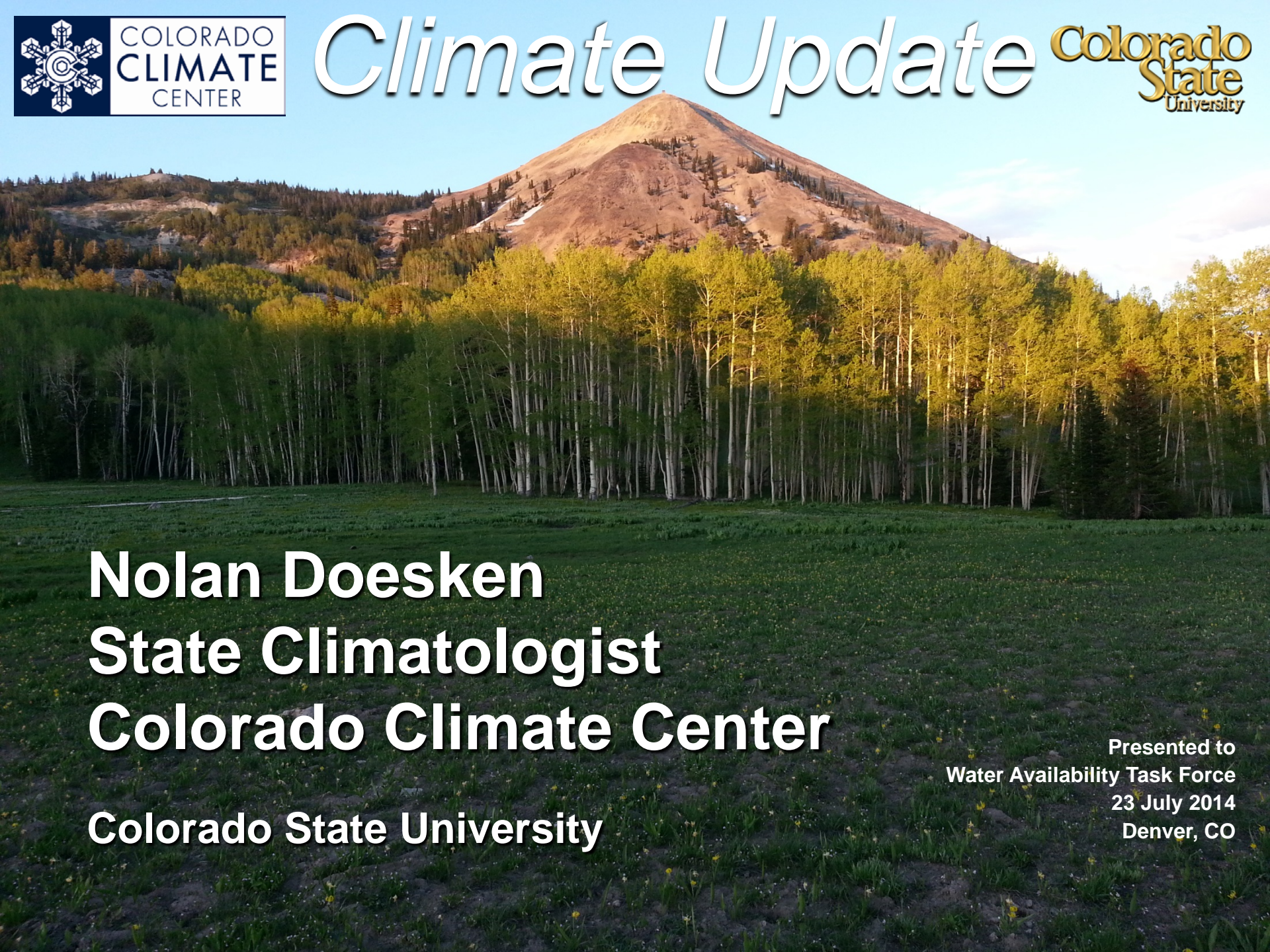




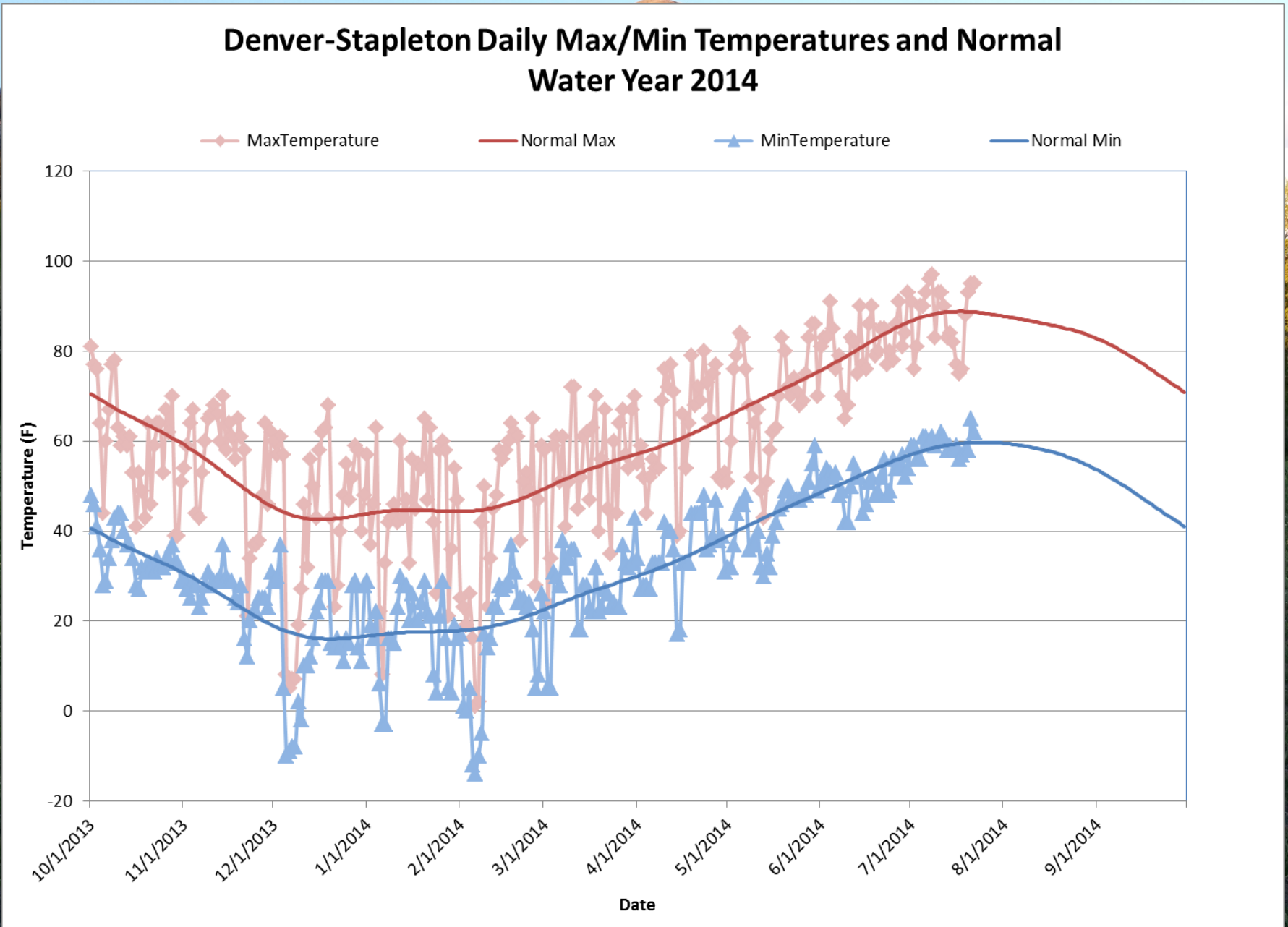
Climate Update



Nolan Doesken
State Climatologist
Colorado Climate Center
Colorado State University

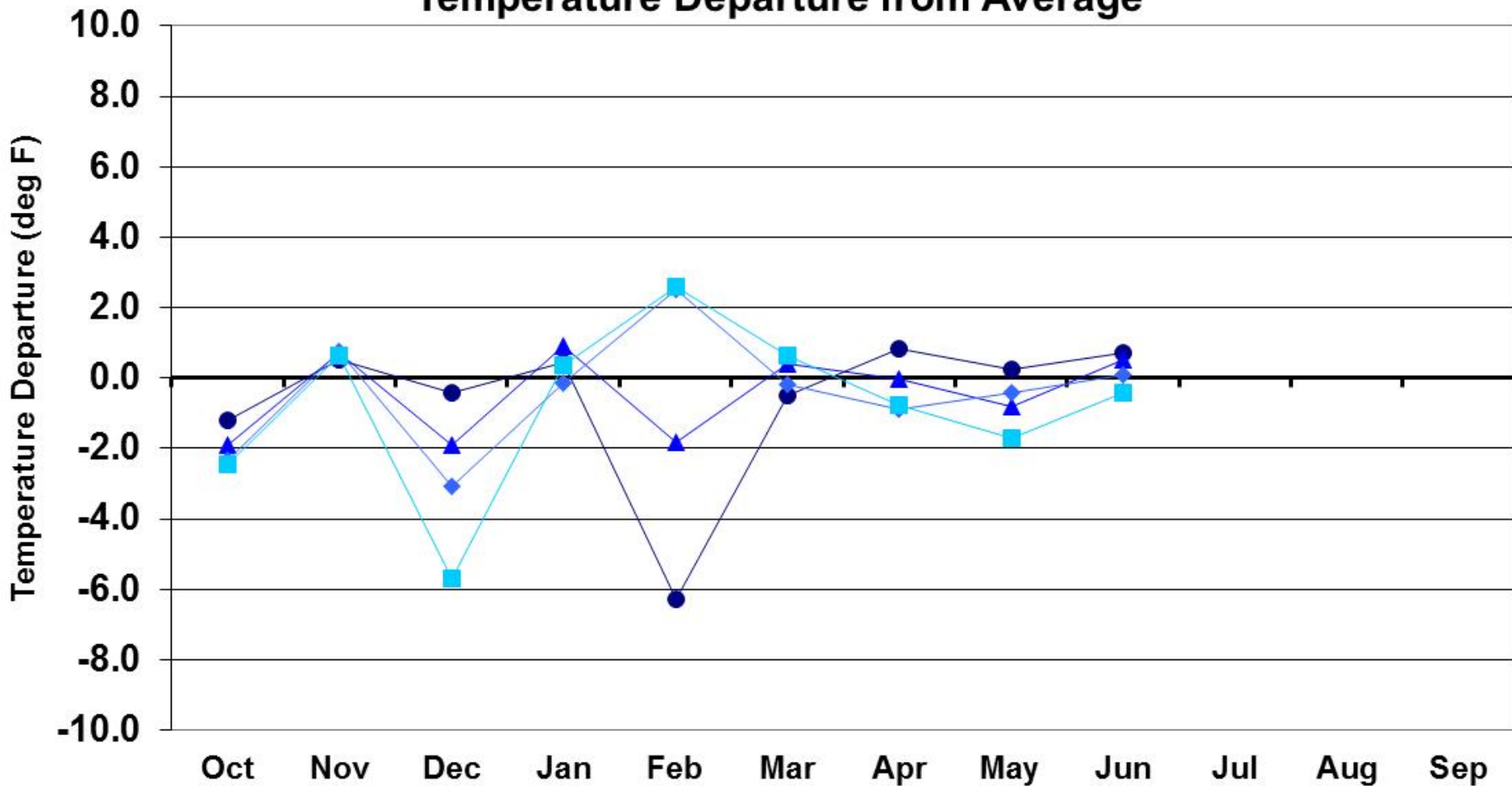
Presented to
Water Availability Task Force
23 July 2014
Denver, CO

Temperatures First – fairly “normal”



Water Year 2014 Temperature Departures

Water Year 2014
Temperature Departure from Average



● Eastern Plains

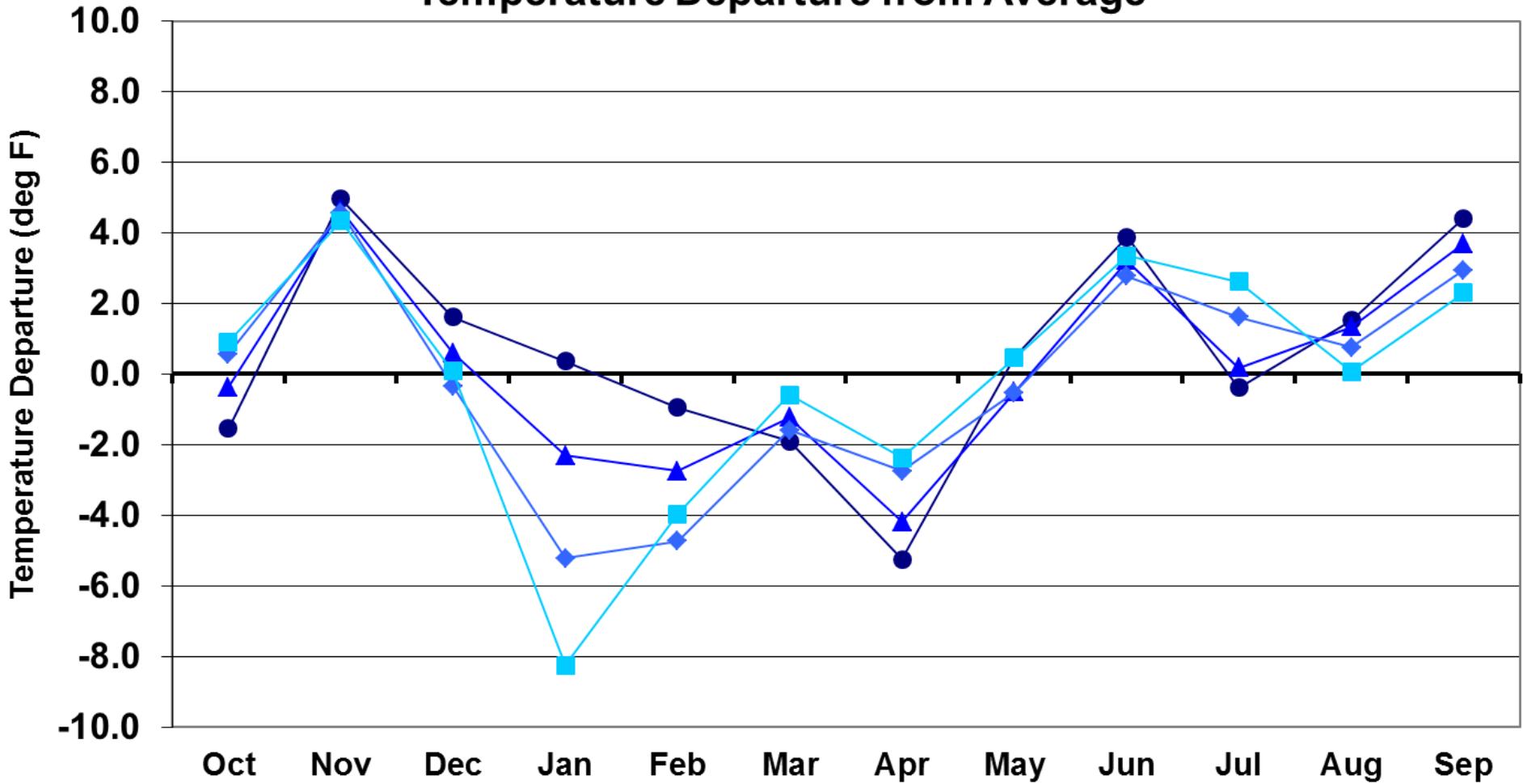
▲ Foothills

◆ Mountains

■ Western Valleys

Water Year 2013 Temperature Departures

Water Year 2013
Temperature Departure from Average



● Eastern Plains

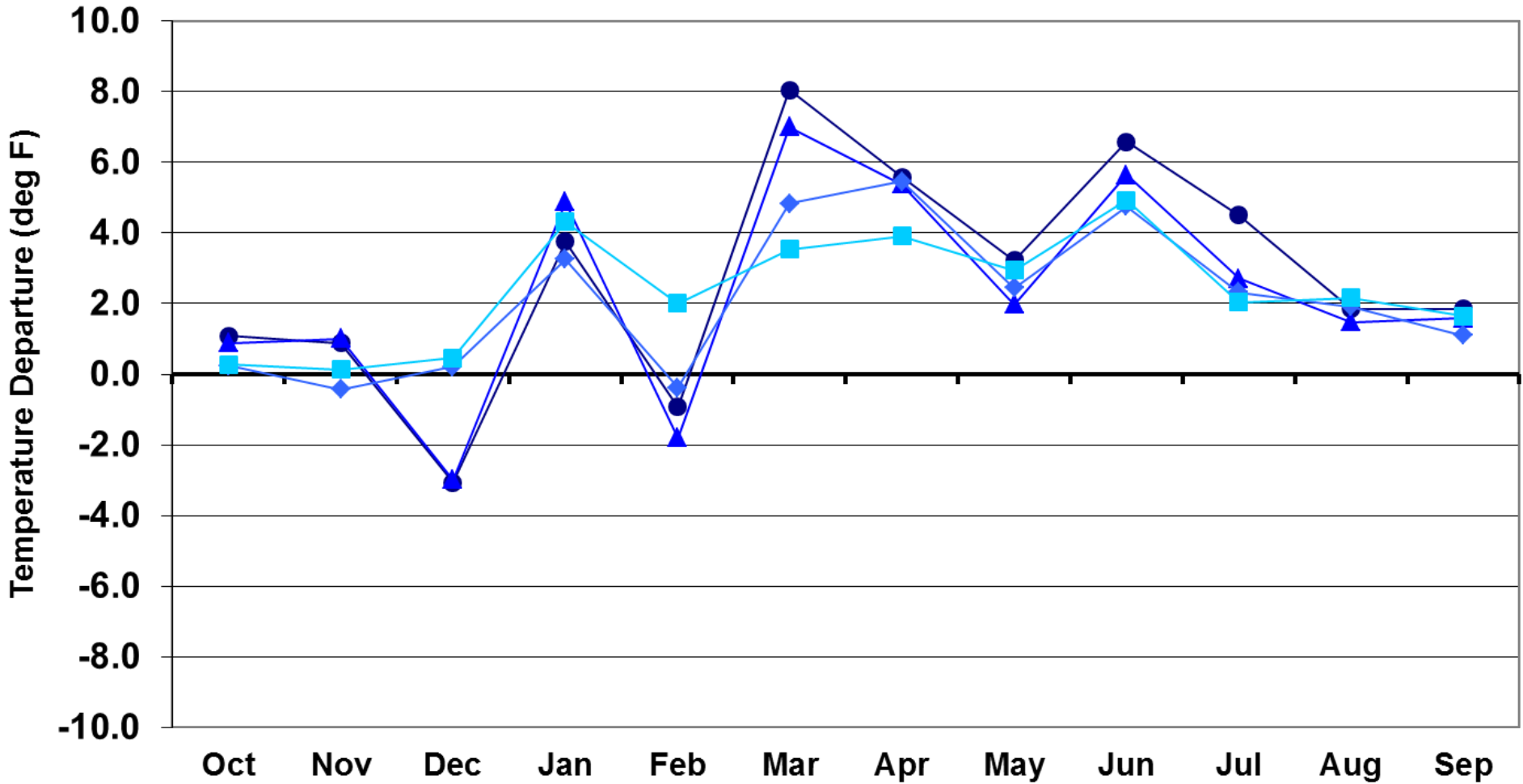
▲ Foothills

◆ Mountains

■ Western Valleys

Water Year 2012 Temperature Departures

Water Year 2012



● Eastern Plains

▲ Foothills

◆ Mountains

■ Western Valleys

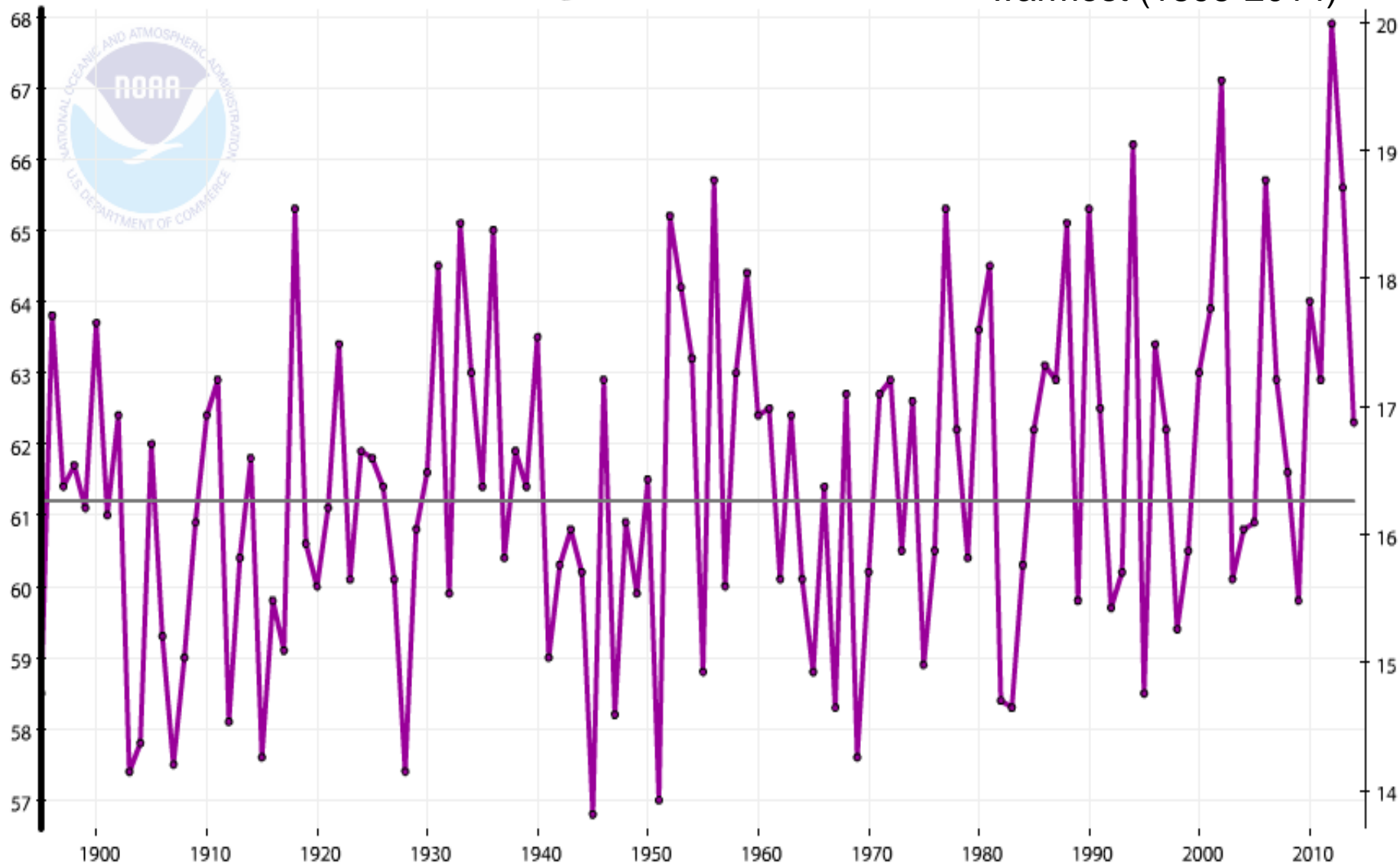
June Average Temperature History for Colorado (NCDC)

Colorado, Average Temperature, June

— 1901-2000
Avg: 61.2°F

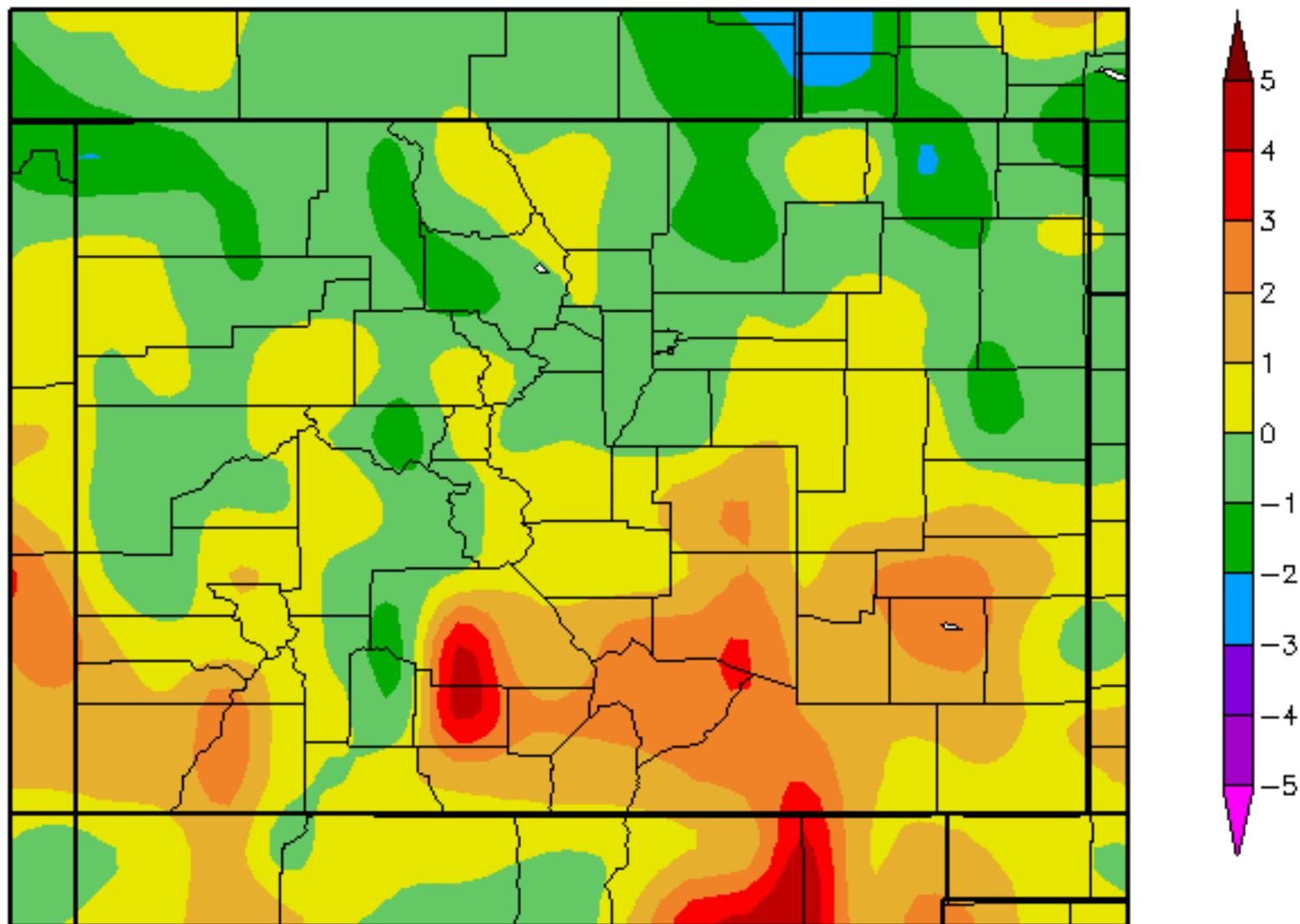
—●— Avg Temperature

62.3F ranks as the 46th
warmest (1895-2014)



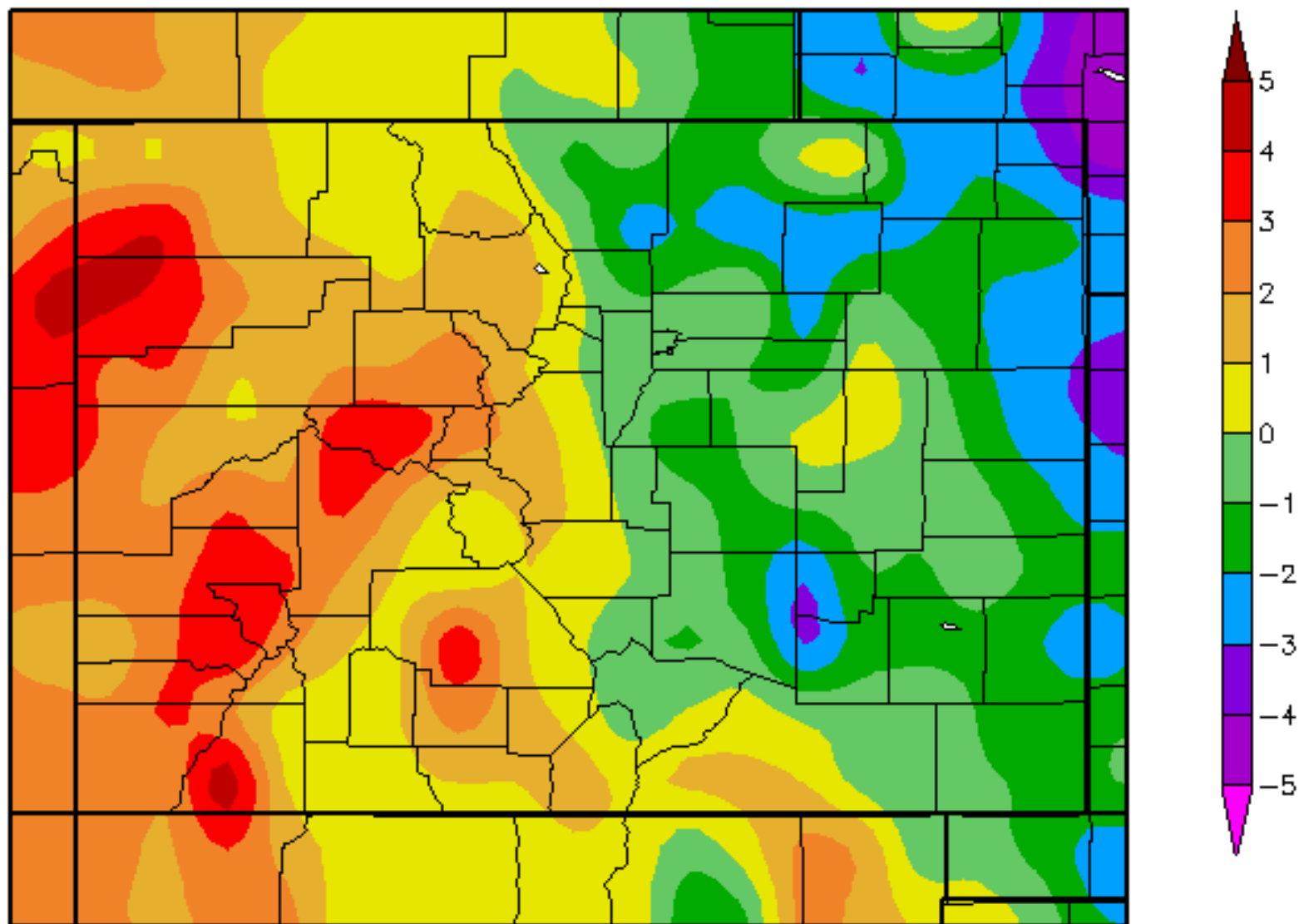
Departure from Normal Temperature (F)

6/1/2014 - 6/30/2014

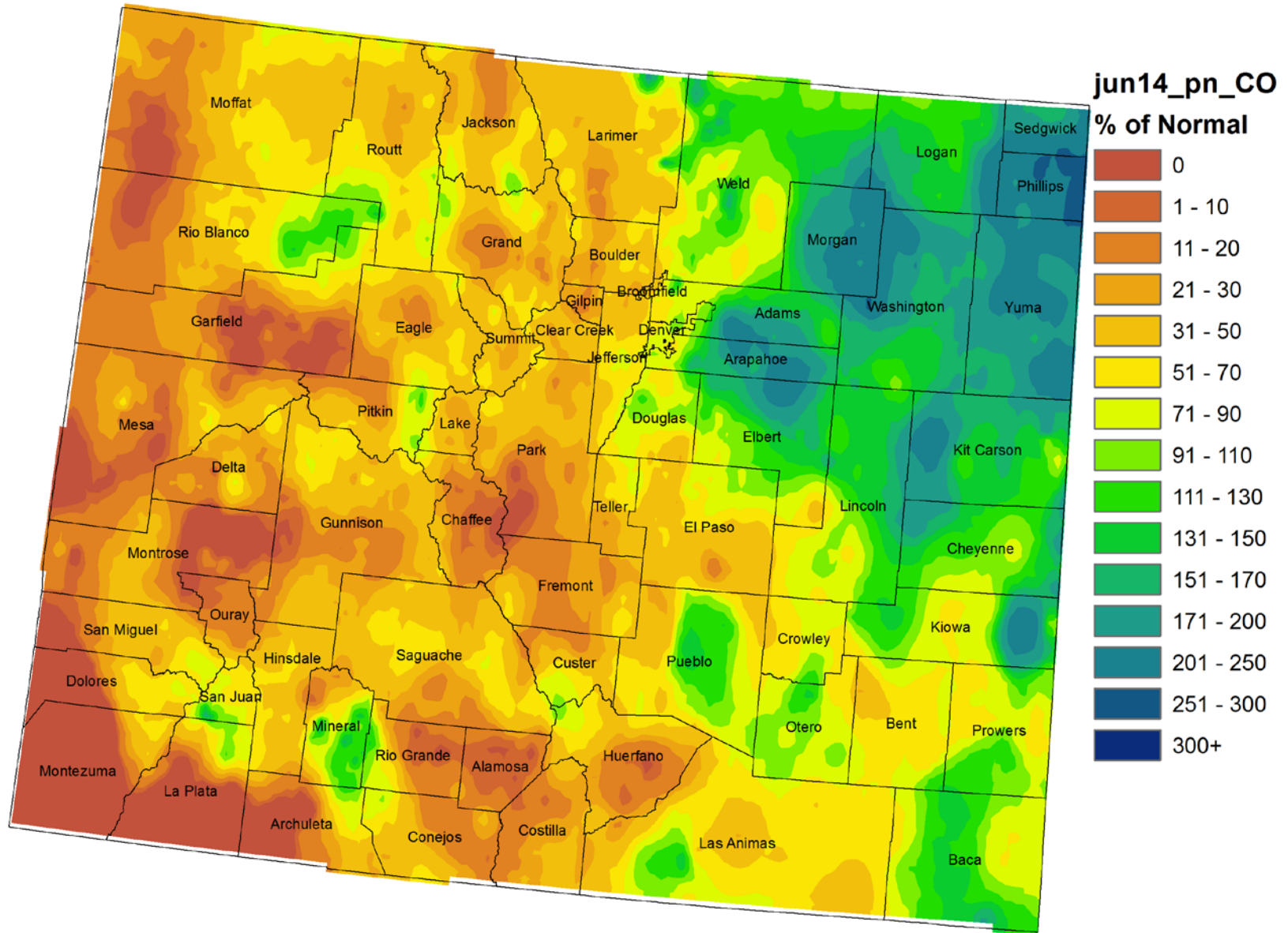


Departure from Normal Temperature (F)

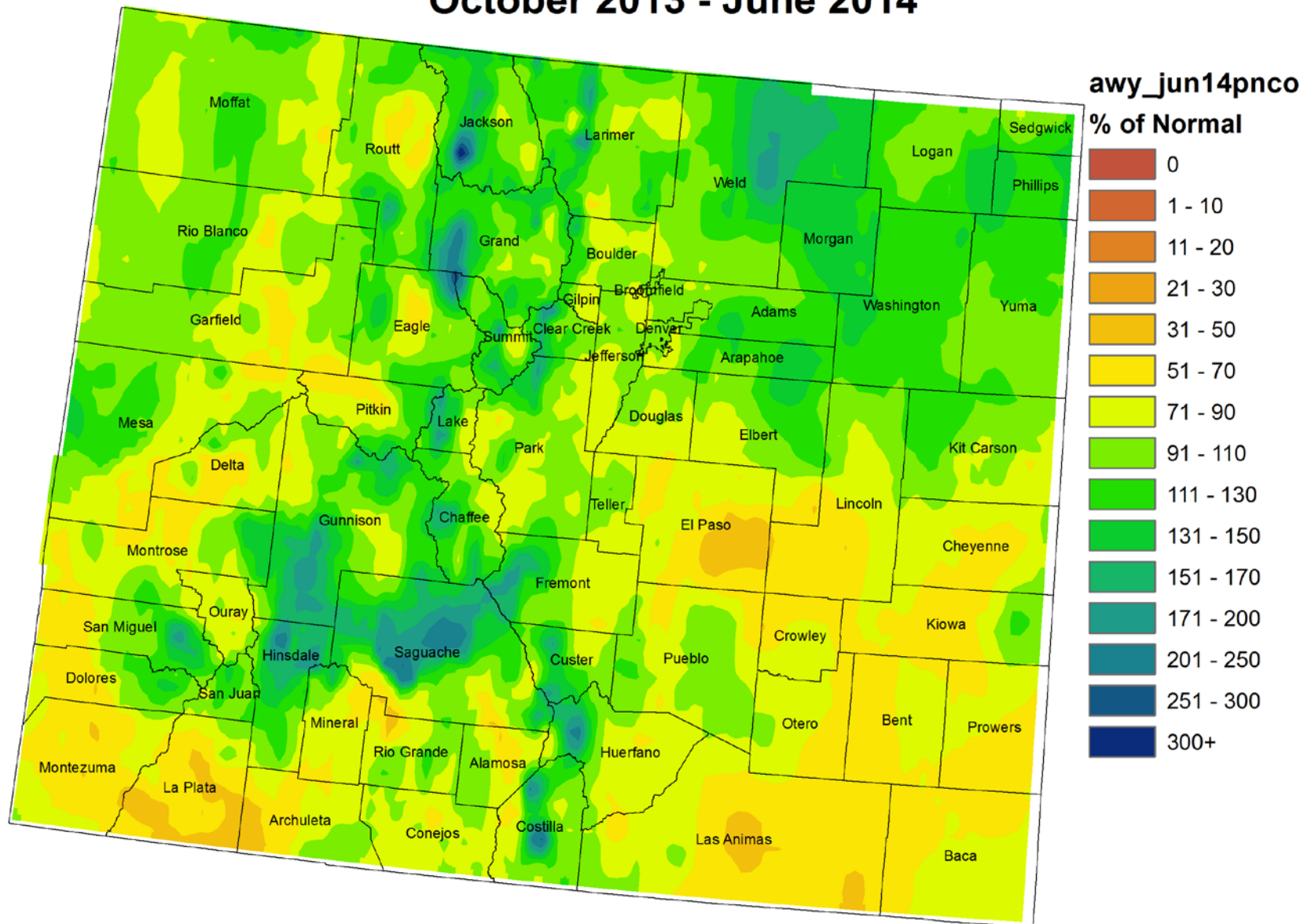
7/1/2014 - 7/20/2014



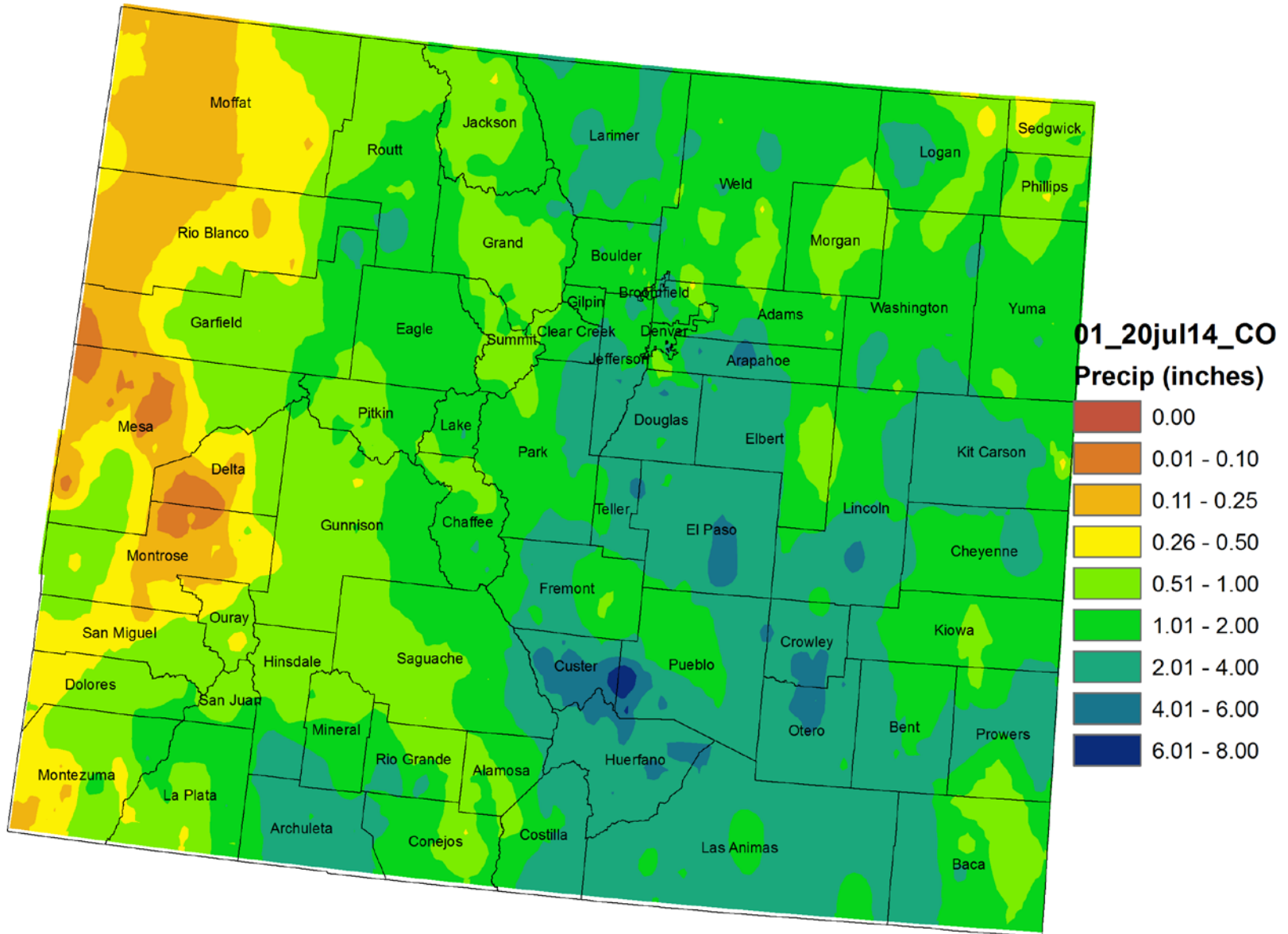
Colorado June 2014 Precipitation as a Percentage of Normal



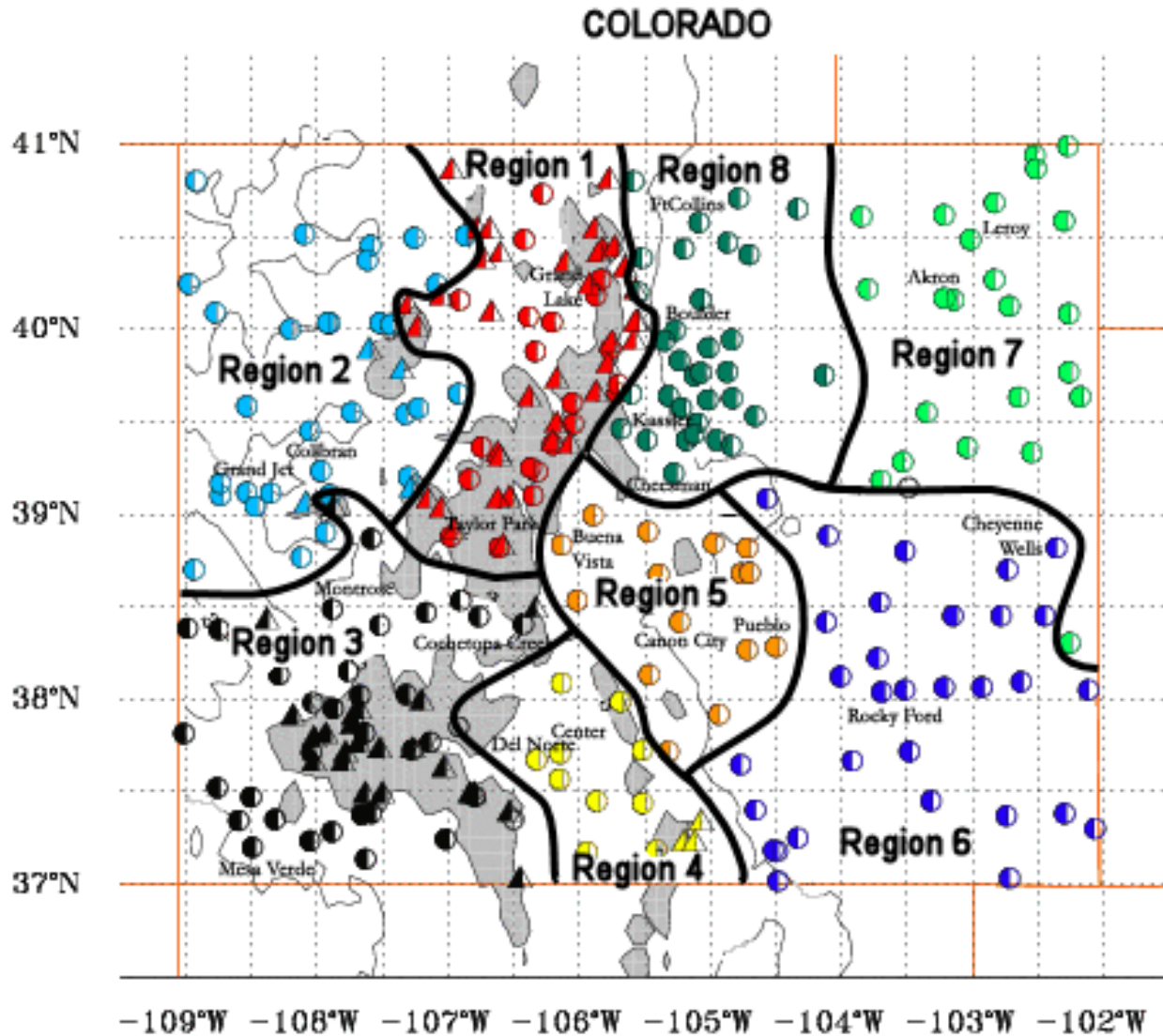
Colorado Water Year 2014 Precipitation as a Percentage of Normal October 2013 - June 2014



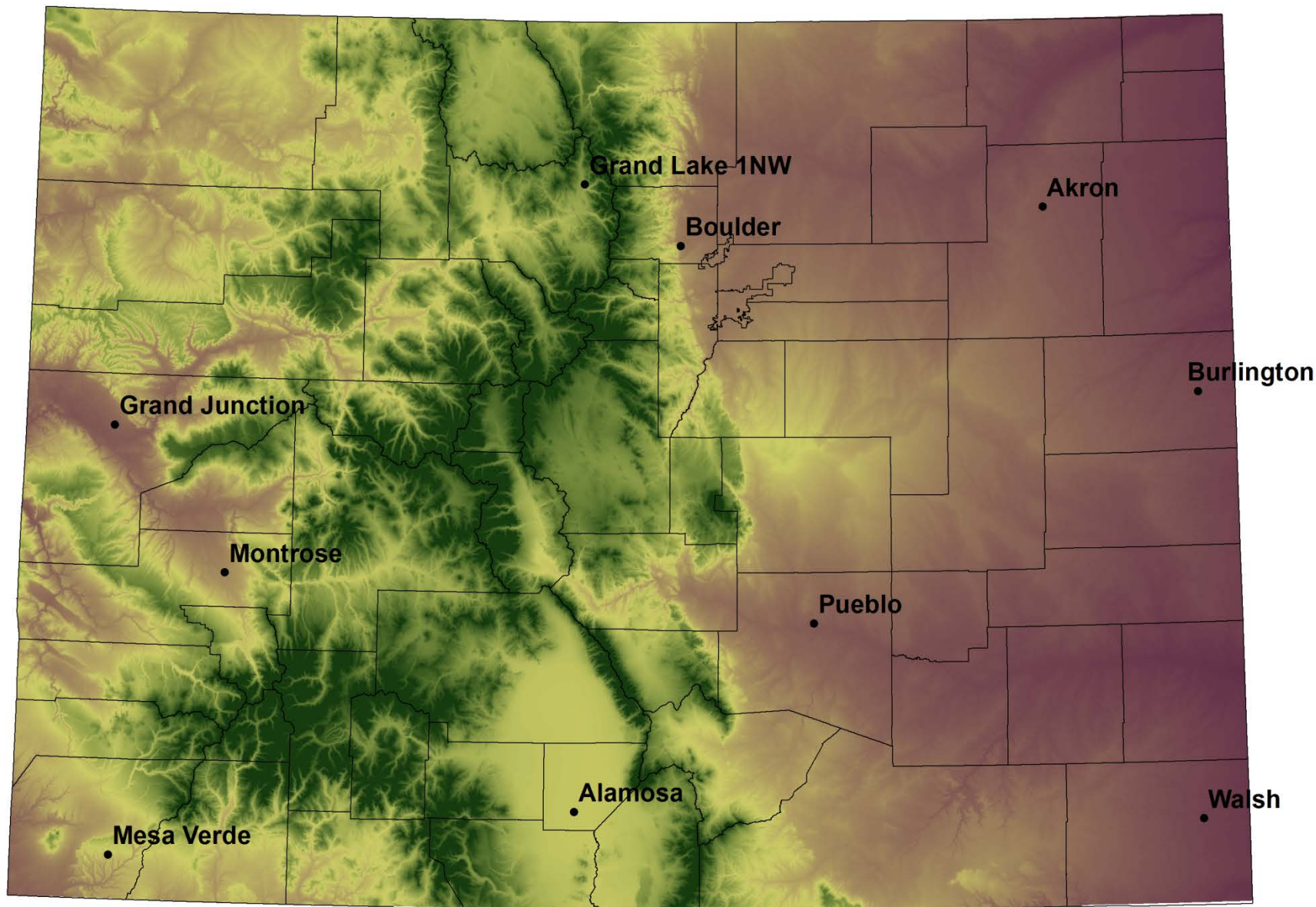
Colorado Month to Date Precipitation 1 - 20 July 2014



Climate divisions defined by Dr. Klaus Wolter CU-Boulder/NOAA

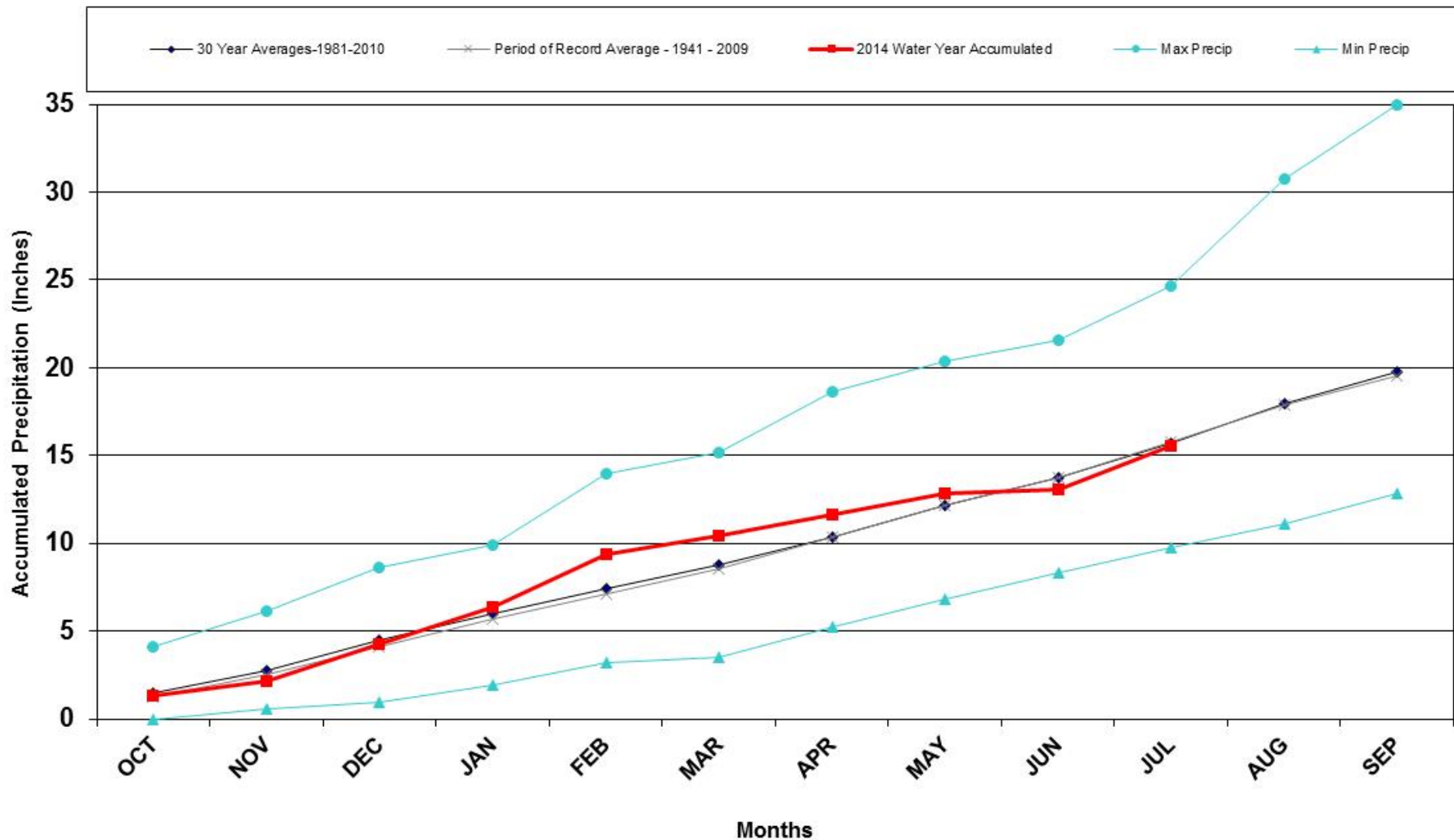


NWS Cooperative Stations for WATF



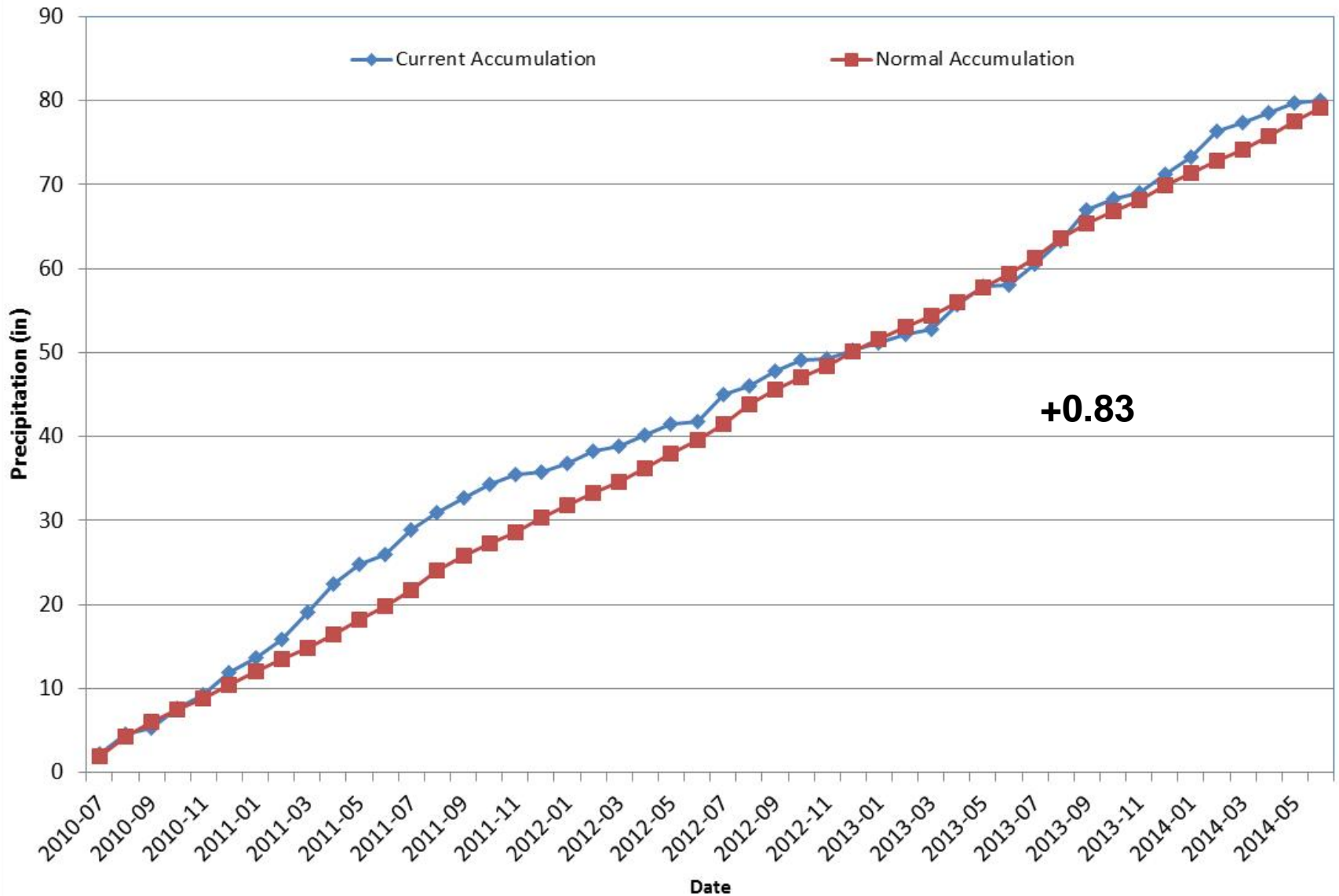
Division 1 – Grand Lake 1NW

Grand Lake 1 NW 2014 Water Year



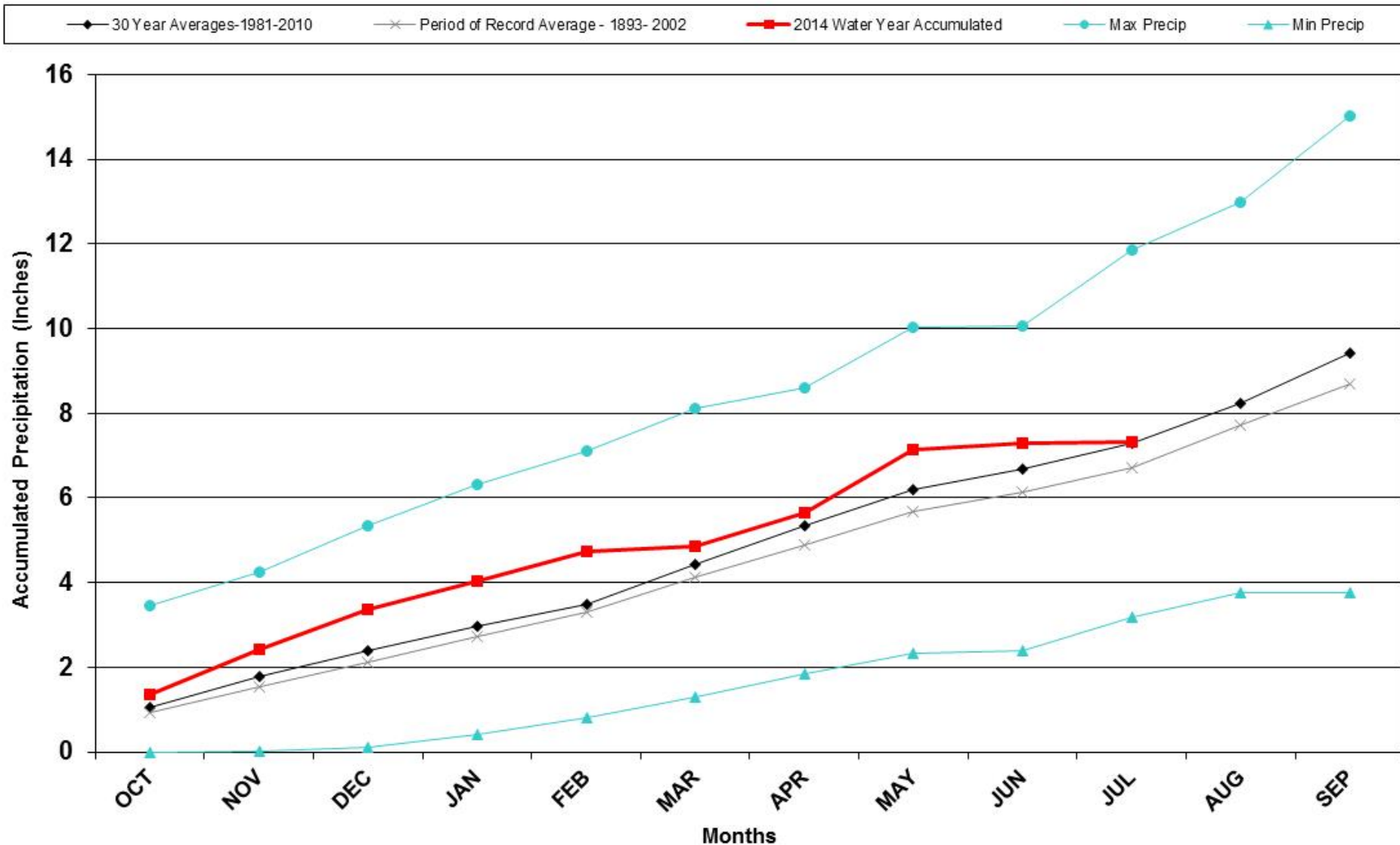
Division 1 – Grand Lake 1NW

Grand Lake 1NW Precipitation Accumulation



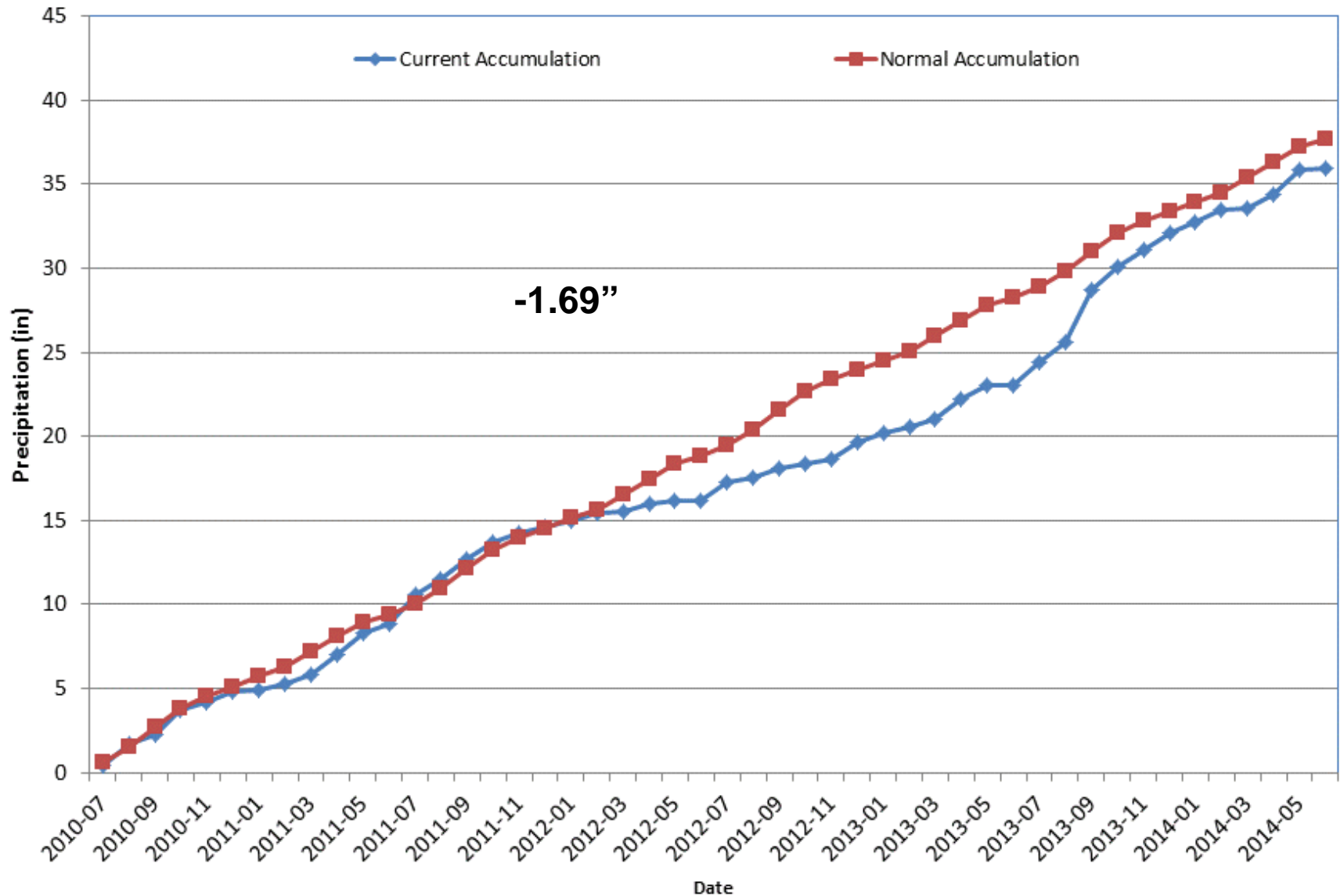
Division 2 – Grand Junction

Grand Junction WSFO 2014 Water Year



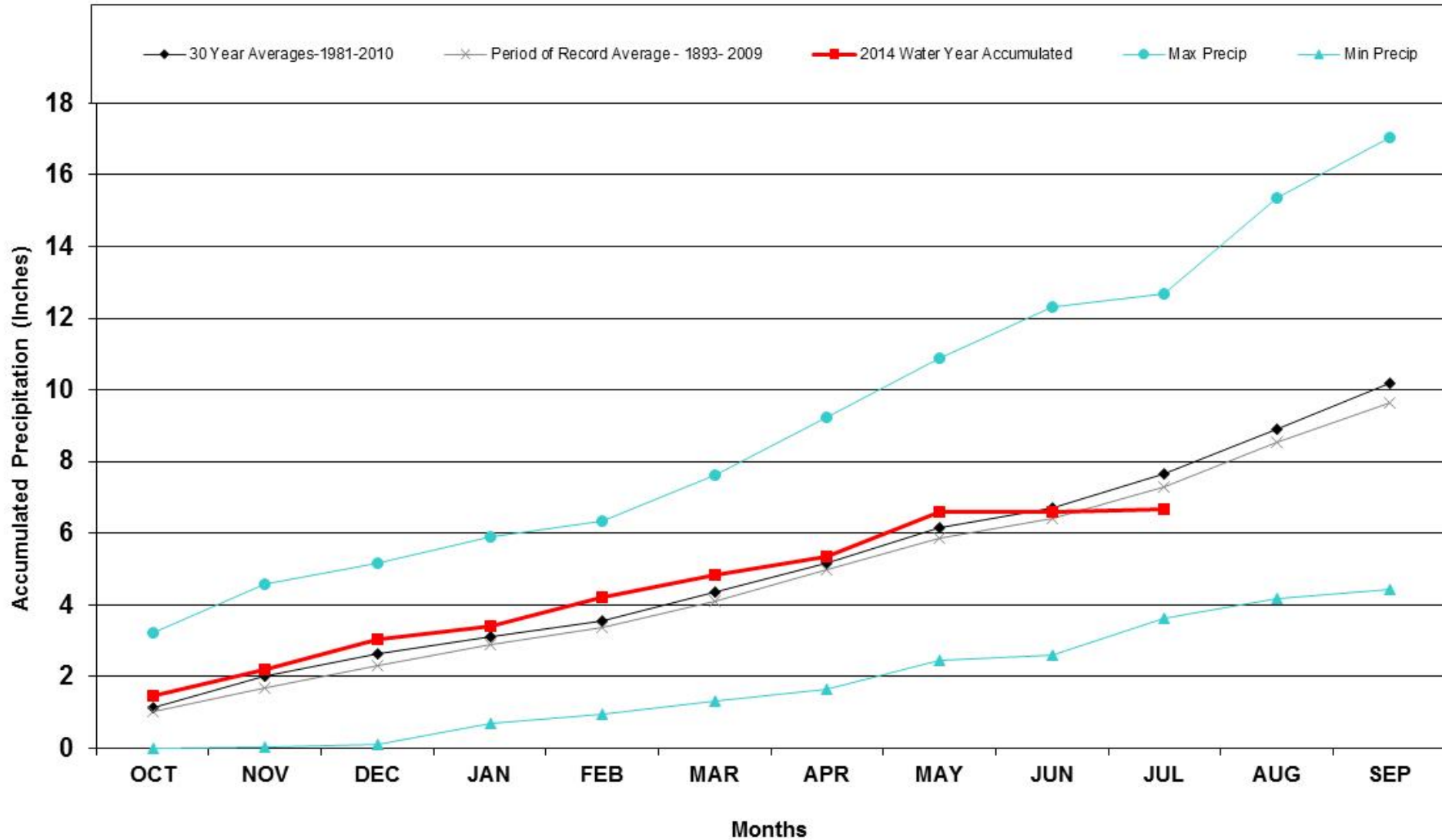
Division 2 – Grand Junction

Grand Junction Precipitation Accumulation



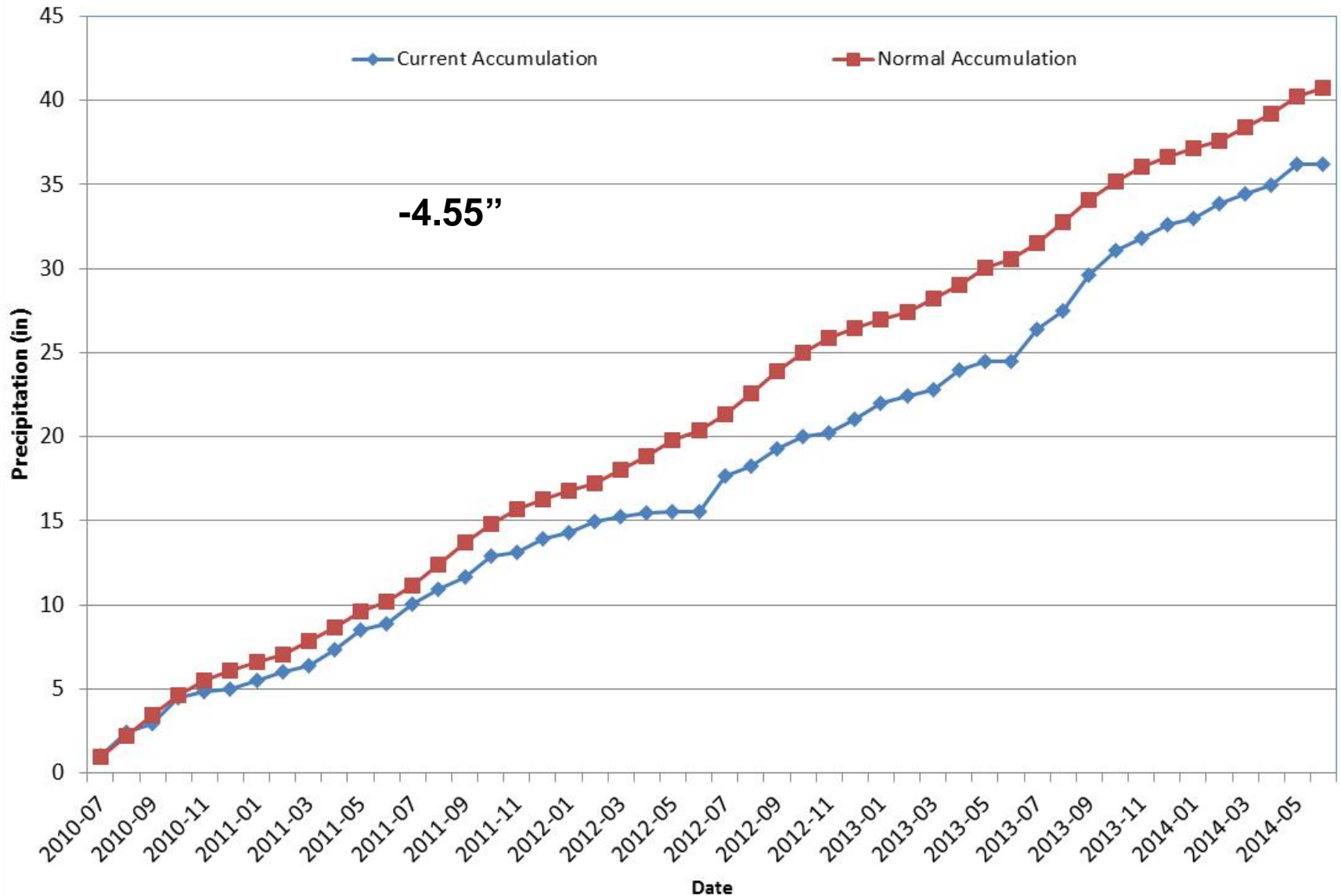
Division 3 – Montrose

Montrose #2 2014 Water Year



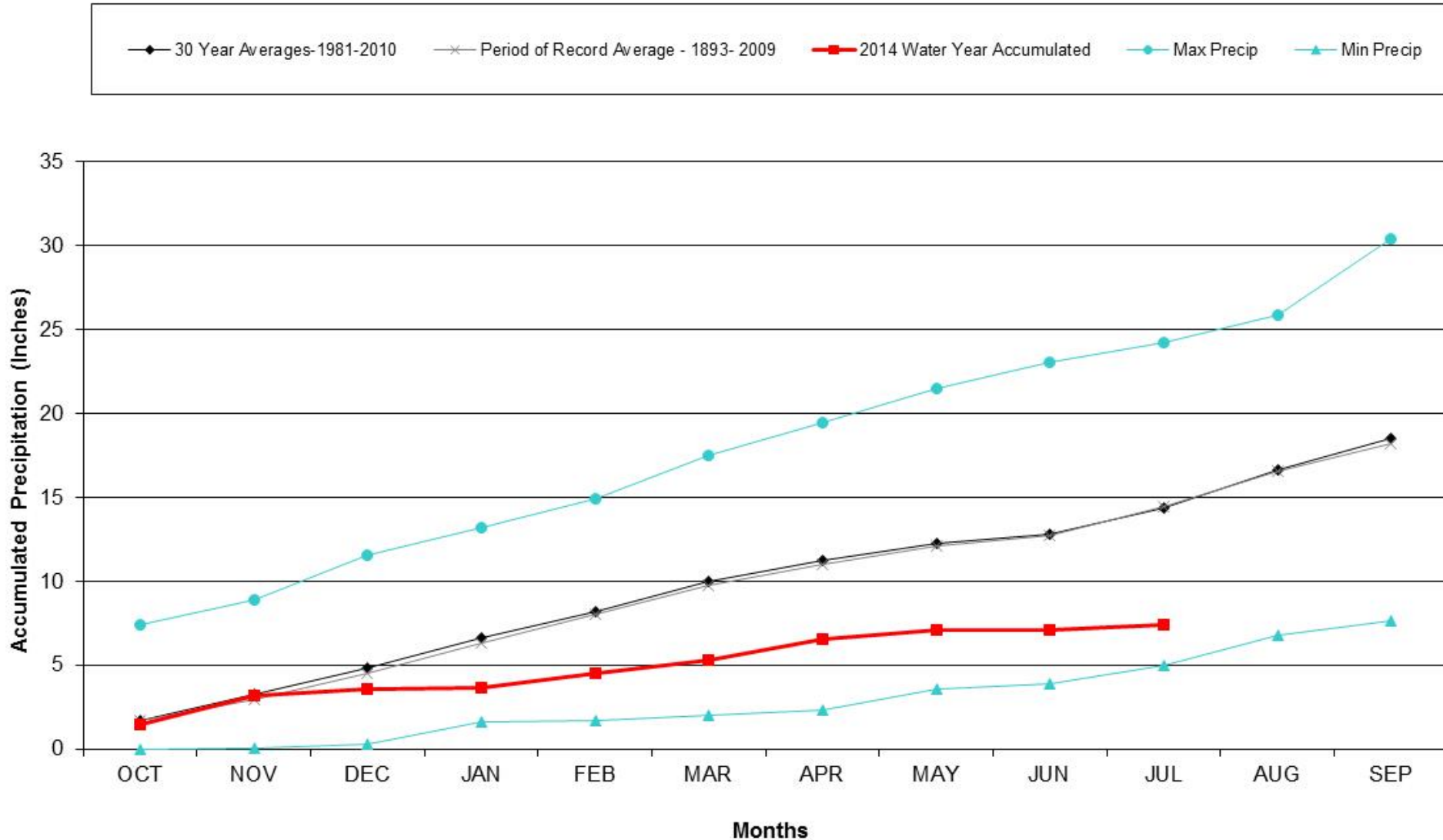
Division 3 – Montrose

Montrose #2 Precipitation Accumulation



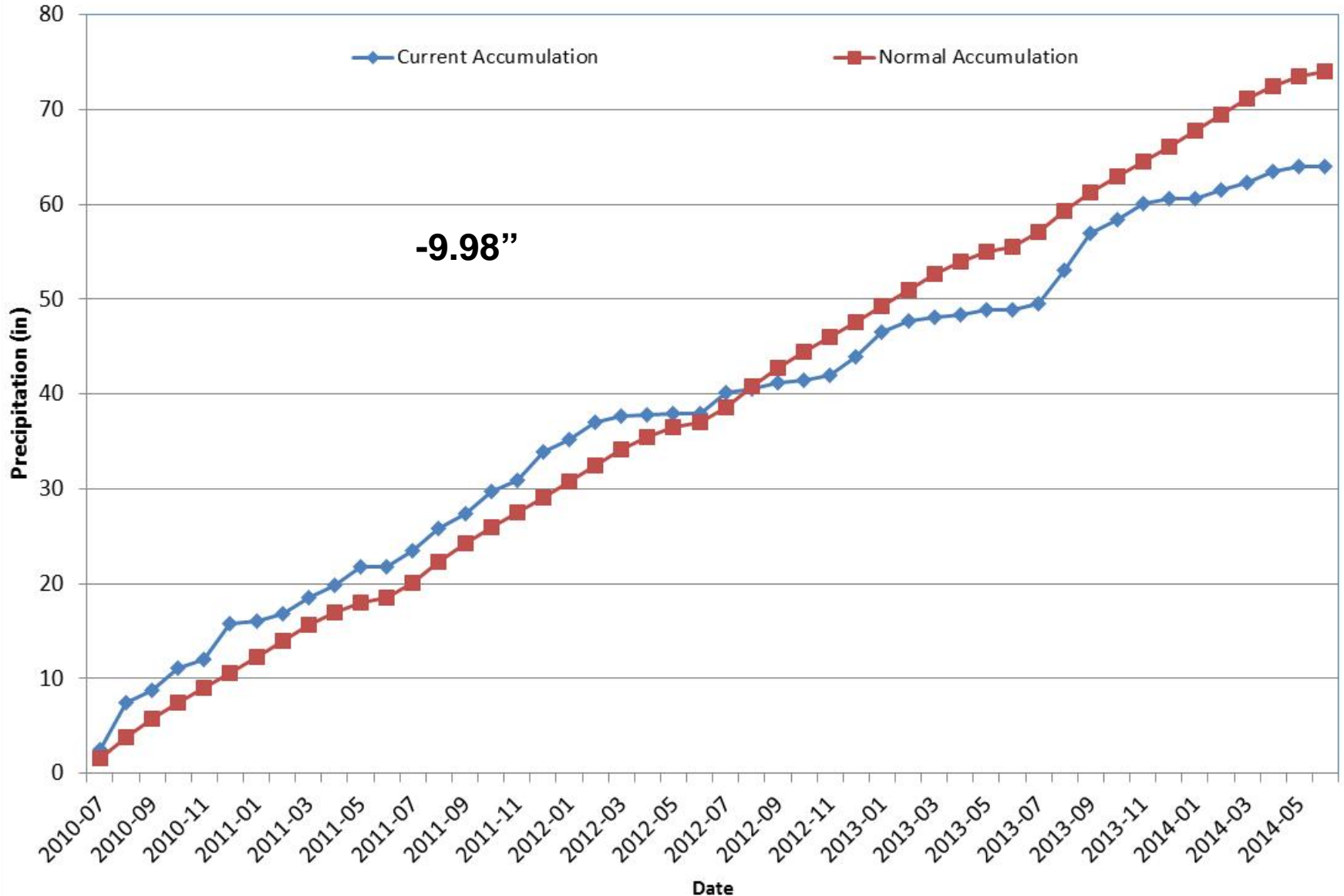
Division 3 – Mesa Verde NP

Mesa Verde NP 2014 Water Year



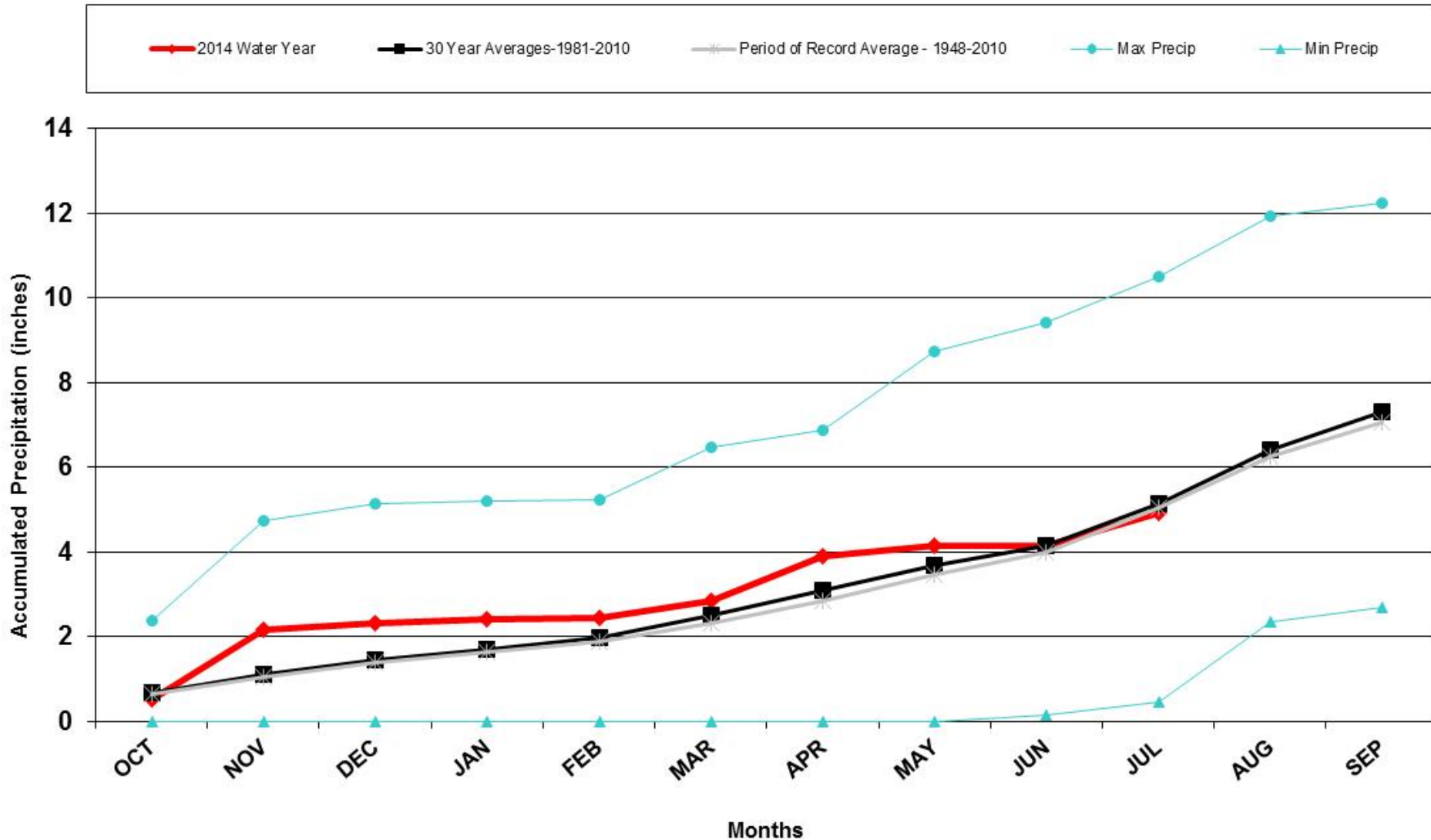
Division 3 – Mesa Verde NP

Mesa Verde NP Precipitation Accumulation



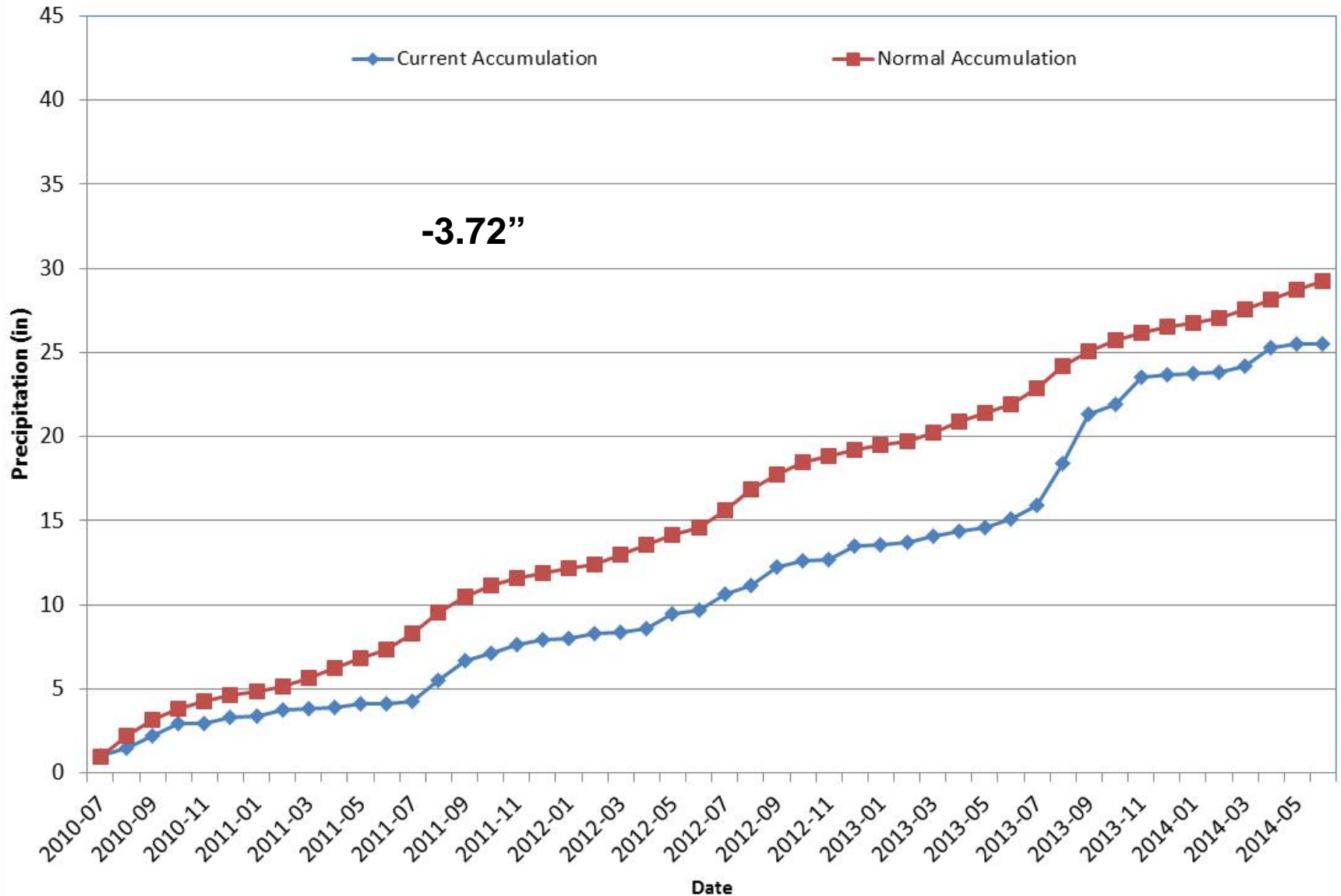
Division 4 – Alamosa

Alamosa WSO 2014 Water Year



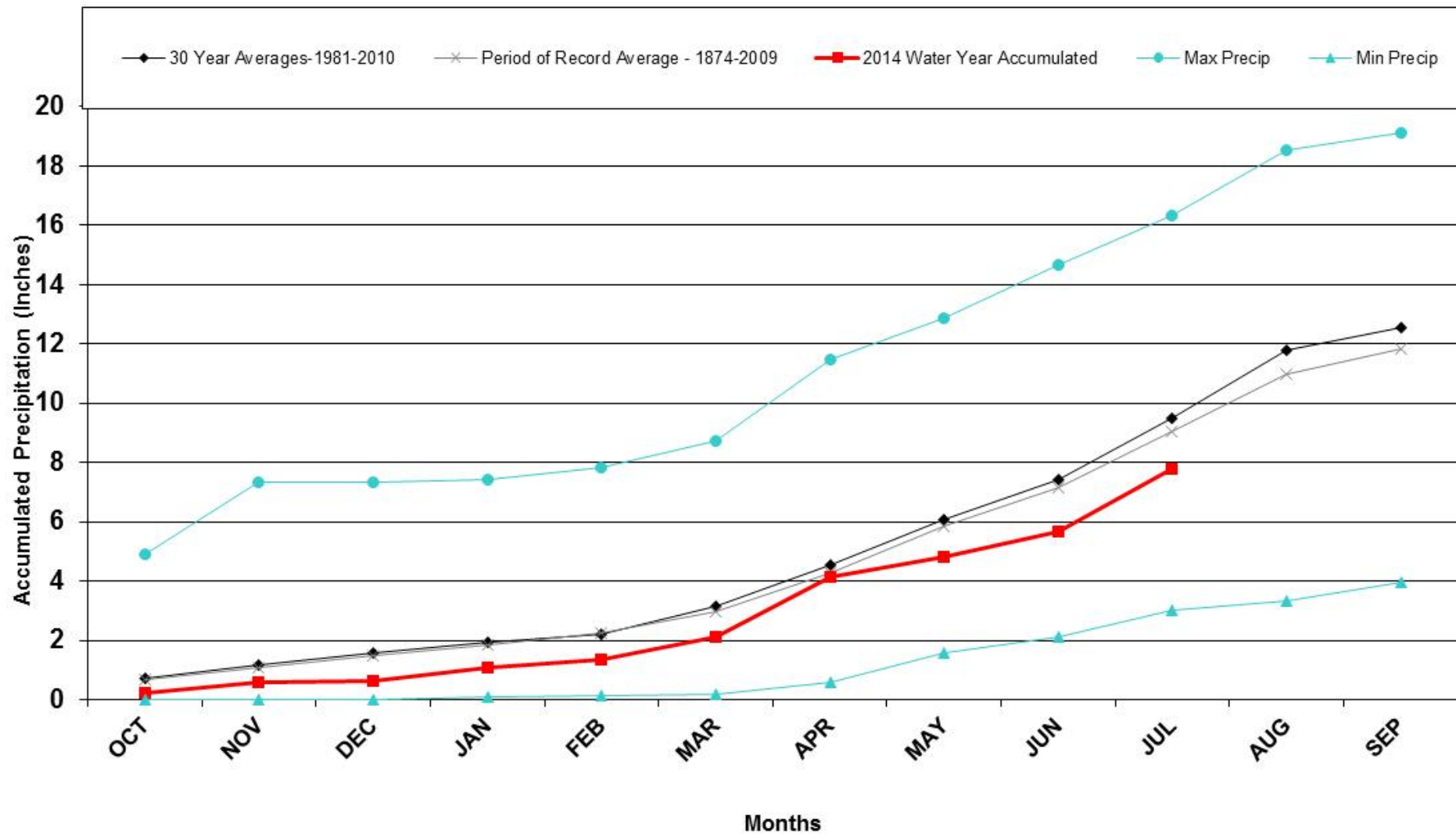
Division 4 – Alamosa

Alamosa WSO Precipitation Accumulation



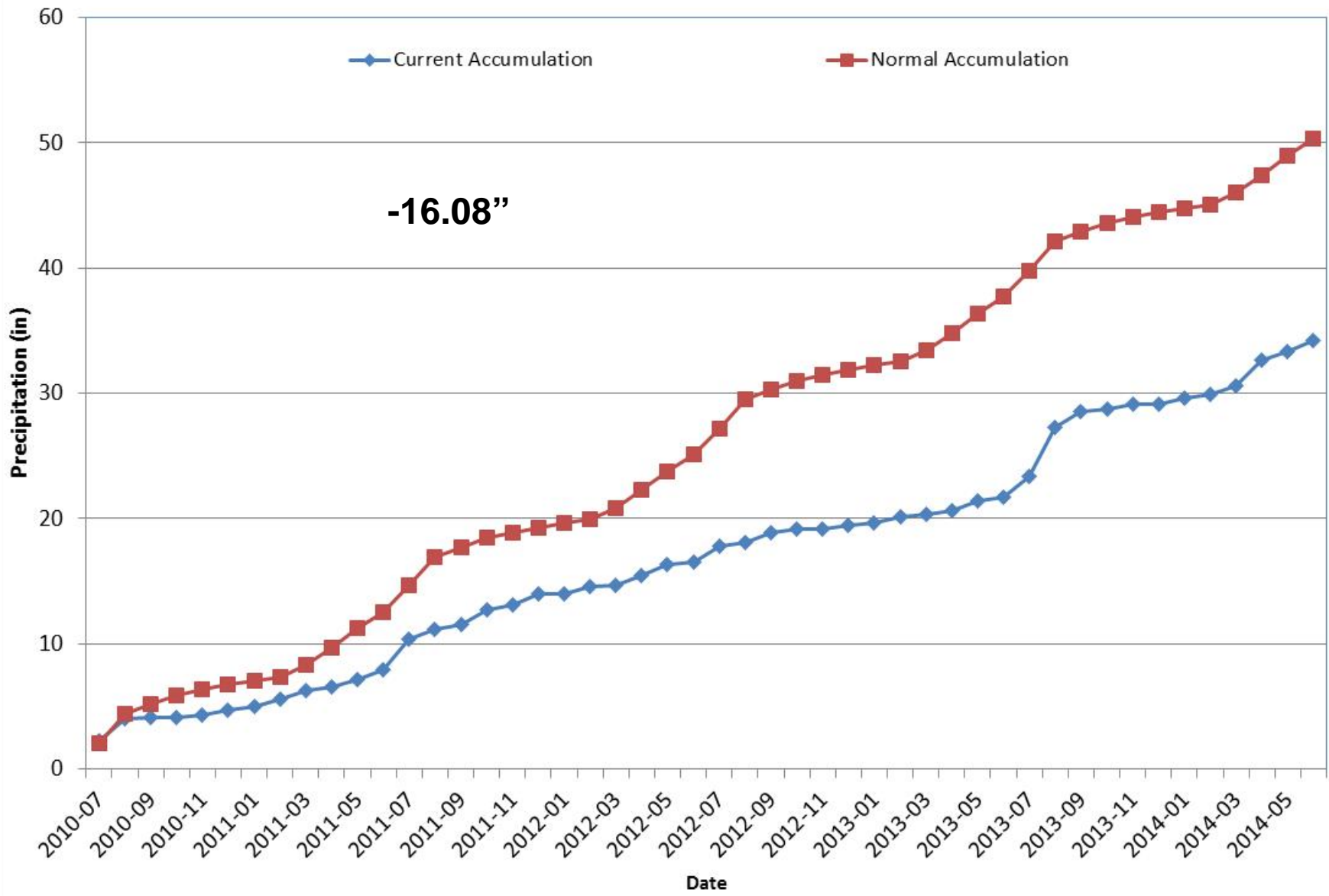
Division 5 – Pueblo

Pueblo WSO 2014 Water Year

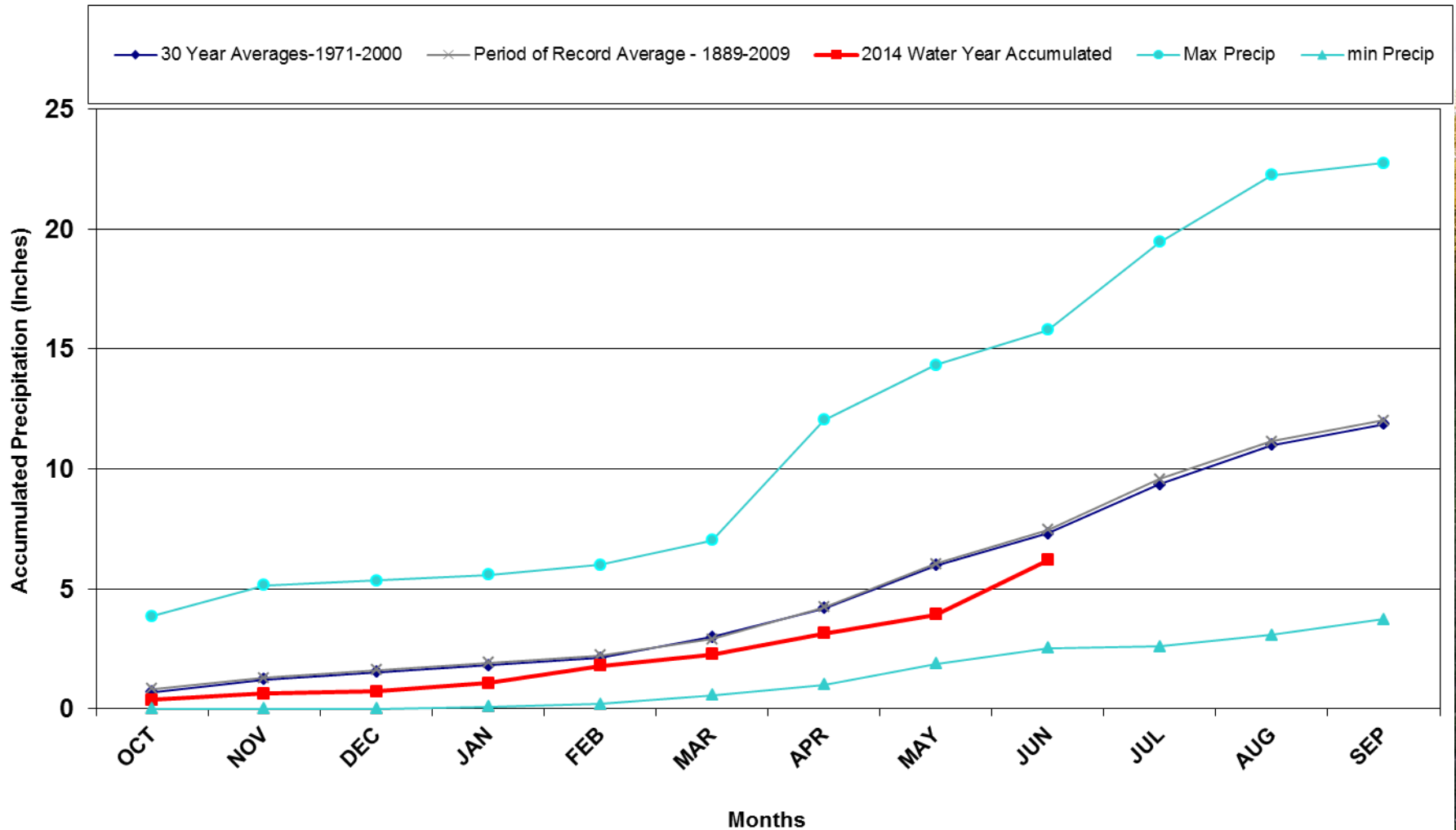


Division 5 – Pueblo

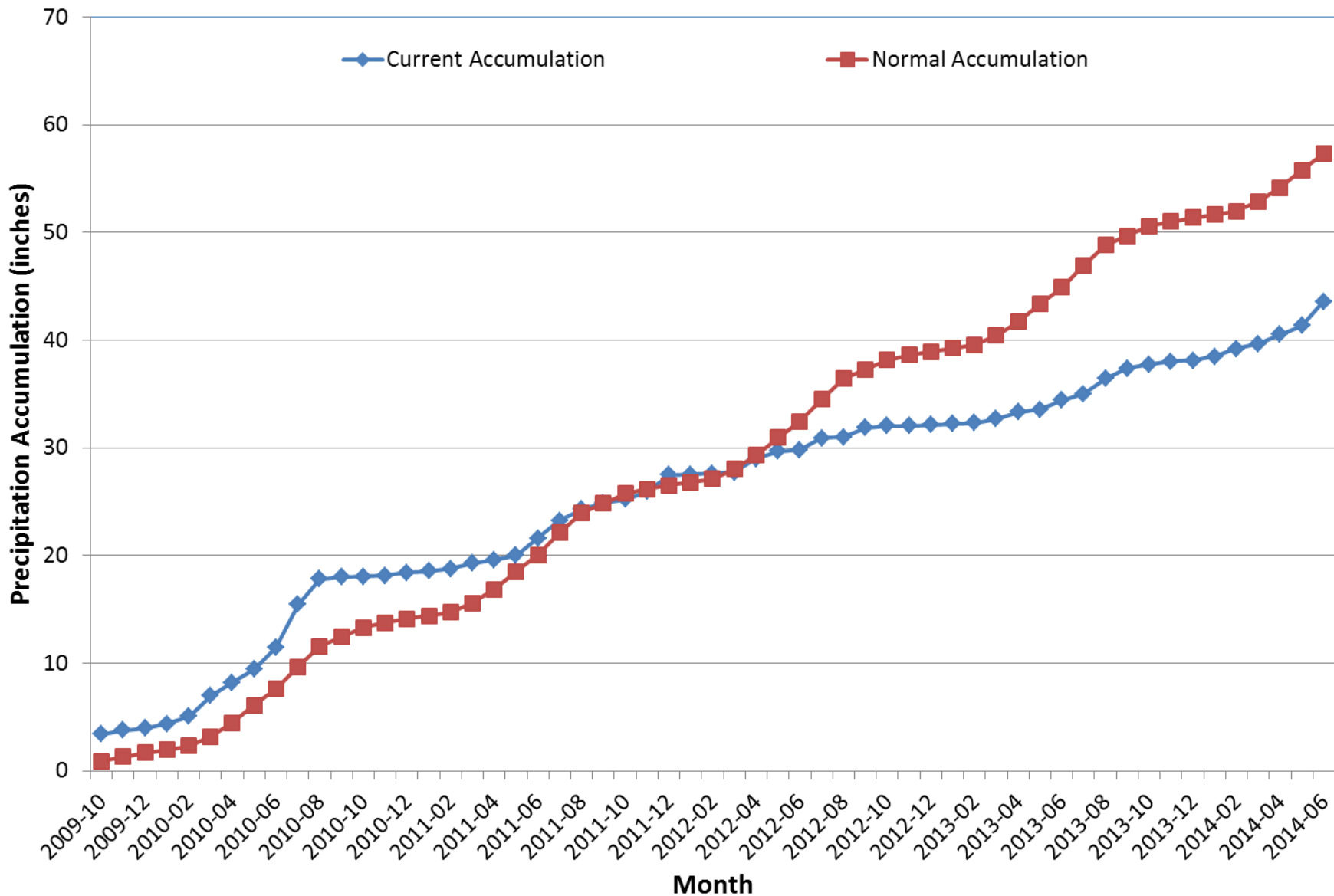
Pueblo Memorial AP Precipitation Accumulation



Rocky Ford 2014 Water Year

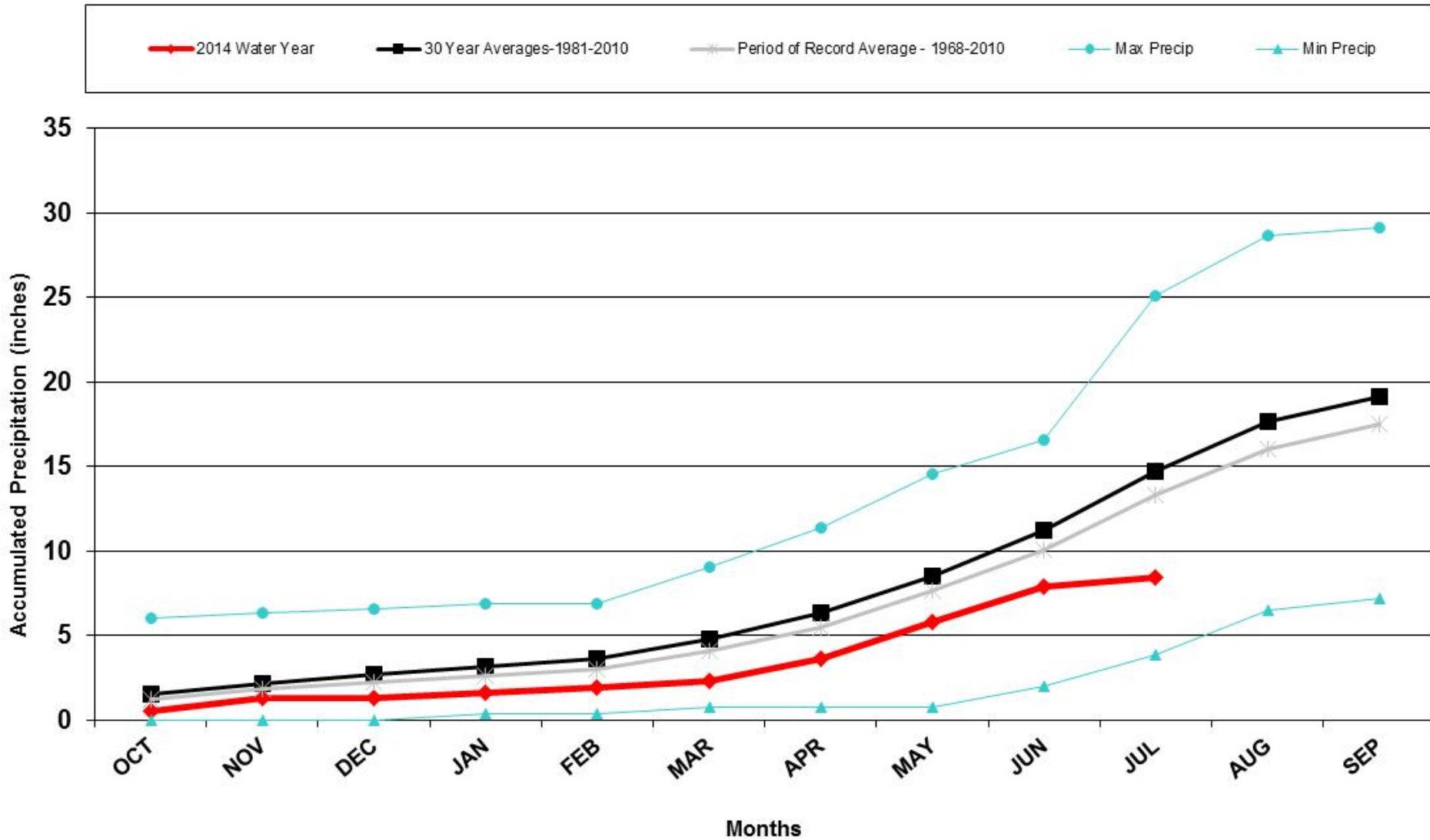


Rocky Ford Accumulated Precipitation



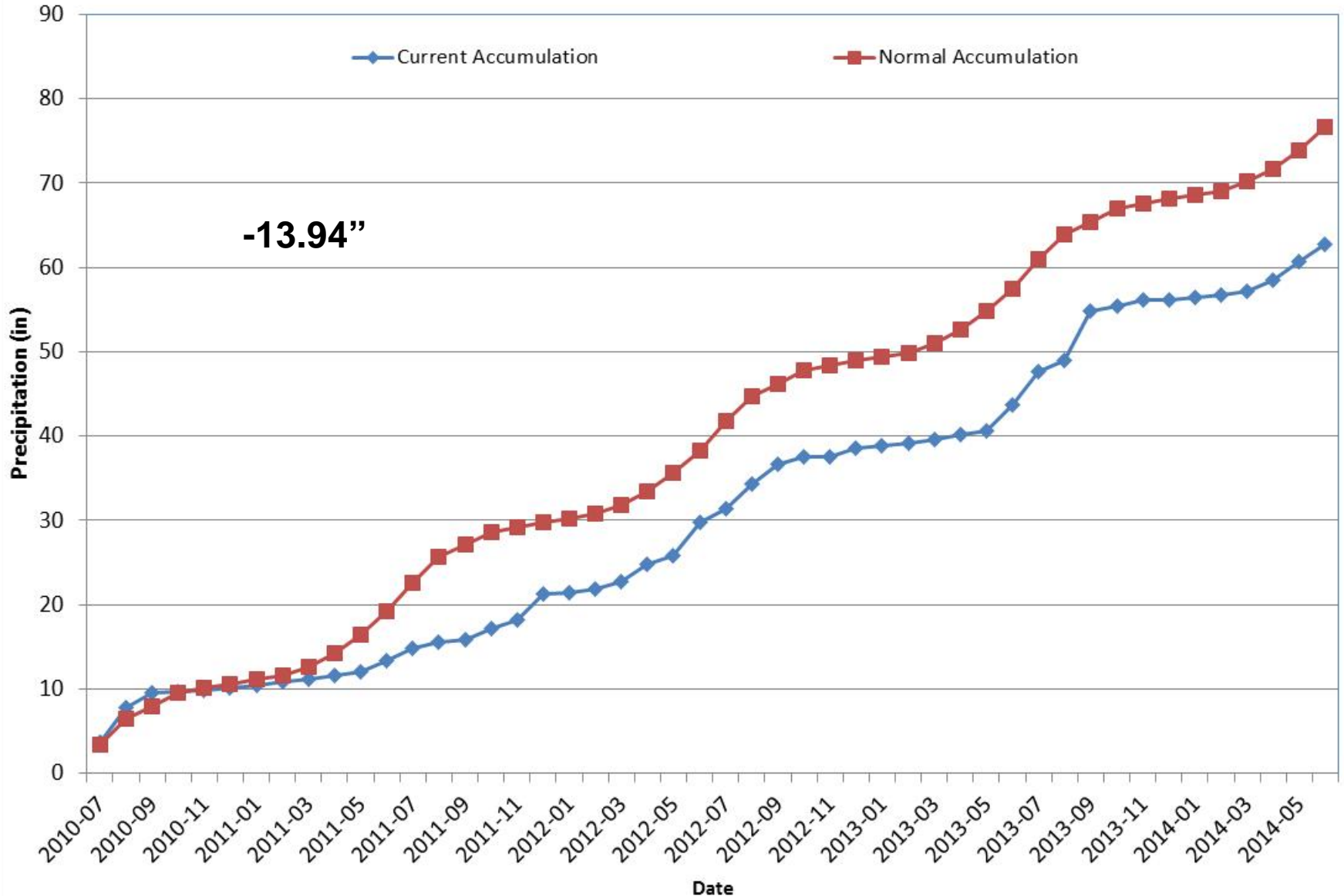
Division 6 - Walsh

Walsh 2014 Water Year



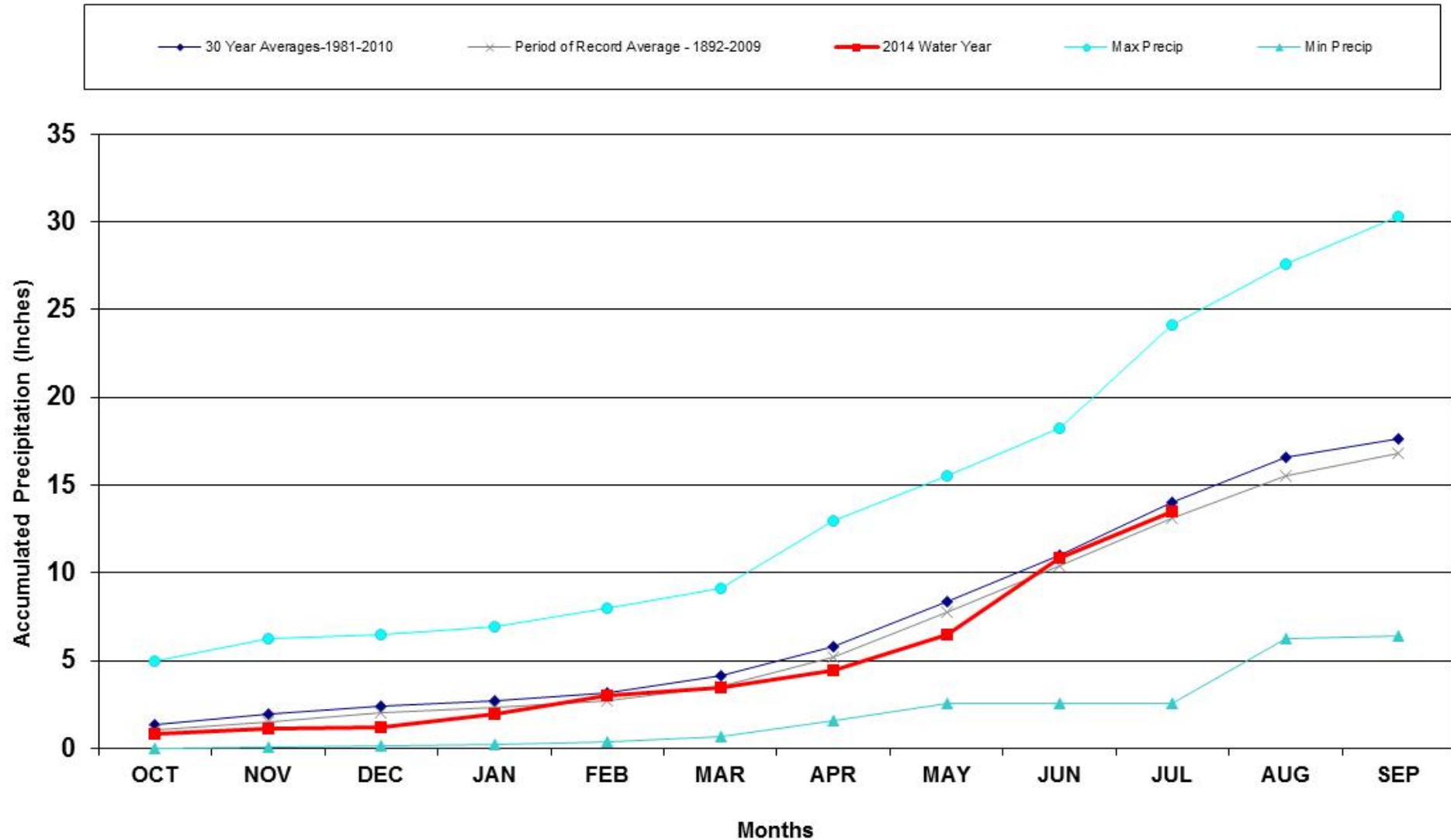
Division 6 - Walsh

Walsh 1W Precipitation Accumulation



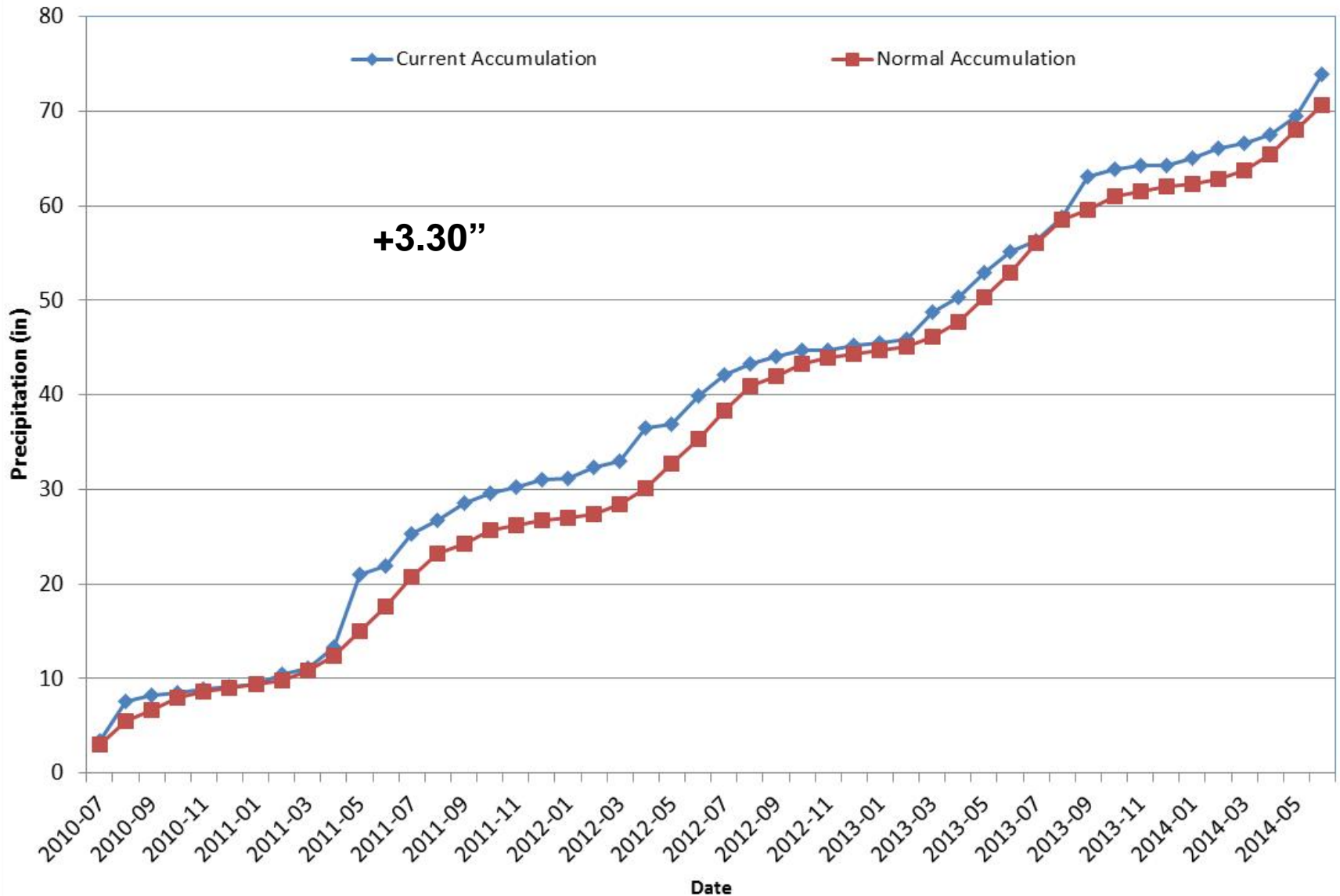
Division 6 - Burlington

Burlington 2014 Water Year



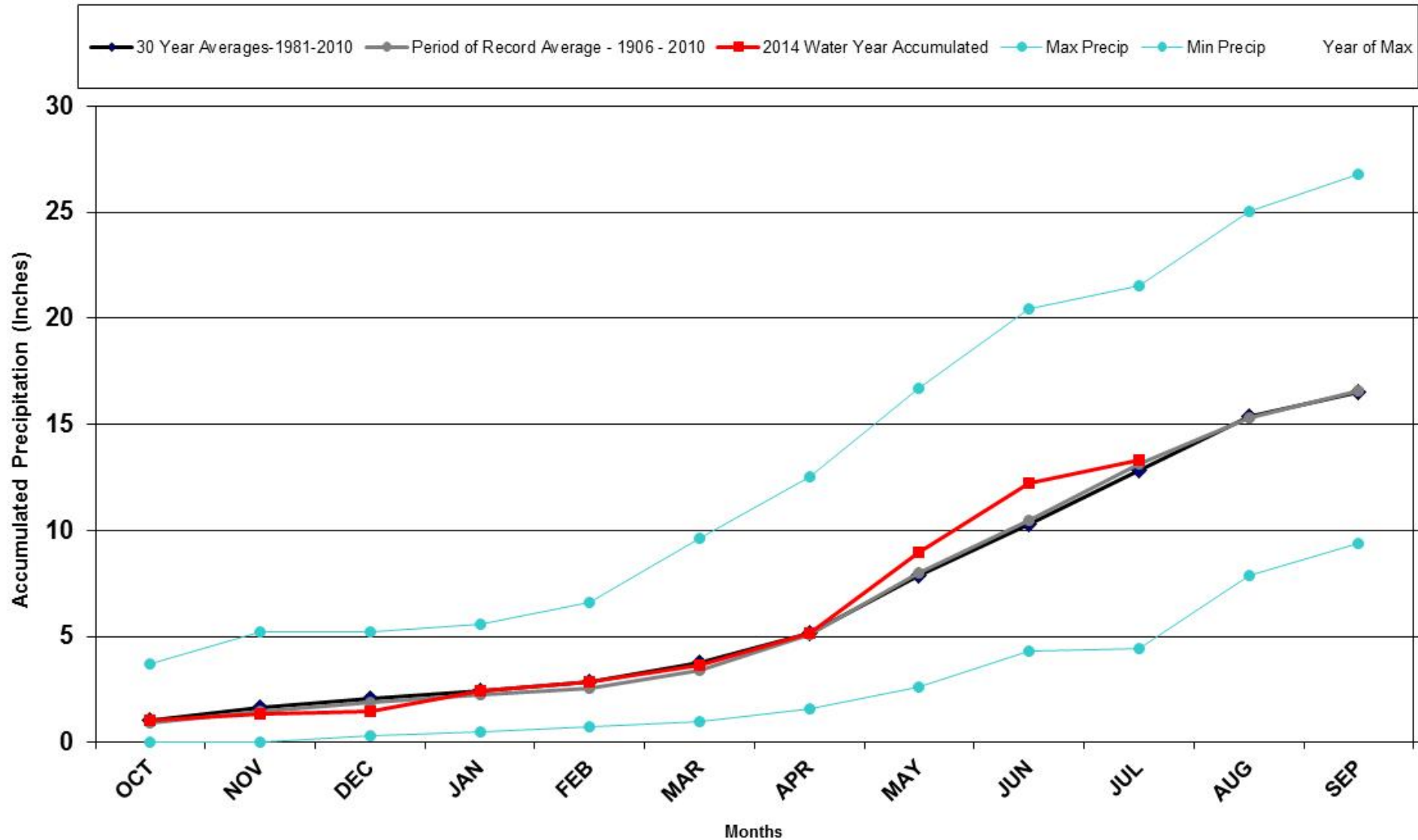
Division 6 - Burlington

Burlington, CO Precipitation Accumulation



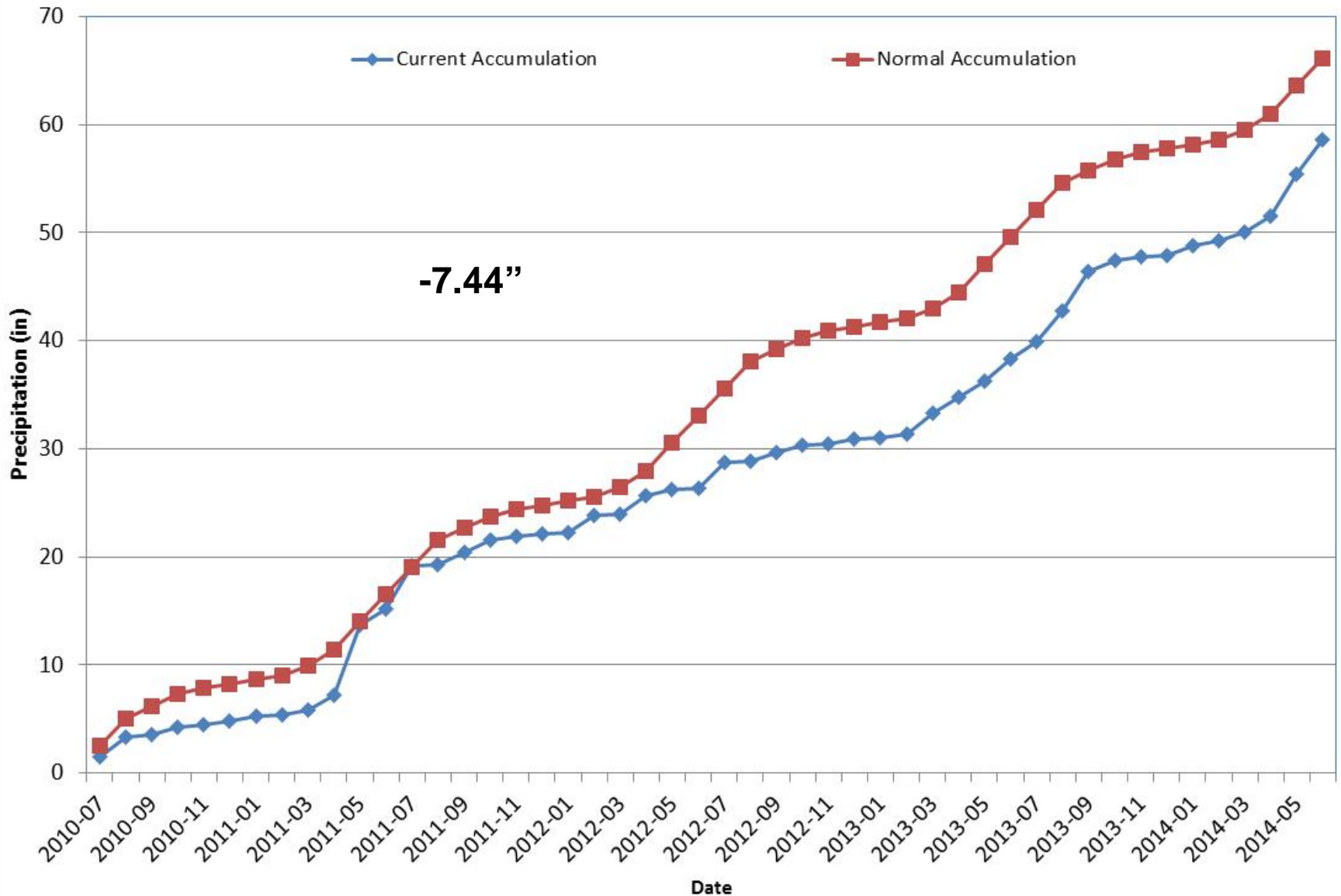
Division 7 – Akron

Akron 4E 2014 Water Year



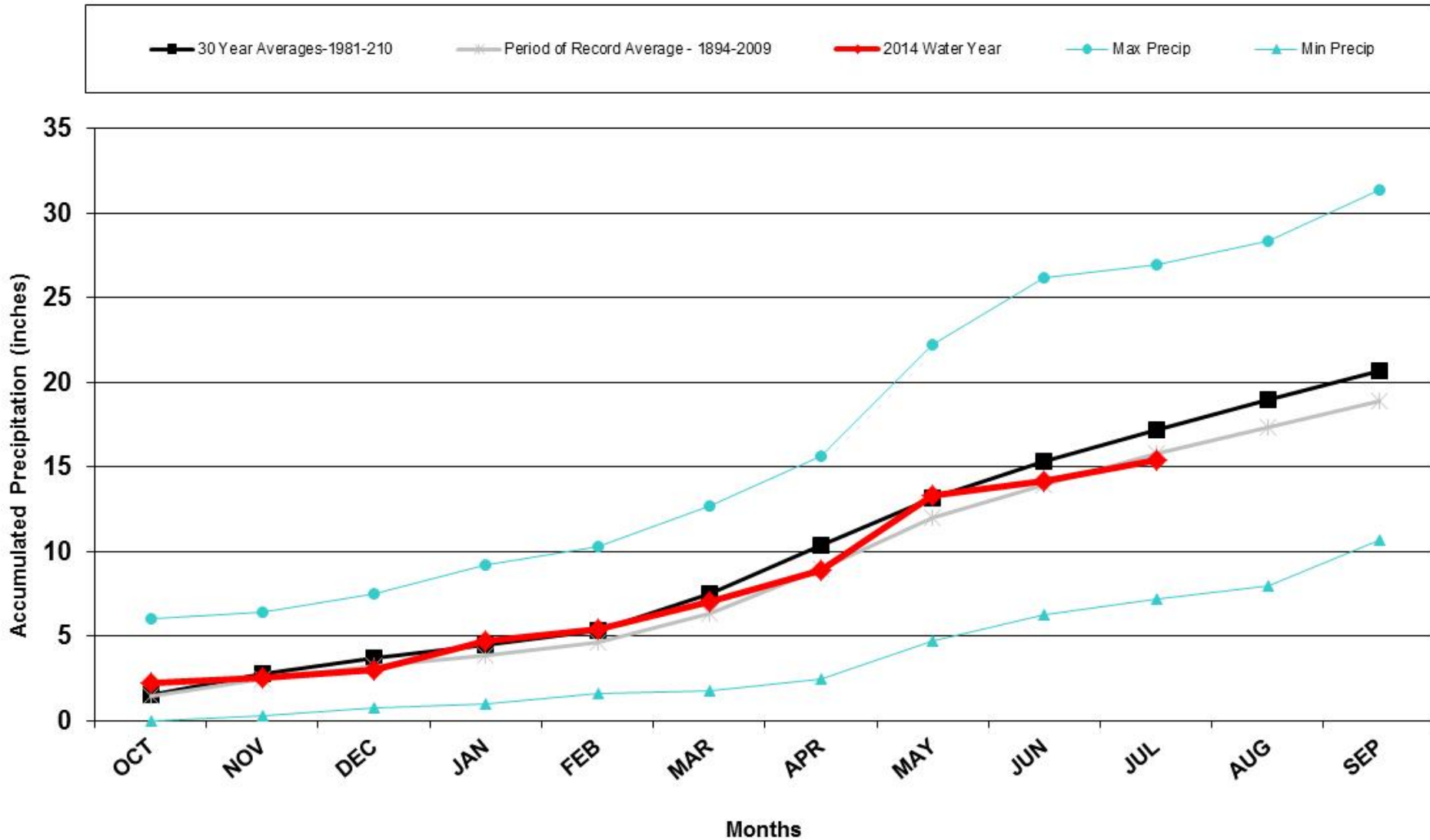
Division 7 – Akron

Akron 4E Precipitation Accumulation



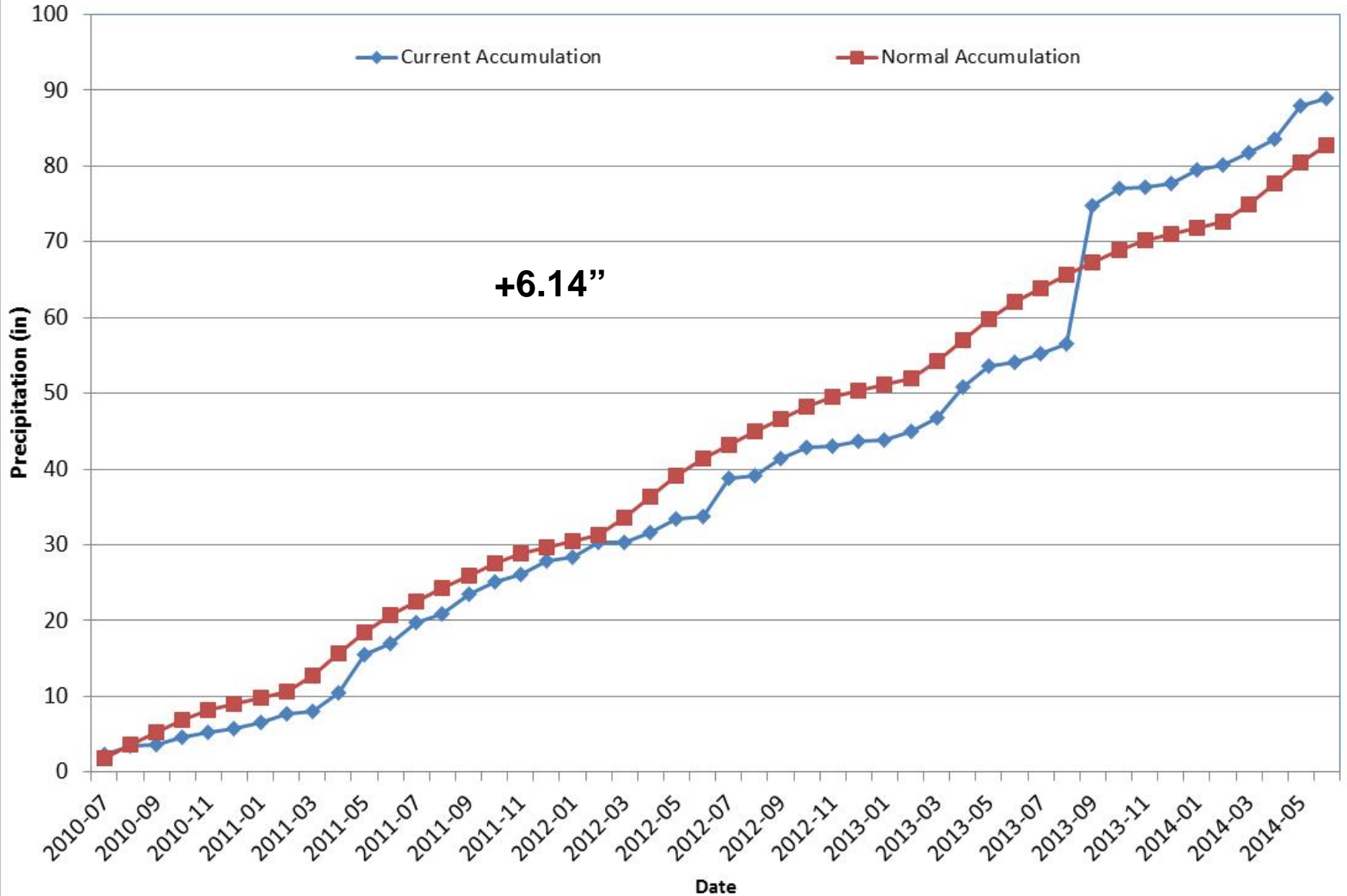
Division 8 - Boulder

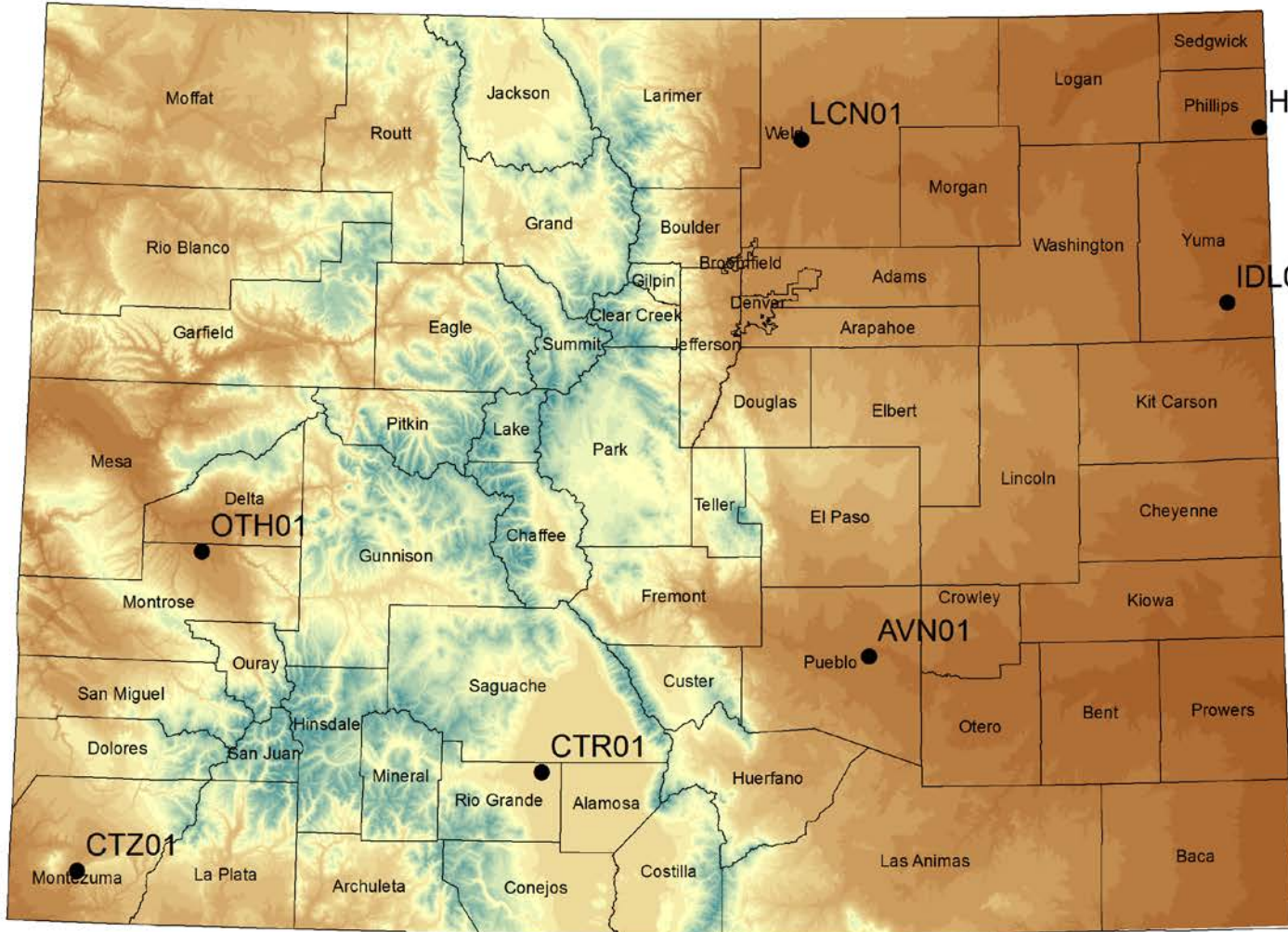
Boulder 2014 Water Year



Division 8 - Boulder

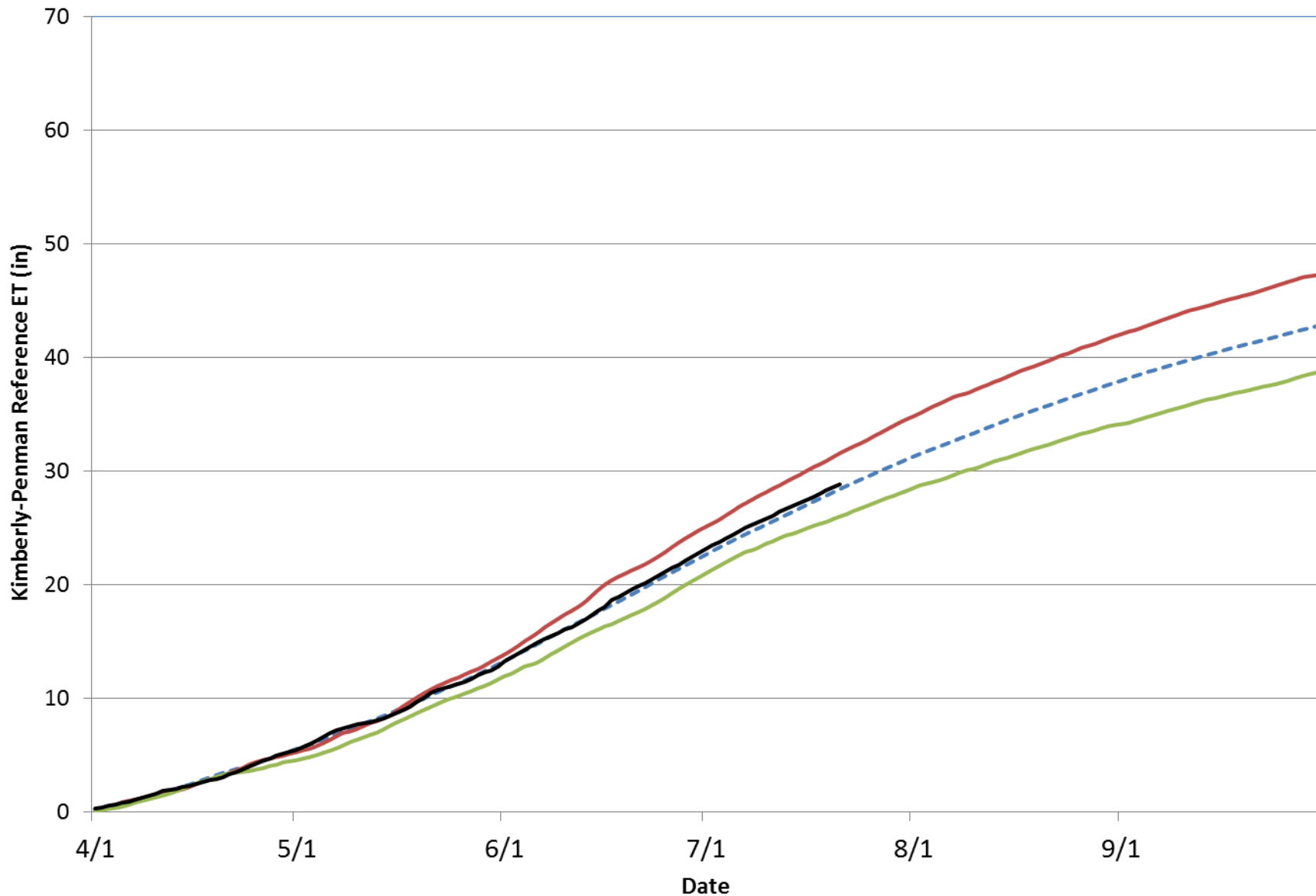
Boulder Precipitation Accumulation





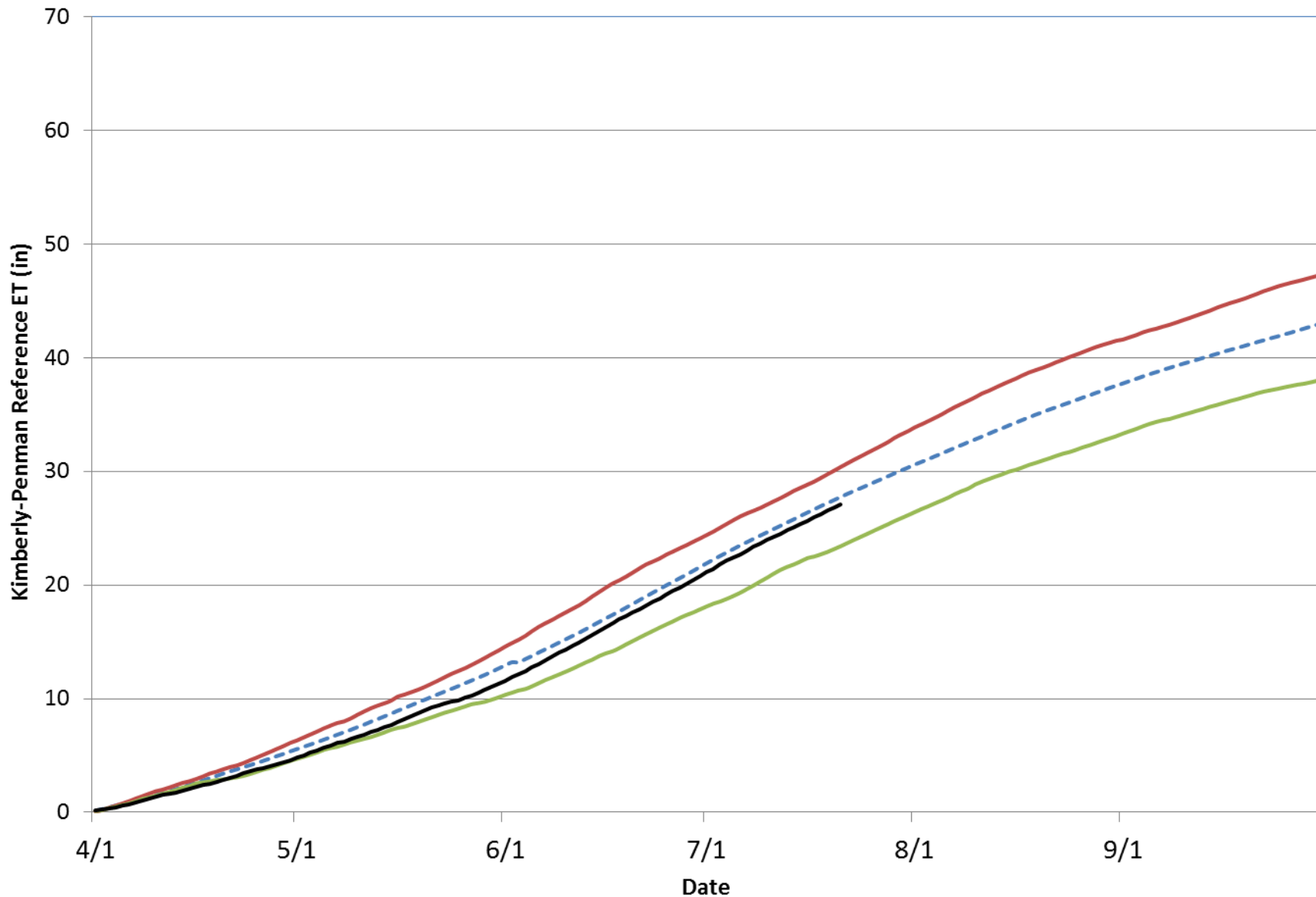
Olathe Kimberly-Penman Reference ET (1993 - 2013)

--- Average — 1994 — 1999 — 2014



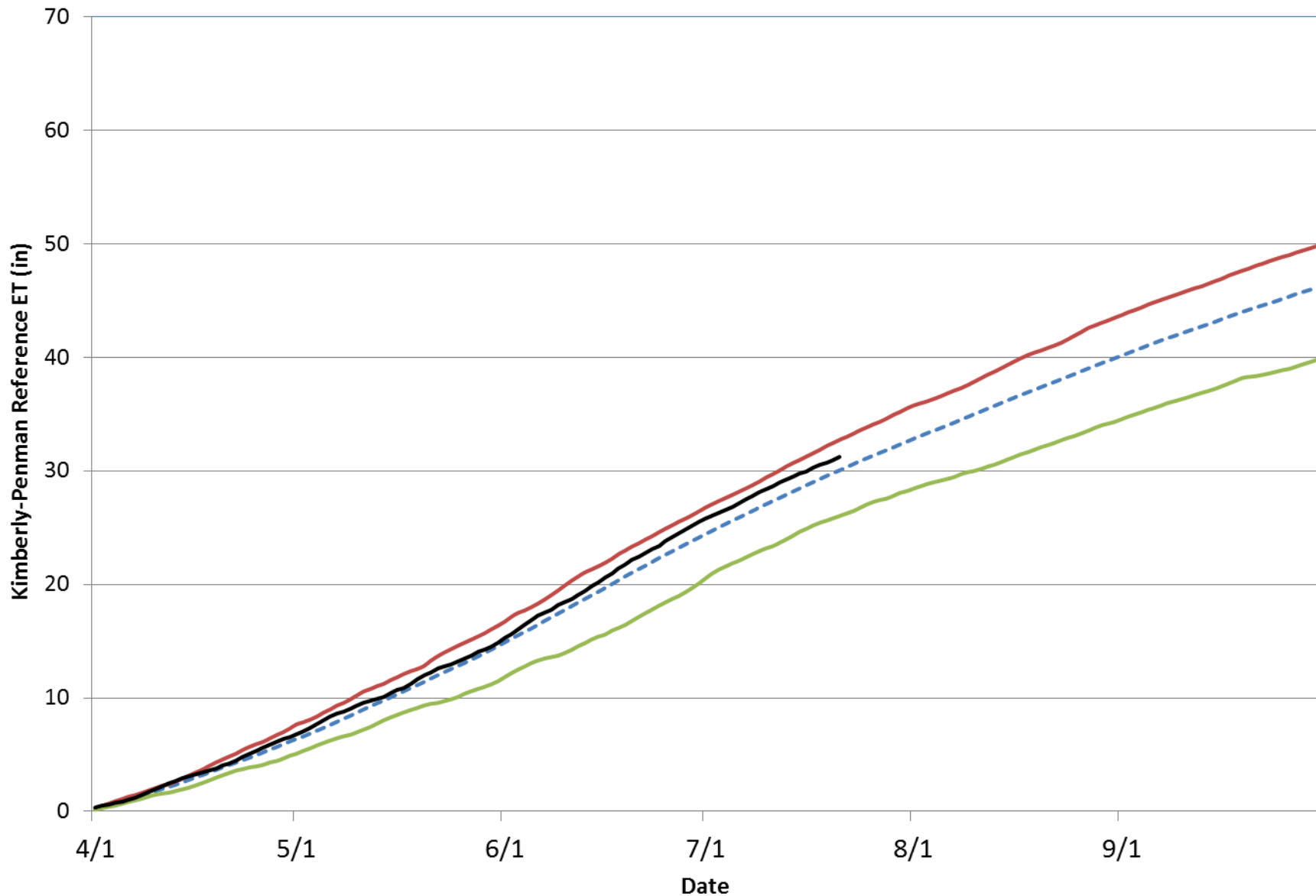
Cortez Kimberly-Penman Reference ET (1992 - 2013)

--- Average — 2000 — 1995 — 2014



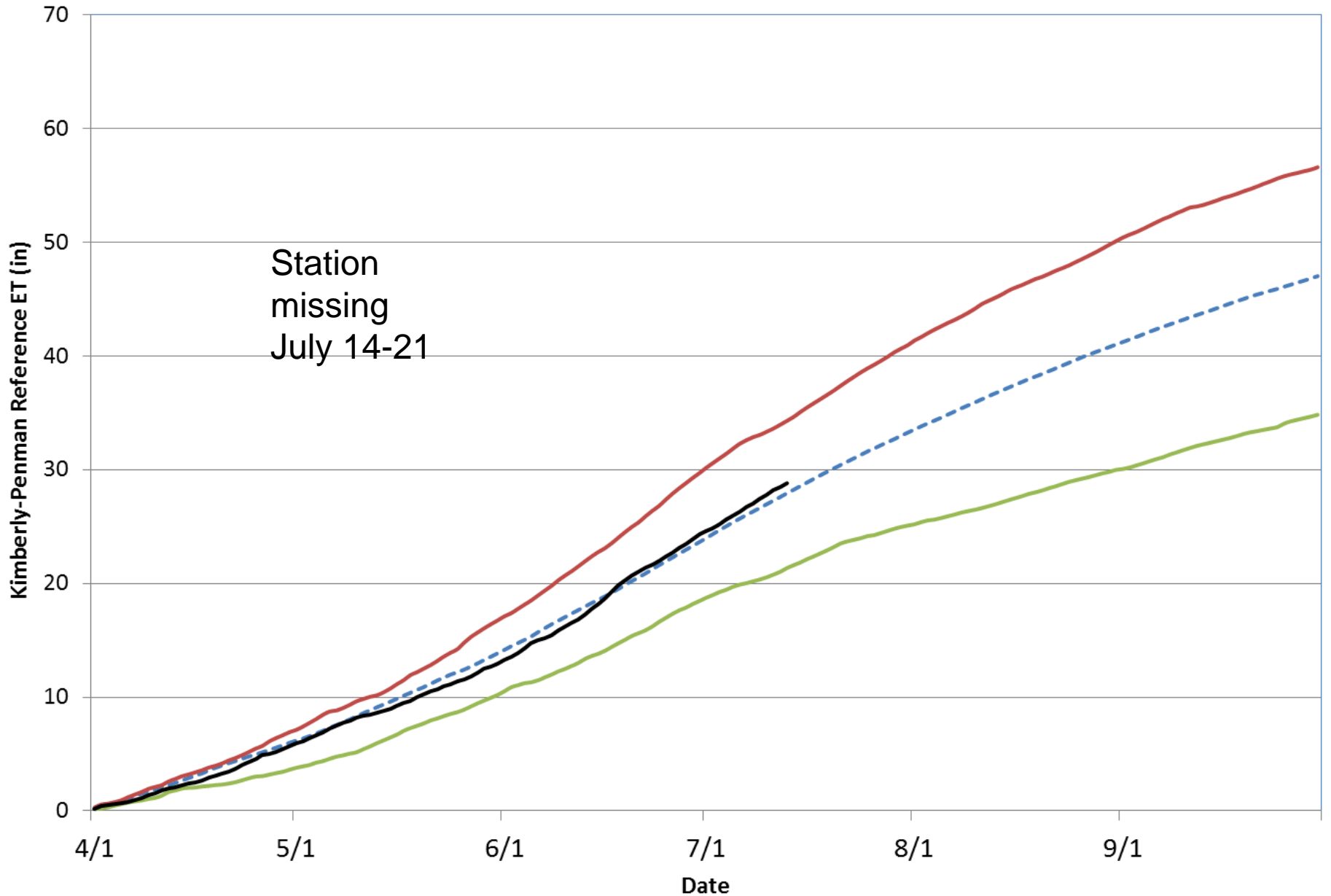
Center Kimberly-Penman Reference ET (1994 - 2013)

--- Average — 2002 — 1997 — 2014



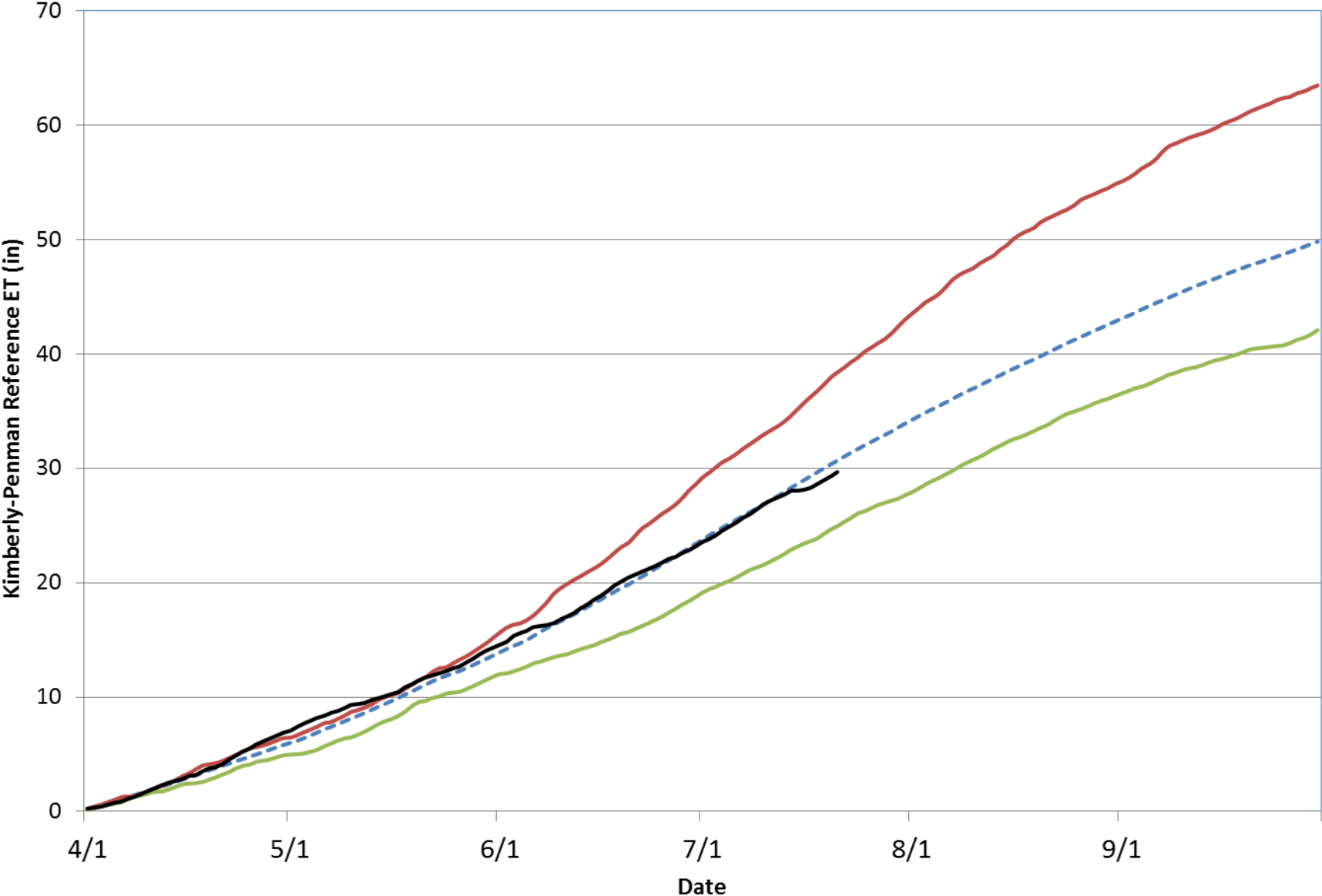
Avondale Kimberly-Penman Reference ET (1993 - 2013)

--- Average — 2012 — 1998 — 2014



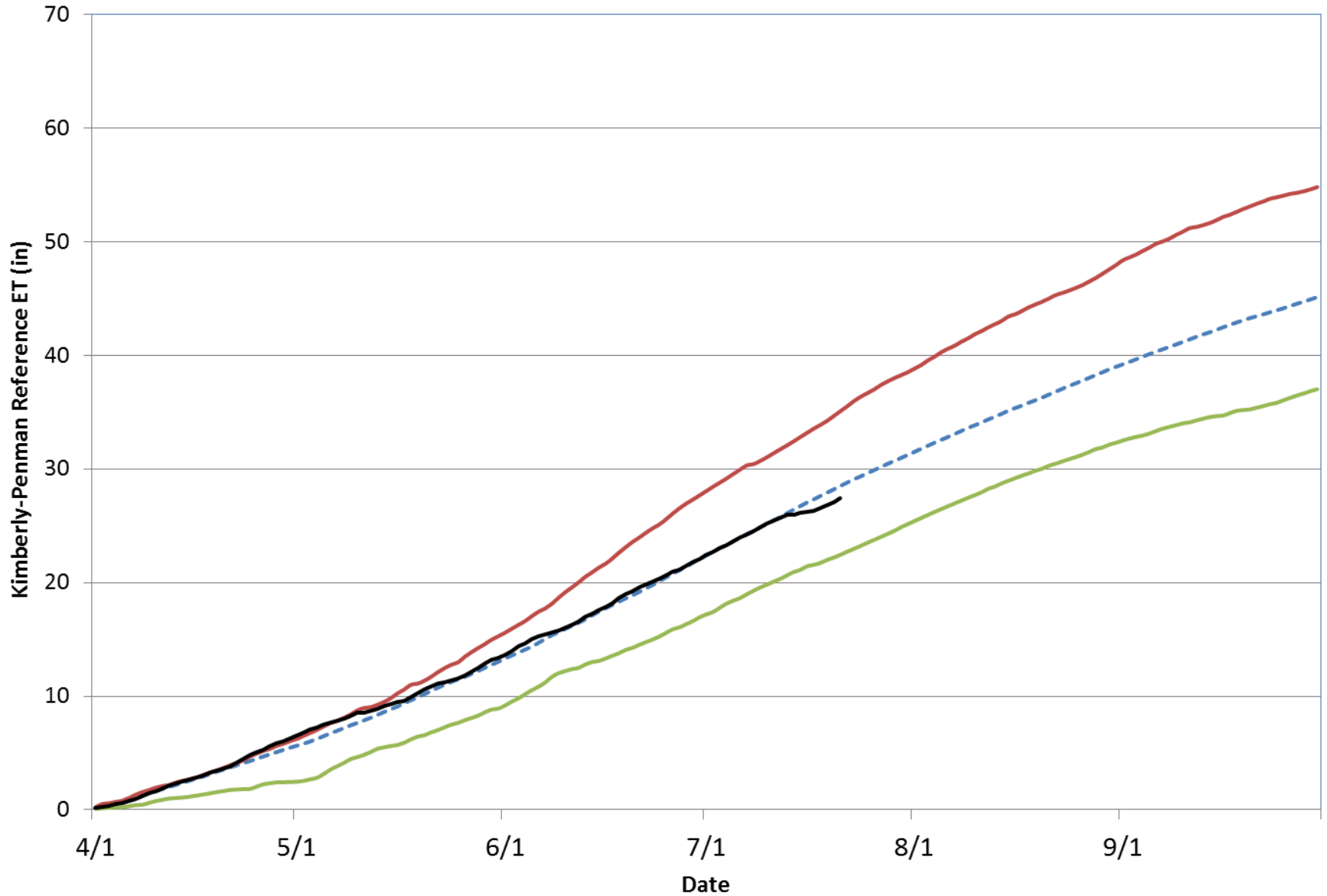
Idalia Kimberly-Penman Reference ET (1992 - 2013)

--- Average — 2002 — 2009 — 2014



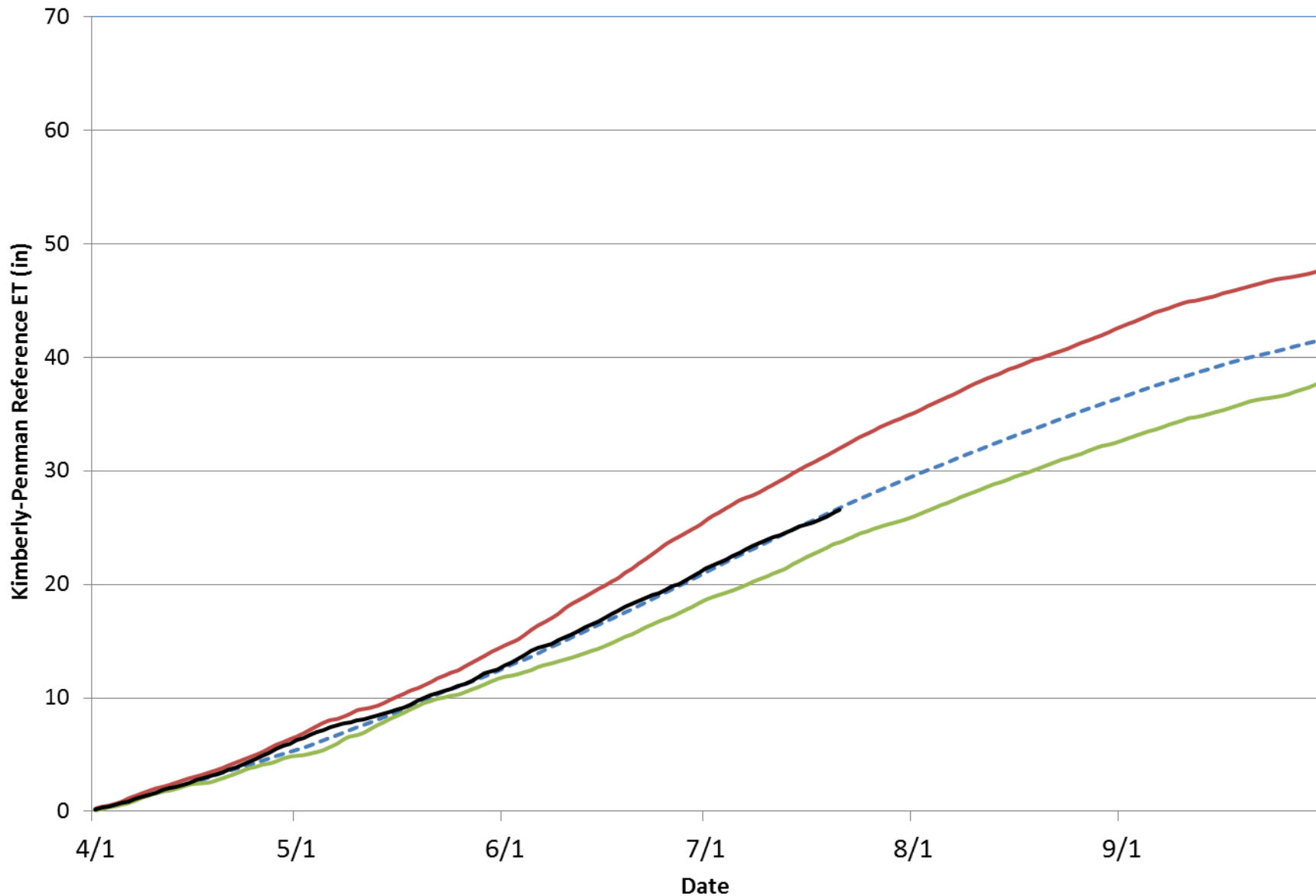
Holyoke Kimberly-Penman Reference ET (1992 - 2013)

--- Average — 2012 — 1999 — 2014



Lucerne Kimberly-Penman Reference ET (1992 - 2013)

--- Average — 2012 — 2009 — 2014

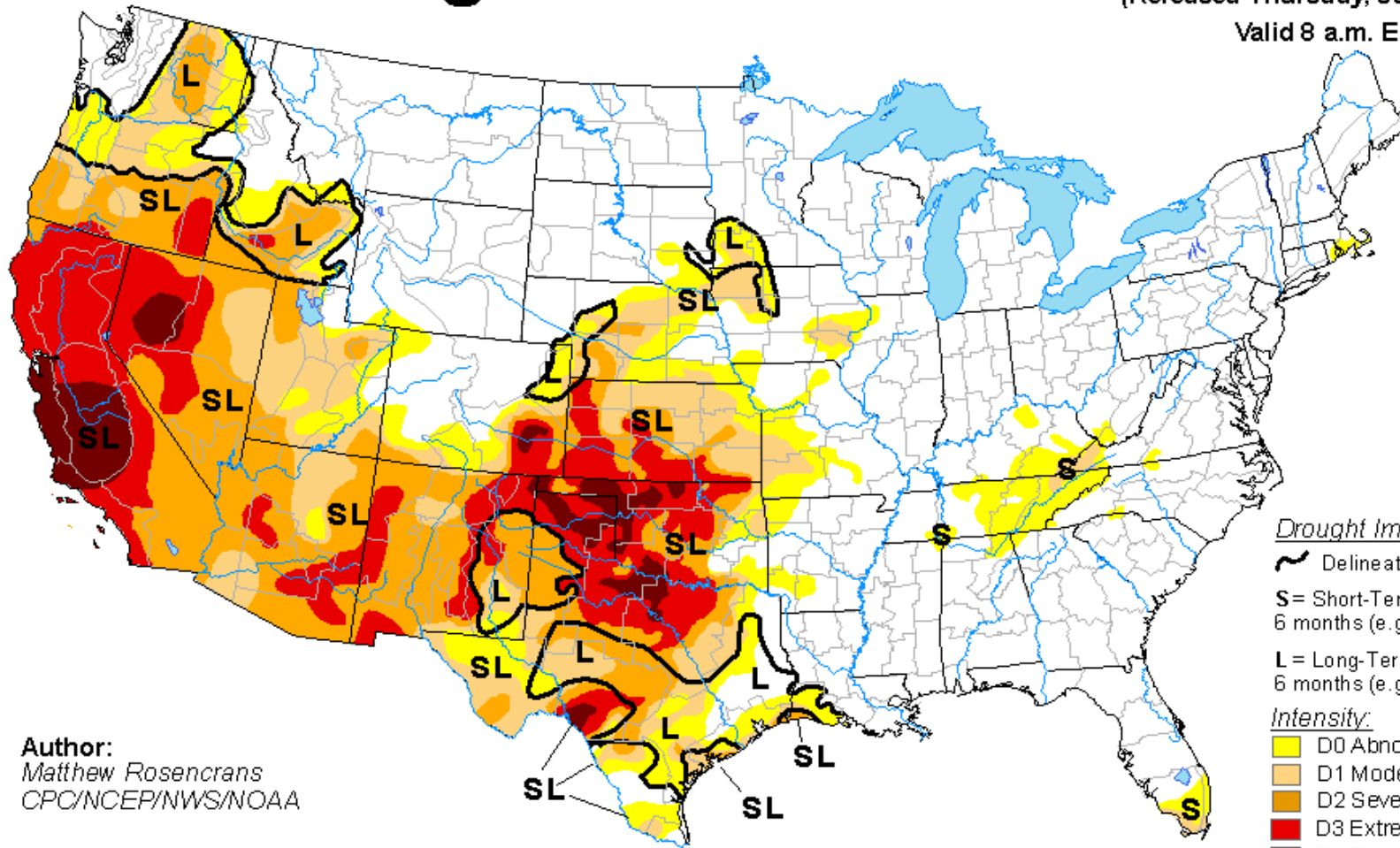


U.S. Drought Monitor

June 10, 2014

(Released Thursday, Jun. 12, 2014)

Valid 8 a.m. EDT



Author:
Matthew Rosenkrans
CPC/NCEP/NWS/NOAA

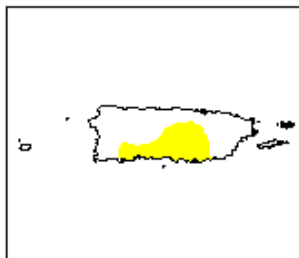
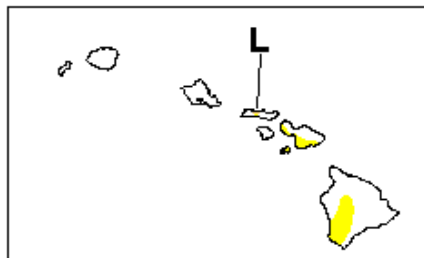
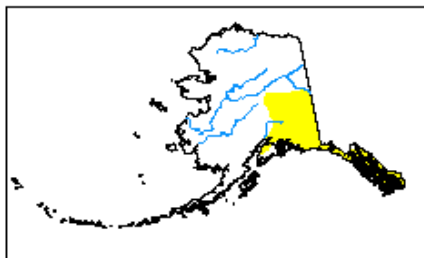
Drought Impact Types:

- Delineates dominant impacts
- S** = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L** = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

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

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



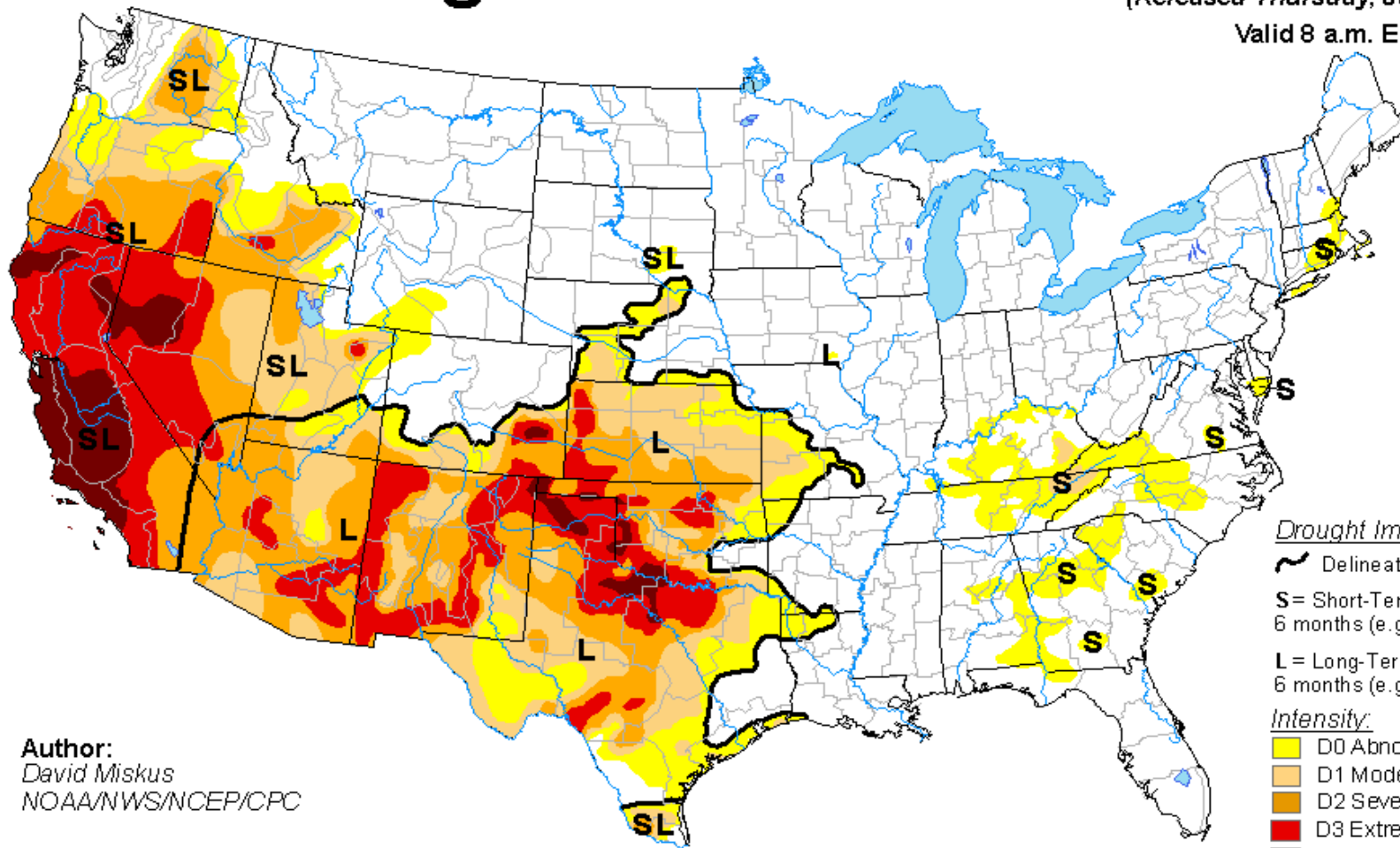
<http://droughtmonitor.unl.edu/>

U.S. Drought Monitor

July 15, 2014

(Released Thursday, Jul. 17, 2014)

Valid 8 a.m. EDT



Author:
David Miskus
NOAA/NWS/NCEP/CPC

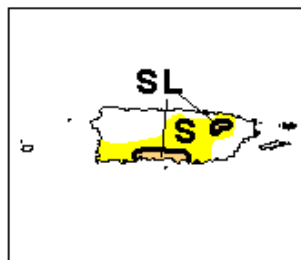
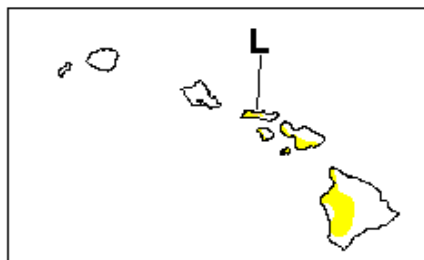
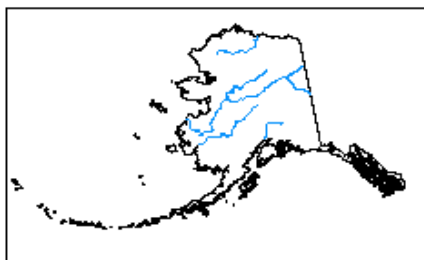
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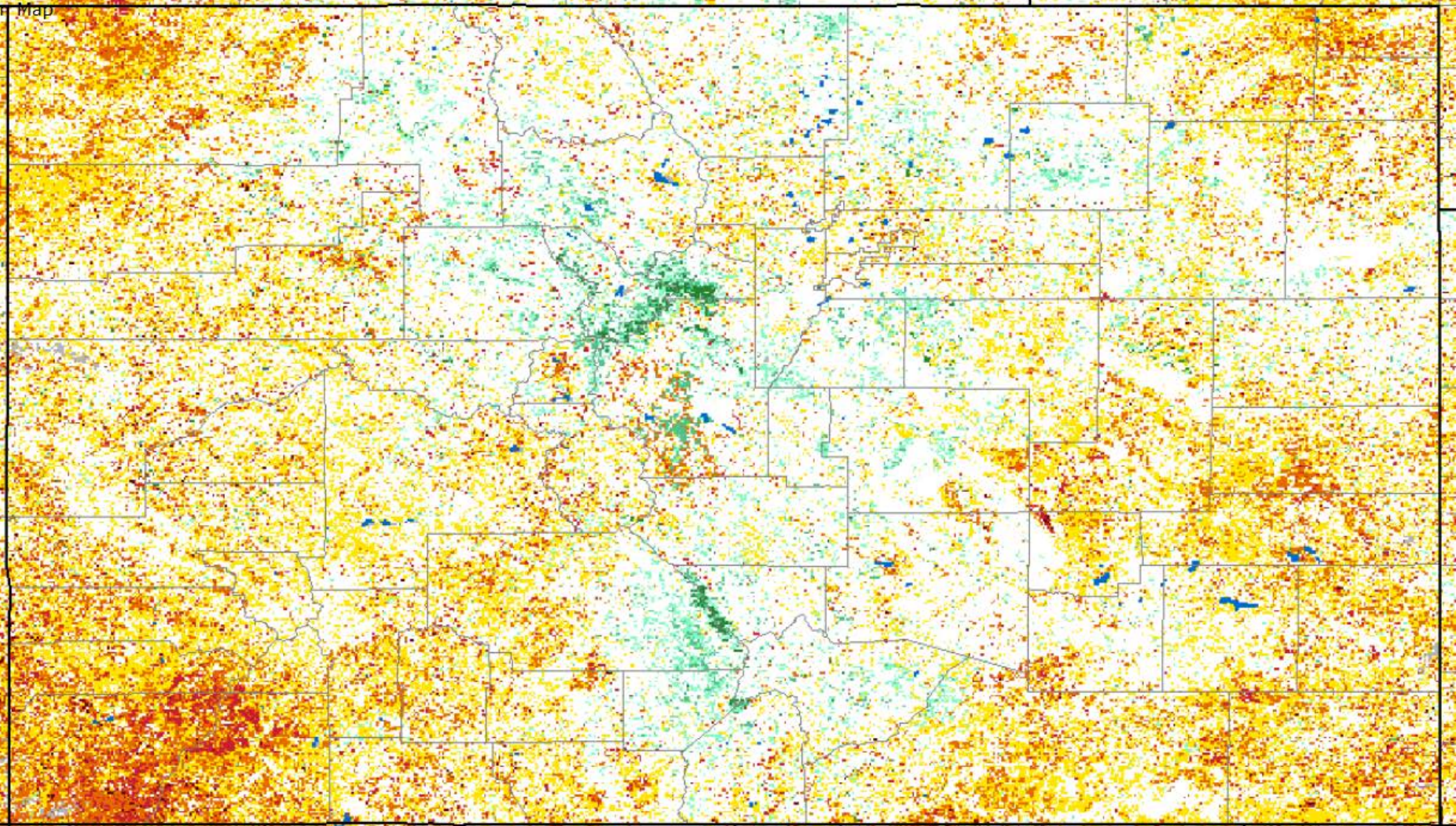


<http://droughtmonitor.unl.edu/>

VegDri- 6/15/14

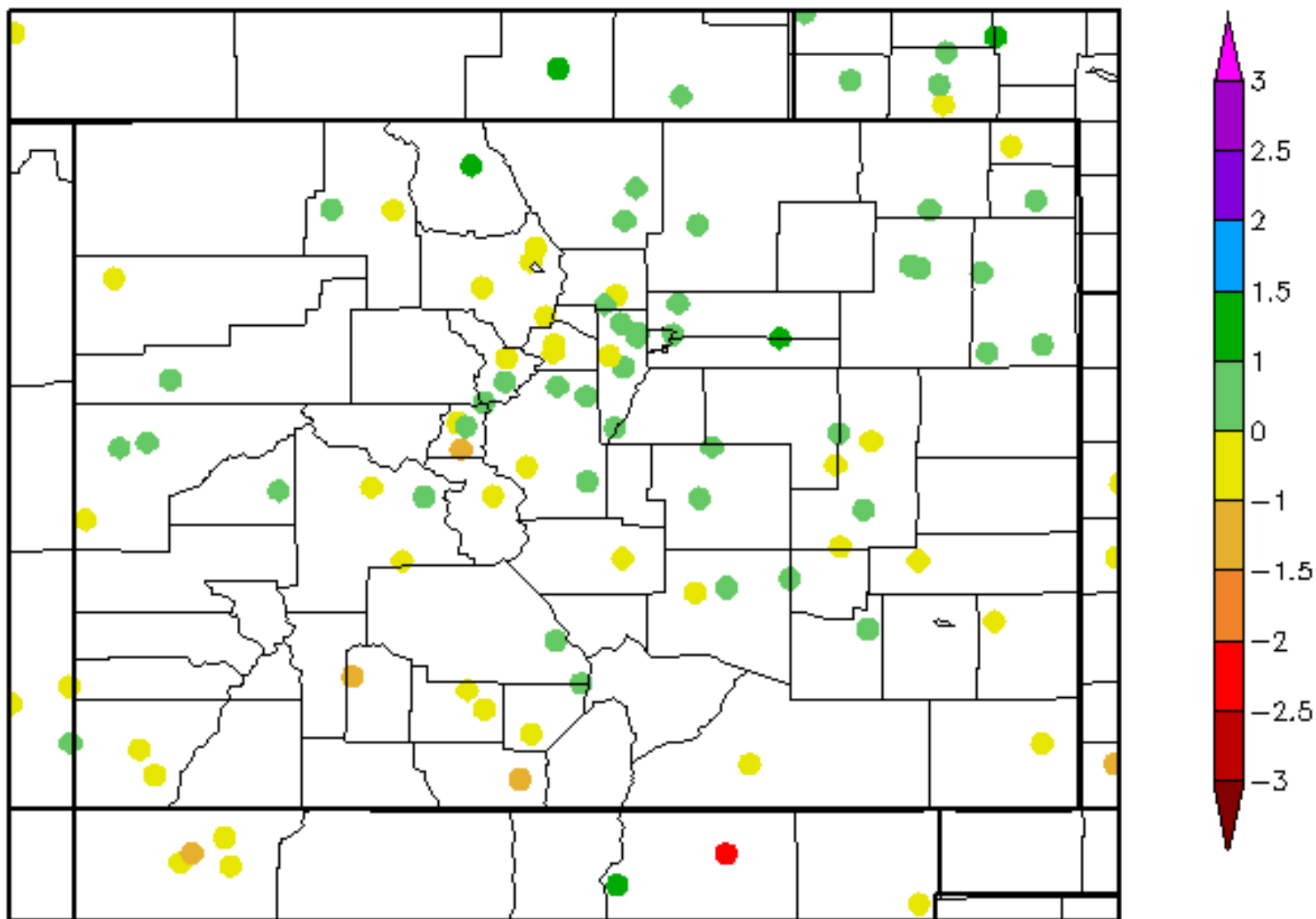


Map



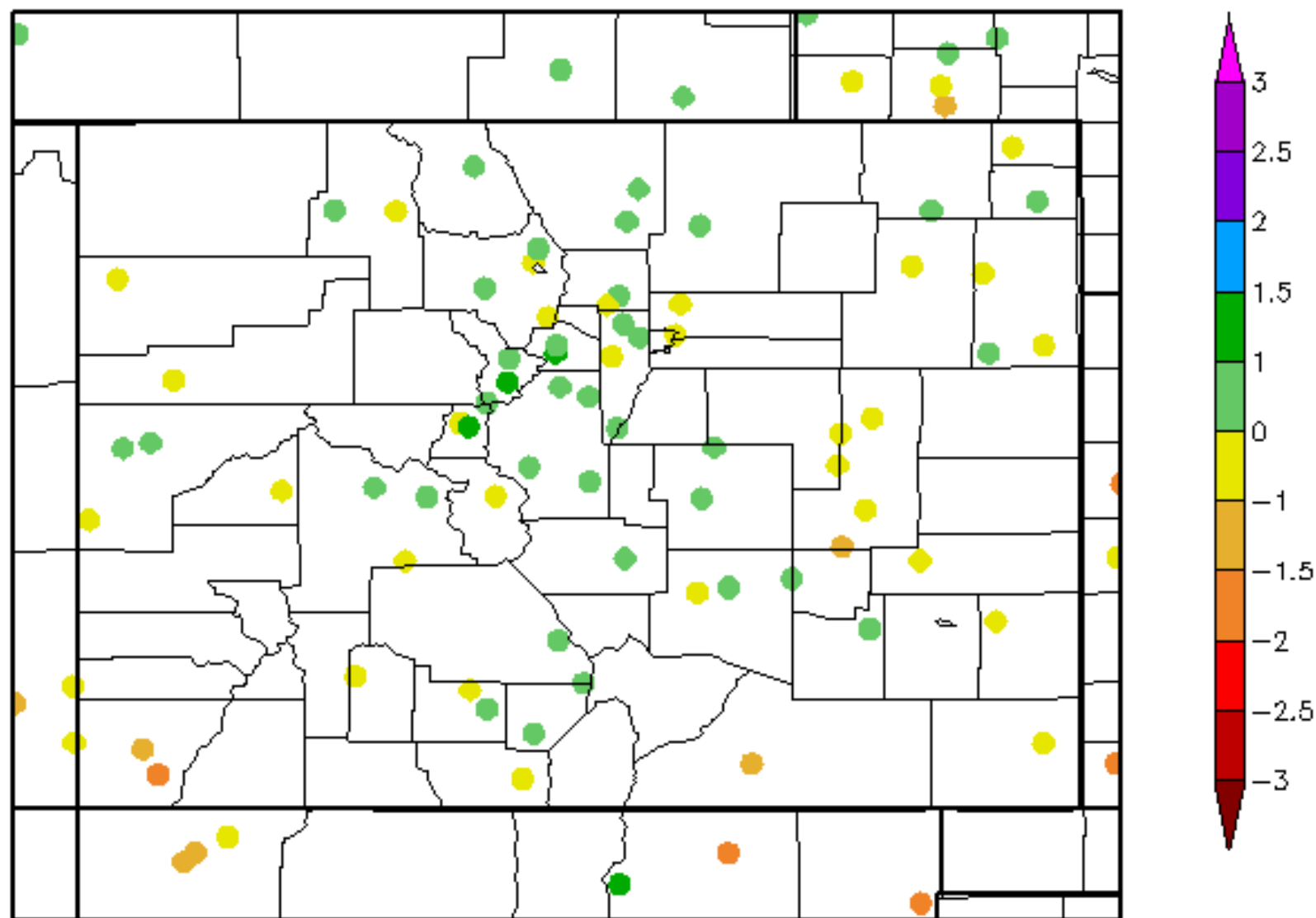
90 Day SPI

4/22/2014 - 7/20/2014



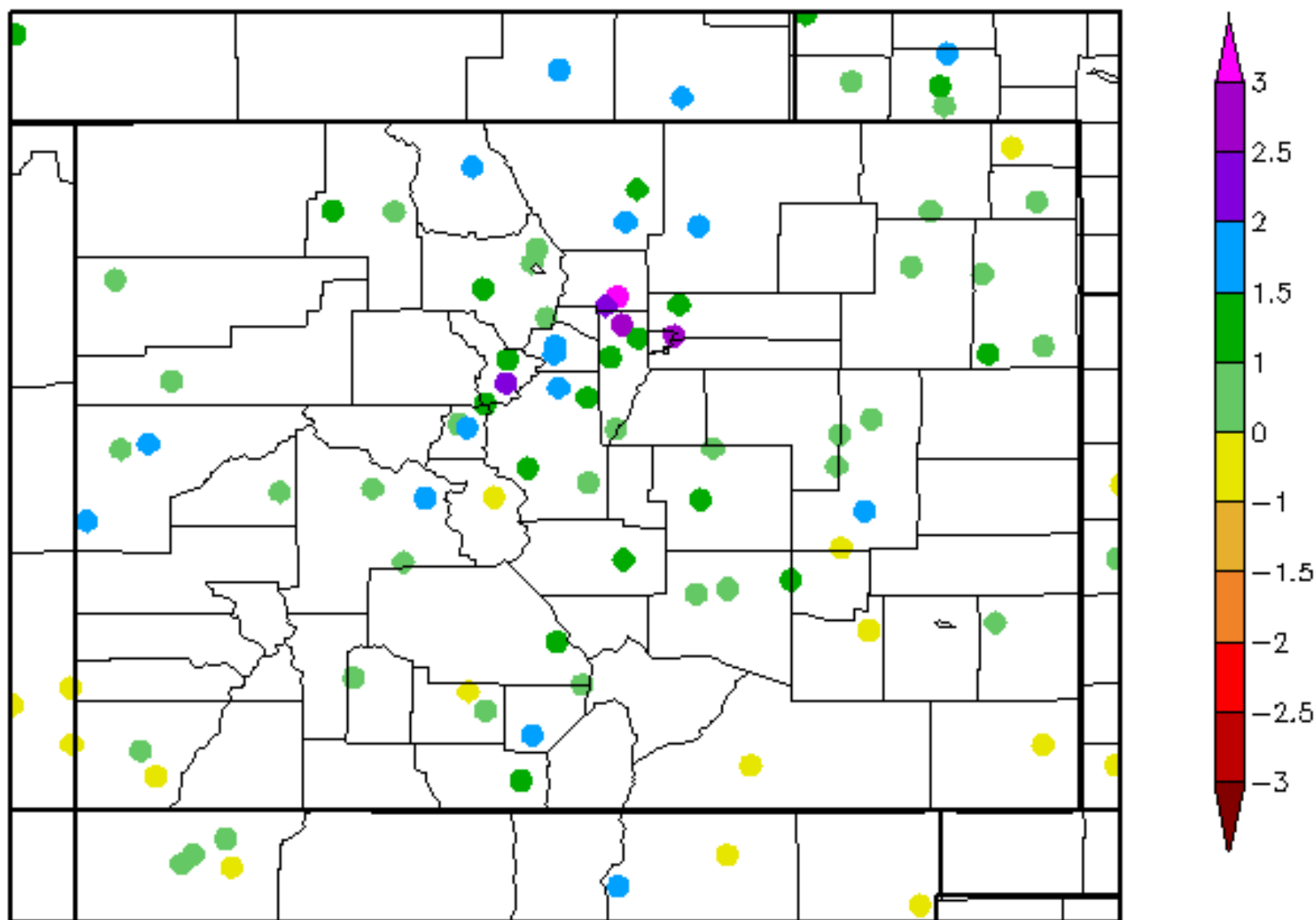
9 Month SPI

10/21/2013 - 7/20/2014



12 Month SPI

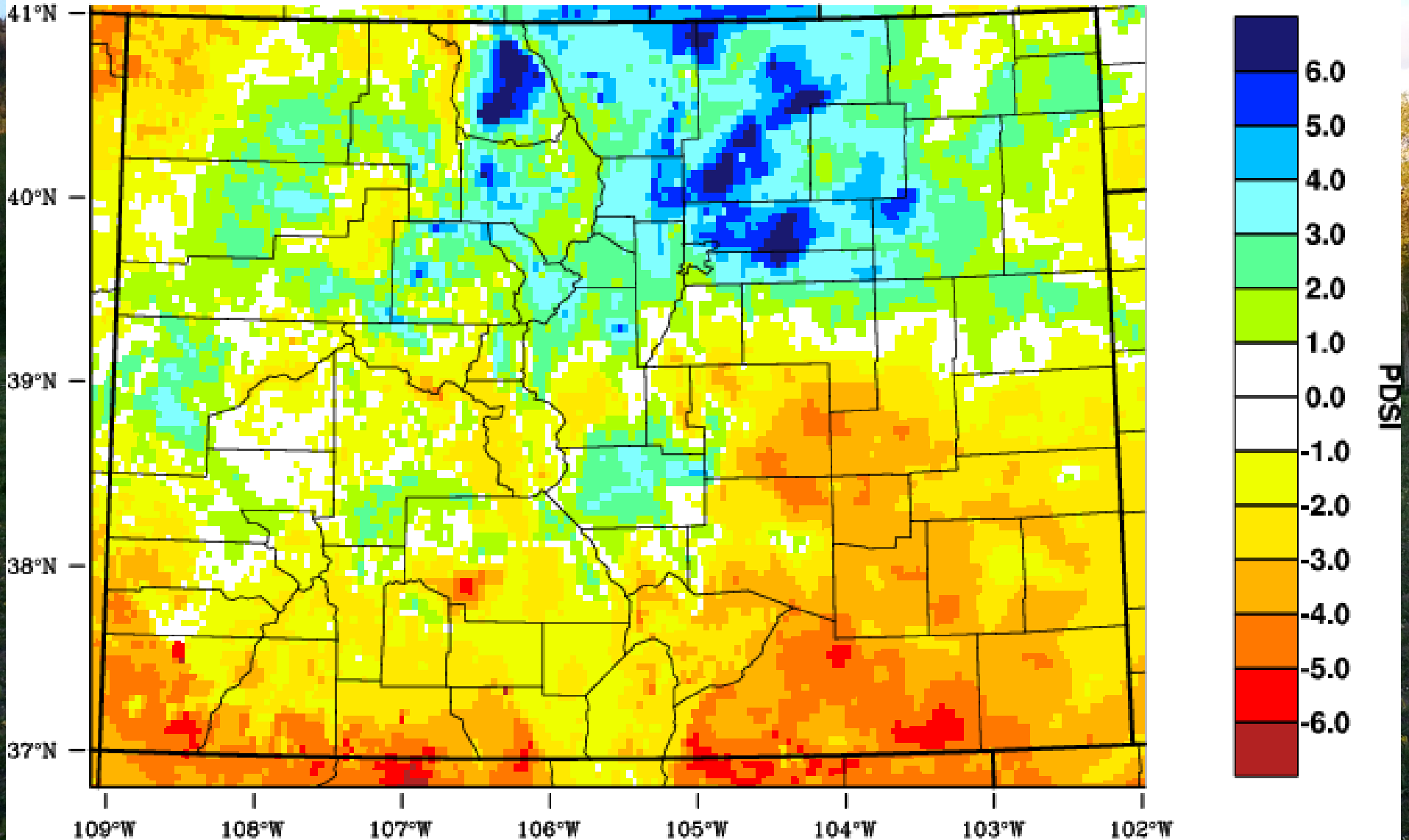
7/21/2013 - 7/20/2014



Palmer

Colorado - PDSI

June 2014



WestWide Drought Tracker - WRCC/UI Data Source - PRISM (Prelim), created 16 JUL 2014

Colorado Climate Center

Data and Power Point Presentations available for
downloading

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



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