

Climate Update

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Colorado Climate Center**

**Atmospheric Science Department
Colorado State University**

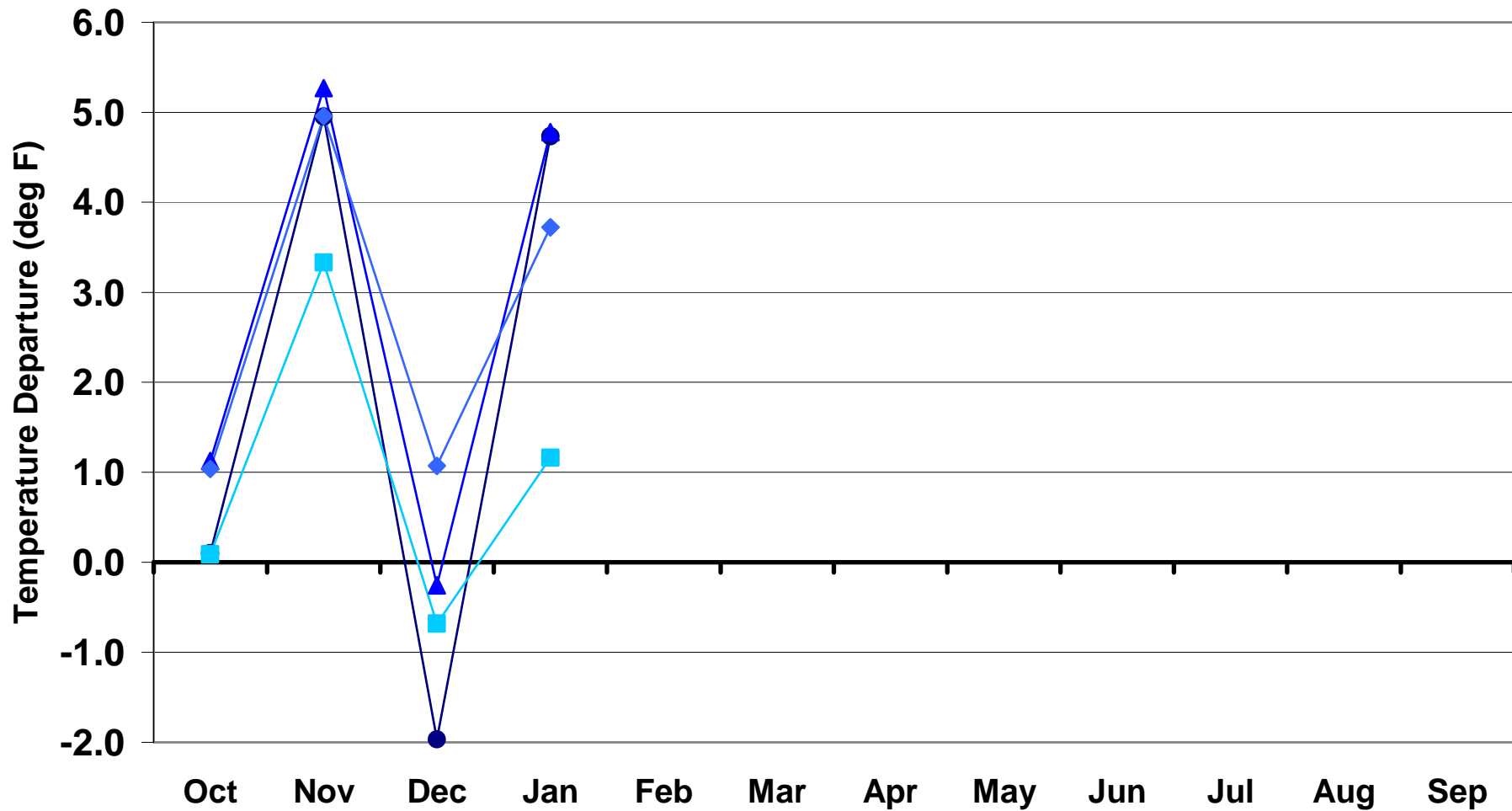
**Presented to
Water Availability Task Force
February 25, 2009
Denver, CO**

Prepared by Wendy Ryan



Water Year 2009 Temperature Departures

Water Year 2009



● Eastern Plains

▲ Foothills

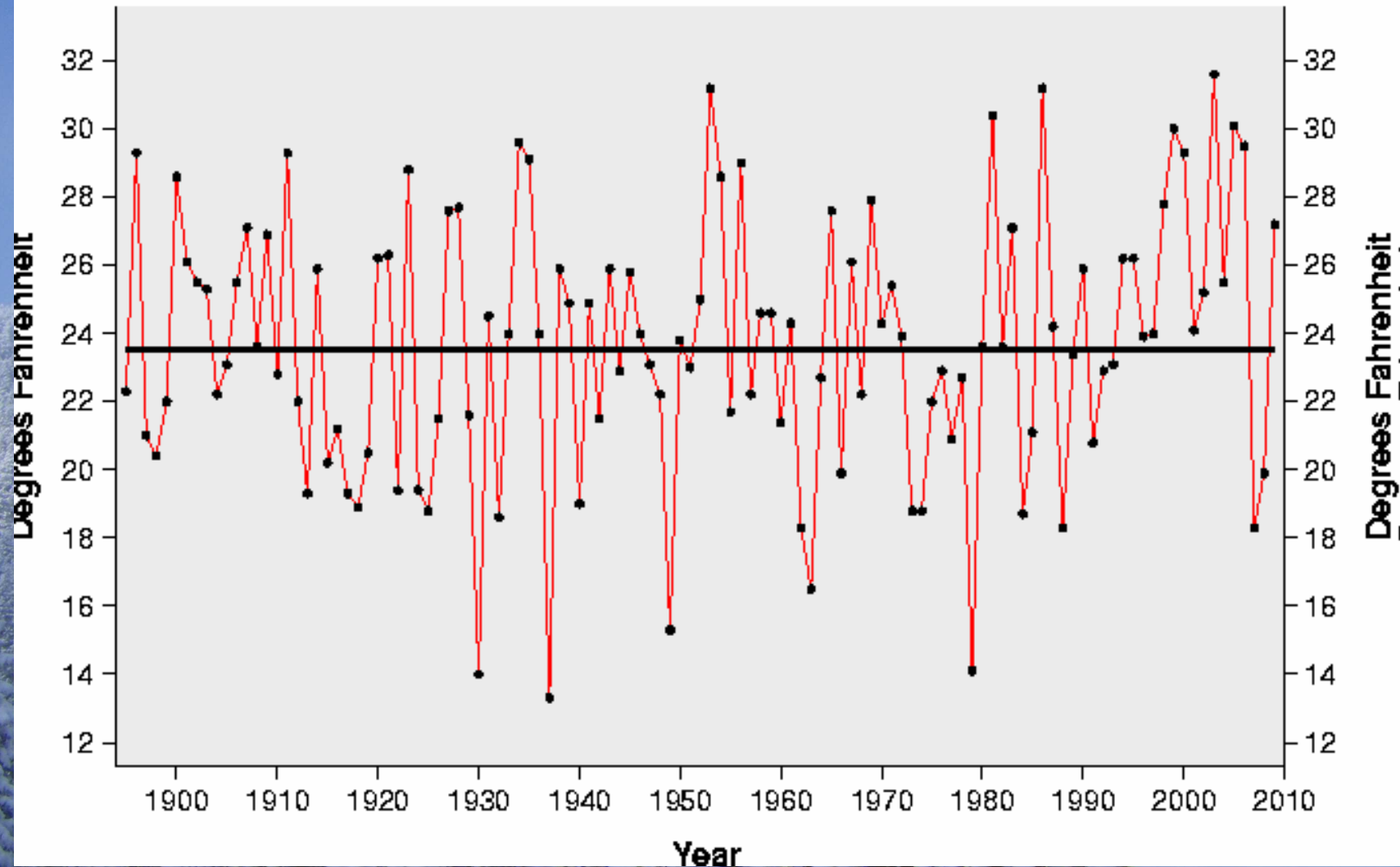
◆ Mountains

■ Western Valleys

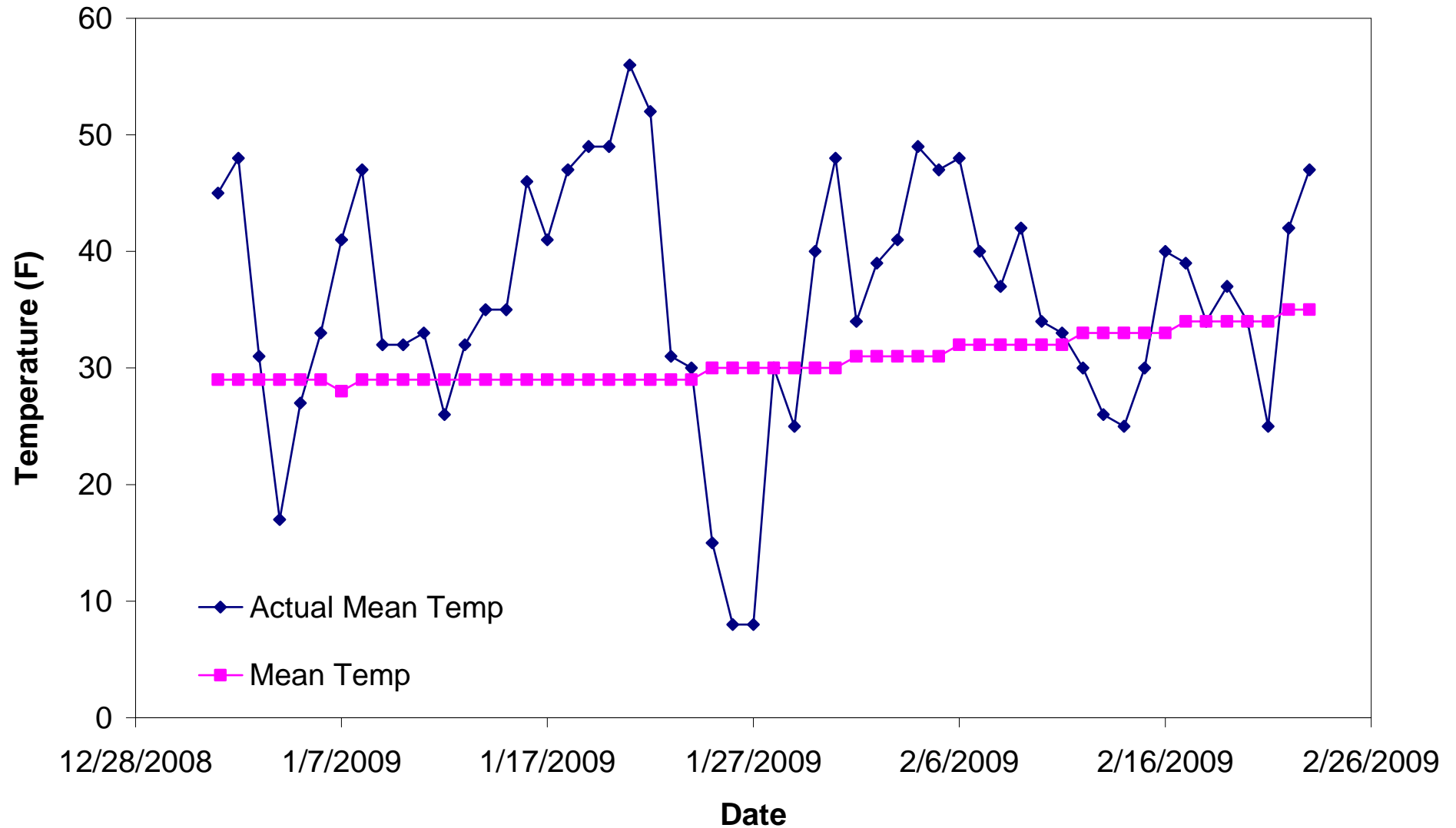
January Average Temperature History for Colorado (NCDC)

— Actual Temperature
— Average Temperature

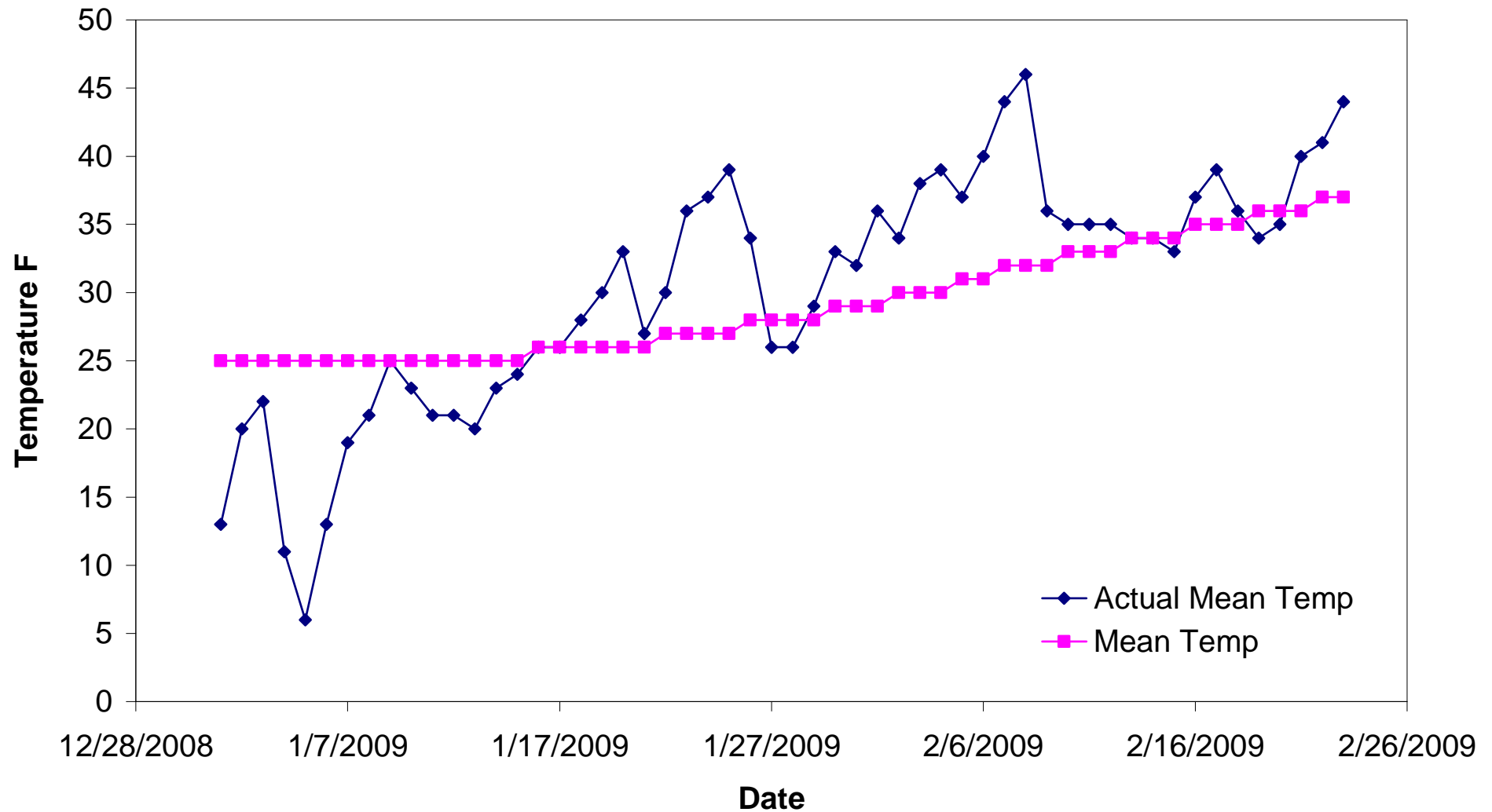
Rank: 27.2 degrees is 94th coolest
for period of record 1895-2009



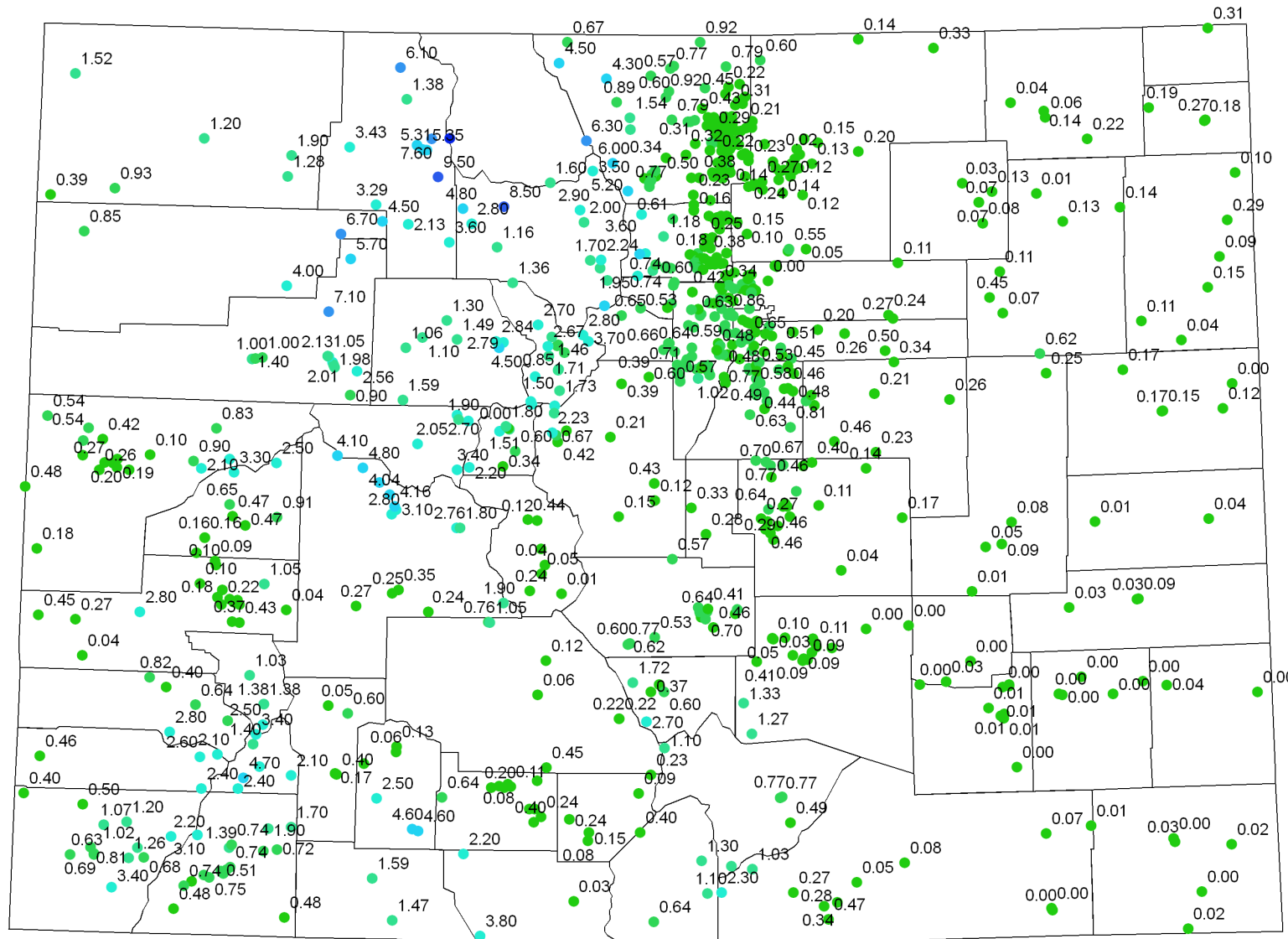
Denver, CO Jan 1 - Feb 23 2009 Mean and Actual Daily Temperature



Grand Junction Jan 1 - Feb 23 2009 Mean and Actual Daily Temperatures



January 2009 Precipitation (inches)

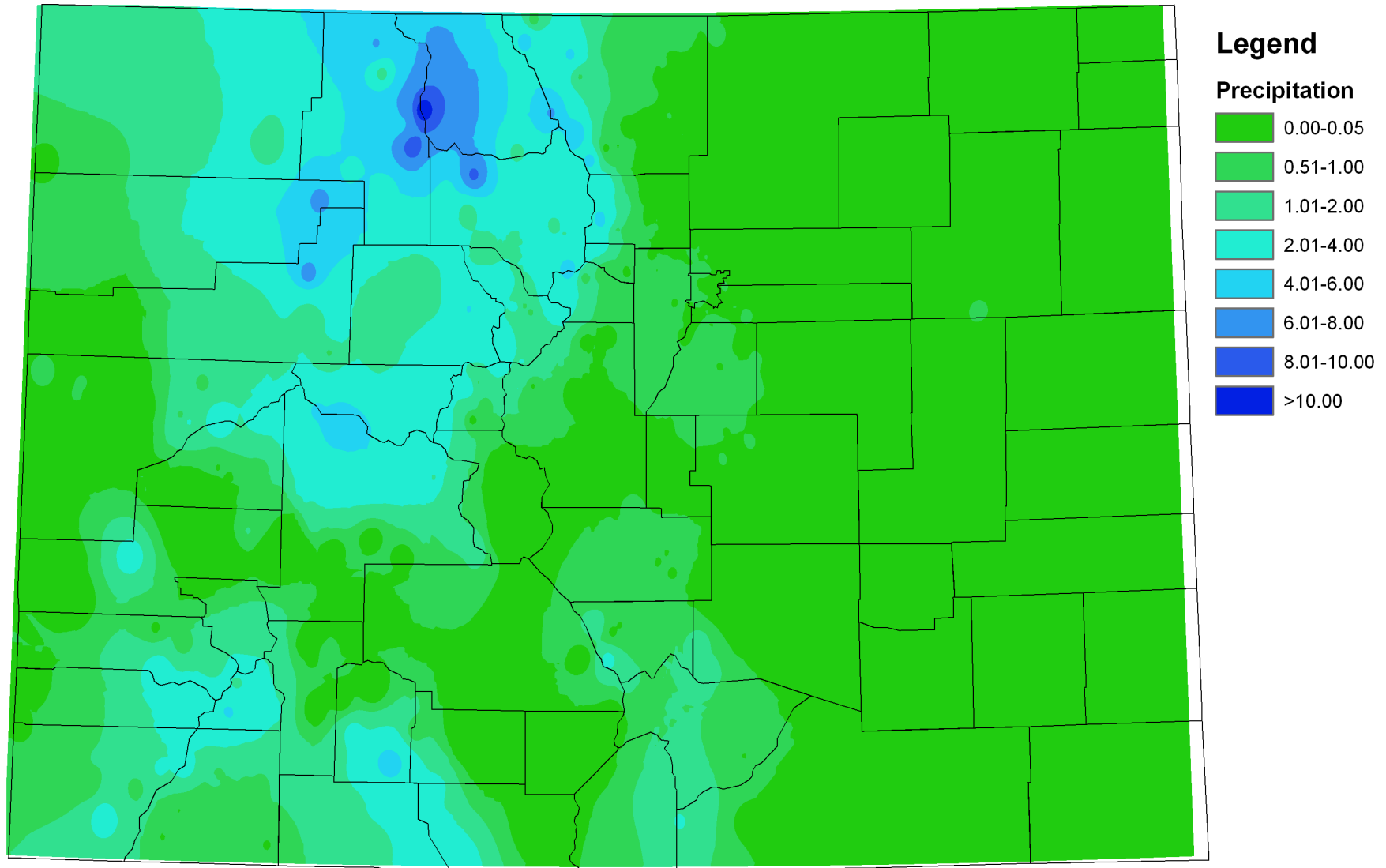


Legend

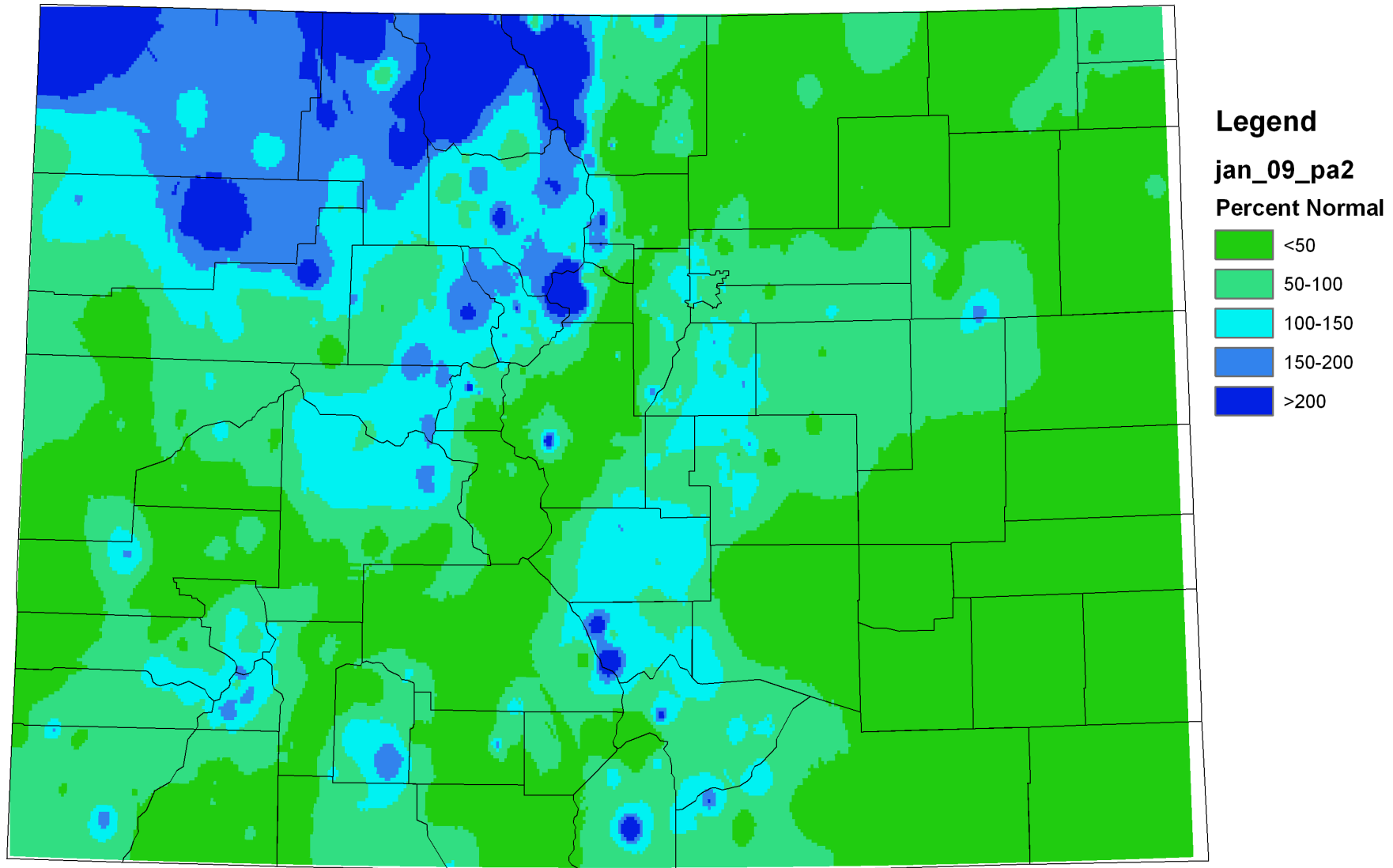
Jan_09_prelim.txt Events
January

- 0.00 - 0.50
- 0.51 - 1.00
- 1.01 - 2.00
- 2.01 - 4.00
- 4.01 - 6.00
- 6.01 - 8.00
- 8.01 - 10.00
- 10.01 - 13.00

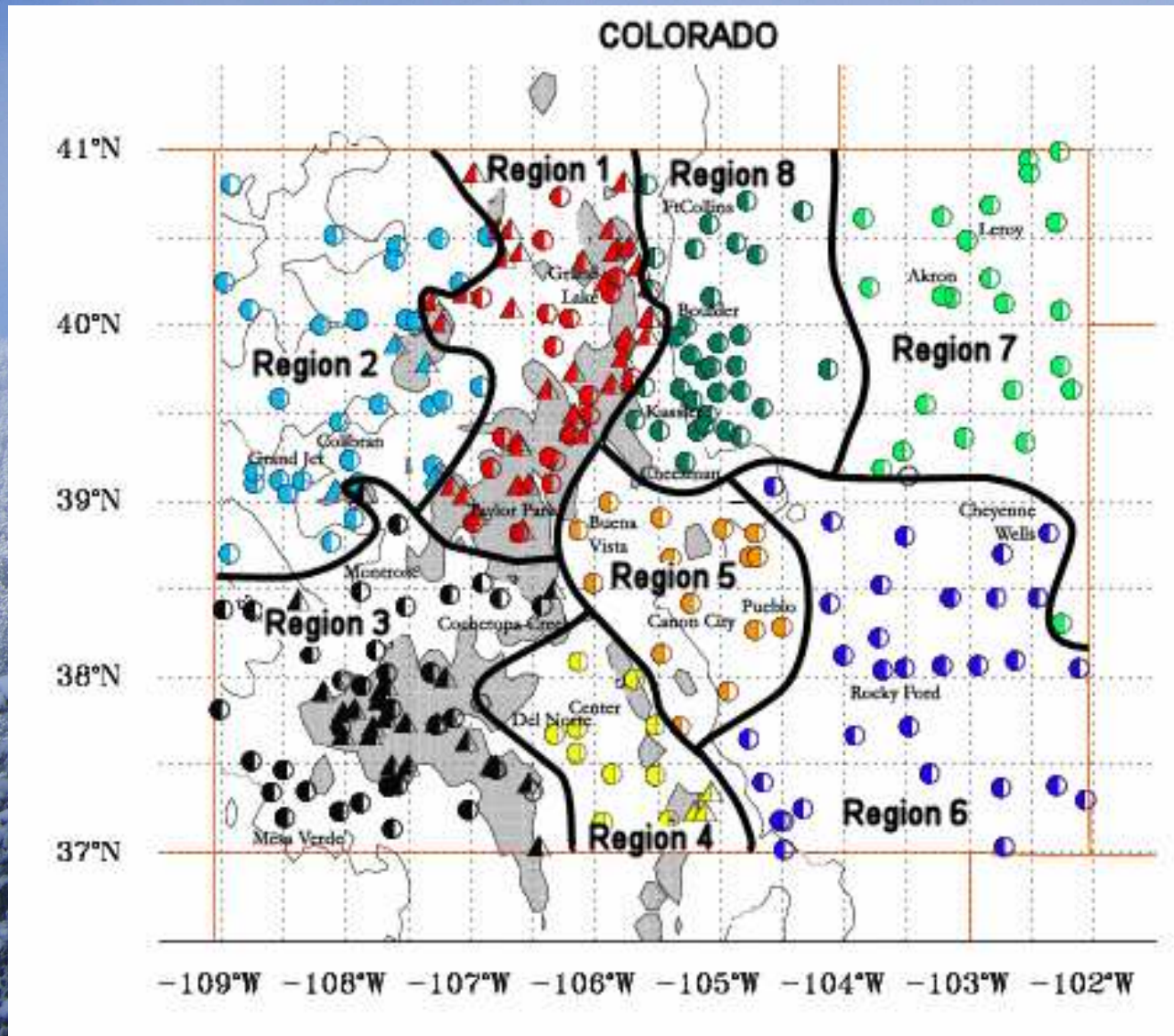
January 2009 Precipitation (inches)



January 2009 Percent of Average

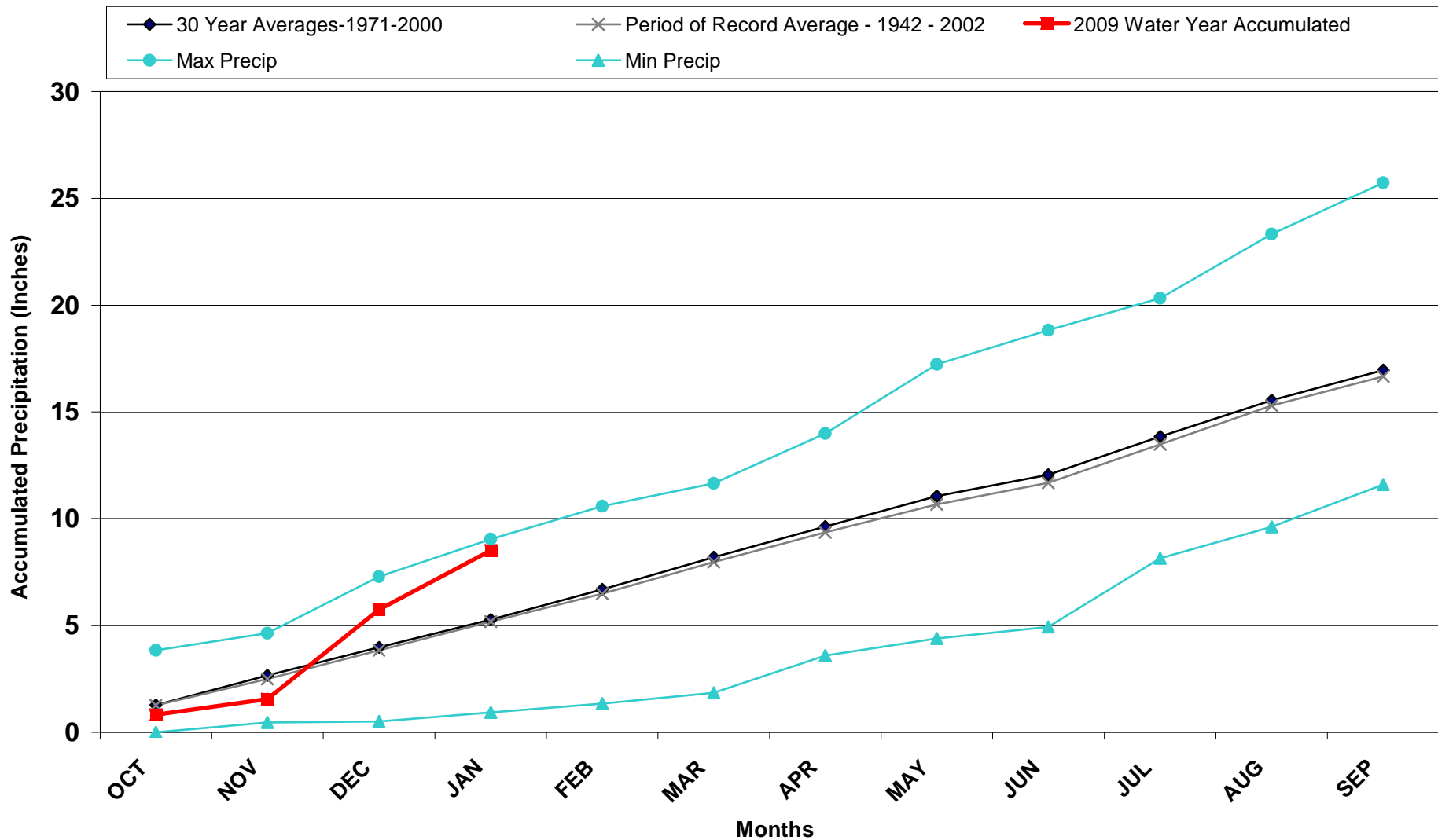


Climate divisions defined by Dr. Klaus Wolter of NOAA's Climate Diagnostic Center in Boulder, CO



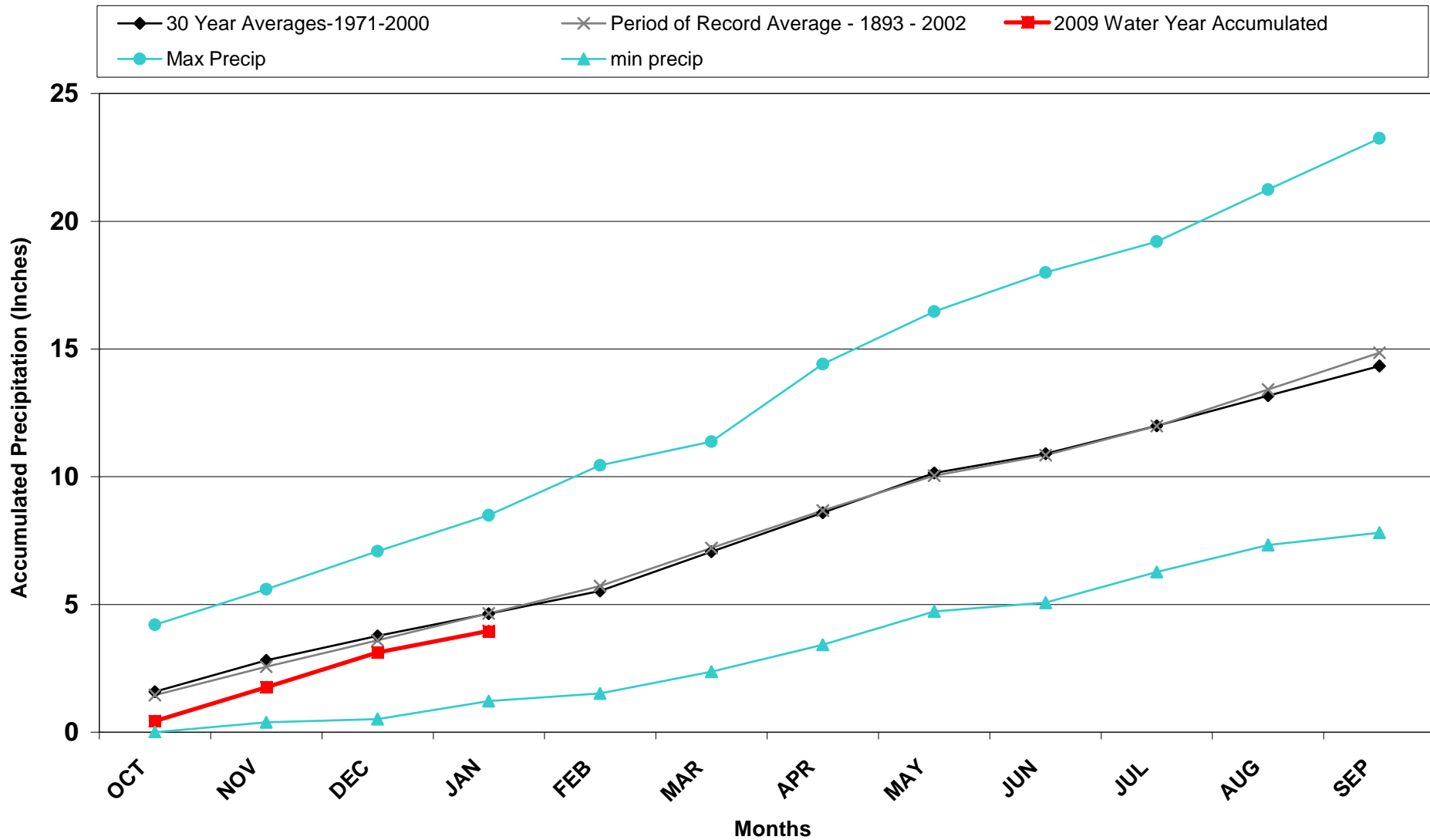
Division 1 – Taylor Park

Taylor Park 2009 Water Year



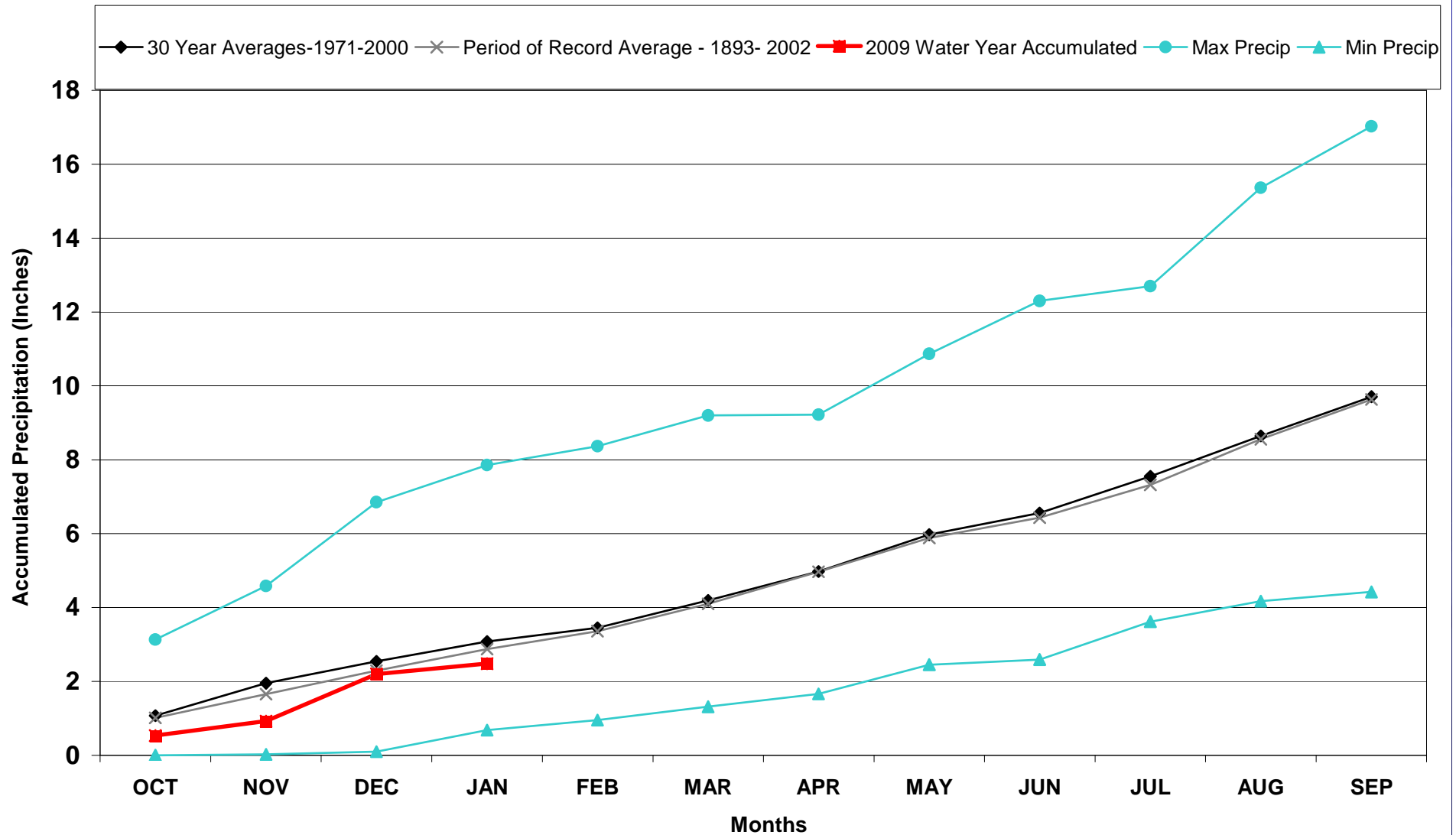
Division 2 – Collbran

Collbran 2SW 2009 Water Year



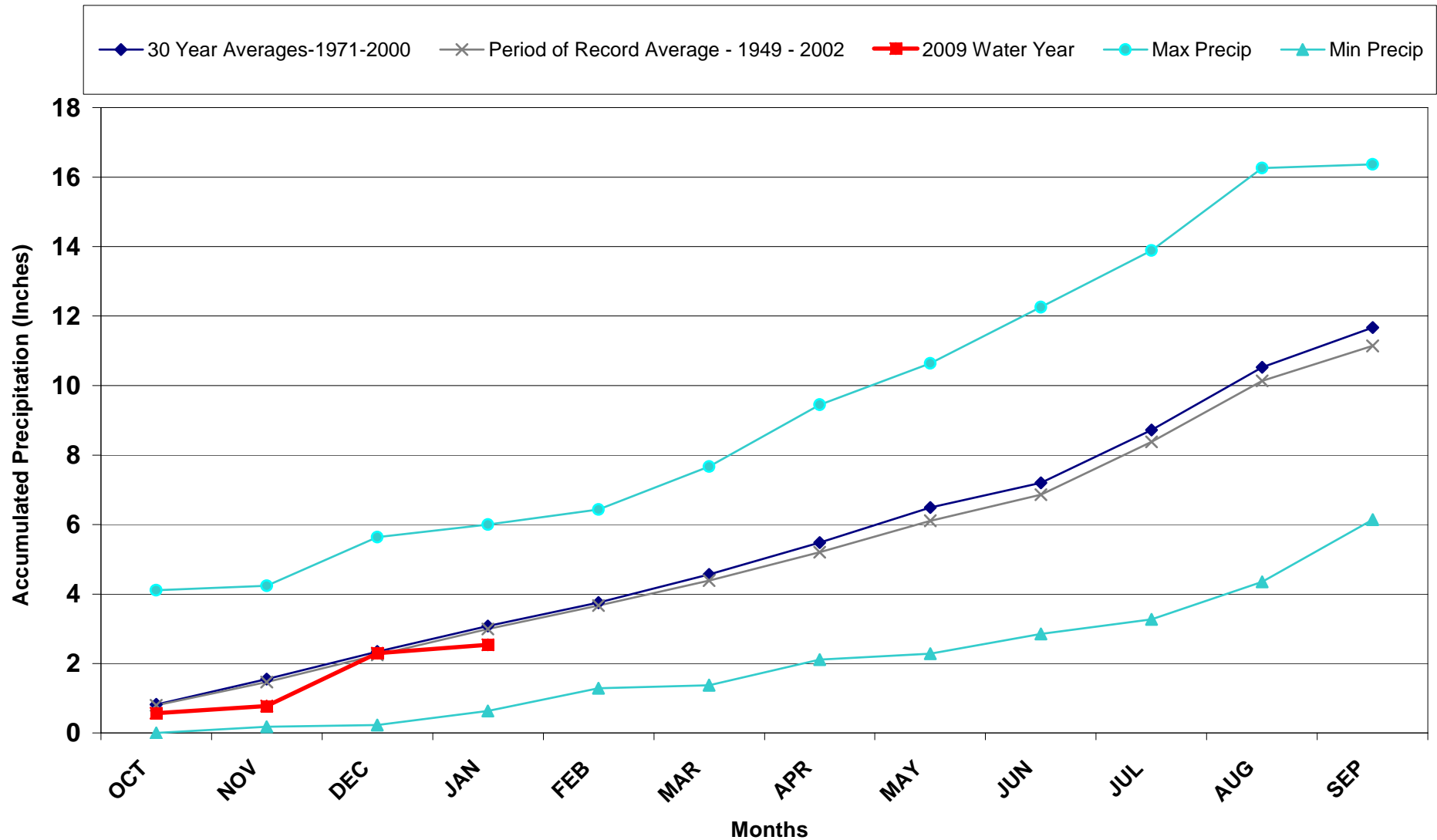
Division 3 – Montrose

Montrose #2 2009 Water Year



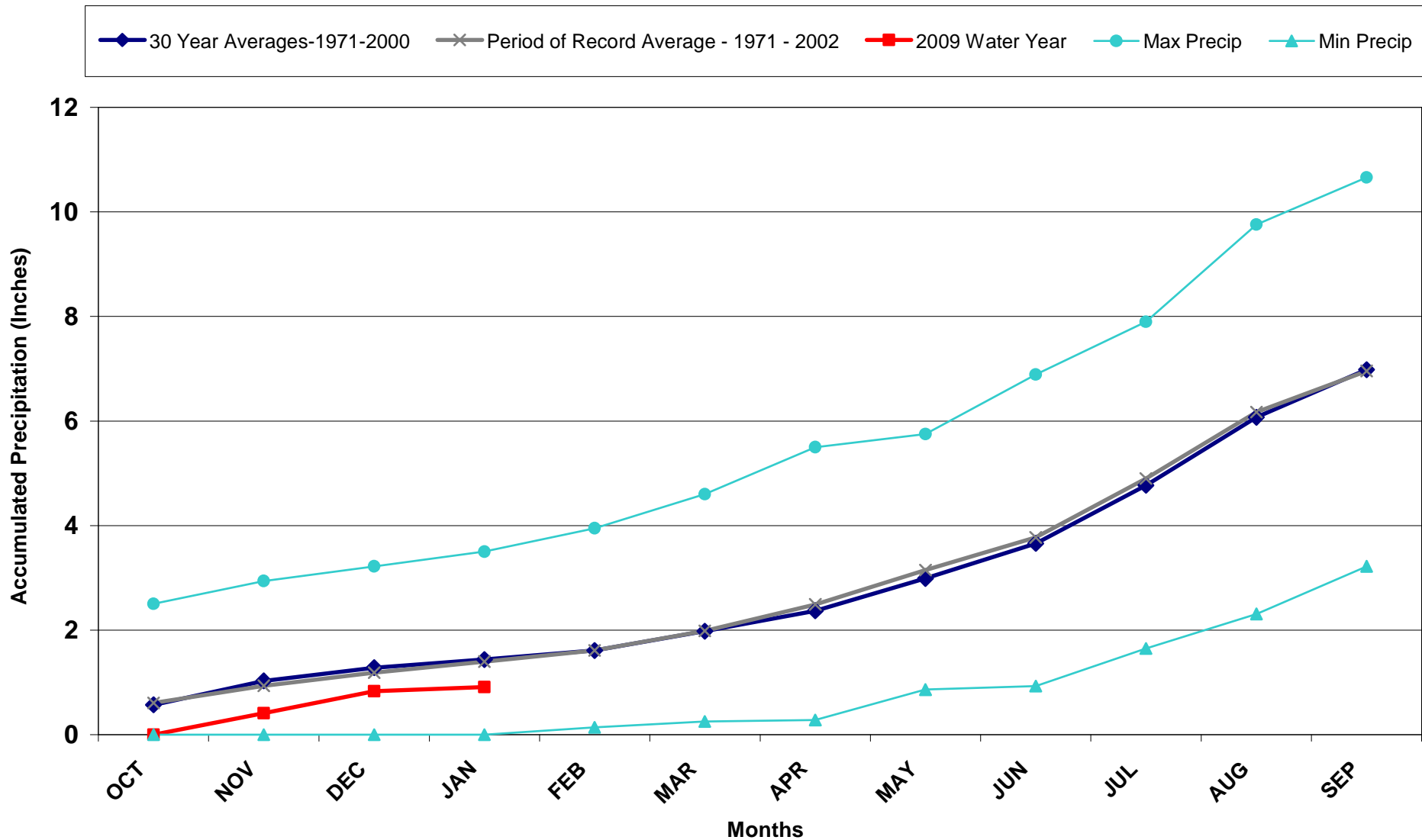
Division 3 – Cochetopa Creek

Cochetopa Creek 2009 Water Year



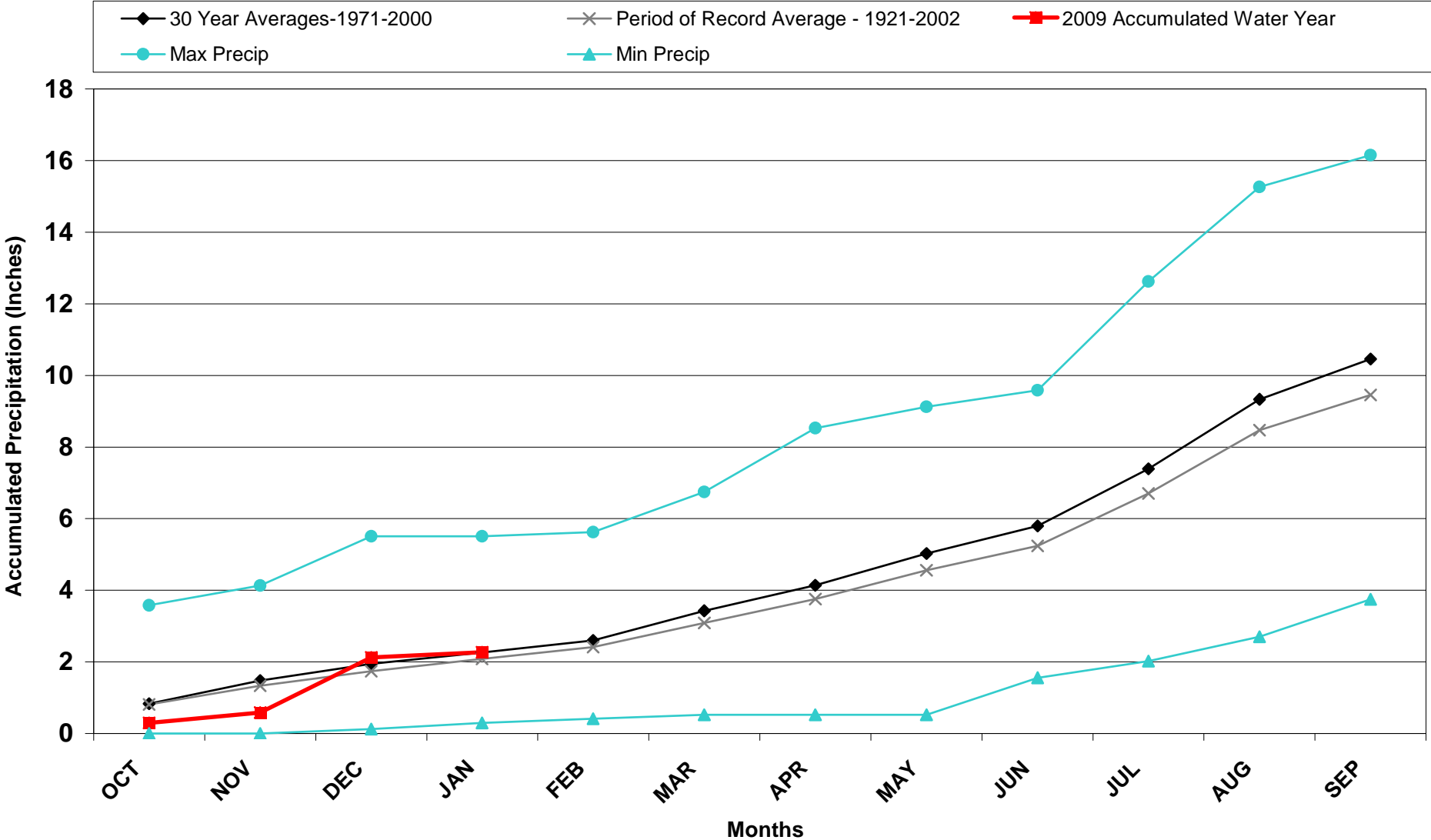
Division 4 – Center

Center 4SSW 2009 Water Year



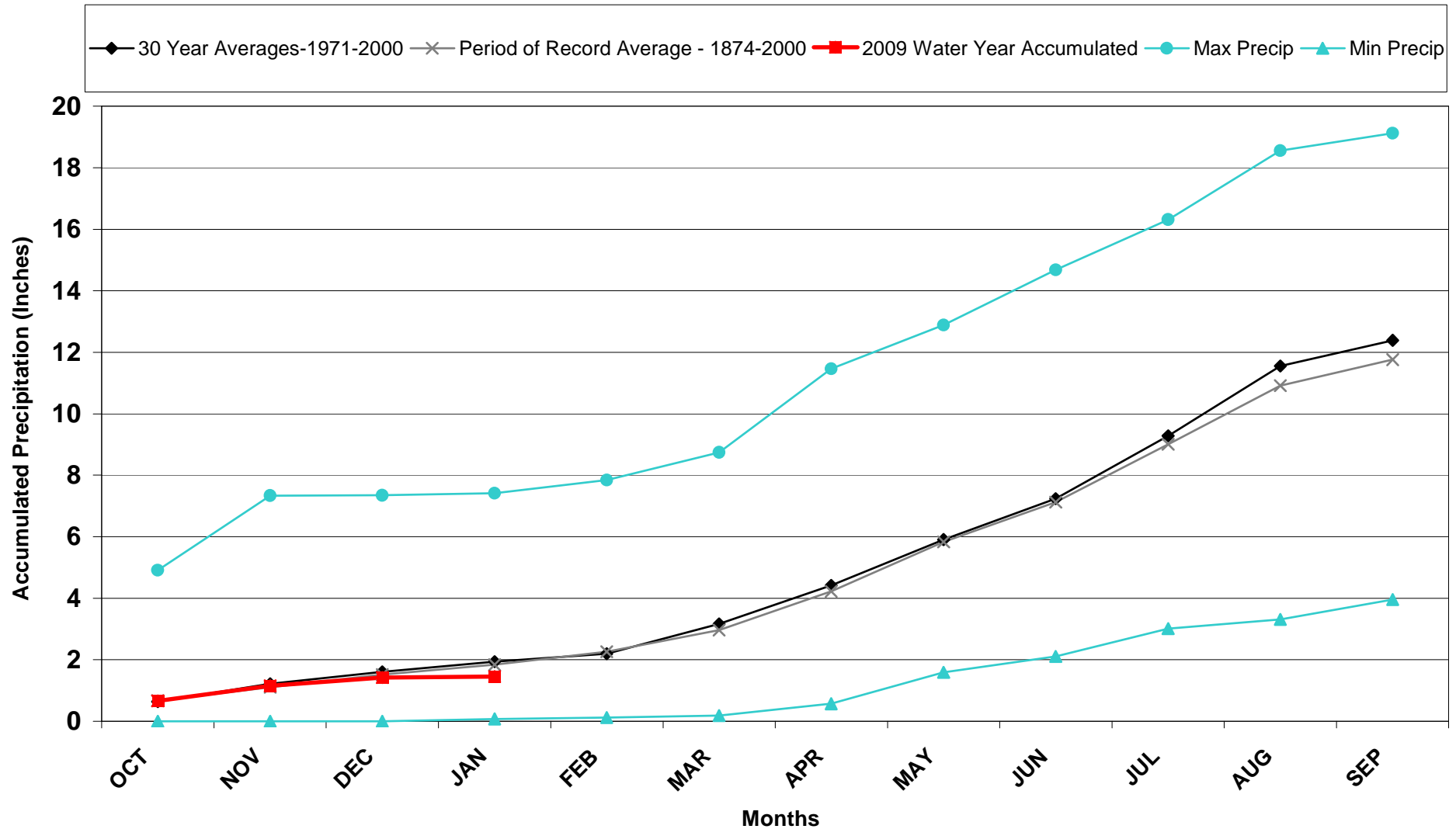
Division 4 – Del Norte

Del Norte 2009 Water Year



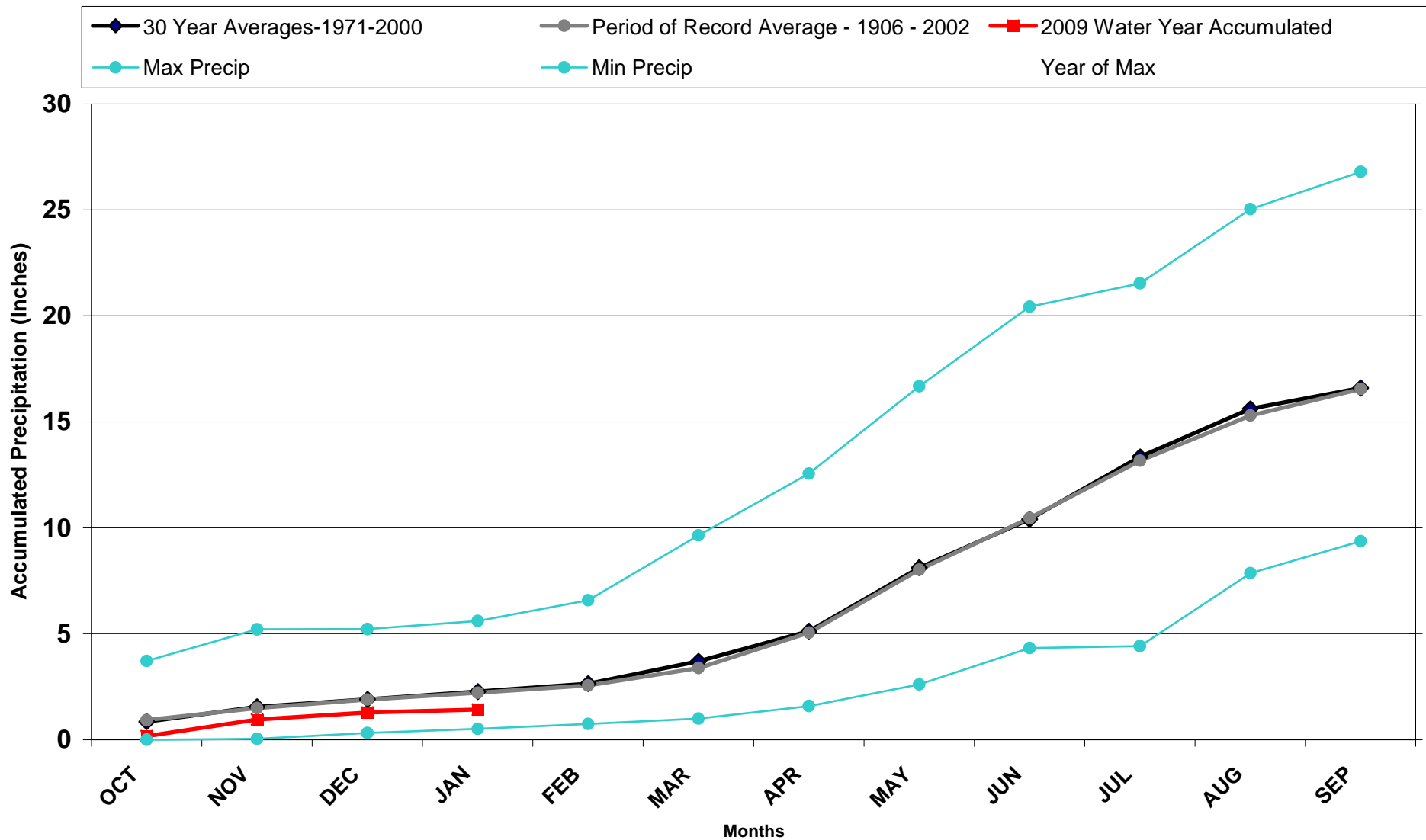
Division 5 – Pueblo

Pueblo WSO 2009 Water Year



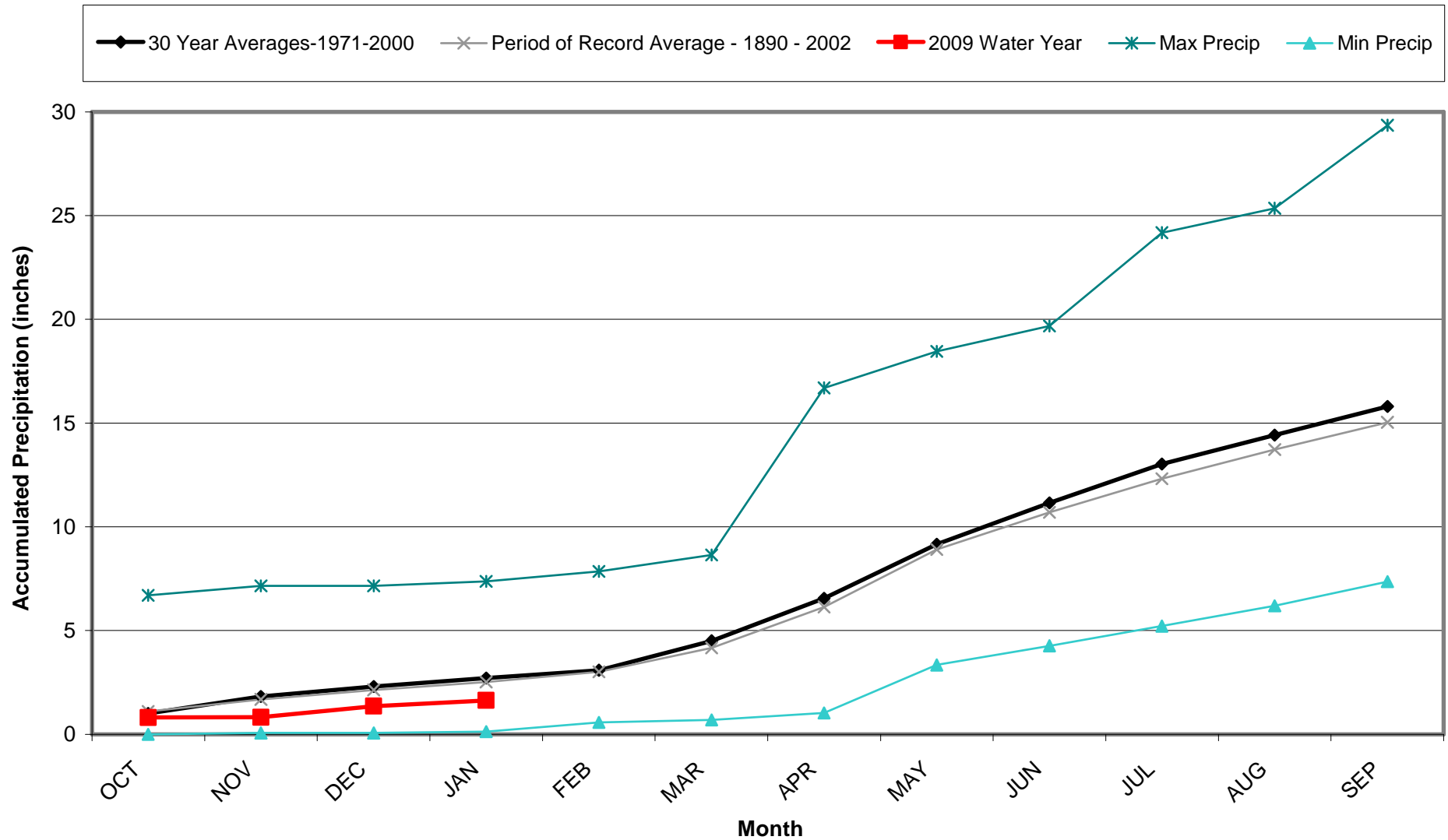
Division 7 – Akron

Akron 4E 2009 Water Year



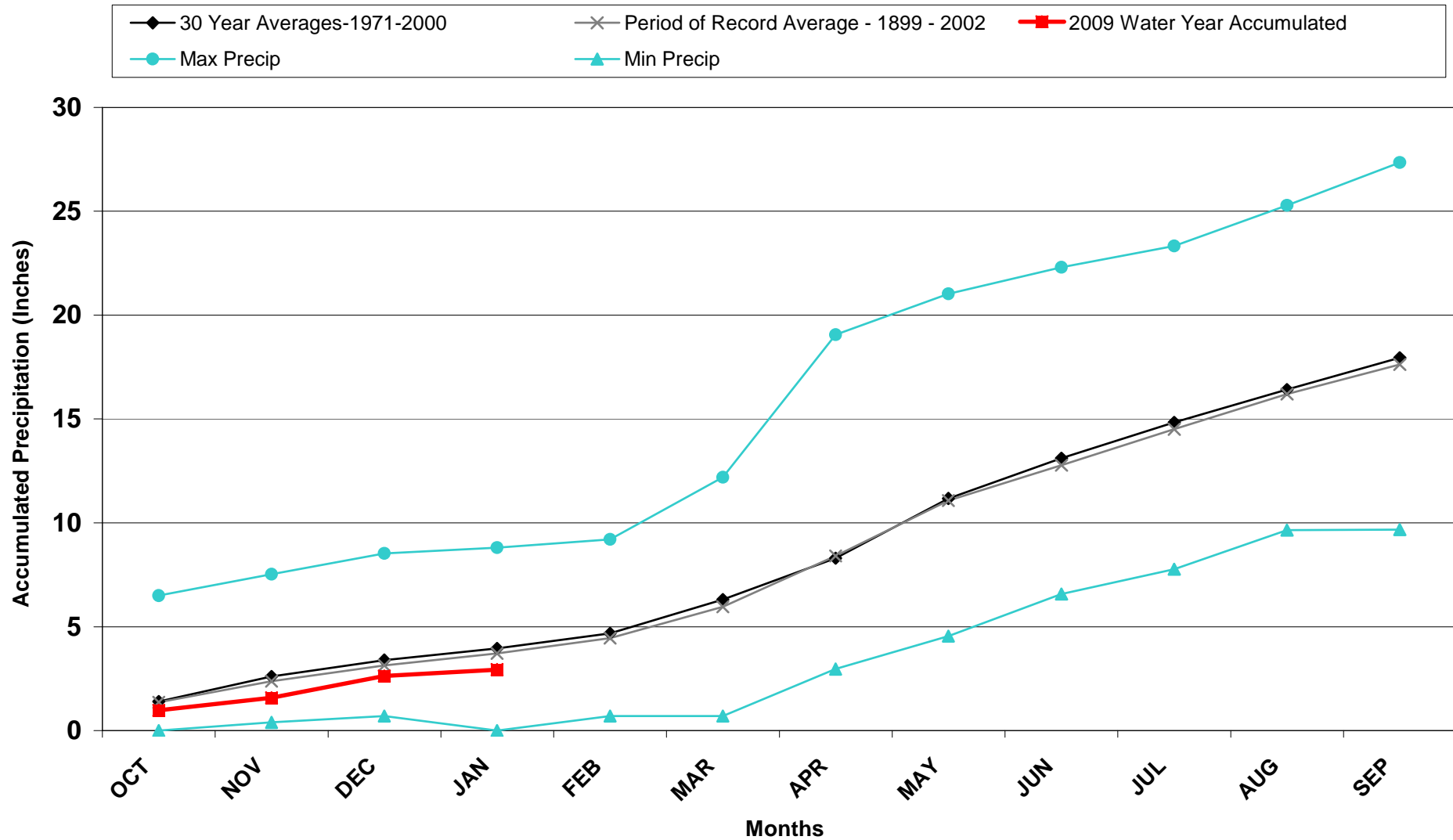
Division 8 – Fort Collins

Fort Collins 2009 Water Year

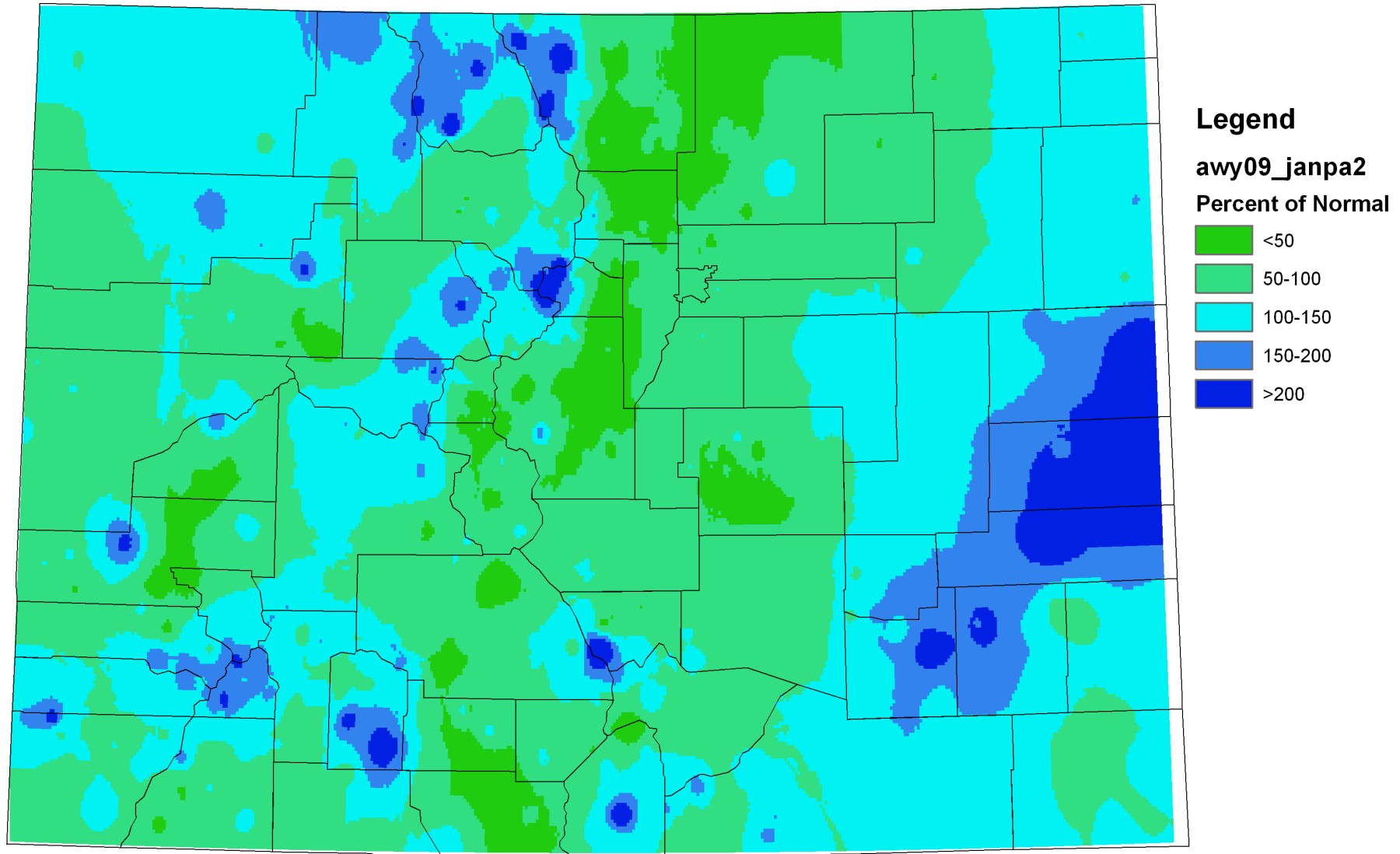


Division 8 – Kassler

Kassler 2009 Water Year

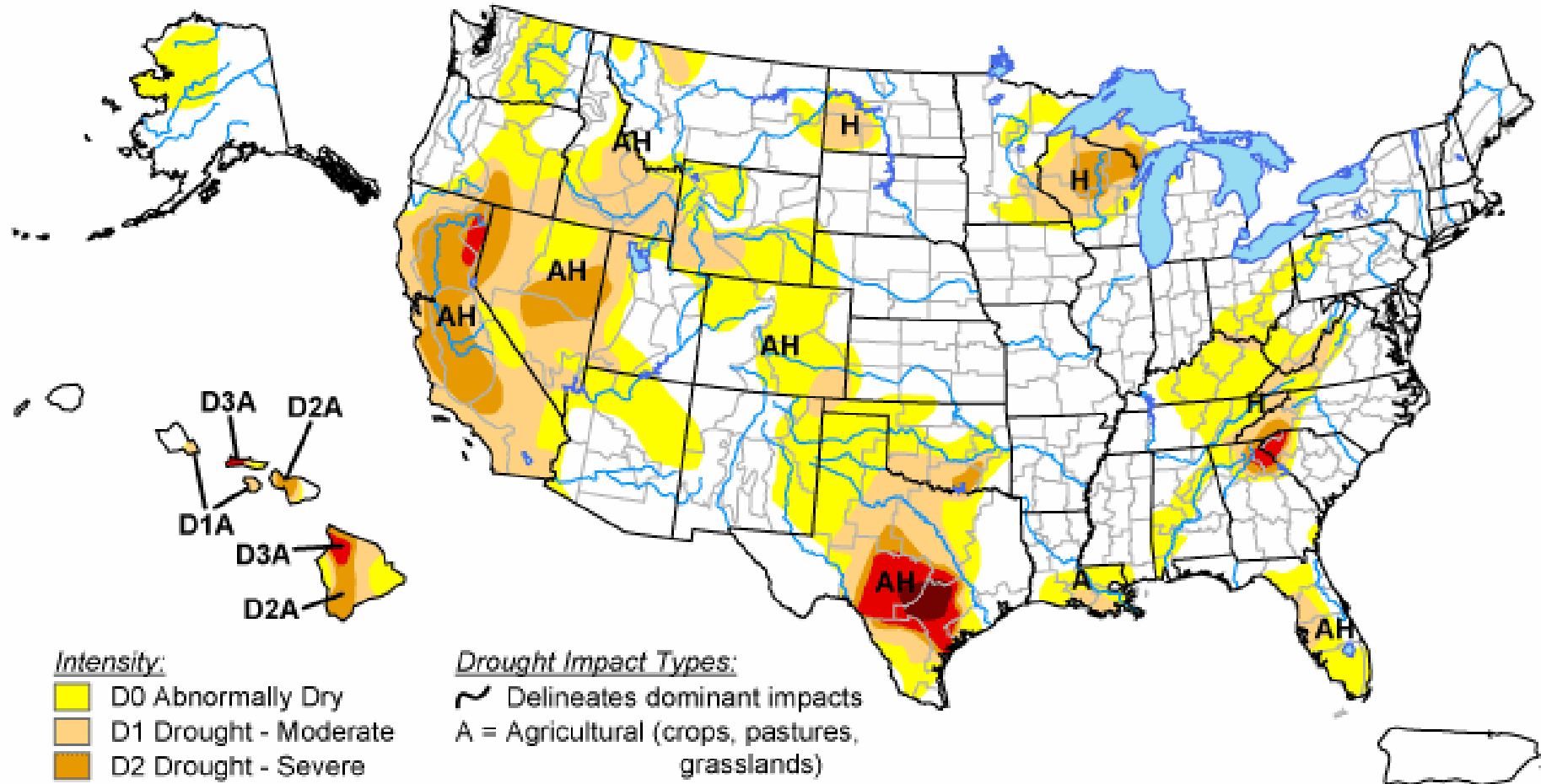


Water Year 2009 Precipitation (Oct 08-Jan 09) as Percent of Normal



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>

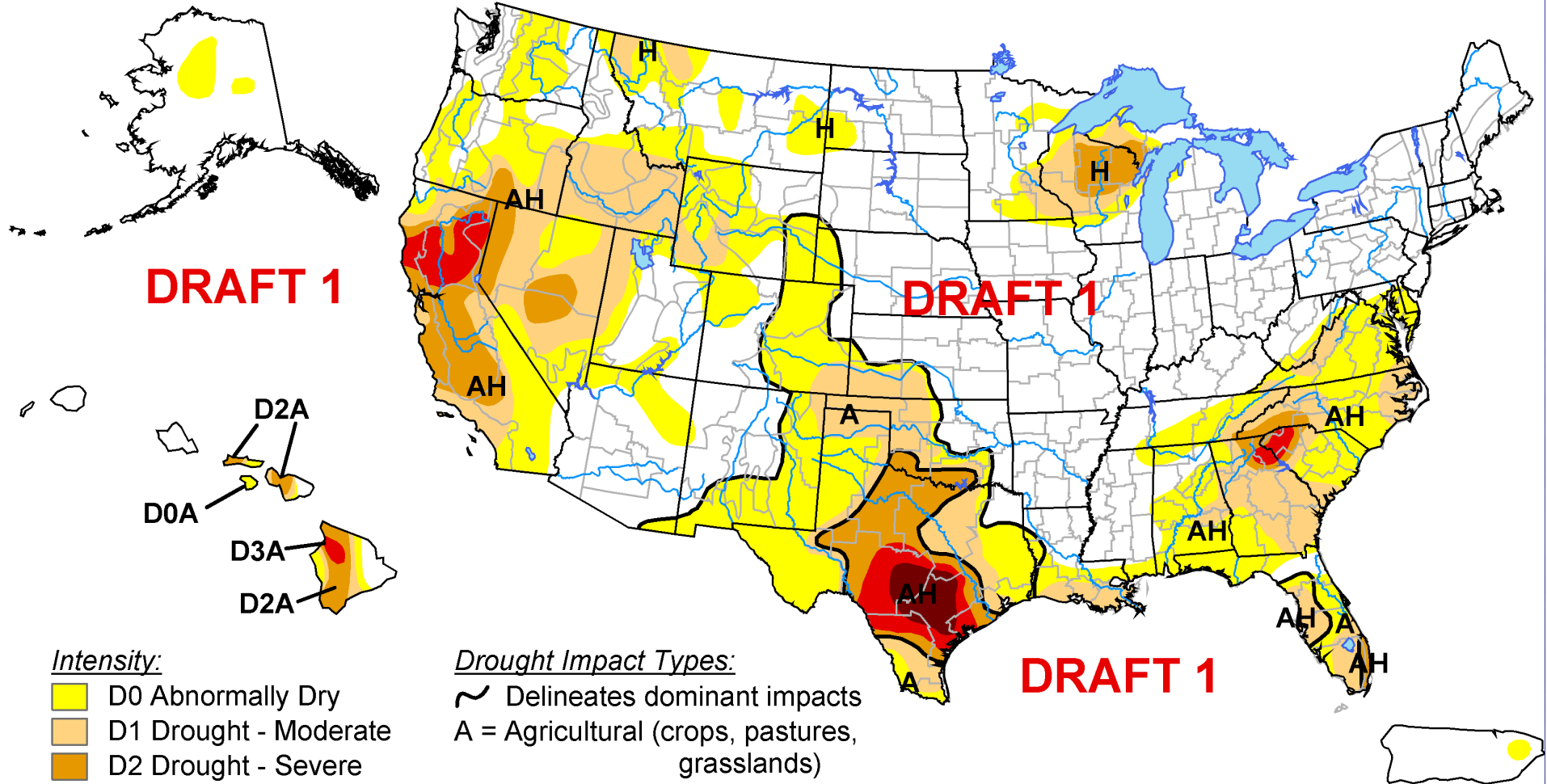


Released Thursday, January 15, 2009

Author: Laura Edwards, Western Regional Climate Center

U.S. Drought Monitor

February 24, 2009
Valid 7 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, February 26, 2009
Author: Rich Tinker, Climate Prediction Center, NOAA

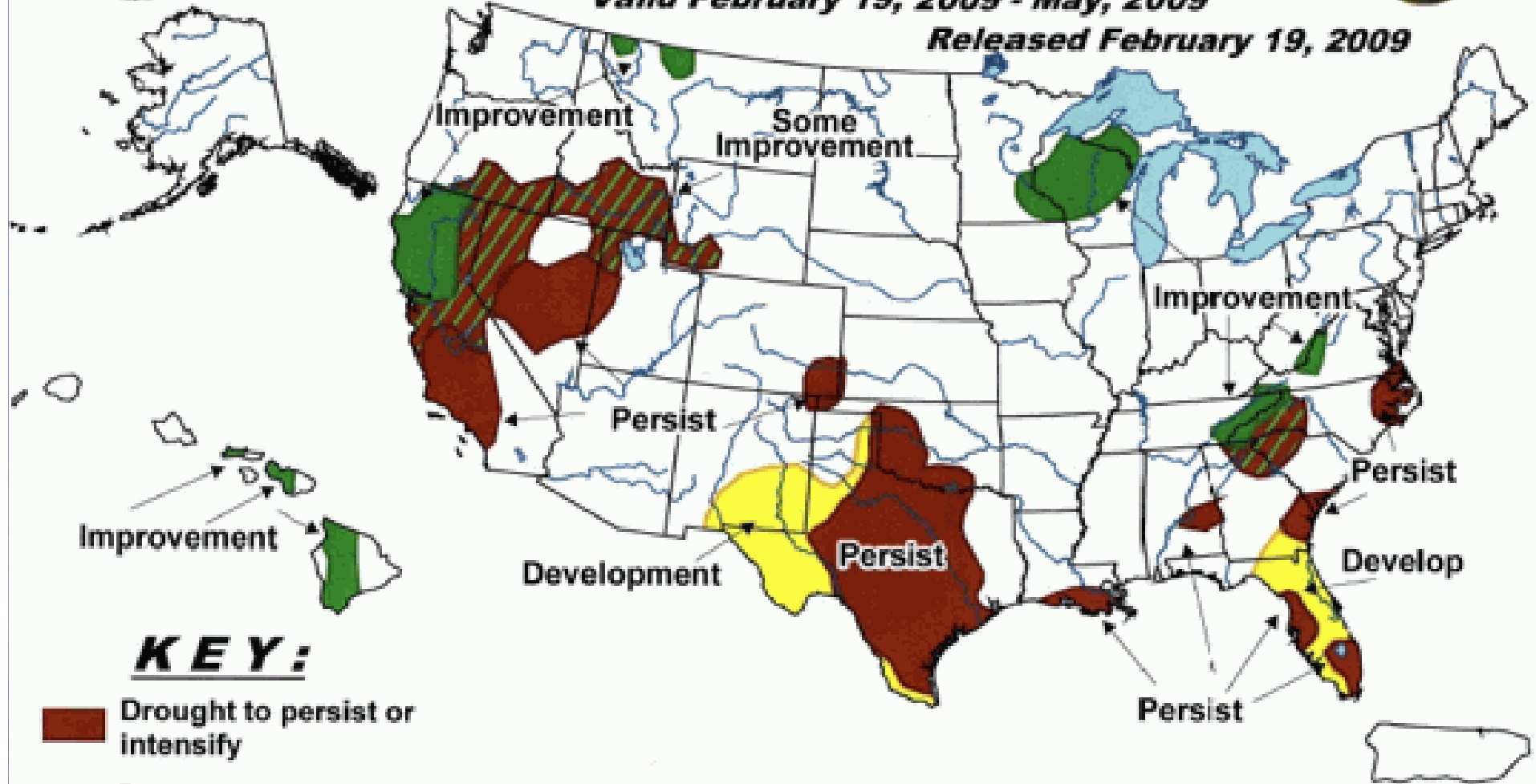


U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid February 19, 2009 - May, 2009

Released February 19, 2009



KEY:

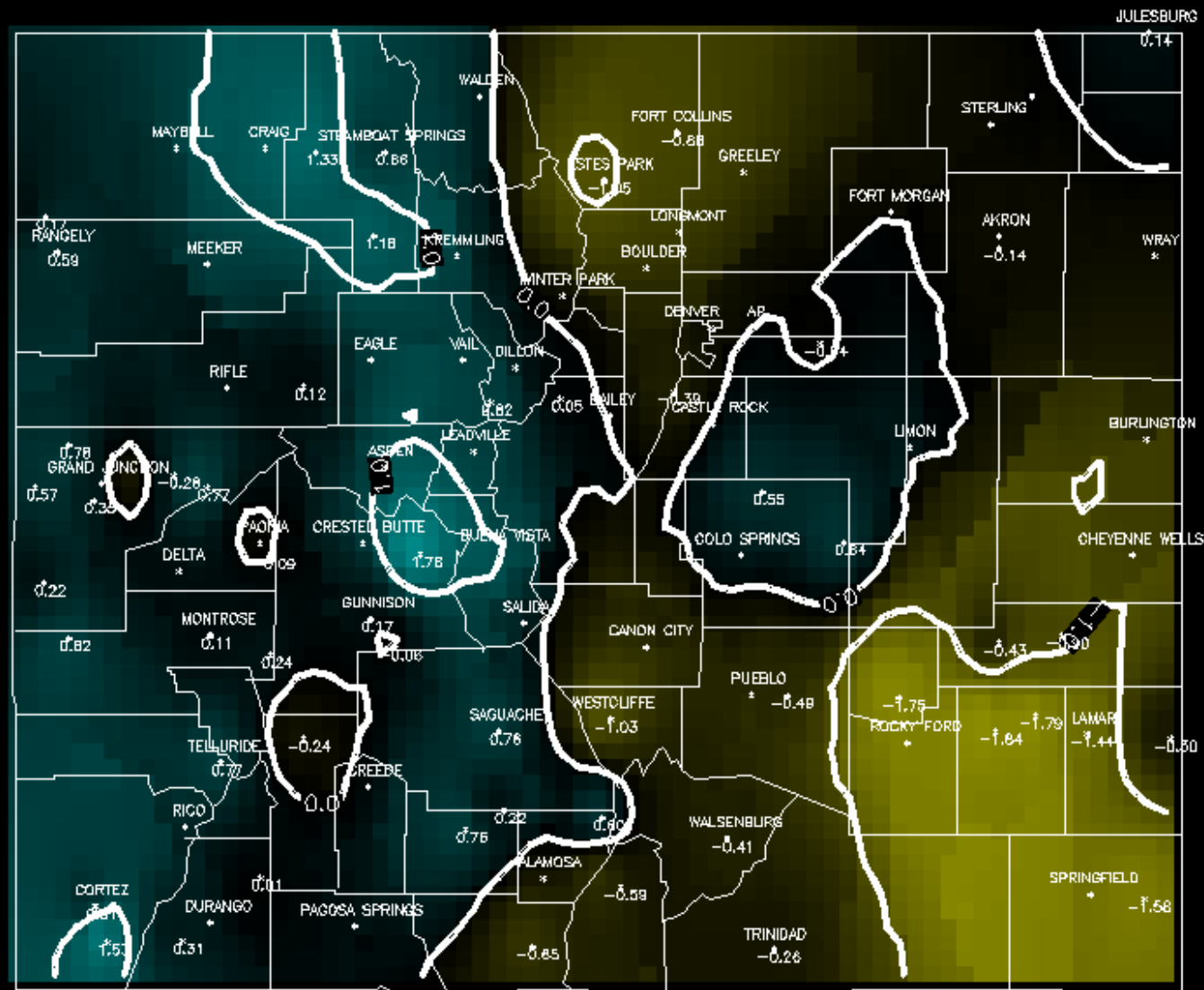
-  Drought to persist or intensify
-  Drought ongoing, some improvement
-  Drought likely to improve, impacts ease
-  Drought development likely

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events – such as individual storms – cannot be accurately forecast more than a few days in advance. Use caution for applications – such as crops – that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

3-month SPI

Colorado

1/2009 3 mon. SPI



100% < 2.0
95% < 1.0
48% < 0.0

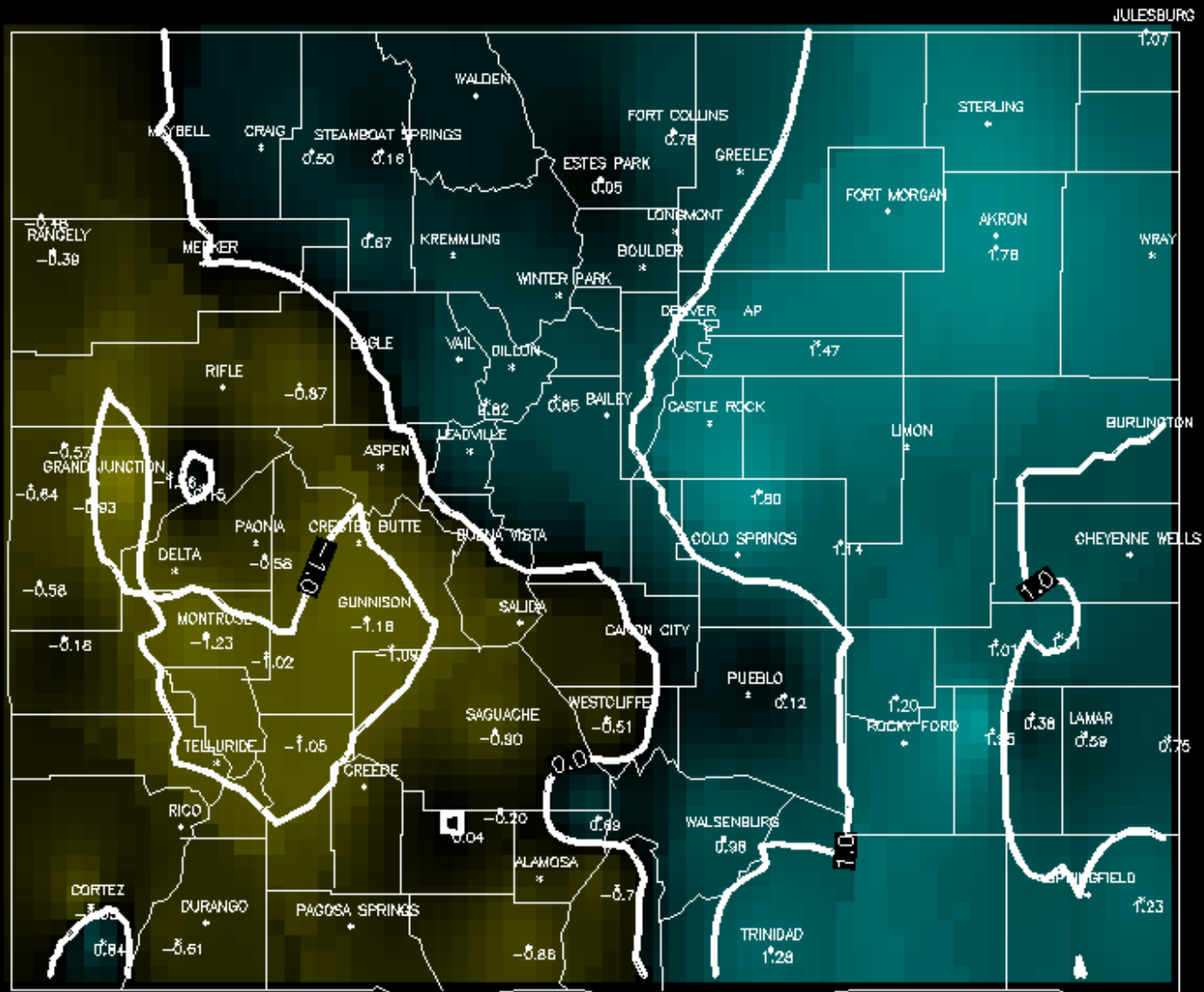
9% < -1.0
0.3% < -2.0
0% < -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO

6-month SPI

Colorado

1/2009 6 mon. SPI



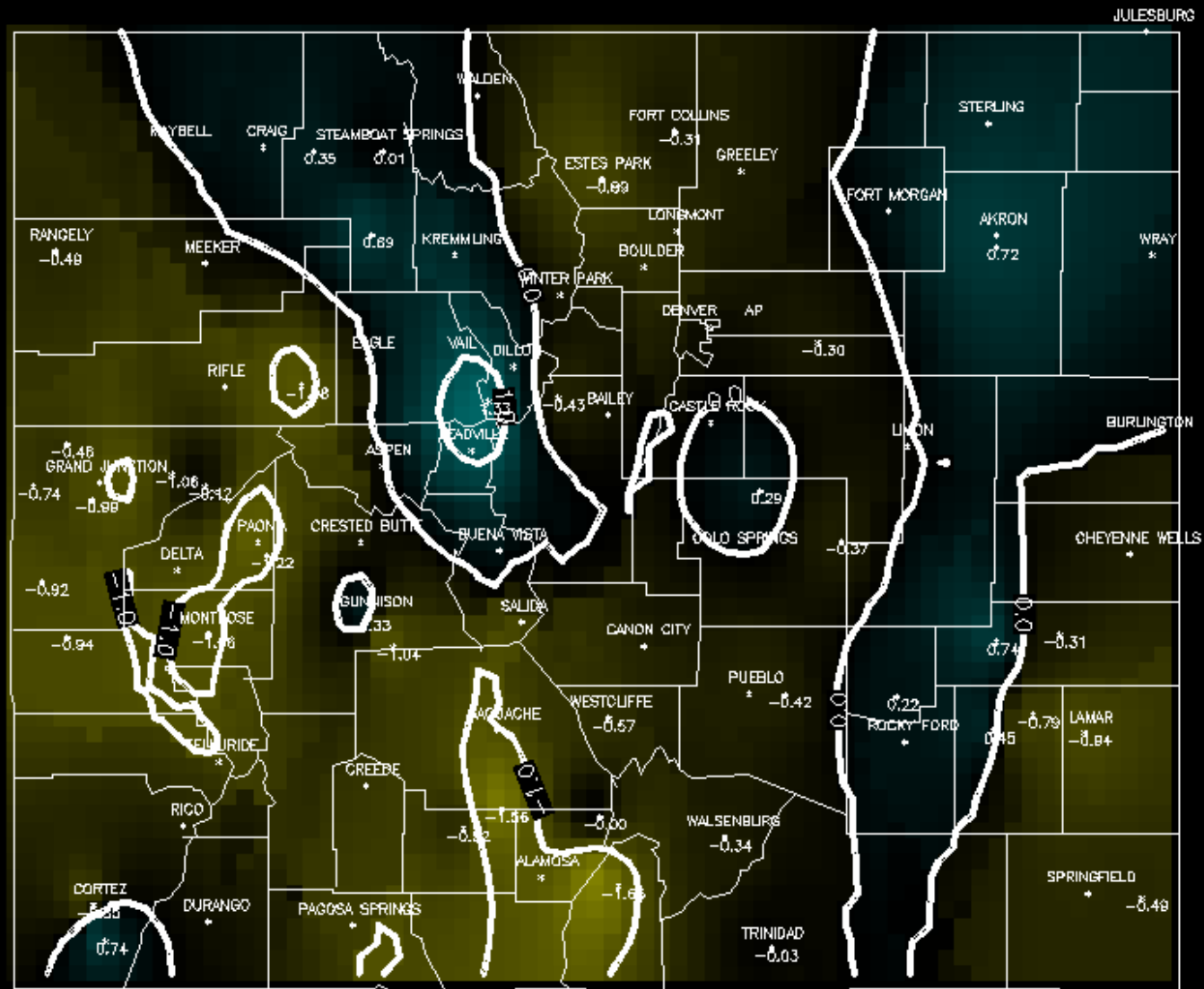
100% < 2.0
 68% < 1.0
 37% < 0.0
 5% < -1.0
 0.2% < -2.0
 0% < -3.0

Produced by:
 Colorado Climate Center
 Fort Collins, CO

12-month SPI

Colorado

1/2009 12 mon. SPI

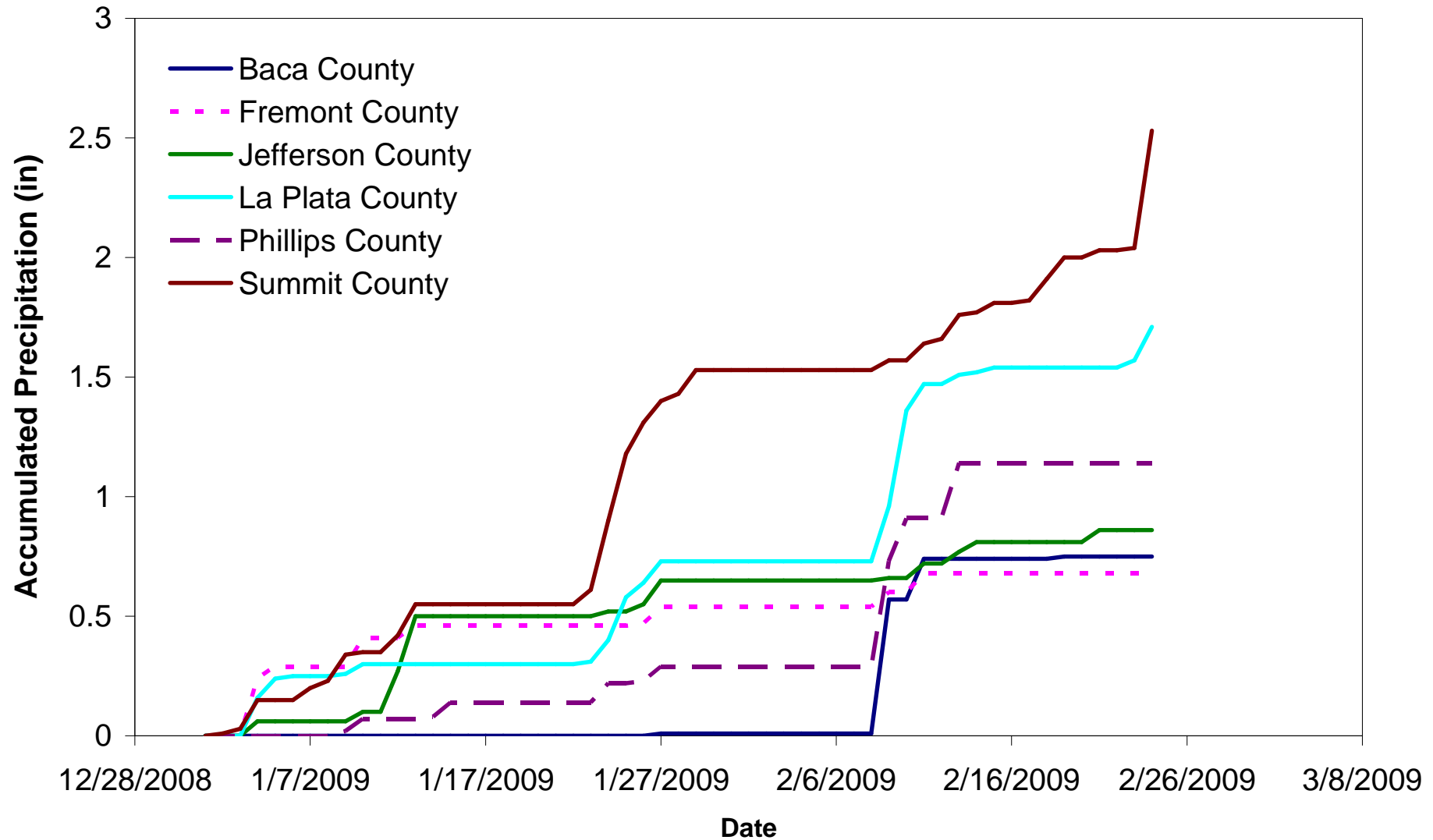


100% < 2.0
99% < 1.0
95% < 0.0

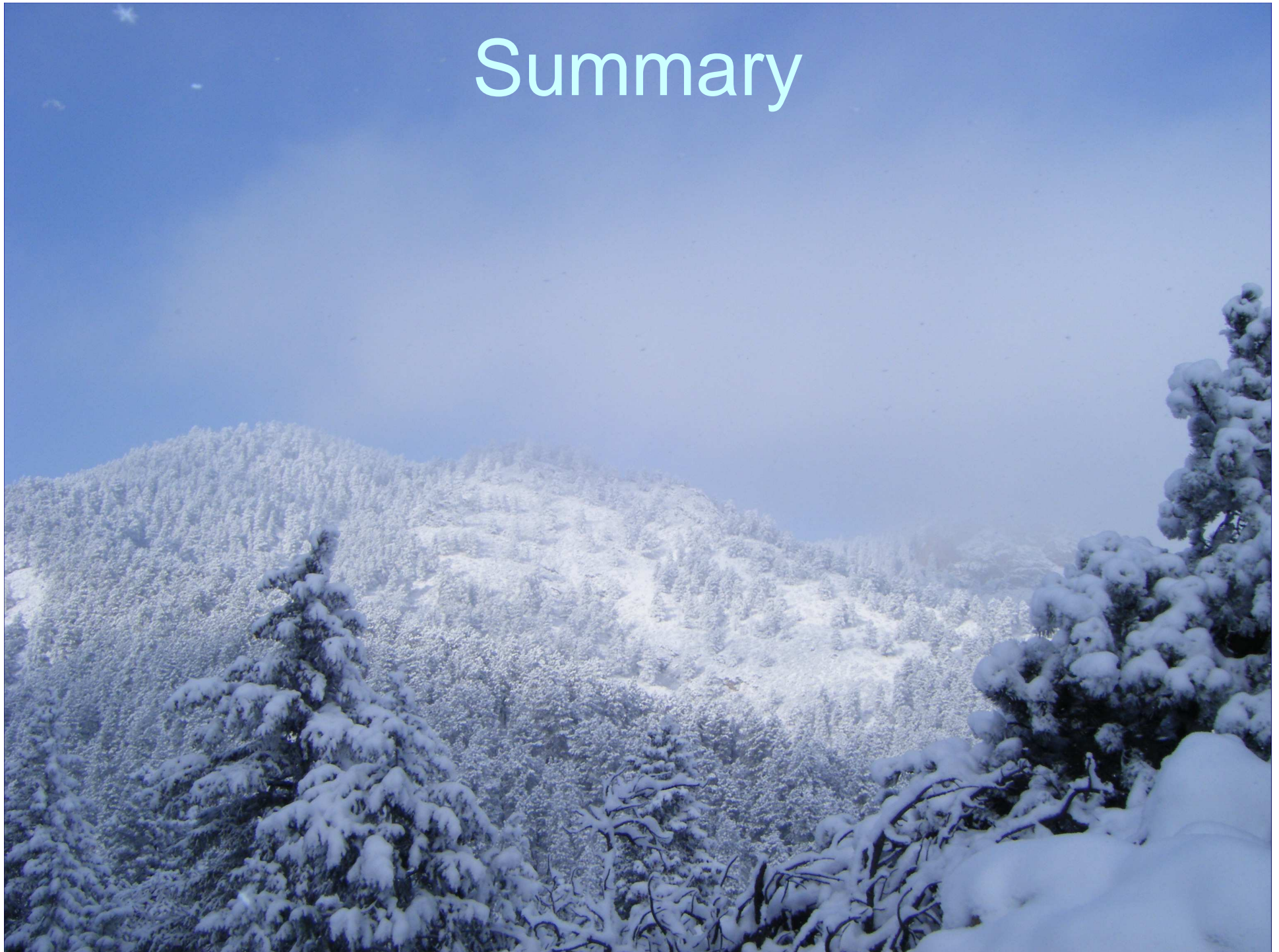
4% < -1.0
0% < -2.0
0% < -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO

CoCoRaHS Accumulated Daily Precipitation for Selected Counties (Jan 1 - Feb 24 2009)



Summary



Colorado Climate Center

Data and Power Point Presentations
available for downloading

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

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

**Colorado
State
University**
Knowledge to Go Places

