

A Review of the 2005 Water Year in Colorado

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March 22, 2006, Colorado State University,

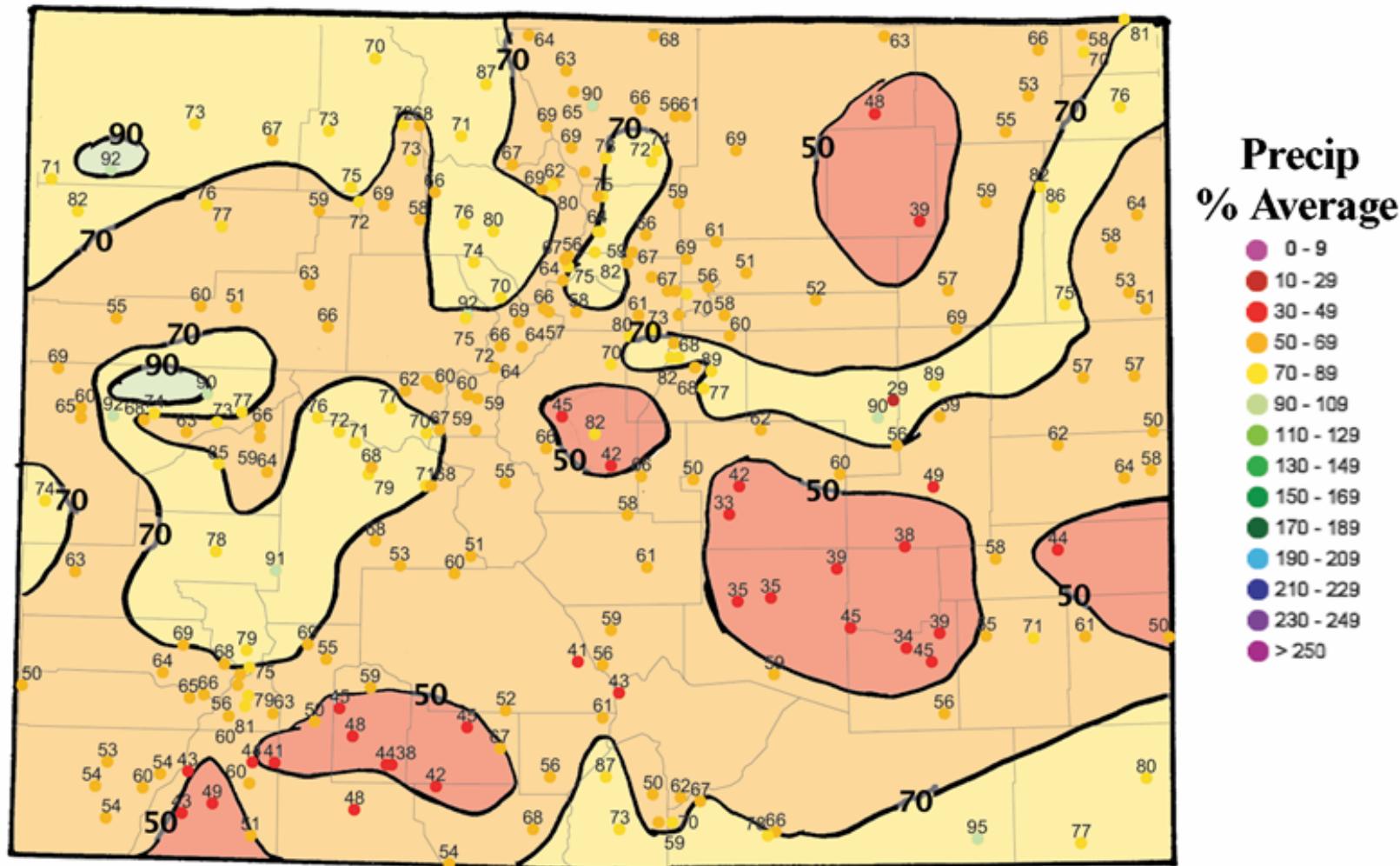
Fort Collins, CO

(Prepared by Odie Bliss)



<http://ccc.atmos.colostate.edu>
<http://www.co.nrcs.usda.gov/snow/>

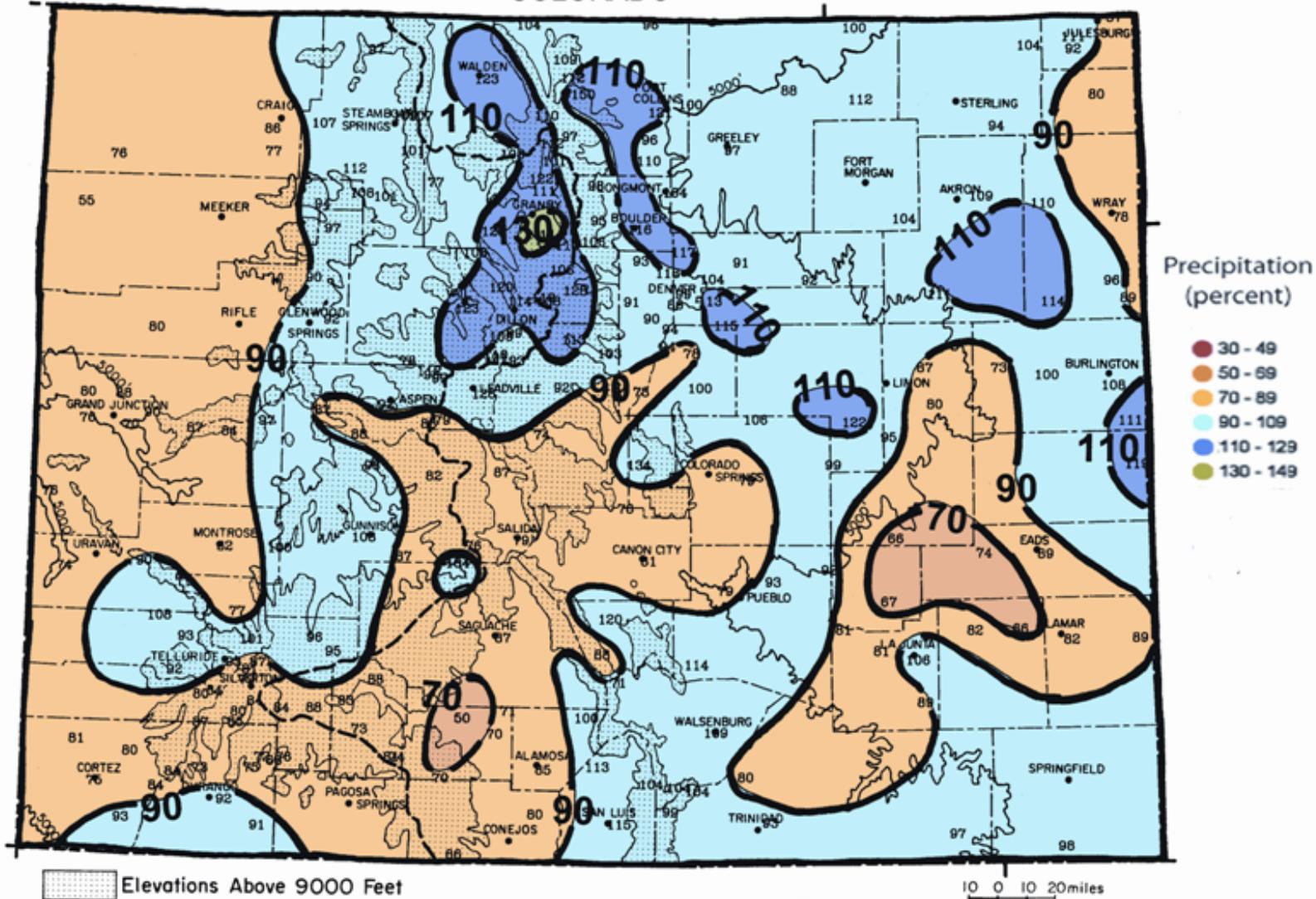
**Water Year 2002
(Oct. 2001 - Sept. 2002)**



2003 Water Year Precipitation

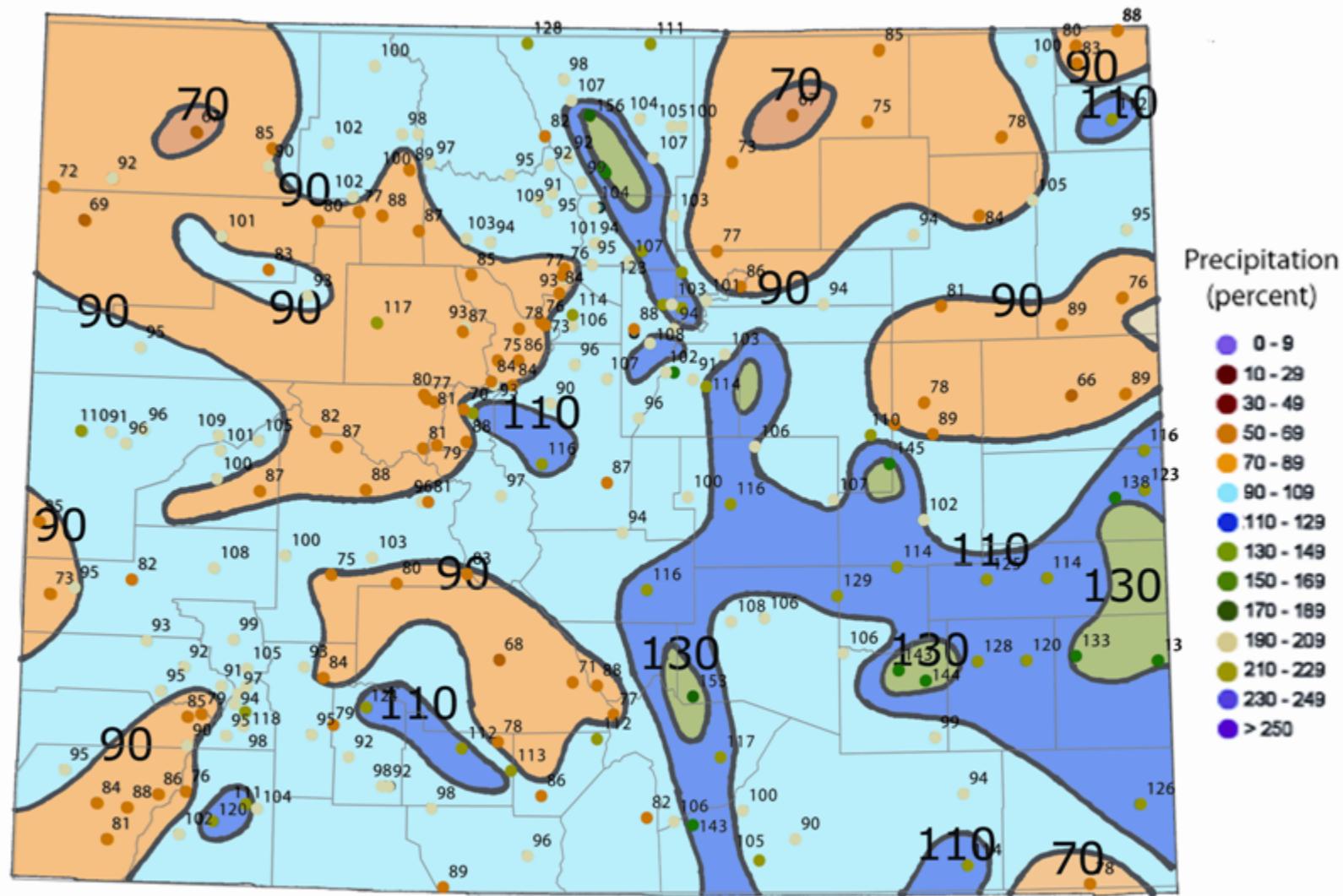
October 2002 - September 2003 precipitation
as a percent of the 1971-2000 average.

COLORADO



2004 Water Year Precipitation

COLORADO



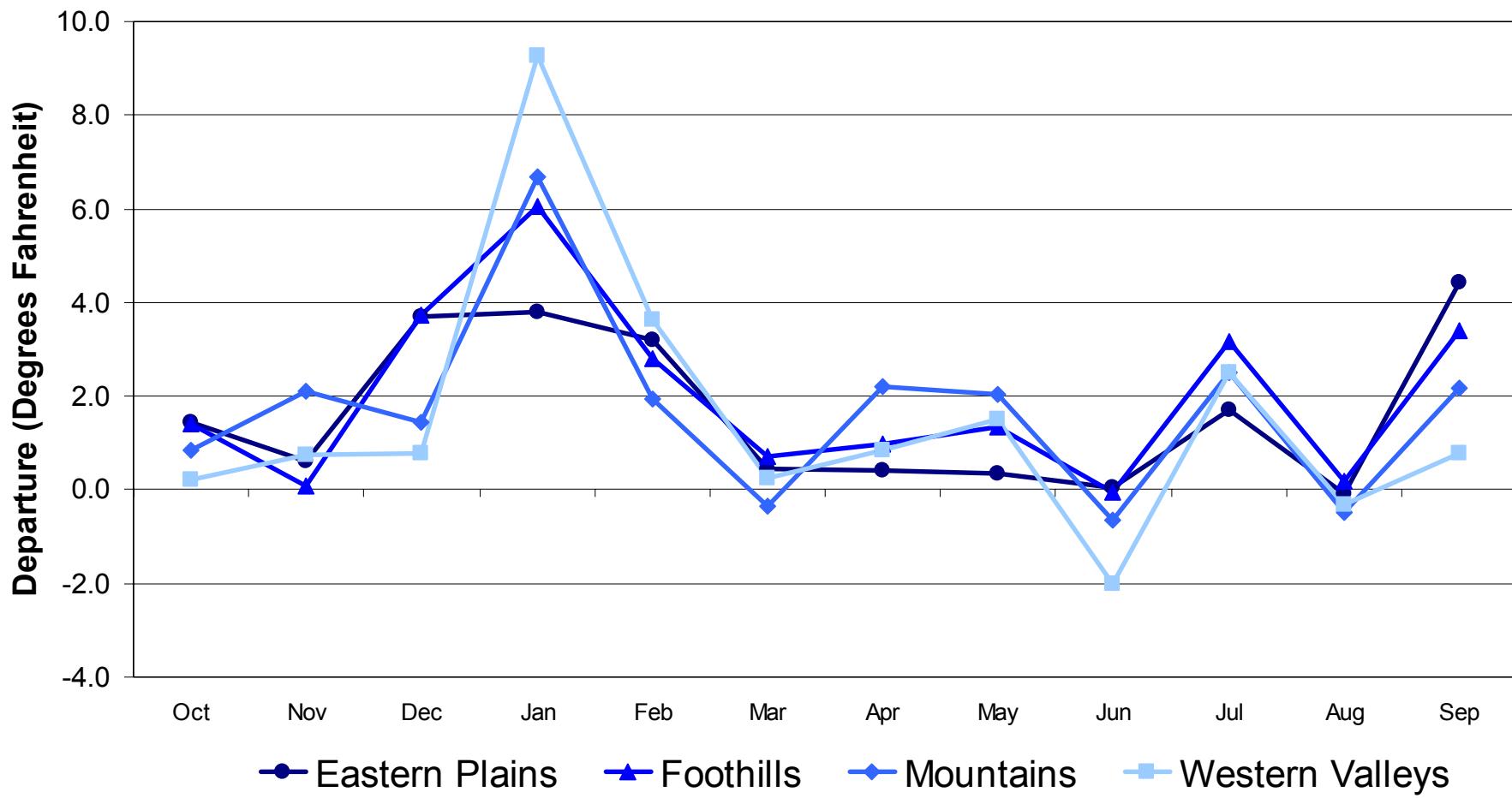
Water Year 2004 (October 2003 through September 2004) precipitation as a percent of the 1971-2000 average.

WY2005 Temperatures

- 12th consecutive warm winter
- Seasonal spring
- Very hot July
- Warm September

2005 WY Temperature Departures

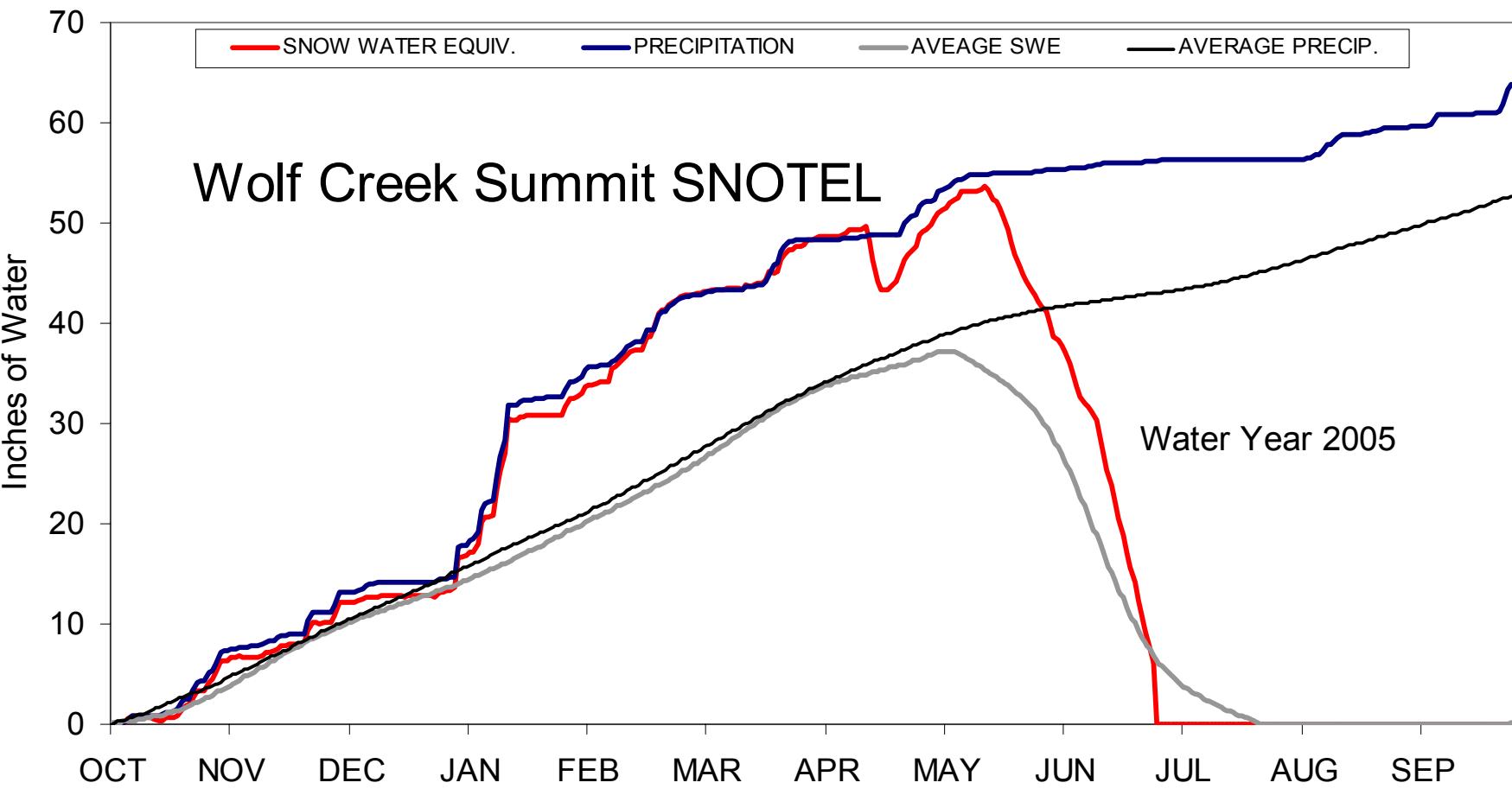
Water Year 2005



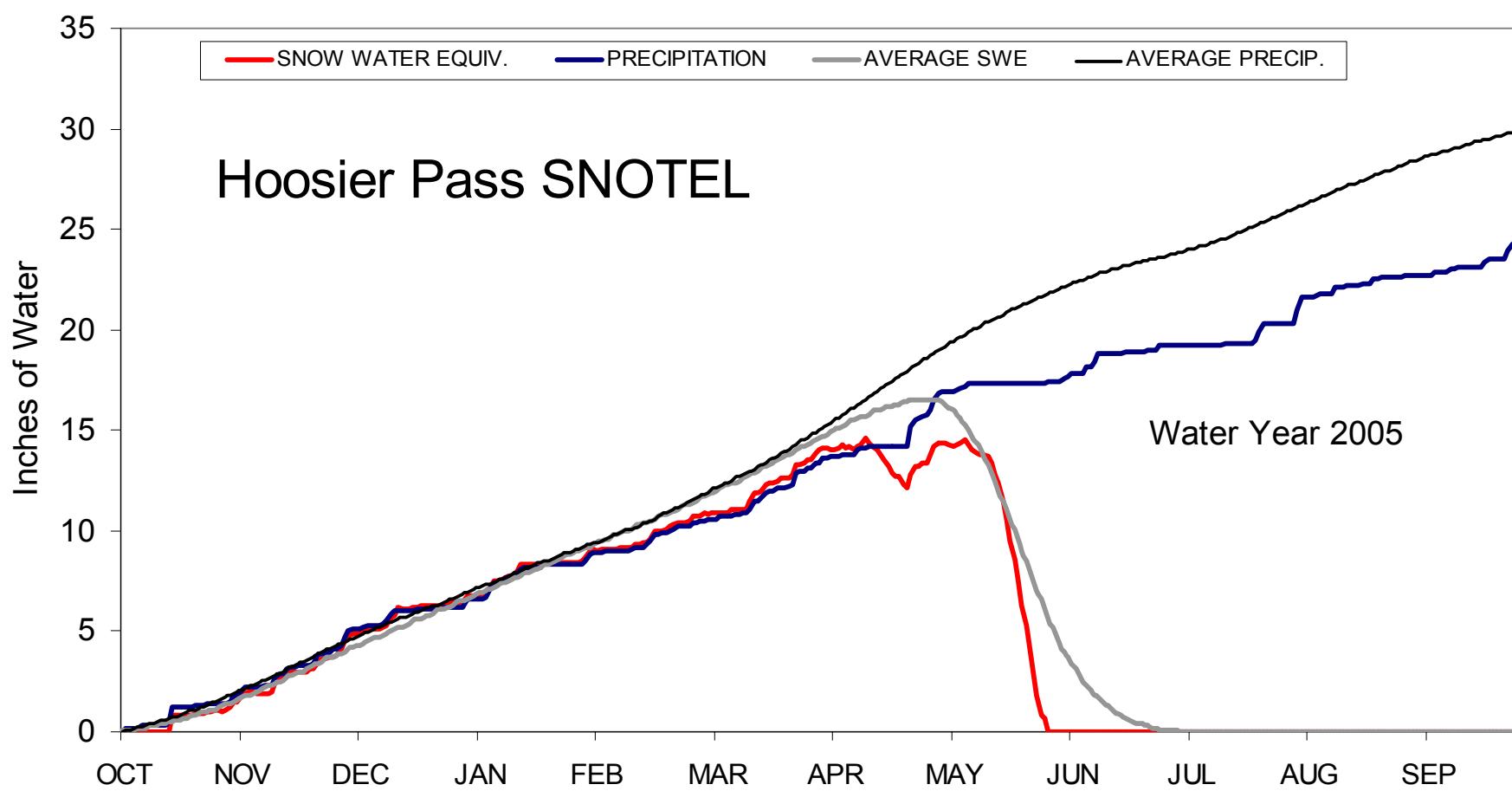
WY2005 Precipitation

- December – January southwest snow blitz
- Beneficial moisture in April and early June
- Dry May, July and much of September
- Big rains western Colorado late September

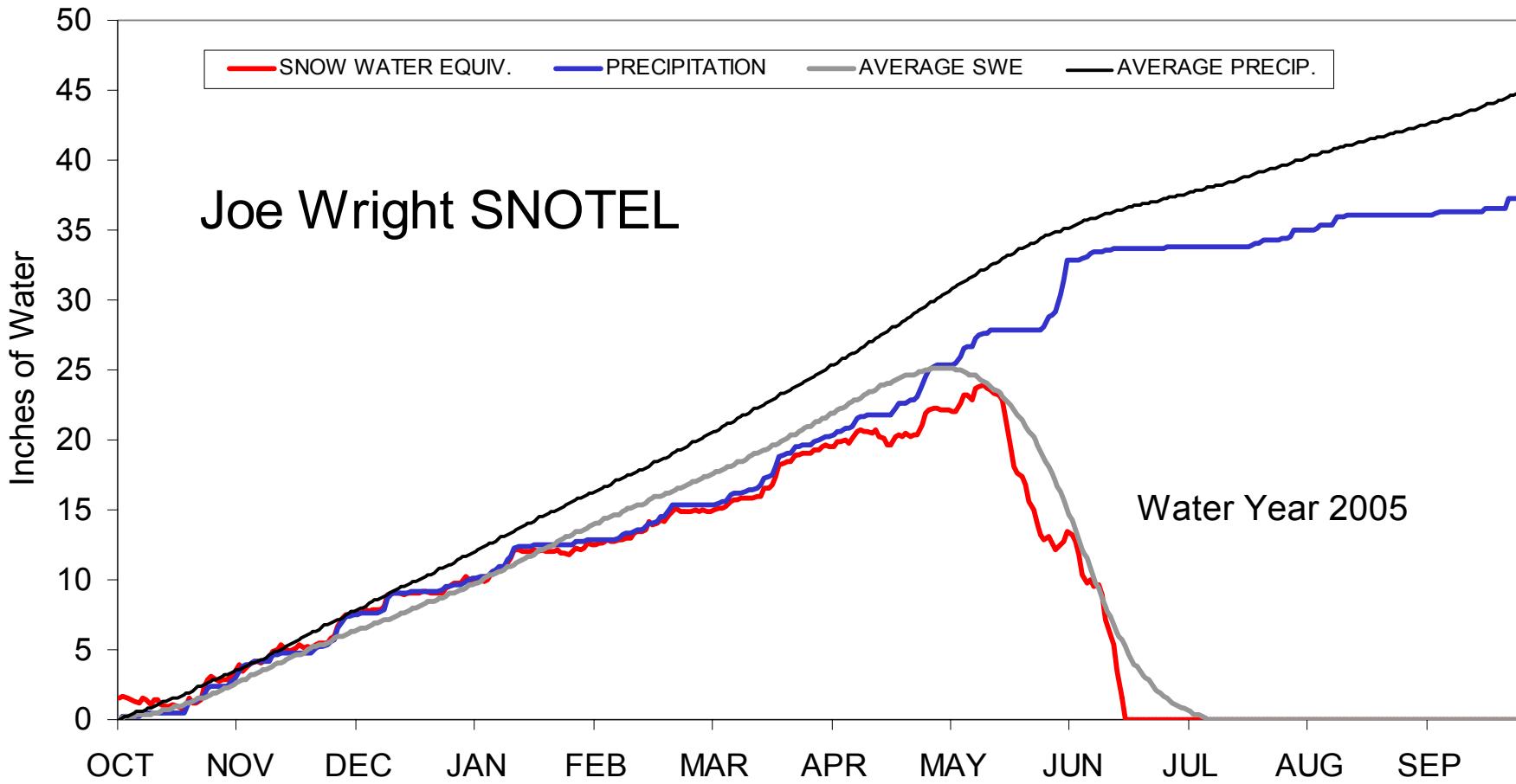
Wolf Creek Summit Snotel



Hoosier Pass Snotel



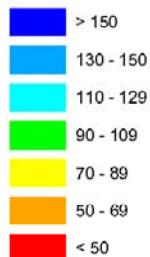
Joe Wright Snotel



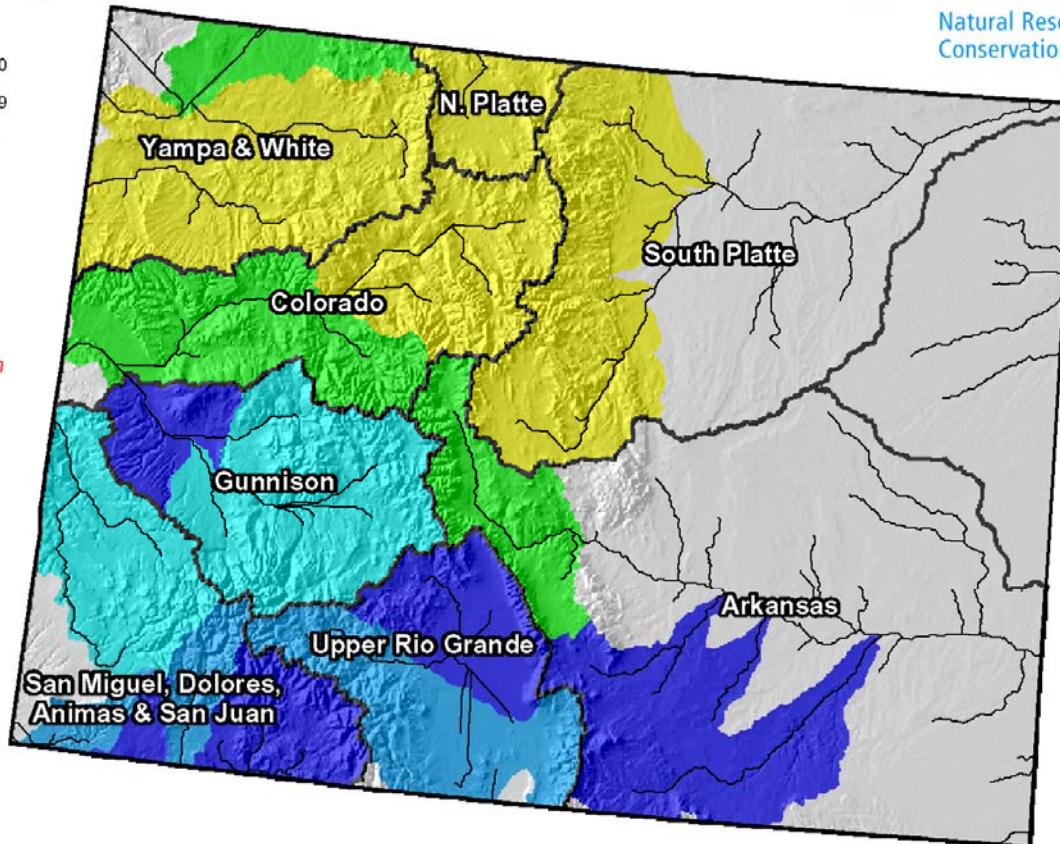
April 1 Snowpack

Colorado Snowpack Map

Percent of Average

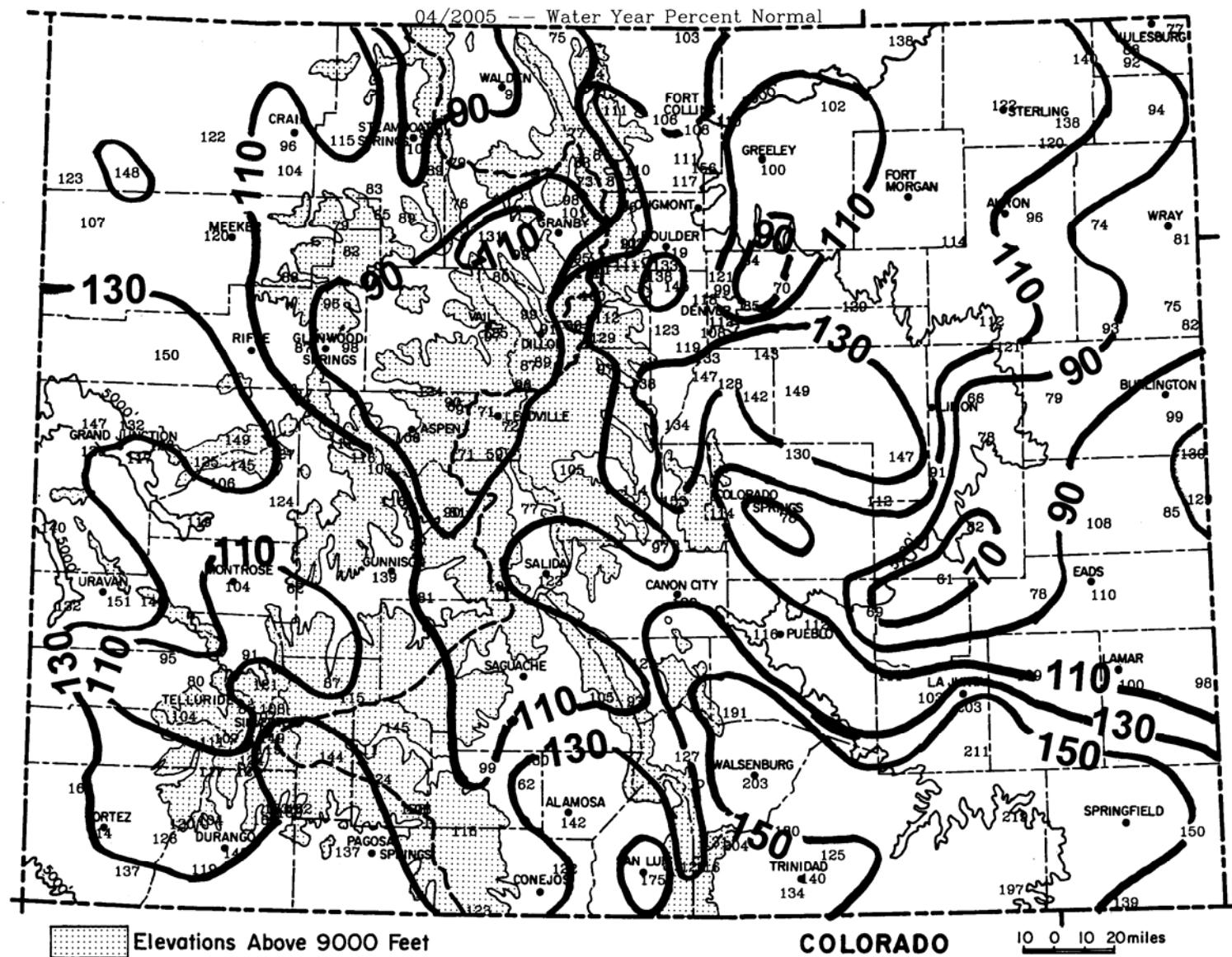


*Provisional Data
Subject to Revision*



Current as of April 1, 2005

Winter (Oct 2004 – Apr 2005) % of Average

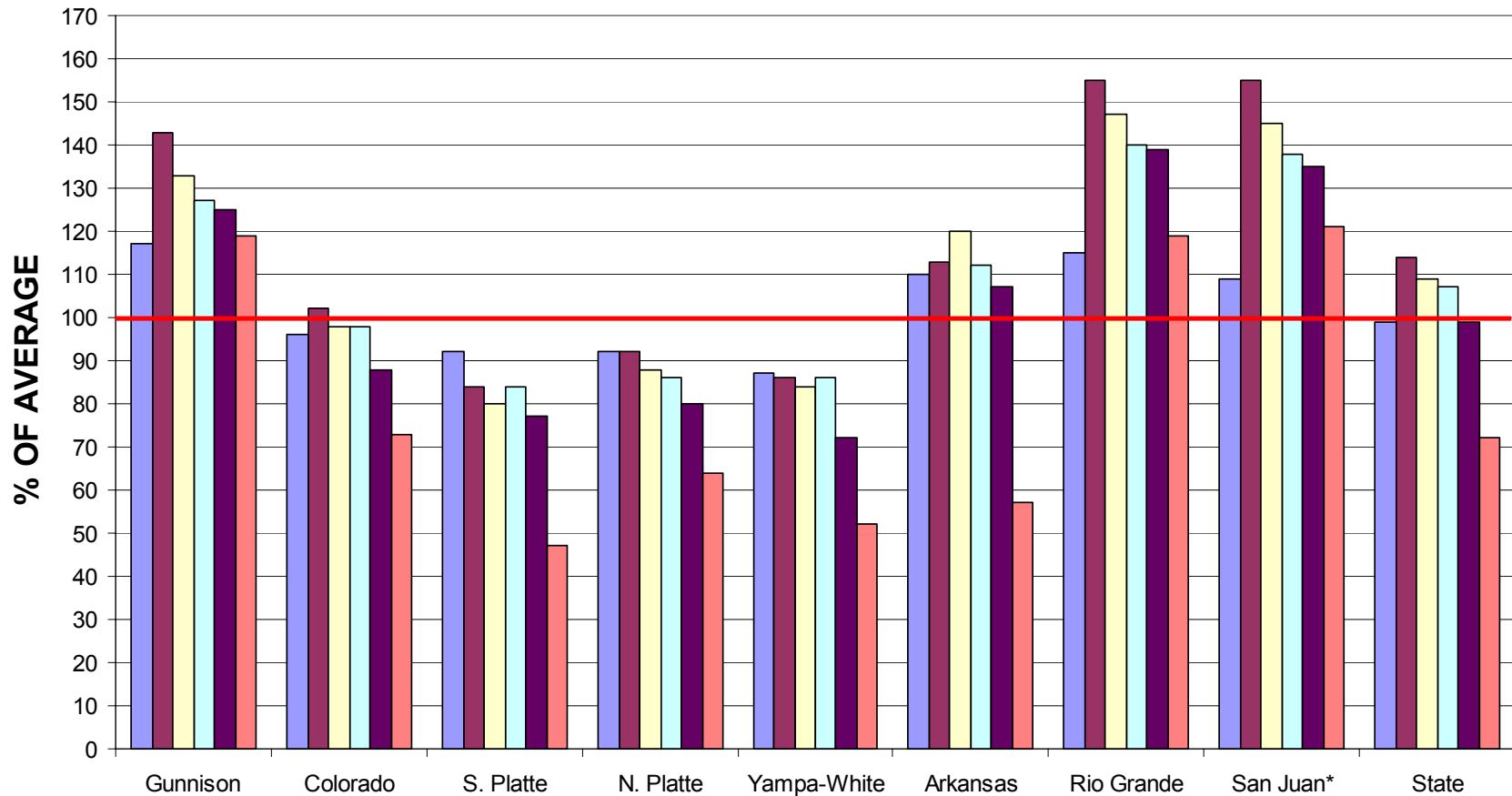


Colorado Snowpack for 2005

COLORADO SNOWPACK Summary for 2005

USDA Natural Resources Conservation Service

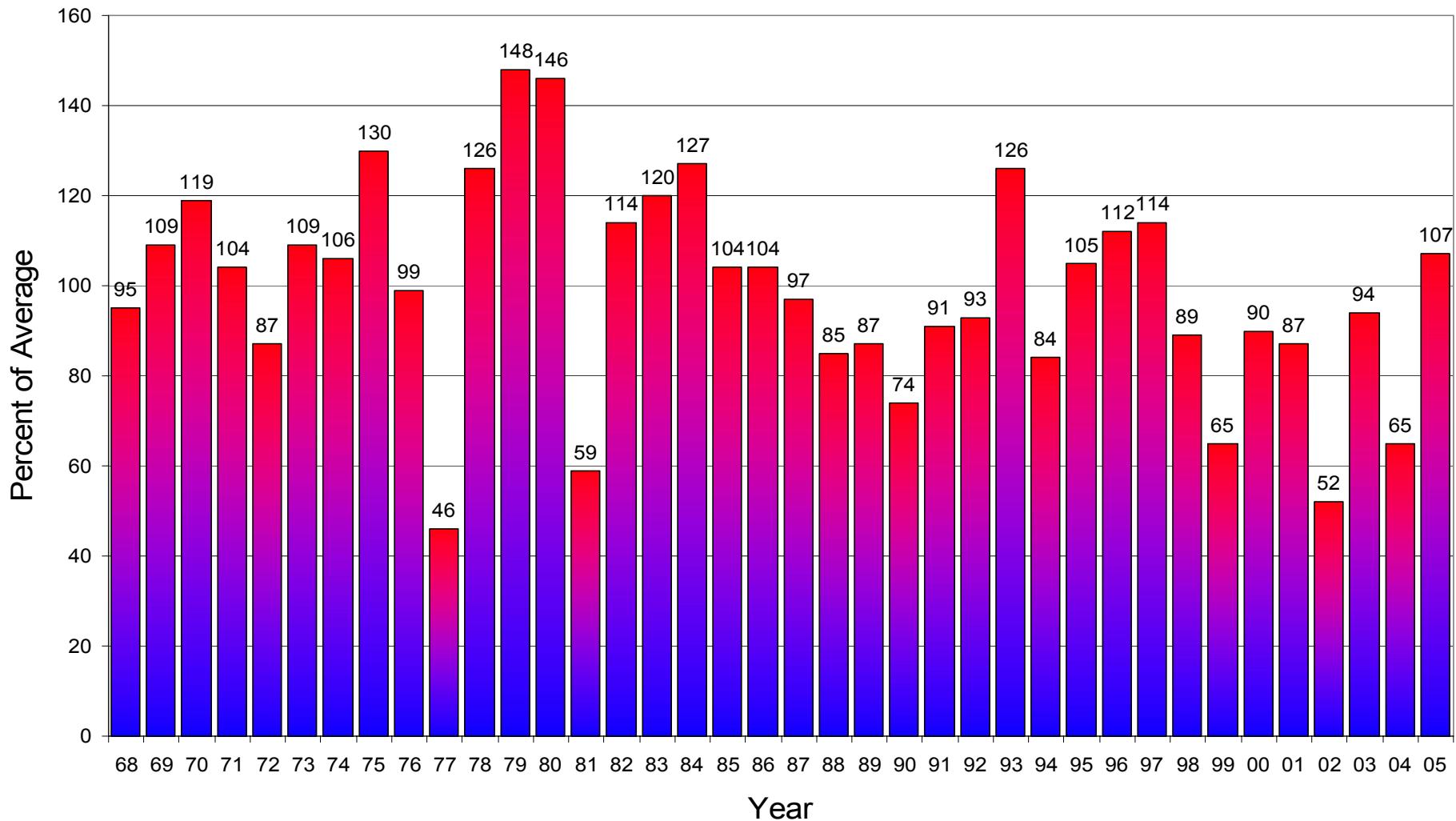
■ JANUARY ■ FEBRUARY ■ MARCH ■ APRIL ■ MAY ■ JUNE



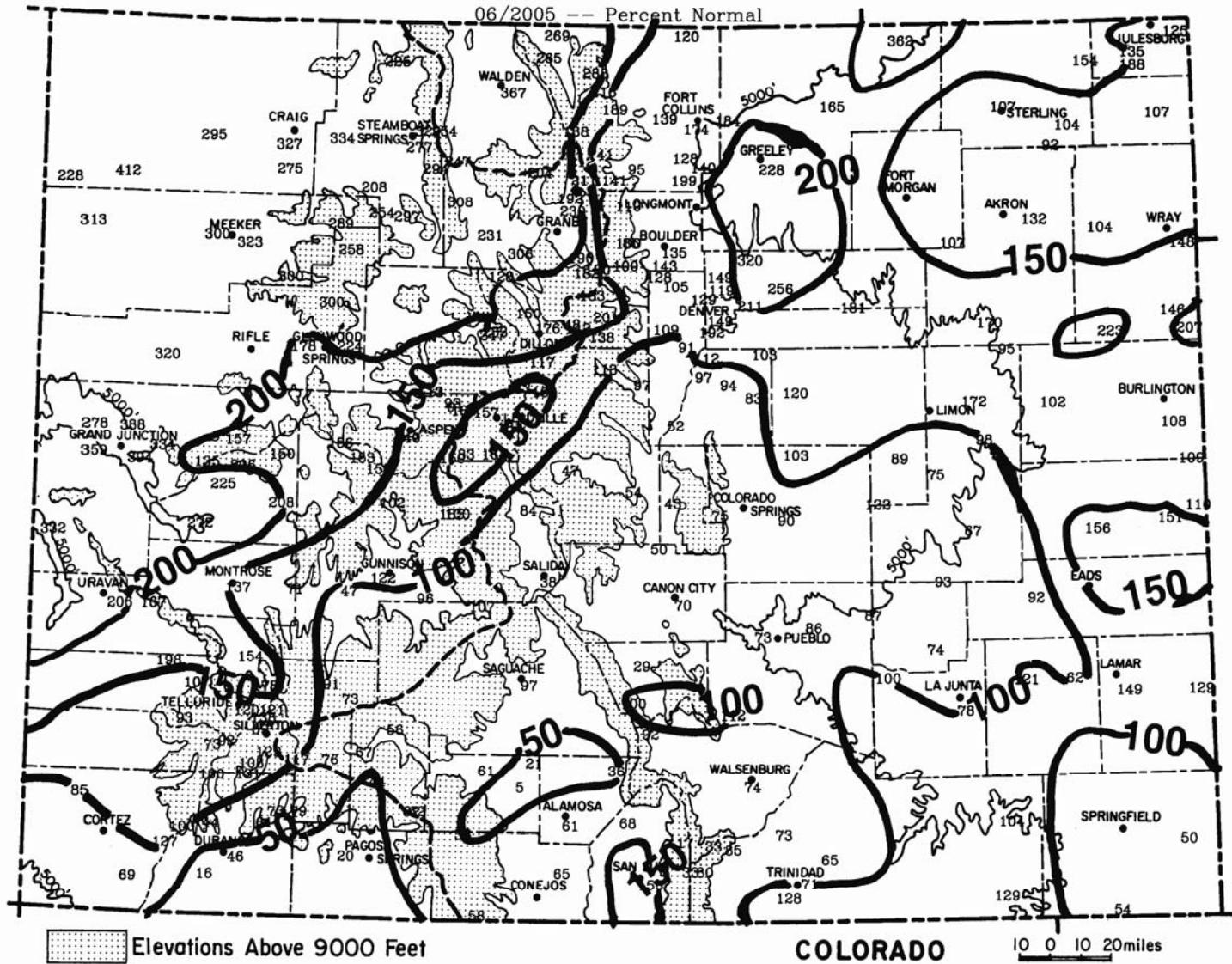
*Includes Animas, Dolores, San Miguel Basins

April 1 Snowpack History

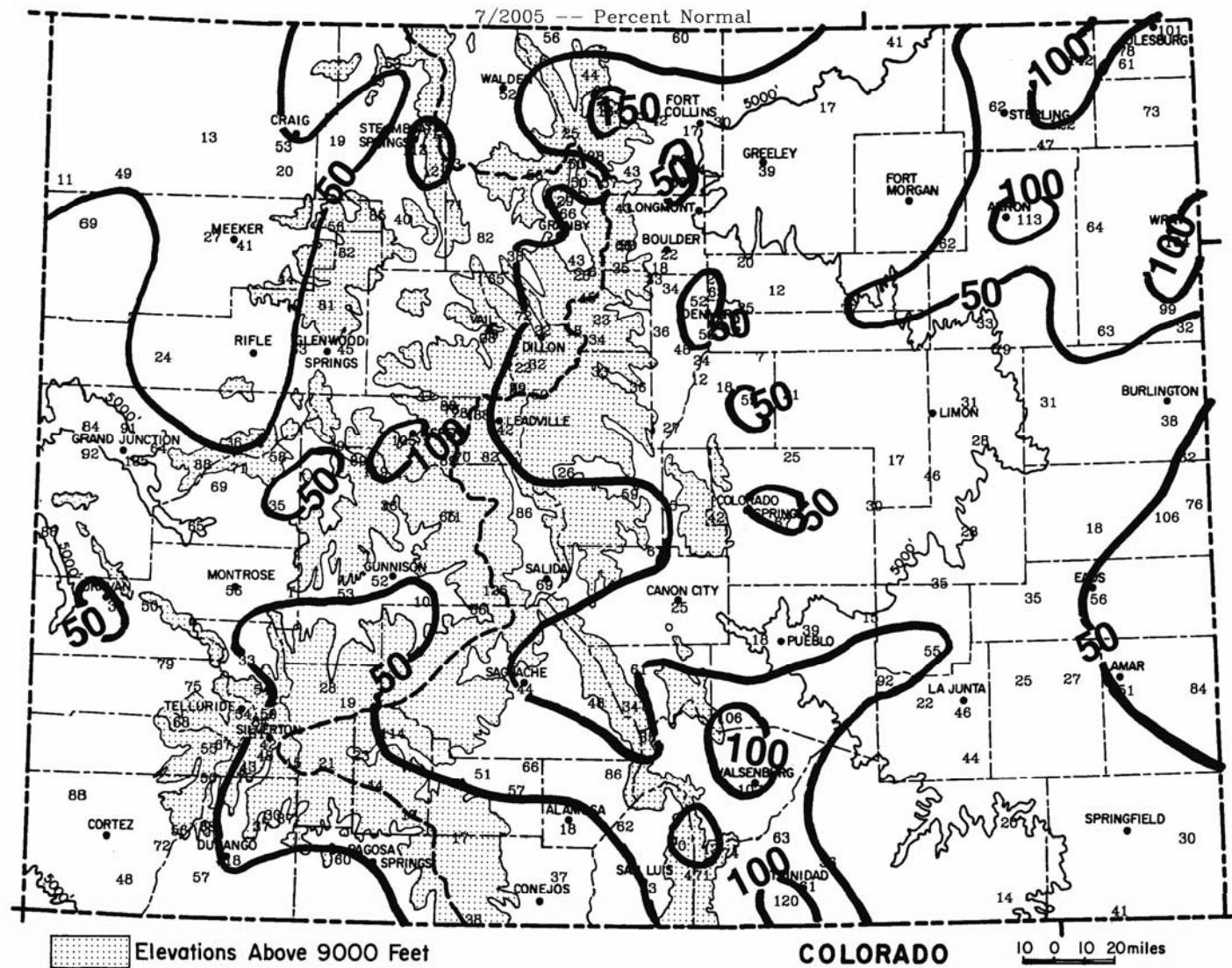
APRIL 1 SNOWPACK
COLORADO STATEWIDE



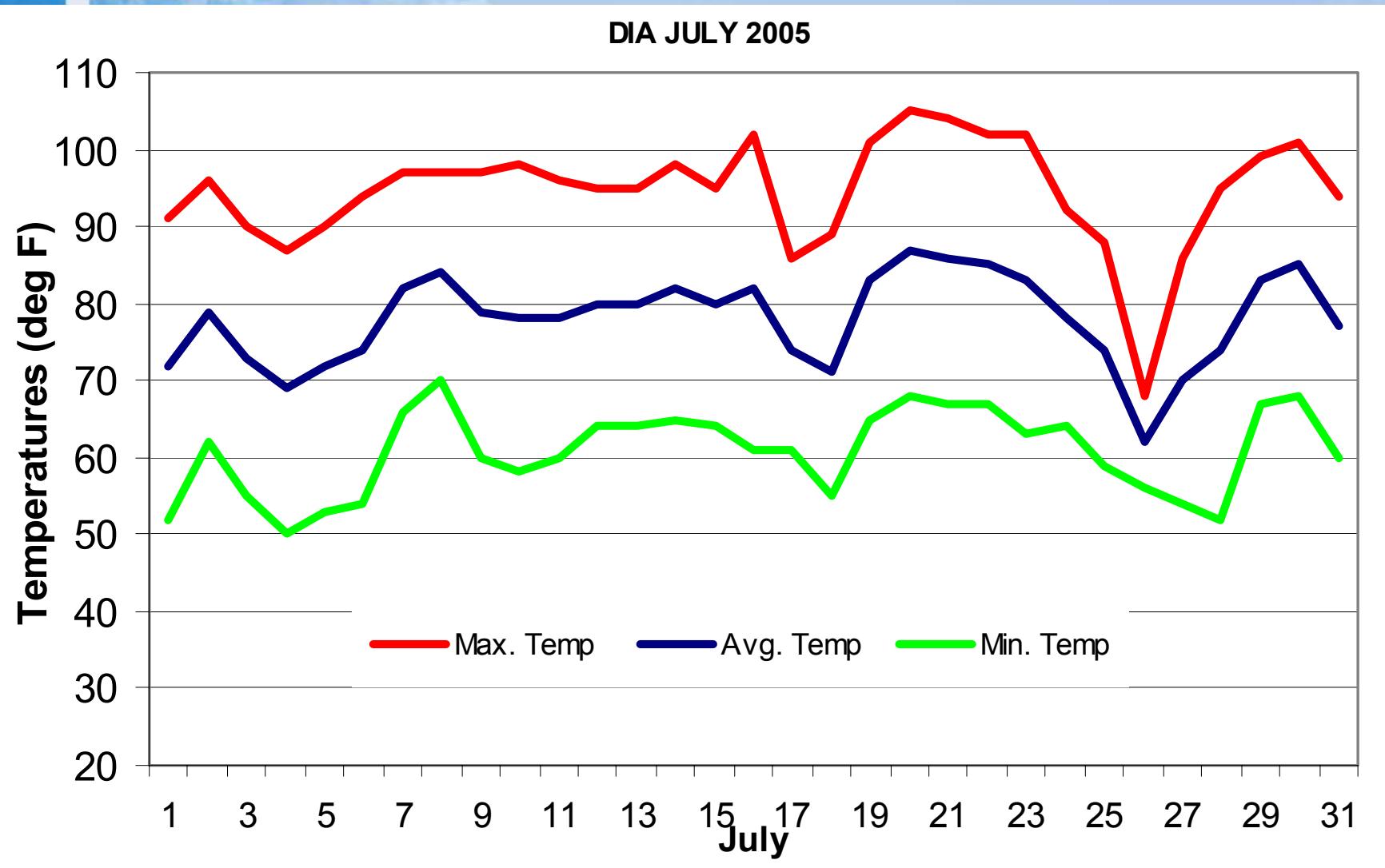
June 2005 % of Average



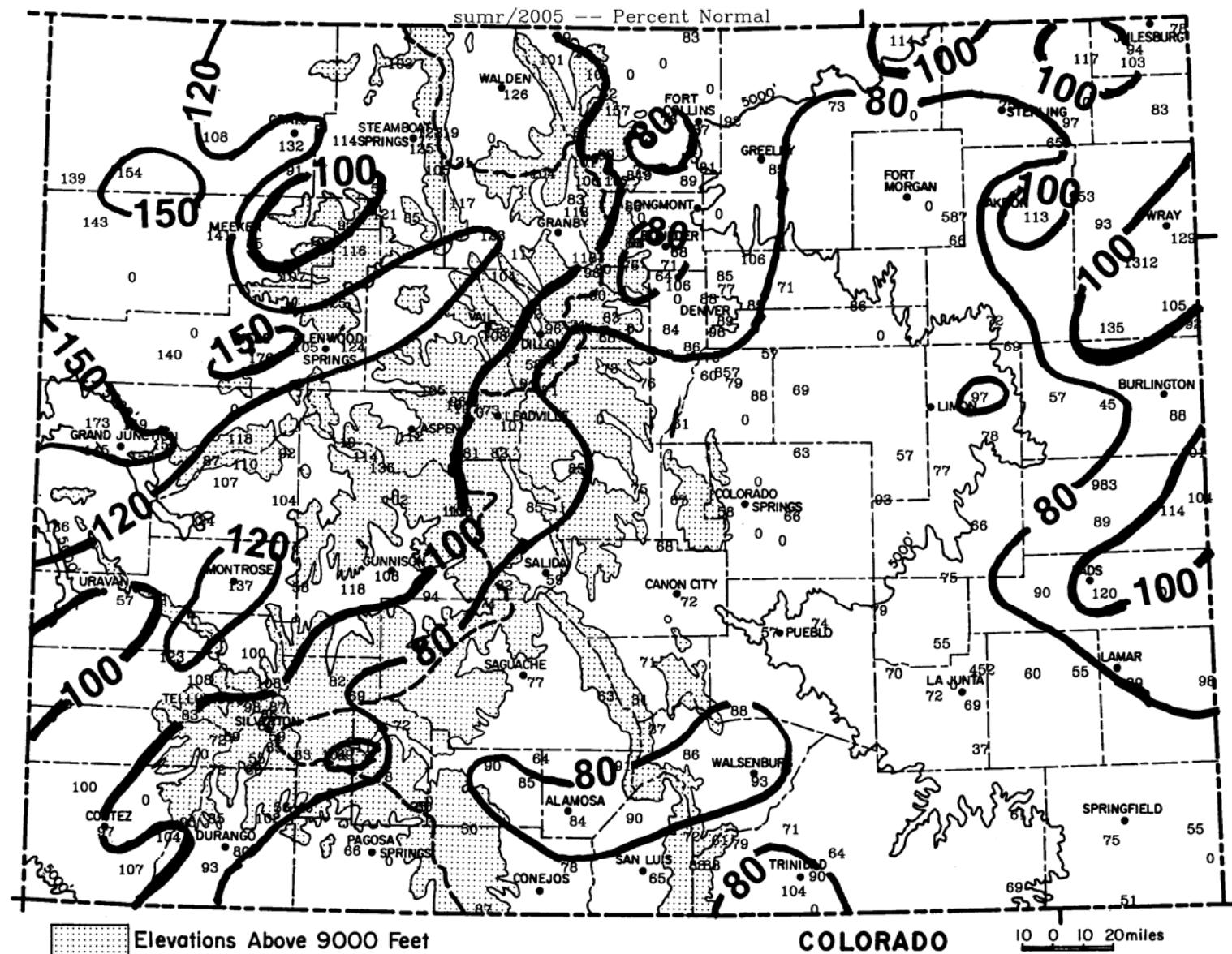
July 2005 % of Average



July 2005 Daily Temperatures

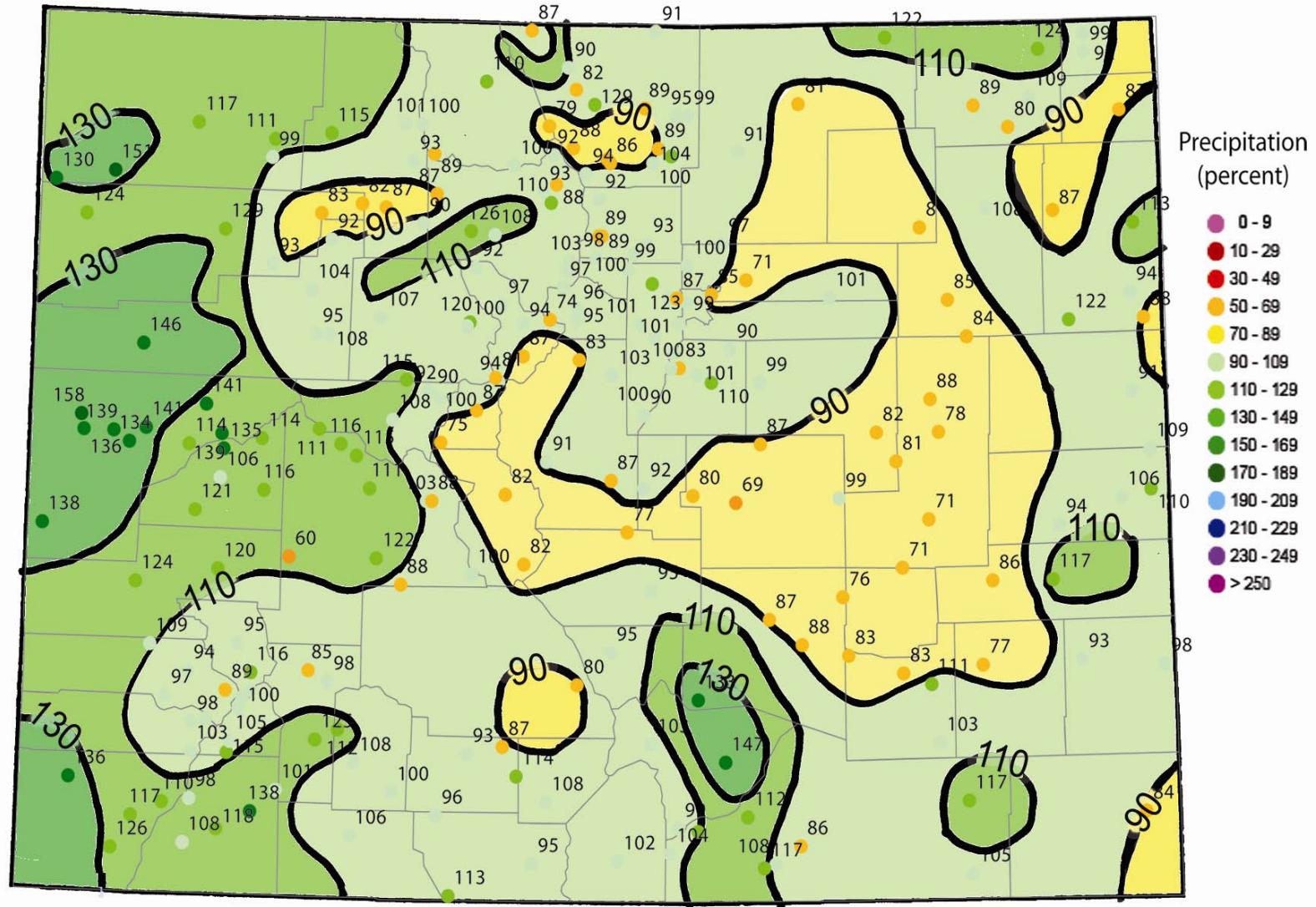


Summer (May-Sep) 2005 Growing Season



2005 Water Year Precipitation

COLORADO

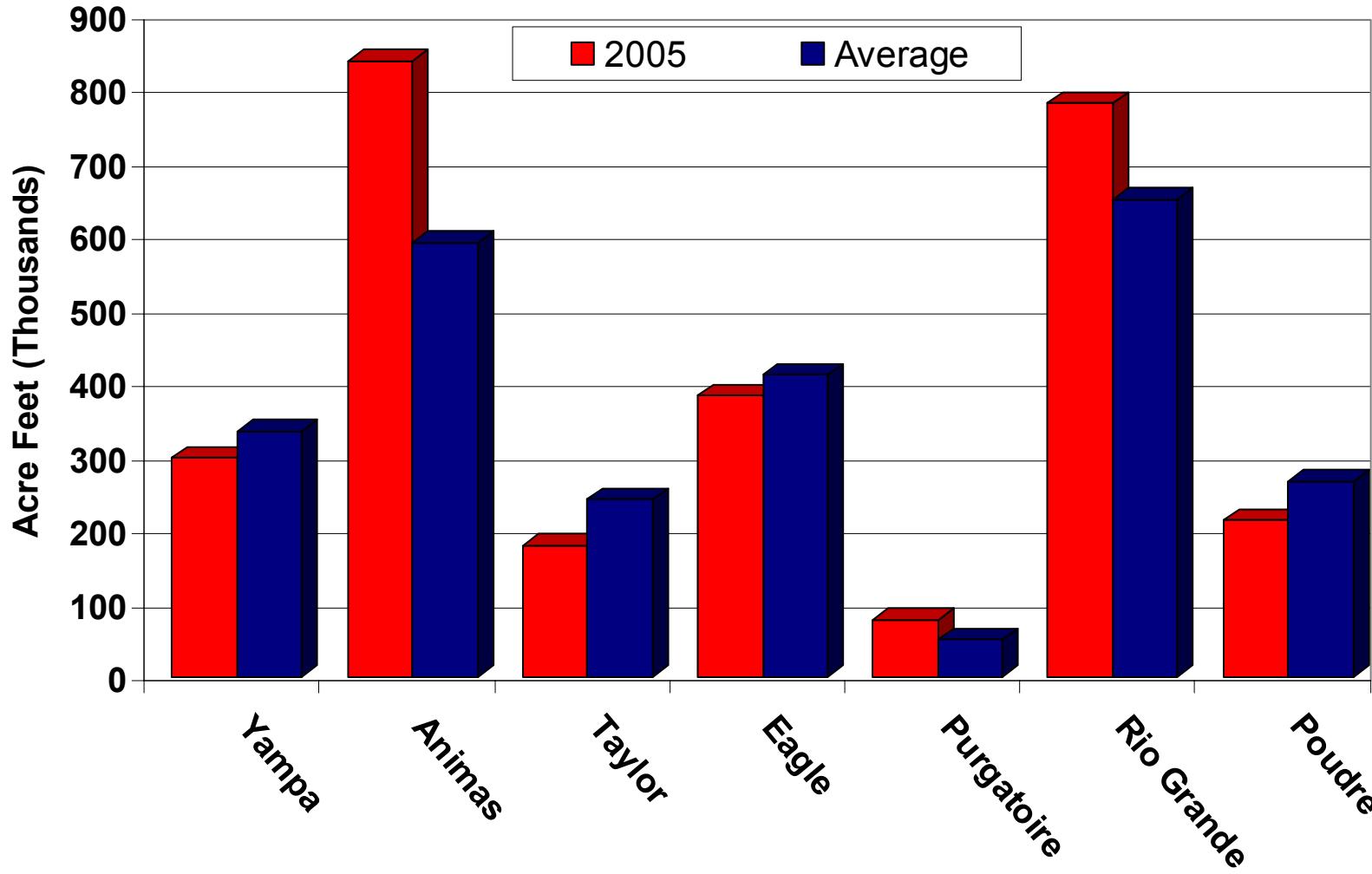


Water Year 2005 (Oct 04 - Sep 05) precipitation as a percent of the 1971-2000 average.

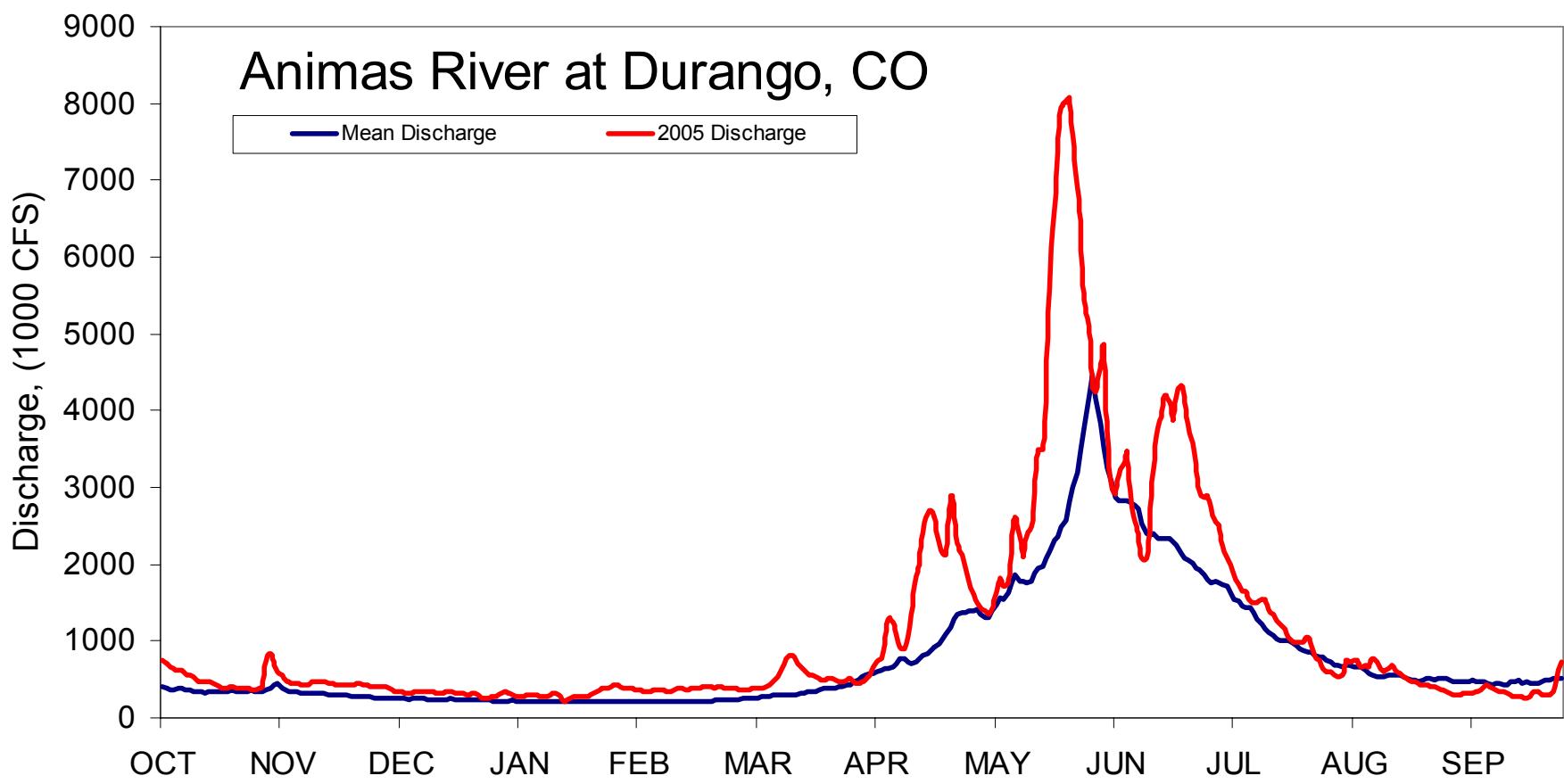
2005 Streamflow

- Large runoff southern Colorado
- Northern rivers below average but better than predicted
- Record daily maximum flows on Colorado River late September

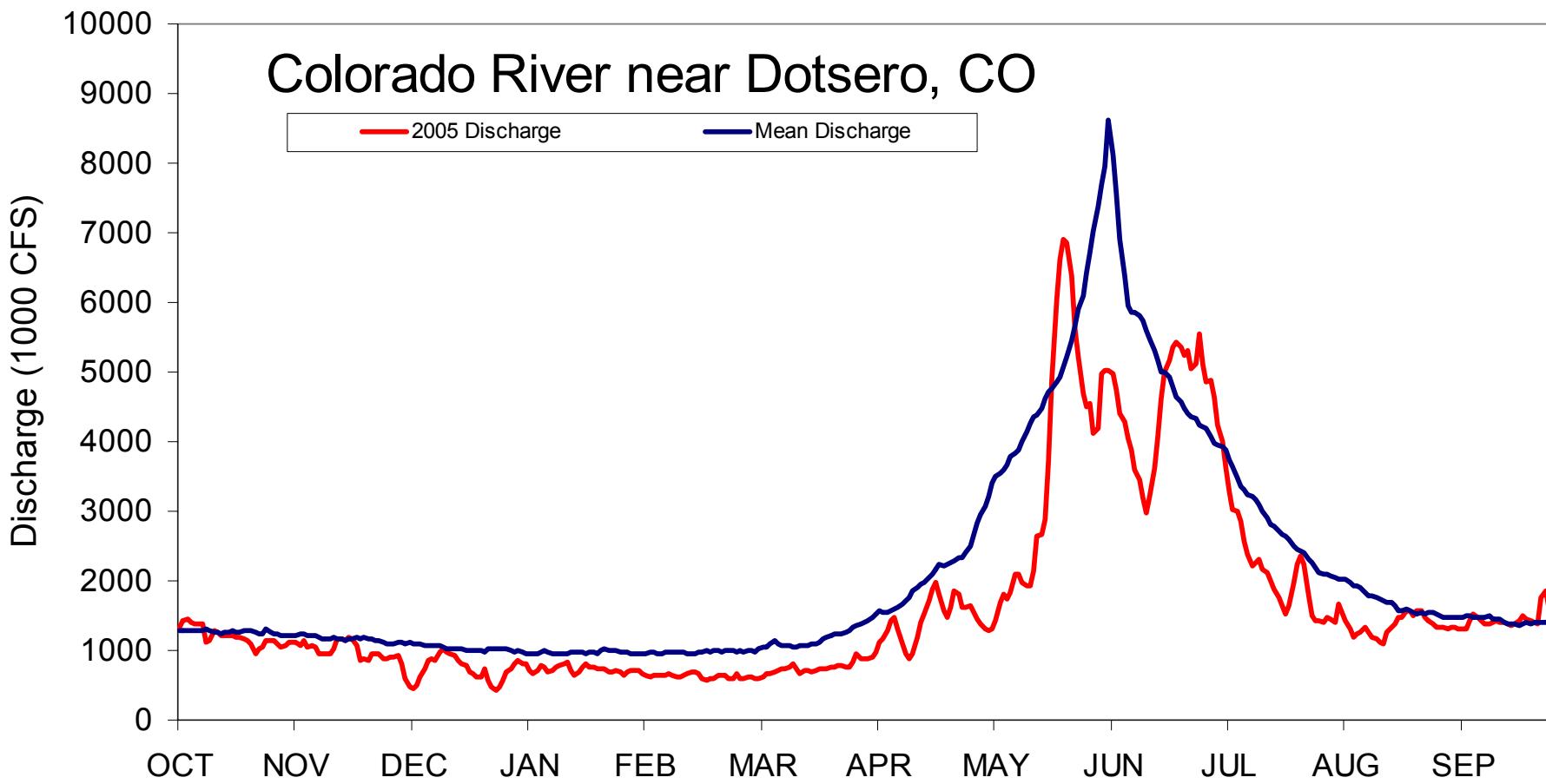
Streamflow vs. Average



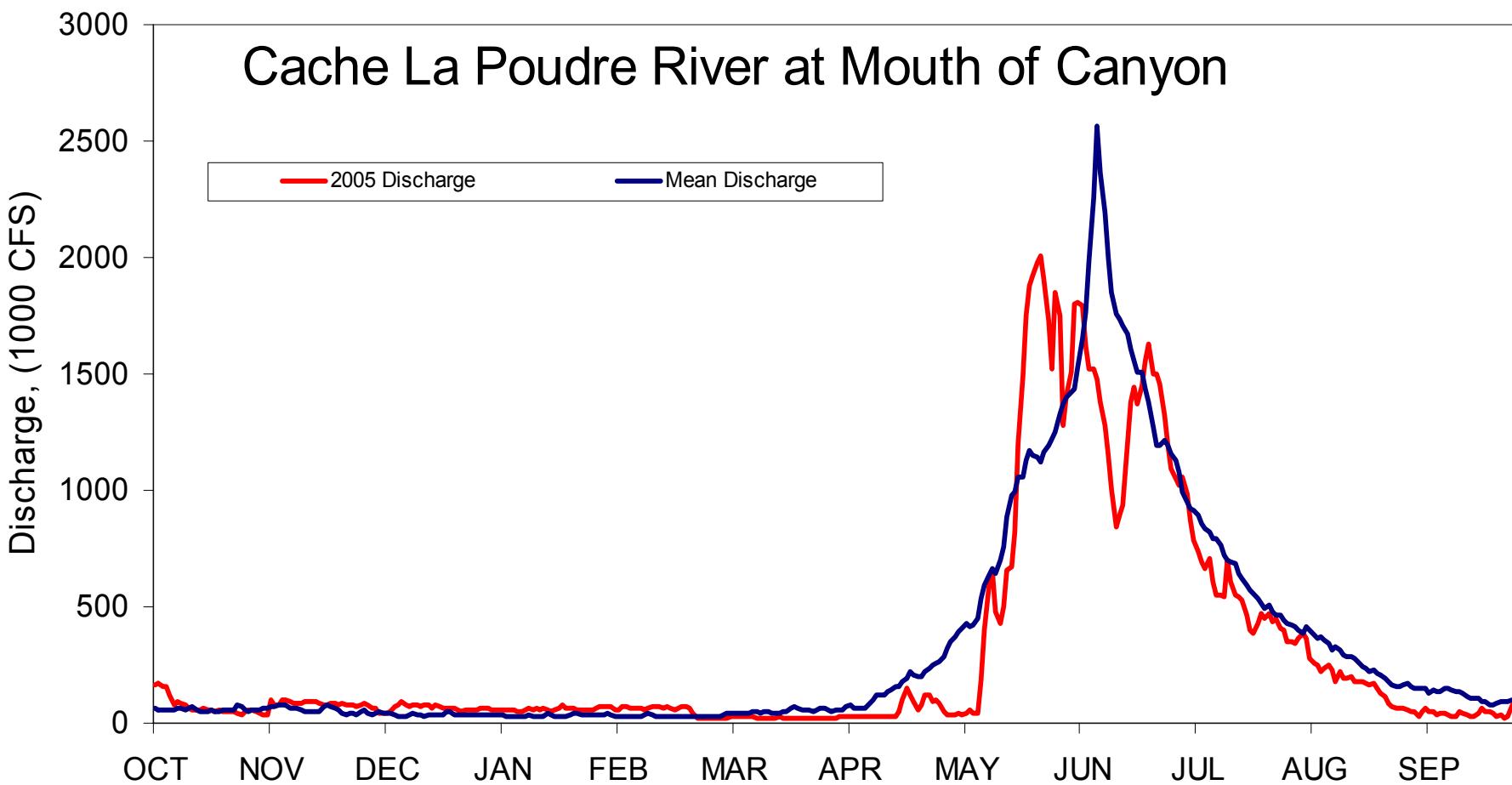
Animas River Streamflow



Colorado River Streamflow



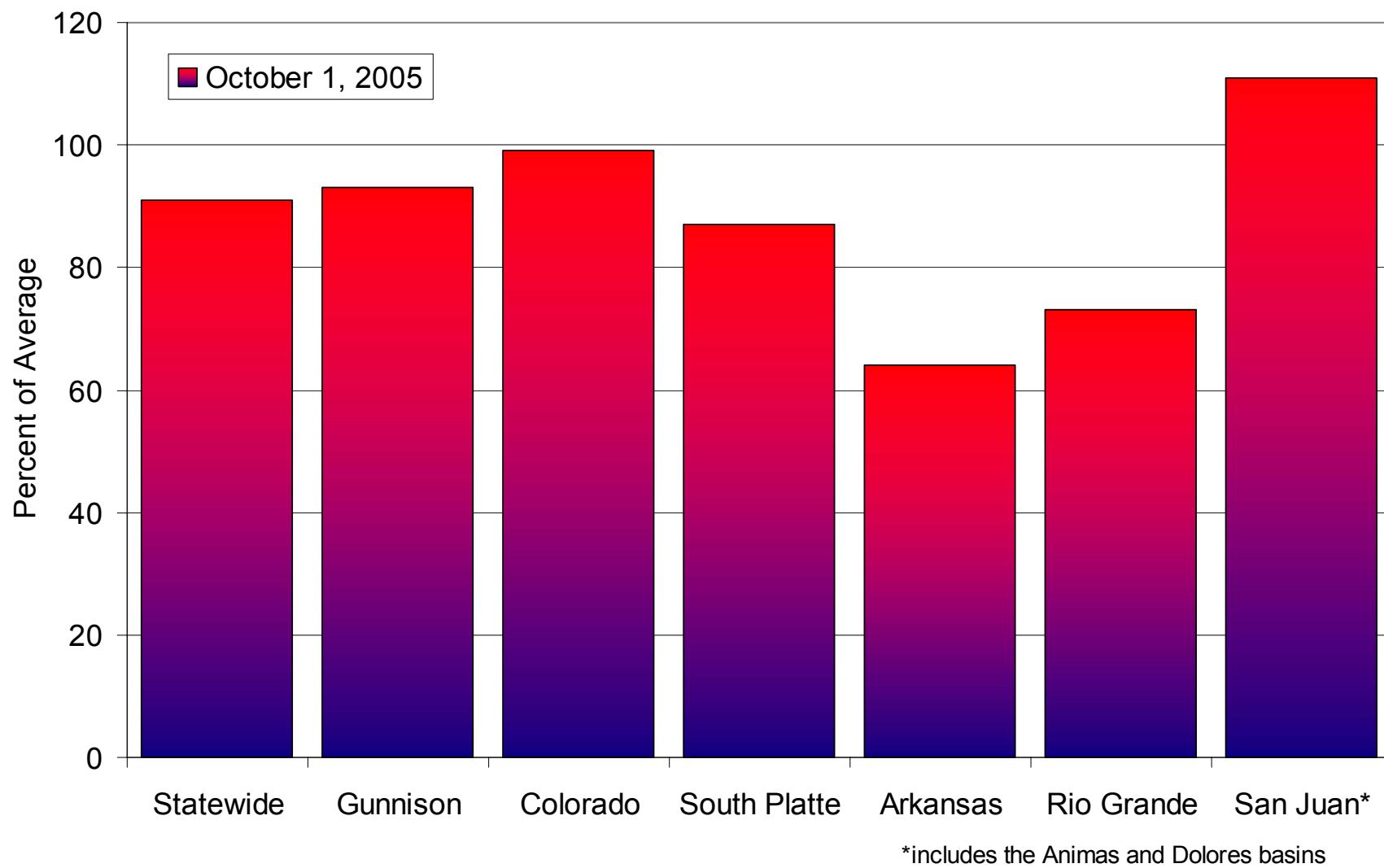
Cache La Poudre River Streamflow



2005 Reservoir Storage

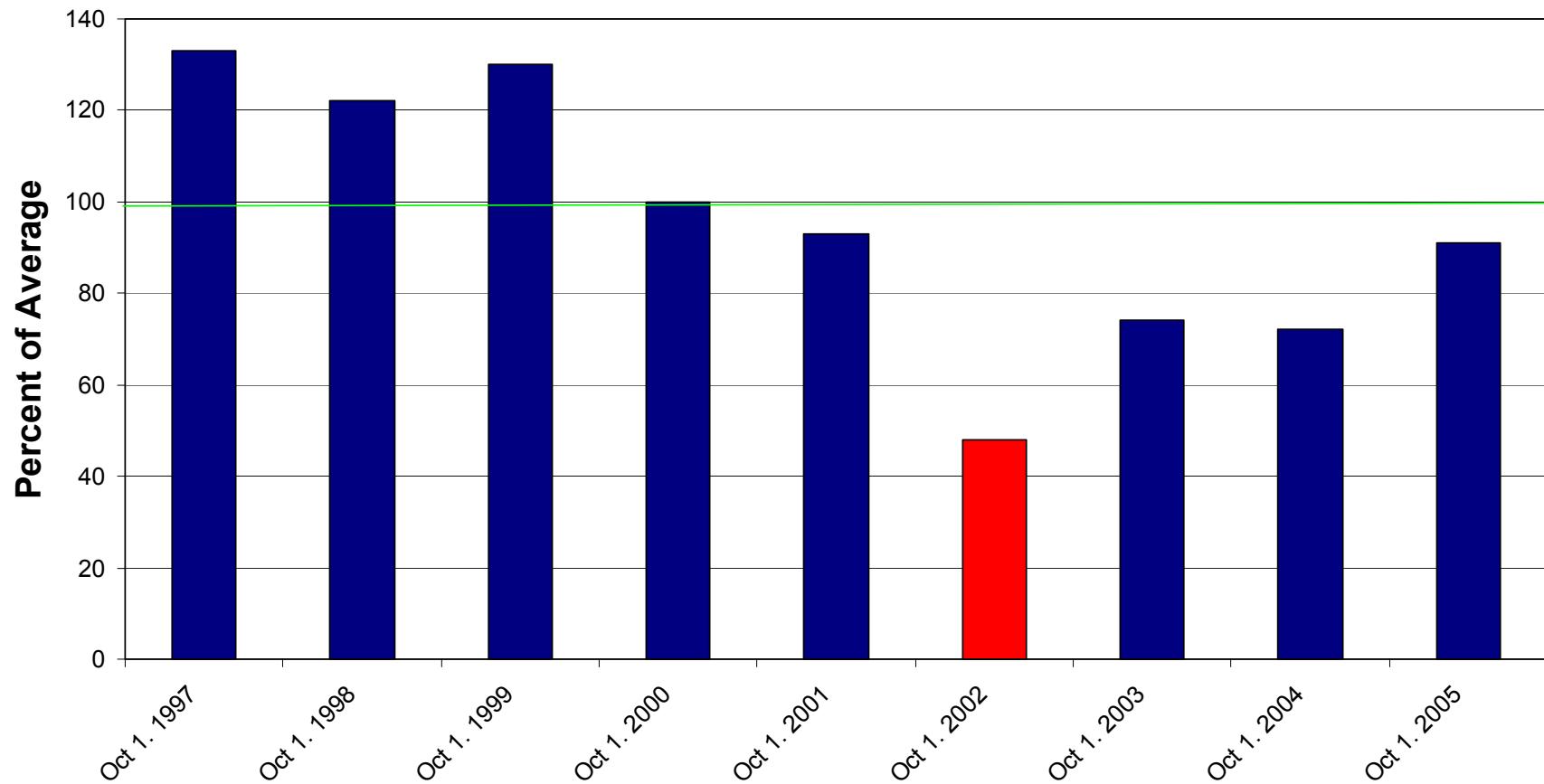
- Continued improvement since 2002 especially in southern Colorado
- Levels still remain below long-term averages

Reservoir Storage by Basin for Oct 1, 2005



Colorado Reservoir Storage

Colorado Statewide Reservoir Levels on October 1st
for Years 1997- 2005



WY 2005 Summary

- Warm winter
- Big snows southern Colorado
- June rains northwest Colorado very helpful
- July heatwave!
- Dry summer
- Excellent runoff southern Colorado
- Reservoir's continue to improve

CoCoRaHS – Increasingly a useful source of local precipitation data

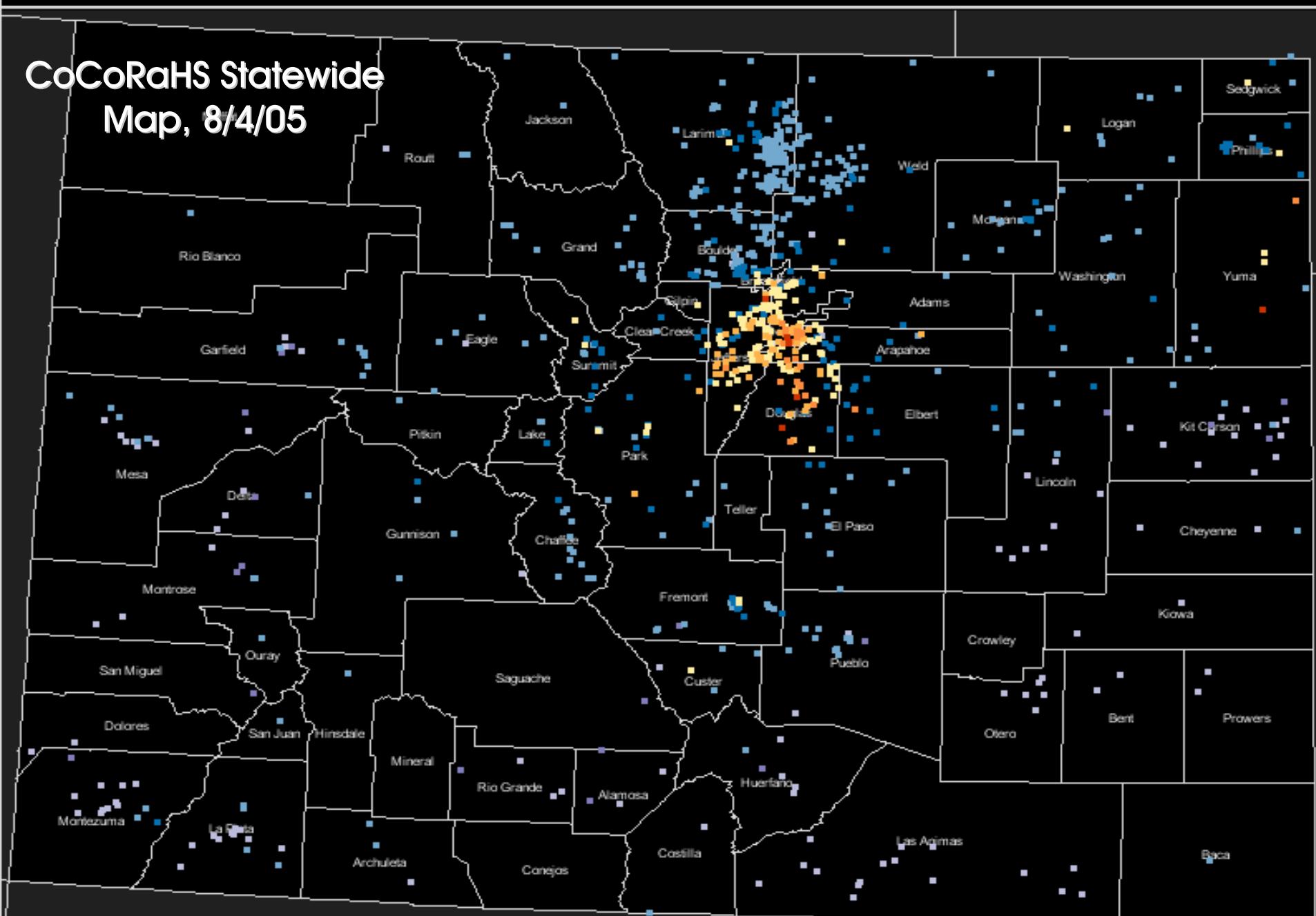


Daily Precipitation (inches x.xx), for the 24 hour period ending ~7:00 am

Colorado 8/4/2005

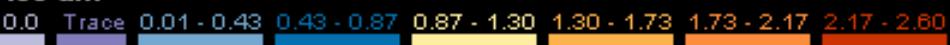
0.0 Trace 0.01 - 0.43 0.43 - 0.87 0.87 - 1.30 1.30 - 1.73 1.73 - 2.17 2.17 - 2.60

CoCoRaHS Statewide Map, 8/4/05

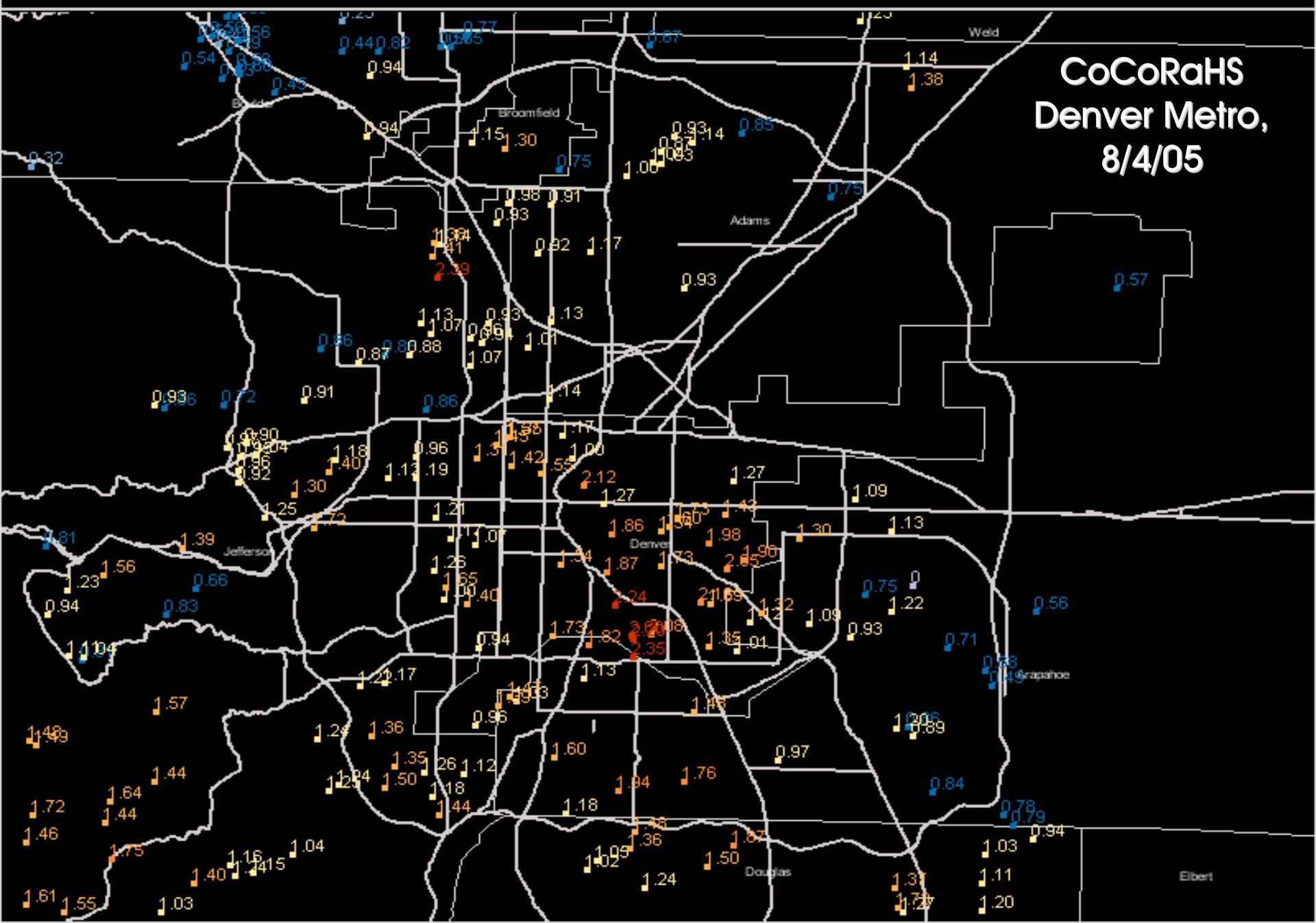


Daily Precipitation (inches x.xx), for the 24 hour period ending ~7:00 am

Denver Metro, Colorado 8/4/2005

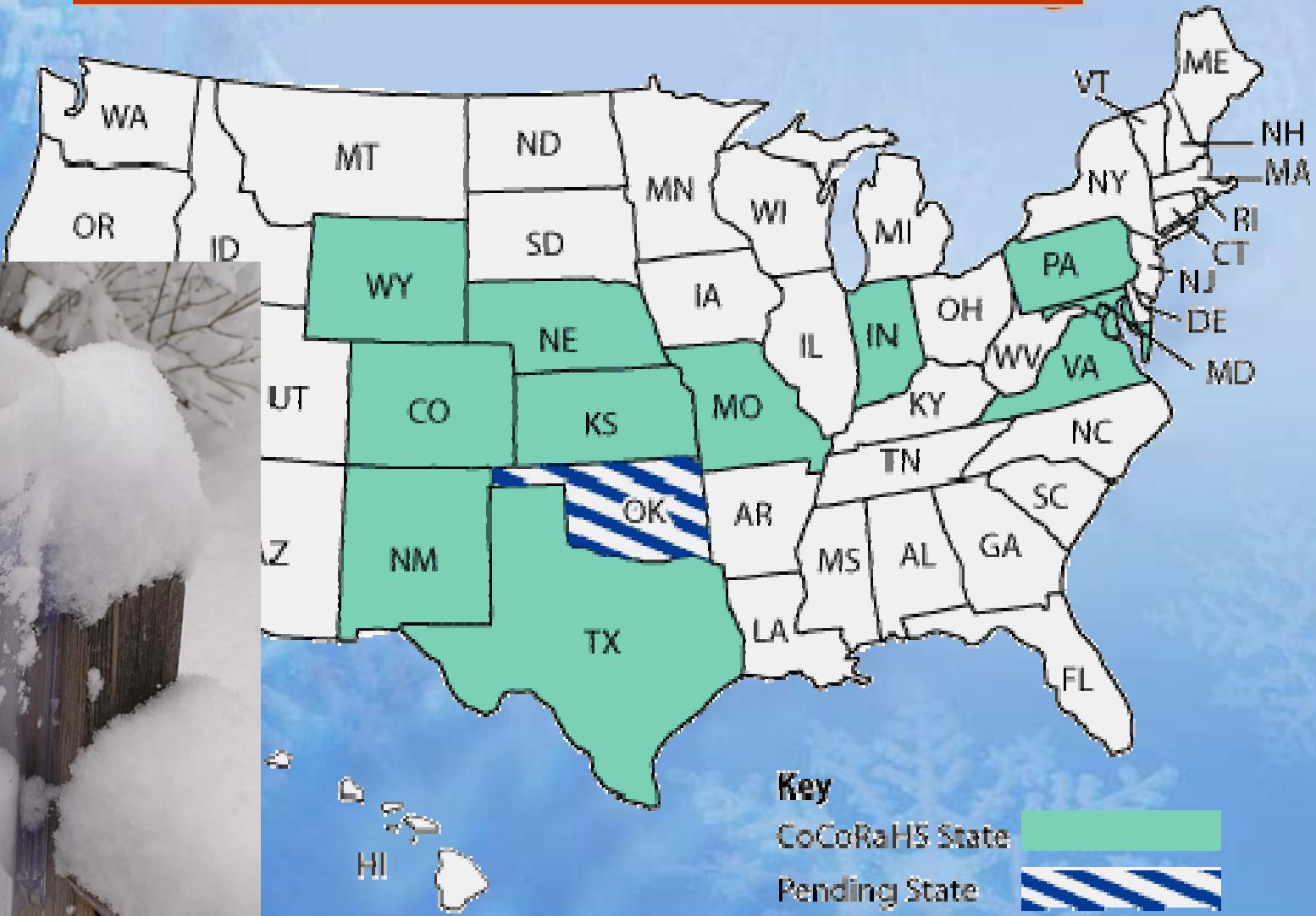


CoCoRaHS
Denver Metro,
8/4/05



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<http://www.cocorahs.org>



Natural Resources Conservation Service

Snow Survey Office

- Access to snowpack, precipitation, reservoir data and streamflow forecast information available at:

<http://www.co.nrcc.usda.gov/snow/index.html>

Colorado Climate Center

Colorado State University

- Data and Power Point Presentations available for downloading
- <http://ccc.atmos.colostate.edu>
click on “Drought”
then click on “Presentations”