



Climate Update

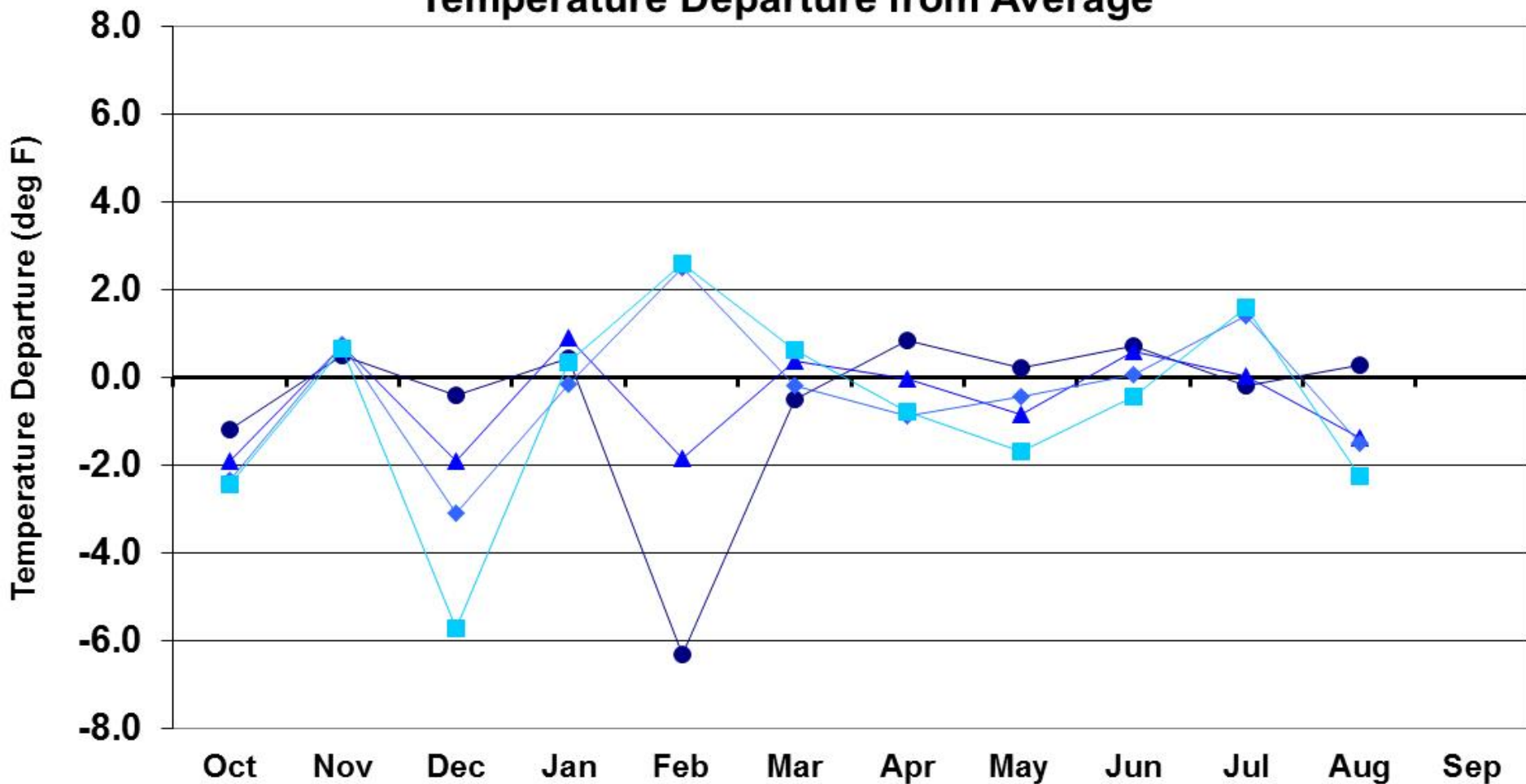


Wendy Ryan
Assistant State Climatologist
Colorado Climate Center

Presented to
Water Availability Task Force
17 September 2014
Denver, CO

Water Year 2014 Temperature Departures

Water Year 2014
Temperature Departure from Average



● Eastern Plains

▲ Foothills

◆ Mountains

■ Western Valleys

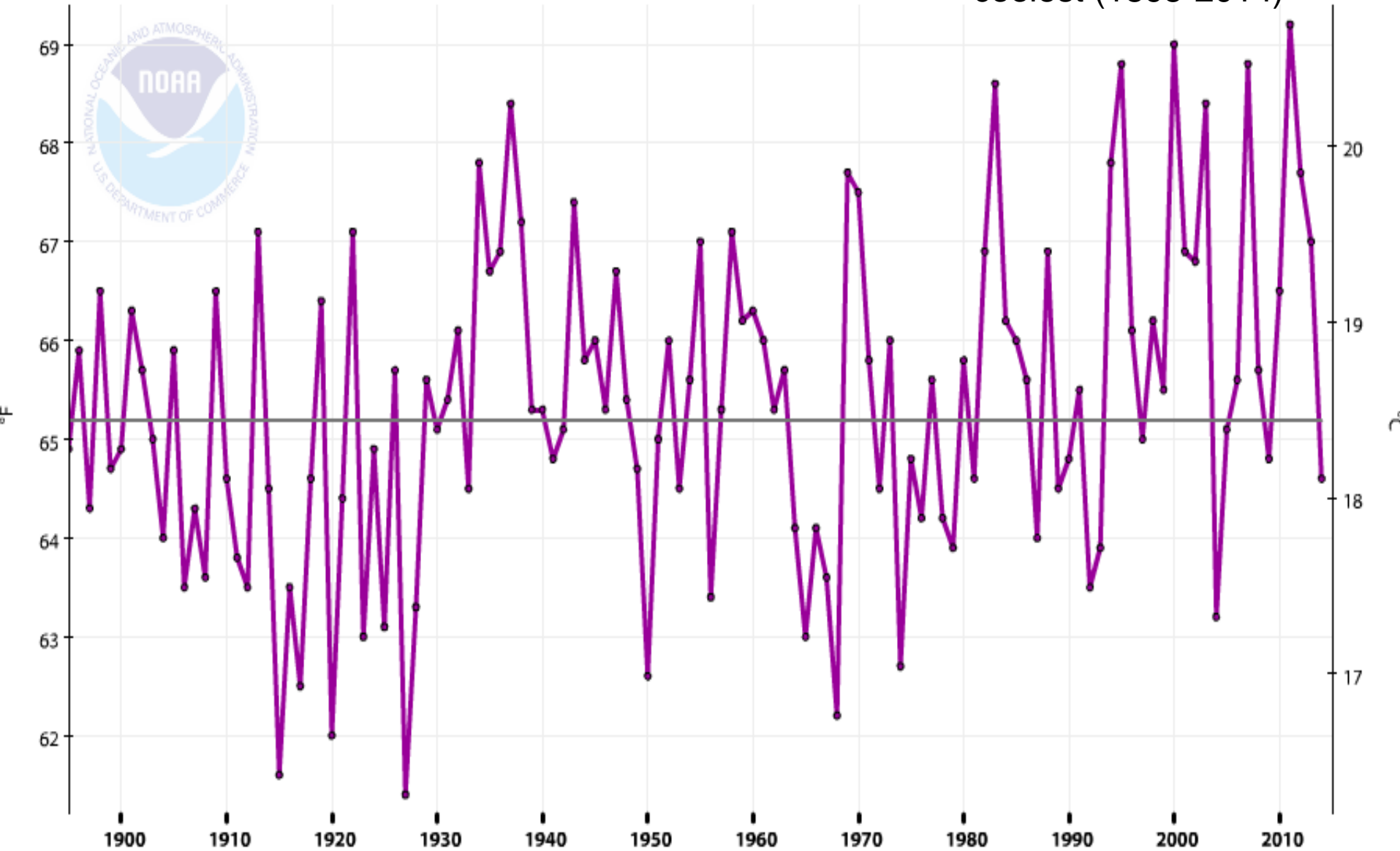
August Average Temperature History for Colorado (NCDC)

Colorado, Average Temperature, August

— 1901-2000
Avg: 65.2°F

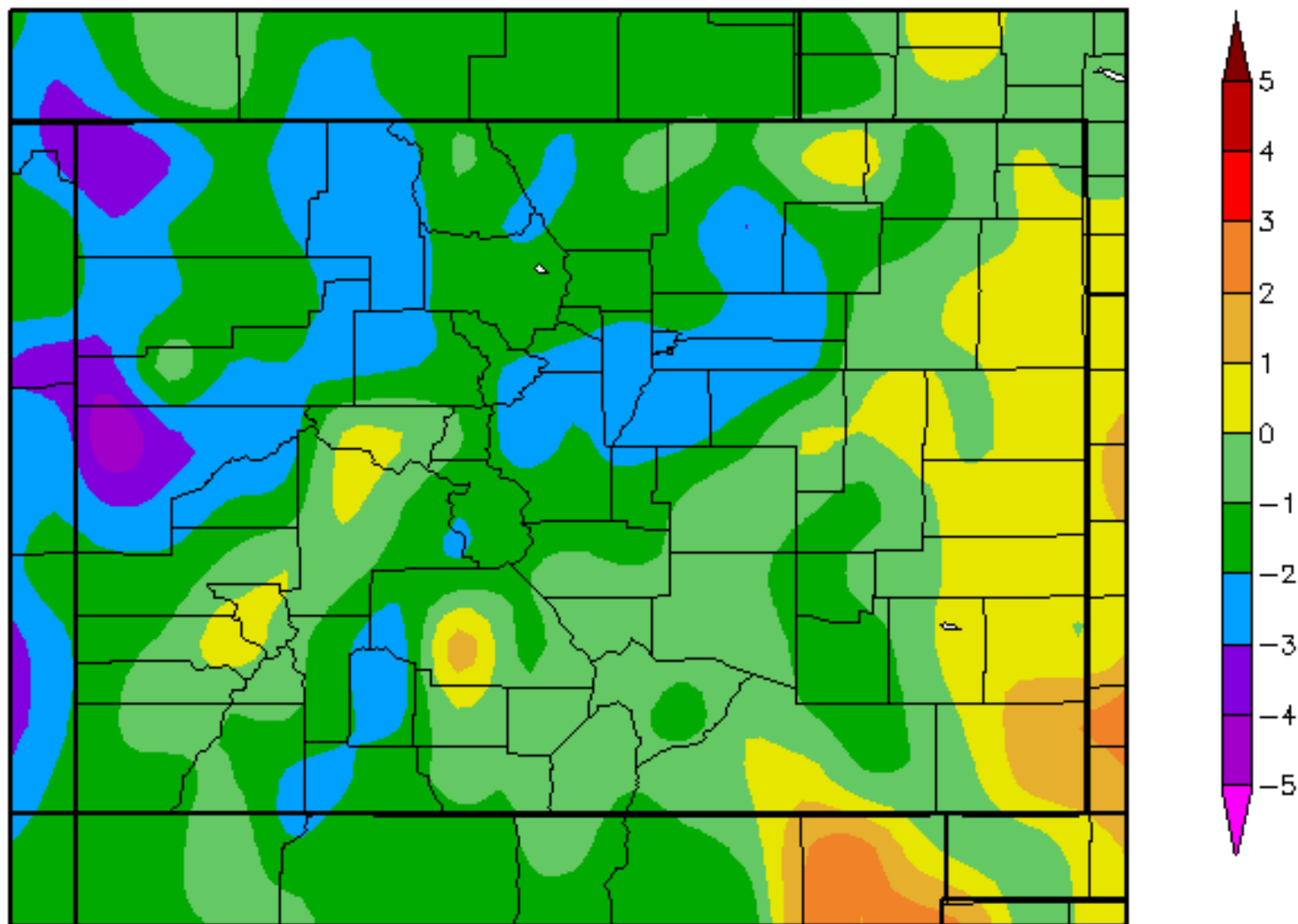
—●— Avg Temperature

64.6F ranks as the 37th
coolest (1895-2014)



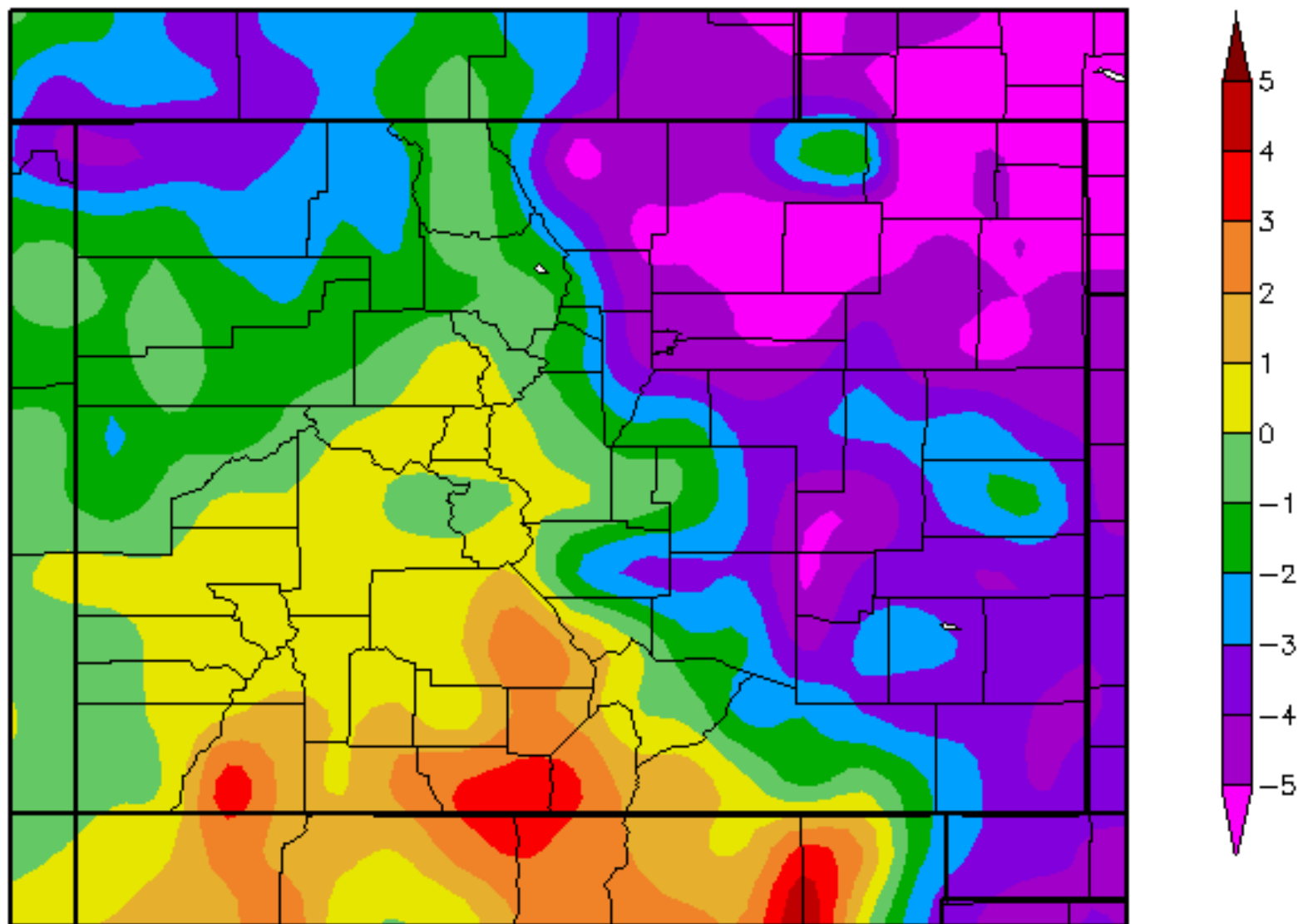
Departure from Normal Temperature (F)

8/1/2014 - 8/31/2014

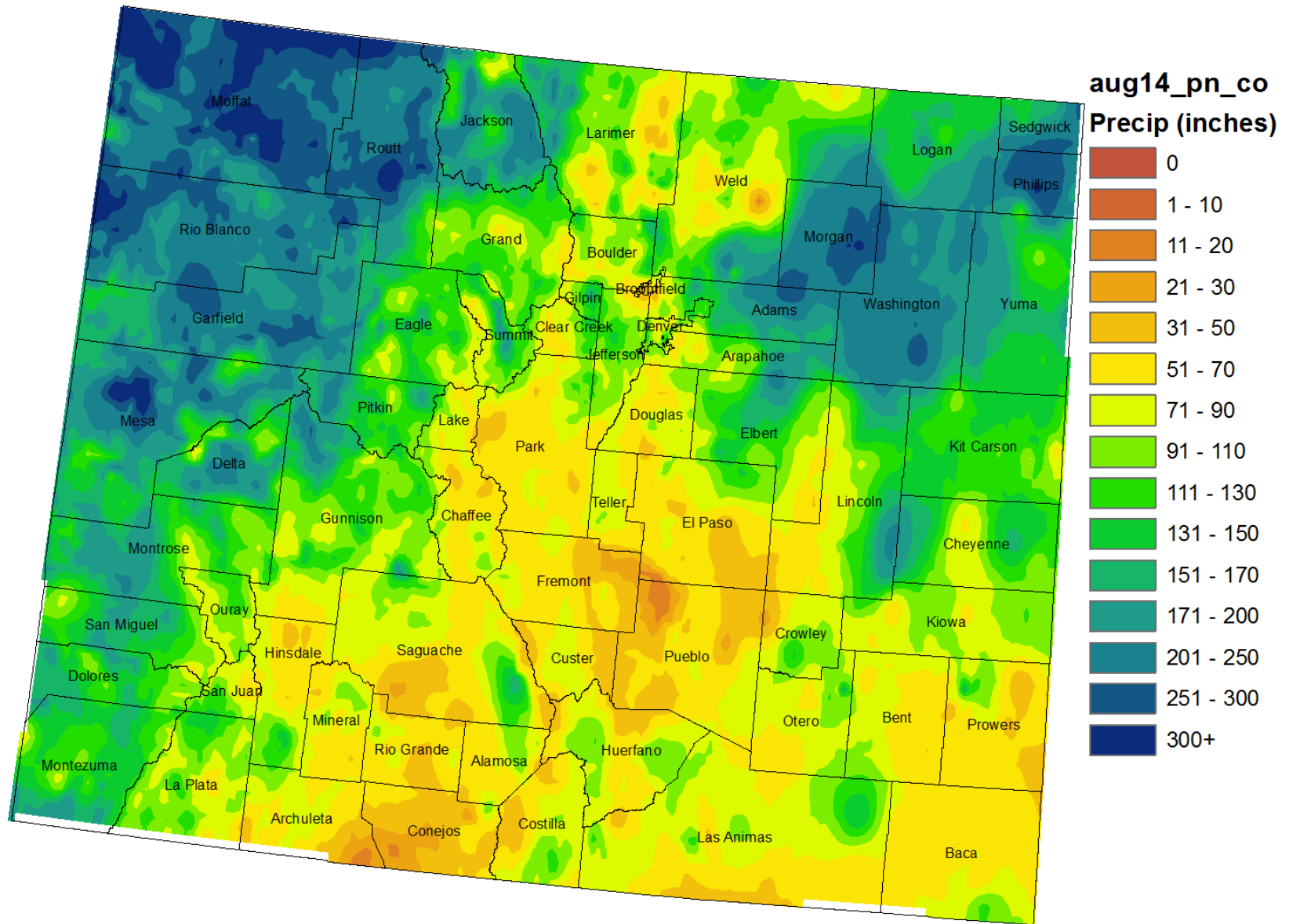


Departure from Normal Temperature (F)

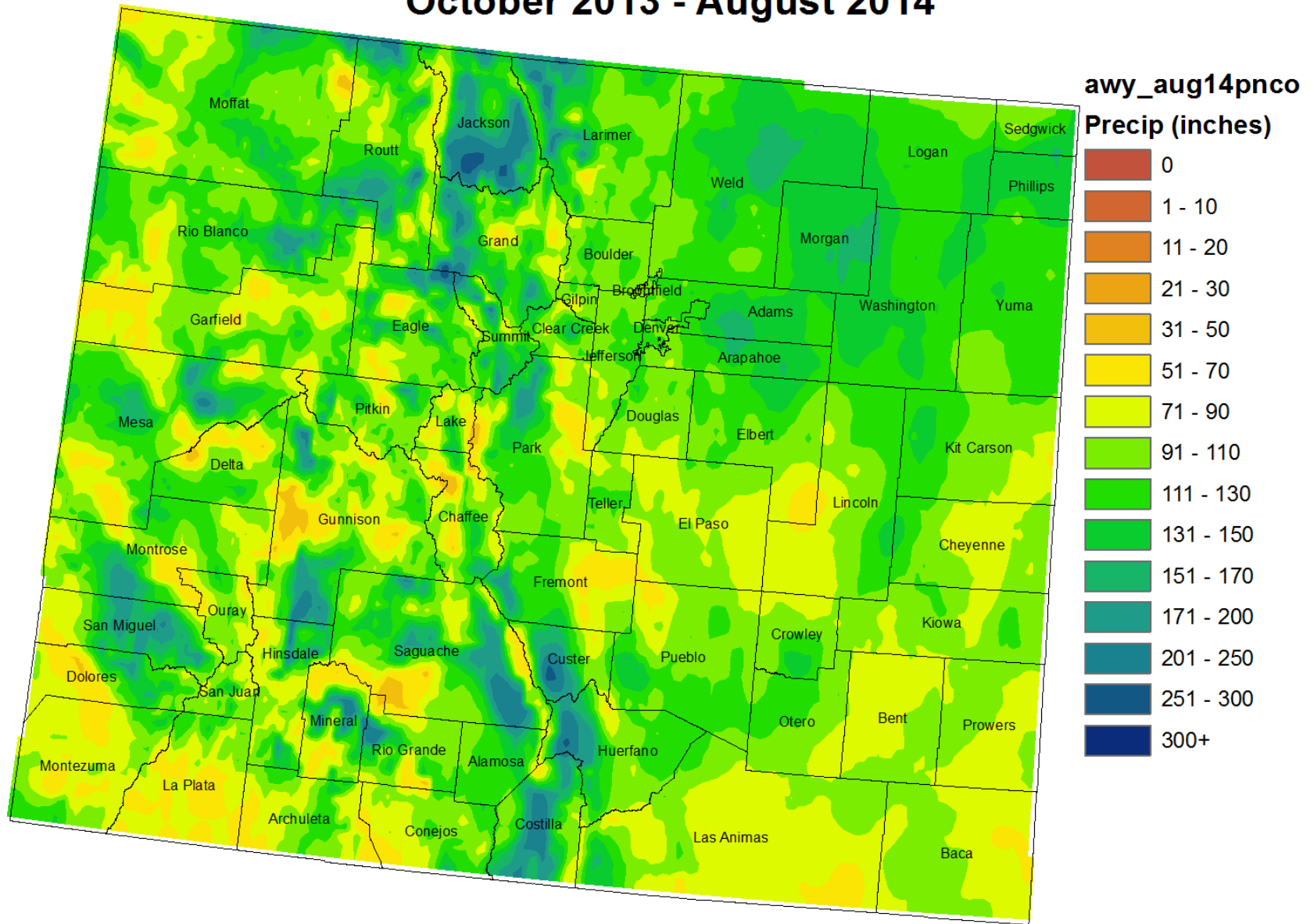
9/1/2014 - 9/15/2014



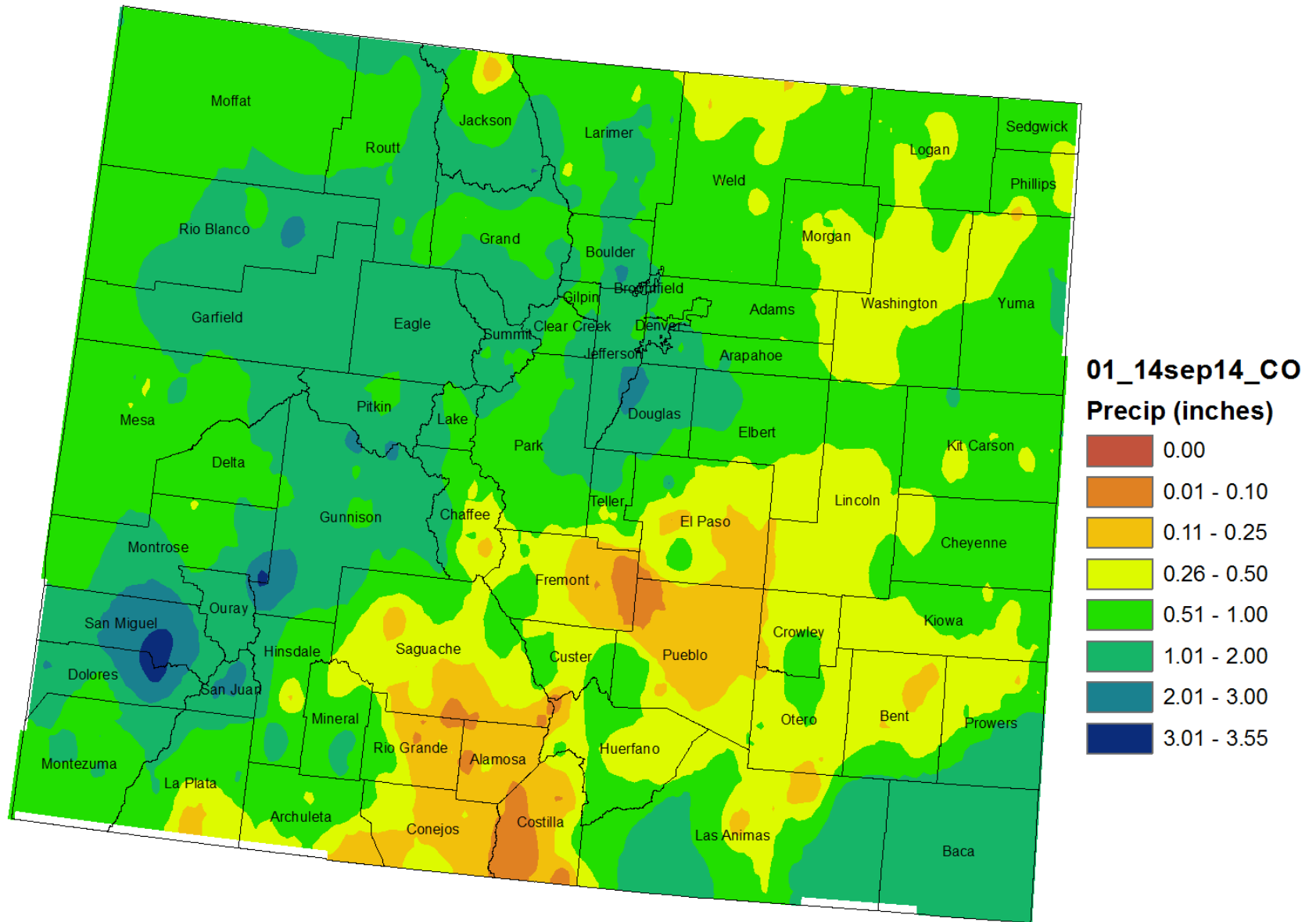
Colorado August 2014 Precipitation as a Percentage of Normal



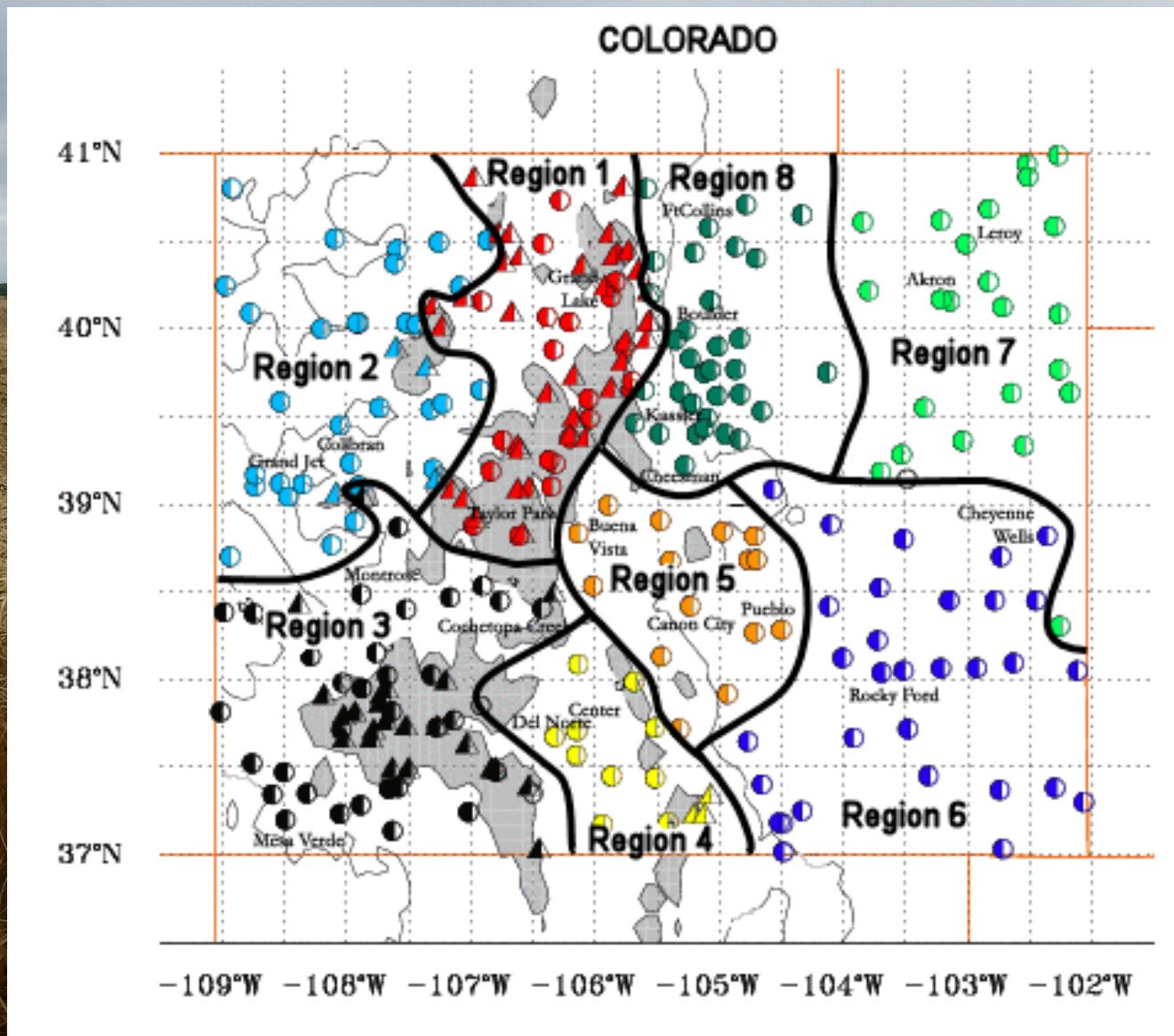
Colorado Water Year 2014 Precipitation as a Percentage of Normal October 2013 - August 2014



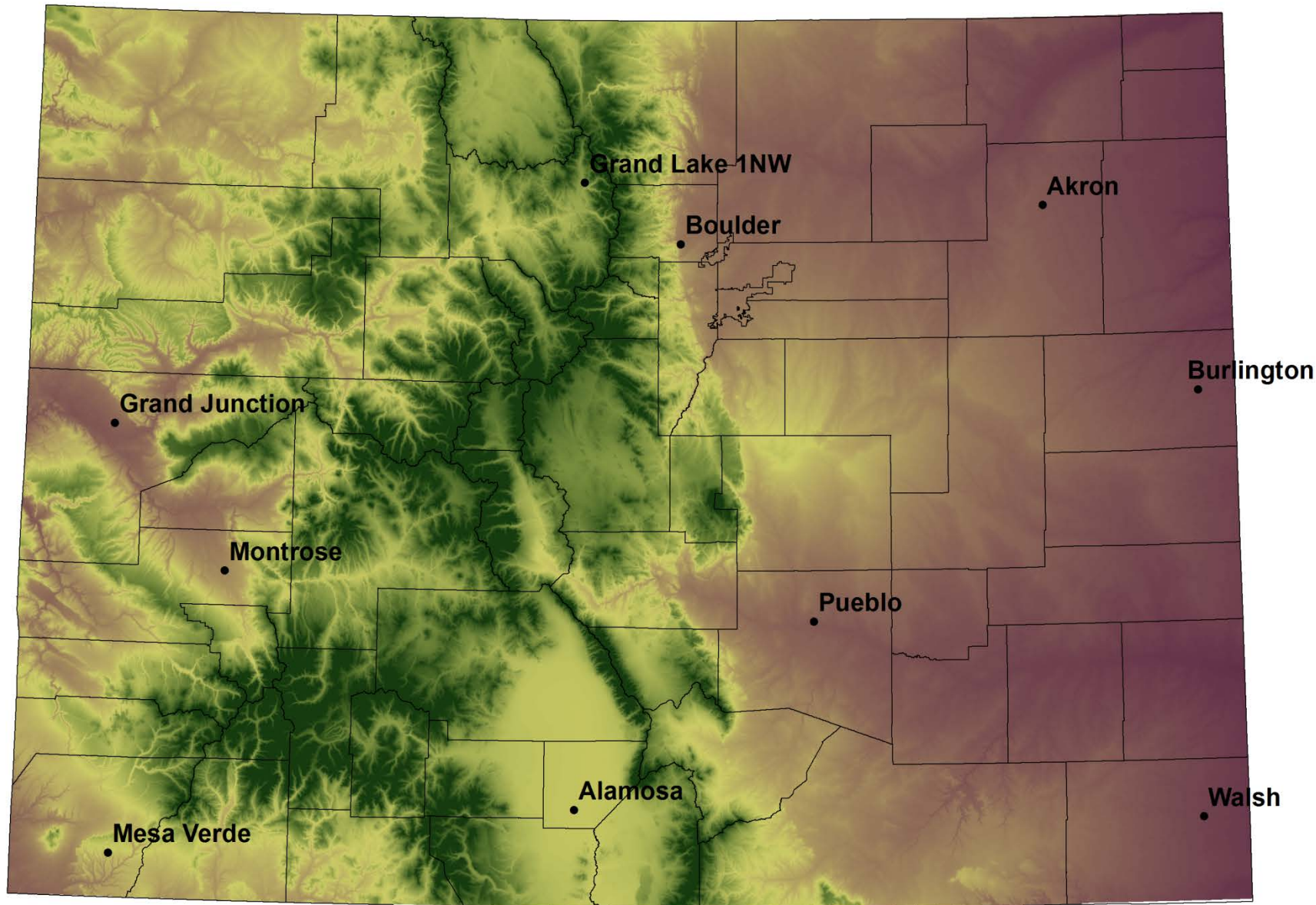
Colorado Month to Date Precipitation 1 - 14 September 2014



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

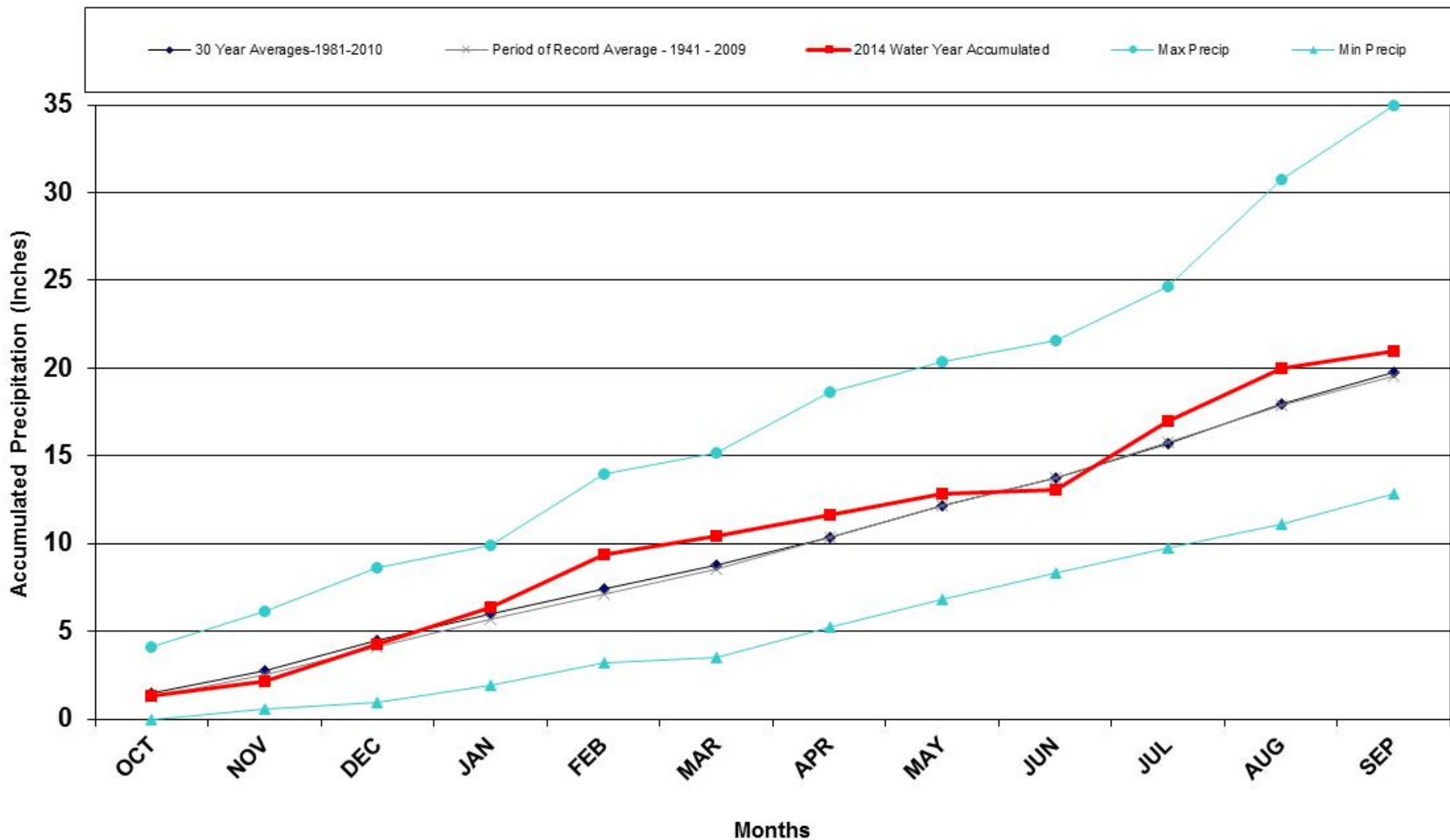


NWS Cooperative Stations for WATF



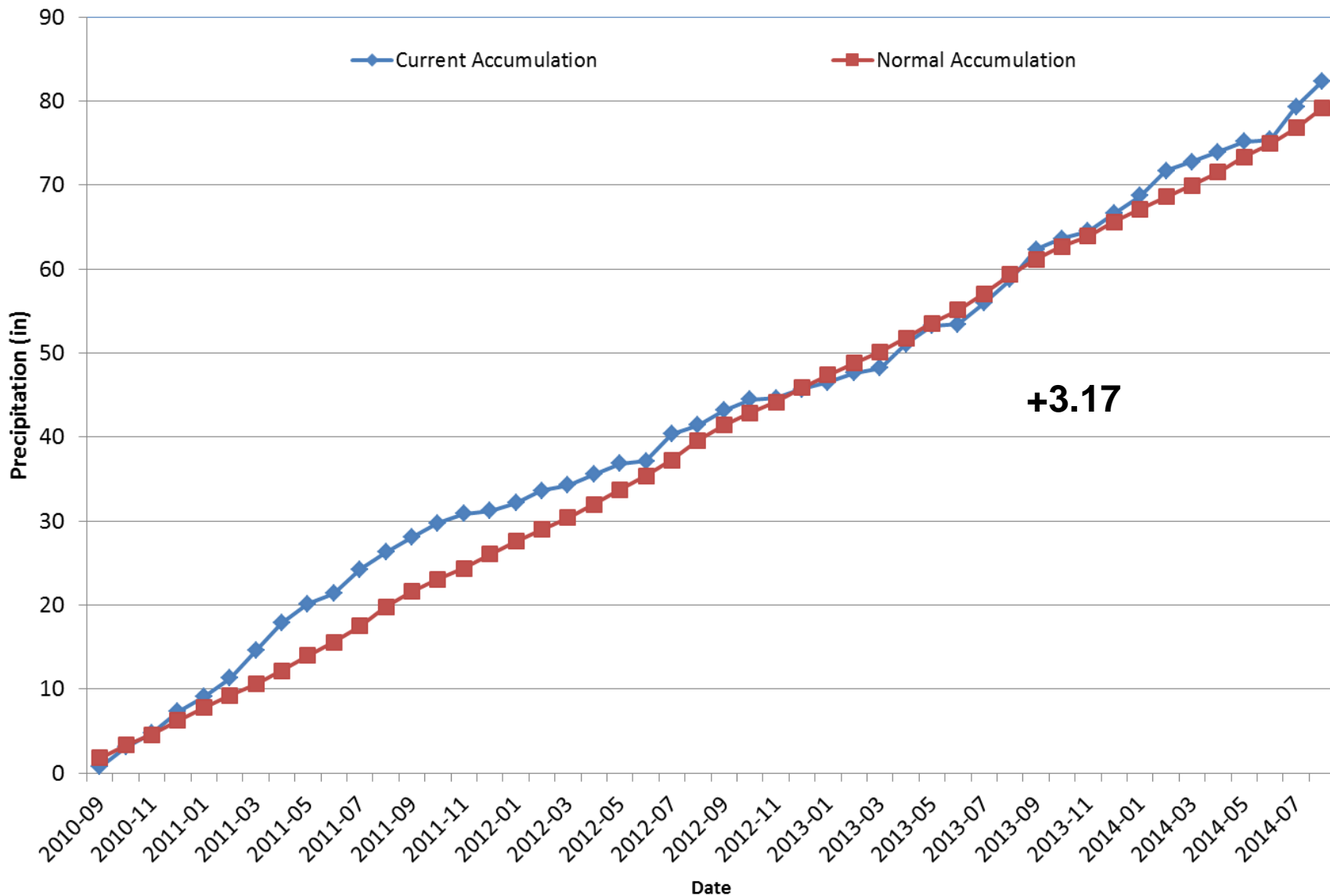
Division 1 – Grand Lake 1NW

Grand Lake 1 NW 2014 Water Year



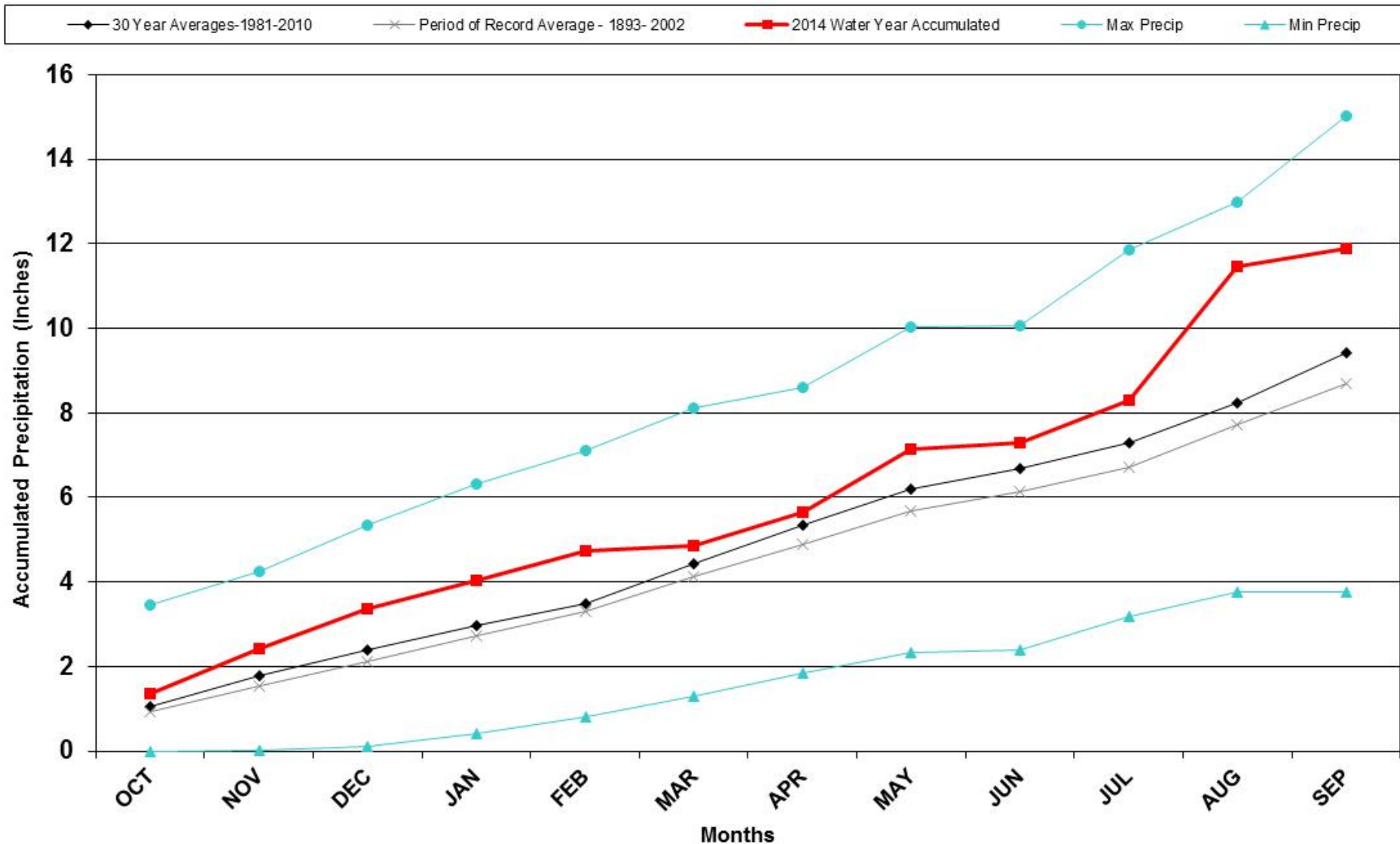
Division 1 – Grand Lake 1NW

Grand Lake 1NW Precipitation Accumulation



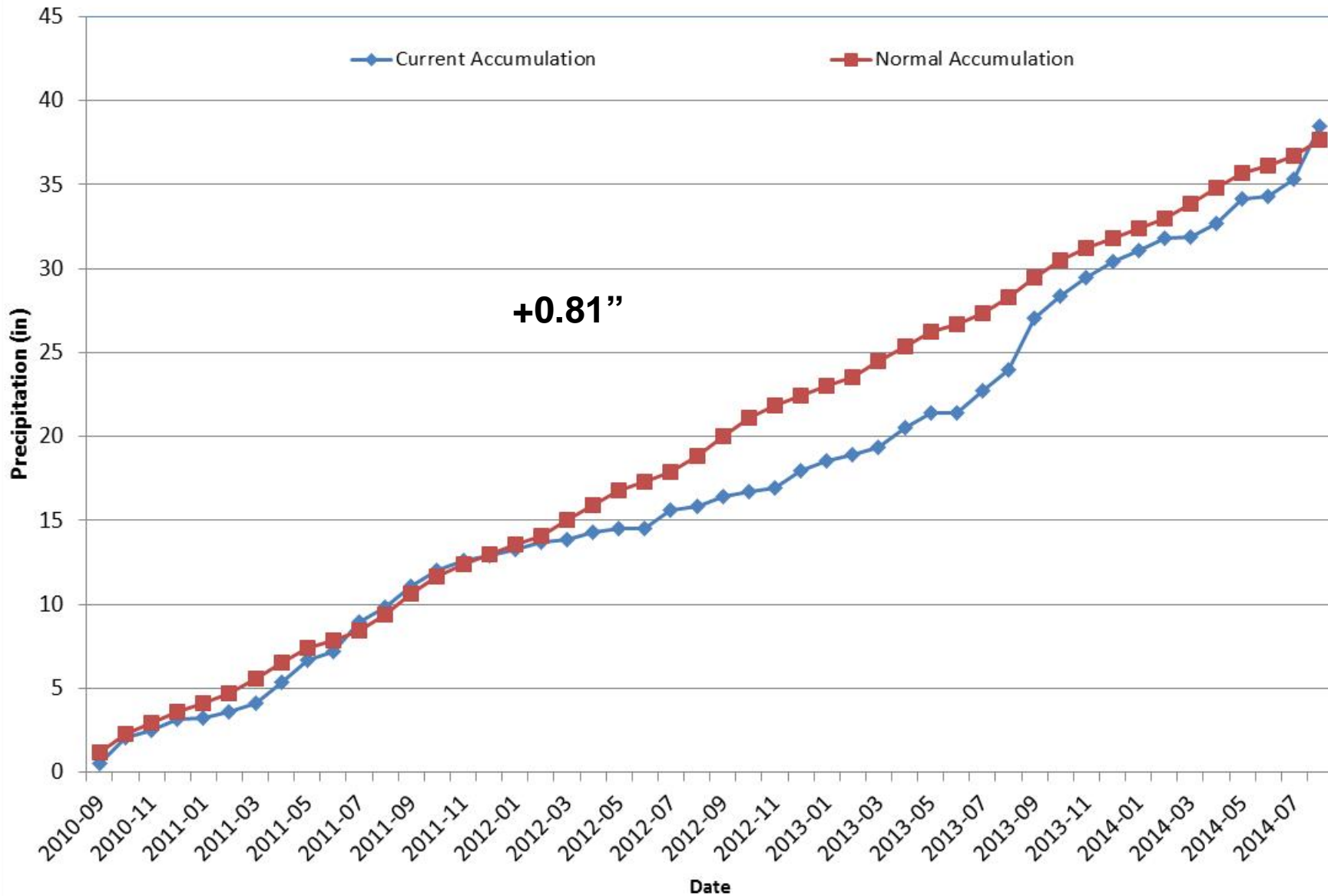
Division 2 – Grand Junction

Grand Junction WSFO 2014 Water Year



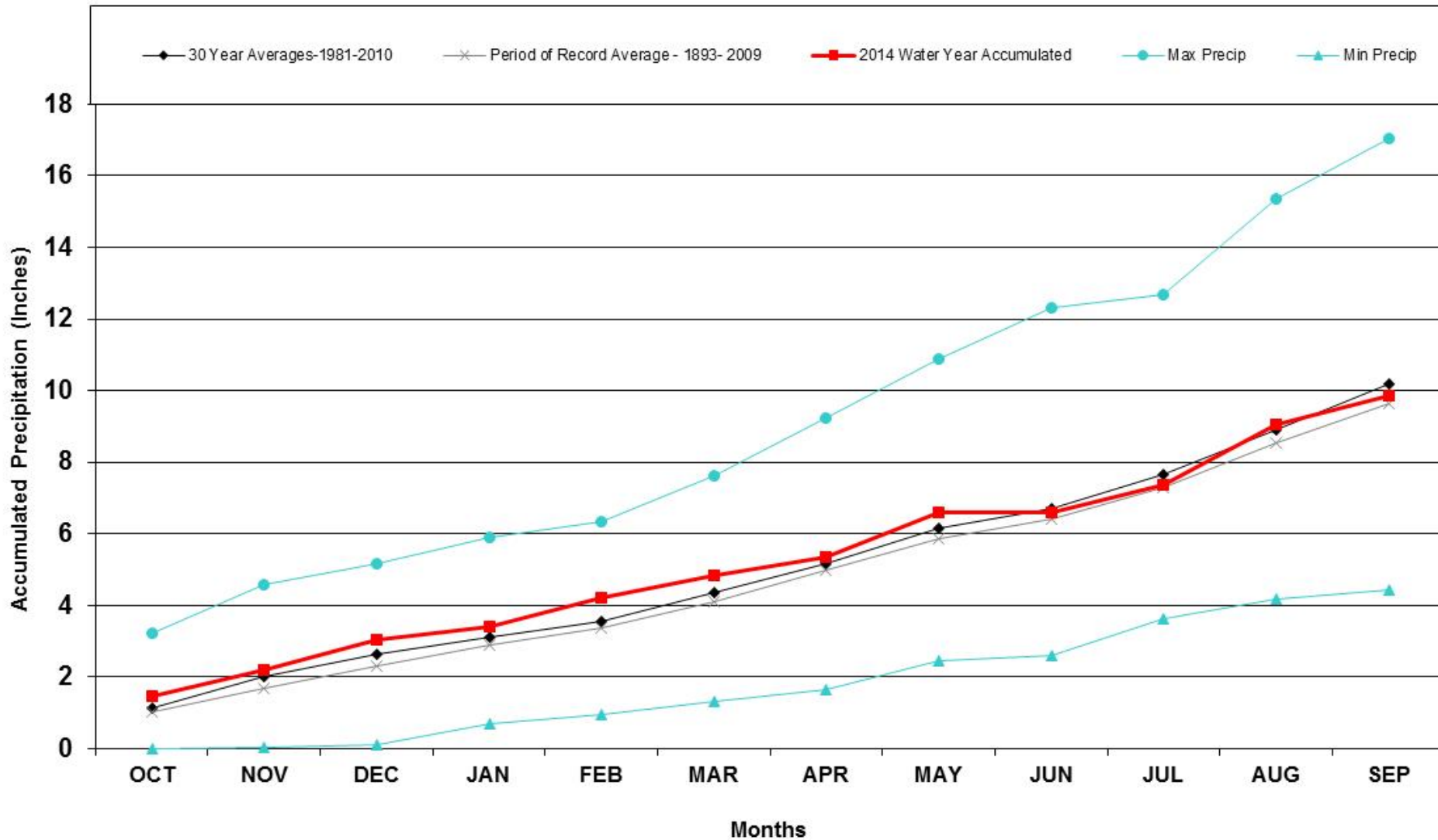
Division 2 – Grand Junction

Grand Junction Precipitation Accumulation



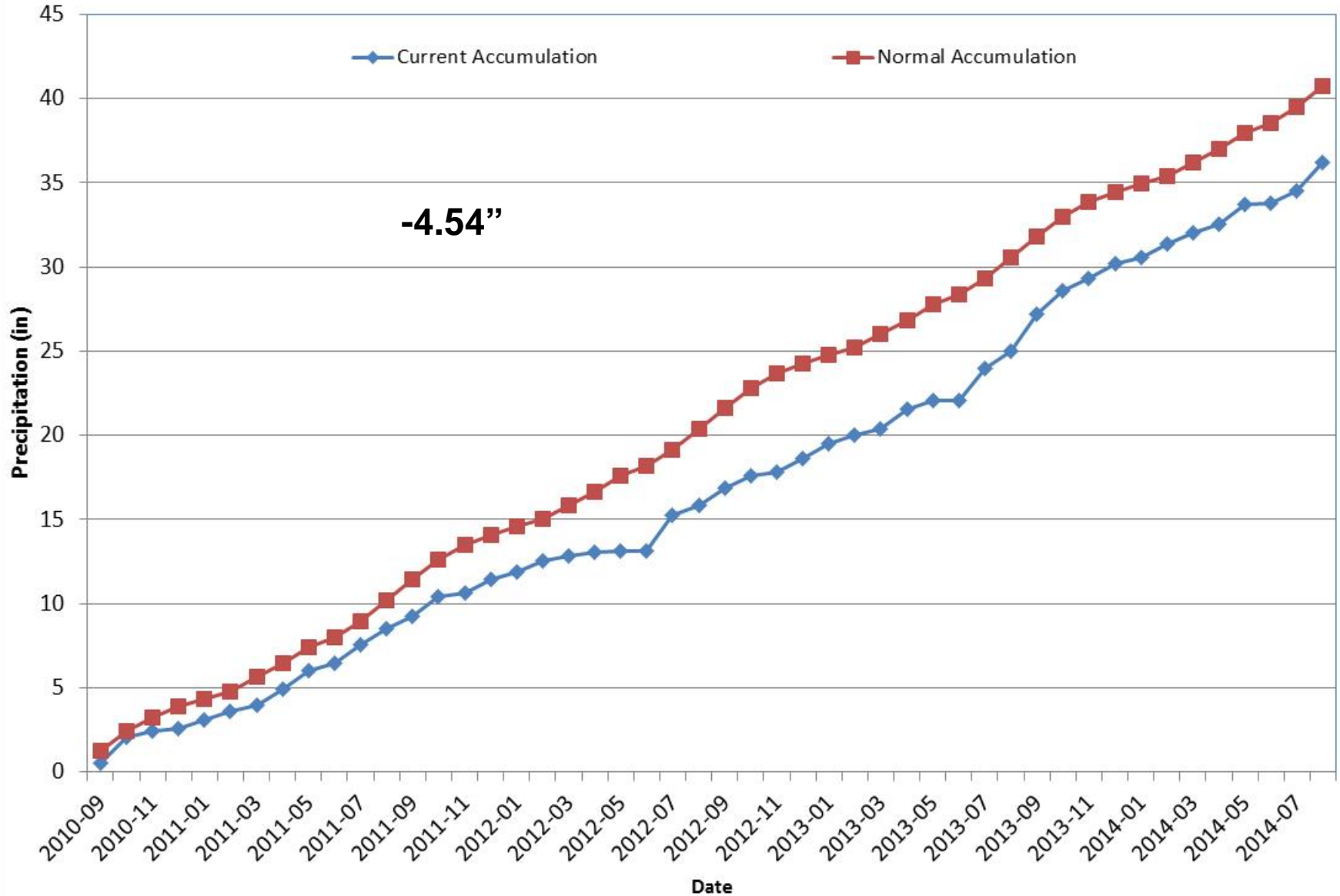
Division 3 – Montrose

Montrose #2 2014 Water Year



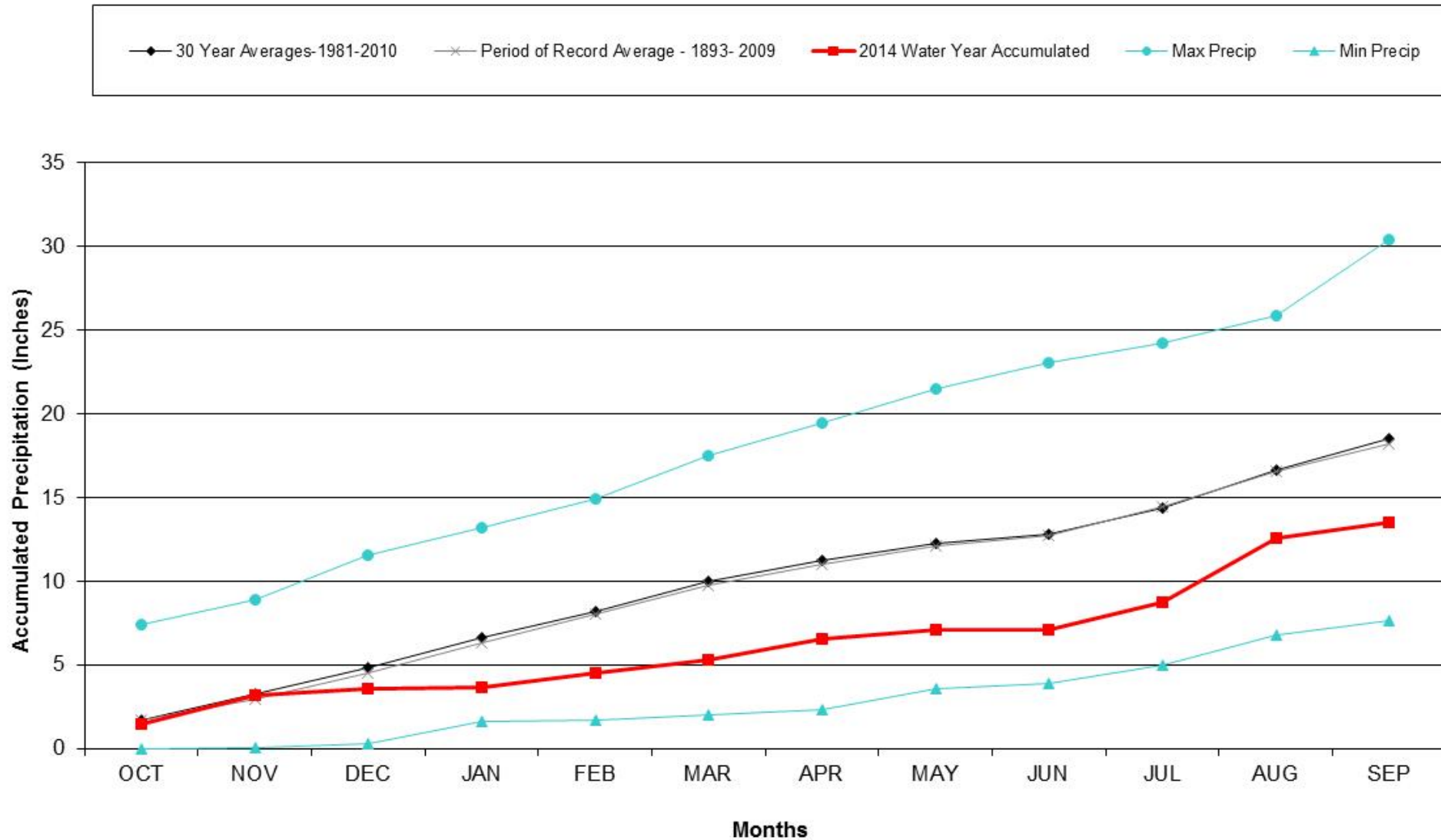
Division 3 – Montrose

Montrose #2 Precipitation Accumulation



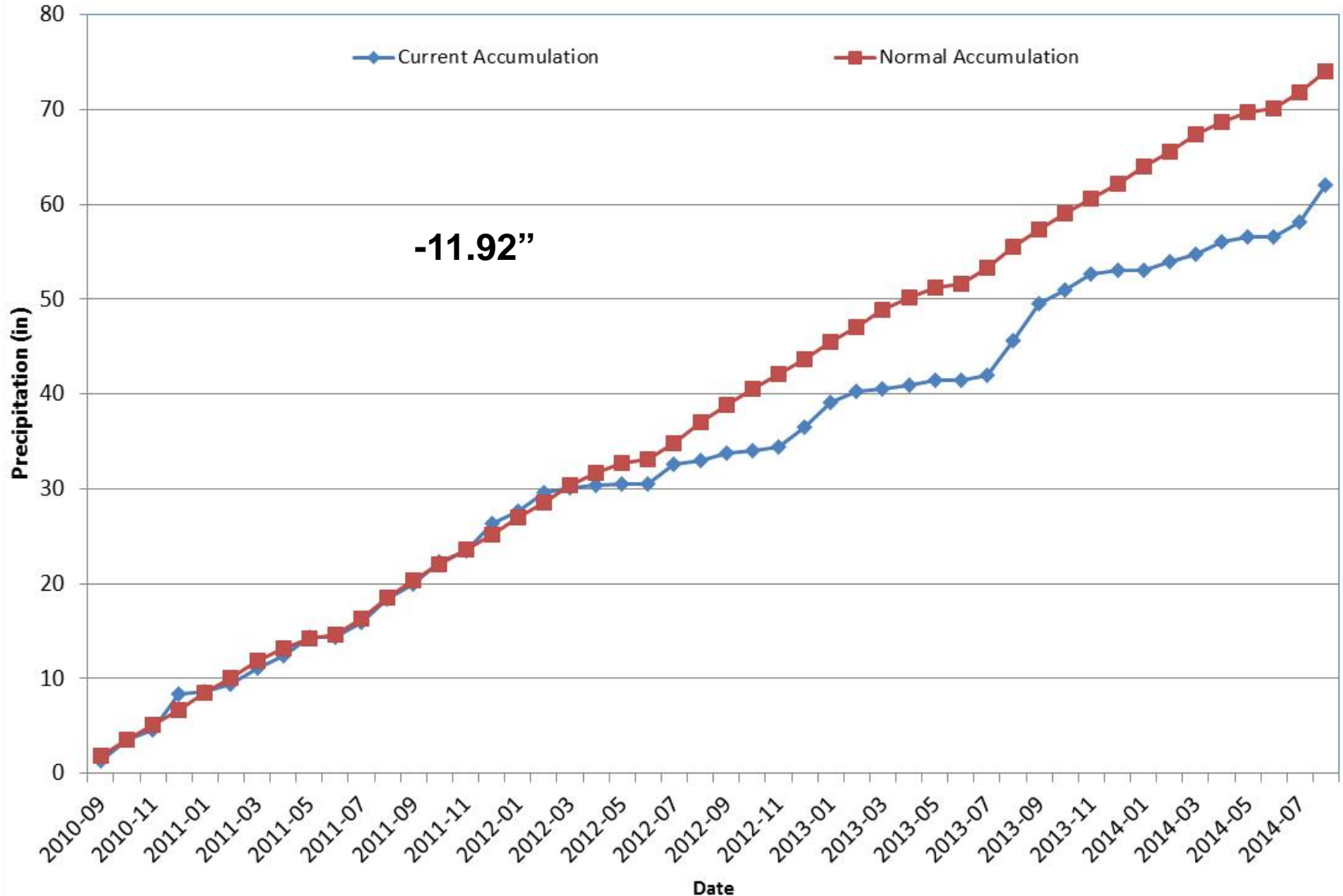
Division 3 – Mesa Verde NP

Mesa Verde NP 2014 Water Year



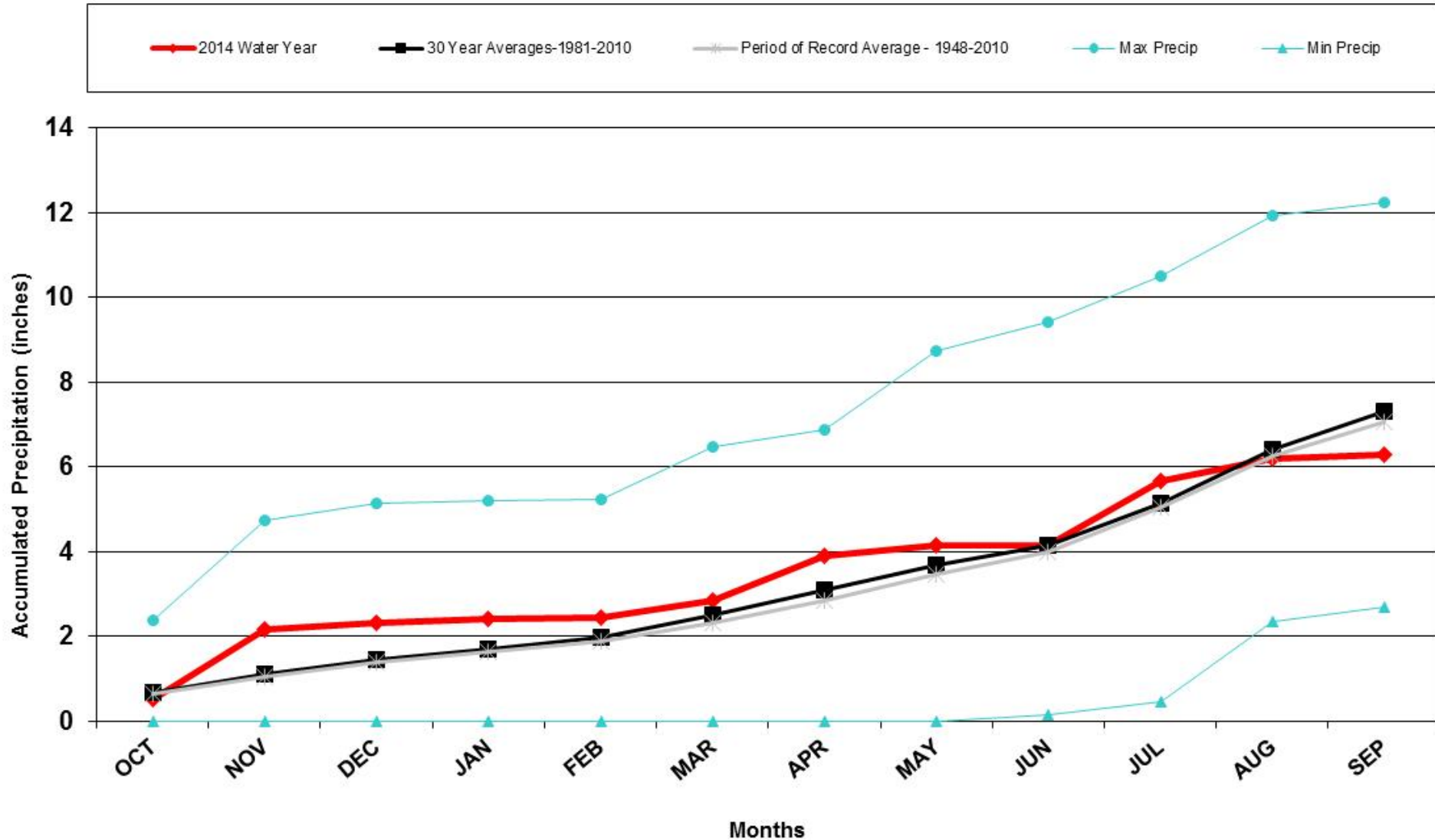
Division 3 – Mesa Verde NP

Mesa Verde NP Precipitation Accumulation



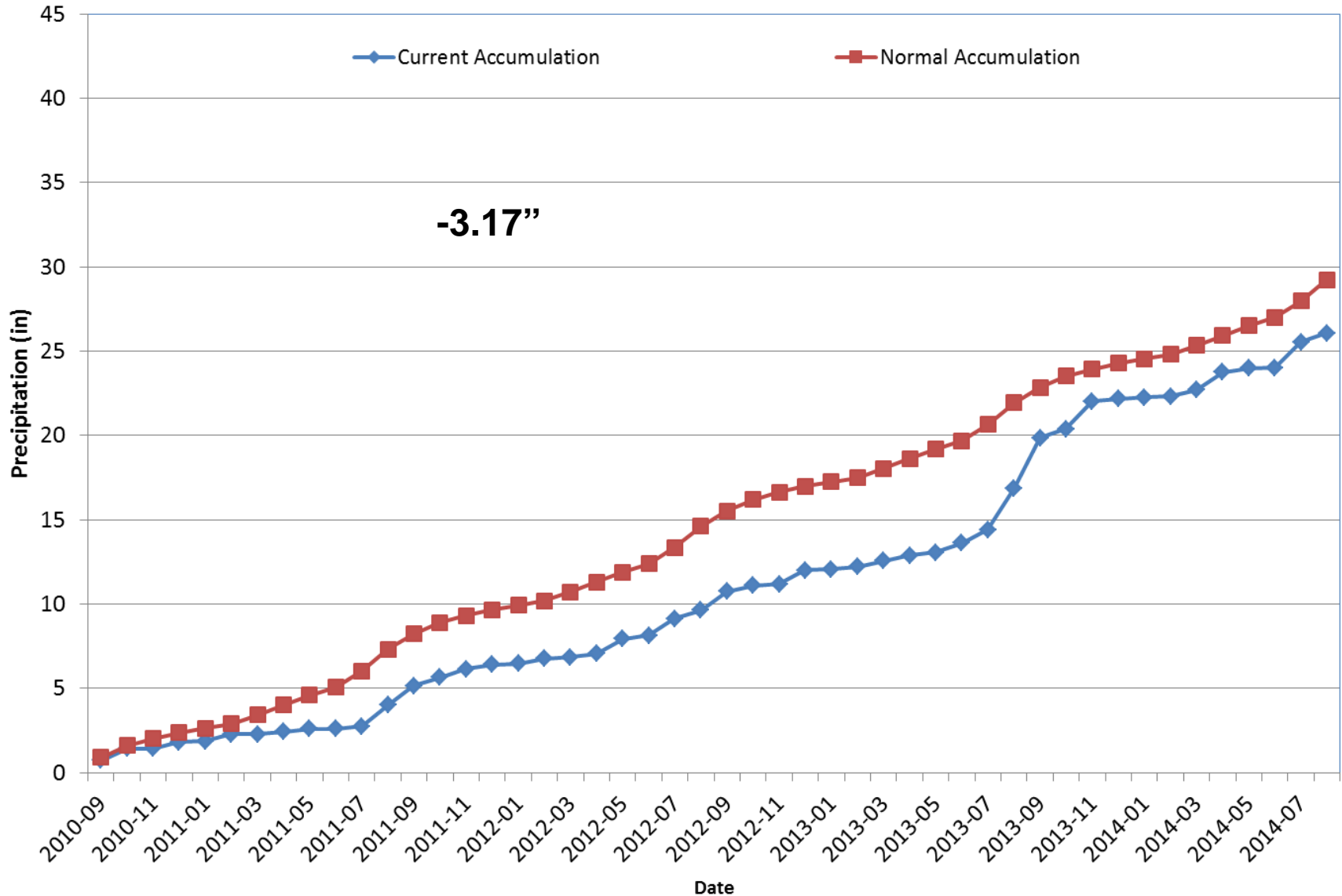
Division 4 – Alamosa

Alamosa WSO 2014 Water Year



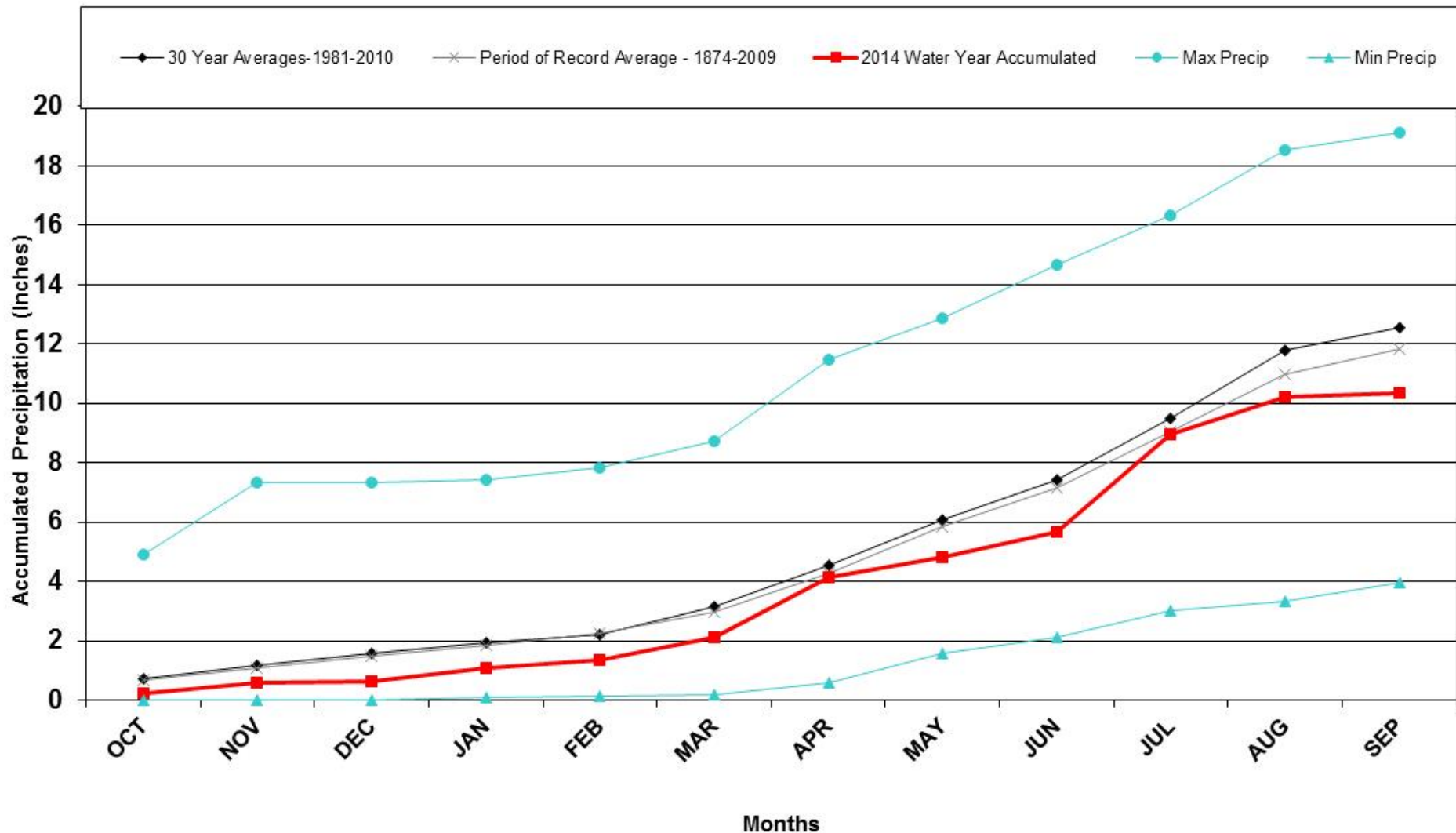
Division 4 – Alamosa

Alamosa WSO Precipitation Accumulation



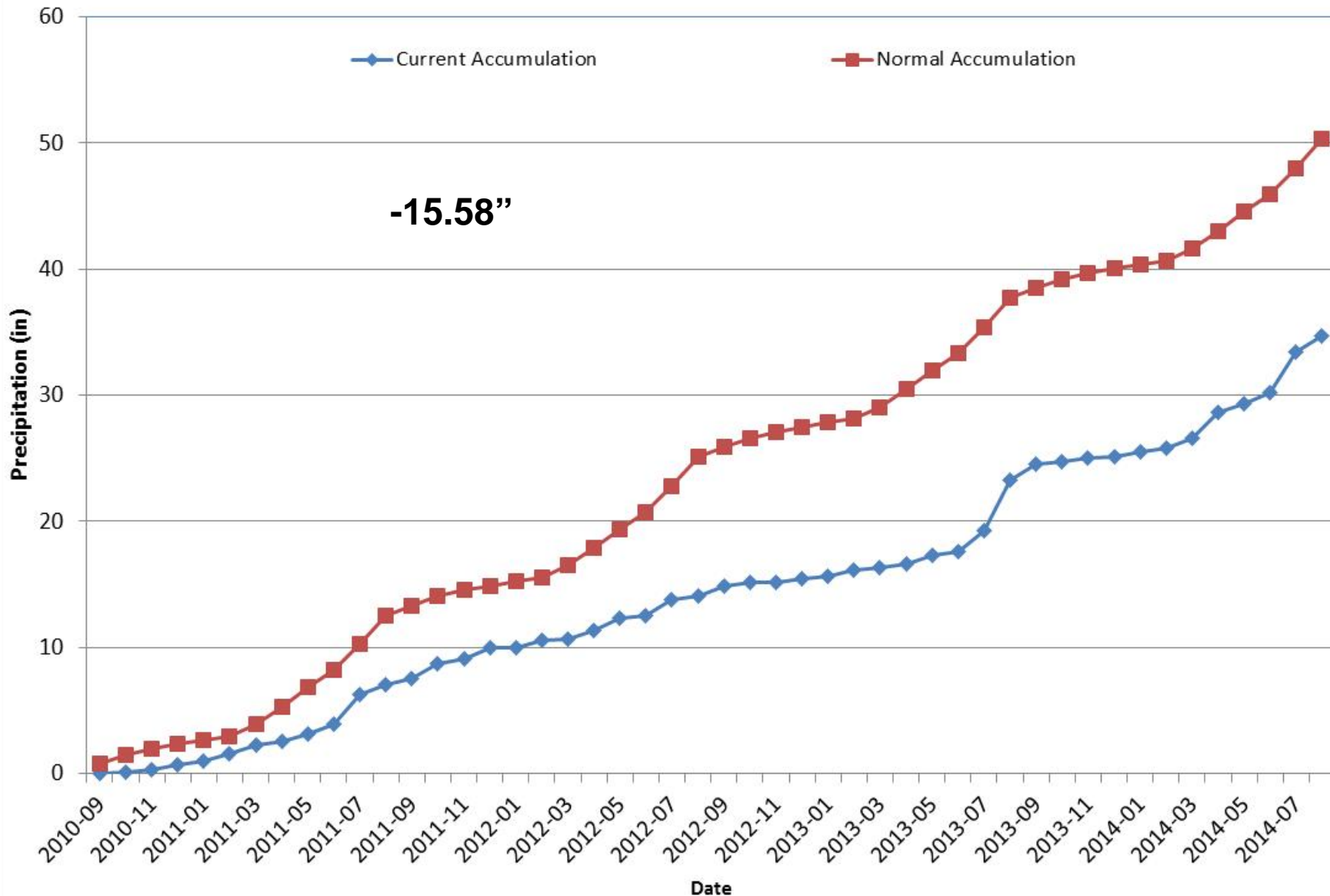
Division 5 – Pueblo

Pueblo WSO 2014 Water Year



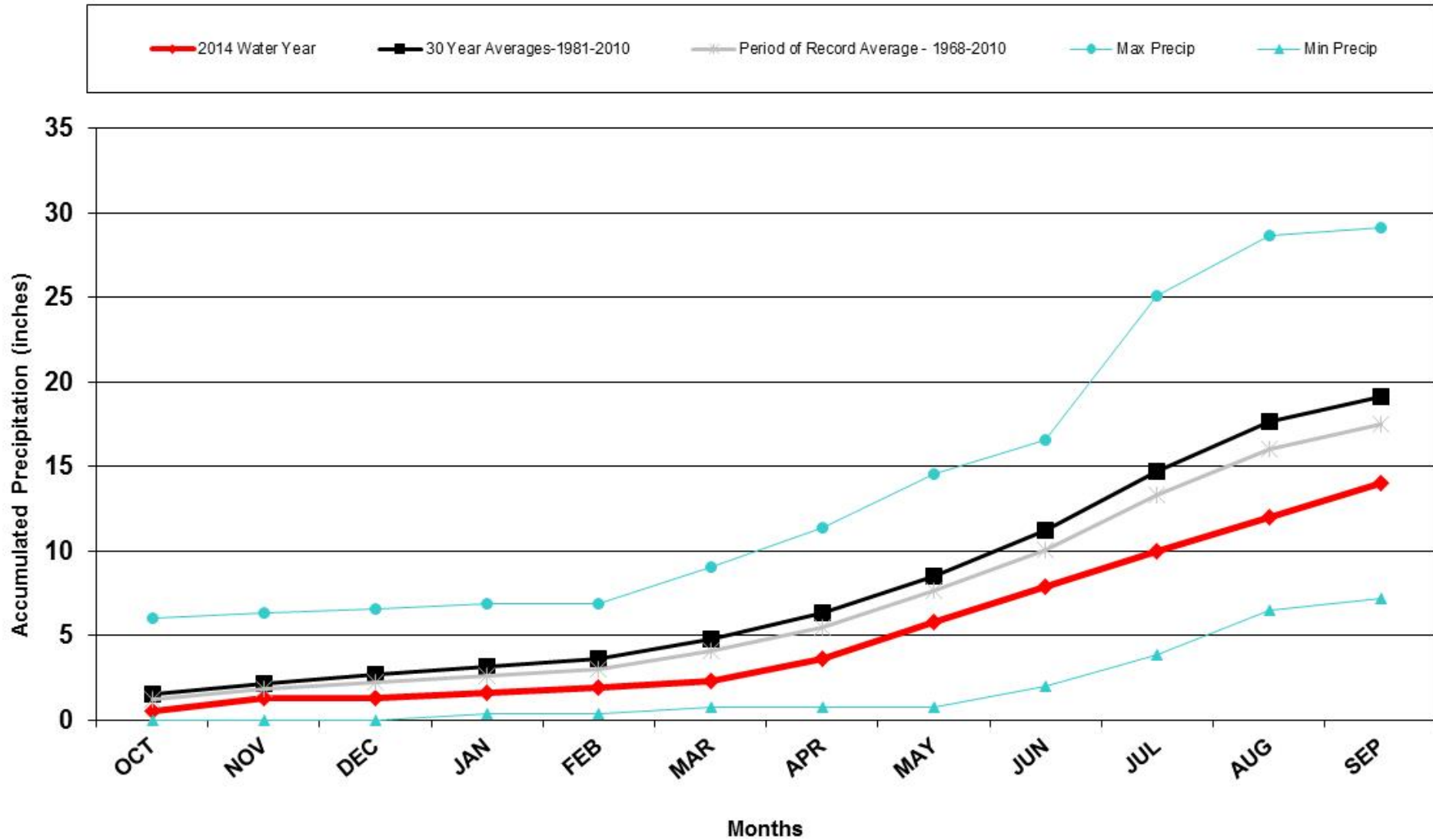
Division 5 – Pueblo

Pueblo Memorial AP Precipitation Accumulation



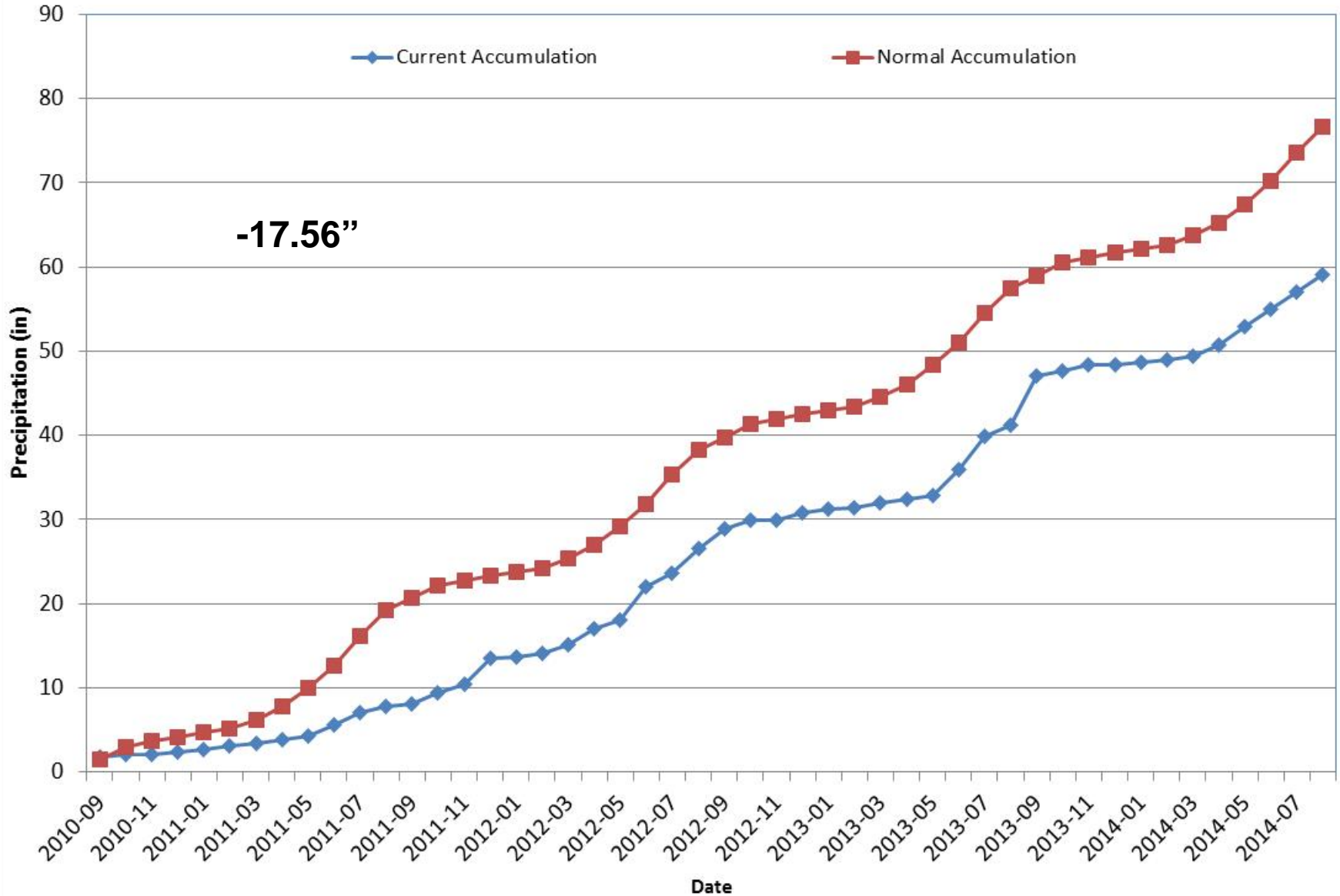
Division 6 - Walsh

Walsh 2014 Water Year



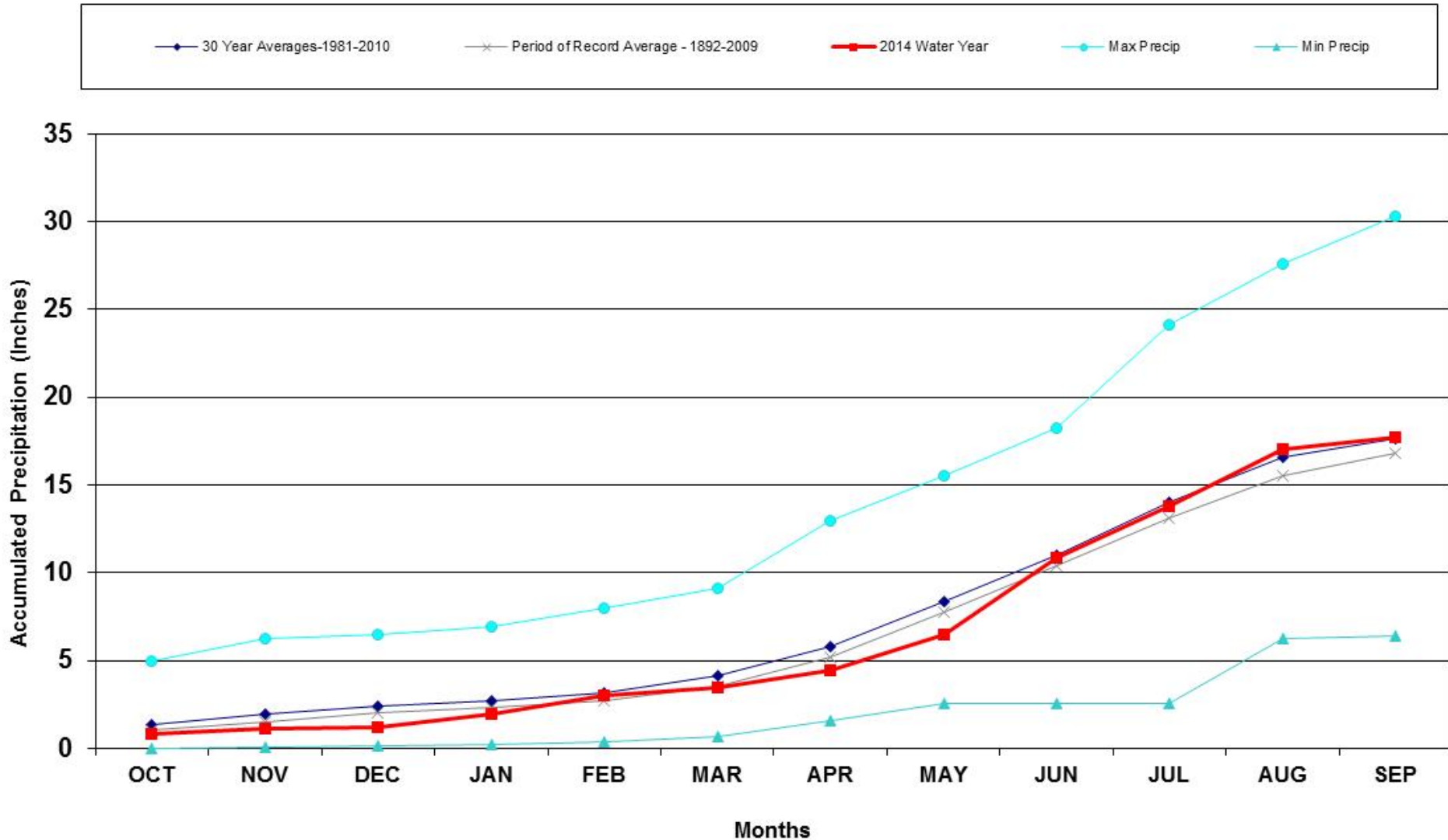
Division 6 - Walsh

Walsh 1W Precipitation Accumulation



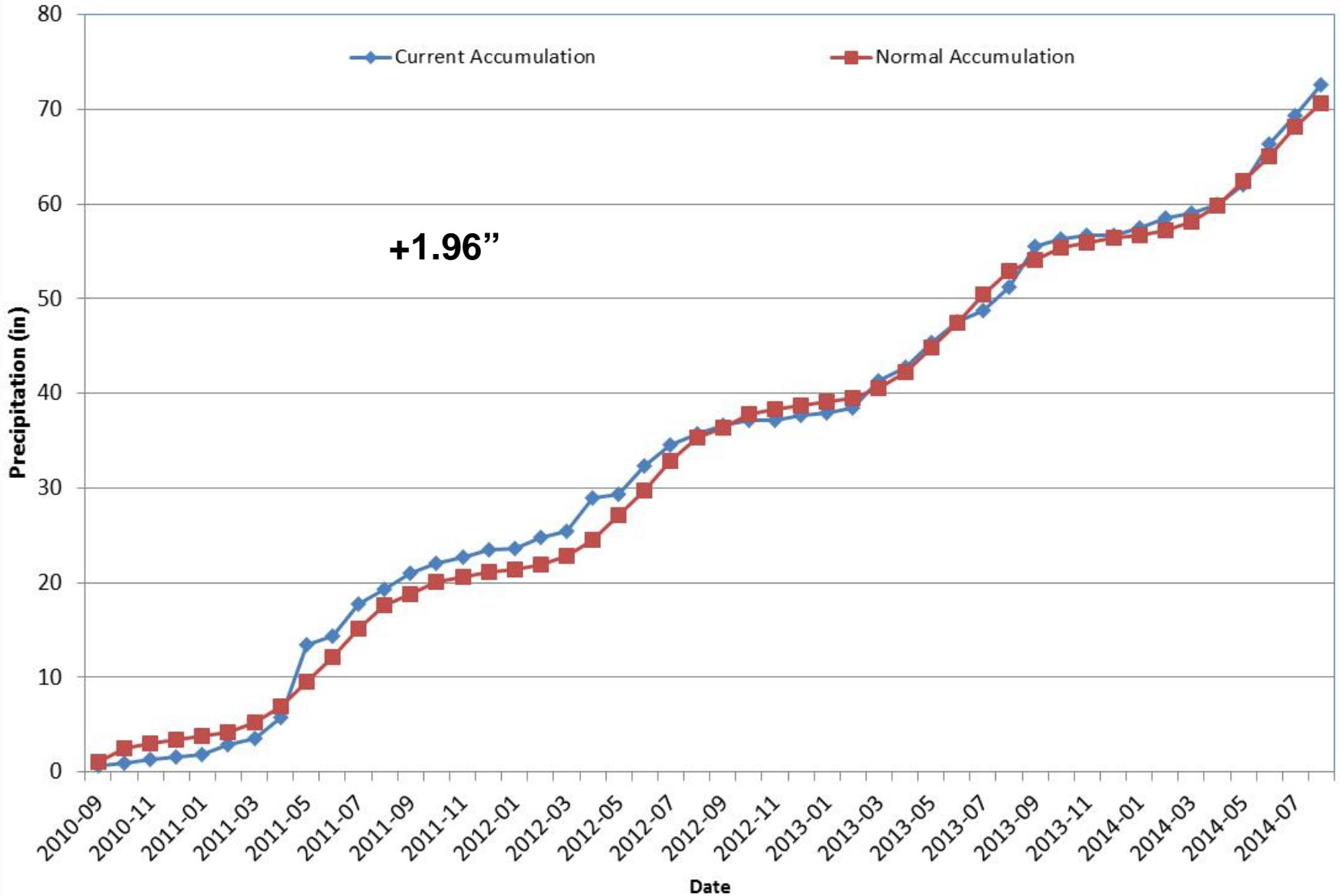
Division 6 - Burlington

Burlington 2014 Water Year



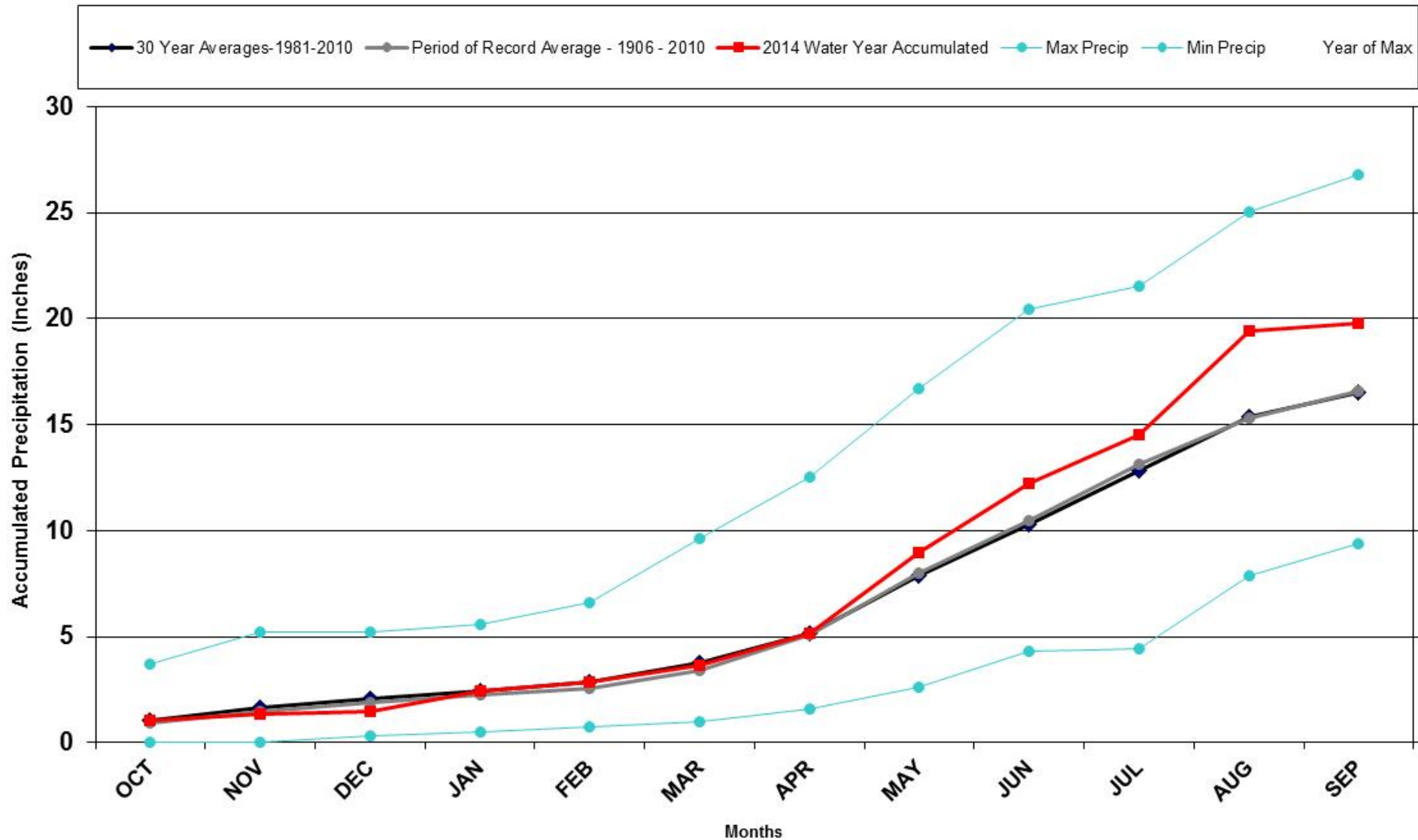
Division 6 - Burlington

Burlington, CO Precipitation Accumulation



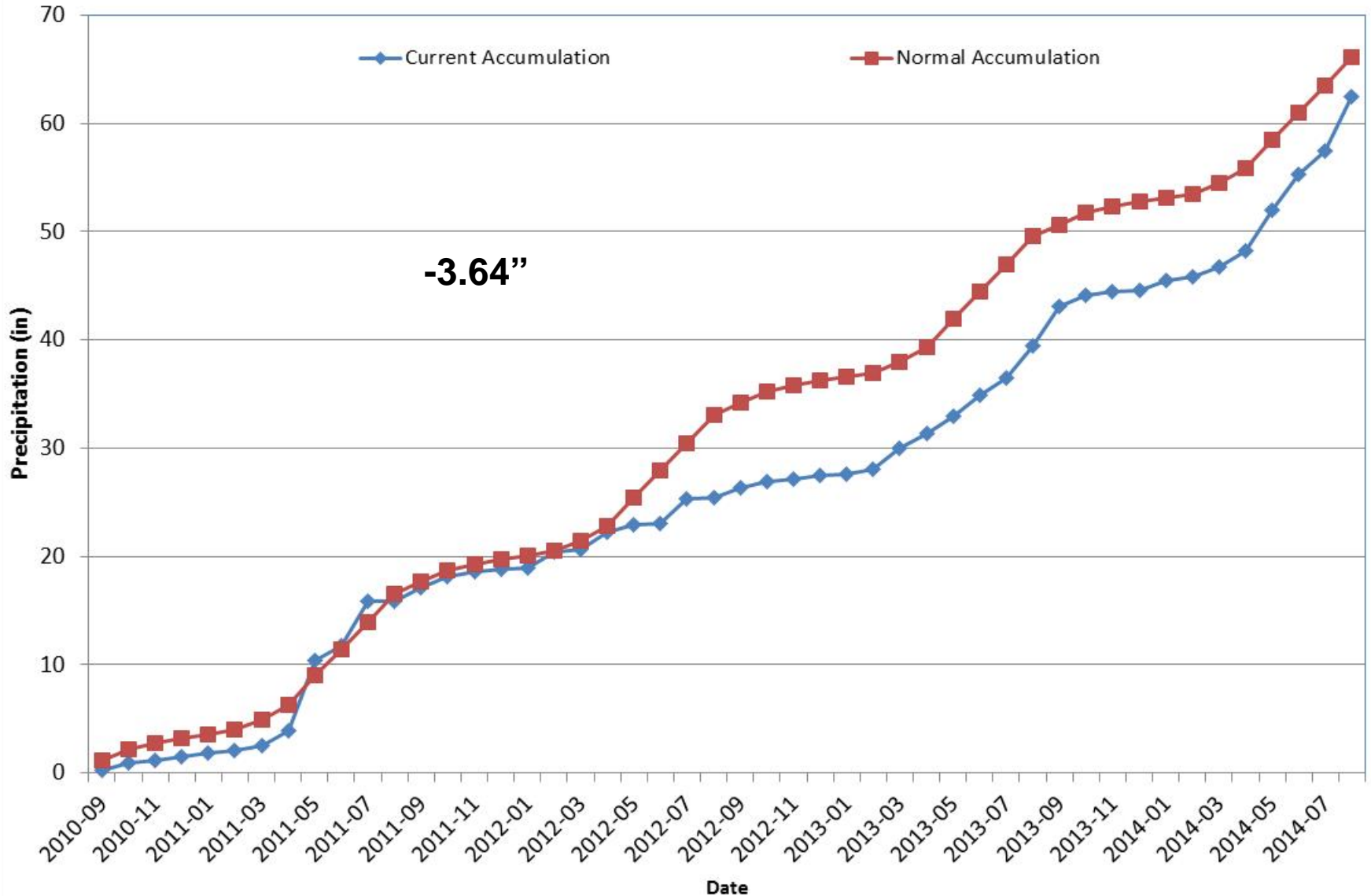
Division 7 – Akron

Akron 4E 2014 Water Year



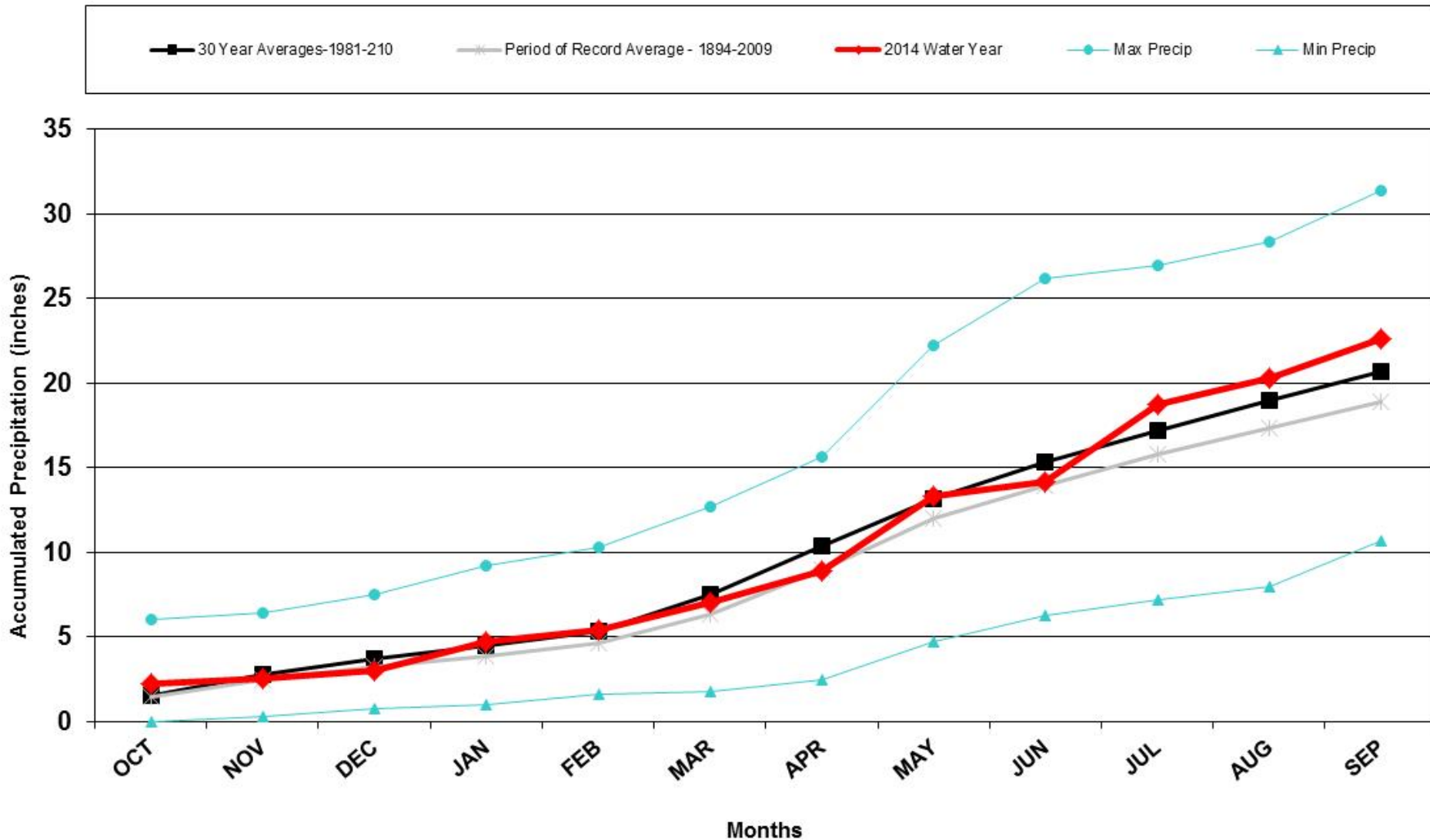
Division 7 – Akron

Akron 4E Precipitation Accumulation



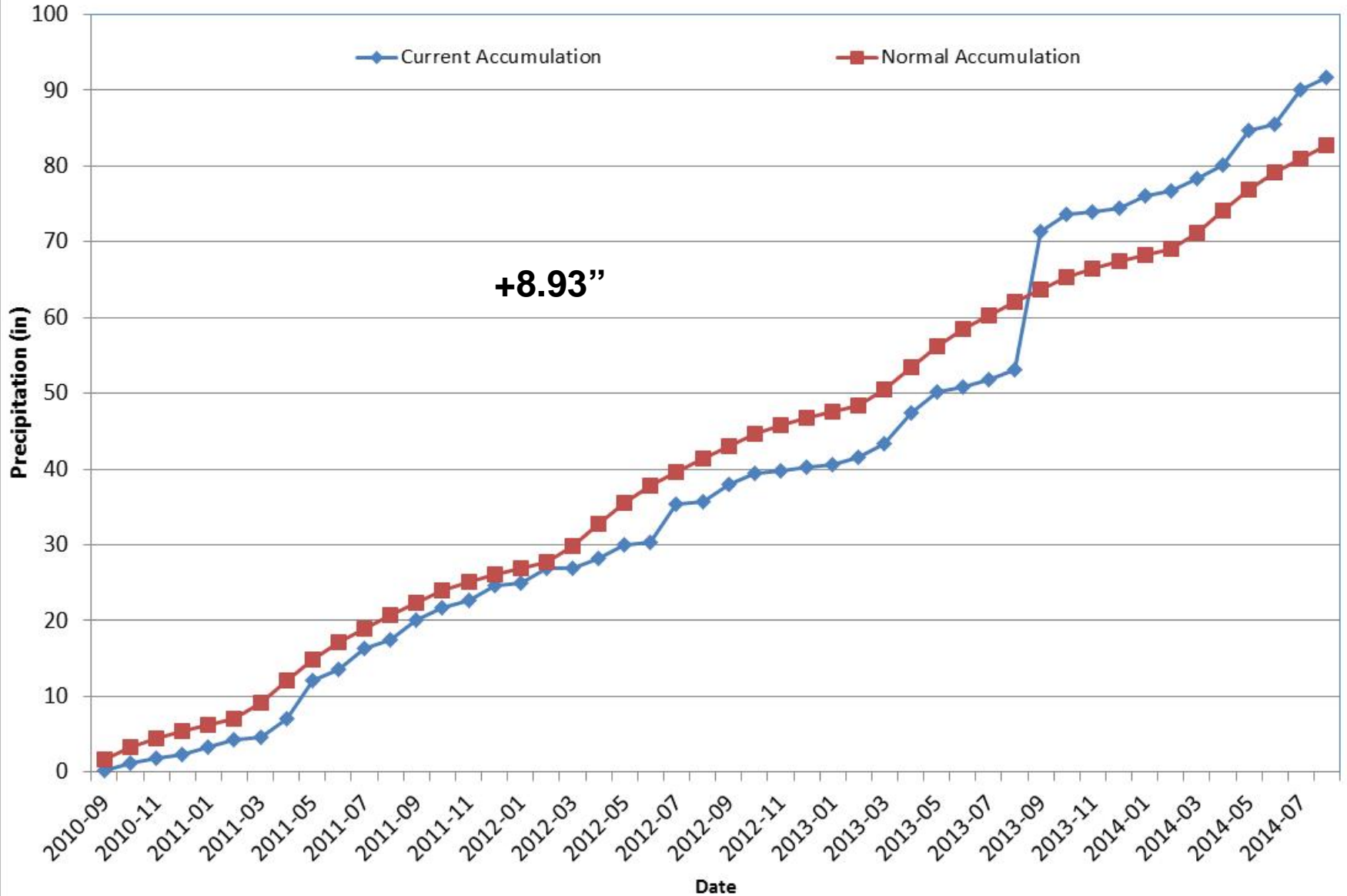
Division 8 - Boulder

Boulder 2014 Water Year

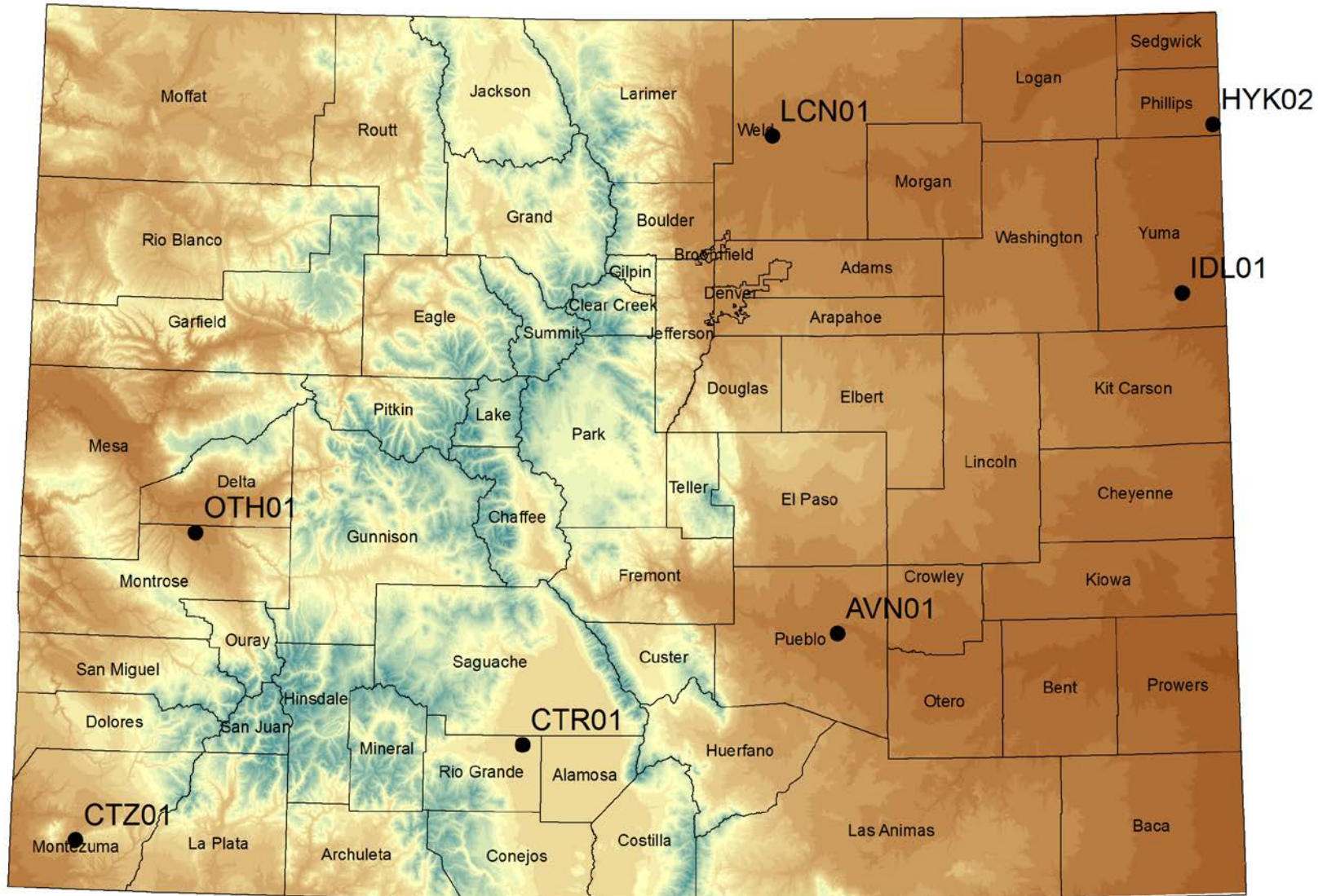


Division 8 - Boulder

Boulder Precipitation Accumulation

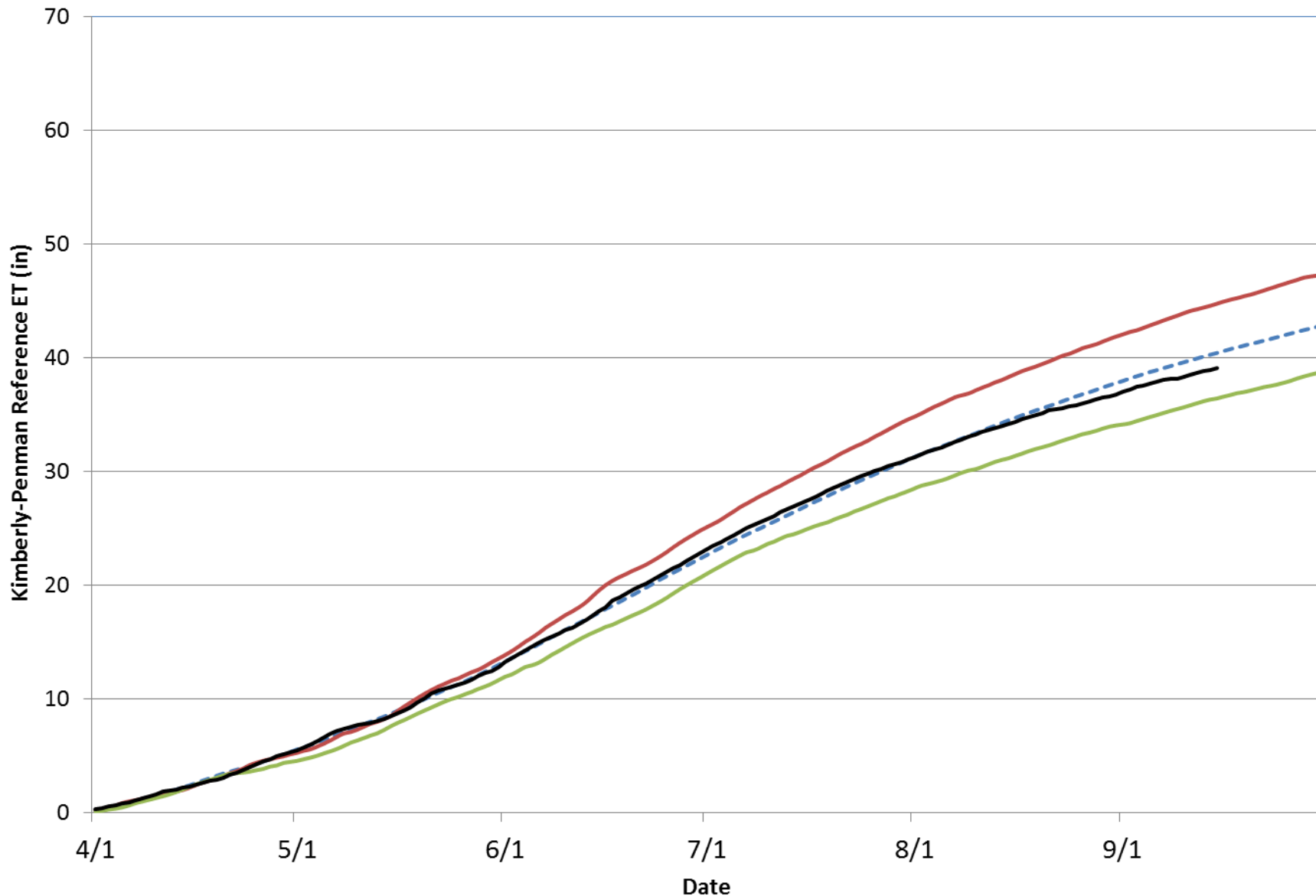


CoAgMet Reference Evapotranspiration



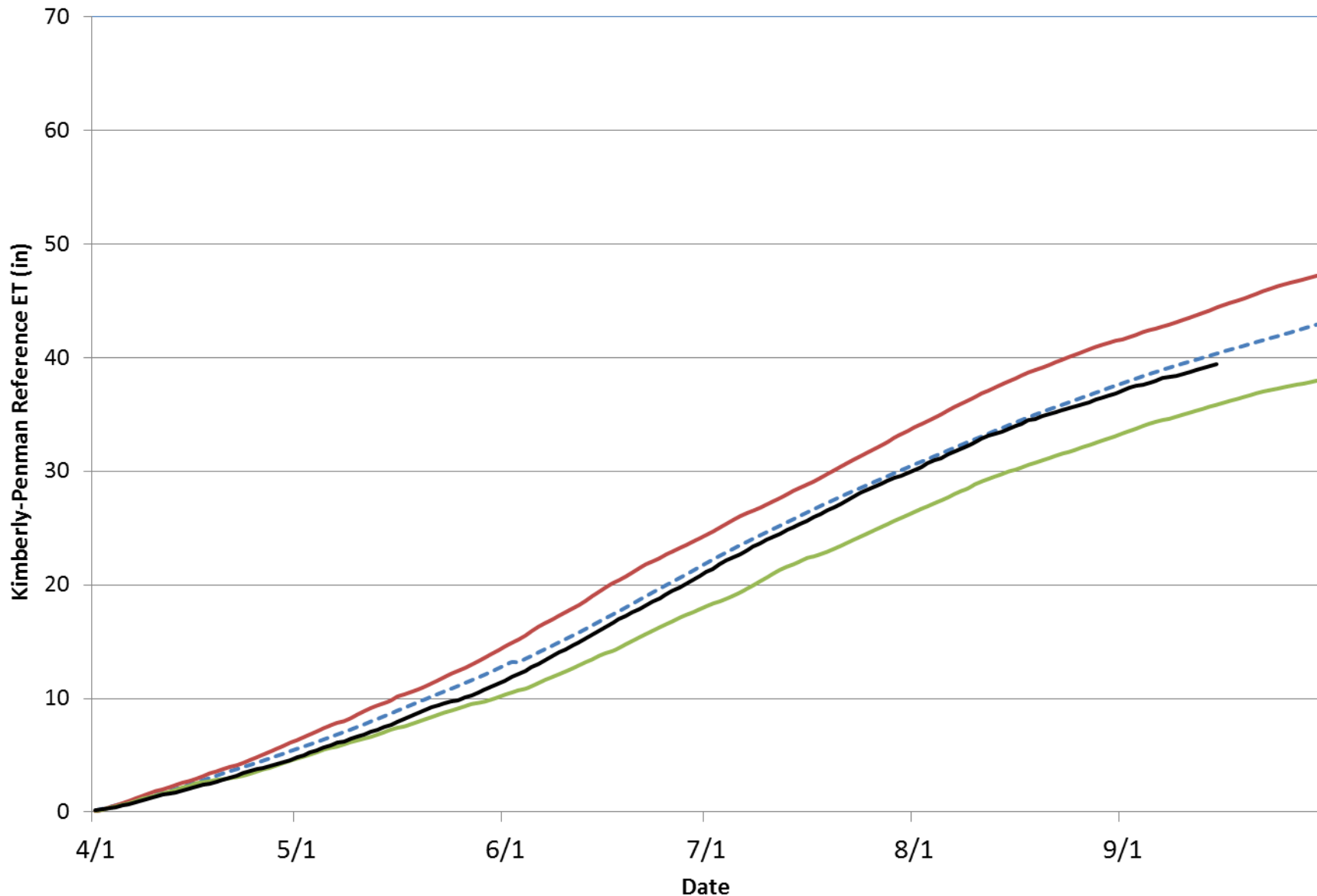
Olathe Kimberly-Penman Reference ET (1993 - 2013)

--- Average — 1994 — 1999 — 2014



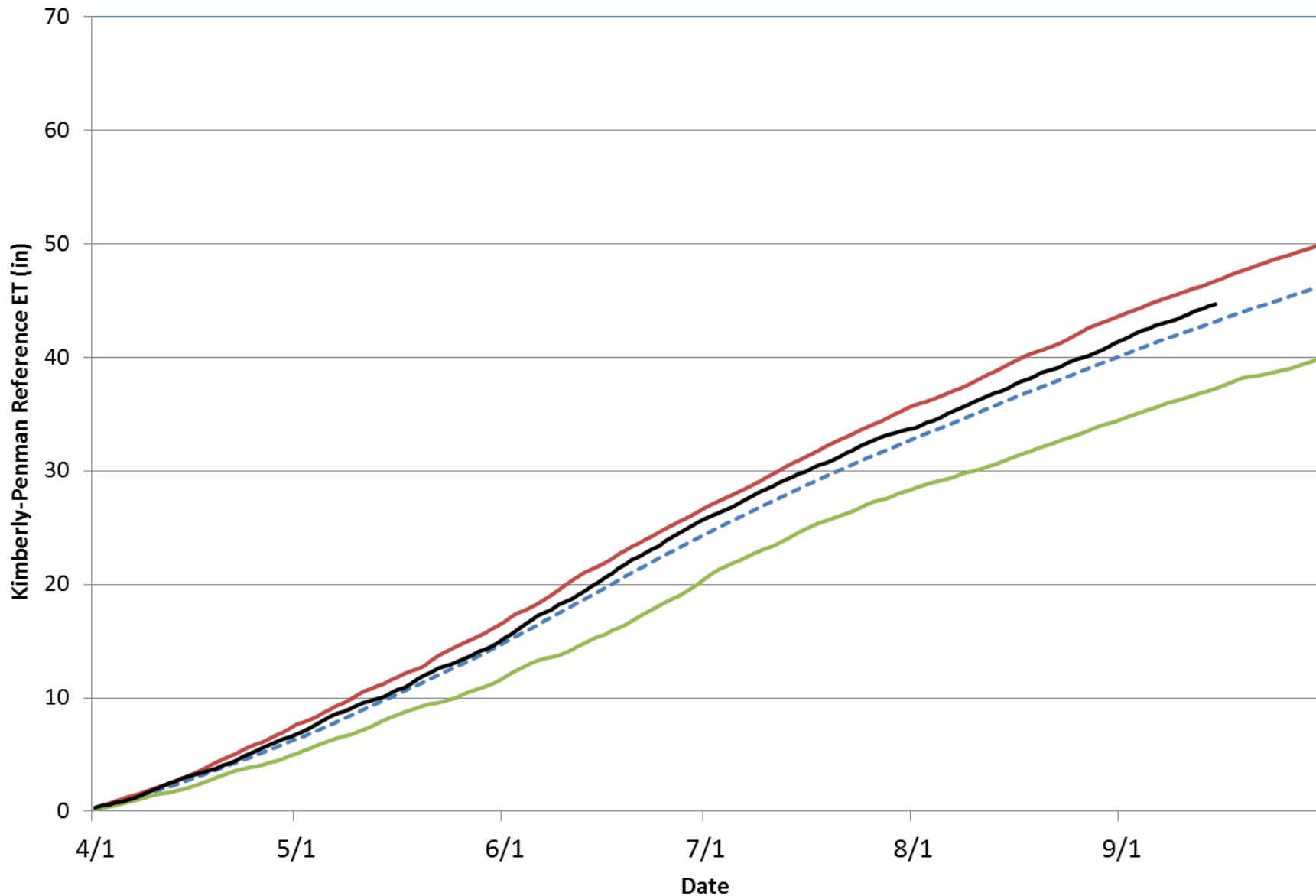
Cortez Kimberly-Penman Reference ET (1992 - 2013)

--- Average — 2000 — 1995 — 2014



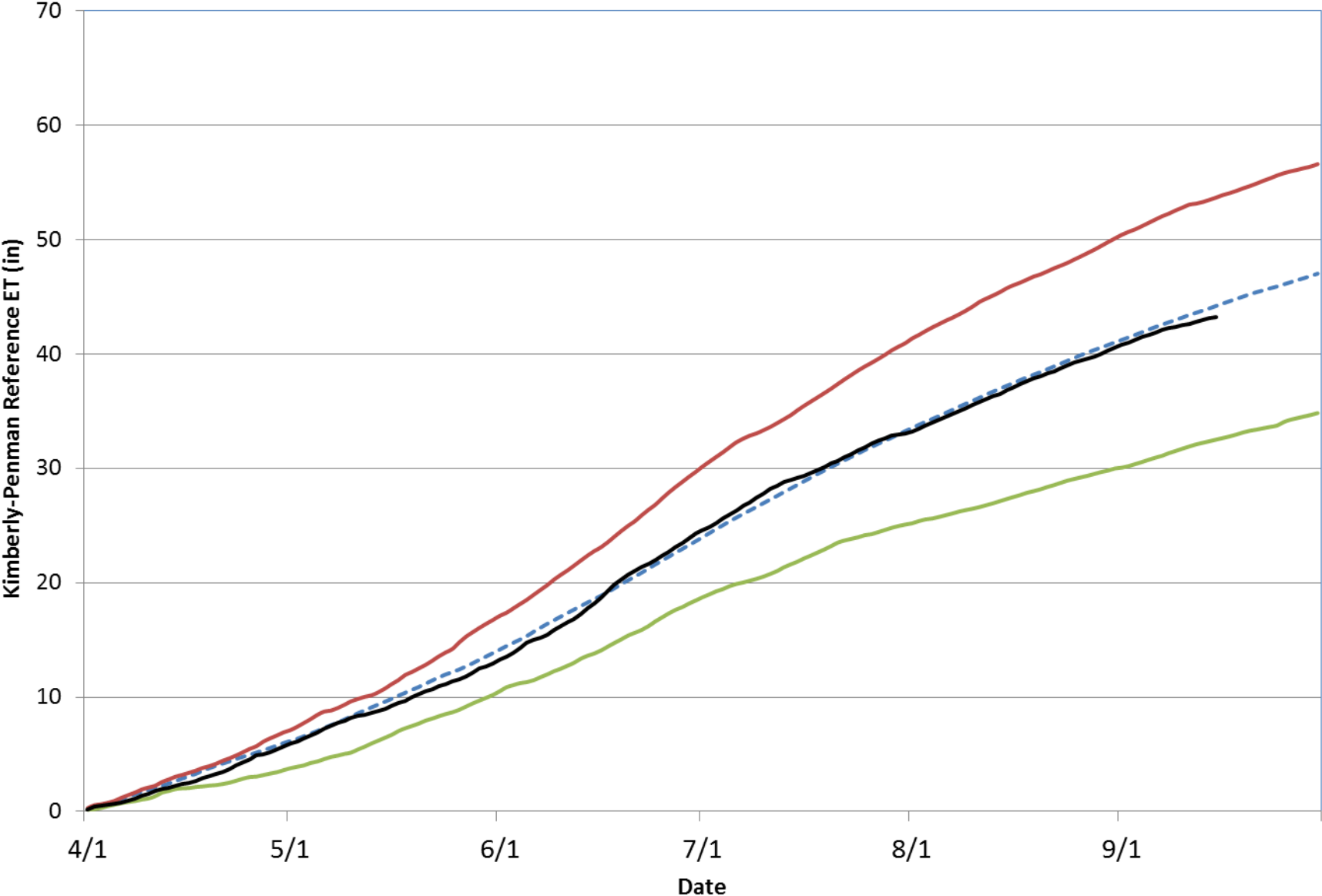
Center Kimberly-Penman Reference ET (1994 - 2013)

--- Average — 2002 — 1997 — 2014



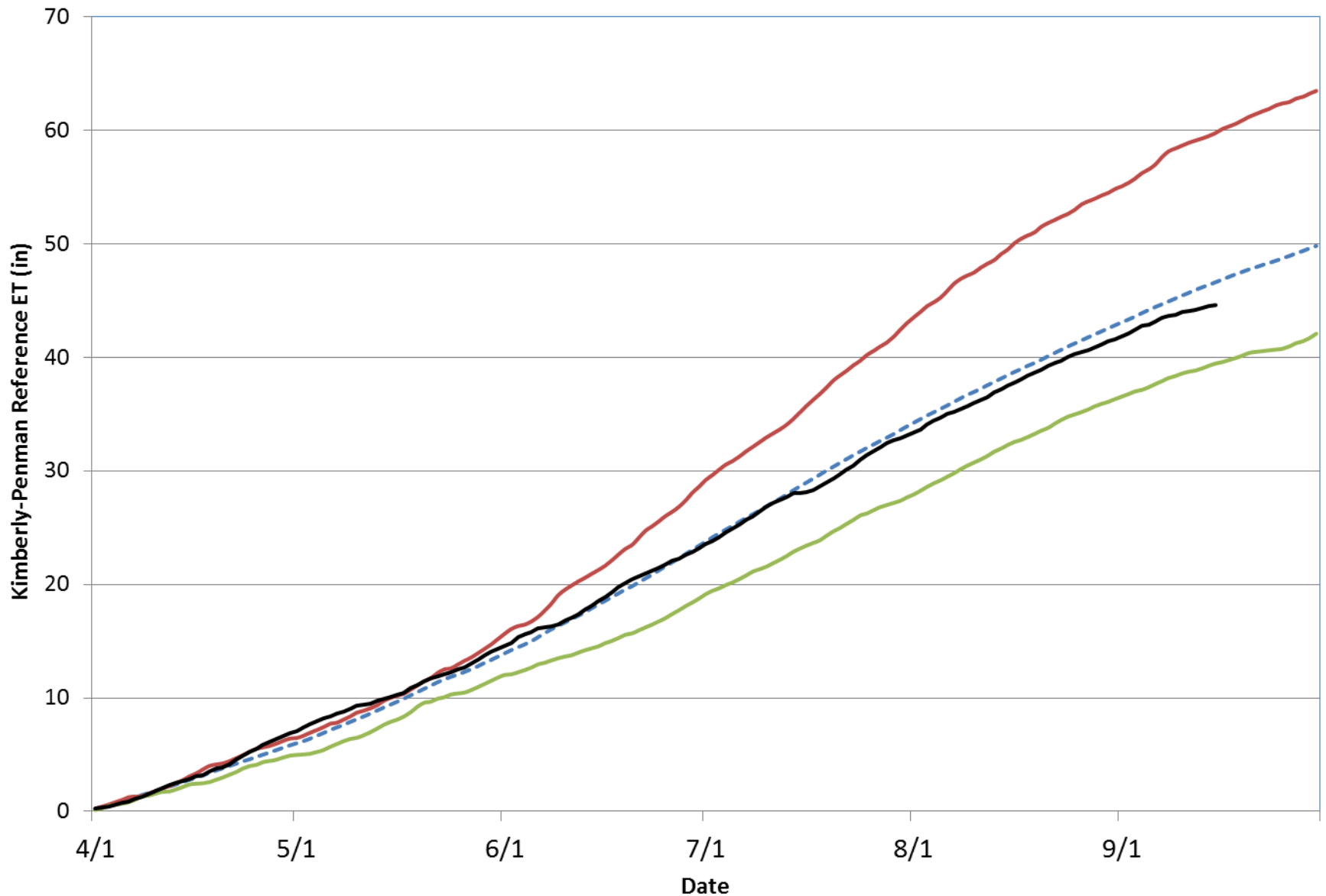
Avondale Kimberly-Penman Reference ET (1993 - 2013)

--- Average — 2012 — 1998 — 2014



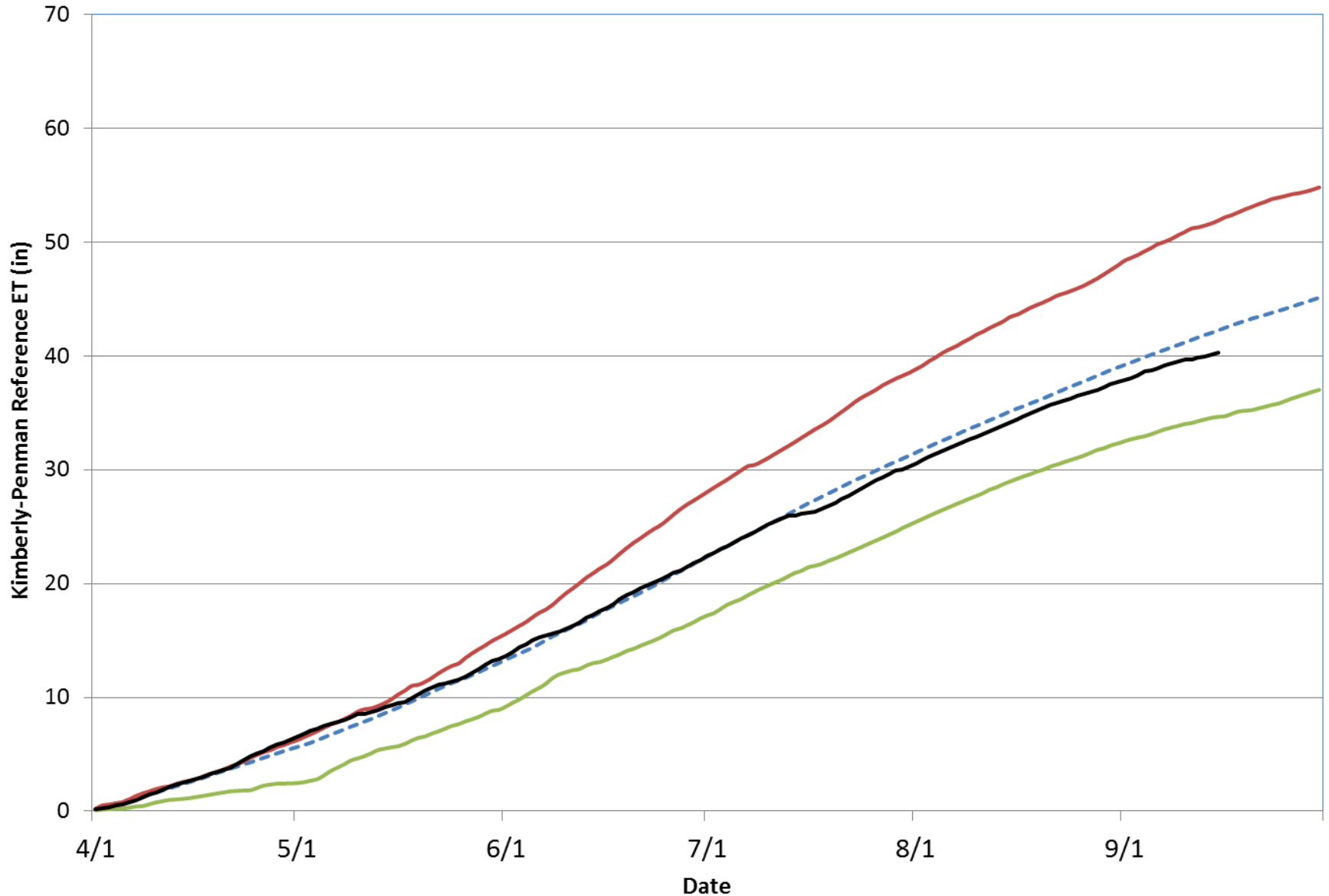
Idalia Kimberly-Penman Reference ET (1992 - 2013)

--- Average — 2002 — 2009 — 2014



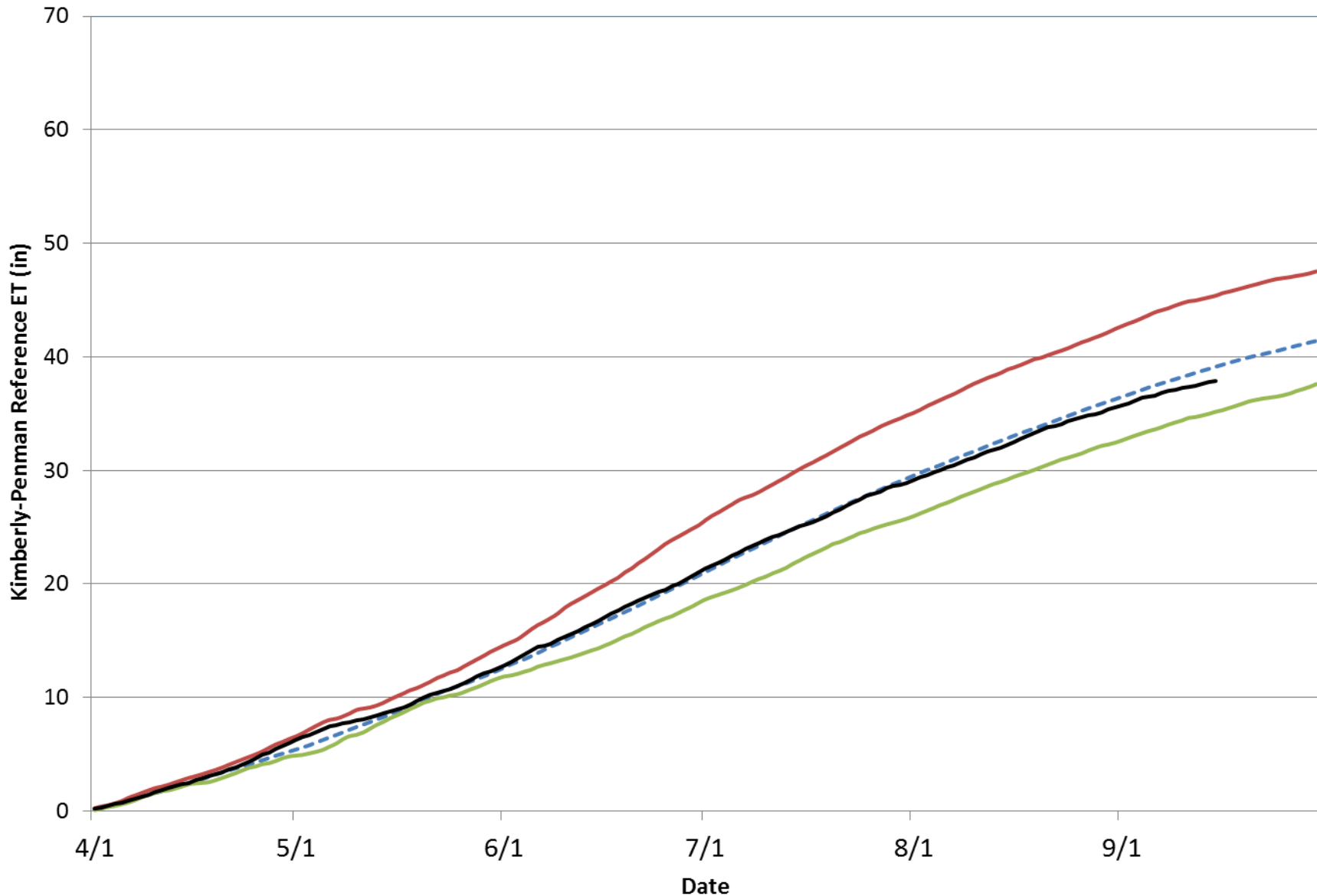
Holyoke Kimberly-Penman Reference ET (1992 - 2013)

--- Average — 2012 — 1999 — 2014



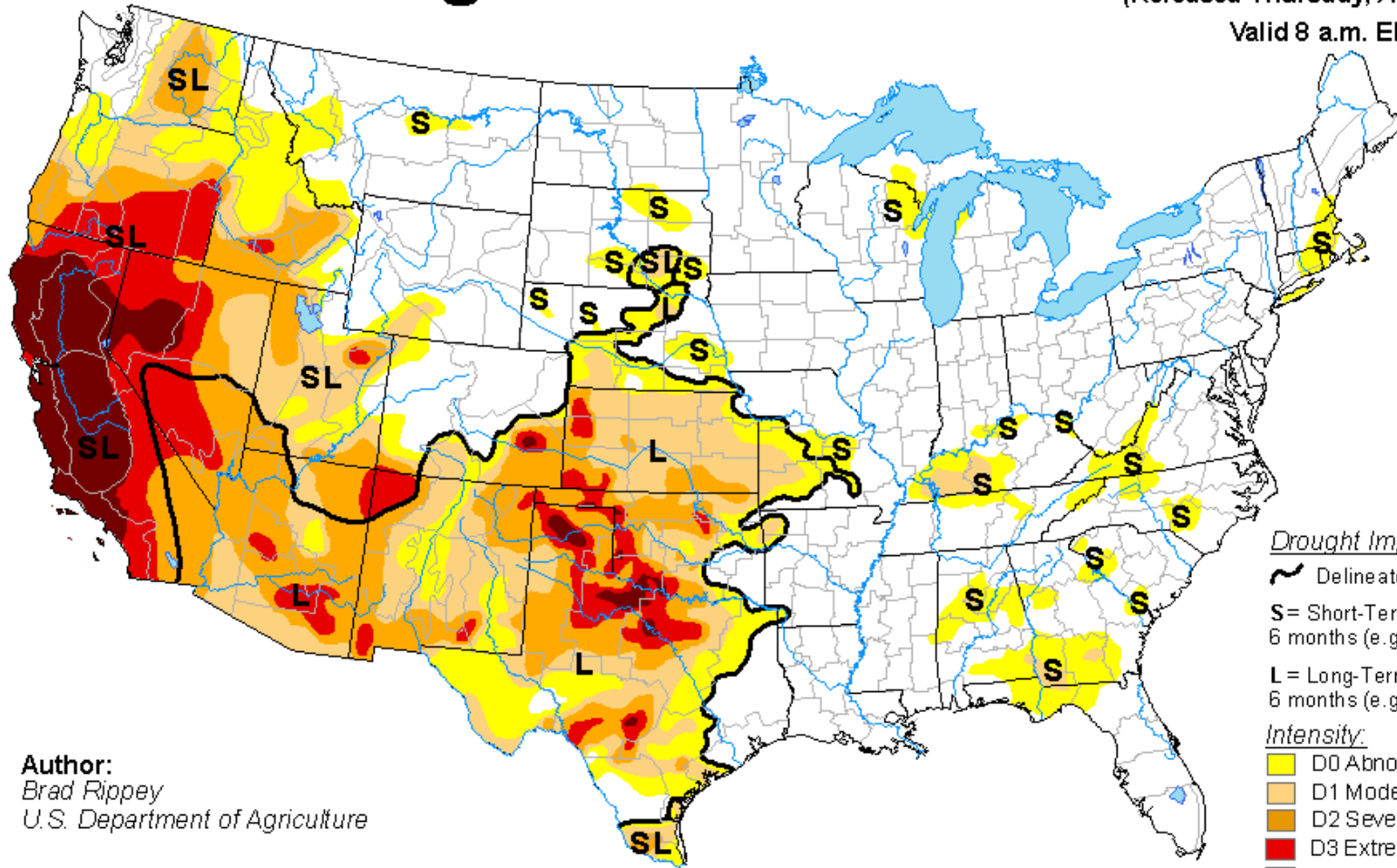
Lucerne Kimberly-Penman Reference ET (1992 - 2013)

--- Average — 2012 — 2009 — 2014



U.S. Drought Monitor

August 5, 2014
(Released Thursday, Aug. 7, 2014)
Valid 8 a.m. EDT



Drought Impact Types:

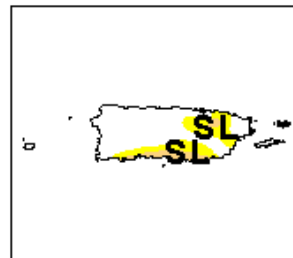
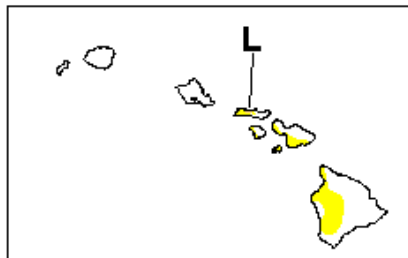
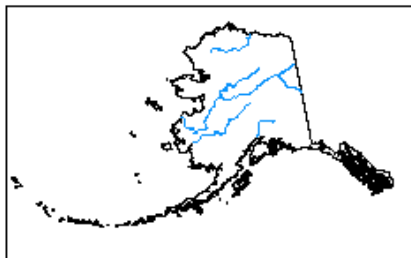
- ~ Delineates dominant impacts
- S= Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L= Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

- Yellow: D0 Abnormally Dry
- Light Orange: D1 Moderate Drought
- Orange: D2 Severe Drought
- Red: D3 Extreme Drought
- Dark Red: D4 Exceptional Drought

Author:
Brad Rippey
U.S. Department of Agriculture

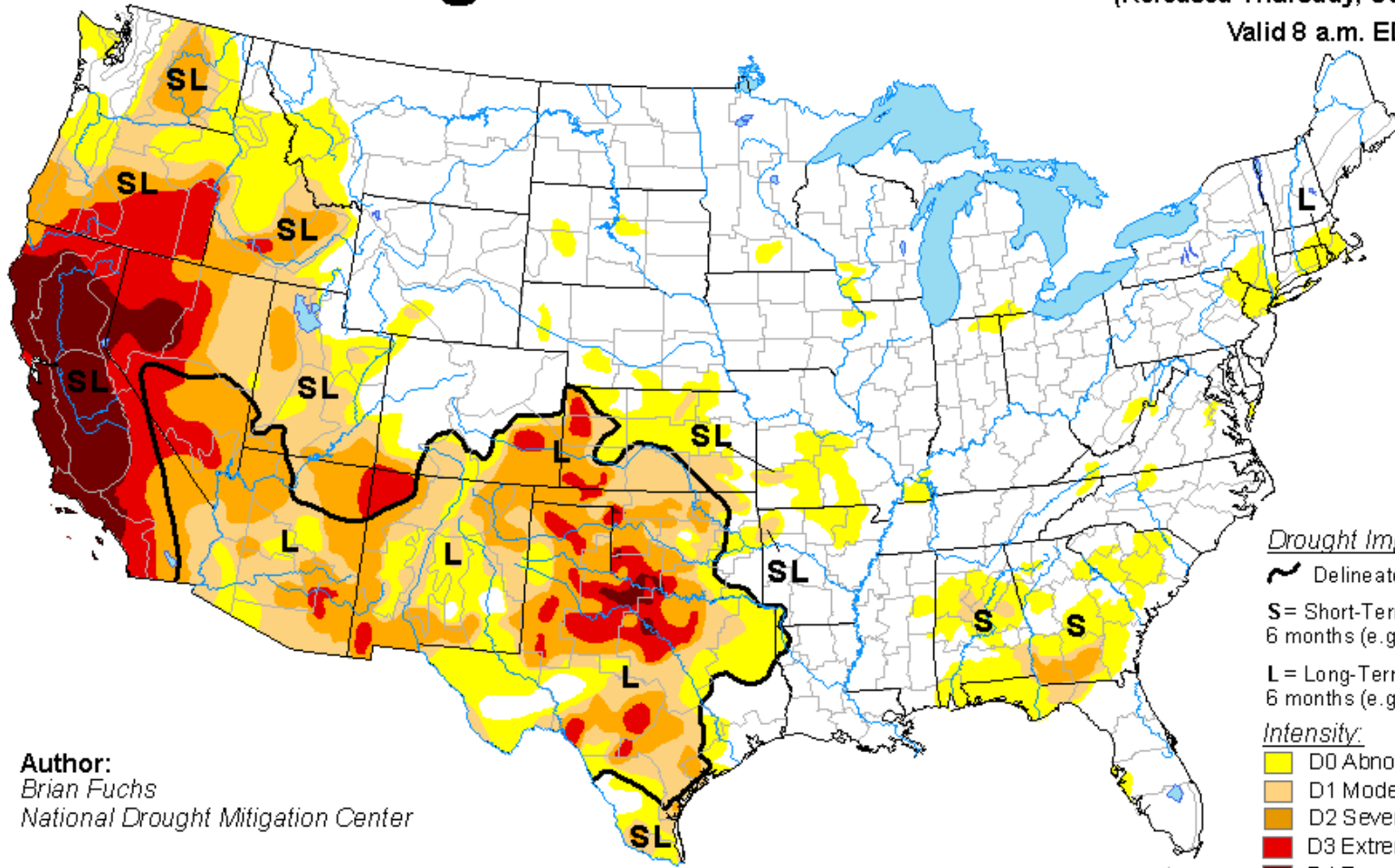
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



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

U.S. Drought Monitor

September 9, 2014
(Released Thursday, Sep. 11, 2014)
Valid 8 a.m. EDT



Author:
Brian Fuchs
National Drought Mitigation Center

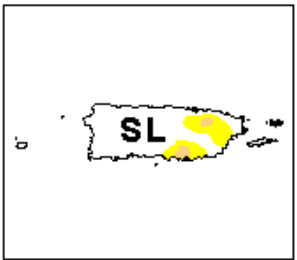
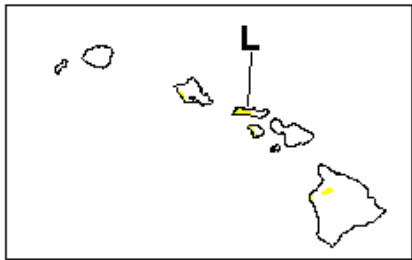
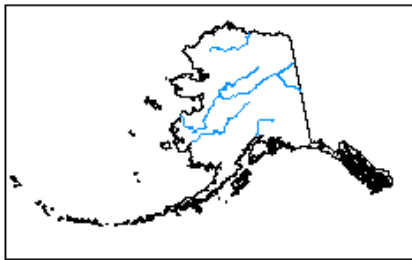
Drought Impact Types:

- 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:

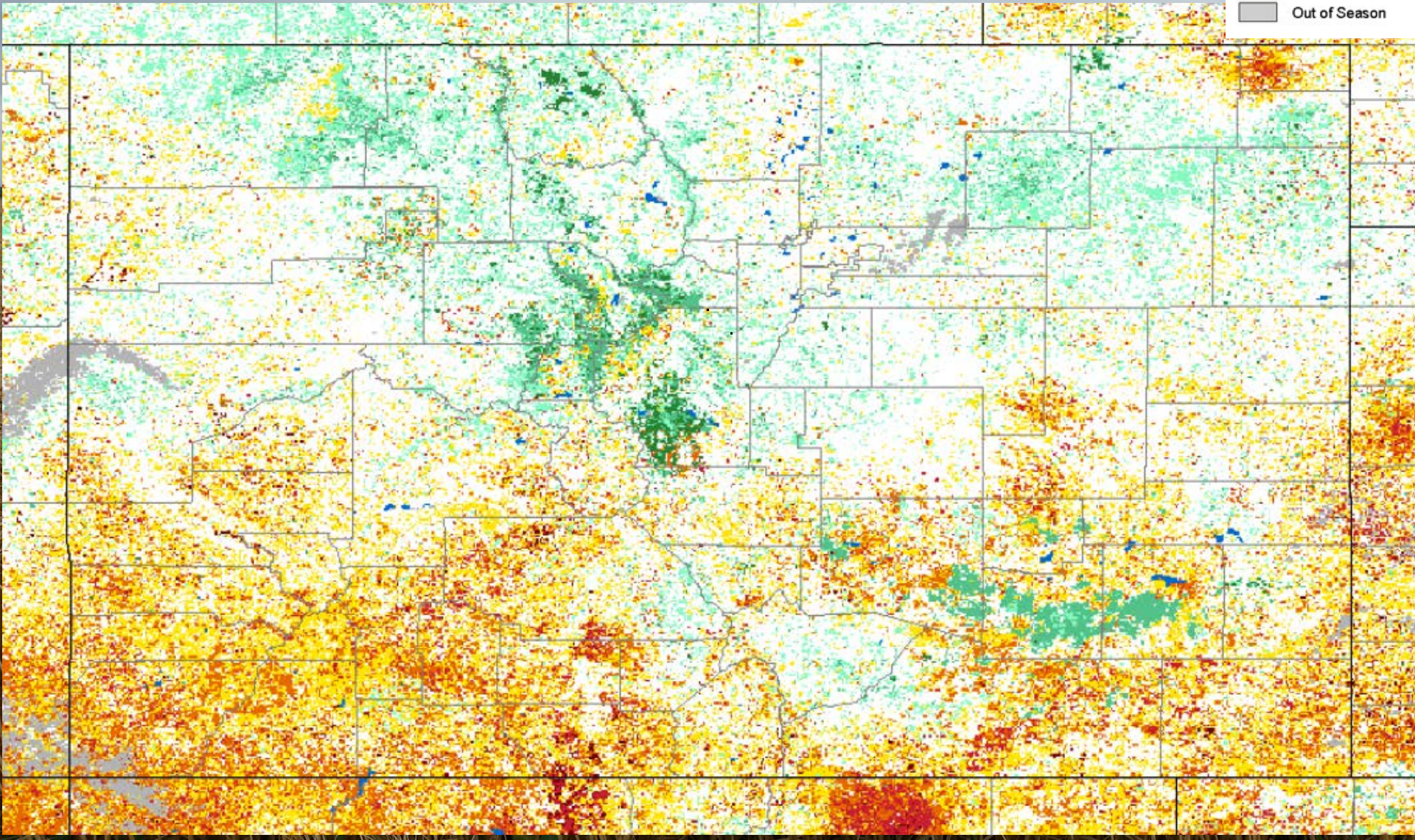
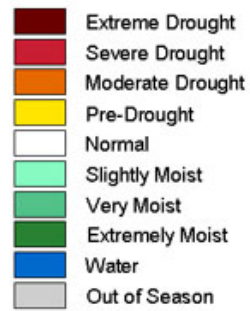
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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



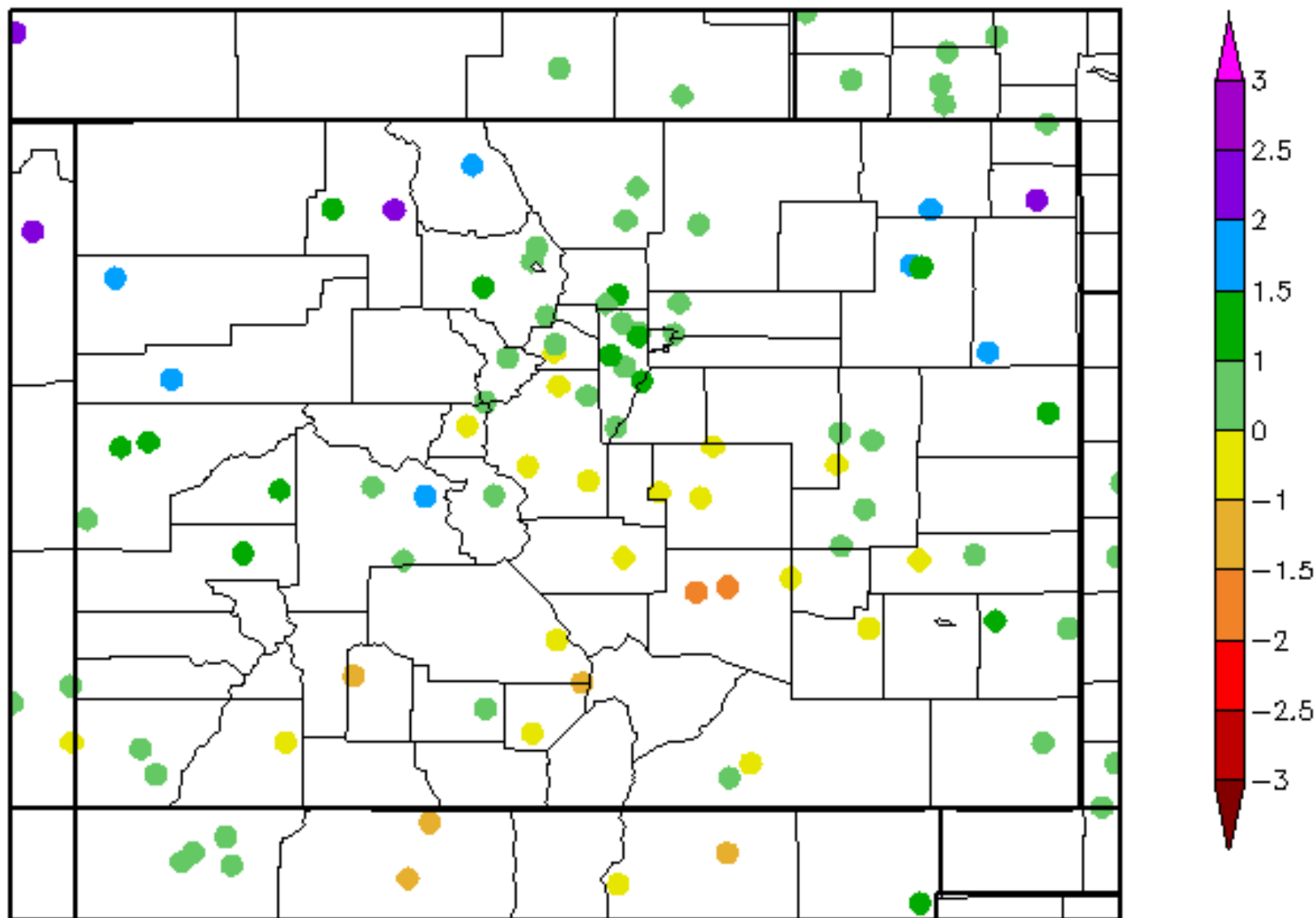
<http://droughtmonitor.unl.edu/>

VegDri- 7 Sept 2014



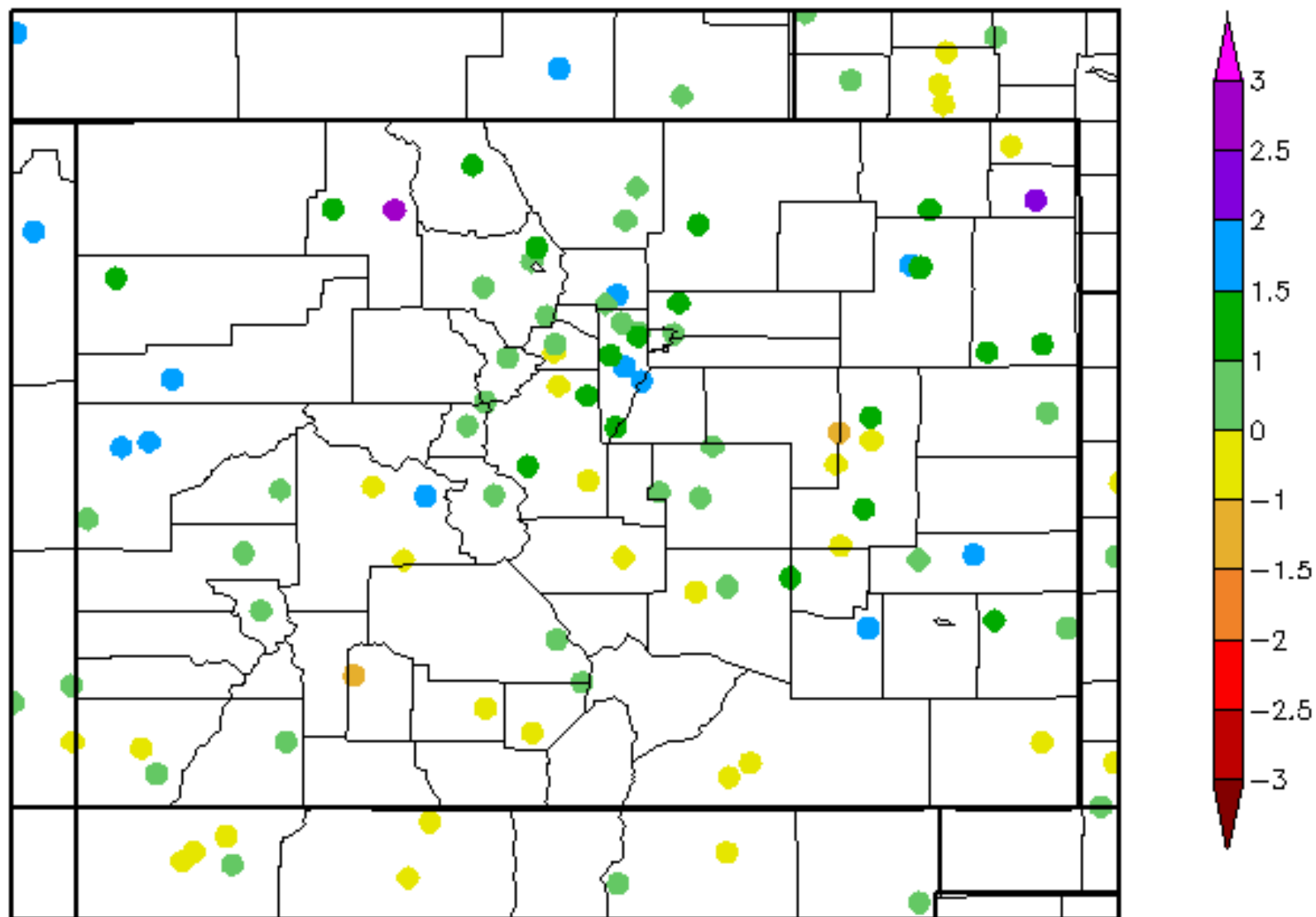
30 Day SPI

8/17/2014 - 9/15/2014



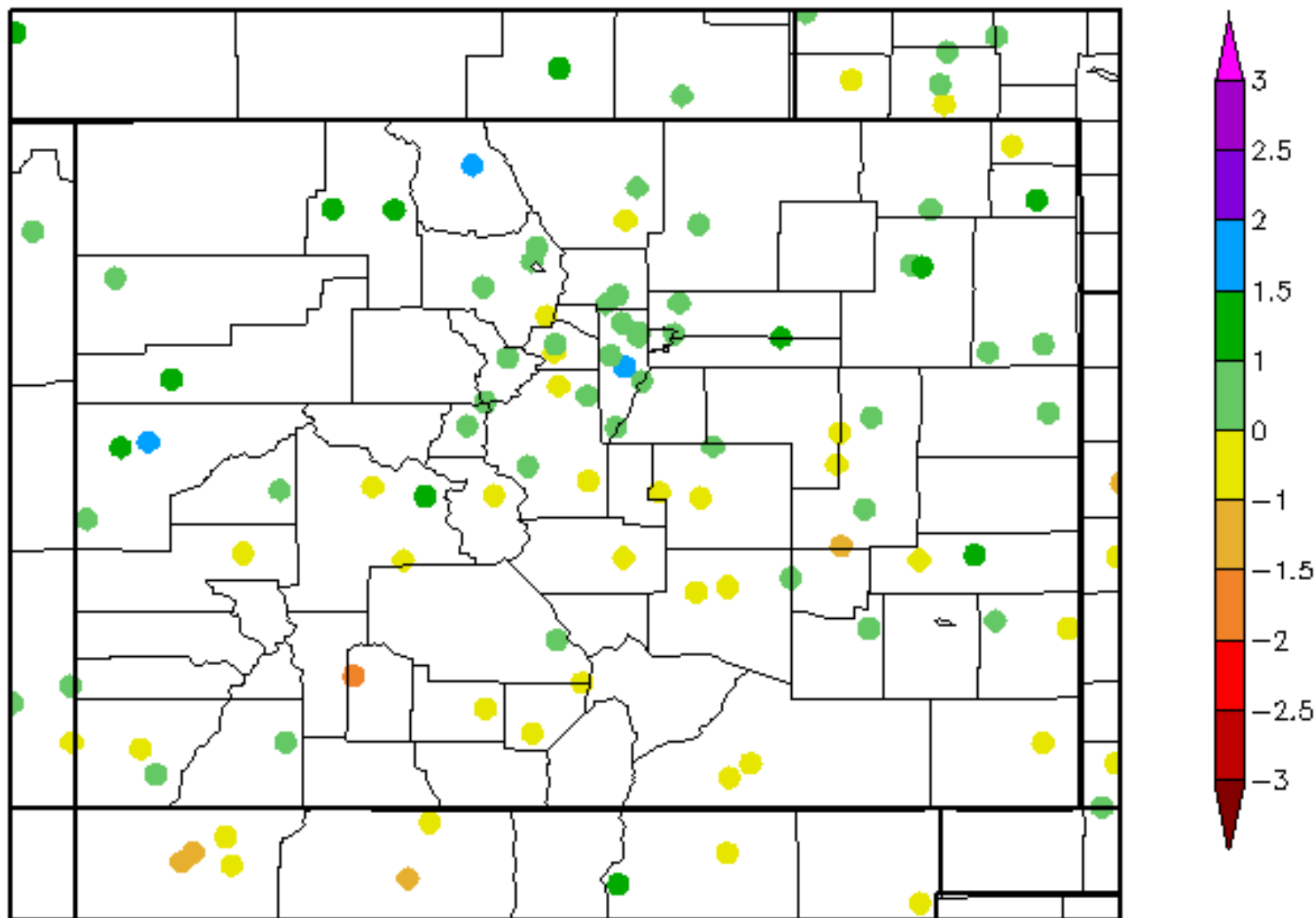
90 Day SPI

6/18/2014 - 9/15/2014



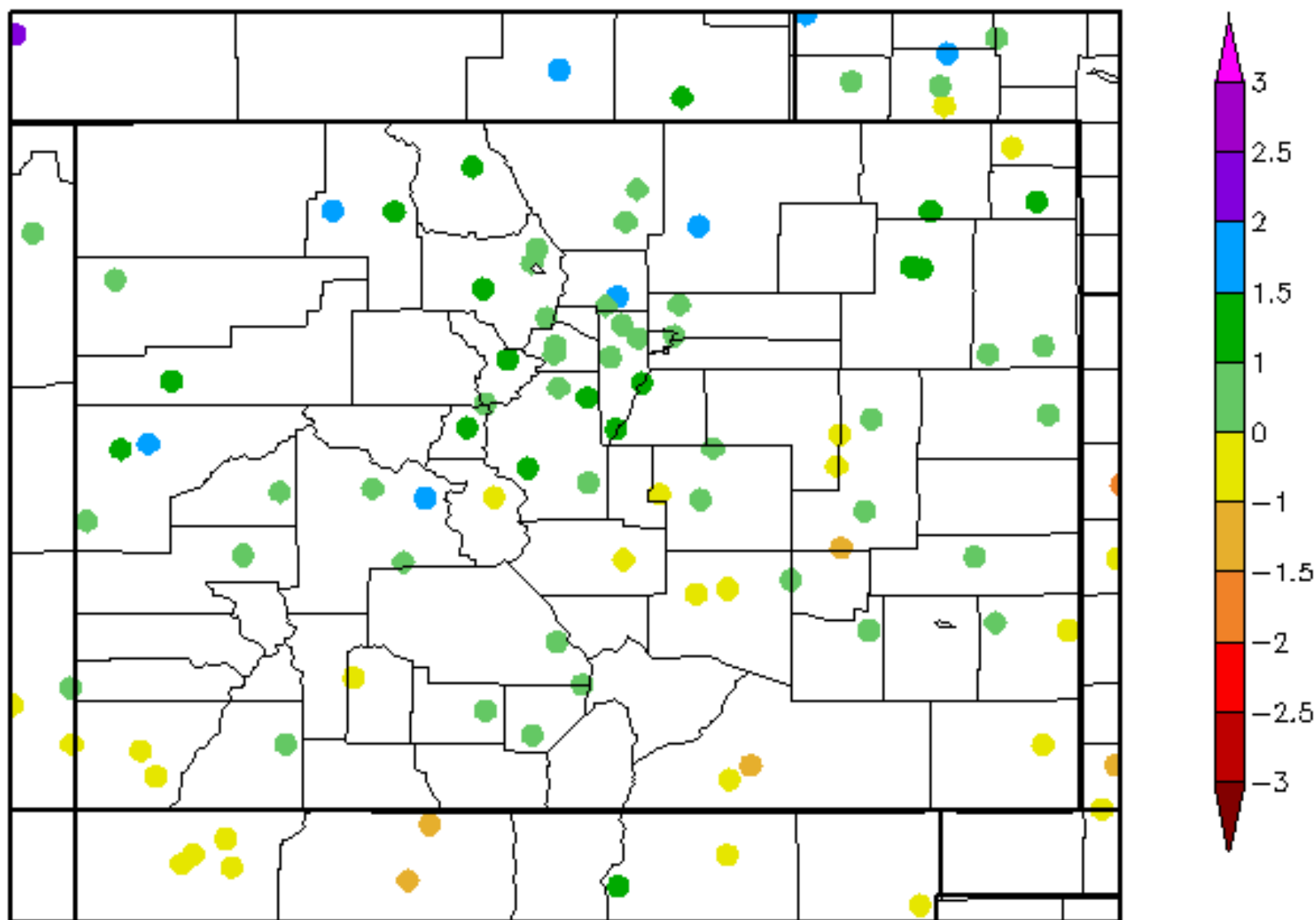
6 Month SPI

3/16/2014 - 9/15/2014



12 Month SPI

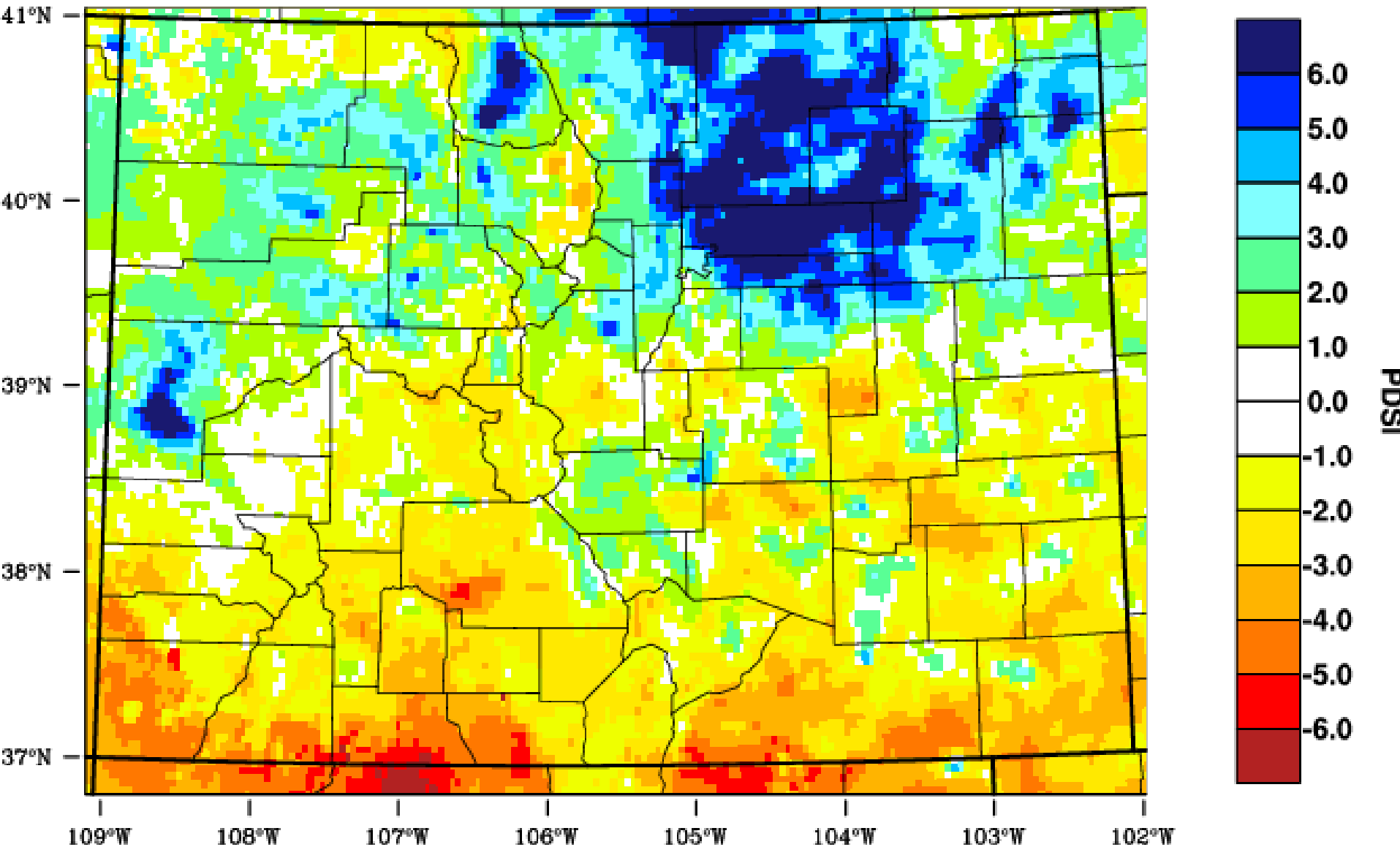
9/16/2013 - 9/15/2014



Palmer

Colorado - PDSI

August 2014



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

Colorado Climate Center

Data and Power Point Presentations available for downloading

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



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