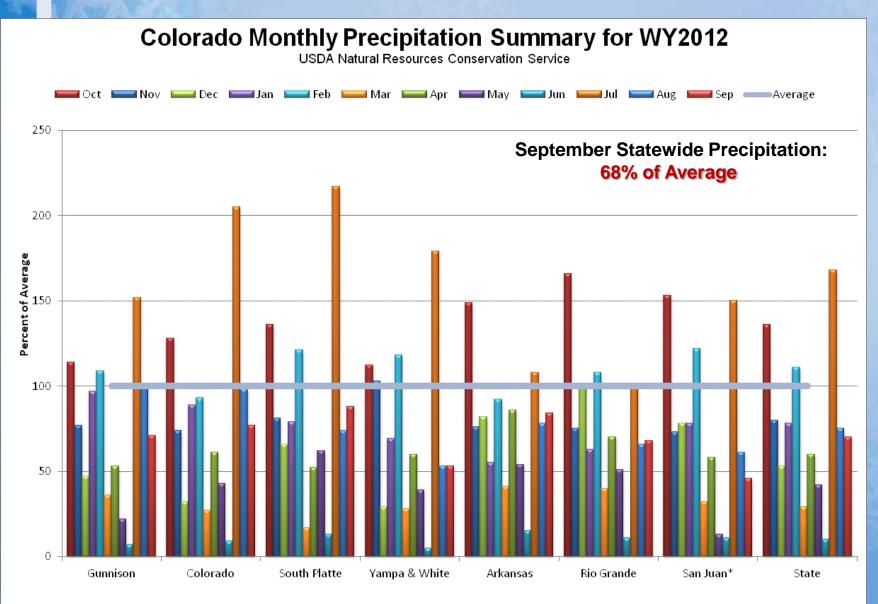
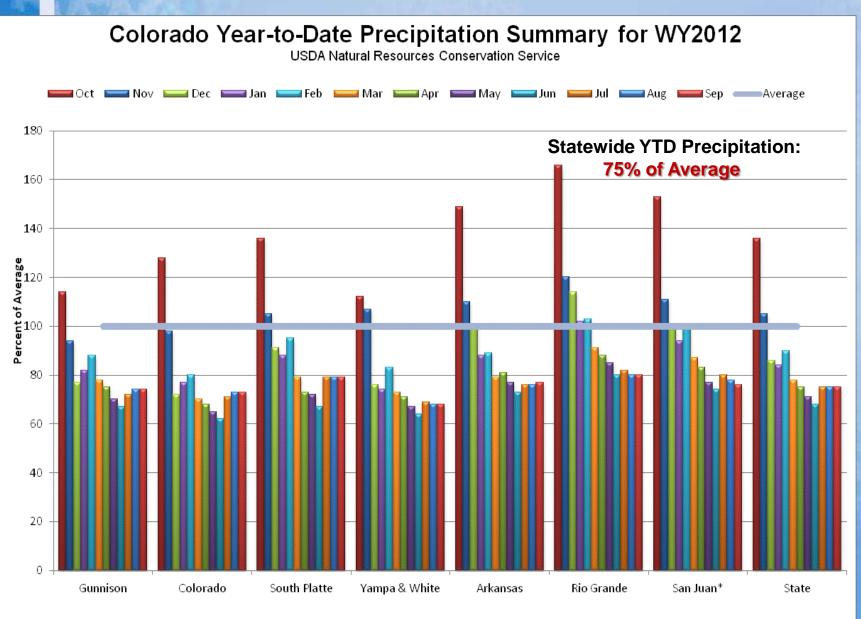
# NRCS – Snow Survey & Water Supply Forecasting

# Water Availability Task Force Meeting November 20<sup>th</sup>, 2012

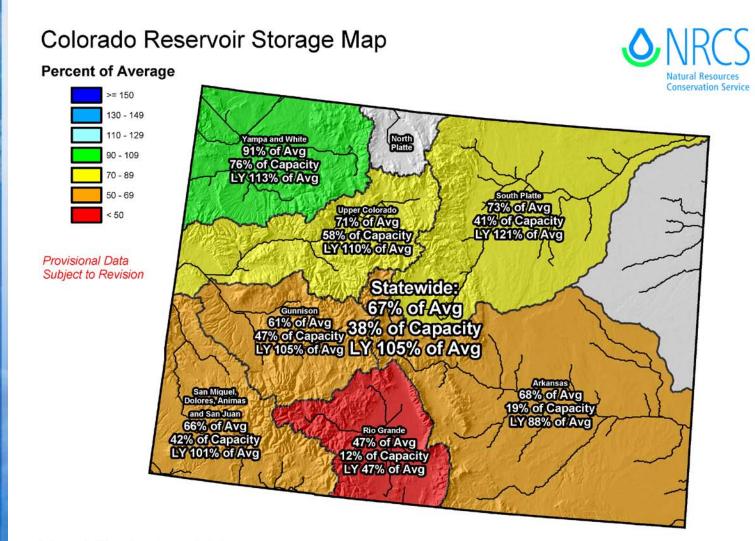
Mage Hultstrand Assistant Snow Survey Supervisor http://www.co.nrcs.usda.gov/snow/



\*Includes Animas, Dolores, San Miguel Basins

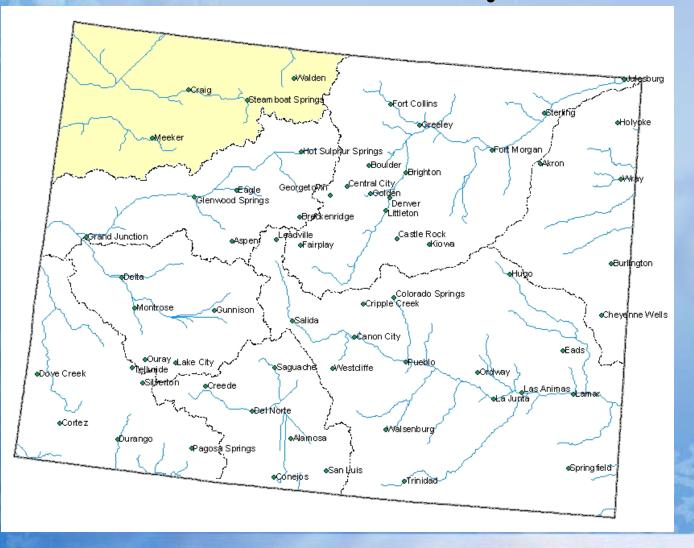


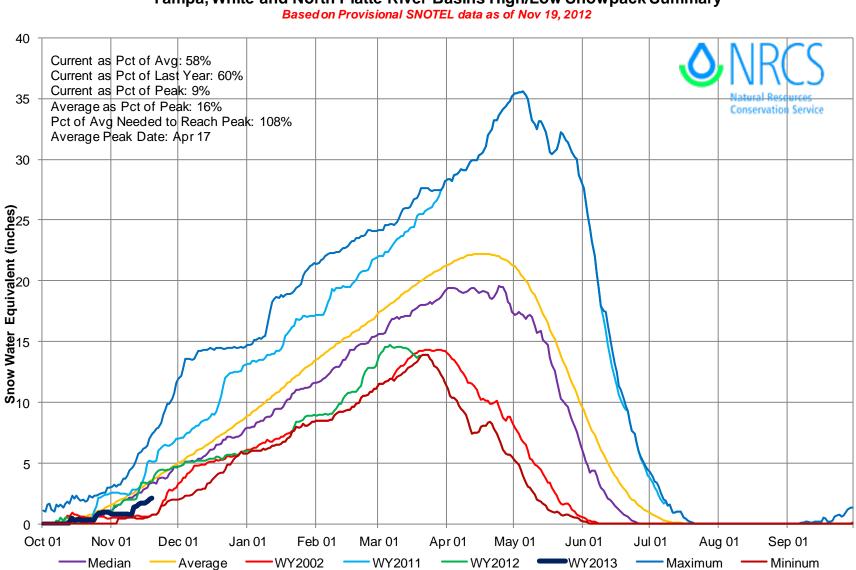
\*Includes Animas, Dolores, San Miguel Basins



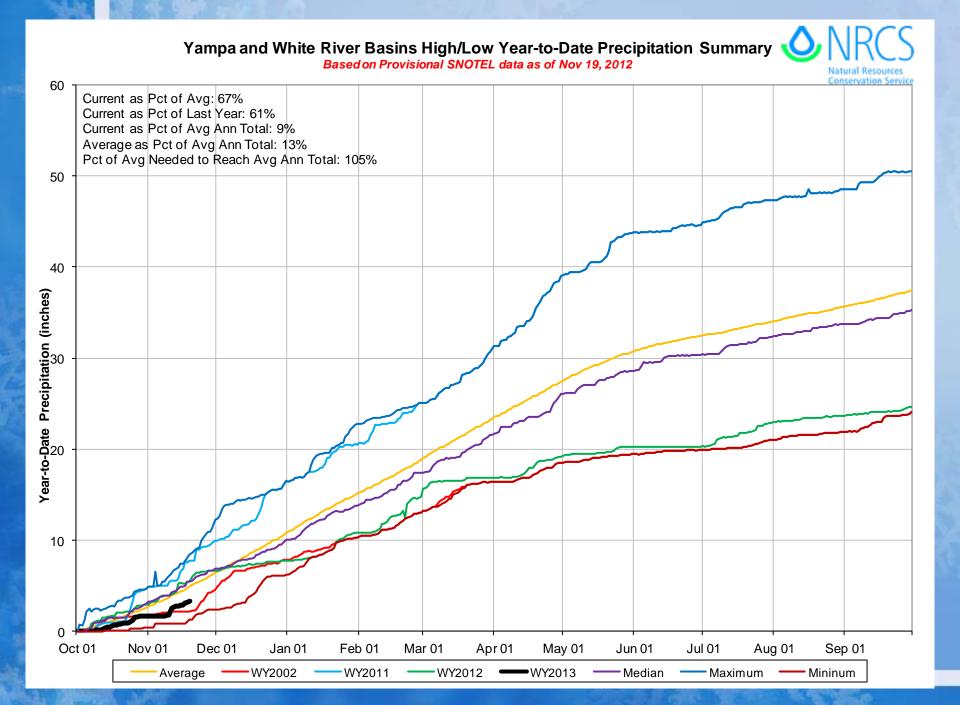
End of September 2012

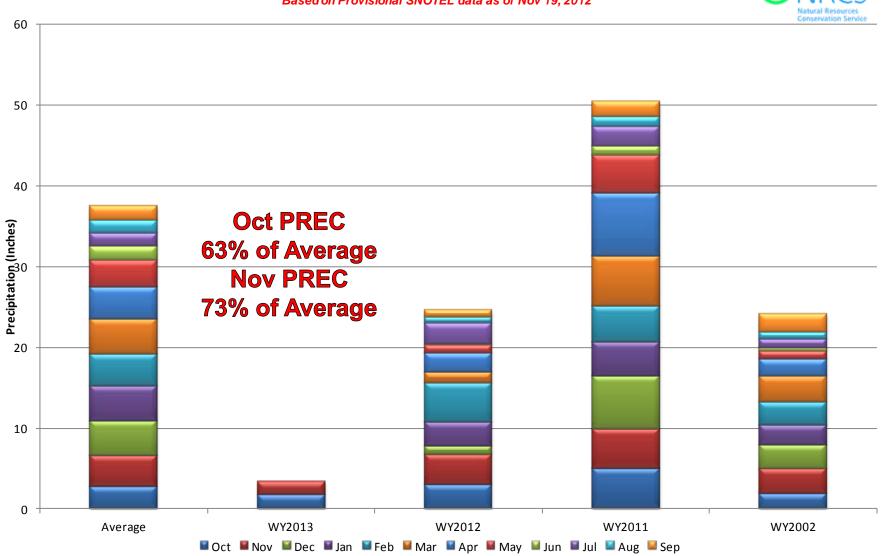
## Yampa, White & North Platte River Basins Summary





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





Yampa and White River Basins High/Low Monthly Precipitation Summary Based on Provisional SNOTEL data as of Nov 19, 2012

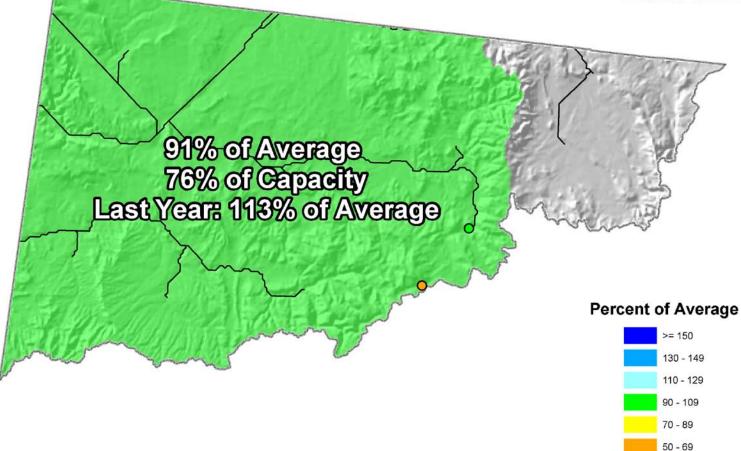


## Yampa & White River Basins Reservoir Storage Map



Provisional Data Subject to Revision

< 50



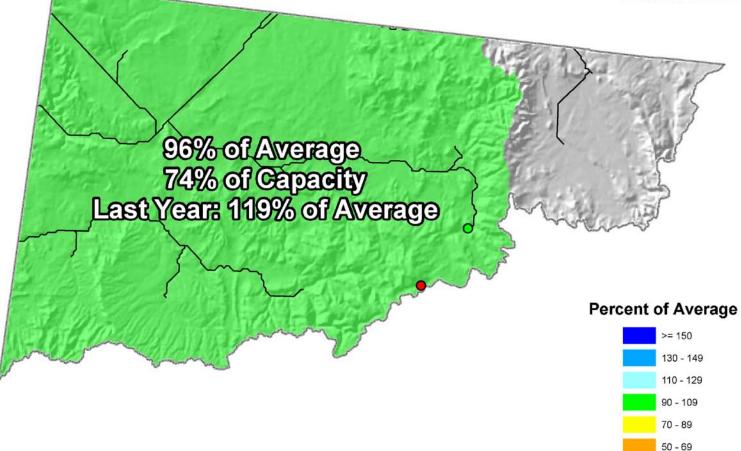
End of September 2012

## Yampa & White River Basins Reservoir Storage Map



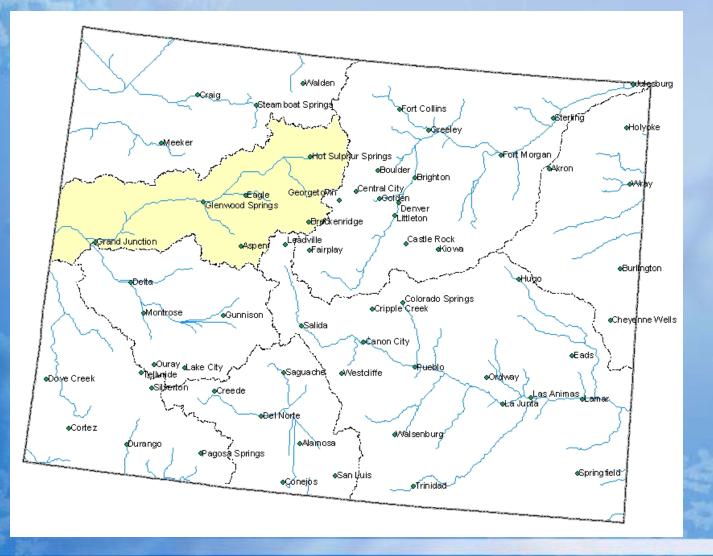
Provisional Data Subject to Revision

< 50



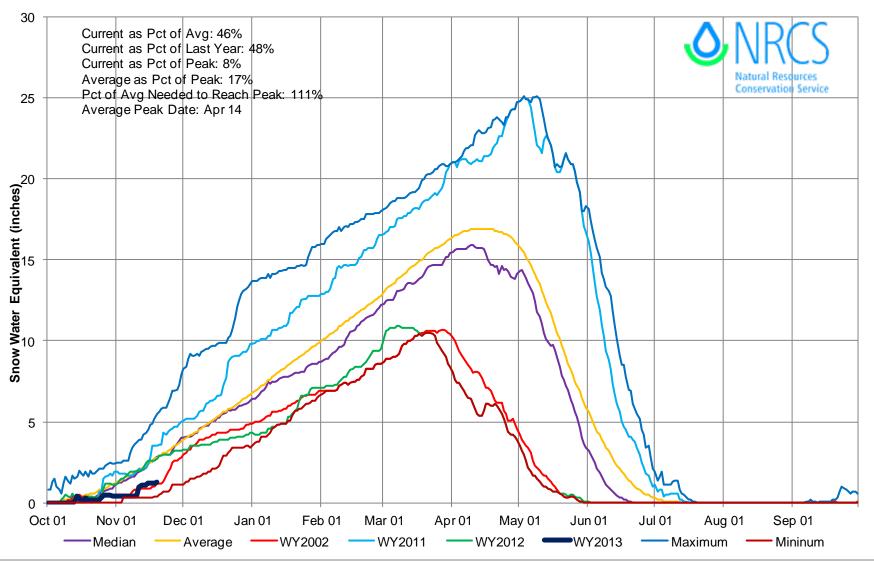
End of October 2012

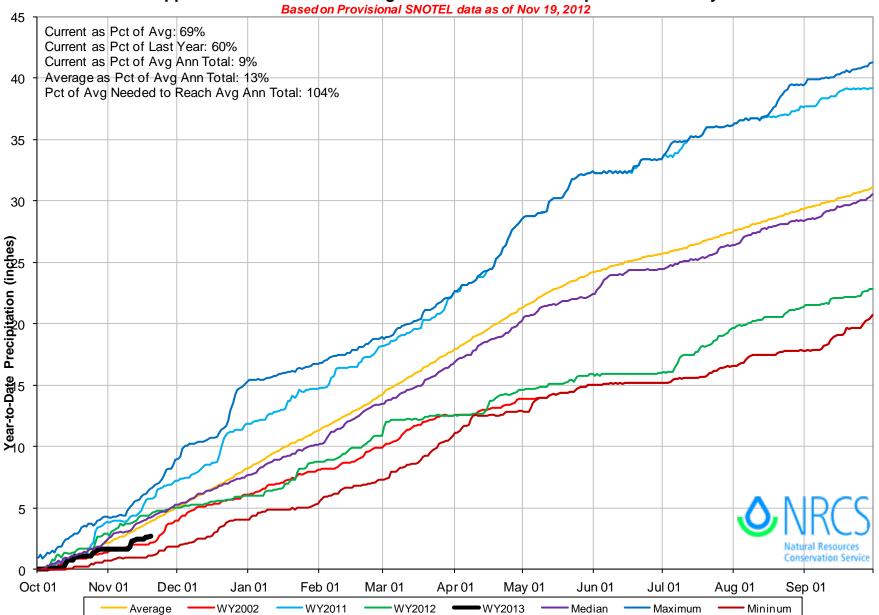
## **Colorado River Basin Summary**



Upper Colorado River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Nov 19, 2012



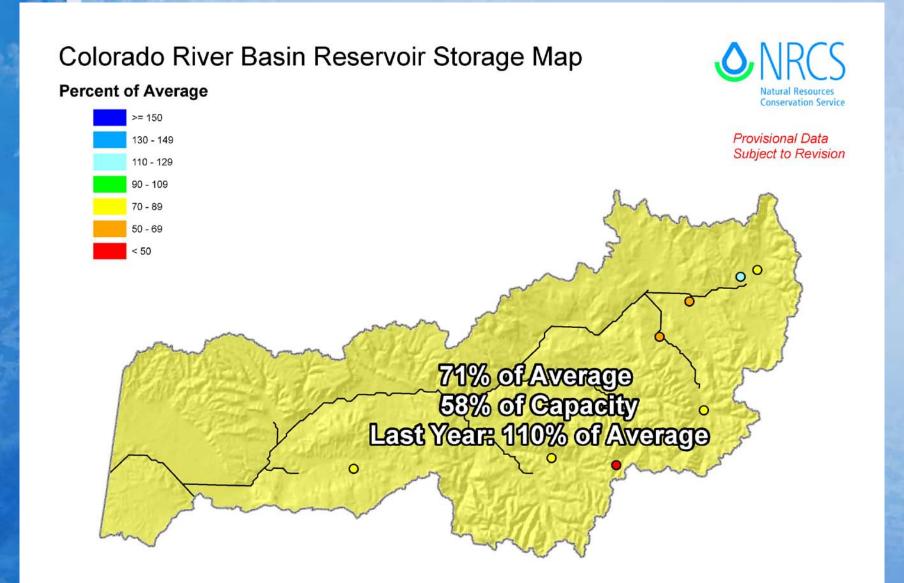


#### Upper Colorado River Basin High/Low Year-to-Date Precipitation Summary

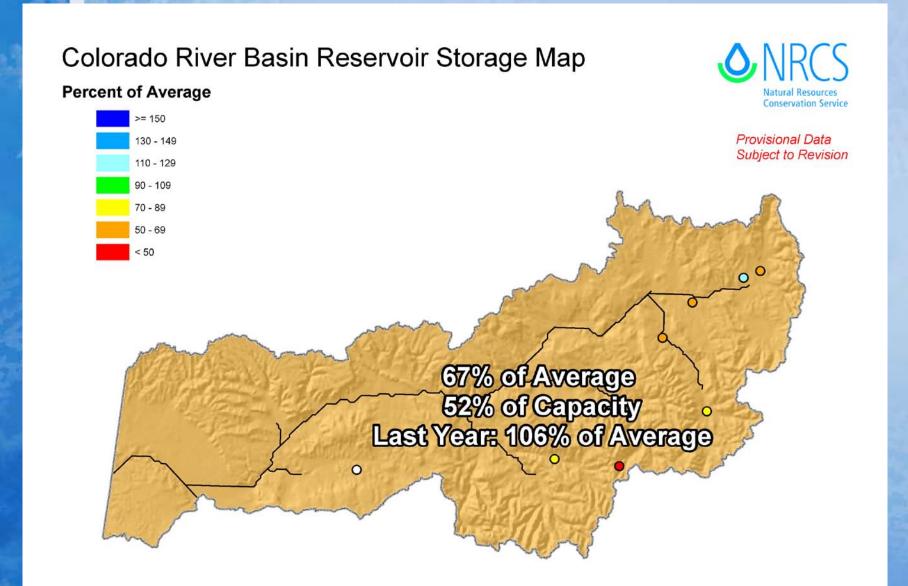
45 40 35 30 Precipitation (Inches) **Oct PREC** 76% of Average **Nov PREC** 59% of Average 15 10 5 0 Average WY2013 WY2012 WY2011 WY2002 Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep

Upper Colorado River Basin High/Low Monthly Precipitation Summary Based on Provisional SNOTEL data as of Nov 19, 2012



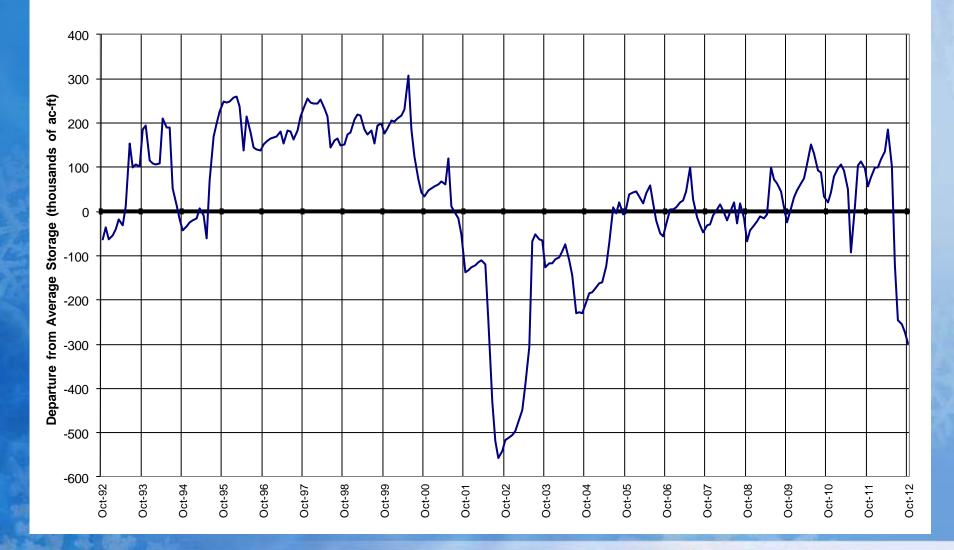


End of September 2012

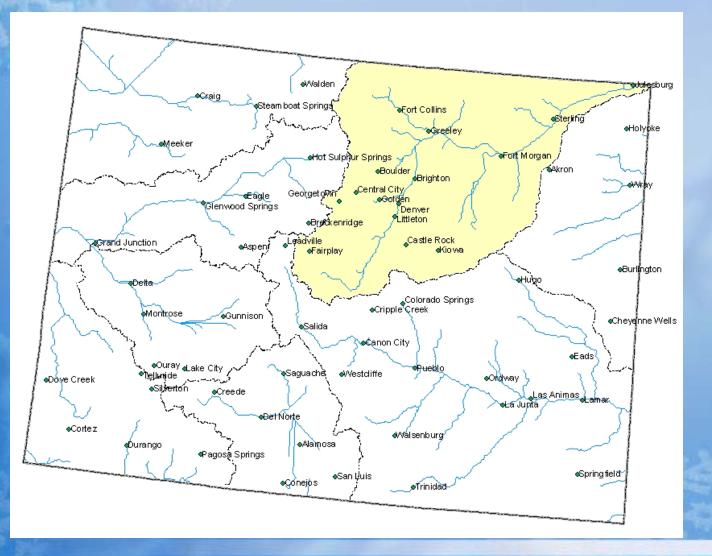


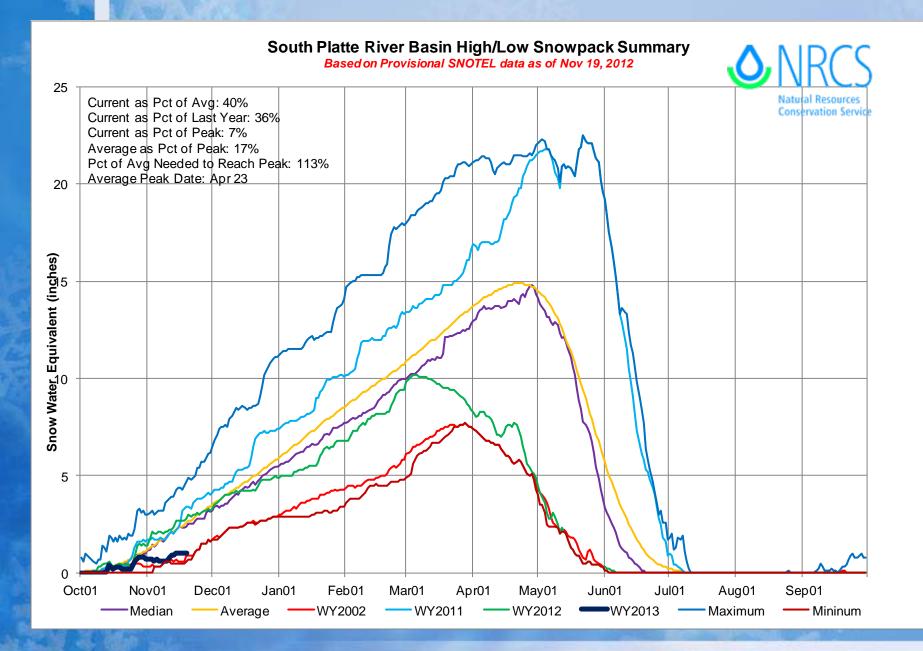
End of October 2012

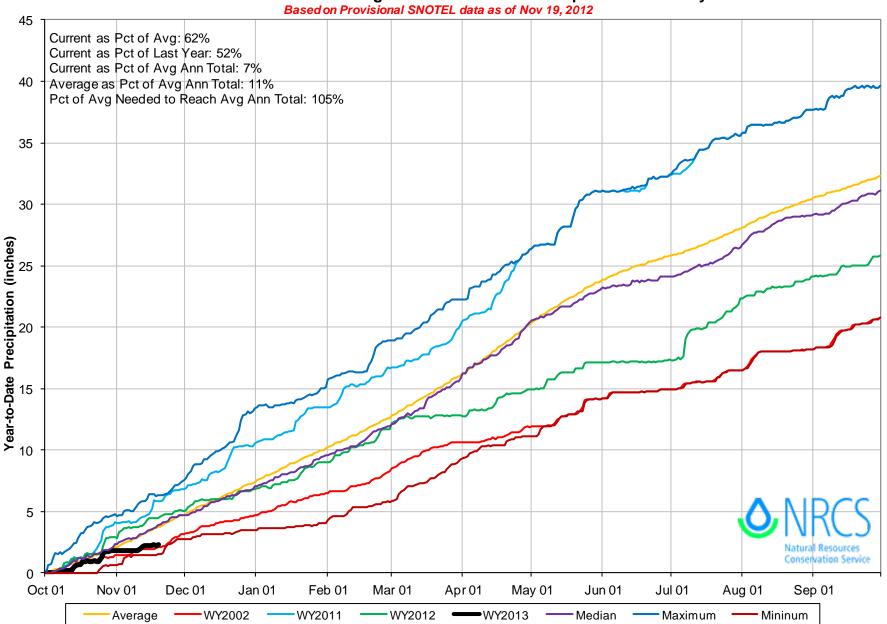
COLORADO RIVER BASIN Reservoir Storage Departure from Average



## South Platte River Basin Summary







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

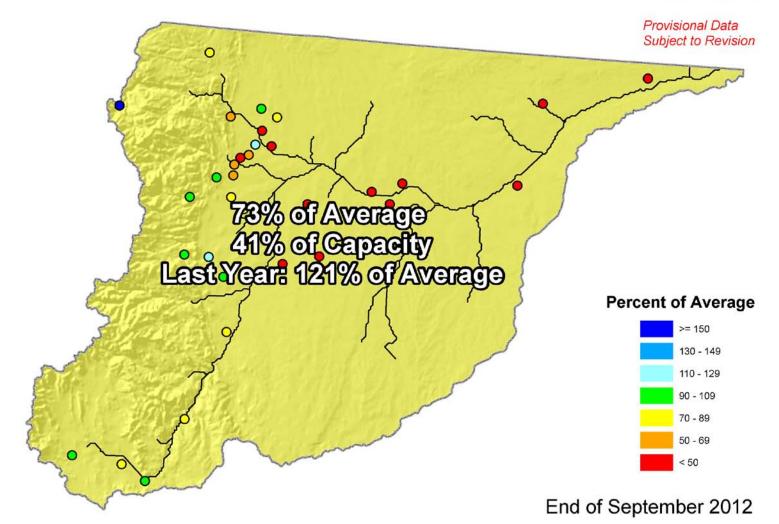
45 40 35 30 **Oct PREC** Precipitation (Inches) 84% of Average **Nov PREC** 31% of Average 15 10 5 0 Average WY2013 WY2012 WY2011 WY2002 Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep

#### South Platte River Basin High/Low Monthly Precipitation Summary Based on Provisional SNOTEL data as of Nov 19, 2012



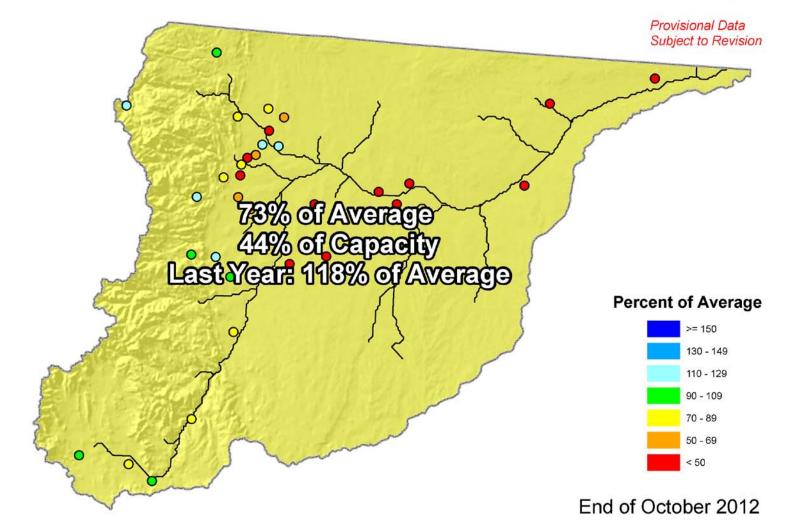
## South Platte River Basin Reservoir Storage Map



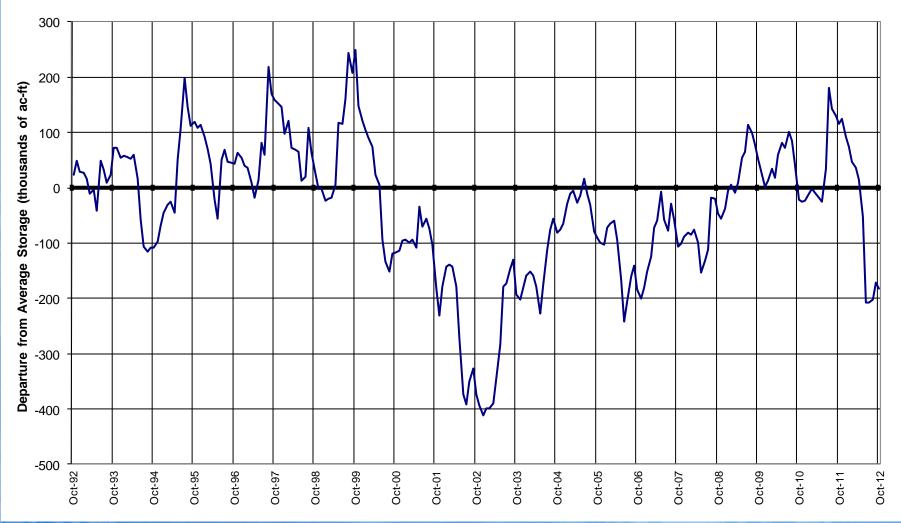


## South Platte River Basin Reservoir Storage Map





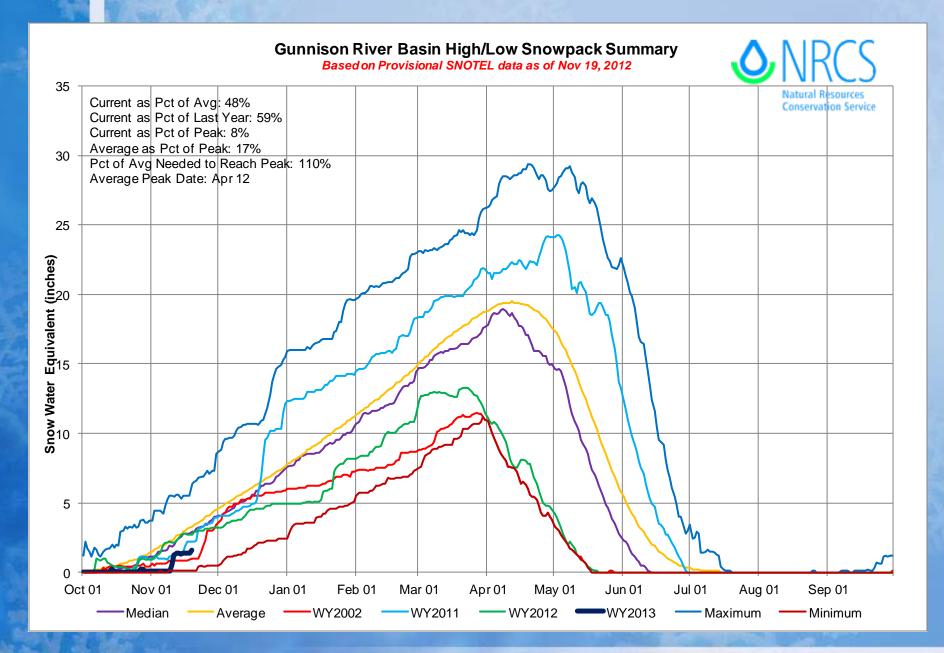
SOUTH PLATTE RIVER BASIN Reservoir Storage Departure from Average

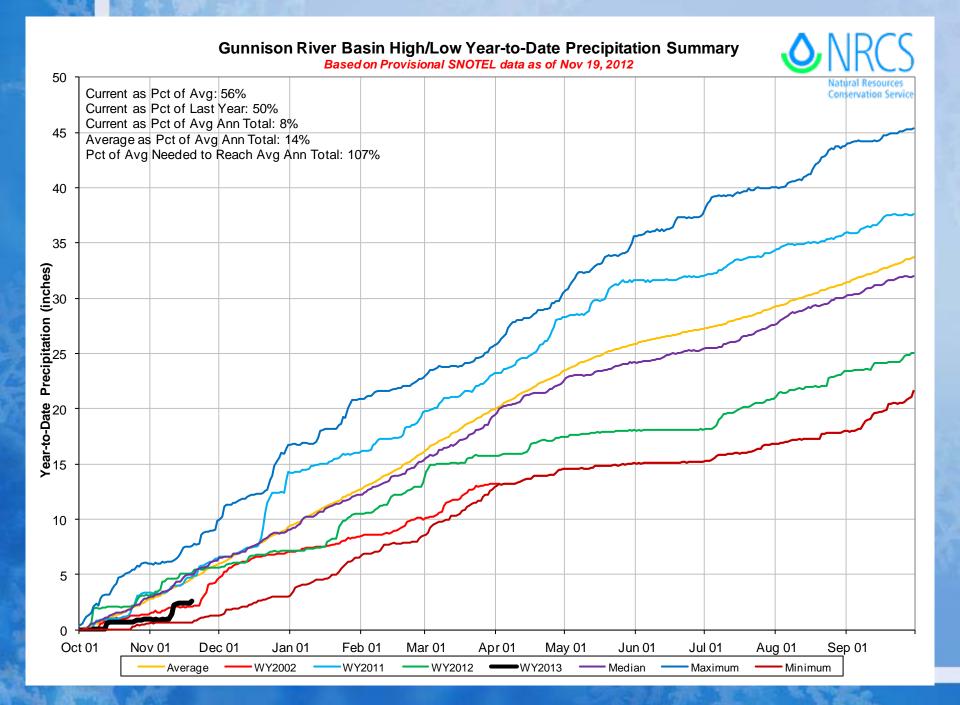


Dep

## **Gunnison River Basin Summary**







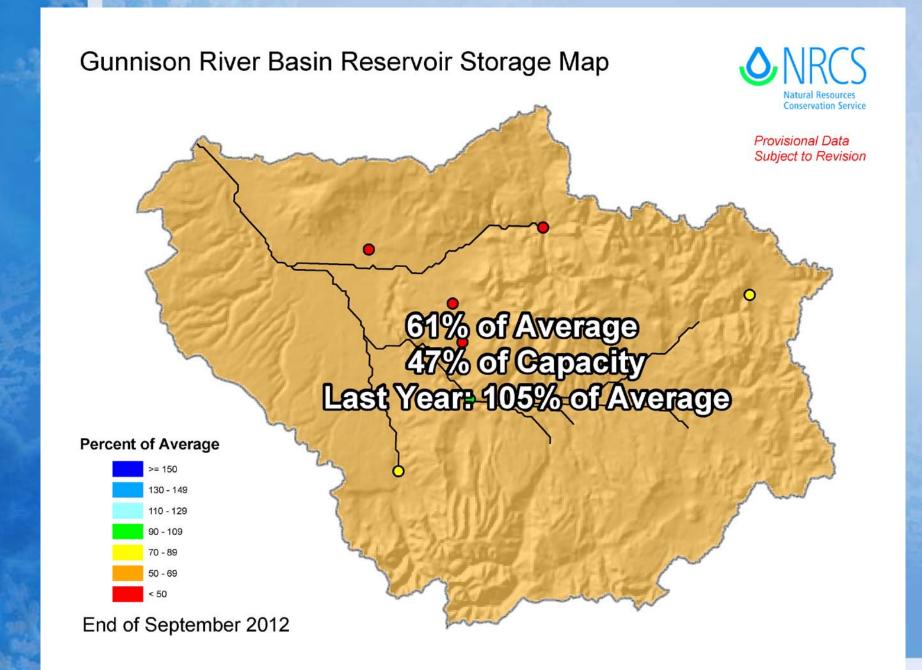
40 35 30 25 **Oct PREC** Precipitation (Inches) 34% of Average **Nov PREC** 89% of Average 10 5 0 WY2013 WY2012 WY2011 WY2002 Average

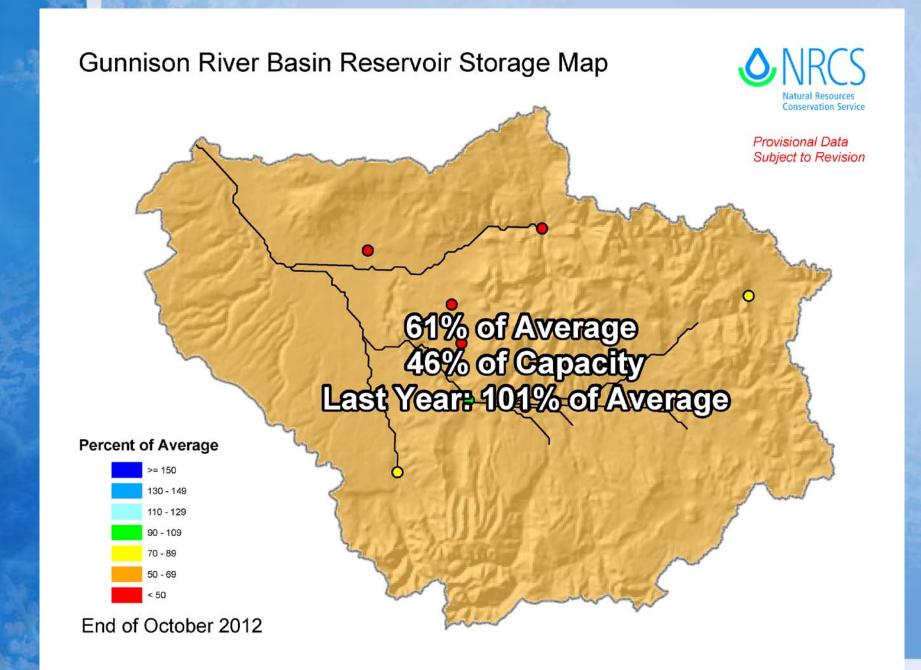
Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep

### **Gunnison River Basin High/Low Monthly Precipitation Summary**

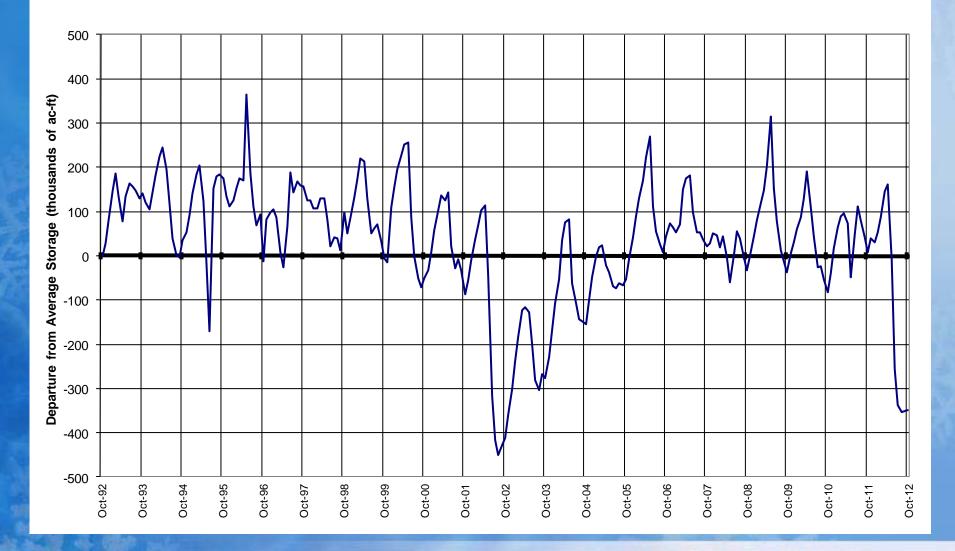
Based on Provisional SNOTEL data as of Nov 19, 2012



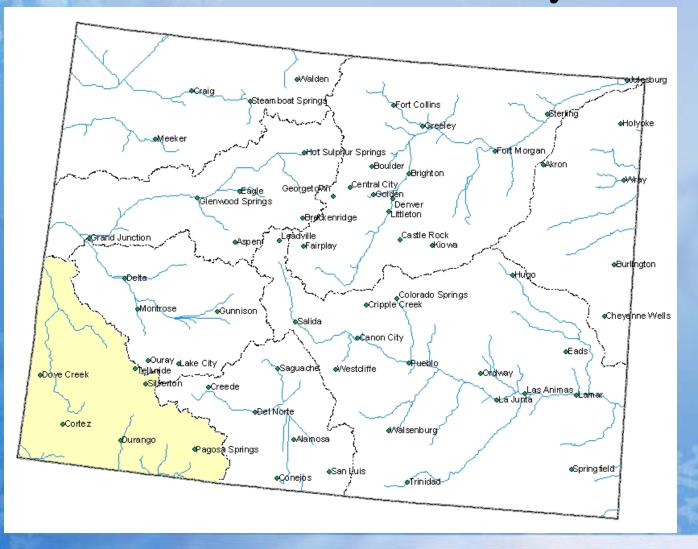




GUNNISON RIVER BASIN Reservoir Storage Departure from Average

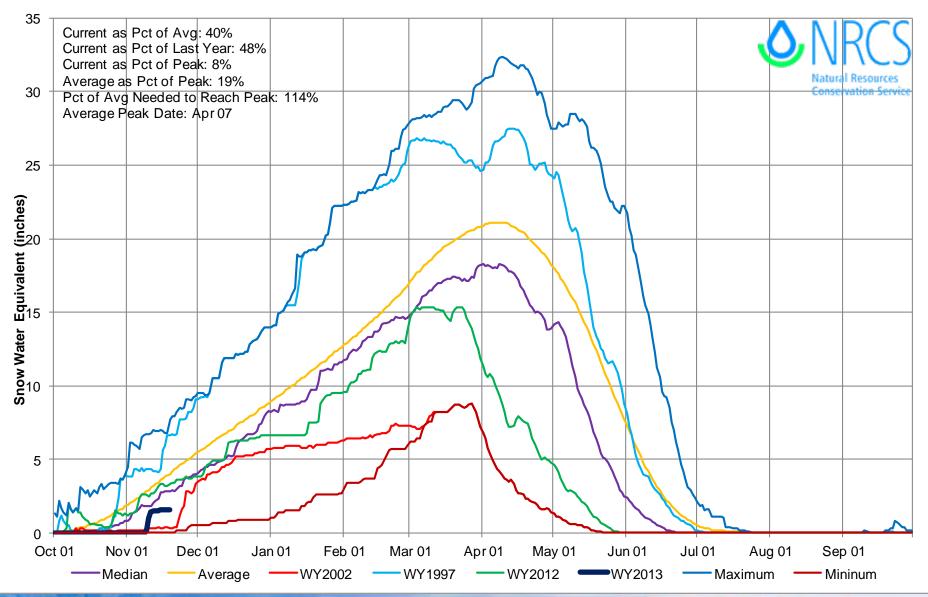


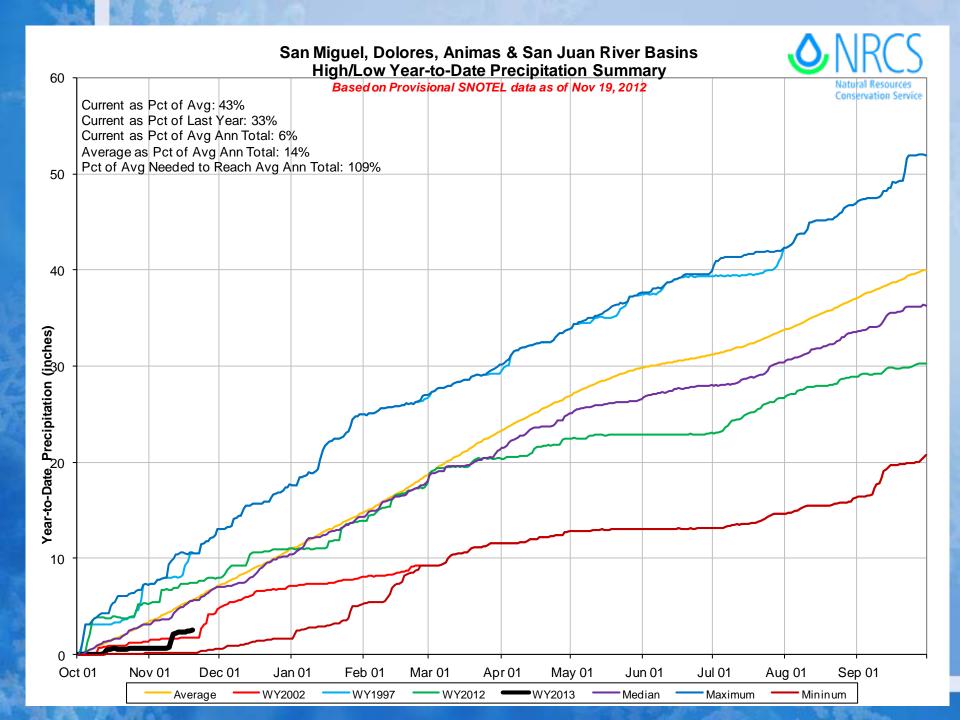
## San Miguel, Dolores, Animas & San Juan River Basins Summary

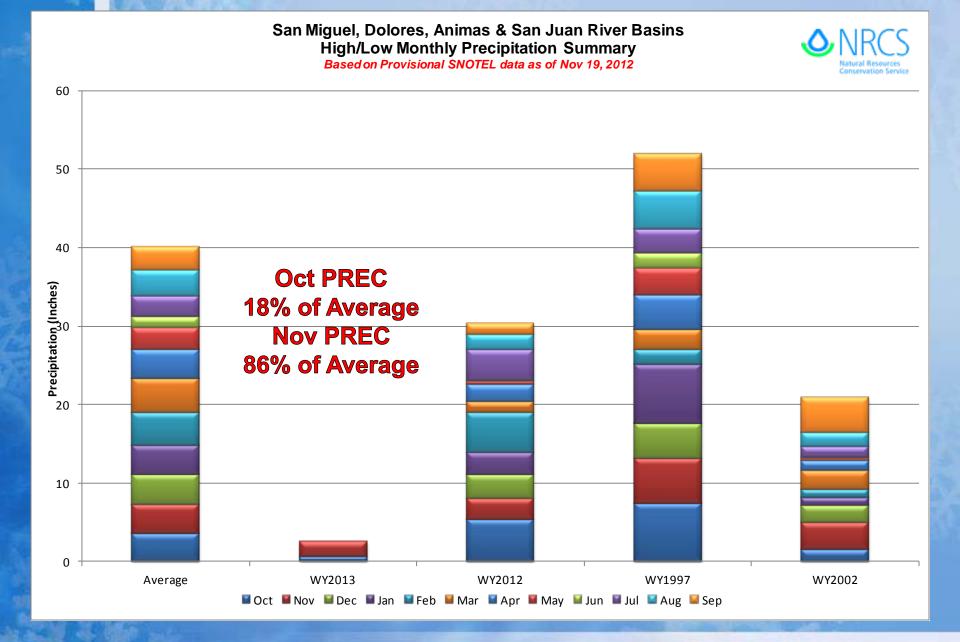


### San Miguel, Dolores, Animas & San Juan River Basins High/Low Snowpack Summary

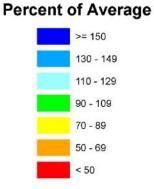
Based on Provisional SNOTEL data as of Nov 19, 2012







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



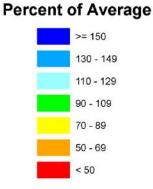


Provisional Data Subject to Revision

66% of Average 42% of Capacity Last Year: 101% of Average

End of September 2012

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



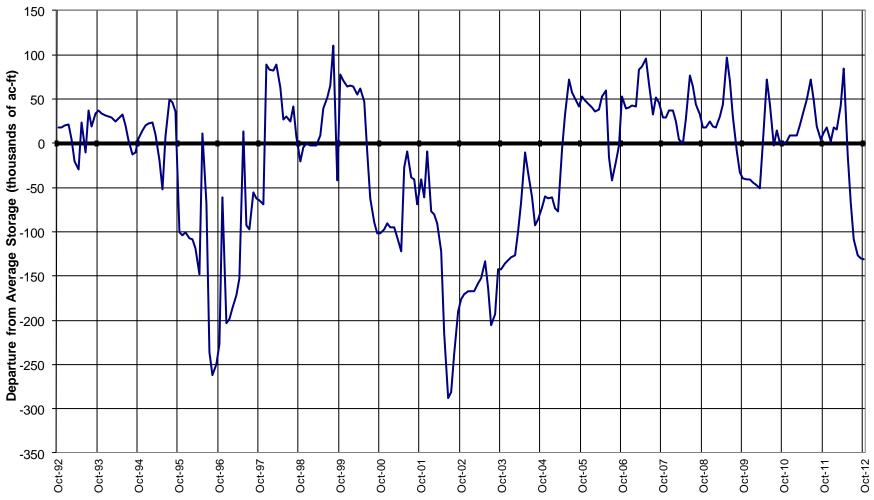


Provisional Data Subject to Revision

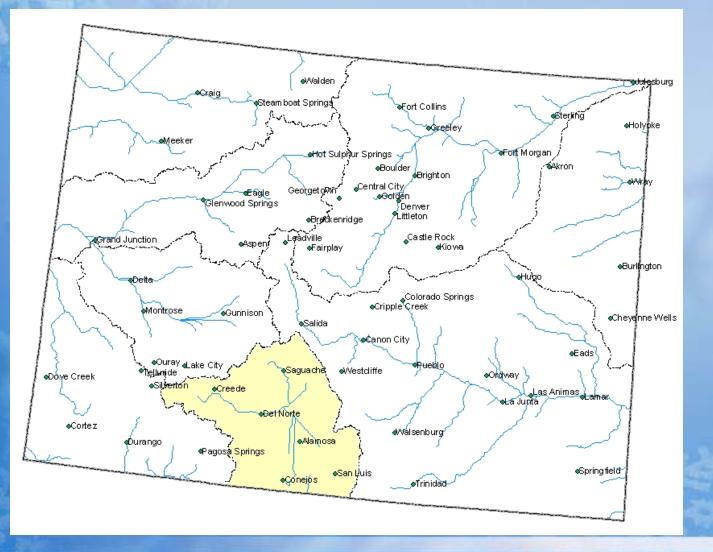
65% of Average 41% of Capacity Last Year: 103% of Average

End of October 2012

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

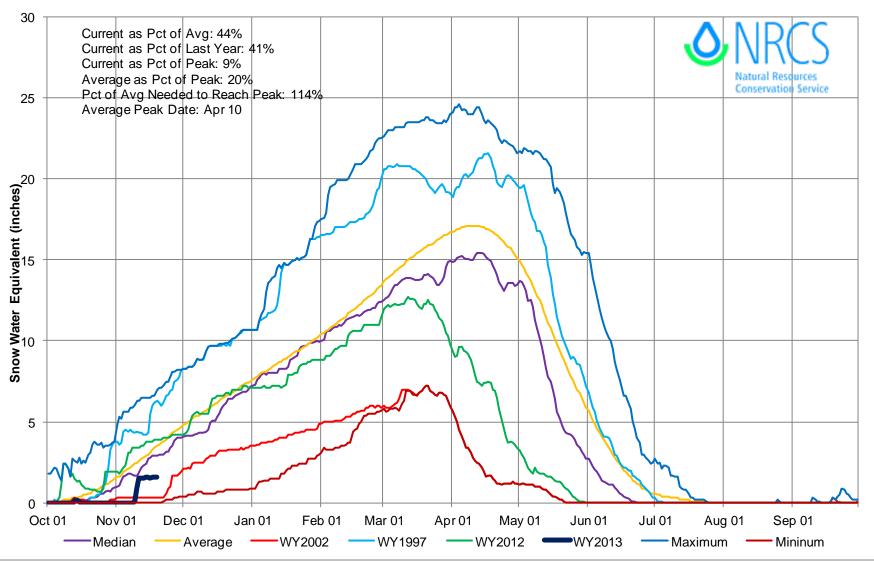


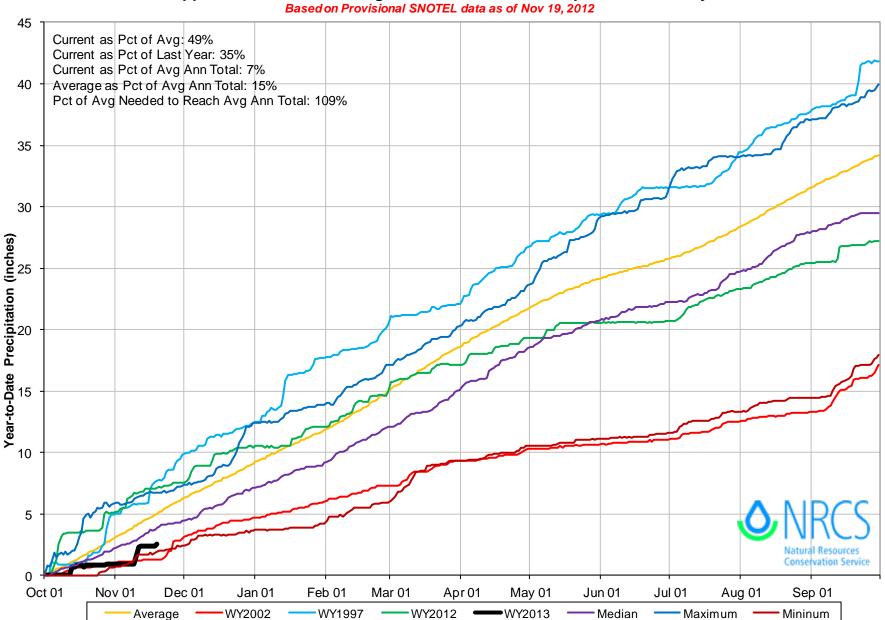
# **Upper Rio Grande Basin Summary**



Upper Rio Grande Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Nov 19, 2012





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

45 40 35 30 **Oct PREC** Precipitation (Inches) 28% of Average **Nov PREC** 84% of Average 15 10 5 0 WY2012 WY1997 Average WY2013 WY2002 ■ Oct ■ Nov ■ Dec ■ Jan ■ Feb ■ Mar ■ Apr ■ May ■ Jun ■ Jul ■ Aug ■ Sep

Upper Rio Grande Basin High/Low Monthly Precipitation Summary Based on Provisional SNOTEL data as of Nov 19, 2012



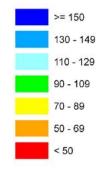
### Upper Rio Grande Basin Reservoir Storage Map



Provisional Data Subject to Revision

### 47% of Average 12% of Capacity Last Year: 47% of Average

#### **Percent of Average**



End of September 2012

### Upper Rio Grande Basin Reservoir Storage Map



Provisional Data Subject to Revision

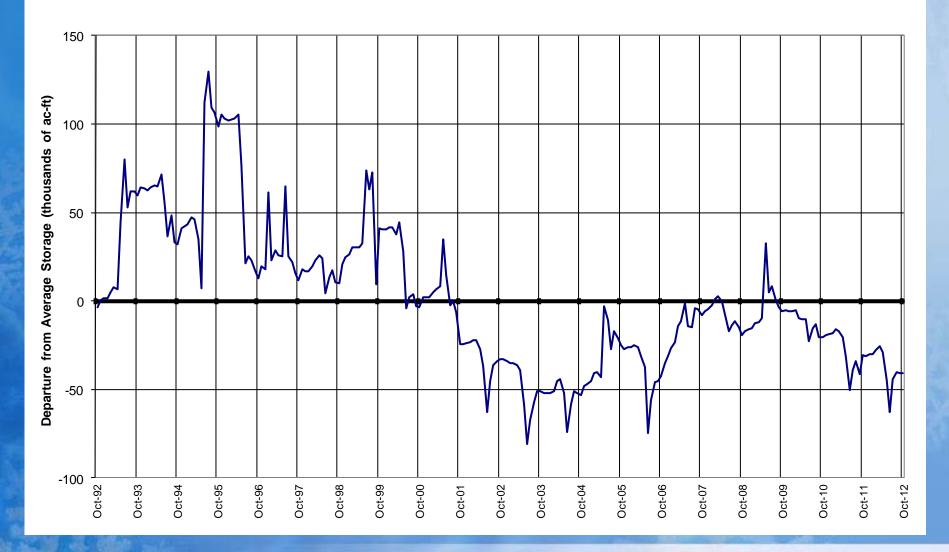
### 47% of Average 12% of Capacity Last Year: 60% of Average

#### **Percent of Average**



End of October 2012

UPPER RIO GRANDE BASIN Reservoir Storage Departure from Average

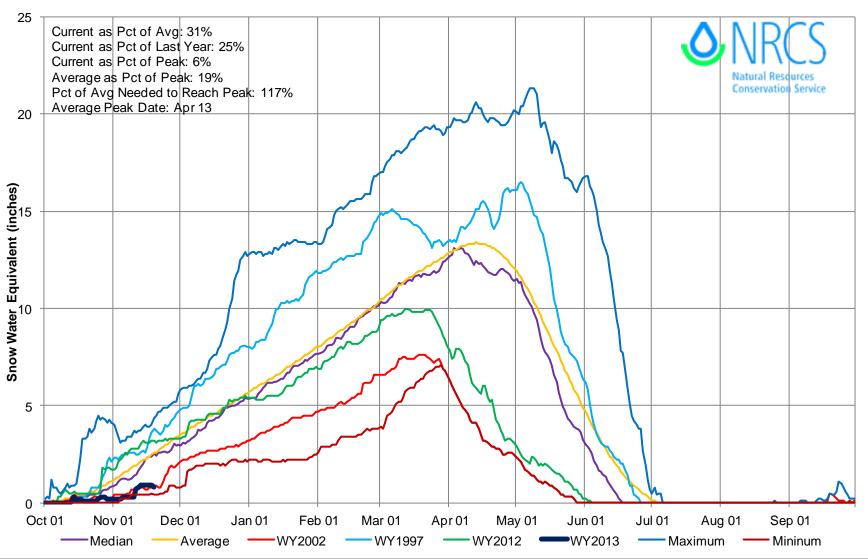


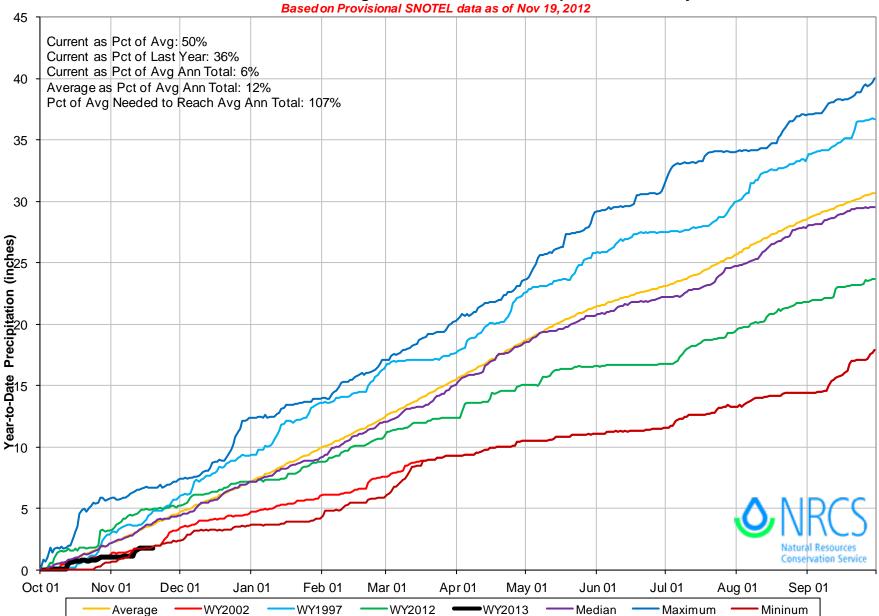
## Arkansas River Basin Summary



Arkansas River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Nov 19, 2012





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

40 35 30 25 Precipitation (Inches) **Oct PREC** 47% of Average **Nov PREC** 53% of Average 10 5 0 Average WY2013 WY2012 WY1997 WY2002 Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep

#### Arkansas River Basin High/Low Monthly Precipitation Summary Based on Provisional SNOTEL data as of Nov 19, 2012

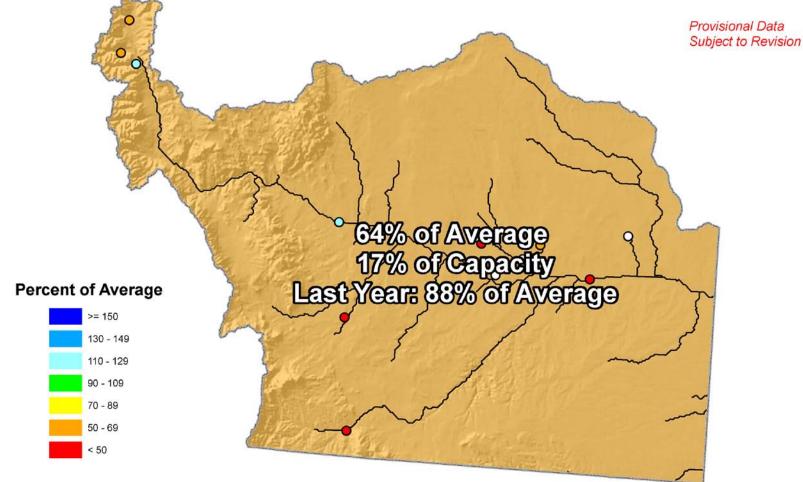


## Arkansas River Basin Reservoir Storage Map Natural Resources **Conservation Service** Provisional Data Subject to Revision 68% of Average 19% of Capacity Last Year: 88% of Average Percent of Average >= 150 130 - 149 110 - 129 90 - 109 70 - 89 50 - 69 < 50

End of September 2012

### Arkansas River Basin Reservoir Storage Map



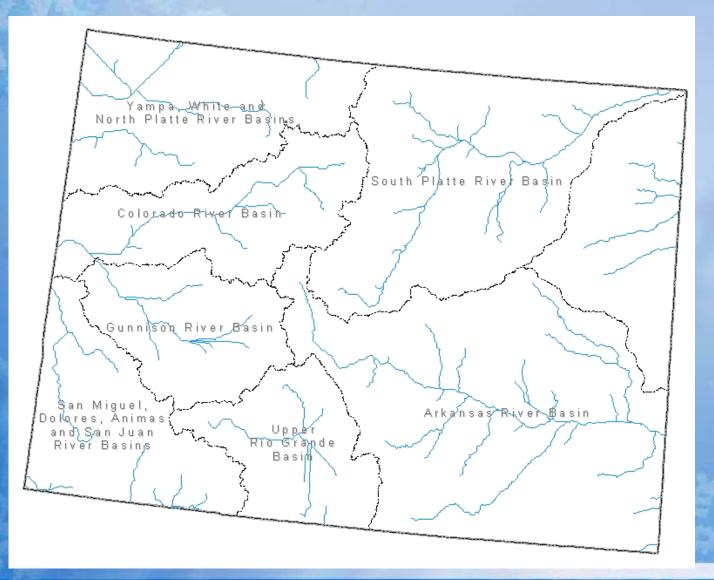


End of October 2012

#### ARKANSAS RIVER BASIN Reservoir Storage Departure from Average

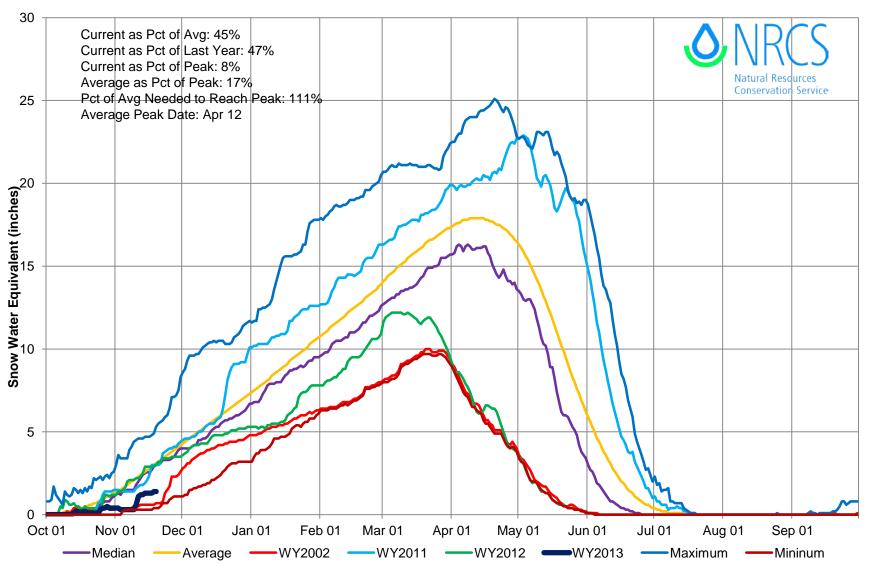


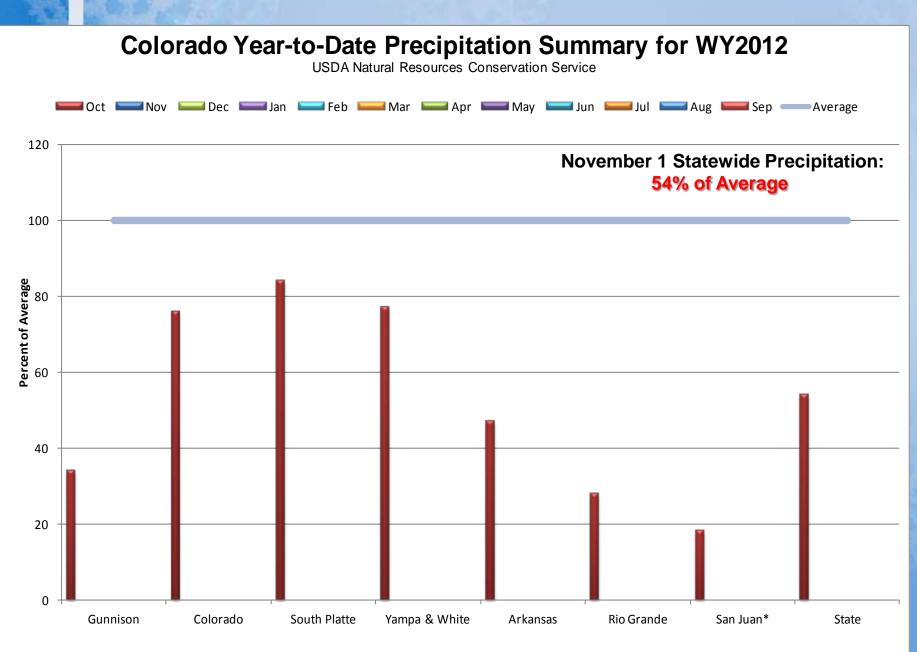
# Colorado Statewide Summary



Colorado Statewide High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Nov 19, 2012

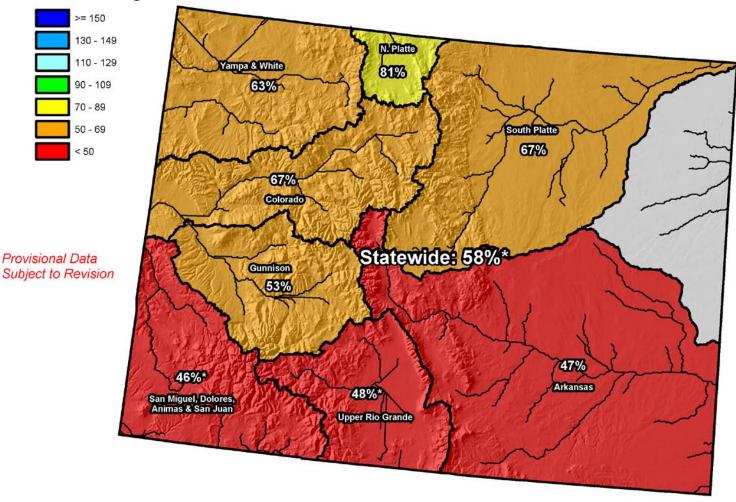




\*Includes Animas, Dolores, San Miguel Basins

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

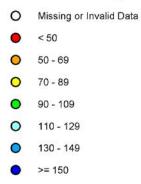
#### Percent of Average



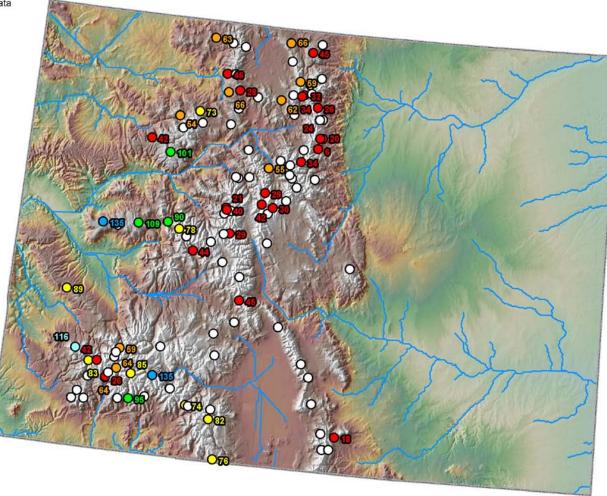
### Current as of Nov 19, 2012

### Colorado SNOTEL Month-to-Date Precipitation

#### Percent of Average



#### Provisional Data Subject to Revision

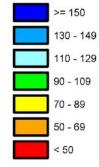


### Current as of Nov 19, 2012

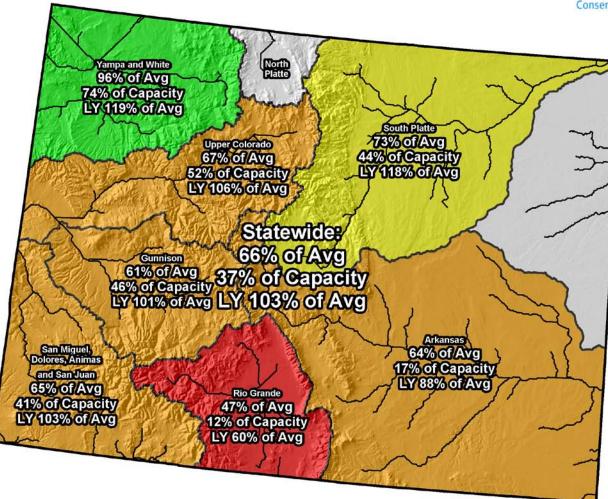
### Colorado Reservoir Storage Map

#### **Percent of Average**

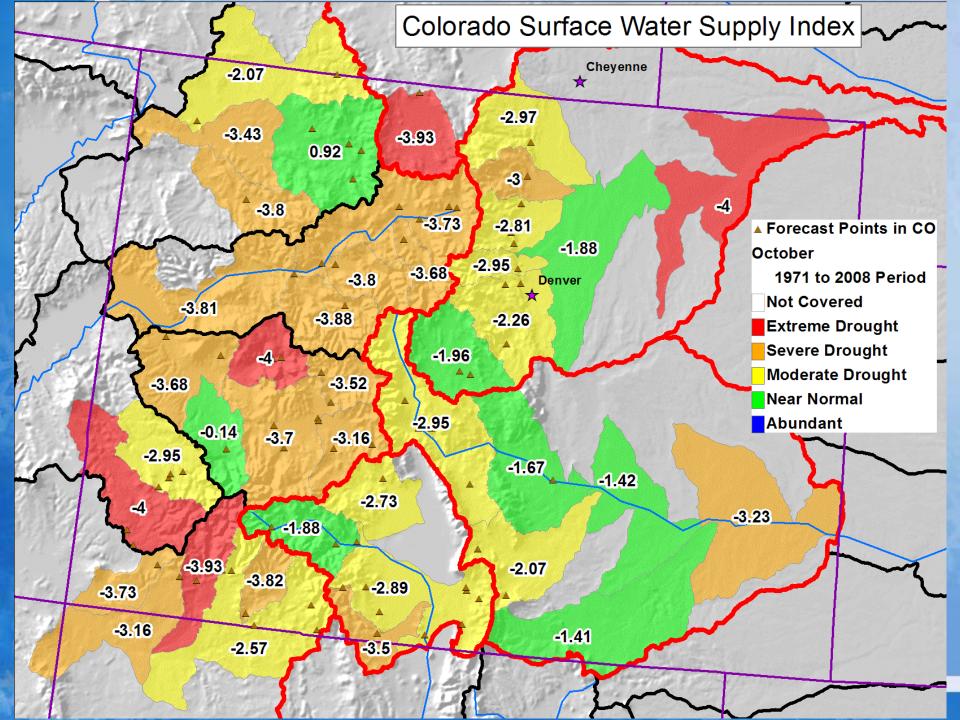


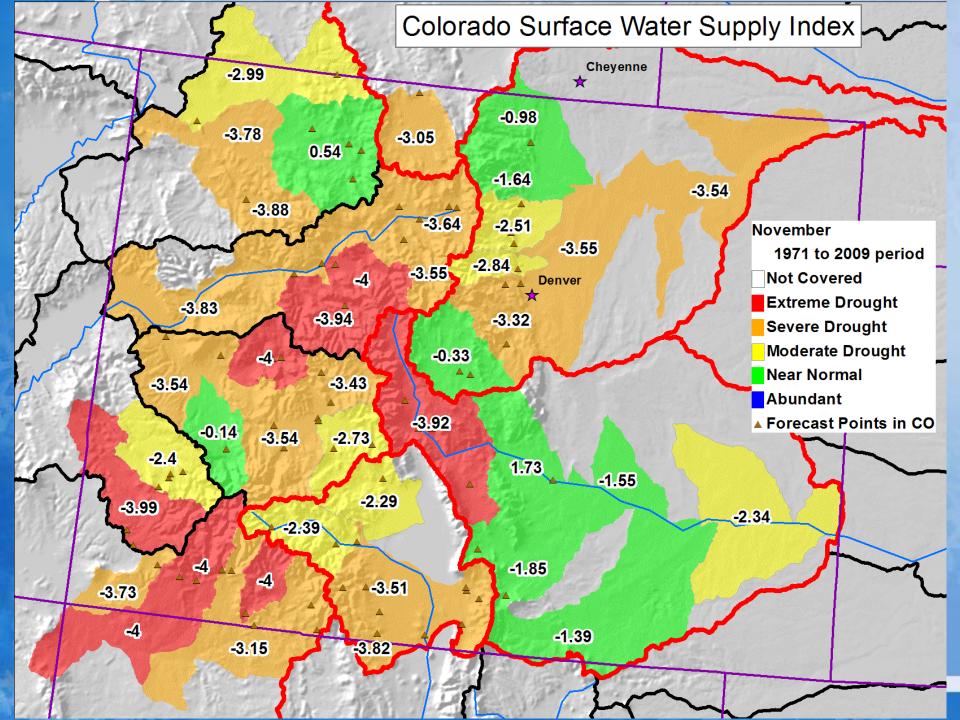


Provisional Data Subject to Revision



End of October 2012





# WY2013 Summary

•OCT: Began WY with below average mountain precipitation and SWE. Statewide SWE was only 26% of average on November 1.

•NOV: Storm around Veterans Day boosted prec and SWE totals across the state. Statewide prec is now above 50% of average and SWE is just under that.

•Basins in the south and southwest have been the driest but benefited the most from the latest storm.