



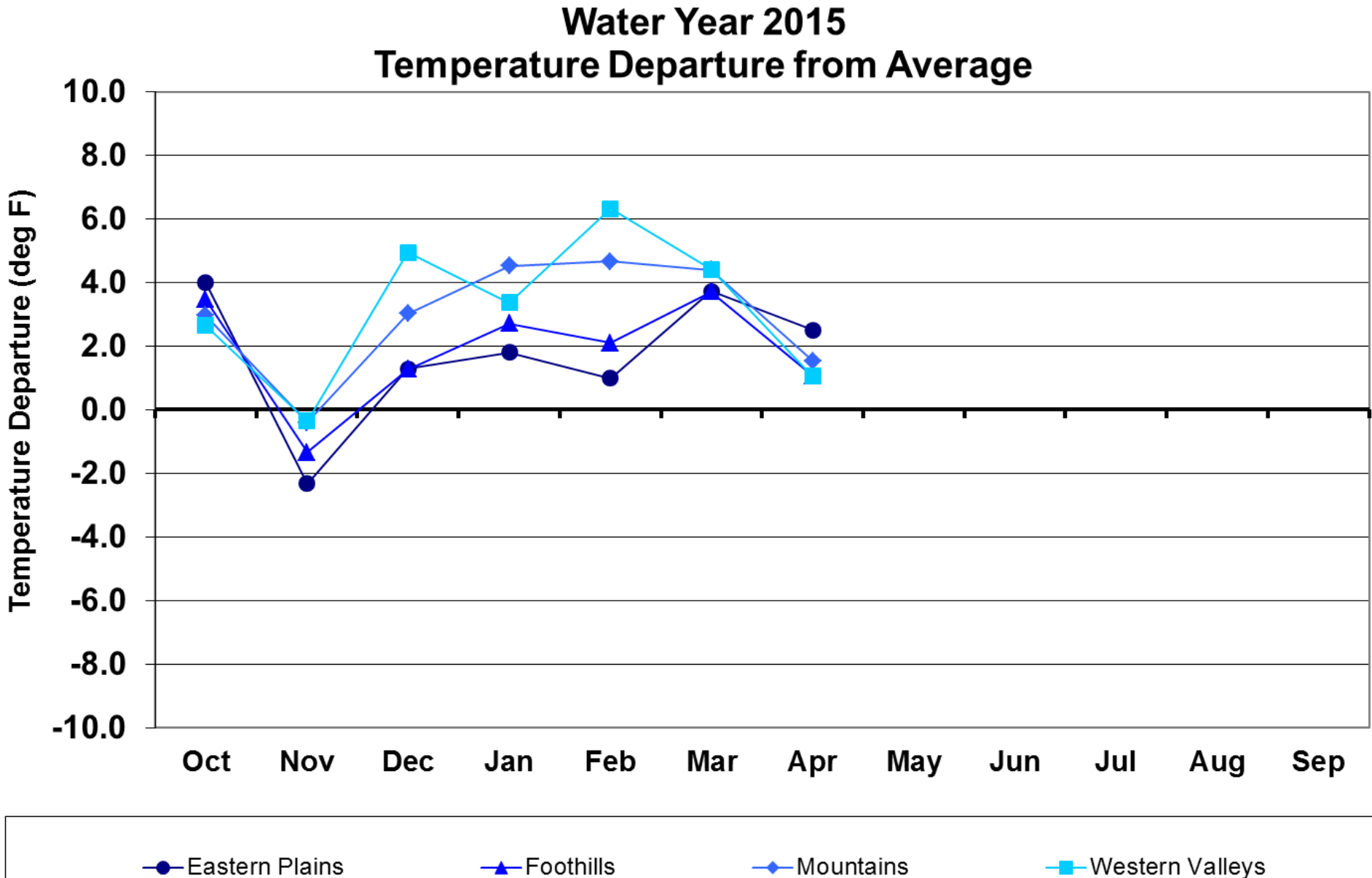
# Climate Update



Nolan Doesken  
State Climatologist  
Colorado Climate Center

Presented to  
Water Availability Task Force  
13 May 2015  
Denver, CO

# Water Year 2015 Temperature Departures

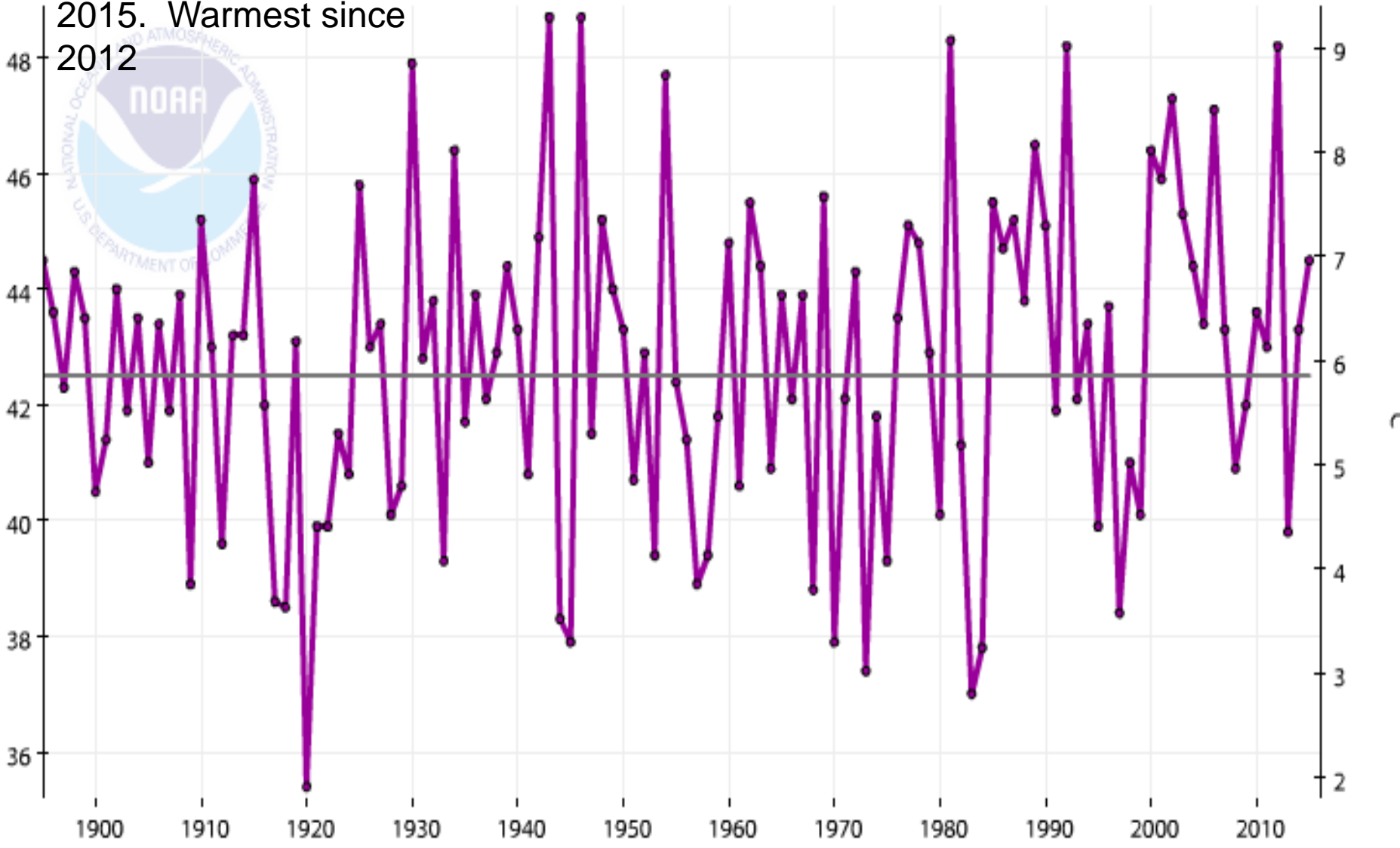


# April 2015 Average Temperature History for Colorado (NCDC)

44.5 F (+2.0) Ranks  
29<sup>th</sup> warmest 1895-  
2015. Warmest since  
2012

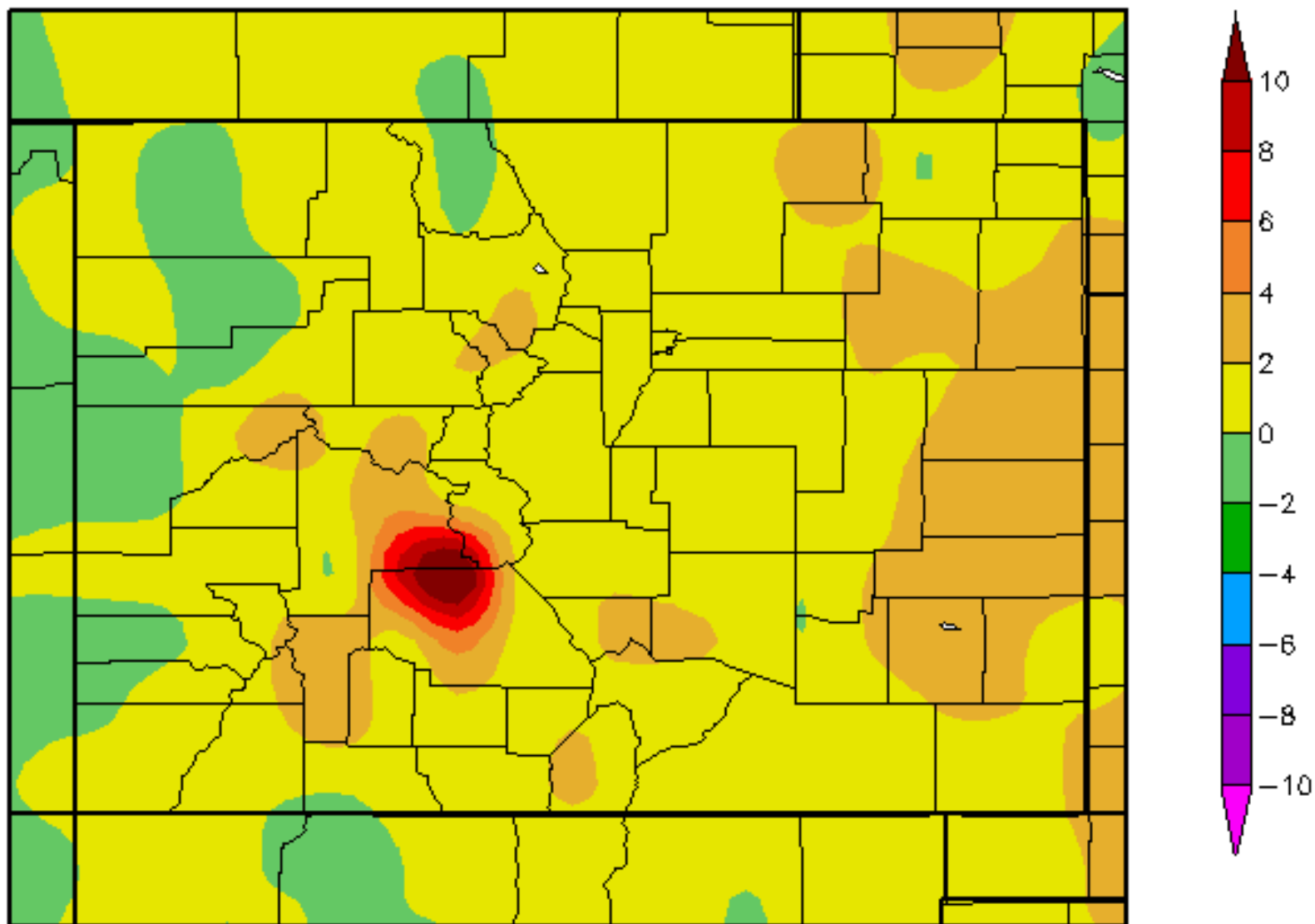
## Colorado, Average Temperature, April

— 1901-2000 Avg: 42.5°F  
—●— Avg Temperature



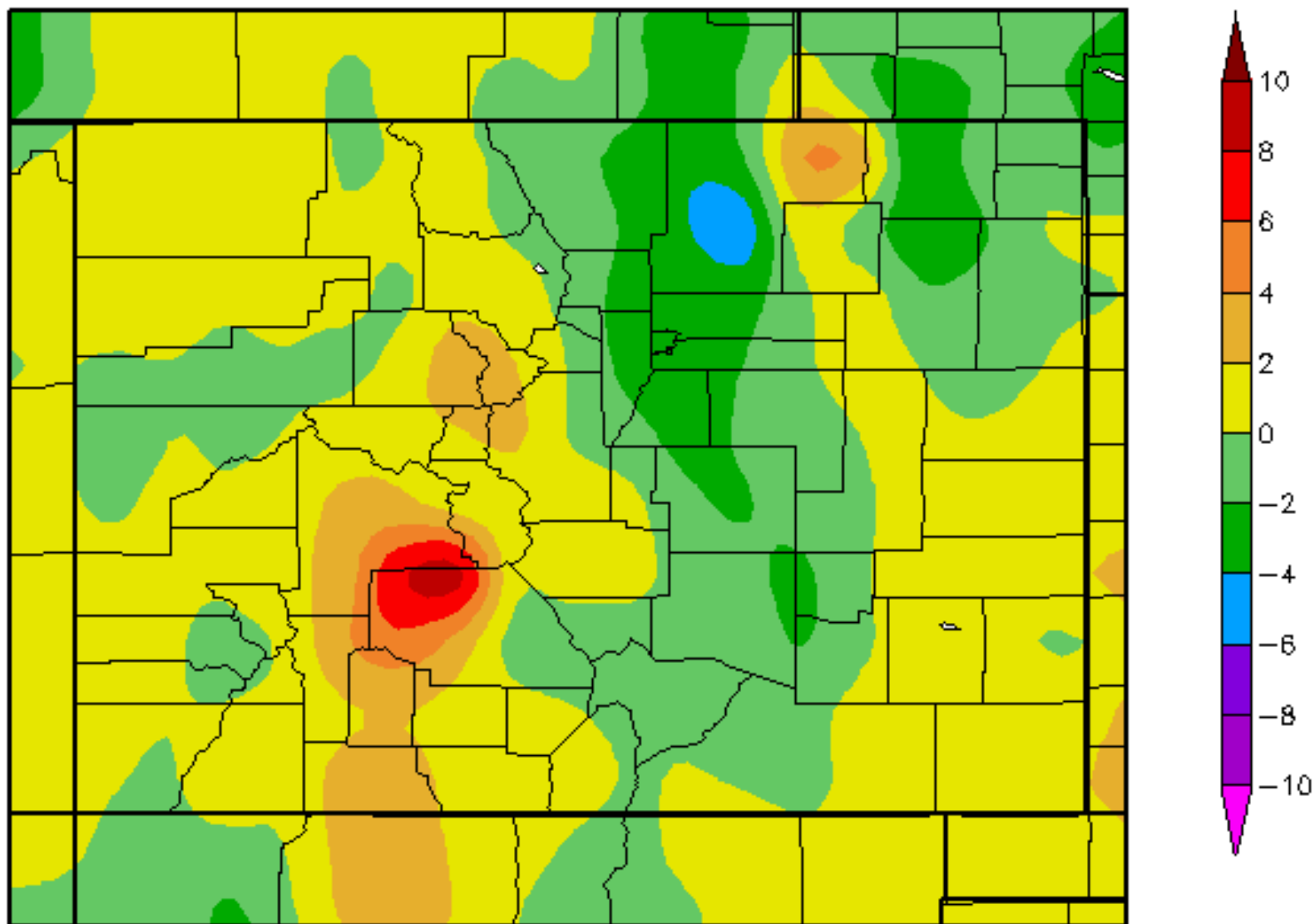
# Departure from Normal Temperature (F)

## 4/1/2015 - 4/30/2015



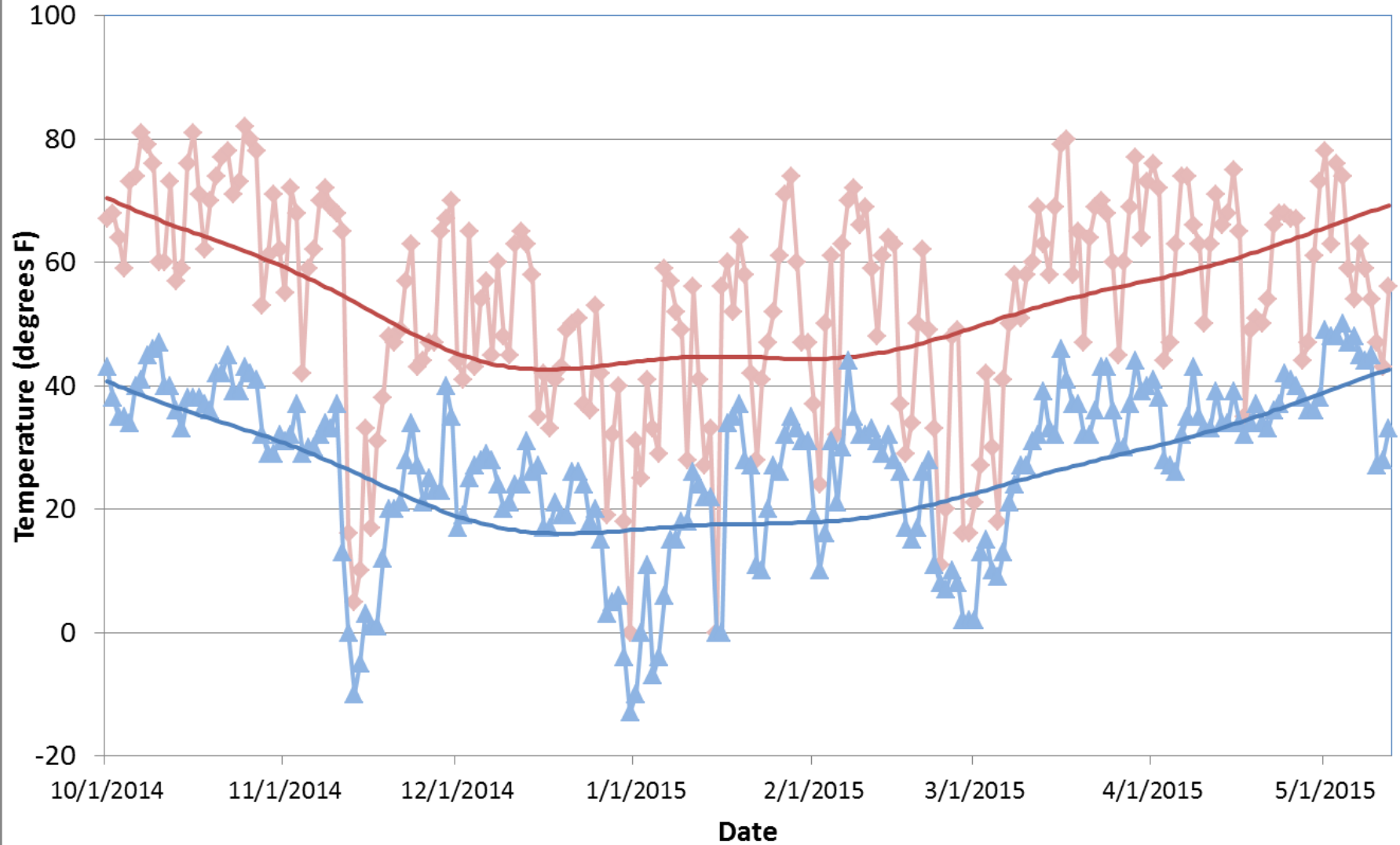
# Departure from Normal Temperature (F)

## 5/1/2015 – 5/11/2015



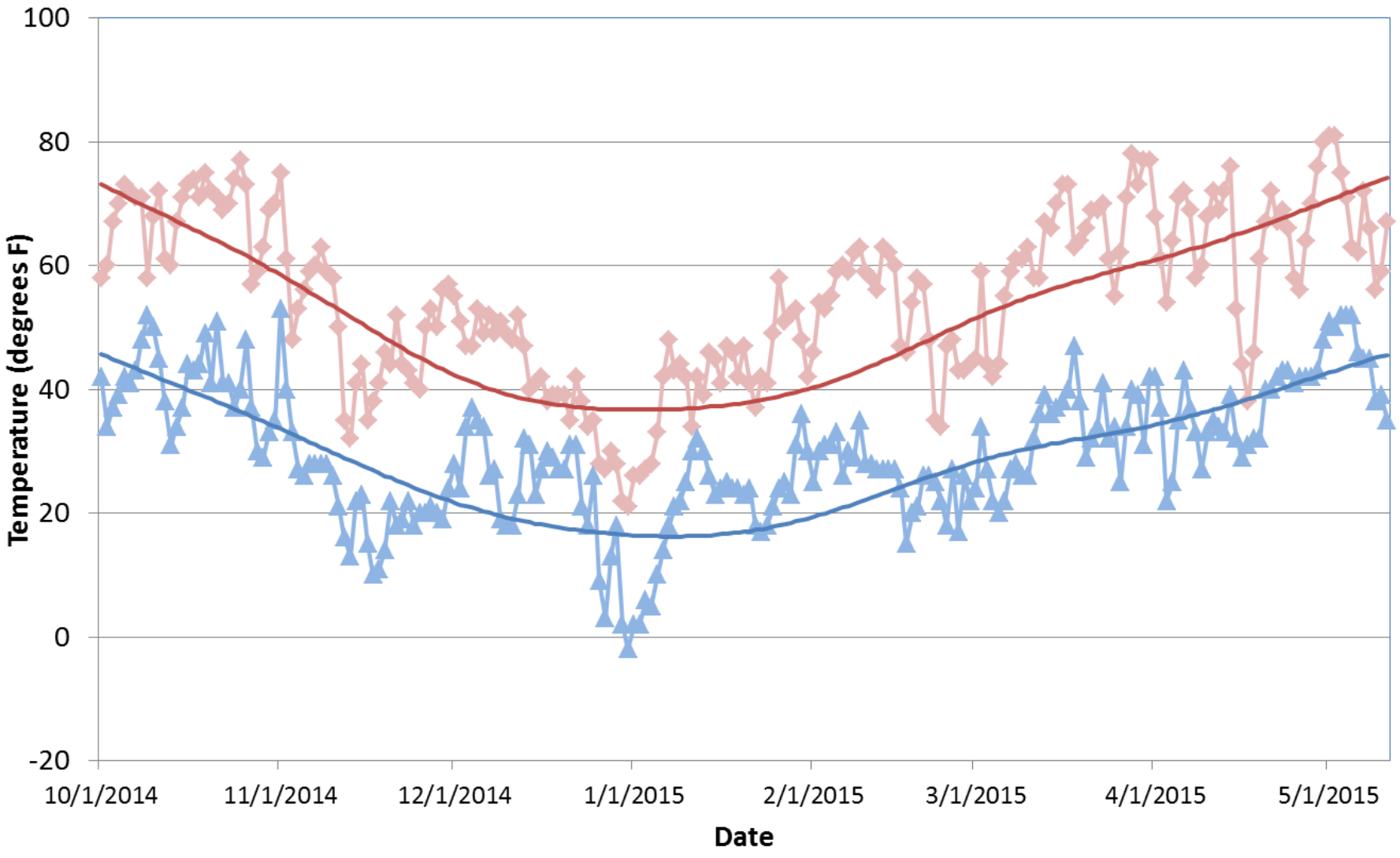
# Denver-Stapleton Daily Max/Min Temperature with Normal (Oct 1, 2014 - Present)

MaxTemperature Normal Max MinTemperature Normal Min

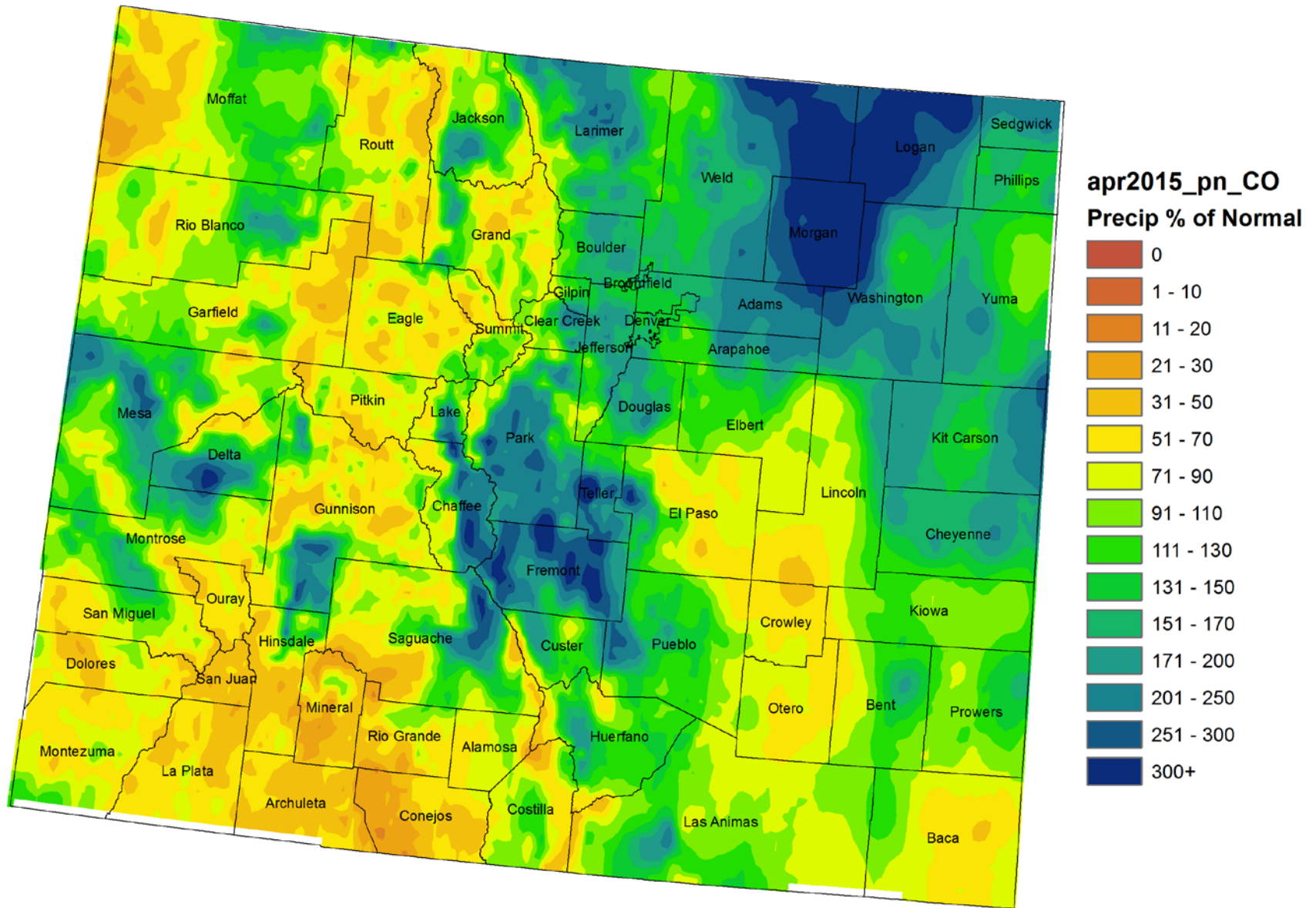


# Grand Junction Daily Max/Min Temperature with Normals (Oct 1, 2014 - Present)

Max Temperature      Normal Max      Min Temperature      Normal Min



# Colorado April 2015 Precipitation as a Percentage of Normal





# April 2015 Statewide Precipitation

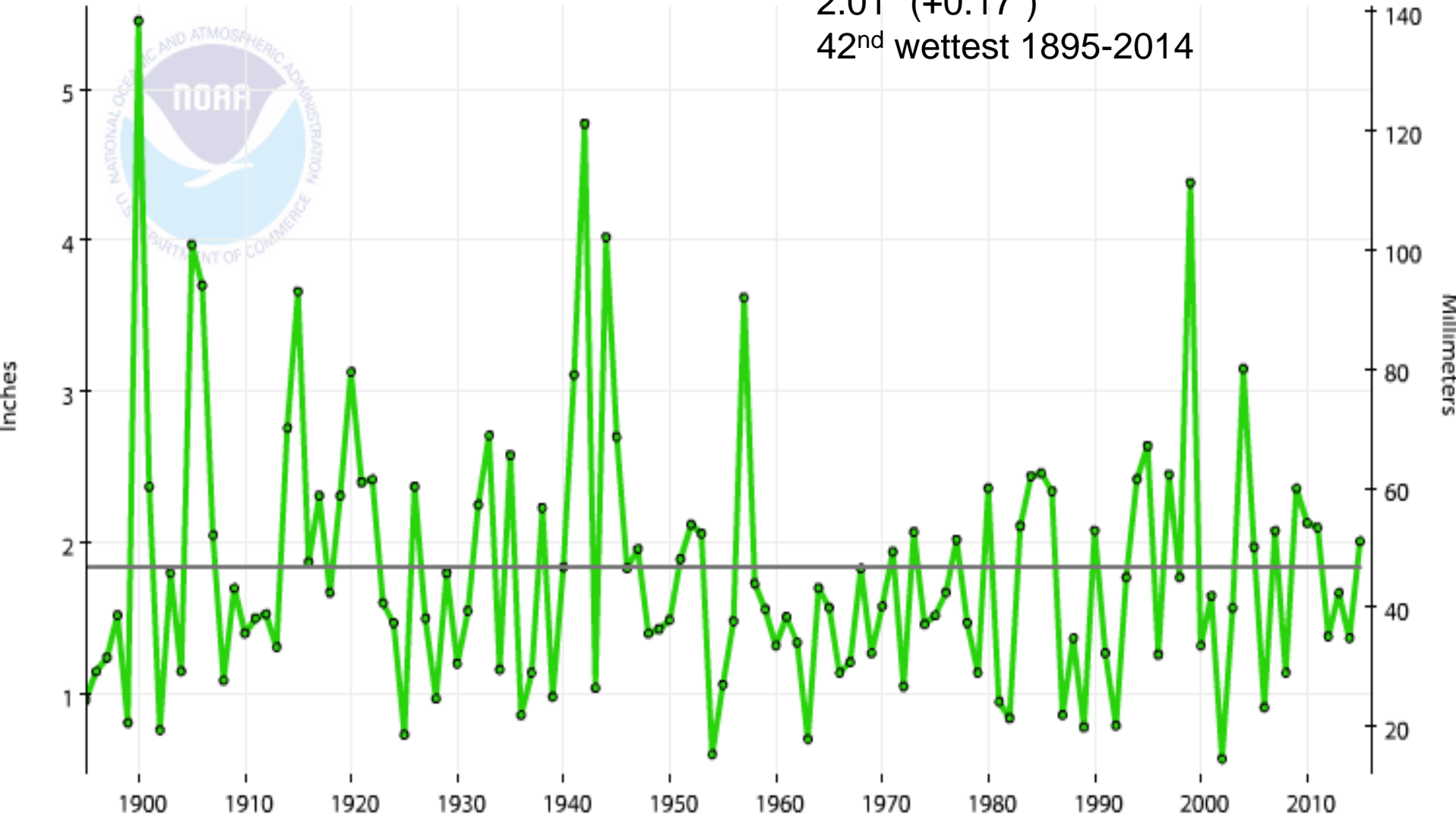
## Colorado, Precipitation, April

— 1901-2000  
Avg: 1.84"

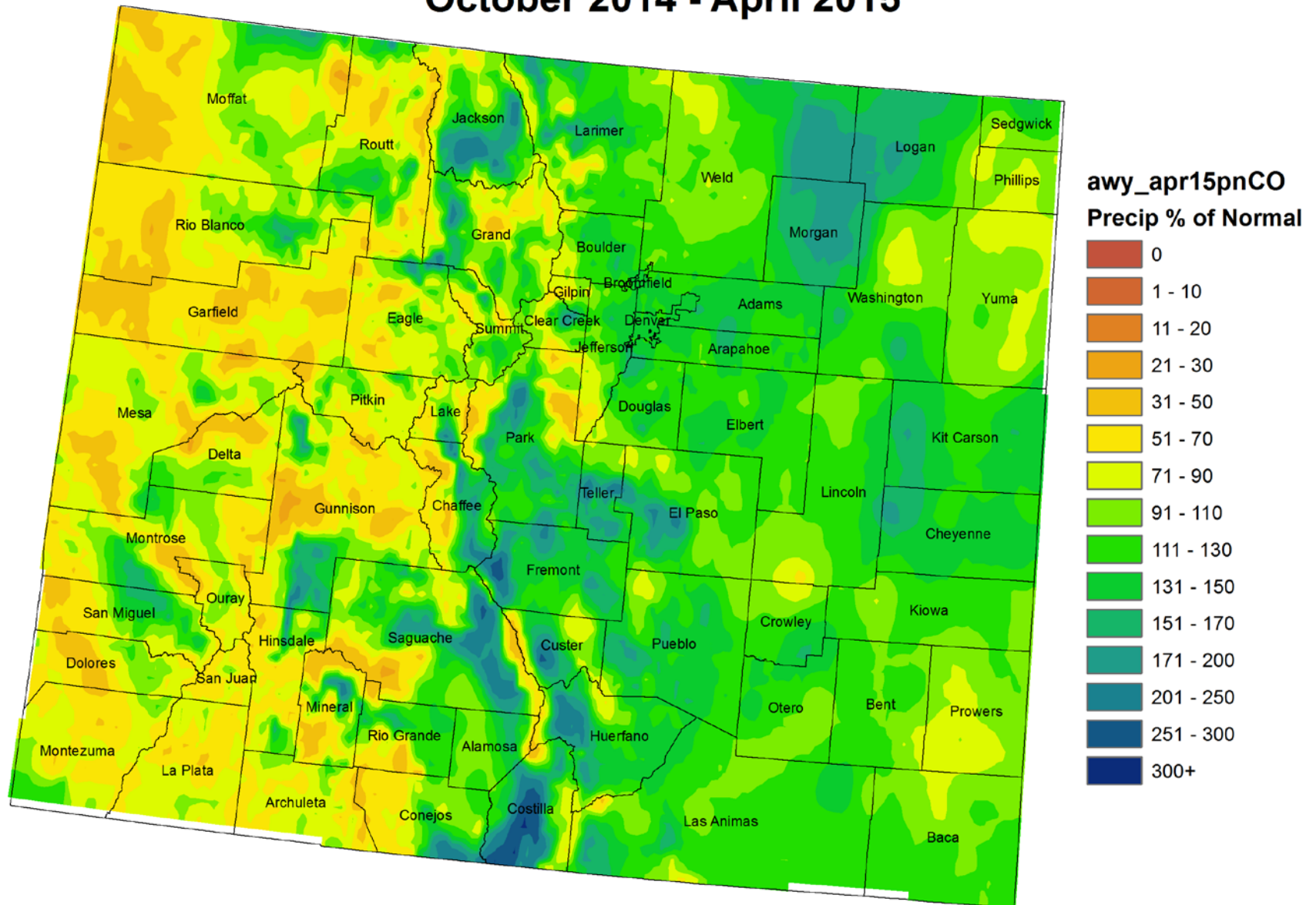
—●— Precip

2.01" (+0.17")

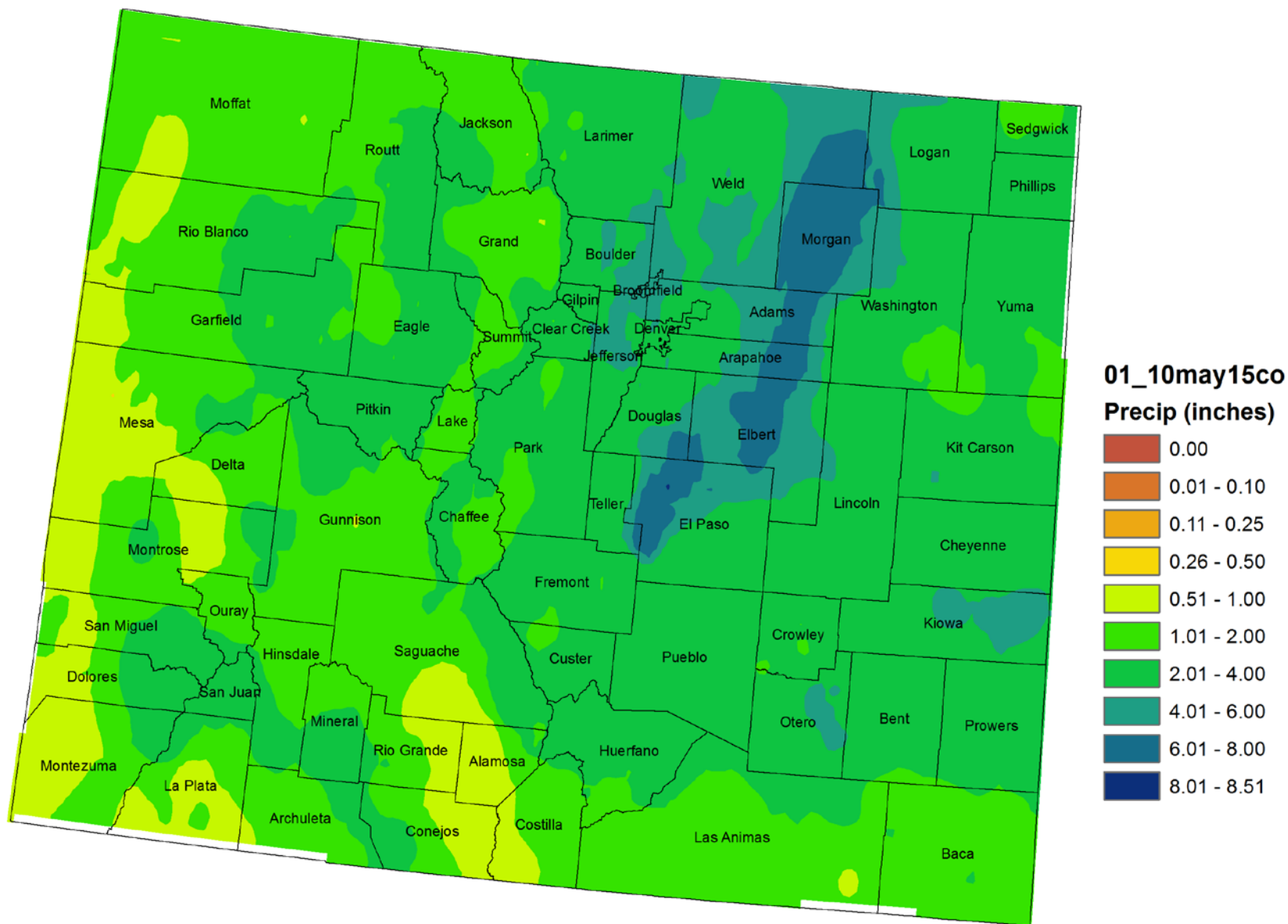
42<sup>nd</sup> wettest 1895-2014



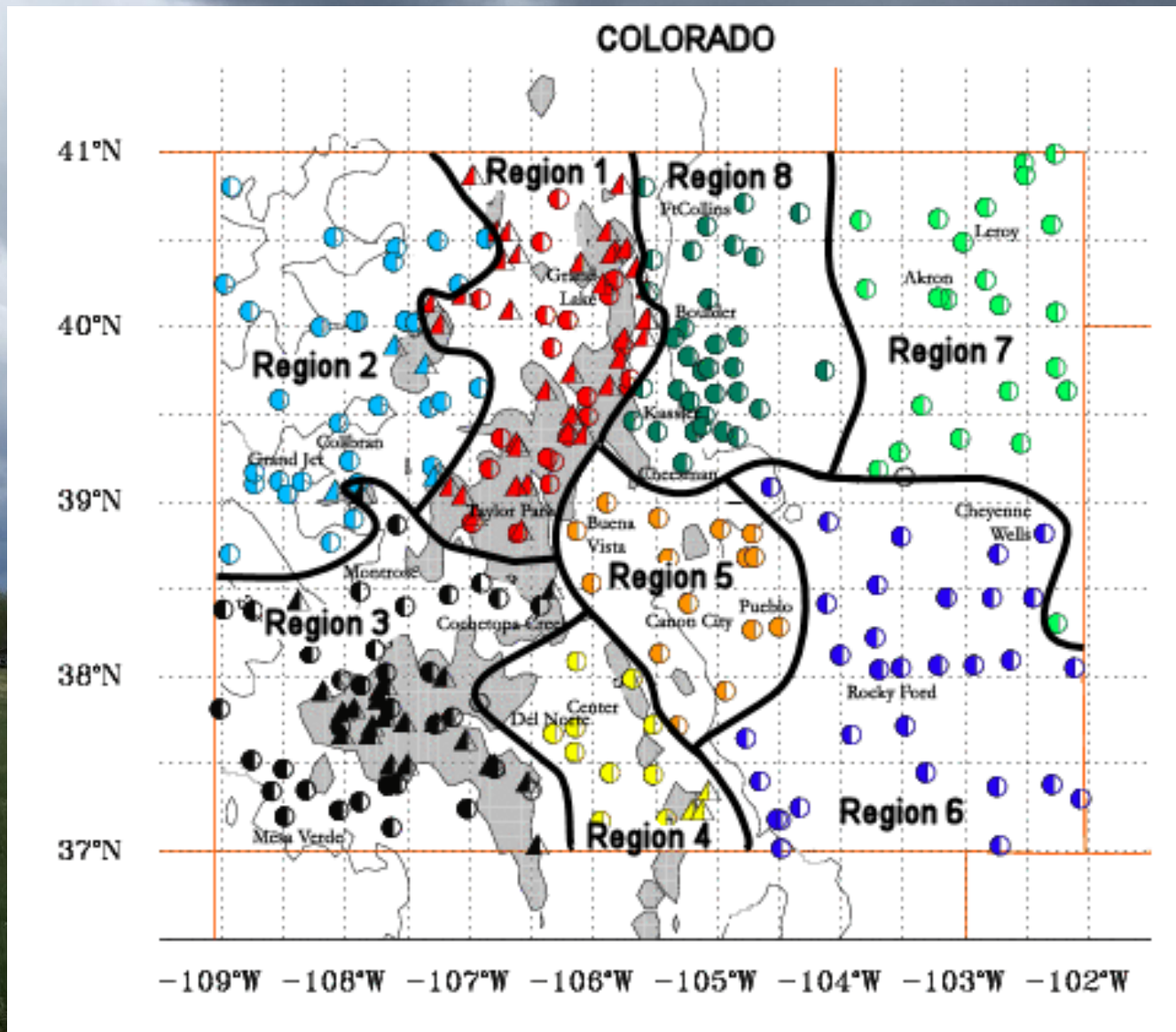
# Colorado Water Year 2015 Precipitation as a Percentage of Normal October 2014 - April 2015



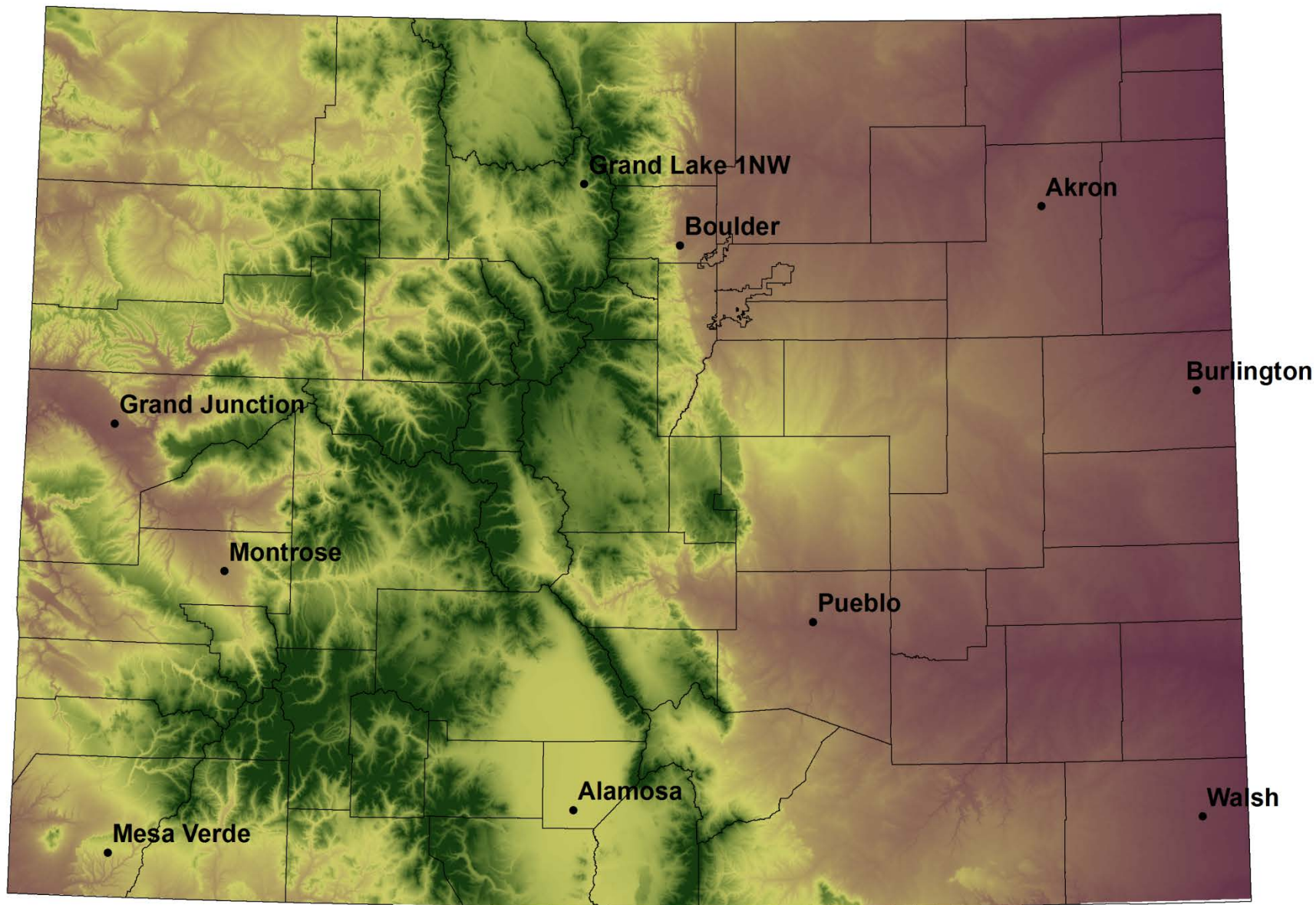
# Colorado Month to Date Precipitation 1 - 10 May 2015



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

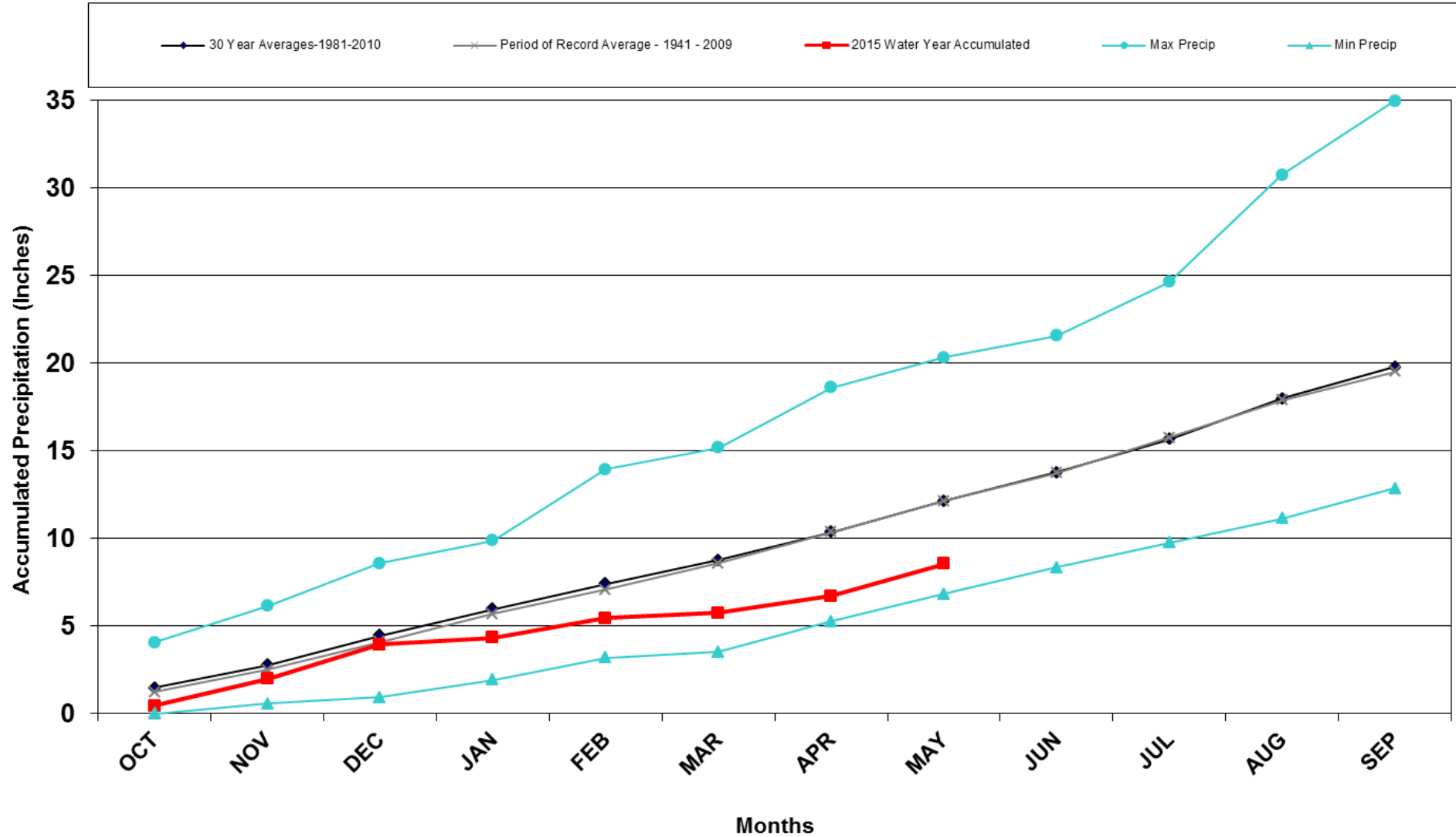


# NWS Cooperative Stations for WATF



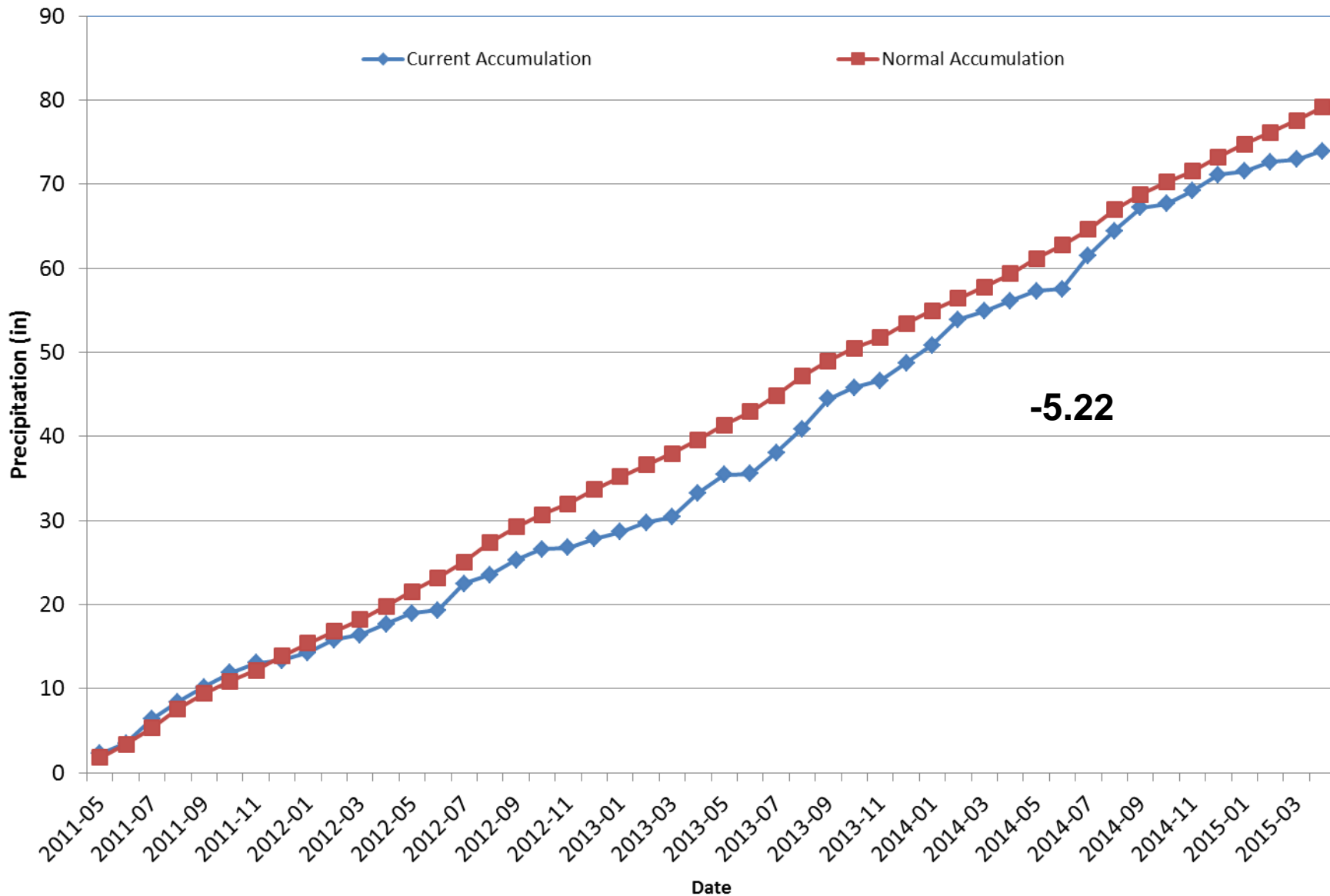
# Division 1 – Grand Lake 1NW

## Grand Lake 1 NW 2015 Water Year



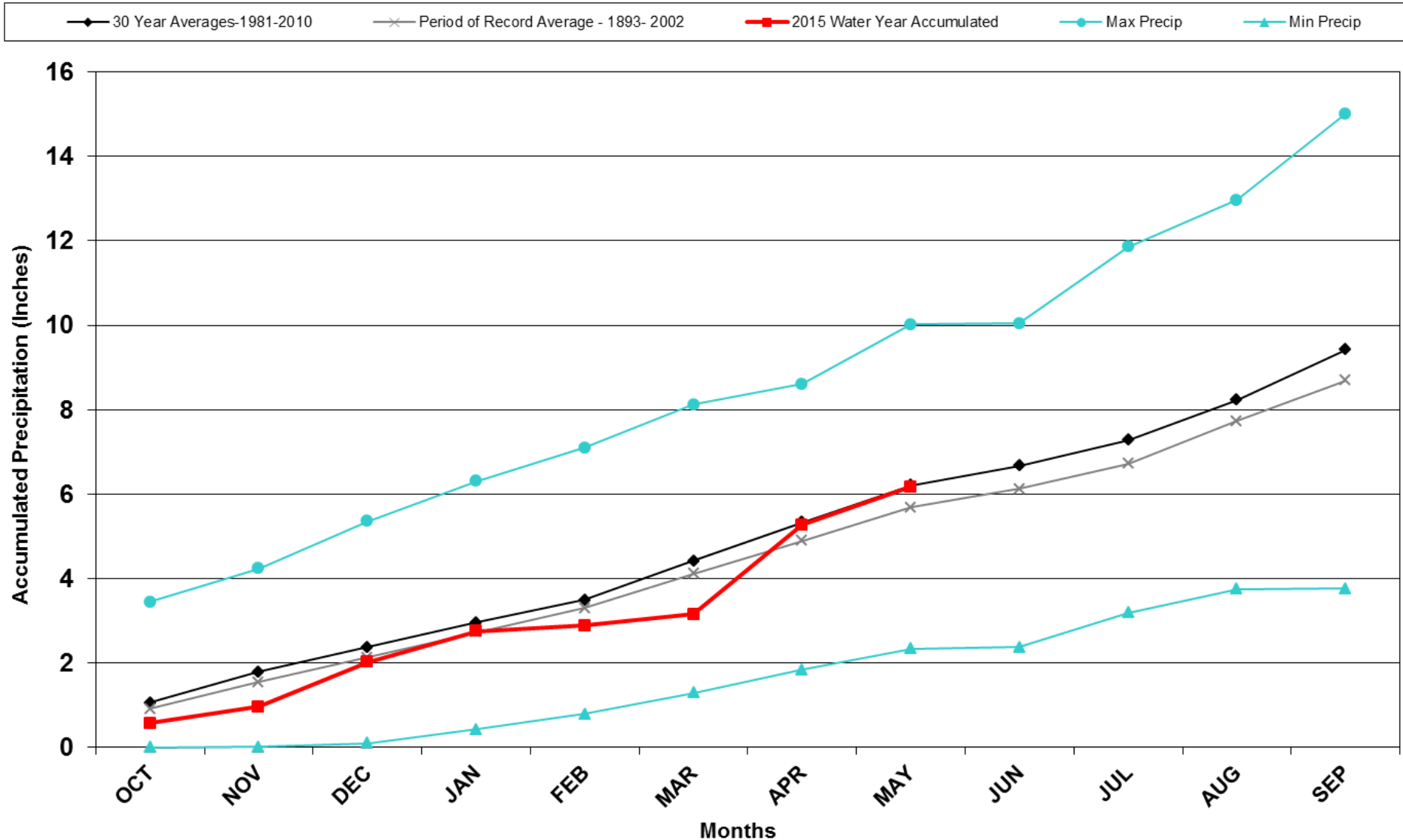
# Division 1 – Grand Lake 1NW

## Grand Lake 1NW Precipitation Accumulation



# Division 2 – Grand Junction

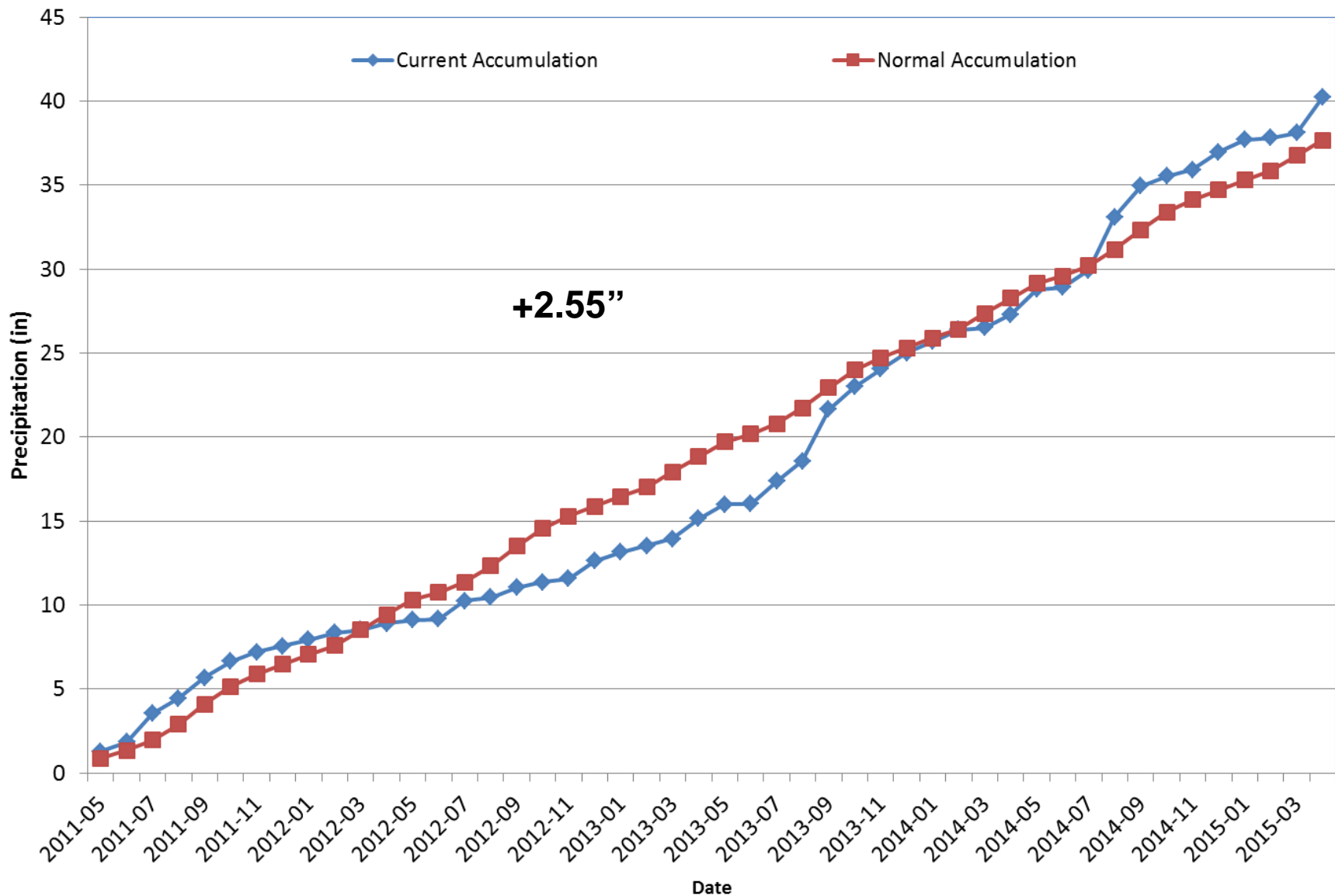
## Grand Junction WSFO 2015 Water Year





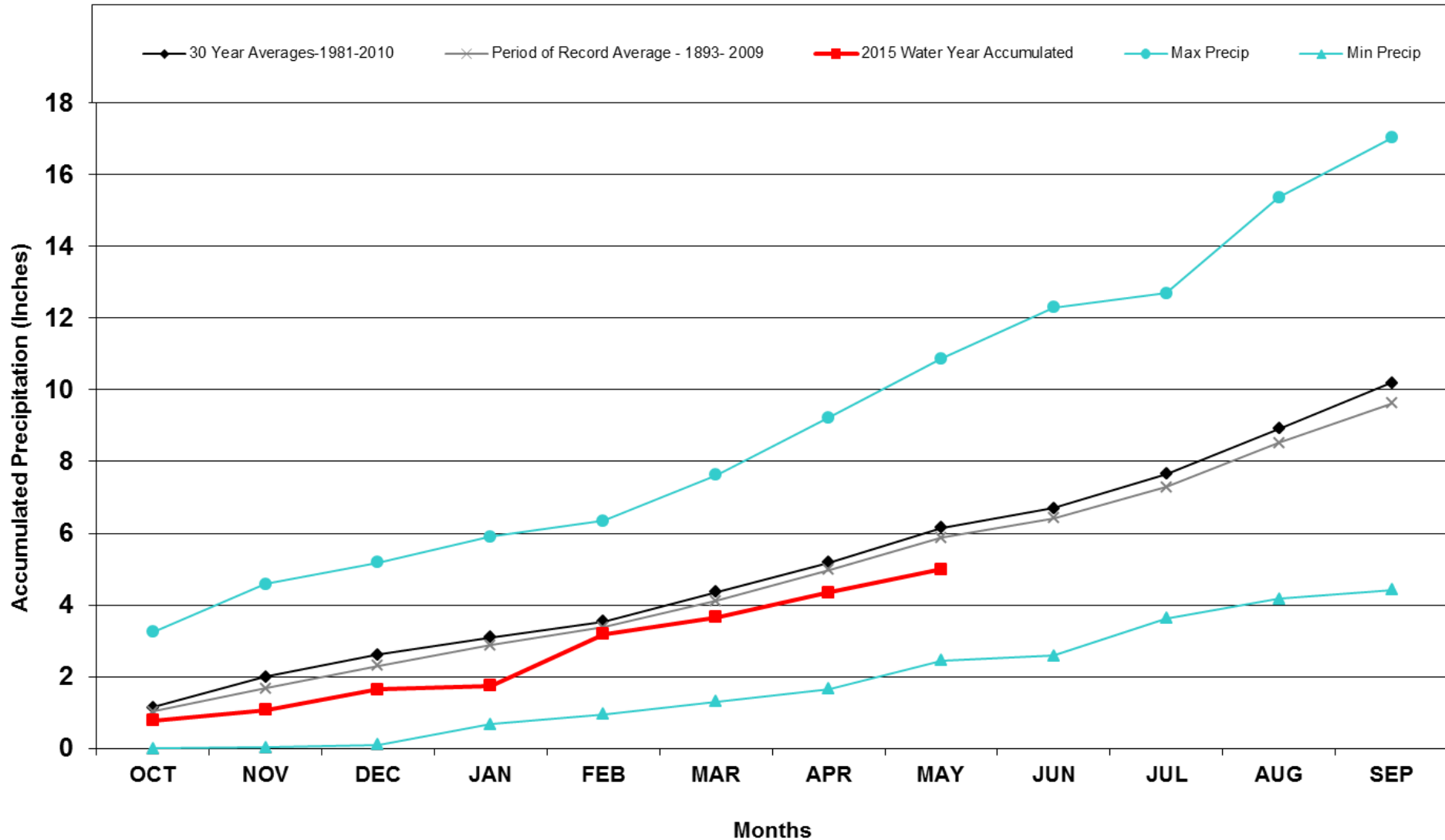
# Division 2 – Grand Junction

## Grand Junction Precipitation Accumulation



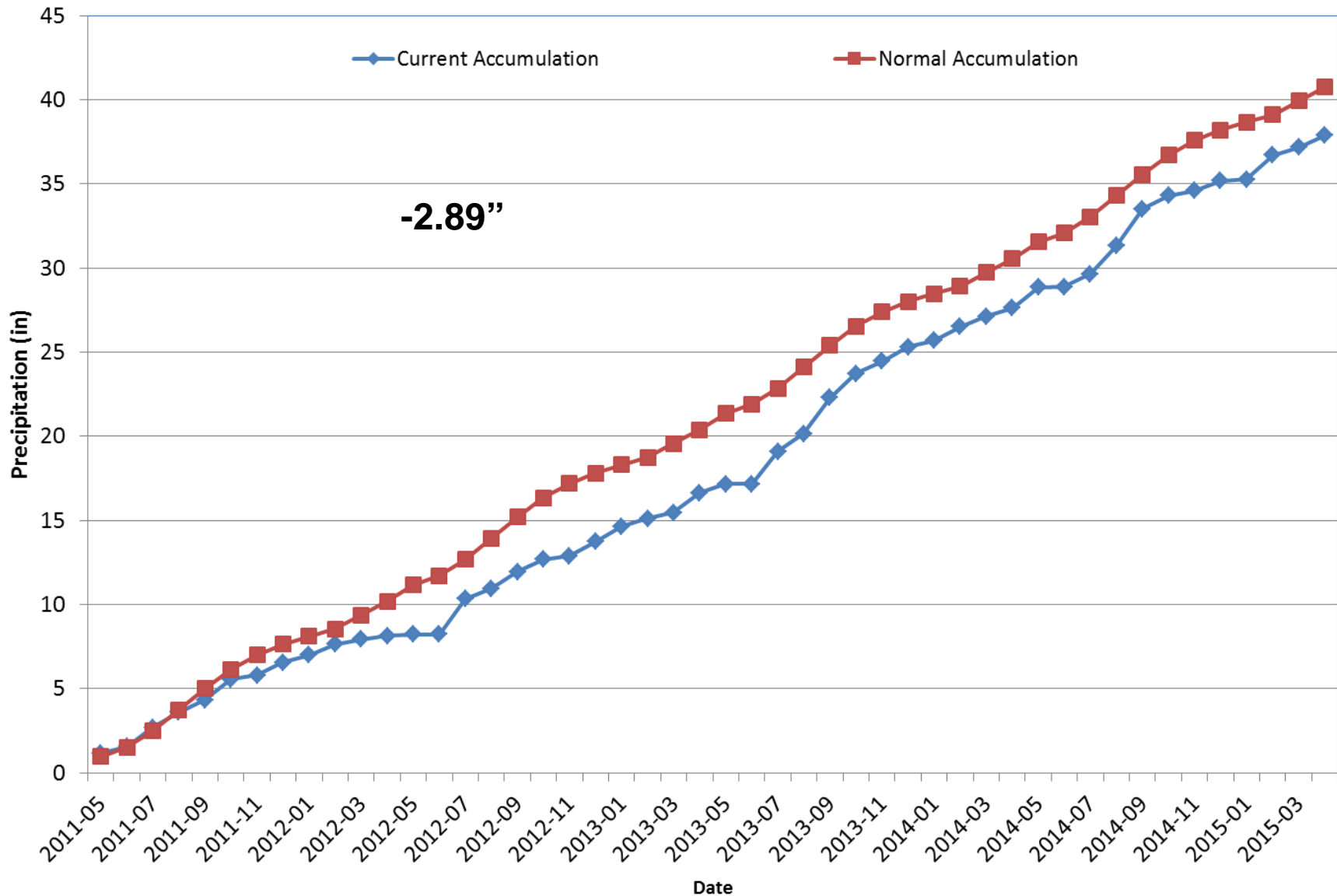
# Division 3 – Montrose

## Montrose #2 2015 Water Year



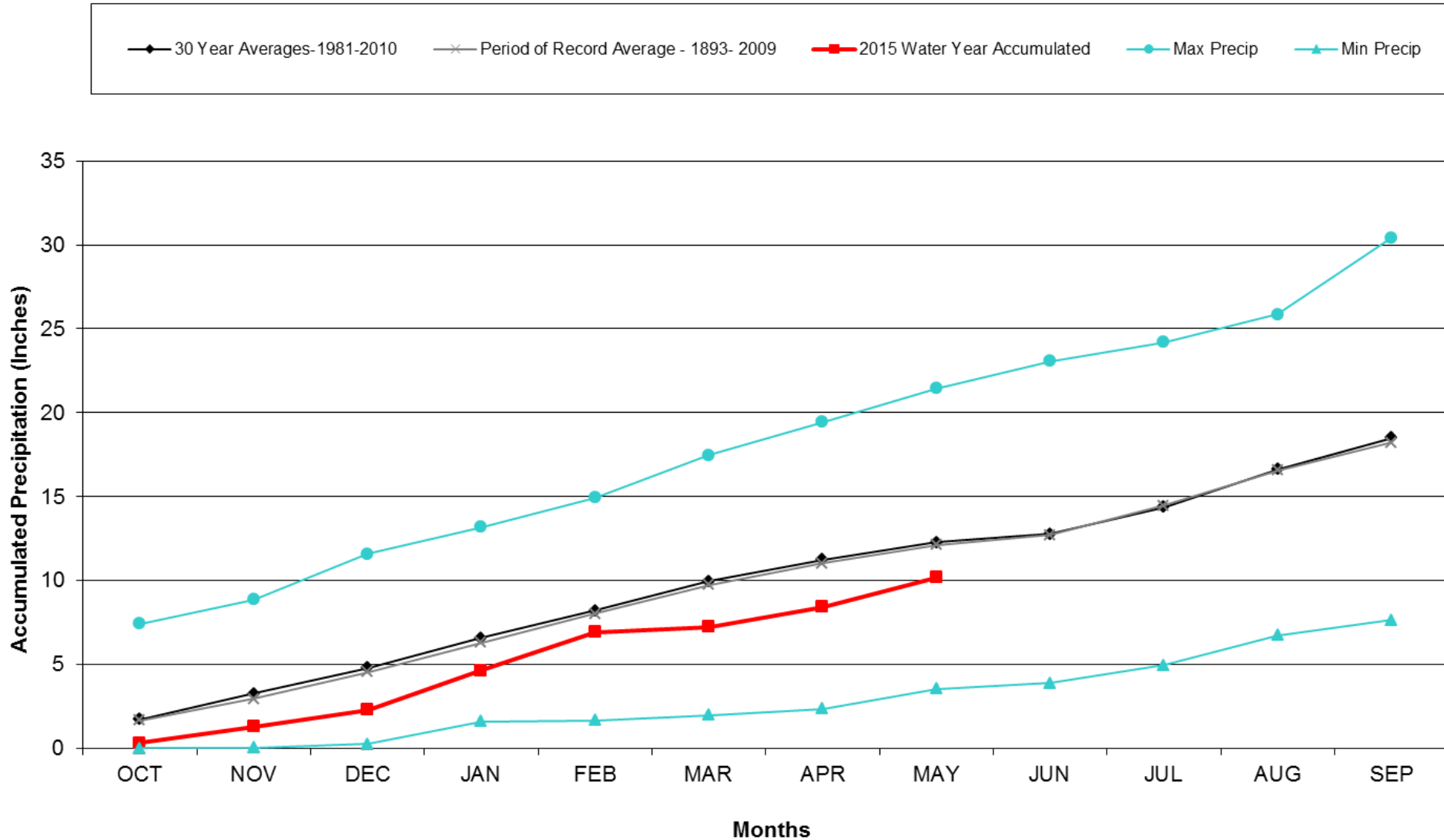
# Division 3 – Montrose

## Montrose #2 Precipitation Accumulation



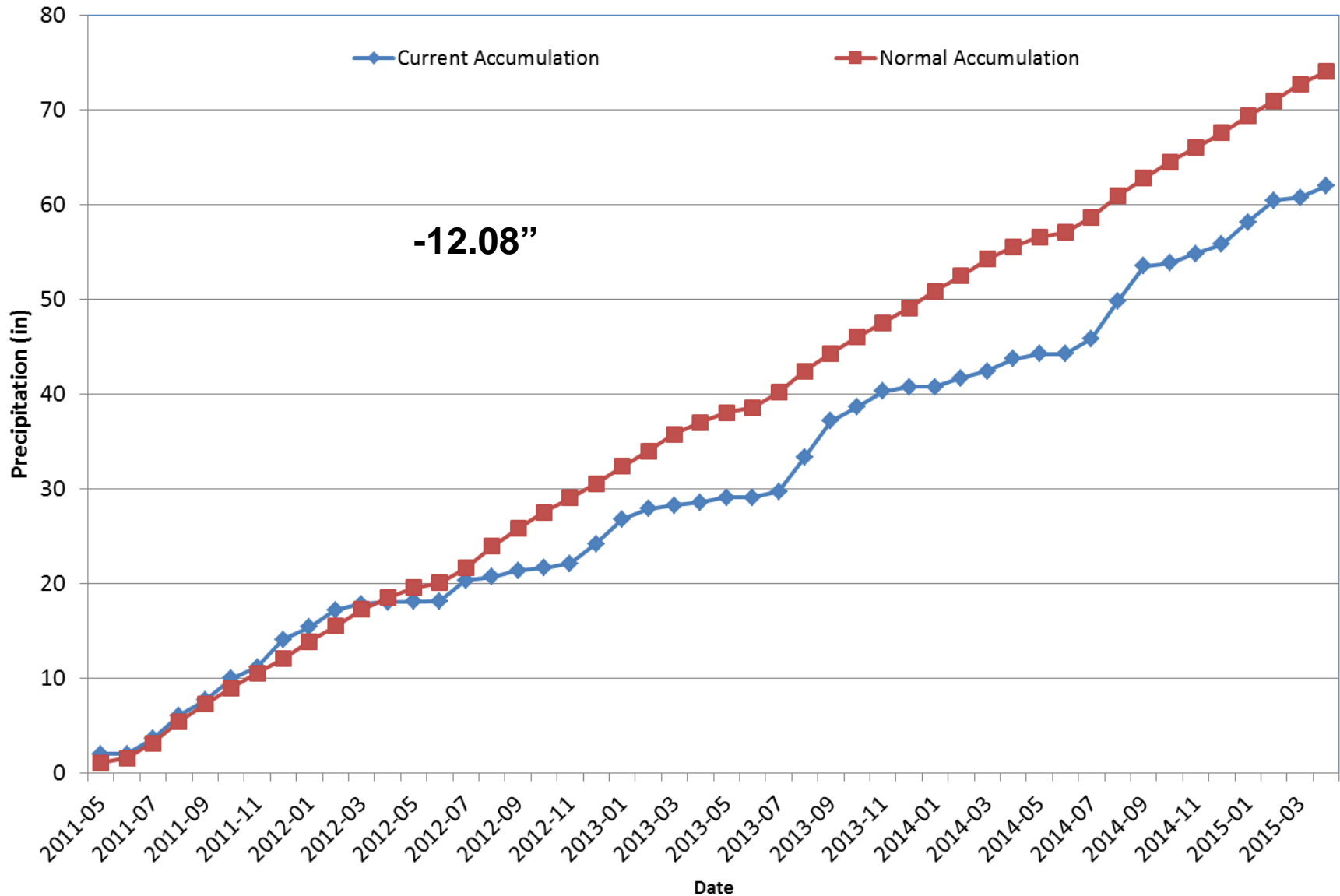
# Division 3 – Mesa Verde NP

## Mesa Verde NP 2015 Water Year



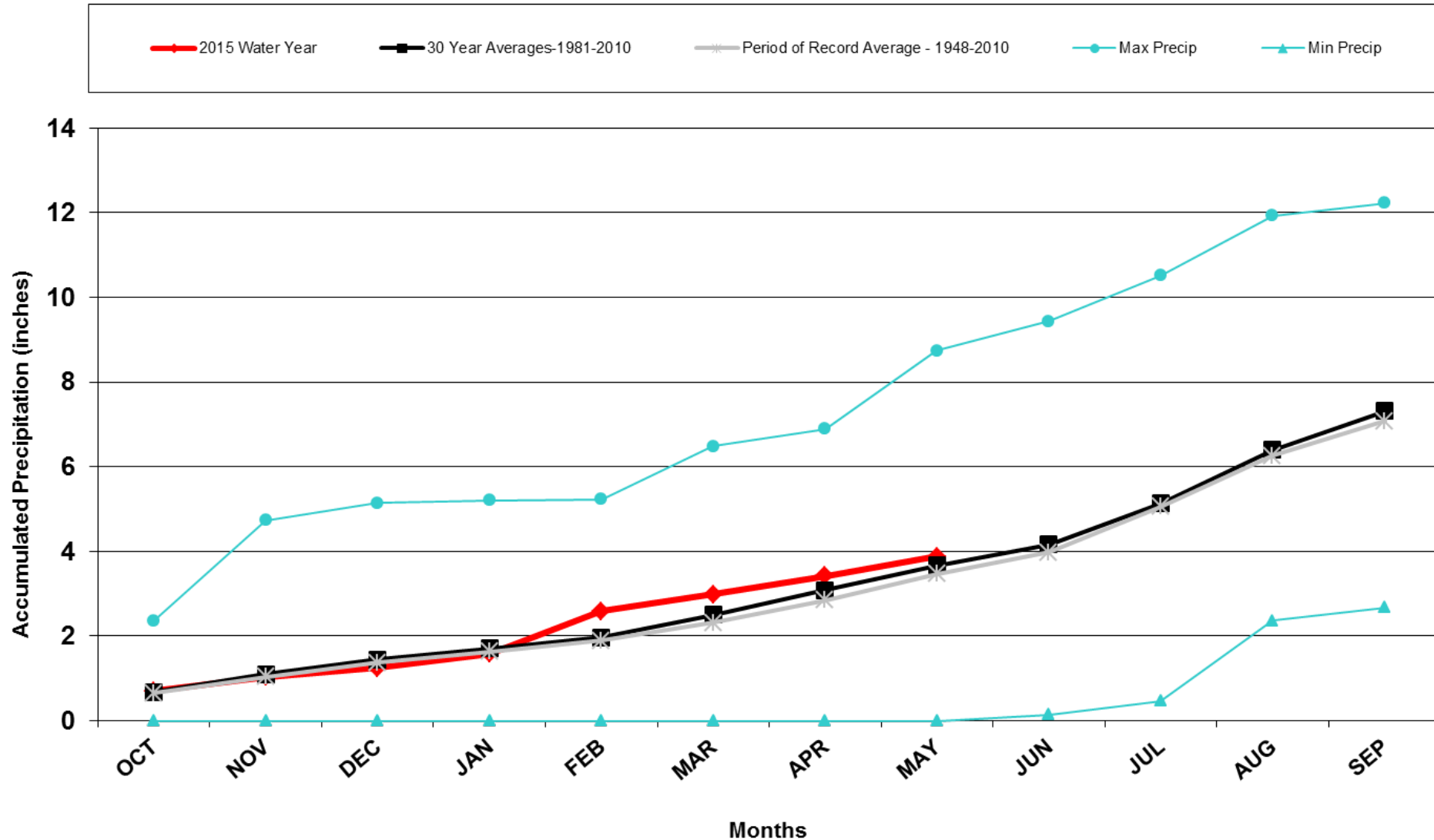
# Division 3 – Mesa Verde NP

## Mesa Verde NP Precipitation Accumulation



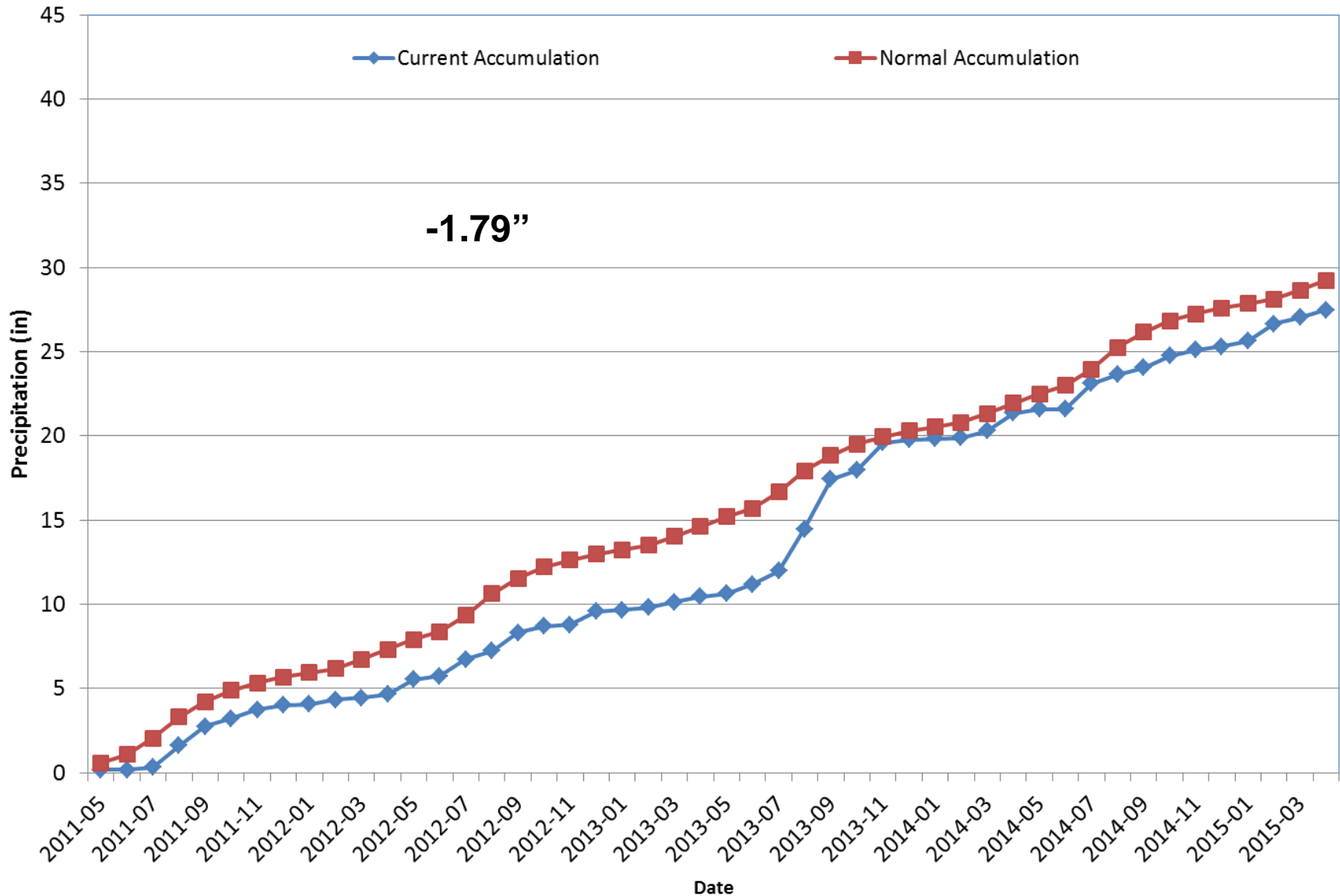
# Division 4 – Alamosa

## Alamosa WSO 2015 Water Year



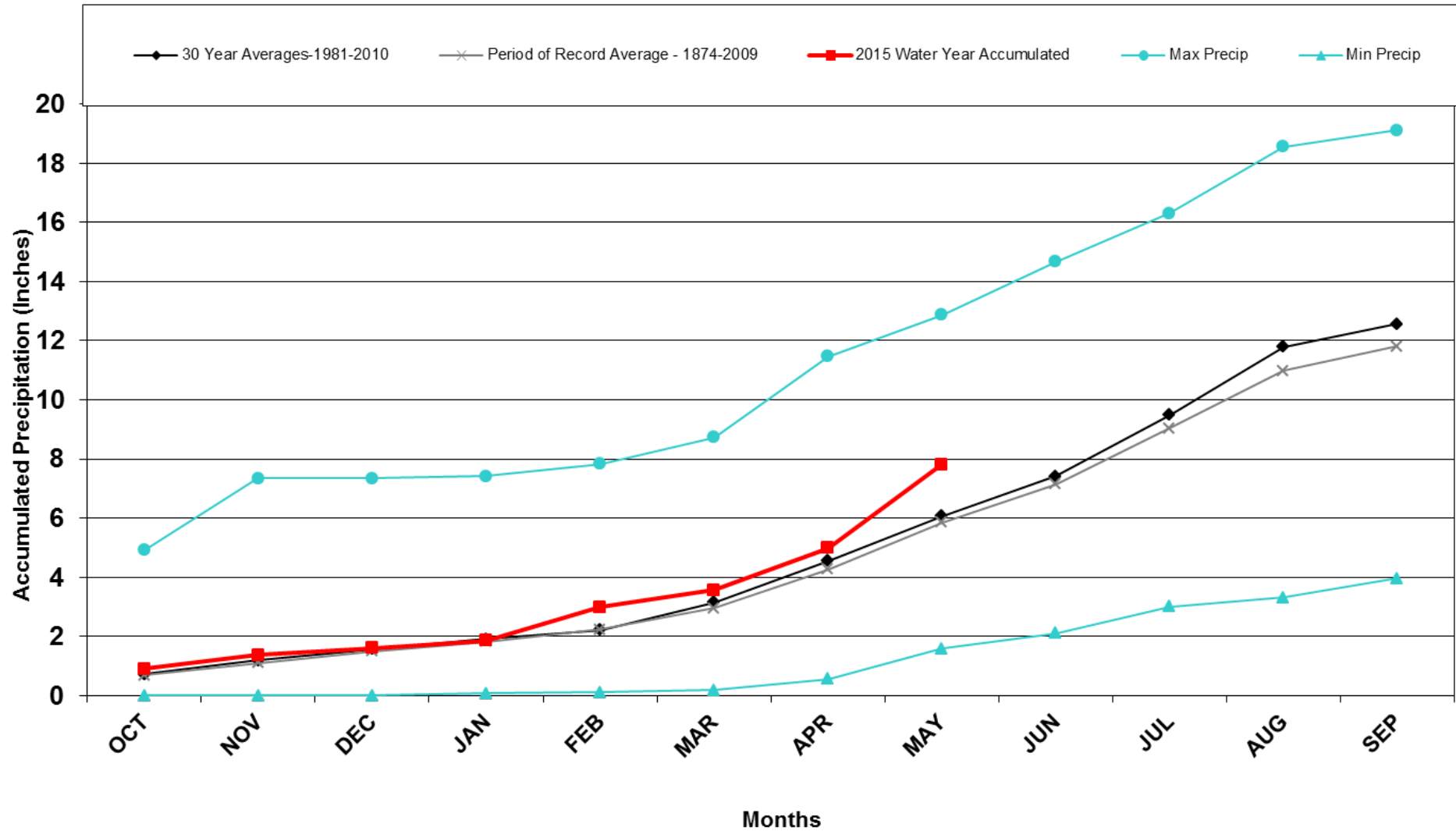
# Division 4 – Alamosa

## Alamosa WSO Precipitation Accumulation



# Division 5 – Pueblo

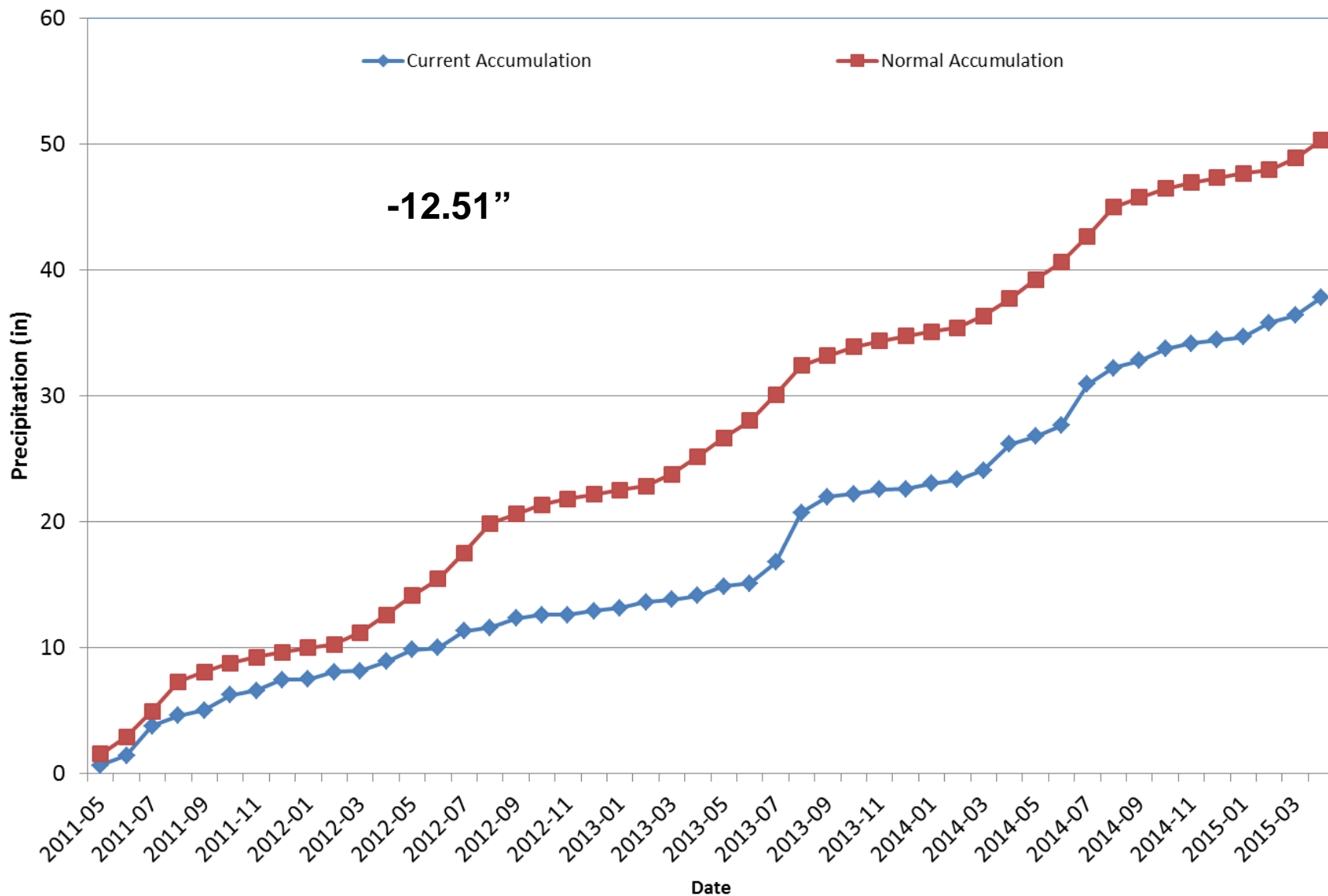
## Pueblo WSO 2015 Water Year





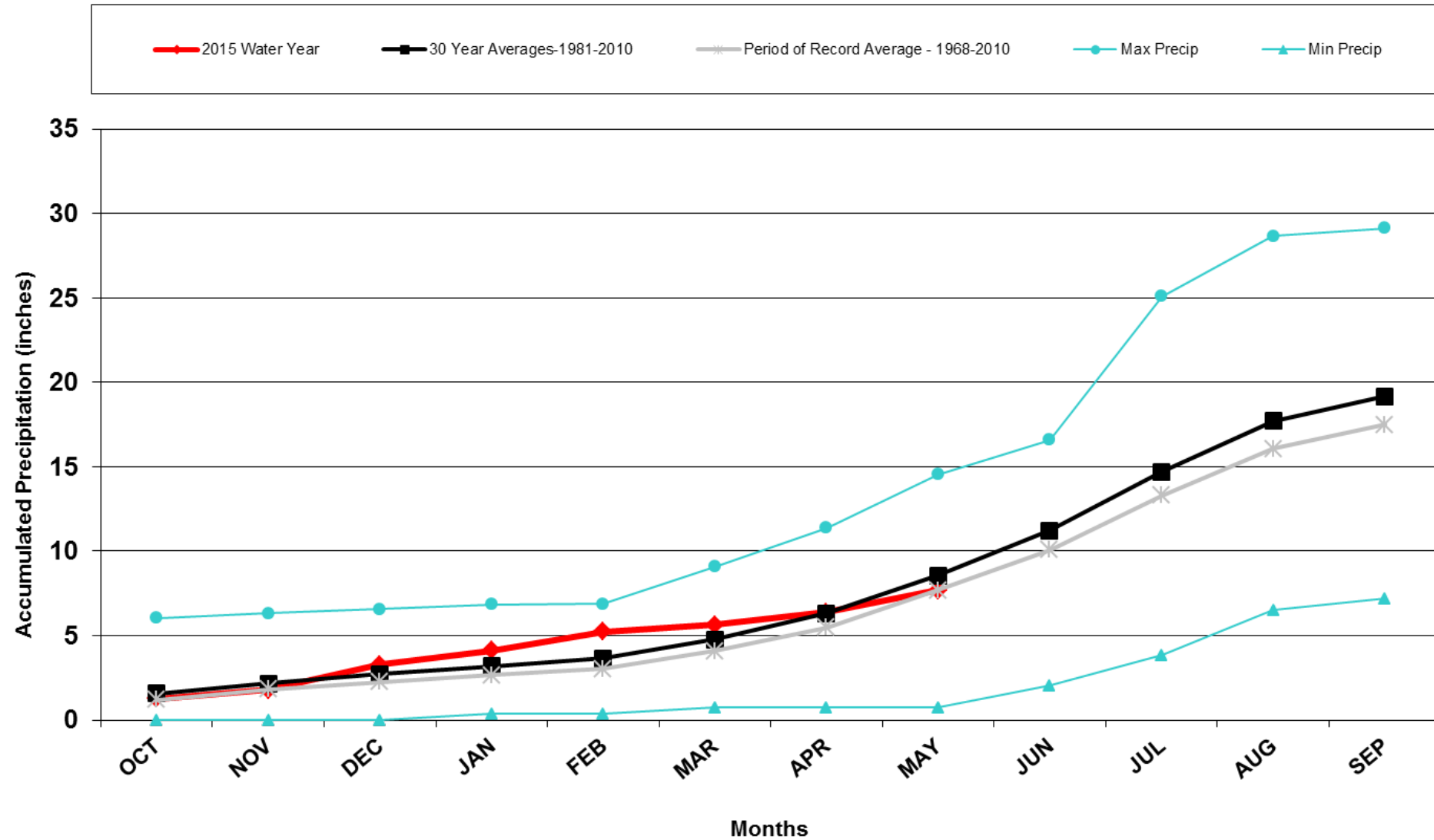
# Division 5 – Pueblo

## Pueblo Memorial AP Precipitation Accumulation



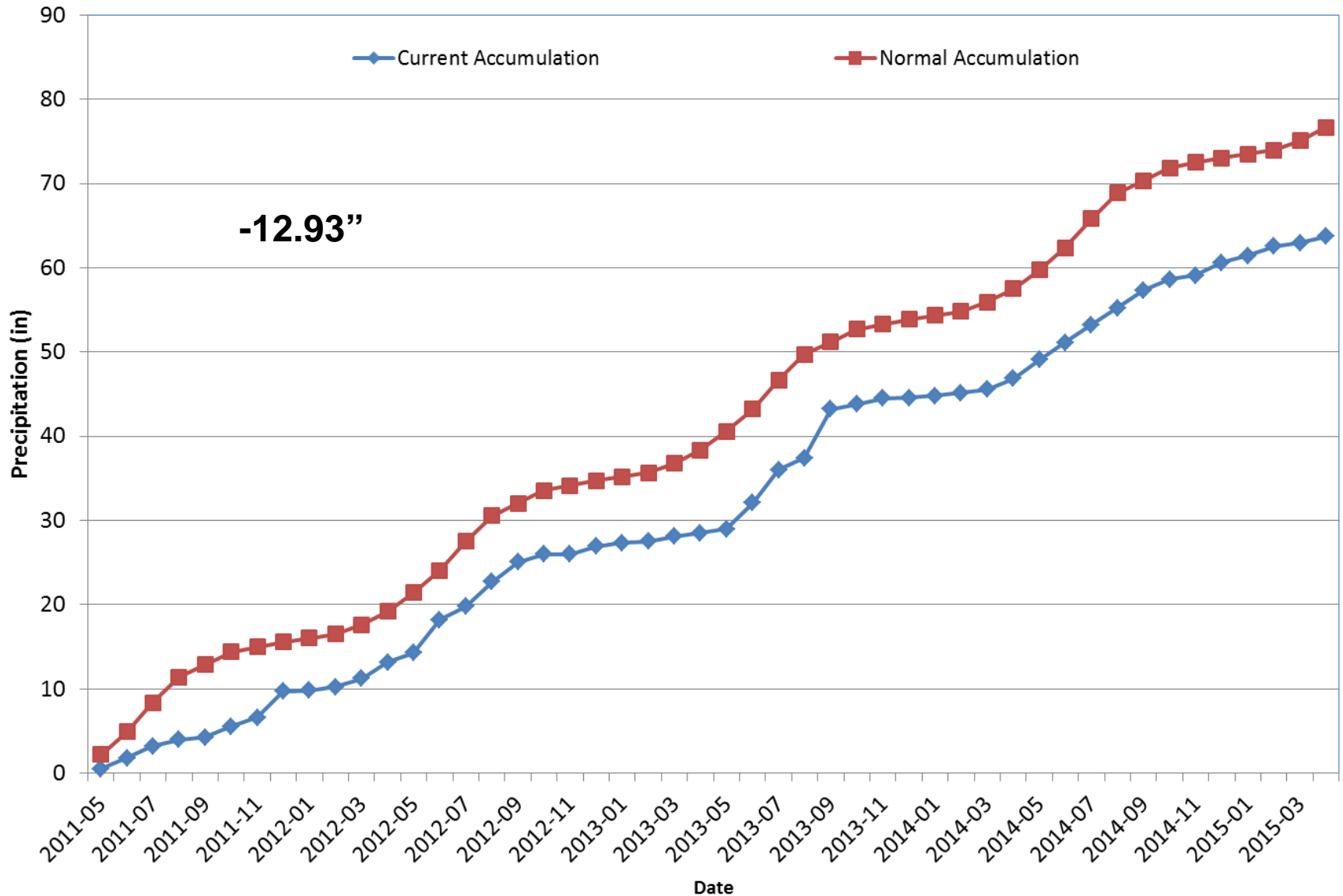
# Division 6 - Walsh

## Walsh 2015 Water Year



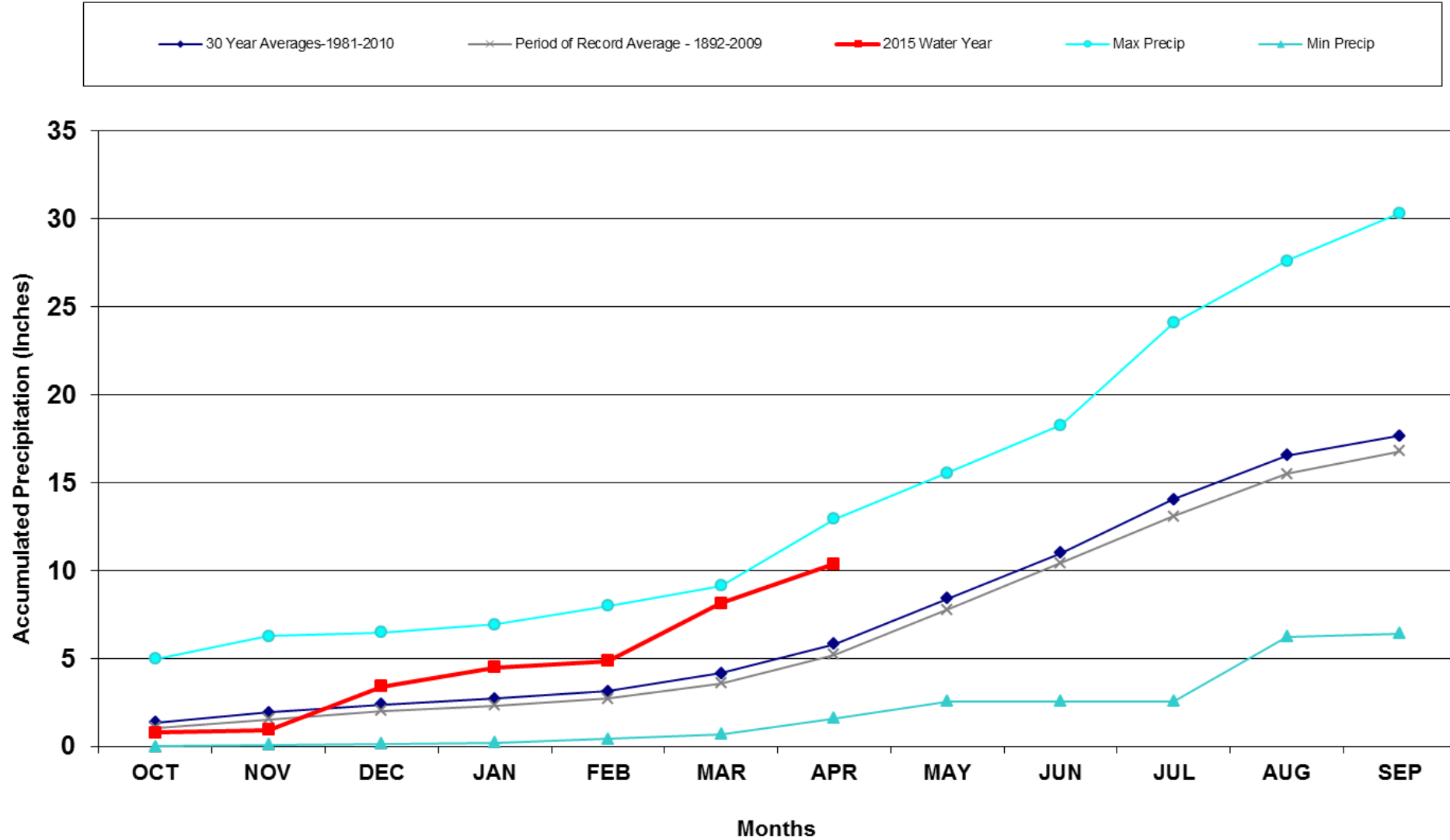
# Division 6 - Walsh

## Walsh 1W Precipitation Accumulation



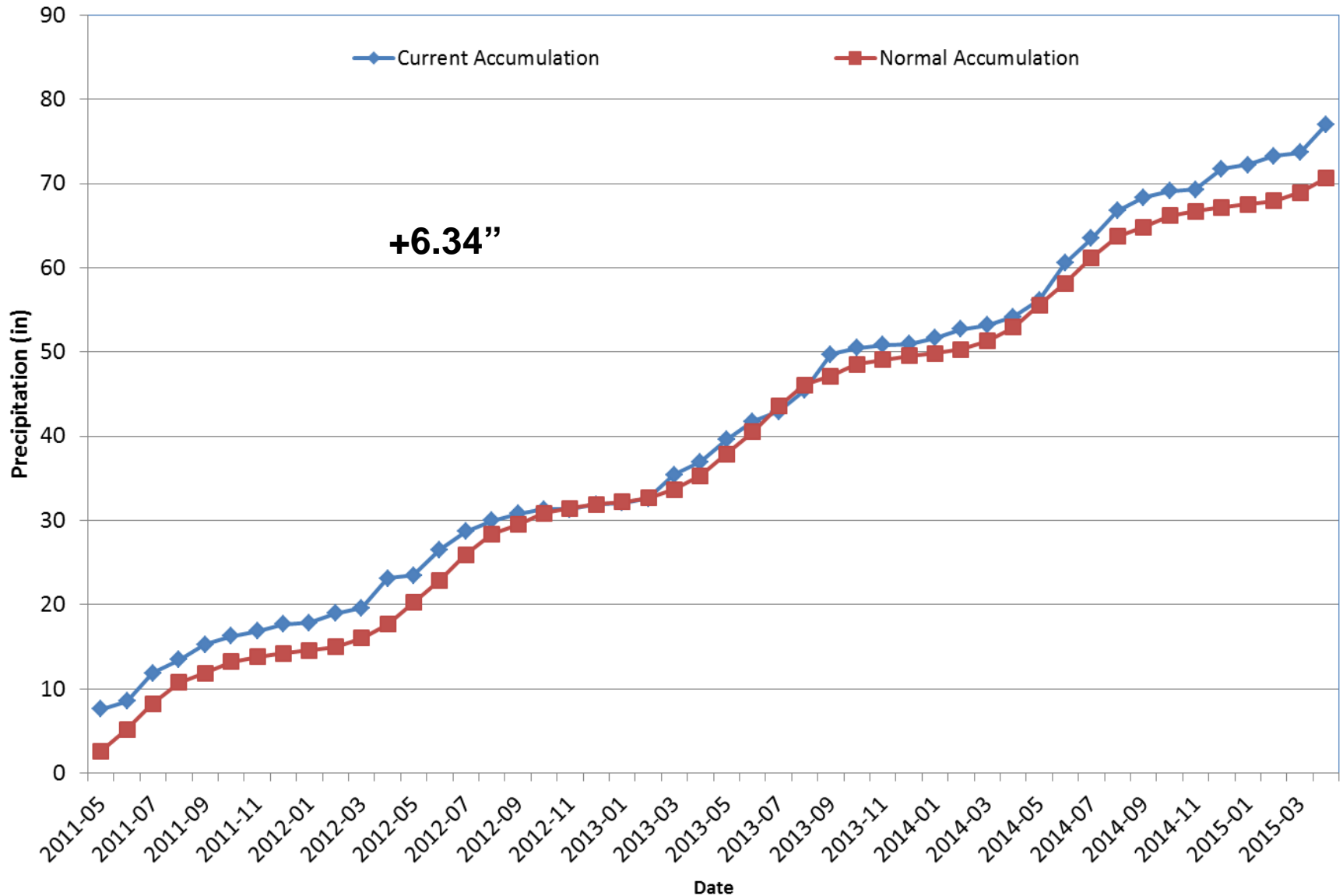
# Division 6 - Burlington

## Burlington 2015 Water Year



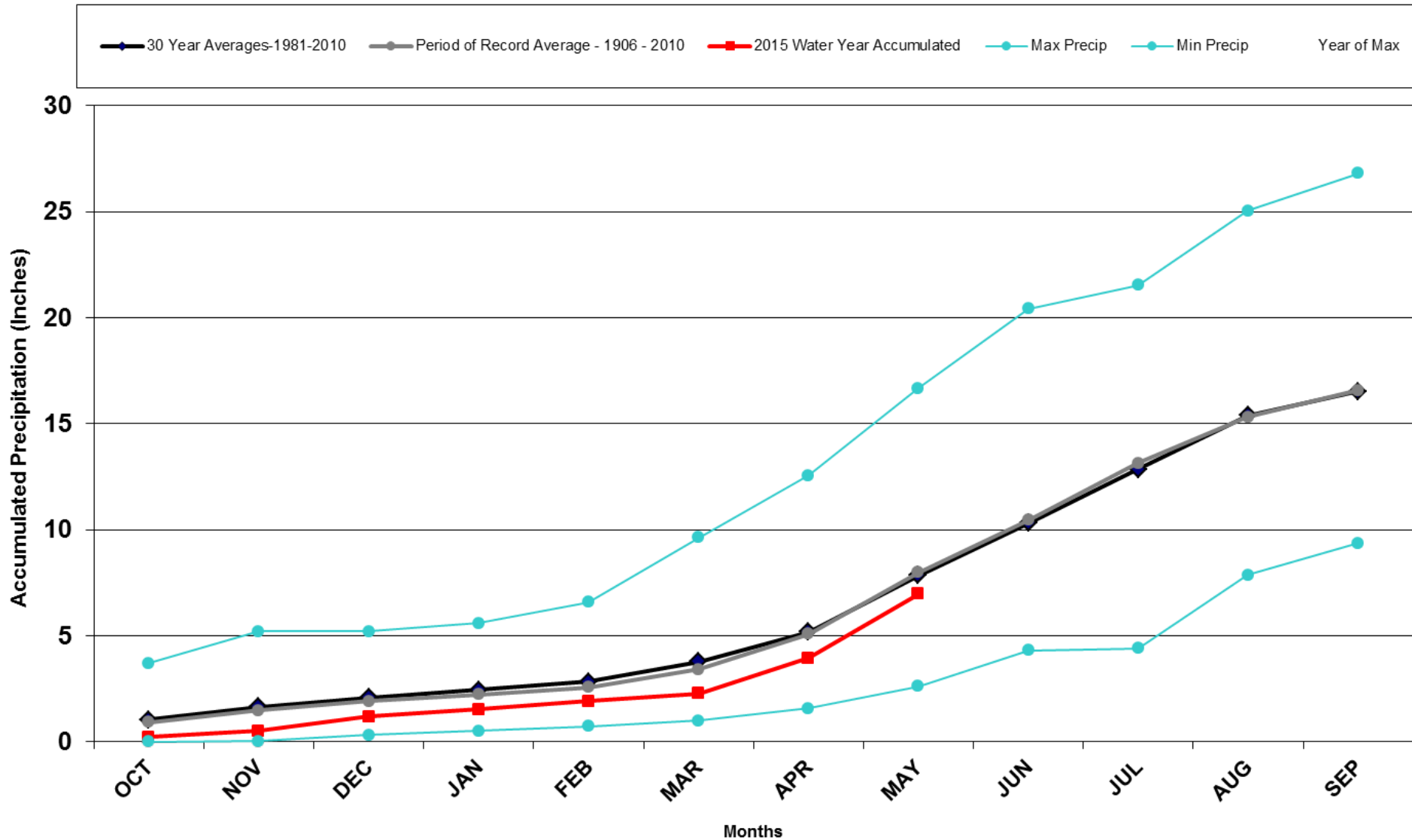
# Division 6 - Burlington

## Burlington, CO Precipitation Accumulation



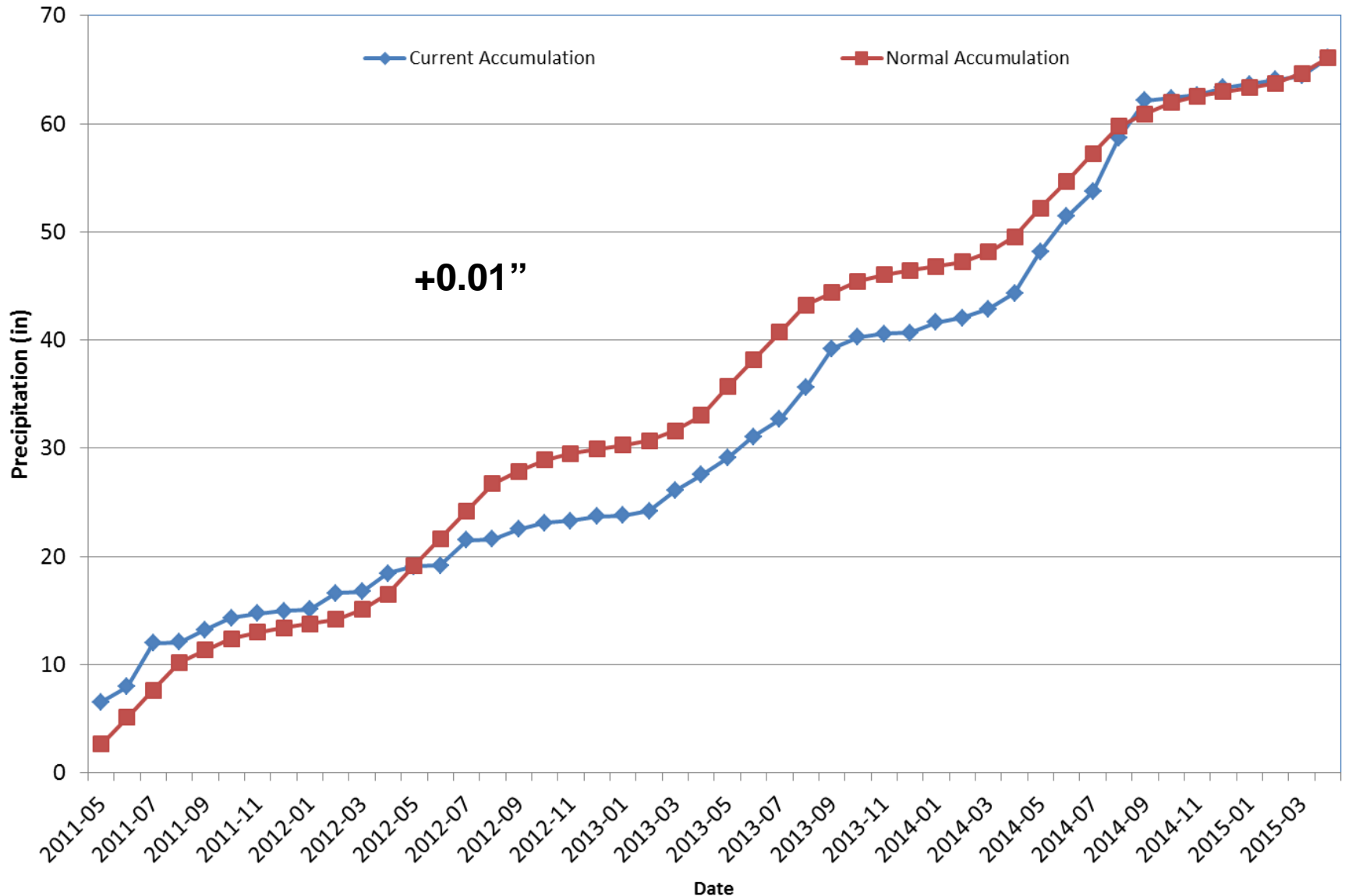
# Division 7 – Akron

## Akron 4E 2015 Water Year



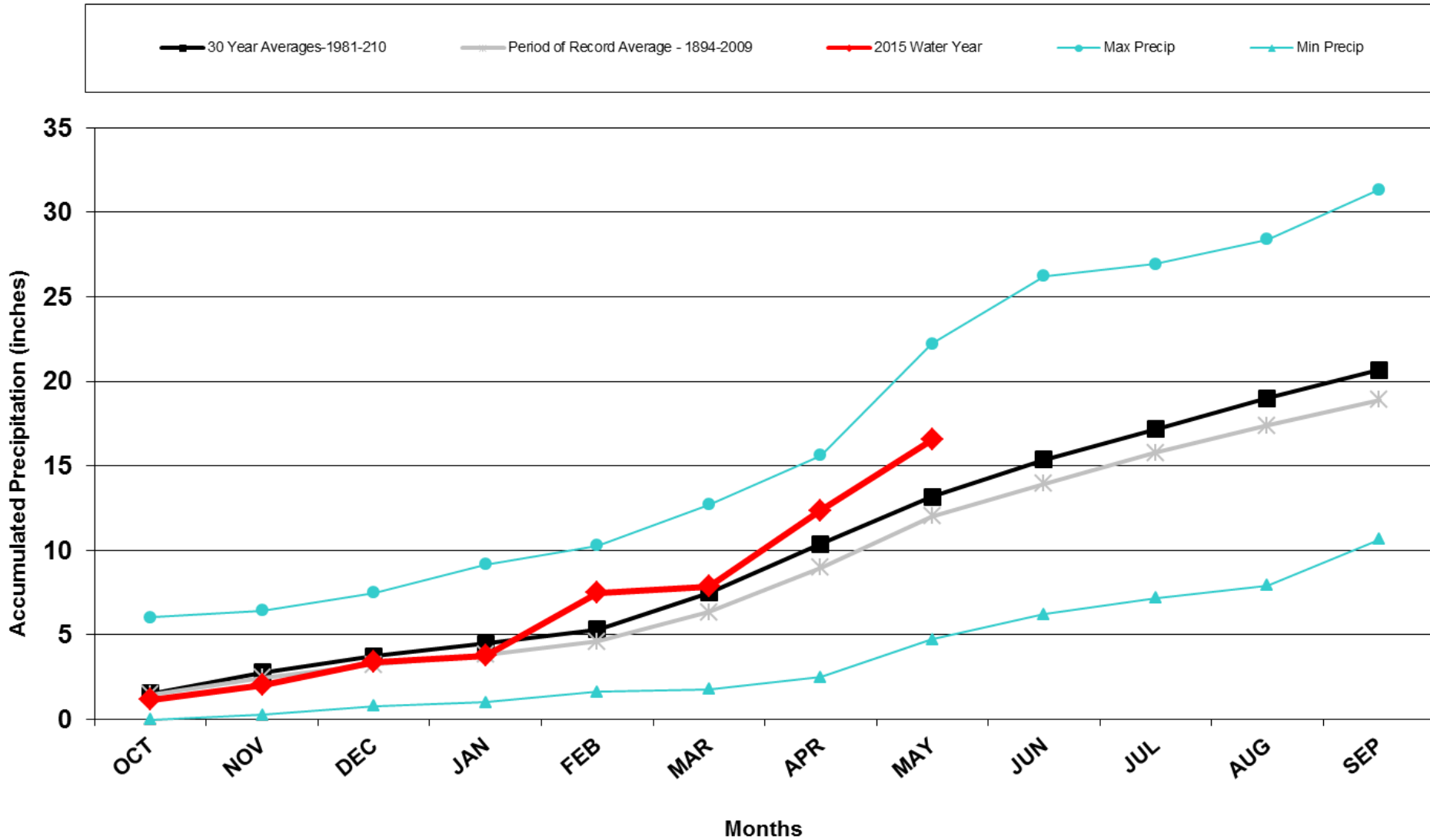
# Division 7 – Akron

## Akron 4E Precipitation Accumulation



# Division 8 - Boulder

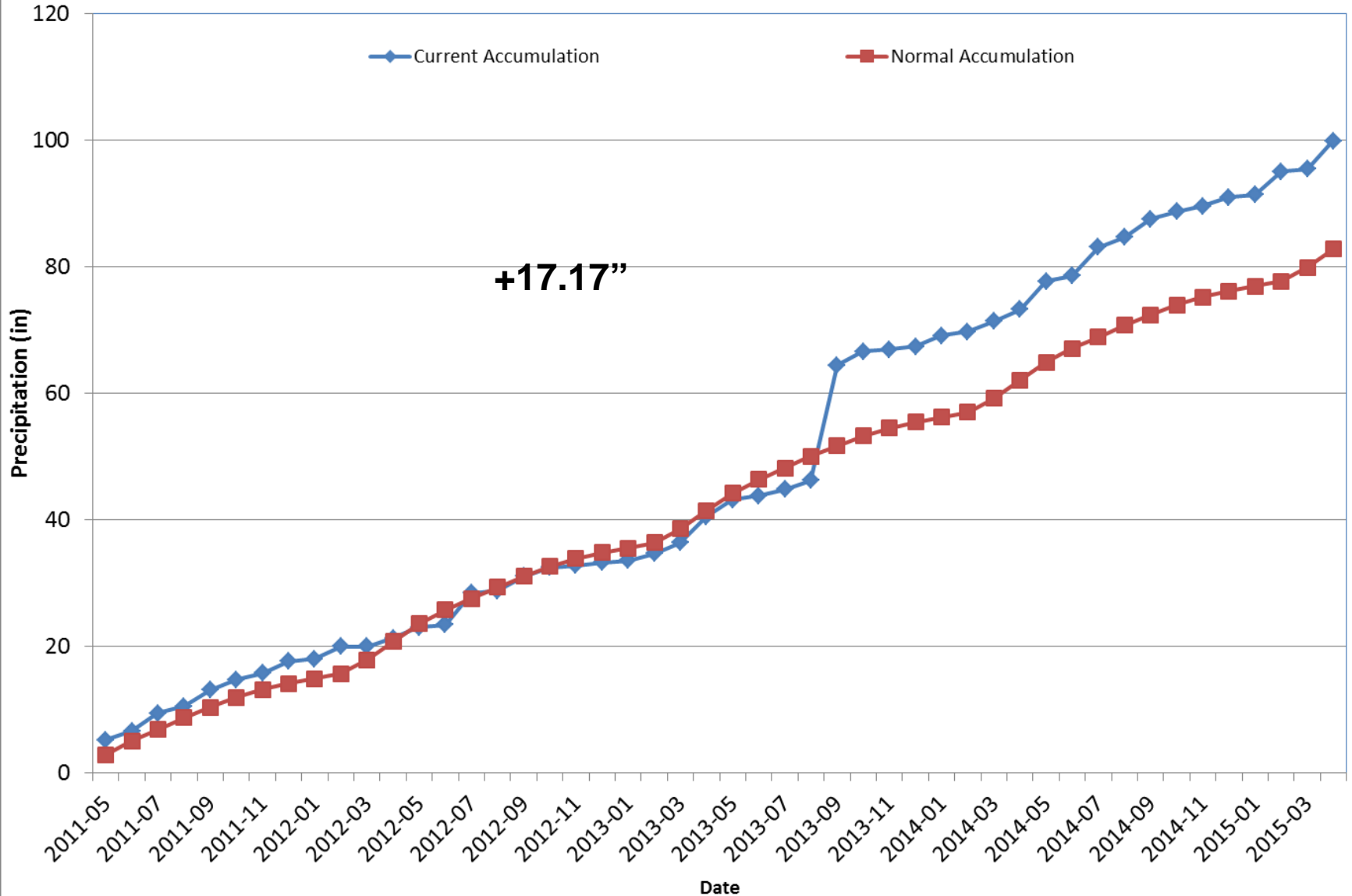
## Boulder 2015 Water Year





# Division 8 - Boulder

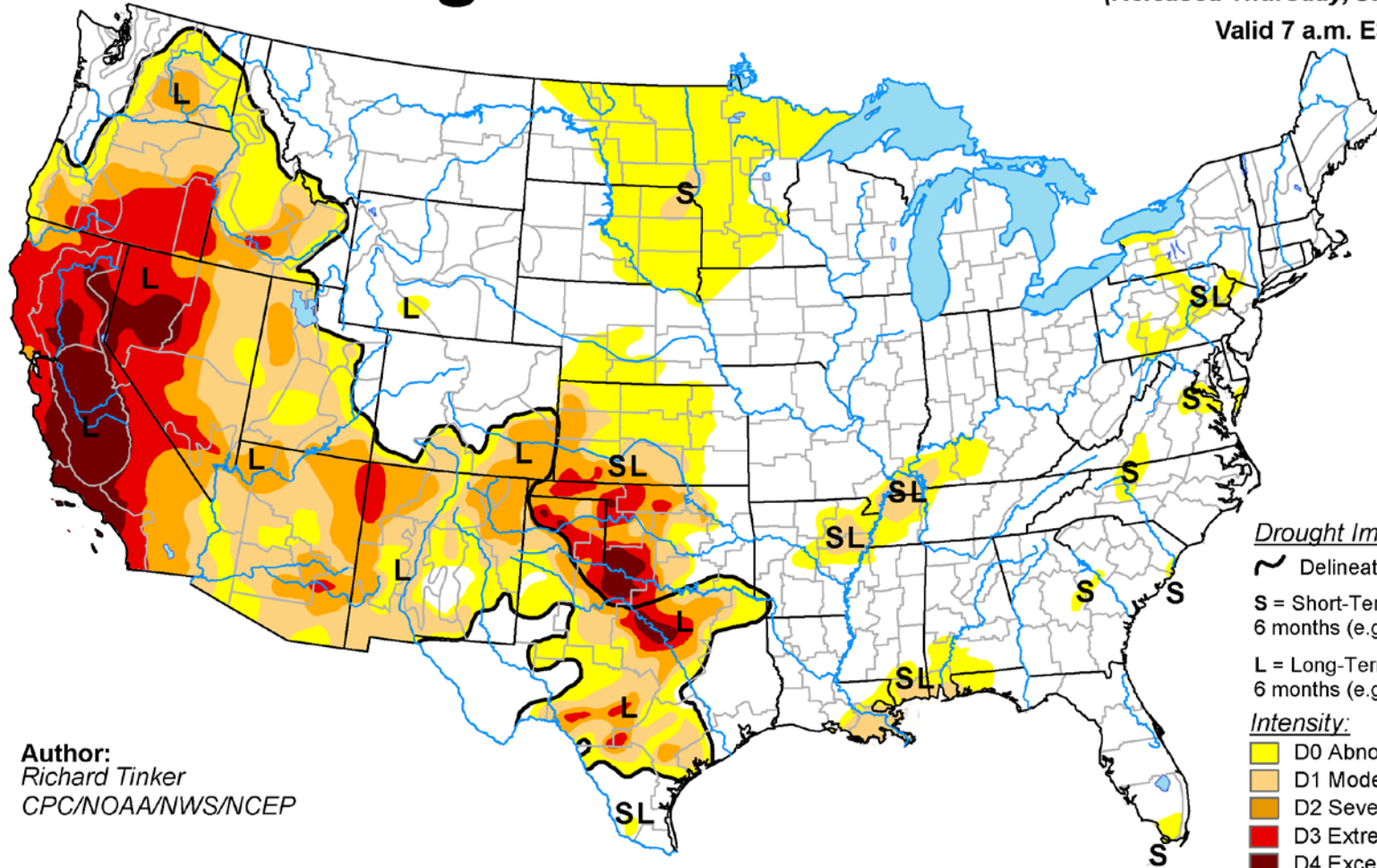
## Boulder Precipitation Accumulation



# U.S. Drought Monitor


January 13, 2015  
(Released Thursday, Jan. 15, 2015)

Valid 7 a.m. EST








Author:  
Richard Tinker  
CPC/NOAA/NWS/NCEP

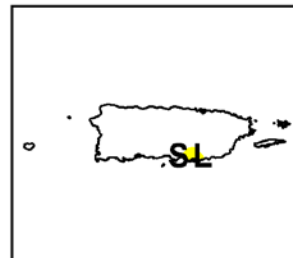
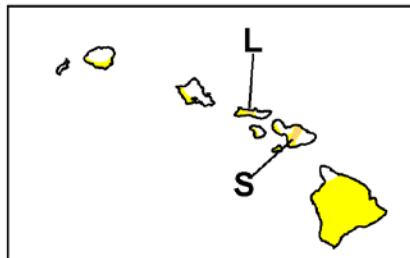
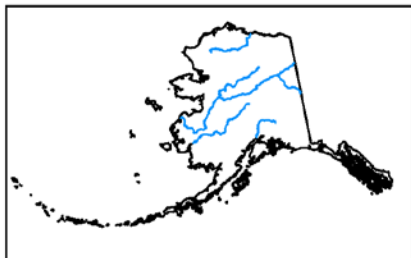
### Drought Impact Types:

-  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.

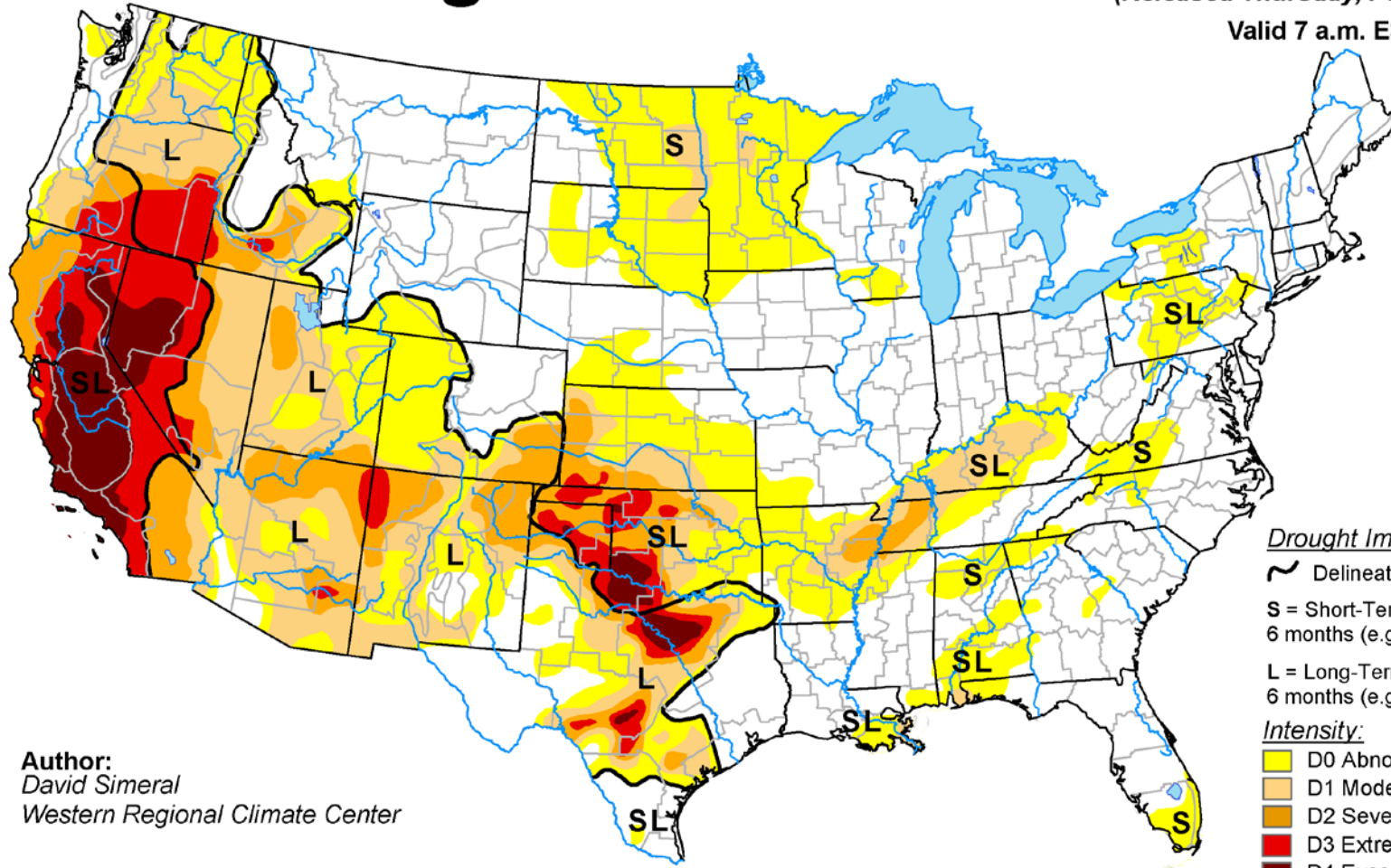


<http://droughtmonitor.unl.edu/>

# U.S. Drought Monitor


February 10, 2015  
(Released Thursday, Feb. 12, 2015)

Valid 7 a.m. EST








**Author:**  
David Simeral  
Western Regional Climate Center

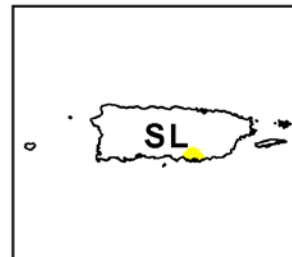
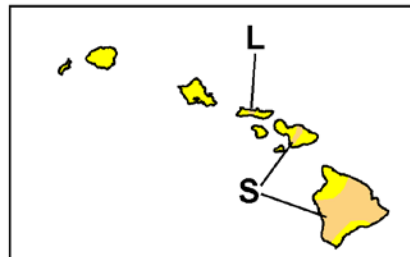
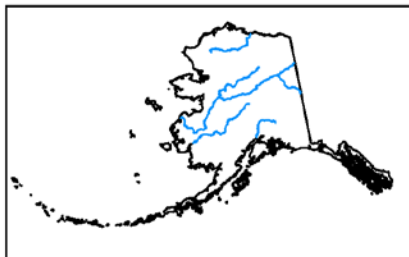
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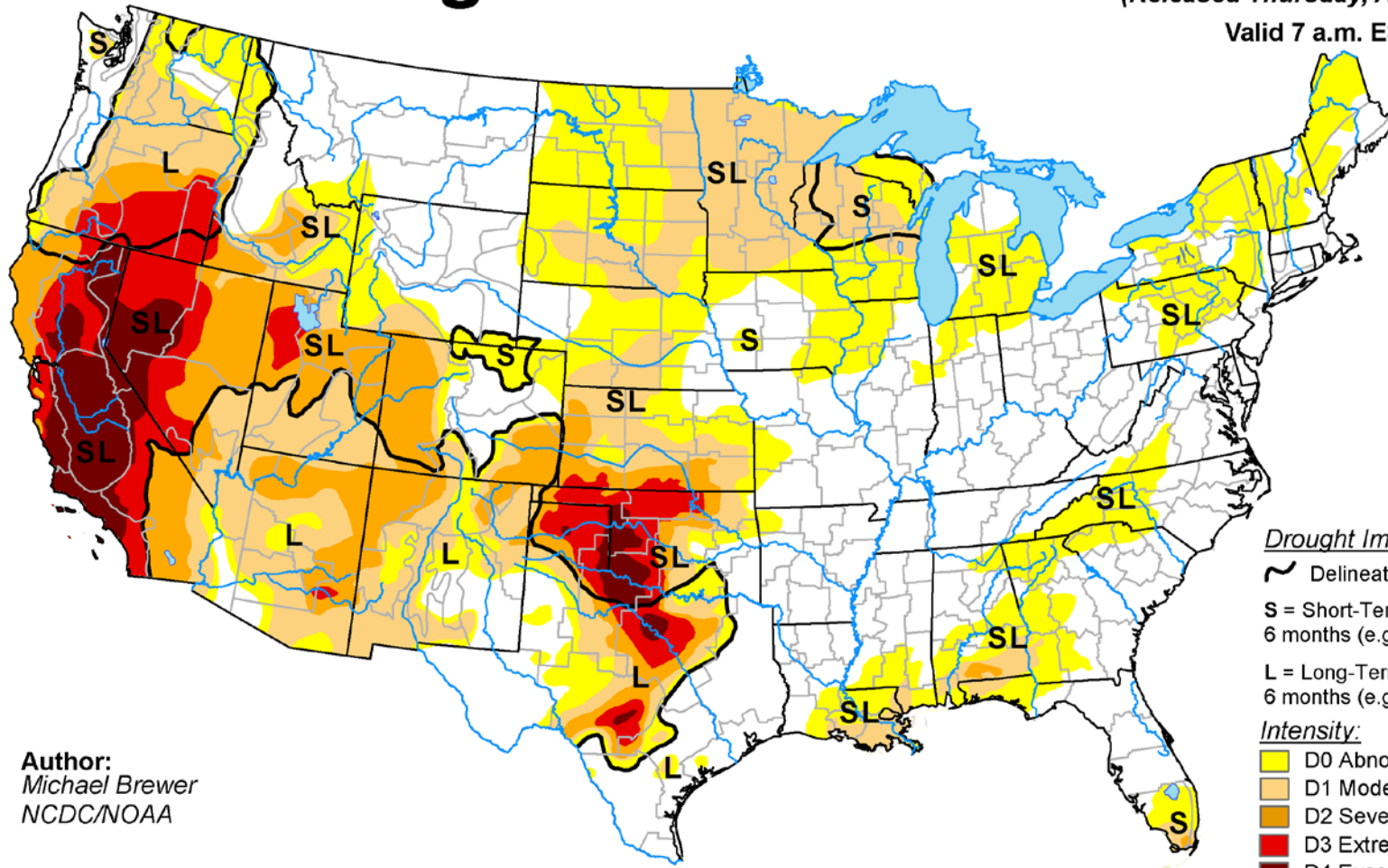
<http://droughtmonitor.unl.edu/>

# U.S. Drought Monitor

April 7, 2015


(Released Thursday, Apr. 9, 2015)

Valid 7 a.m. EST








Author:  
Michael Brewer  
NCDC/NOAA

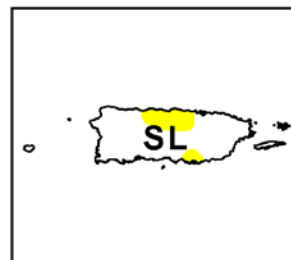
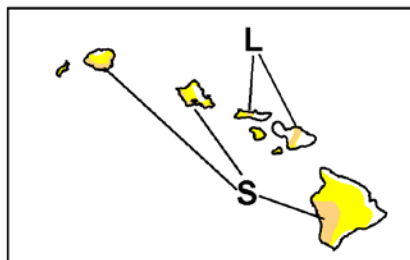
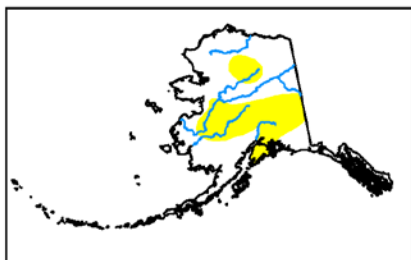
Drought Impact Types:

-  Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
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The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



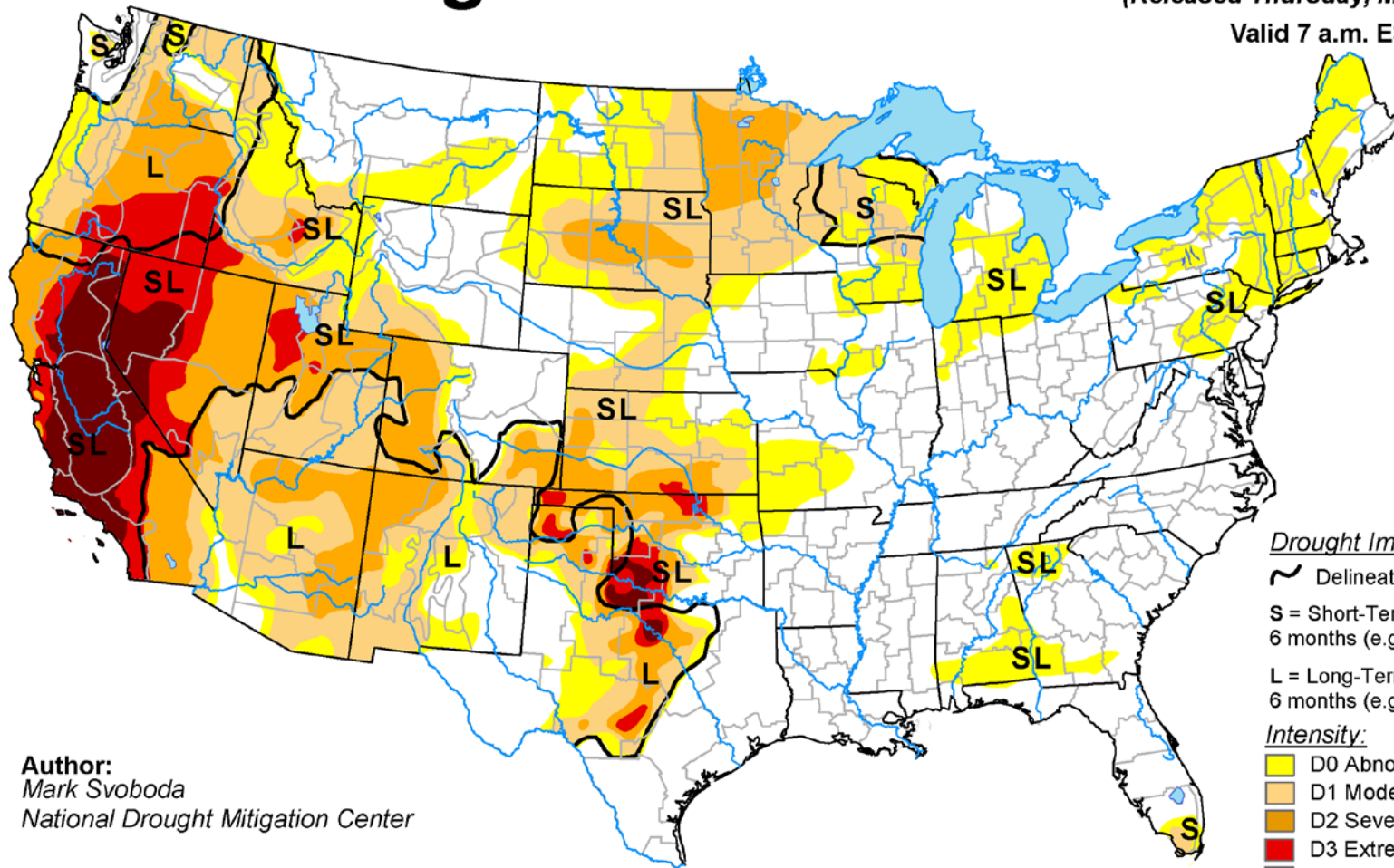
<http://droughtmonitor.unl.edu/>

# U.S. Drought Monitor

May 5, 2015


(Released Thursday, May. 7, 2015)

Valid 7 a.m. EST








**Author:**  
Mark Svoboda  
National Drought Mitigation Center

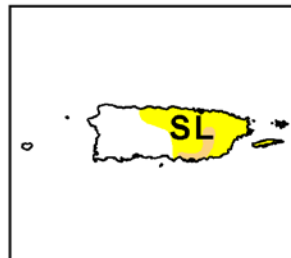
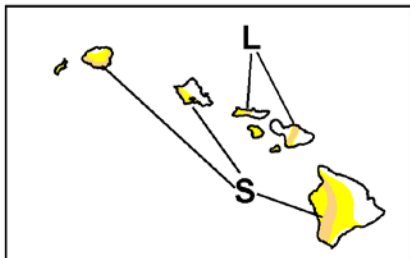
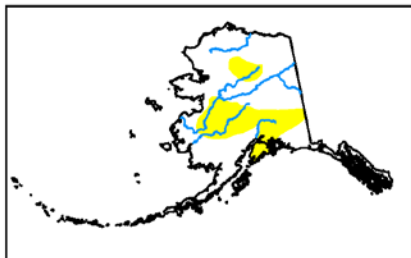
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-  Delineates dominant impacts
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Intensity:

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-  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

## Colorado

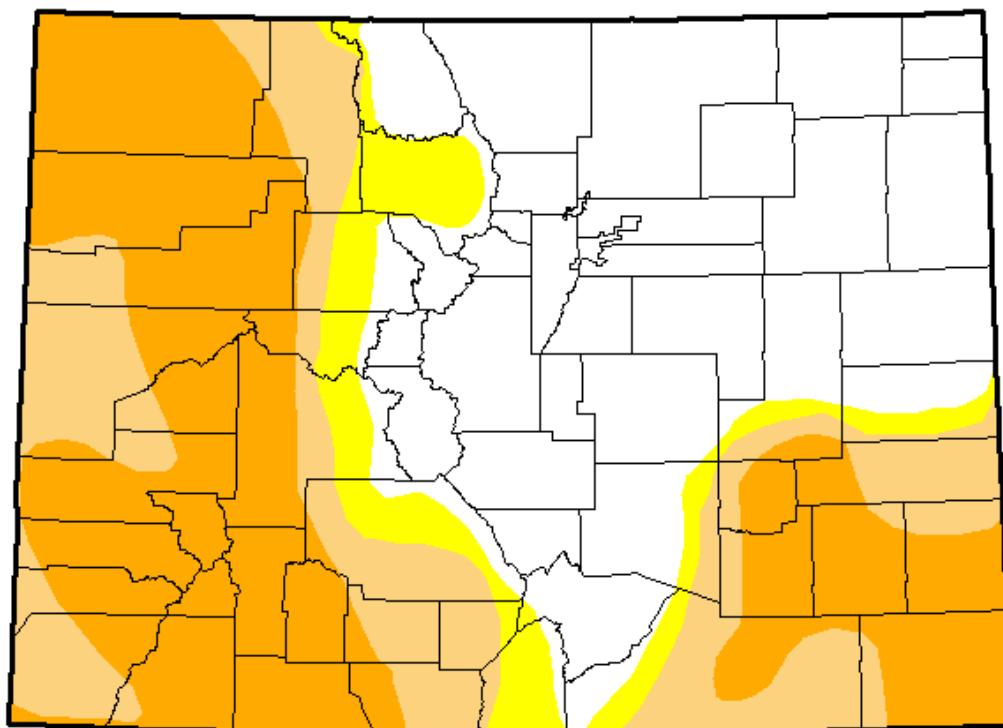
May 5, 2015

(Released Thursday, May 7, 2015)

Valid 7 a.m. EST

*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	42.17	57.83	50.50	31.78	0.00	0.00
<b>Last Week</b> 4/28/2015	41.76	58.24	50.86	35.92	0.00	0.00
<b>3 Months Ago</b> 2/3/2015	36.97	63.03	21.43	12.26	0.00	0.00
<b>Start of Calendar Year</b> 12/31/2014	69.87	30.13	21.26	12.26	0.00	0.00
<b>Start of Water Year</b> 9/30/2014	68.96	31.04	22.94	13.82	2.31	0.00
<b>One Year Ago</b> 5/6/2014	36.40	63.60	31.93	18.85	8.38	1.89



### Intensity:



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

### Author:

Mark Svoboda

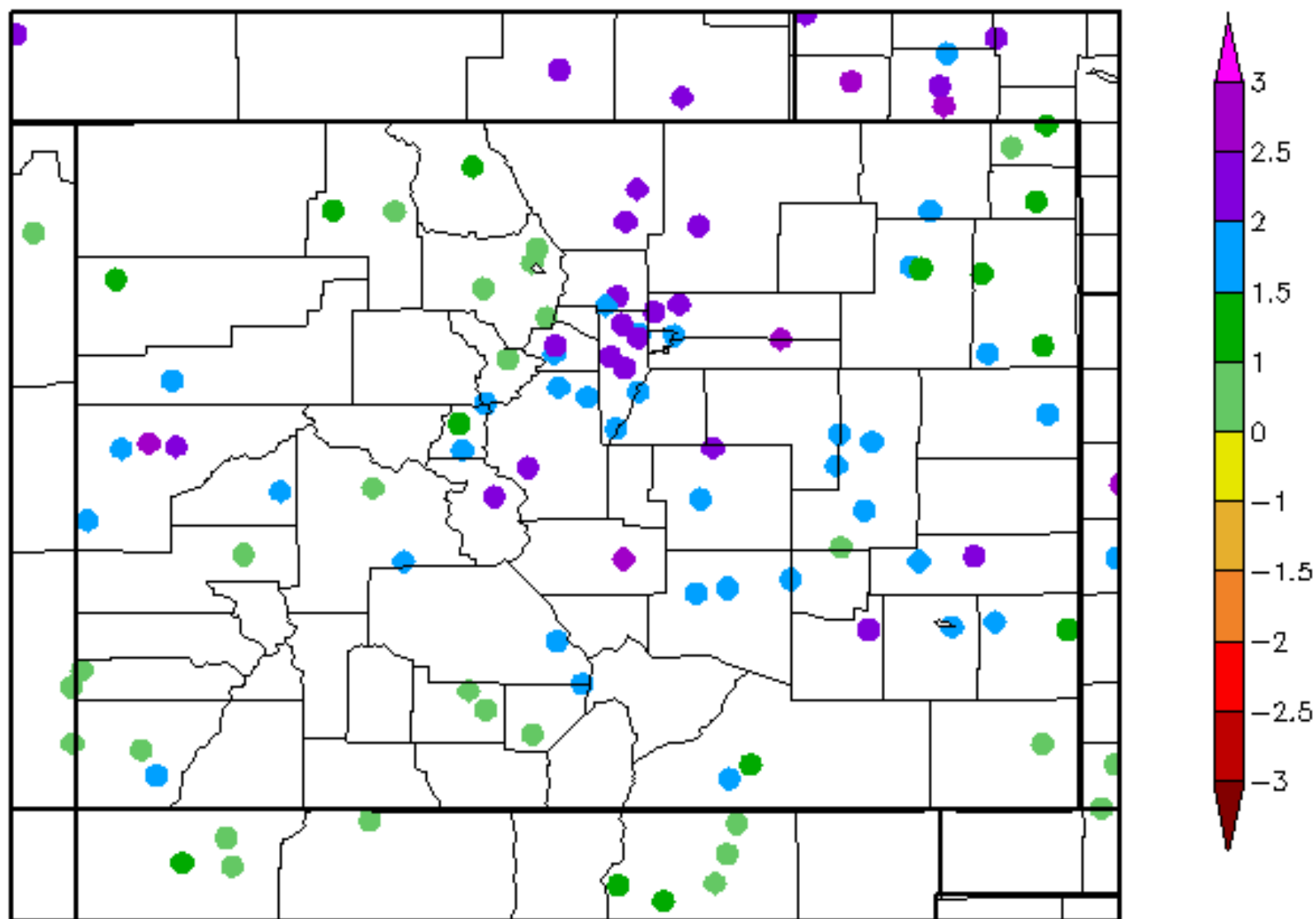
National Drought Mitigation Center



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

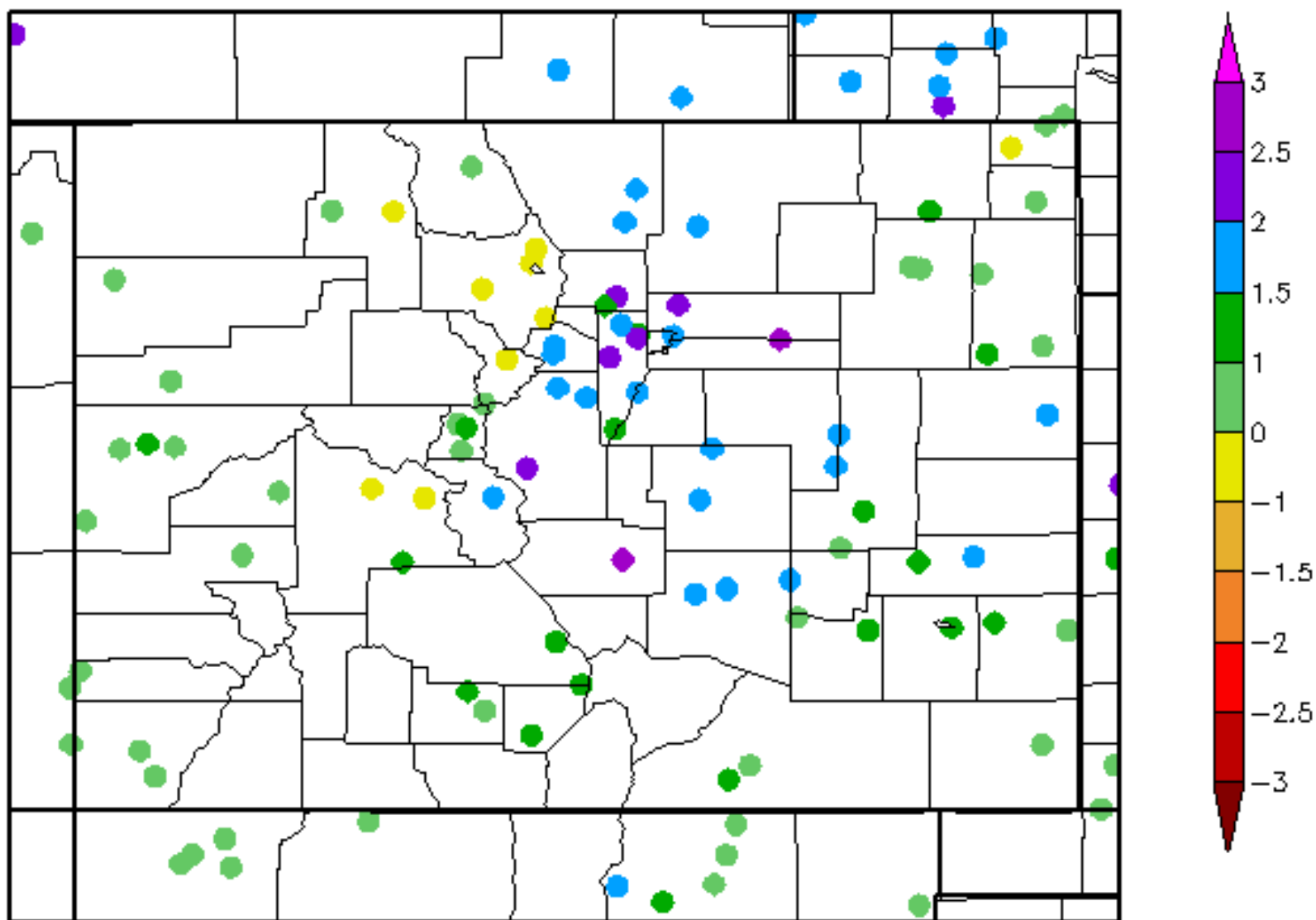
# 30 Day SPI

4/12/2015 - 5/11/2015



# 90 Day SPI

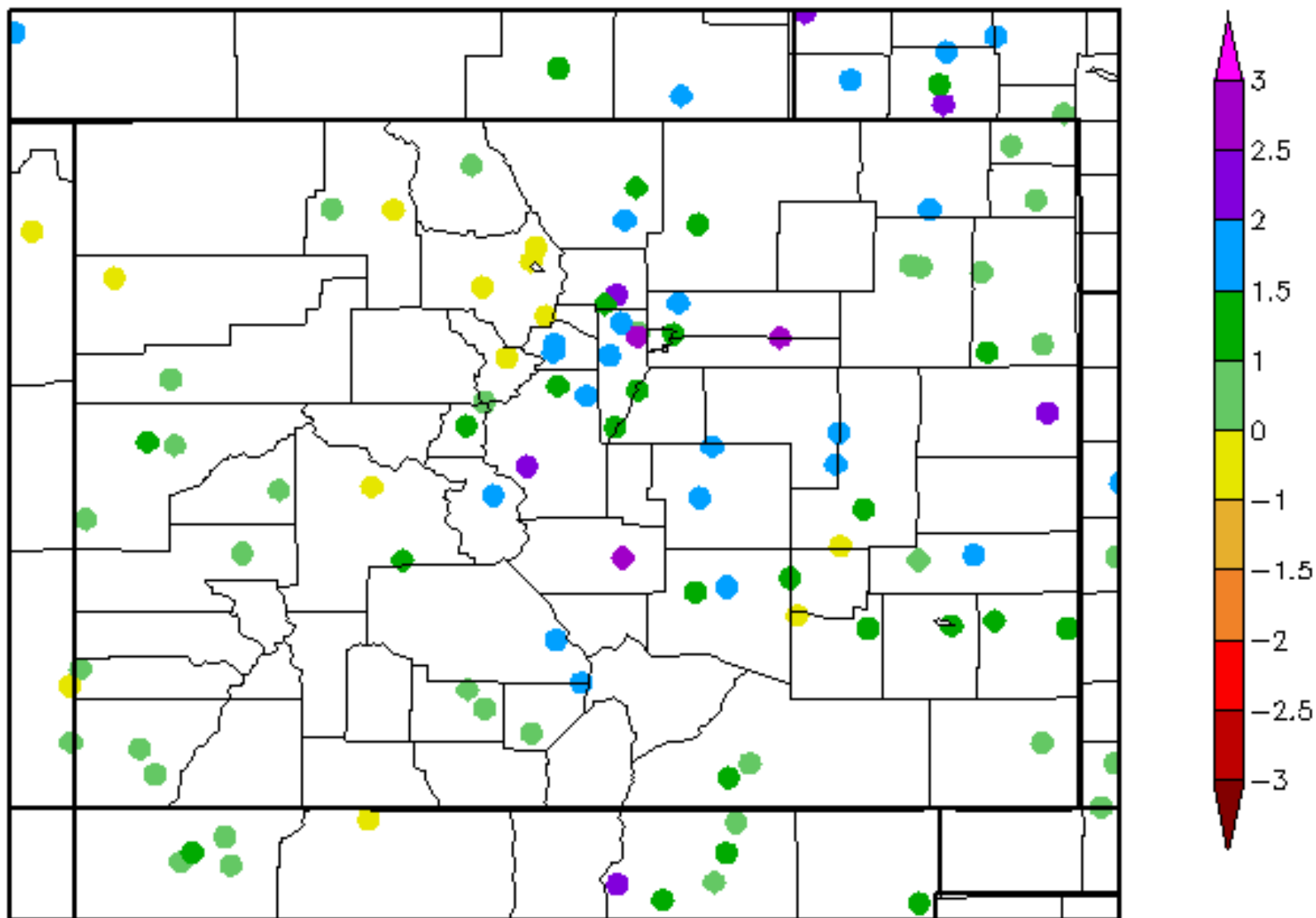
2/11/2015 - 5/11/2015





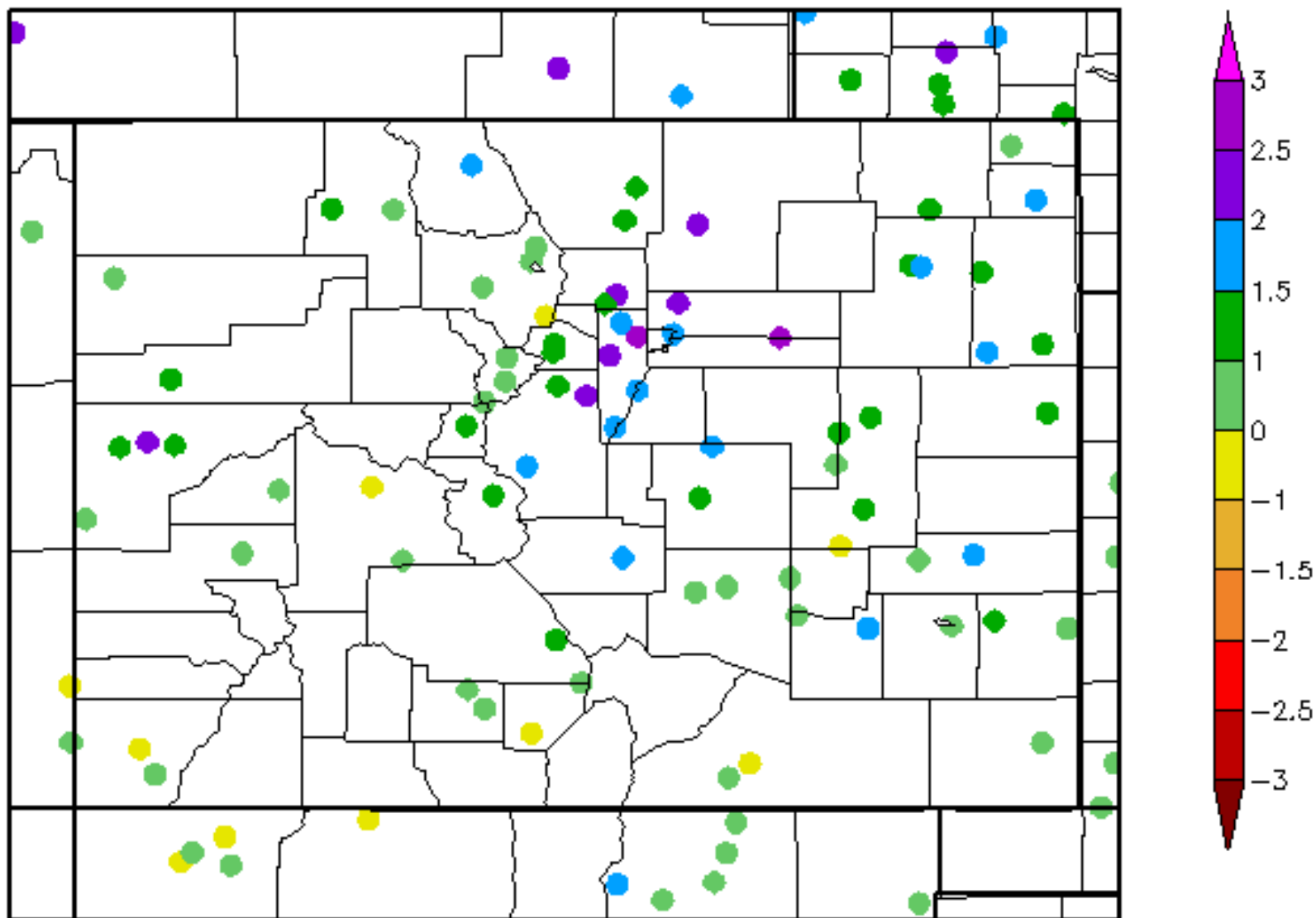
# 6 Month SPI

11/12/2014 - 5/11/2015



# 12 Month SPI

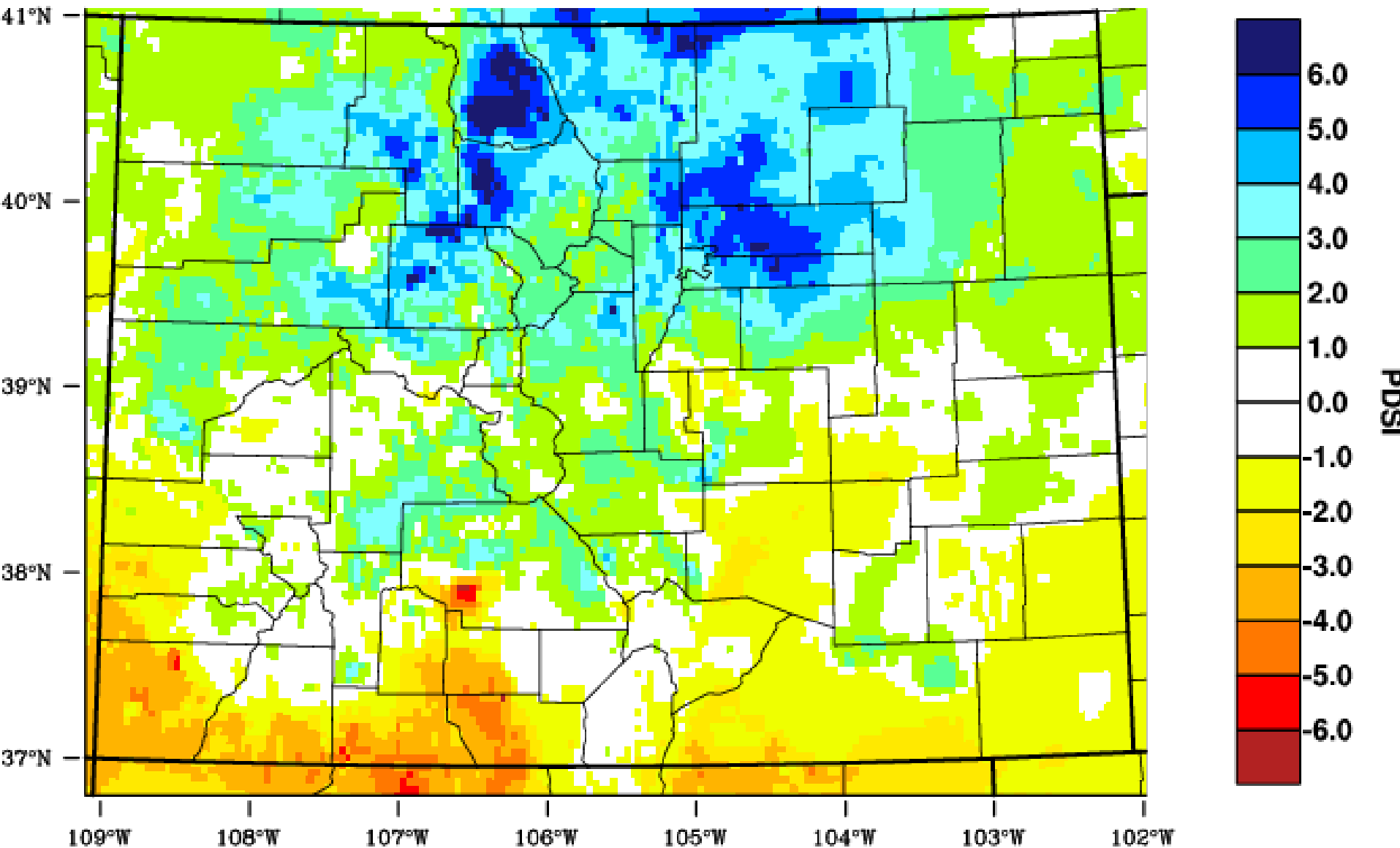
5/12/2014 - 5/11/2015



# Palmer

Colorado - PDSI

December 2014

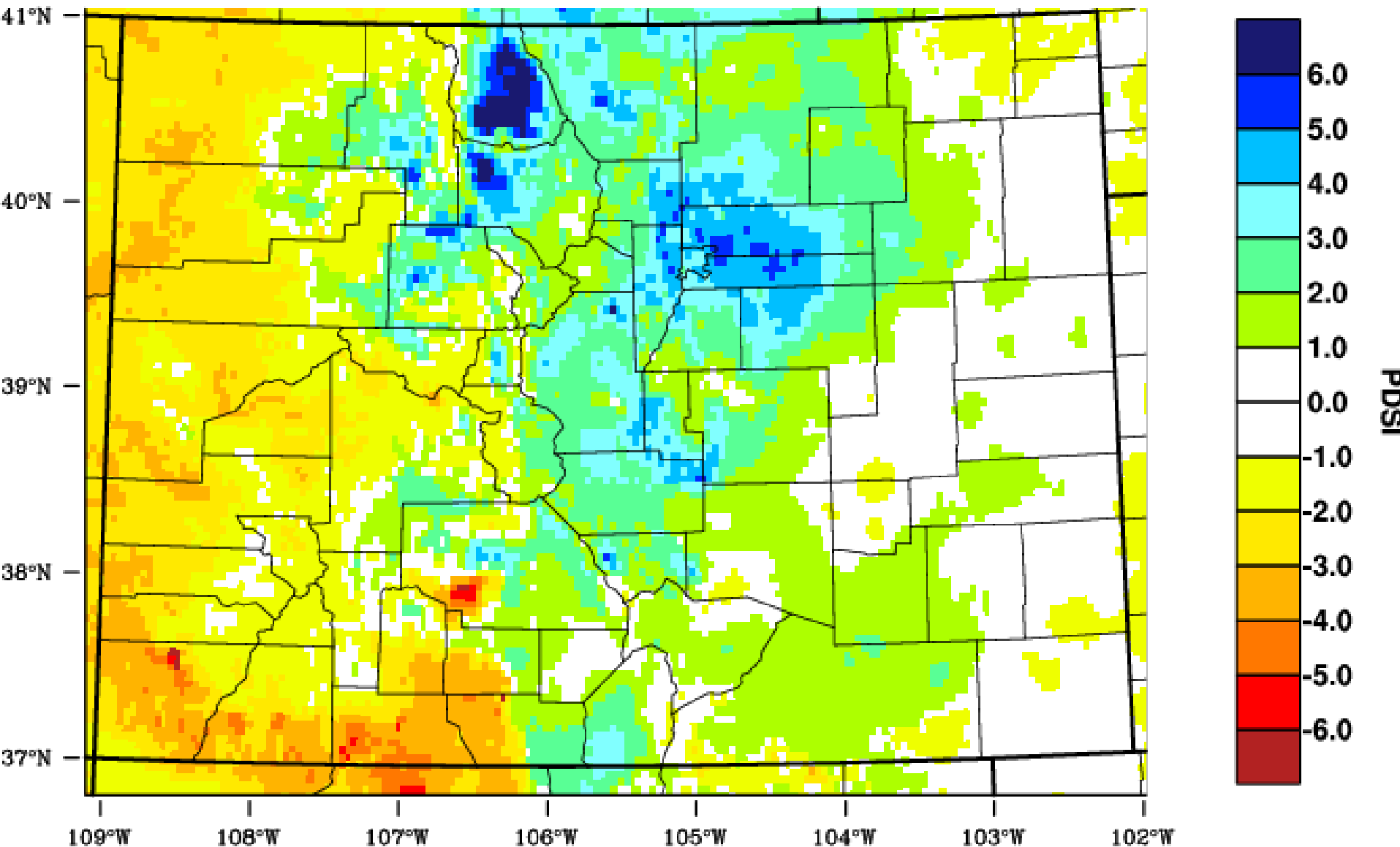


WestWide Drought Tracker - WRCC/UI Data Source - PRISM (Prelim), created 16 JAN 2015

# Palmer

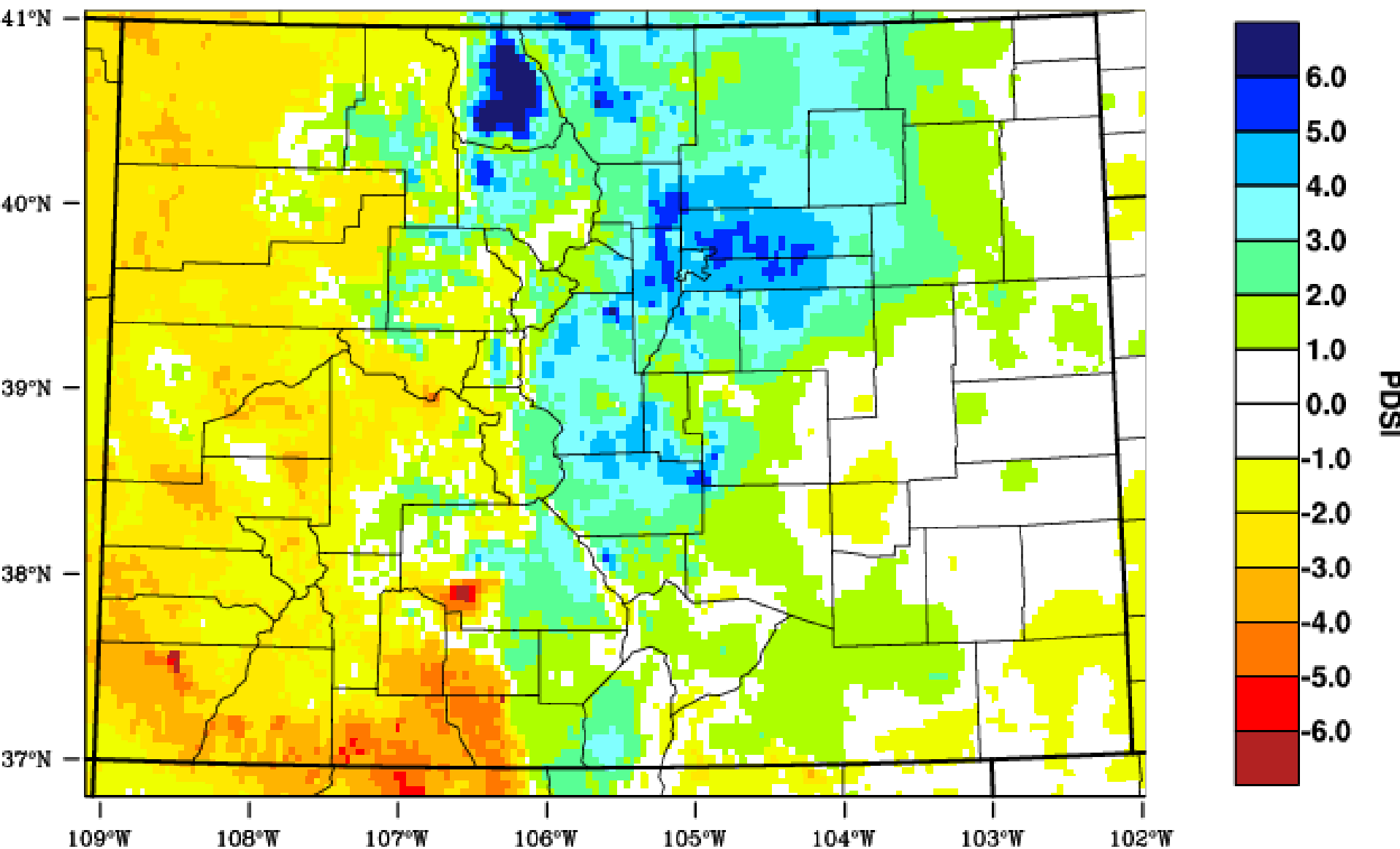
Colorado - PDSI

March 2015



# Colorado - PDSI

April 2015



WestWide Drought Tracker - WRCC/UI Data Source - PRISM (Prelim), created 11 MAY 2015

# Colorado Climate Center

Data and Power Point Presentations available for downloading

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

