Annnual Total: 44% Average as Pct of Average Annual Total: 35% Pct of Avg Needed to Reach Avg Annual Total: 86% 35.0 Year-to-Date Precipitation (inches) 10.0 5.0 Aug 01 Oct 01 Jan 01 Feb 01 Mar 01 Apr 01 May 01 Jun 01 Jul 01 Sep 01 Nov 01 Dec 01 WY2002 WY2011 WY2013 **-**WY2014 Median

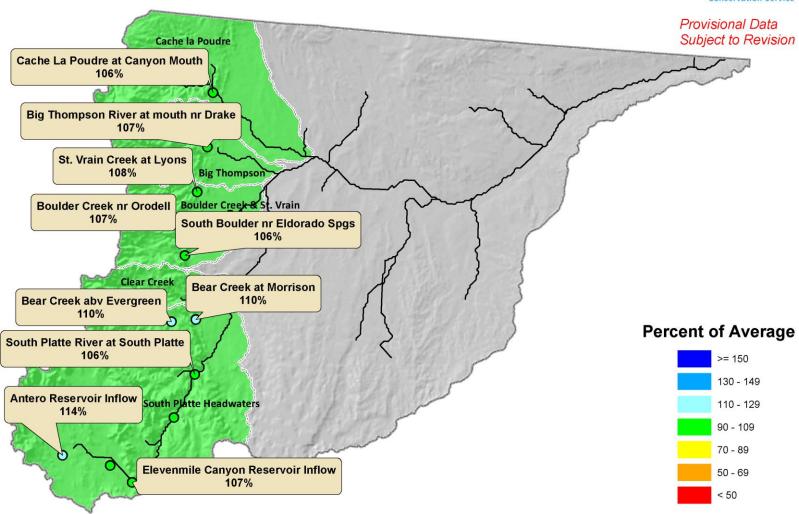
South Platte River Basin Reservoir Storage Map





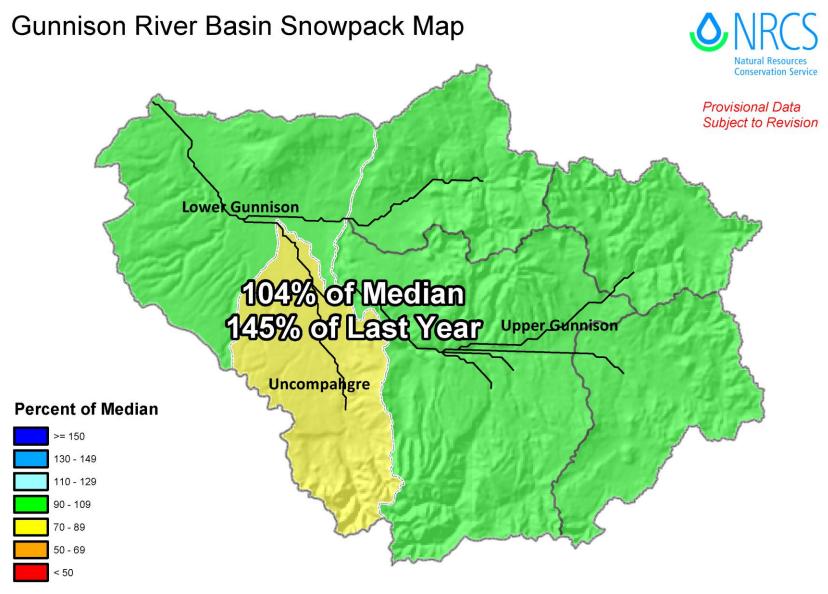
South Platte River Basin Streamflow Forecast Map

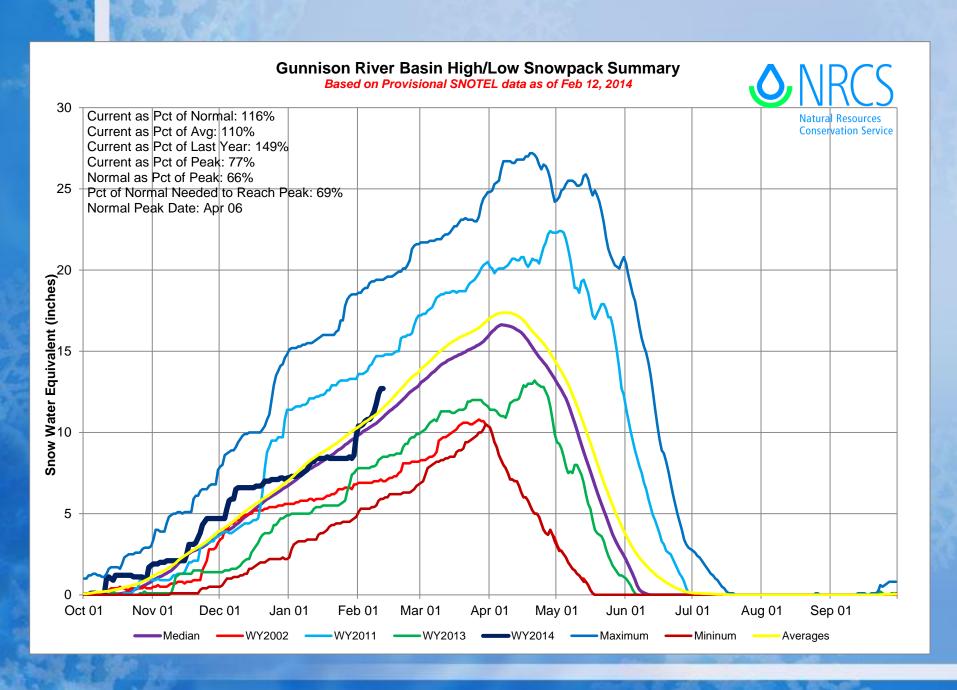


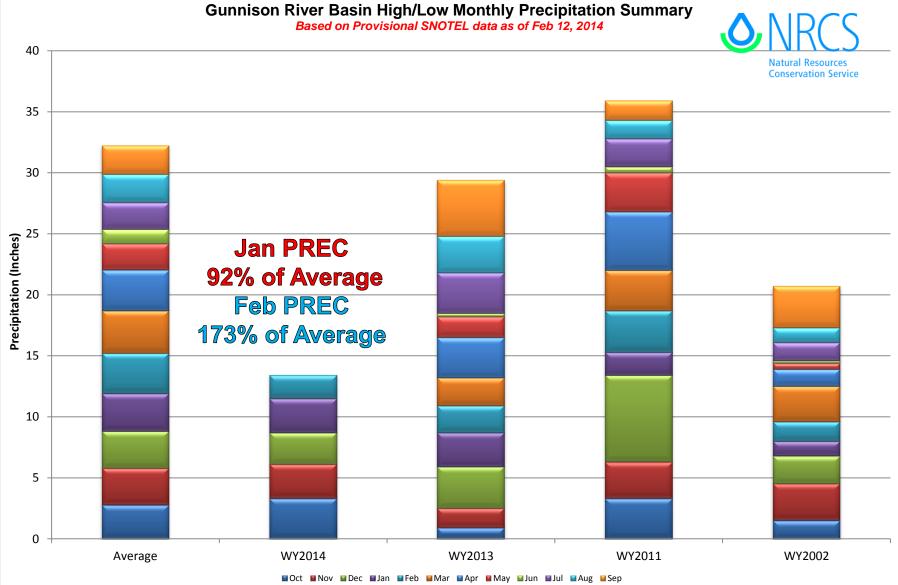


Gunnison River Basin Summary



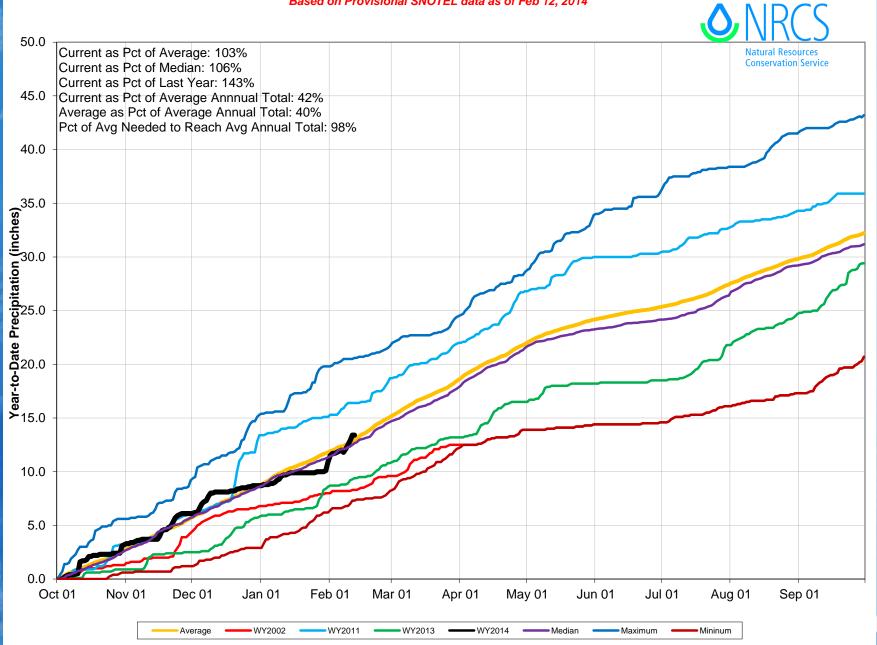


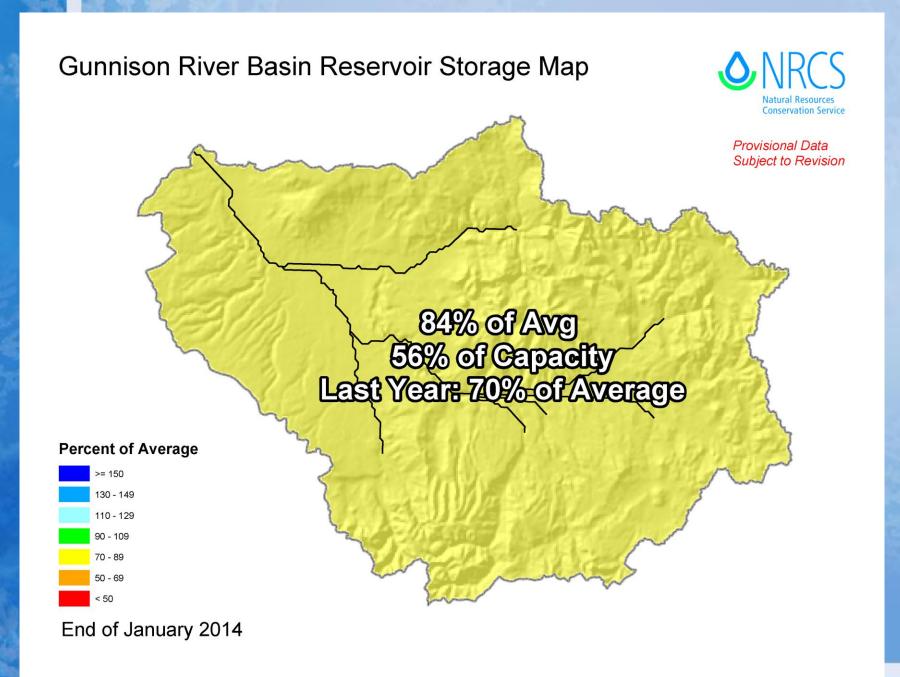


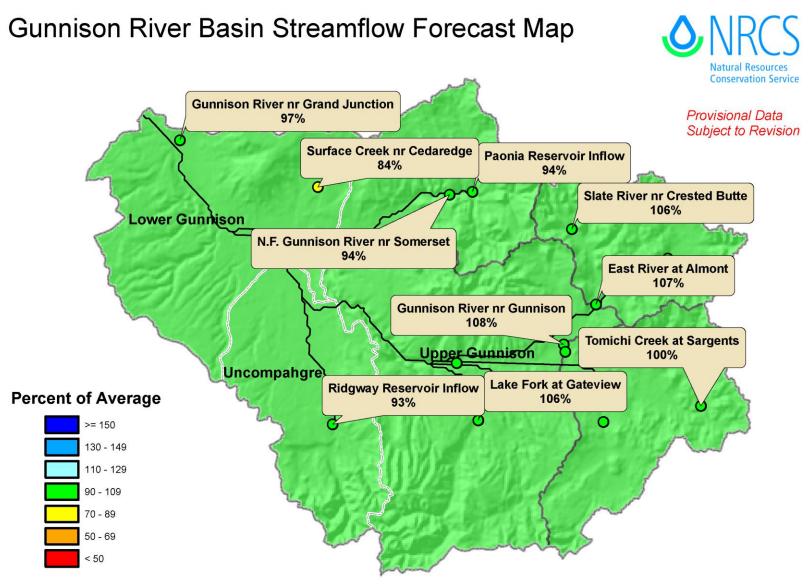


Gunnison River Basin High/Low Year-to-Date Precipitation Summary

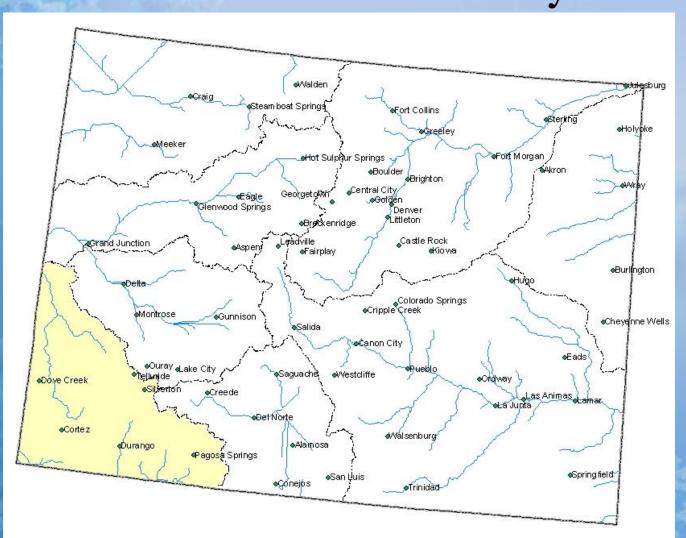
Based on Provisional SNOTEL data as of Feb 12, 2014







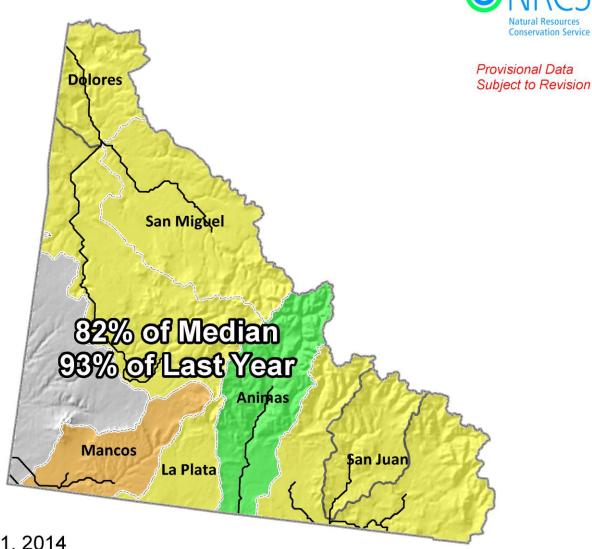
San Miguel, Dolores, Animas & San Juan River Basins Summary



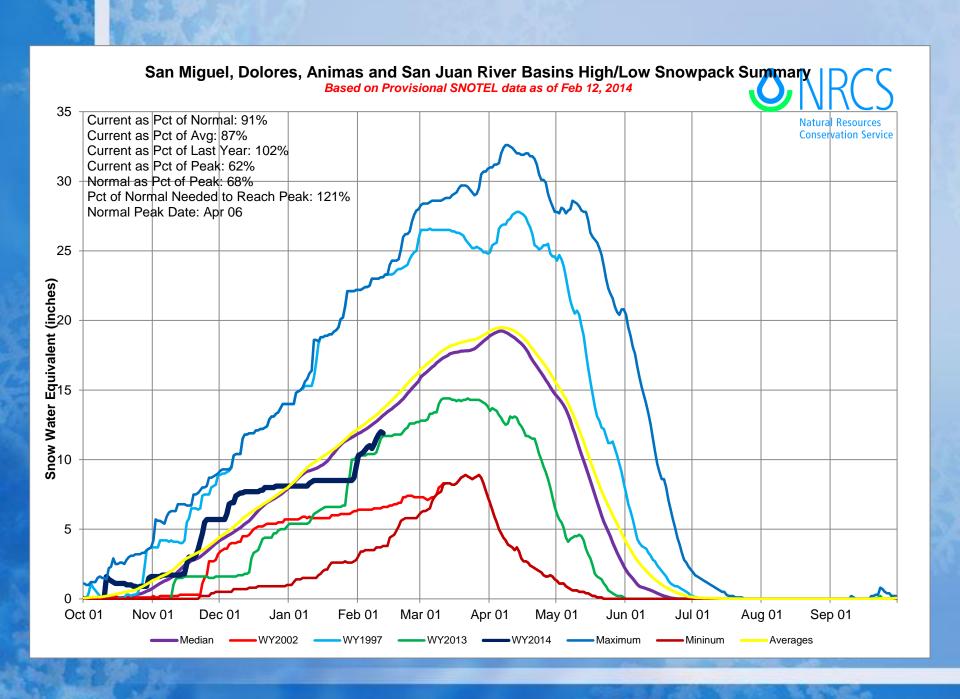
San Miguel, Dolores, Animas and San Juan River Basins

Snowpack Map

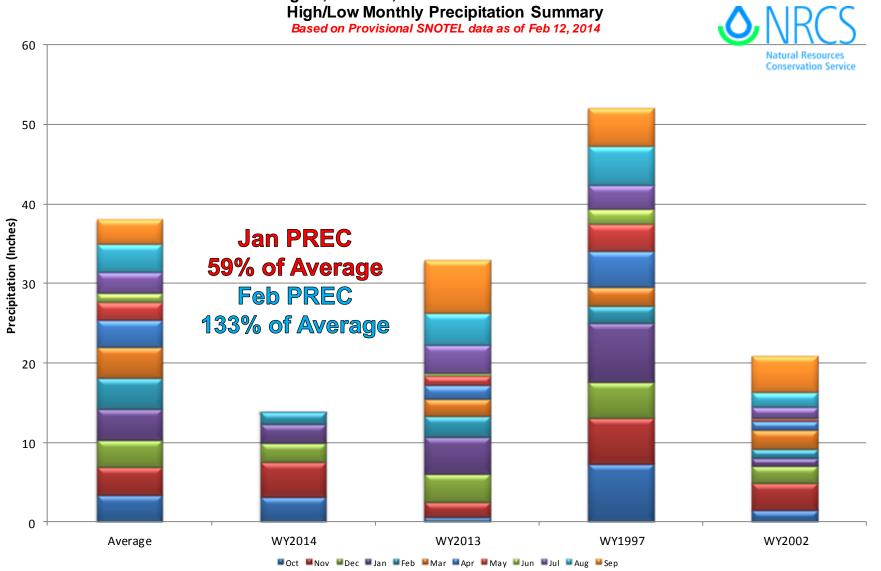




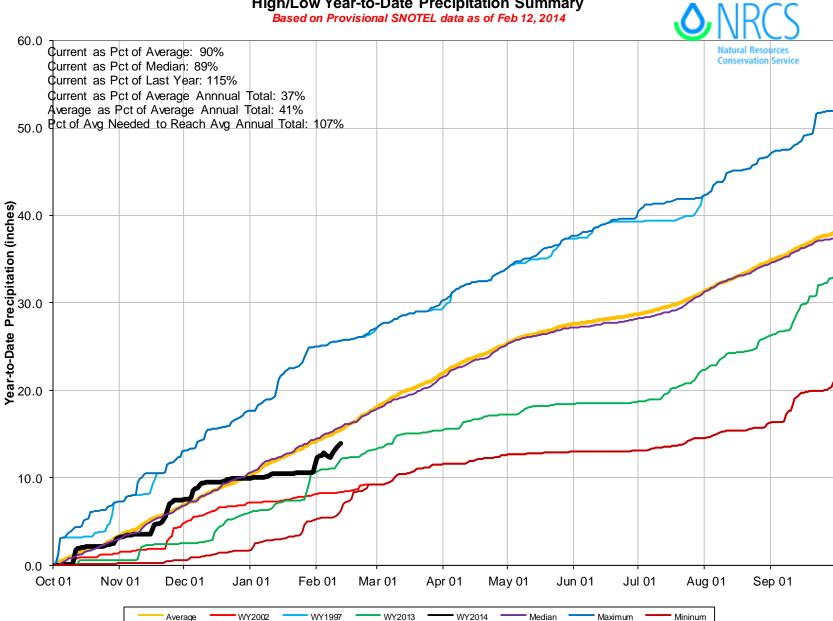
Conservation Service



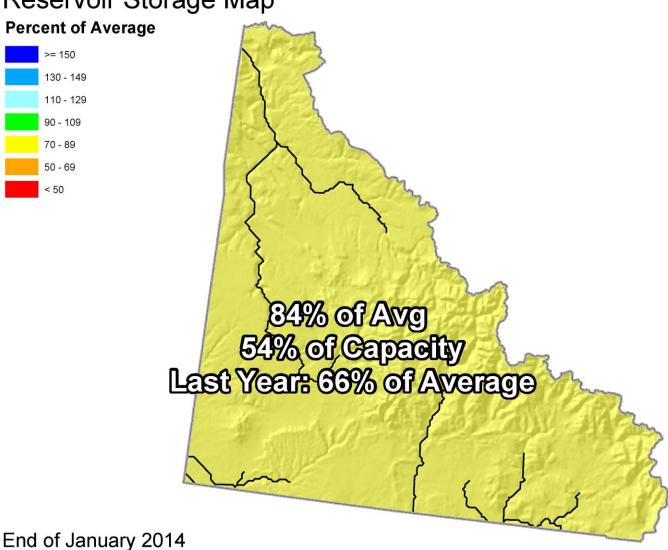
San Miguel, Dolores, Animas & San Juan River Basins



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



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

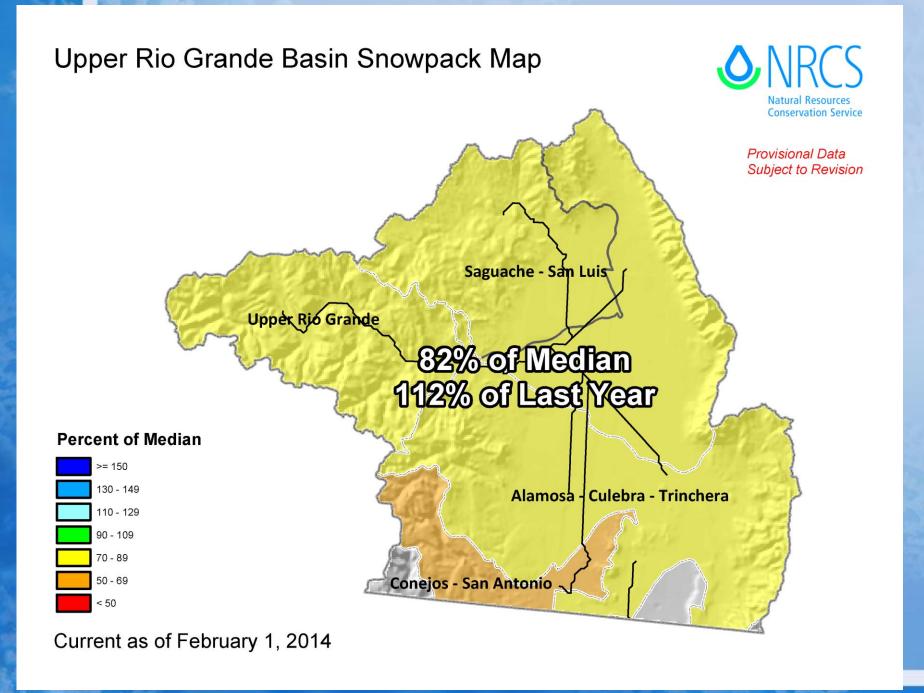




Provisional Data Subject to Revision San Miguel, Dolores, Animas and San Juan River Basins Streamflow Forecast Map **Percent of Average** Conservation Service >= 150 Provisional Data 130 - 149 Dolores Subject to Revision 110 - 129 90 - 109 70 - 89 50 - 69 < 50 San Miguel River nr Placerville San Miguel 97% McPhee Reservoir Inflow 83% **Mancos River nr Mancos Dolores River at Dolores** 72% 85% **Lemon Reservoir Inflow** Animas La Plata 90% Mancos **Animas River at Durango** Piedra River nr Arboles 91% 89% San Juan San Juan River nr Carracus 77% Current as of February 1, 2014

Upper Rio Grande Basin Summary



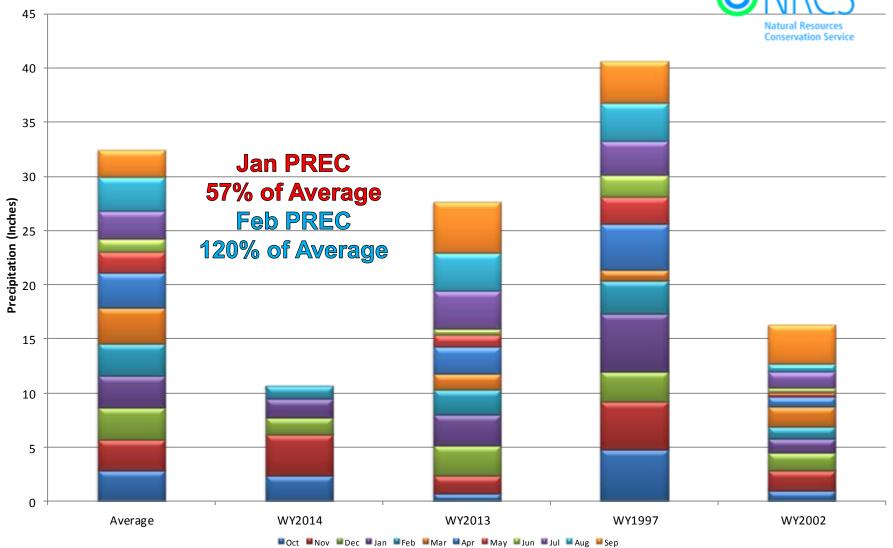


Upper Rio Grande Basin High/Low Snowpack Summary Based on Provisional SNOTEL data as of Feb 12, 2014 25 Current as Pct of Normal: 79% Current as Pct of Avg: 80% Conservation Service Current as Pct of Last Year: 101% Current as Pct of Peak: 57% Normal as Pct of Peak: 72% Pct of Normal Needed to Reach Peak: 153% Normal Peak Date: Apr 10 Snow Water Equivalent (inches) 5 Oct 01 May 01 Jun 01 Jul 01 Sep 01 Nov 01 Dec 01 Jan 01 Feb 01 Mar 01 Apr 01 Aug 01 WY2002 WY1997 **W**Y2014 Maximum Mininum Median

Upper Rio Grande Basin High/Low Monthly Precipitation Summary

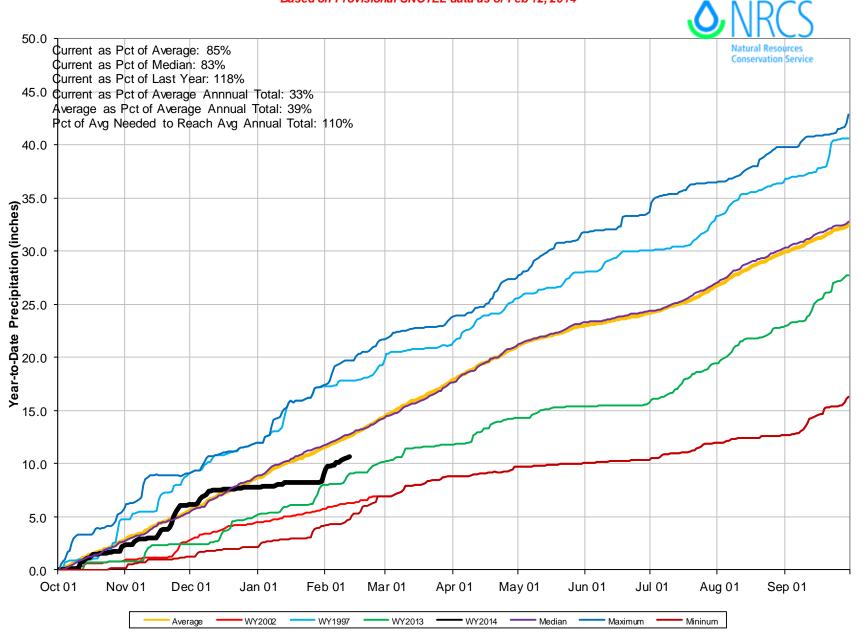
Based on Provisional SNOTEL data as of Feb 12, 2014

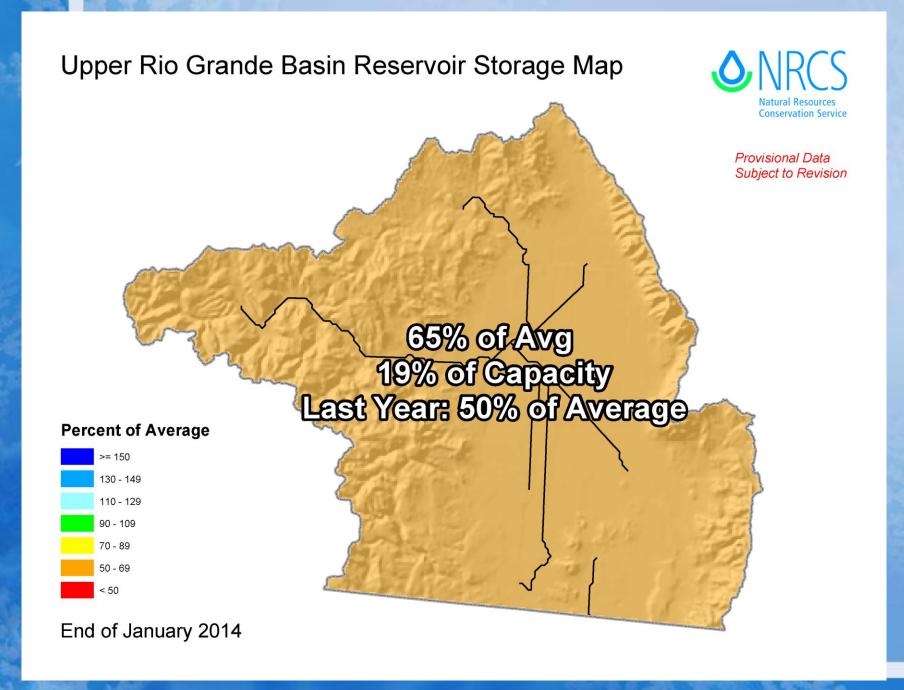


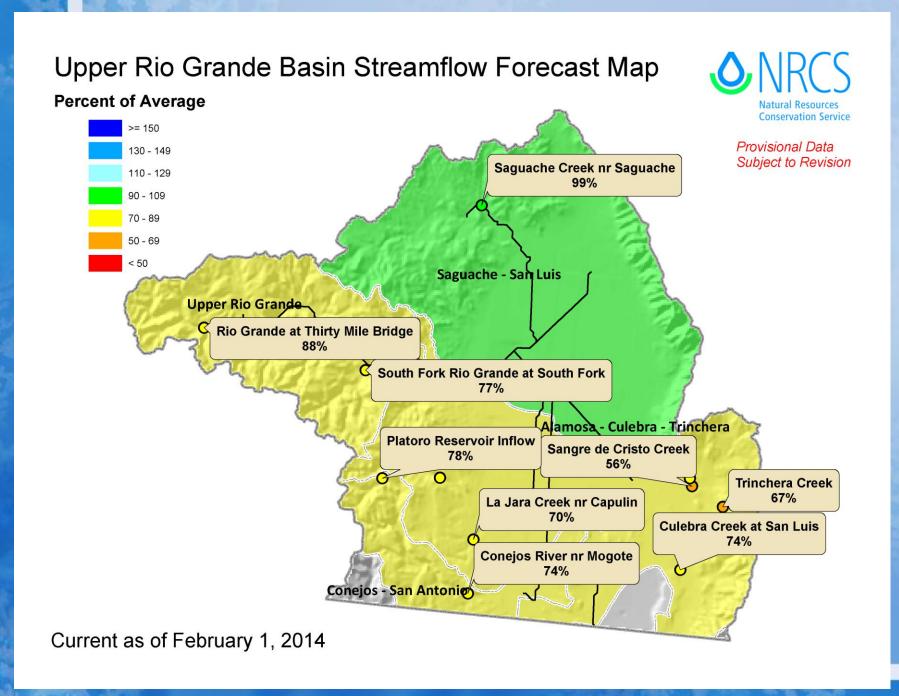


Upper Rio Grande Basin High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of Feb 12, 2014

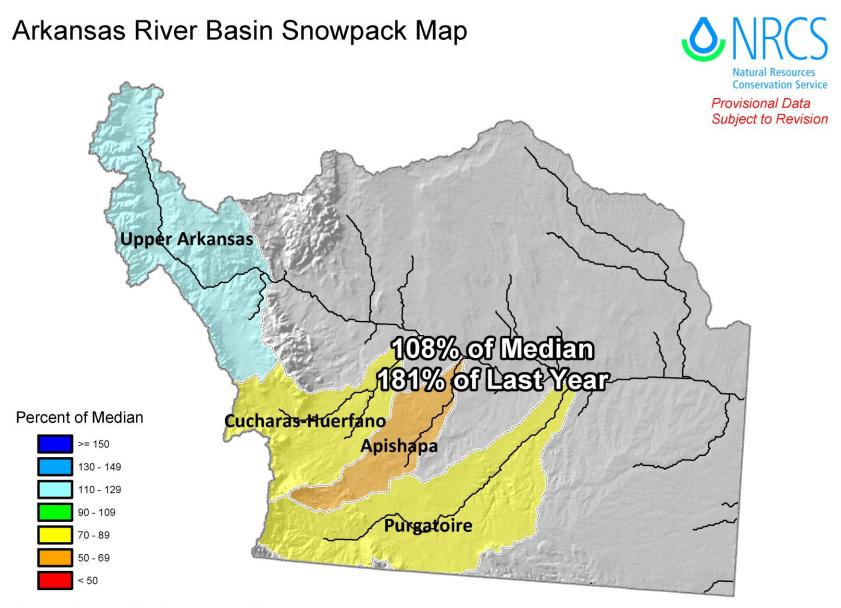






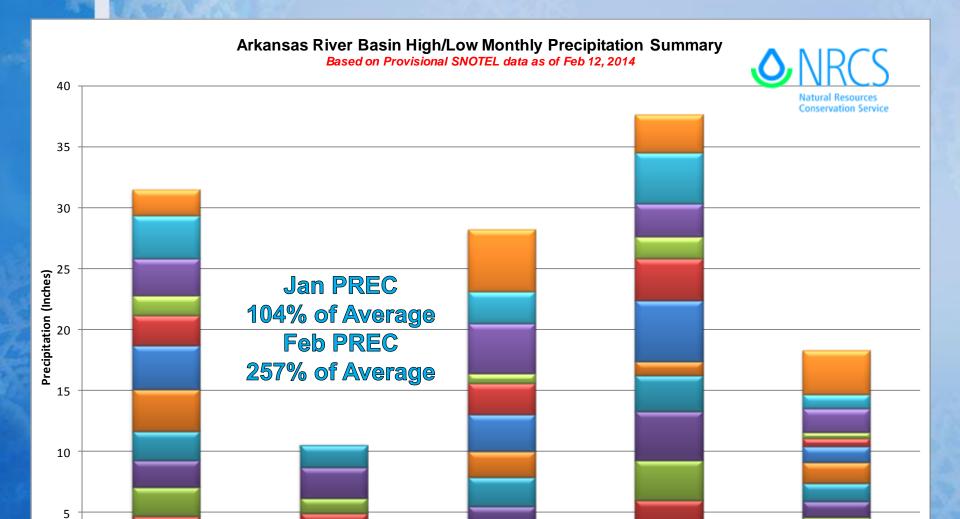
Arkansas River Basin Summary





Current as of February 1, 2014

Arkansas River Basin High/Low Snowpack Summary Based on Provisional SNOTEL data as of Feb 12, 2014 25 Current as Pct of Normal: 115% Current as Pct of Avg: 111% **Conservation Service** Current as Pct of Last Year: 193% Current as Pct of Peak: 74% Normal as Pct of Peak: 64% Pct of Normal Needed to Reach Peak: 72% Normal Peak Date: Apr 11 Snow Water Equivalent (inches) 5 Oct 01 Dec 01 Feb 01 Mar 01 May 01 Jun 01 Jul 01 Aug 01 Sep 01 Nov 01 Jan 01 Apr 01 **W**Y2002 WY1997 -Maximum ---- Mininum **W**Y2013 **W**Y2014



WY2013

■Oct ■Nov ■Dec ■Jan ■Feb ■Mar ■Apr ■May ■Jun ■Jul ■Aug ■Sep

WY1997

WY2002

WY2014

0

Average

Arkansas River Basin High/Low Year-to-Date Precipitation Summary Based on Provisional SNOTEL data as of Feb 12, 2014 45.0 Current as Pct of Average: 104% Conservation Service Current as Pct of Median: 104% Current as Pct of Last Year: 172% 40.0 Current as Pct of Average Annual Total: 33% Average as Pct of Average Annual Total: 32% Pct of Avg Needed to Reach Avg Annual Total: 98% 35.0 Year-to-Date Precipitation (inches) 0.02 0.05 0.05 0.05 10.0 5.0 Oct 01 Nov 01 Dec 01 Jan 01 Feb 01 Mar 01 May 01 Jun 01 Jul 01 Aug 01 Sep 01 Apr 01

WY 2002

WY 1997

WY2013

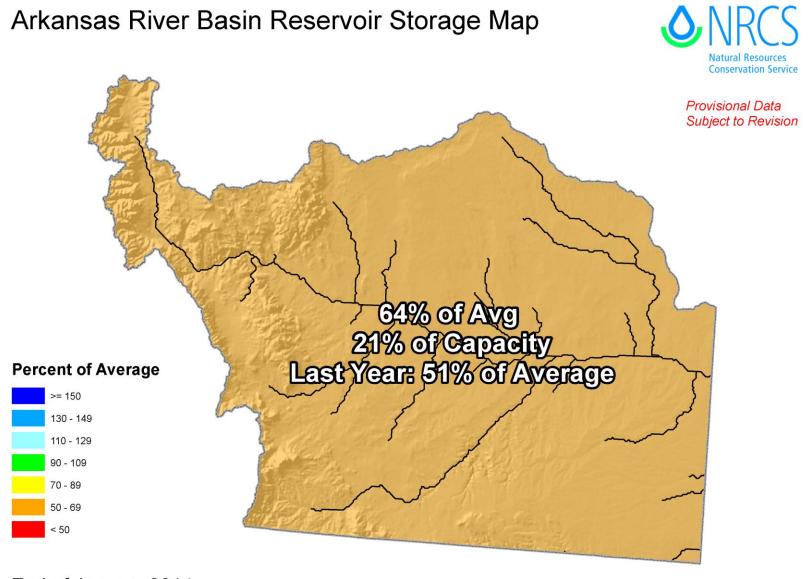
WY 2014

Median

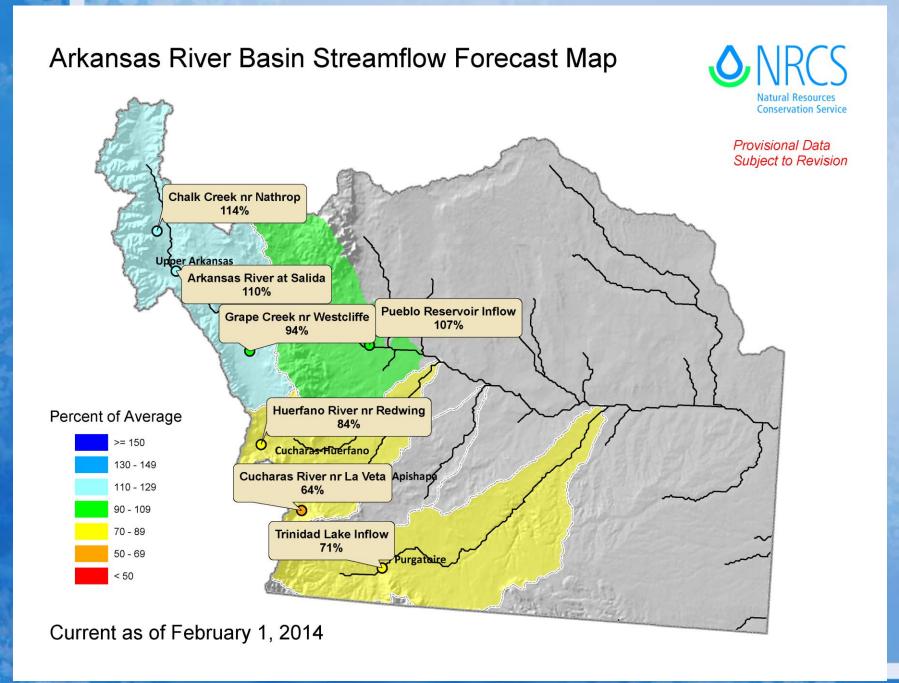
Maximum

Mininum

Average



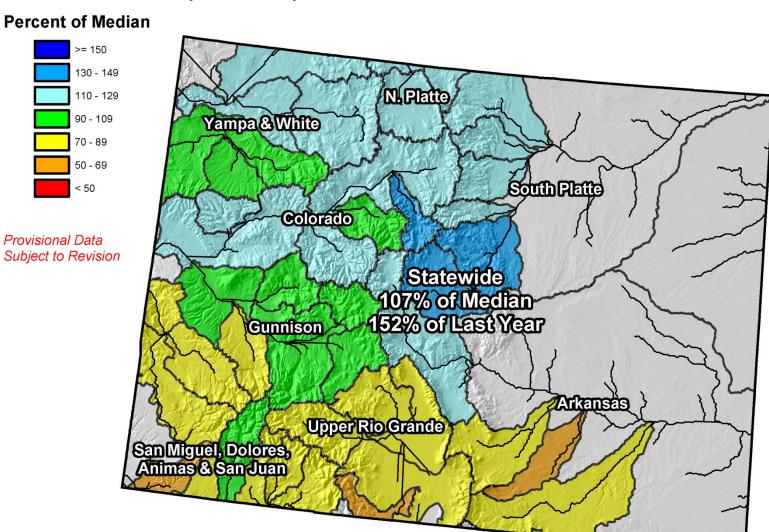
End of January 2014



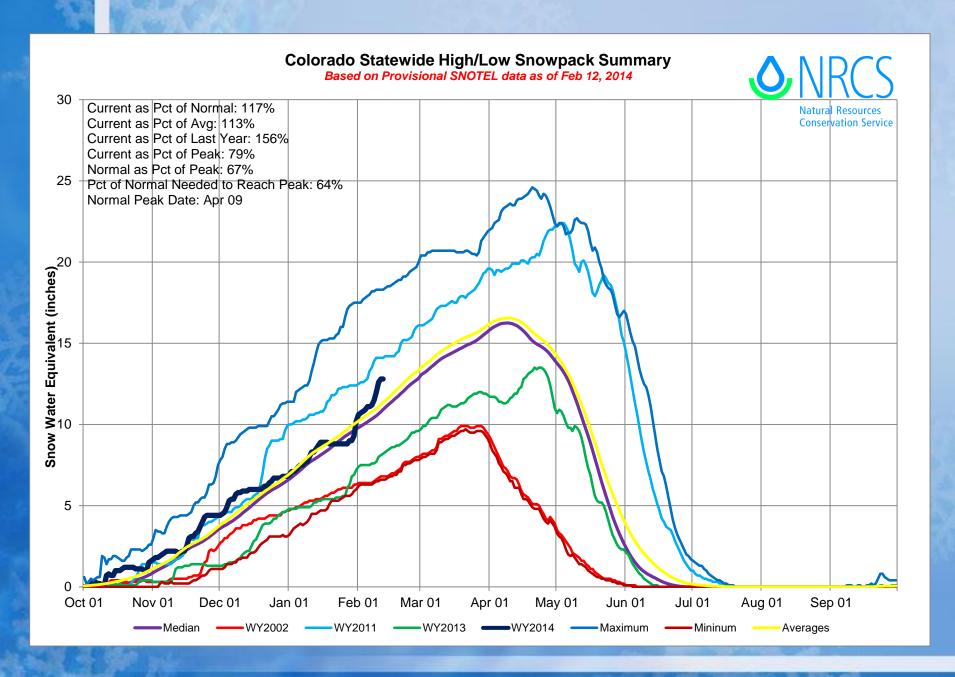
Colorado Statewide Summary



Colorado Snowpack Map

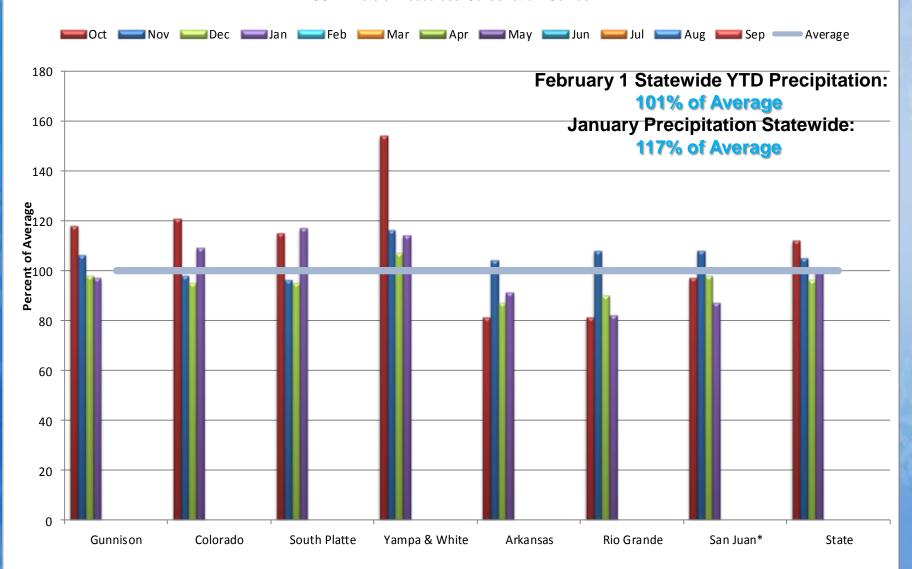


Current as of February 1, 2014



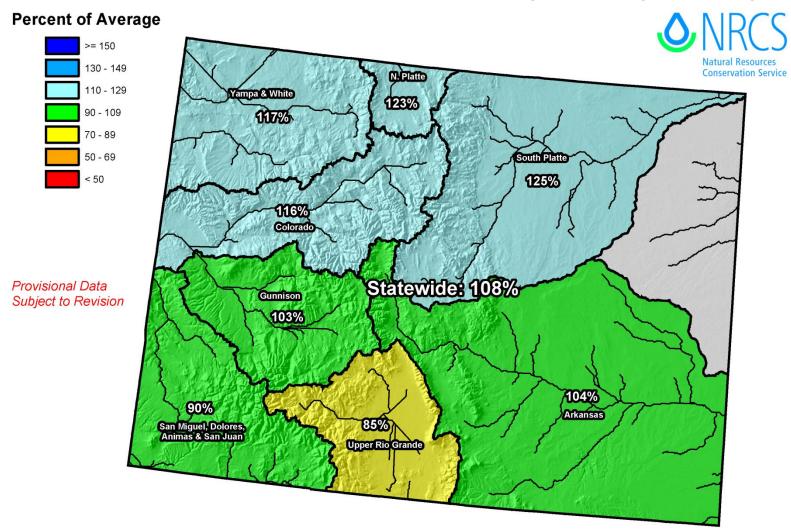
Colorado Year-to-Date Precipitation Summary for WY2014

USDA Natural Resources Conservation Service



*Includes Animas, Dolores, San Miguel Basins

Colorado SNOTEL Water Year-to-Date Precipitation Update Map

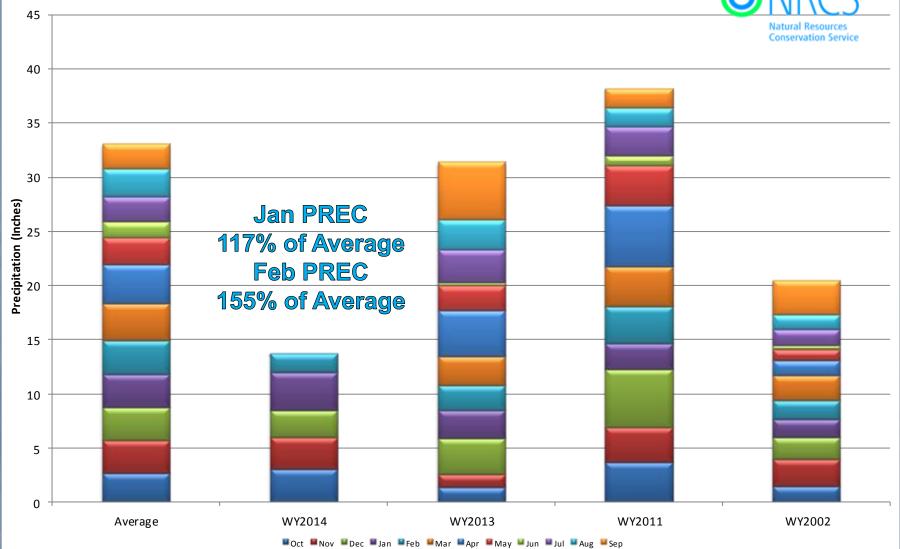


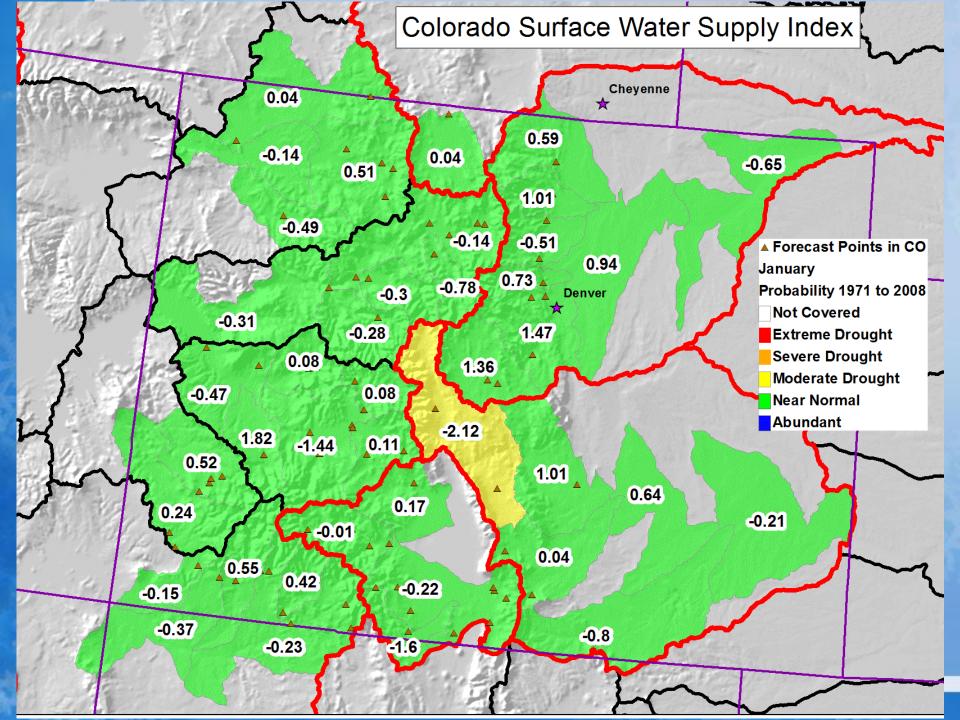
Current as of 02/12/2014

Colorado Statewide High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Feb 12, 2014



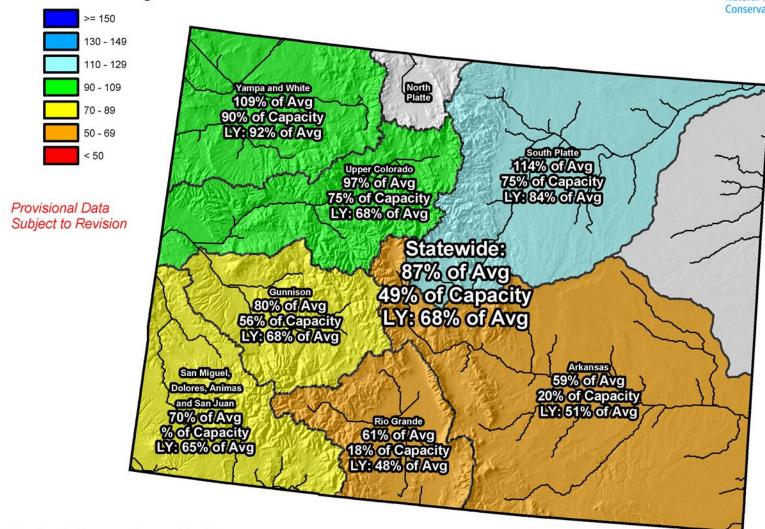




Colorado Reservoir Storage Map

Natural Resources Conservation Service

Percent of Average

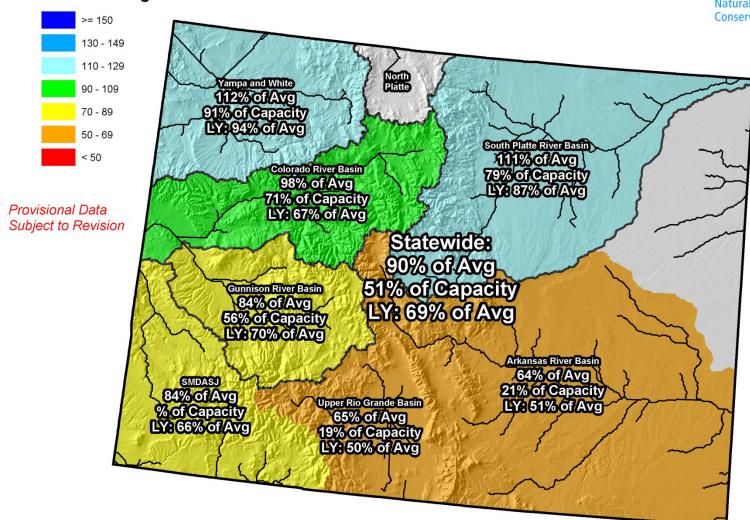


End of December 2013

Colorado Reservoir Storage Map

Natural Resources Conservation Service

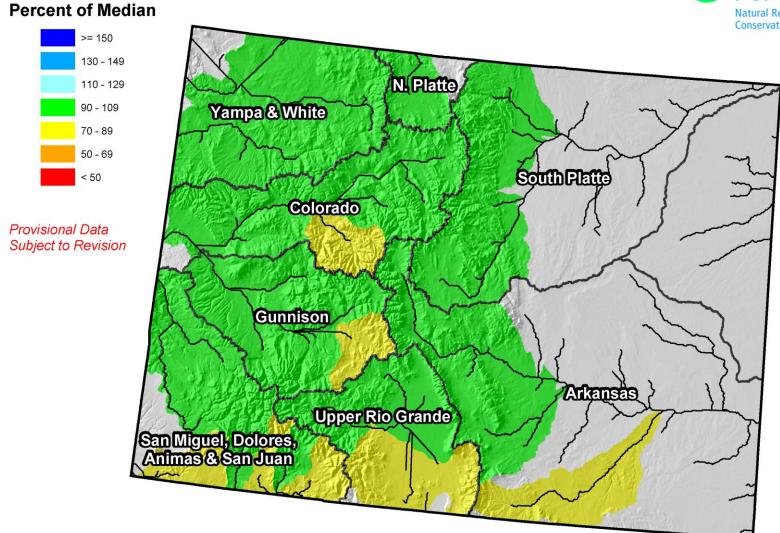
Percent of Average



End of January 2014

Colorado Streamflow Forecast Map

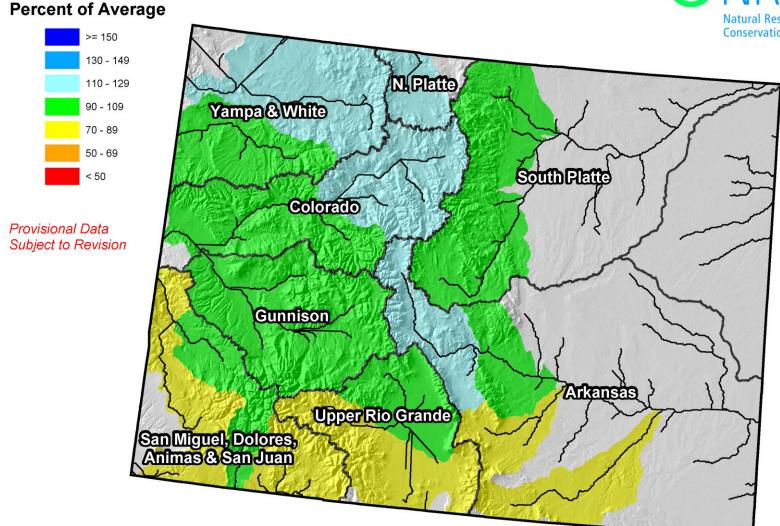




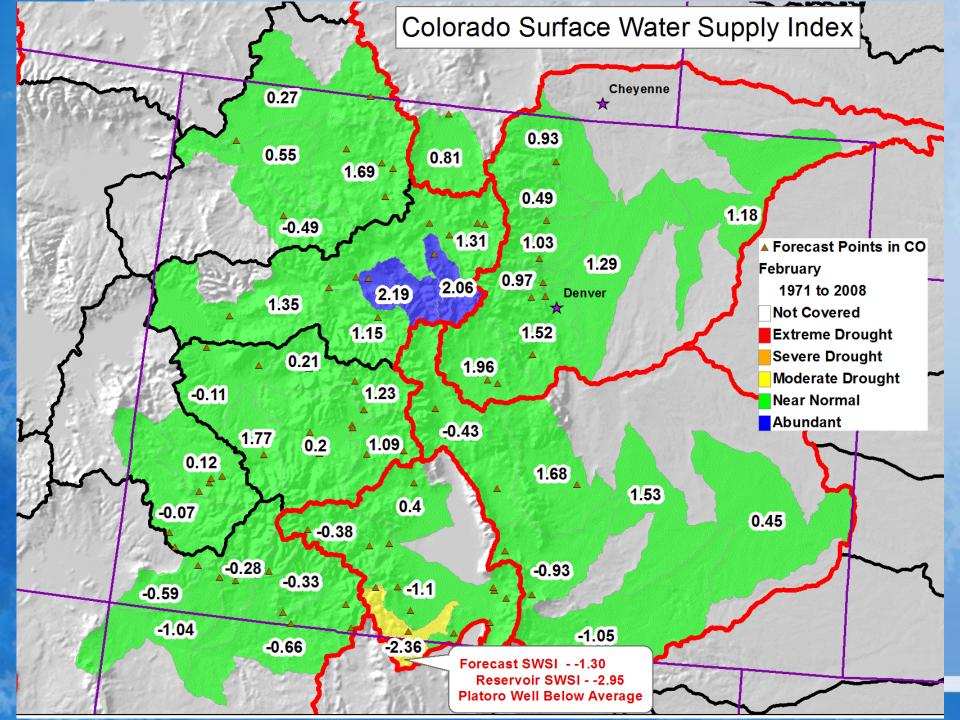
Current as of January 1, 2014

Colorado Streamflow Forecast Map





Current as of February 1, 2014



WY2014 Summary

- •OCT: The northern basins had well above average precipitation for the 2nd consecutive month. All basins received some good early season snow accumulation.
- •NOV: Basins flip flopped with the southern basins seeing above average precip and northern basins slightly below average. All basins still accumulating snow.
- •DEC: Things dried up in the southwest part of the state in early December. Snowpack totals were above to near normal across the state.
- •JAN: The northern basins continued to accumulate snow at near normal rates the first couple of weeks. Most of the state was pretty dry the latter half of the month until the very last week. Those storms boosted northern basins back to above normal and helped the southern basins as well.
- •FEB: All basins have above normal precipitation so far this month. The URG basin the only area not benefiting from the most recent storms.