

Climate Update

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Atmospheric Science Department
Colorado State University

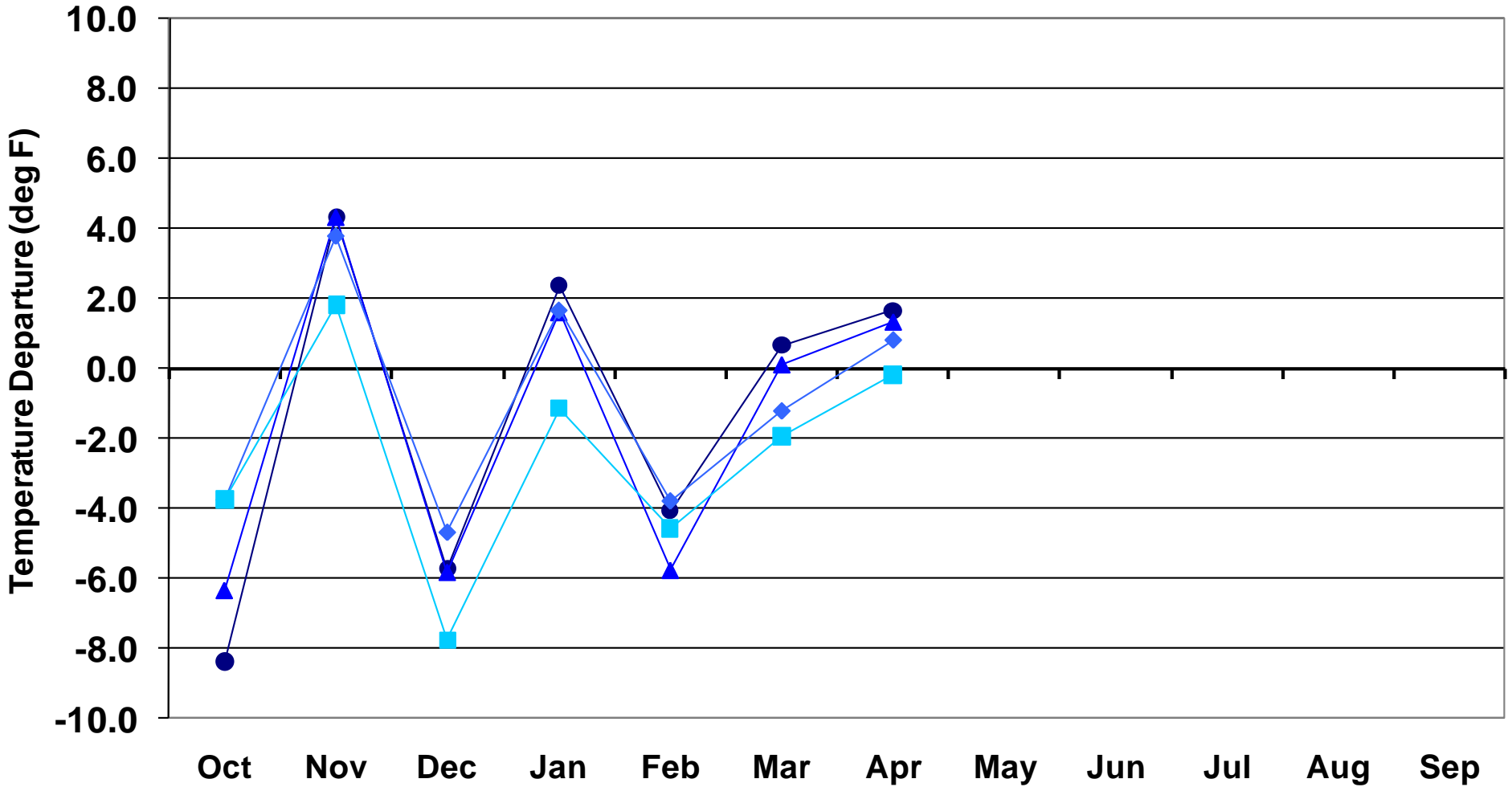
Presented to
Water Availability Task Force
May 21, 2010
Denver, CO

Prepared by Wendy Ryan



Water Year 2010 Temperature Departures

Water Year 2010



● Eastern Plains

▲ Foothills

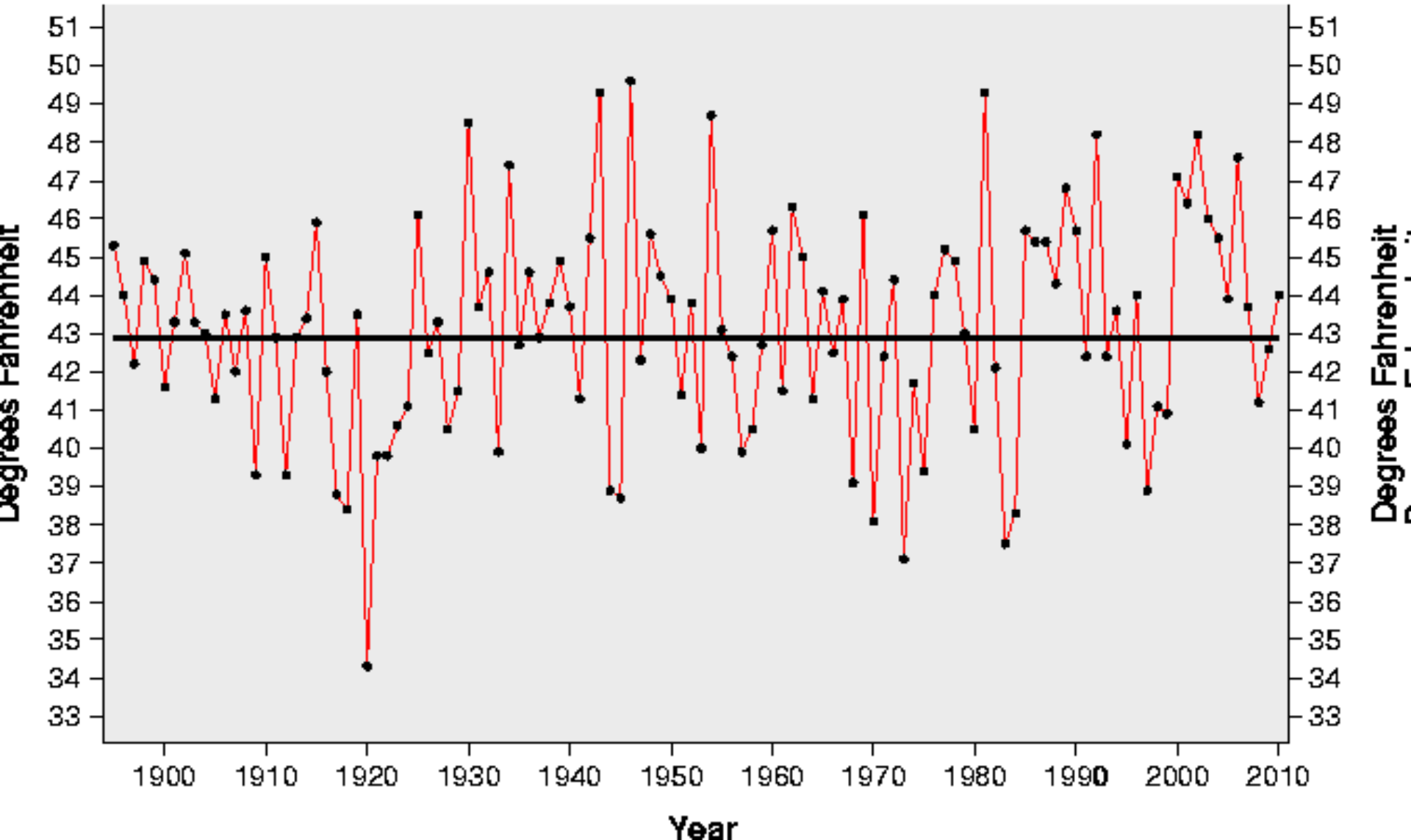
◆ Mountains

■ Western Valleys

April Average Temperature History for Colorado (NCDC)

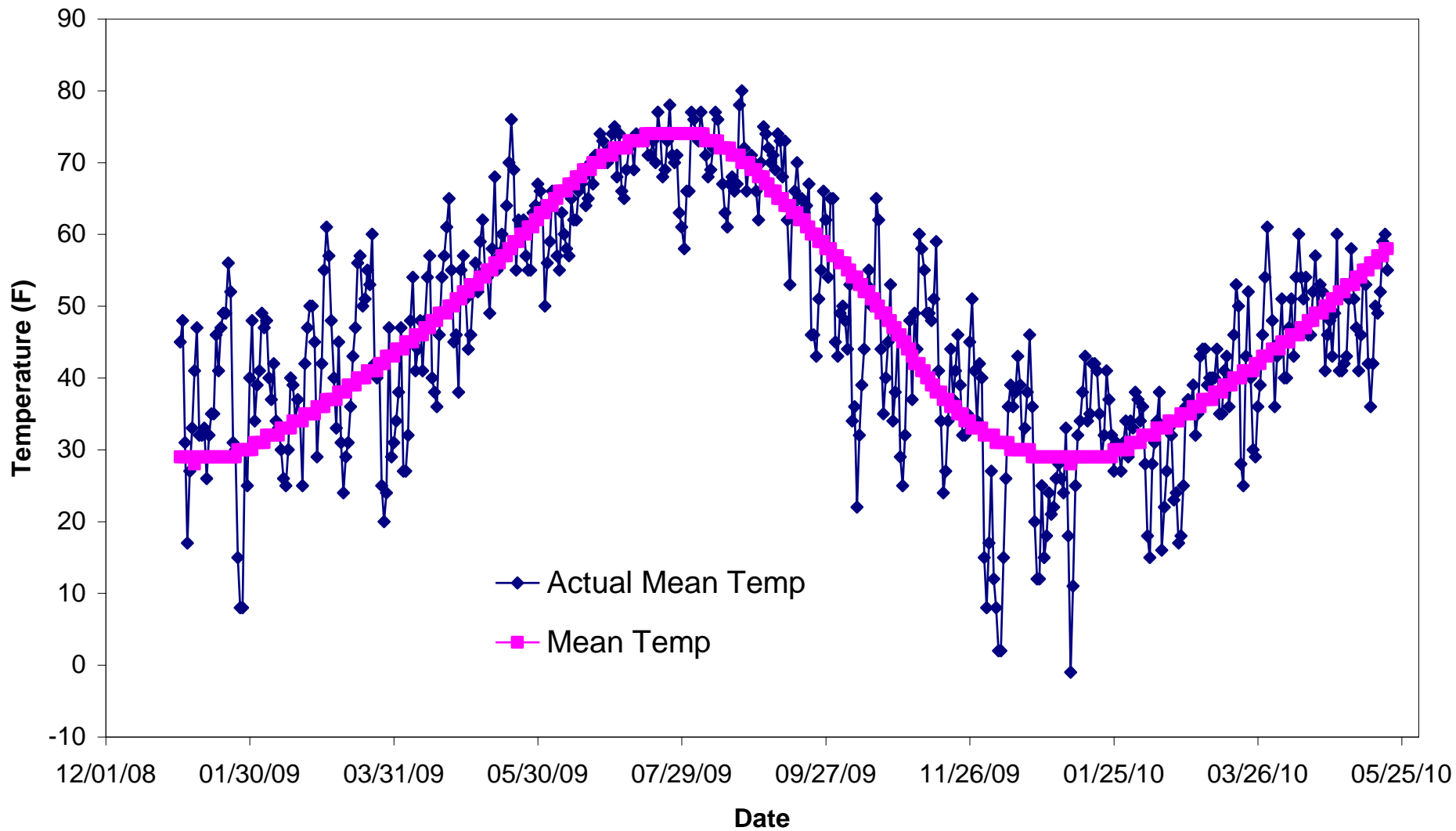
— Actual Temperature
— Average Temperature

Rank: 44.0 degrees is 76th coolest
for period of record 1895-2010



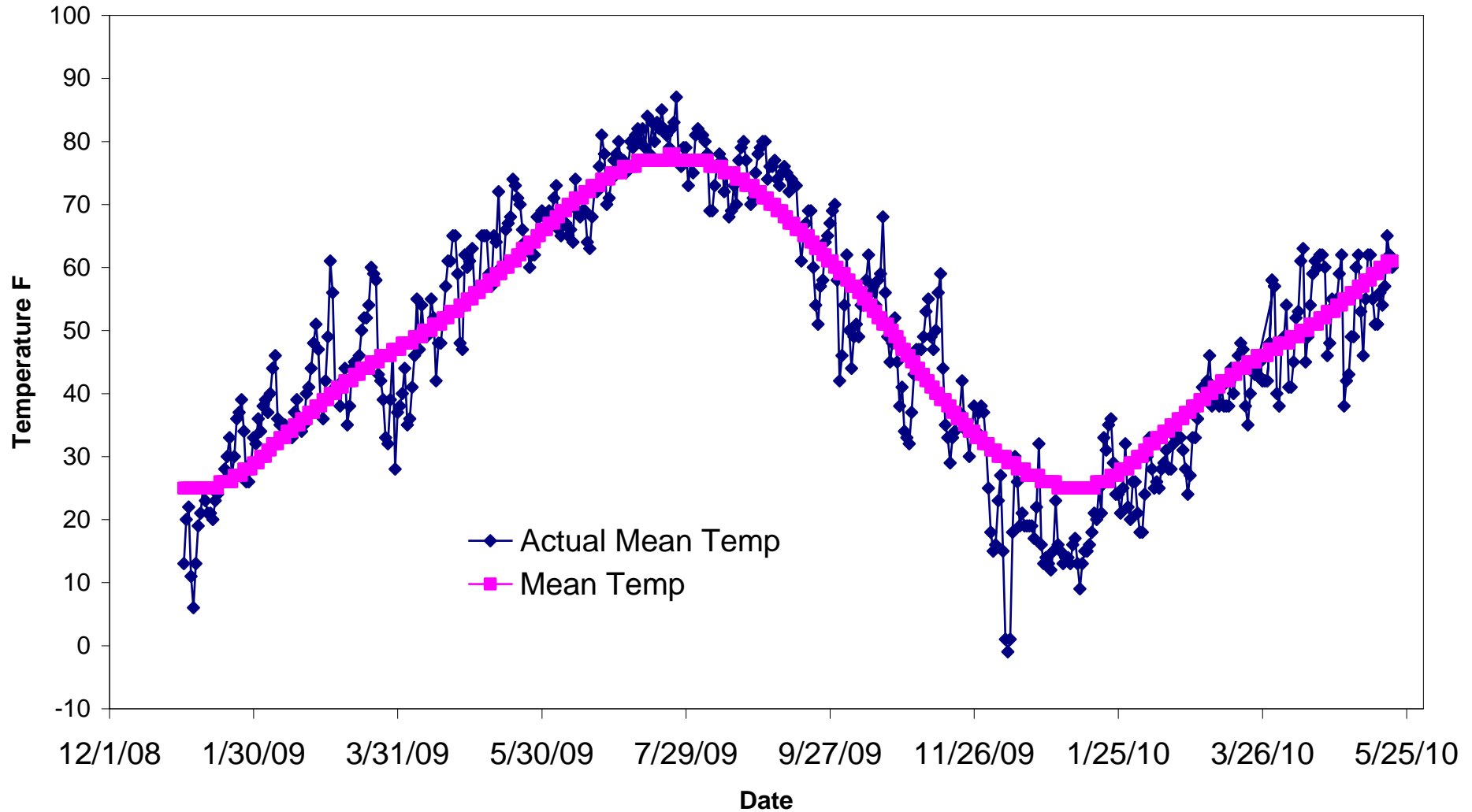
Denver, CO Jan 1, 2009 - May 19, 2010

Mean and Actual Daily Temperature

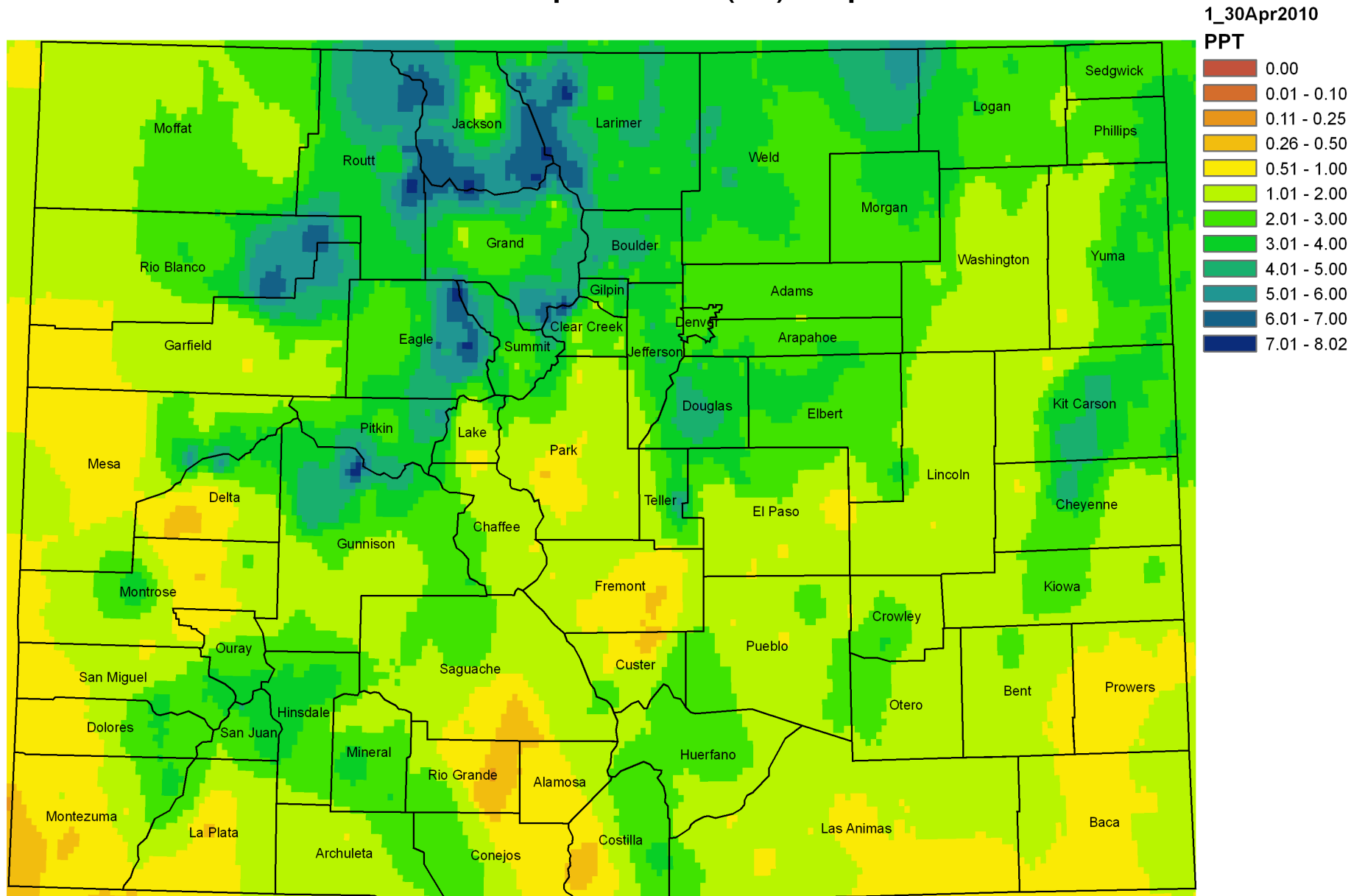


Grand Junction Jan 1, 2009 - May 19, 2010

Mean and Actual Daily Temperature

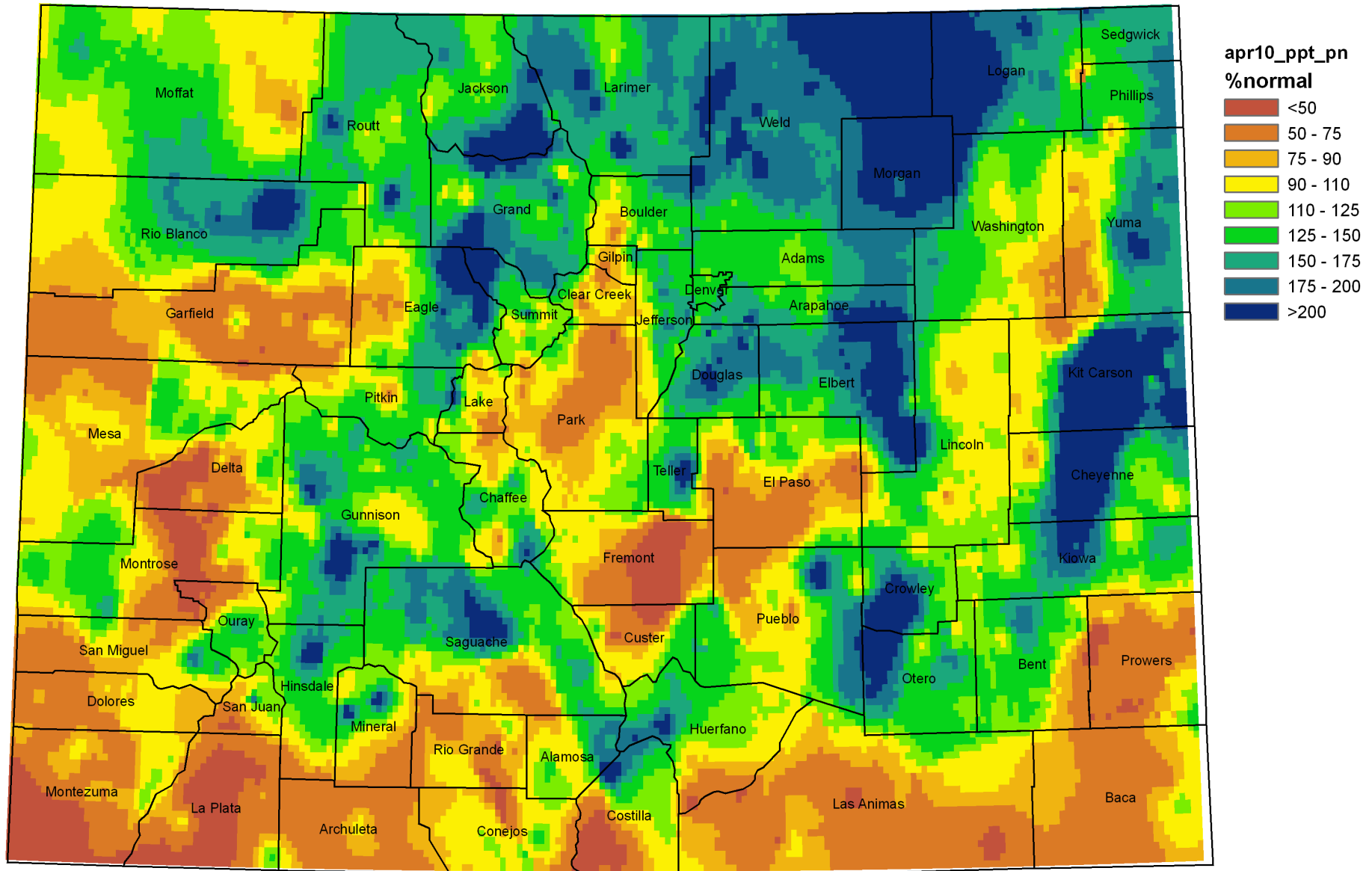


Colorado Precipitation (in) April 2010



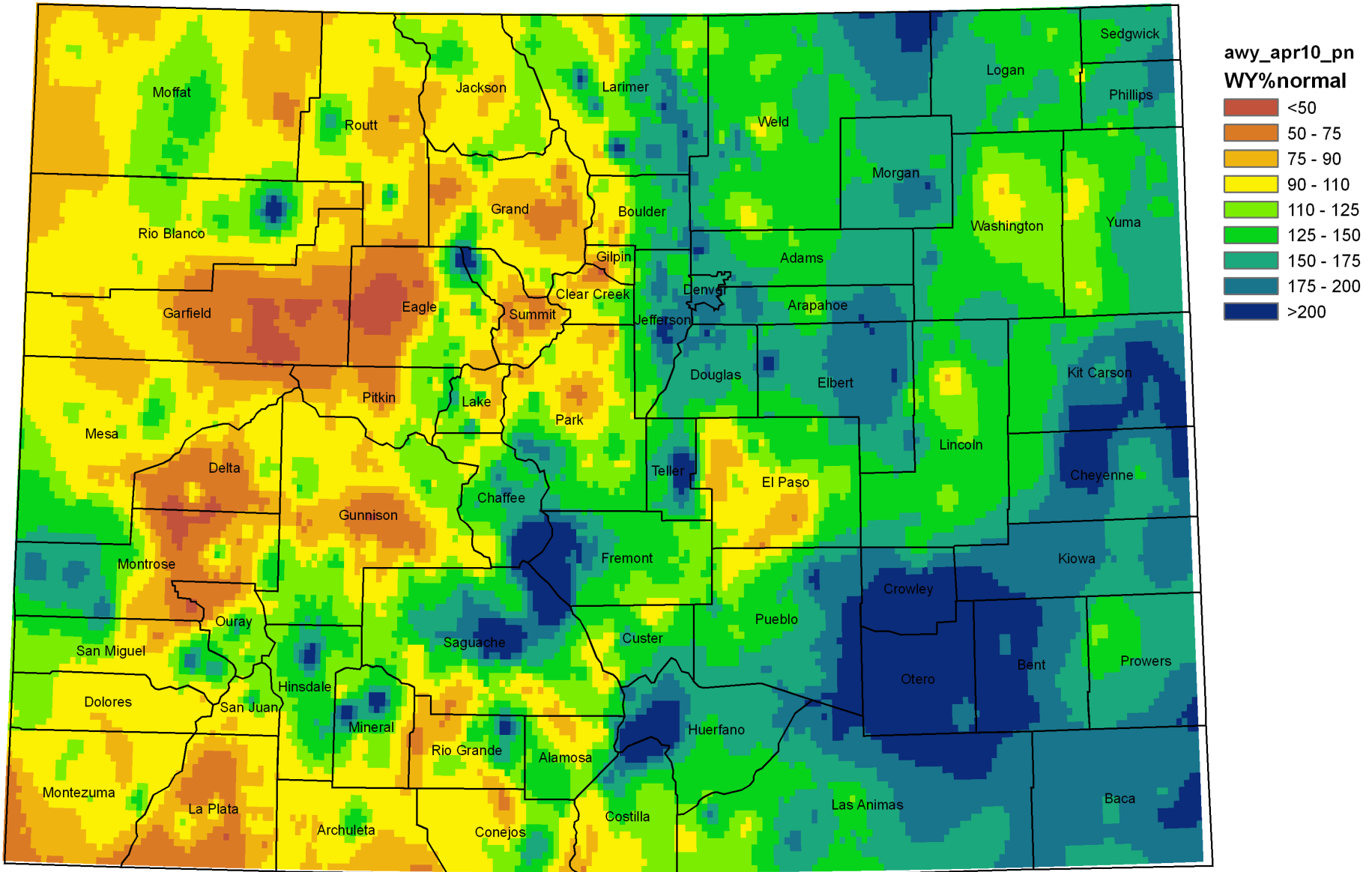
Produced by the Colorado Climate Center utilizing Snotel, NWS, CoCoRaHS and CoAgMet* Preliminary Precipitation Data
Analysis: Inverse Distance Weighting
*Summer only

April 2010 Precipitation as Percent of Normal



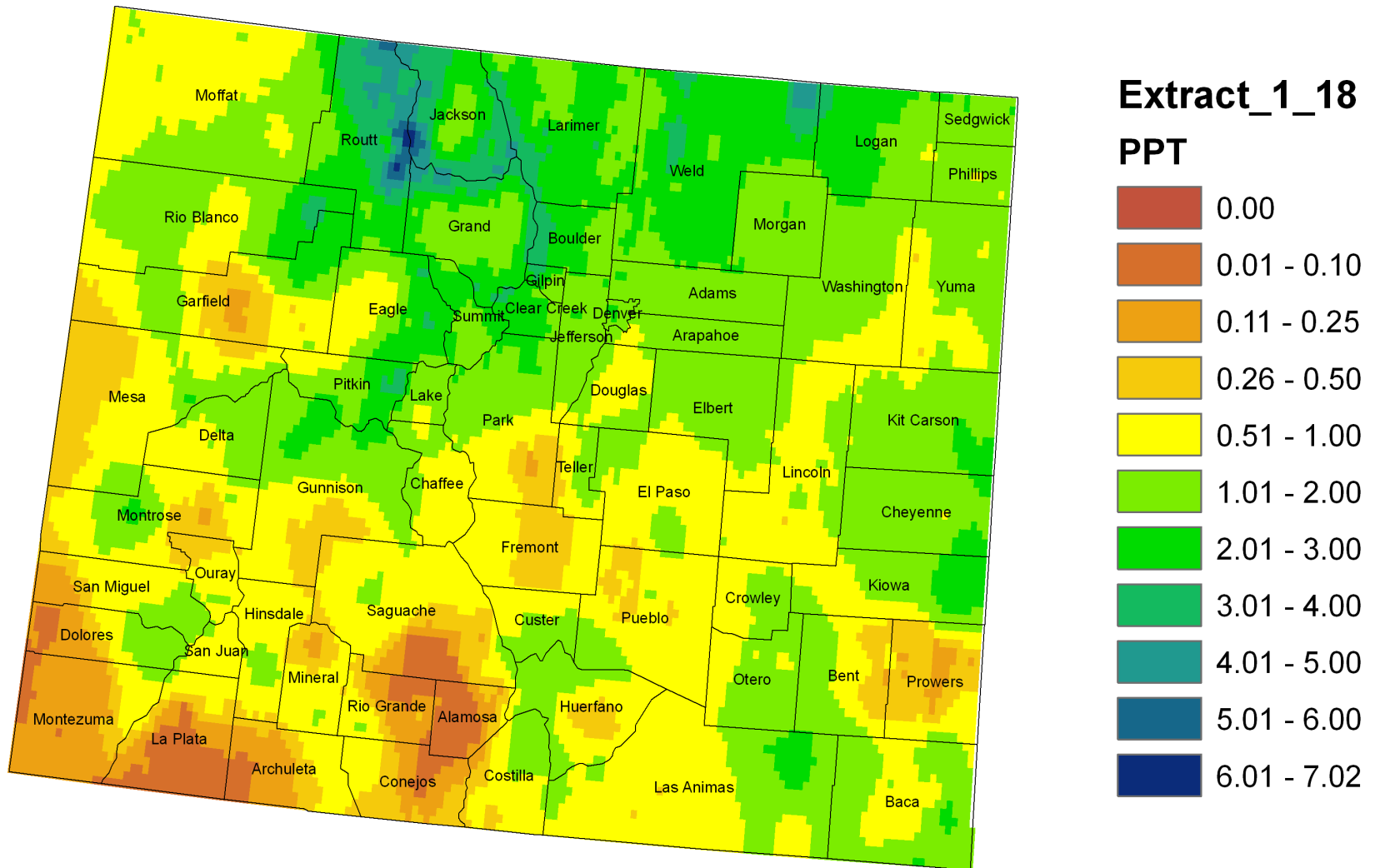
Produced by the Colorado Climate Center utilizing Snotel, NWS, CoCoRaHS and CoAgMet* Preliminary Precipitation Data
Analysis: Inverse Distance Weighting
*Summer only

Water Year 2010 Precipitation as Percent of Normal (Oct 09 - Apr 10)

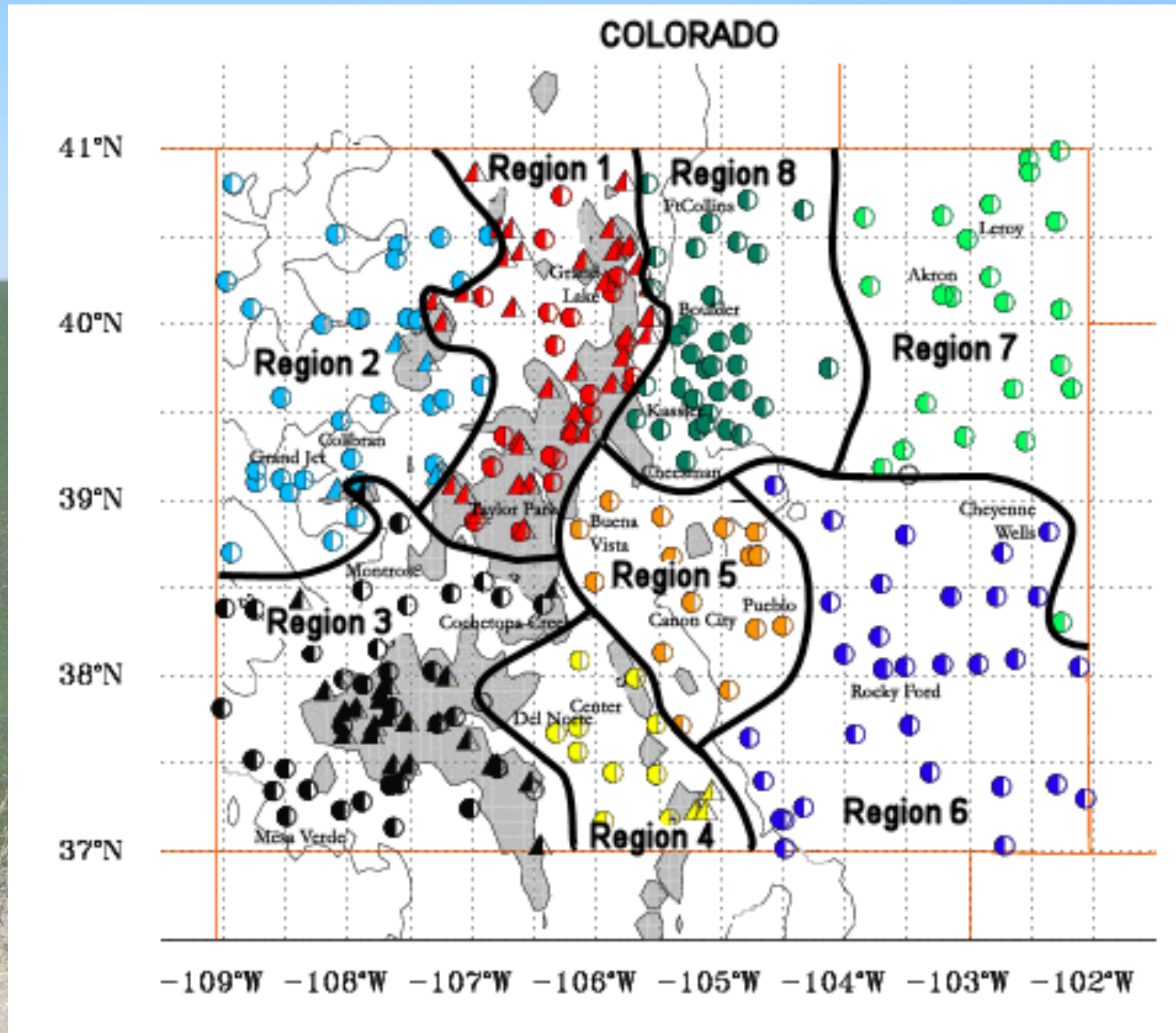


Produced by the Colorado Climate Center utilizing Snotel, NWS, CoCoRaHS and CoAgMet* Preliminary Precipitation Data
Analysis: Inverse Distance Weighting
*Summer only

Colorado Precipitation (in) 1 - 18 May 2010

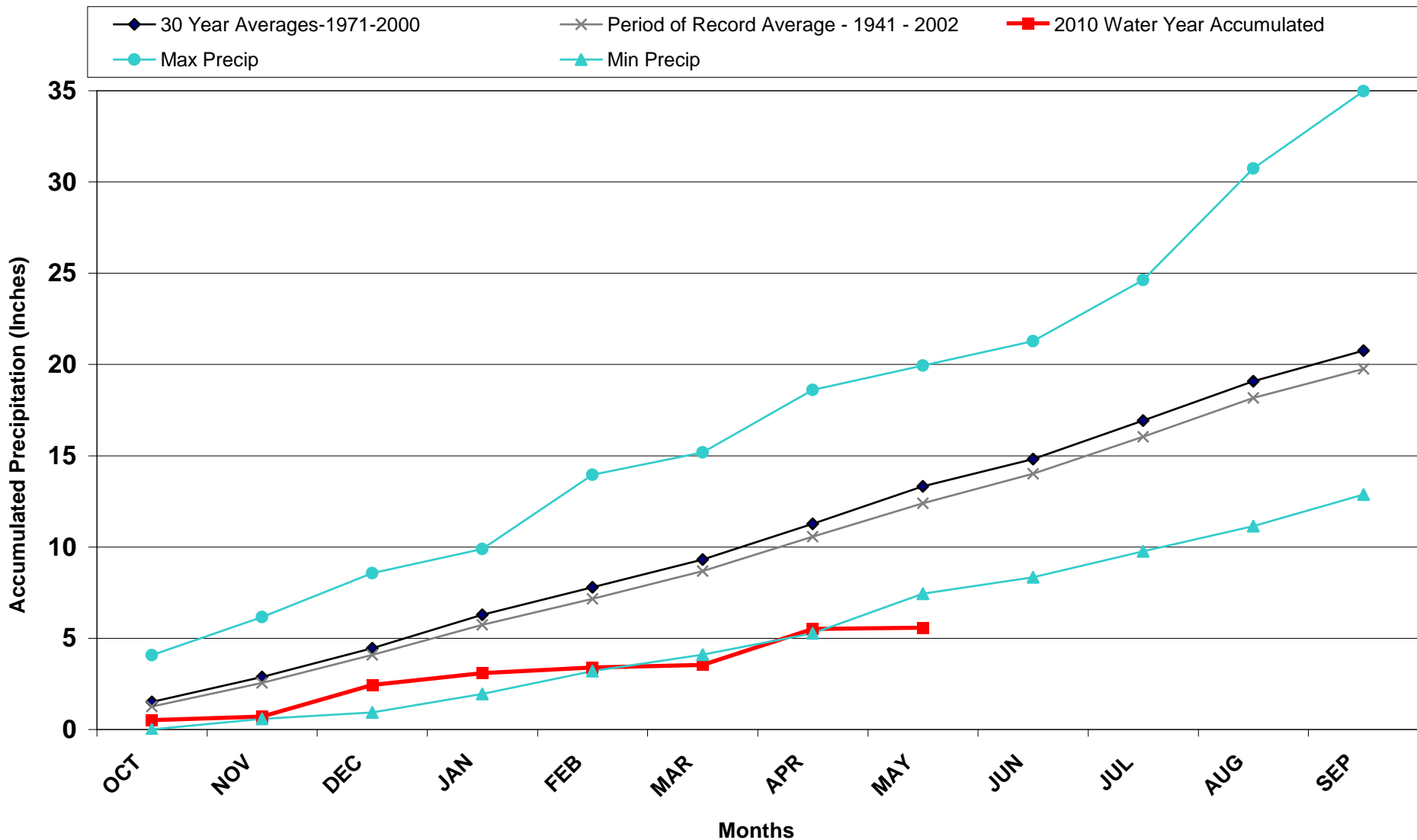


Climate divisions defined by Dr. Klaus Wolter of NOAA's Climate Diagnostic Center in Boulder, CO



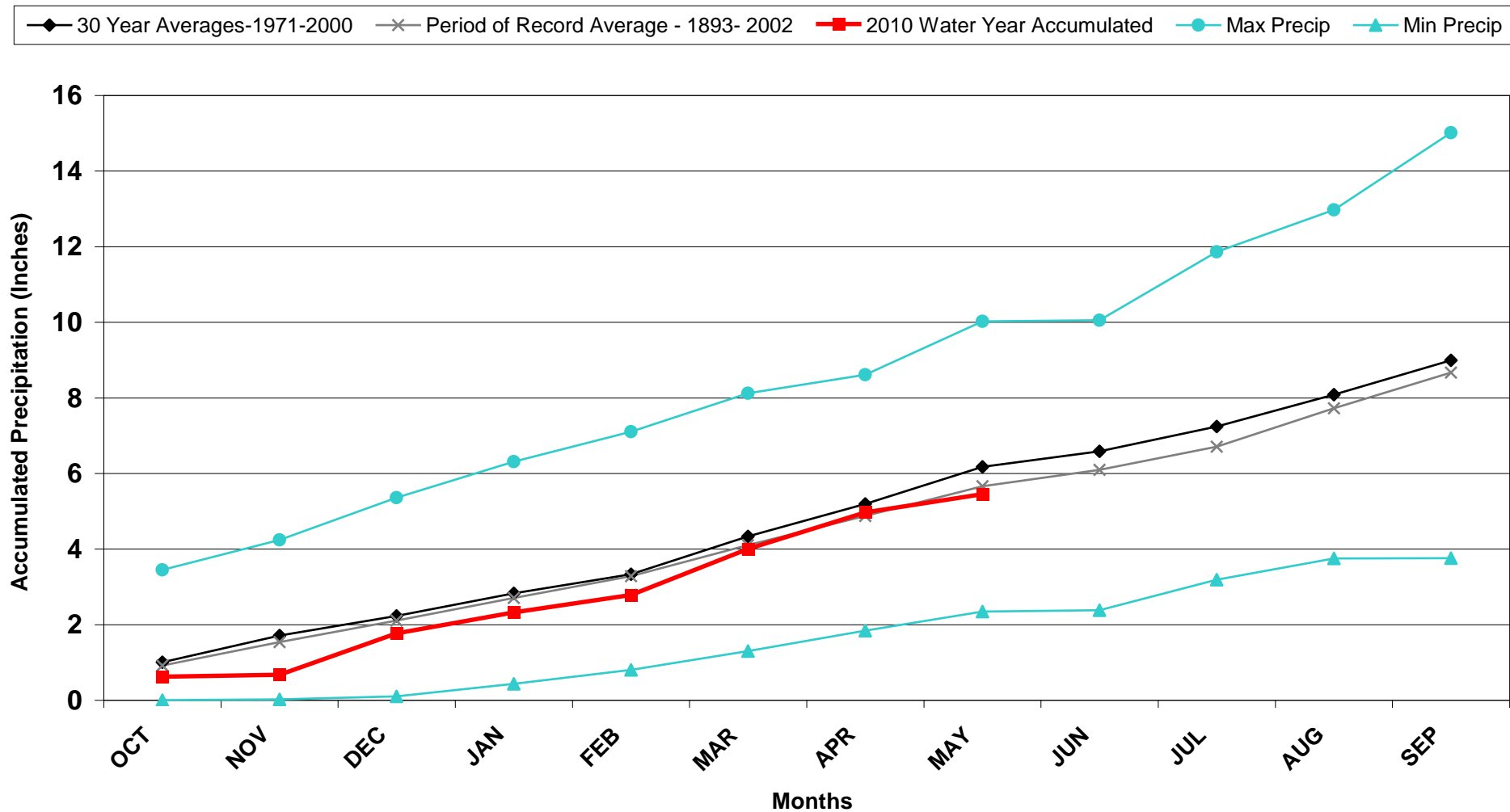
Division 1 – Grand Lake 1NW

Grand Lake 1 NW 2010 Water Year



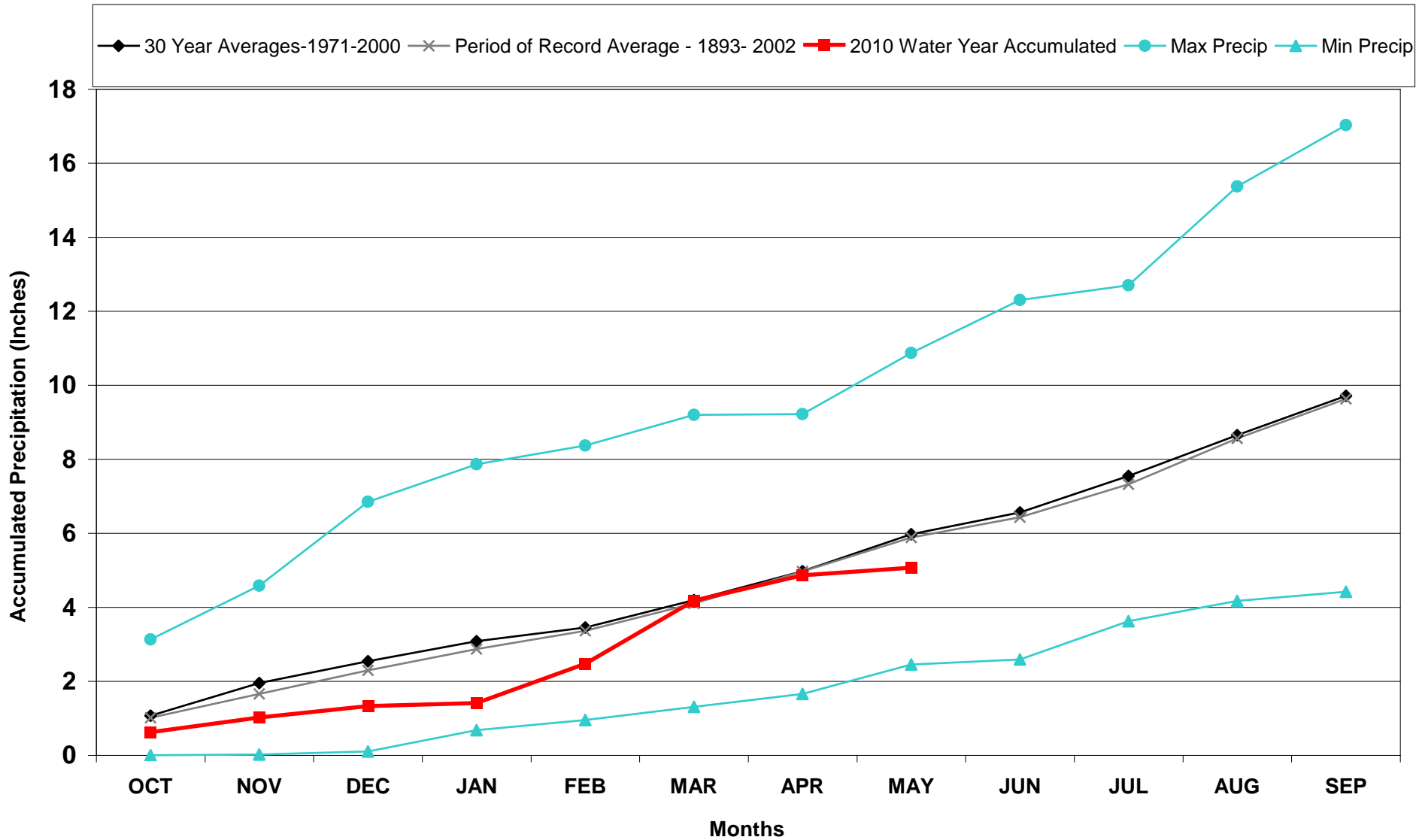
Division 2 – Grand Junction

Grand Junction WSFO 2010 Water Year



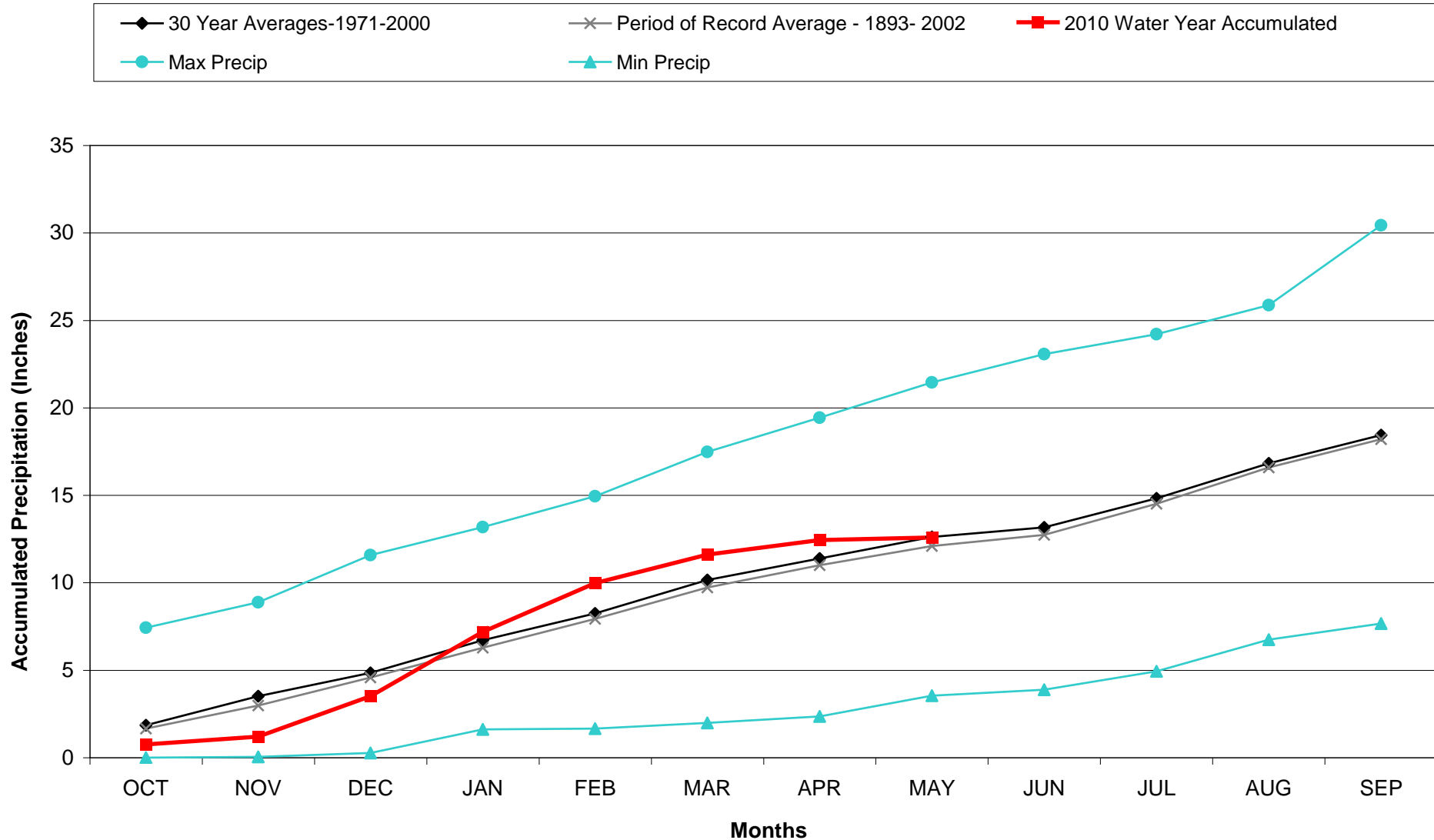
Division 3 – Montrose

Montrose #2 2010 Water Year



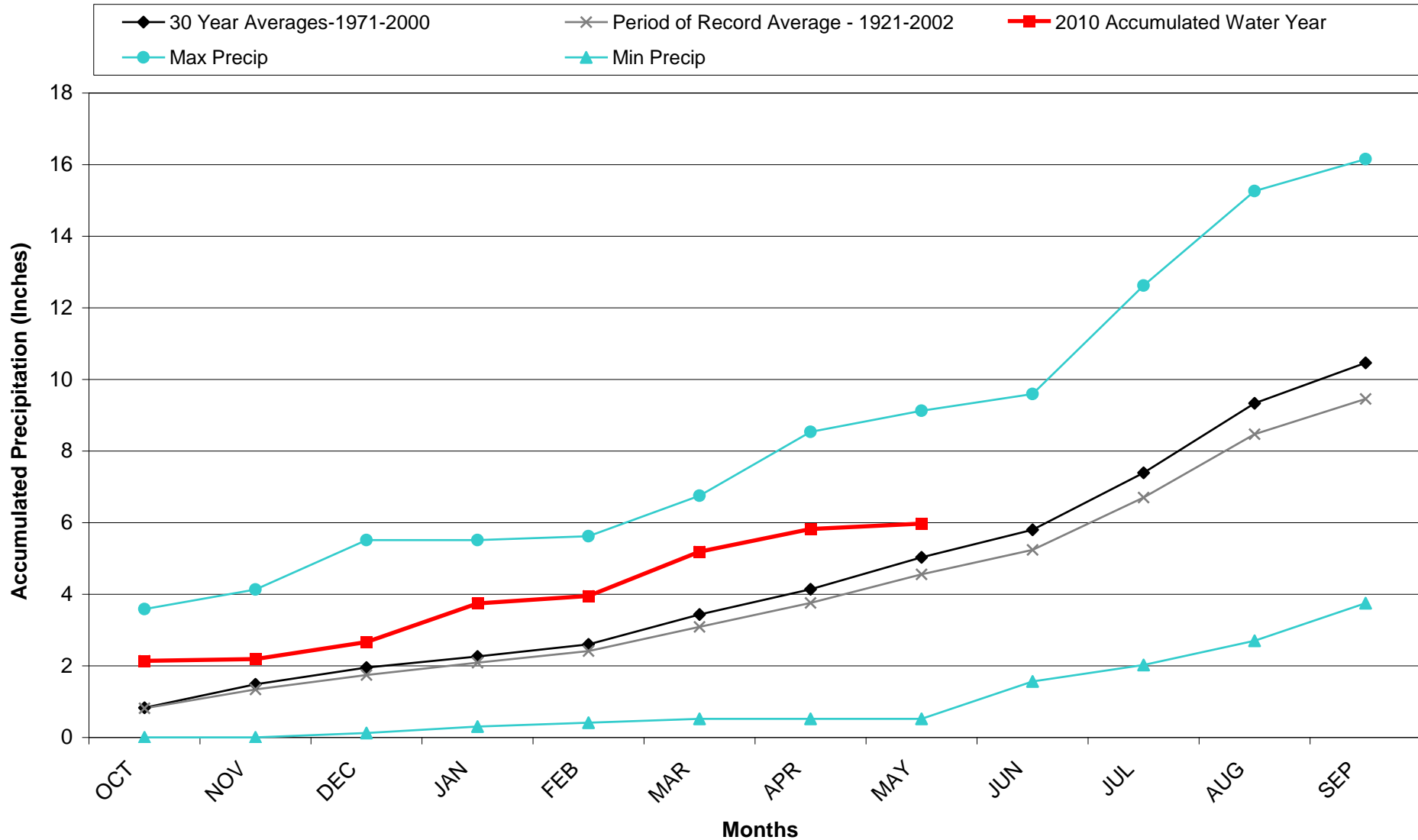
Division 3 – Mesa Verde NP

Mesa Verde NP 2010 Water Year



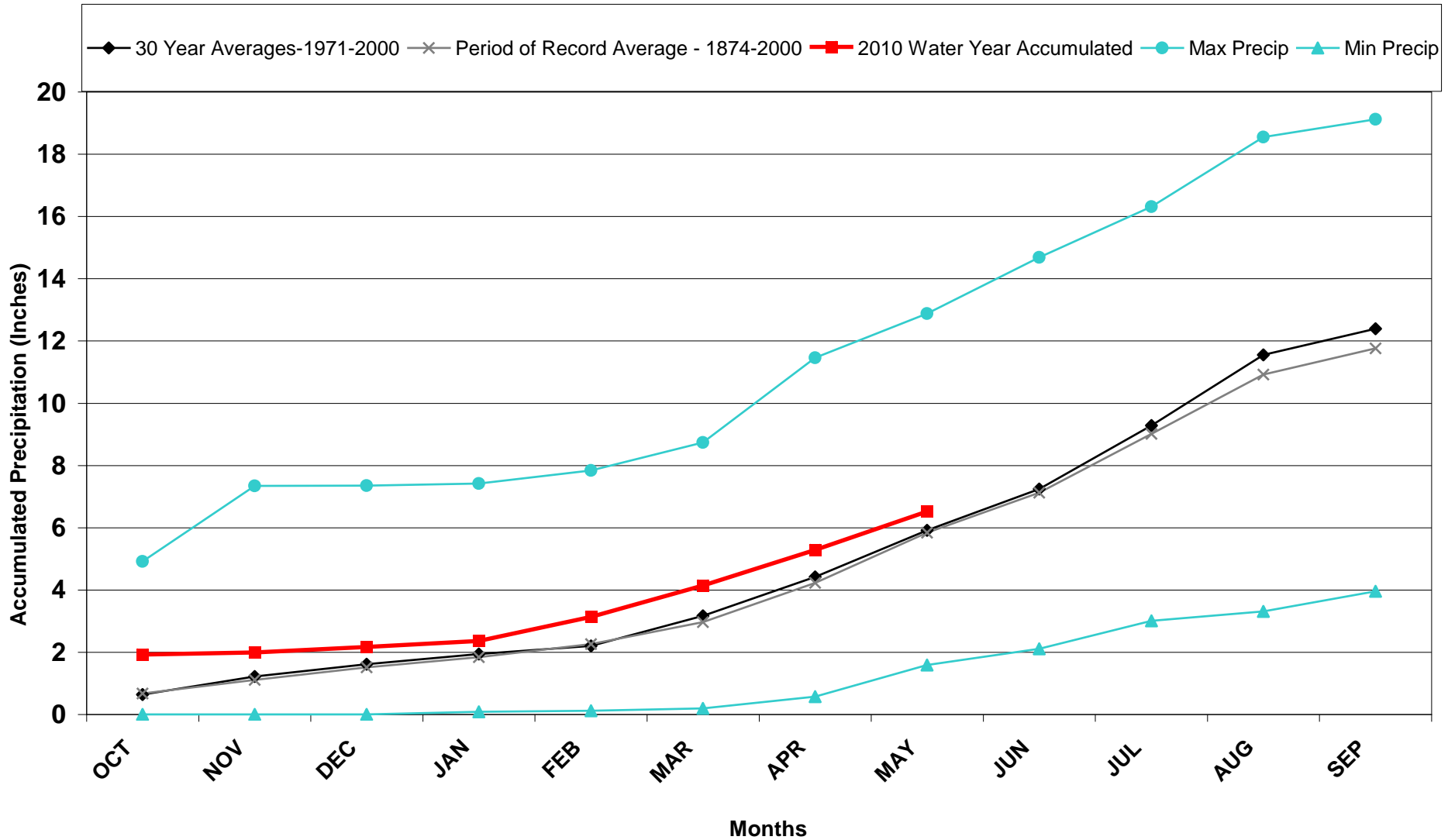
Division 4 – Del Norte

Del Norte 2010 Water Year



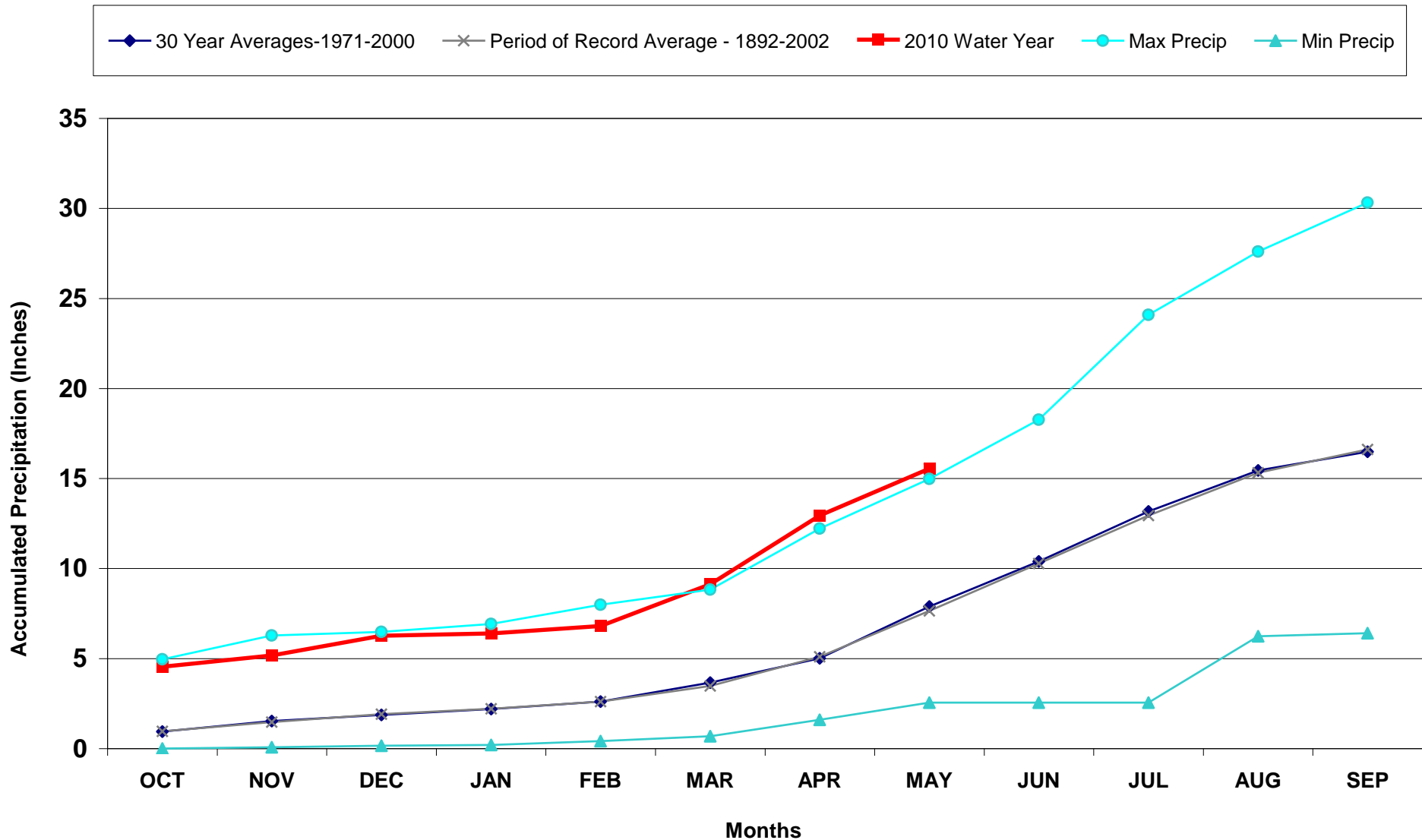
Division 5 – Pueblo

Pueblo WSO 2010 Water Year



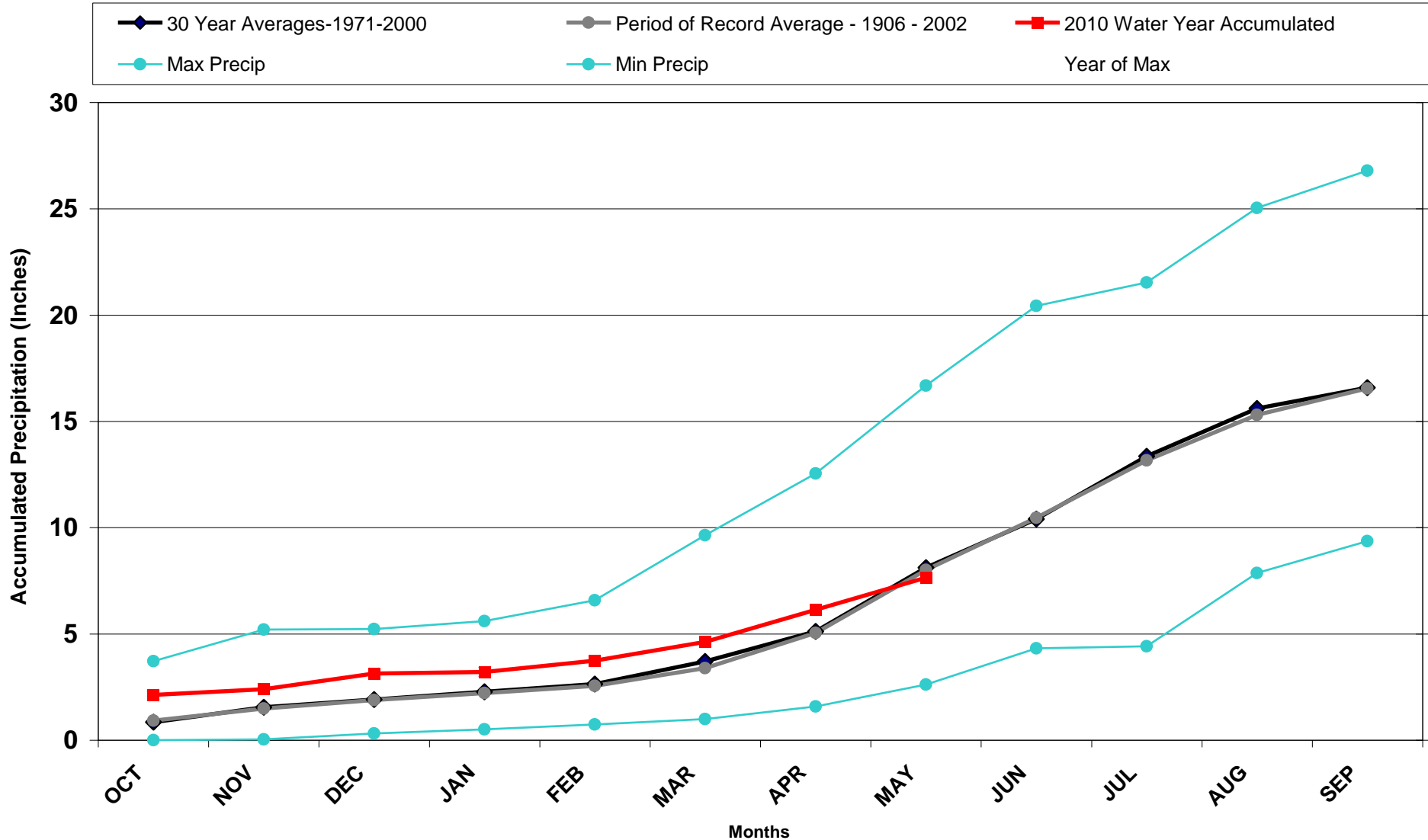
Division 6 - Burlington

Burlington 2010 Water Year



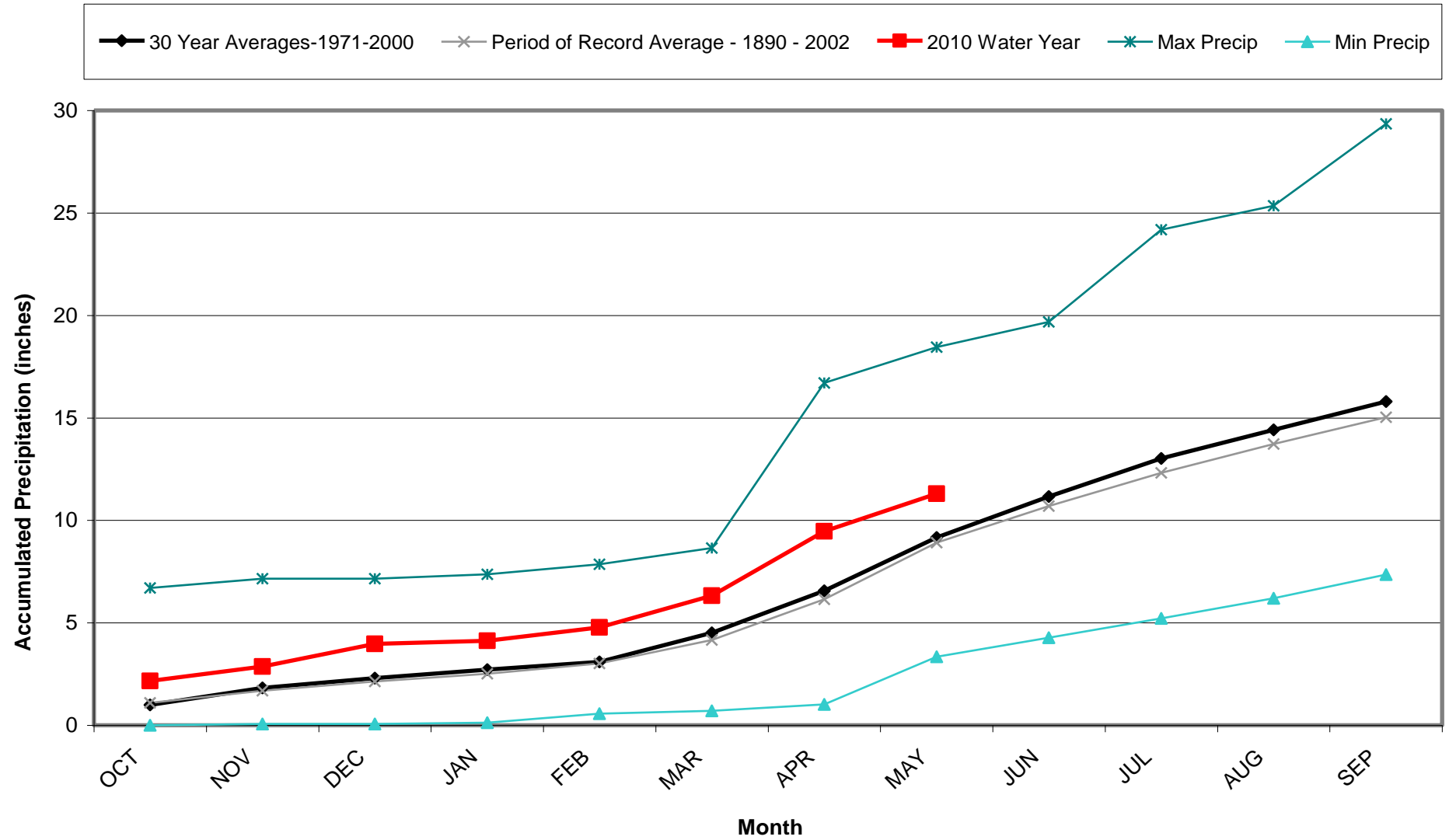
Division 7 – Akron

Akron 4E 2010 Water Year



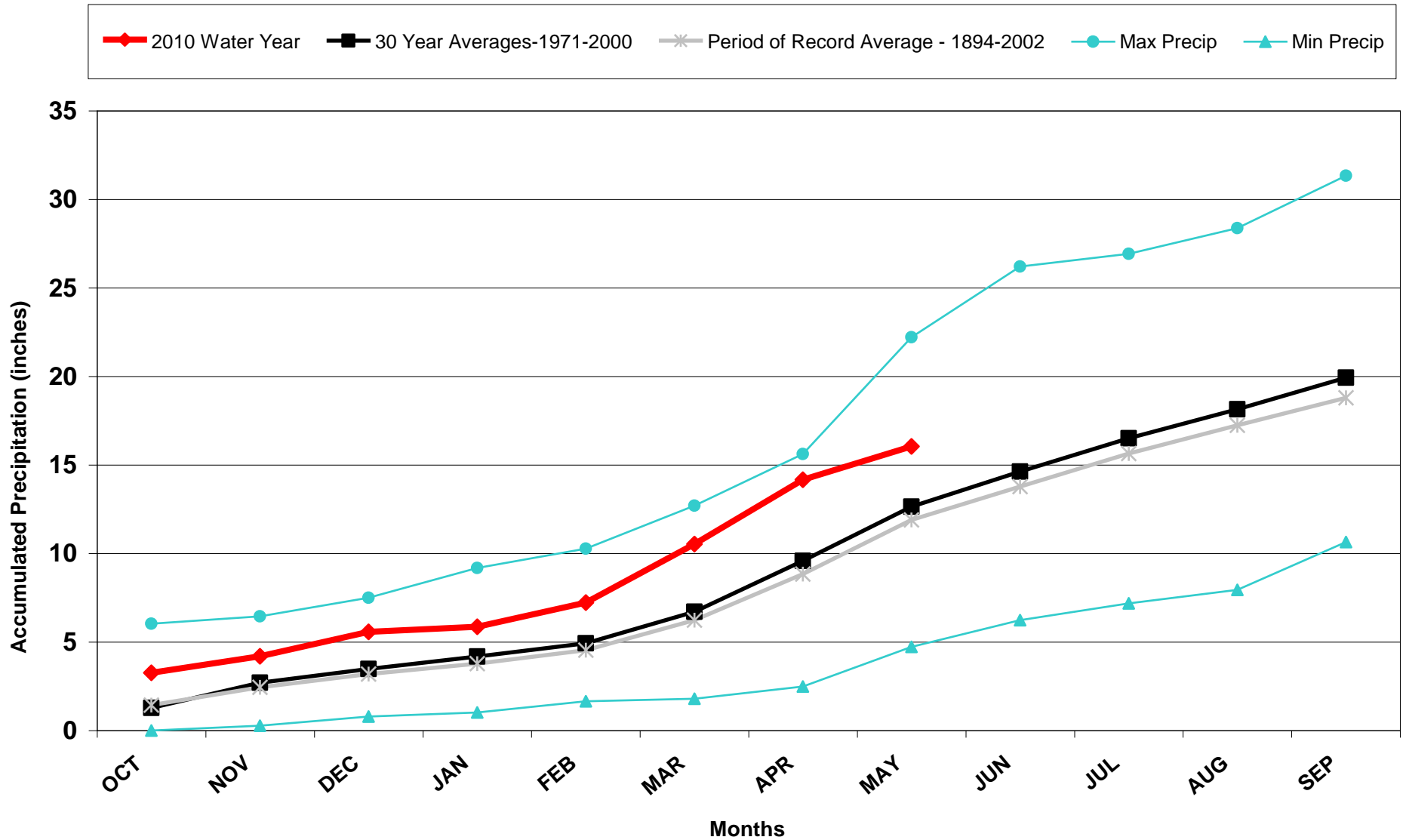
Division 8 – Fort Collins

Fort Collins 2010 Water Year



Division 8 - Boulder

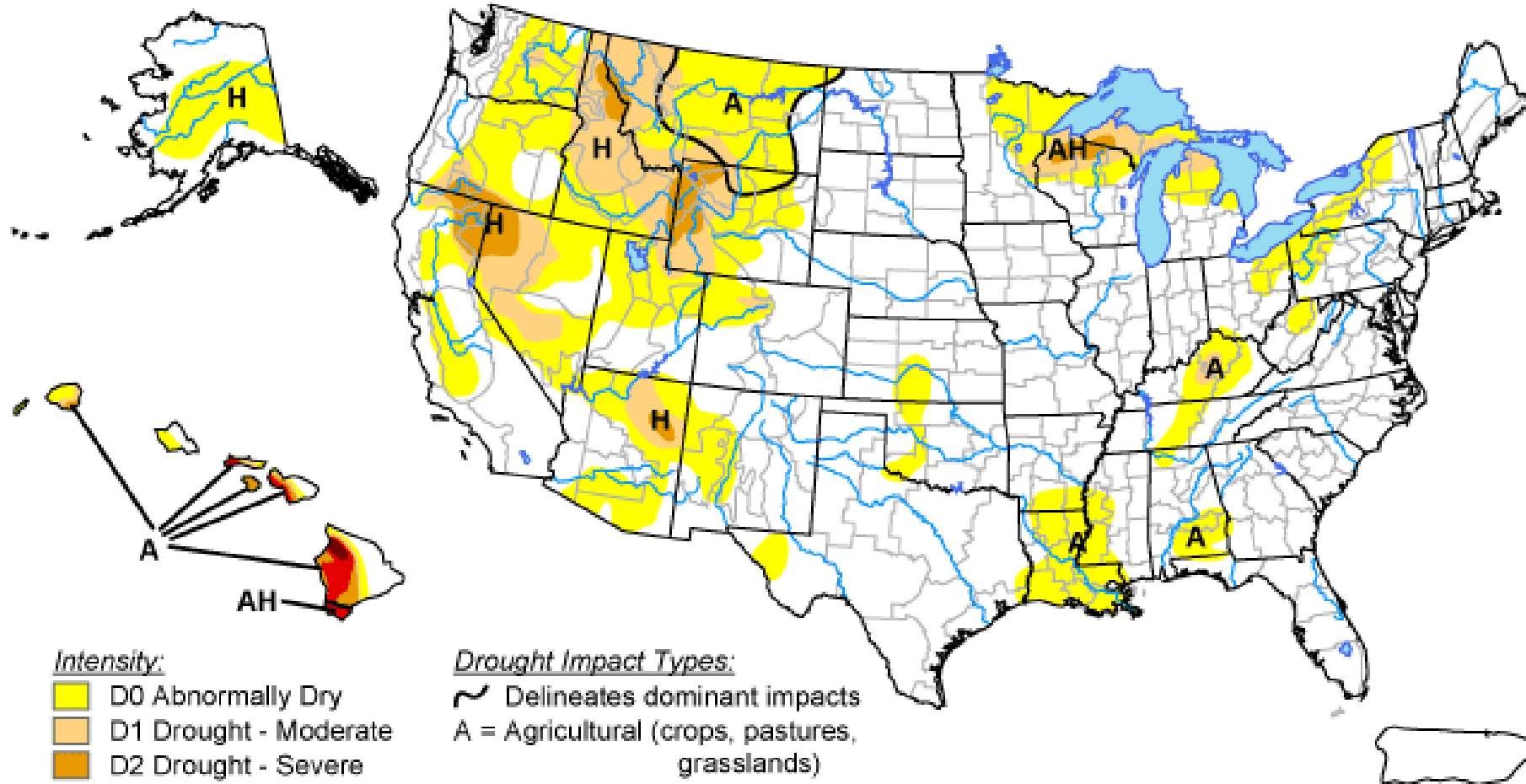
Boulder 2010 Water Year








U.S. Drought Monitor

April 13, 2010

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.

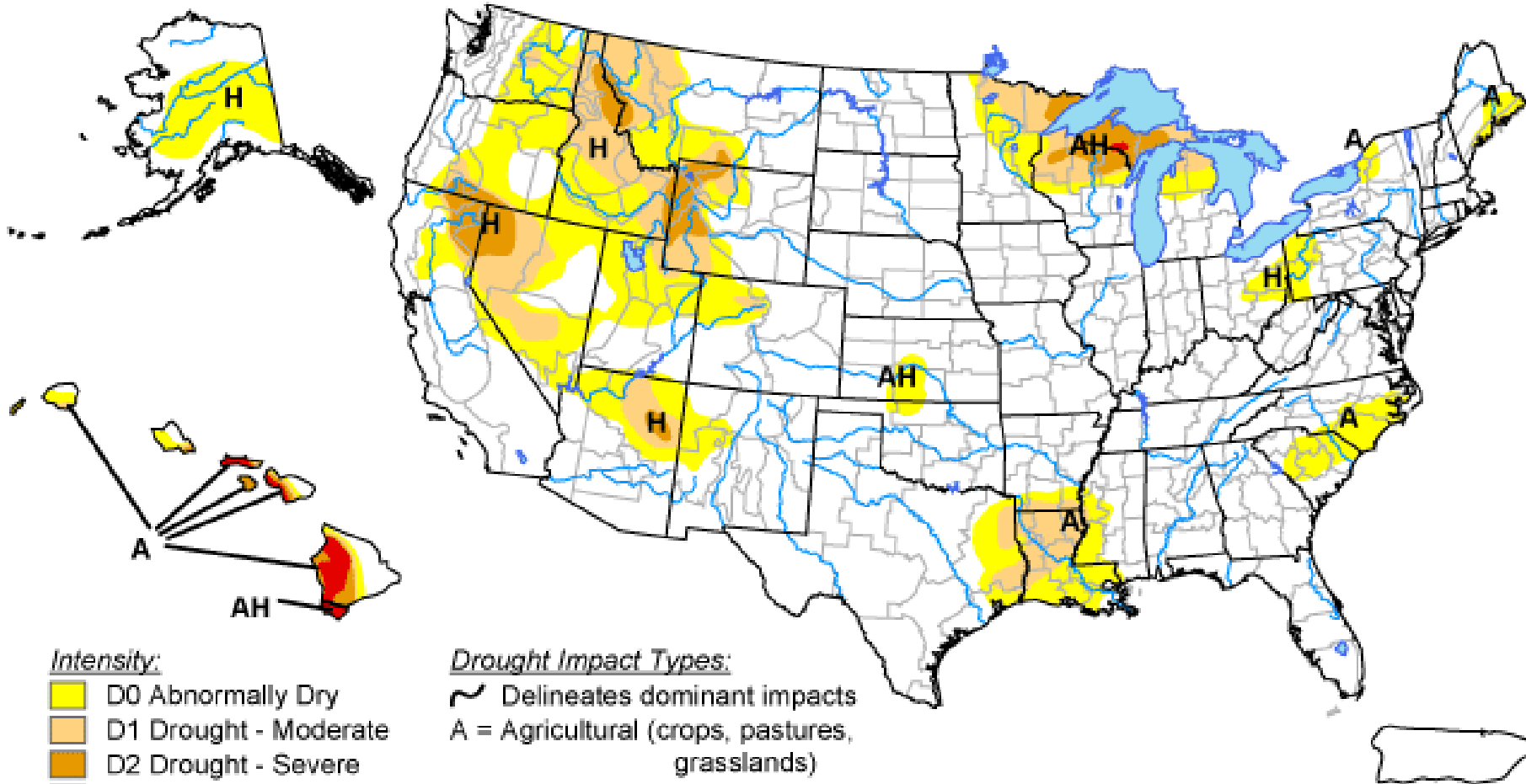
<http://drought.unl.edu/dm>








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

U.S. Drought Monitor


May 18, 2010
Valid 8 a.m. EDT



Intensity:

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

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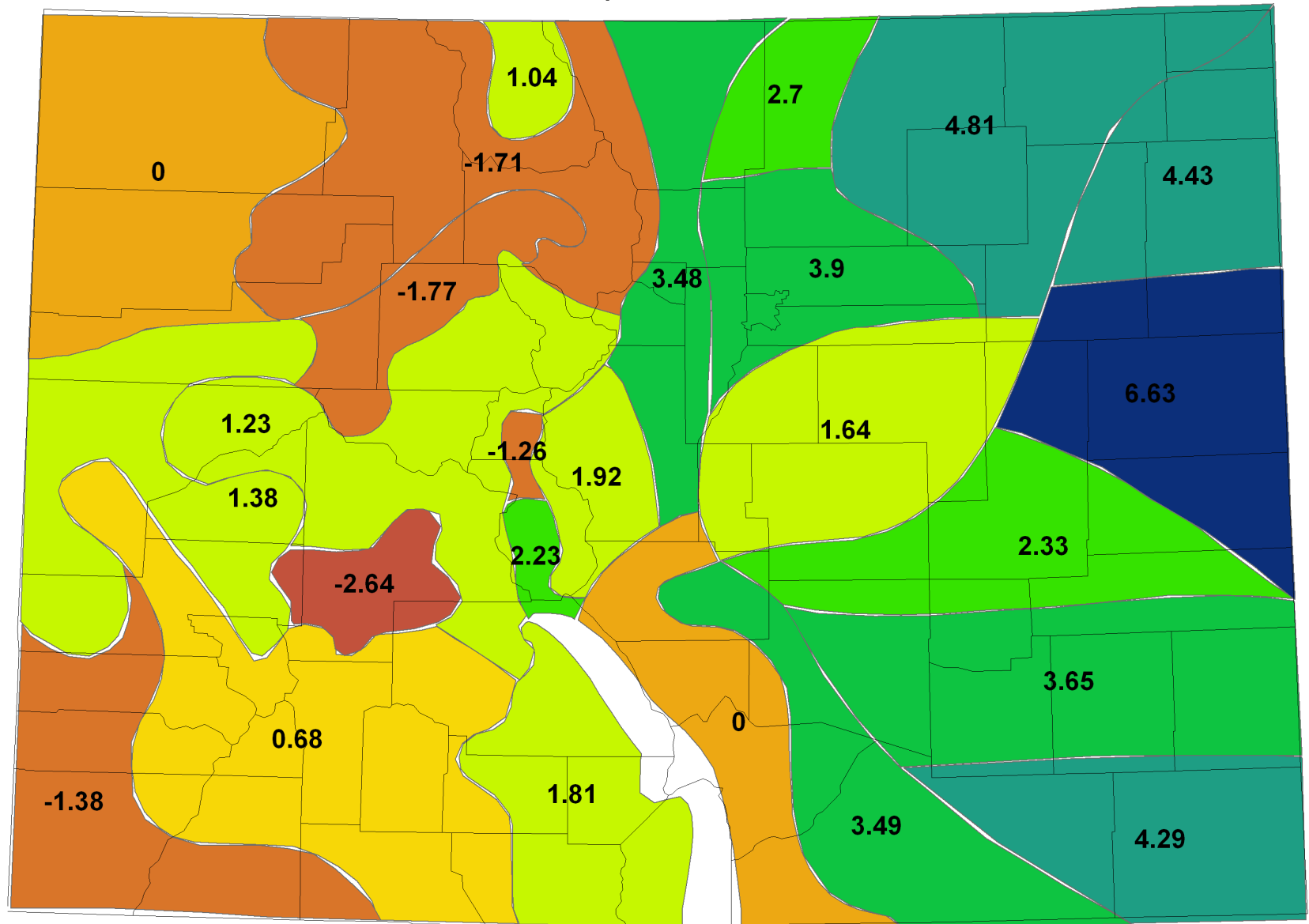


Released Thursday, May 20, 2010

Author: Eric Luebehusen, U.S. Department of Agriculture

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

Colorado Modified Palmer Drought Index April 2010

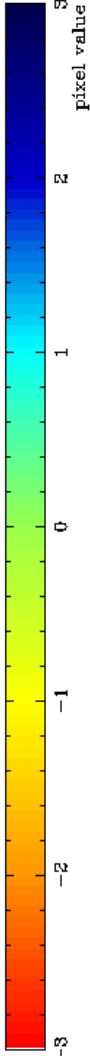
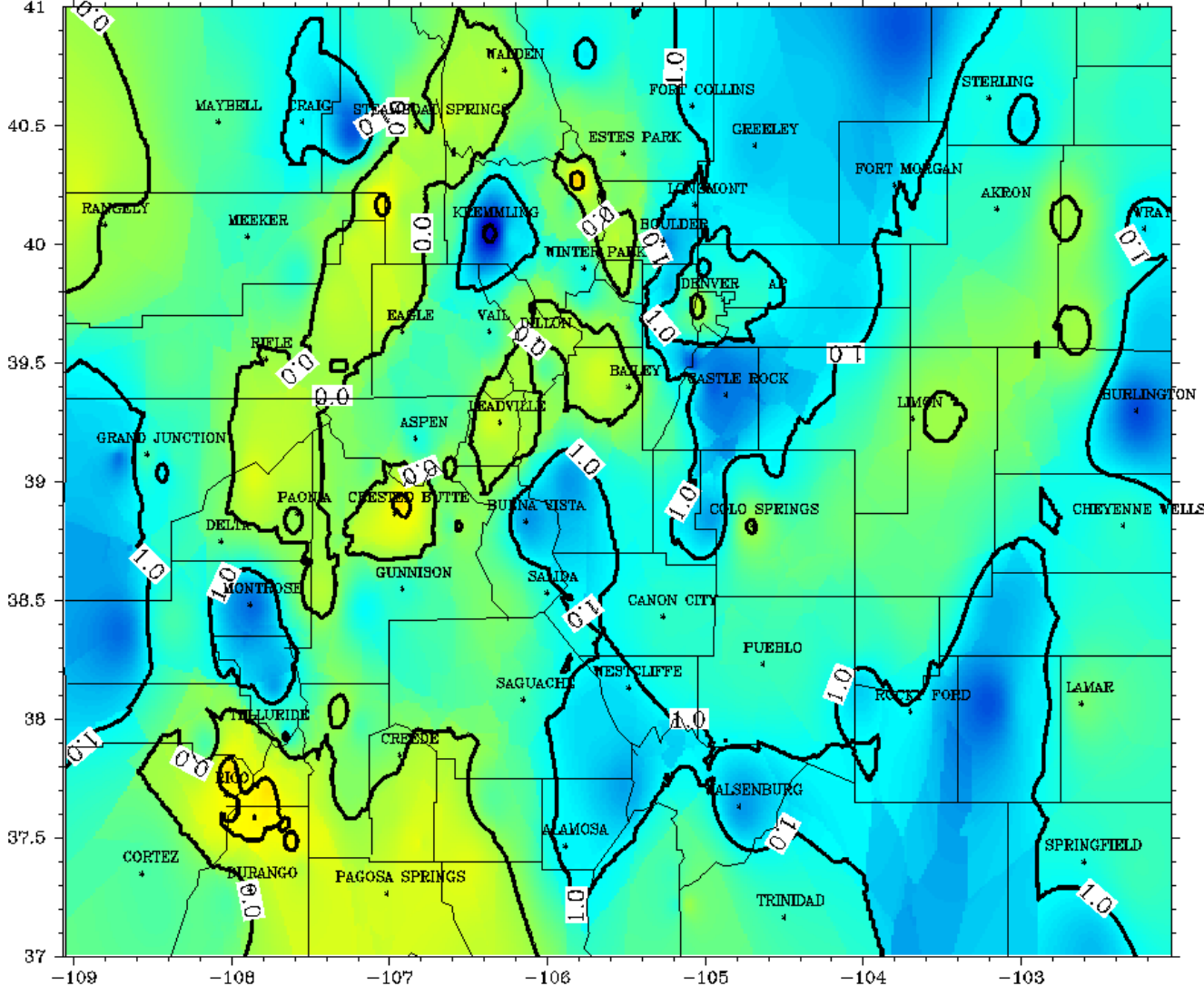


3-month SPI

Colorado

4/2010 3 mon. SPI

JULESBURG



| | |
|-------------|------------|
| 100 % < 2.0 | 0 % < -1.0 |
| 73 % < 1.0 | 0 % < -2.0 |
| 14 % < 0.0 | 0 % < -3.0 |

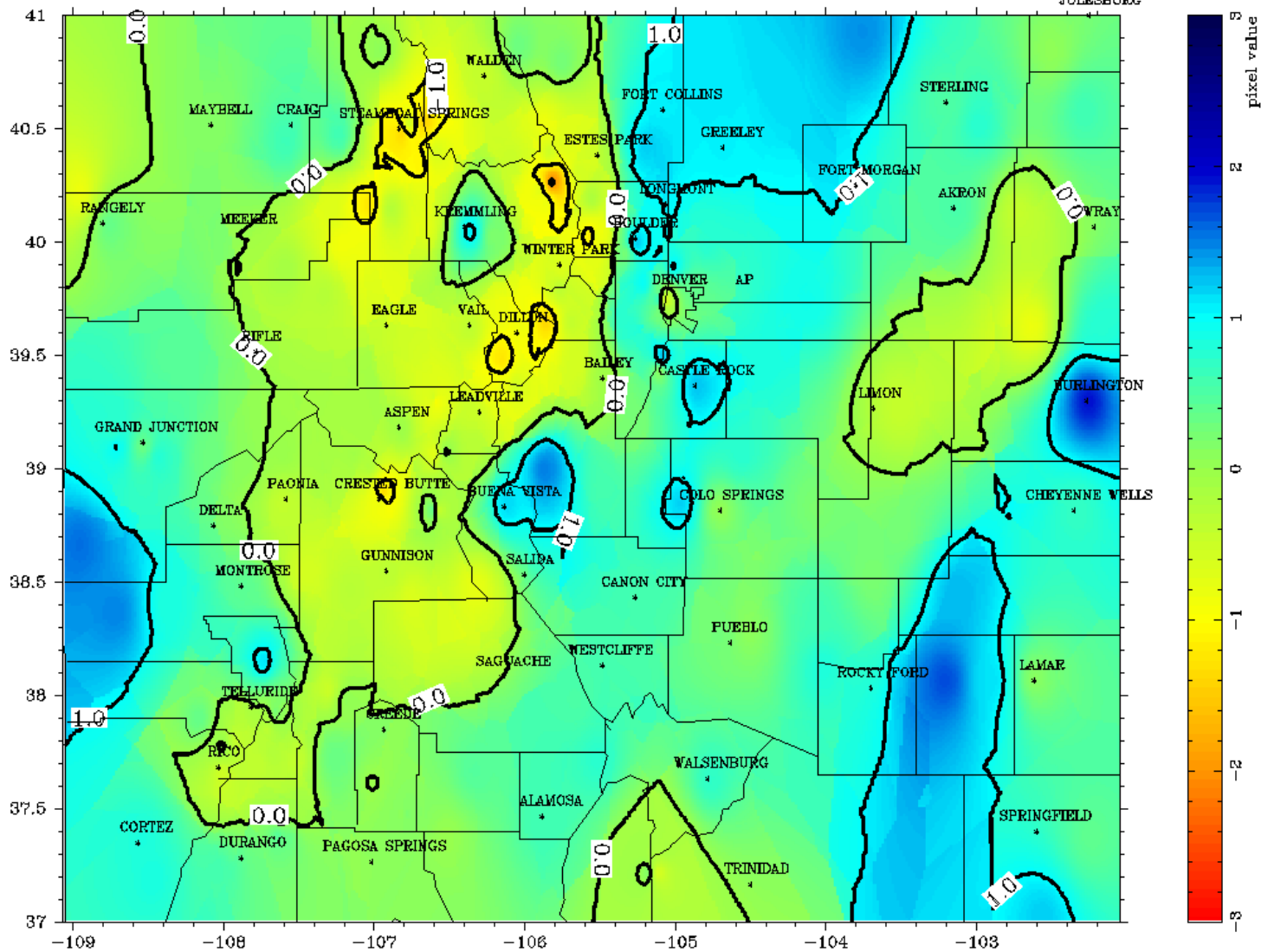
Produced by:
Colorado Climate Center
Fort Collins, CO

6-month SPI

Colorado

4/2010 6 mon. SPI

JULESBURG



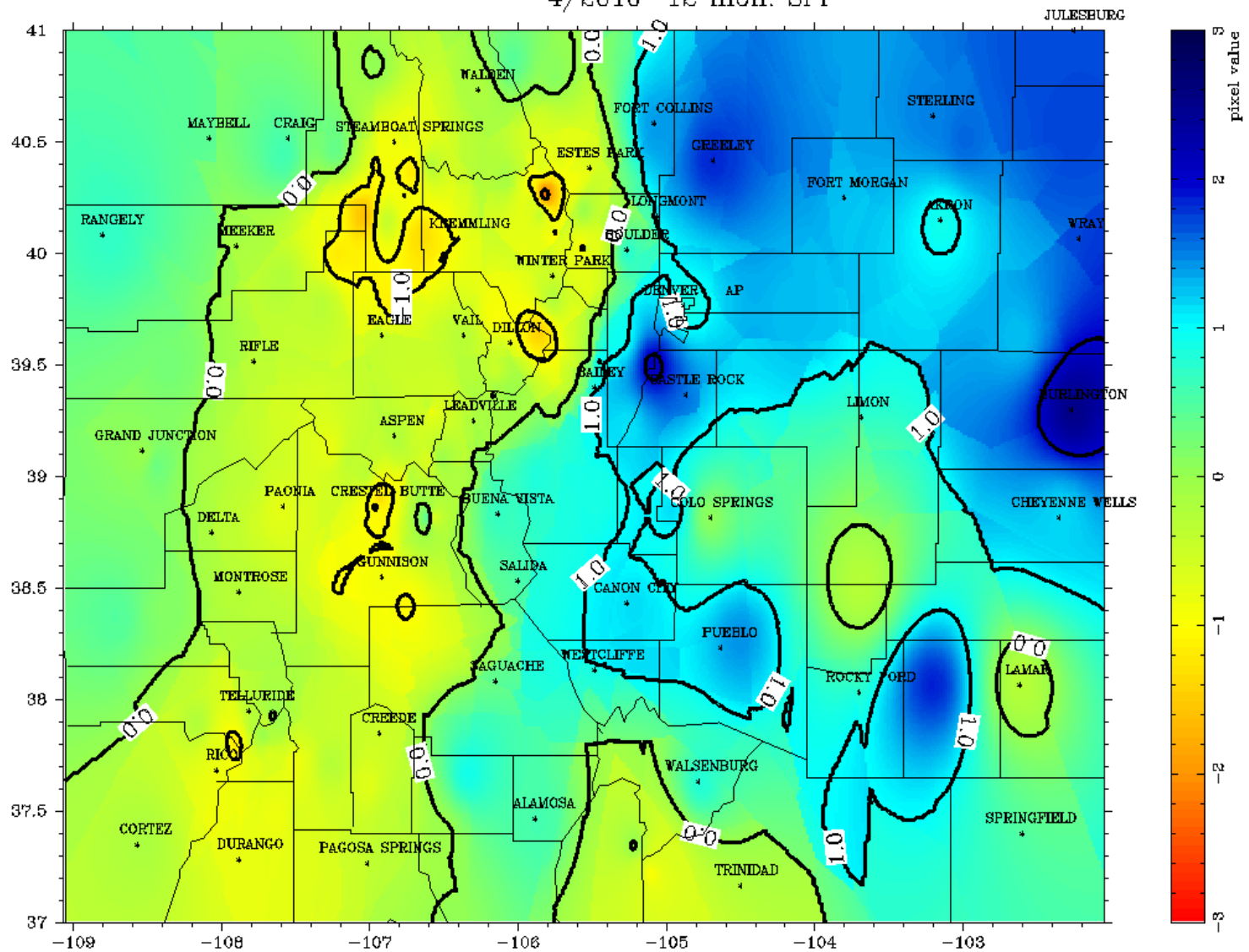
| | |
|-------------|------------|
| 100 % < 2.0 | 1 % < -1.0 |
| 87 % < 1.0 | 0 % < -2.0 |
| 27 % < 0.0 | 0 % < -3.0 |

Produced by:
Colorado Climate Center
Fort Collins, CO

12-month SPI

Colorado

4/2010 12 mon. SPI



| | |
|------------|------------|
| 99 % < 2.0 | 1 % < -1.0 |
| 74 % < 1.0 | 0 % < -2.0 |
| 34 % < 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/droughtpresentations.php>



Knowledge to Go Places

