

Climate Update

Wendy Ryan
Colorado Climate Center

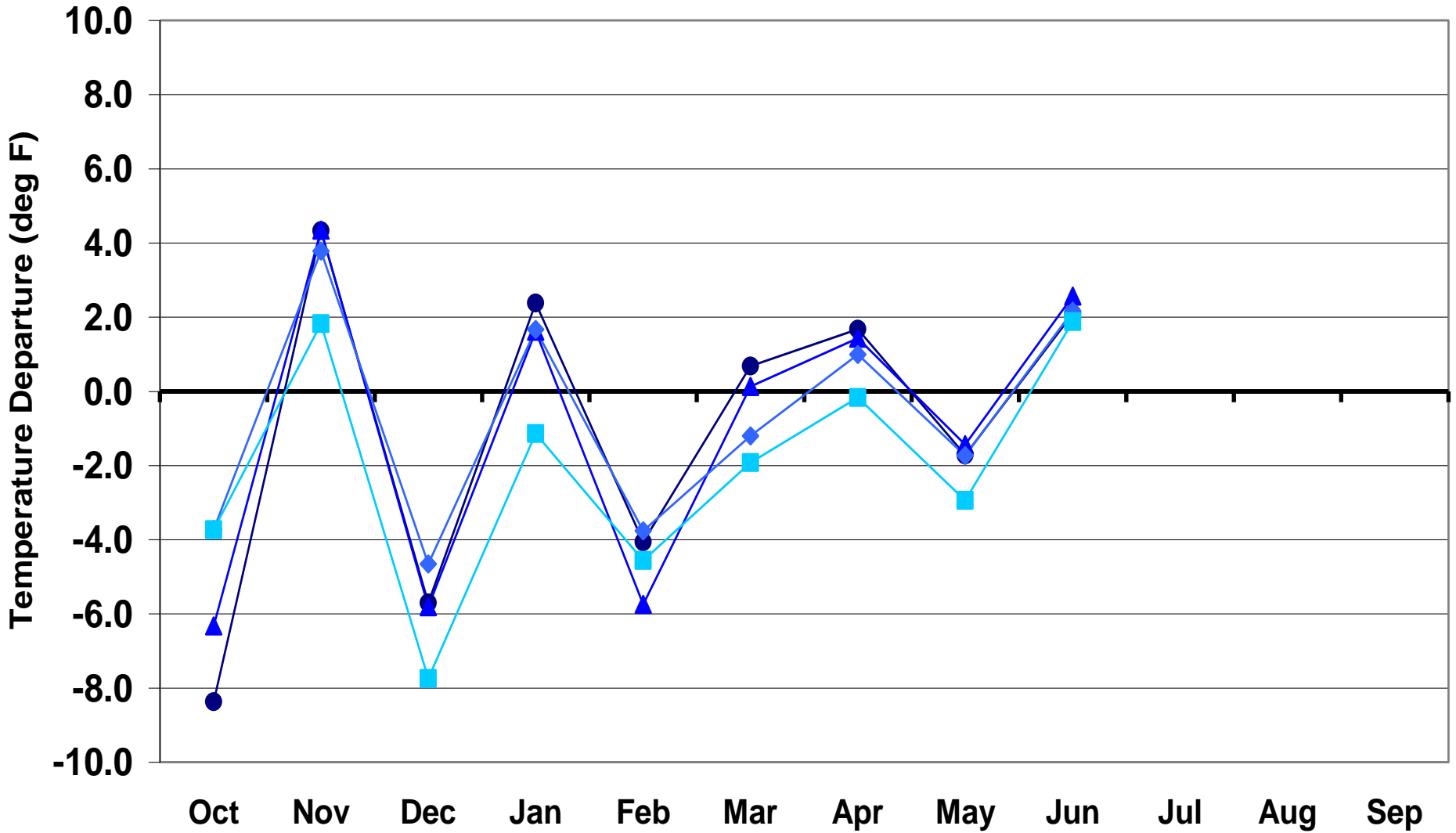
Atmospheric Science Department
Colorado State University

Presented to
Water Availability Task Force
July 19, 2010
Denver, CO

Prepared by Wendy Ryan



Water Year 2010 Temperature Departures



● Eastern Plains

▲ Foothills

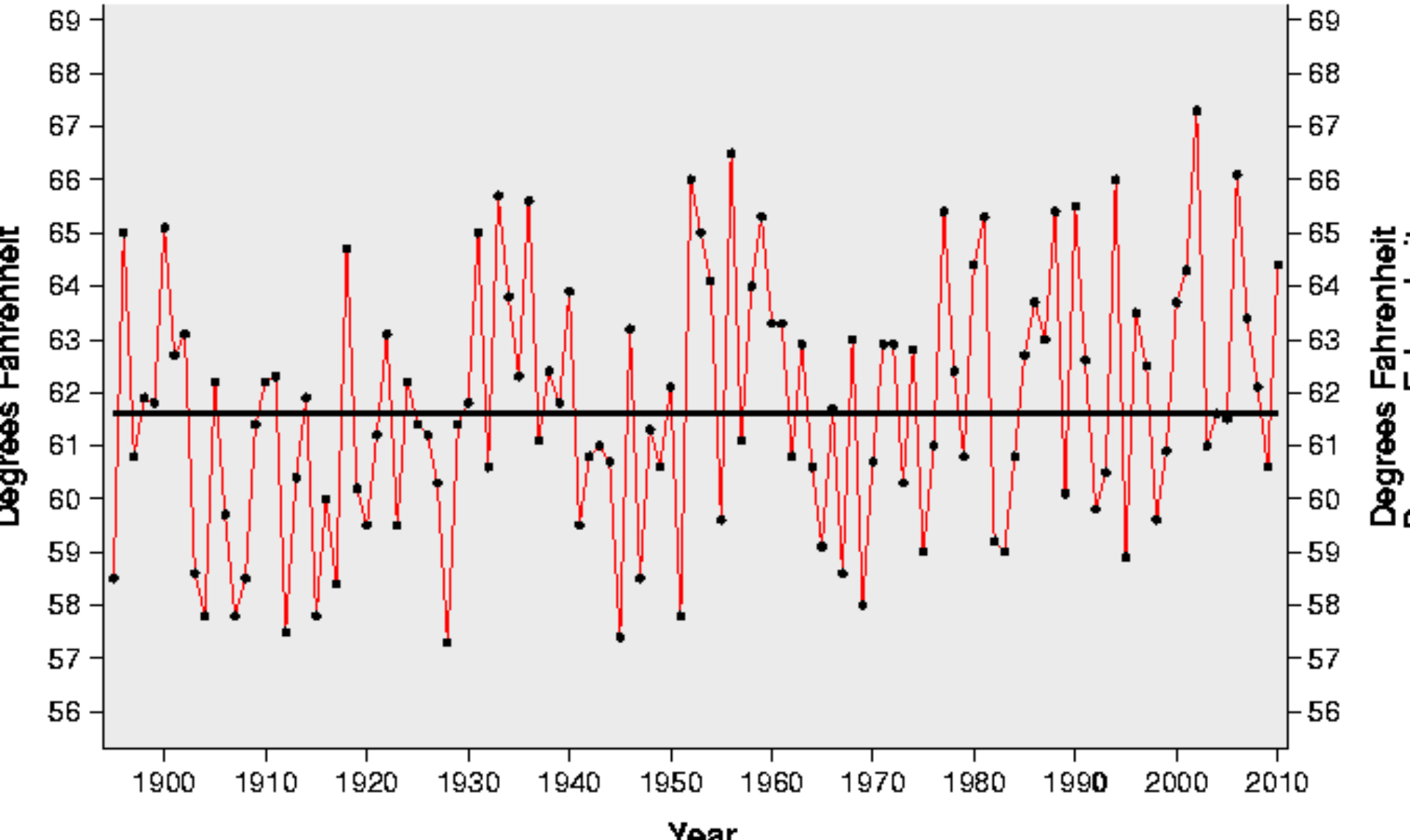
◆ Mountains

■ Western Valleys

June Average Temperature History for Colorado (NCDC)

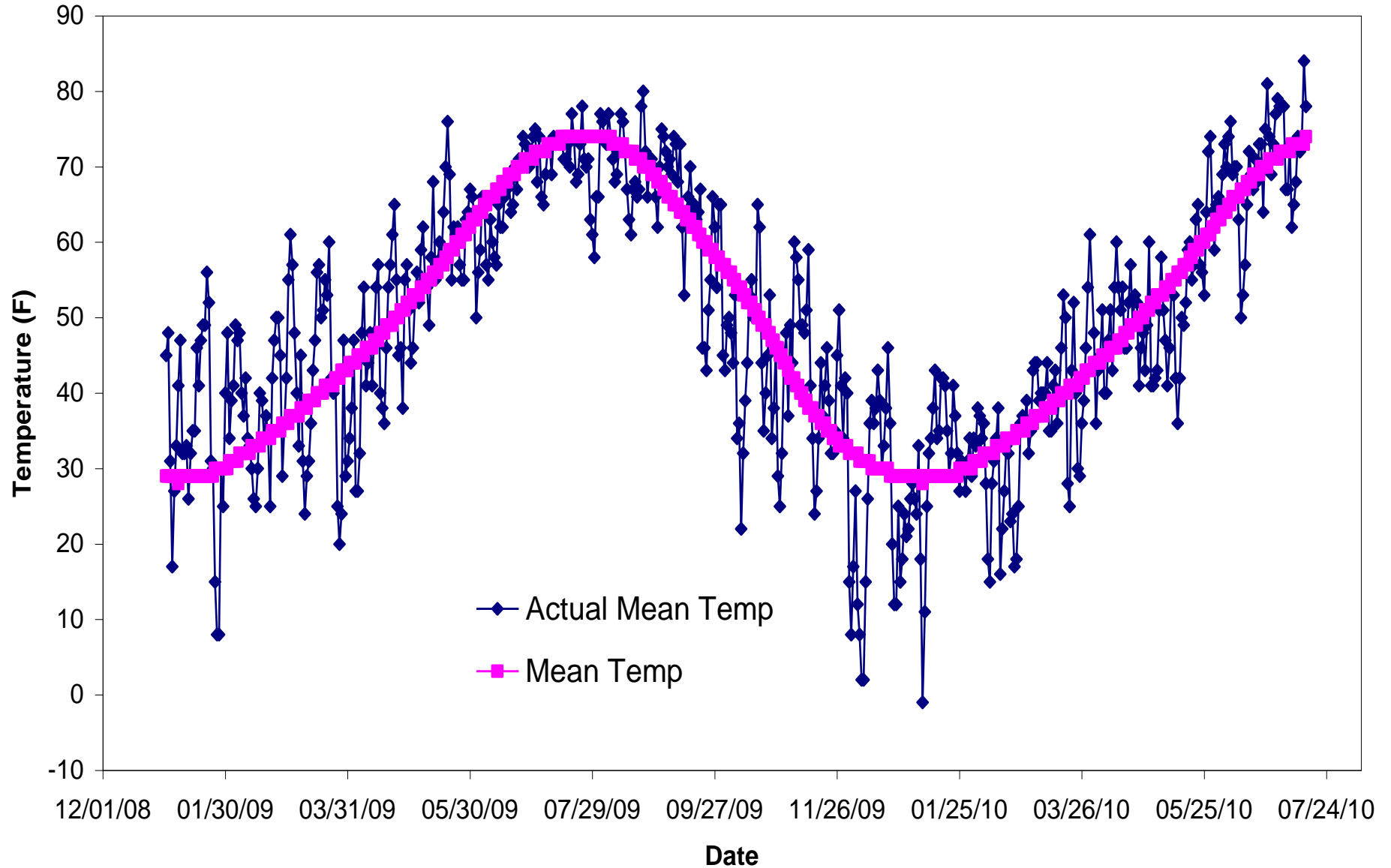
— Actual Temperature
— Average Temperature

Rank: 64.4 degrees is 18th warmest
for period of record 1895-2010



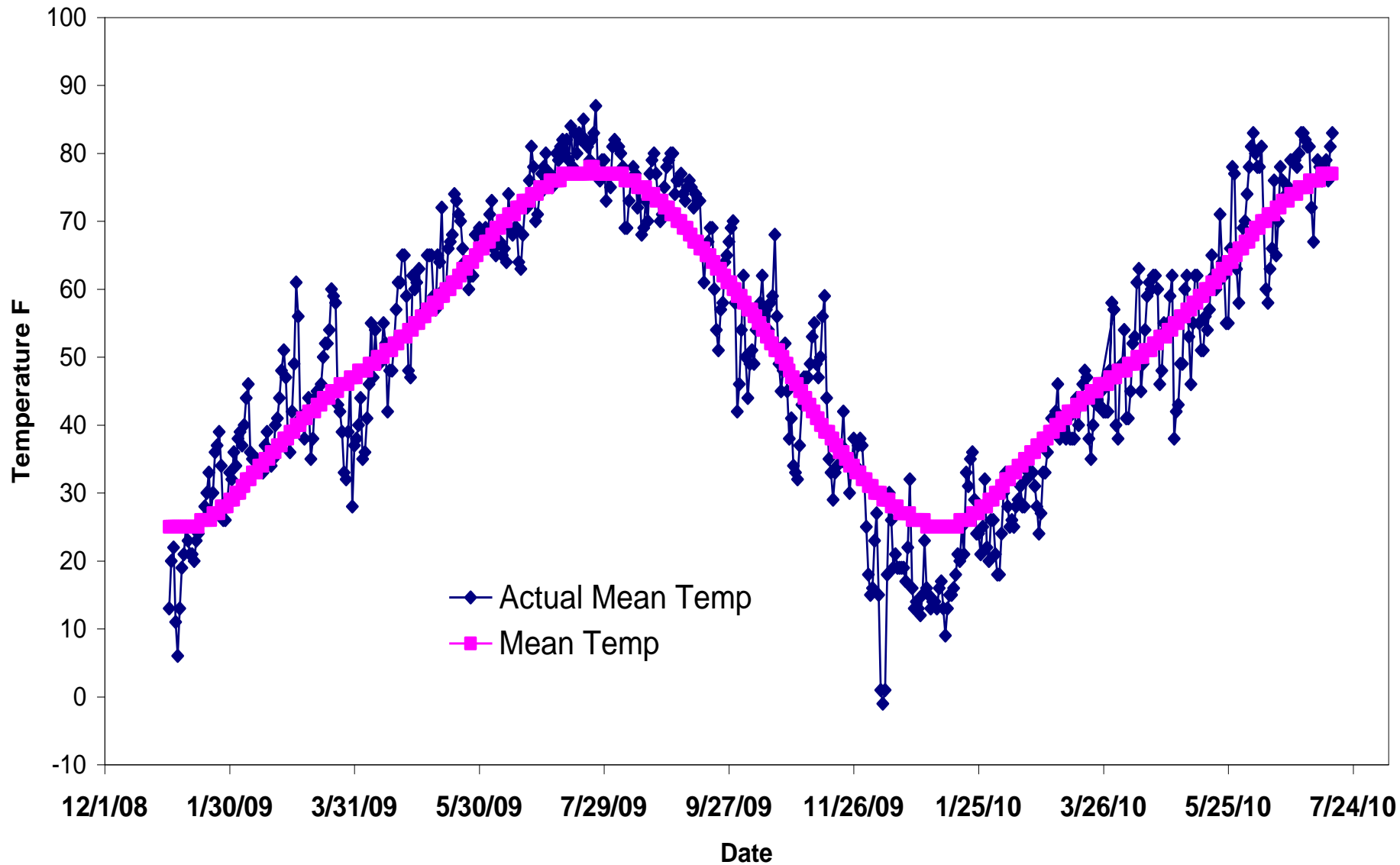
Denver, CO Jan 1, 2009 - July 14, 2010

Mean and Actual Daily Temperature

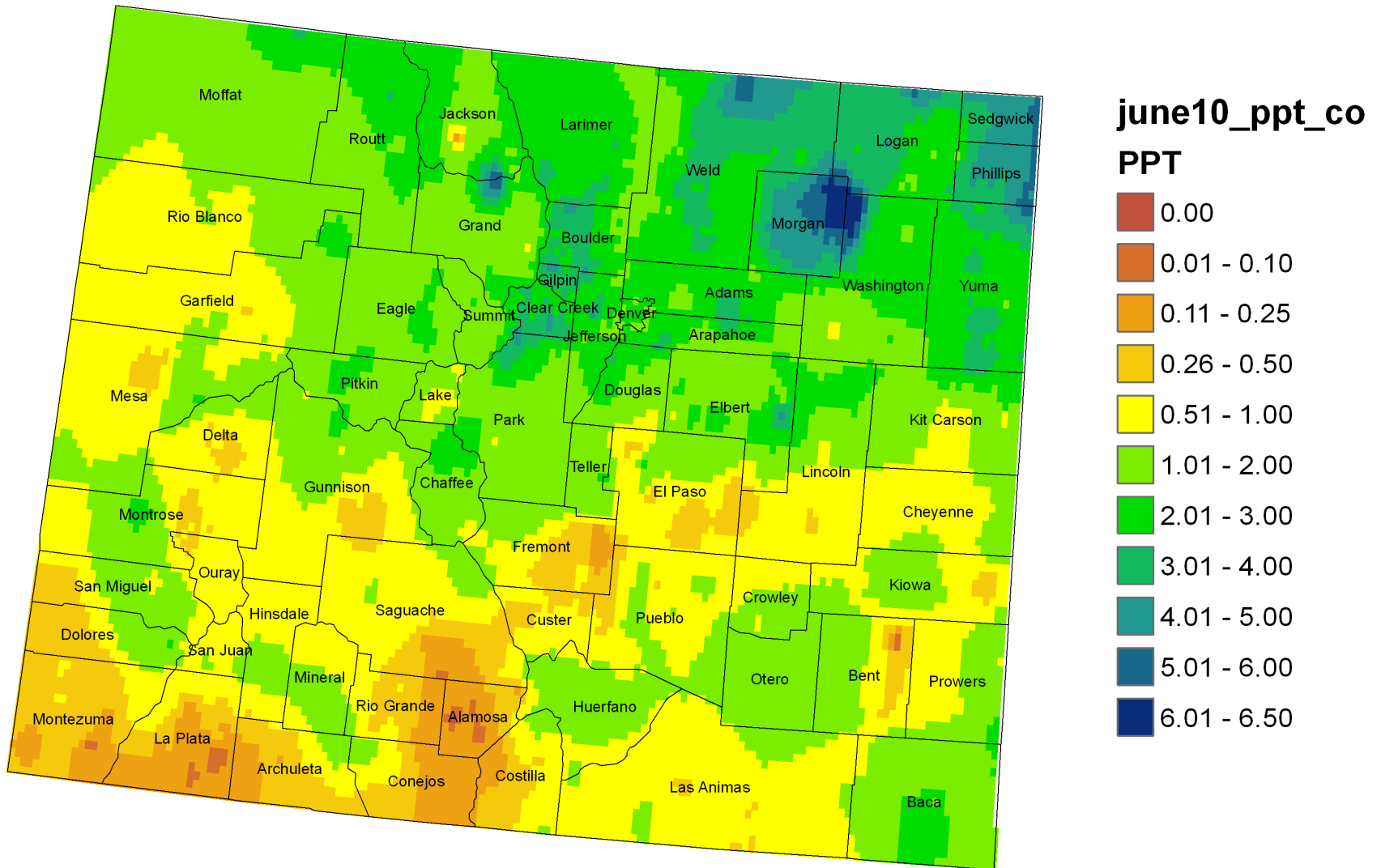


Grand Junction Jan 1, 2009 - July 14, 2010

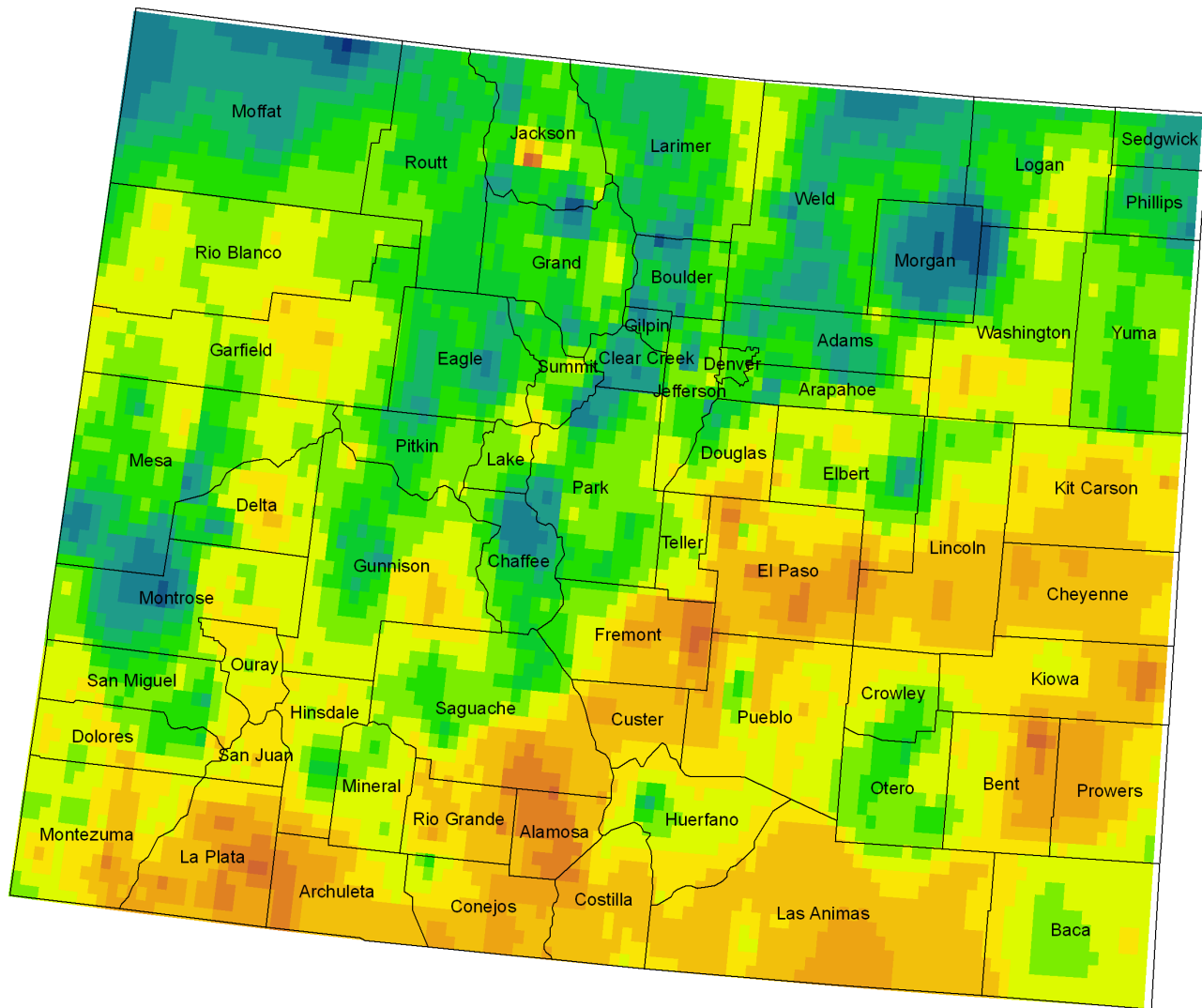
Mean and Actual Daily Temperature



Colorado Precipitation (in) June 2010

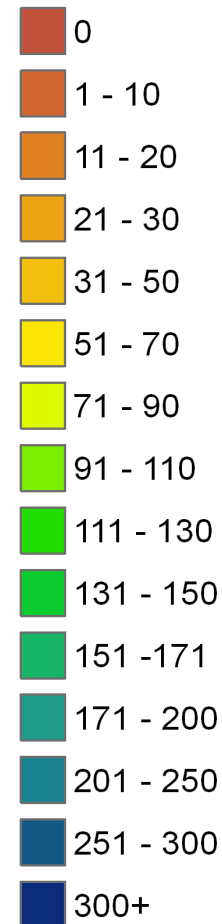


Colorado June Precipitation as Percentage of Normal

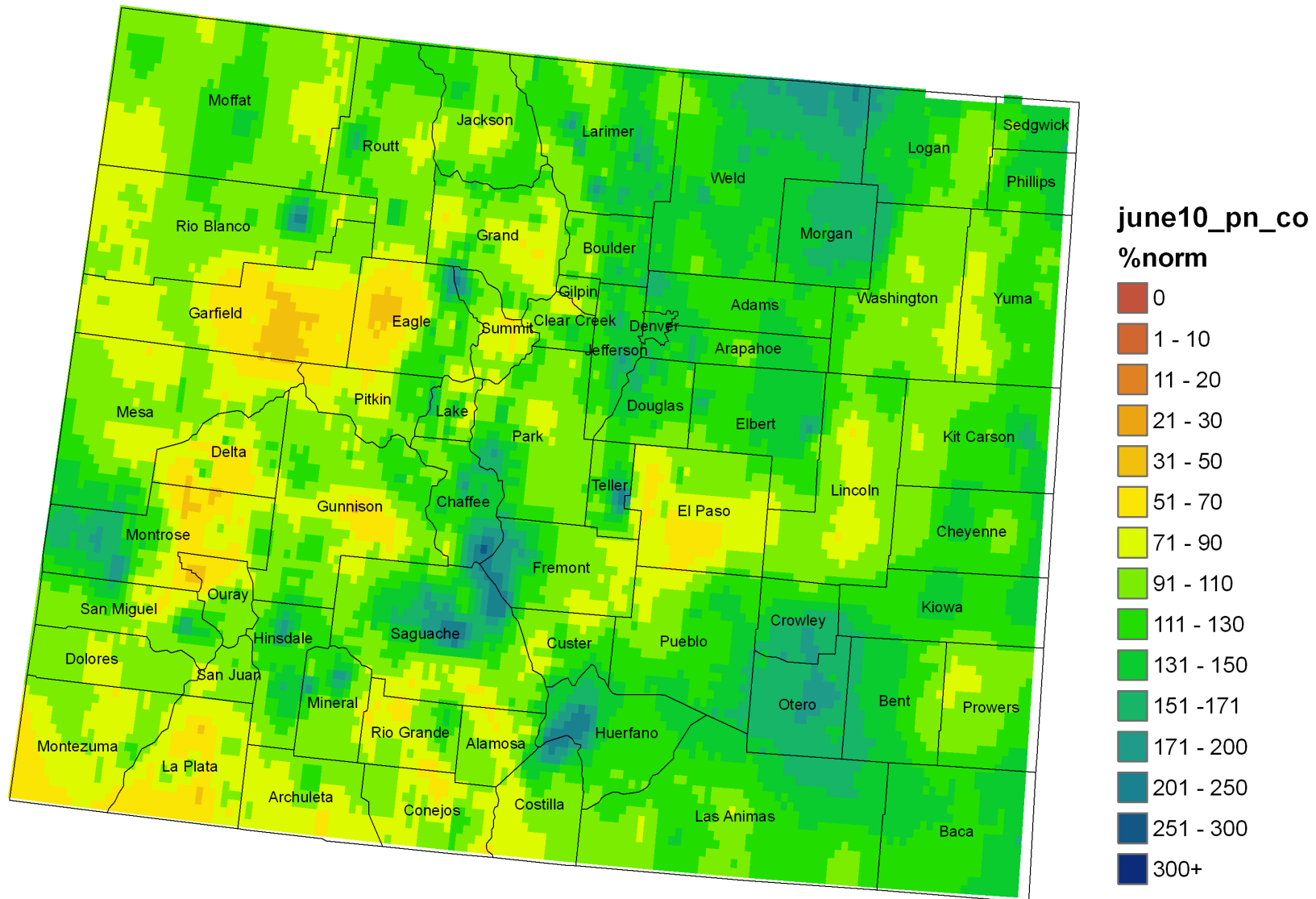


jun10_pn_co

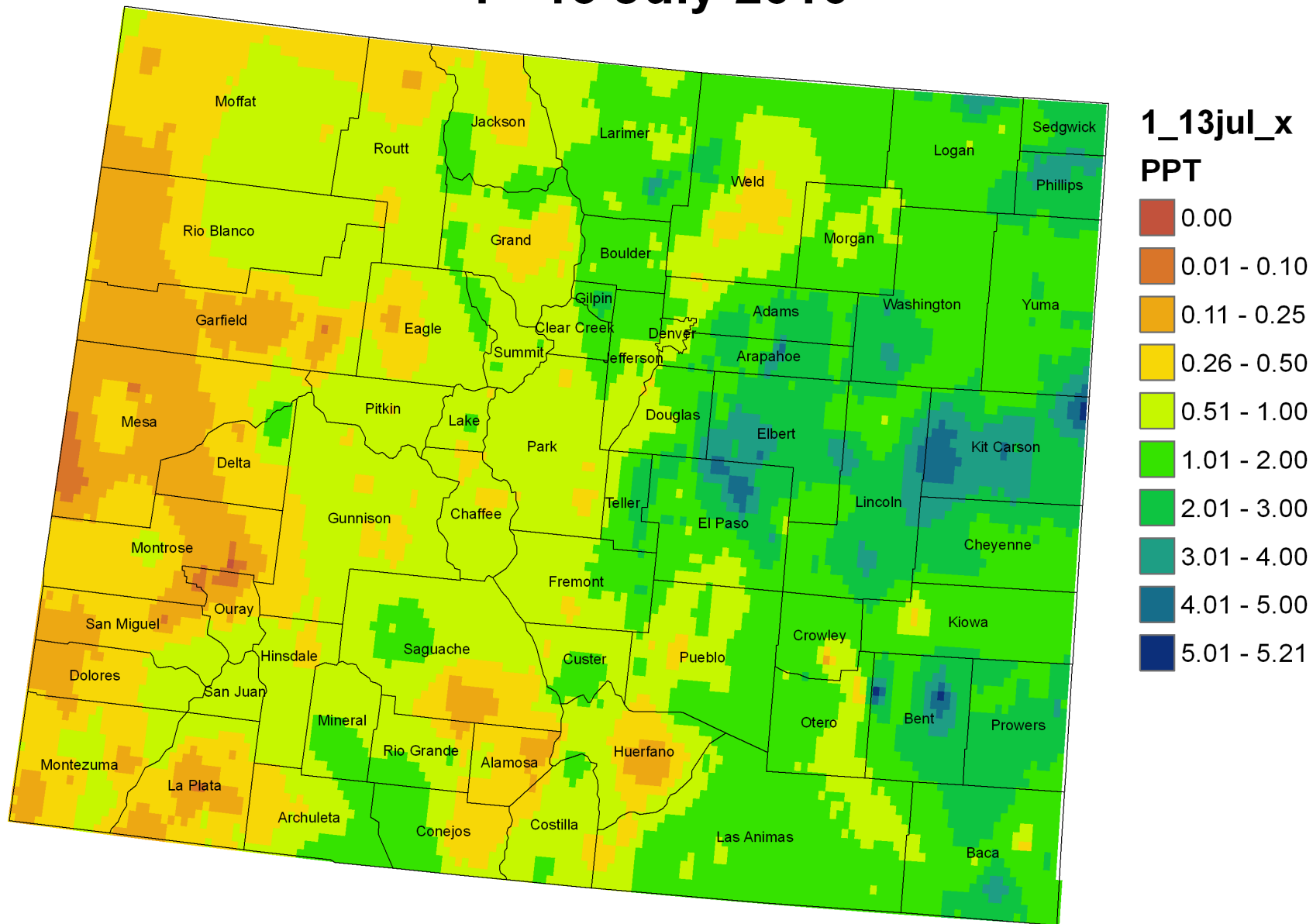
%norm



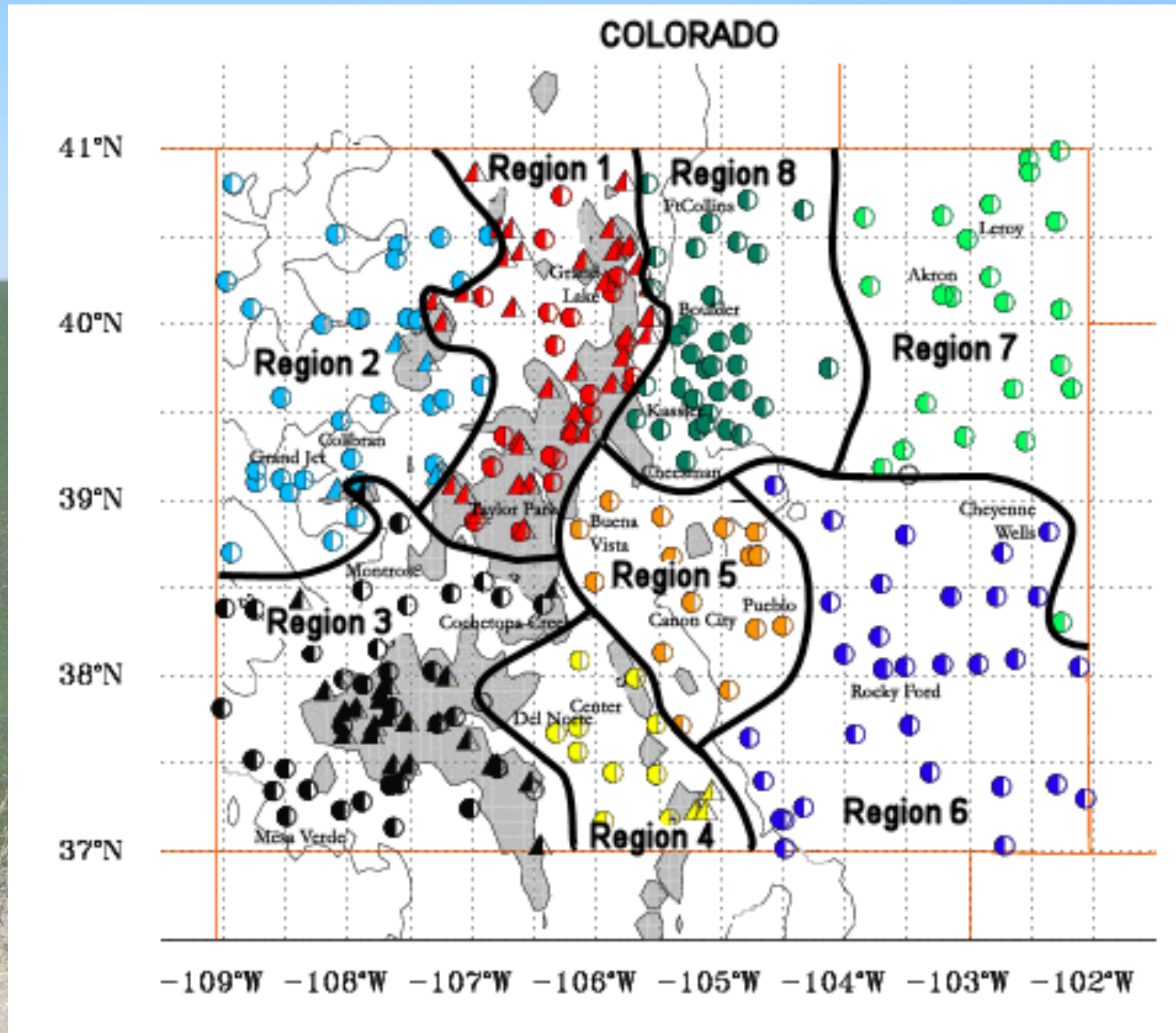
Colorado Water Year Precipitation as Percent of Average Oct 09 - Jun 10



Colorado Precipitation (in) 1 - 13 July 2010

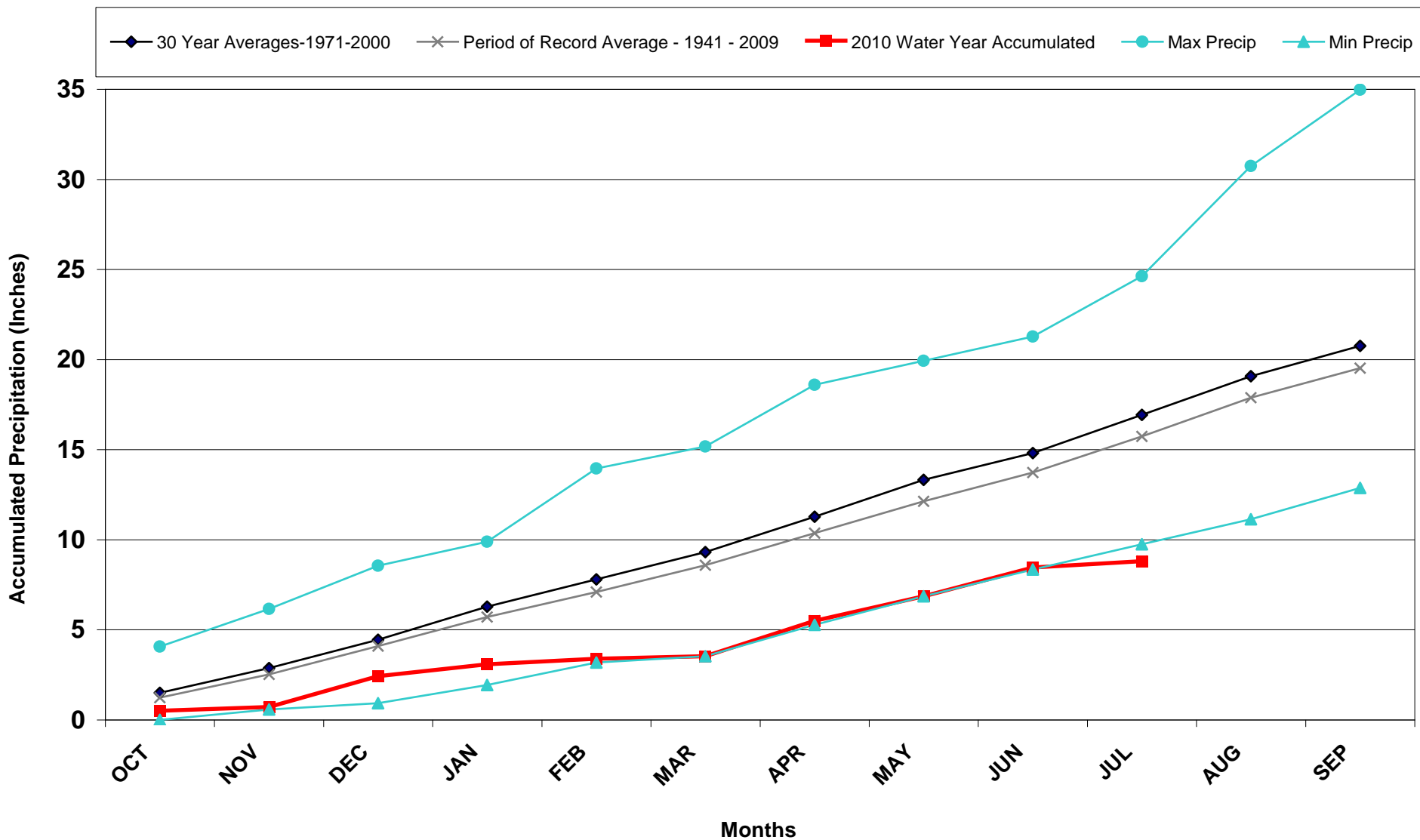


Climate divisions defined by Dr. Klaus Wolter of NOAA's Climate Diagnostic Center in Boulder, CO



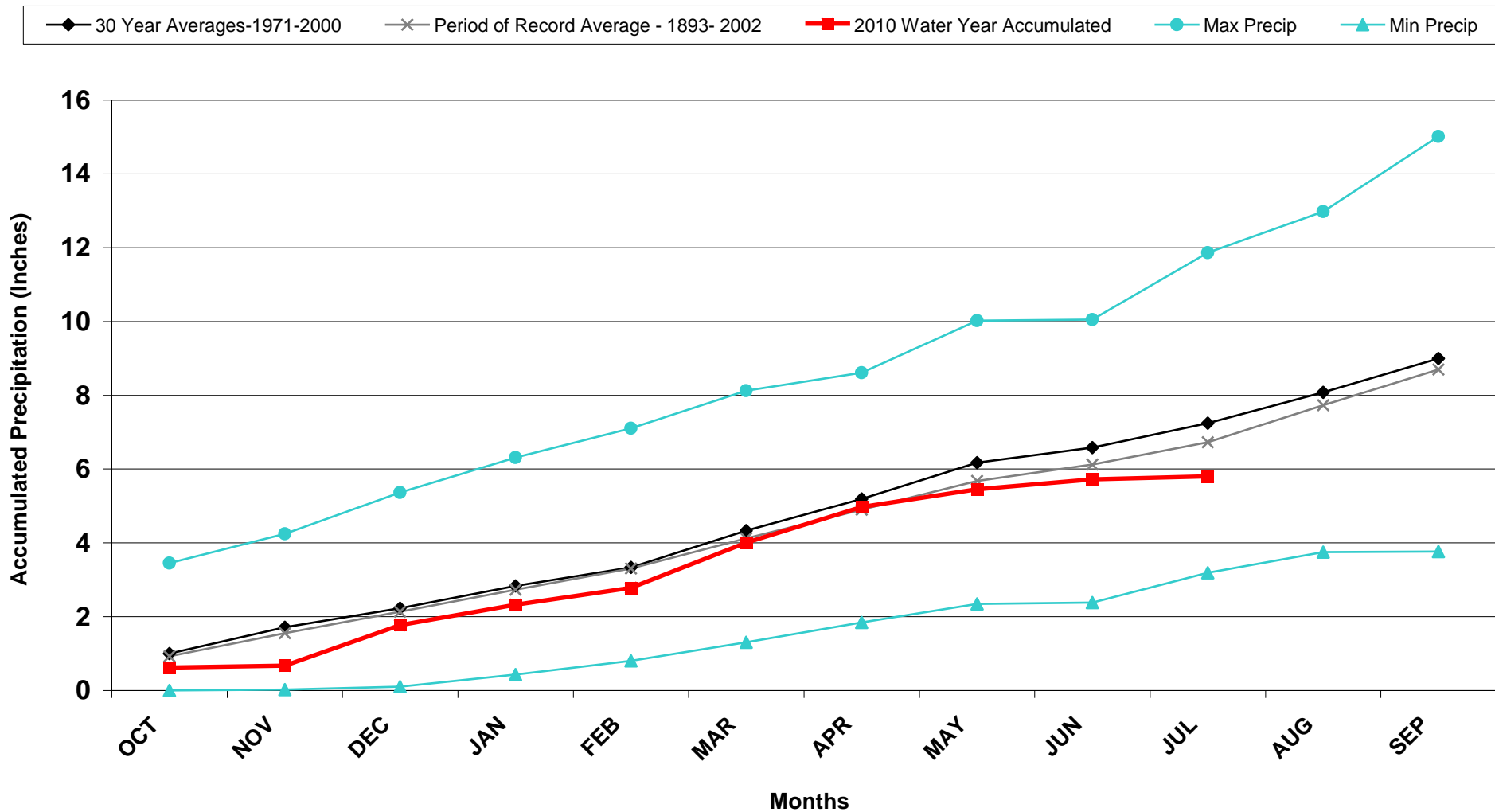
Division 1 – Grand Lake 1NW

Grand Lake 1 NW 2010 Water Year



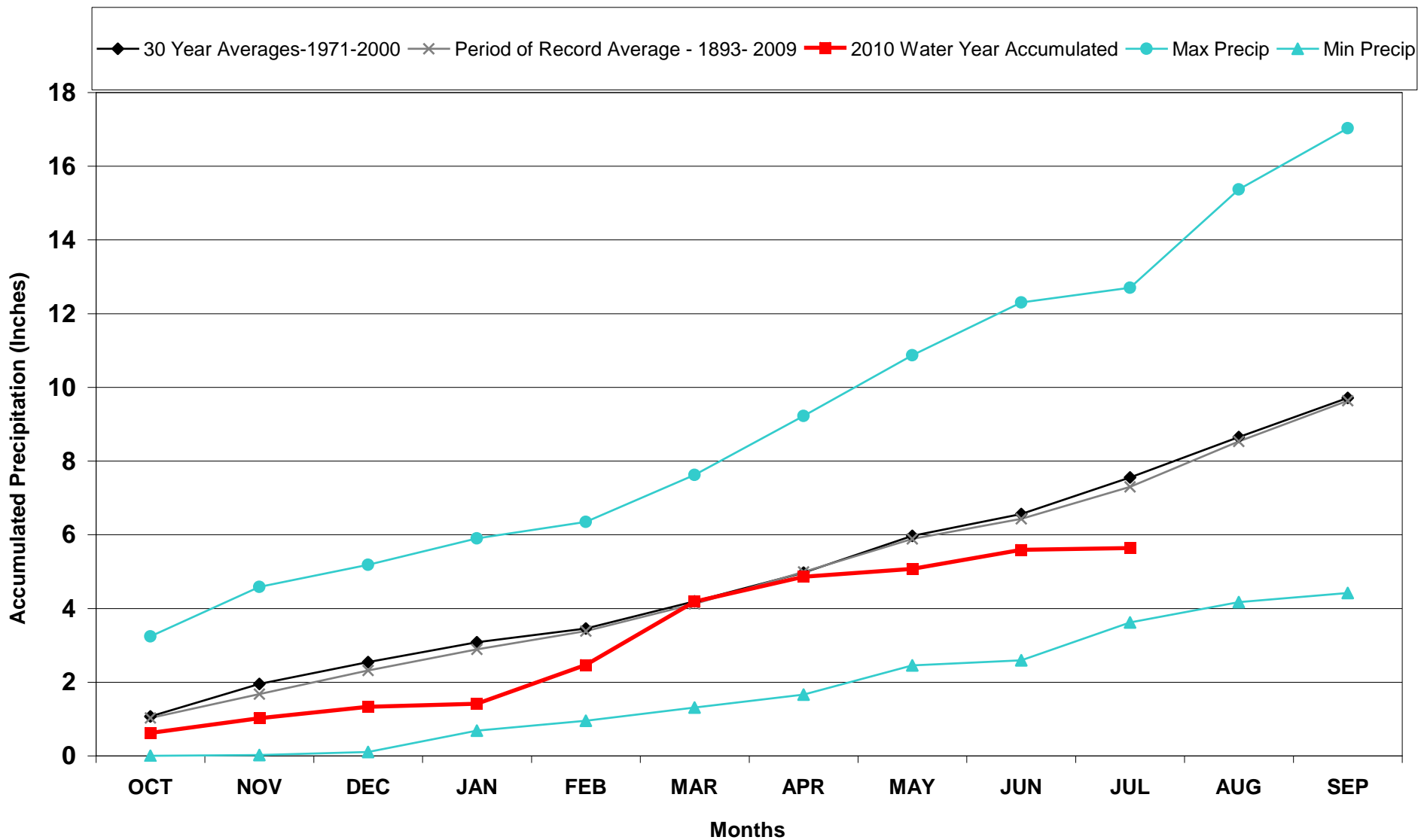
Division 2 – Grand Junction

Grand Junction WSFO 2010 Water Year



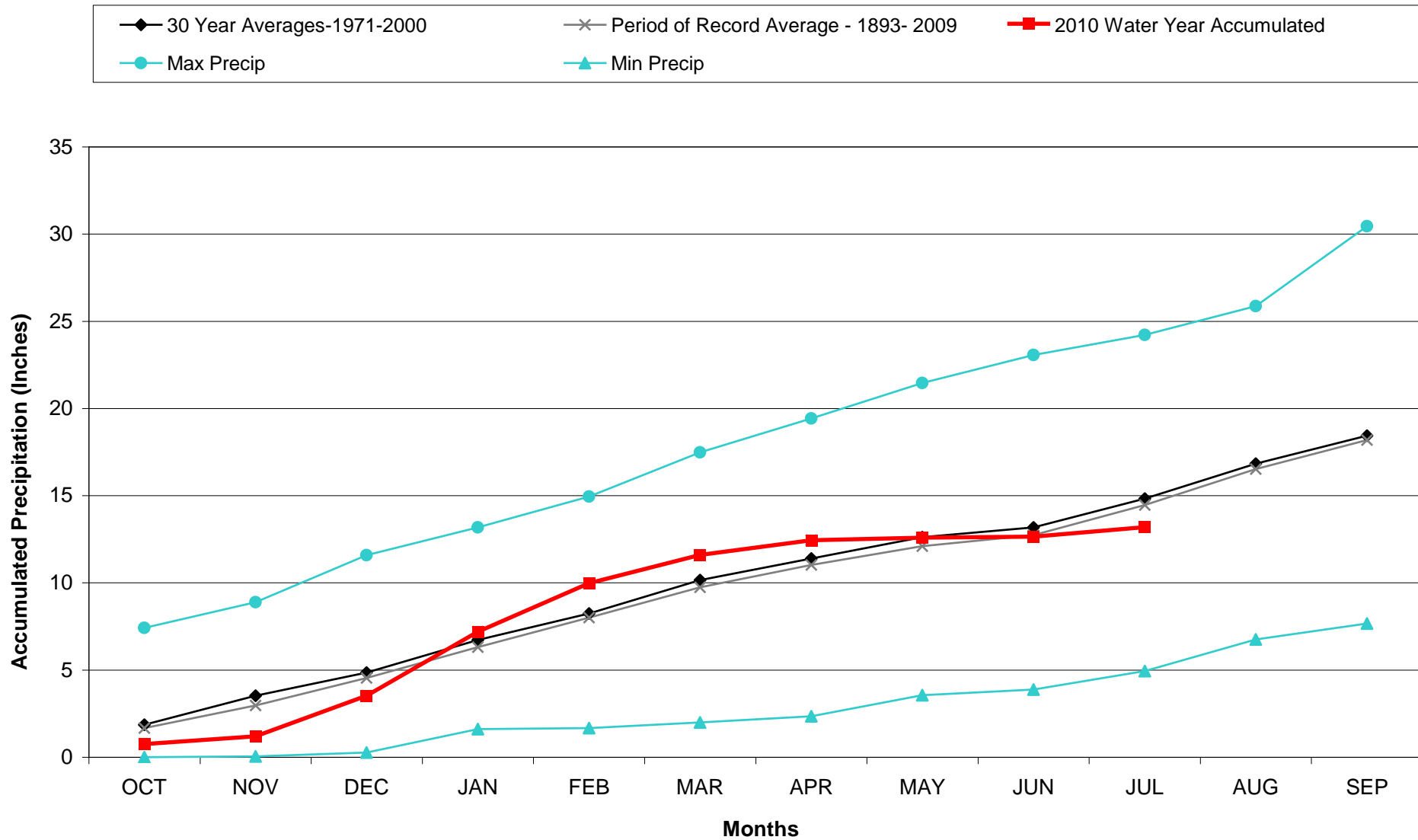
Division 3 – Montrose

Montrose #2 2010 Water Year



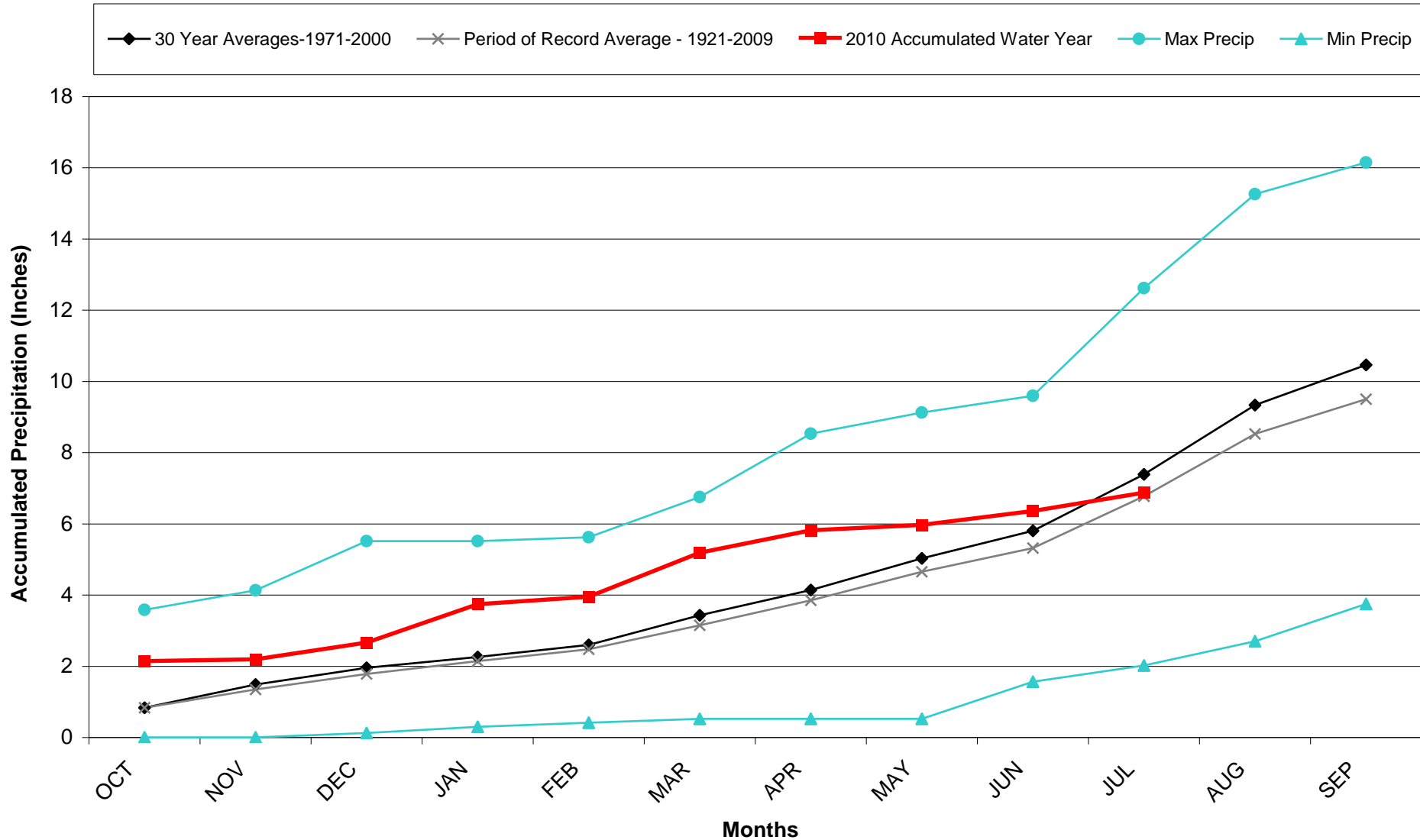
Division 3 – Mesa Verde NP

Mesa Verde NP 2010 Water Year



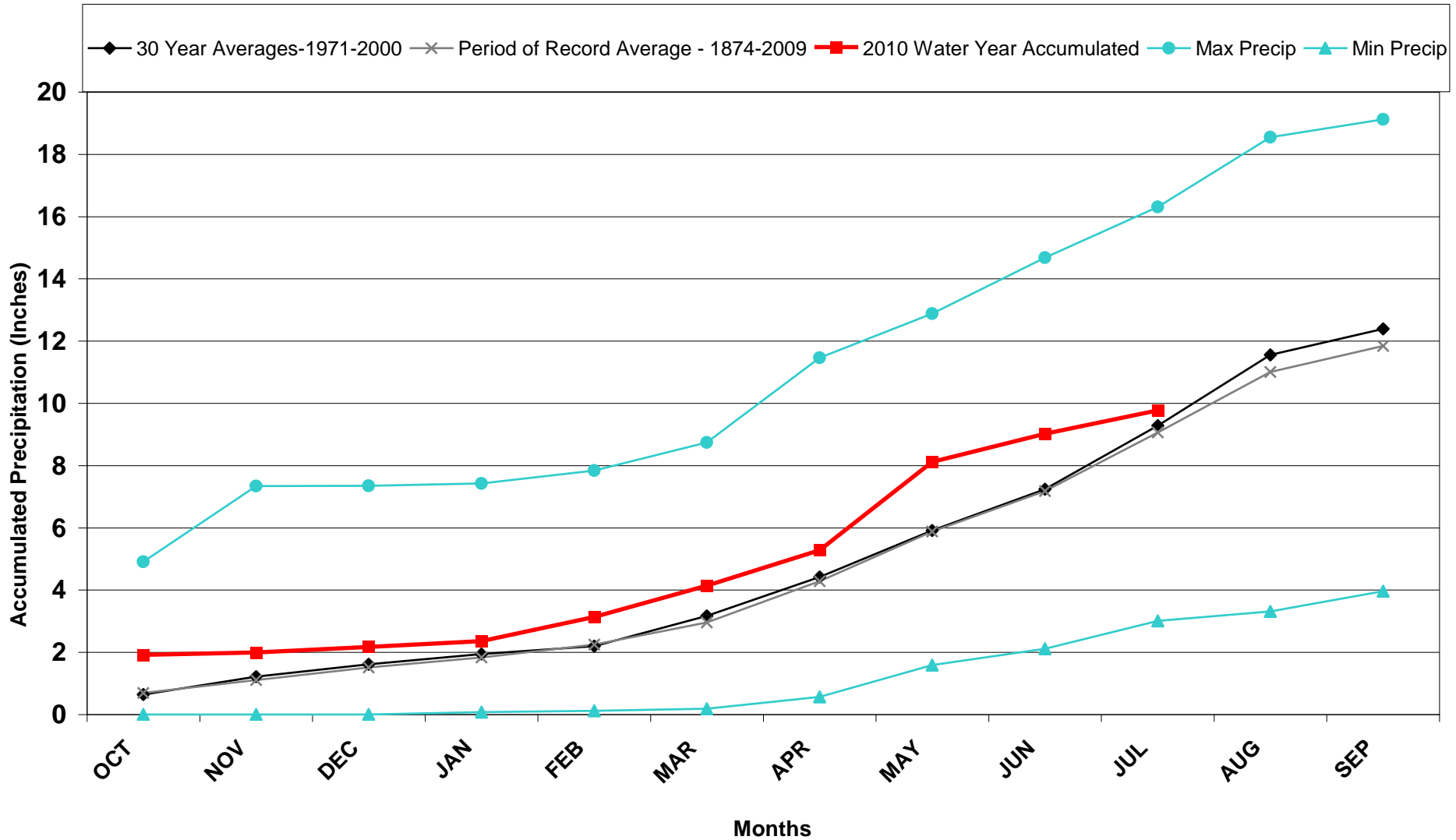
Division 4 – Del Norte

Del Norte 2010 Water Year



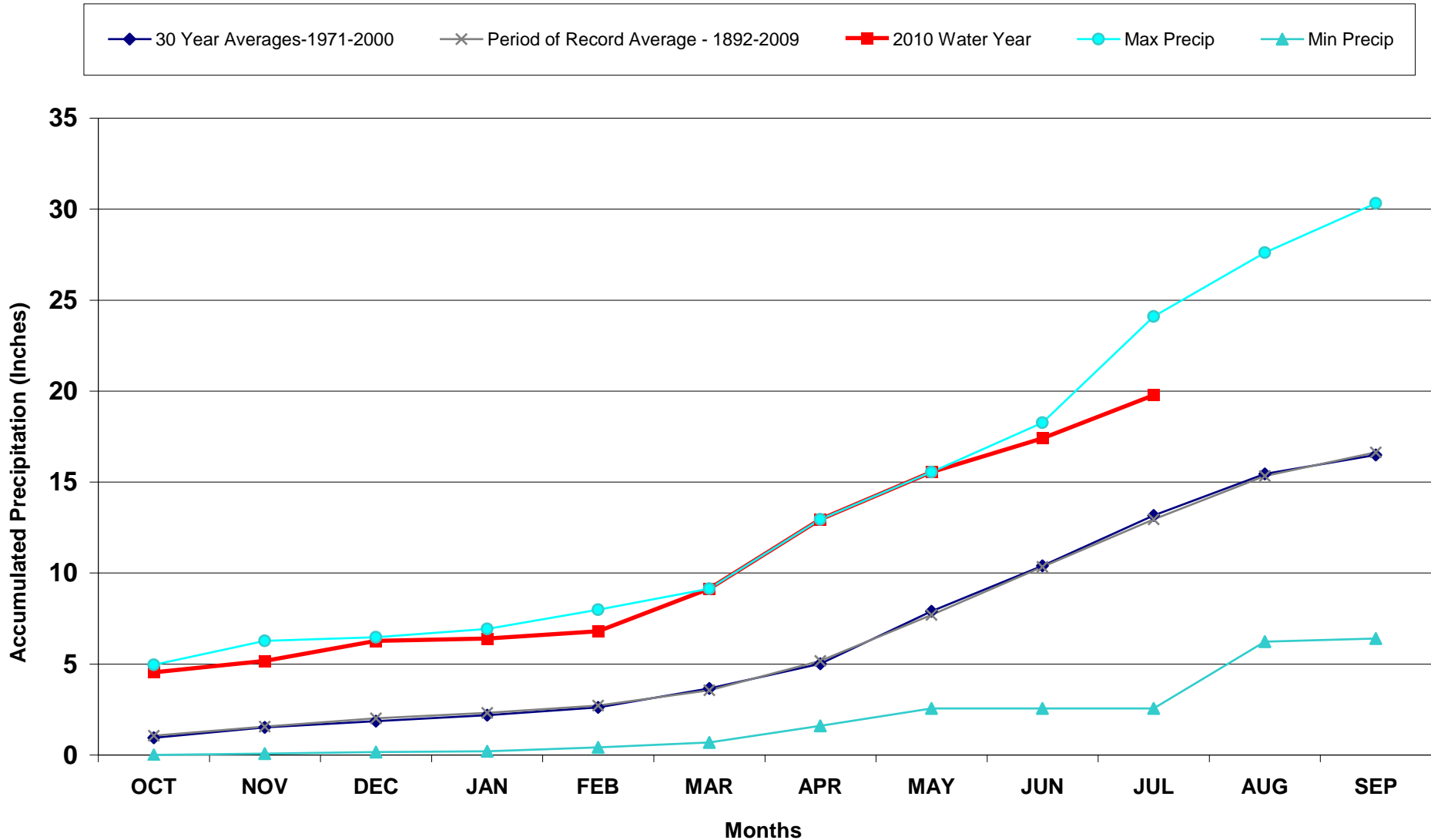
Division 5 – Pueblo

Pueblo WSO 2010 Water Year



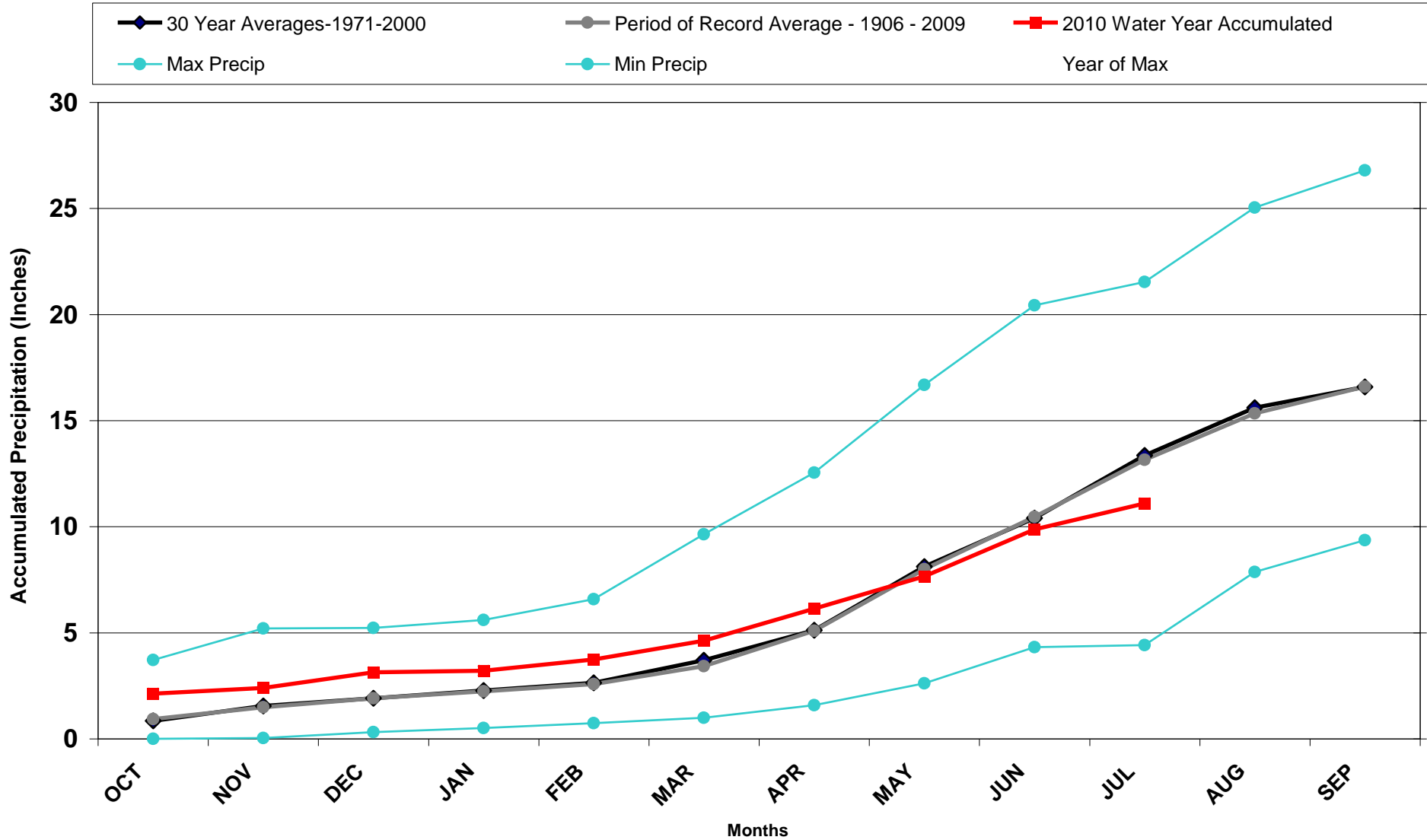
Division 6 - Burlington

Burlington 2010 Water Year



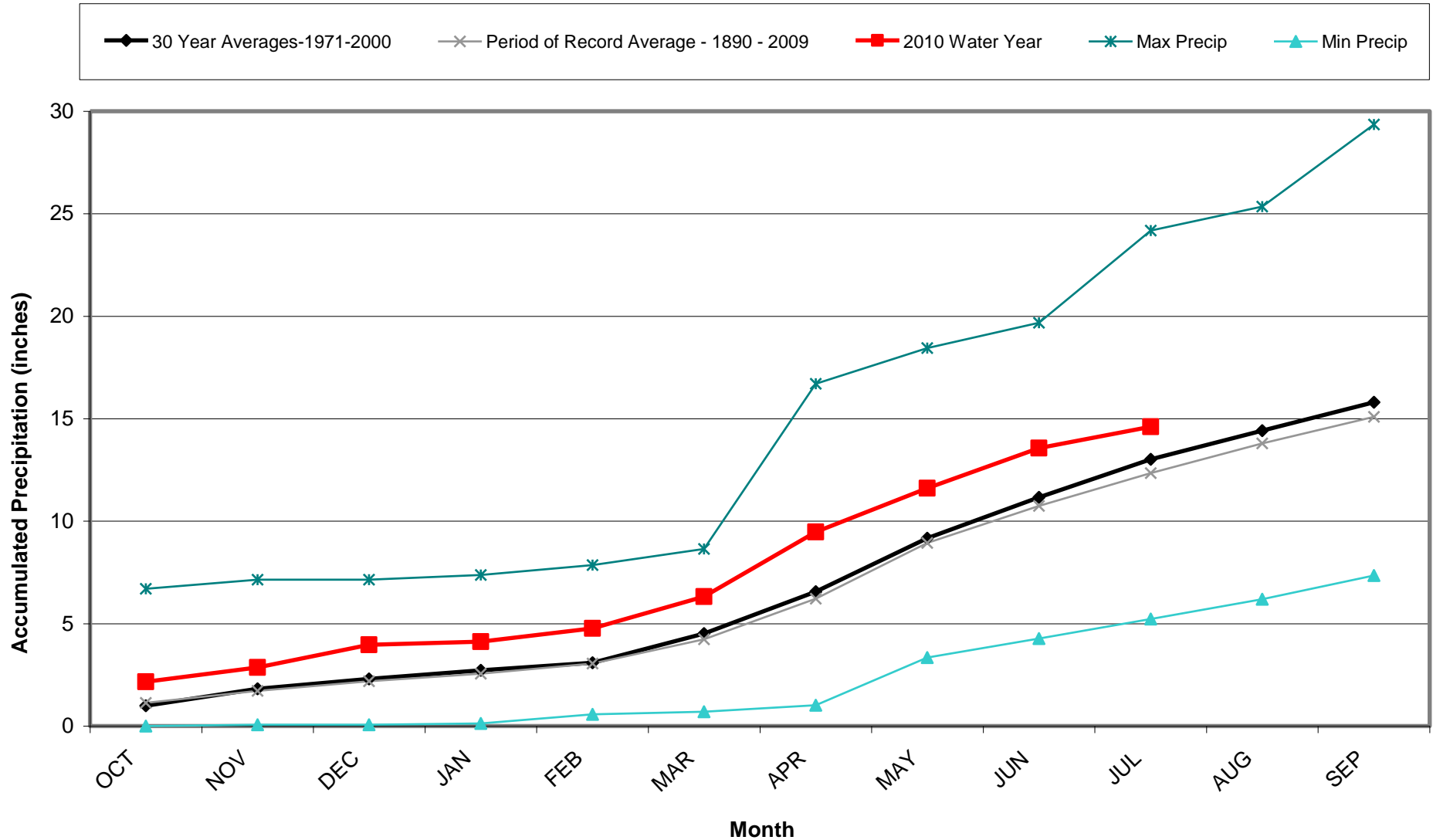
Division 7 – Akron

Akron 4E 2010 Water Year



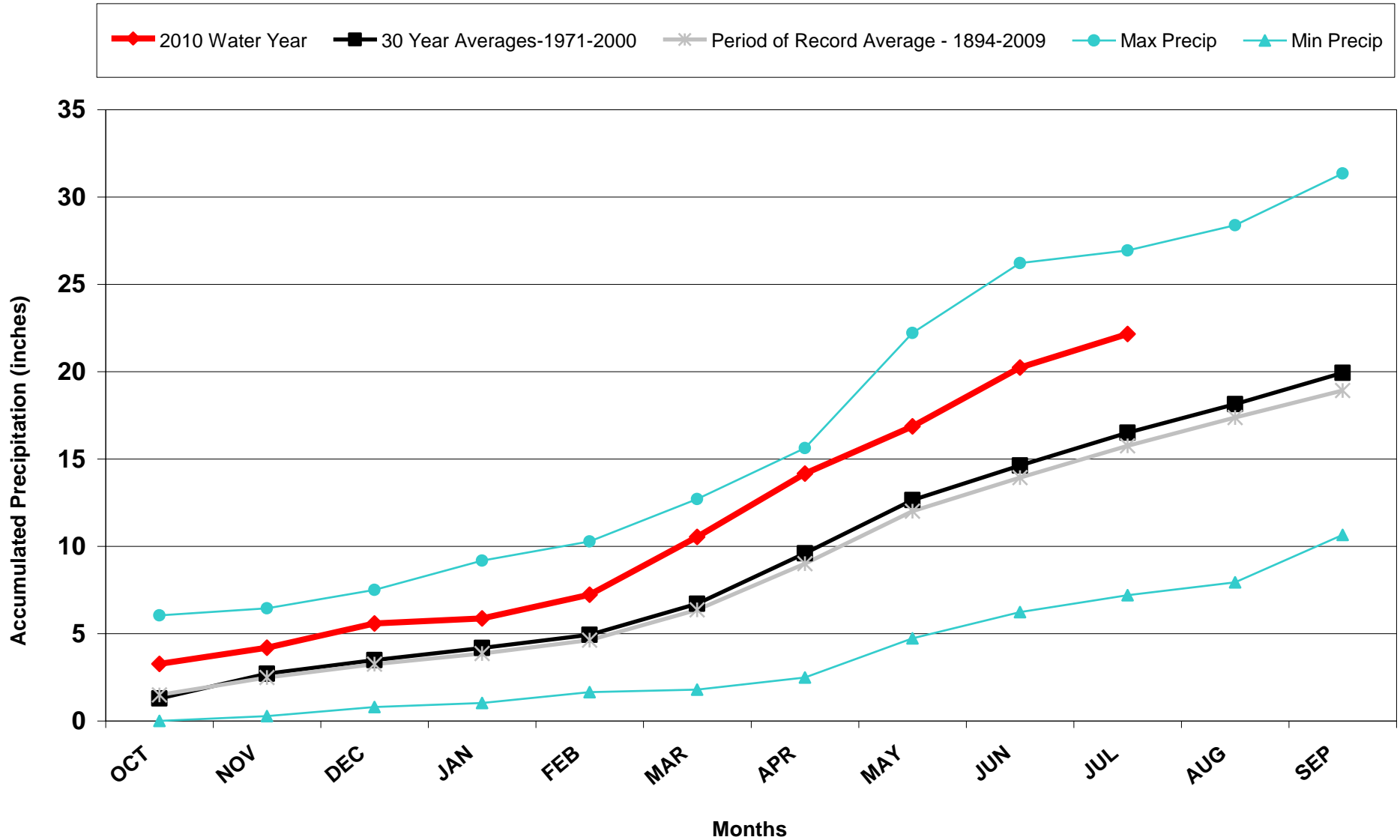
Division 8 – Fort Collins

Fort Collins 2010 Water Year



Division 8 - Boulder

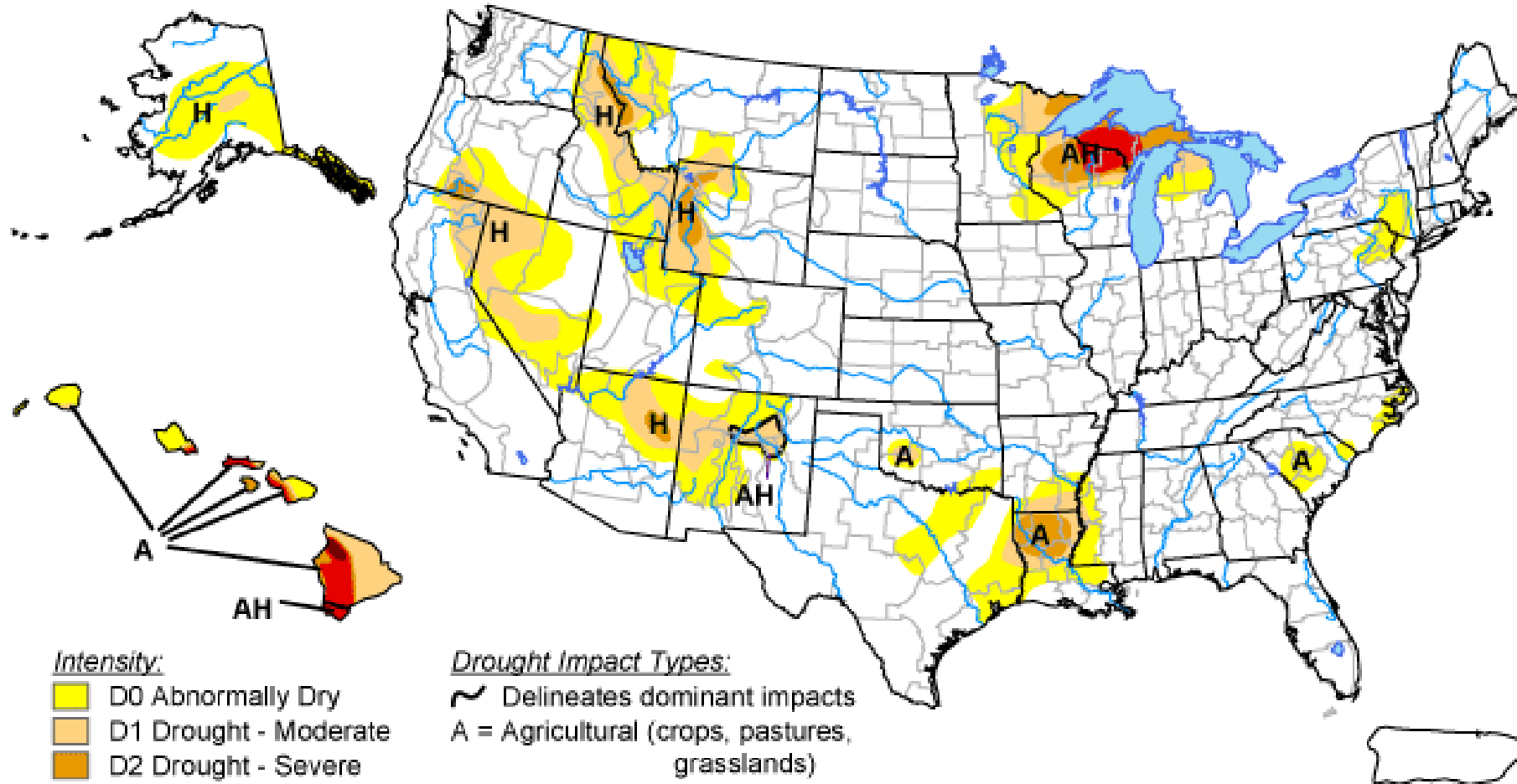
Boulder 2010 Water Year








U.S. Drought Monitor

June 15, 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.



Released Thursday, June 17, 2010

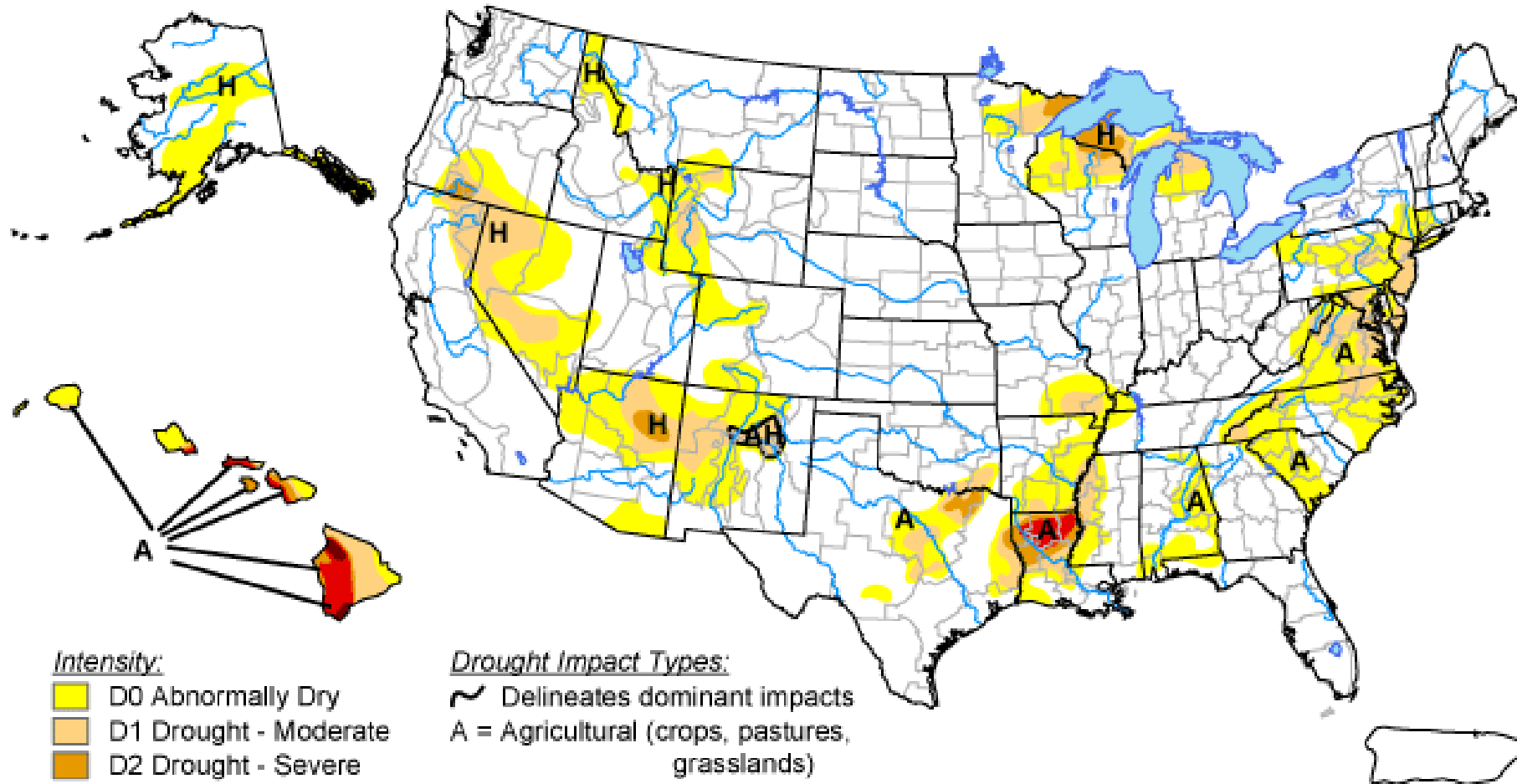
Author: Laura Edwards, Western Regional Climate Center

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






U.S. Drought Monitor

July 13, 2010

Valid 8 a.m. EDT



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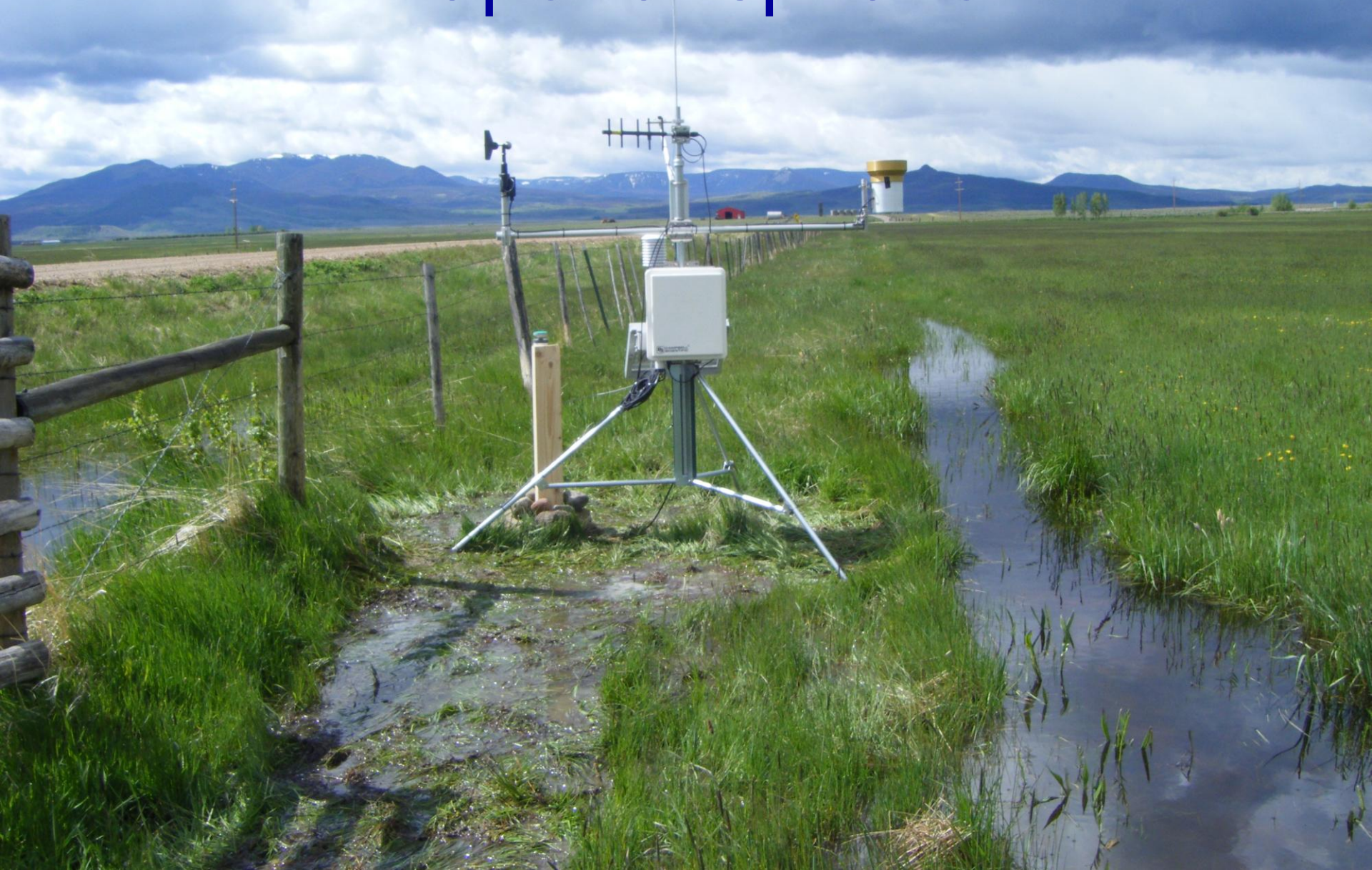
<http://drought.unl.edu/dm>



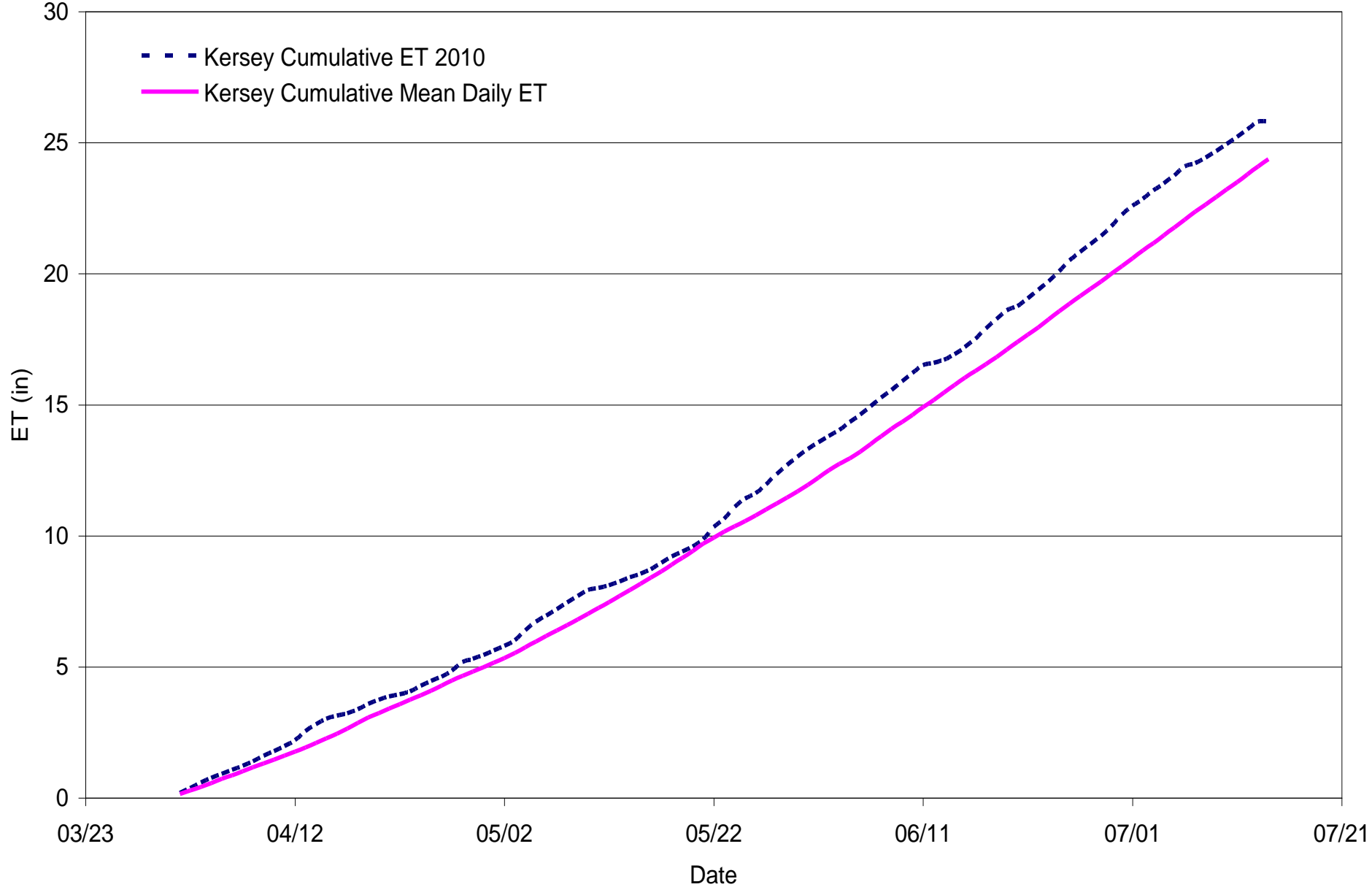
Released Thursday, July 15, 2010

Author: Anthony Artusa, NOAA/NWS/NCEP/CPC

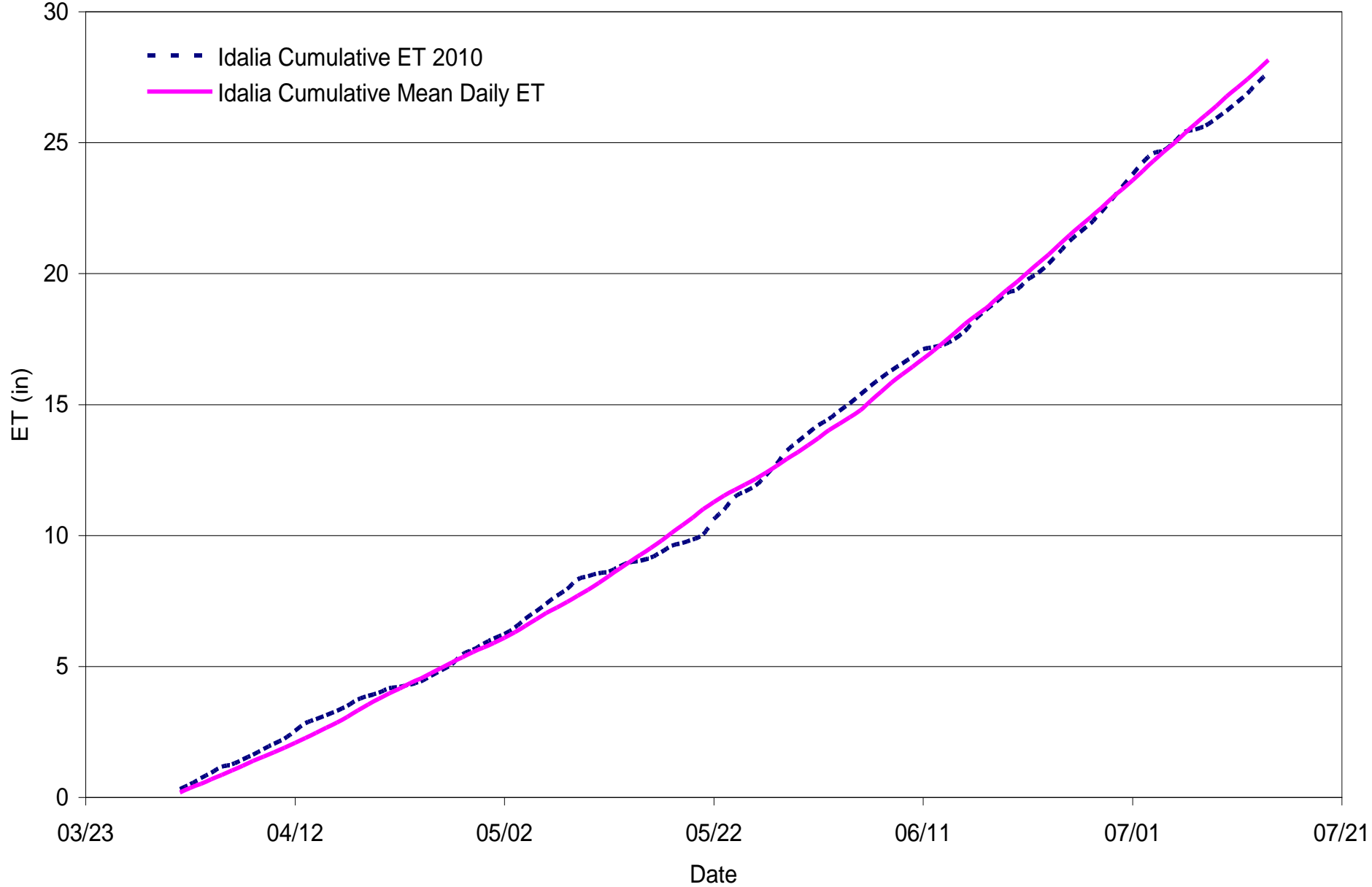
Evapotranspiration



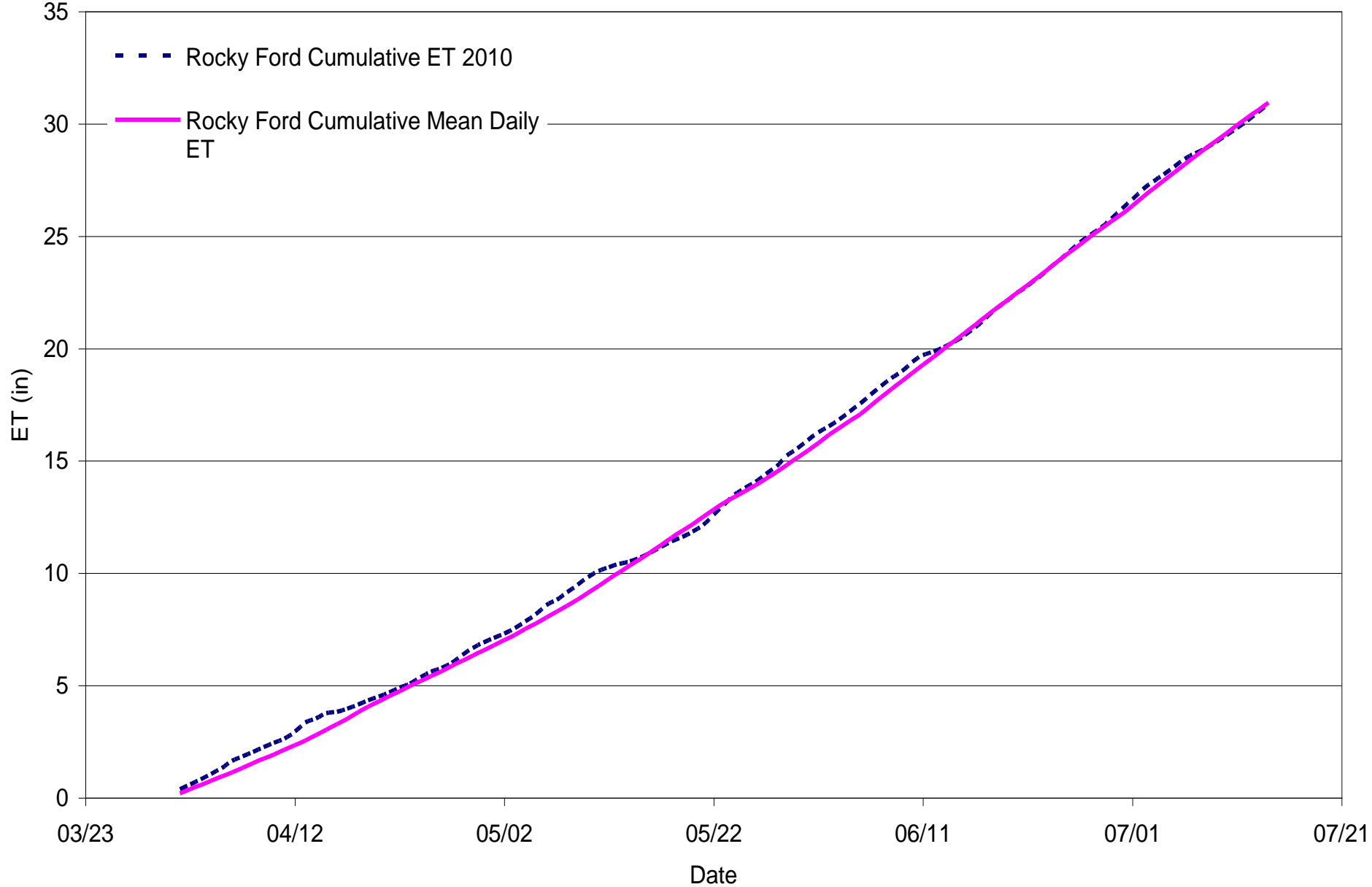
Kersey 2010 Evapotranspiration (Kimberly-Penman)



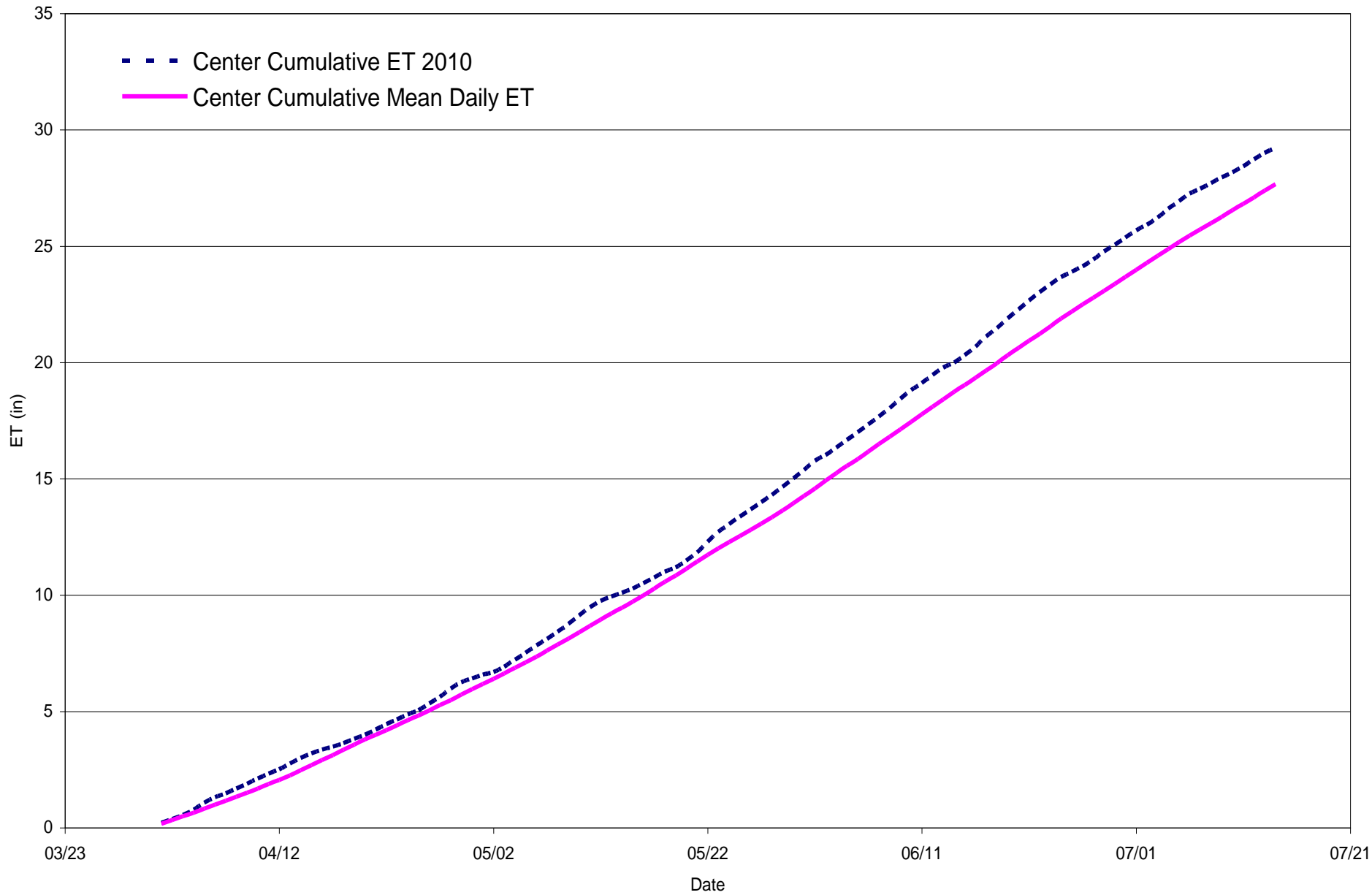
Idalia 2010 Evapotranspiration (Kimberly-Penman)



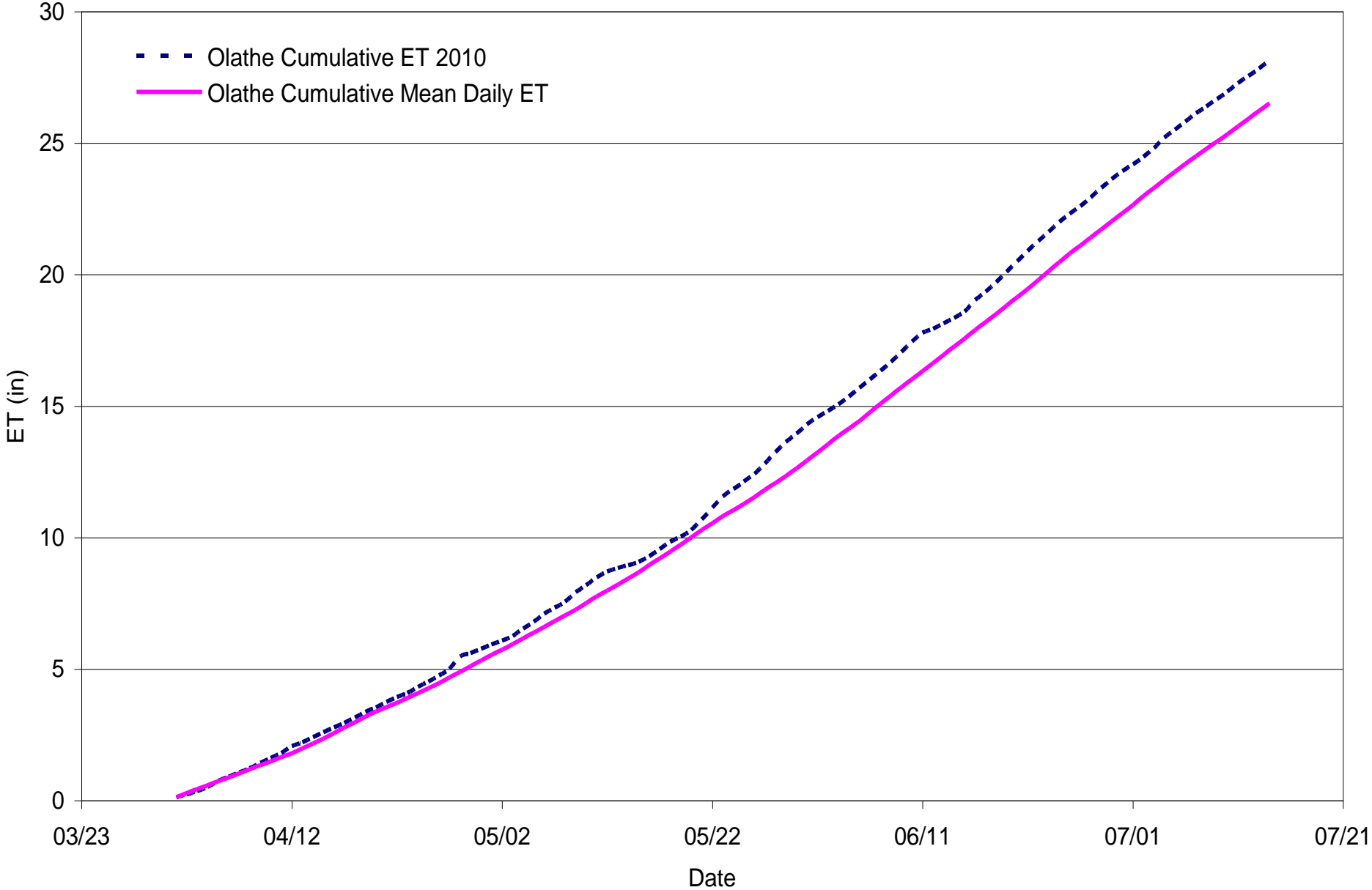
Rocky Ford 2010 Evapotranspiration (Kimberly-Penman)



Center 2010 Evapotranspiration (Kimberly-Penman)



Olathe 2010 Evapotranspiration (Kimberly-Penman)

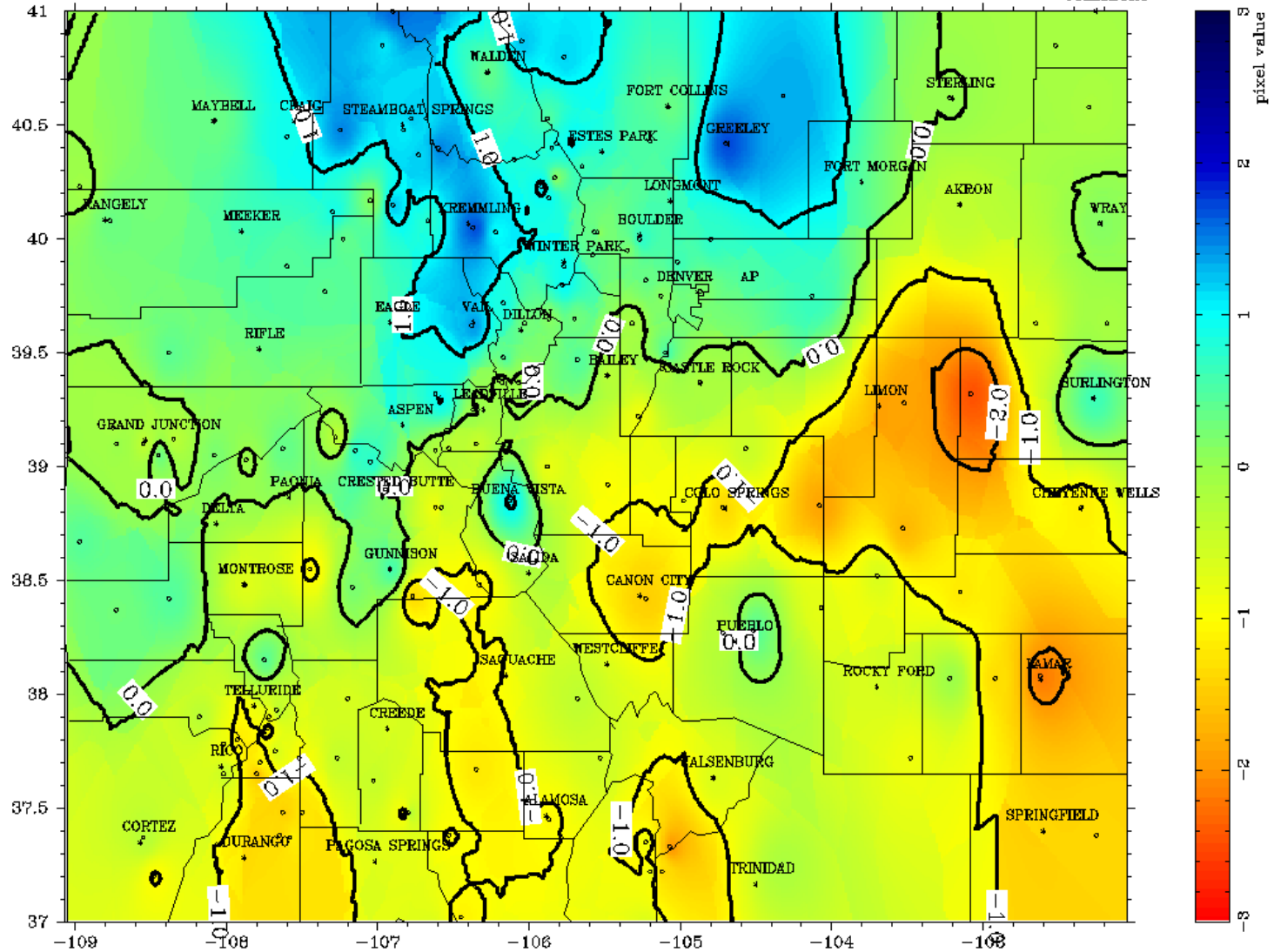


3 Month SPI

Colorado

6/2010 3 mon. SPI

JULESBURG

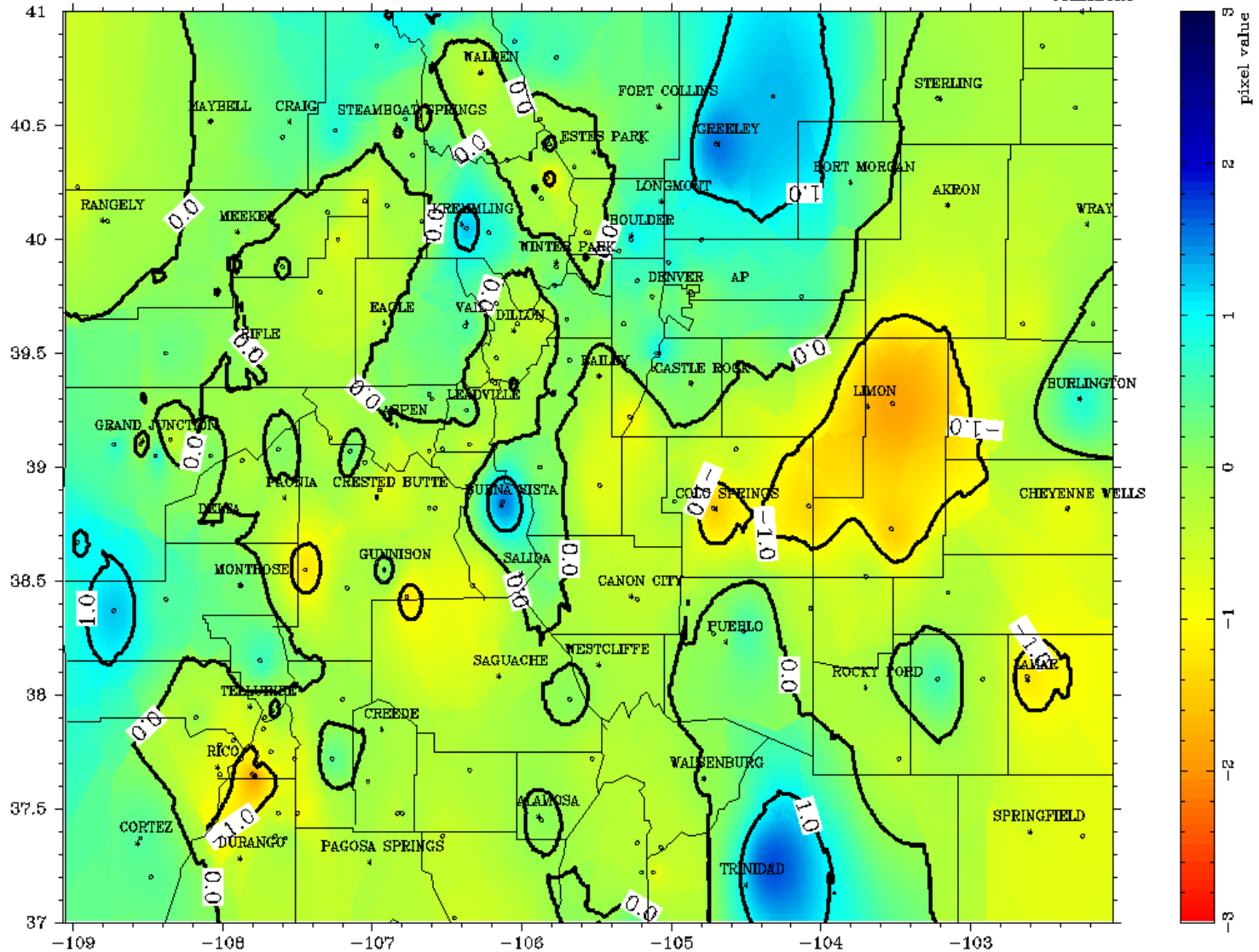


6 Month SPI

Colorado

6/2010 6 mon. SPI

JULESBURG



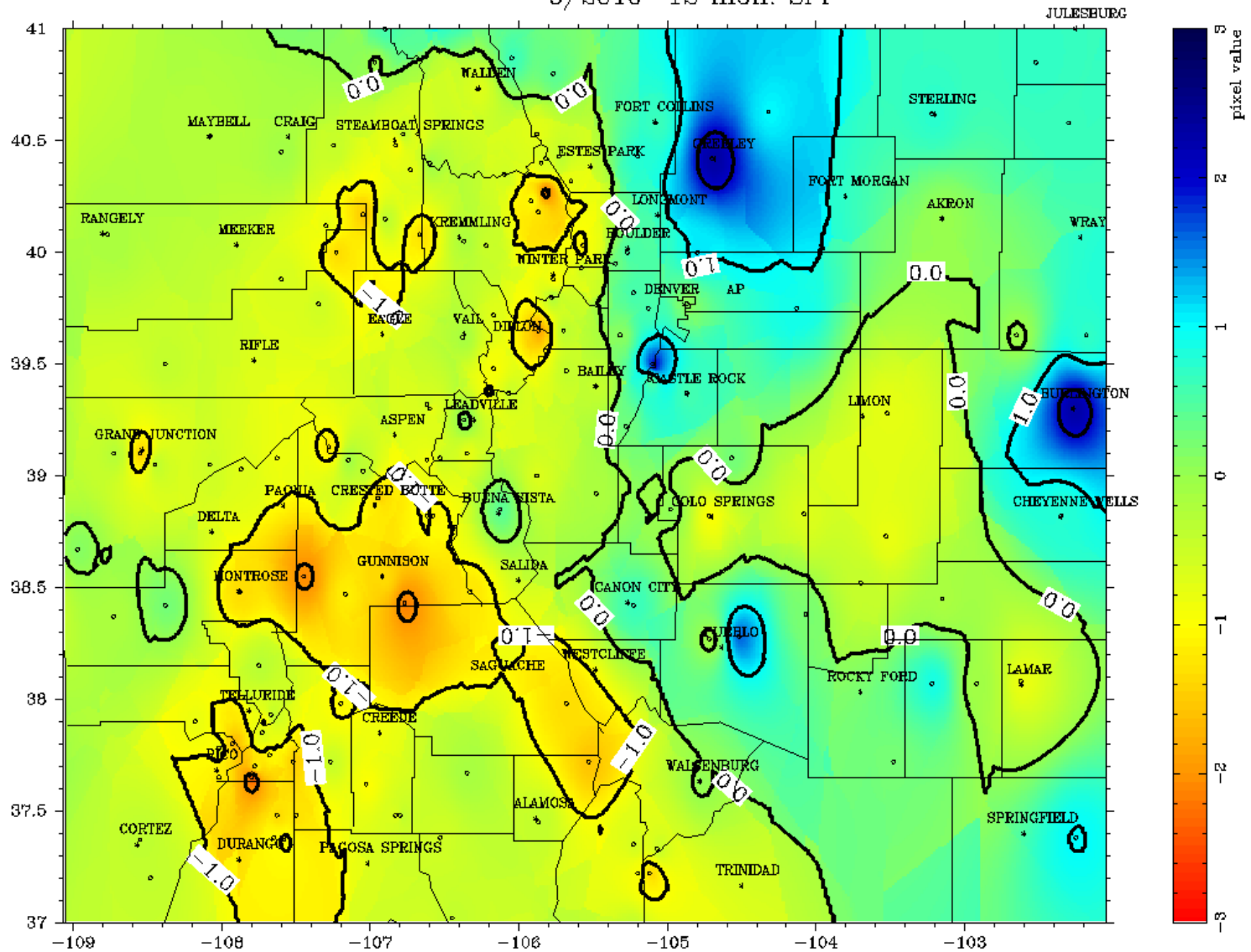
100 % < 2.0	4 % < -1.0
96 % < 1.0	0 % < -2.0
60 % < 0.0	0 % < -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO

12 Month SPI

Colorado

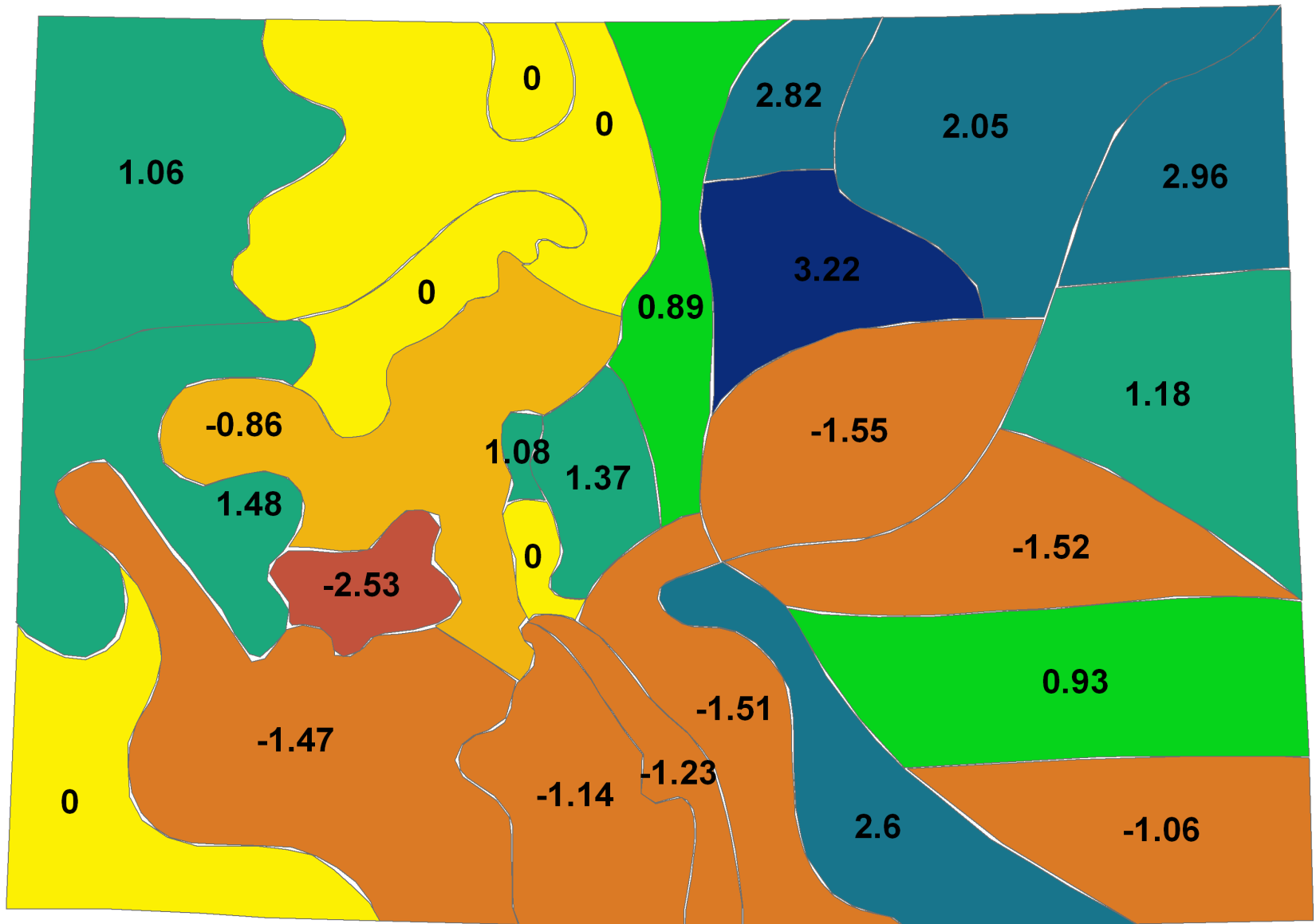
6/2010 12 mon. SPI



100 % < 2.0	10 % < -1.0
94 % < 1.0	0 % < -2.0
63 % < 0.0	0 % < -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO

Colorado Modified Palmer Drought Index June 2010



Colorado Climate Center

Data and Power Point Presentations available for downloading

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



Knowledge to Go Places

