



Climate Update

Nolan Doesken
Colorado Climate Center

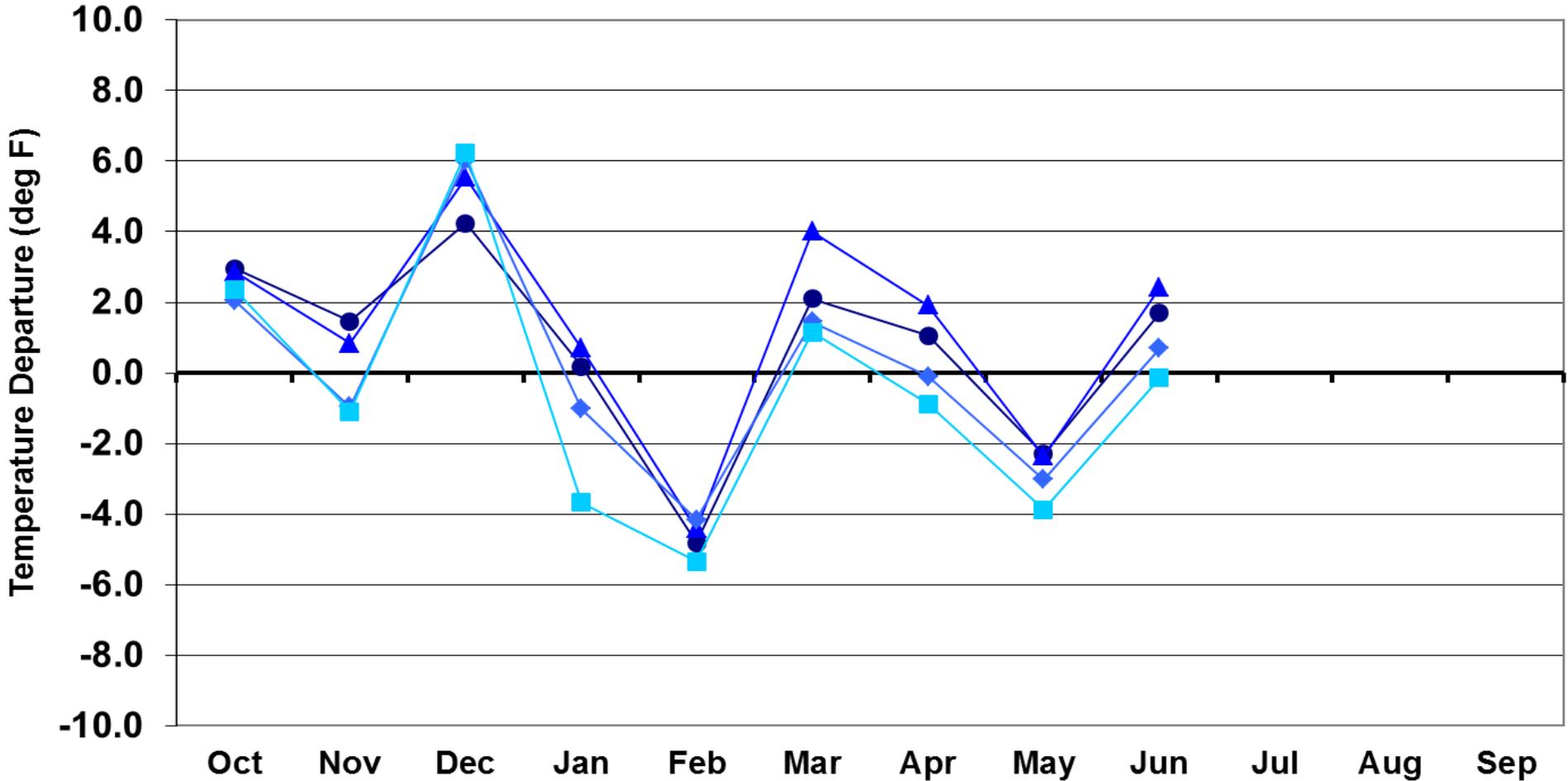
Atmospheric Science Department
Colorado State University

Presented to
Water Availability Task Force
July 14th, 2011
Denver, CO

Prepared by Wendy Ryan

Water Year 2011 Temperature Departures

Water Year 2011



● Eastern Plains

▲ Foothills

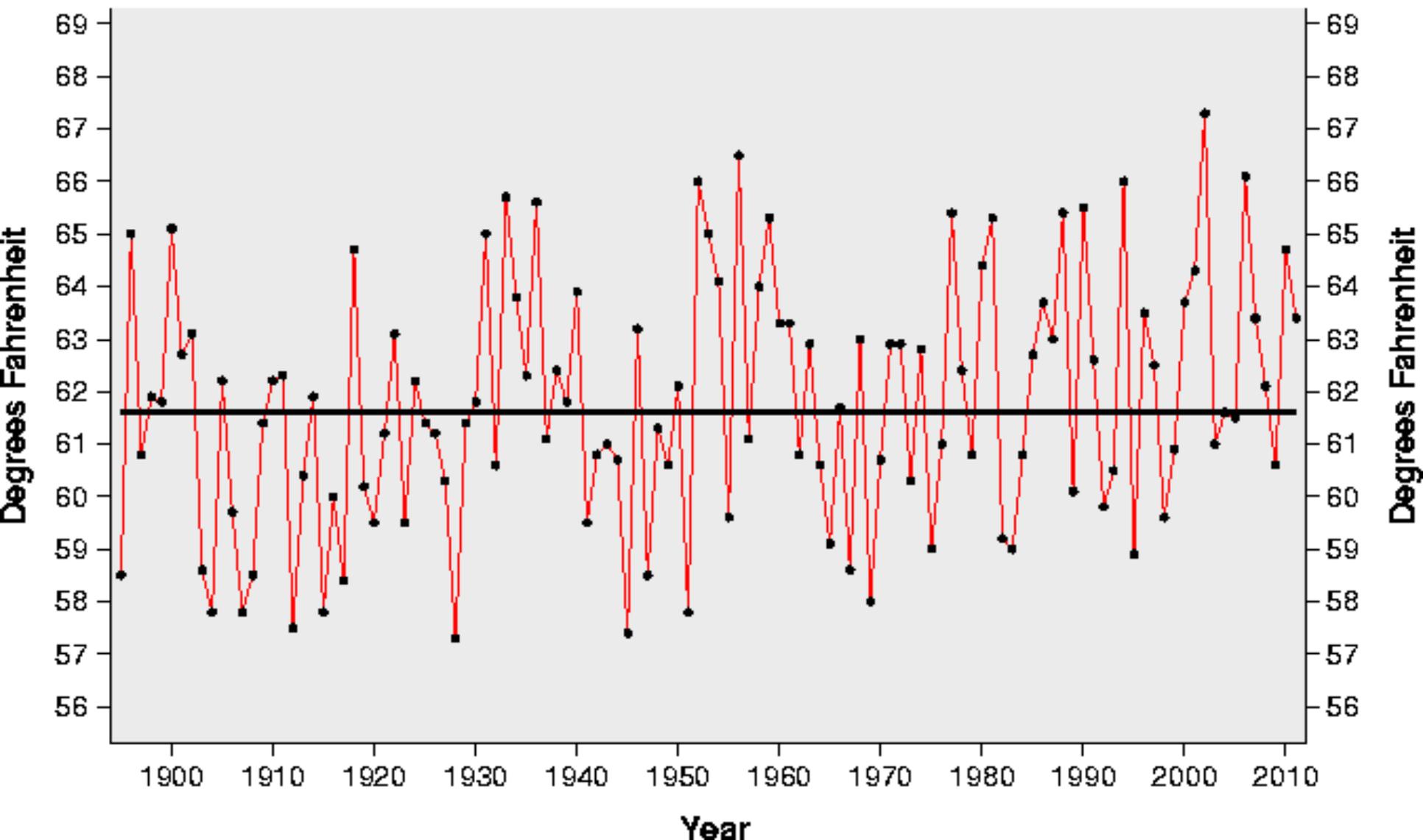
◆ Mountains

■ Western Valleys

June Average Temperature History for Colorado (NCDC)

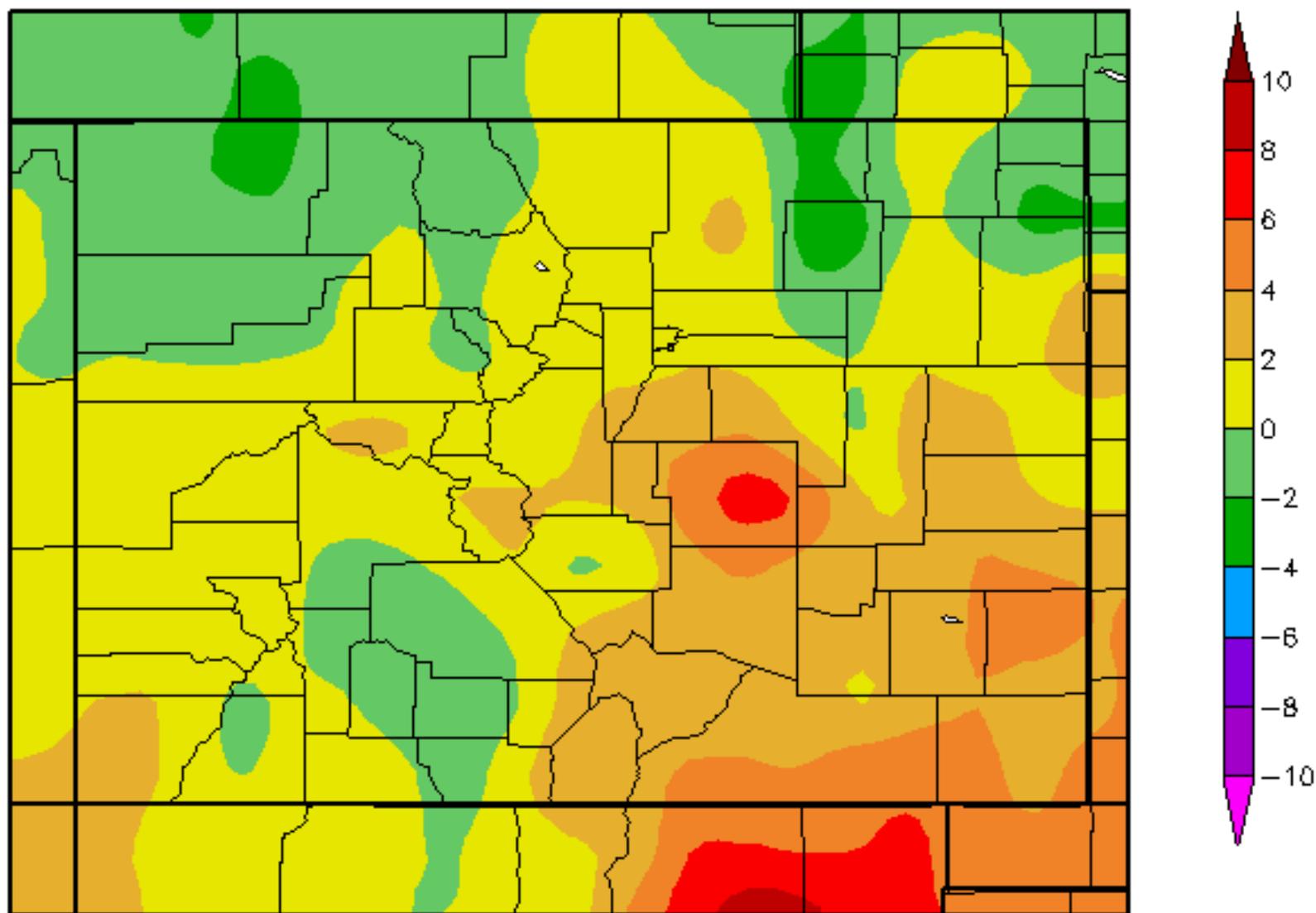
— Actual Temperature
— Average Temperature

63.4 Degrees ranks 28th warmest for the period (1895-2011)



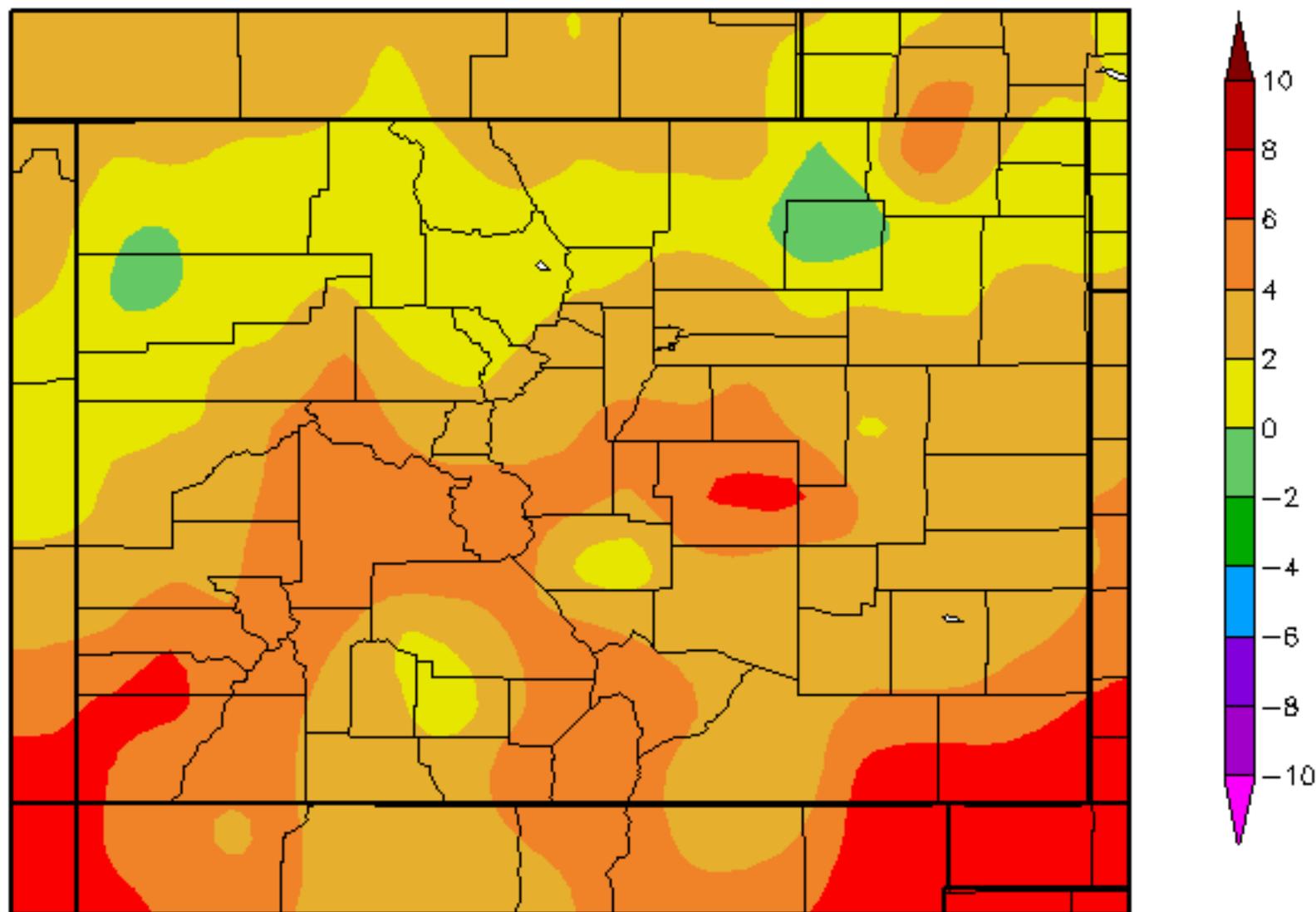
Departure from Normal Temperature (F)

6/1/2011 - 6/30/2011

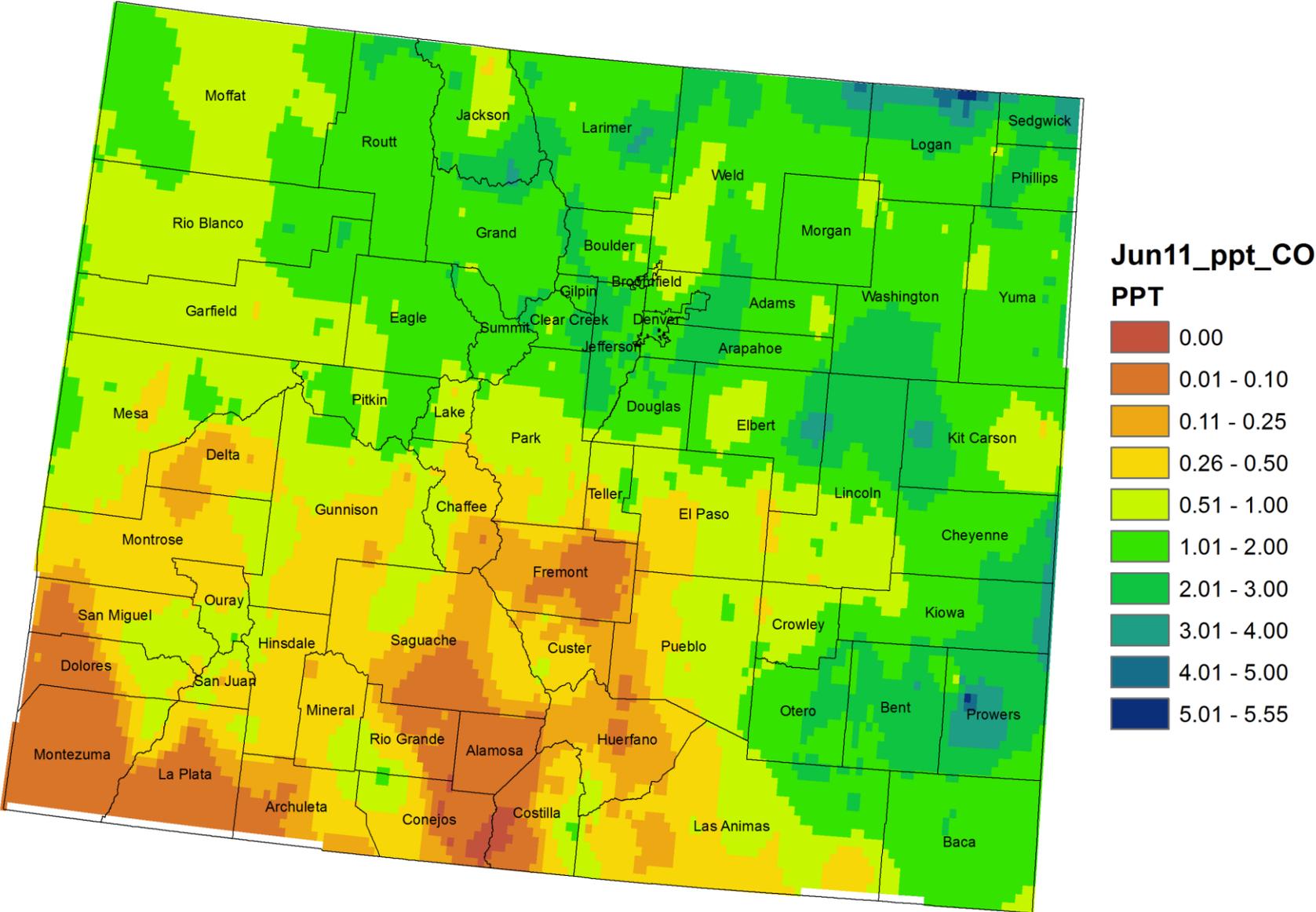


Departure from Normal Temperature (F)

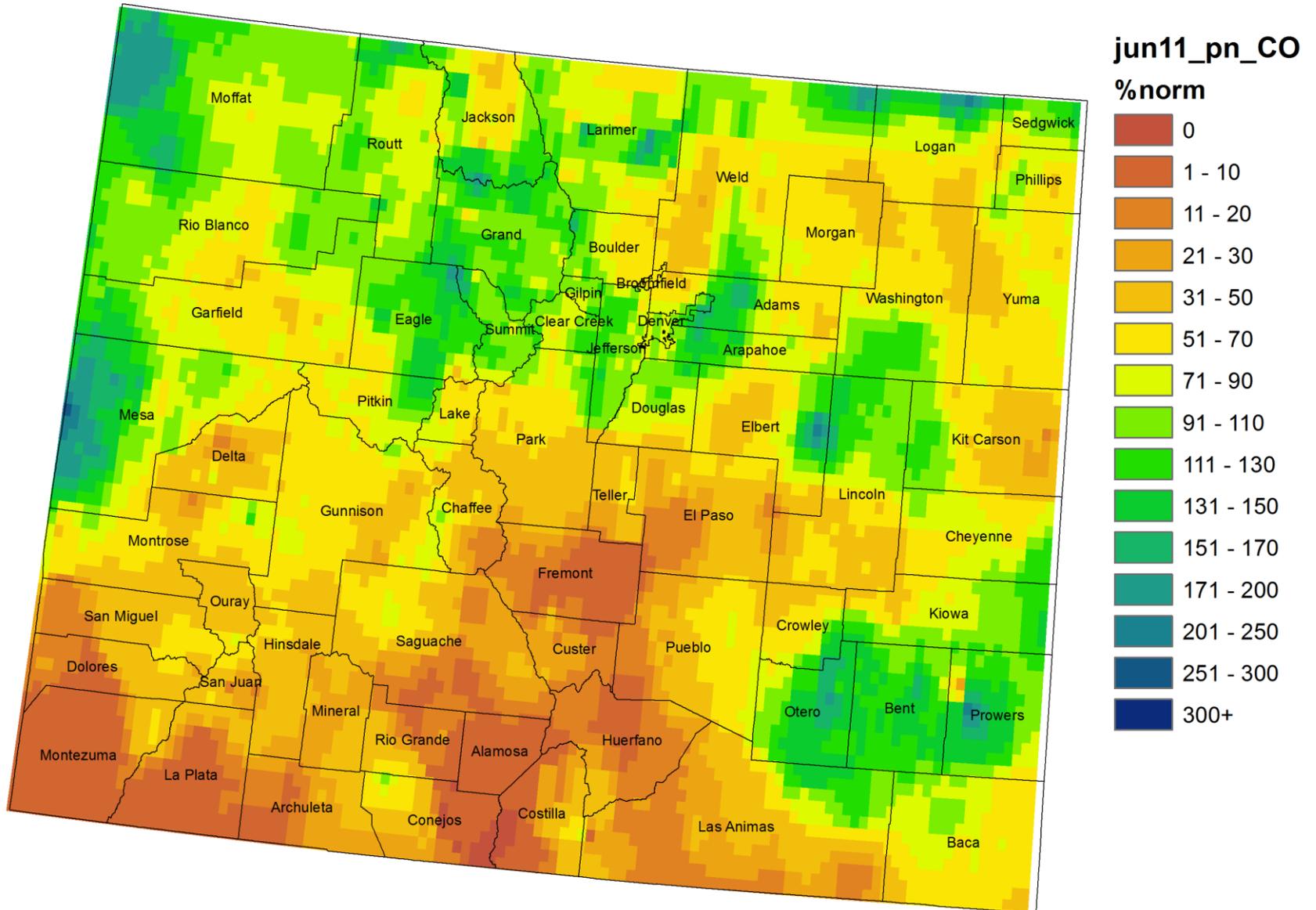
7/1/2011 - 7/10/2011



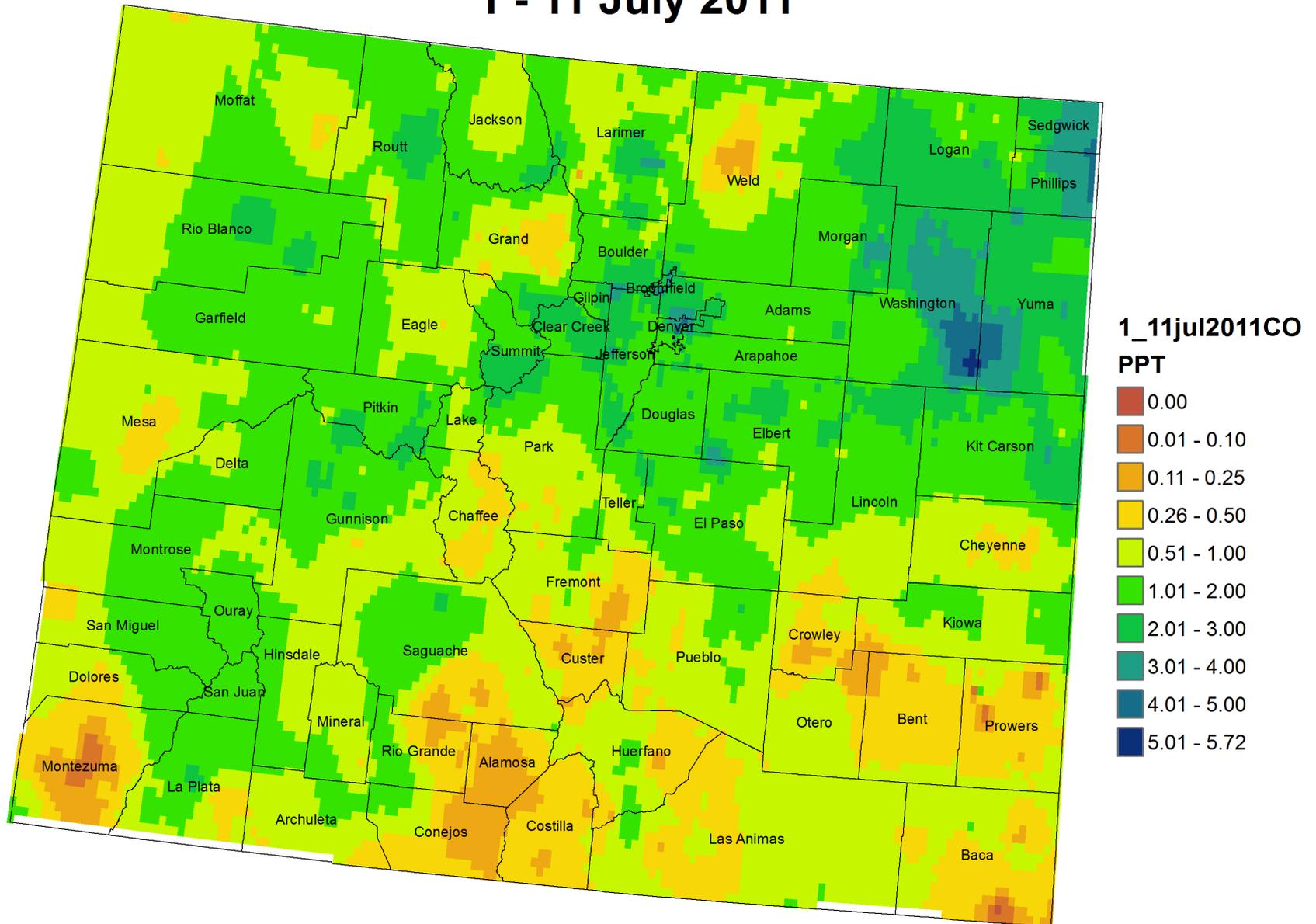
Colorado Precipitation (in) June 2011



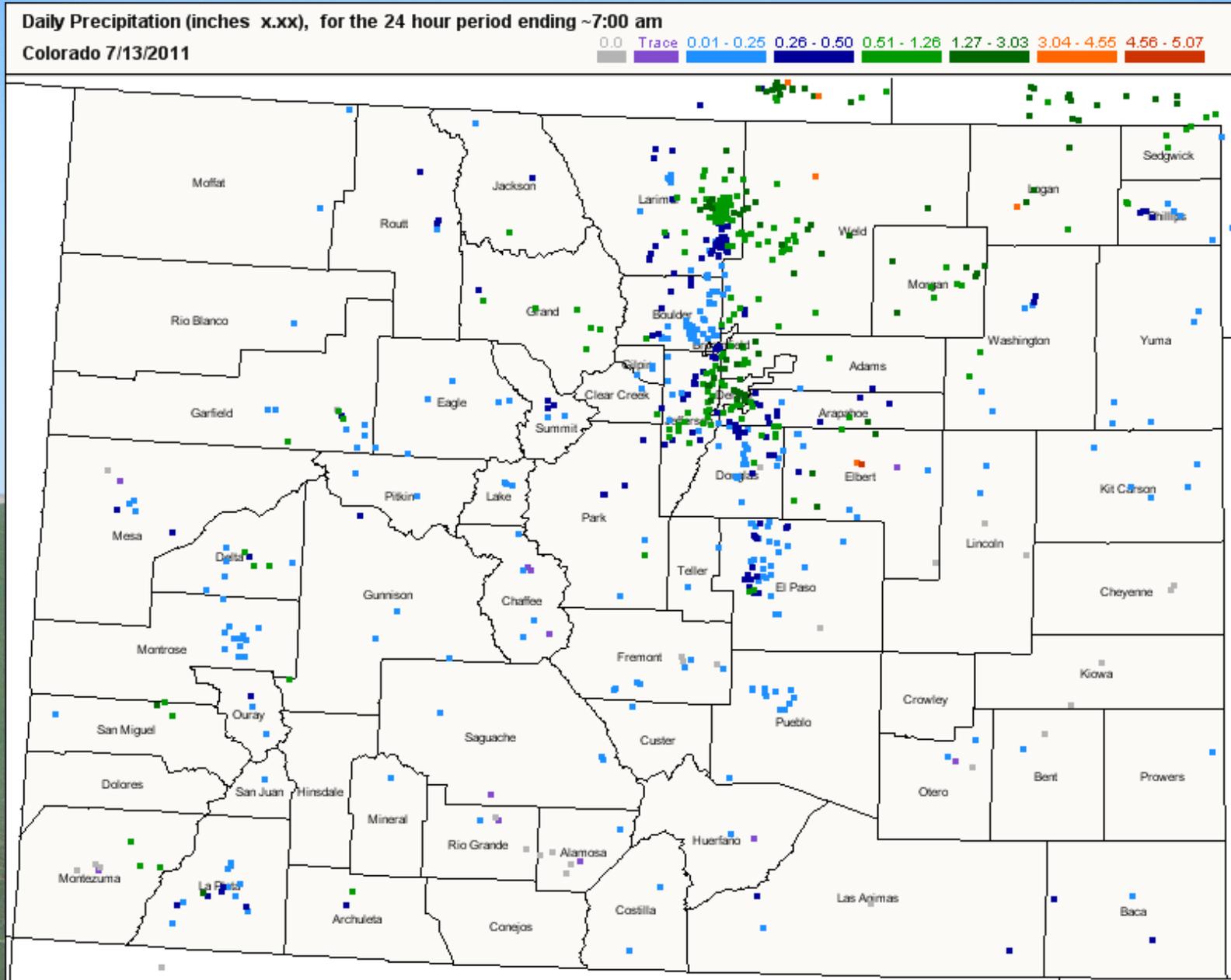
Colorado Precipitation as Percentage of Normal June 2011



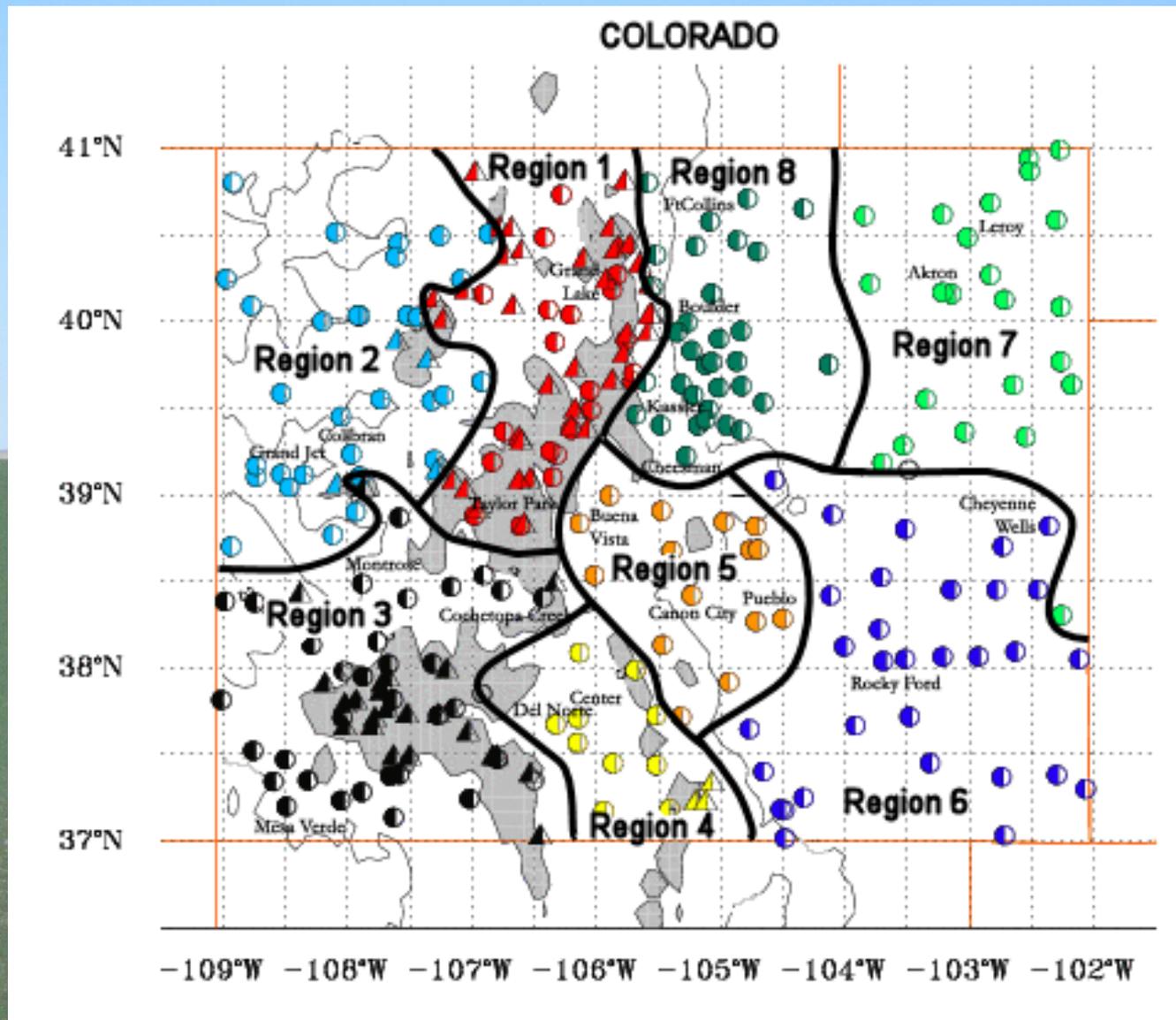
Colorado Precipitation (in) 1 - 11 July 2011



13 July 11 CoCoRaHS

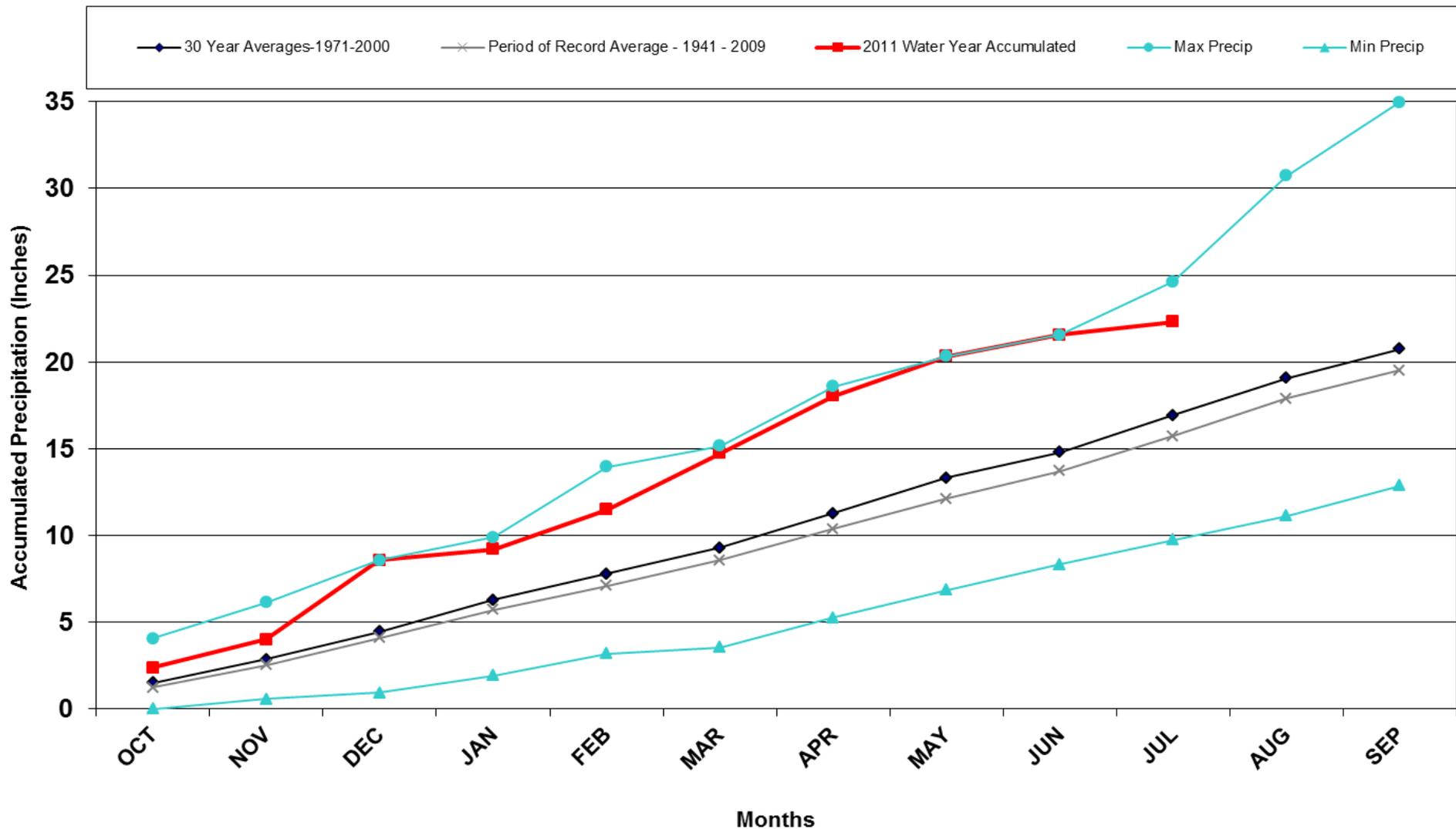


Climate divisions defined by Dr. Klaus Wolter of NOAA's Climate Diagnostic Center in Boulder, CO



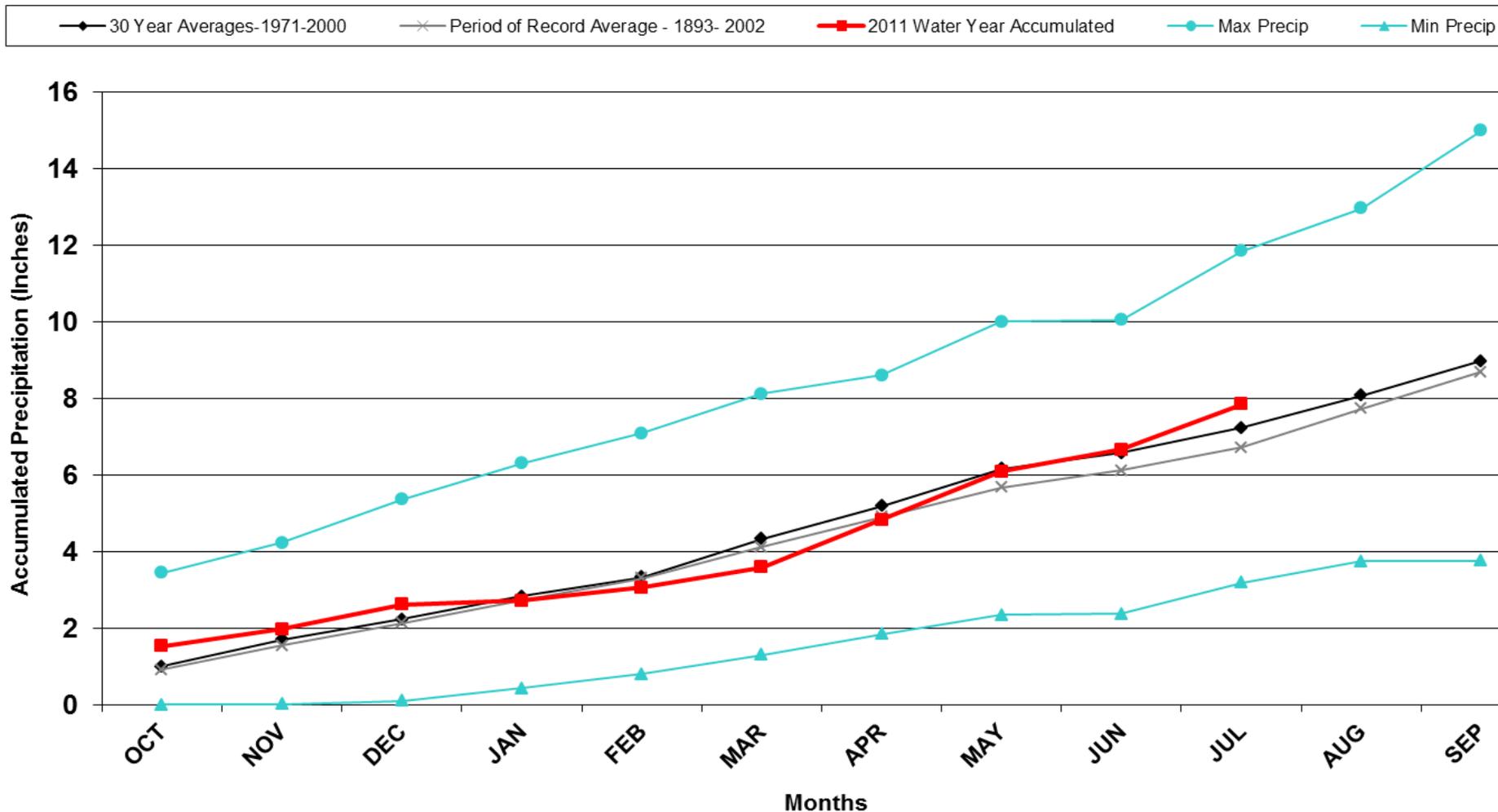
Division 1 – Grand Lake 1NW

Grand Lake 1 NW 2011 Water Year



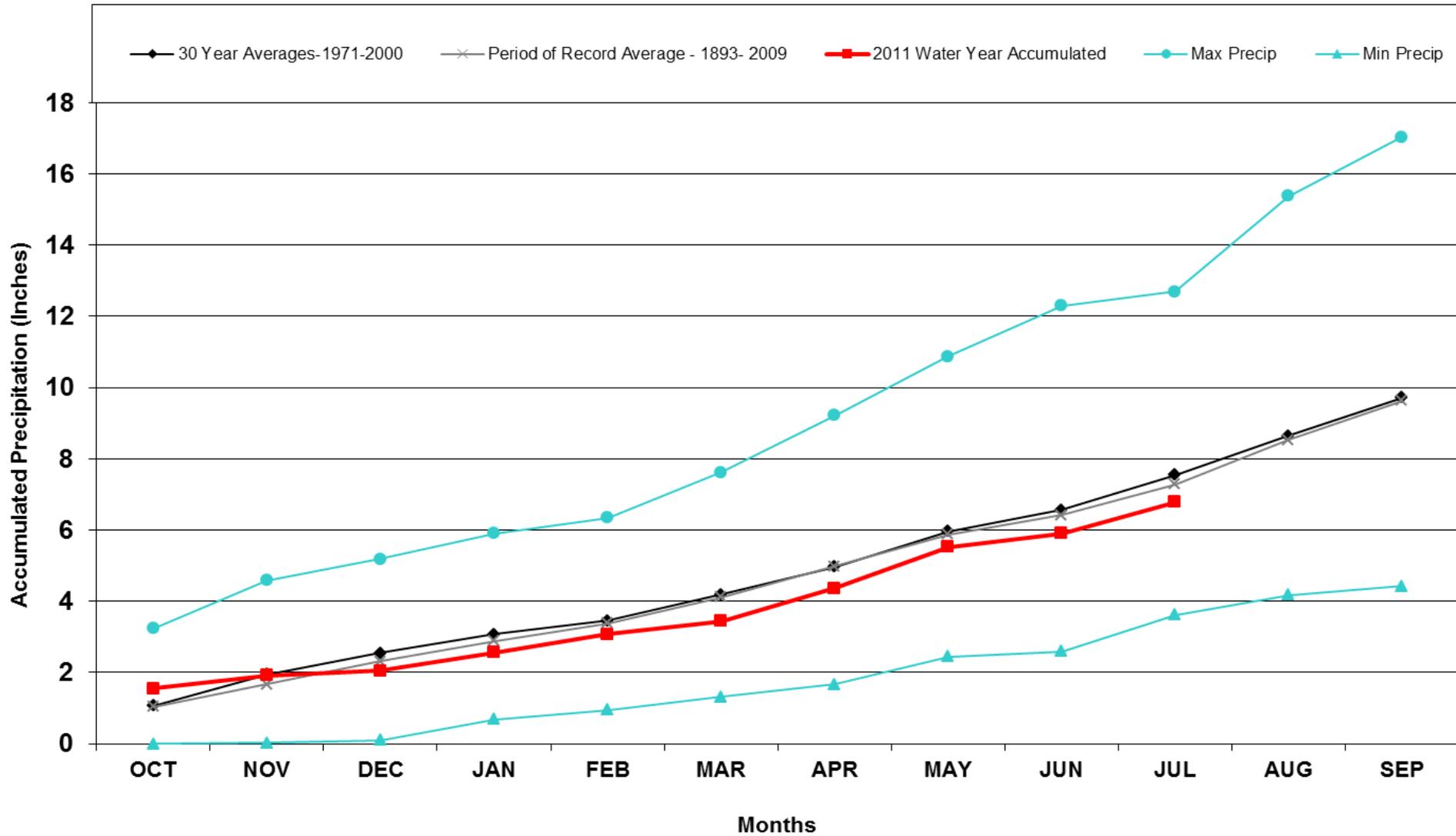
Division 2 – Grand Junction

Grand Junction WSFO 2011 Water Year



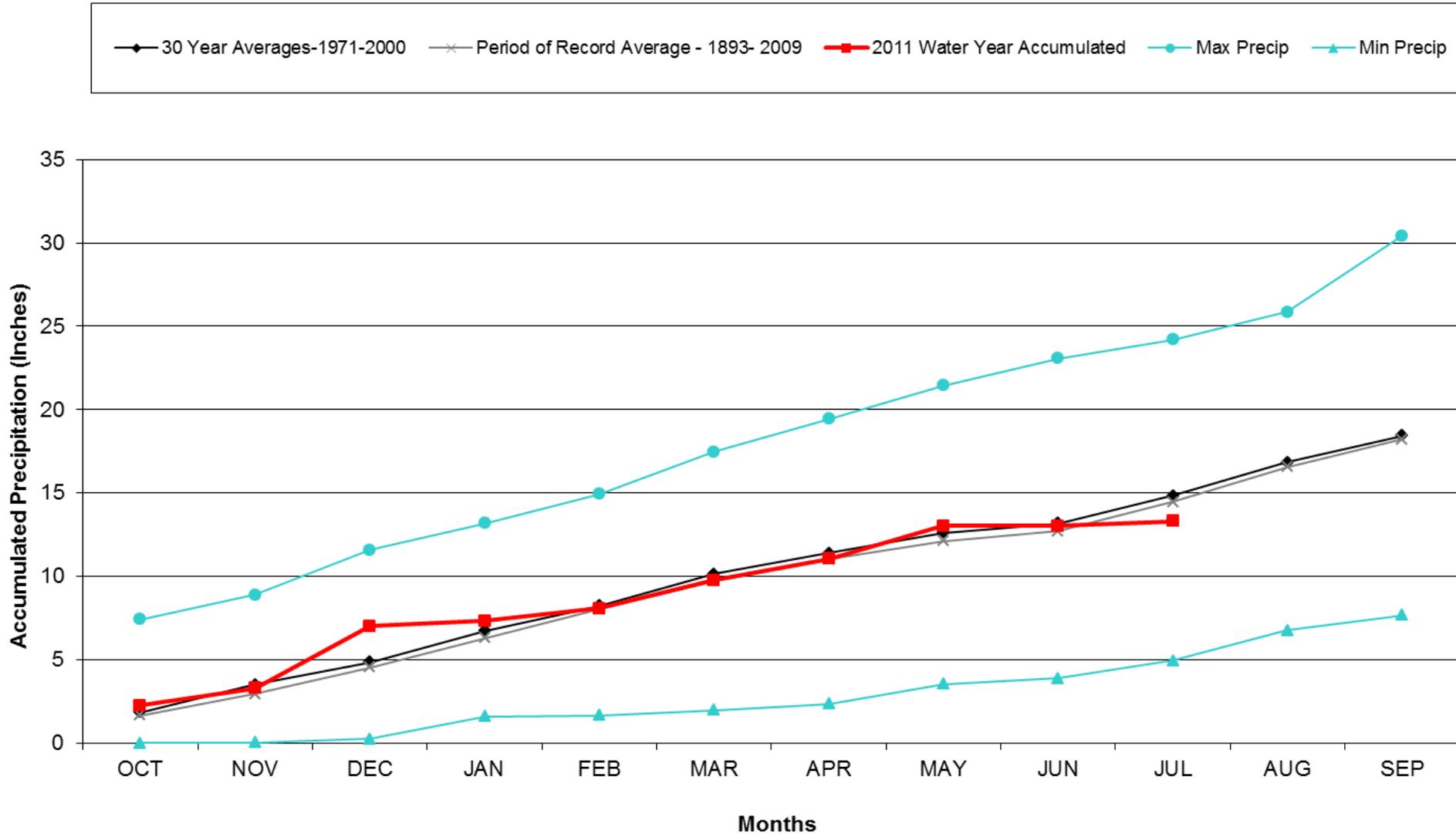
Division 3 – Montrose

Montrose #2 2011 Water Year



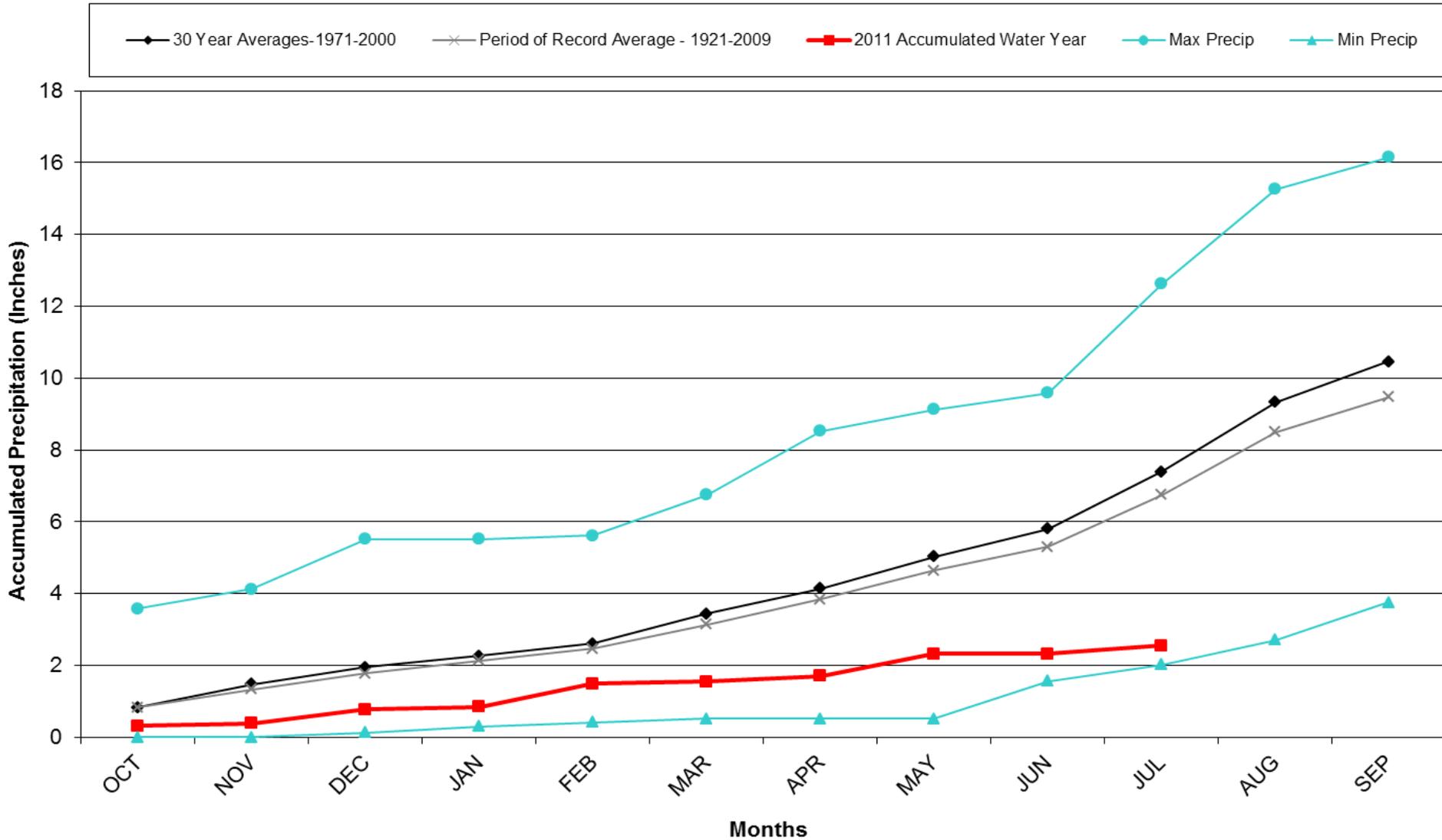
Division 3 – Mesa Verde NP

Mesa Verde NP 2011 Water Year



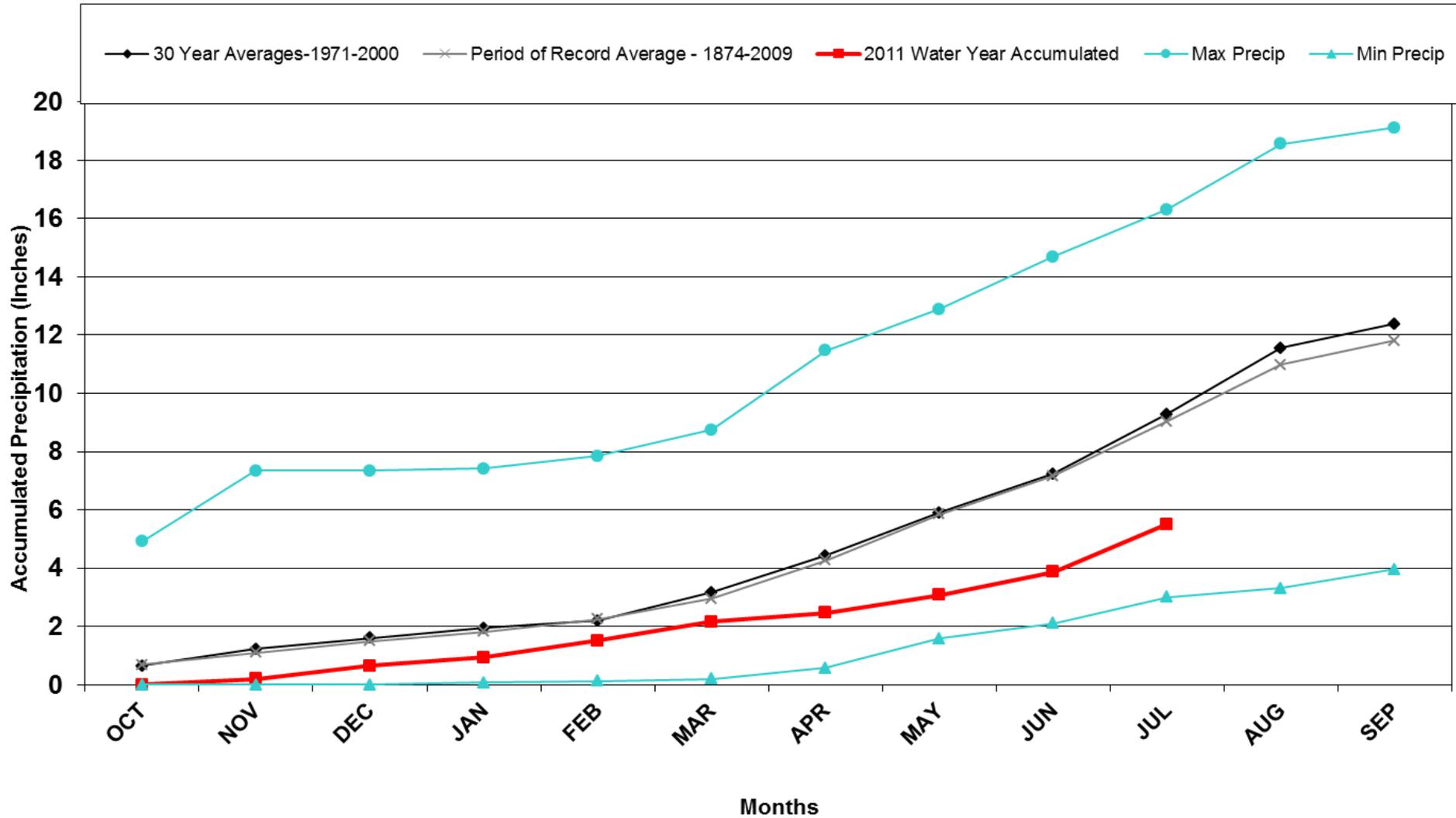
Division 4 – Del Norte

Del Norte 2011 Water Year



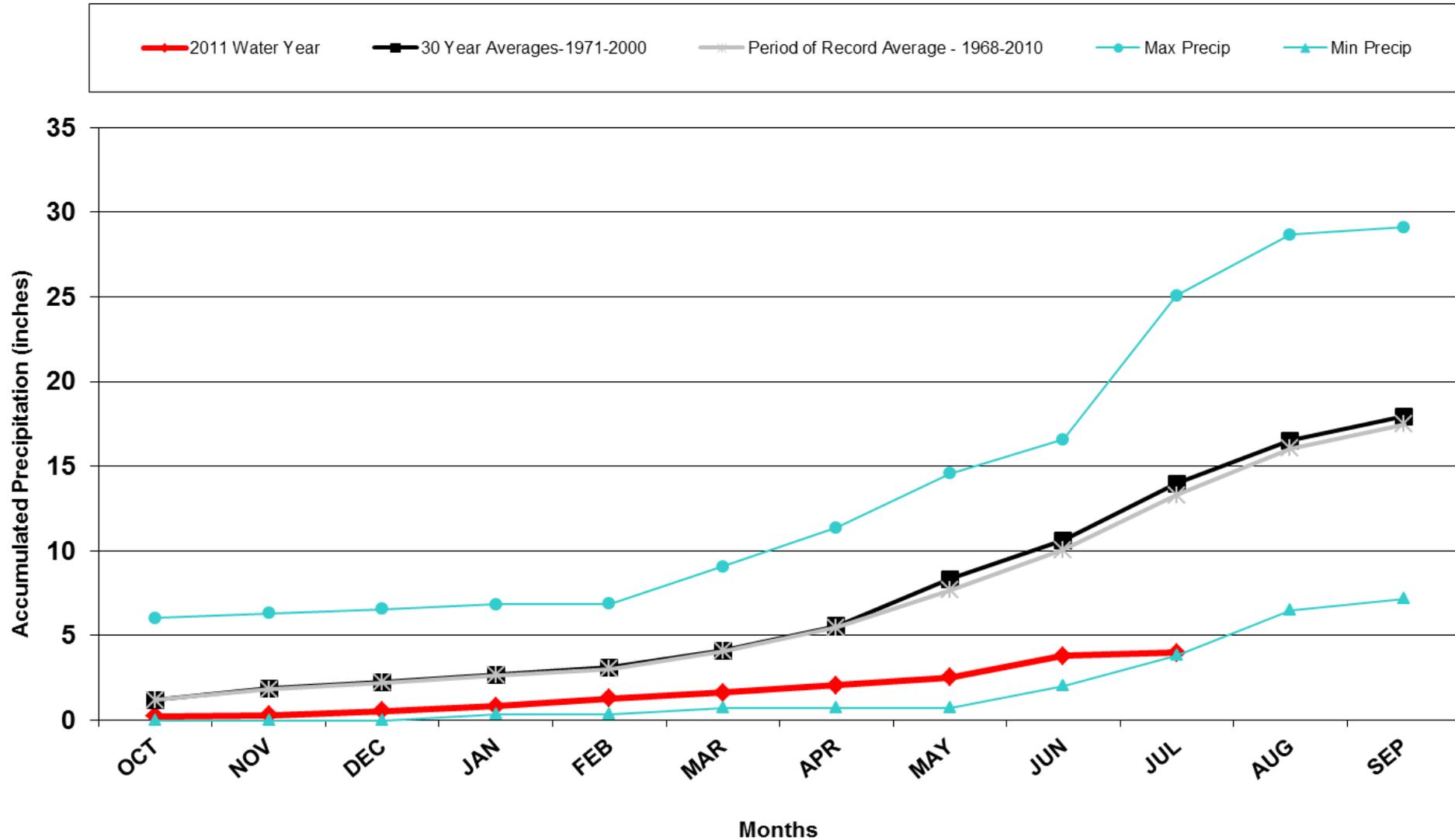
Division 5 – Pueblo

Pueblo WSO 2011 Water Year



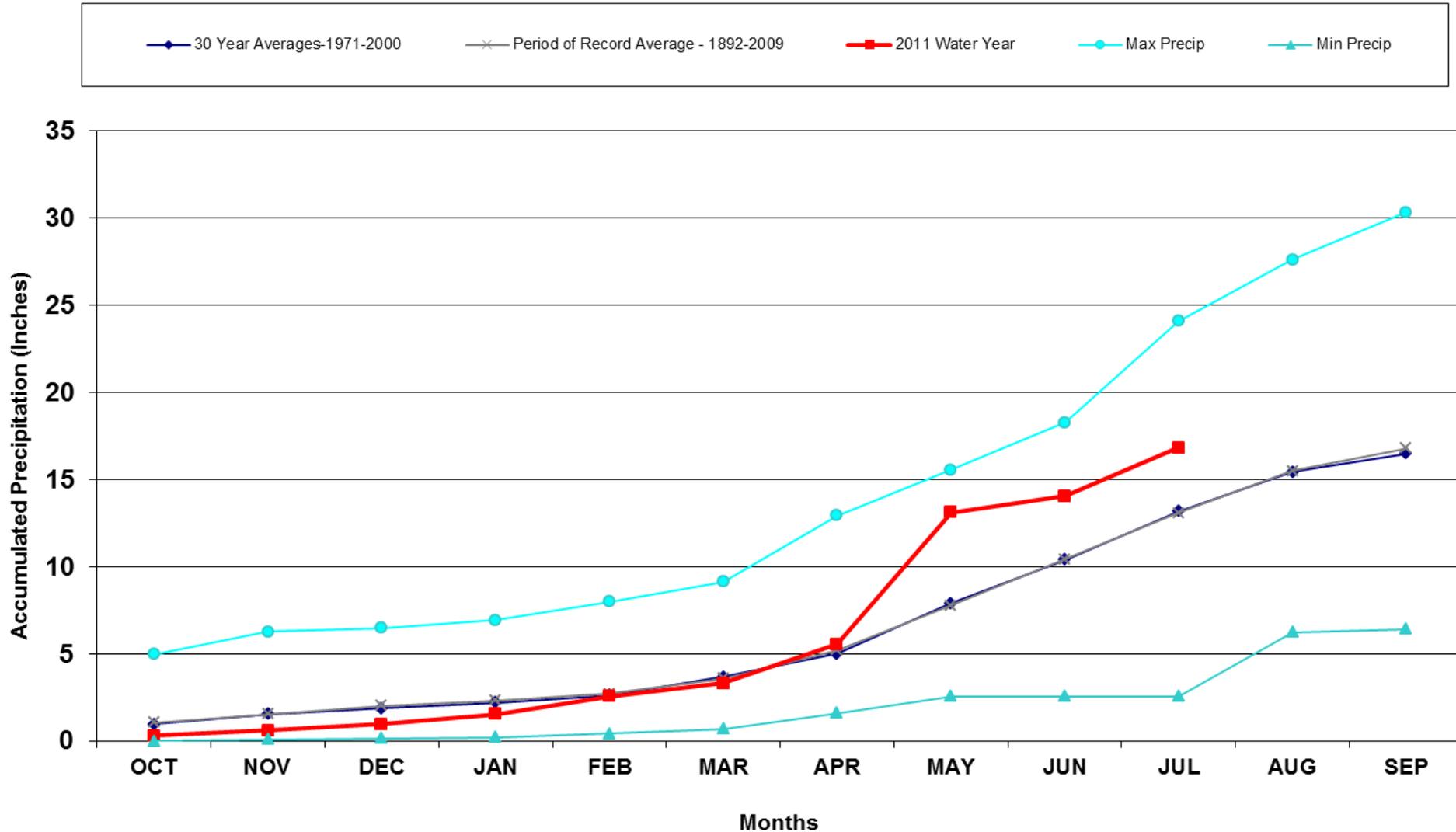
Division 6 - Walsh

Walsh 2011 Water Year



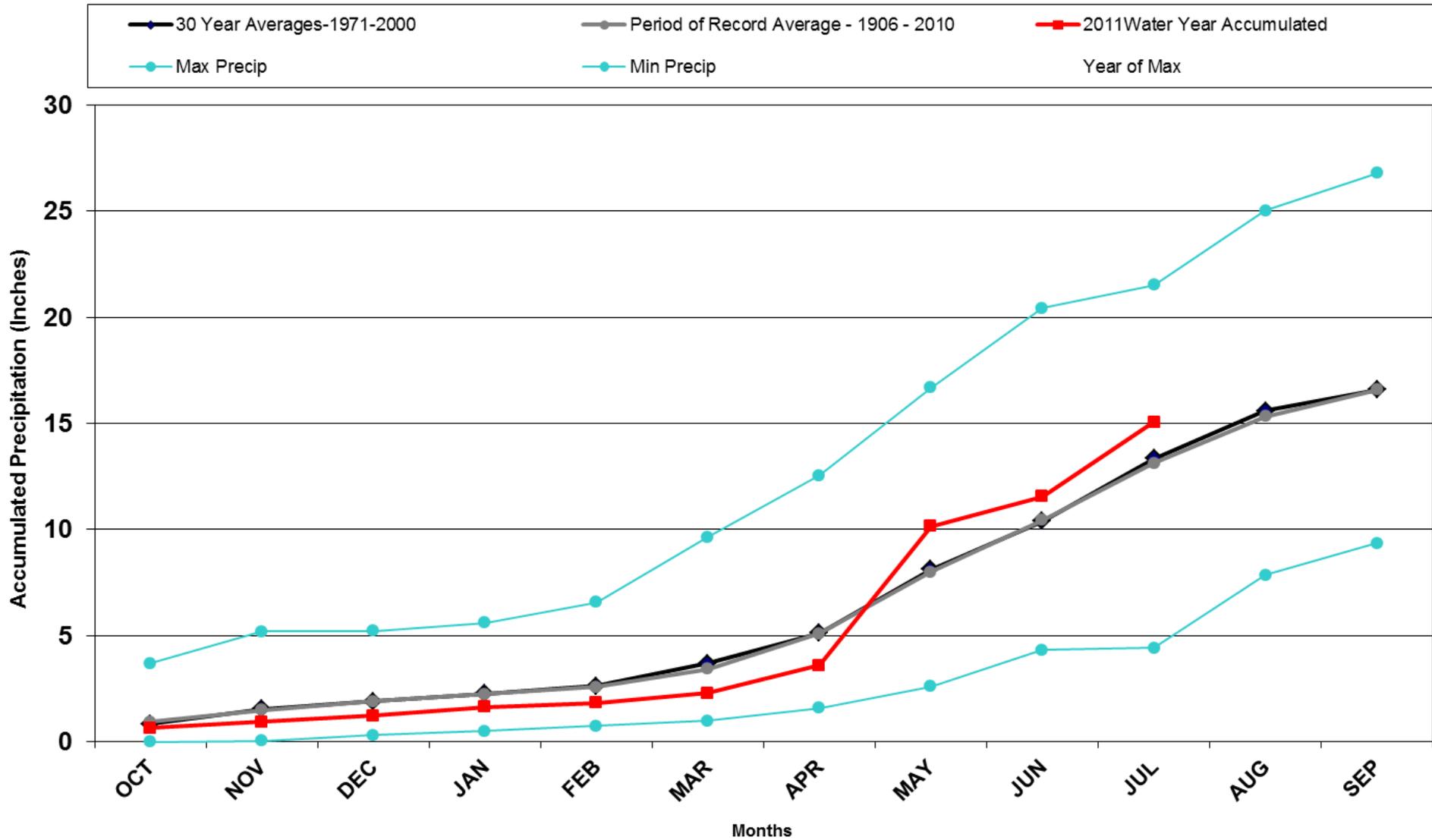
Division 6 - Burlington

Burlington 2011 Water Year



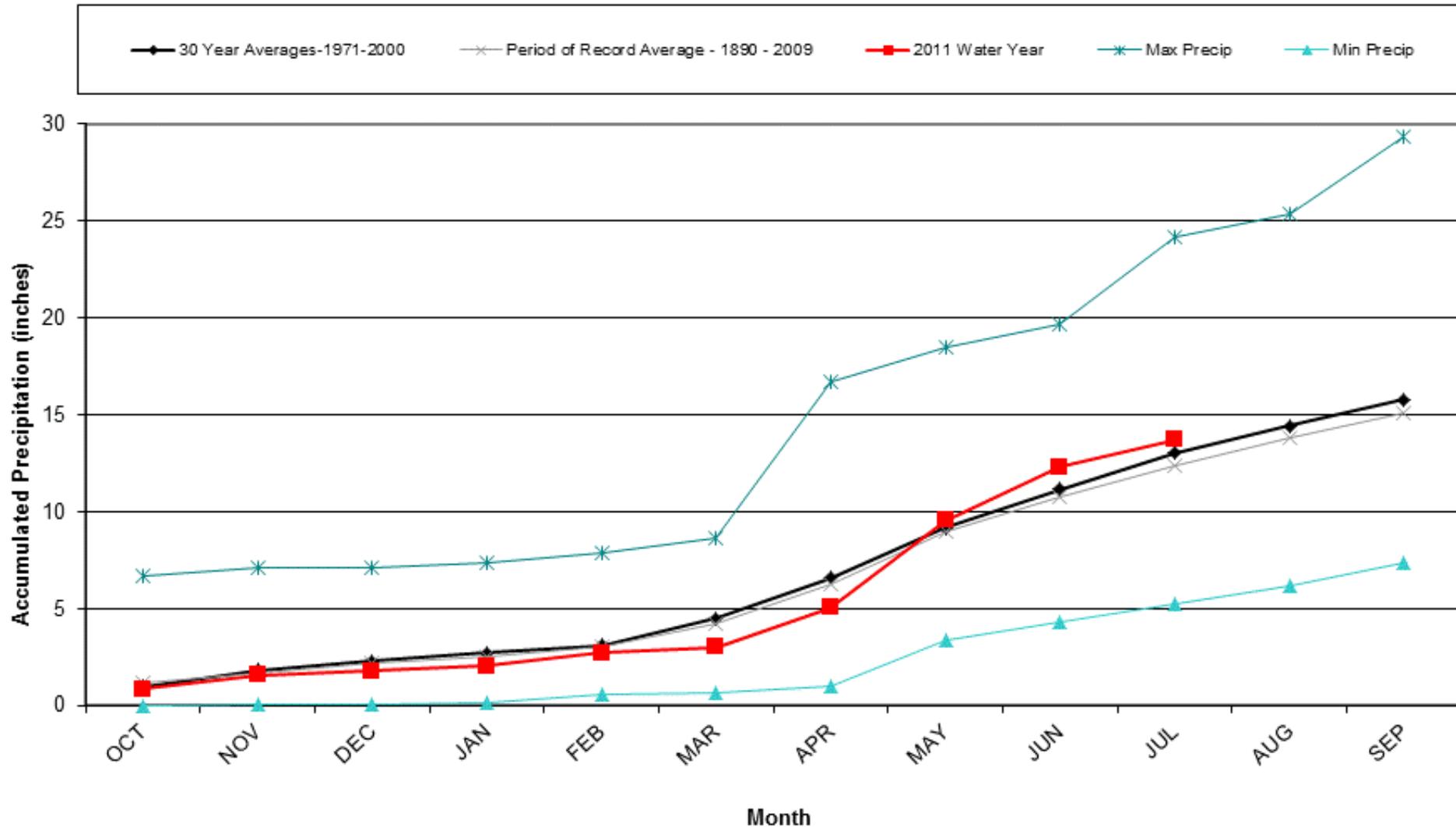
Division 7 – Akron

Akron 4E 2011 Water Year



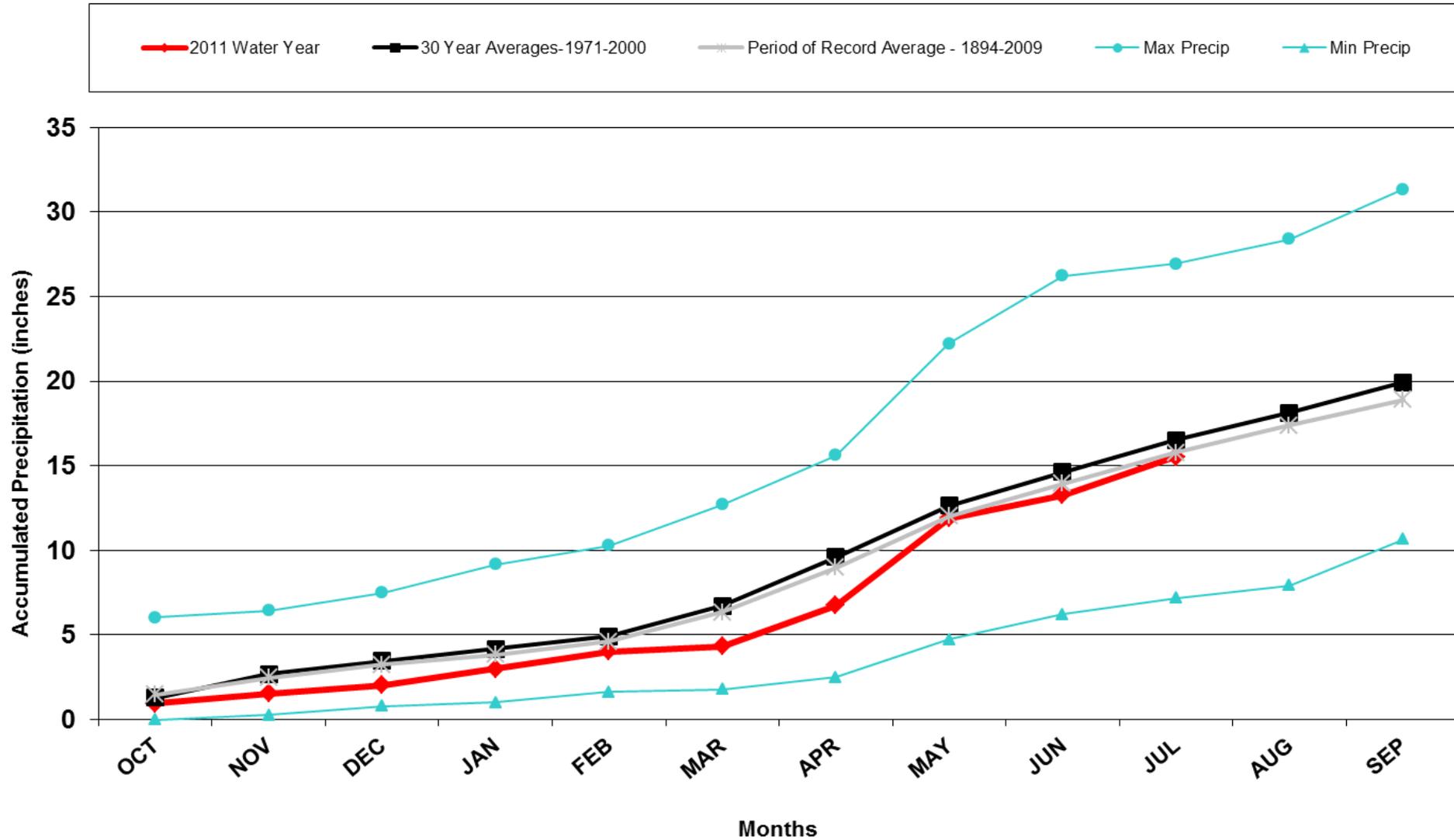
Division 8 – Fort Collins

Fort Collins 2011 Water Year



Division 8 - Boulder

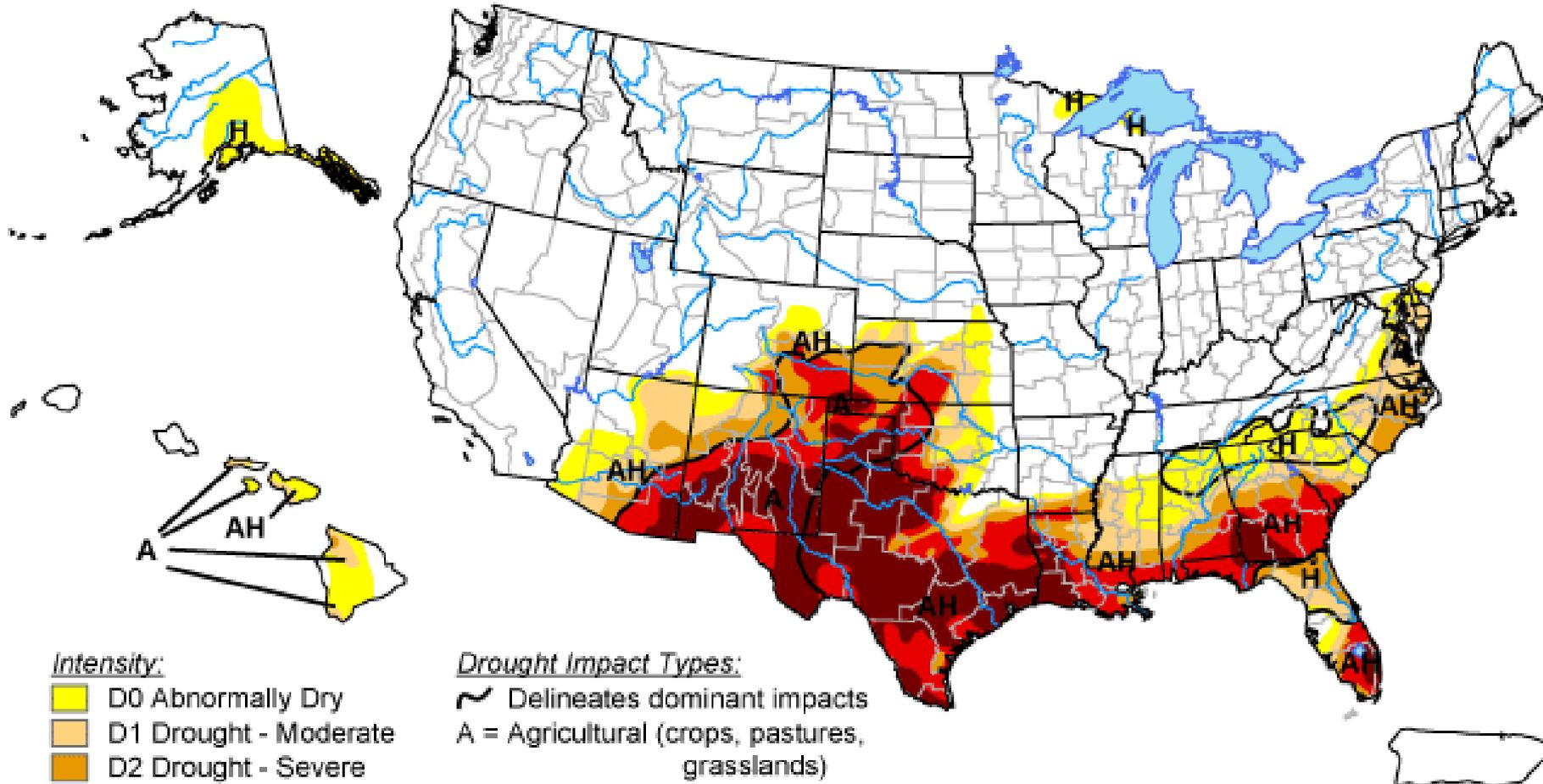
Boulder 2011 Water Year



U.S. Drought Monitor

June 14, 2011

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 16, 2011

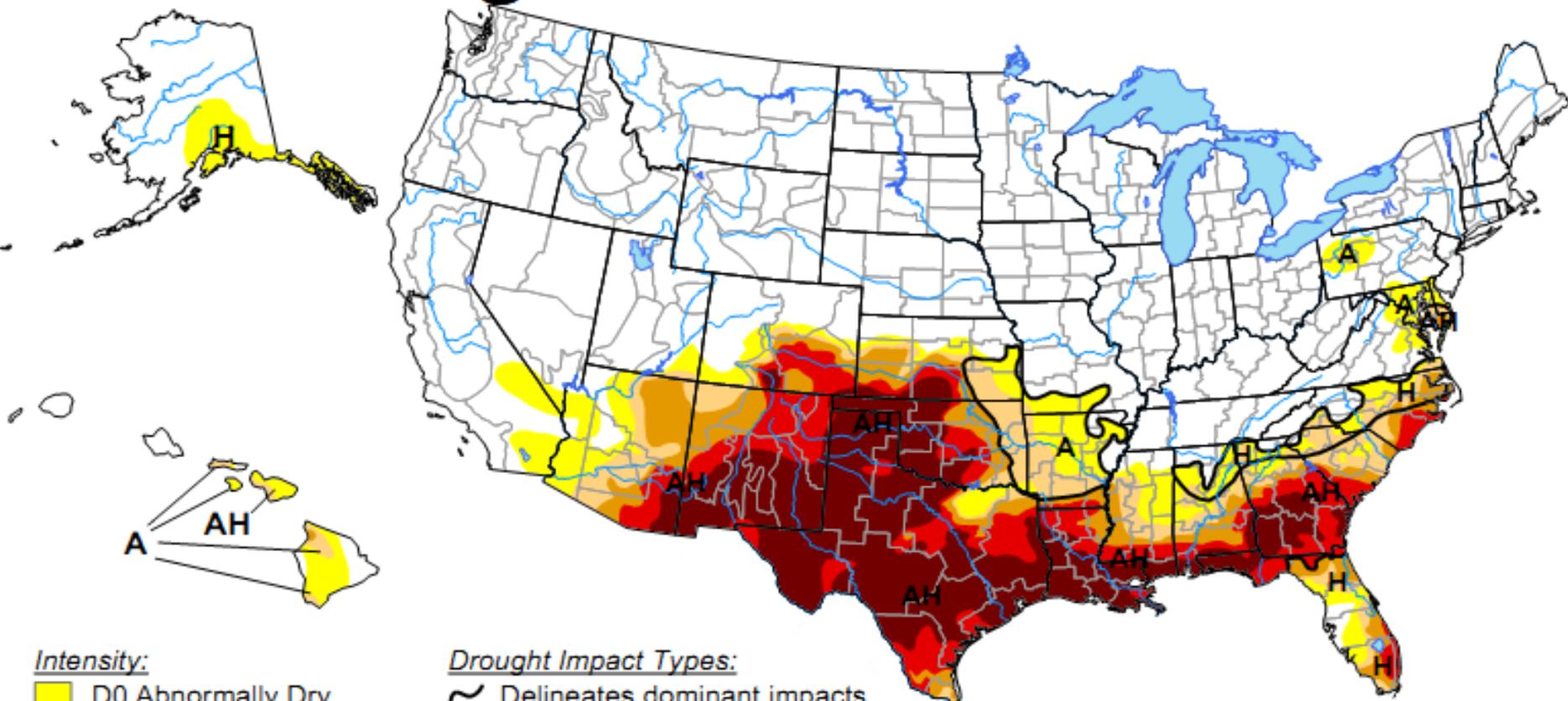
Author: Brian Fuchs, National Drought Mitigation Center

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

U.S. Drought Monitor

July 12, 2011

Valid 8 a.m. EDT



Intensity:

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

Drought Impact Types:

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

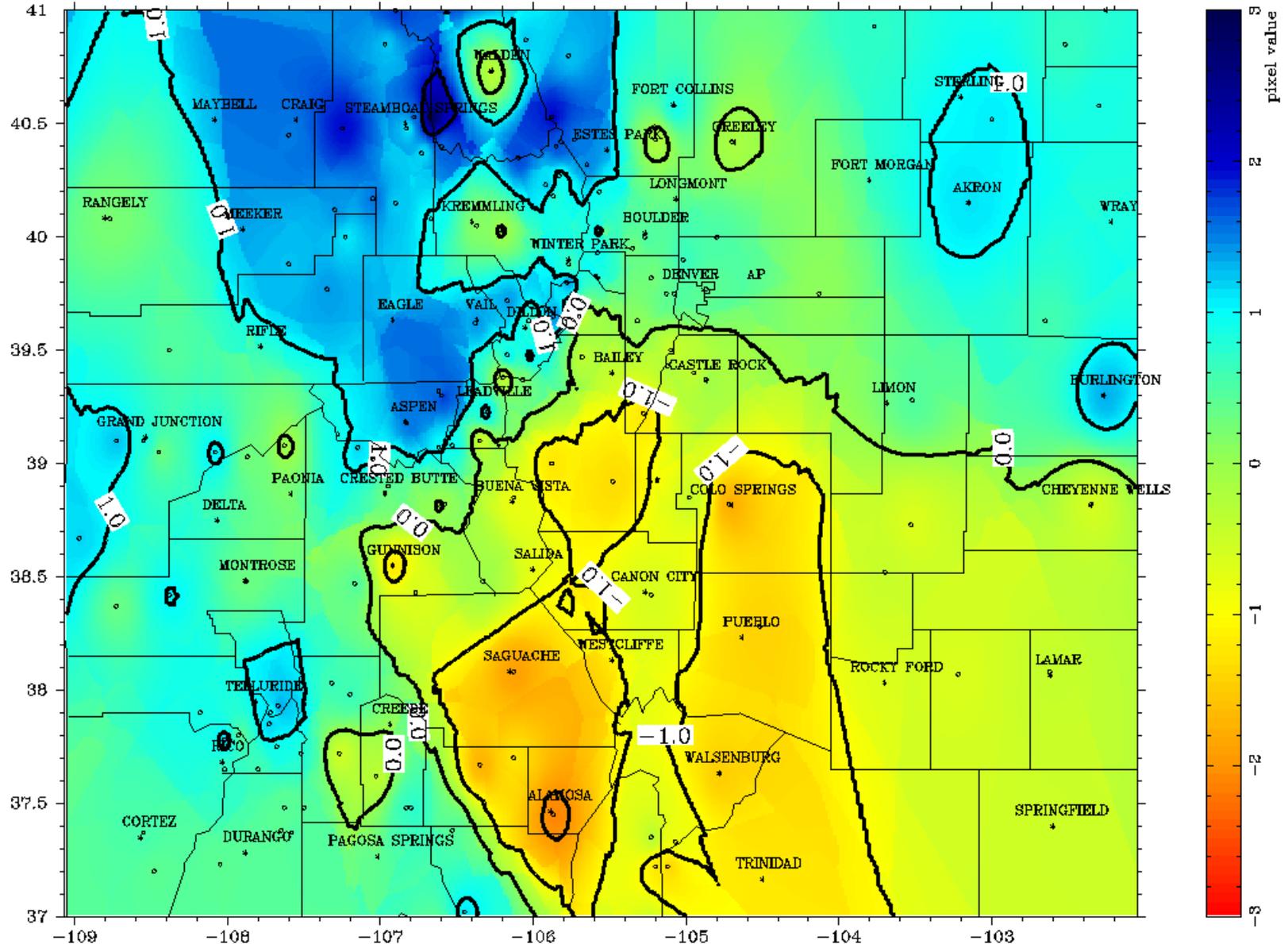


Released Thursday, July 14, 2011
Author: David Miskus, NOAA/NWS/NCEP/CPC

Colorado

6/2011 3 mon. SPI

JULESBURG



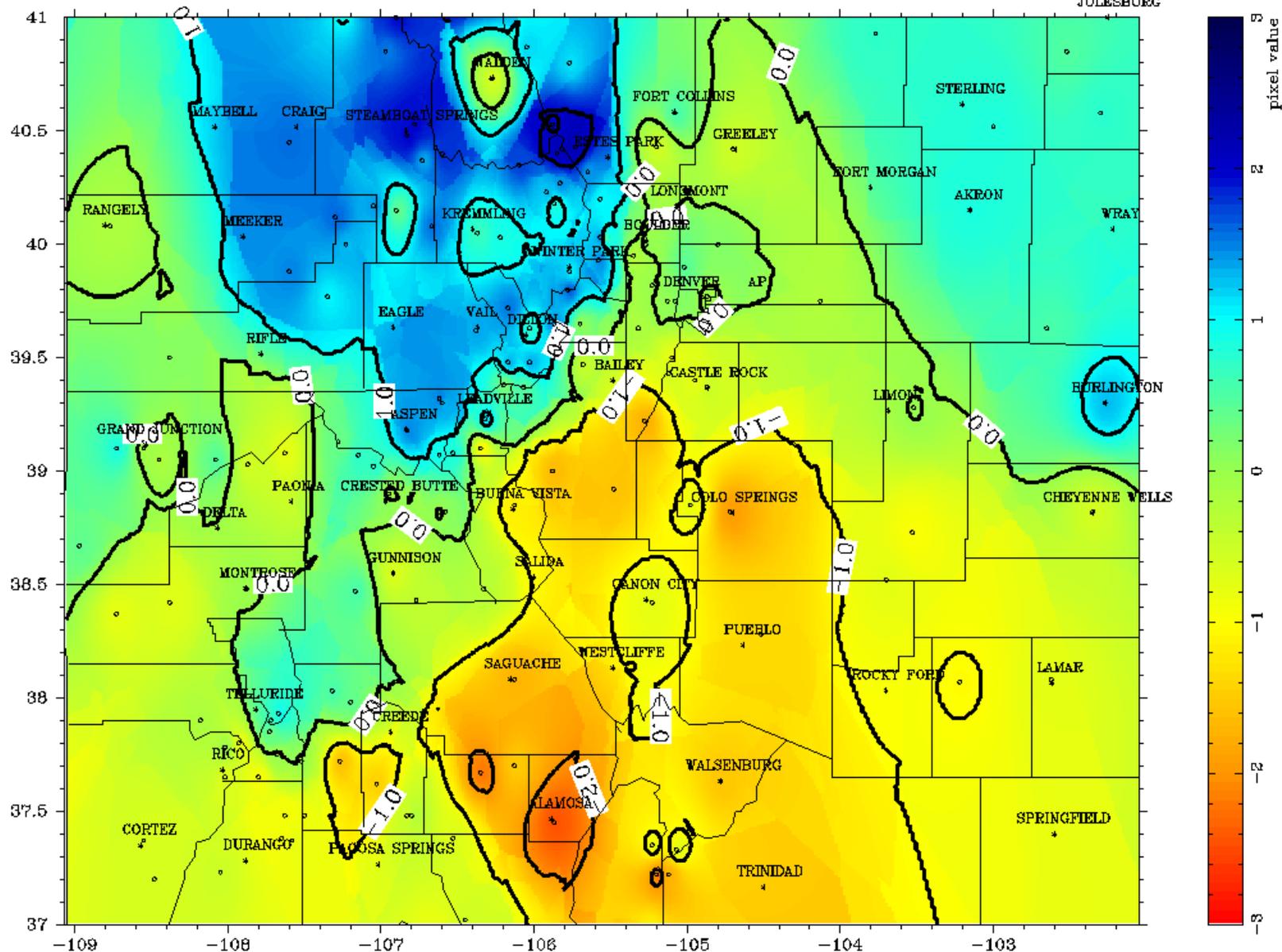
100 % < 2.0	13 % < -1.0
84 % < 1.0	0 % < -2.0
38 % < 0.0	0 % < -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO

Colorado

6/2011 6 mon. SPI

JULESBURG



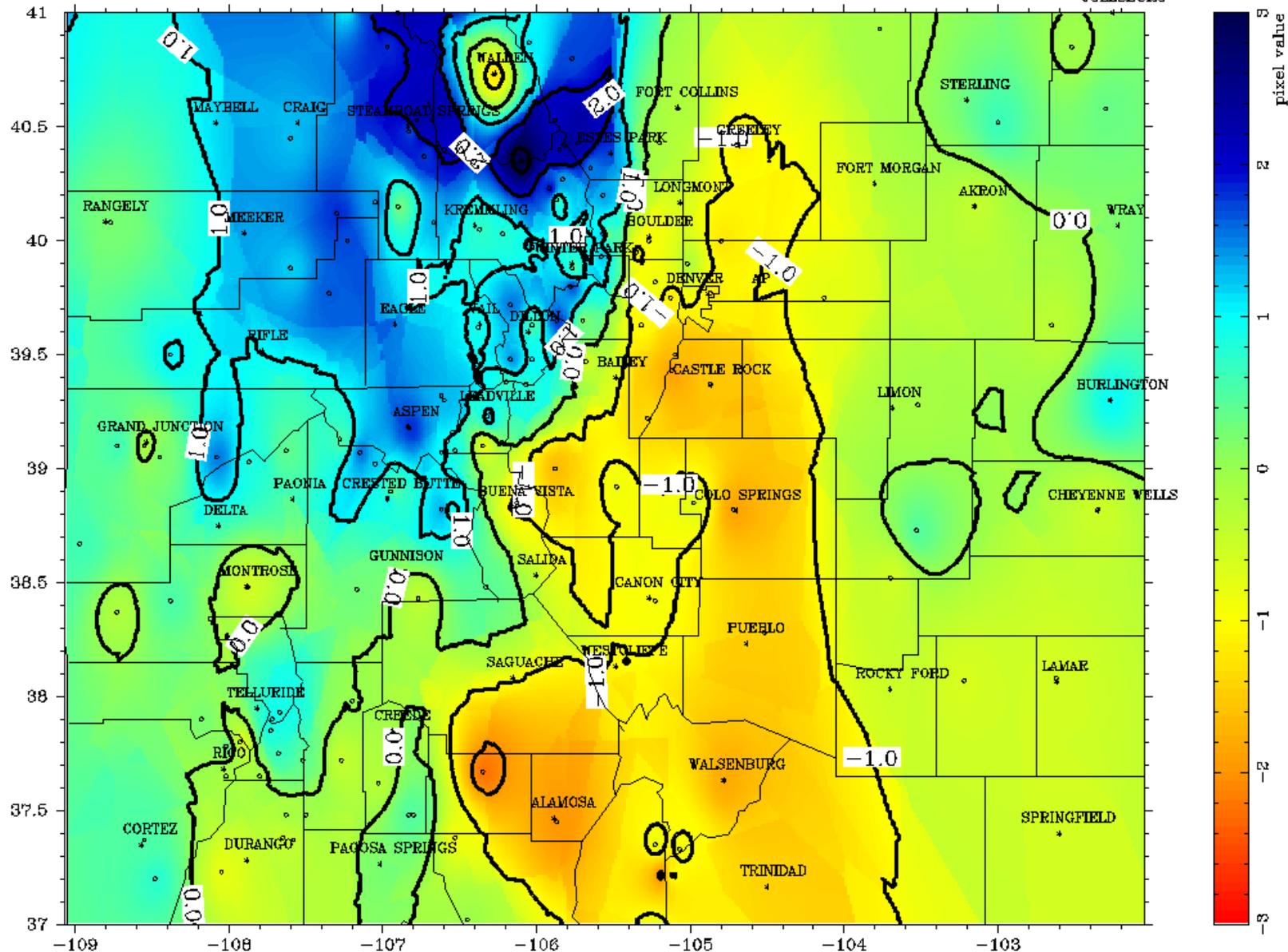
100 % < 2.0	19 % < -1.0
87 % < 1.0	1 % < -2.0
58 % < 0.0	0 % < -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO

Colorado

6/2011 12 mon. SPI

JULESBURG

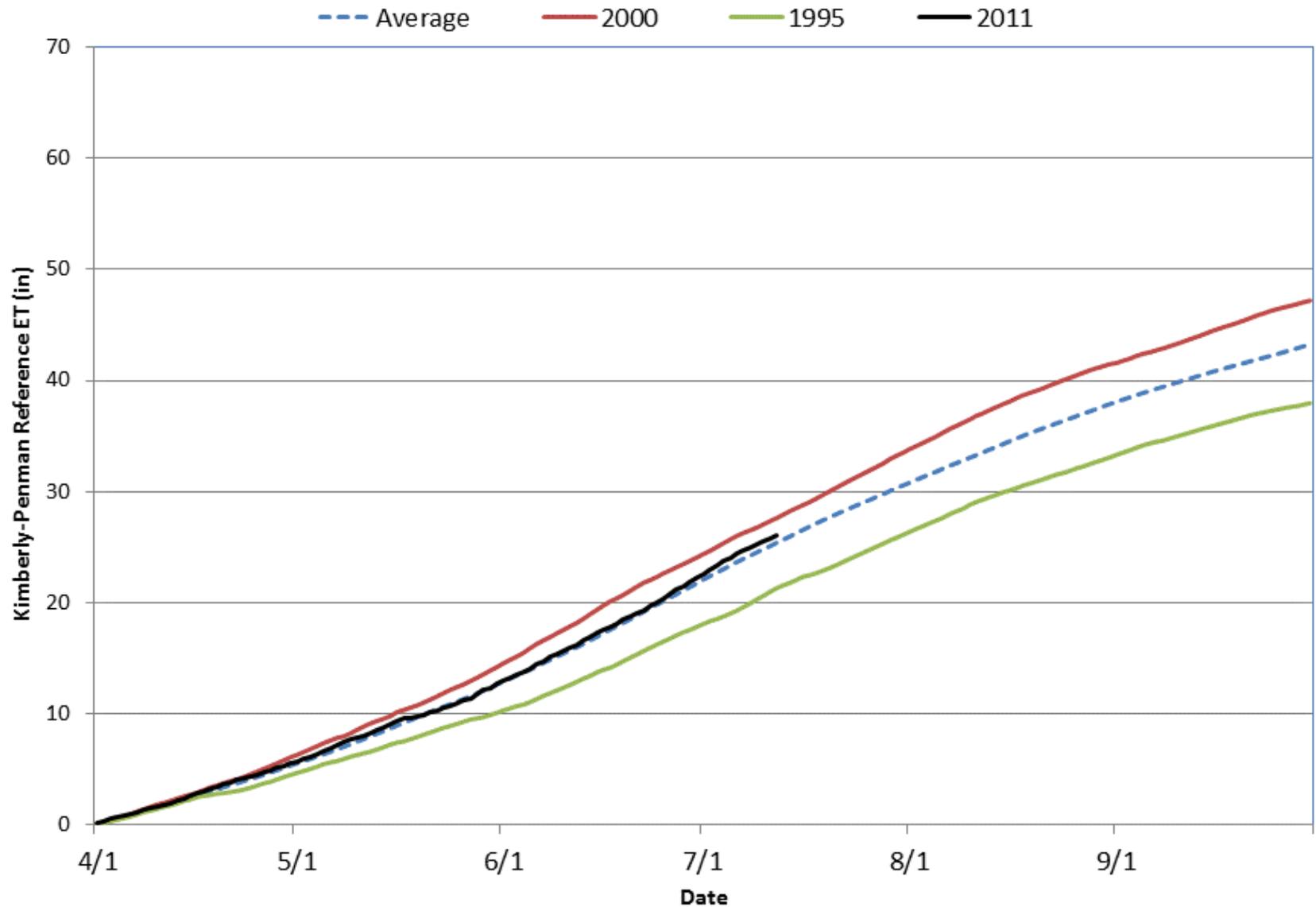


98 % < 2.0	19 % < -1.0
85 % < 1.0	0 % < -2.0
55 % < 0.0	0 % < -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO

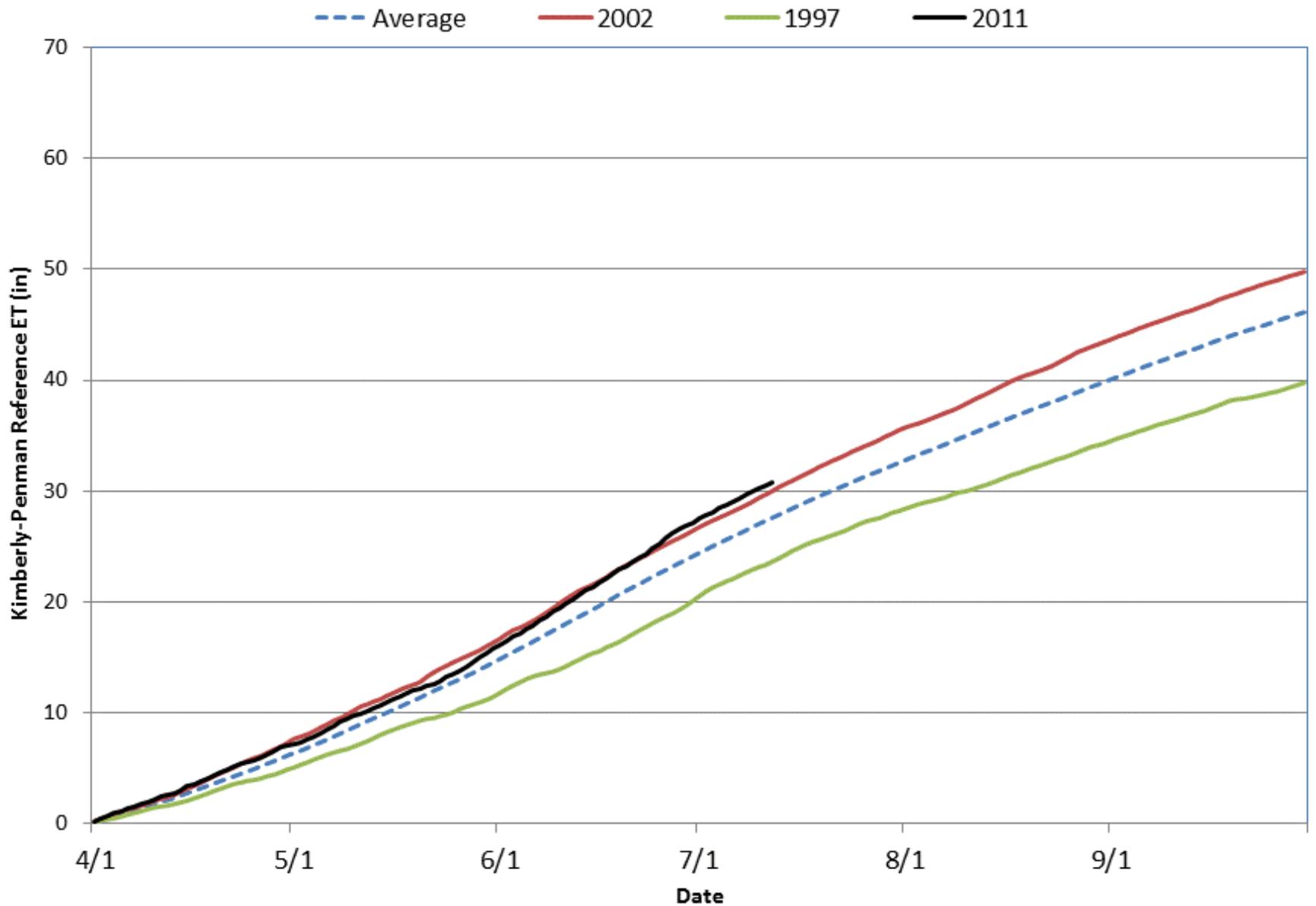
Cortez Reference ET

CTZ01 Kimberly-Penman Reference ET (1992 - 2011)



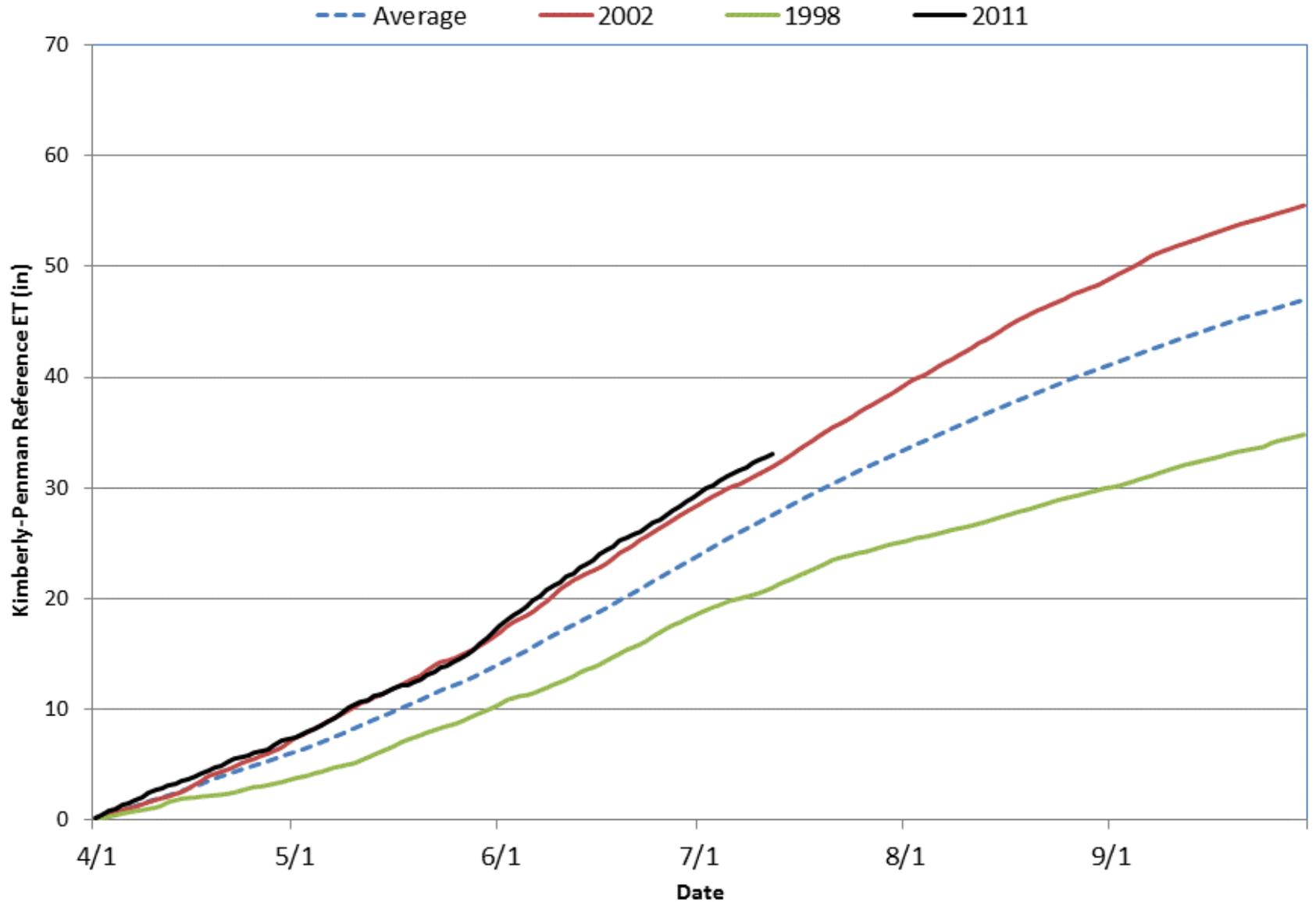
Center Reference ET

CTR01 Kimberly-Penman Reference ET (1994 - 2011)



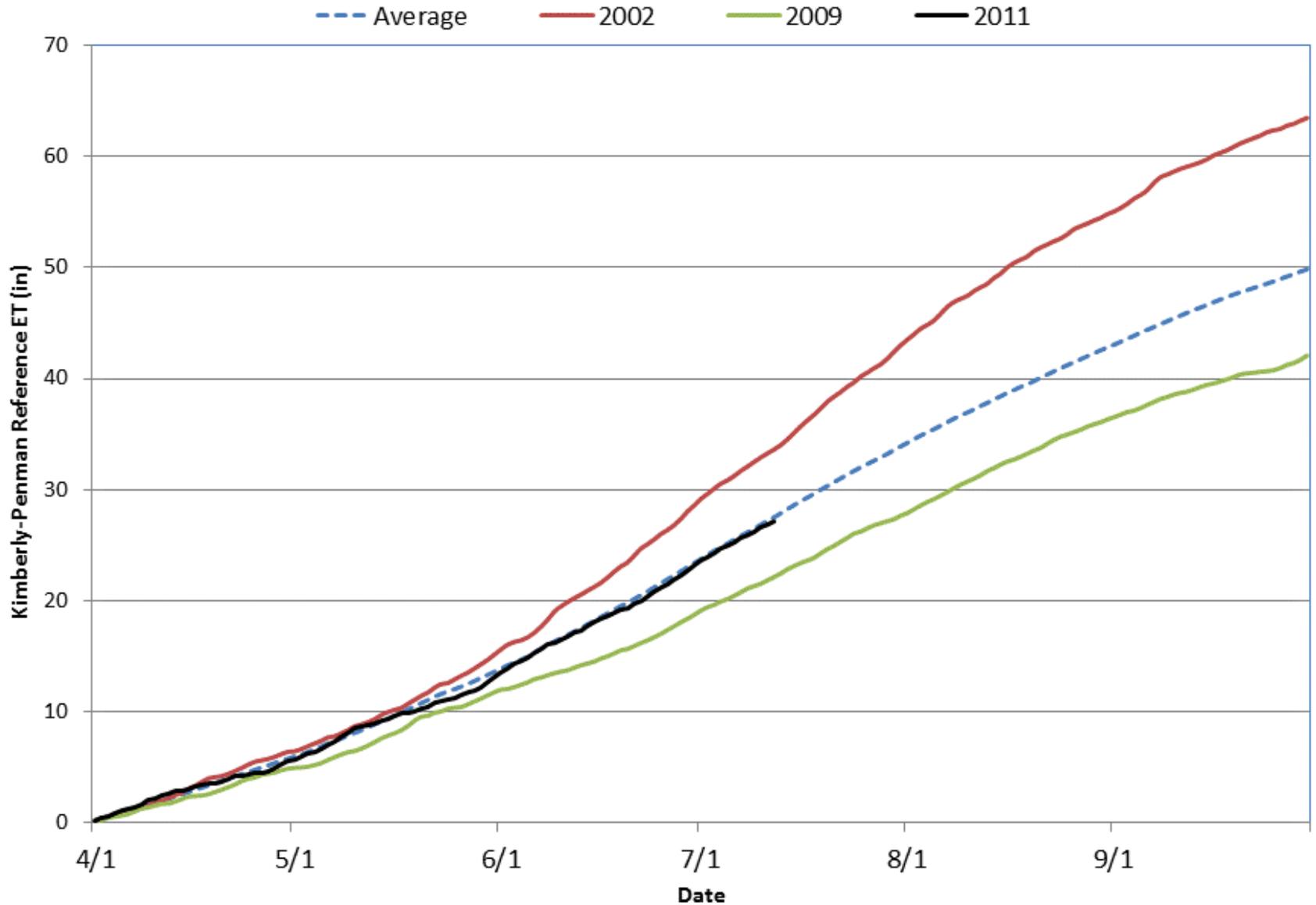
Avondale Reference ET

AVN01 Kimberly-Penman Reference ET (1993 - 2011)



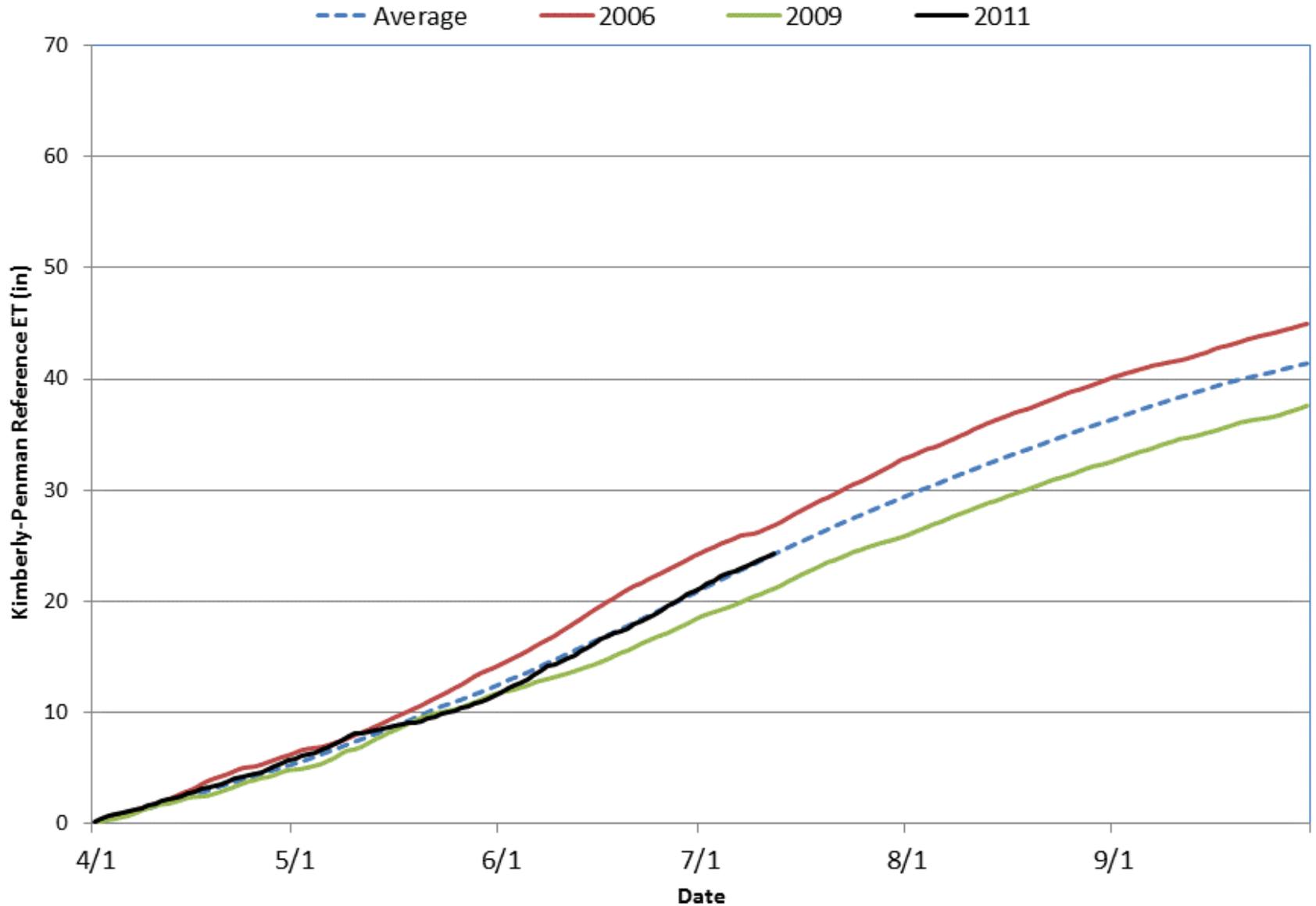
Idalia Reference ET

IDL01 Kimberly-Penman Reference ET (1992 - 2011)



Lucerne Reference ET

LCN01 Kimberly-Penman Reference ET (1992 - 2011)



Colorado Climate Center



Data and Power Point Presentations available for downloading

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