

Climate Update

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Presented to
Water Availability Task Force
April 20, 2010
Denver, CO

Prepared by Wendy Ryan



Since We Last Met - - - -

- Warmer weather has kicked in
 - early mini heat wave in late March caused a surge of snowmelt around the Wet Mountains that caused some minor flooding
 - snow melt has begun in most mountain areas except very high elevations
 - green up is well underway and evapotranspiration rates have been ramping up – soil moisture holding up, but being depleted

Since We Last Met -- -- --

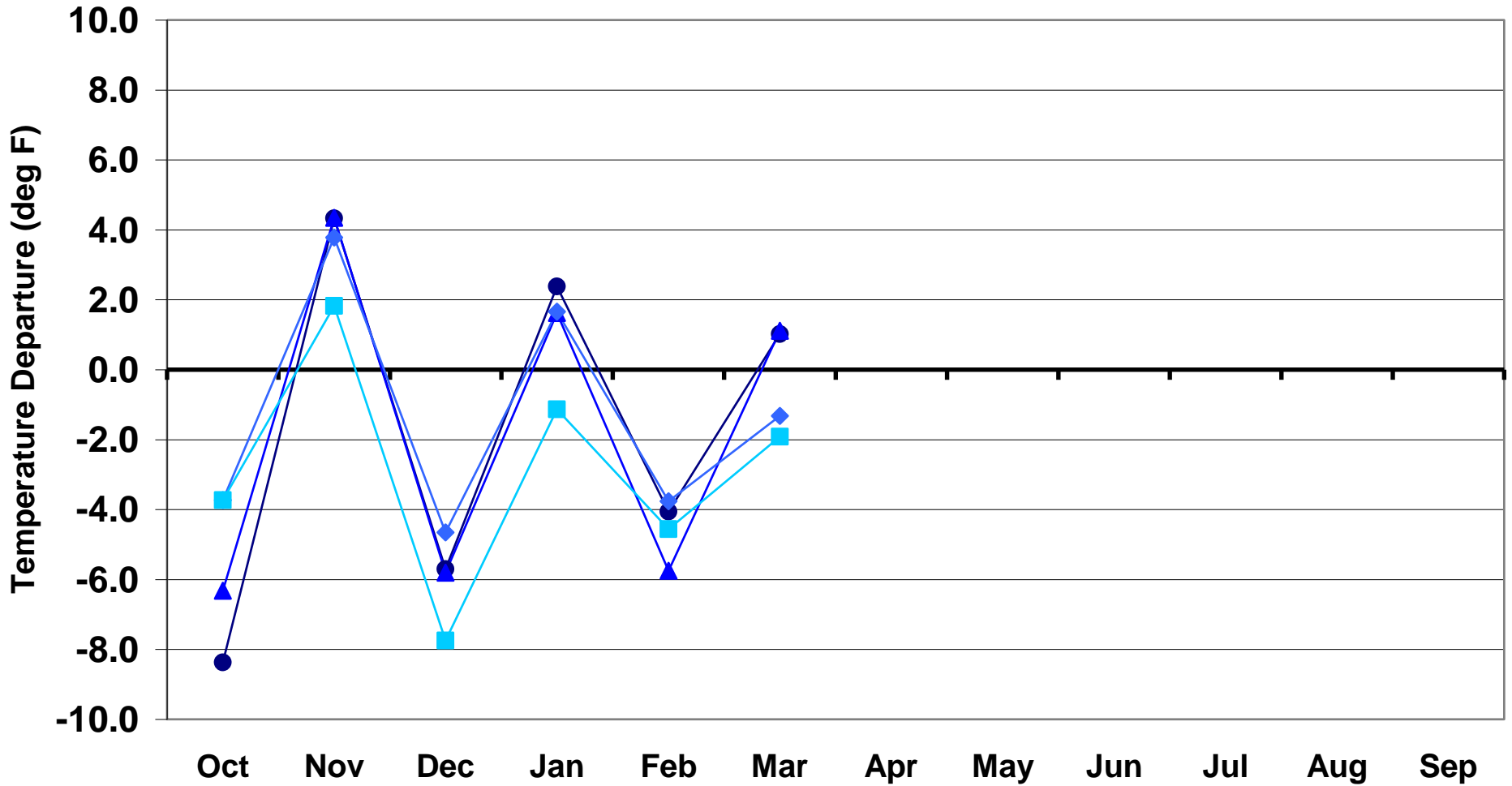
- Several storms have crossed the area
 - several dust events early April
 - heavy, wet, beneficial snows in early April NW Colo
 - A change to misty, moisty, convective weather the past week with significant but localized precipitation eastern Colorado (>2.5" in Crowley County - April 15th)

But overall, for most of the state the last month has been mild with below average precipitation and fewer widespread spring storms than usual.



Water Year 2010 Temperature Departures

Water Year 2010

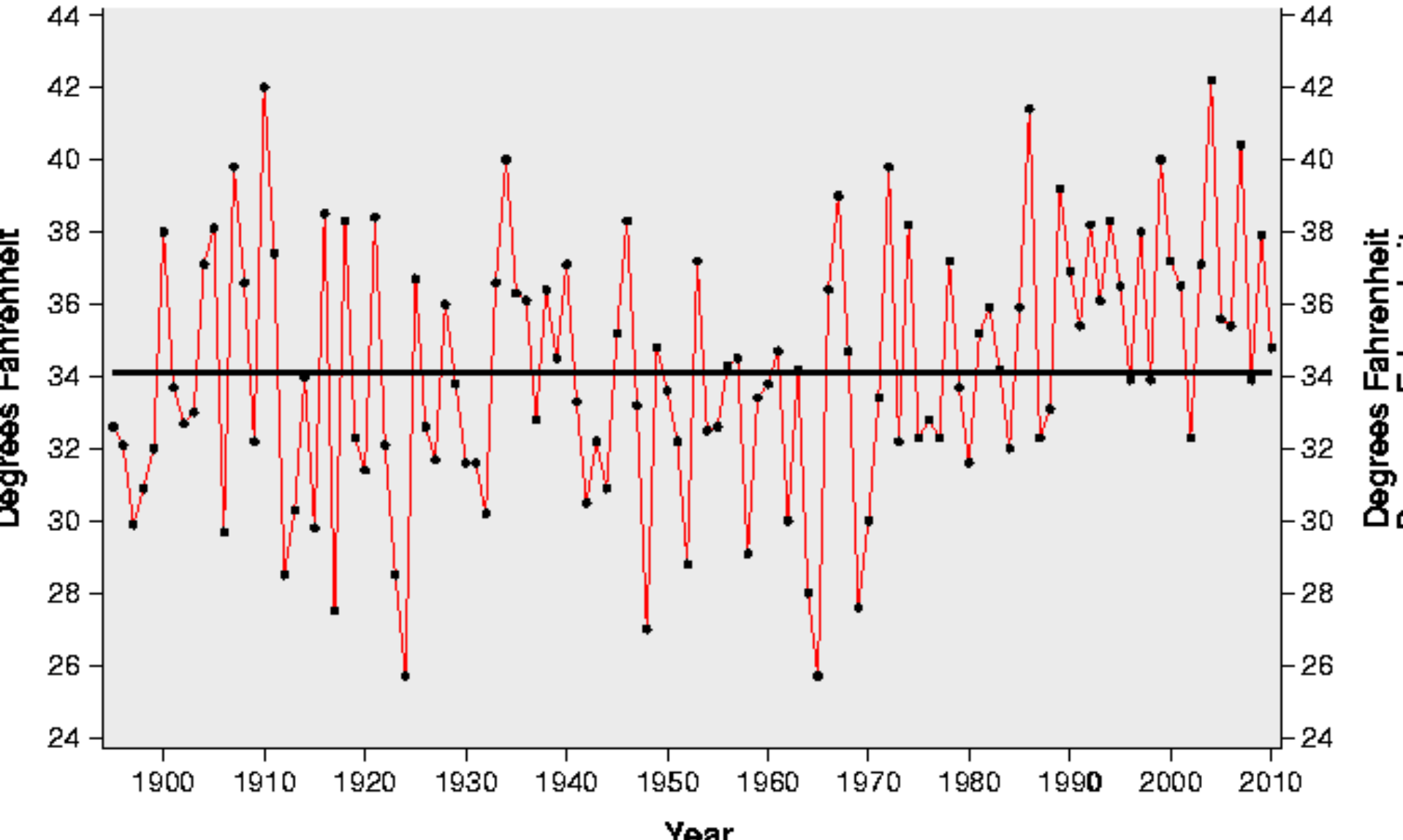


● Eastern Plains ▲ Foothills ◆ Mountains ■ Western Valleys

March Average Temperature History for Colorado (NCDC)

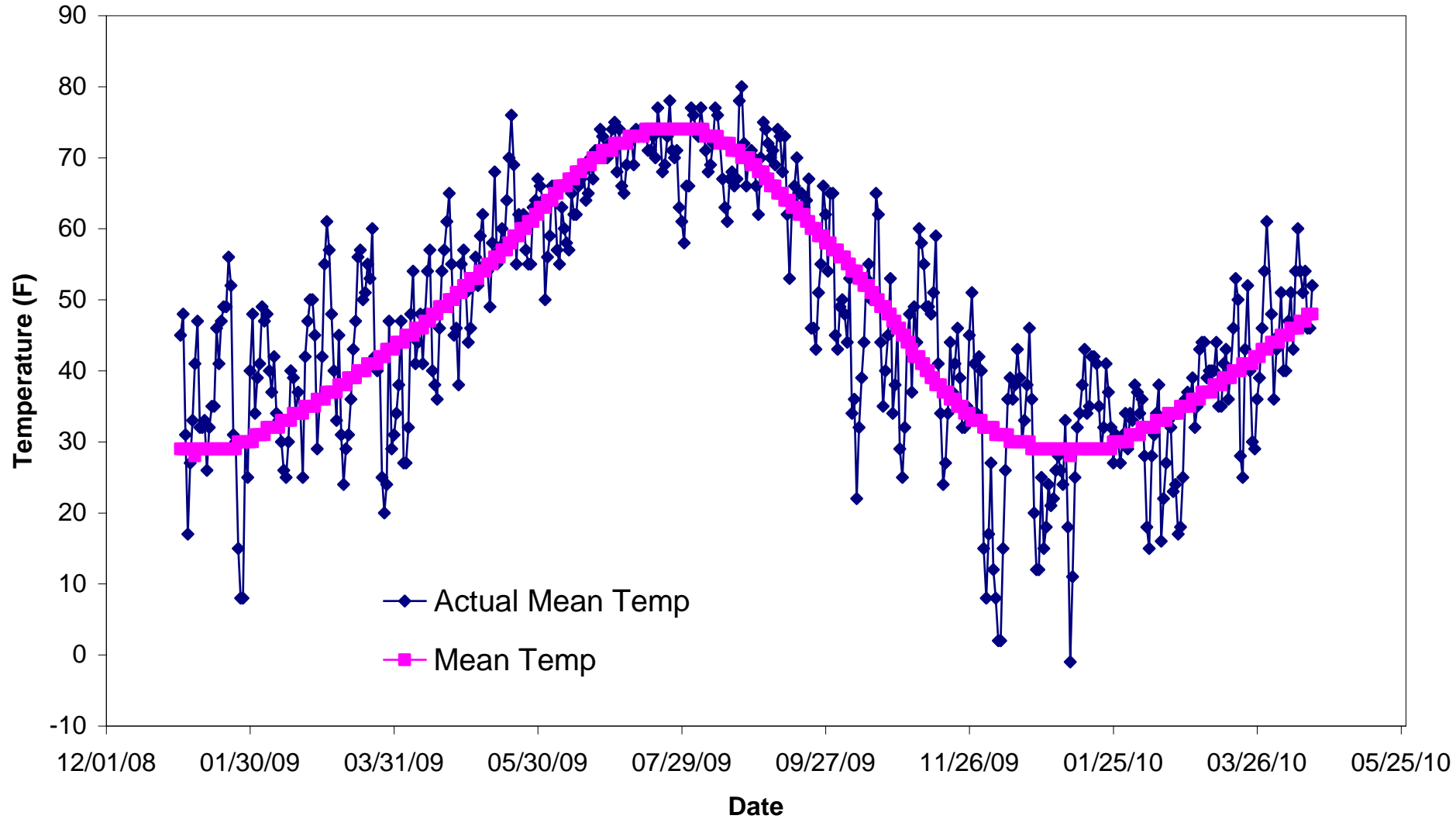
— Actual Temperature
— Average Temperature

Rank: 34.8 degrees is 69th coolest
for period of record 1895-2010



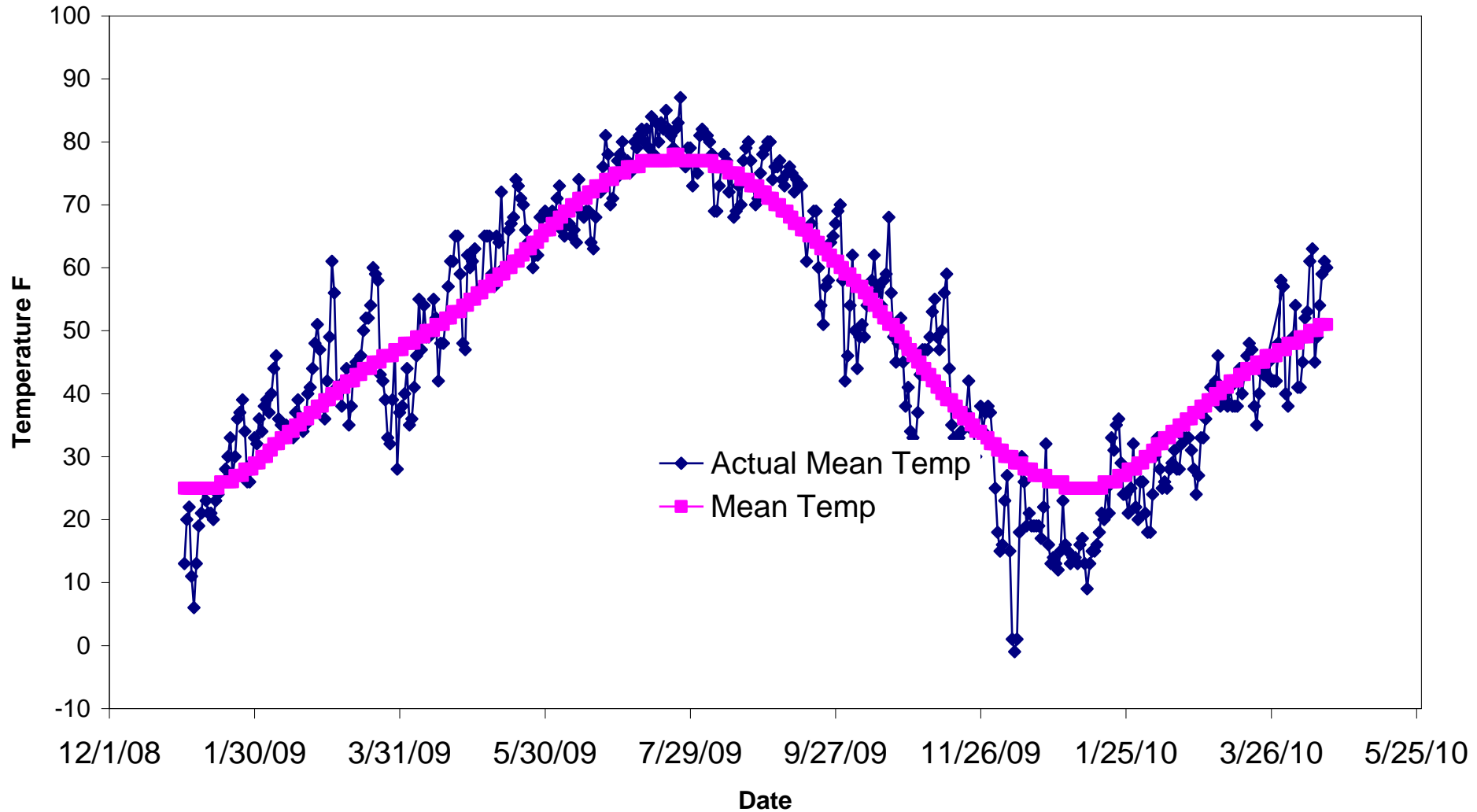
Denver, CO Jan 1, 2009 - Apr 18, 2010

Mean and Actual Daily Temperature

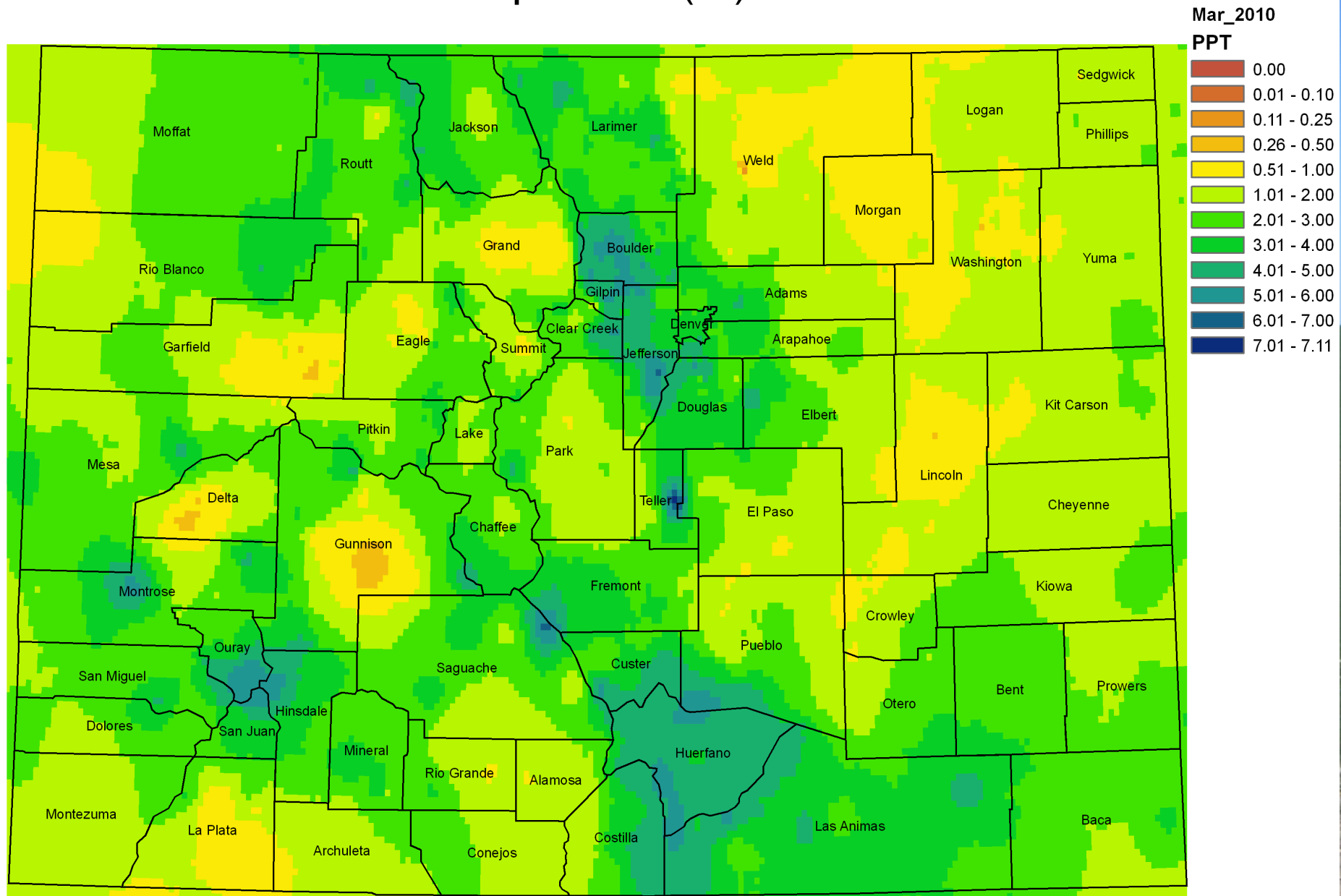


Grand Junction Jan 1, 2009 - Apr 18, 2010

Mean and Actual Daily Temperature

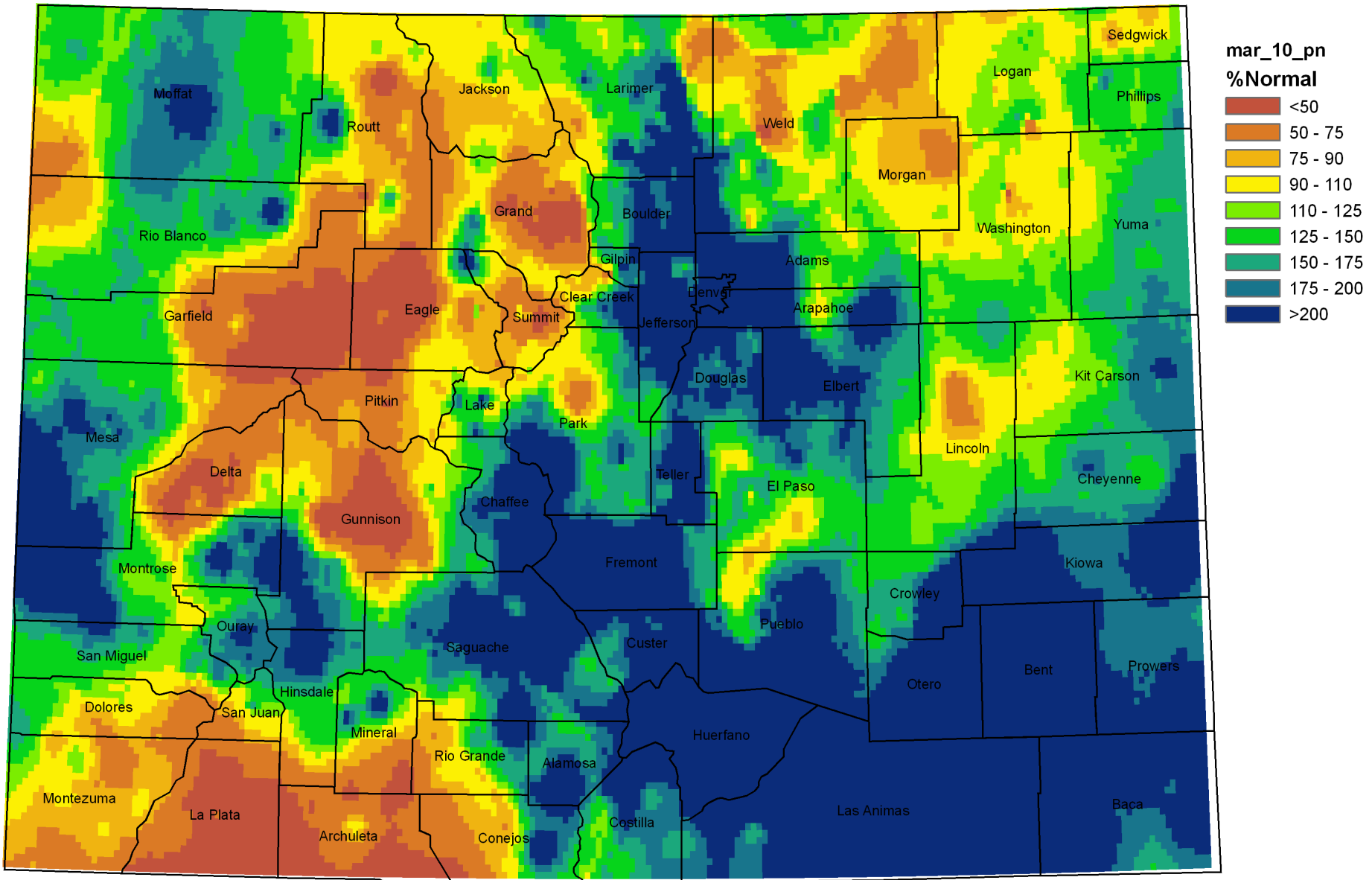


Colorado Precipitation (in) March 2010



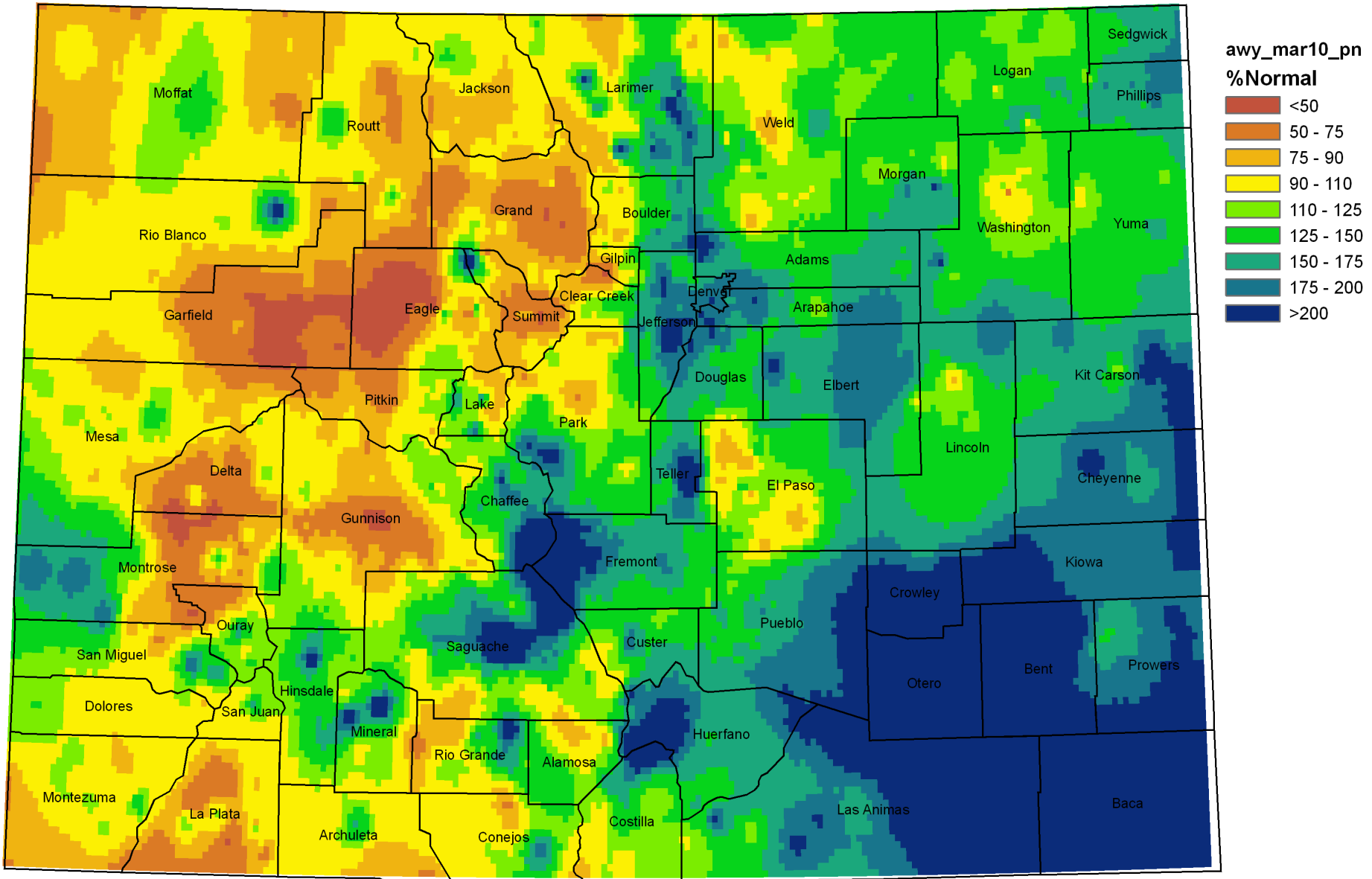
Produced by the Colorado Climate Center utilizing Snotel, NWS, CoCoRaHS and CoAgMet* Preliminary Precipitation Data
Analysis: Inverse Distance Weighting
*Summer only

March 2010 Precipitation as Percent of Average



Produced by the Colorado Climate Center utilizing Snotel, NWS, CoCoRaHS and CoAgMet* Preliminary Precipitation Data
Analysis: Inverse Distance Weighting
*Summer only

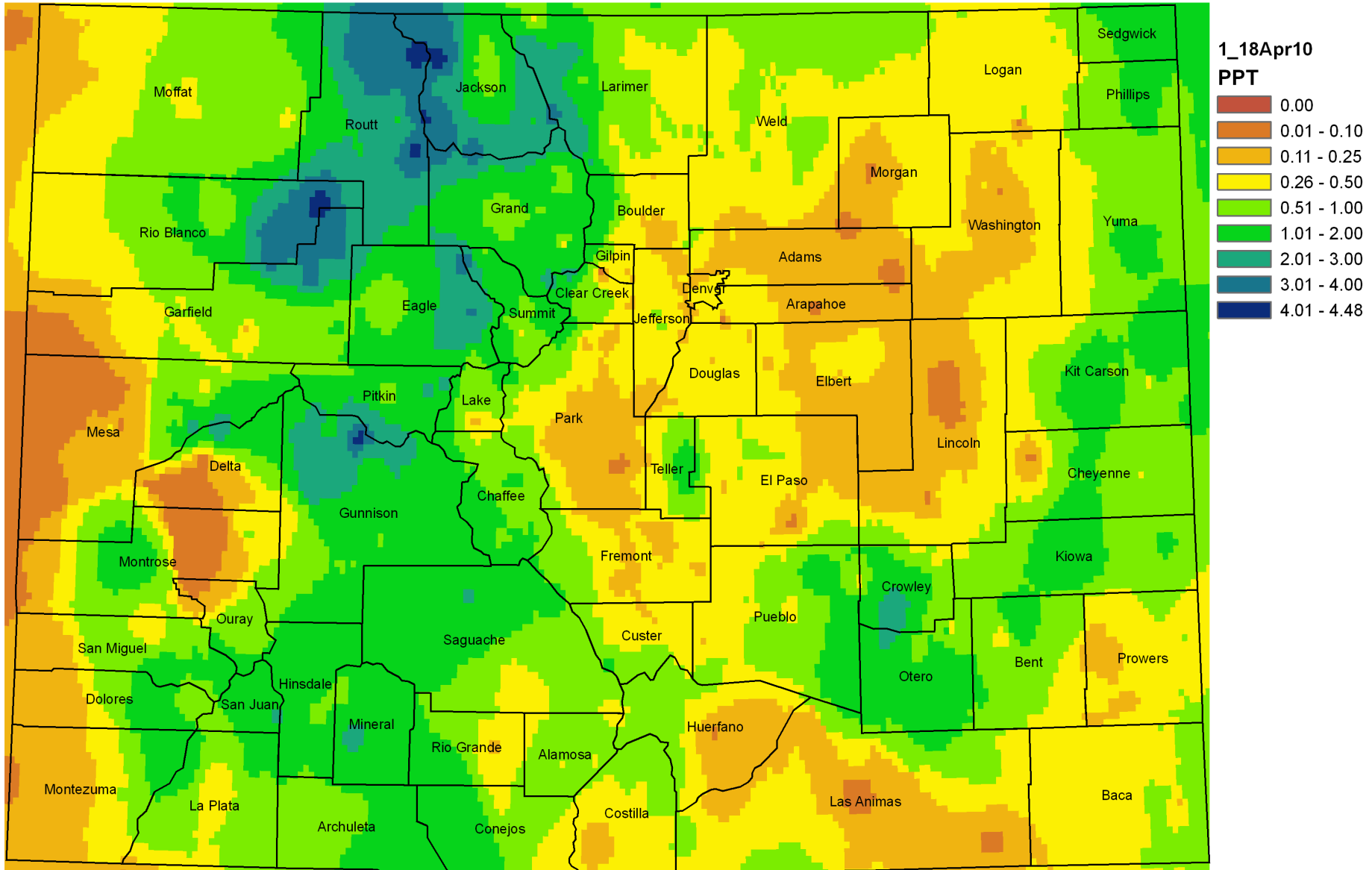
Water Year 2010 Precipitation as Percentage of Normal Oct 2009 - Mar 2010



Produced by the Colorado Climate Center utilizing Snotel, NWS, CoCoRaHS and CoAgMet* Preliminary Precipitation Data
Analysis: Inverse Distance Weighting
*Summer only

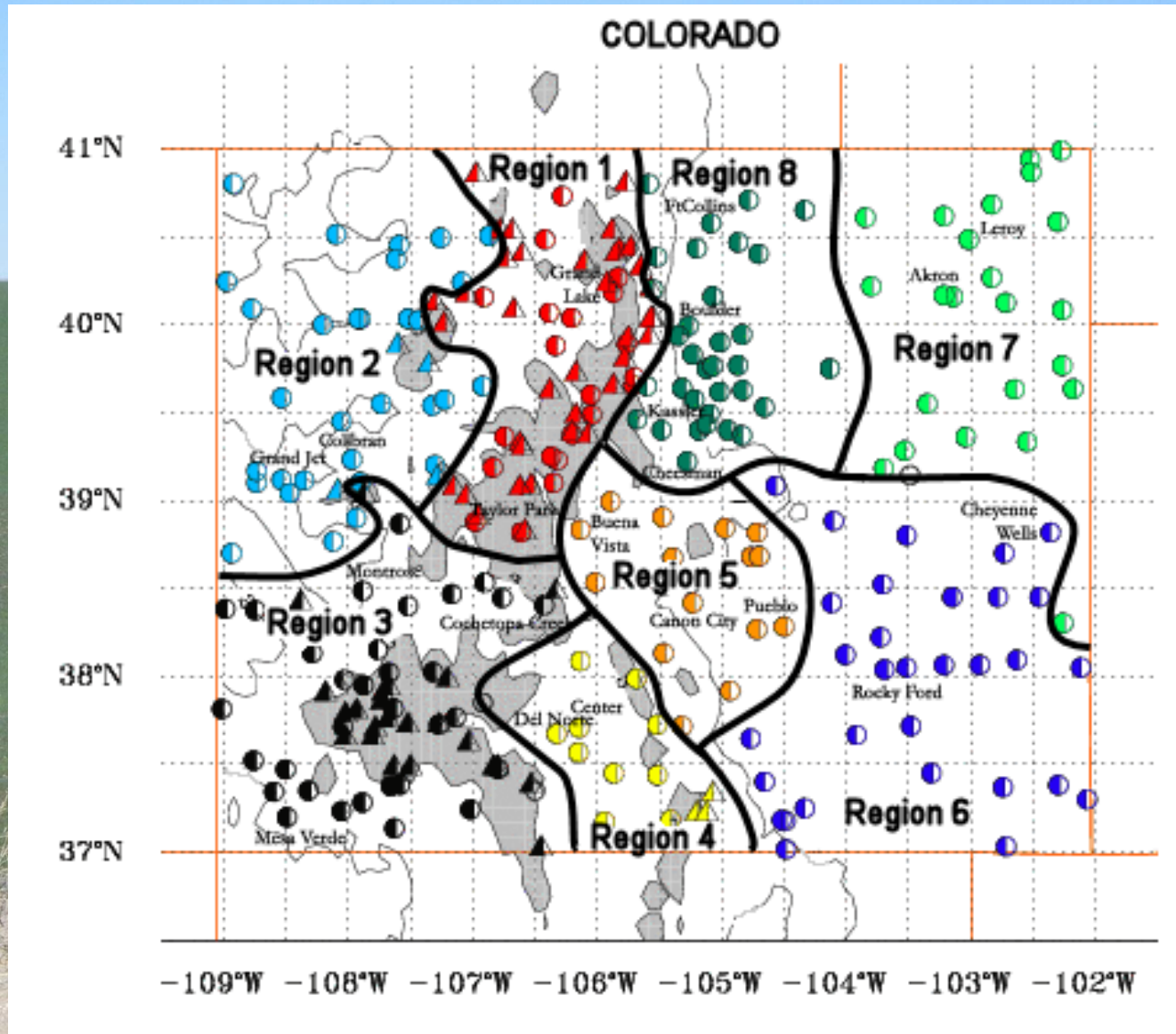
Colorado Month To Date Precipitation

1 - 18 April 2010



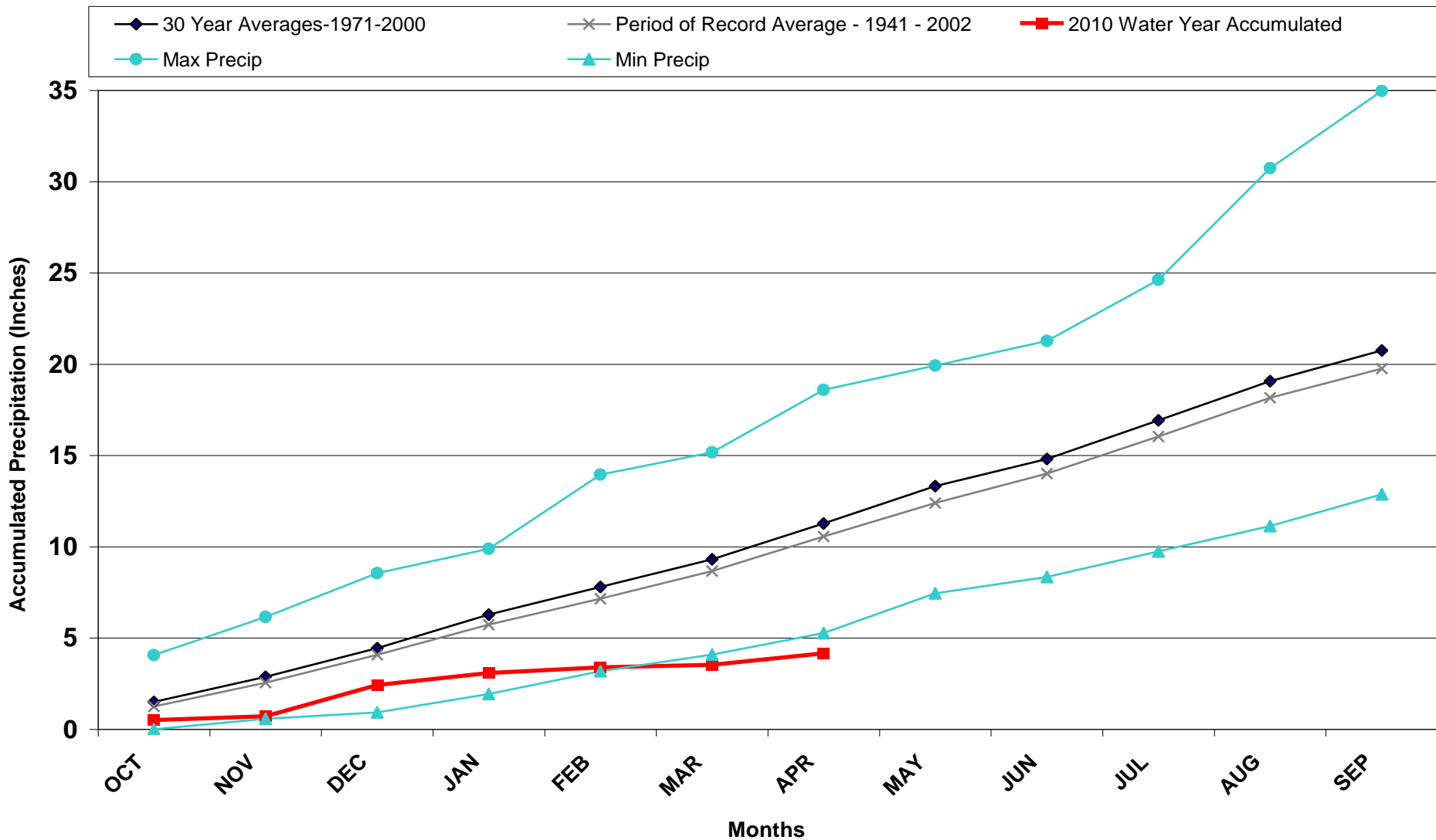
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Climate divisions defined by Dr. Klaus Wolter of NOAA's Climate Diagnostic Center in Boulder, CO



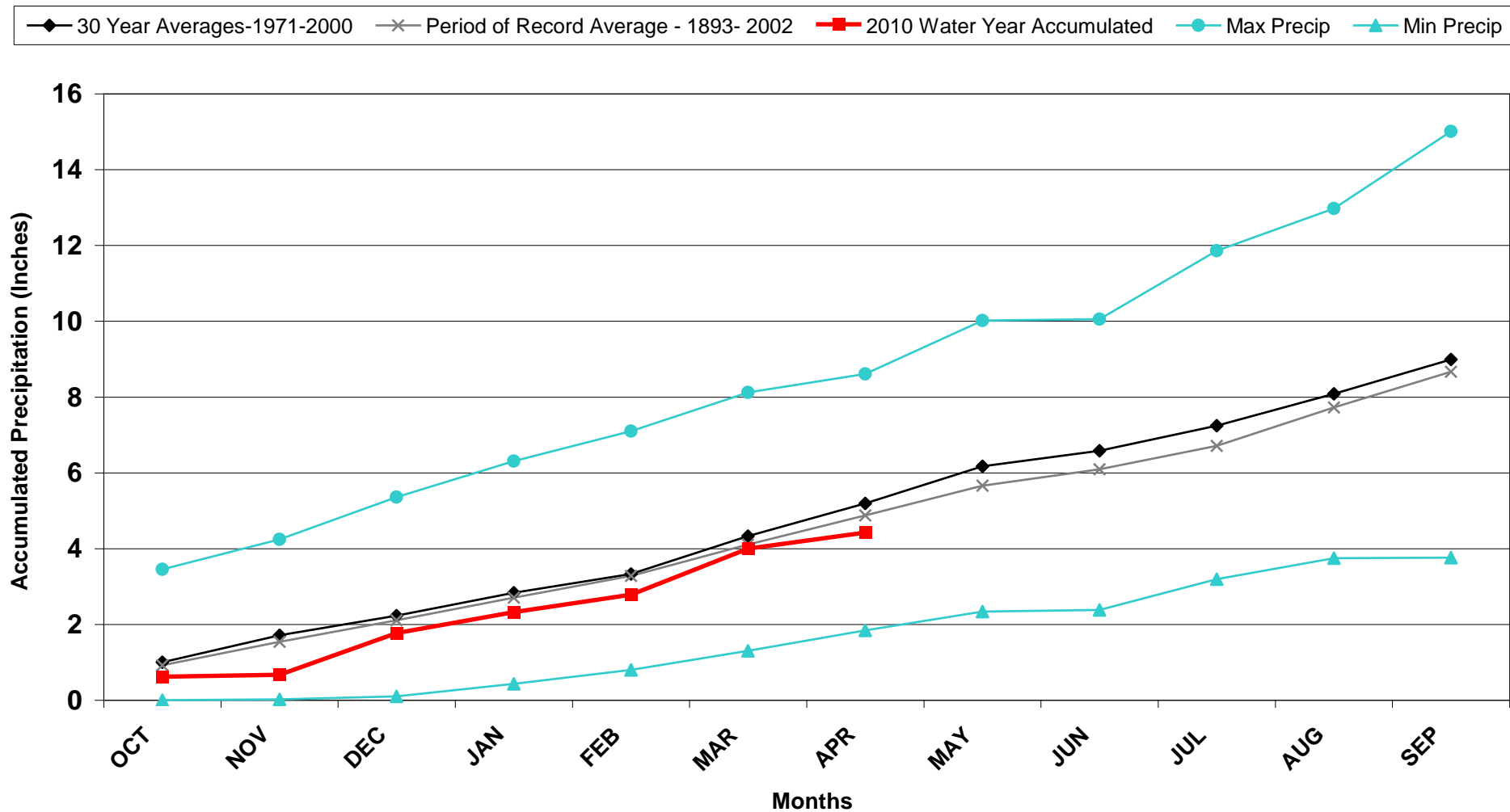
Division 1 – Grand Lake 1NW

Grand Lake 1 NW 2010 Water Year



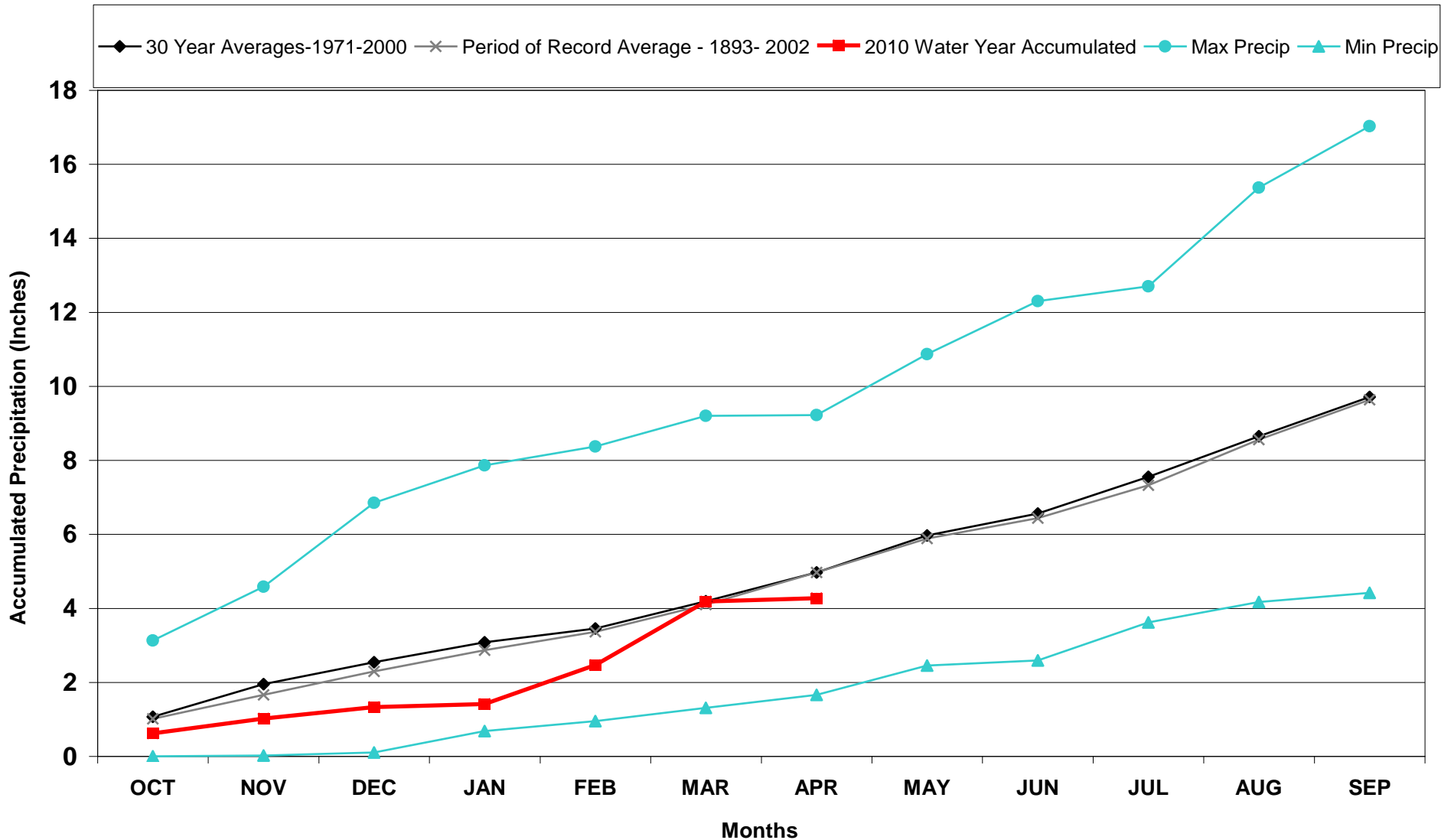
Division 2 – Grand Junction

Grand Junction WSFO 2010 Water Year



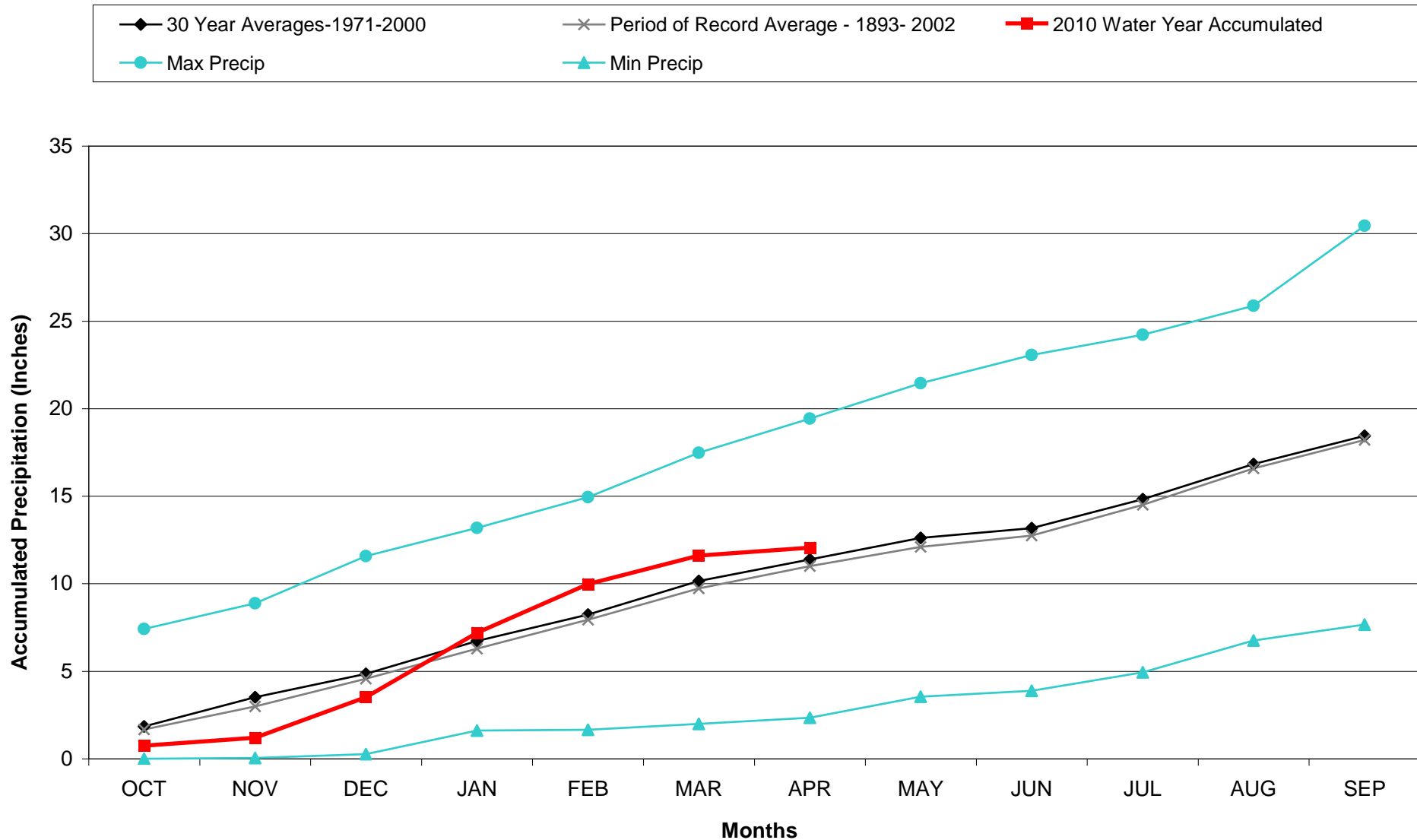
Division 3 – Montrose

Montrose #2 2010 Water Year



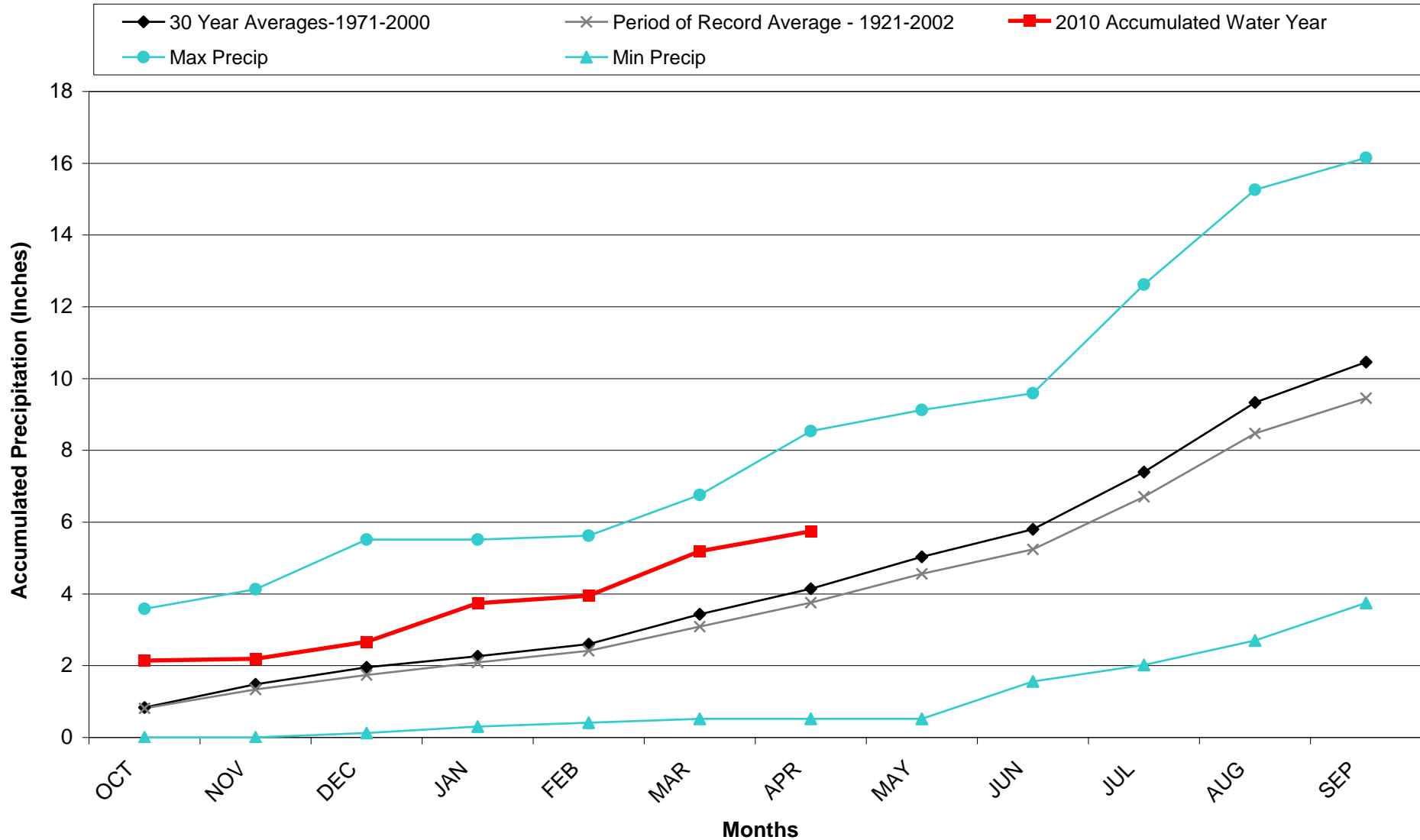
Division 3 – Mesa Verde NP

Mesa Verde NP 2010 Water Year



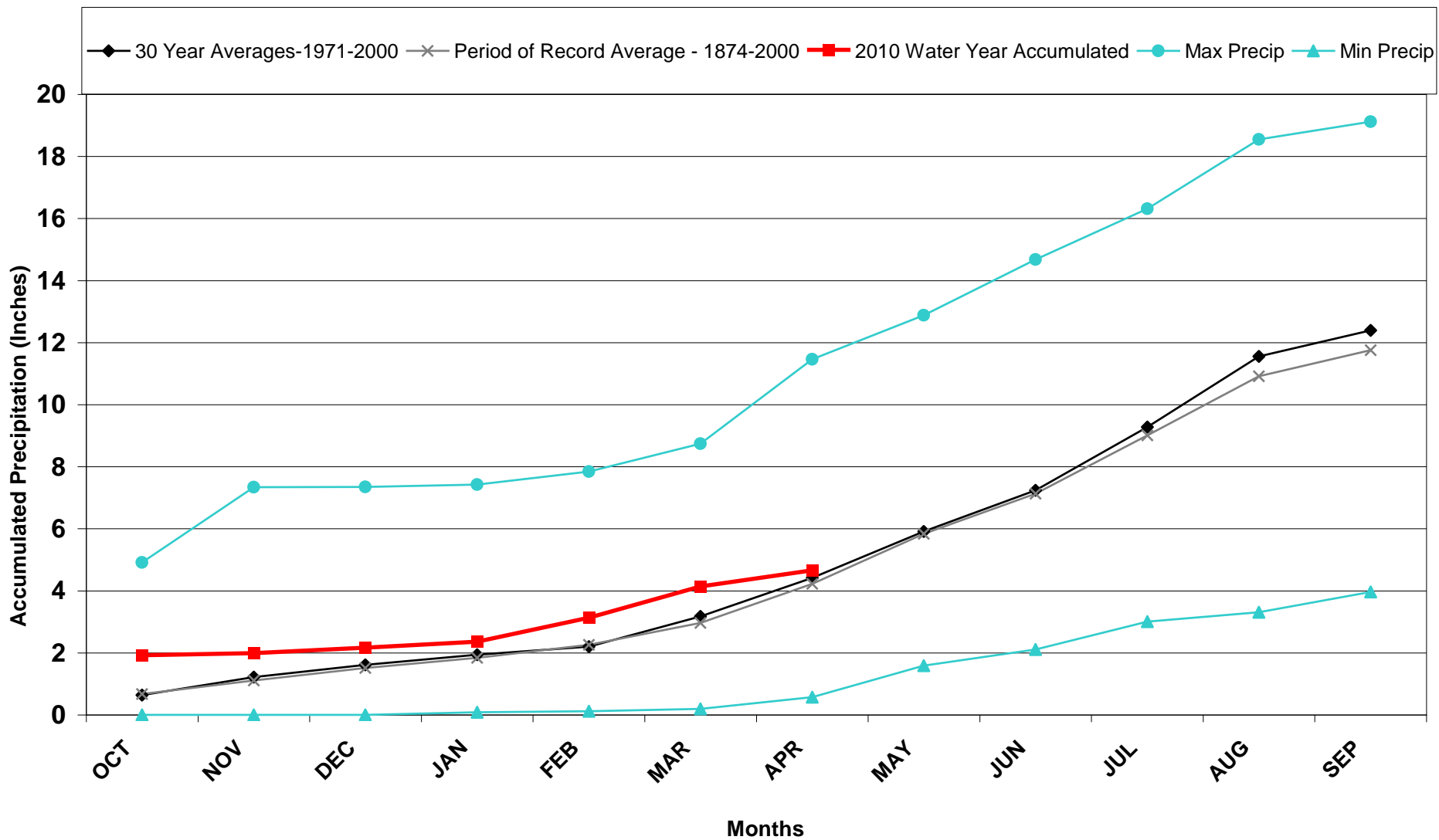
Division 4 – Del Norte

Del Norte 2010 Water Year



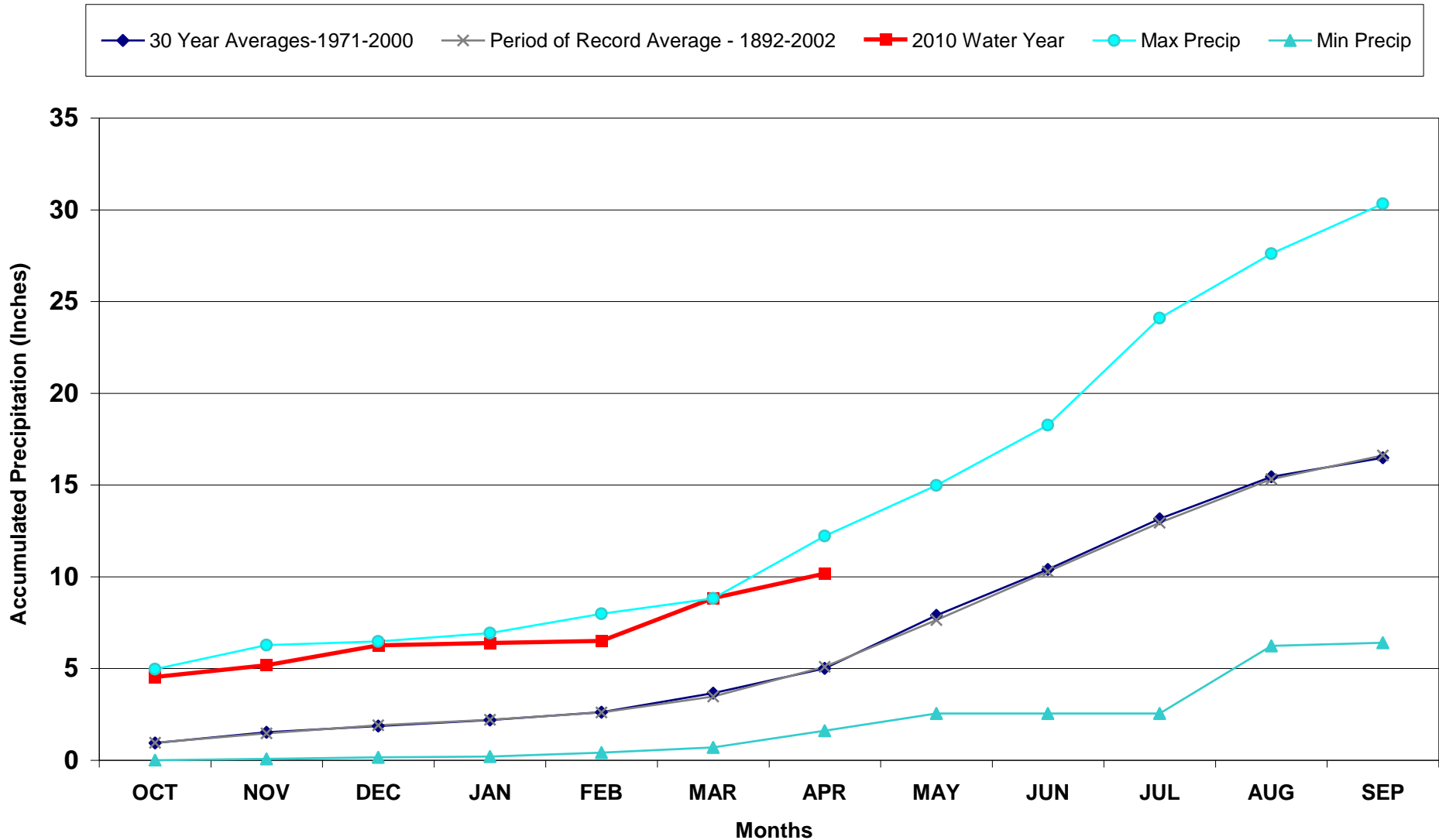
Division 5 – Pueblo

Pueblo WSO 2010 Water Year



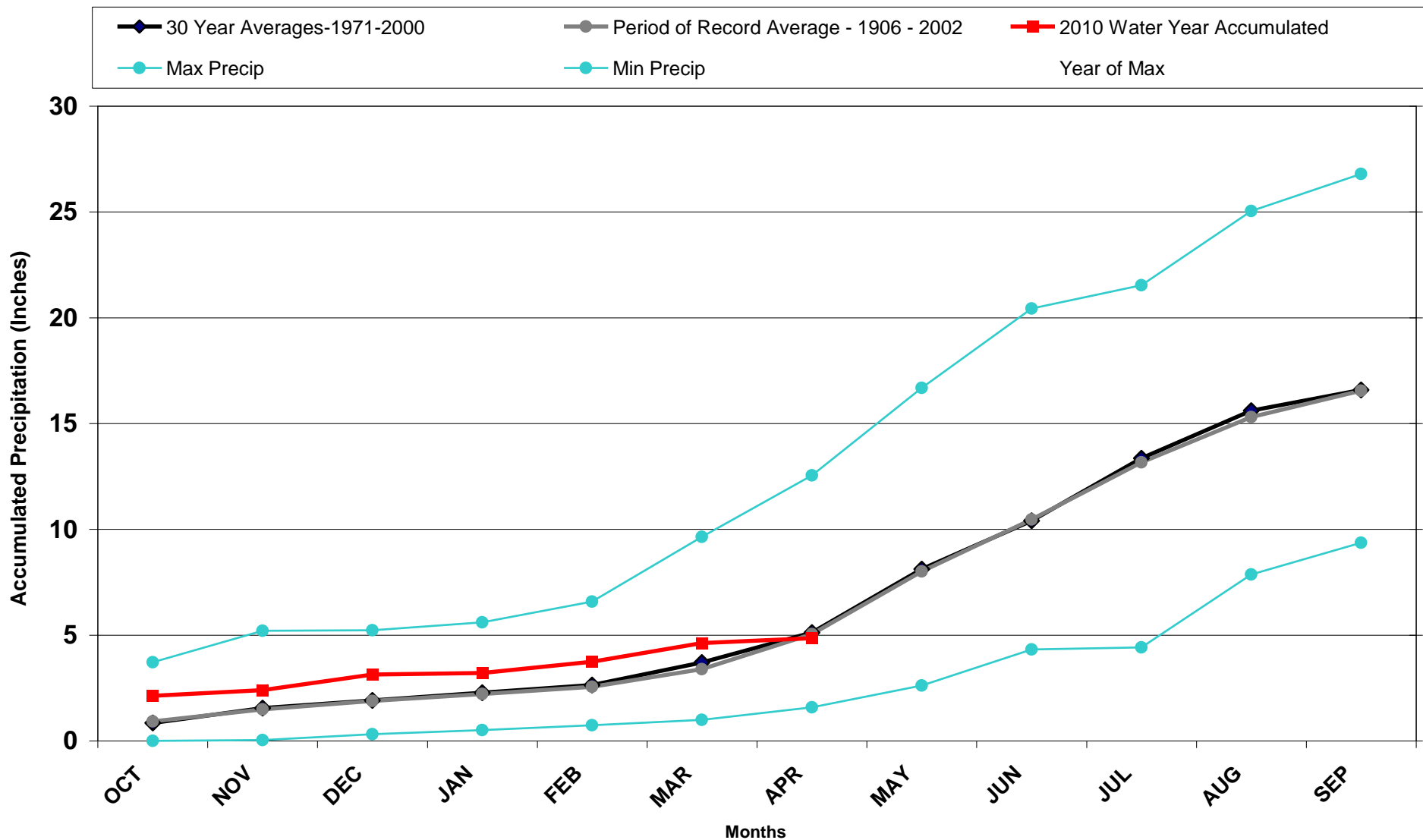
Division 6 - Burlington

Burlington 2010 Water Year



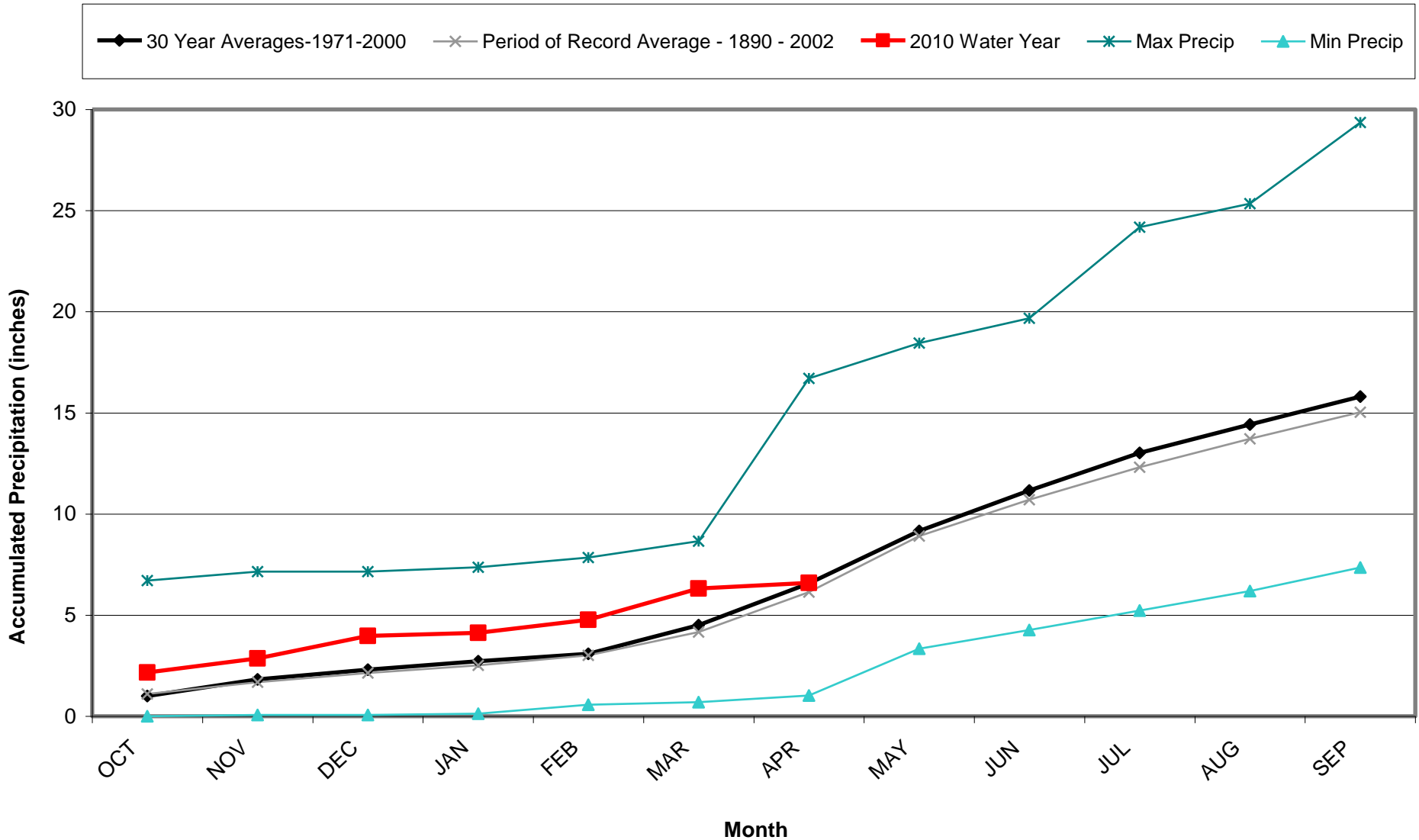
Division 7 – Akron

Akron 4E 2010 Water Year



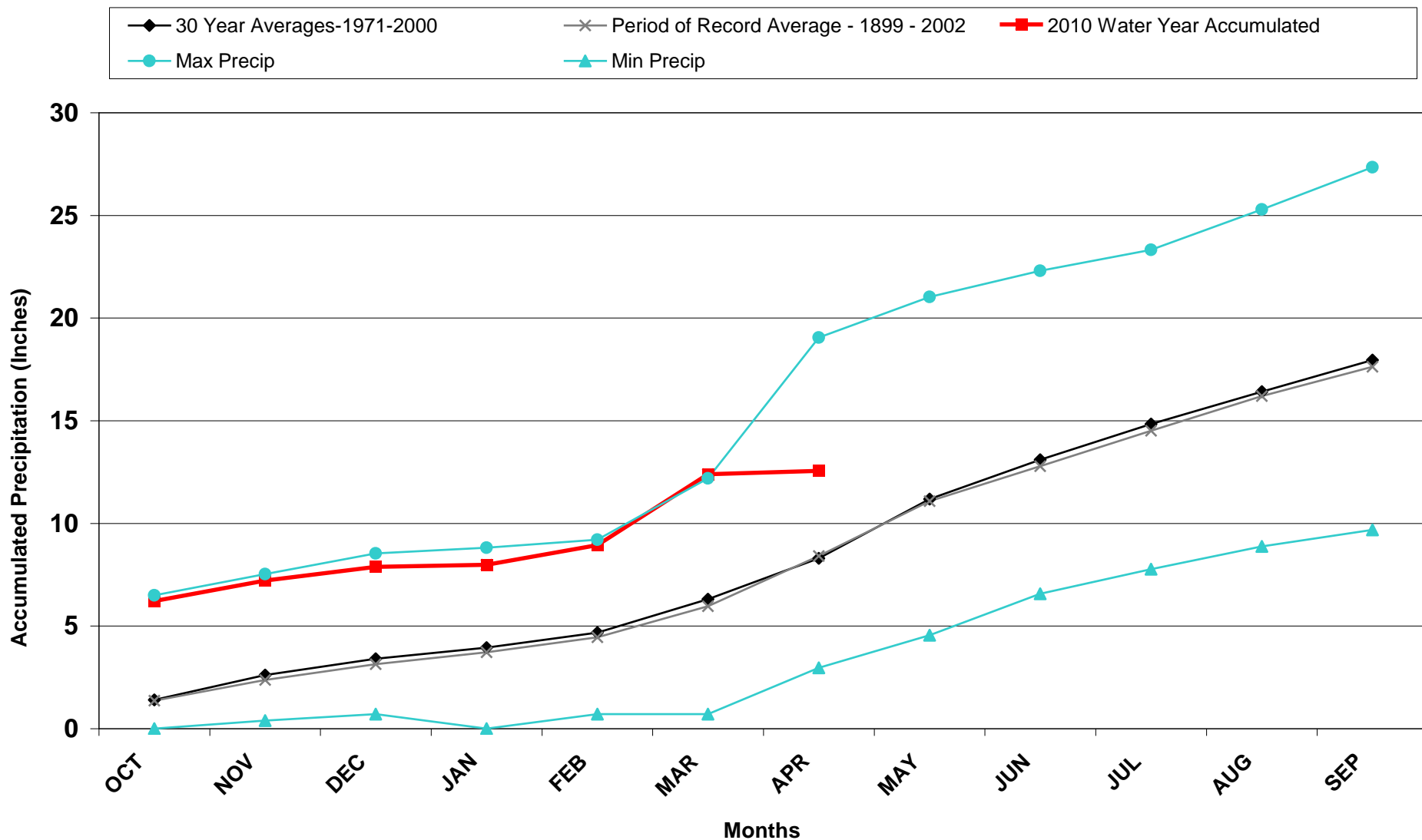
Division 8 – Fort Collins

Fort Collins 2010 Water Year



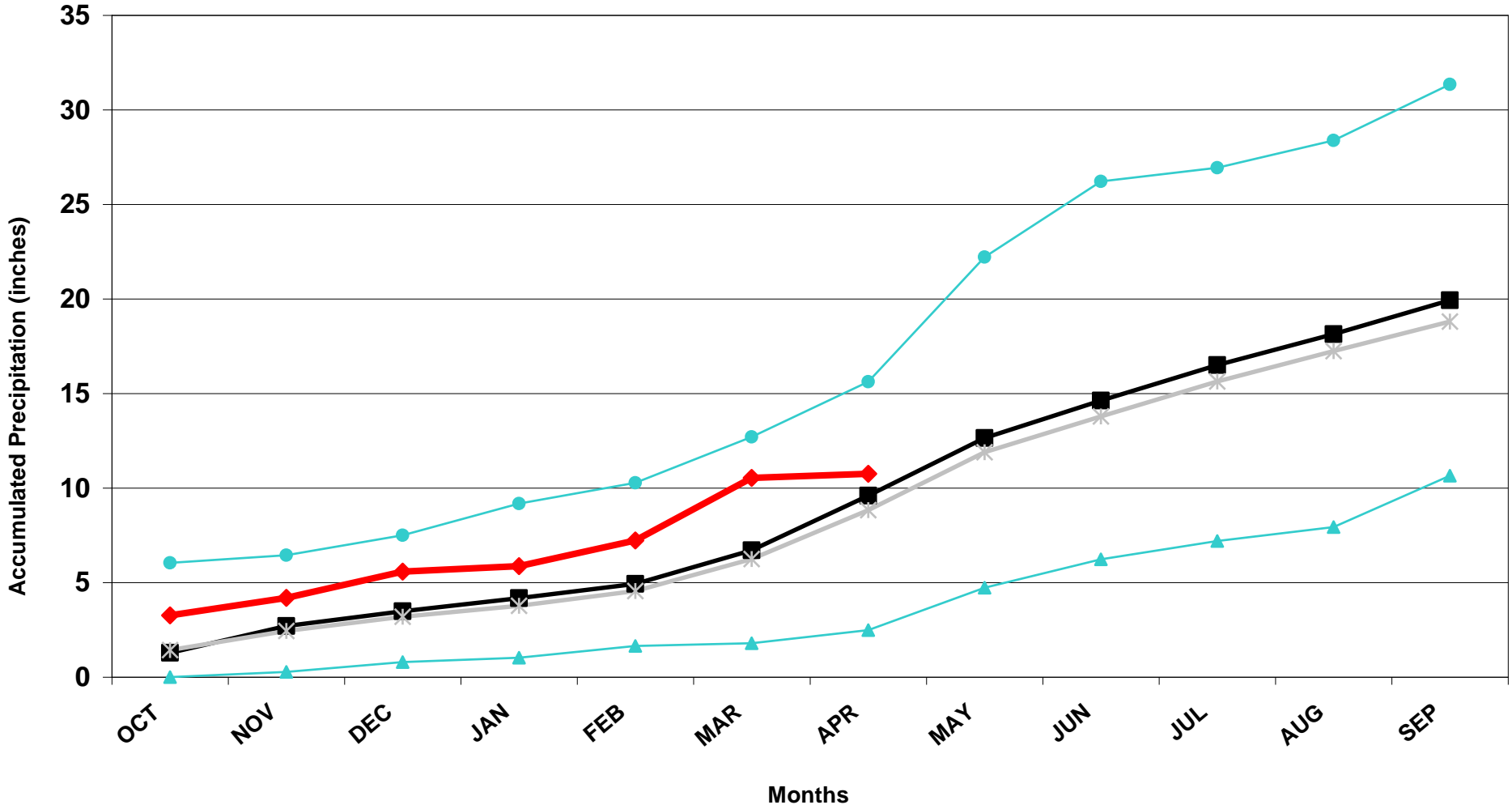
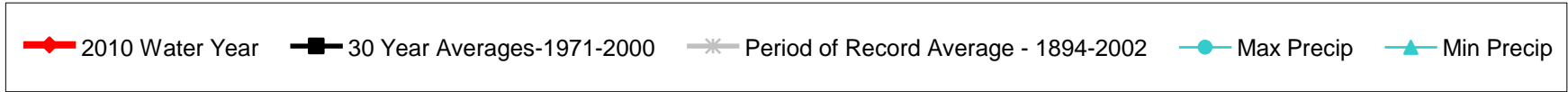
Division 8 – Kassler

Kassler 2010 Water Year



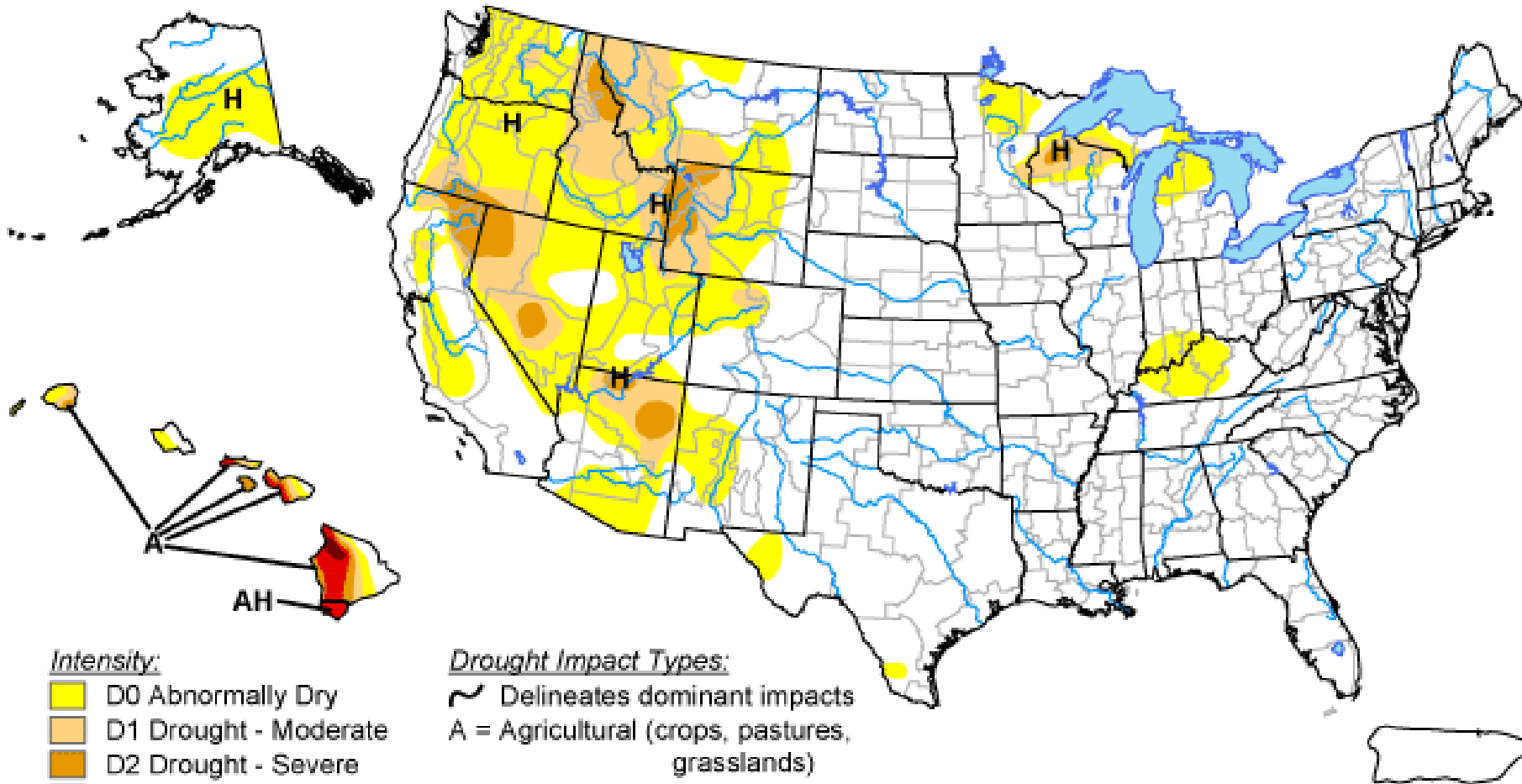
Division 8 - Boulder

Boulder 2010 Water Year








U.S. Drought Monitor


March 16, 2010
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>



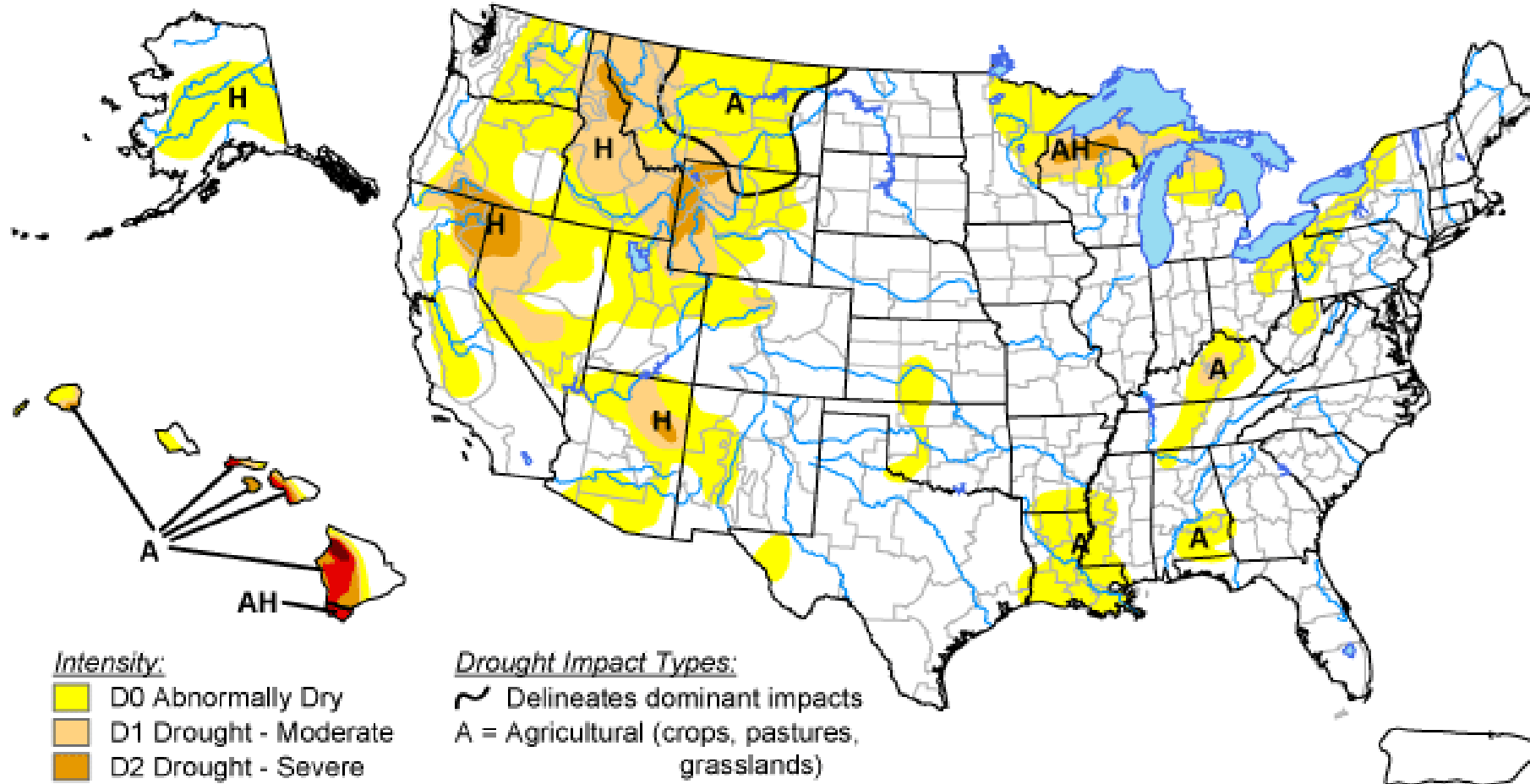
Released Thursday, March 18, 2010

Author: Matthew Rosencrans, NOAA/NWS/NCEP/CPC






U.S. Drought Monitor

April 13, 2010


Valid 8 a.m. EDT



Intensity:

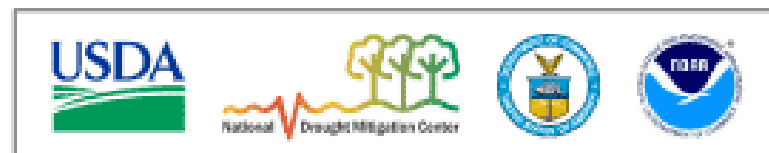
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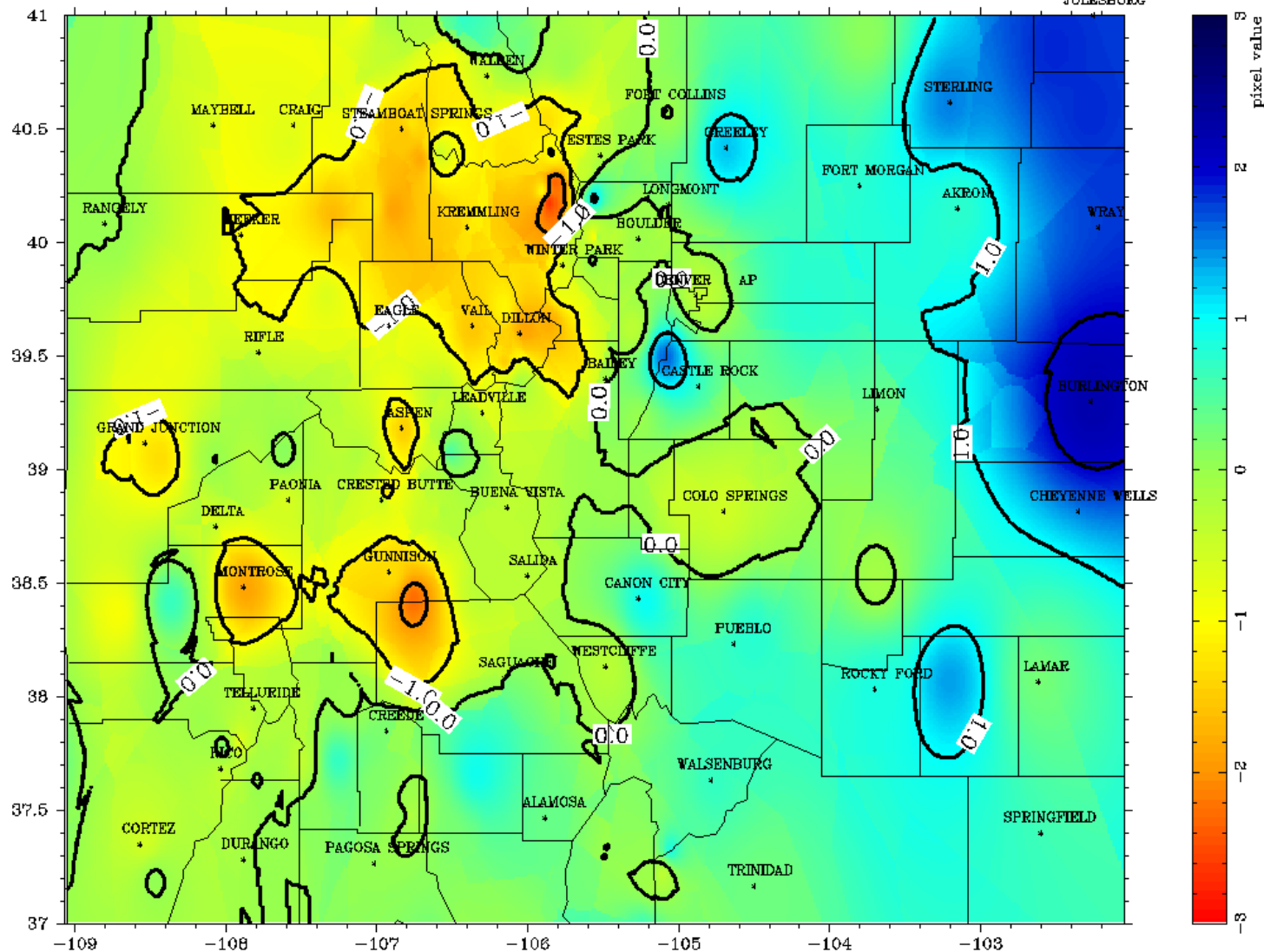
Released Thursday, April 15, 2010
Author: David Miskus, CPC/NCEP/NWS/NOAA

6-month SPI

Colorado

3/2010 6 mon. SPI

JULESBURG



| | |
|------------|------------|
| 99 % < 2.0 | 9 % < -1.0 |
| 89 % < 1.0 | 0 % < -2.0 |
| 44 % < 0.0 | 0 % < -3.0 |

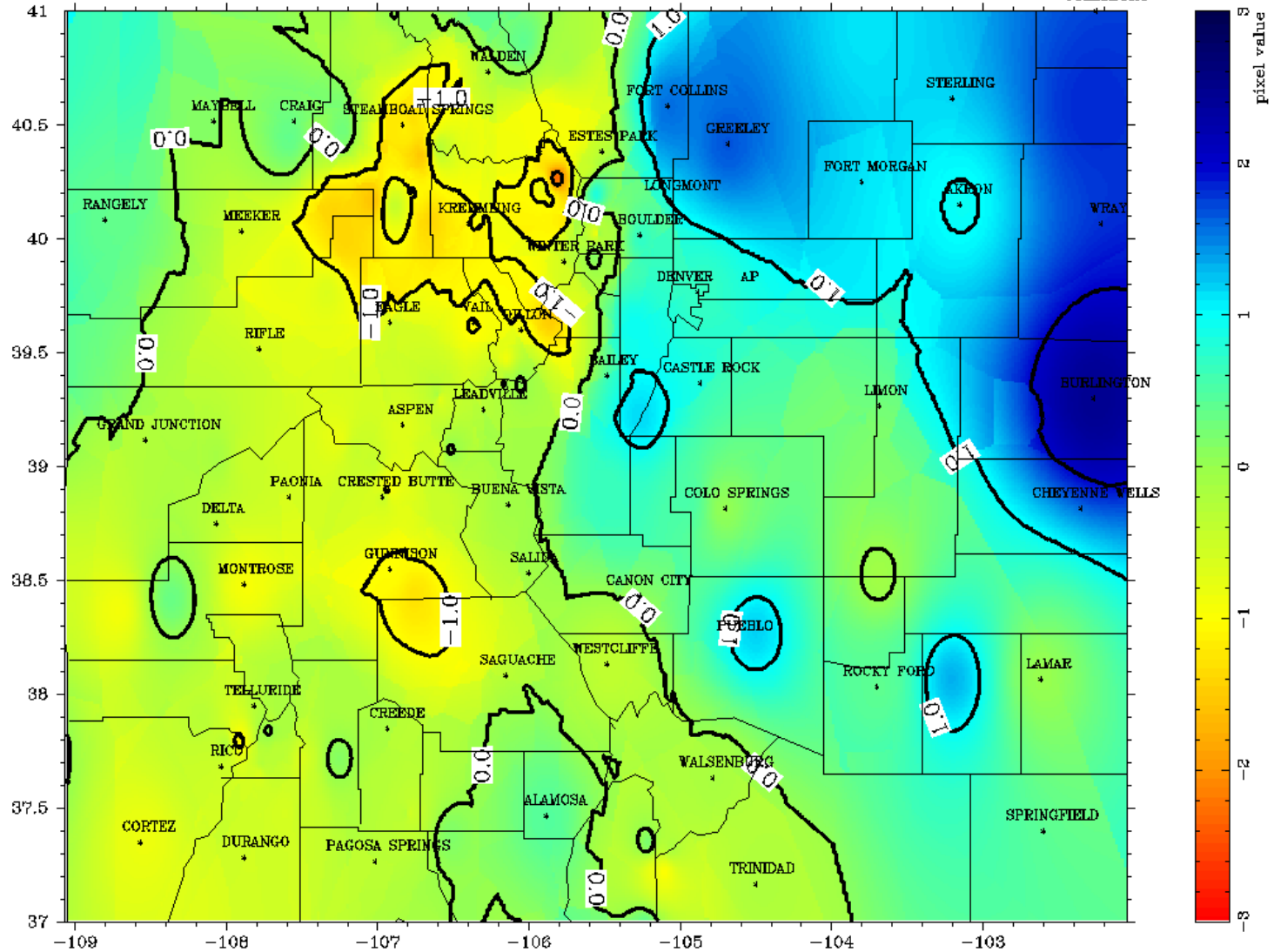
Produced by:
Colorado Climate Center
Fort Collins, CO

12-month SPI

Colorado

3/2010 12 mon. SPI

JULESBURG



| | |
|------------|------------|
| 98 % < 2.0 | 4 % < -1.0 |
| 81 % < 1.0 | 0 % < -2.0 |
| 44 % < 0.0 | 0 % < -3.0 |

Produced by:
Colorado Climate Center
Fort Collins, CO

Colorado Climate Center

Data and Power Point Presentations
available for downloading

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

– then click on “Presentations”



Knowledge to Go Places

