

Climate Update

July 2006 Meeting

Nolan Doesken, State Climatologist
Colorado Climate Center

presented at the Water Availability Task Force, DOW,
Denver, CO, July 20, 2006

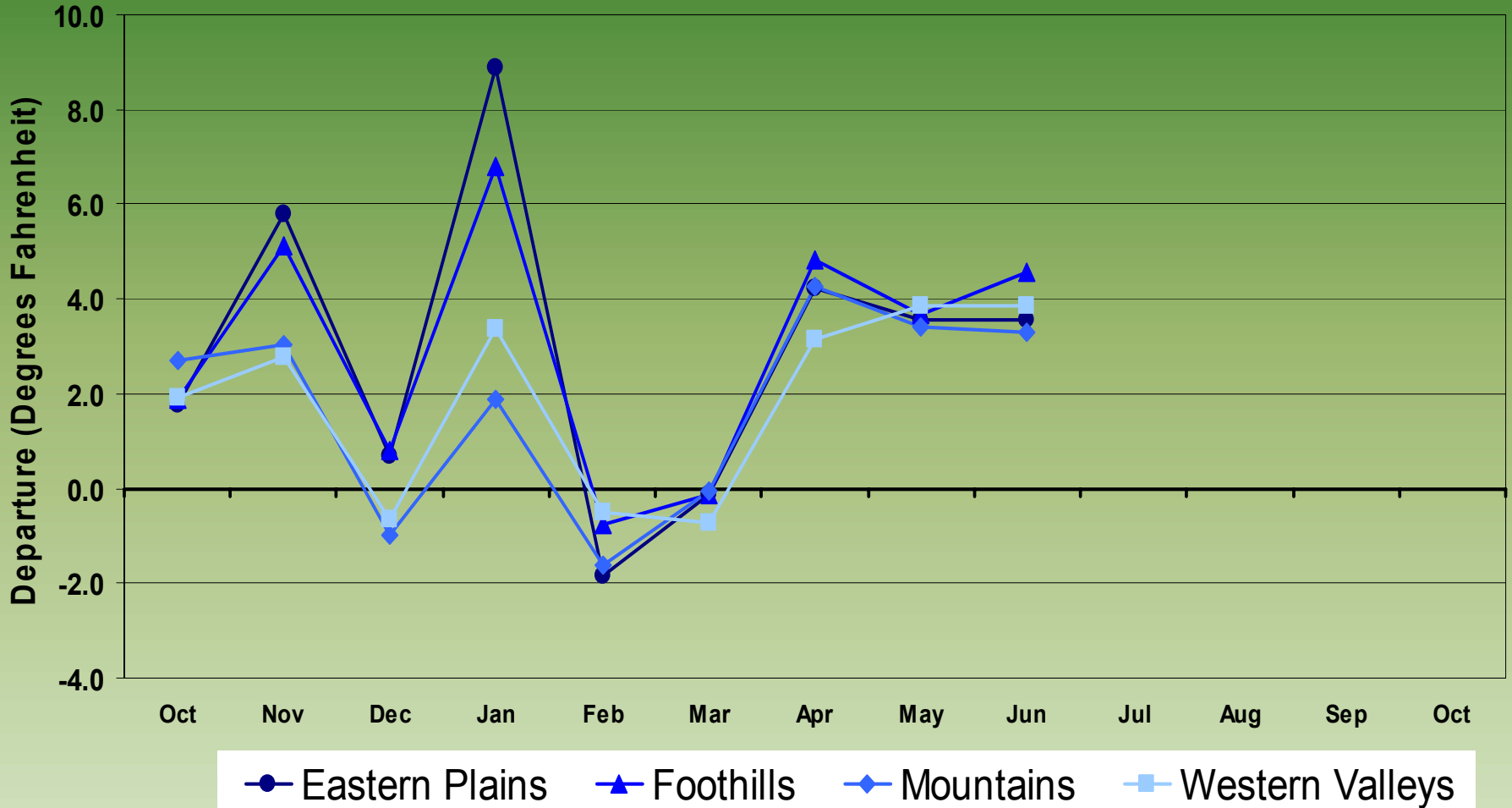
Prepared by Odie Bliss

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



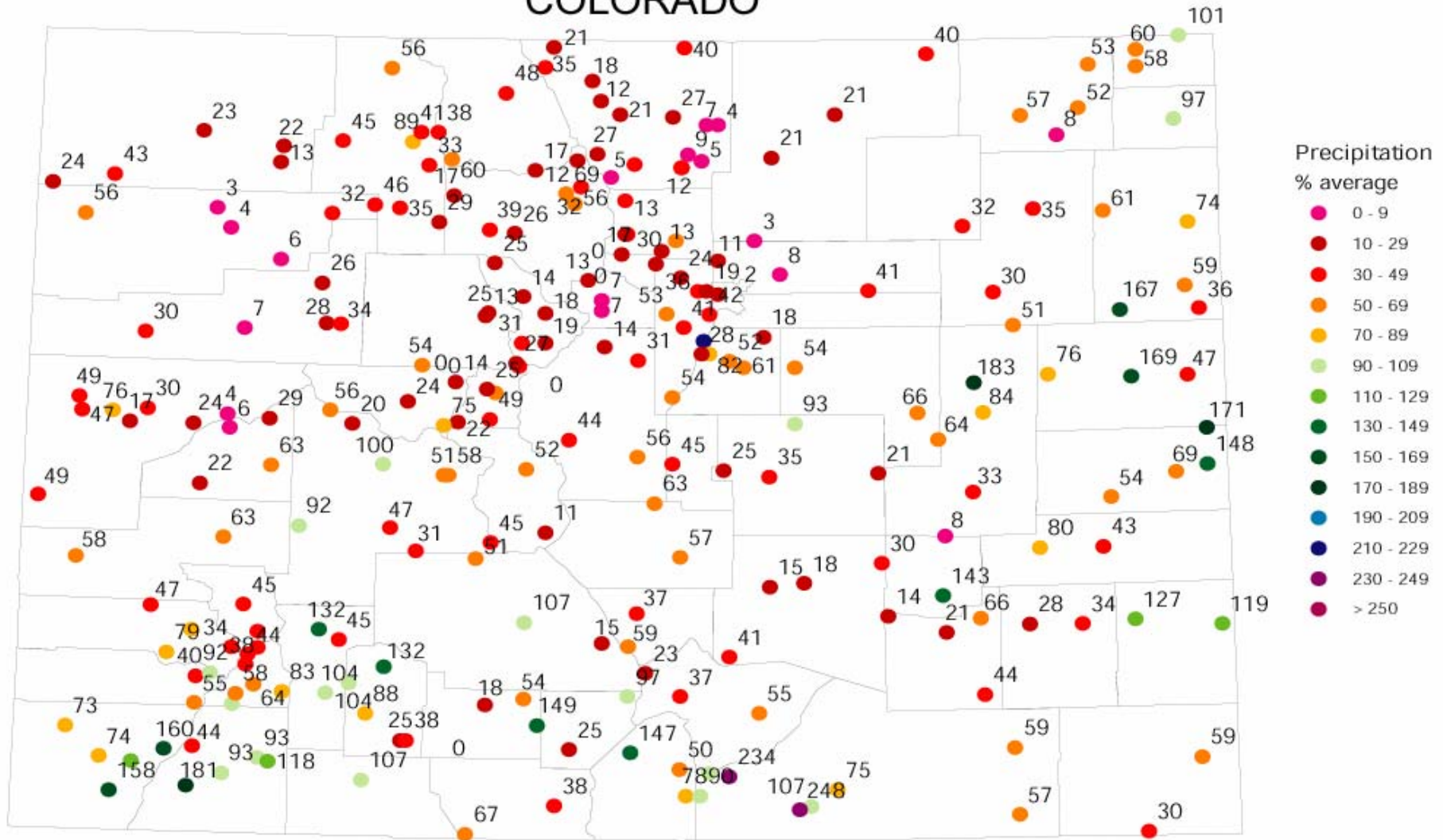
Temperature Departures

Water Year 2006



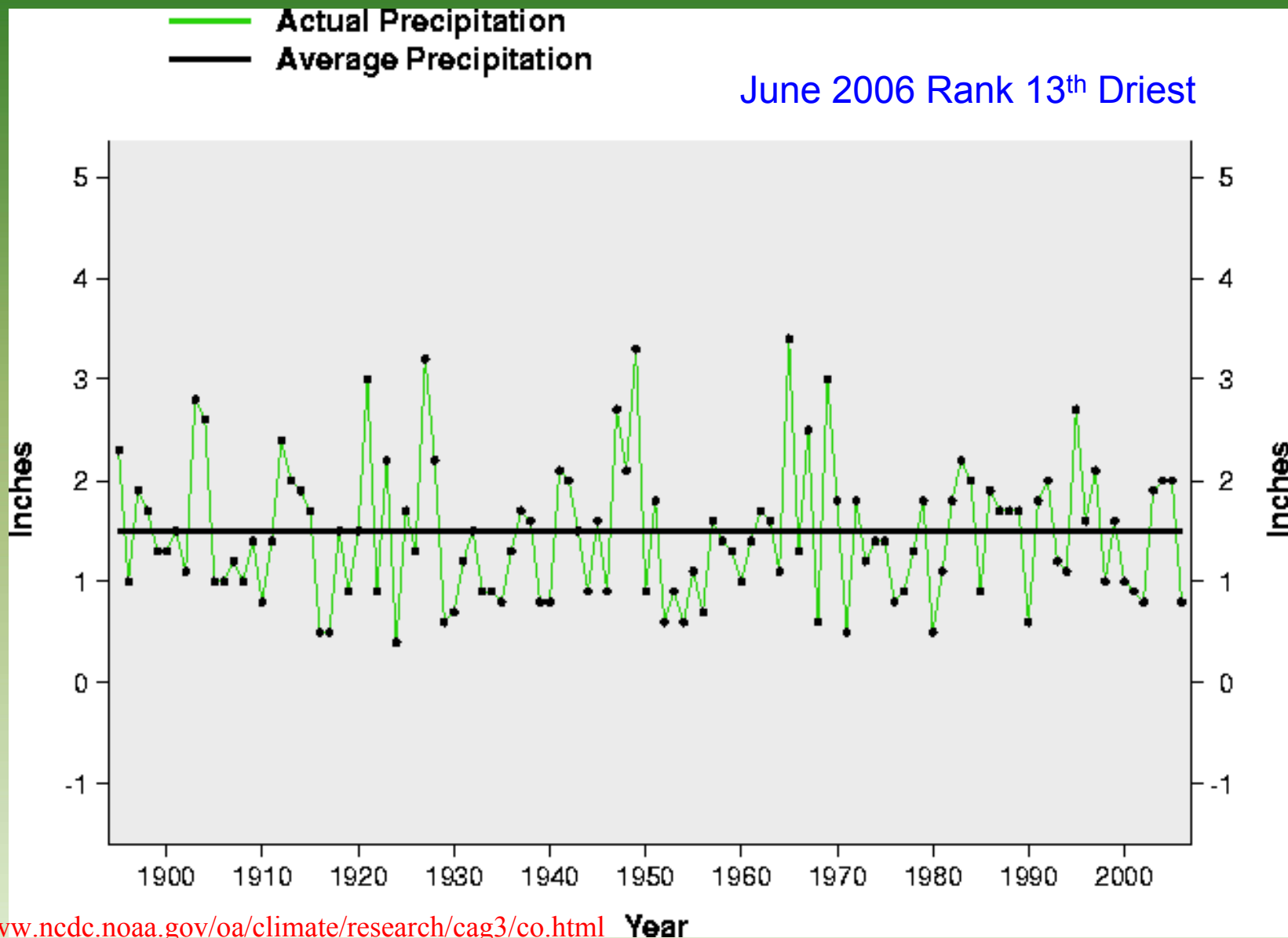
June 2006 precipitation

COLORADO

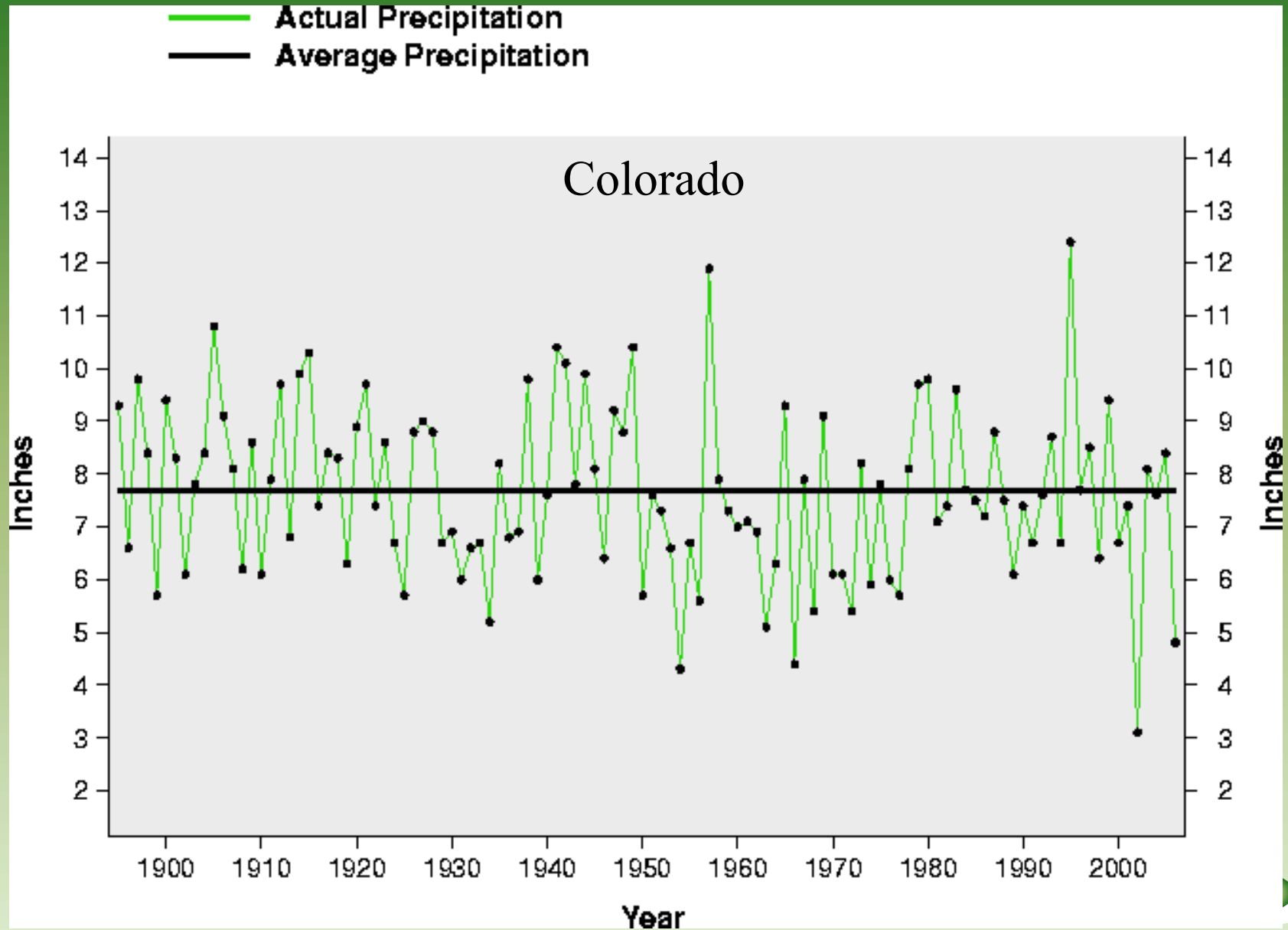


June 2006 precipitation as a percent of the 1971-2000 average.

Colorado Total Precipitation

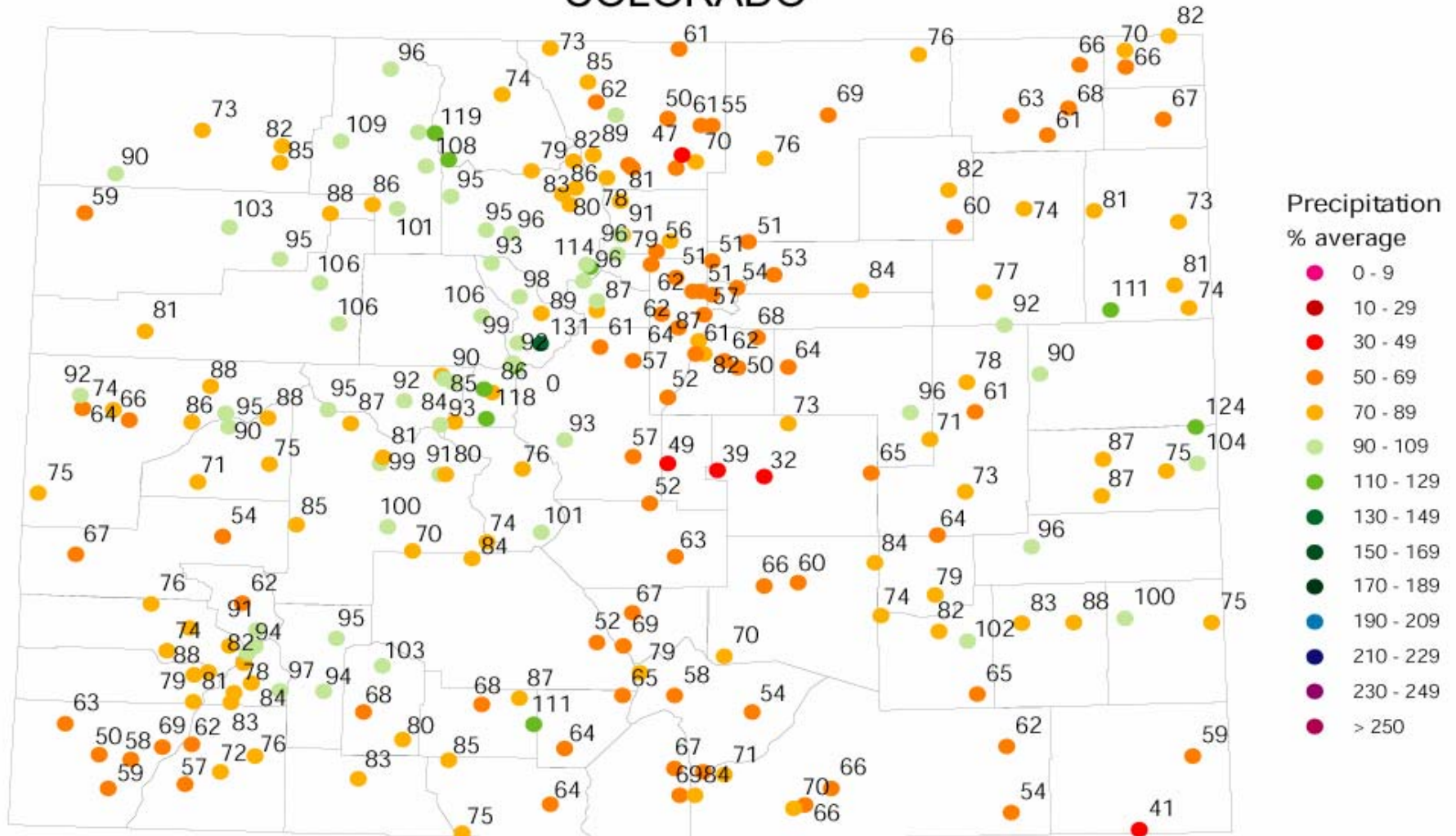


Colorado 6-Month Period (Jan - Jun)



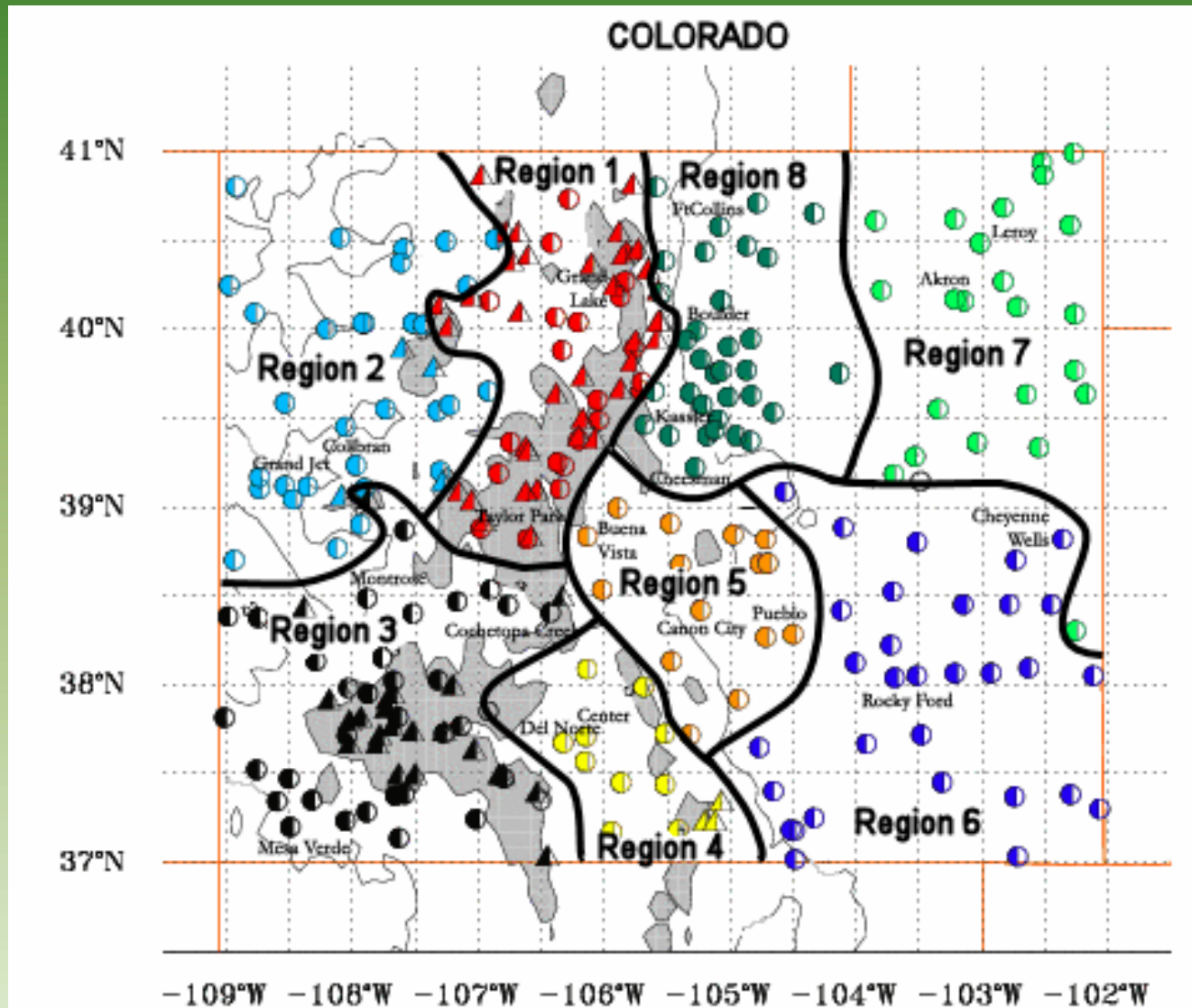
Water Year 2006 precipitation

COLORADO



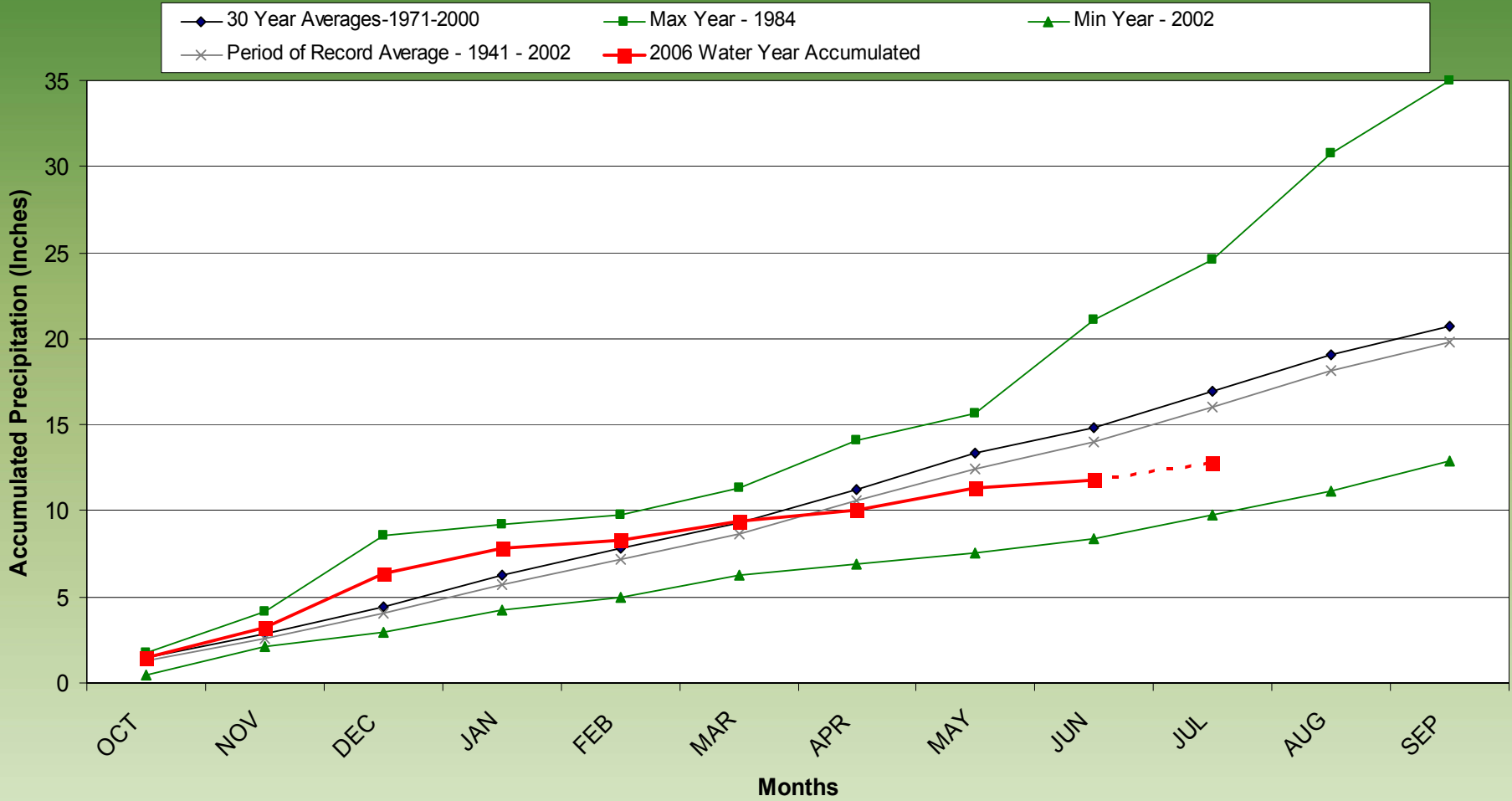
Water Year 2006 (October 2005 through June 2006) precipitation as a percent of the 1971-2000 average.

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



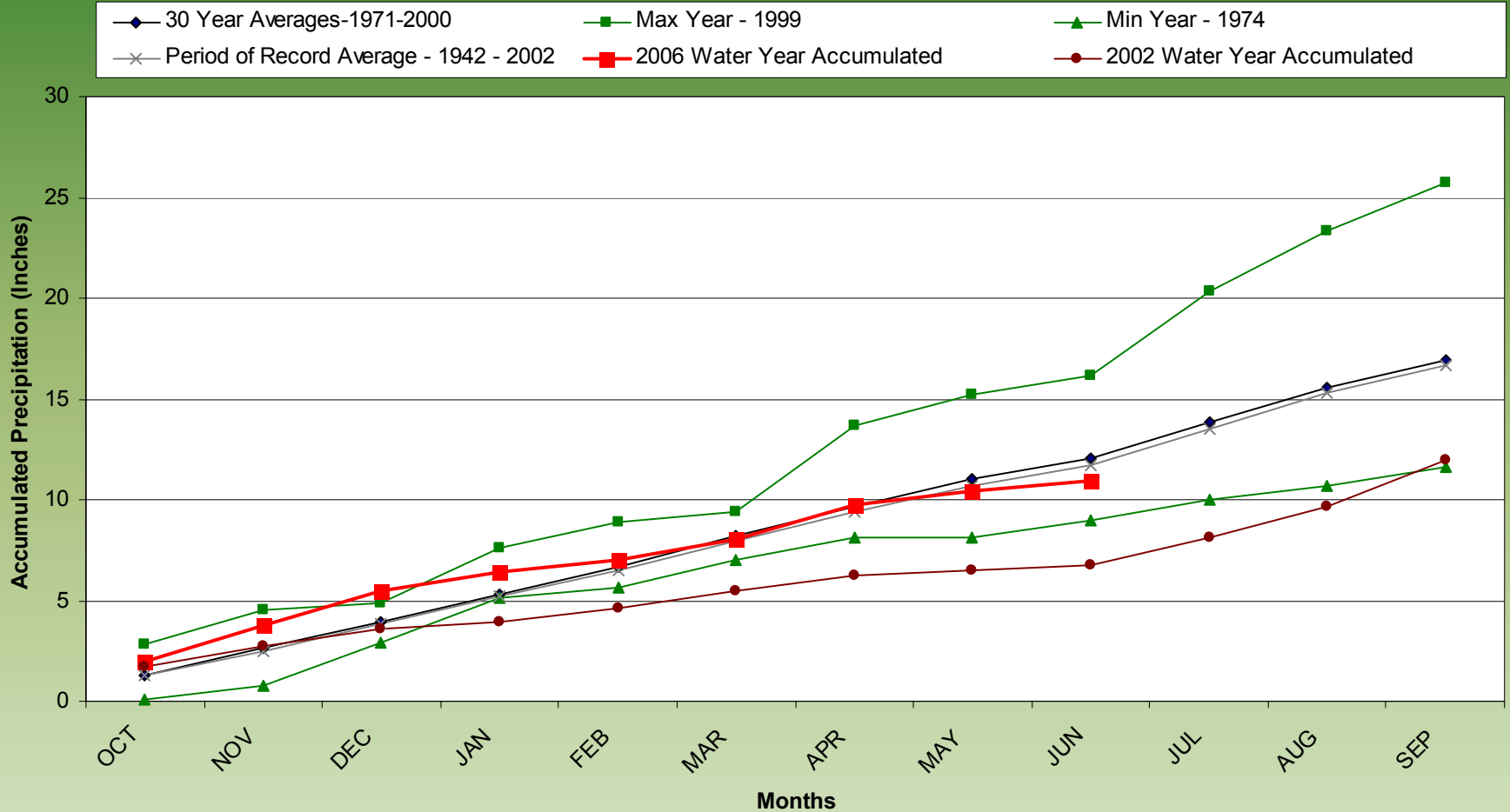
Division 1– Grand Lake 1NW

Grand Lake 1 NW 2006 Water Year



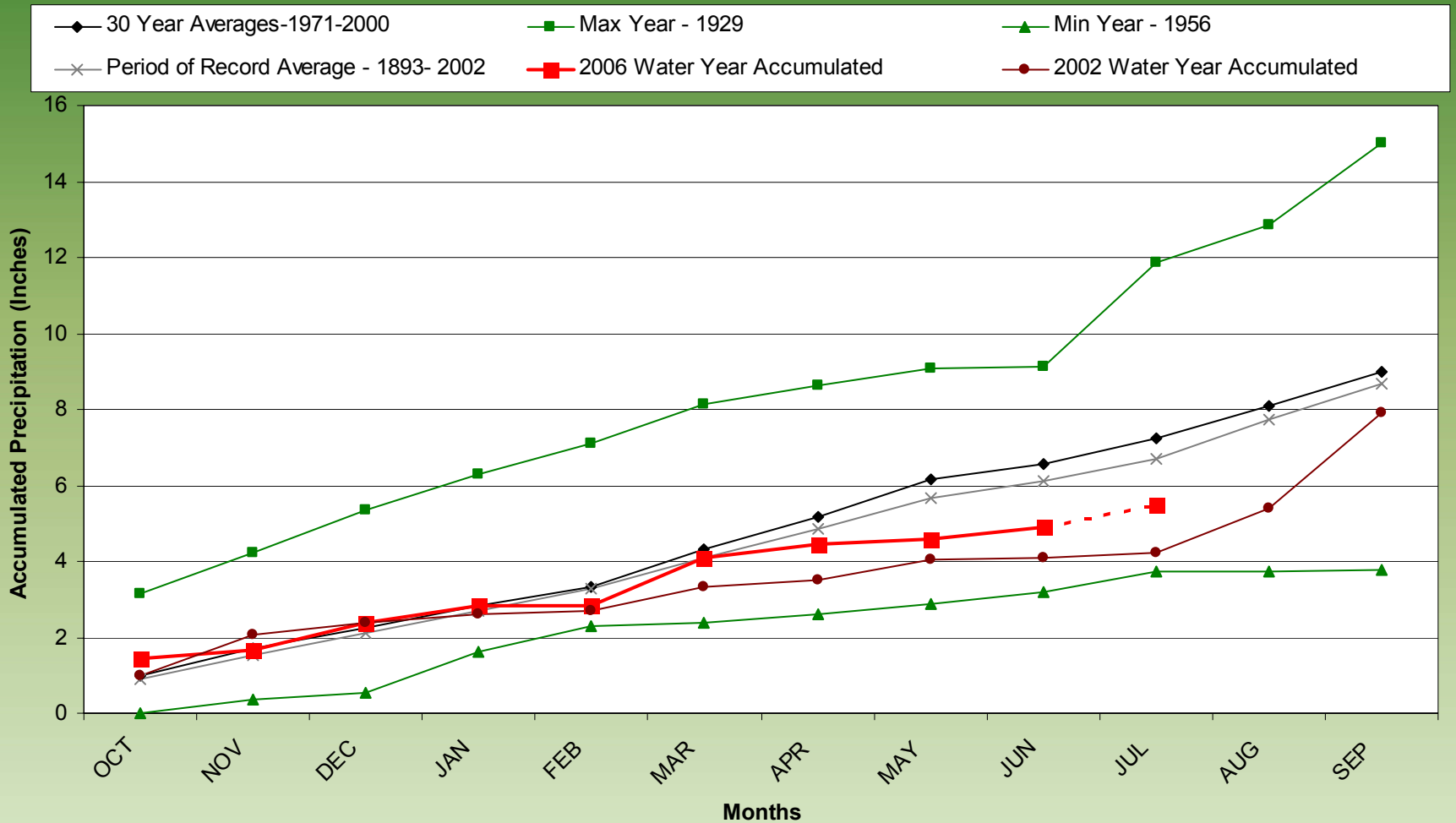
Division 1 – Taylor Park

Taylor Park 2006 Water Year



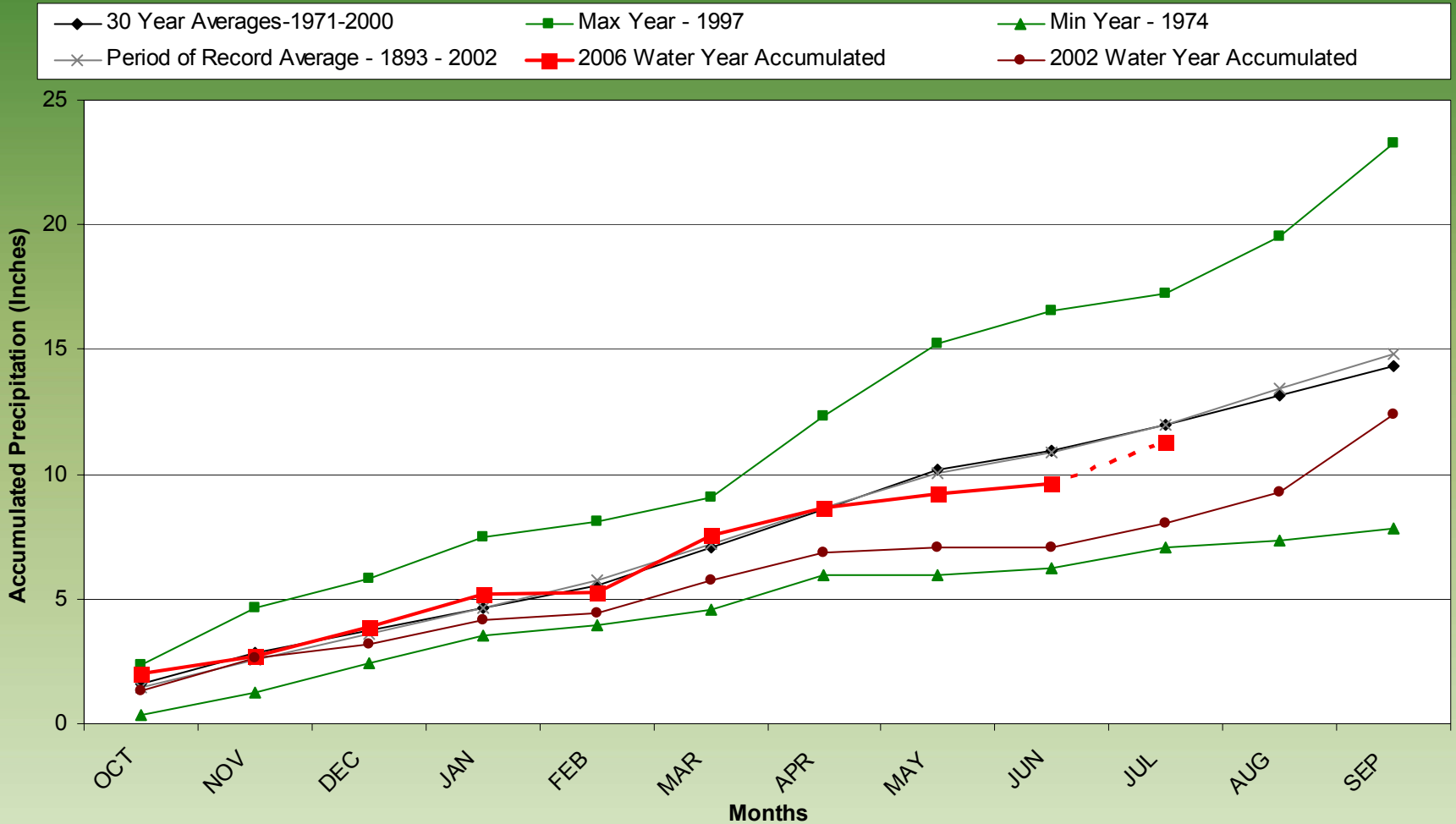
Division 2 – Grand Junction

Grand Junction WSFO 2006 Water Year



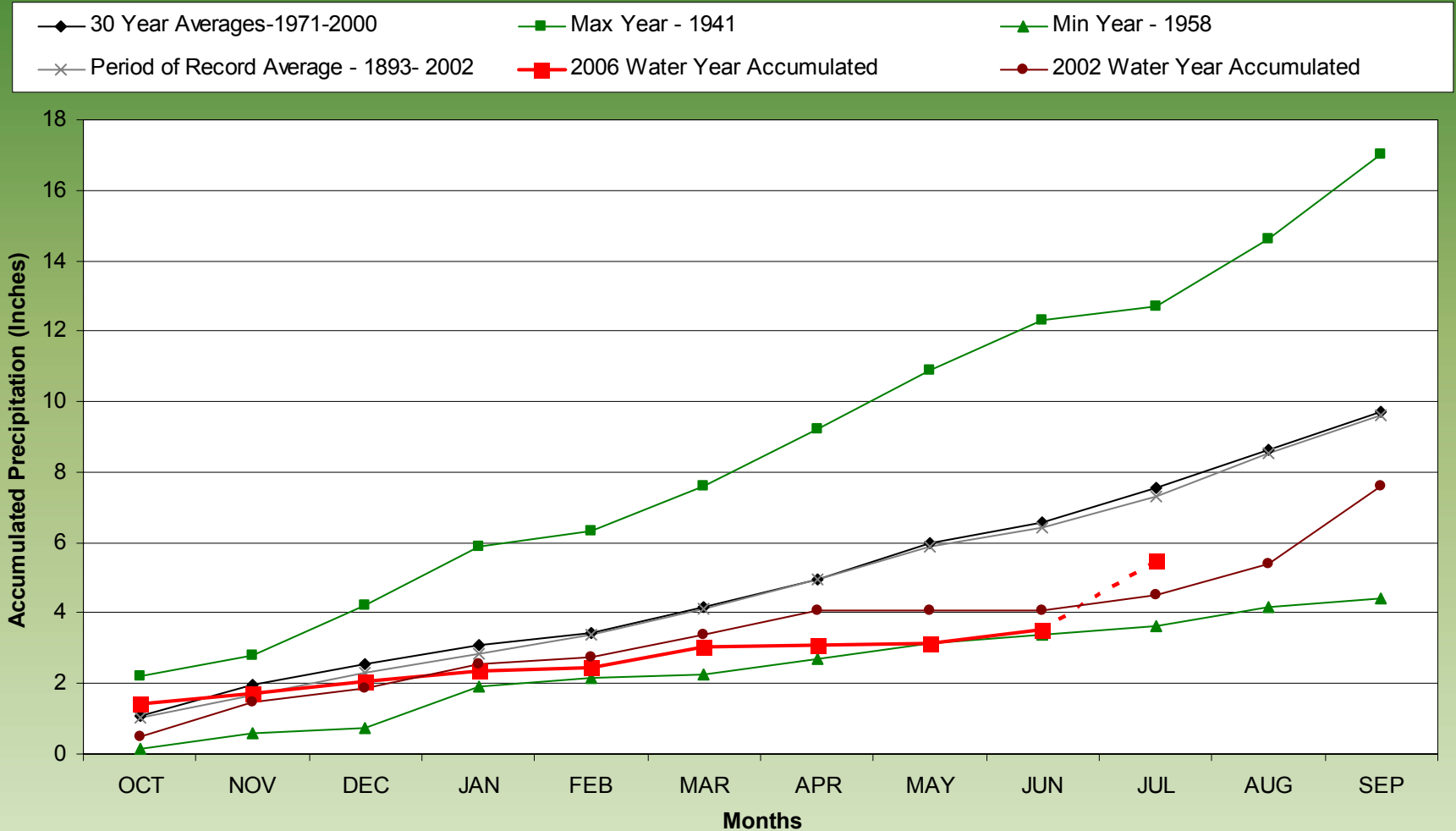
Division 2 – Collbran

Collbran 2SW 2006 Water Year



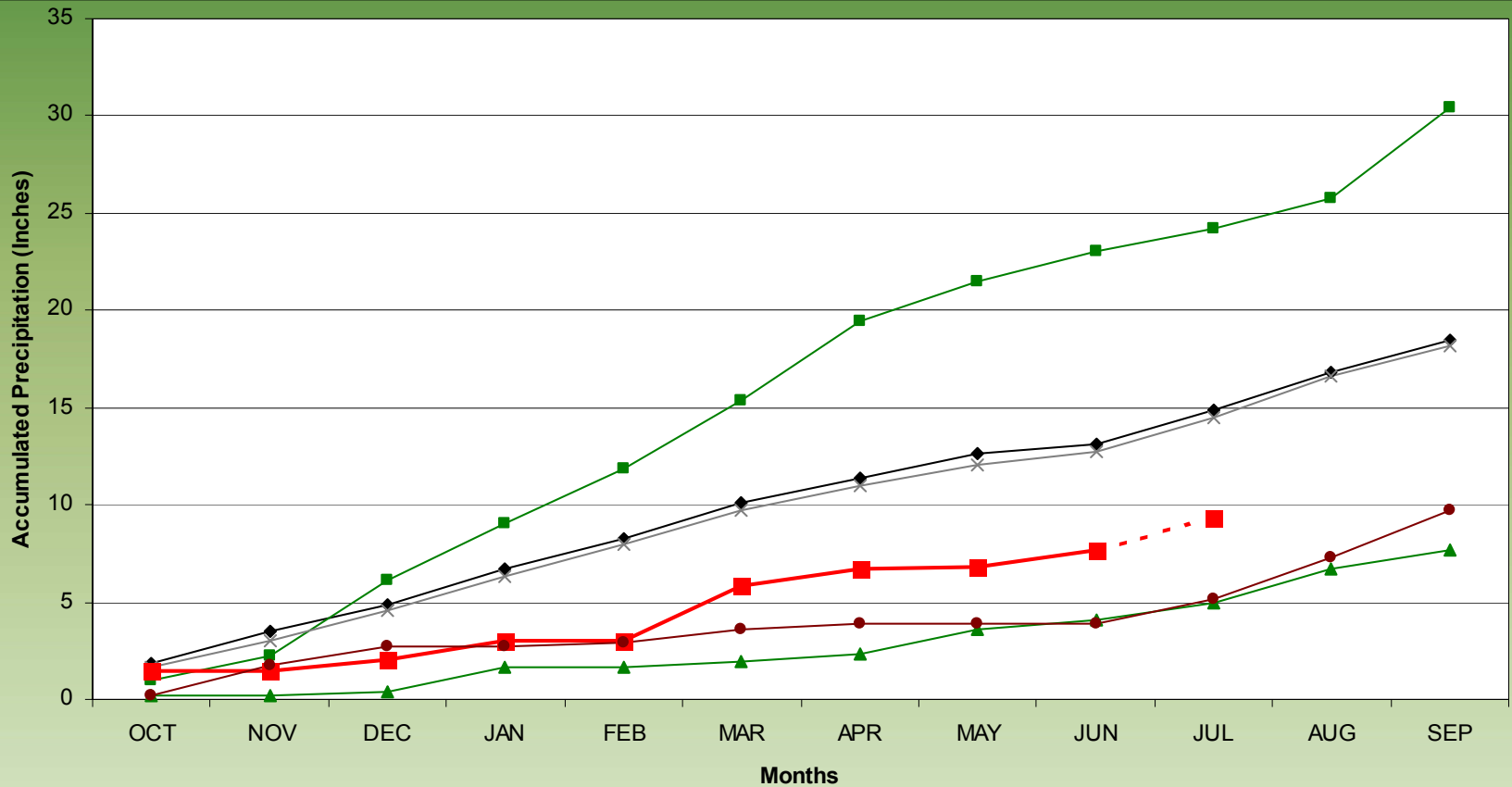
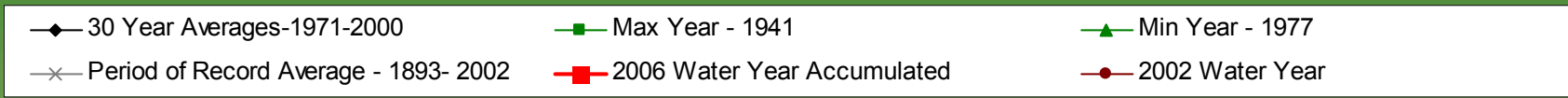
Division 3 – Montrose

Montrose #2 2006 Water Year



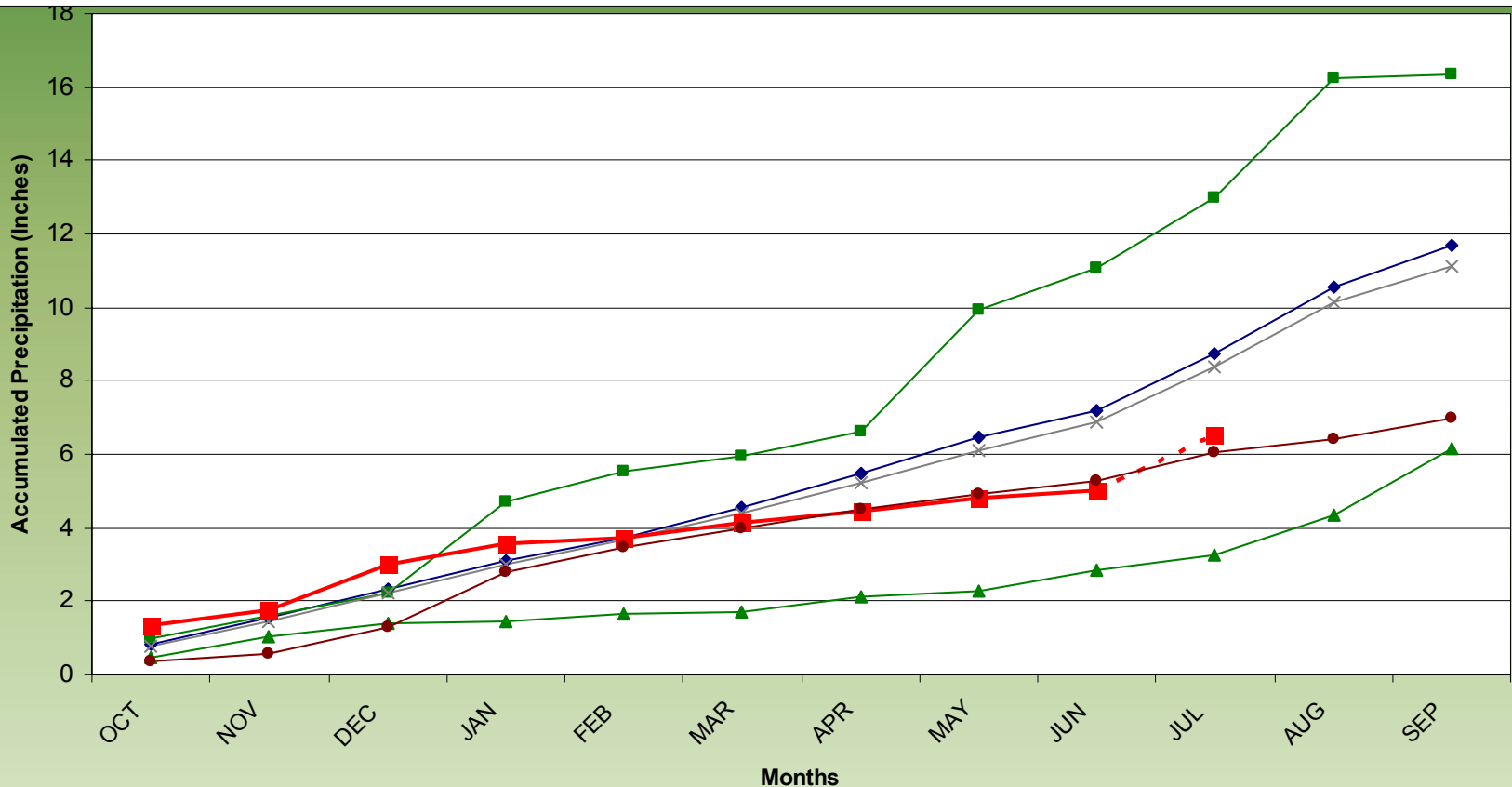
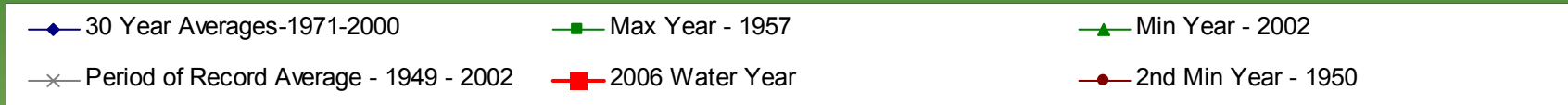
Division 3 – Mesa Verde

Mesa Verde NP 2006 Water Year



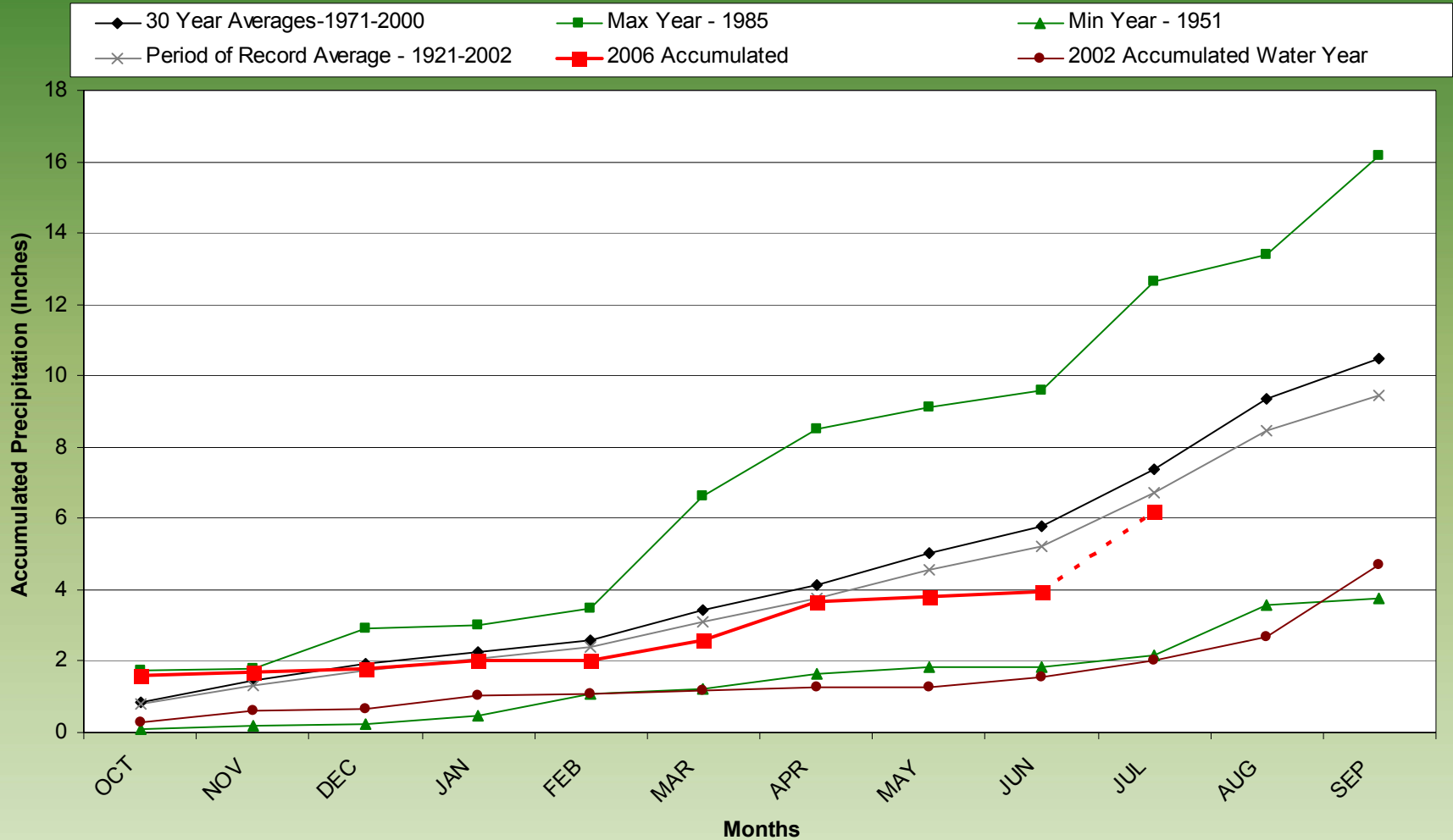
Division 3 – Cochetopa Creek

Cochetopa Creek 2006 Water Year



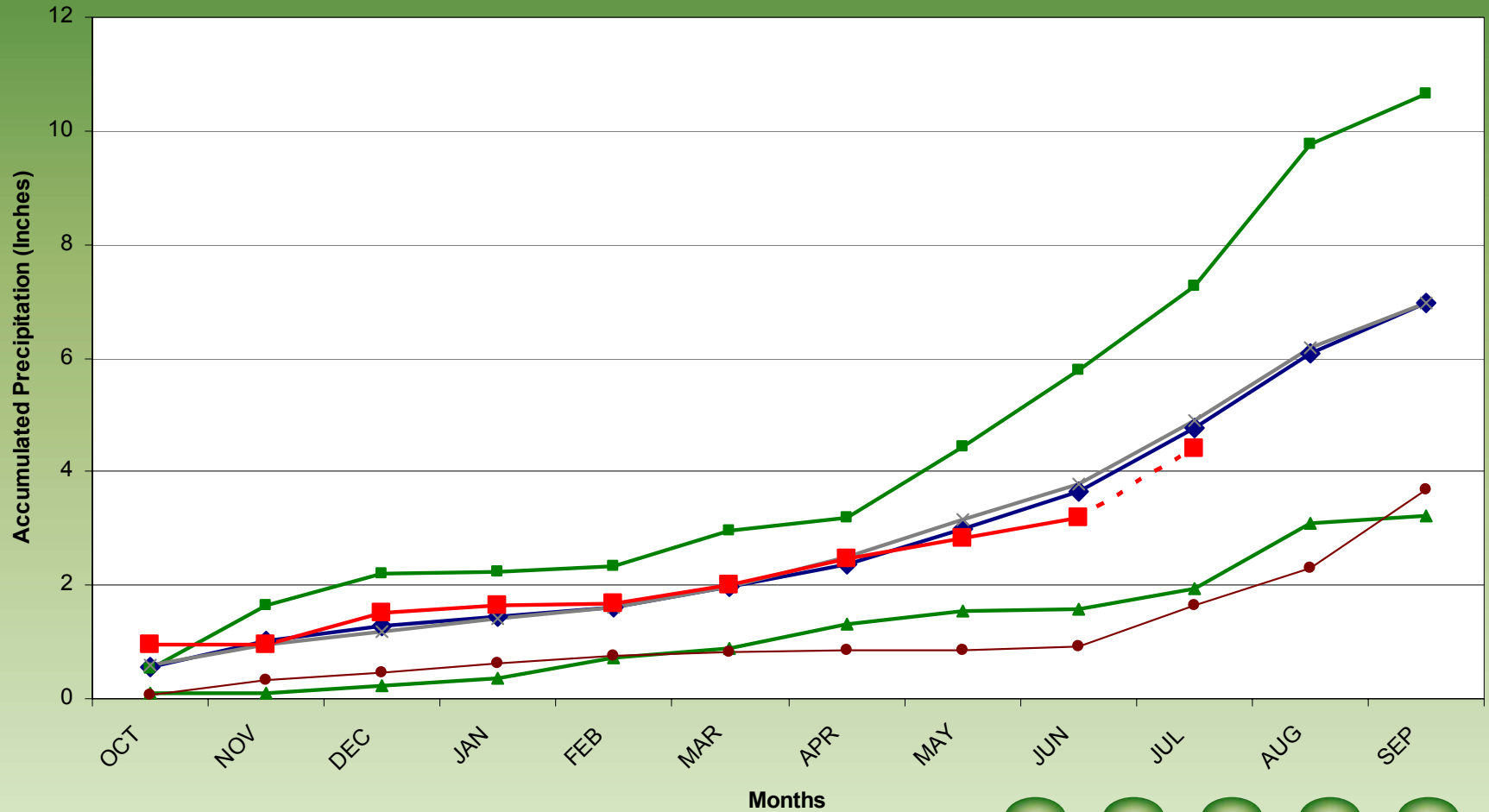
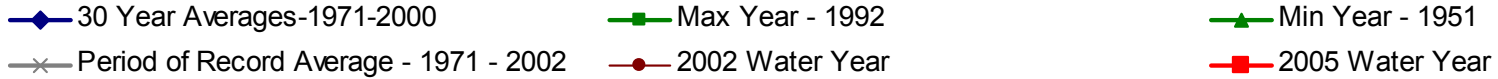
Division 4 – Del Norte

Del Norte 2006 Water Year



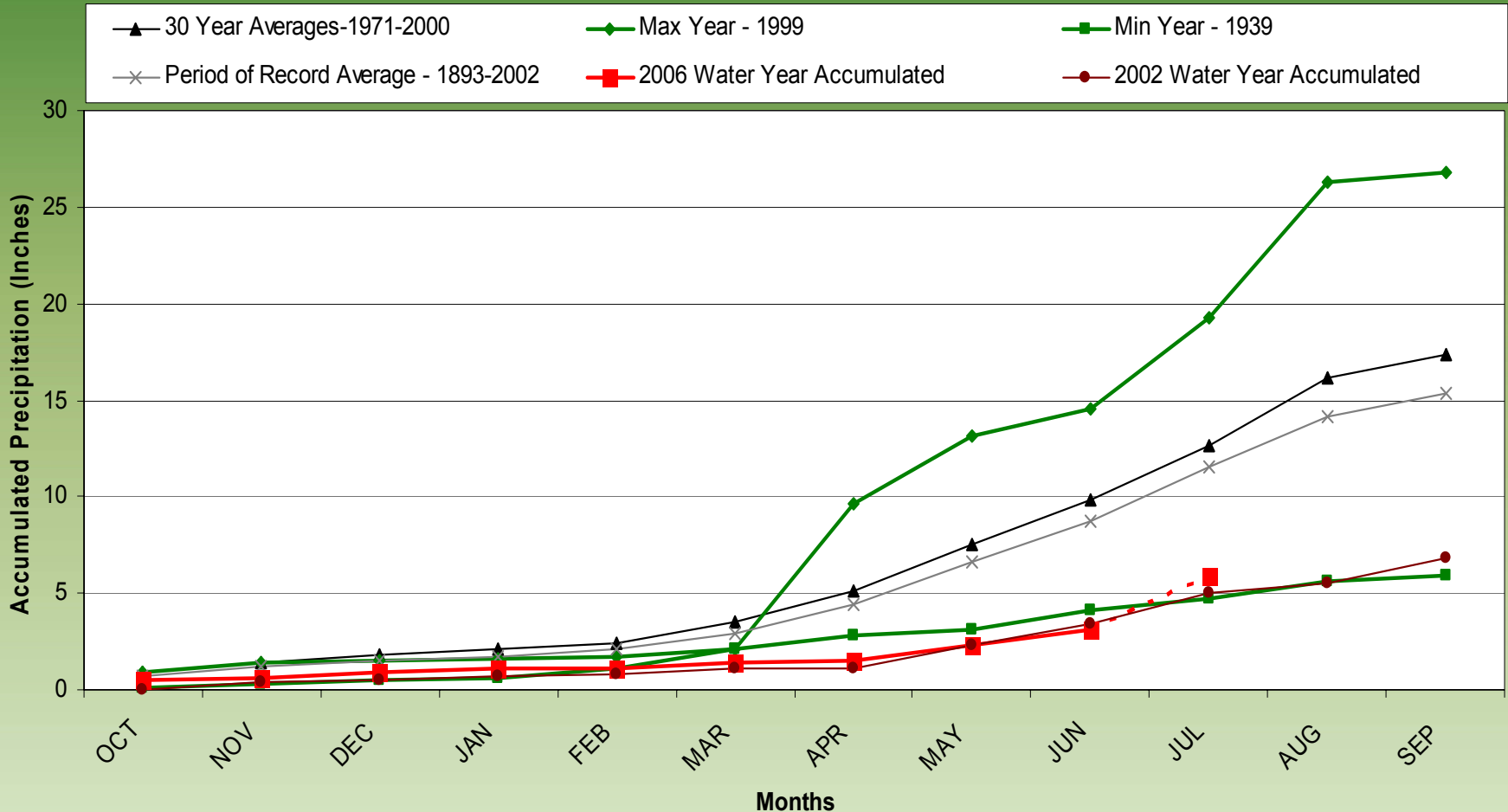
Division 4 – Center

Center 4SSW 2006 Water Year



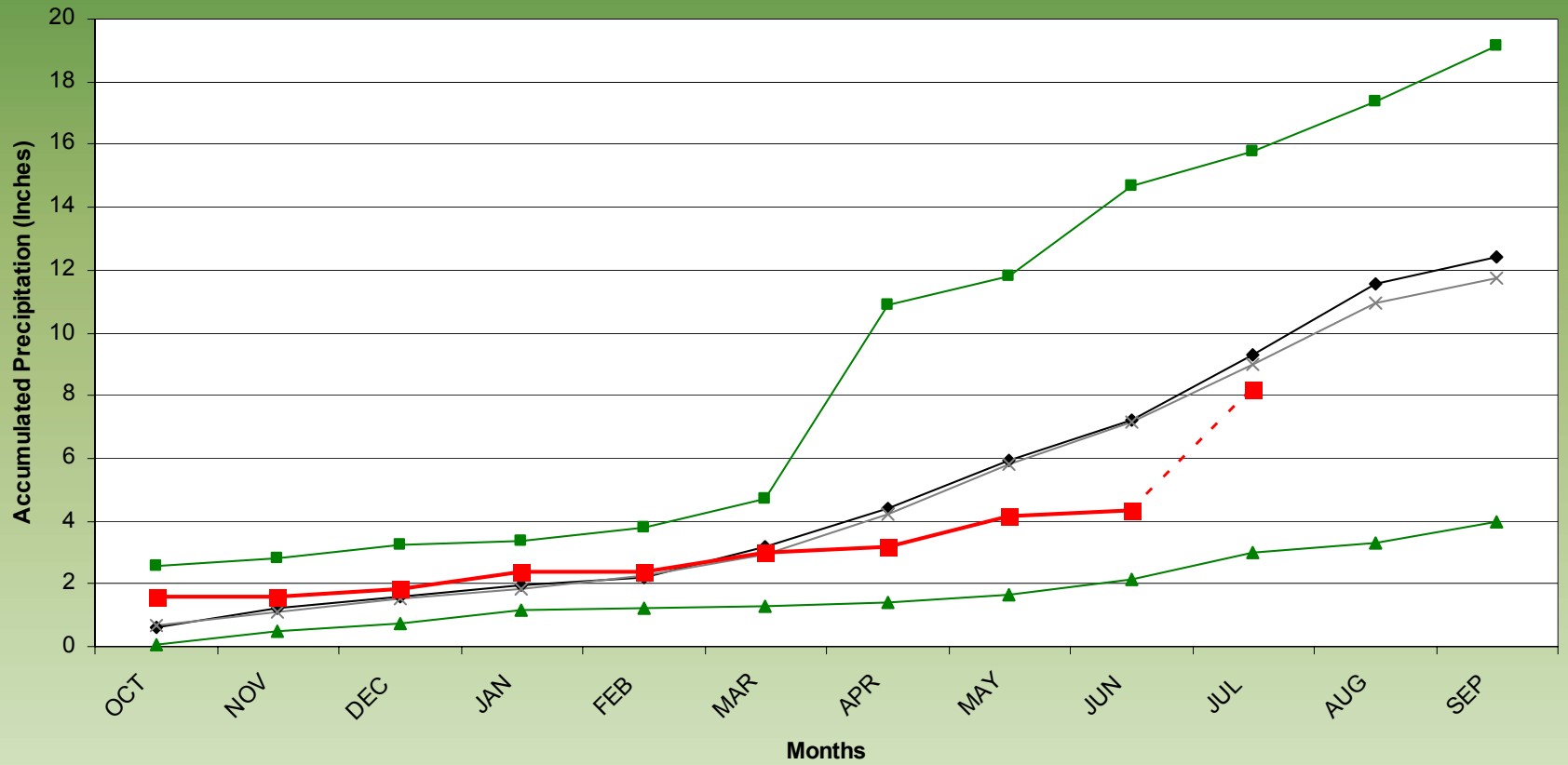
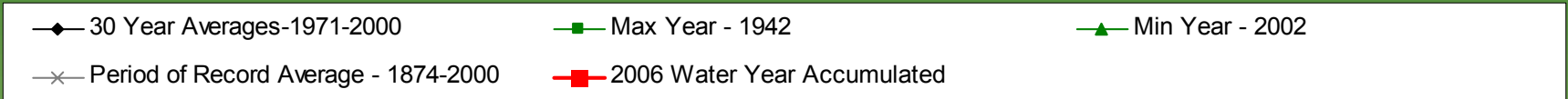
Division 5 – Colorado Springs

Colorado Springs 2006 Water Year



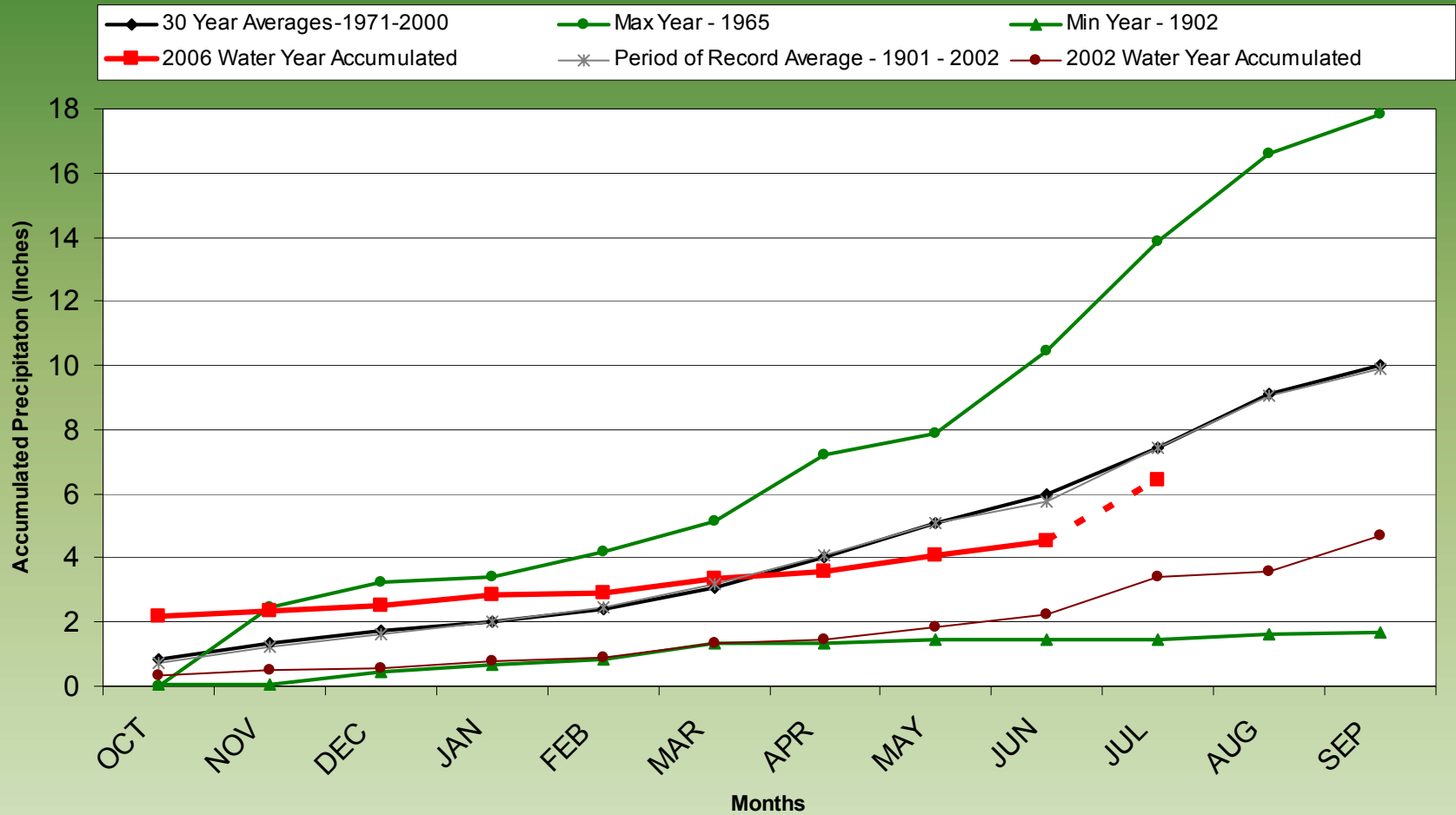
Division 5 – Pueblo

Pueblo WSO 2006 Water Year



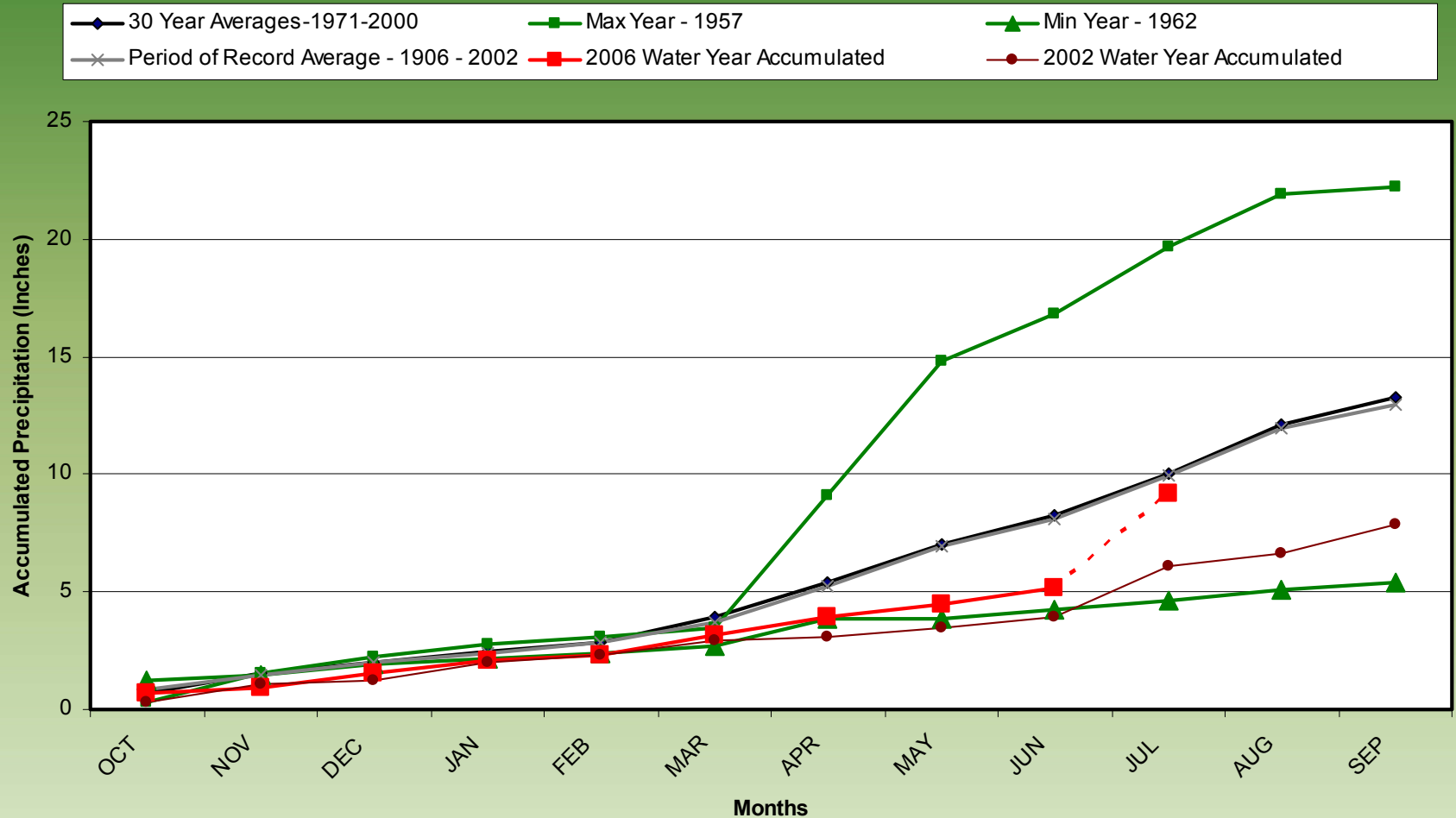
Division 5 – Buena Vista

Buena Vista 2006 Water Year



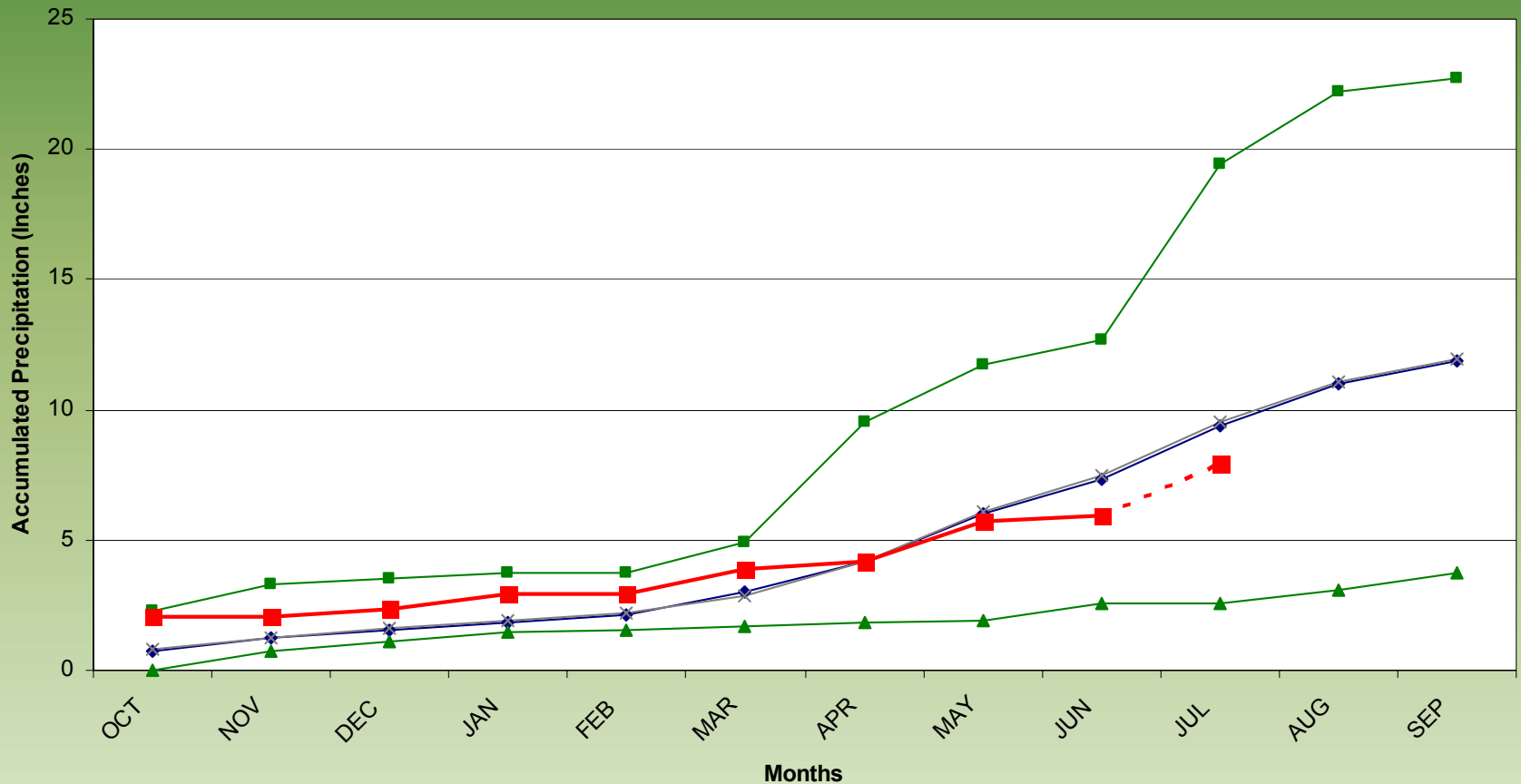
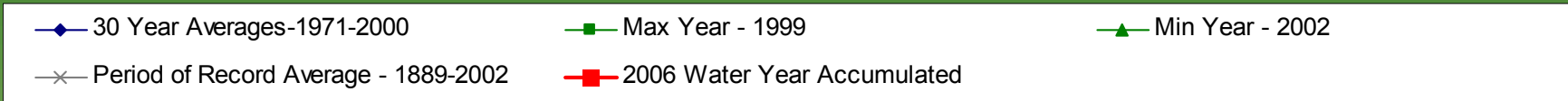
Division 5 – Canon City

Canon City 2006 Water Year



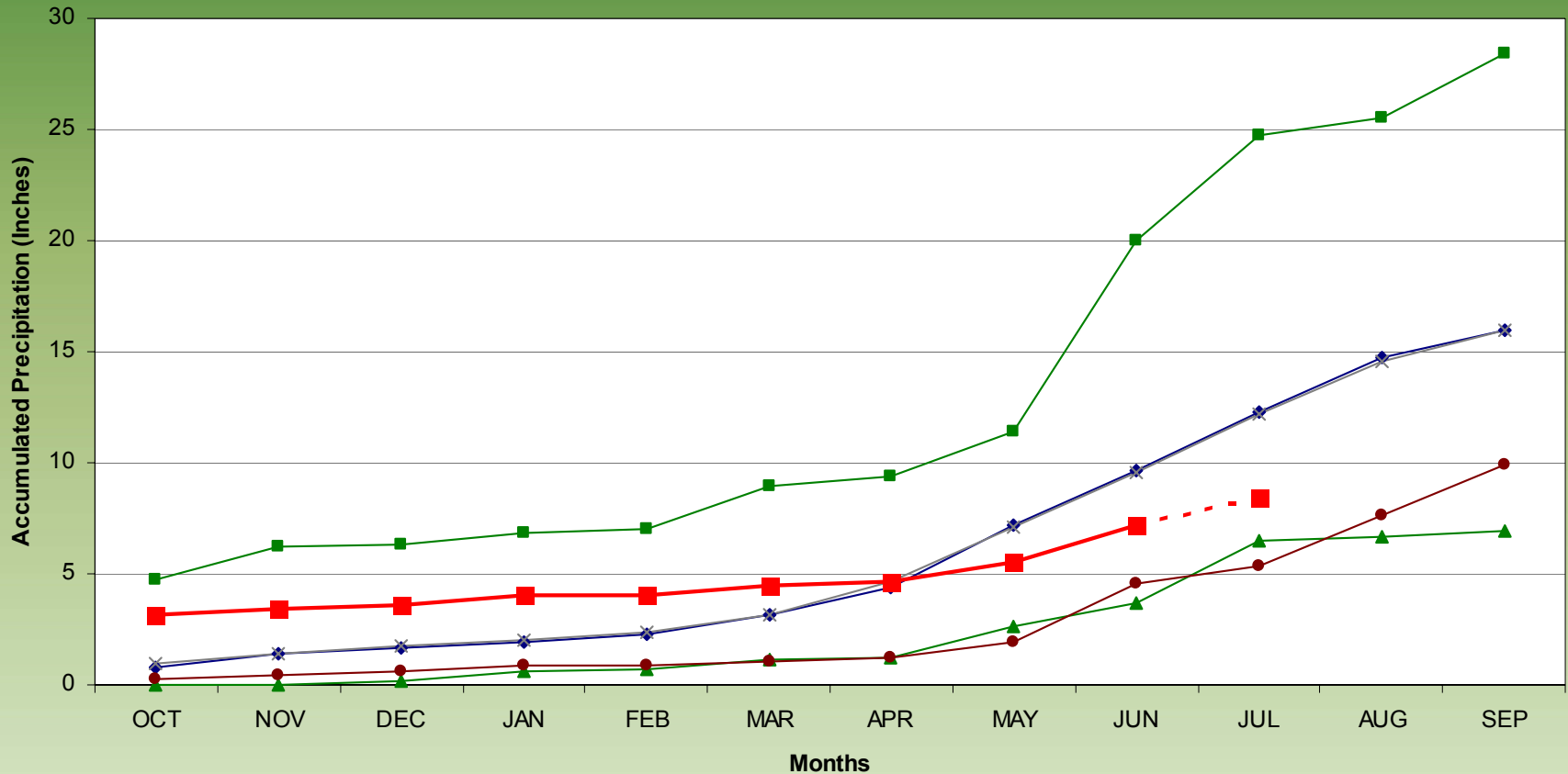
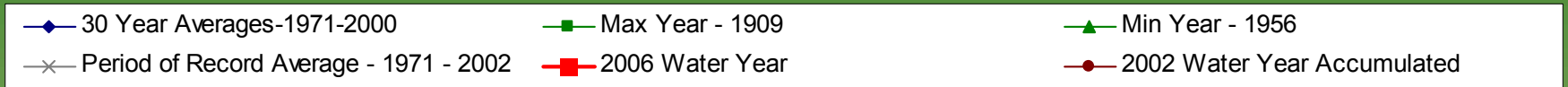
Division 6 – Rocky Ford

Rocky Ford 2006 Water Year



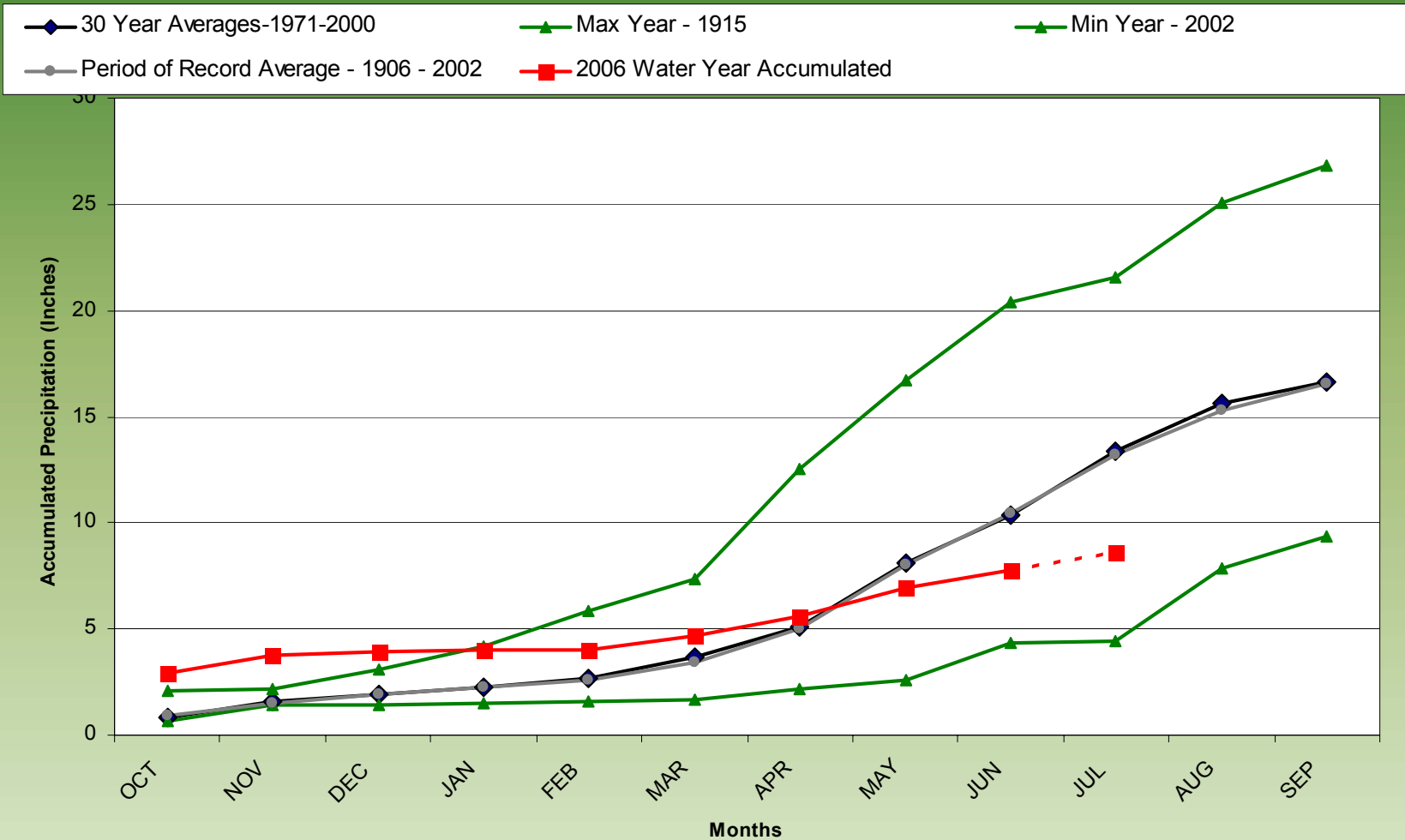
Division 6 – Cheyenne Wells

Cheyenne Wells 2006 Water Year



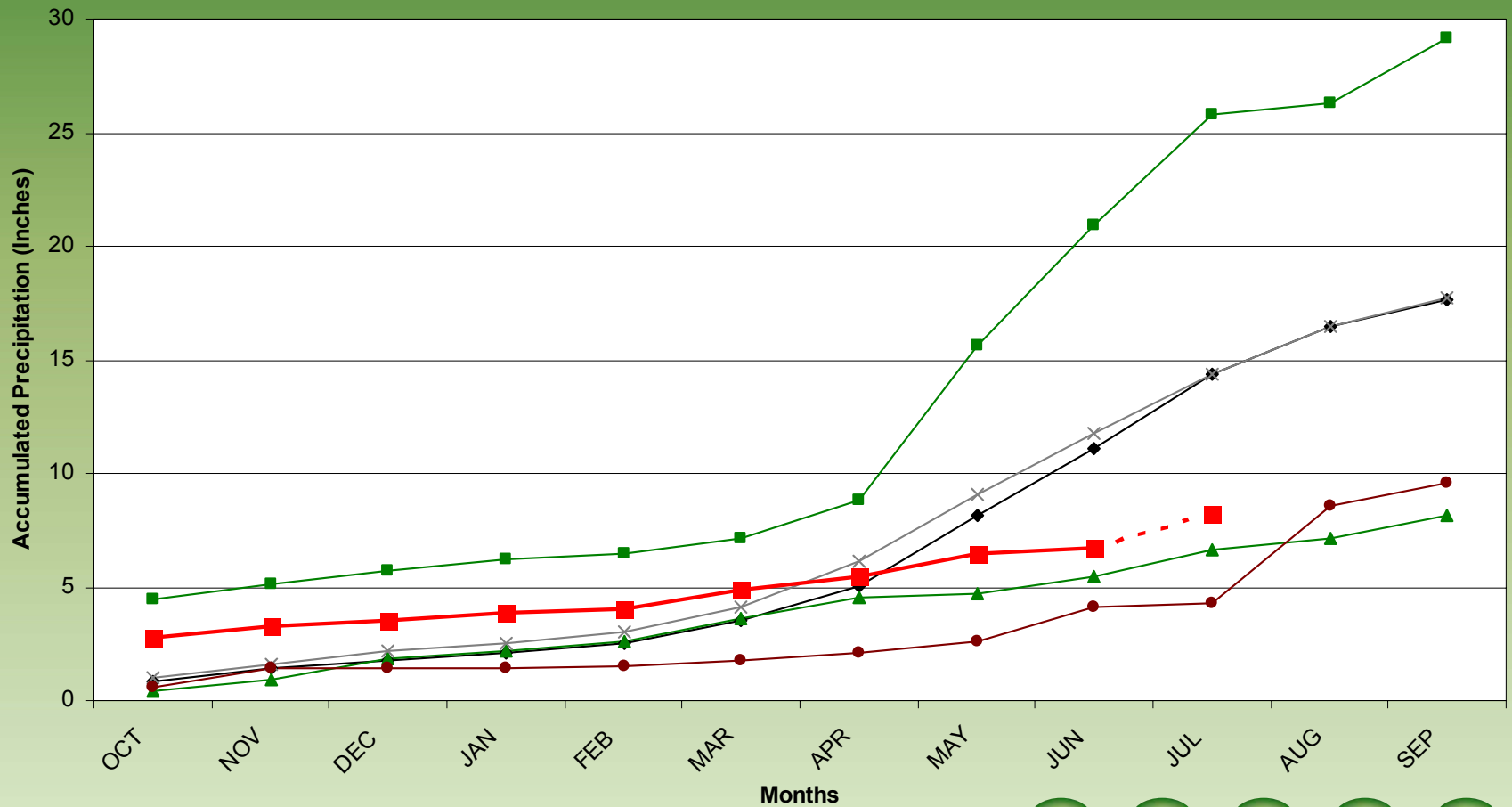
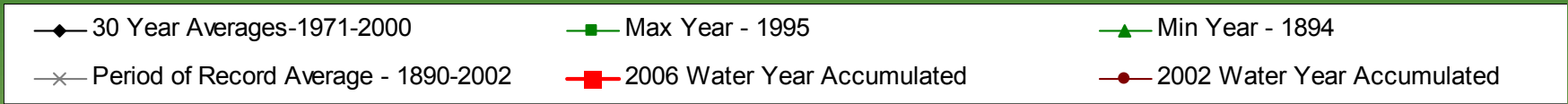
Division 7 – Akron

Akron 4E 2006 Water Year



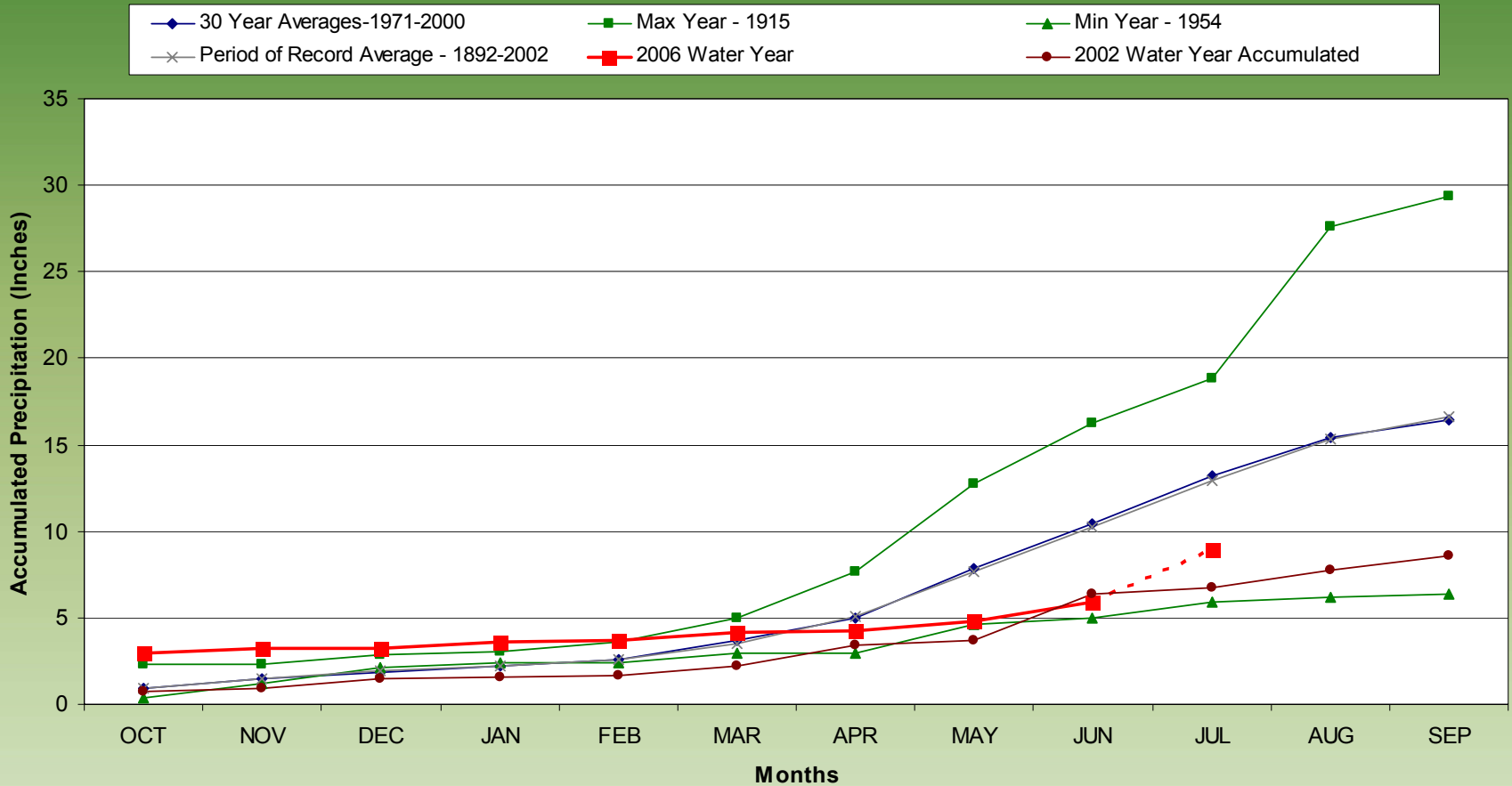
Division 7 – Leroy

Leroy 5SW 2006 Water Year



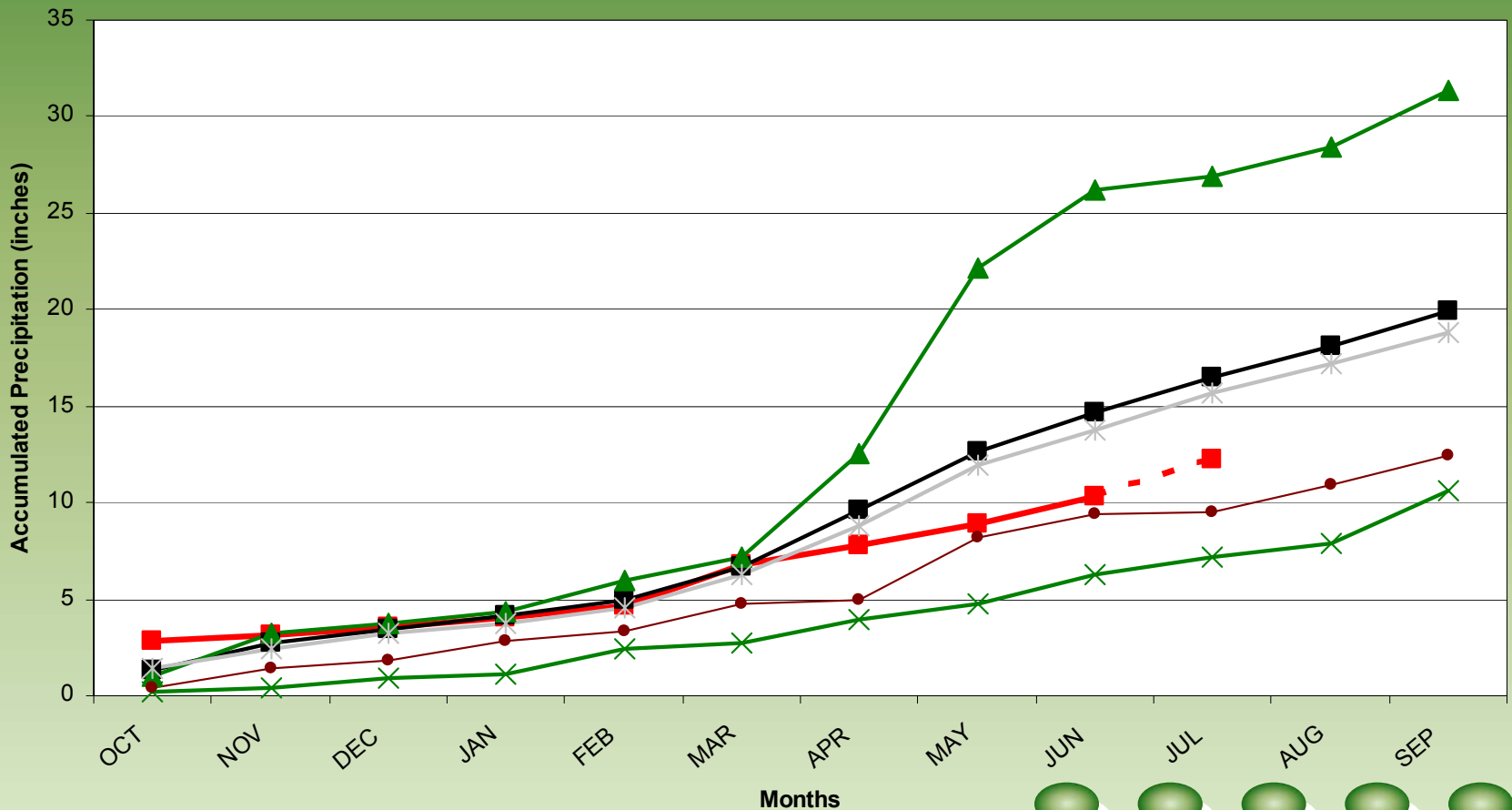
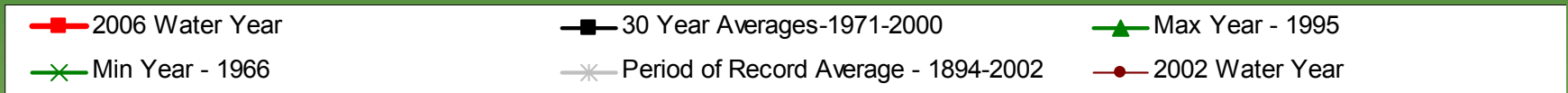
Division 7 – Burlington

Burlington 2006 Water Year



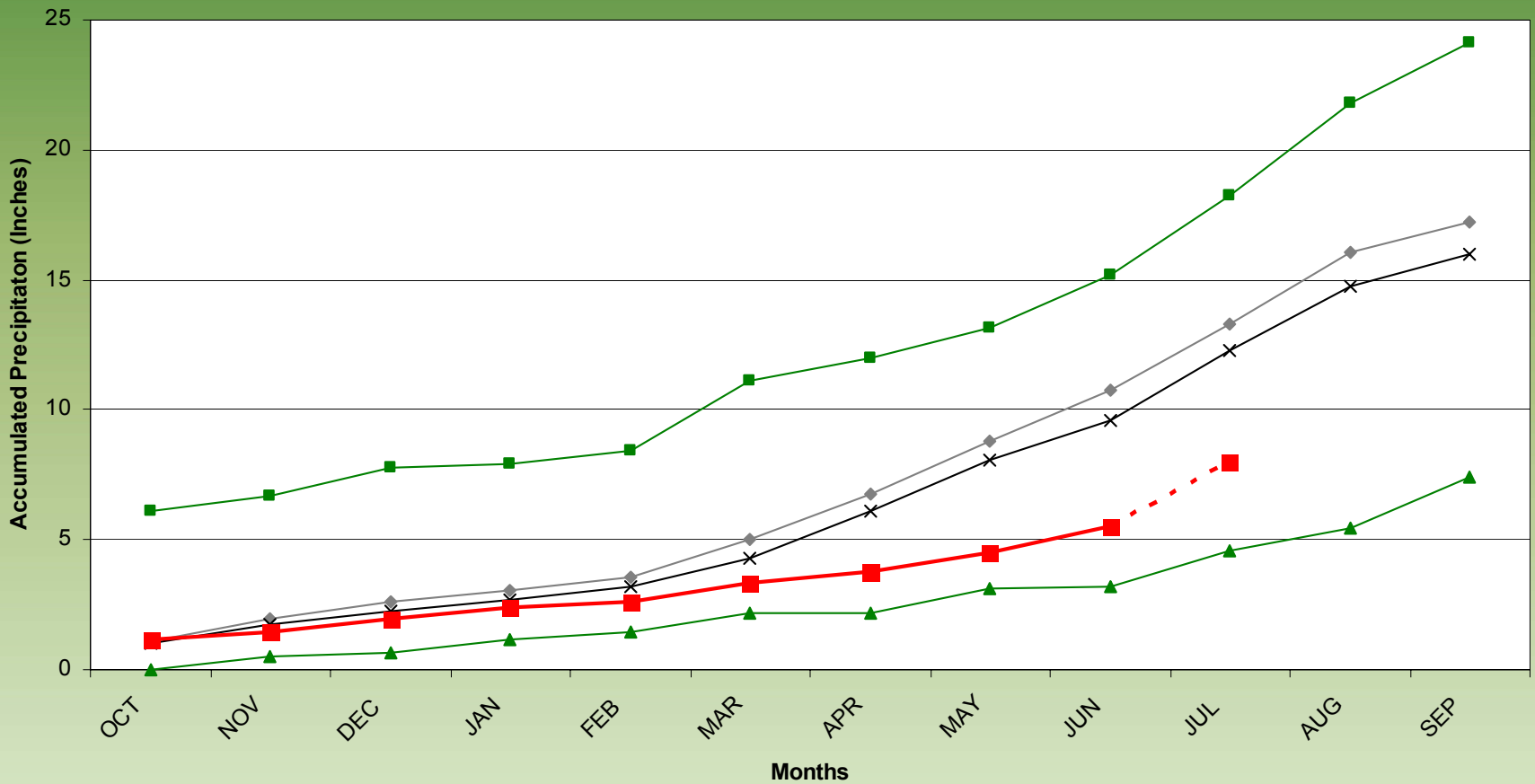
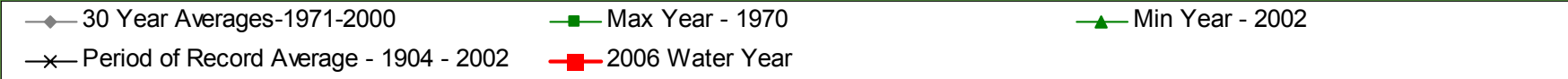
Division 8 – Boulder

Boulder 2006 Water Year



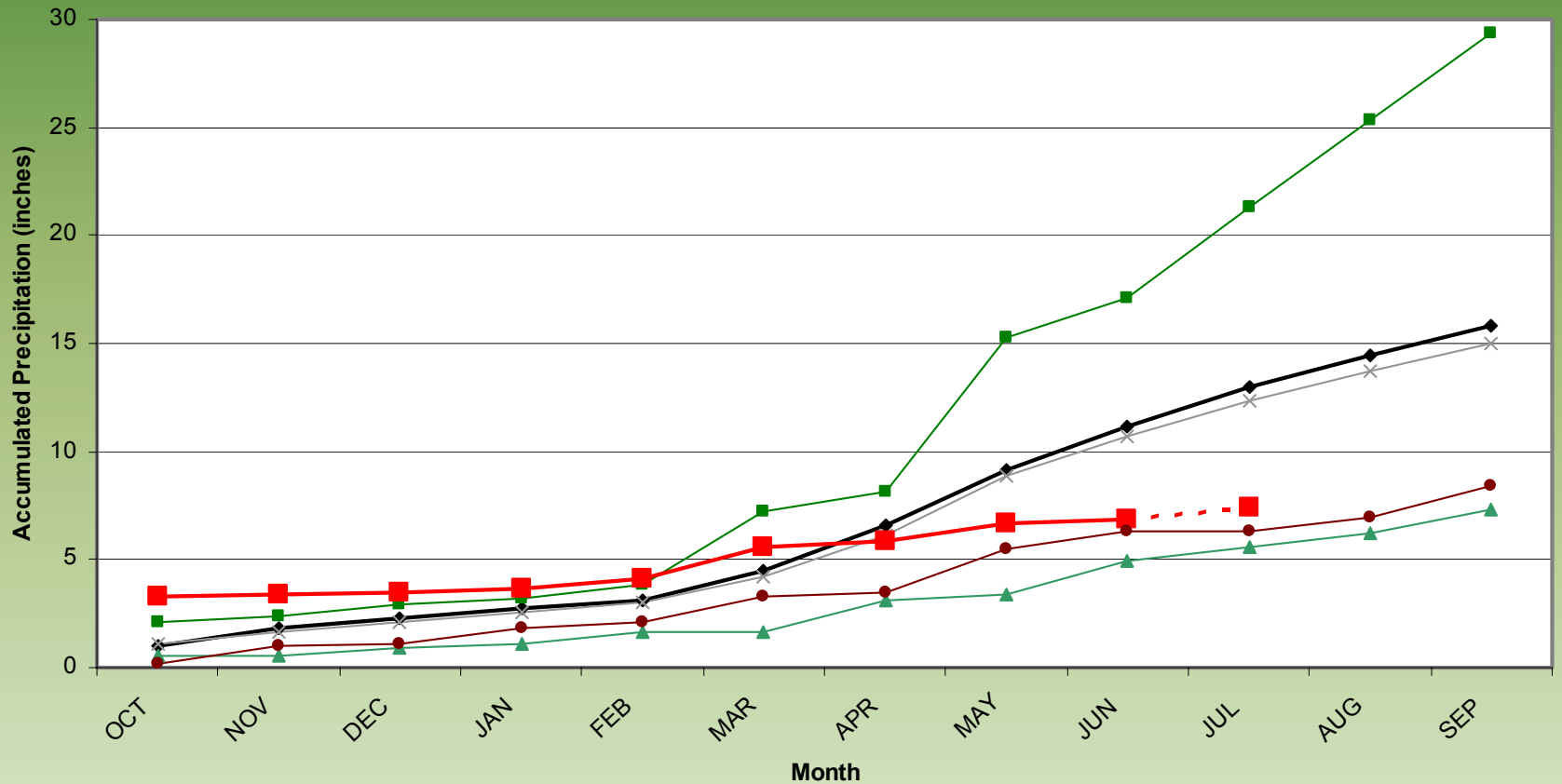
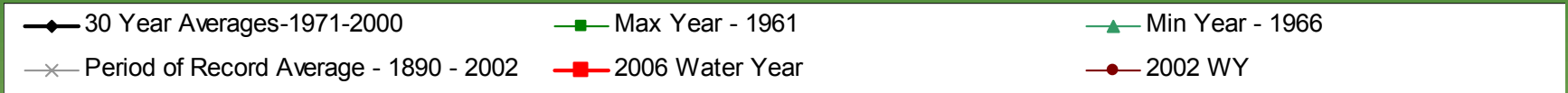
Division 8 – Cheesman

Cheesman 2006 Water Year



Division 8 – Fort Collins

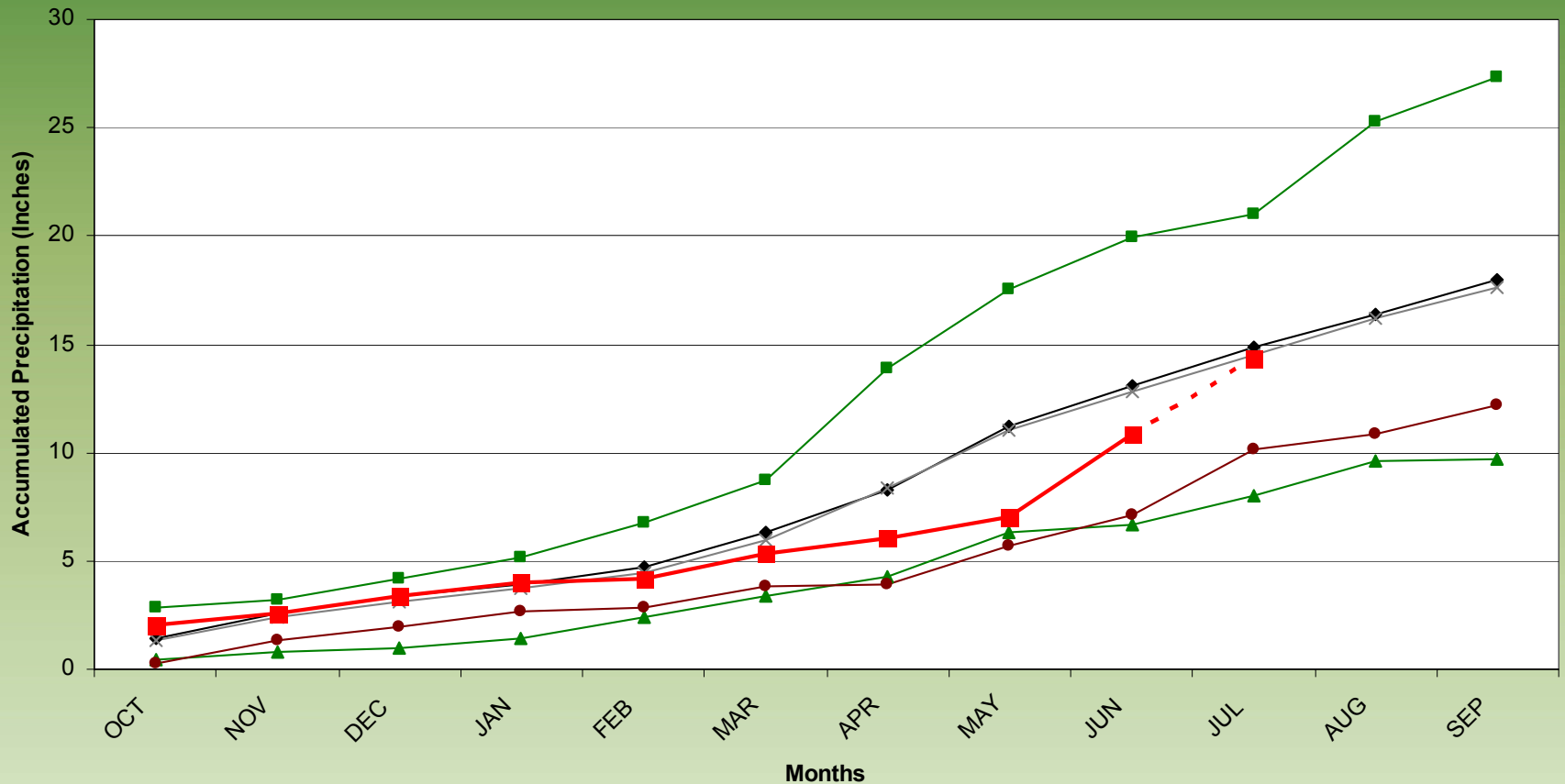
Fort Collins 2006 Water Year



Division 8 – Kassler

Kassler 2006 Water Year

◆ 30 Year Averages-1971-2000 ■ Max Year - 1915 ▲ Min Year - 1956
× Period of Record Average - 1899 - 2002 ■ 2006 Water Year Accumulated ● 2002 Water Year Accumulated



6 Month SPI

Colorado

6/2006 6 mon. SPI



100 %	> 2.0	68 %	> -1.0
100 %	> 1.0	14 %	> -2.0
100 %	> 0.0	0 %	> -3.0

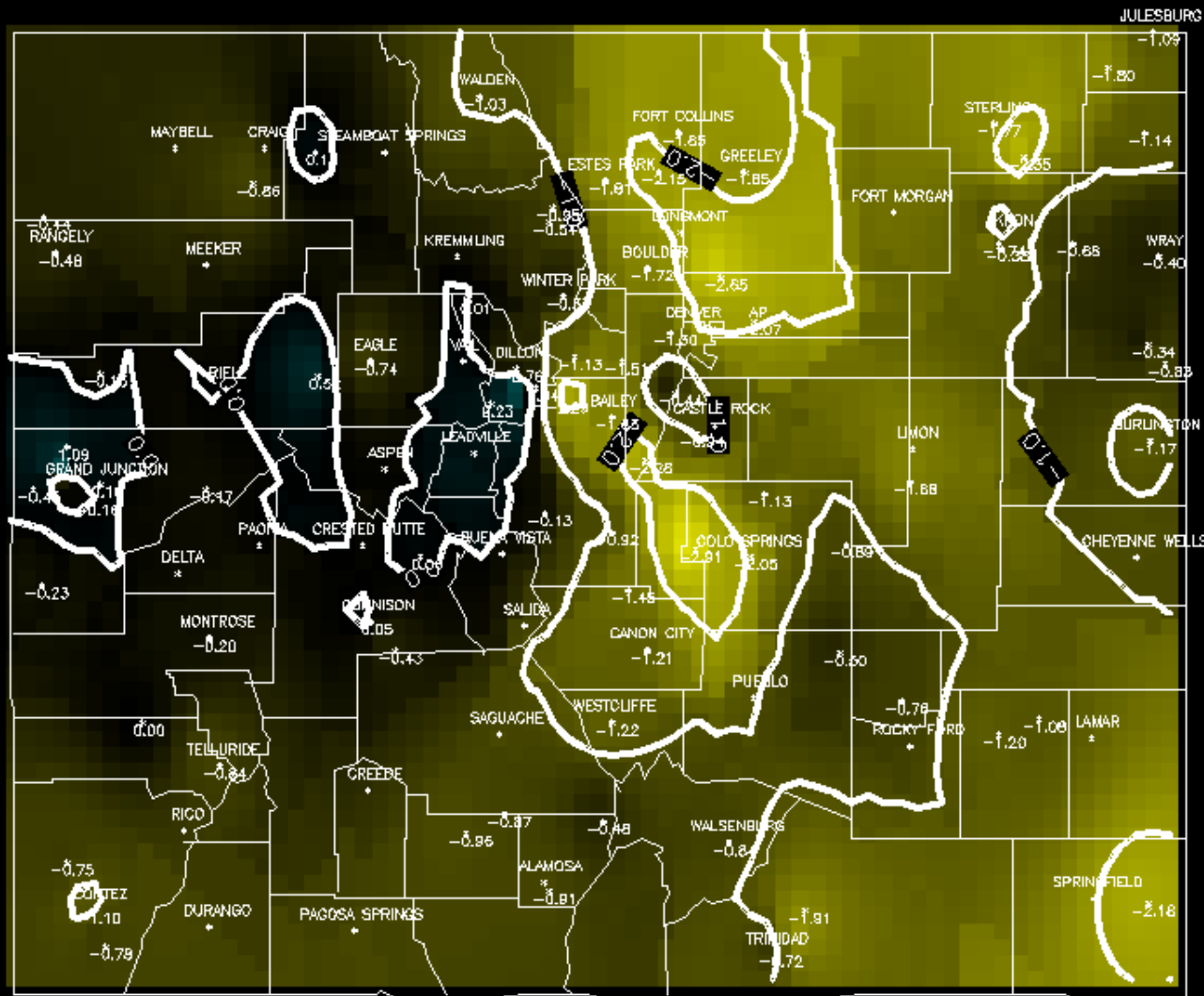
Produced by:
Colorado Climate Center
Fort Collins, CO



12 Month SPI

Colorado

6/2006 12 mon. SPI



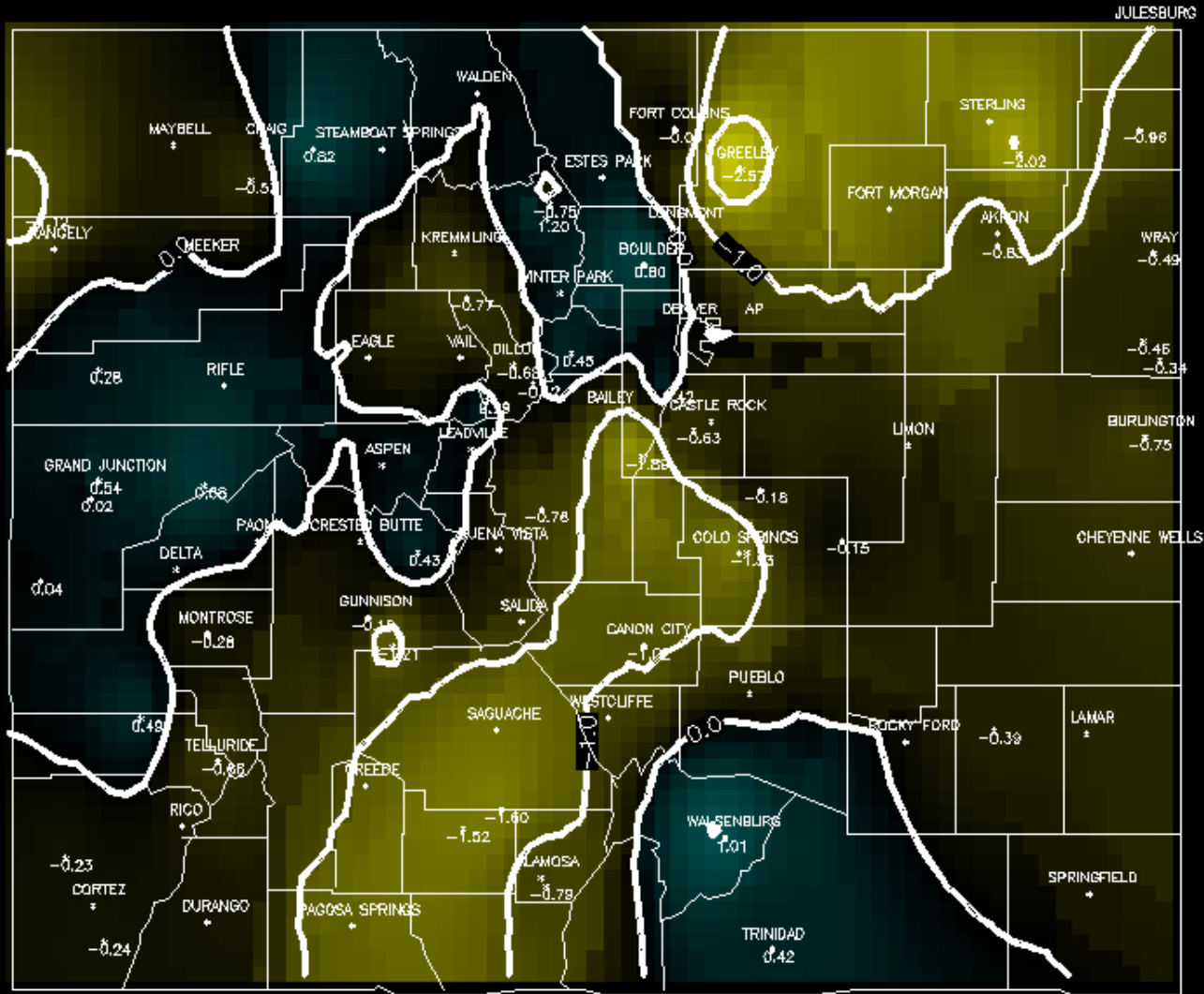
100 % < 2.0	40 % < -1.0
100 % < 1.0	5 % < -2.0
94 % < 0.0	0 % < -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO

48 Month SPI

Colorado

6/2006 48 mon. SPI



100 % < 2.0	18 % < -1.0
100 % < 1.0	0 % < -2.0
72 % < 0.0	0 % < -3.0

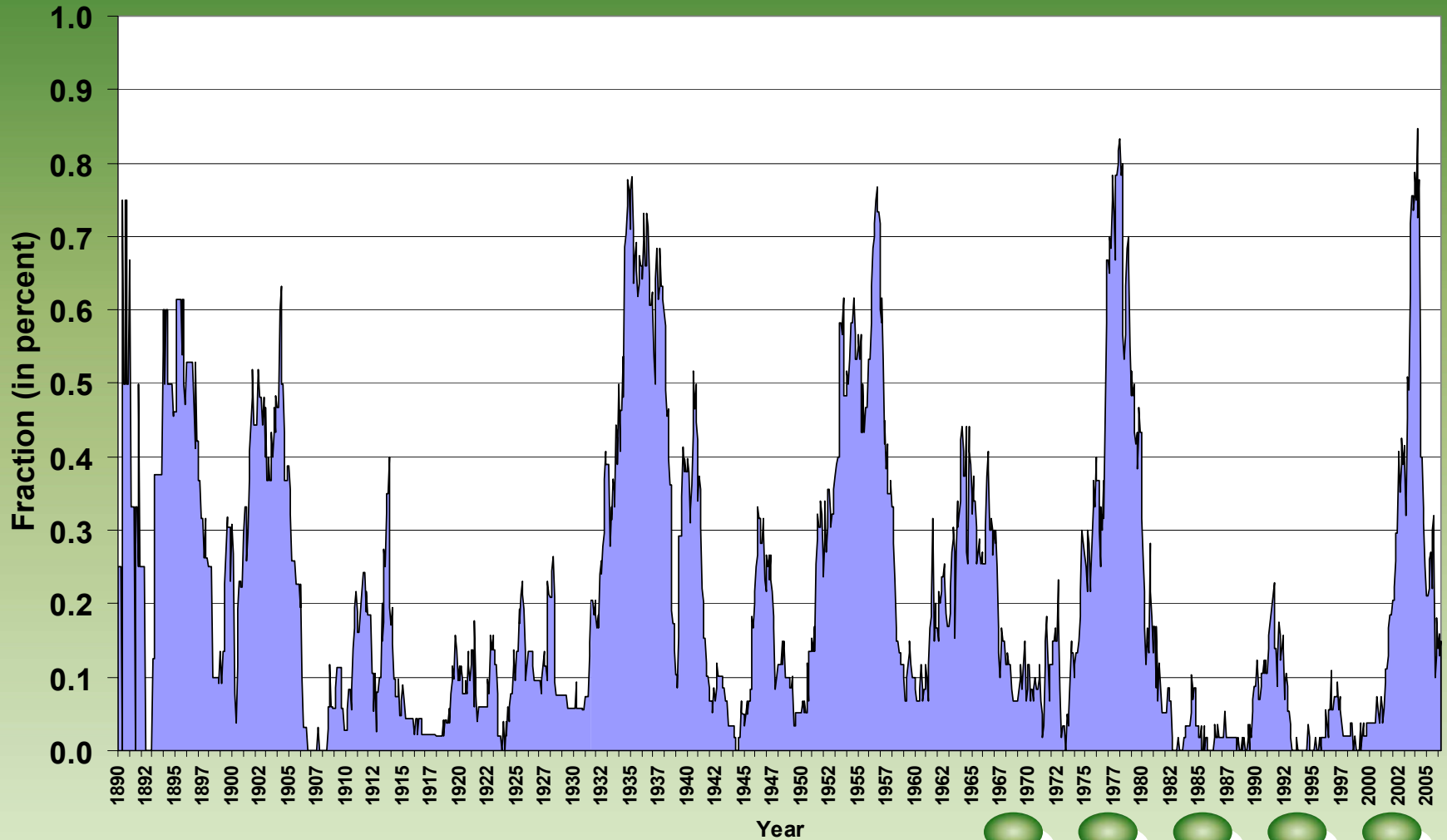
Produced by:
Colorado Climate Center
Fort Collins, CO



Fraction of Colorado in Drought

Fraction of Colorado in Drought
Based on 48 month SPI

(1890 - June 2006)

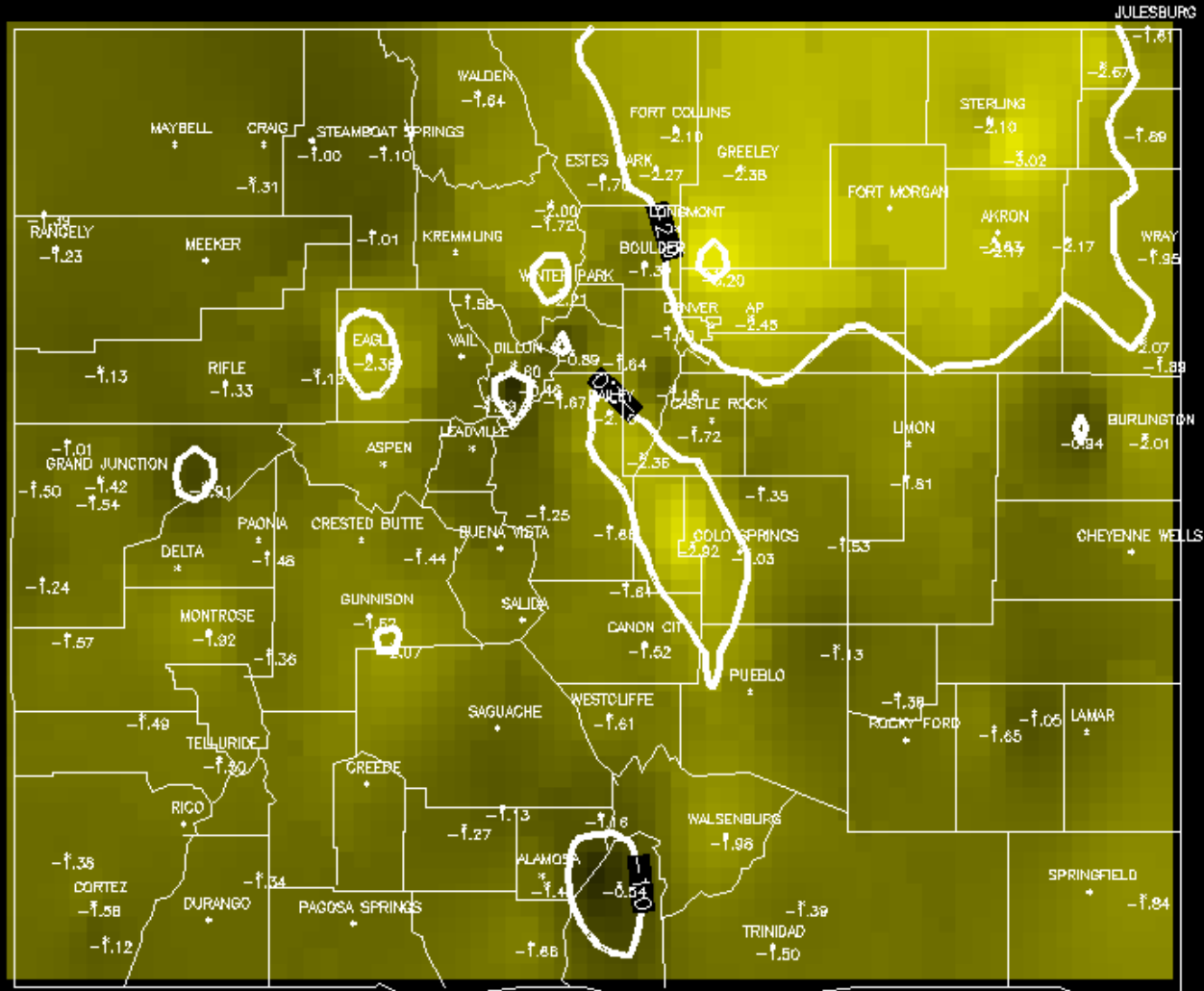


Projected Conditions at 0.2 Probability Level

12 Month SPI at 6 months

Colorado

6/2006 12 mon. SPI - Projected 6 mon. at P=0.20



100 % >= 2.0	99 % < -1.0
100 % >= 1.0	16 % < -2.0
100 % >= 0.0	0 % < -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO

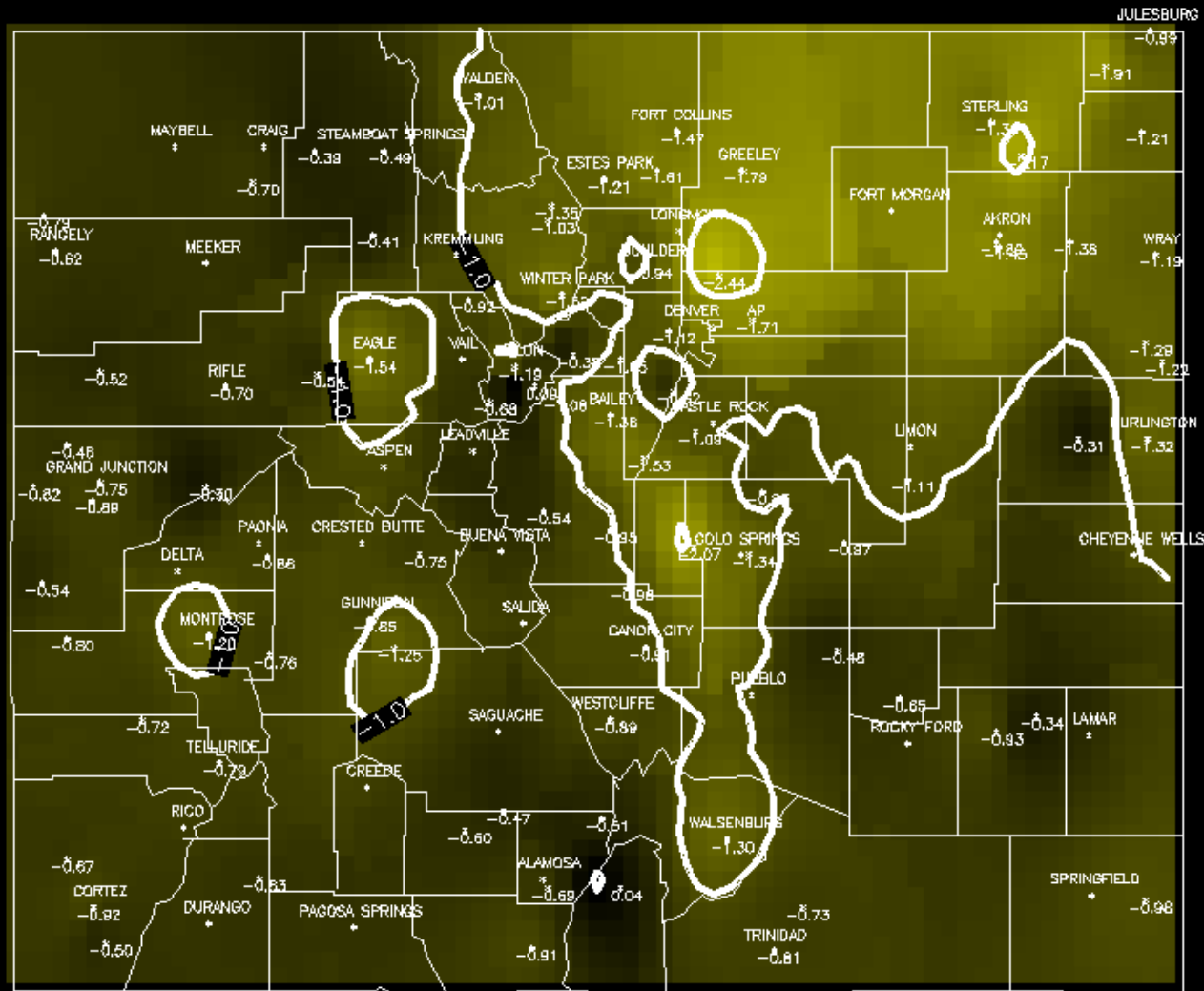


Projected Conditions at 0.5 Probability Level

12 Month SPI at 6 months

Colorado

6/2006 12 mon. SPI – Projected 6 mon. at P=0.50



100 % < 2.0	31 % < -1.0
100 % < 1.0	1 % < -2.0
100 % < 0.0	0 % < -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO



Projected Conditions at 0.8 Probability Level

12 Month SPI at 6 months

Colorado

6/2006 12 mon. SPI – Projected 6 mon. at P=0.80



100% > 2.0
100% > 1.0
61% > 0.0

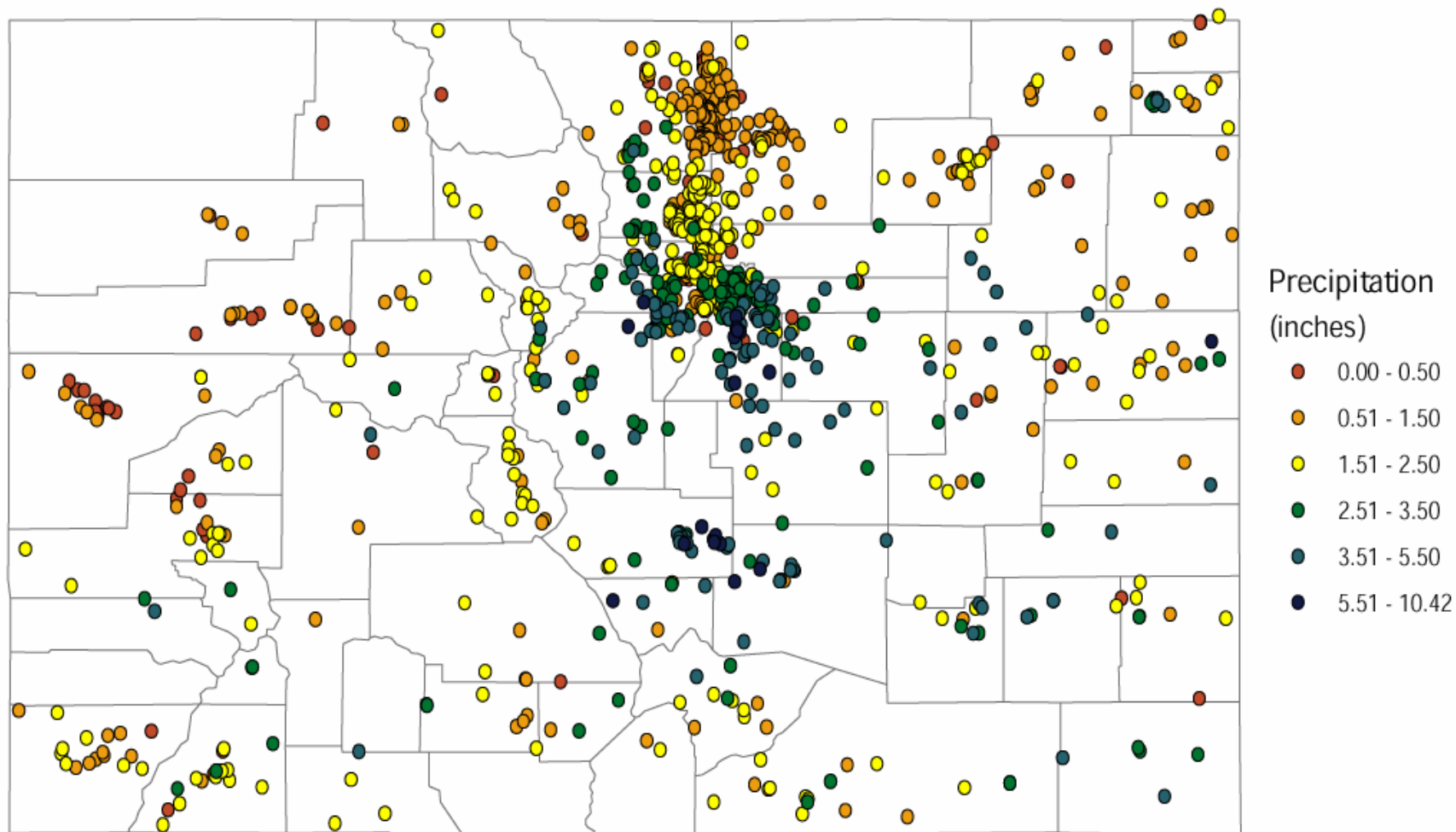
4 > -1.0
0 > -2.0
0 > -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO



CoCoRaHS All Stations

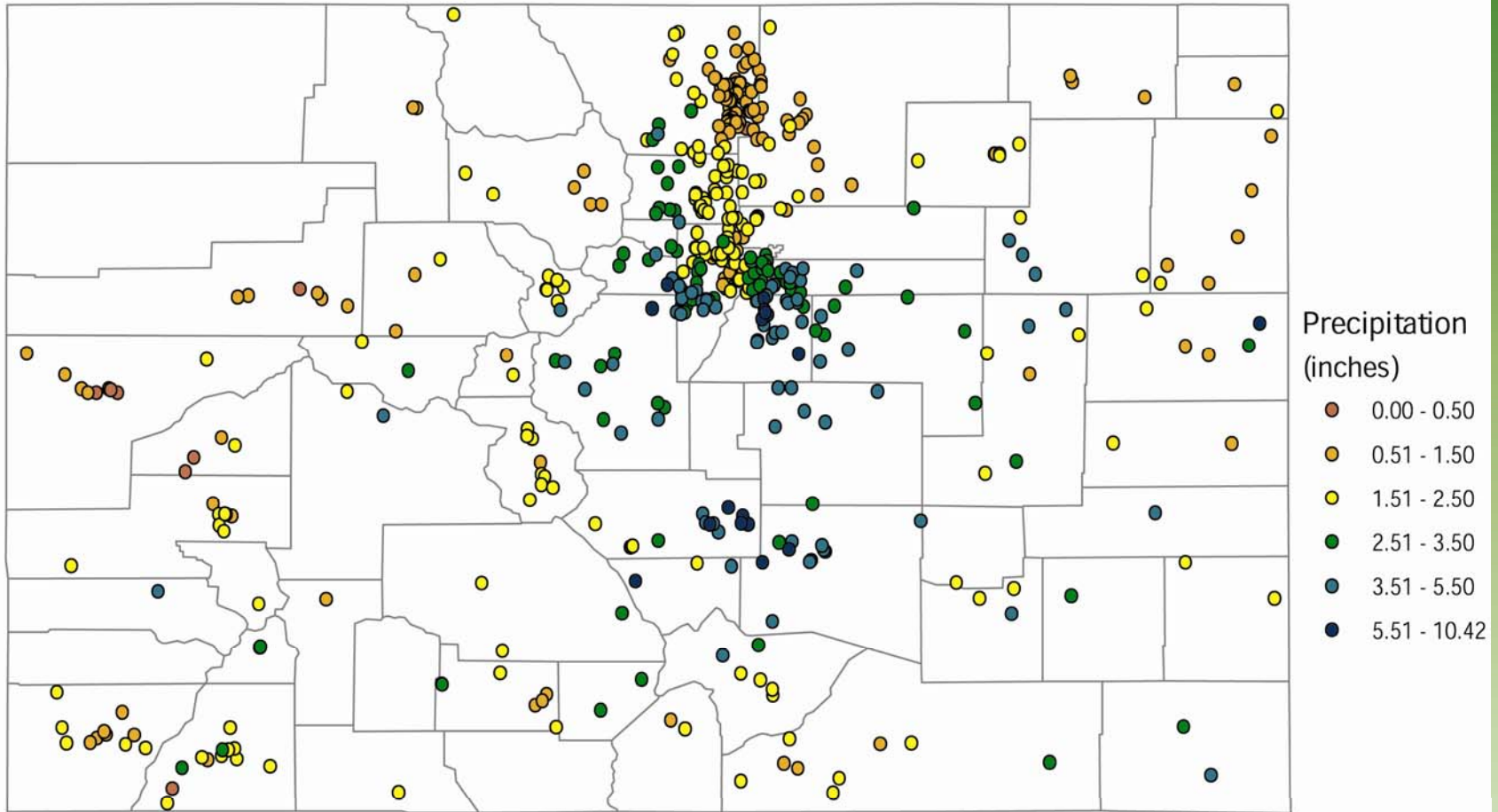
Colorado



CoCoRaHS Observations for 01 July 2006 - 19 July 2006

CoCo RaHS .GE. 15 observations

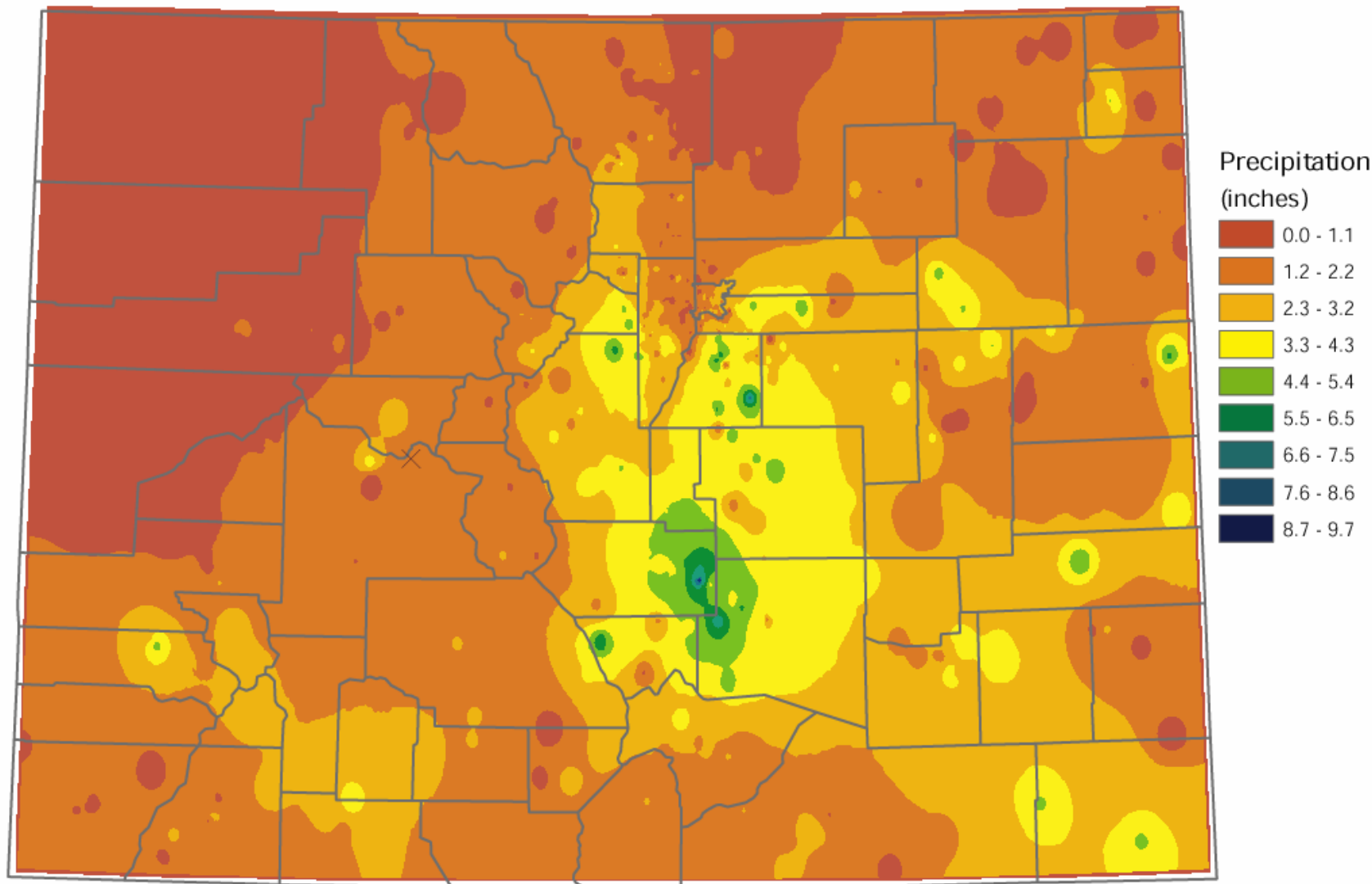
Colorado



CoCoRaHS Observations for 01 July 2006 - 19 July 2006
(greater than 15 observations)

CoCoRaHS Contour Analysis

Colorado



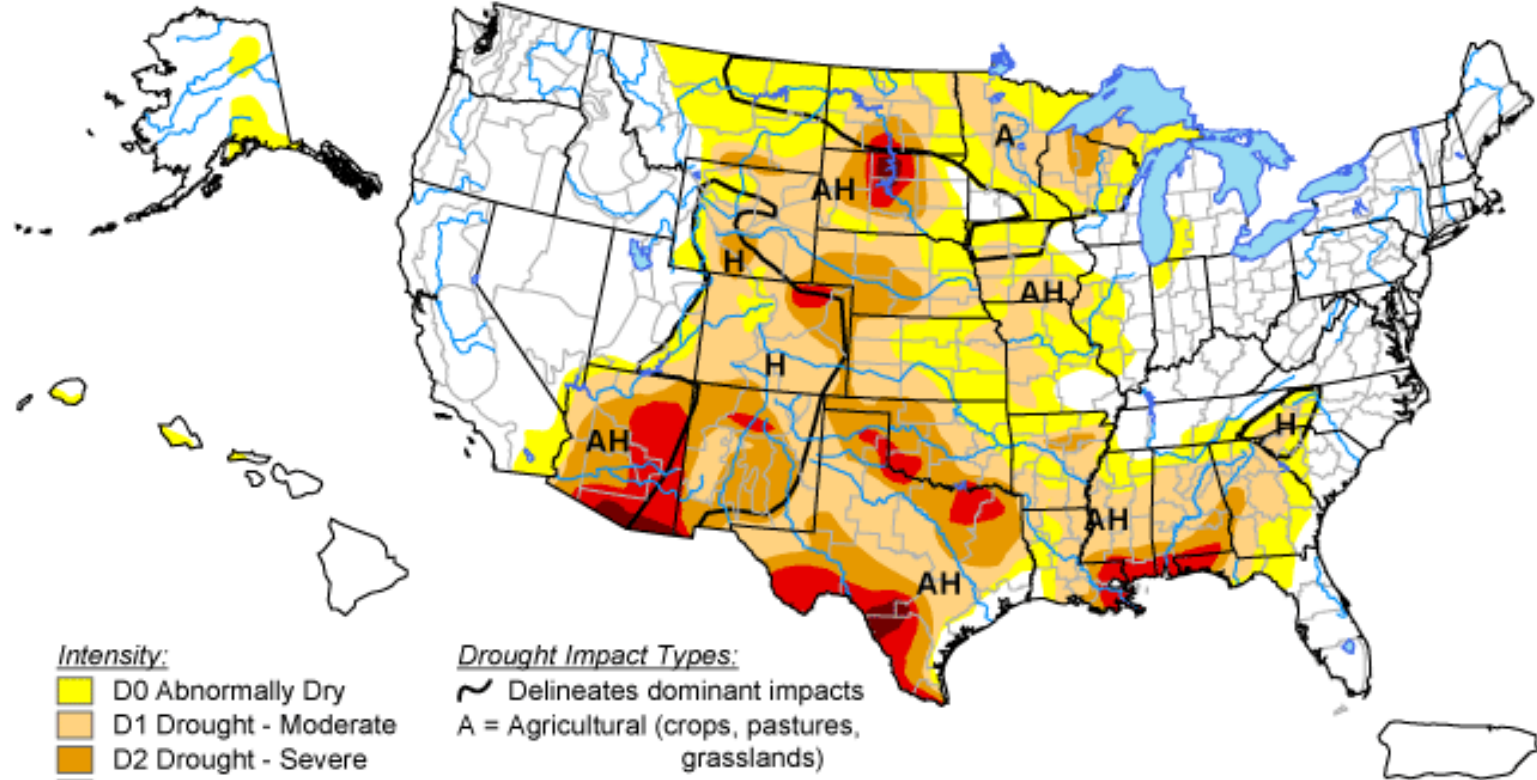
CoCoRaHS Observations for 01 July 2006 - 19 July 2006

Drought Monitor Map






U.S. Drought Monitor

July 11, 2006


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, July 13, 2006

Author: Doug Le Comte and Tom Heddinghaus, CPC/NOAA

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

Colorado Climate Center

Colorado State University

Data and Power Point Presentations available for downloading

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

- click on “Drought”
- then click on “Presentations”

