

Climate Update

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Colorado Climate Center

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Colorado State University

Presented to
Water Availability Task Force
January 22, 2009, CDOW
Denver, CO

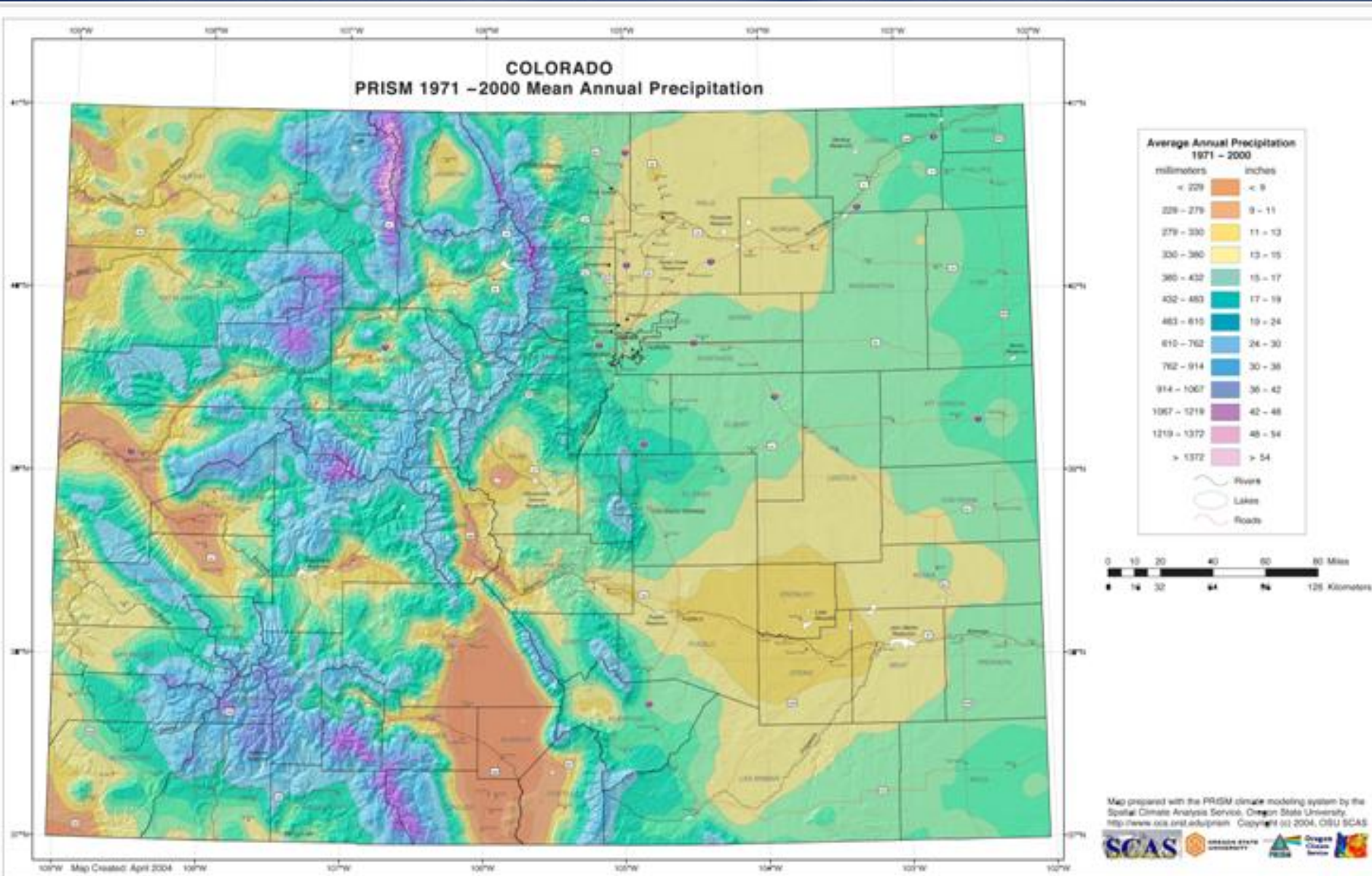
Prepared by Wendy Ryan



A Little Background on our Climate

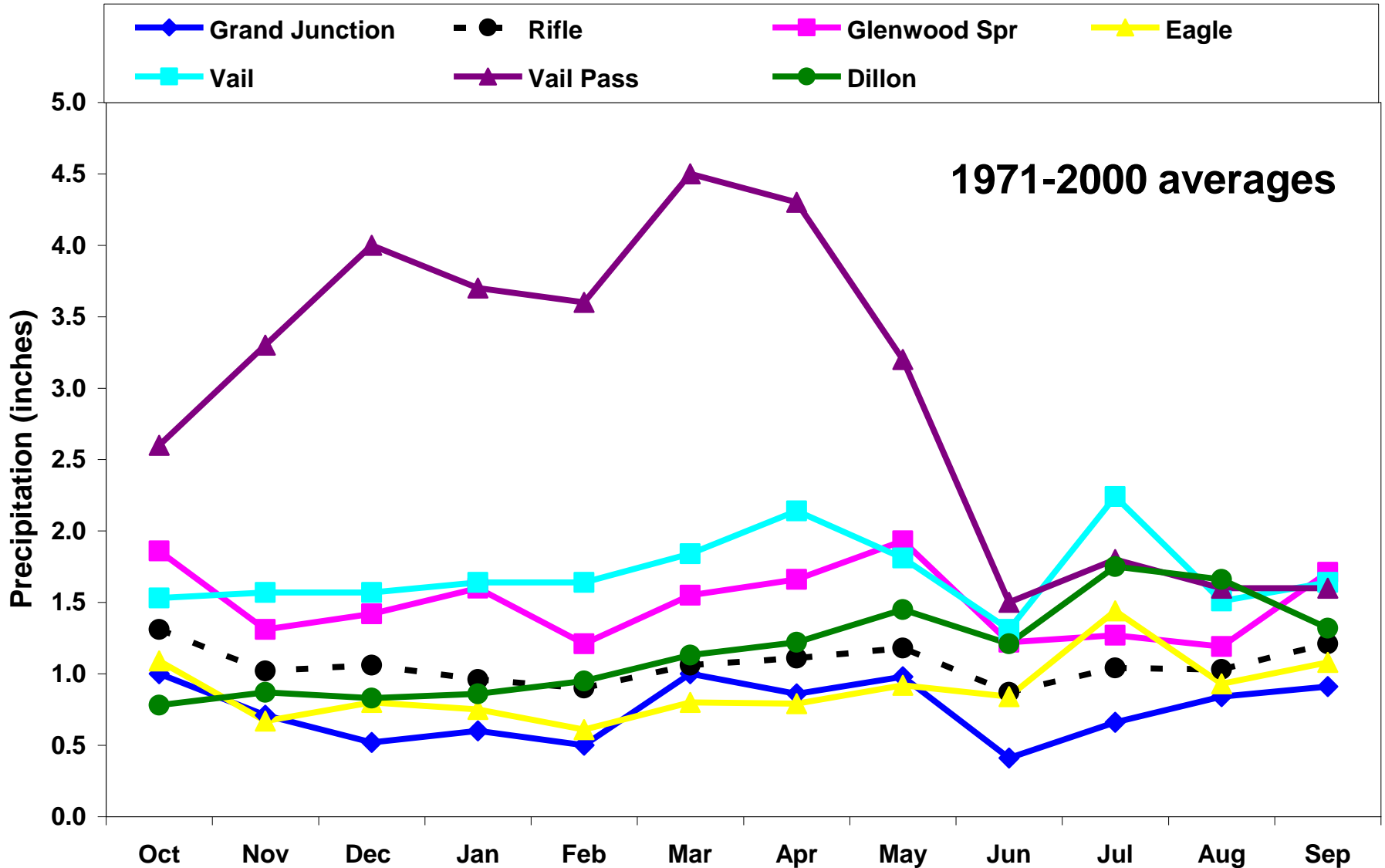


Colorado Average Annual Precipitation Map



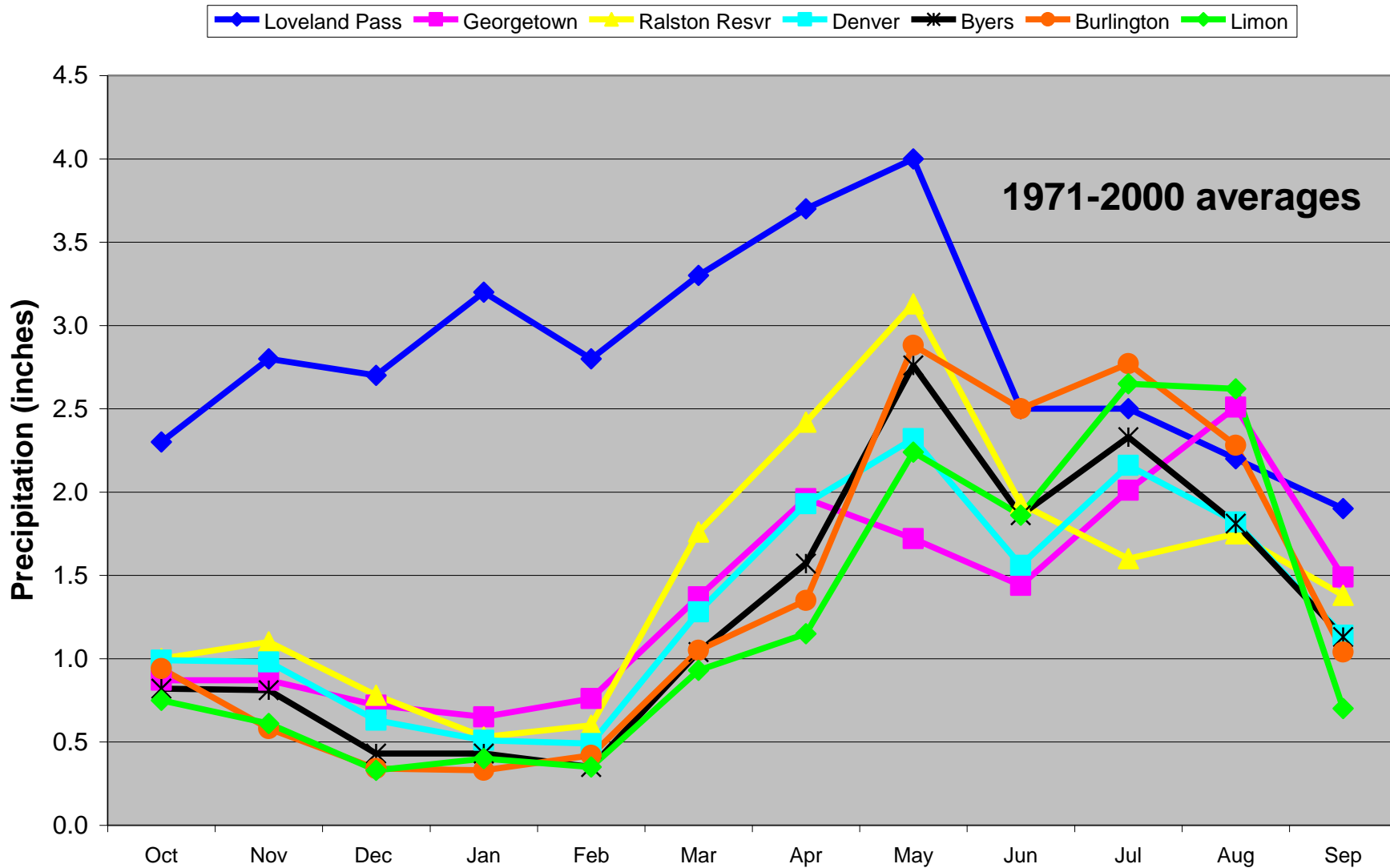
Average Monthly Precipitation along the I-70 Corridor

Water Year Average Precipitation for Selected Stations in the I-70 Transect

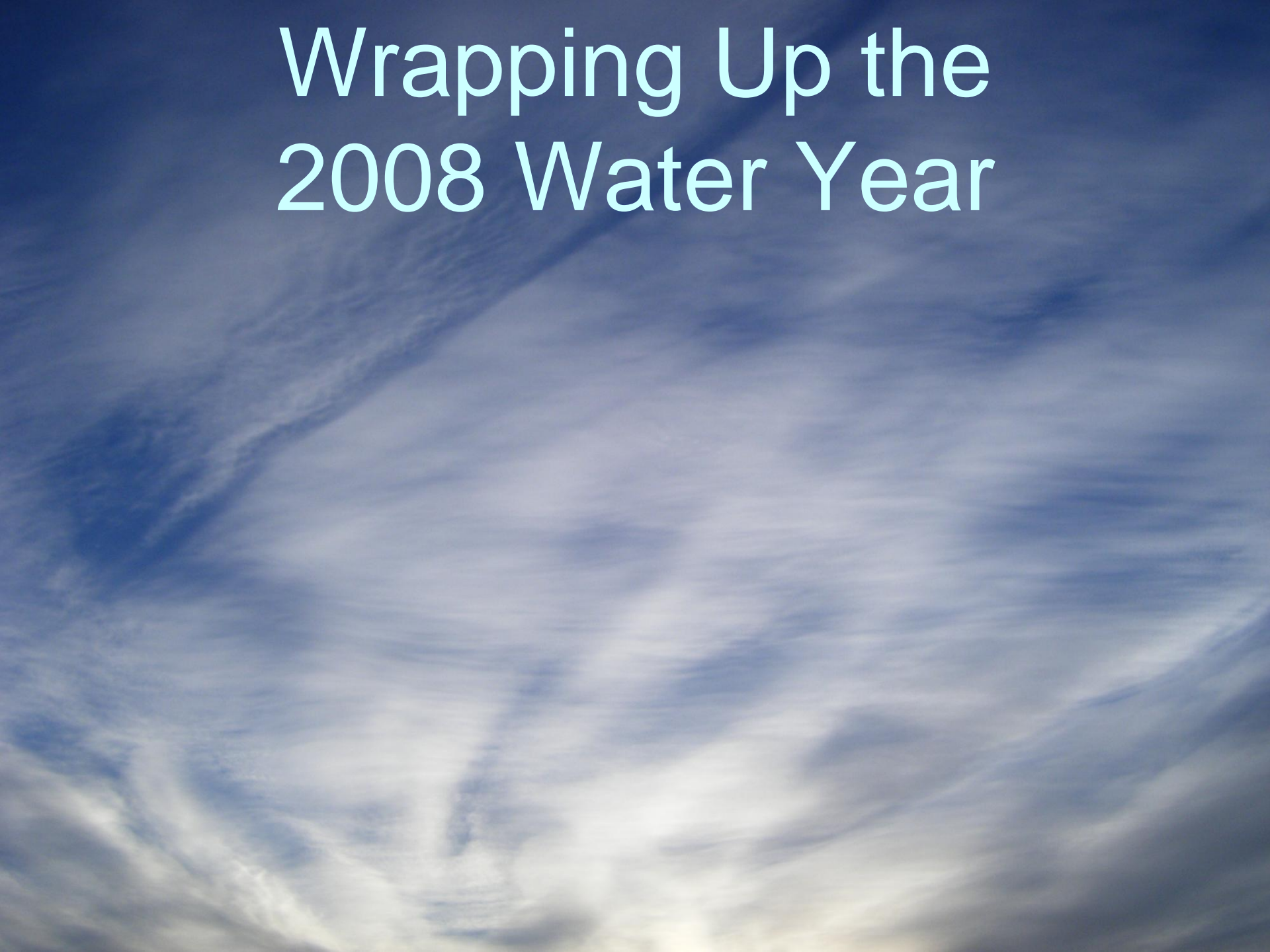


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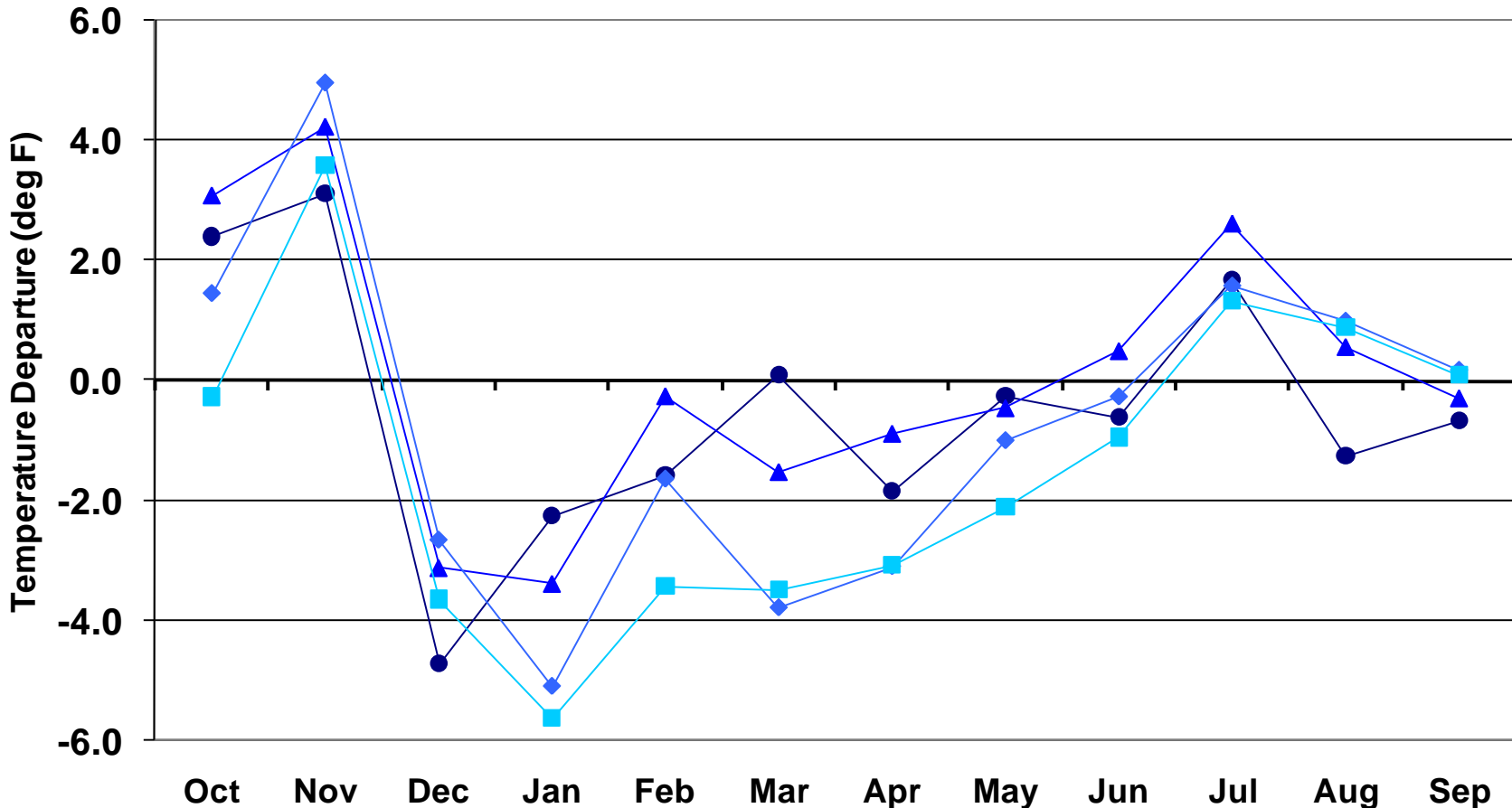


Wrapping Up the 2008 Water Year



Water Year 2008 Temperature Departures

Water Year 2008



● Eastern Plains

▲ Foothills

◆ Mountains

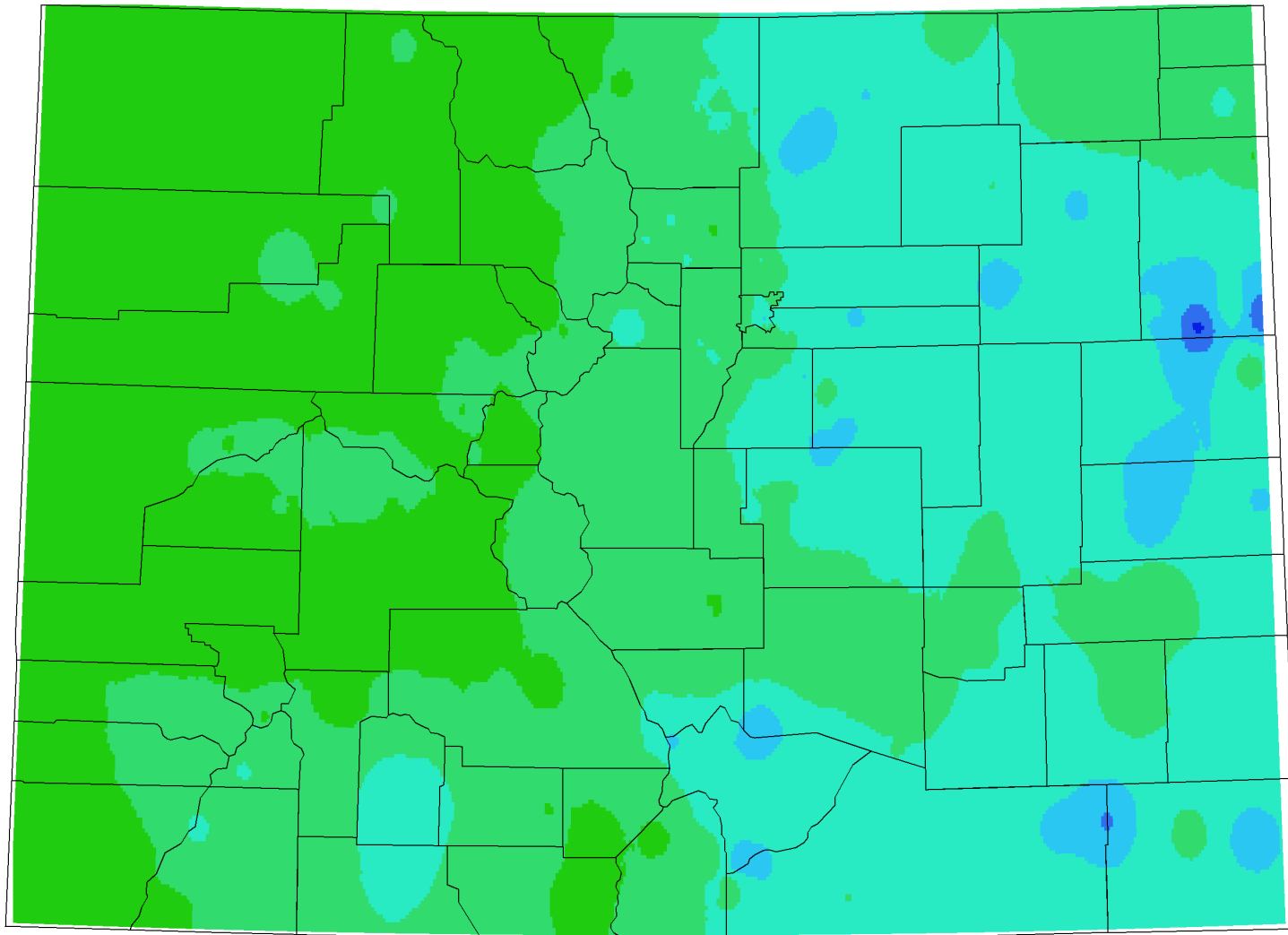
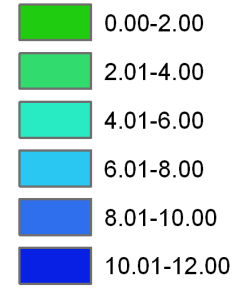
■ Western Valleys

August 2008 Precipitation

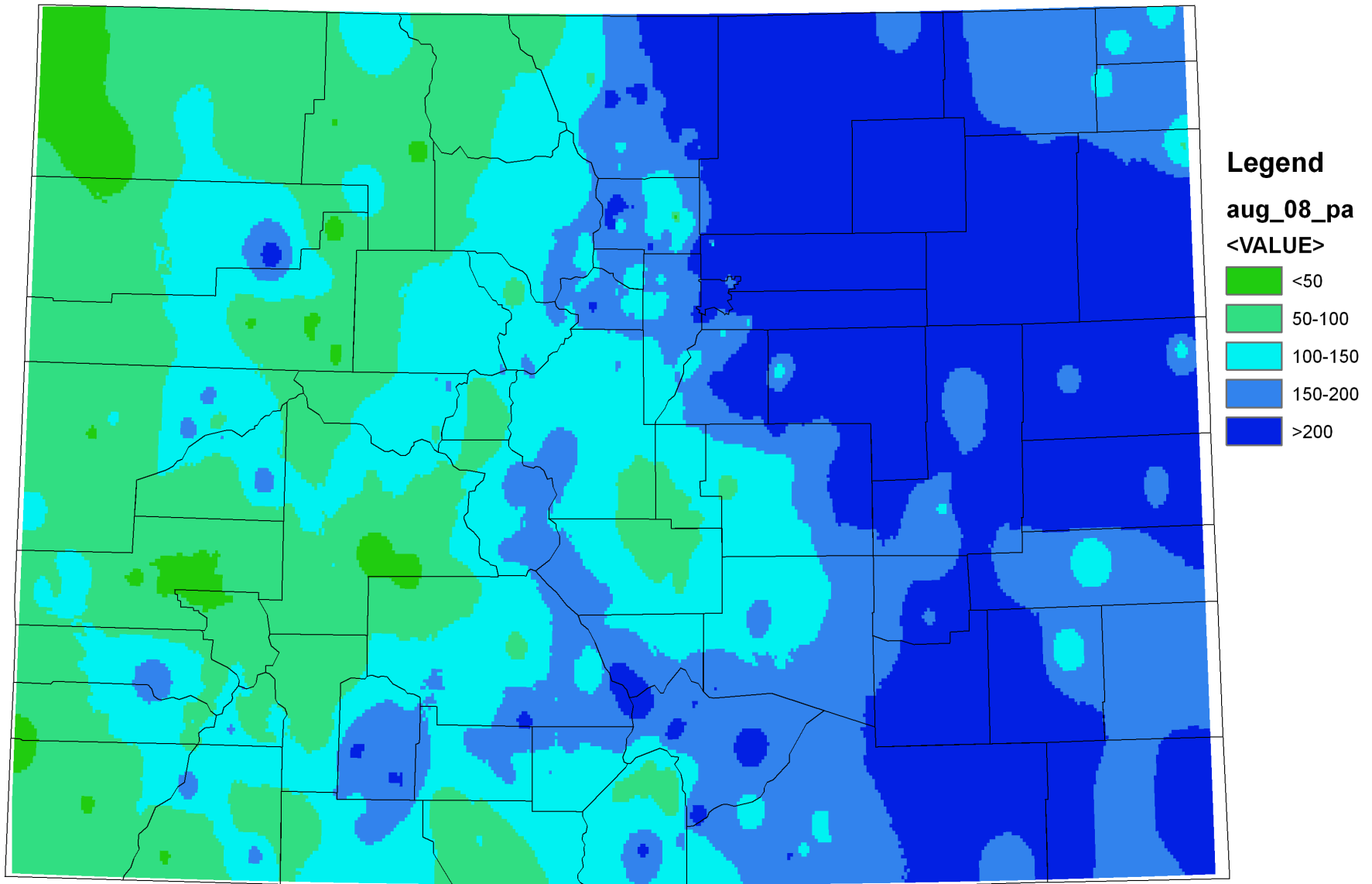
Legend

aug_08_all

Precip



August 2008 Precipitation Percent of Average

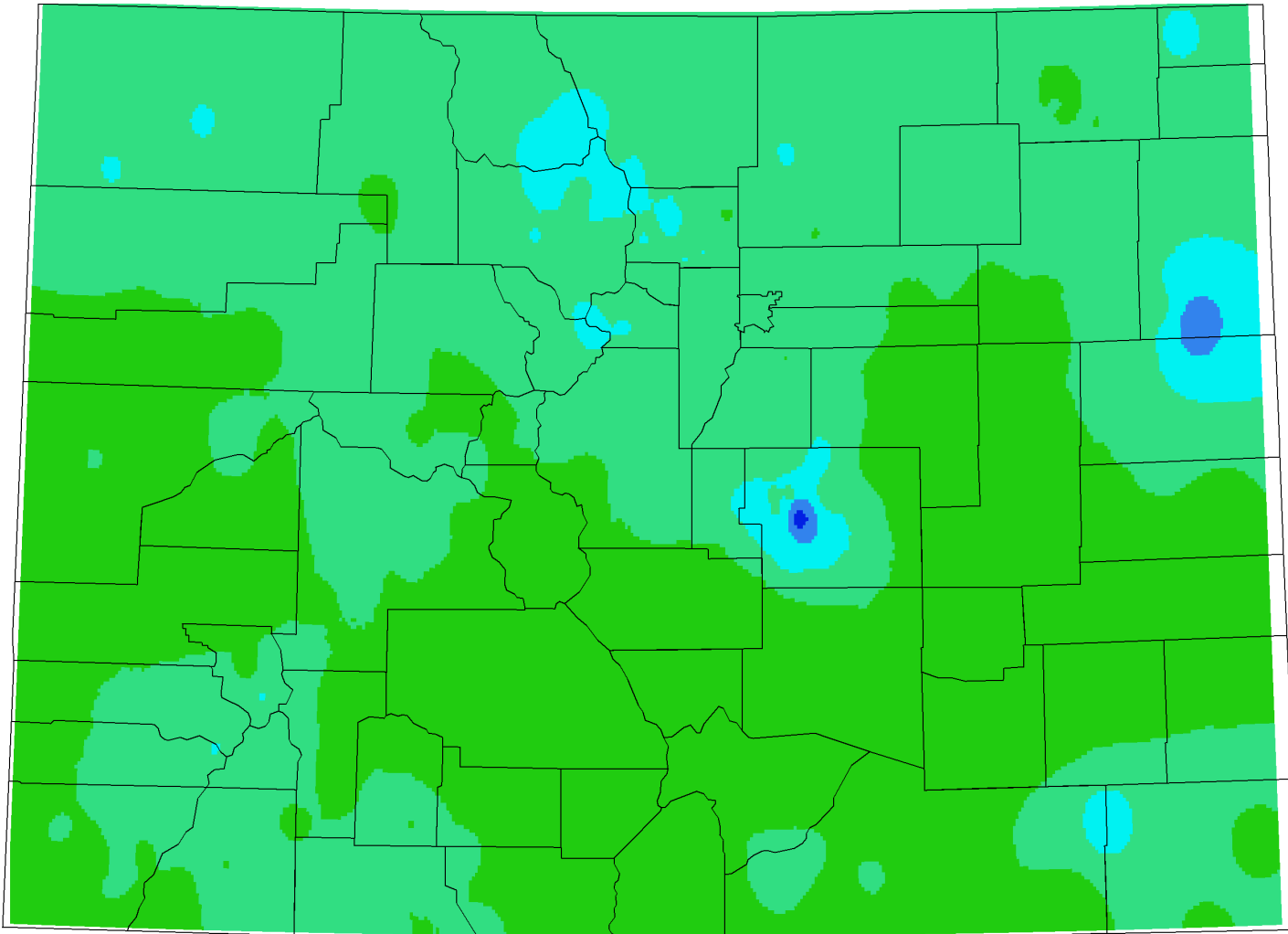
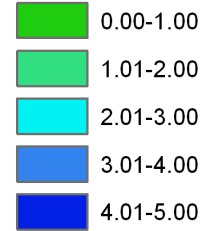


September 2008 Precipitation

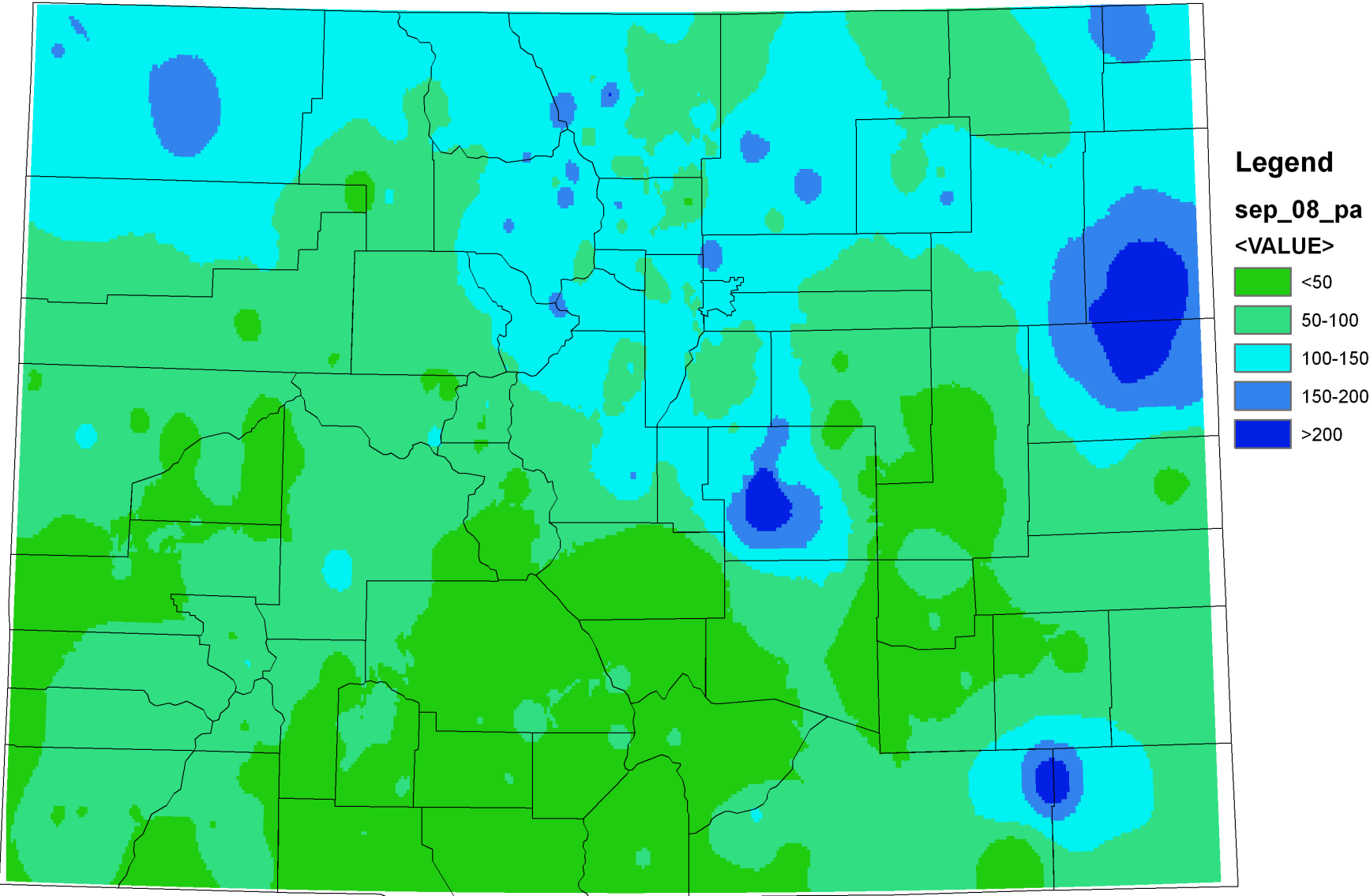
Legend

sep_08_all

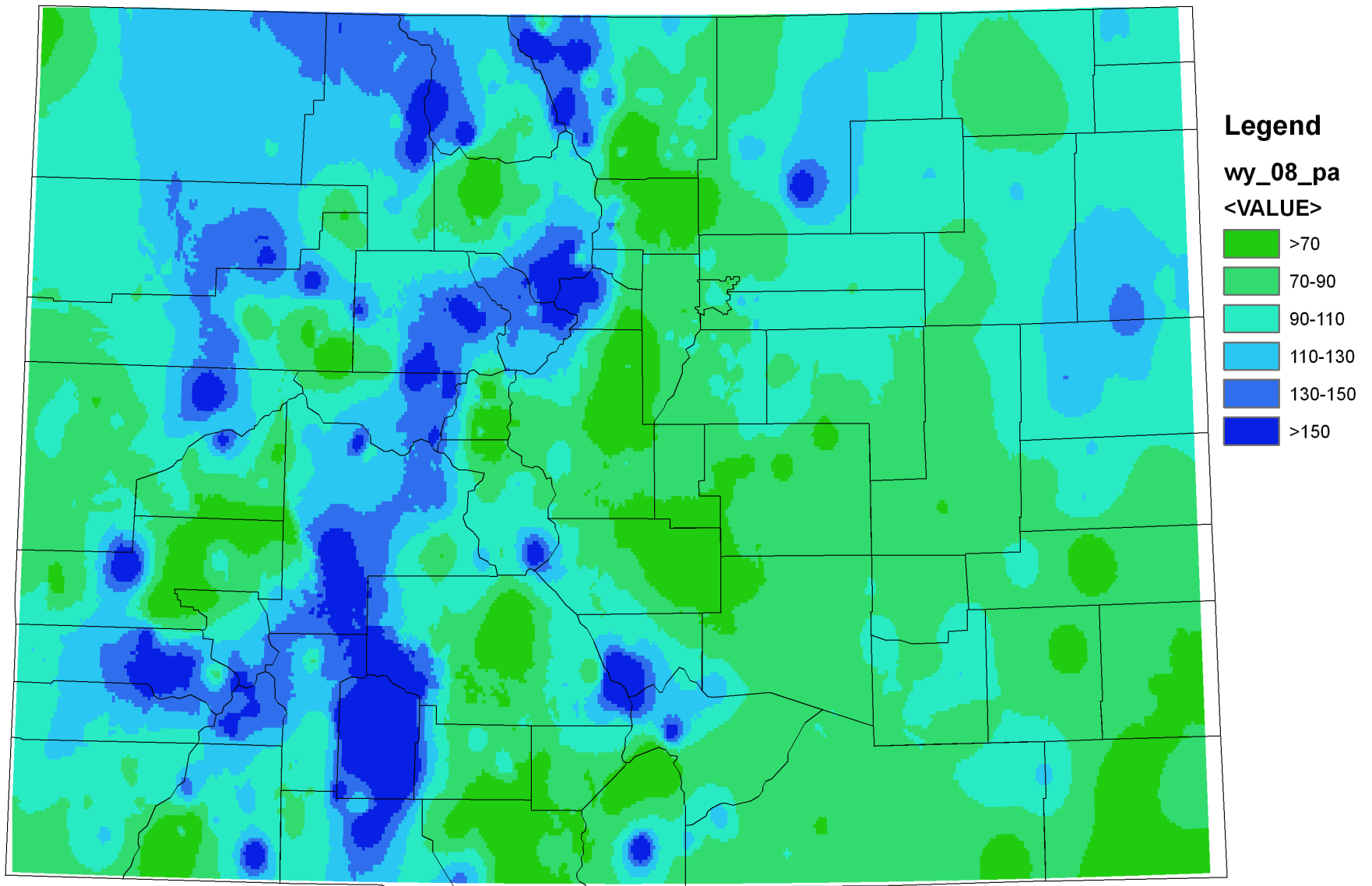
Precip



September 2008 Precipitation Percent of Average



Water Year 2008 Precipitation Percent of Average

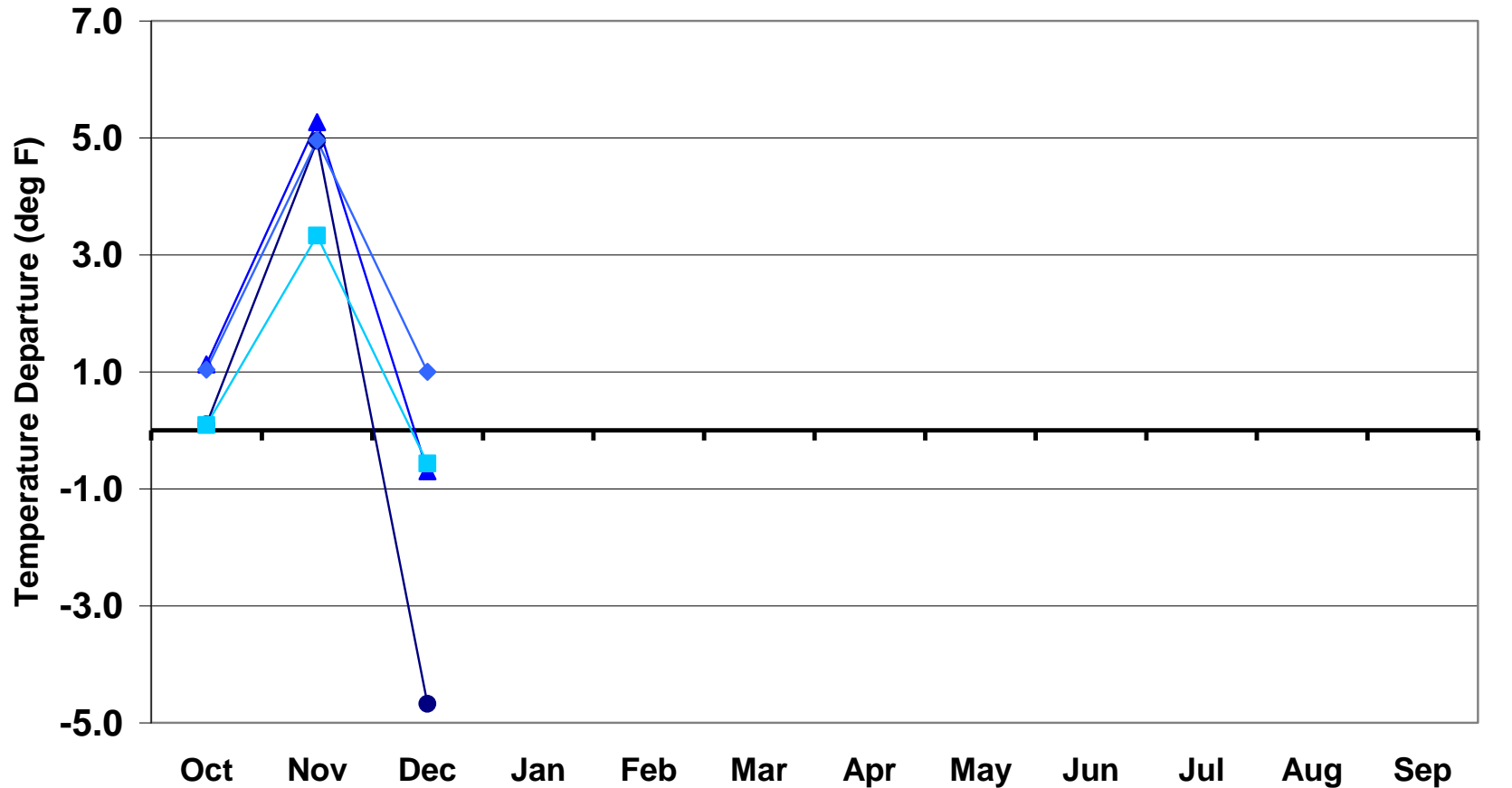




2009 Water Year Is Underway

Water Year 2009 Temperature Departures

Water Year 2009



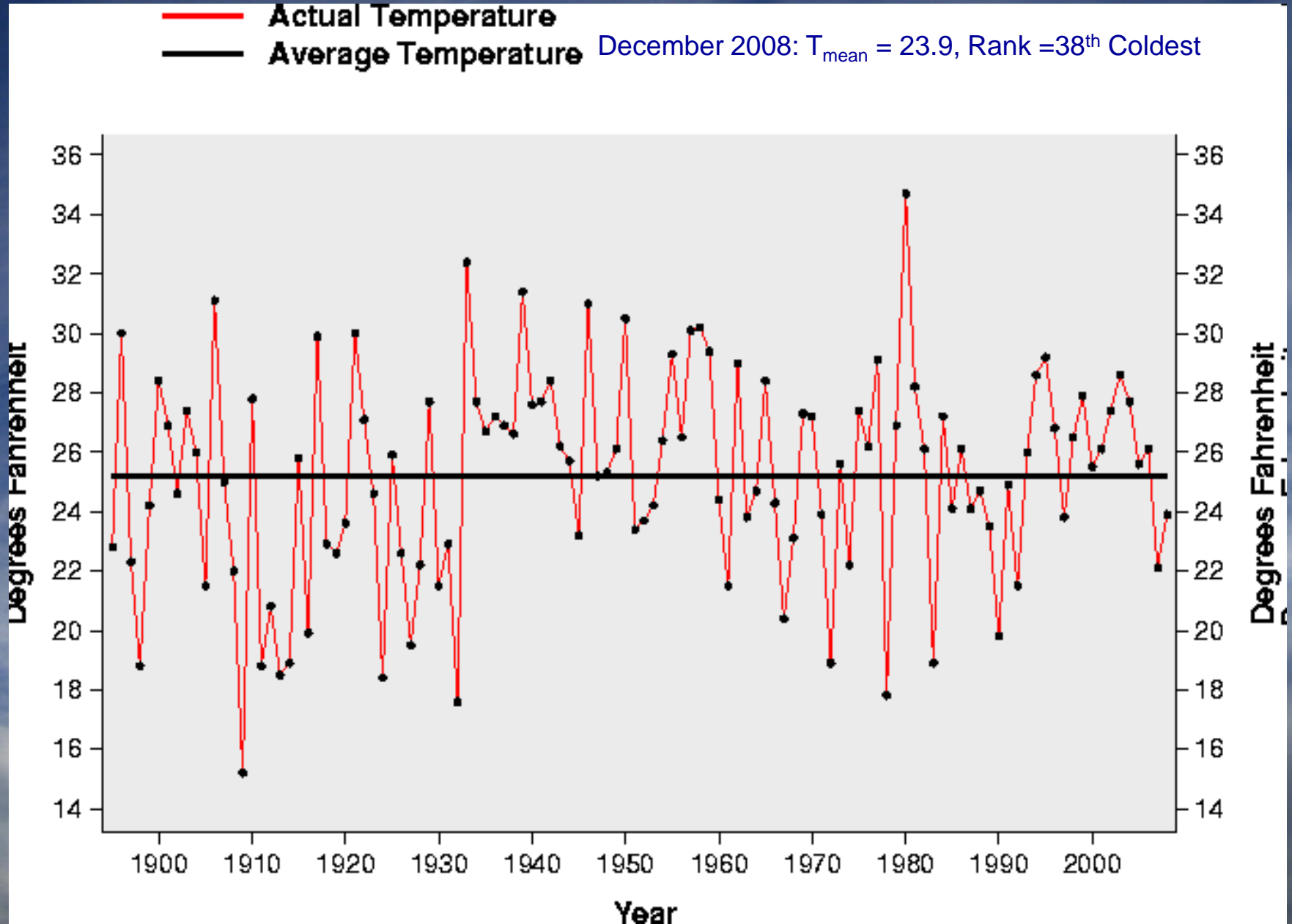
● Eastern Plains

▲ Foothills

◆ Mountains

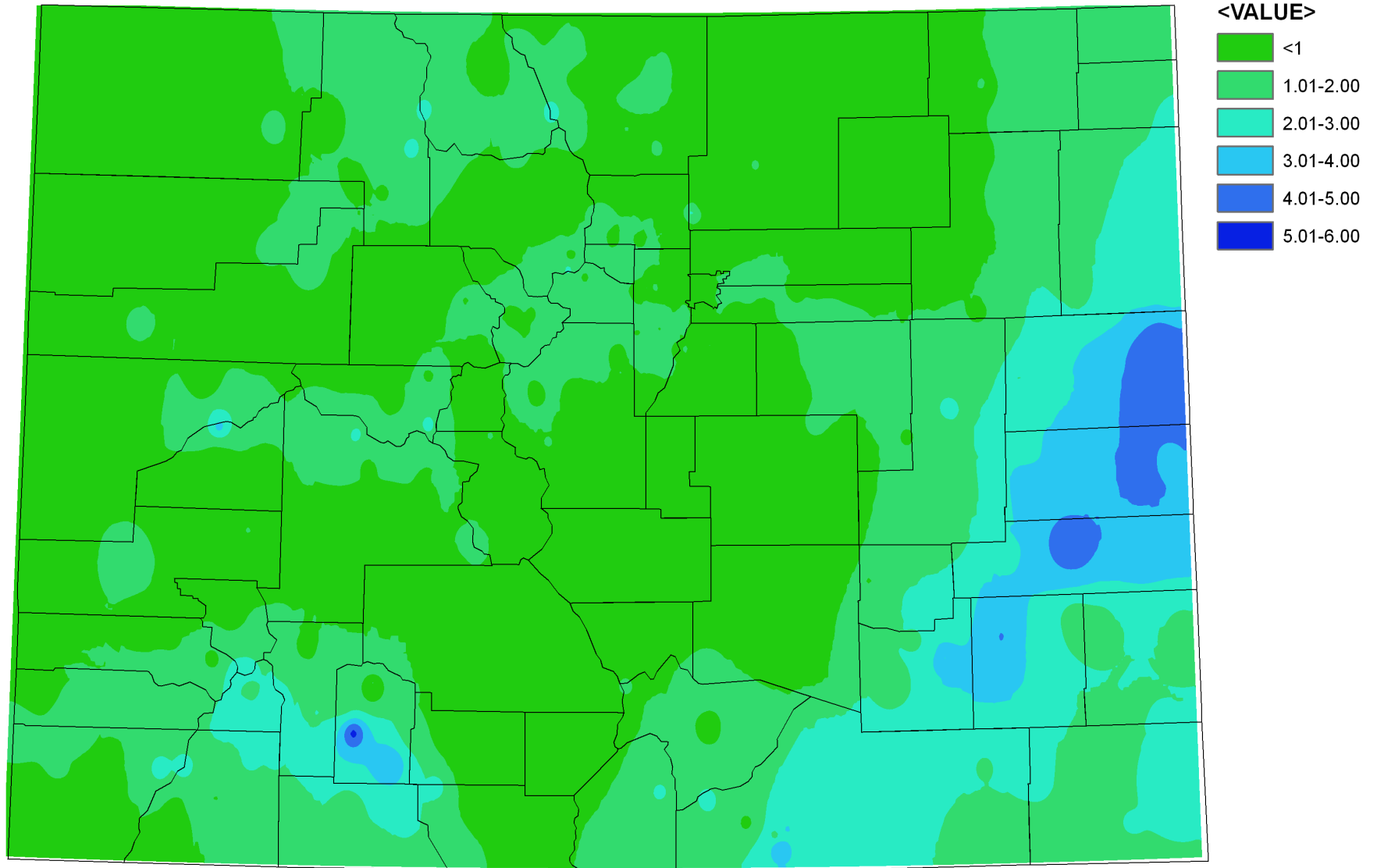
■ Western Valleys

December Average Temperature History for Colorado (NCDC)

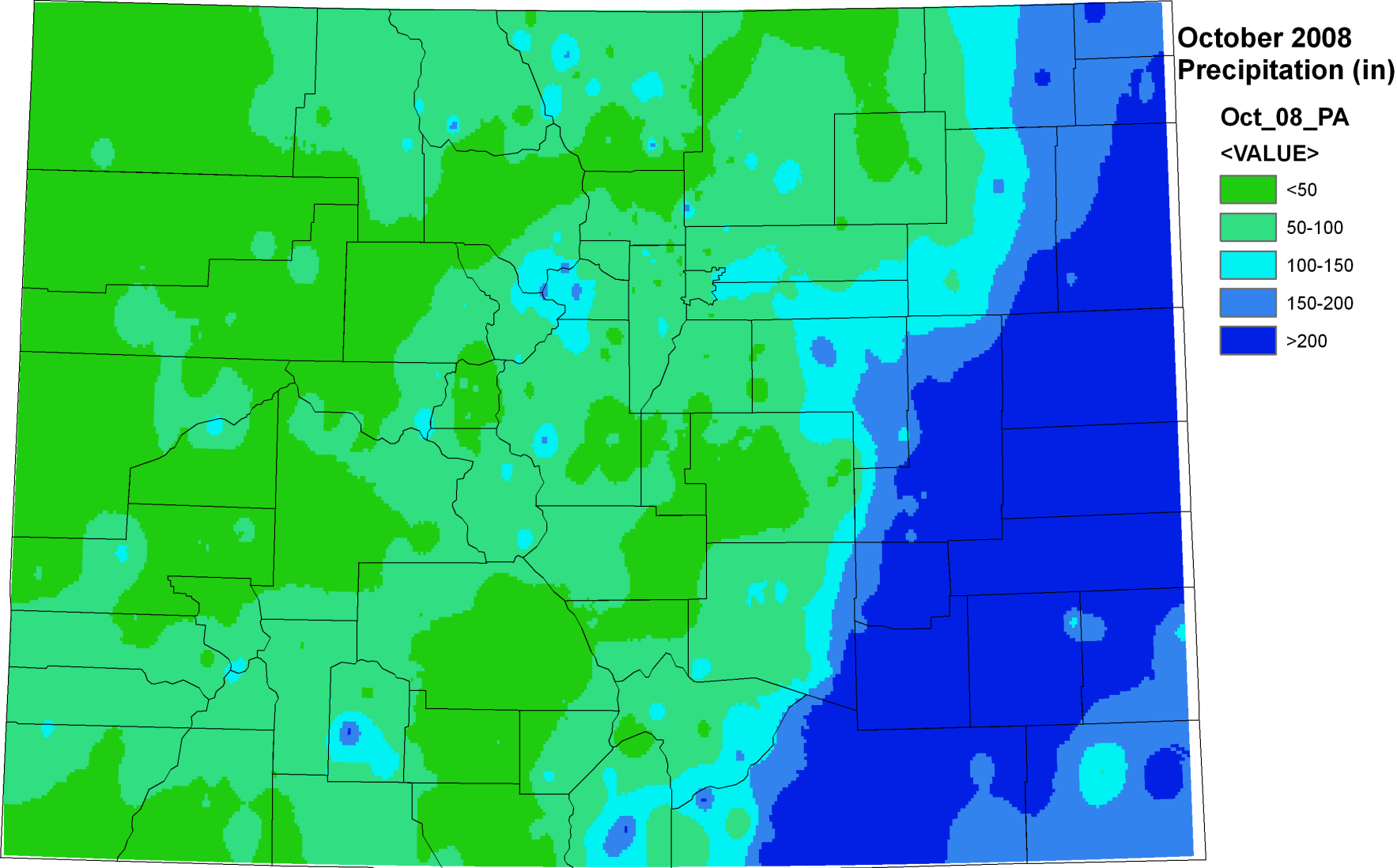


October 2008 Precipitation

October 2008
Precipitation (in)

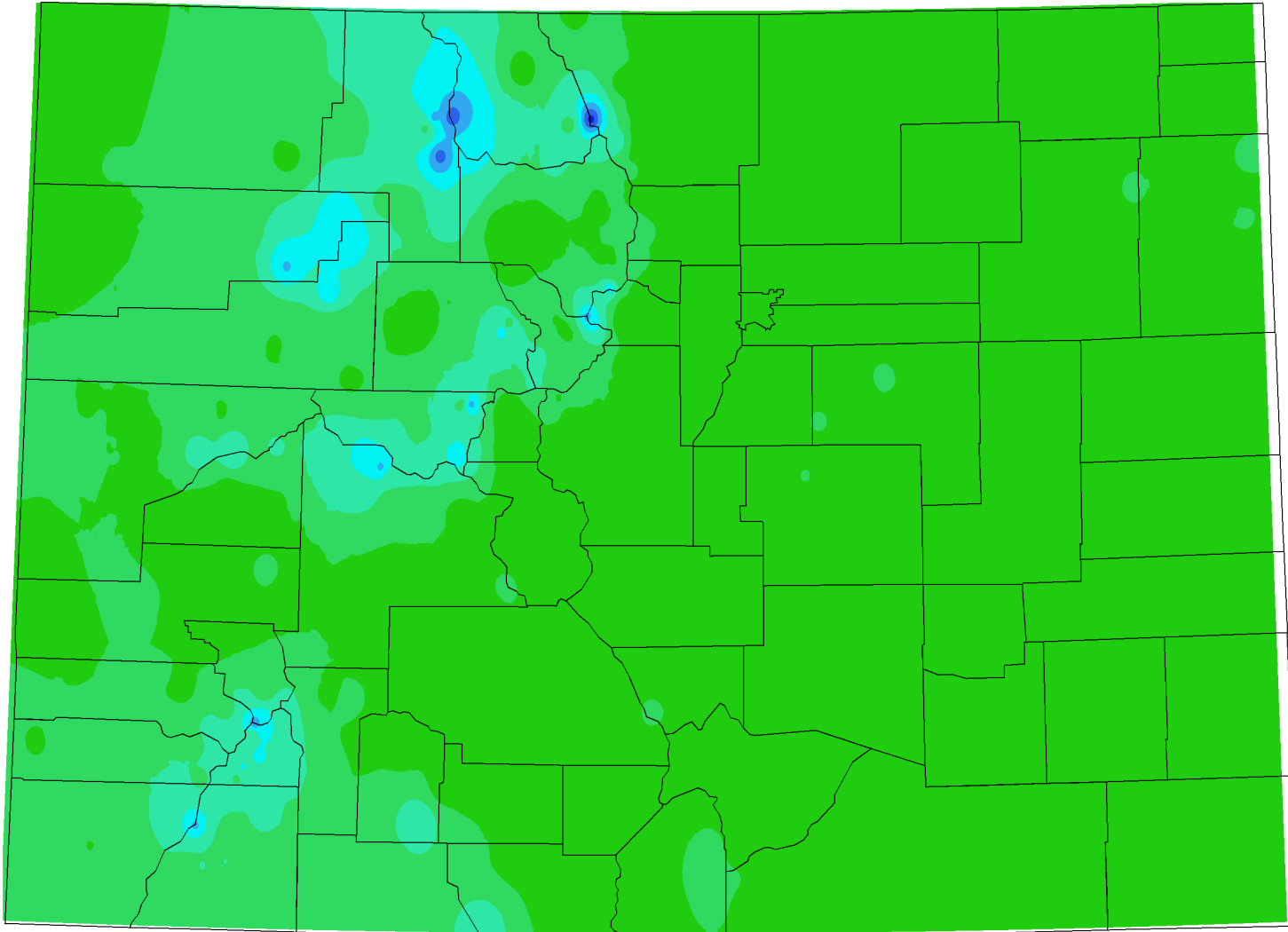
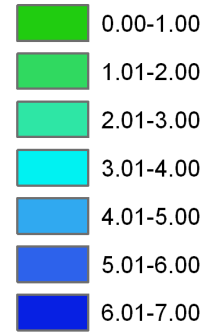


October 2008 Percent Normal Precipitation

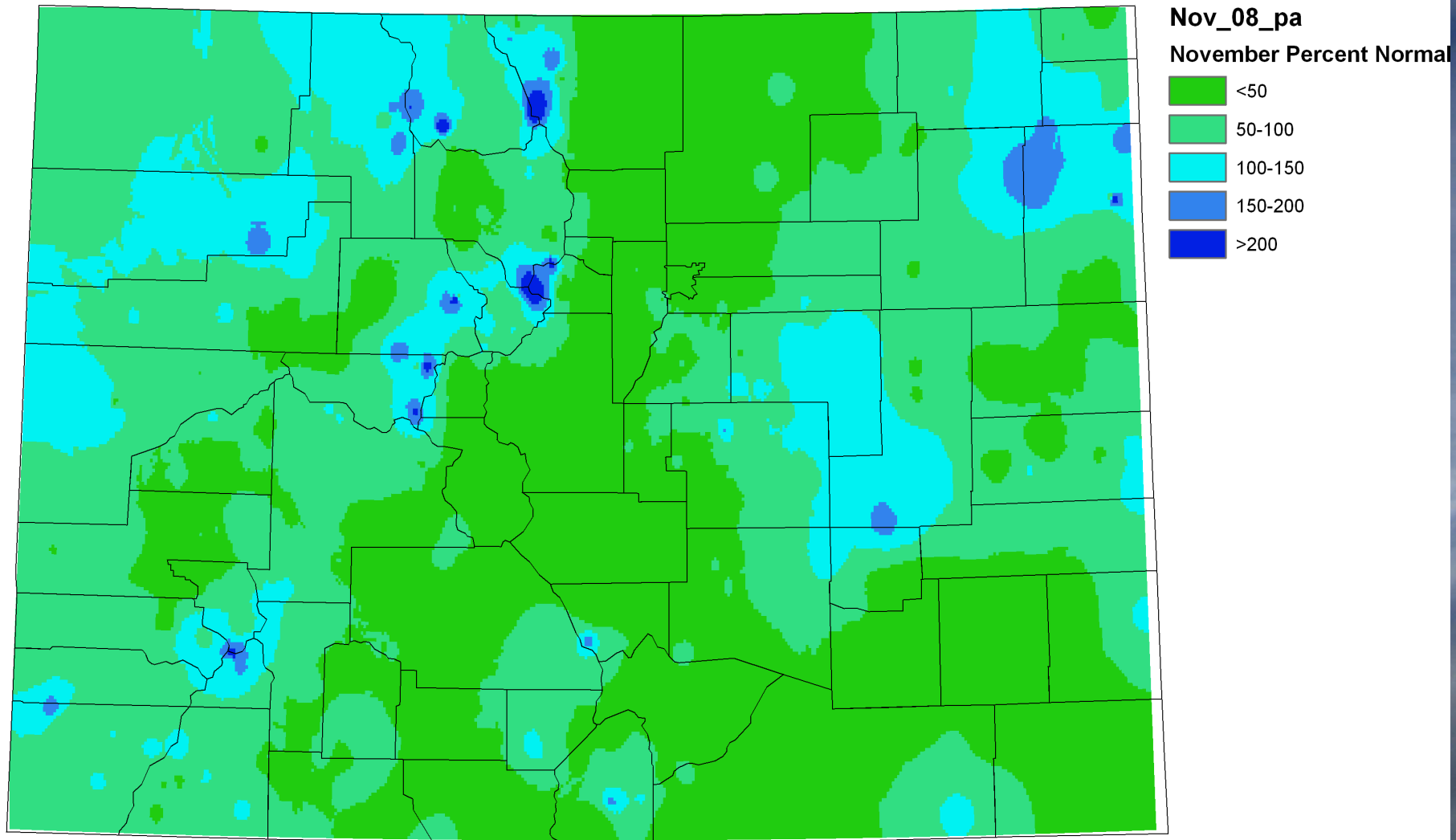


November 2008 Precipitation

November 2008



November 2008 Percent of Normal Precipitation

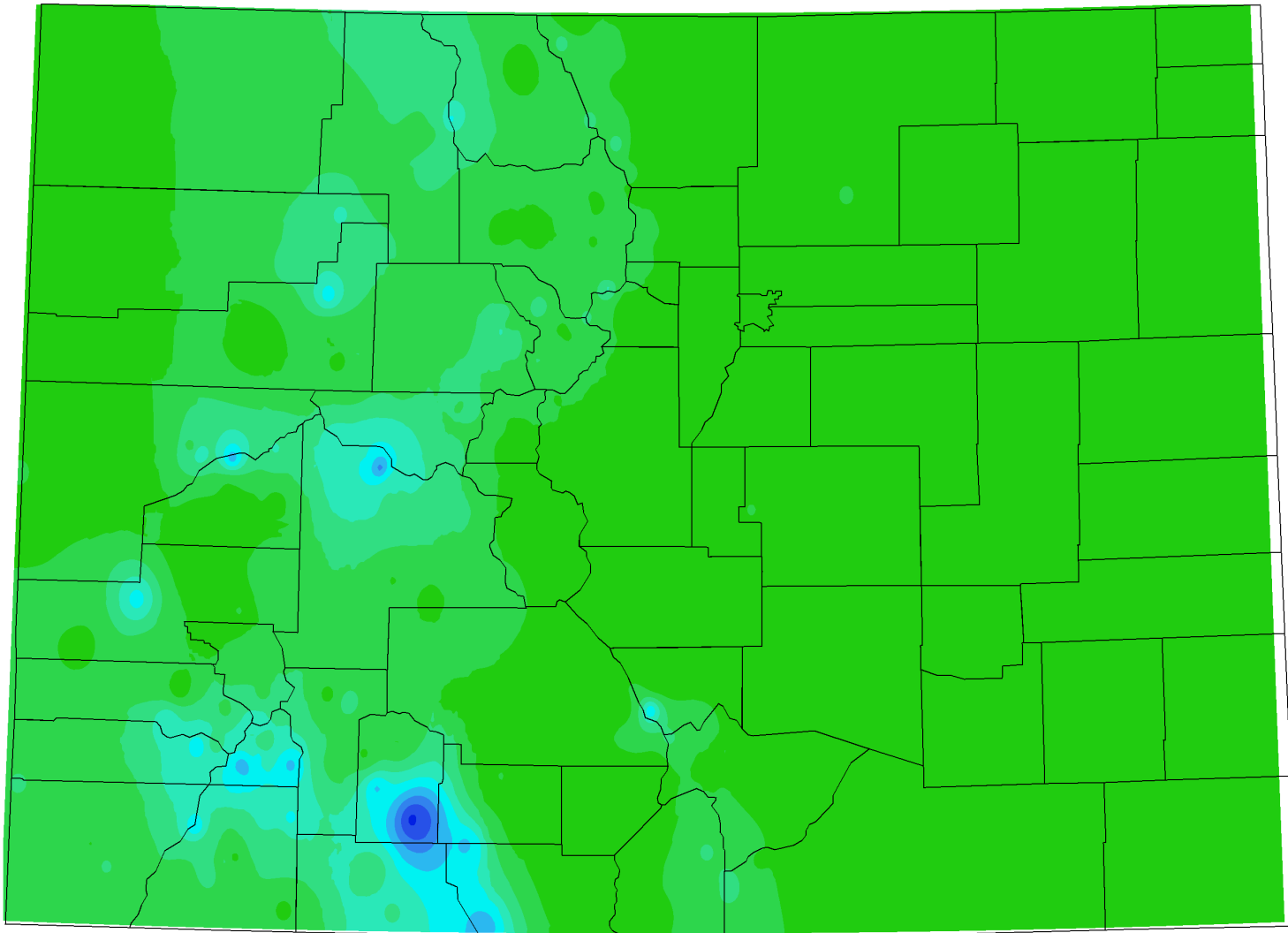
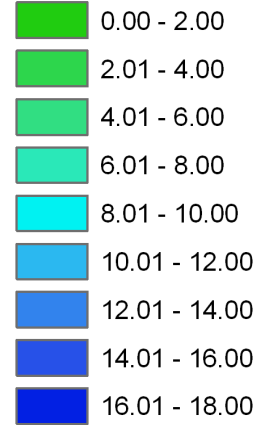


December 2008 Precipitation

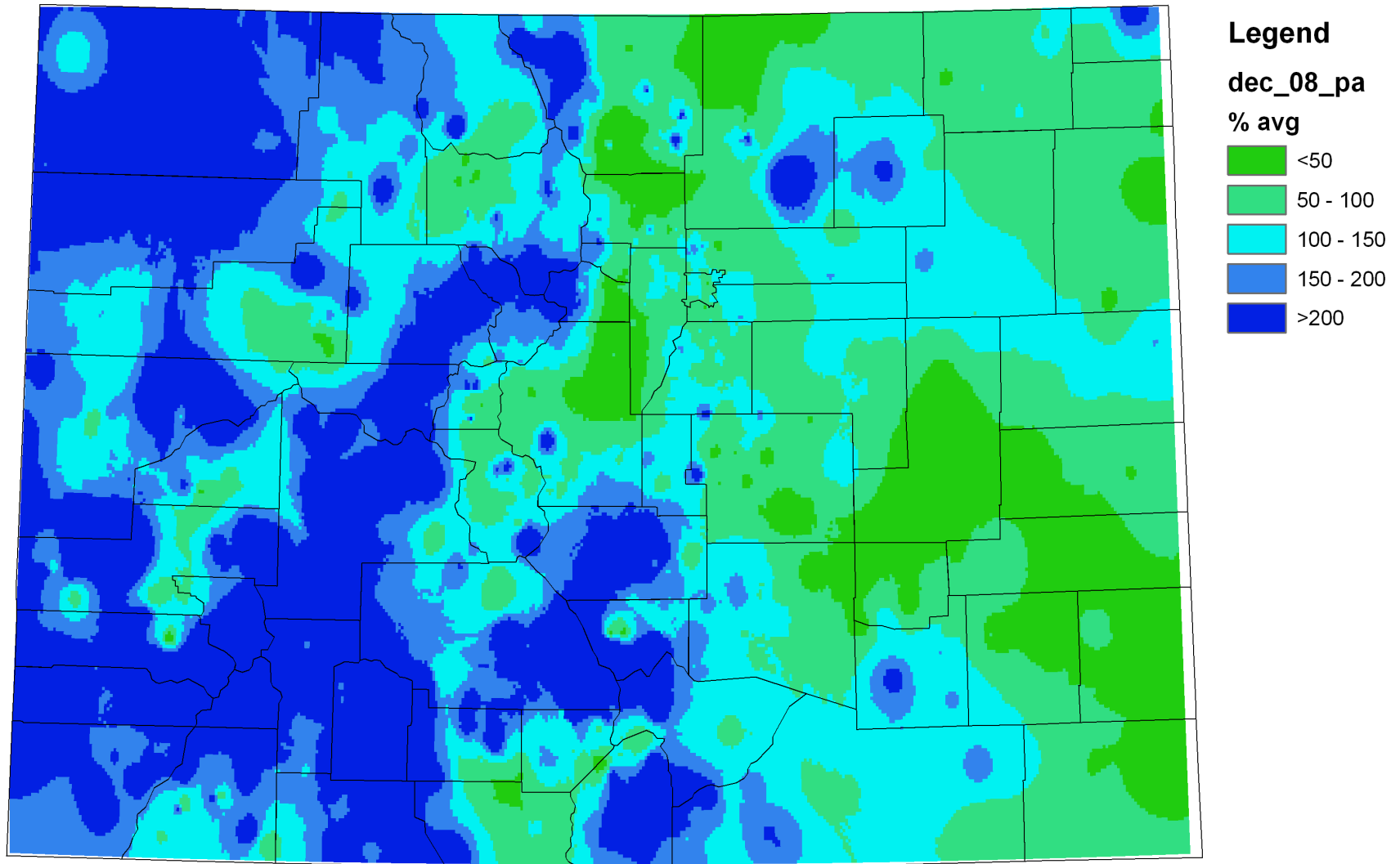
Legend

December 2008

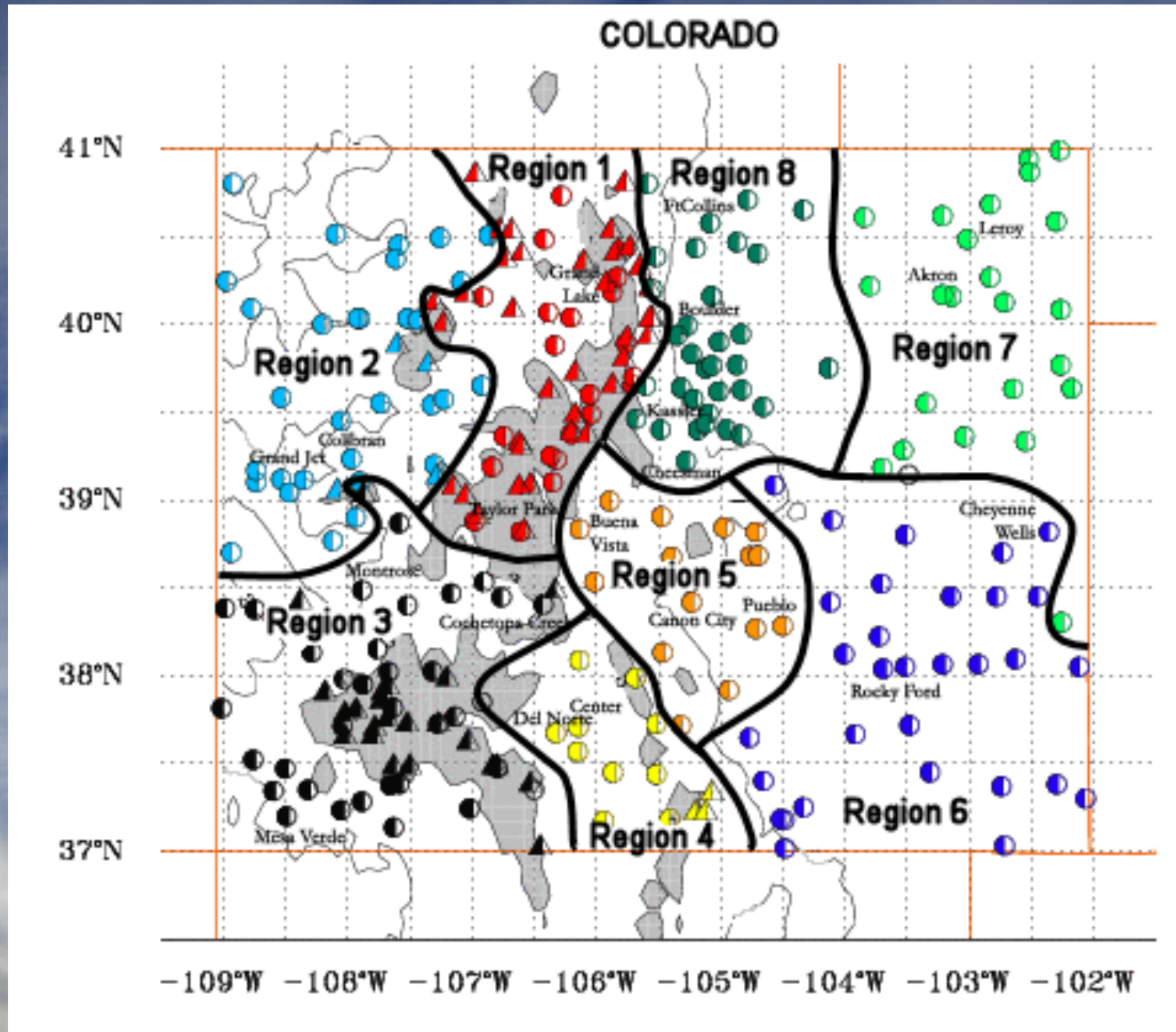
Precip



December 2008 Precipitation Percent of Average

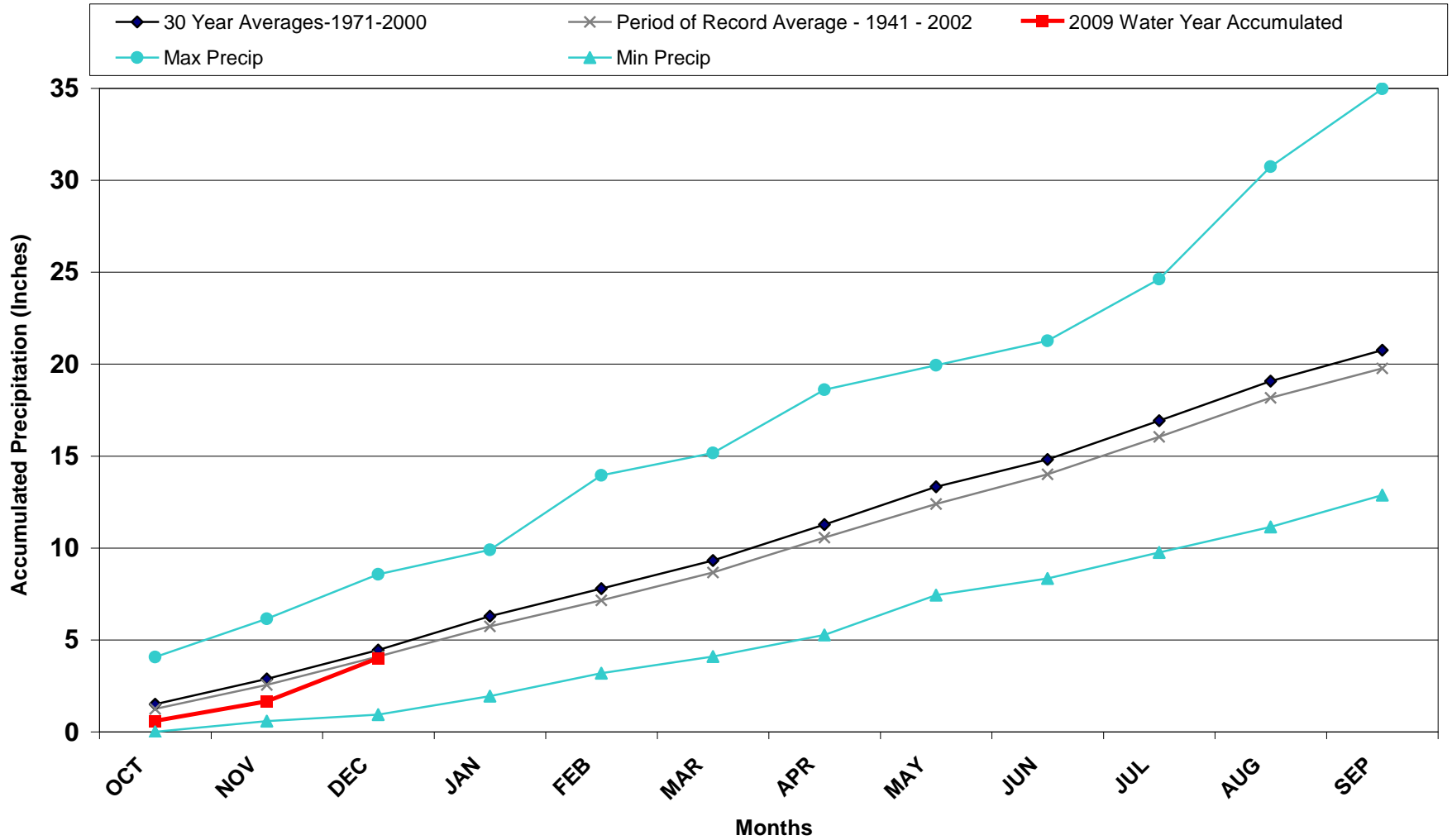


Climate divisions defined by Dr. Klaus Wolter, NOAA's Climate Diagnostic Center, Boulder, CO



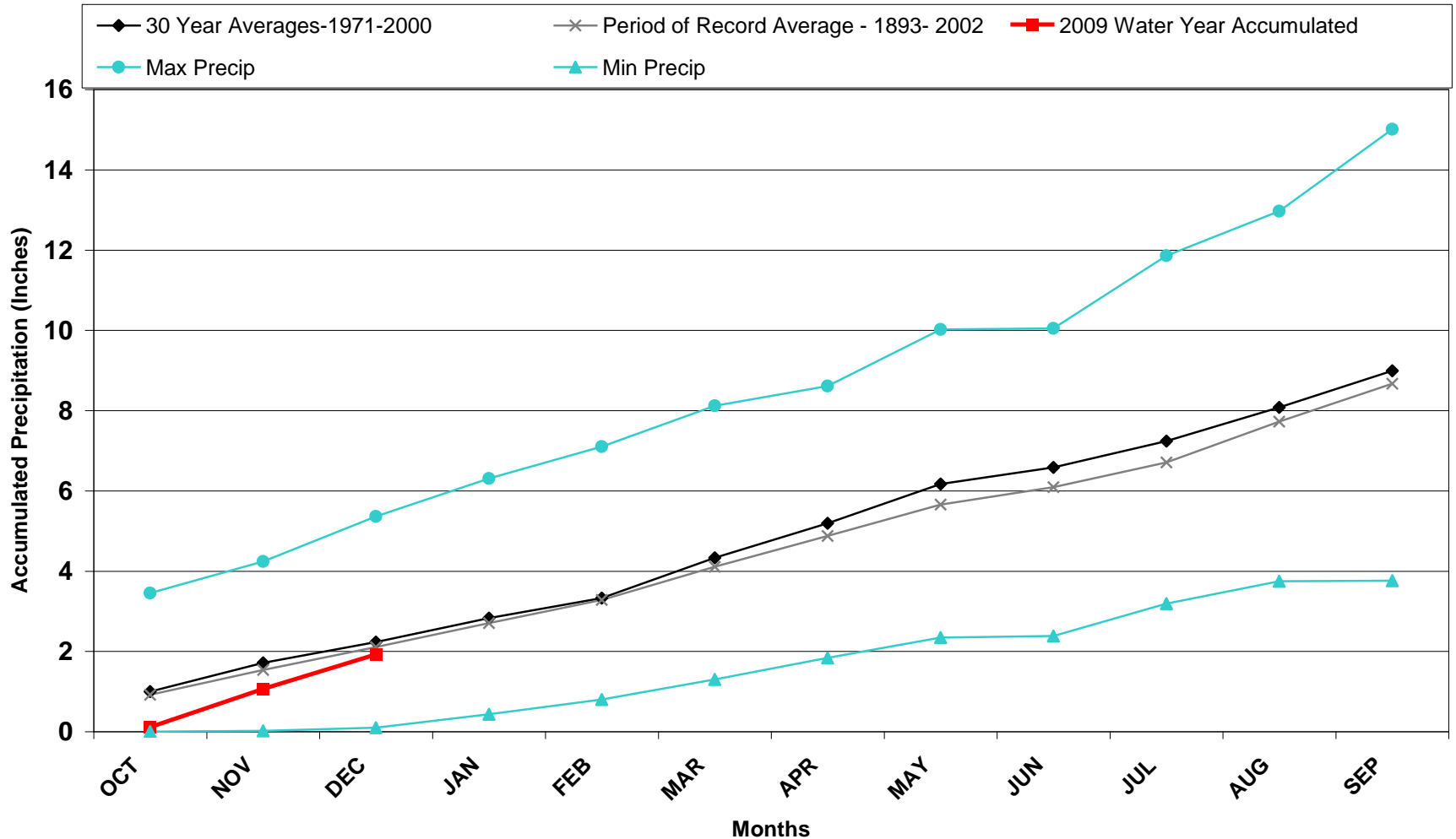
Division 1 – Grand Lake 1NW

Grand Lake 1 NW 2009 Water Year



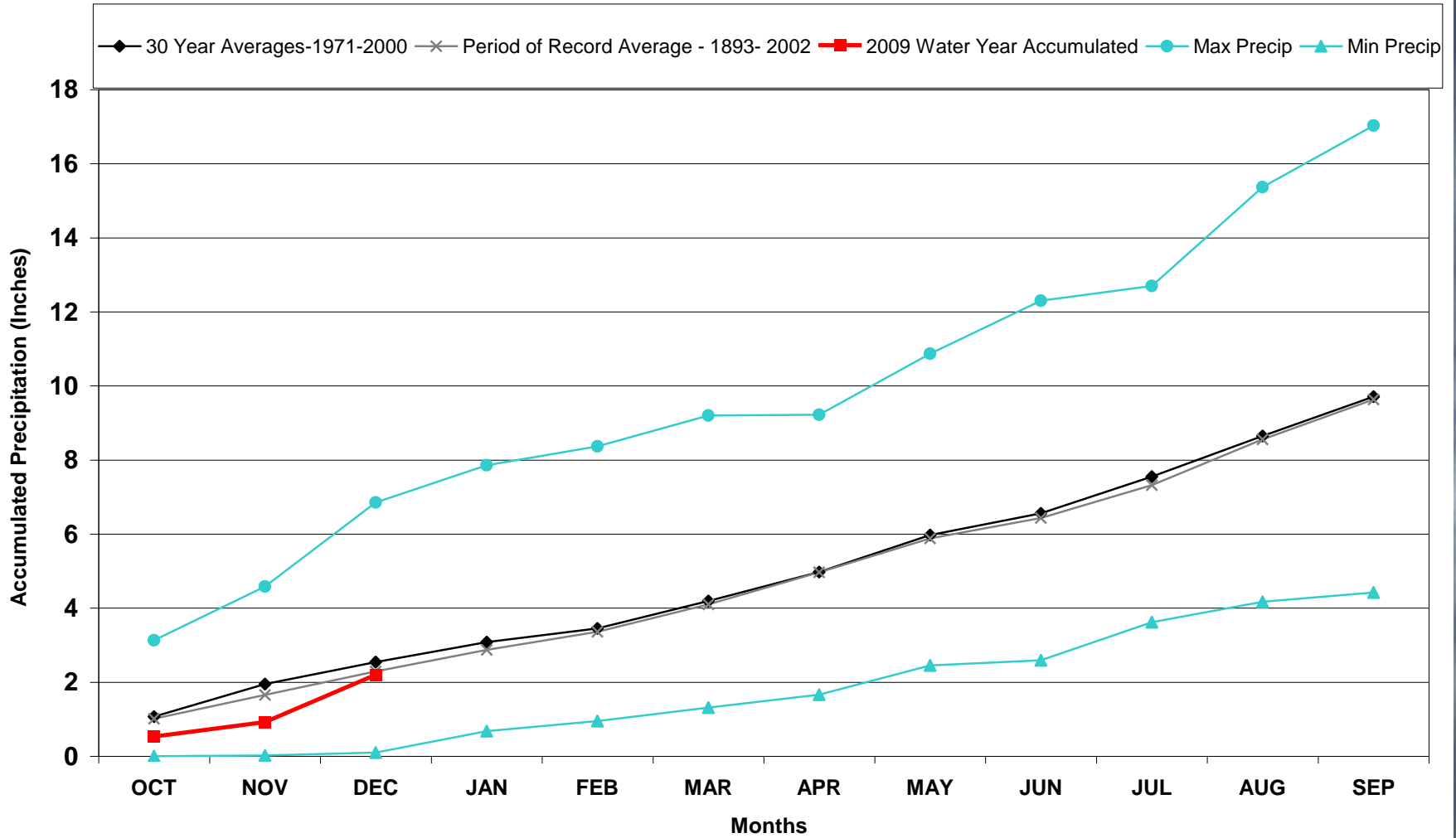
Division 2 – Grand Junction

Grand Junction WSFO 2009 Water Year



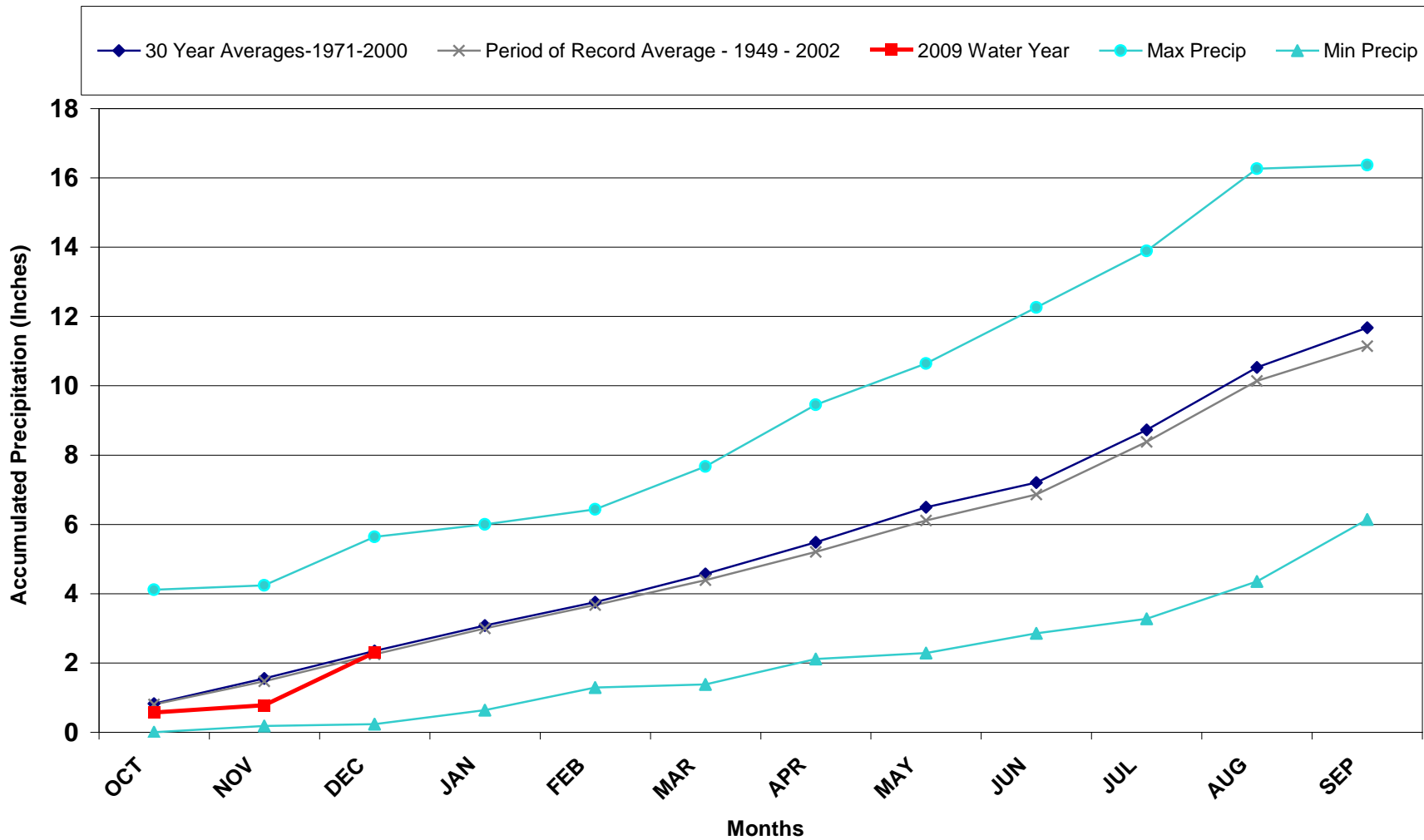
Division 3 – Montrose

Montrose #2 2009 Water Year



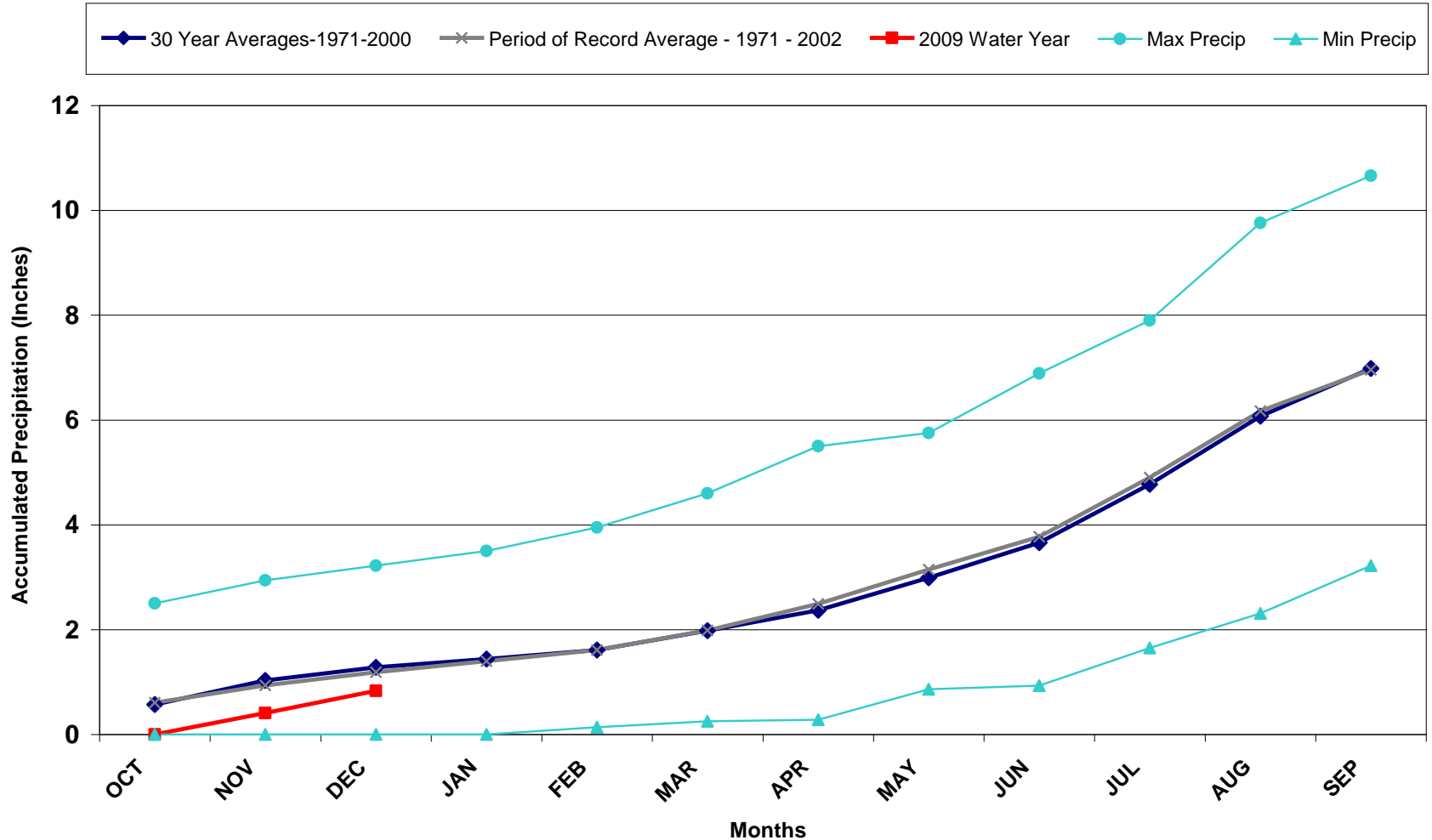
Division 3 – Cochetopa Creek

Cochetopa Creek 2009 Water Year



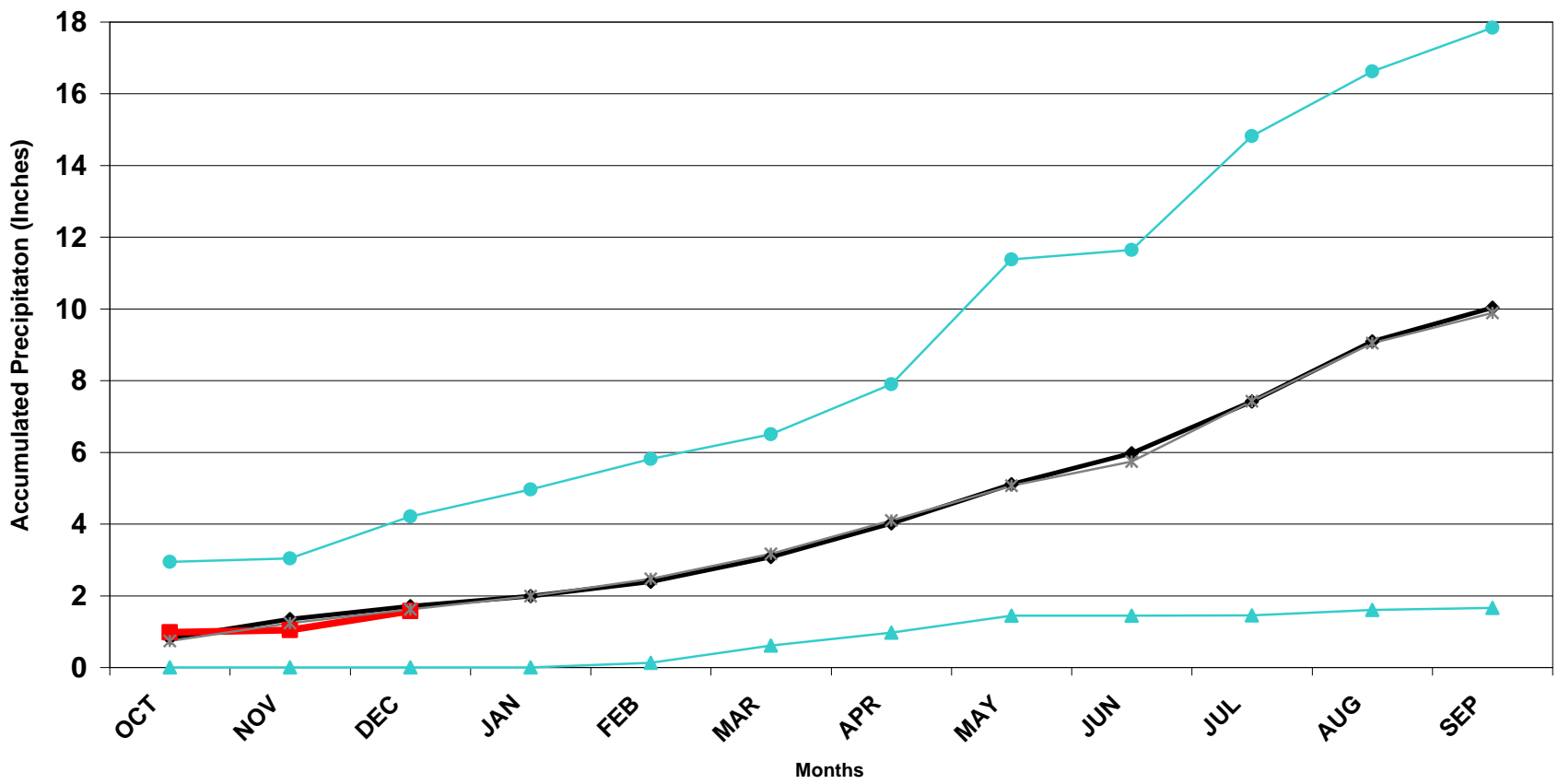
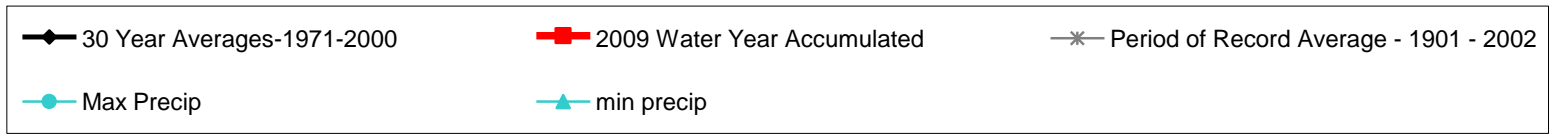
Division 4 - Center

Center 4SSW 2009 Water Year



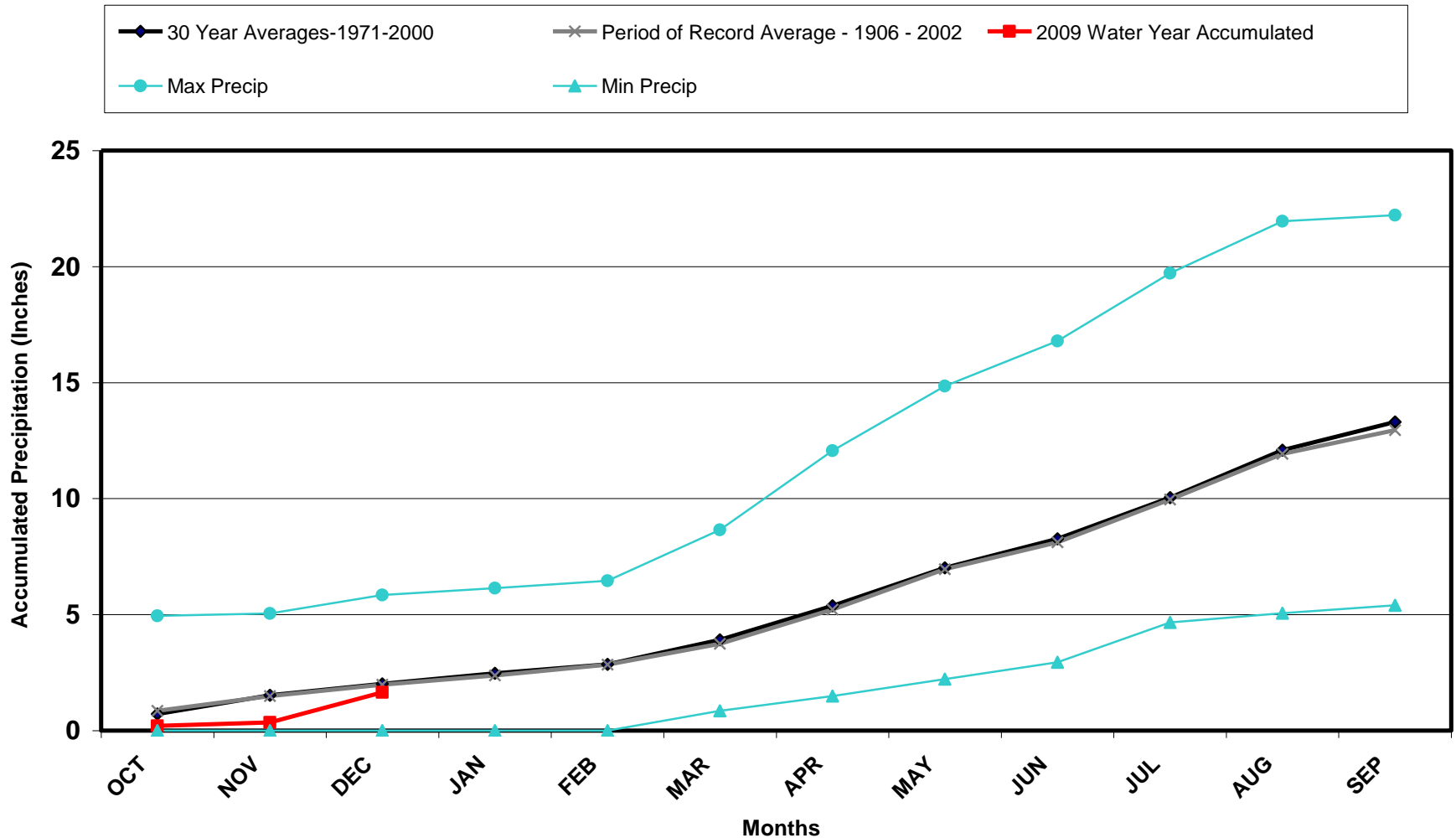
Division 5 – Buena Vista

Buena Vista 2009 Water Year



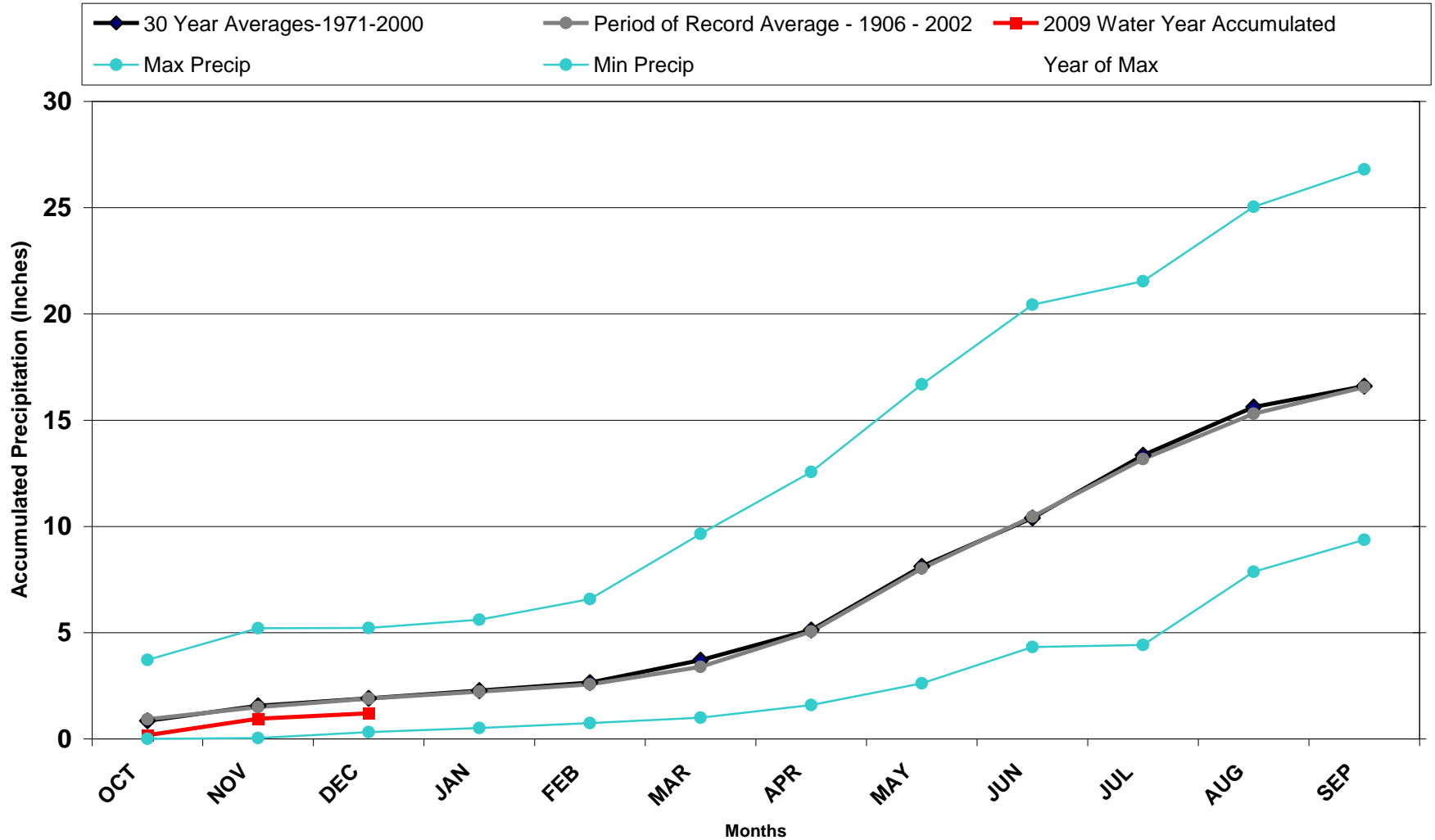
Division 5 – Canon City

Canon City 2009 Water Year



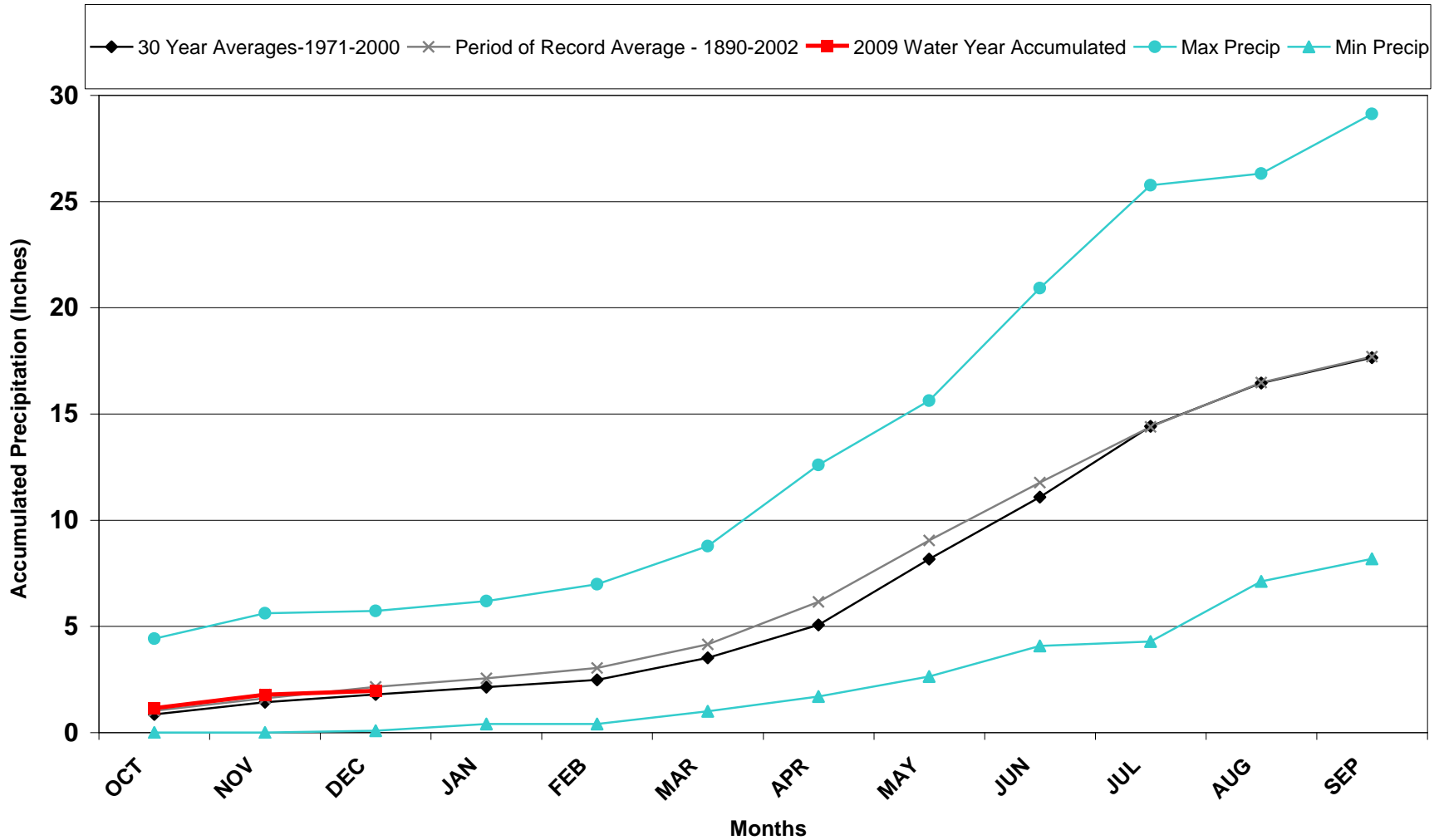
Division 7 – Akron

Akron 4E 2009 Water Year



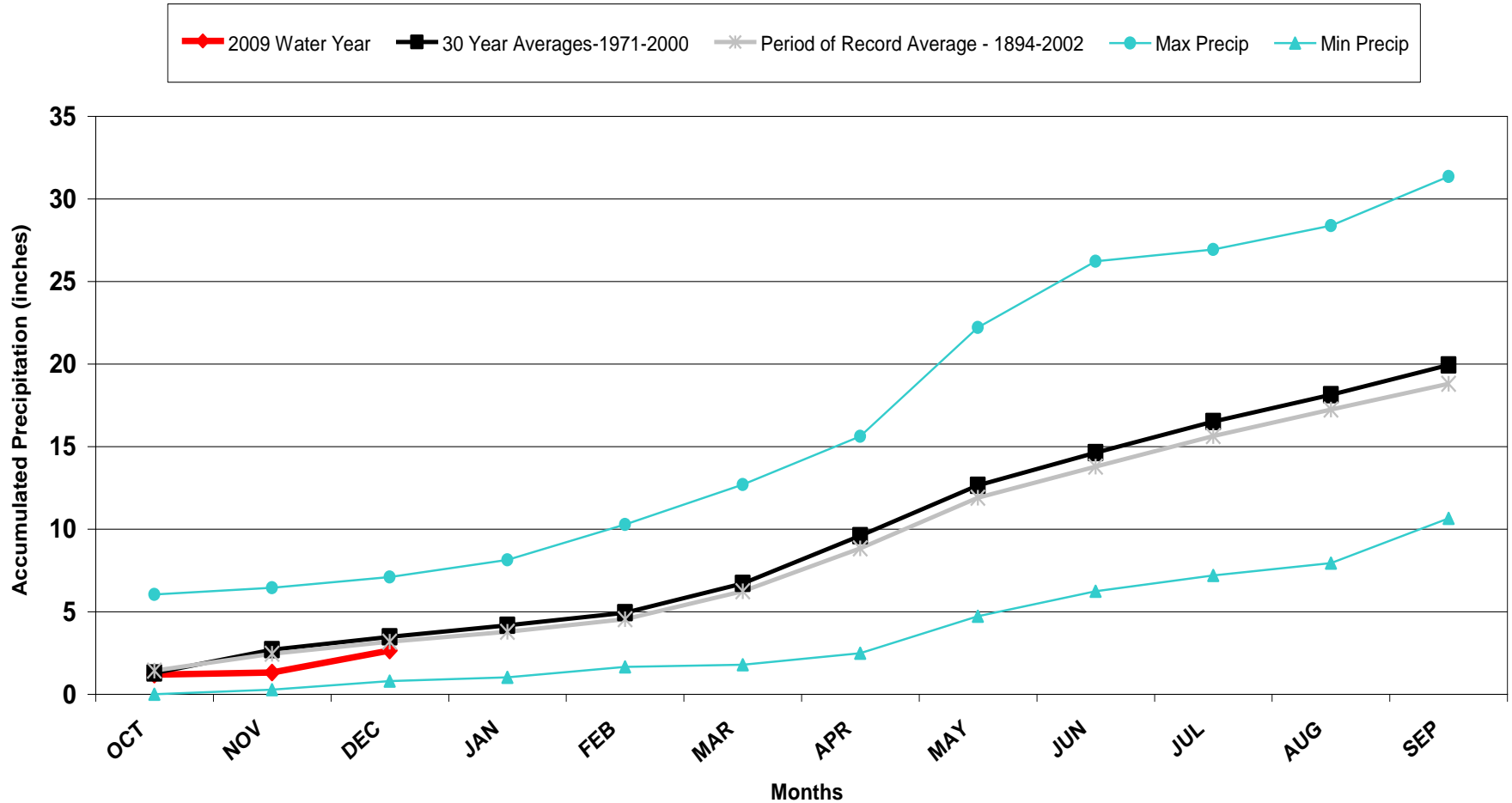
Division 7 – Leroy

Leroy 5SW 2009 Water Year



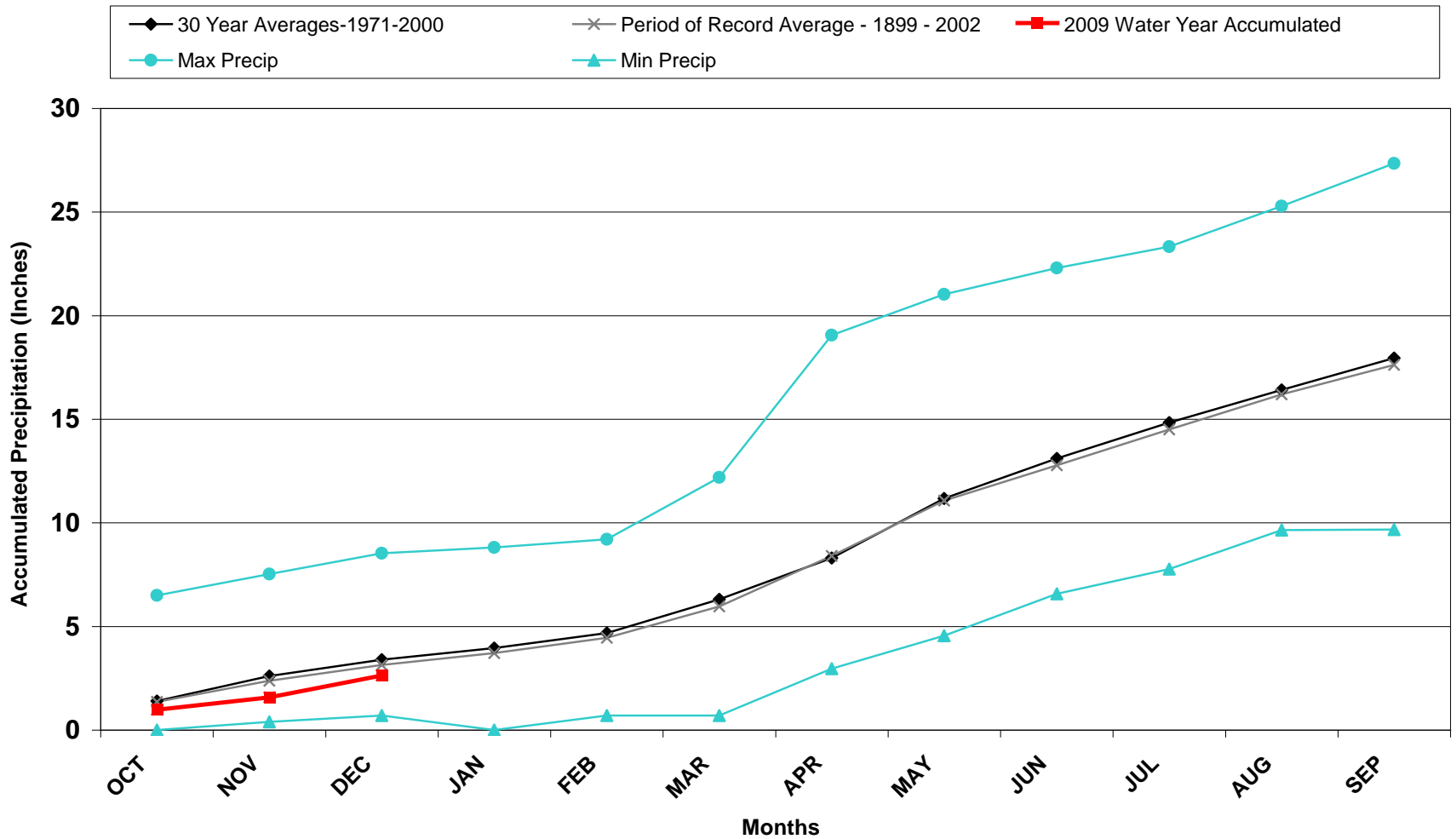
Division 8 – Boulder

Boulder 2009 Water Year



Division 8 – Kassler

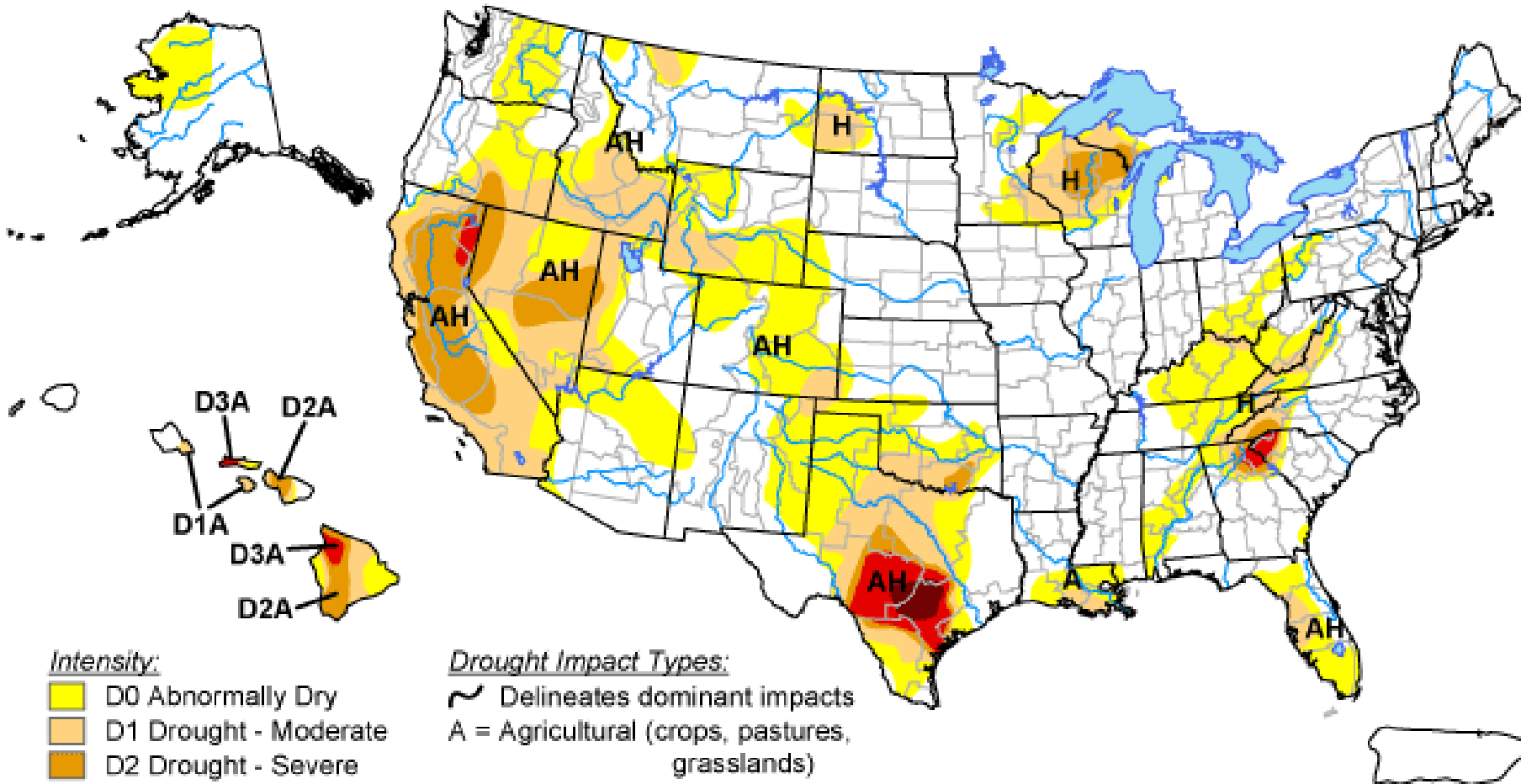
Kassler 2009 Water Year








U.S. Drought Monitor

January 13, 2009


Valid 8 a.m. EST



Intensity:

-  D0 Abnormally Dry
-  D1 Drought - Moderate
-  D2 Drought - Severe
-  D3 Drought - Extreme
-  D4 Drought - Exceptional

Drought Impact Types:

-  Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>



Released Thursday, January 15, 2009

Author: Laura Edwards, Western Regional Climate Center

Colorado

12/2008 12 mon. SPI



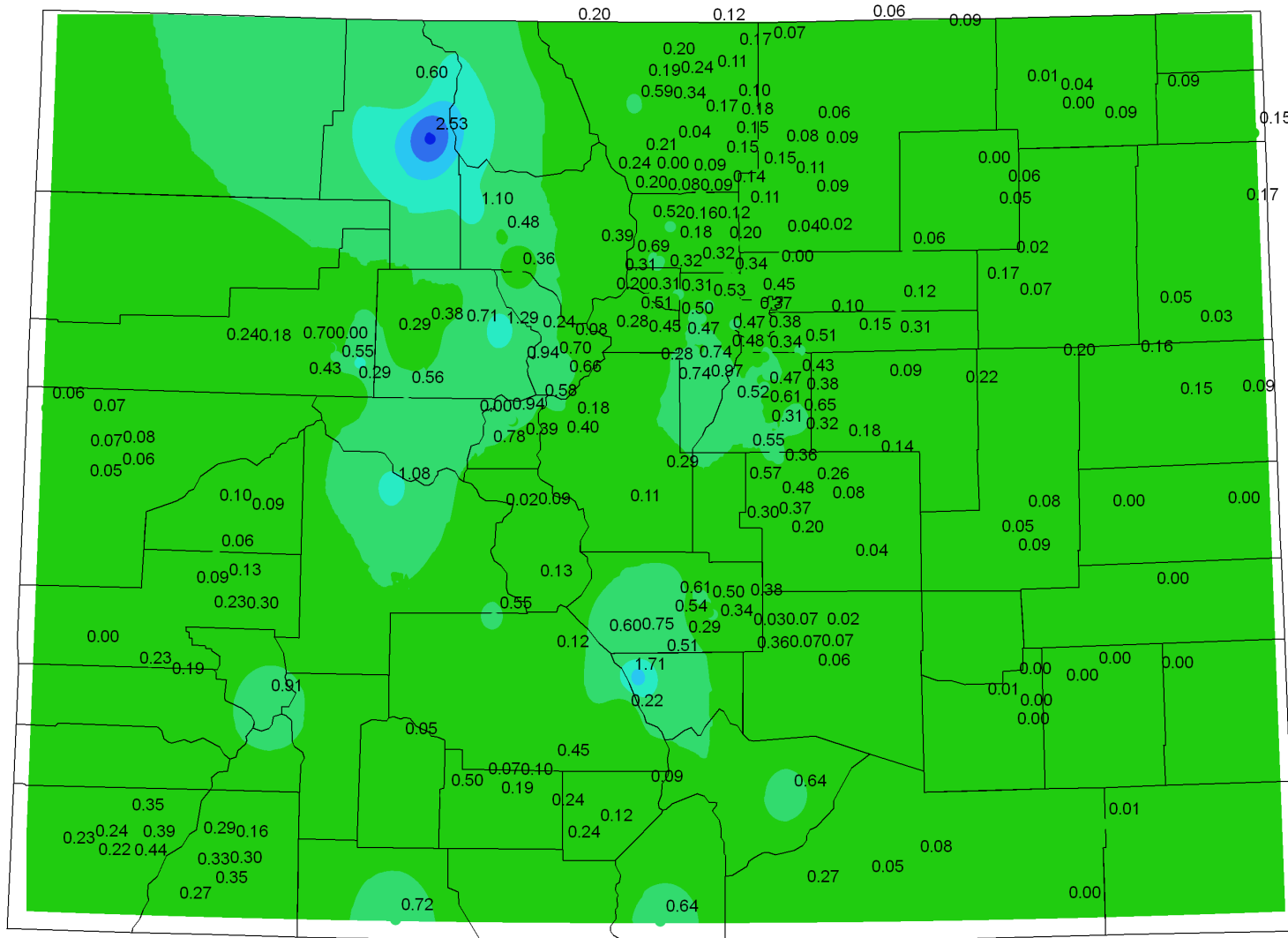
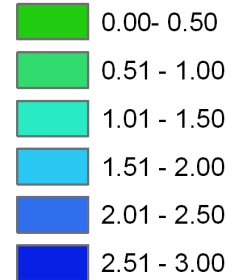
100 % < 2.0	8 % < -1.0
89 % < 1.0	0 % < -2.0
75 % < 0.0	0 % < -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO

January 1st - 21st, 2009 Precipitation

Legend

Preliminary Data



Summary

- **WY 2008 precip. varied widely – surface water supplies good**
- **August and October 2008 precip. helped eastern plains avert serious drought**
- **Mild and dry November was followed by cold and stormy December**
- **Windy, dry January – very warm except for cold air trapping in mtn valleys**
- **Currently OK in mtns; plains tending dry**

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- **Mild and dry November was followed by cold and stormy December**
- **Windy, dry January – very warm except for cold air trapping in mtn. valleys**
- **Mtn. snow ok; plains tending dry**

Colorado Climate Center

Data and Power Point Presentations
available for downloading

<http://ccc.atmos.colostate.edu>

- click on “Drought”
- then click on “Presentations”

