

Climate Update

**Wendy Ryan
Colorado Climate Center**

**Atmospheric Science Department
Colorado State University**

**Presented to
Water Availability Task Force
January 22, 2010
Denver, CO**

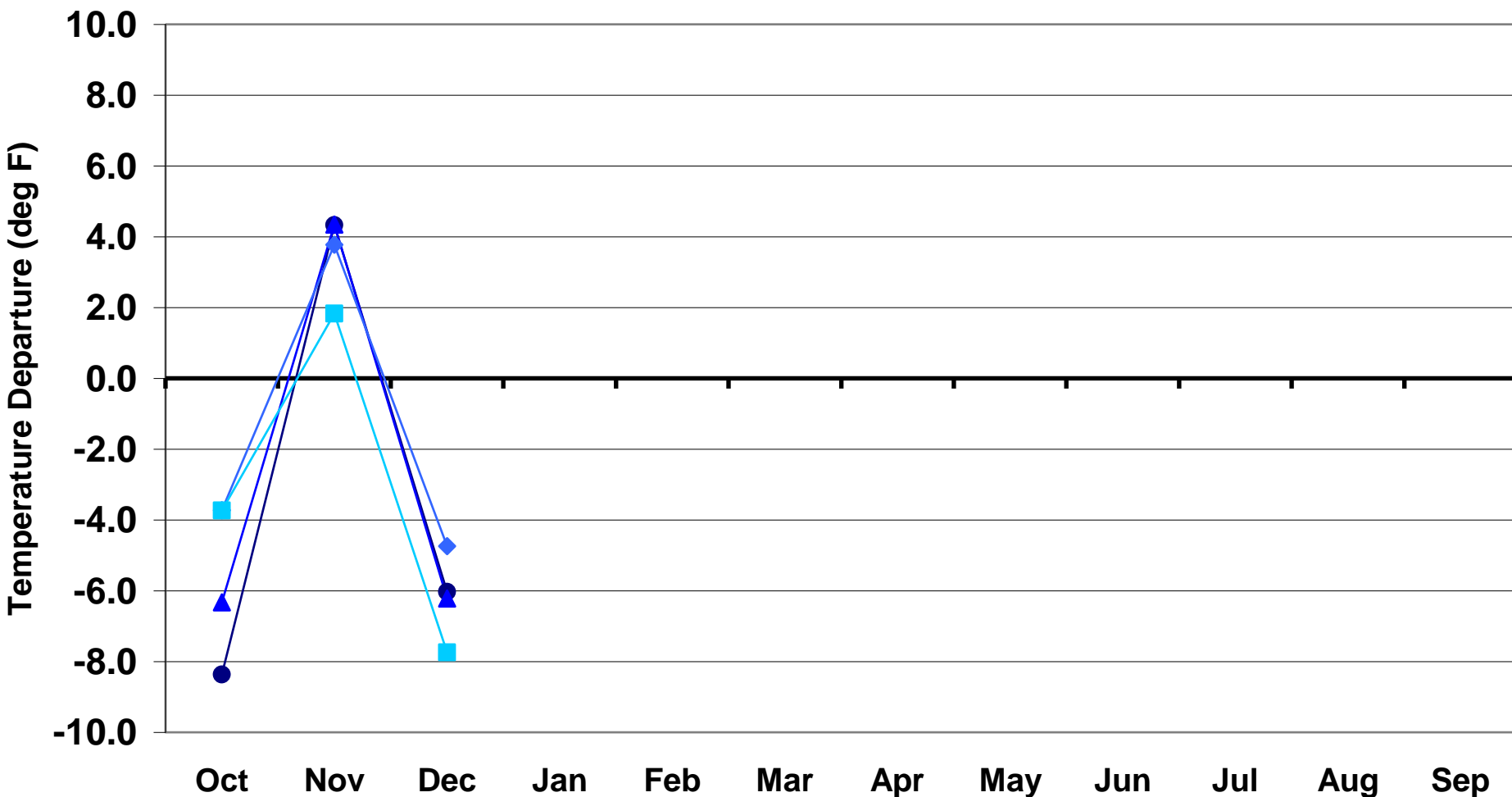
Prepared by Wendy Ryan



**Colorado
State
University**
Knowledge to Go Places

Water Year 2010 Temperature Departures

Water Year 2010



● Eastern Plains

▲ Foothills

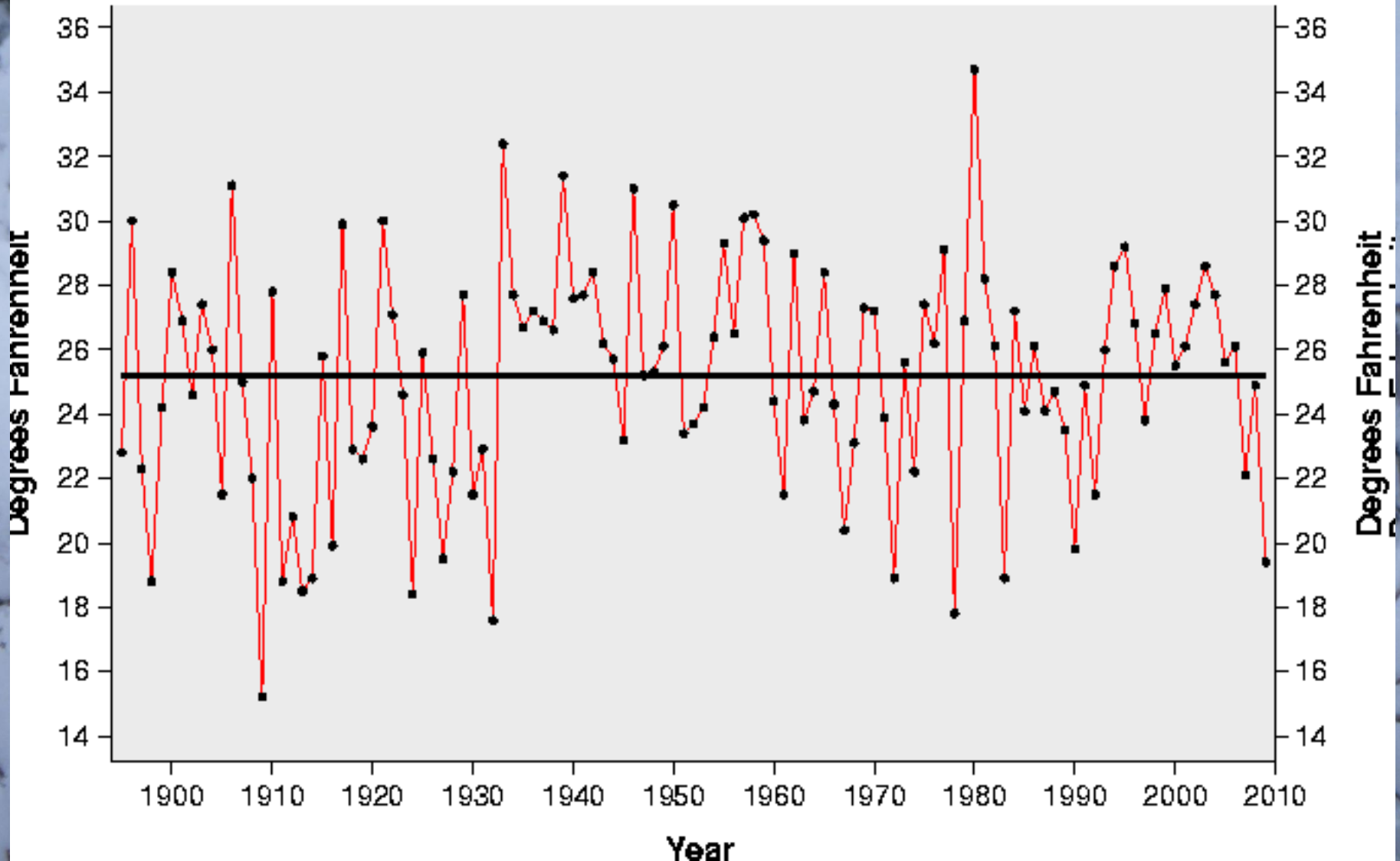
◆ Mountains

■ Western Valleys

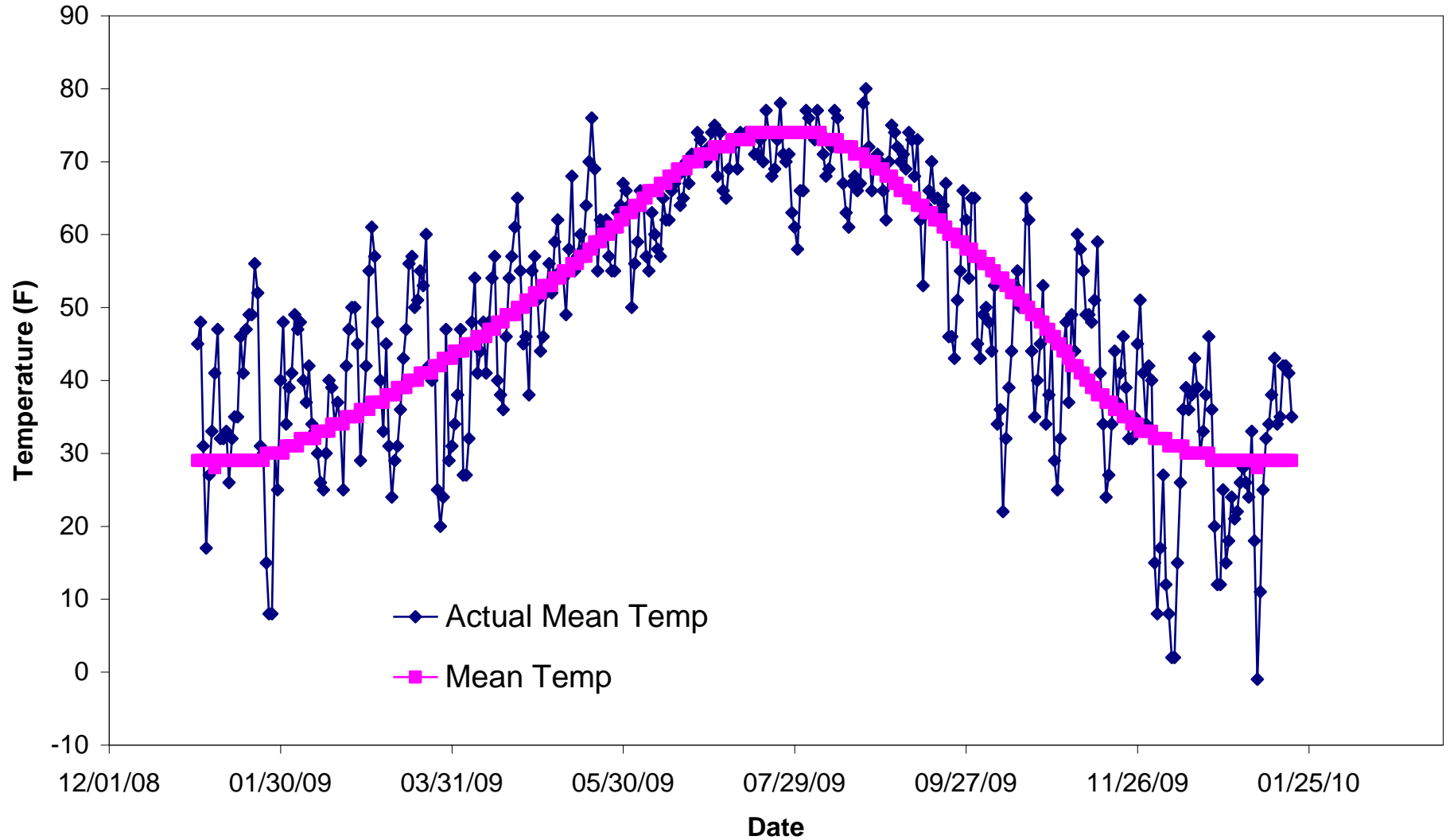
December Average Temperature History for Colorado (NCDC)

— Actual Temperature
— Average Temperature

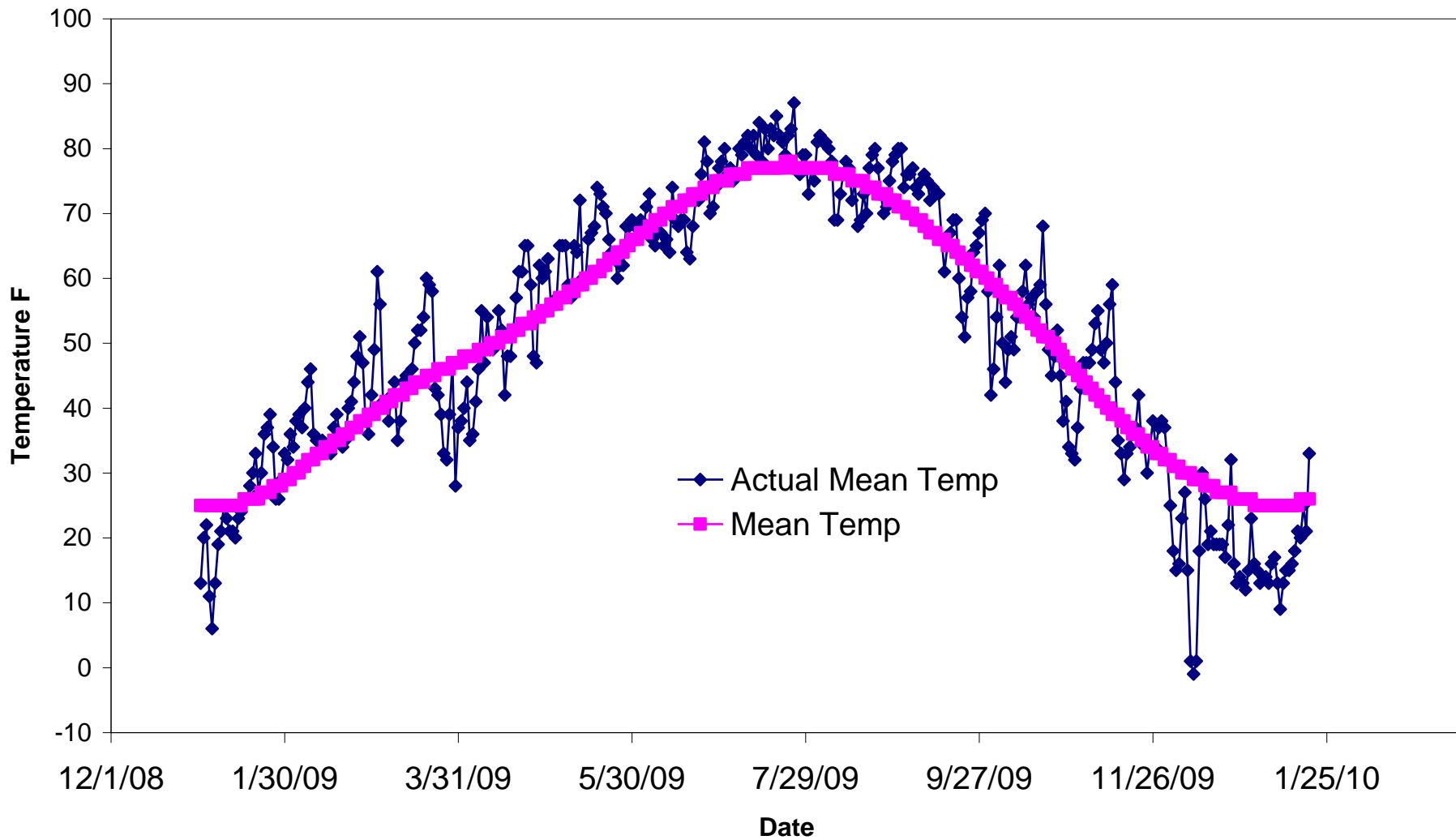
Rank: 19.4 degrees is 11th coolest for period of record 1895-2009



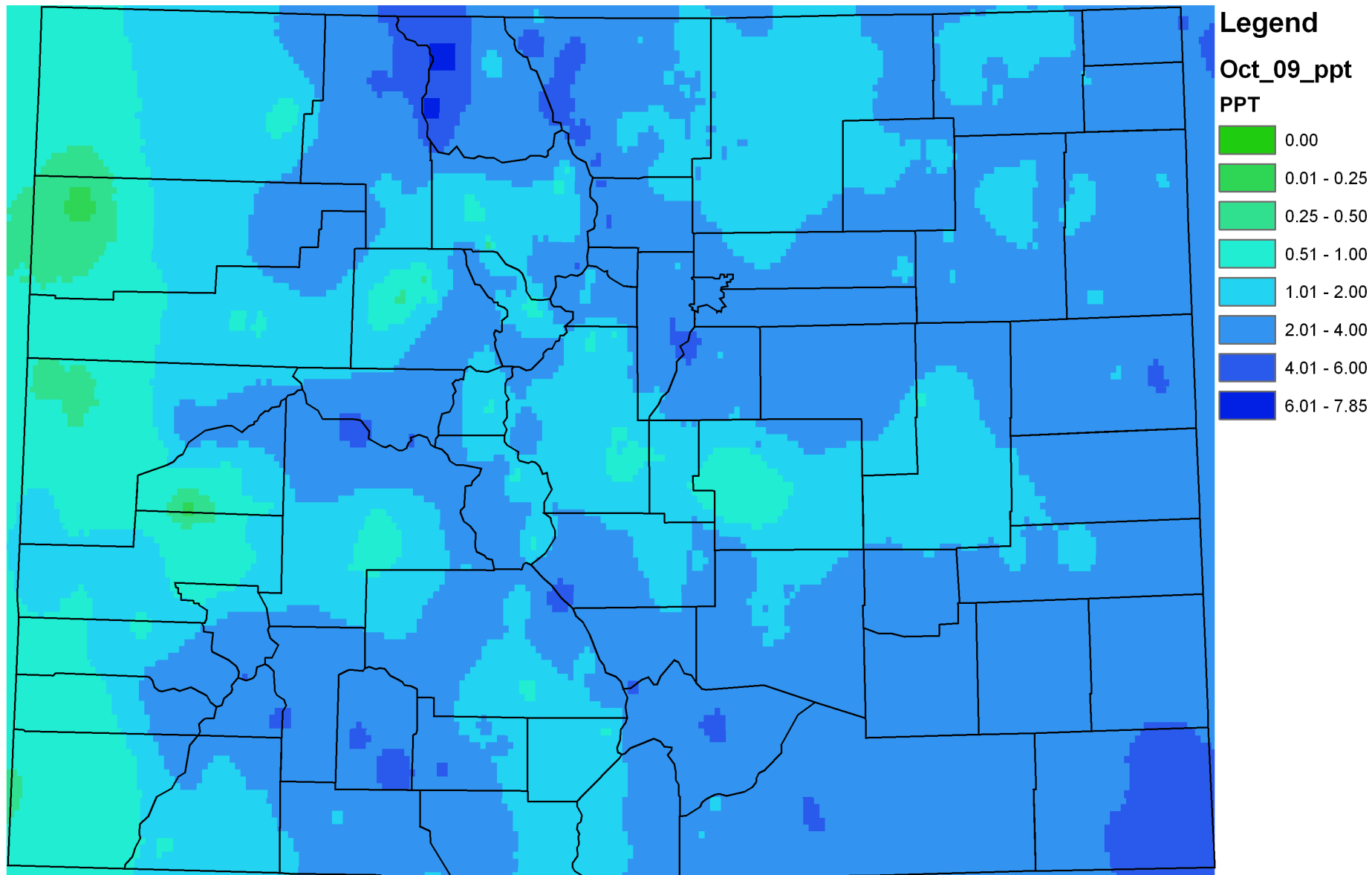
Denver, CO Jan 1, 2009 - Jan 19, 2010 Mean and Actual Daily Temperature



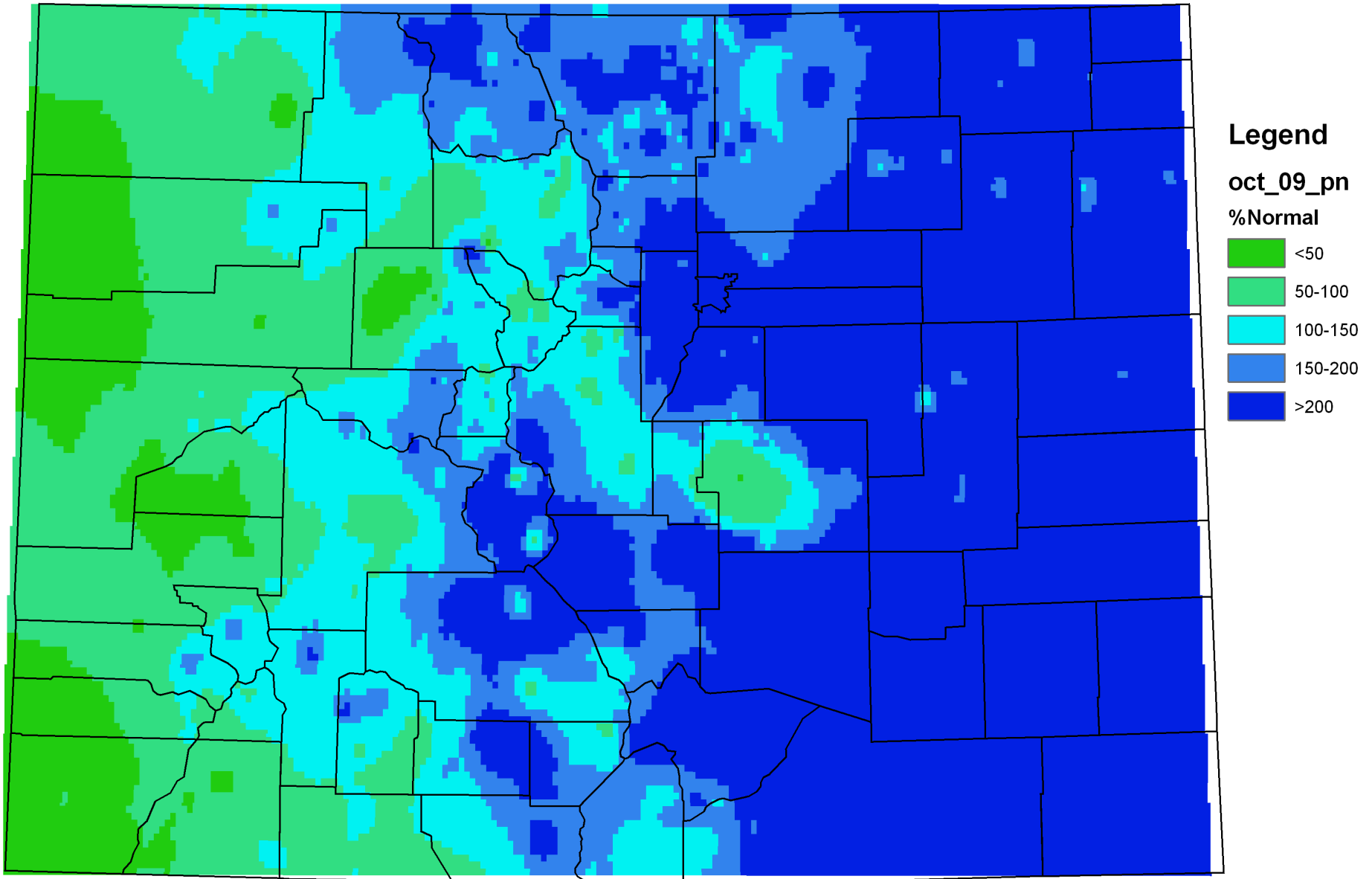
Grand Junction Jan 1, 2009 - Jan 19, 2010 Mean and Actual Daily Temperature



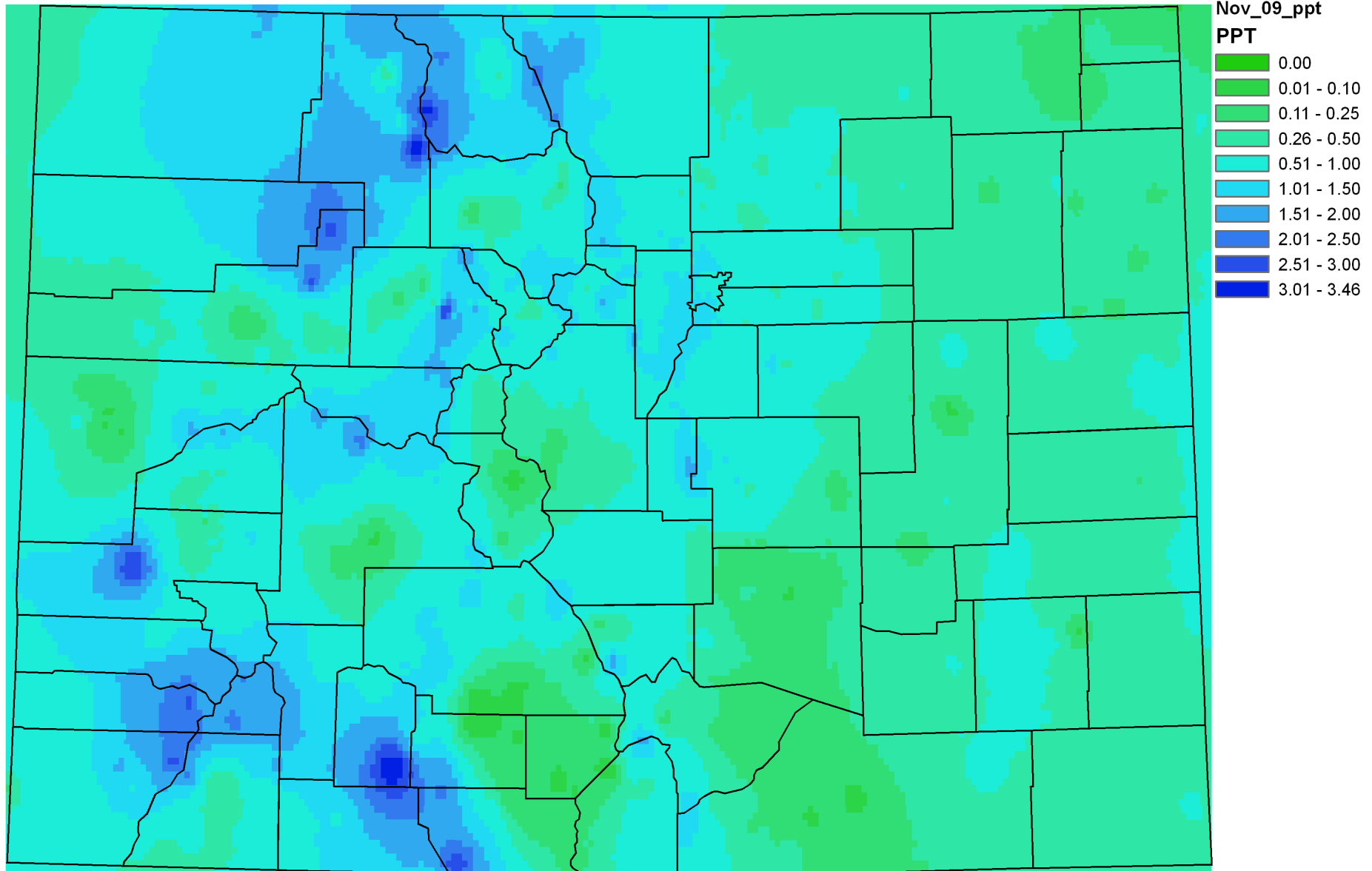
Colorado Precipitation (in) October 2009



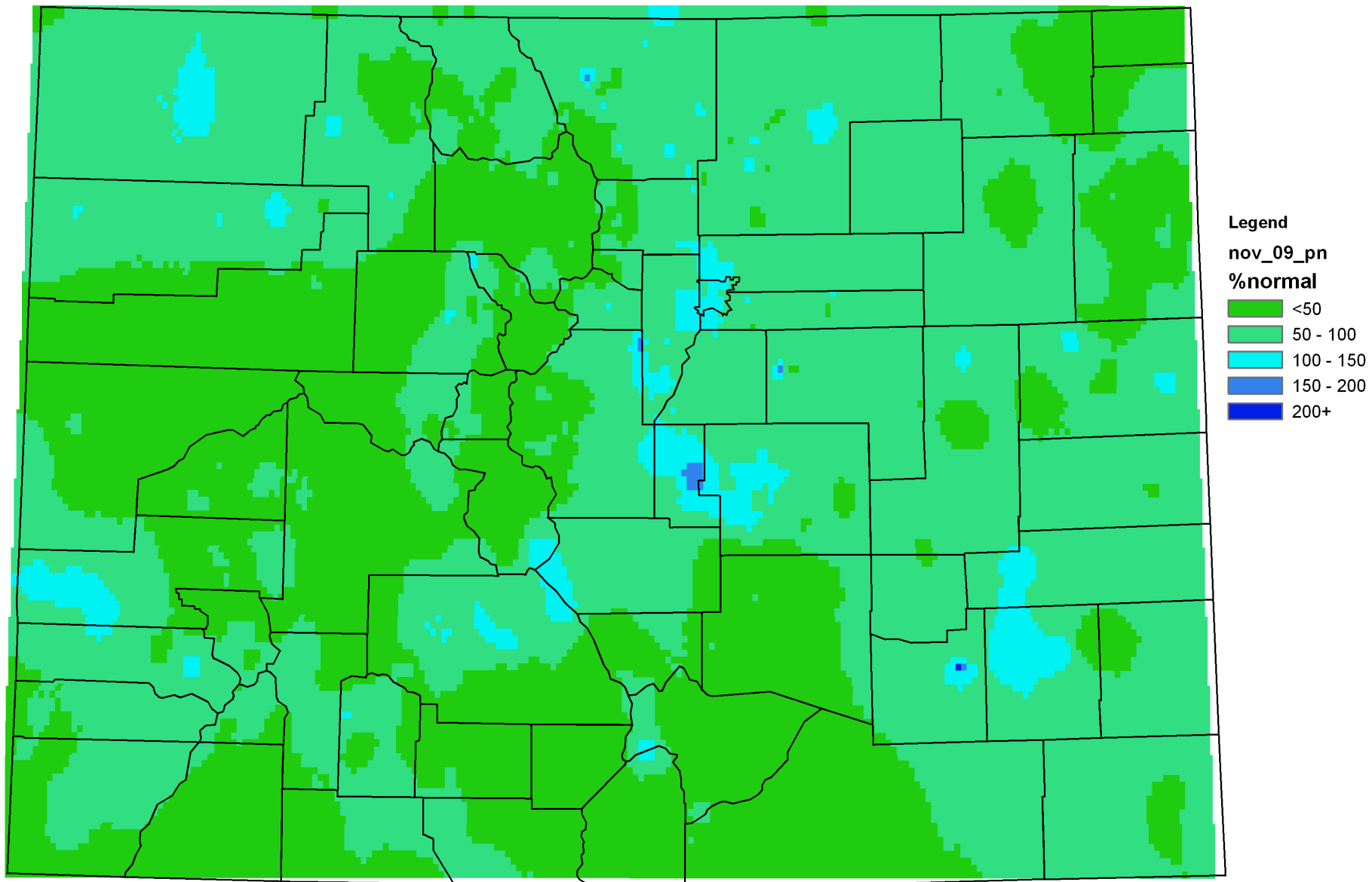
Water Year 2010 Precipitation as Percent of Normal (October 2009)



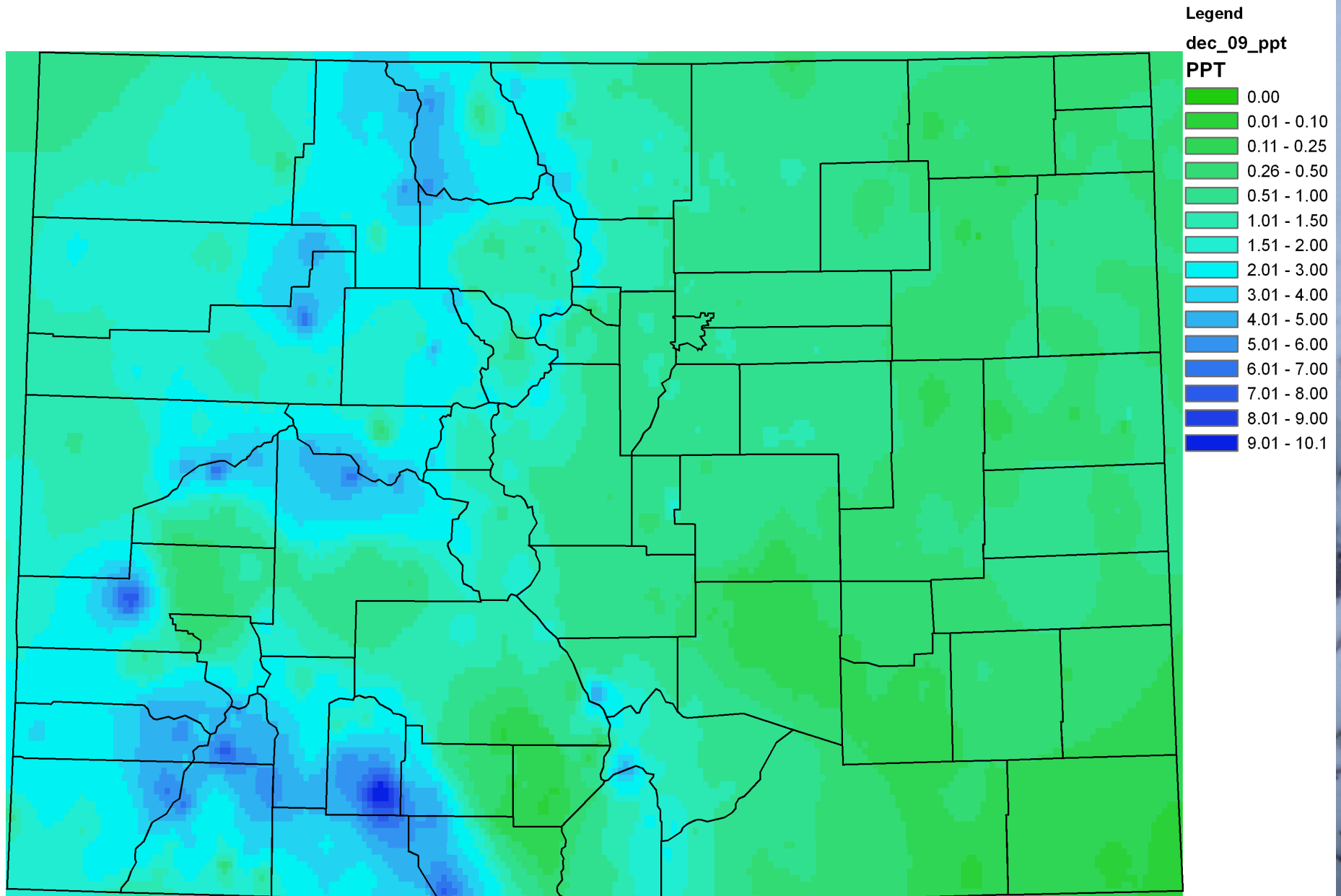
Colorado Precipitation (in) November 2009



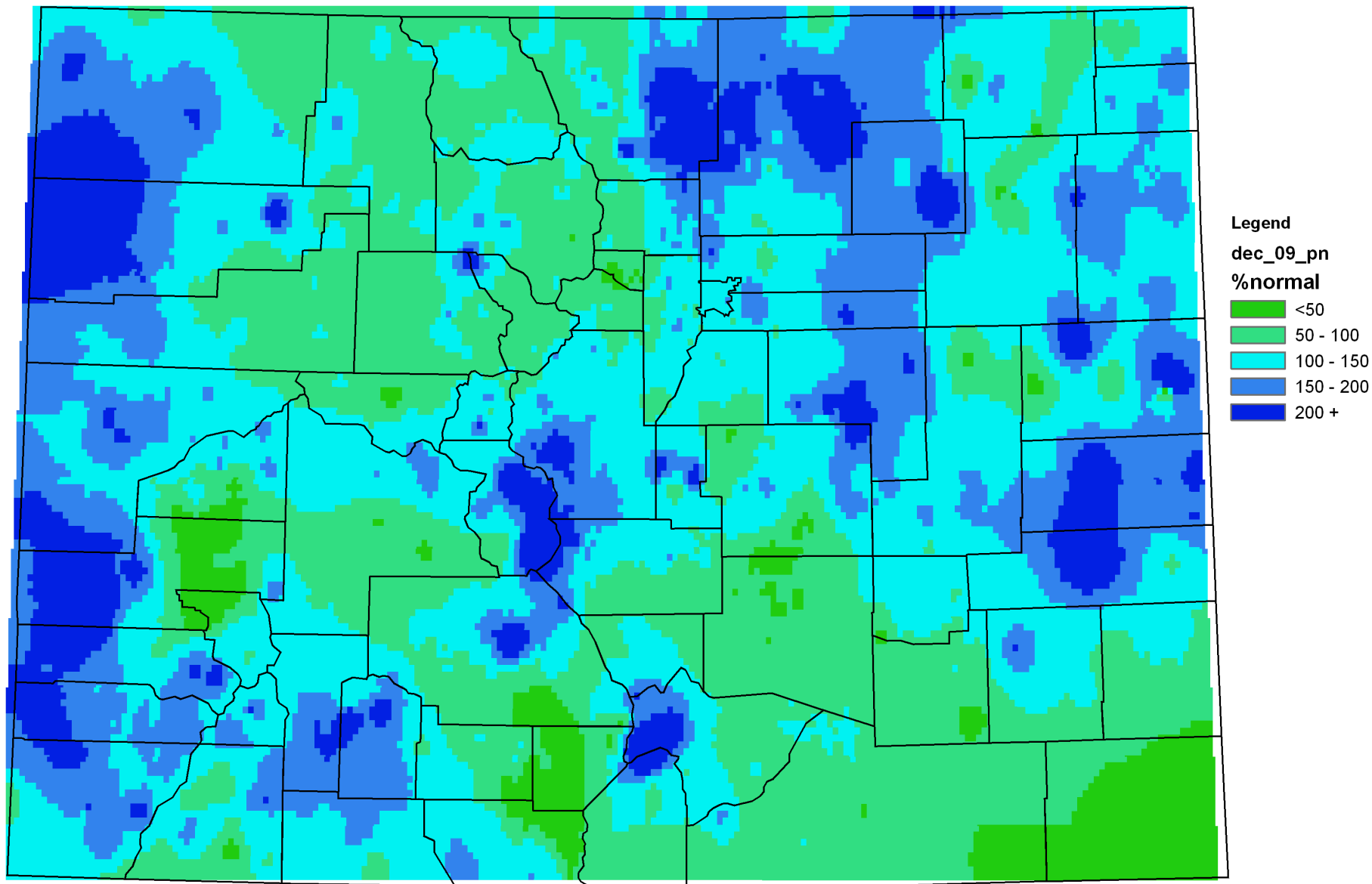
November 2009 Precipitation as Percent of Normal



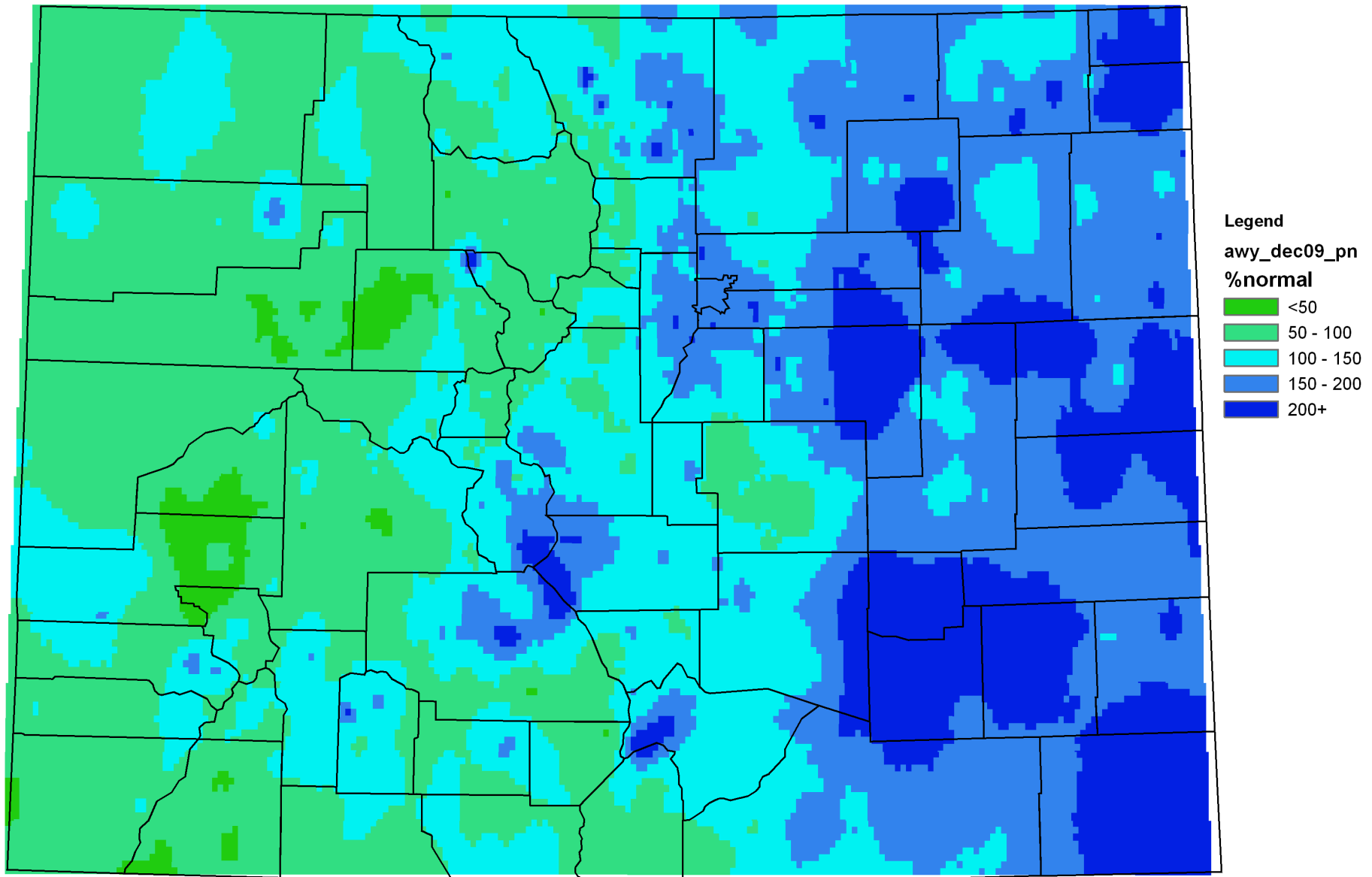
Colorado Precipitation (in) December 2009



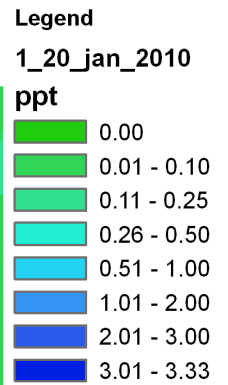
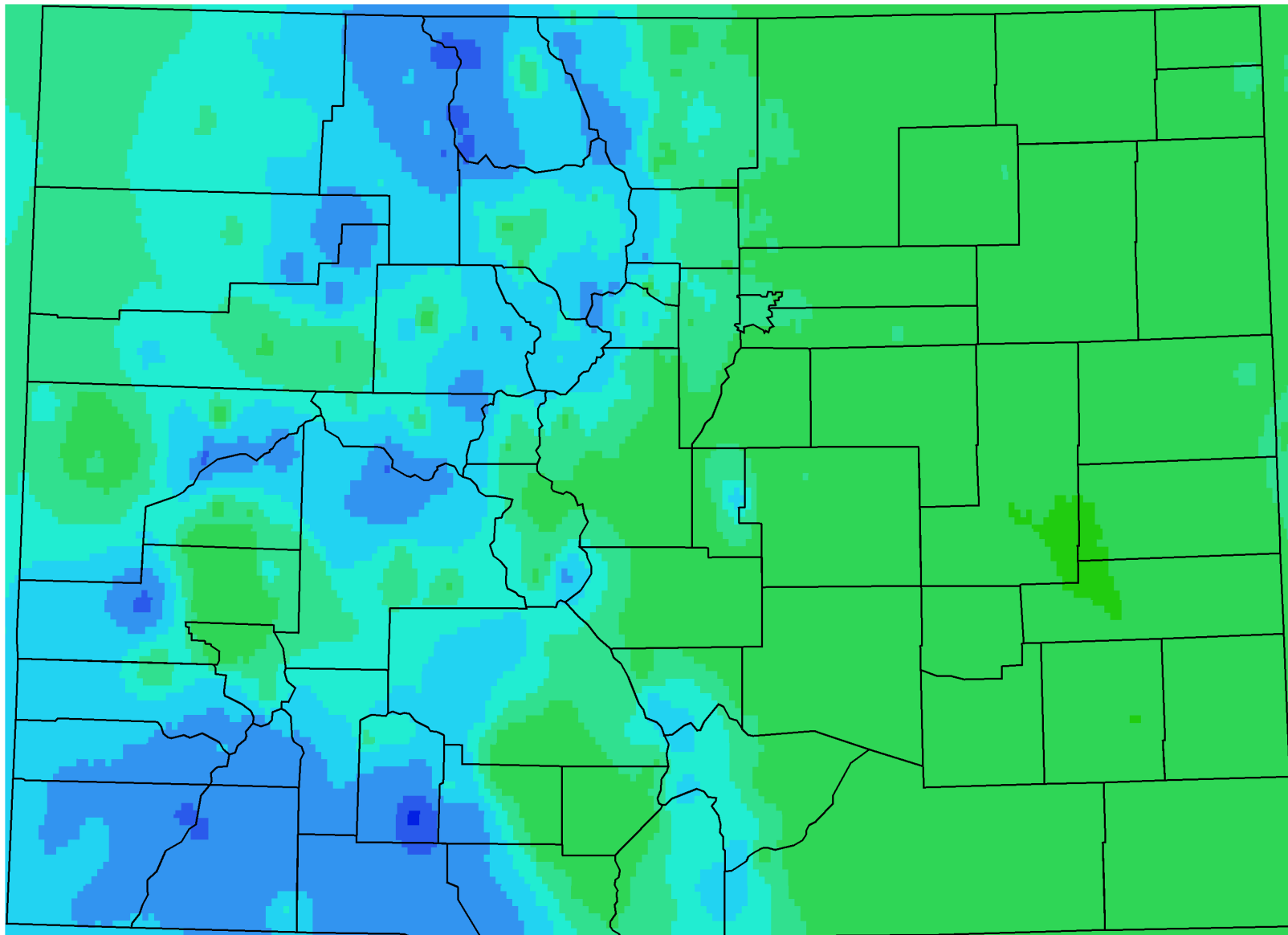
December 2009 Precipitation as Percent of Normal



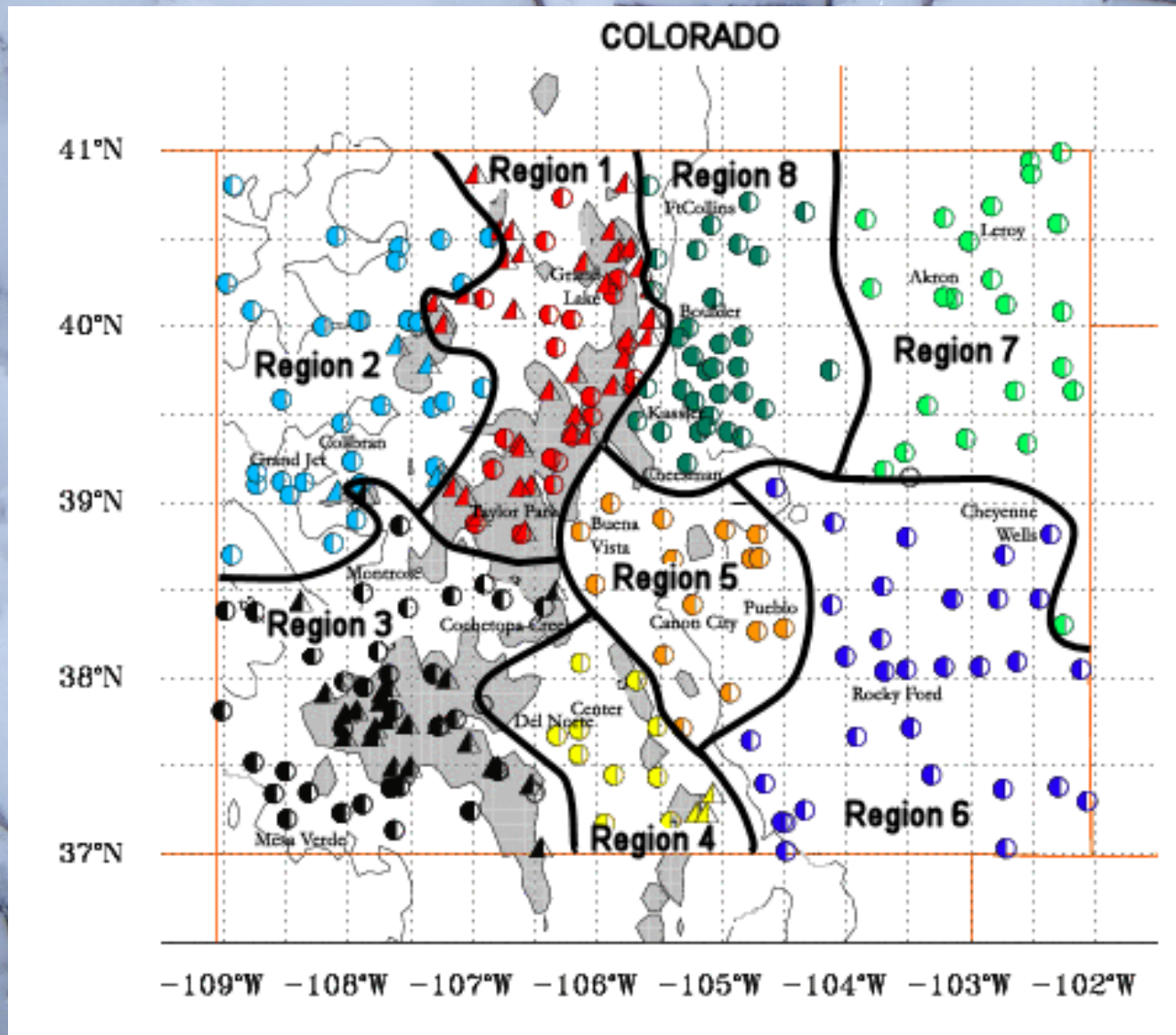
Water Year 2010 Precipitation as Percent of Normal October 2009 - December 2009



Colorado Precipitation (in) 1 January - 20 January 2010

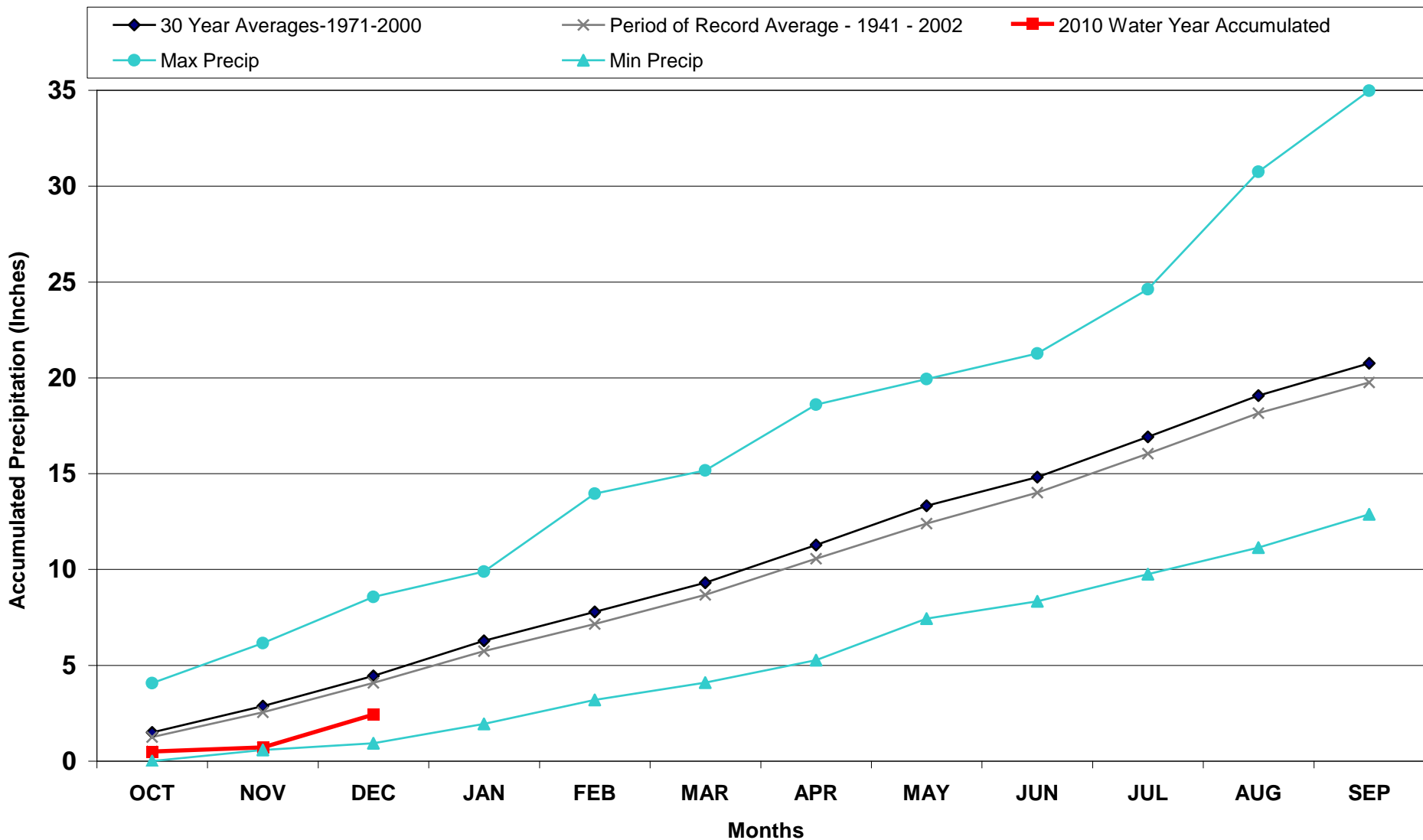


Climate divisions defined by Dr. Klaus Wolter of NOAA's Climate Diagnostic Center in Boulder, CO



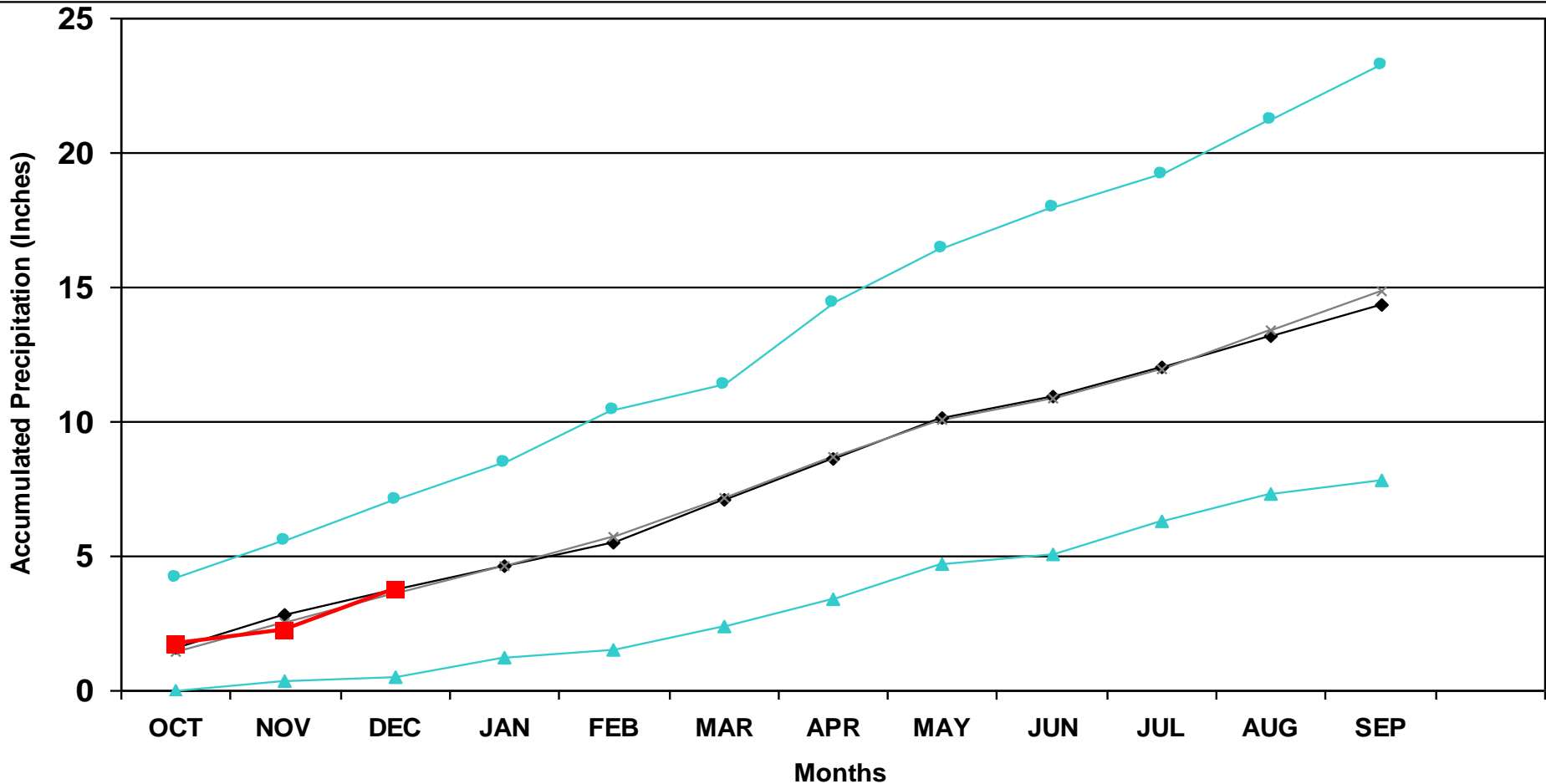
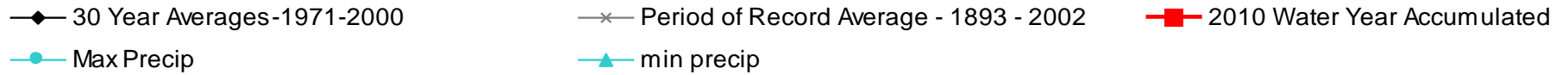
Division 1 – Grand Lake 1NW

Grand Lake 1 NW 2010 Water Year



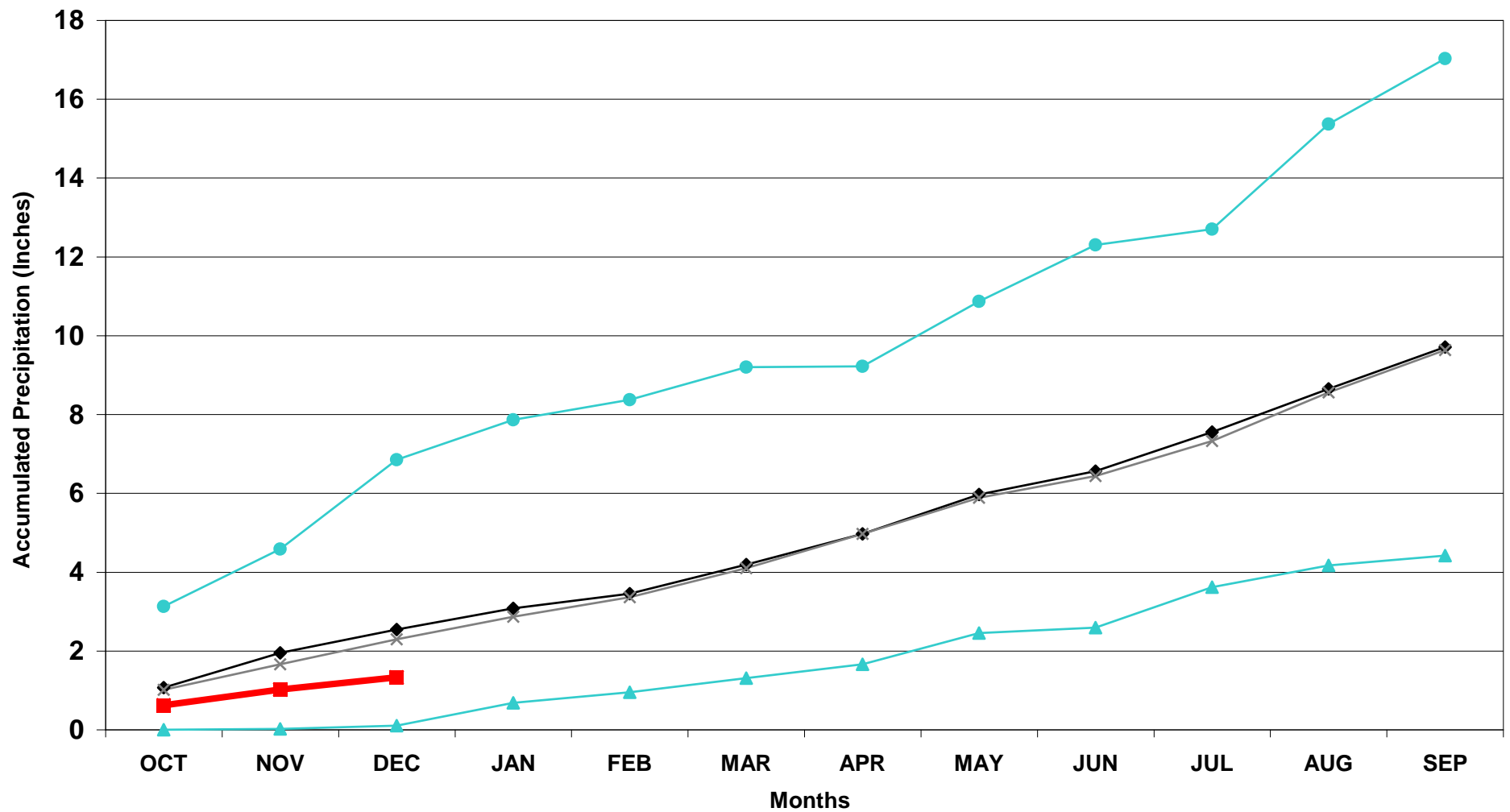
Division 2 – Collbran

Collbran 2SW 2010 Water Year



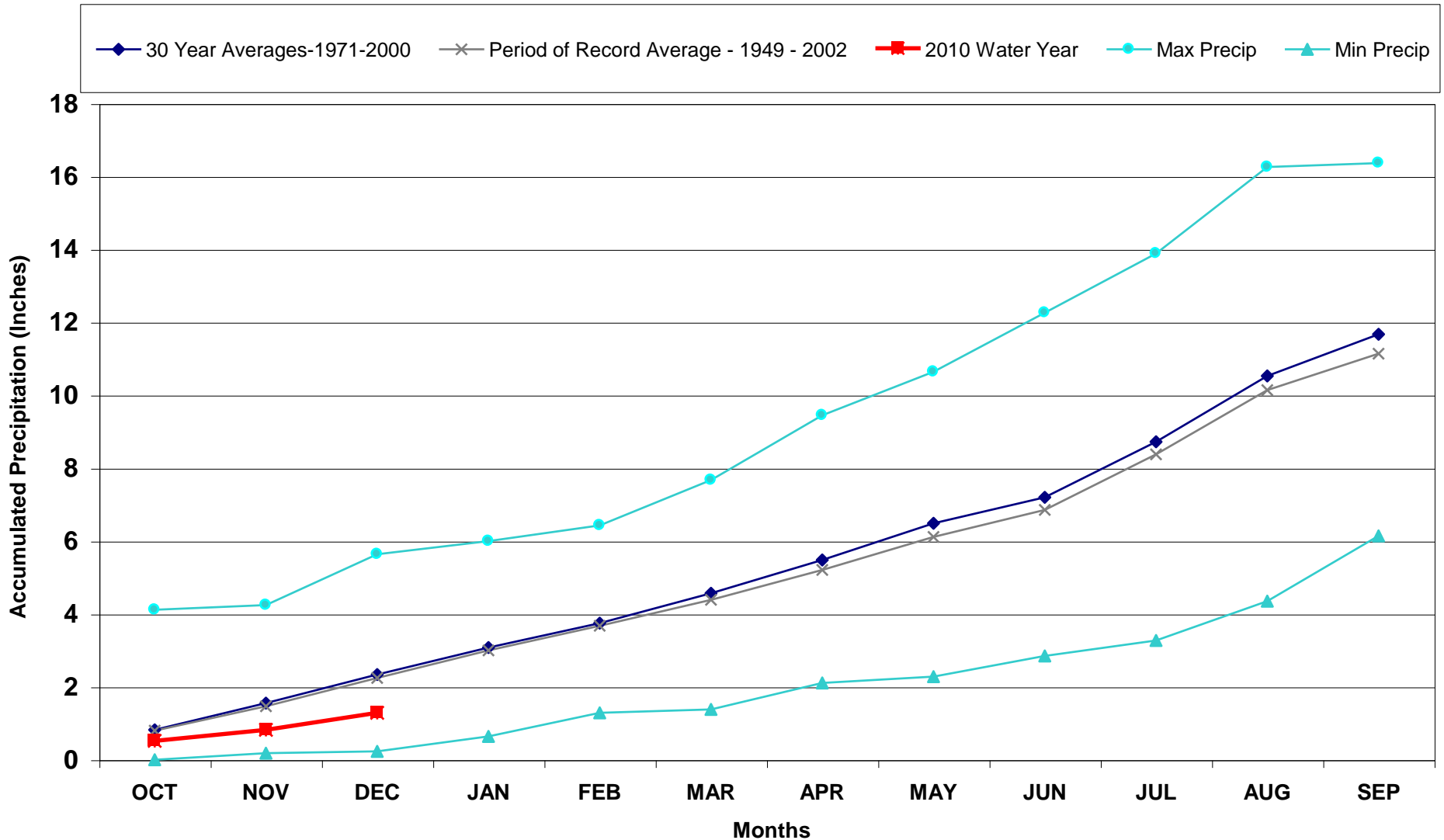
Division 3 – Montrose

Montrose #2 2010 Water Year



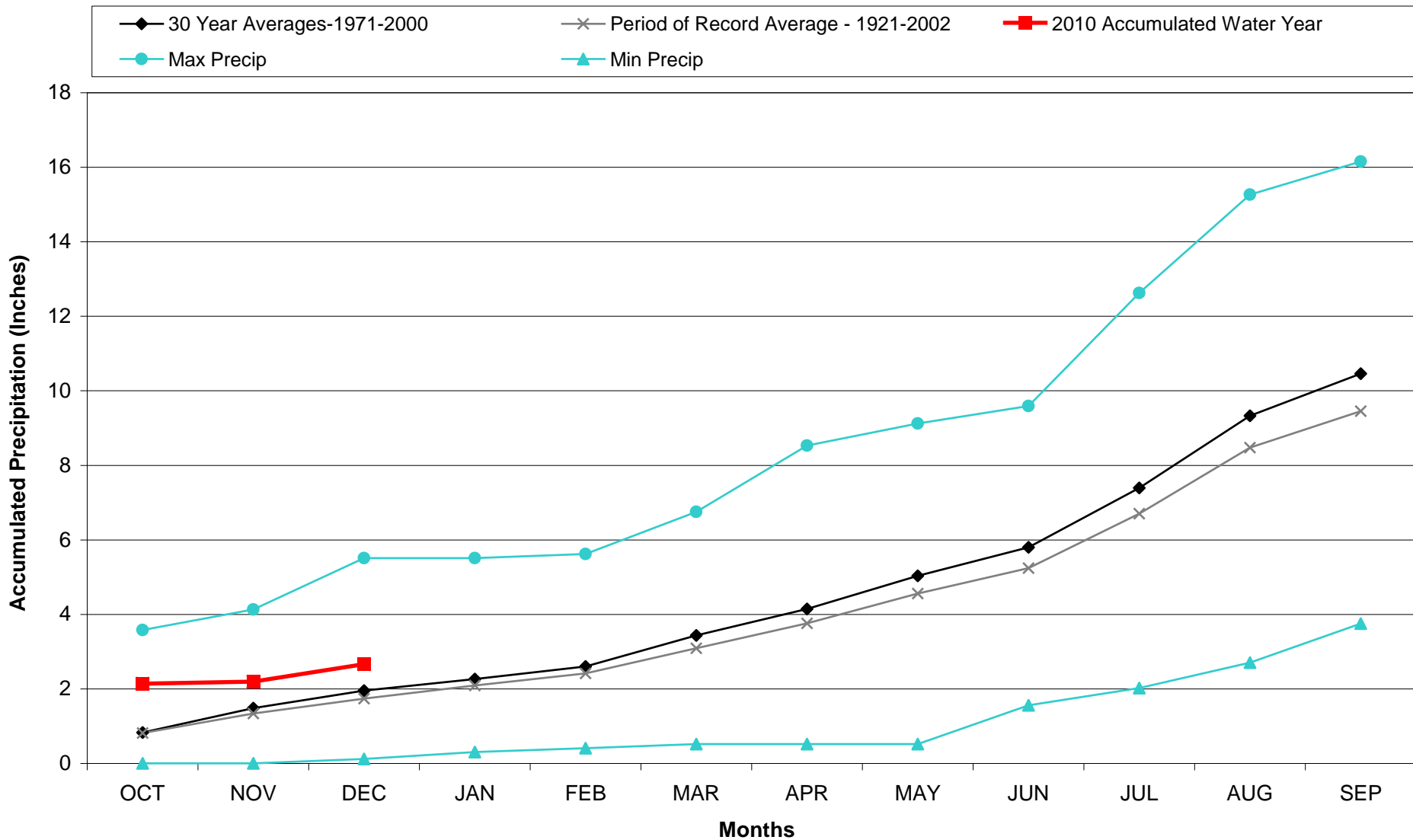
Division 3 – Cochetopa Creek

Cochetopa Creek 2010 Water Year



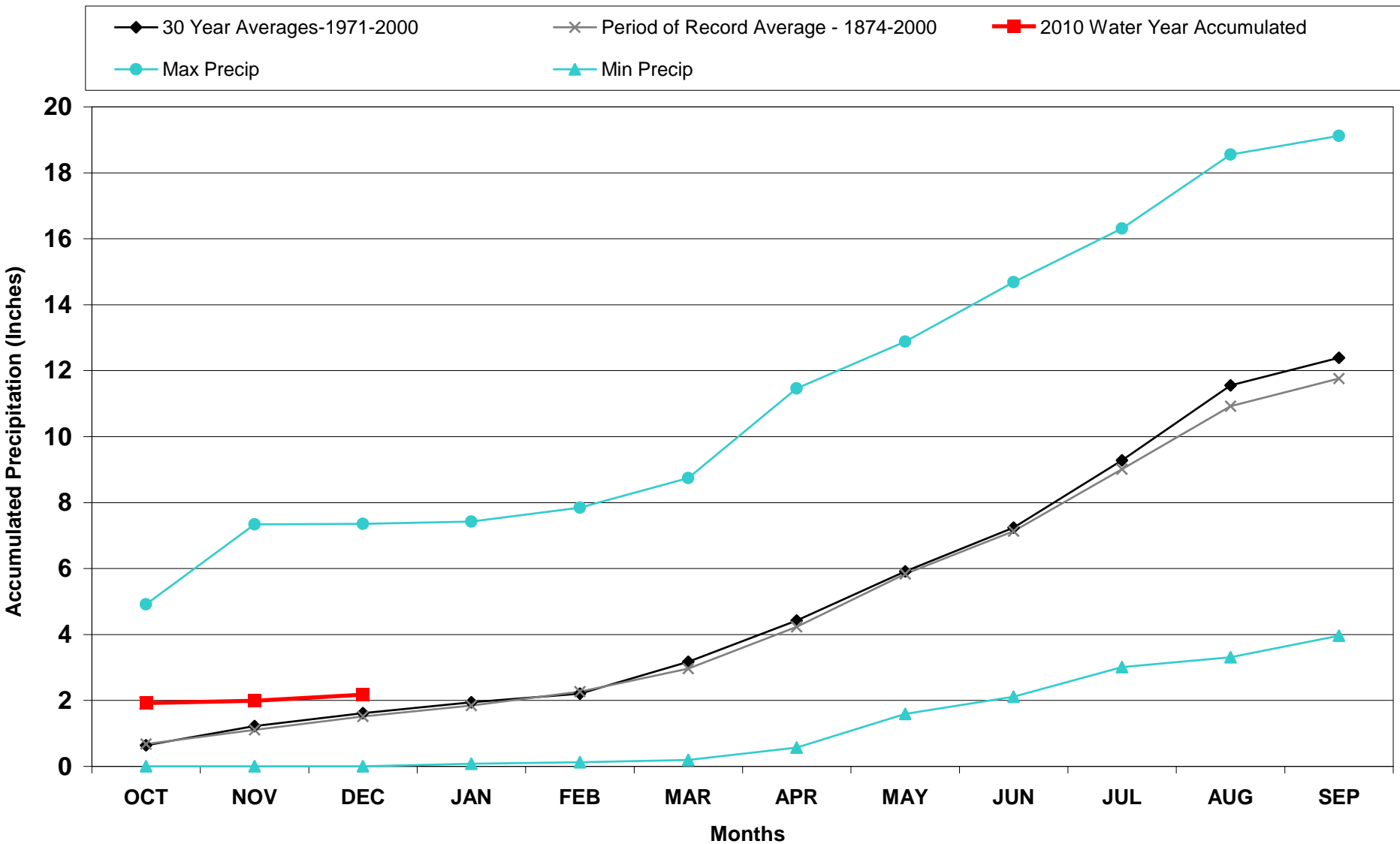
Division 4 – Del Norte

Del Norte 2010 Water Year



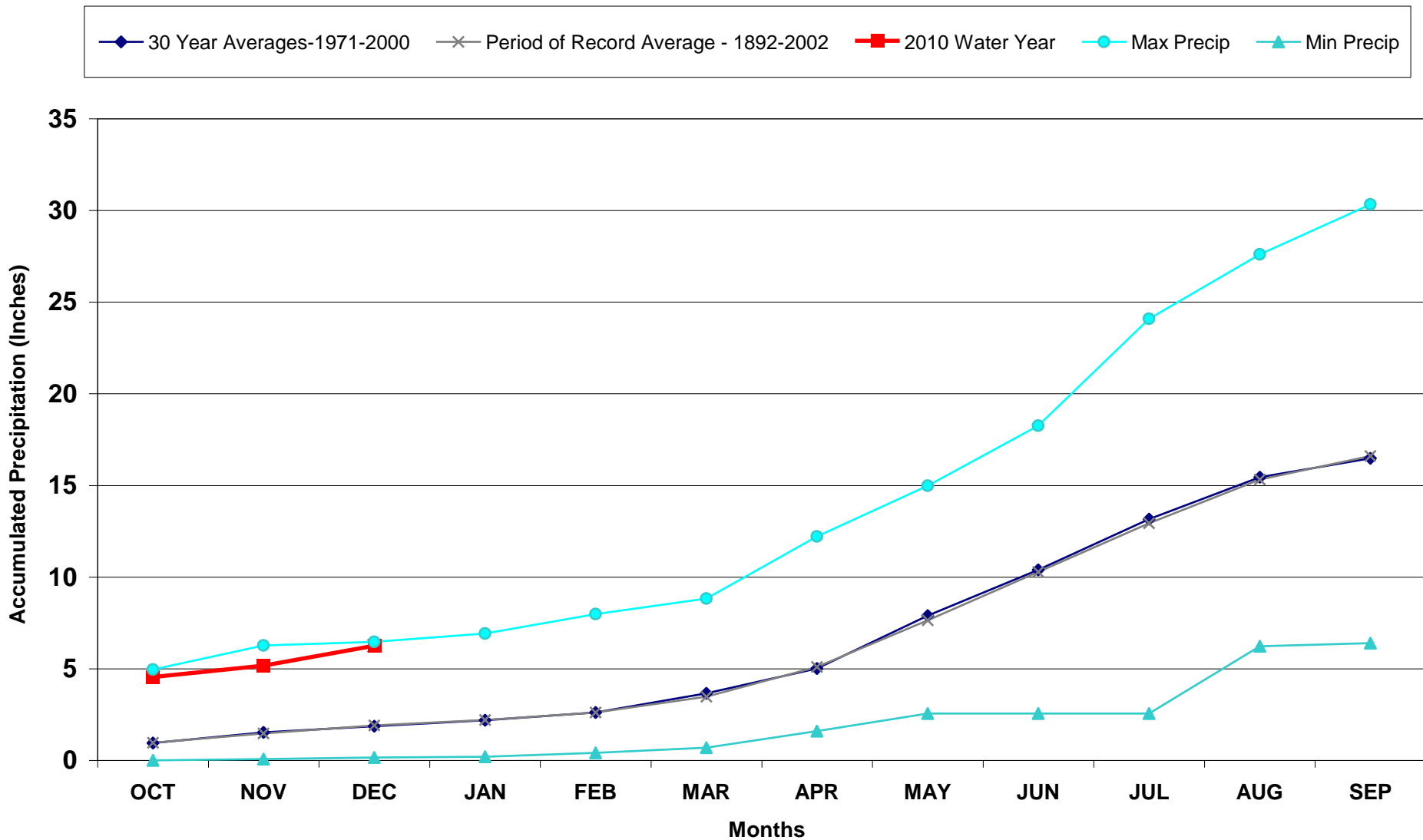
Division 5 – Pueblo

Pueblo WSO 2010 Water Year



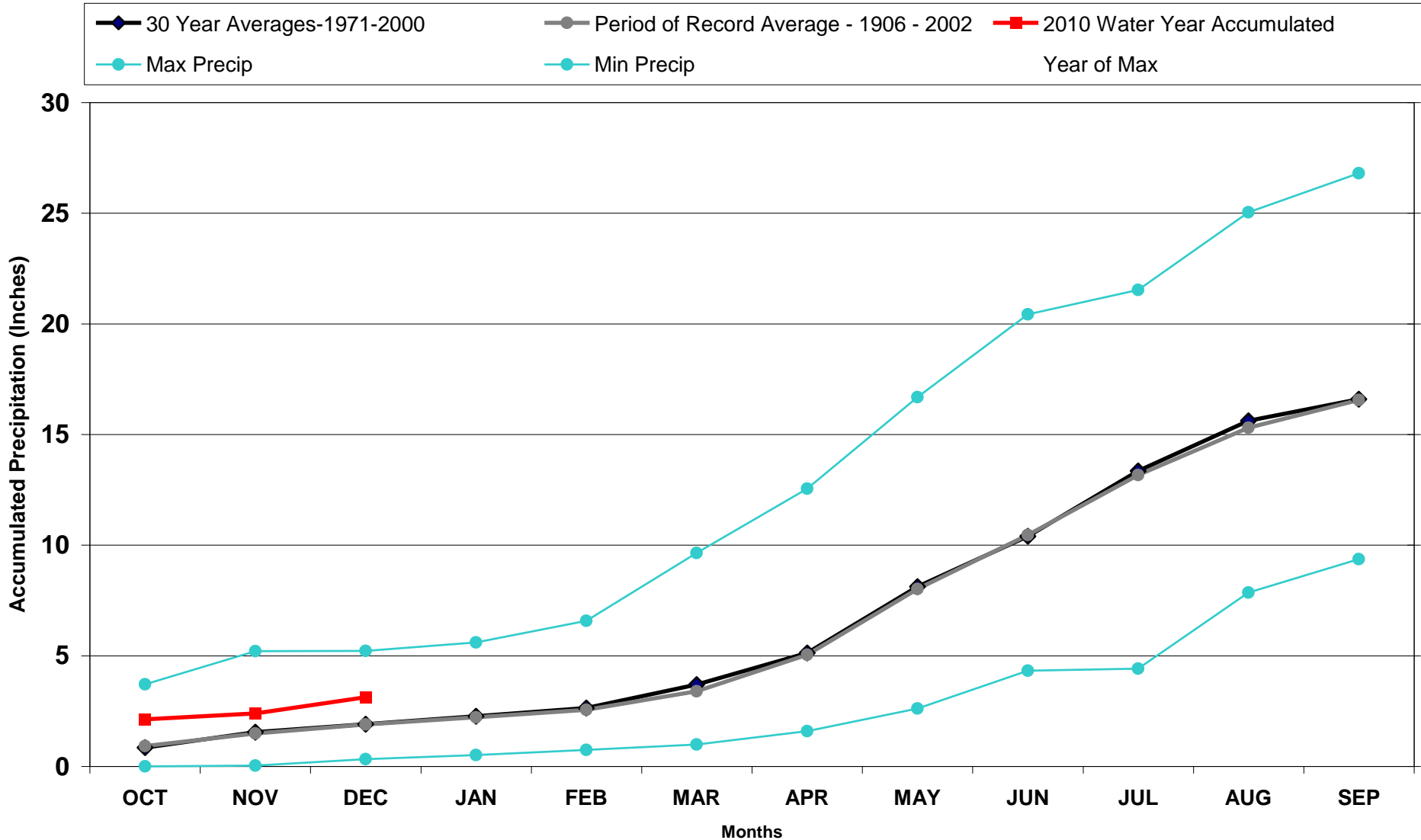
Division 6 - Burlington

Burlington 2010 Water Year



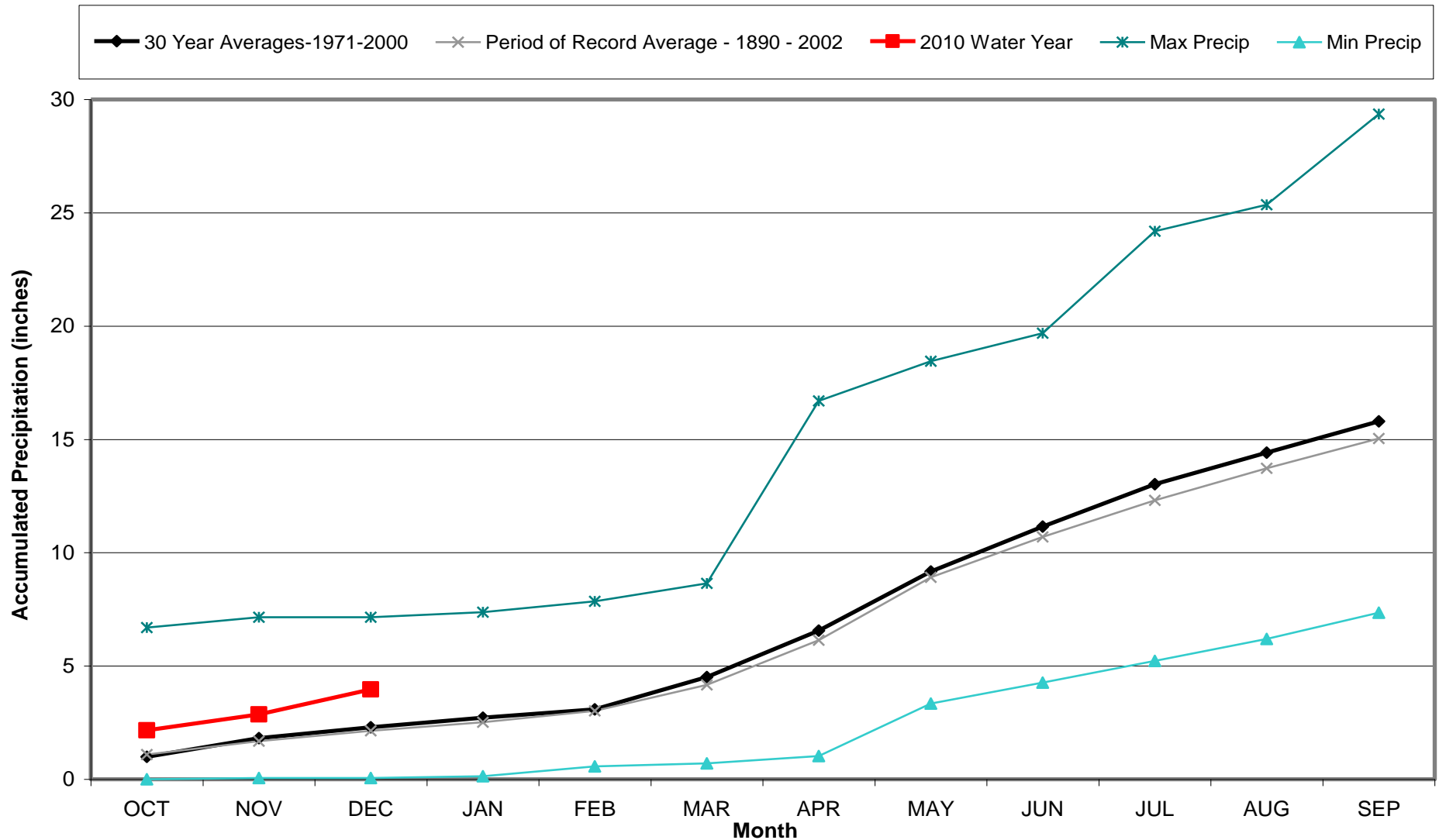
Division 7 – Akron

Akron 4E 2010 Water Year



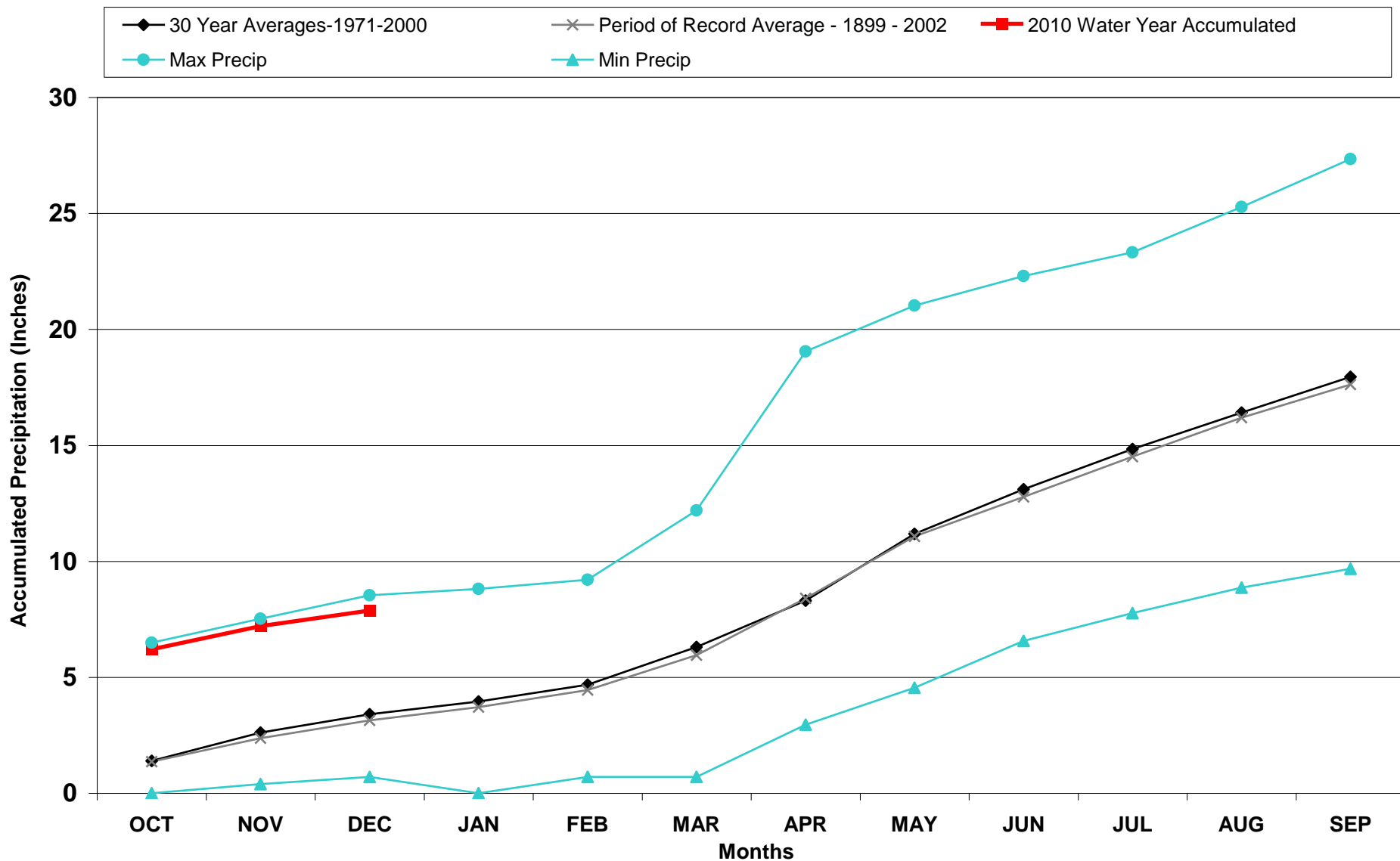
Division 8 – Fort Collins

Fort Collins 2010 Water Year



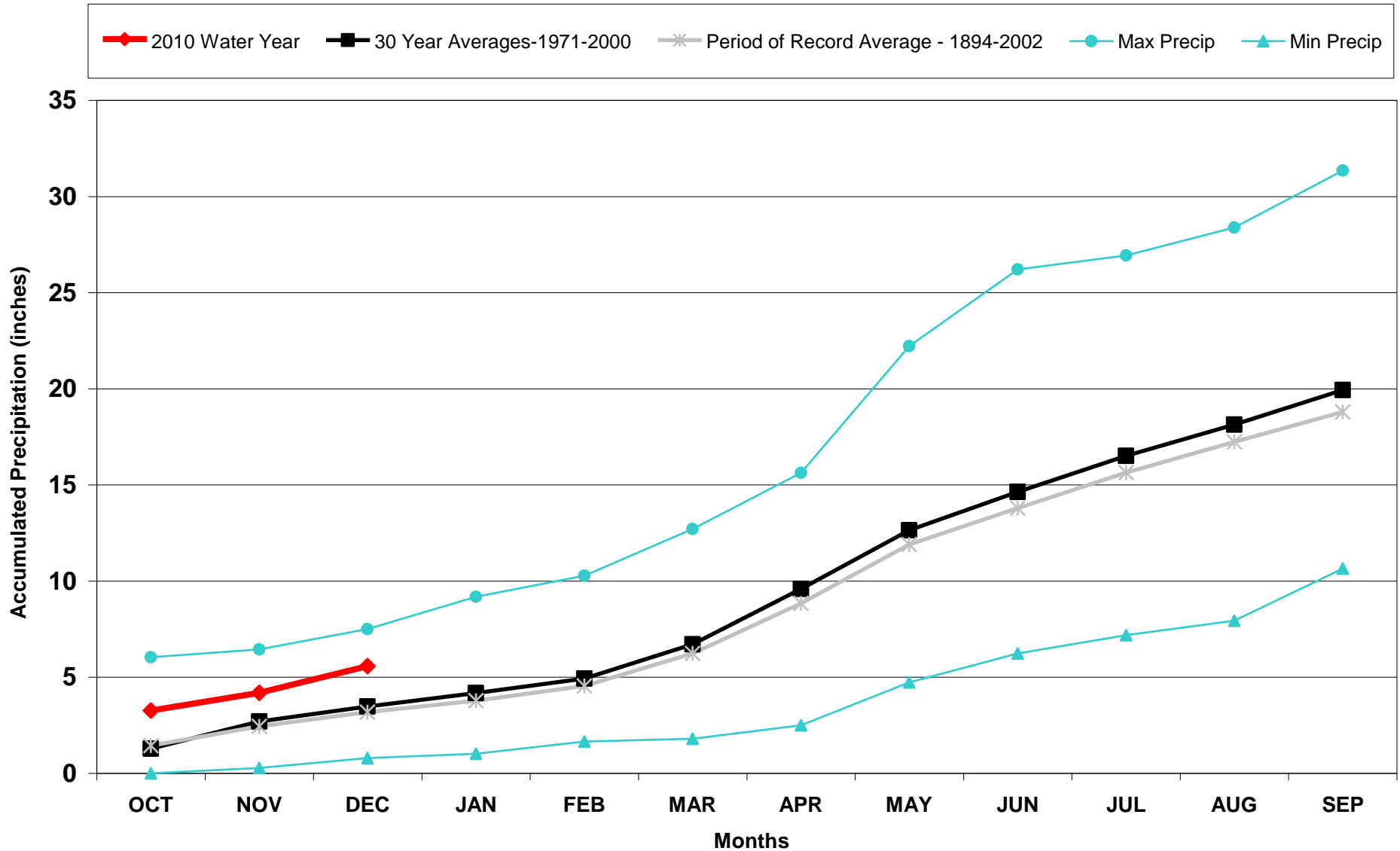
Division 8 – Kassler

Kassler 2010 Water Year



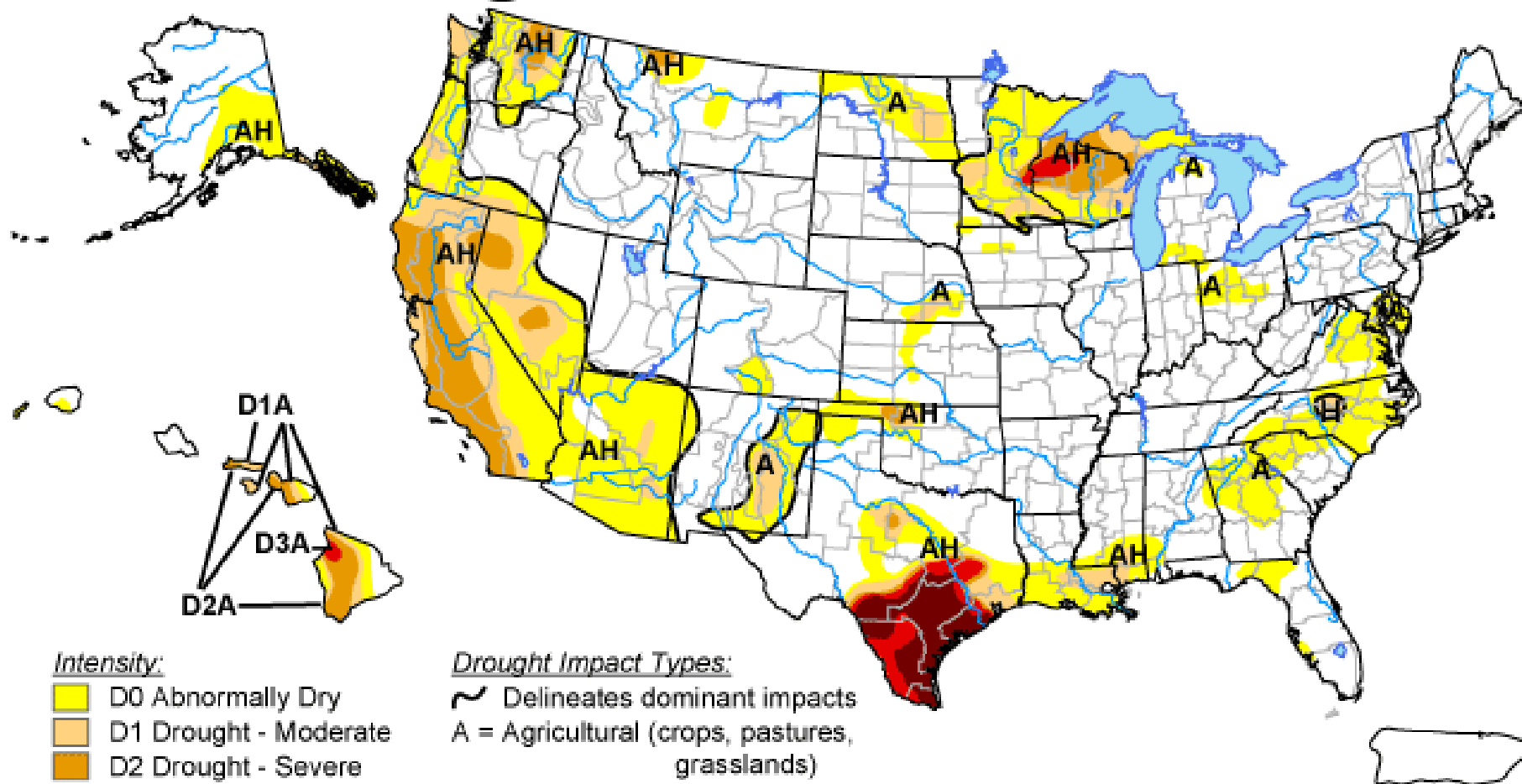
Division 8 - Boulder

Boulder 2010 Water Year



U.S. Drought Monitor


August 18, 2009
Valid 8 a.m. EDT



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.



Released Thursday, August 20, 2009

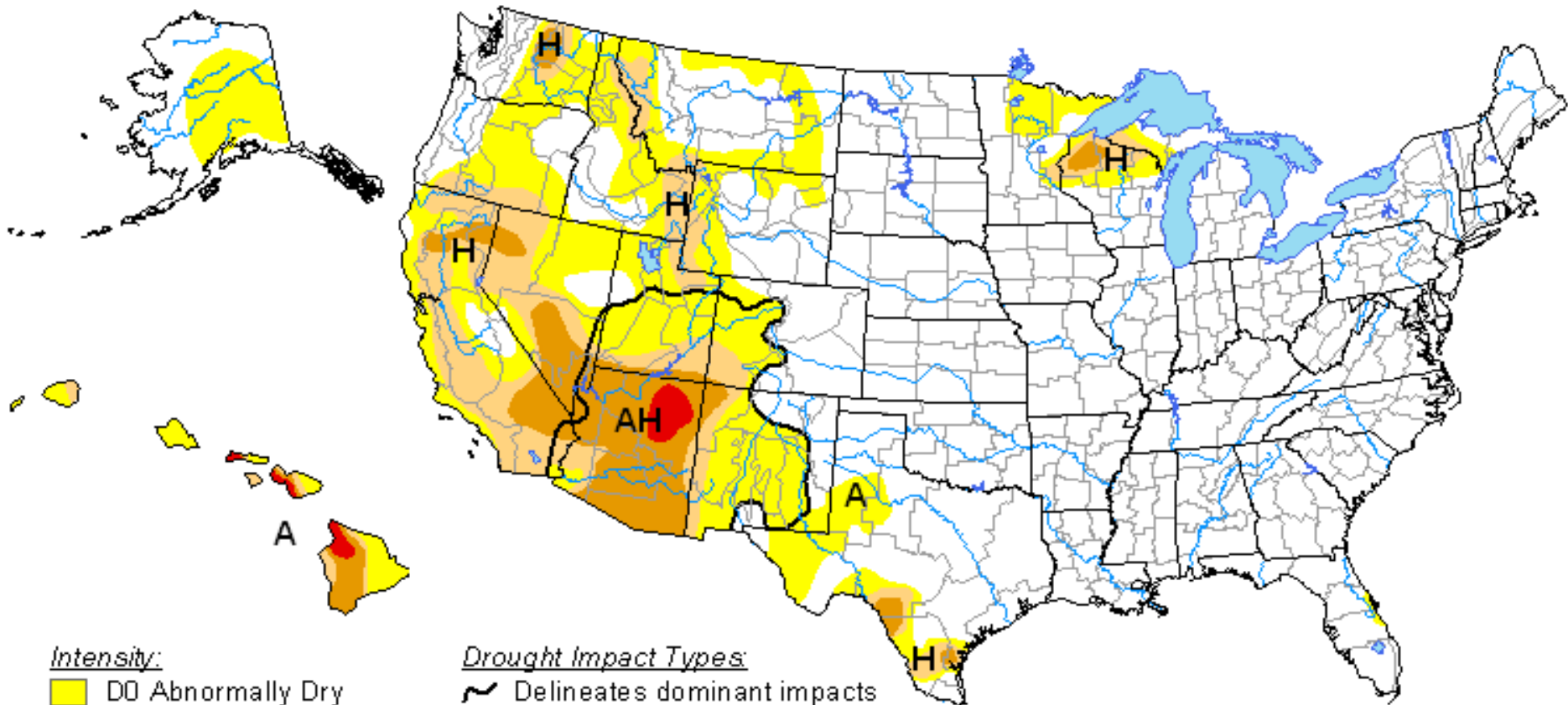
Author: Laura Edwards, Western Regional Climate Center

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






U.S. Drought Monitor

January 19, 2010


Valid 7 am. 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.

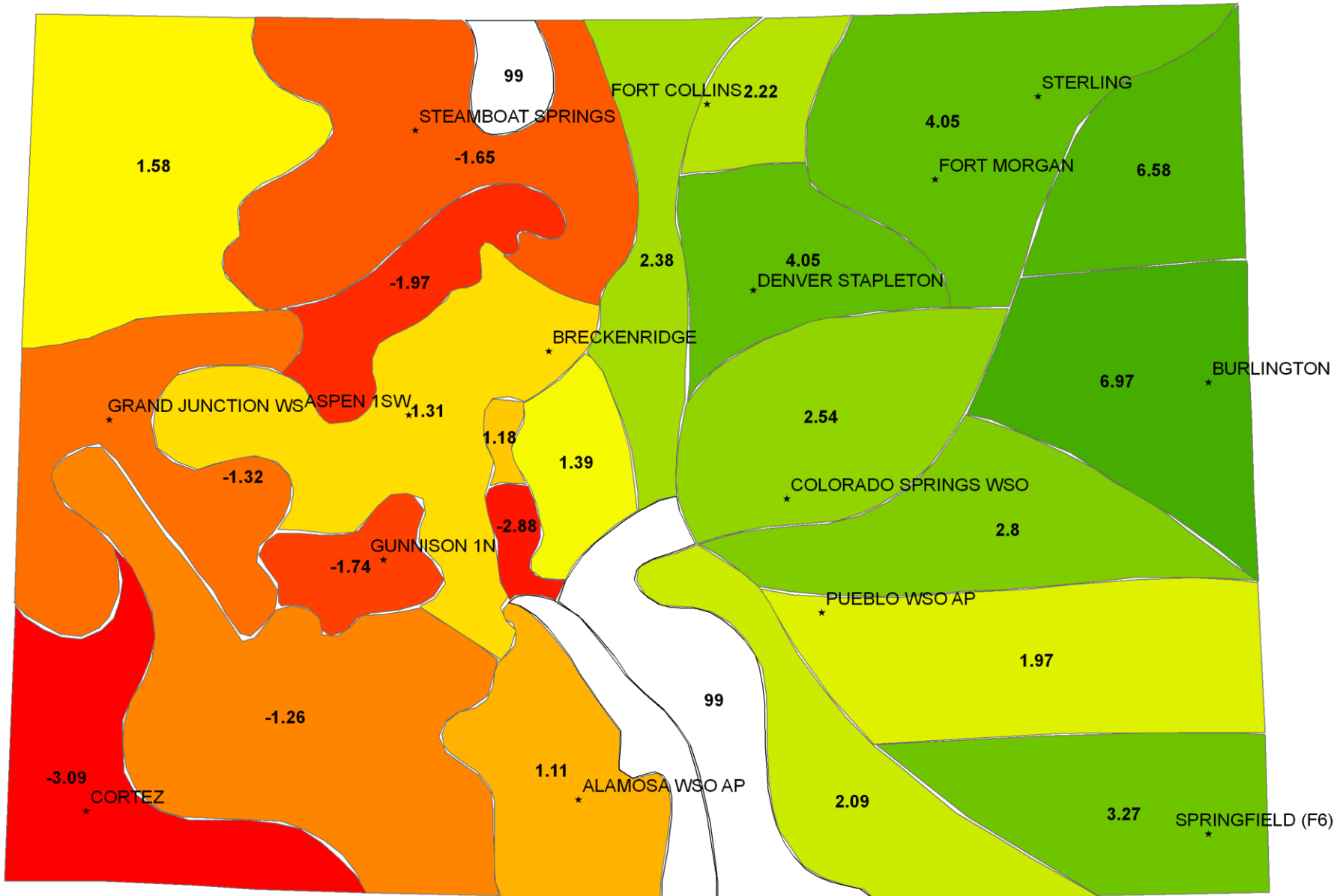
<http://drought.unl.edu/dm>



Released Thursday, January 21, 2010

Author: David Miskus, NOAA/NWS/NCEP/CPC

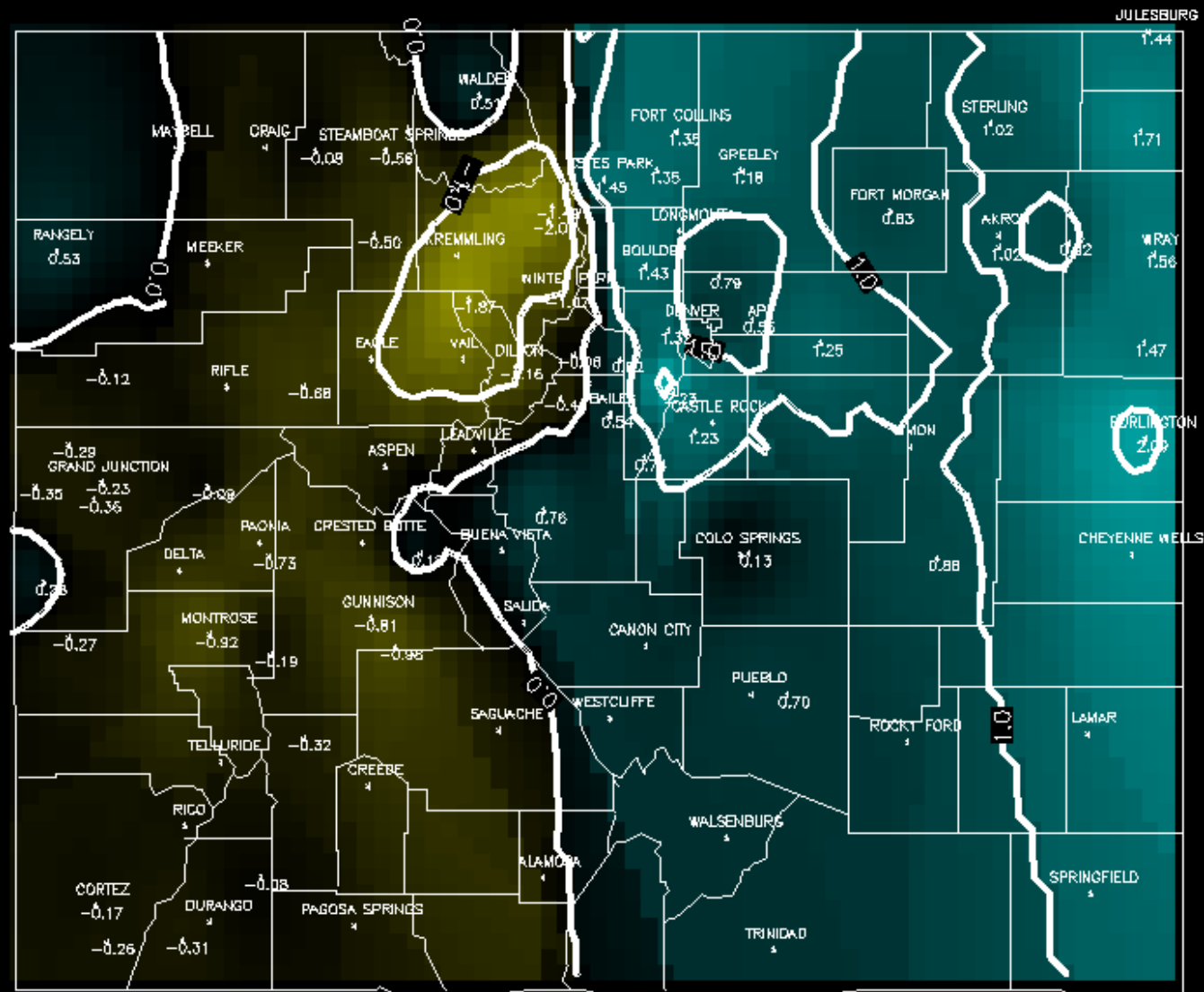
Modified Palmer Drought Index December 2009



3-month SPI

Colorado

12/2009 3 mon. SPI



100 % < 2.0
76 % < 1.0
41 % < 0.0

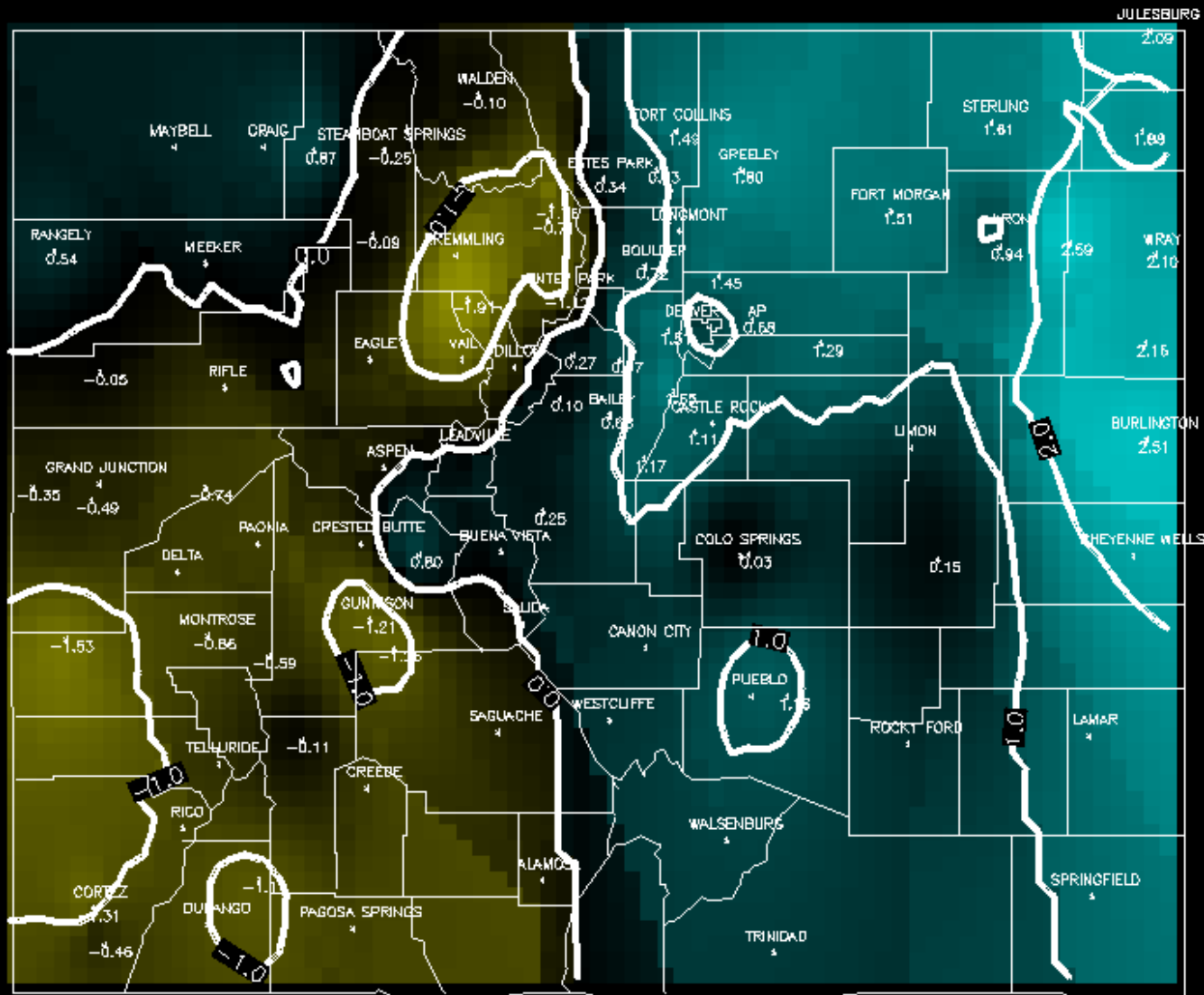
3 % < -1.0
0 % < -2.0
0 % < -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO

12-month SPI

Colorado

12/2009 12 mon. SPI

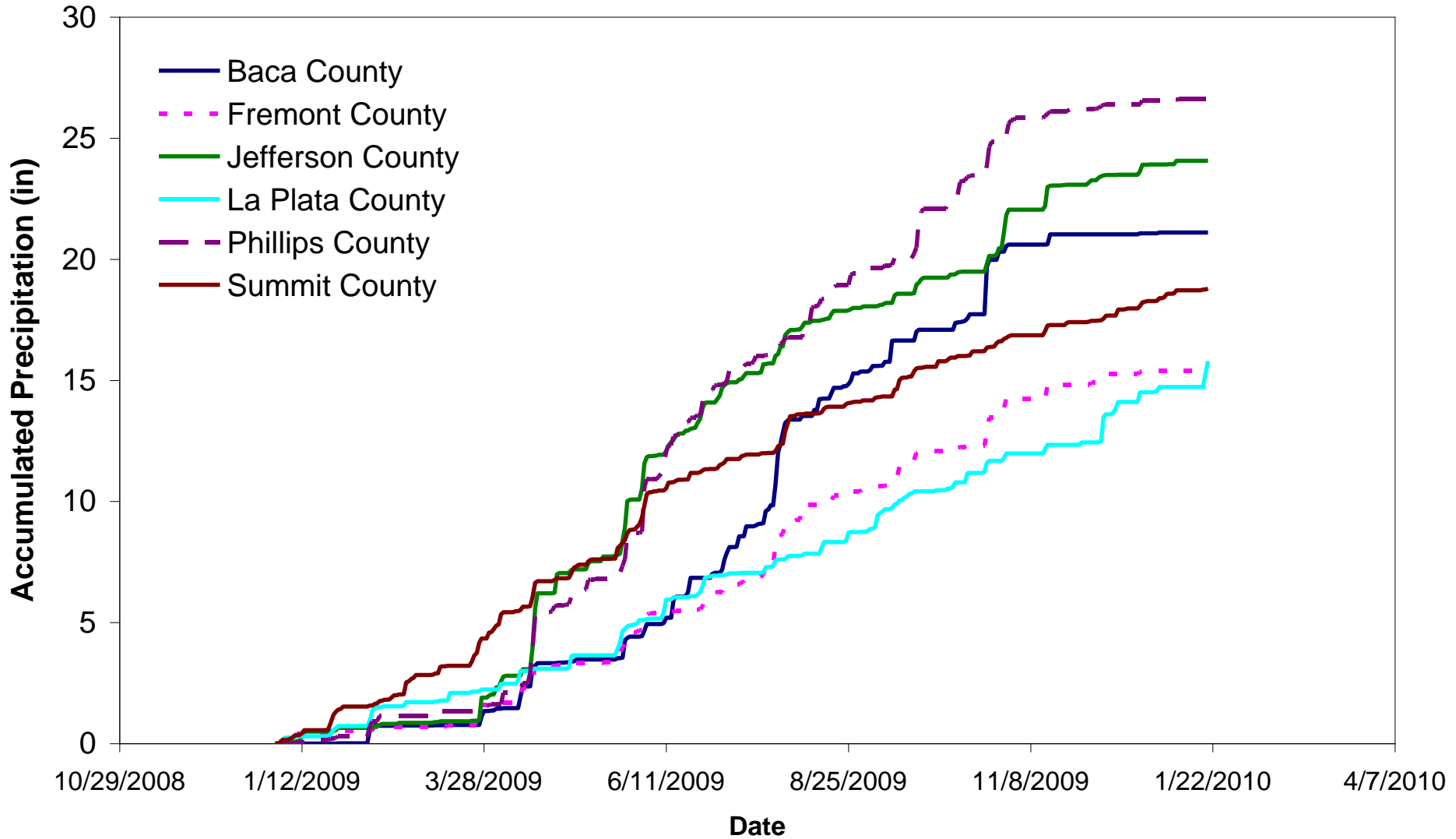


84 % < 2.0
73 % < 1.0
37 % < 0.0

7 % < -1.0
0 % < -2.0
0 % < -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO

CoCoRaHS Accumulated Daily Precipitation for Selected Counties (Jan 1, 2009 - Jan 20, 2010)



Colorado Climate Center

Data and Power Point Presentations
available for downloading

- <http://ccc.atmos.colostate.edu>
- then click on “Presentations”

**Colorado
State
University**

Knowledge to Go Places

