

Climate Update

May 2006 Meeting

Nolan Doesken
Colorado Climate Center

presented at the Joint Meeting of the Flood Task
Force & Water Availability Task Force, DOW, Denver,
CO, May 16, 2006

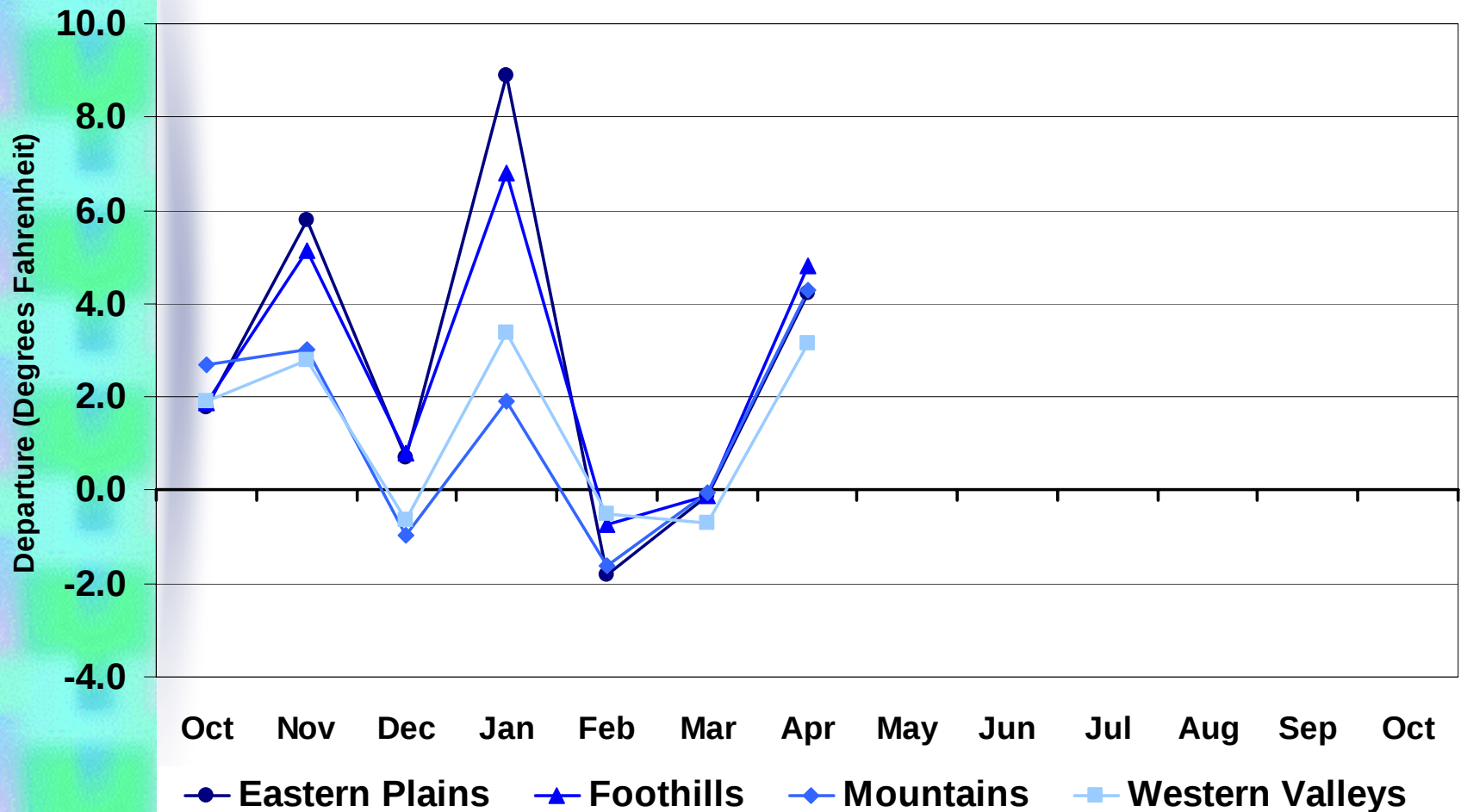
Prepared by Odie Bliss

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

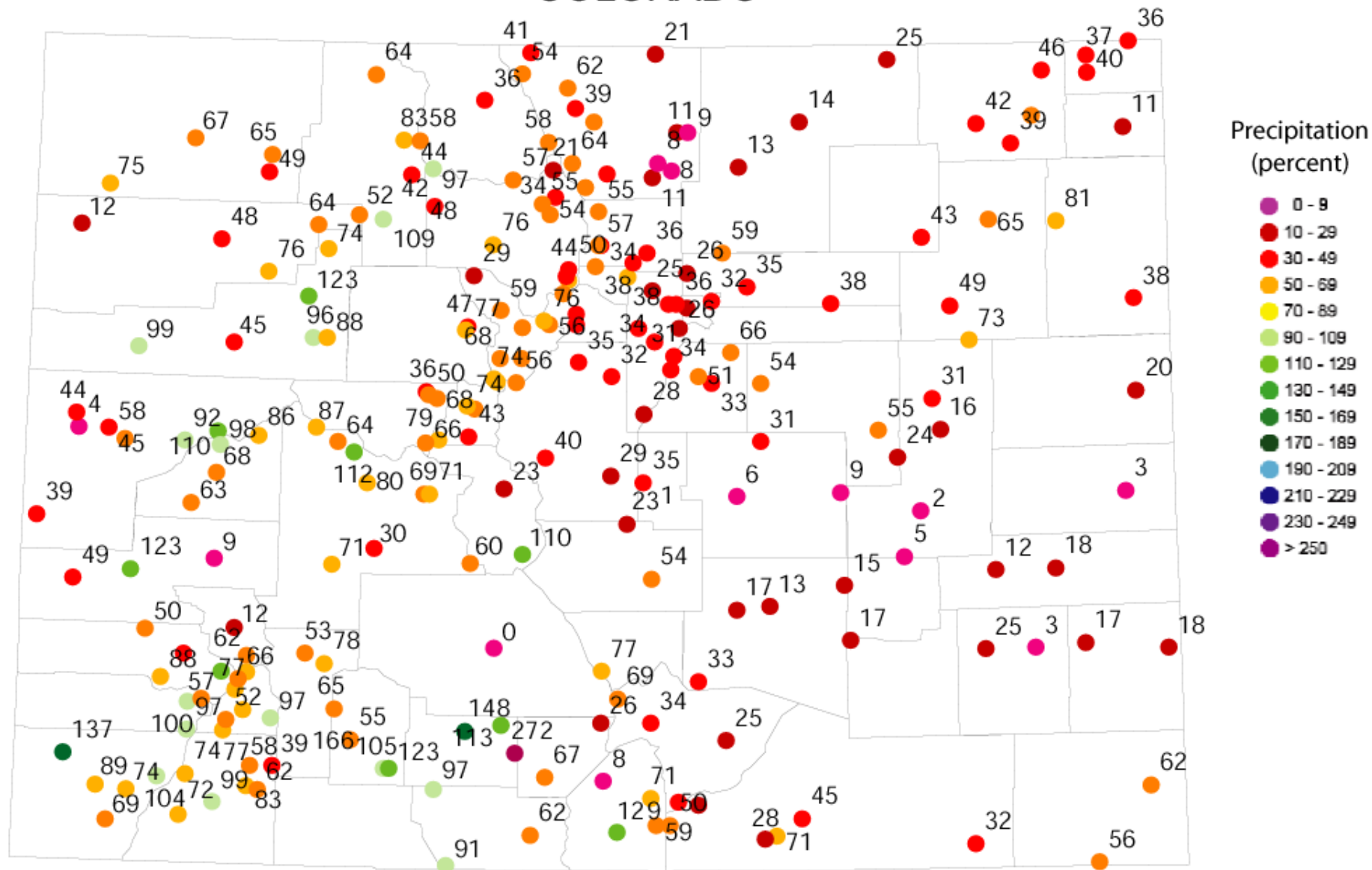


Temperature Departures

Water Year 2006



COLORADO

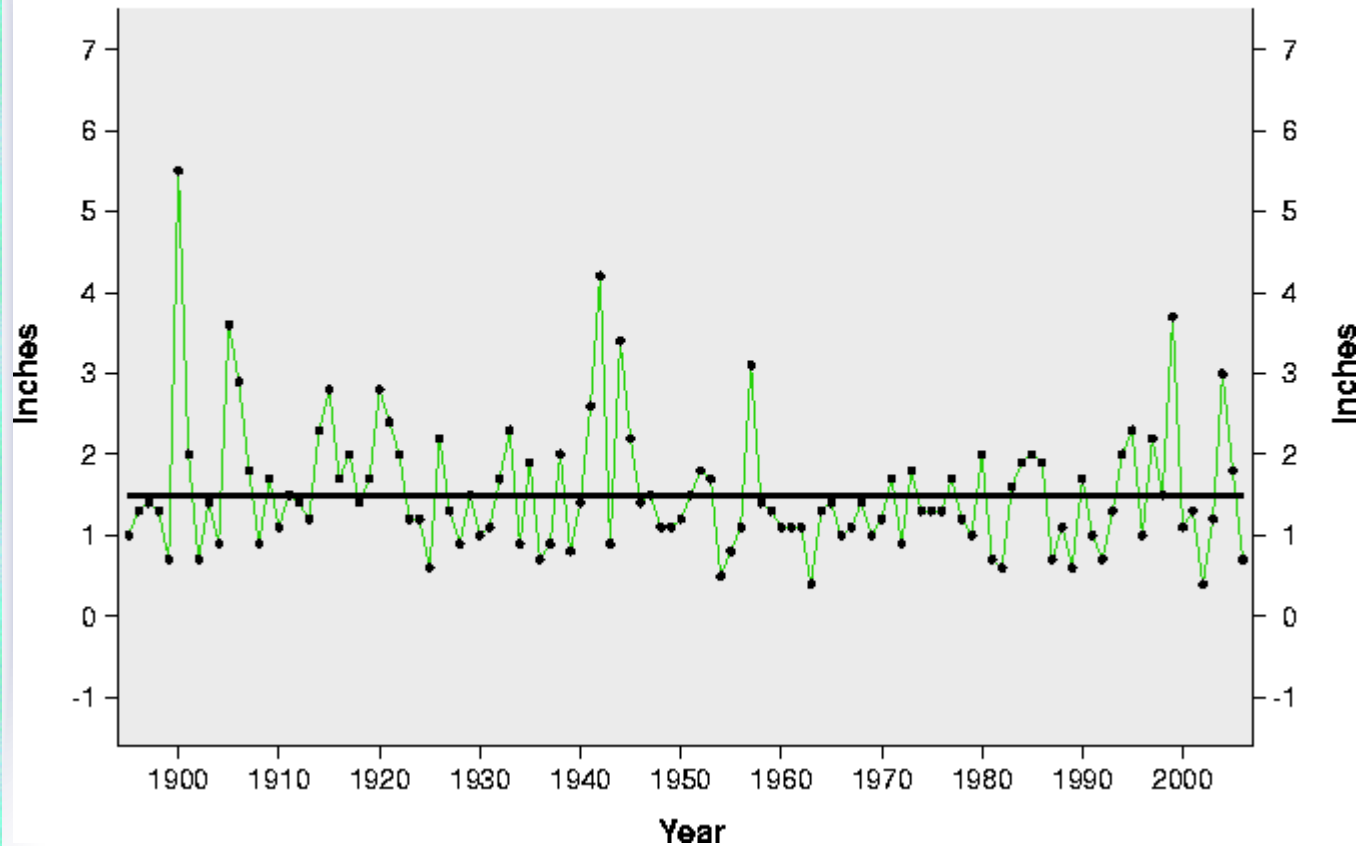


April 2006 precipitation as a percent of the 1971-2000 average.

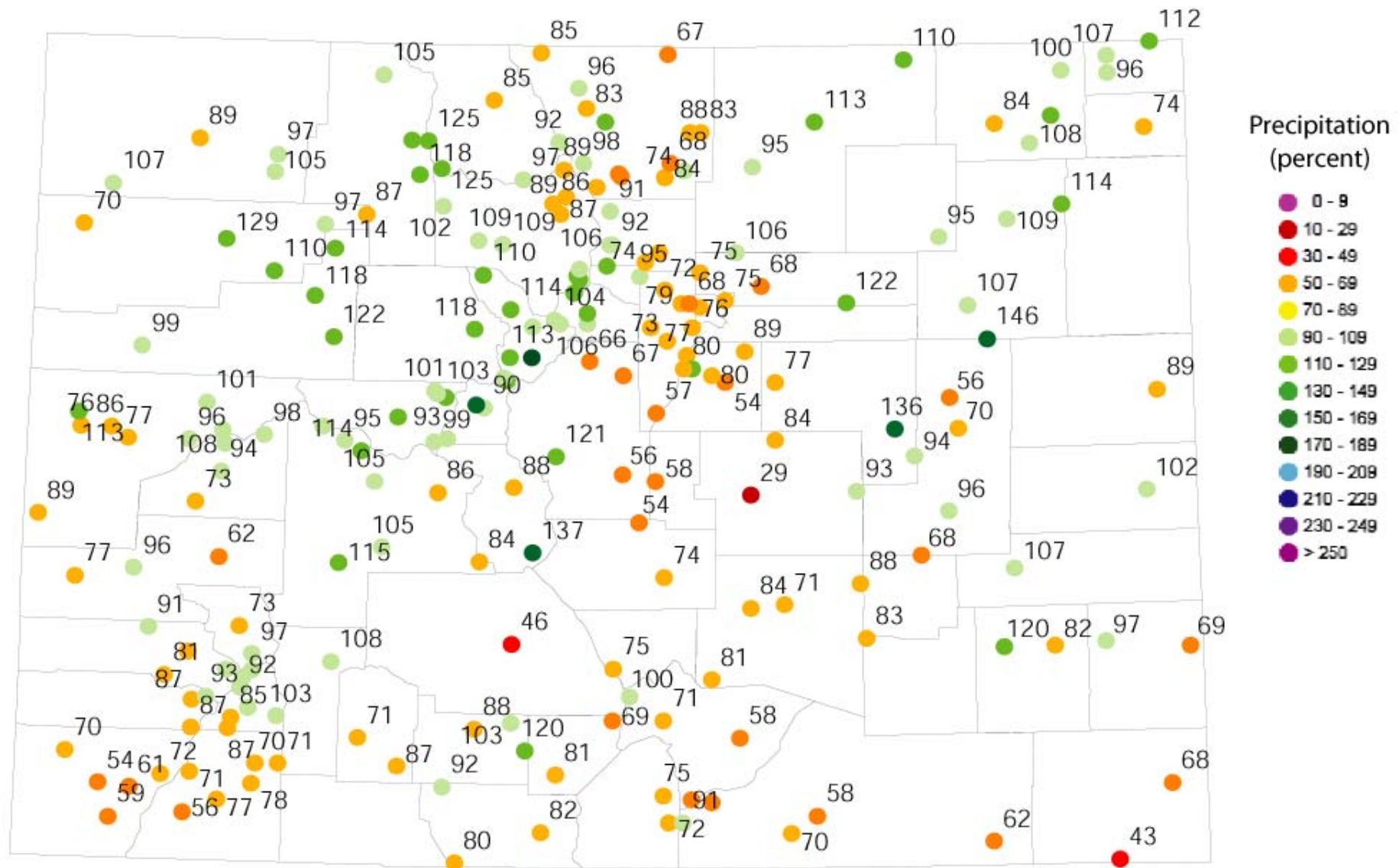
Colorado Total Precipitation

— Actual Precipitation
— Average Precipitation

April 2006 Rank 11th Driest

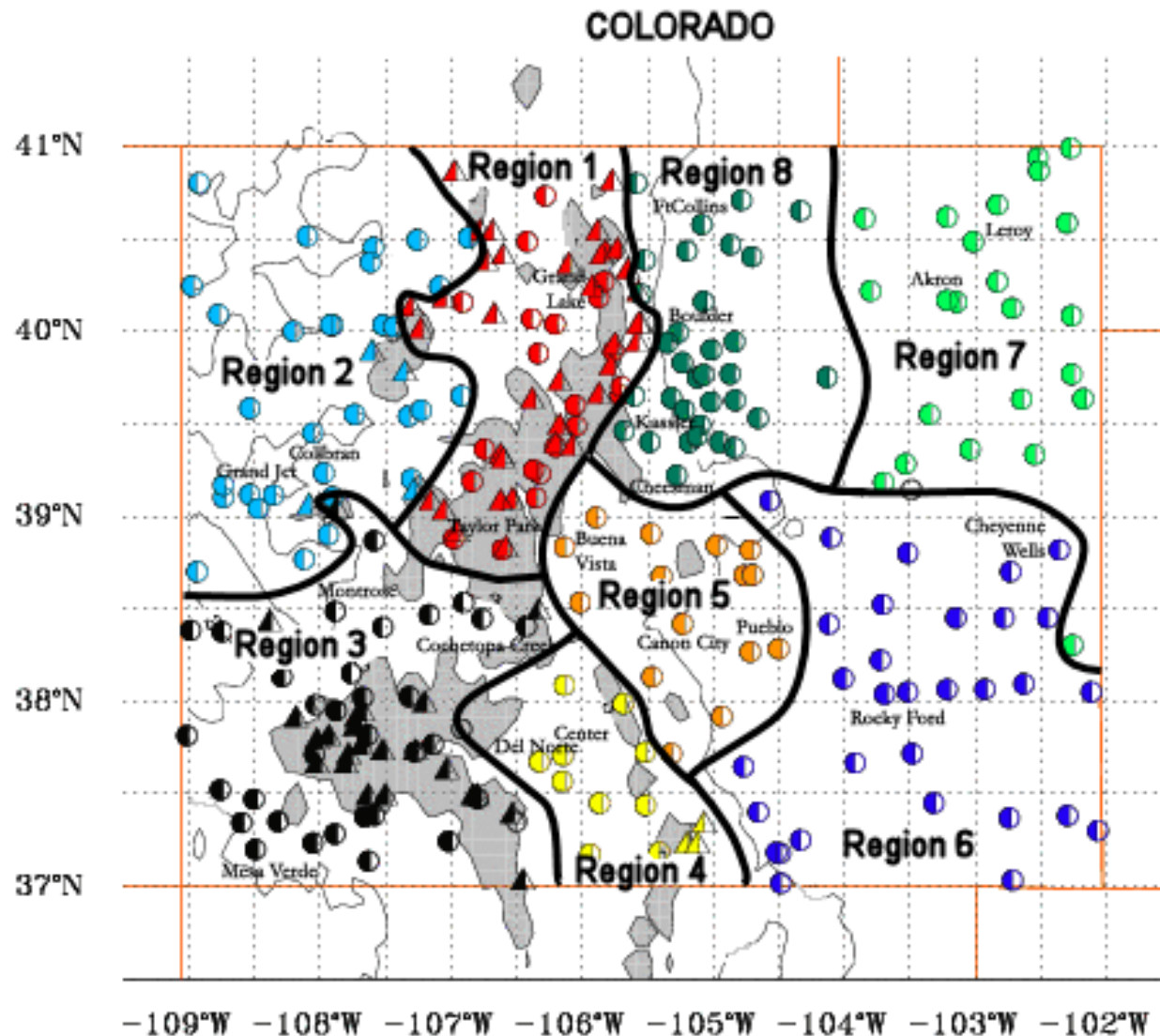


COLORADO



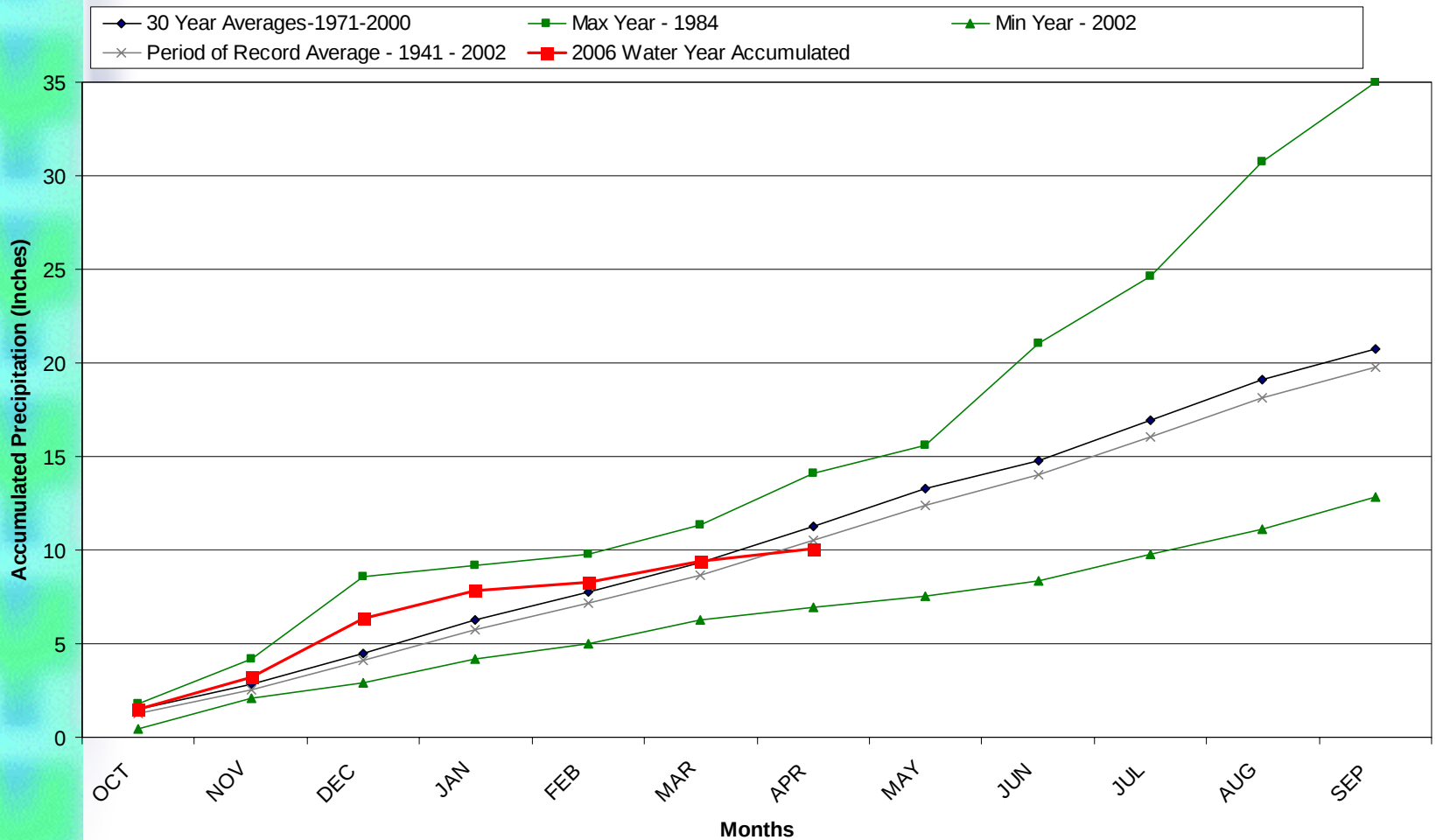
Water Year 2006 (October 2005 through April 2006) precipitation as a percent of the 1971-2000 average.

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



Division 1– Grand Lake 1NW

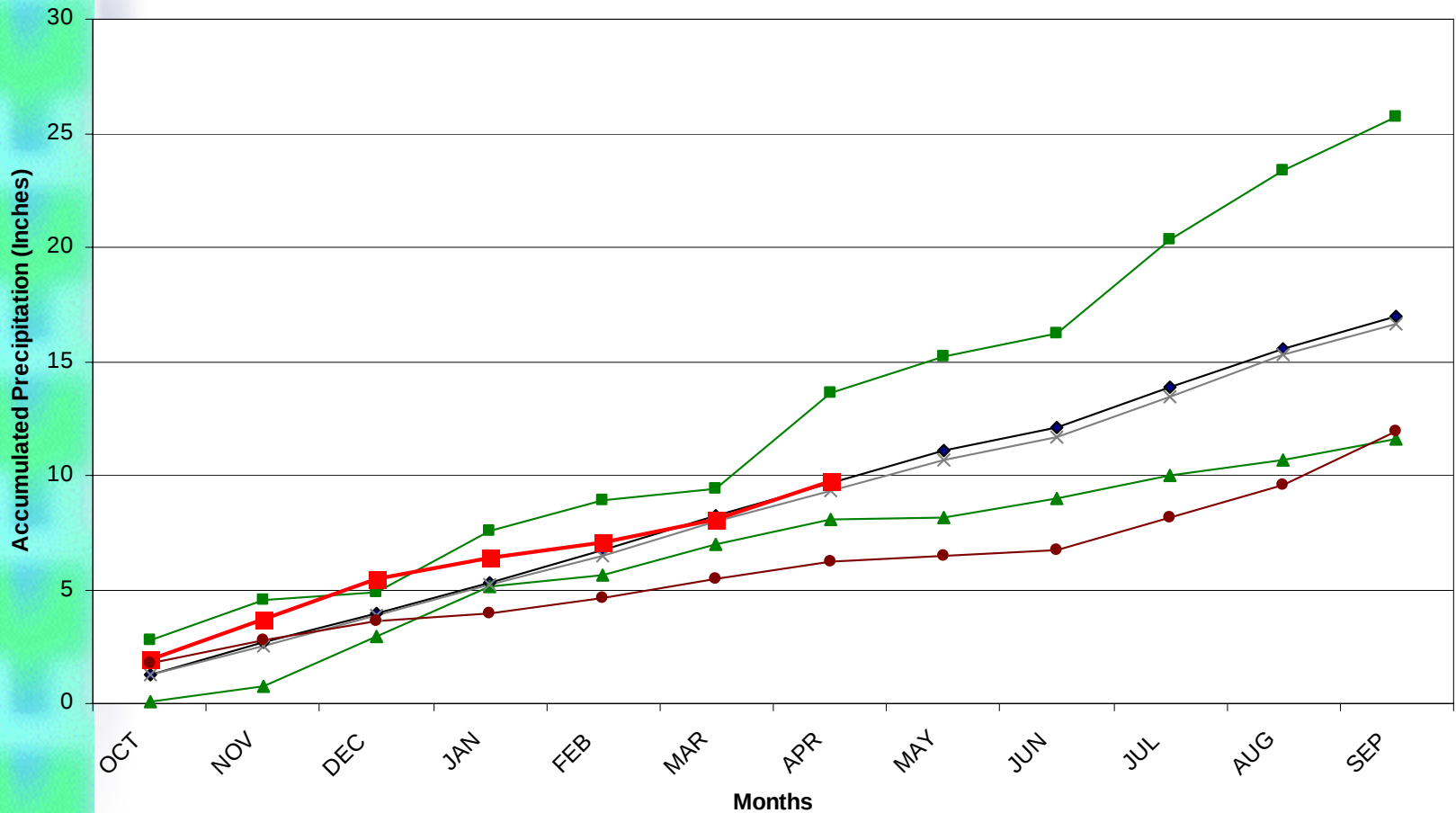
Grand Lake 1 NW 2006 Water Year



Division 1 – Taylor Park

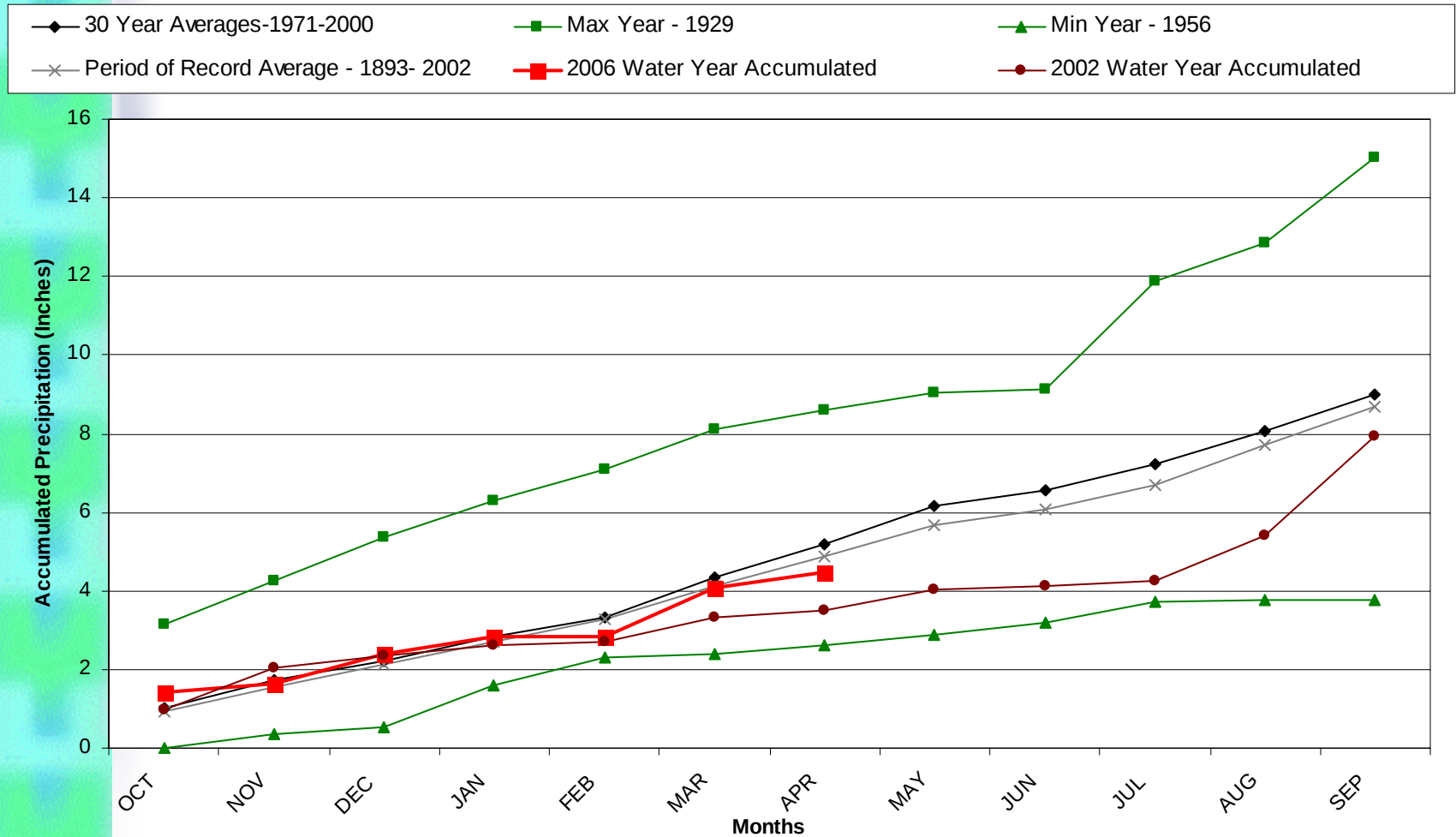
Taylor Park 2006 Water Year

◆ 30 Year Averages-1971-2000 ■ Max Year - 1999 ▲ Min Year - 1974
✕ Period of Record Average - 1942 - 2002 ■ 2006 Water Year Accumulated ● 2002 Water Year Accumulated



Division 2 – Grand Junction

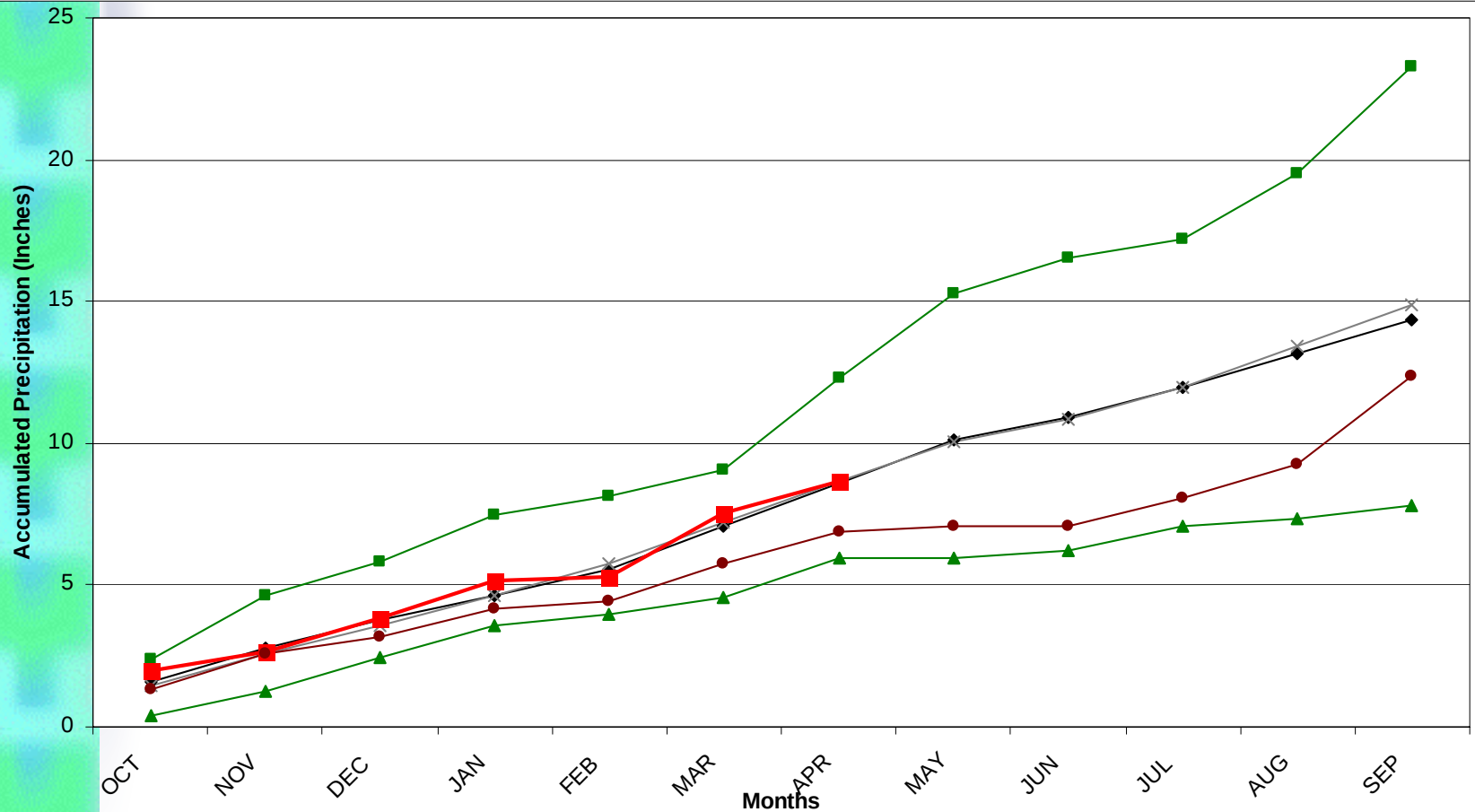
Grand Junction WSFO 2006 Water Year



Division 2 – Collbran

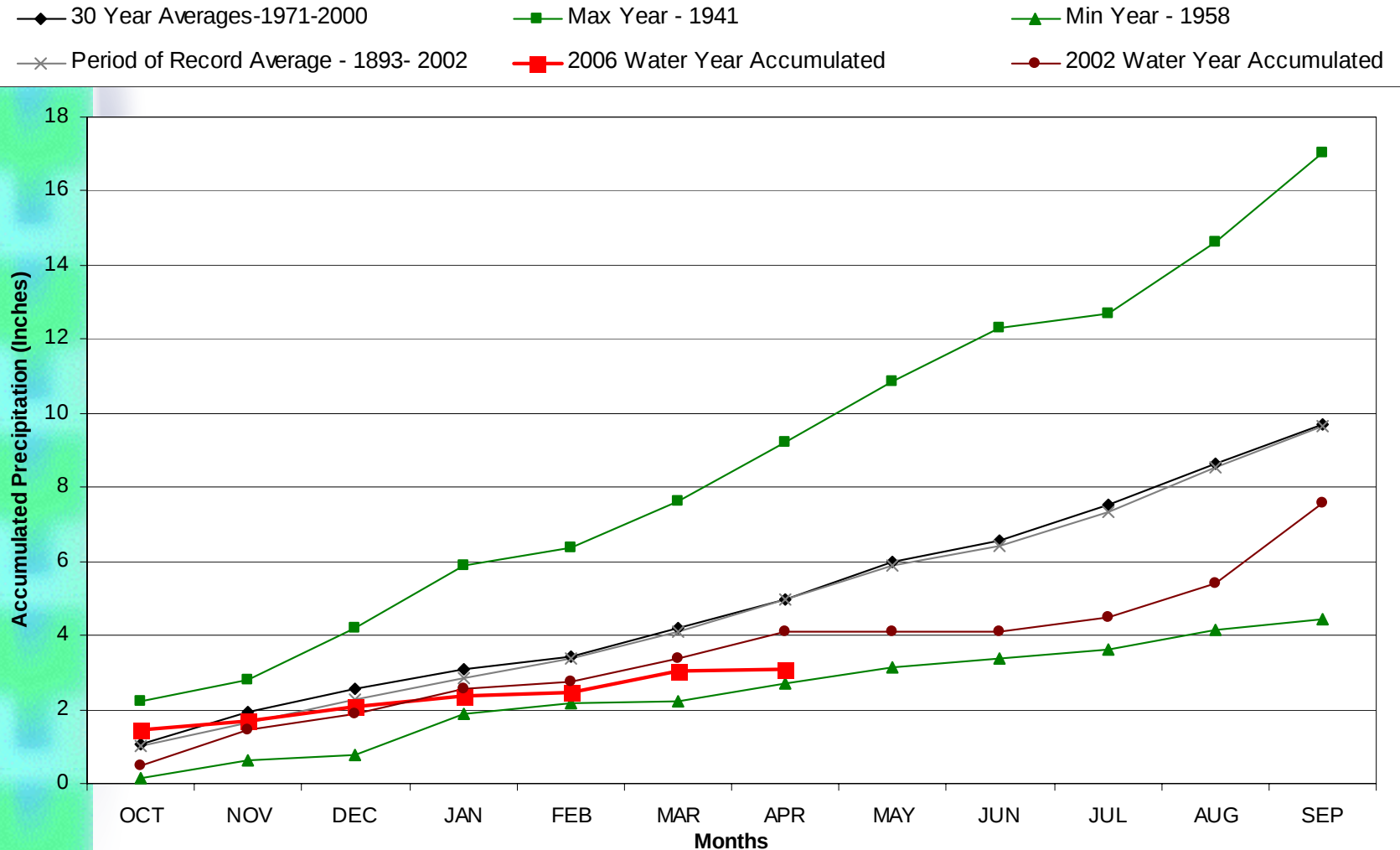
Collbran 2SW 2006 Water Year

—◆— 30 Year Averages-1971-2000 —■— Max Year - 1997 —▲— Min Year - 1974
—x— Period of Record Average - 1893 - 2002 —■— 2006 Water Year Accumulated —●— 2002 Water Year Accumulated



Division 3 – Montrose

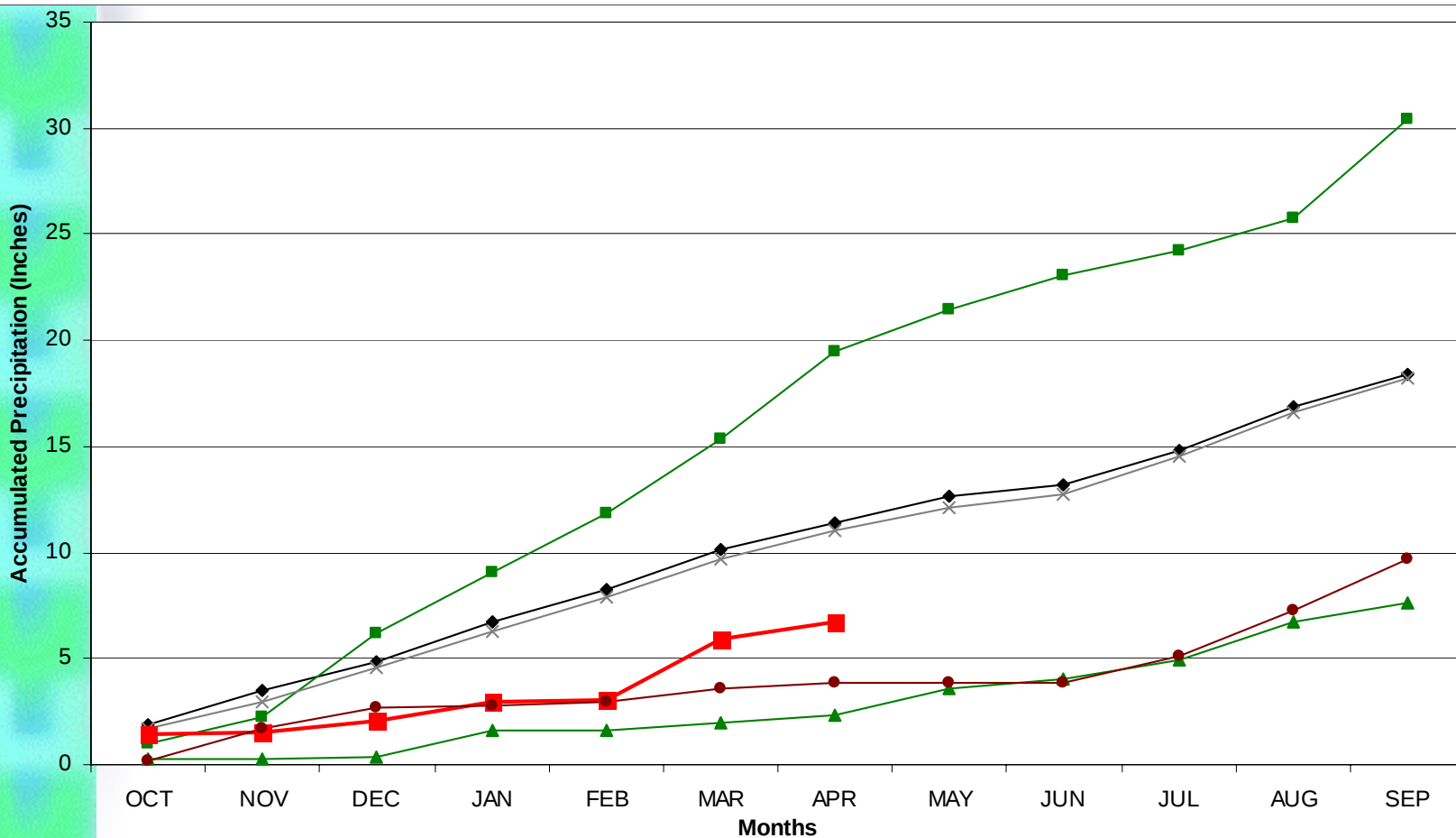
Montrose #2 2006 Water Year



Division 3 – Mesa Verde

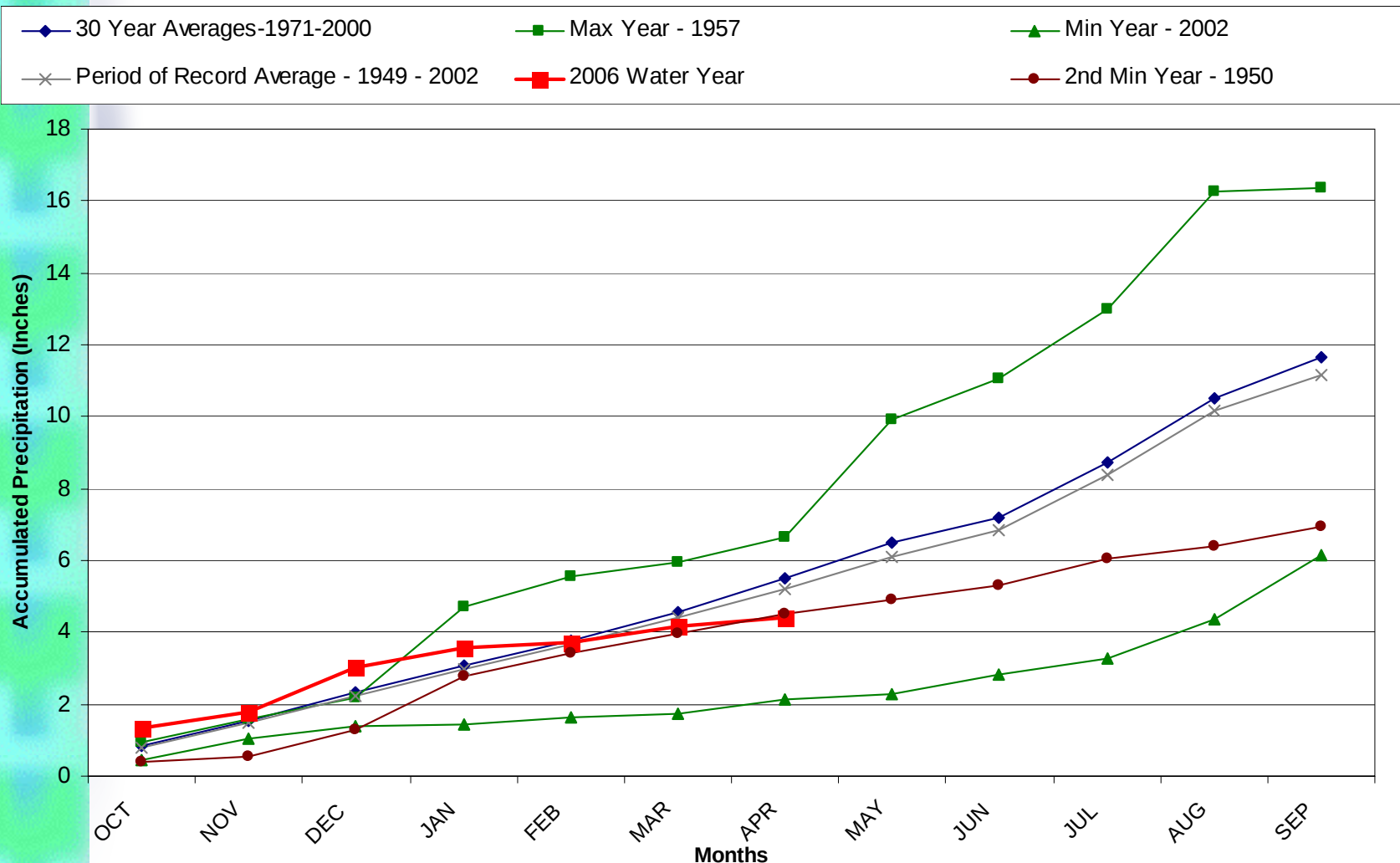
Mesa Verde NP 2006 Water Year

—◆— 30 Year Averages-1971-2000 —■— Max Year - 1941 —▲— Min Year - 1977
—x— Period of Record Average - 1893- 2002 —■— 2006 Water Year Accumulated —●— 2002 Water Year



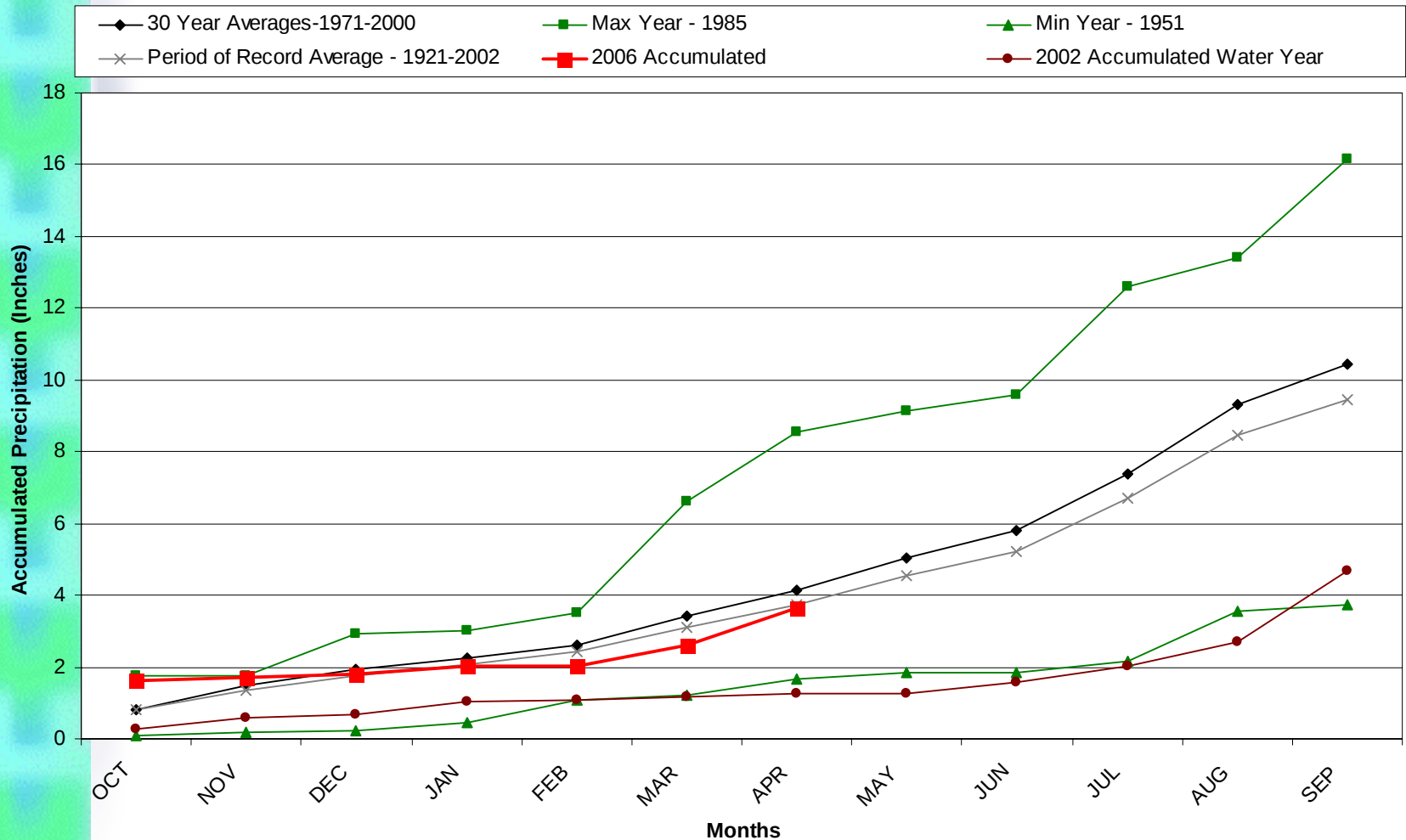
Division 3 – Cochetopa Creek

Cochetopa Creek 2006 Water Year



Division 4 – Del Norte

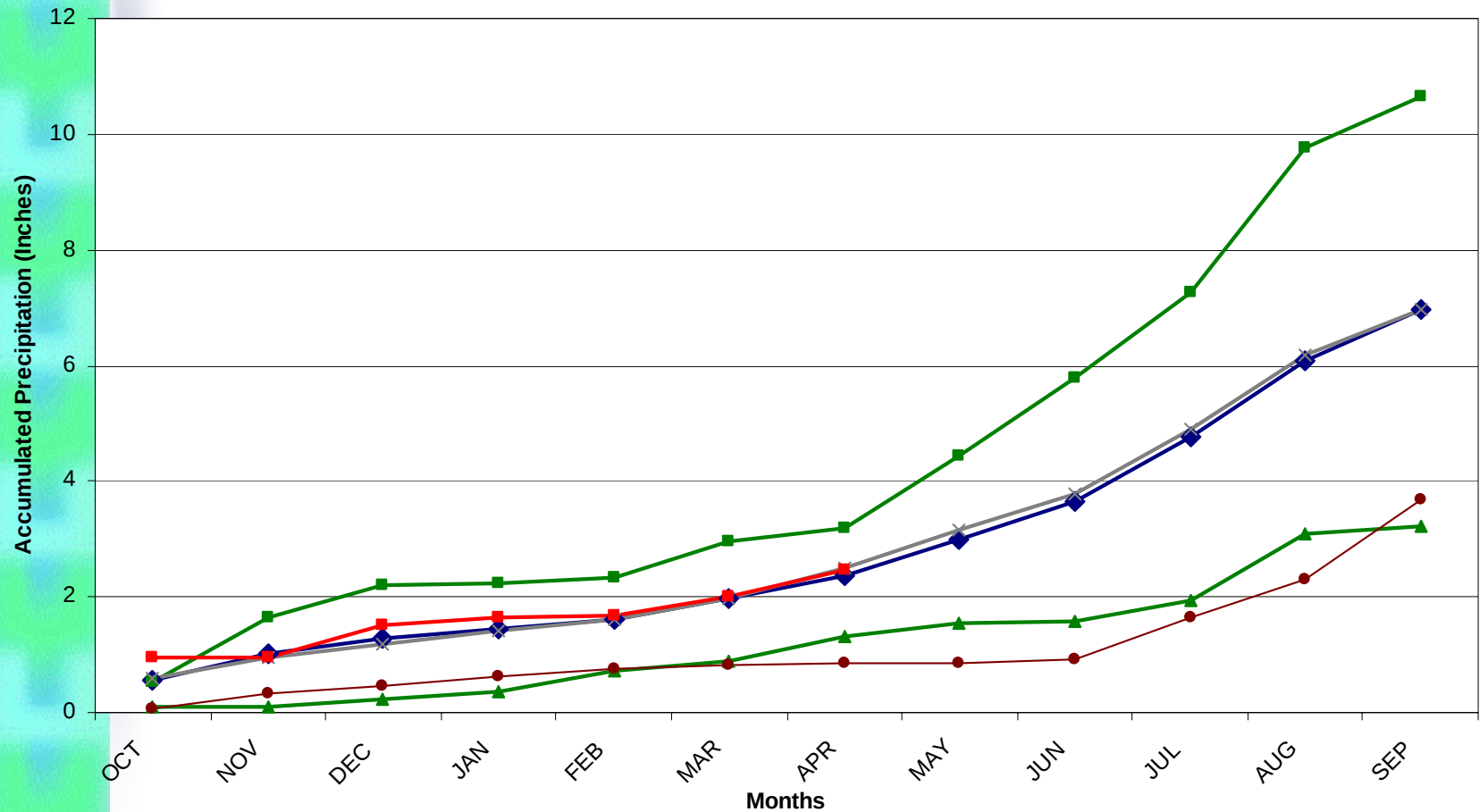
Del Norte 2006 Water Year



Division 4 – Center

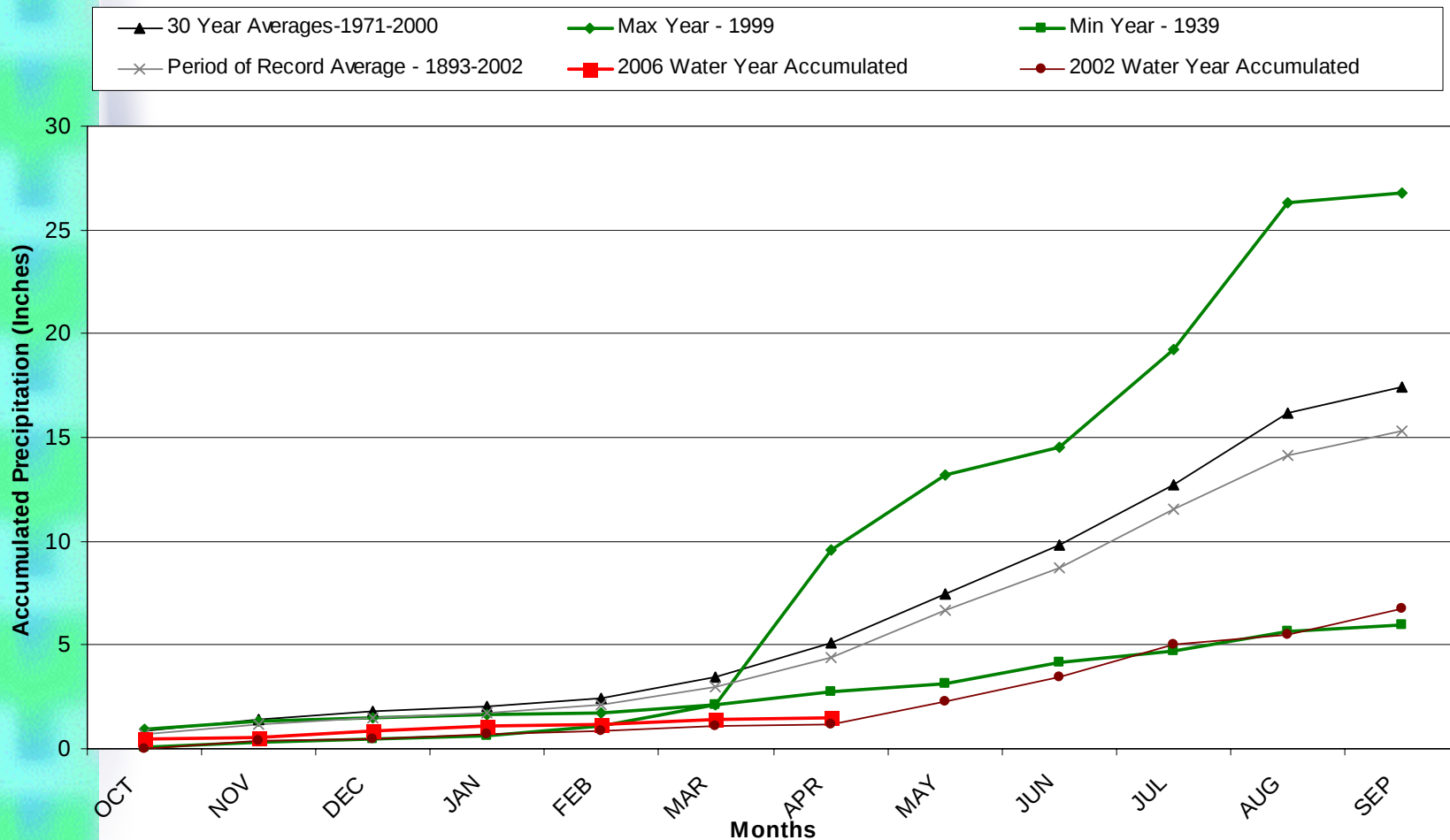
Center 4SSW 2006 Water Year

◆ 30 Year Averages-1971-2000 ■ Max Year - 1992 ▲ Min Year - 1951
× Period of Record Average - 1971 - 2002 ● 2002 Water Year ■ 2005 Water Year



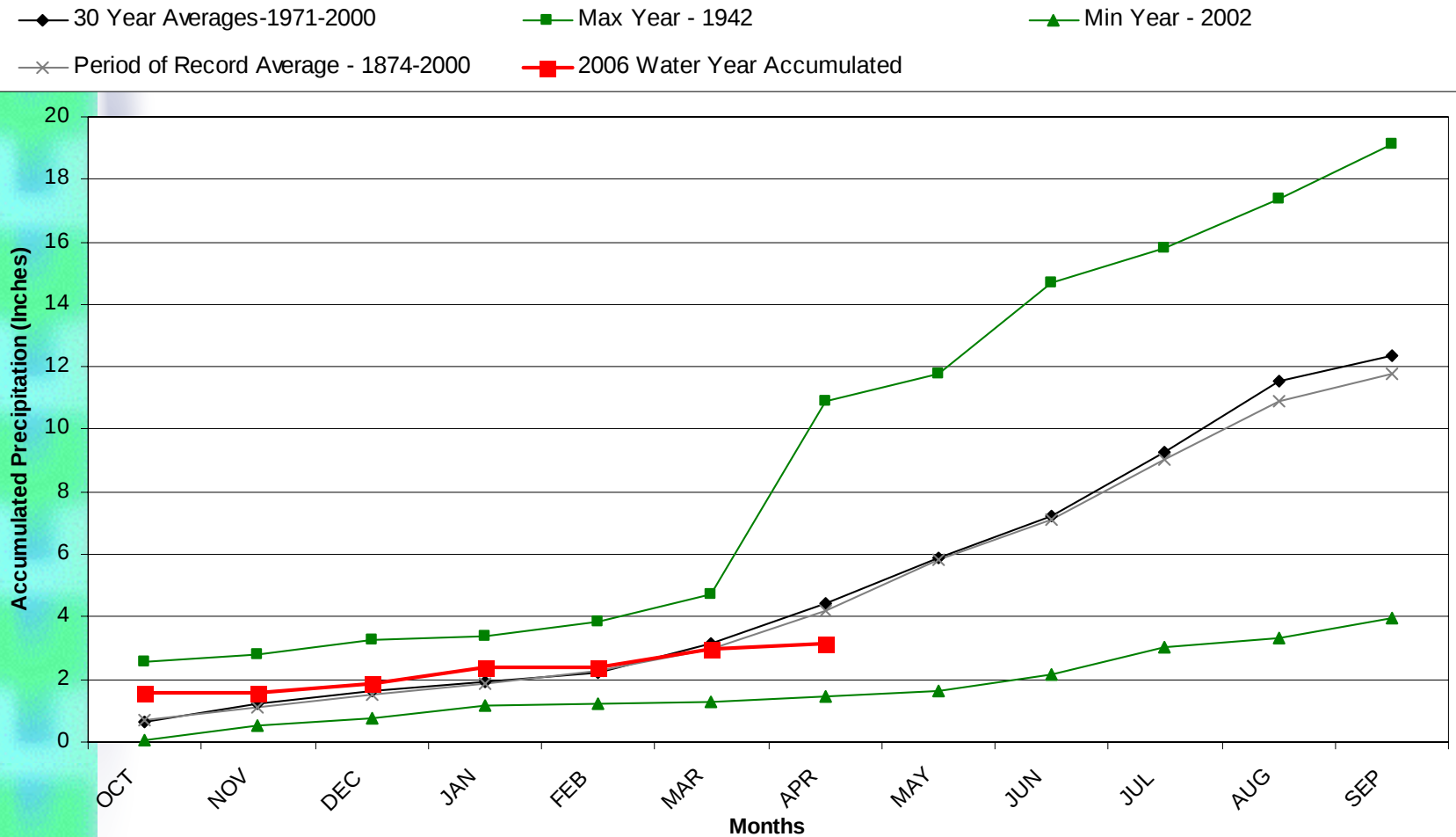
Division 5 – Colorado Springs

Colorado Springs 2006 Water Year



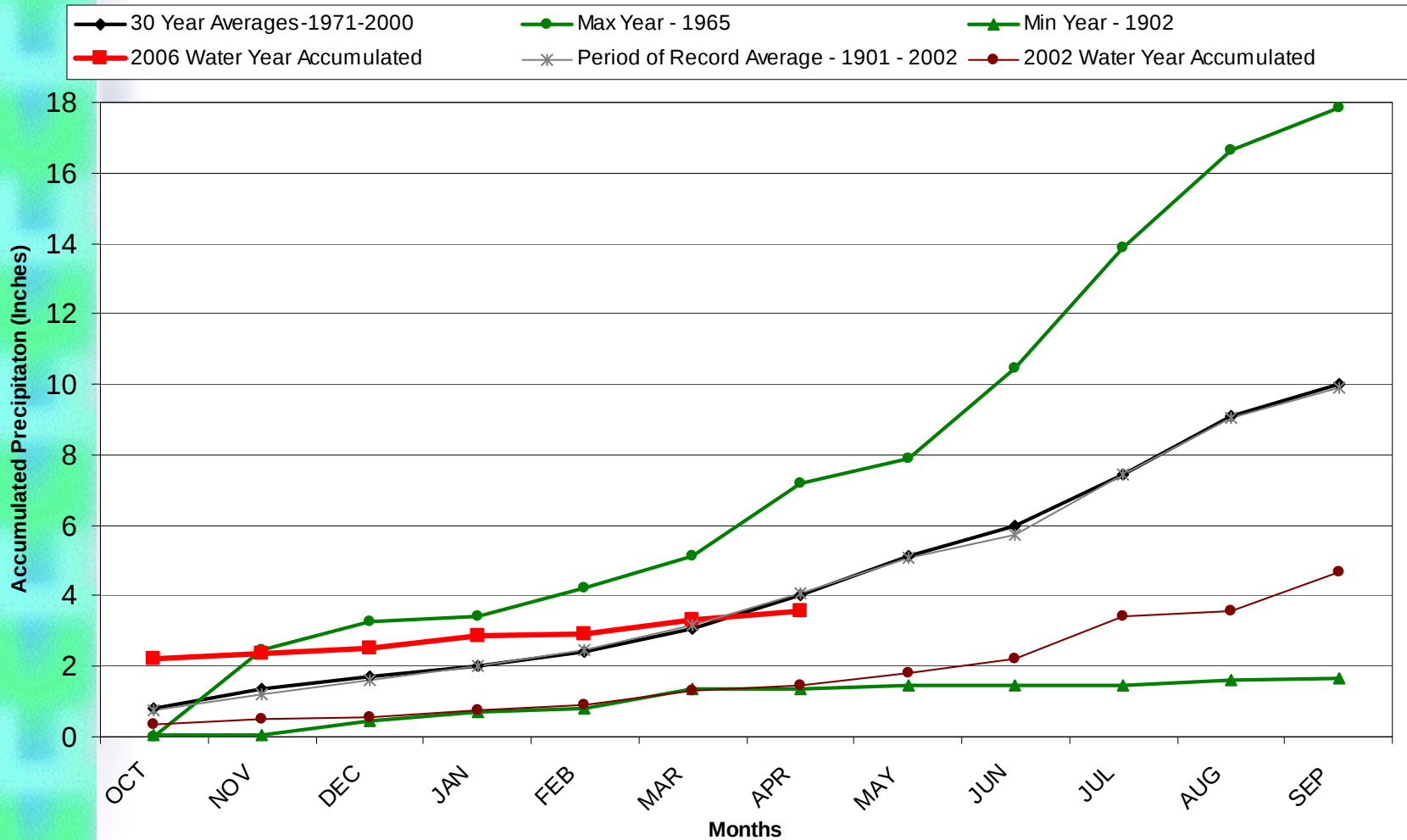
Division 5 – Pueblo

Pueblo WSO 2006 Water Year



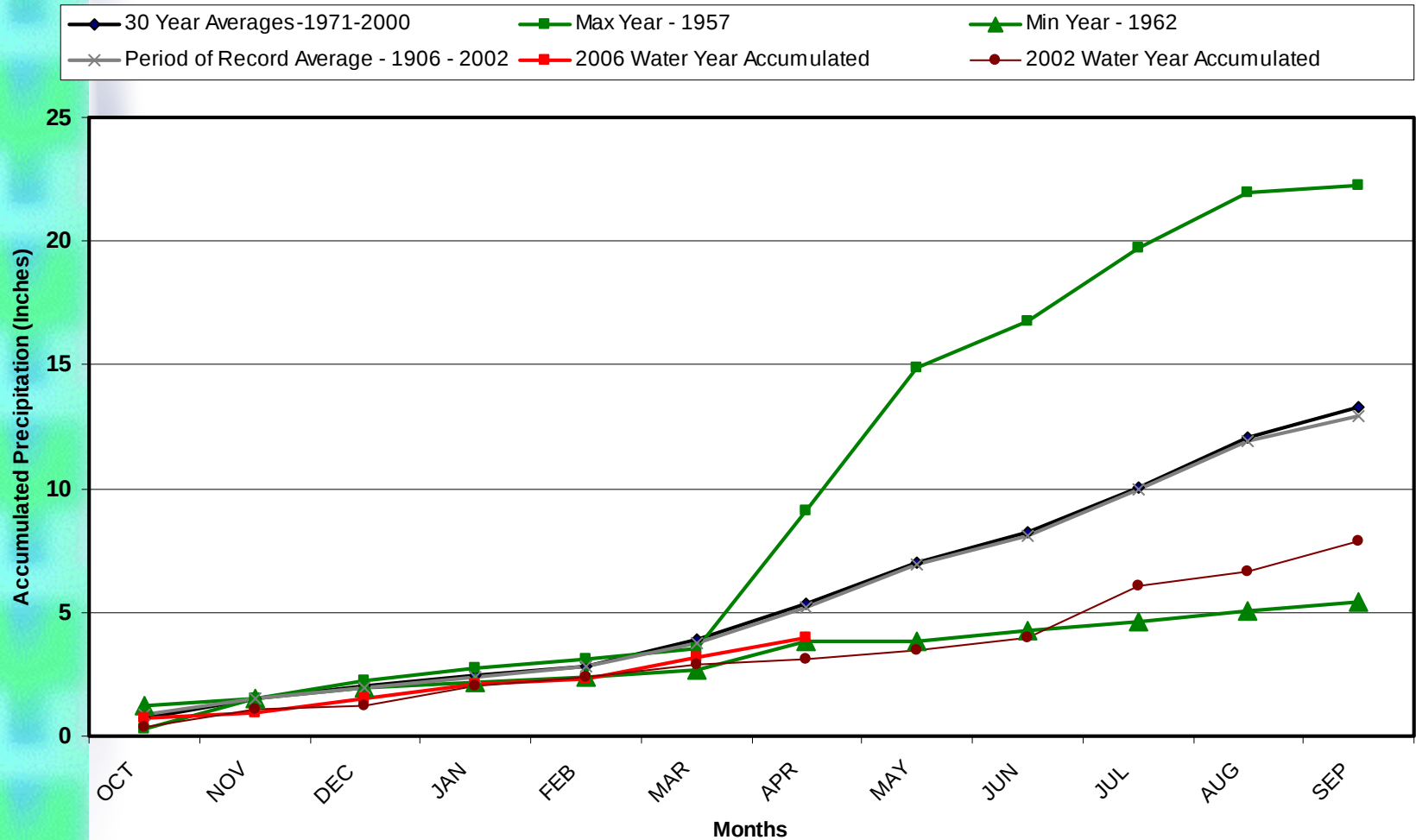
Division 5 – Buena Vista

Buena Vista 2006 Water Year



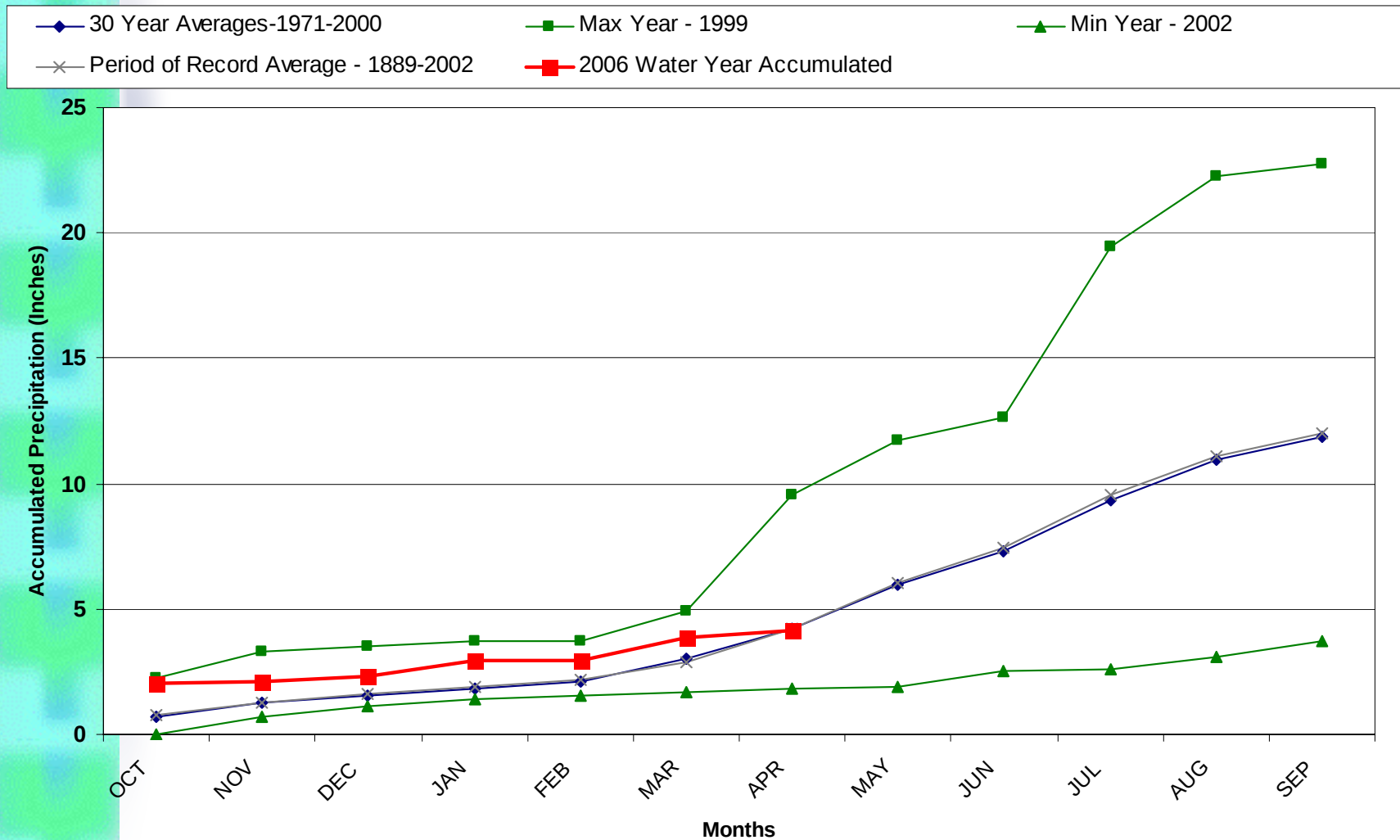
Division 5 – Canon City

Canon City 2006 Water Year



Division 6 – Rocky Ford

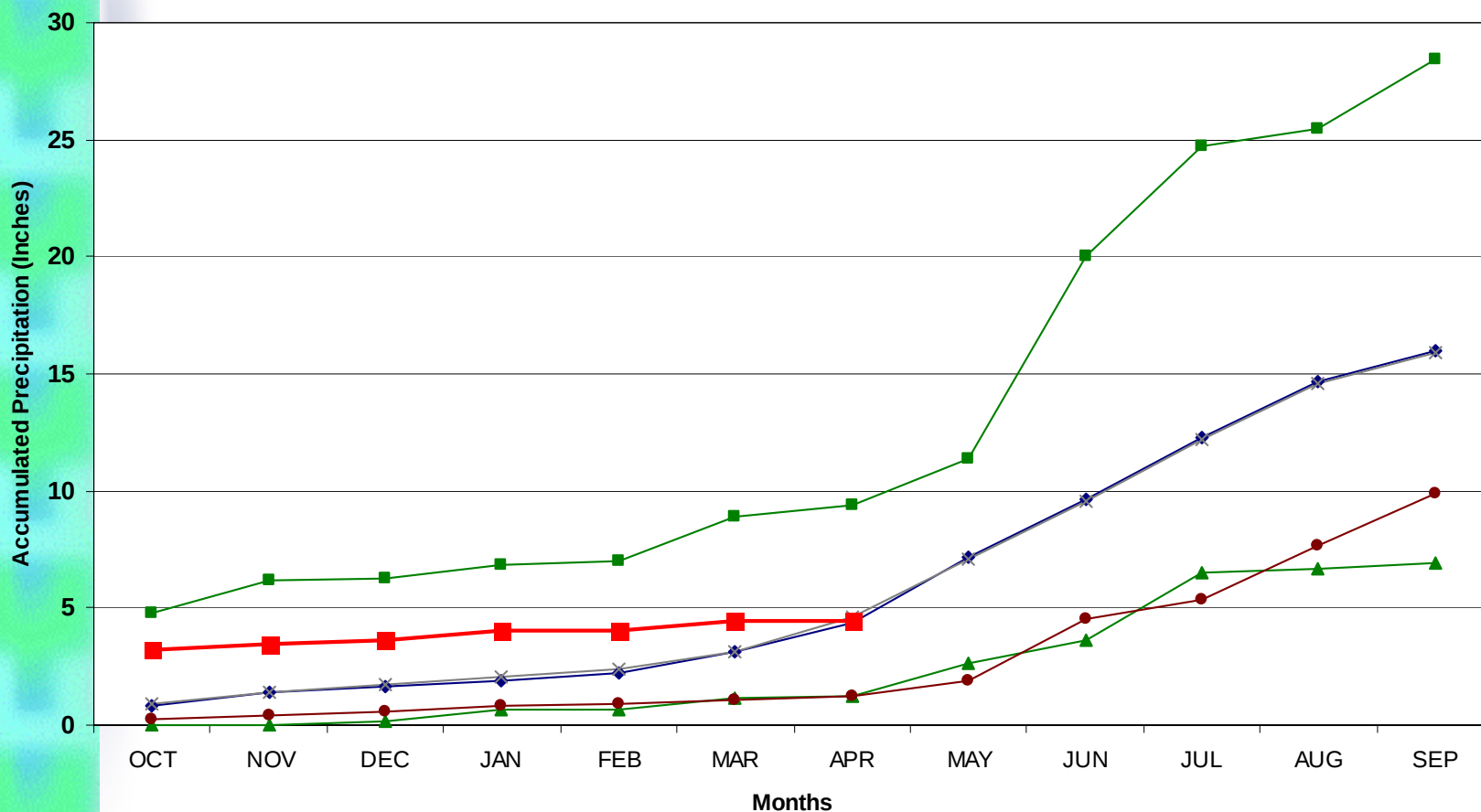
Rocky Ford 2006 Water Year



Division 6 – Cheyenne Wells

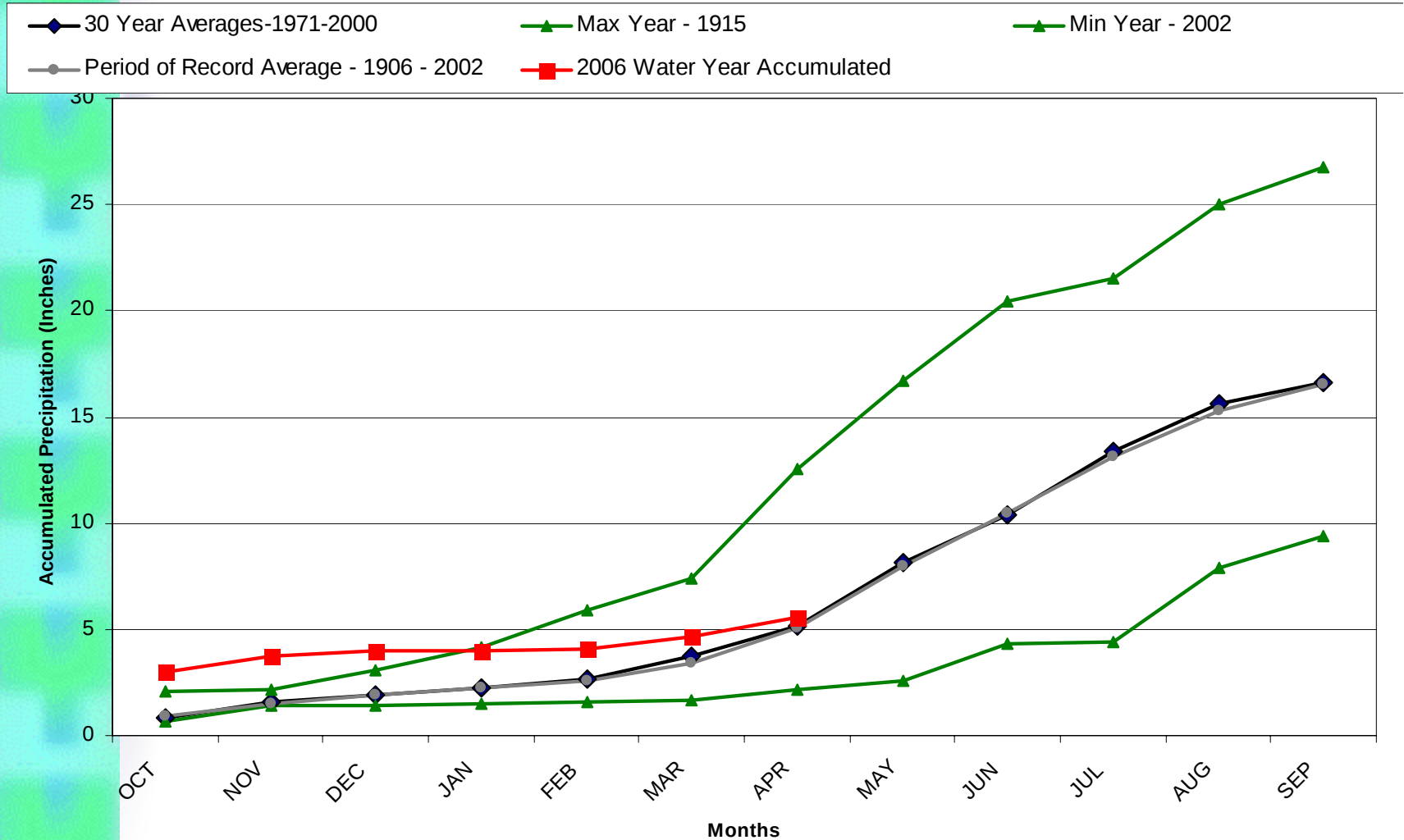
Cheyenne Wells 2006 Water Year

◆ 30 Year Averages-1971-2000 ■ Max Year - 1909 ▲ Min Year - 1956
× Period of Record Average - 1971 - 2002 ■ 2006 Water Year ● 2002 Water Year Accumulated



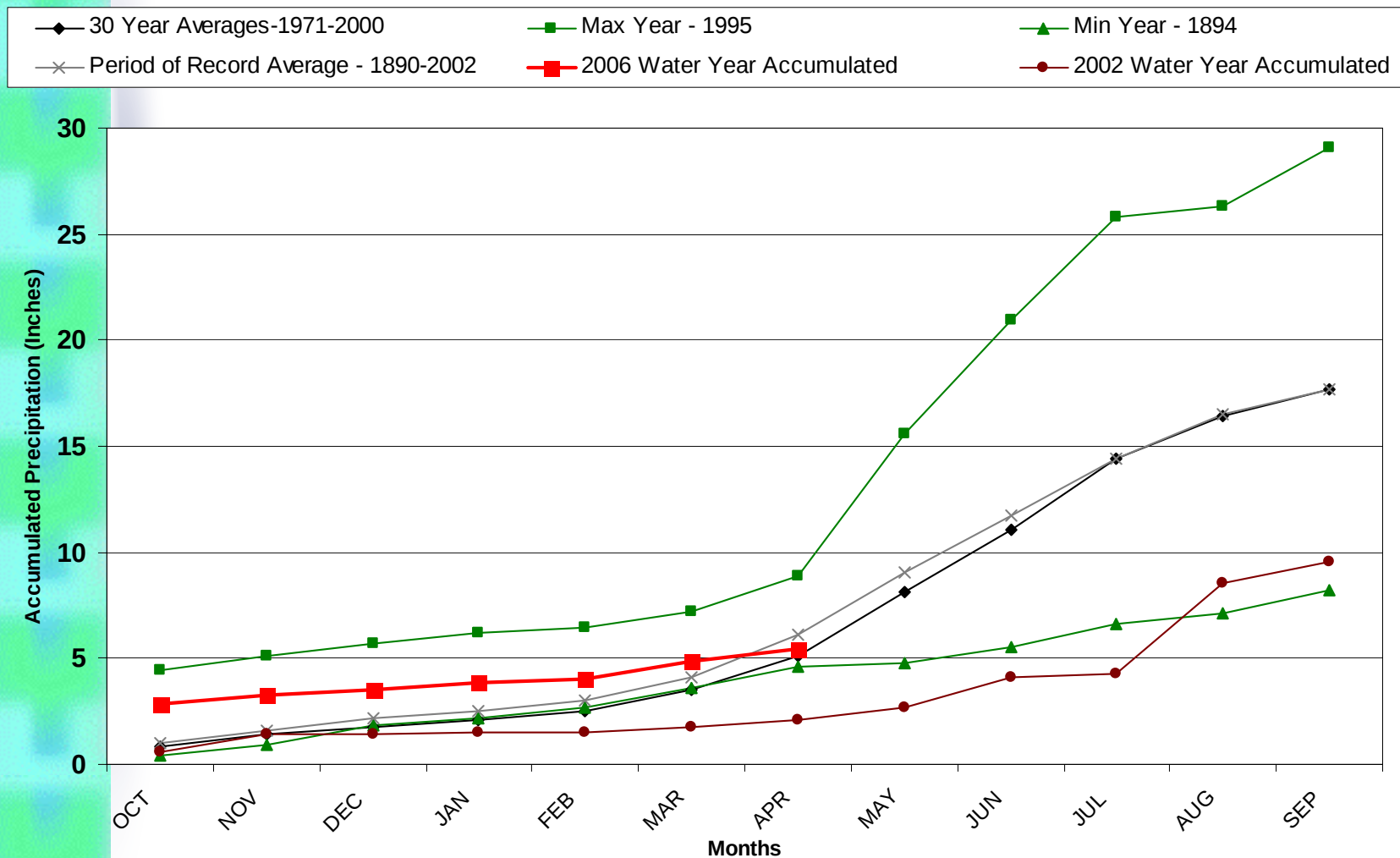
Division 7 – Akron

Akron 4E 2006 Water Year



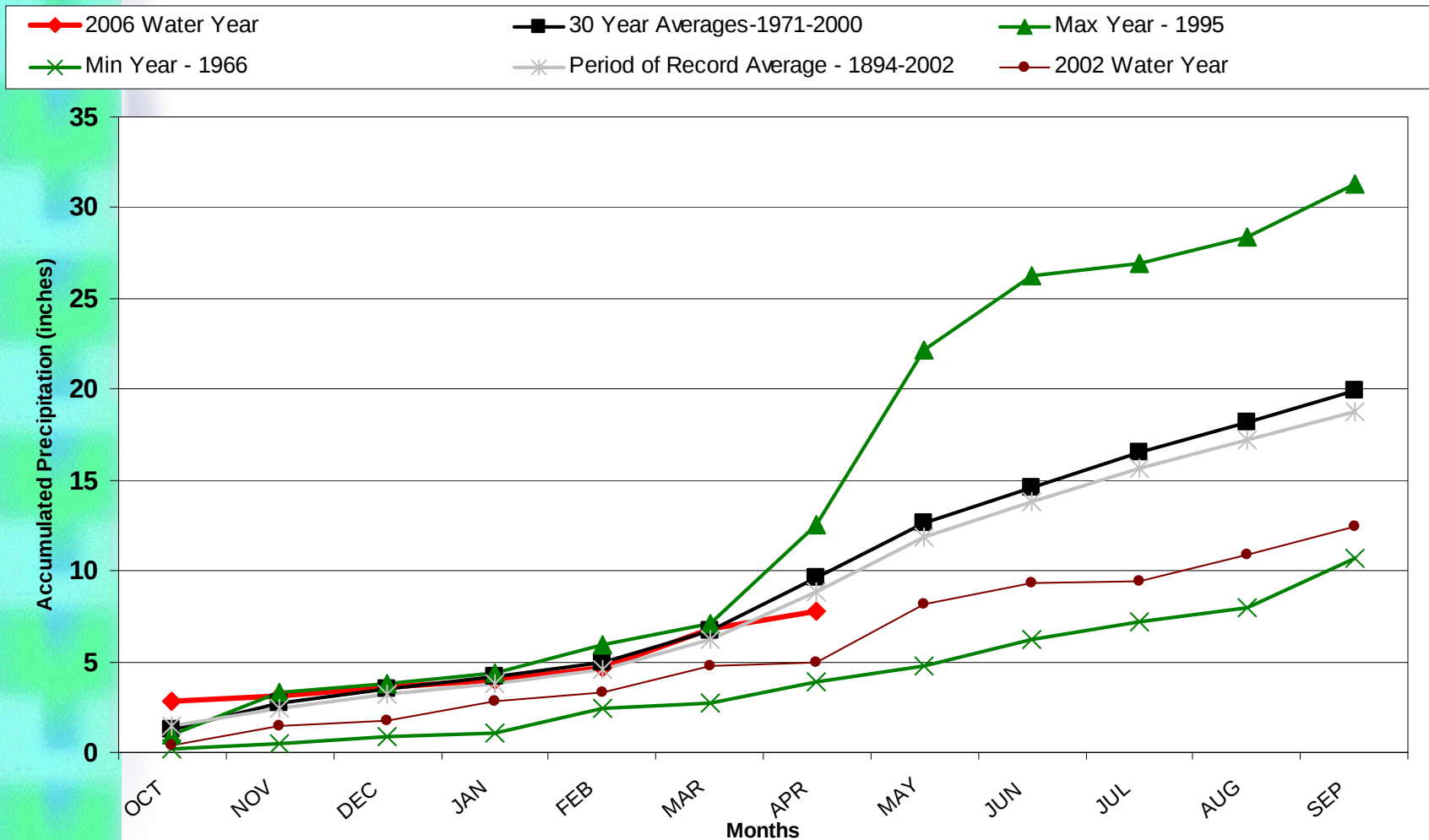
Division 7 – Leroy

Leroy 5SW 2006 Water Year



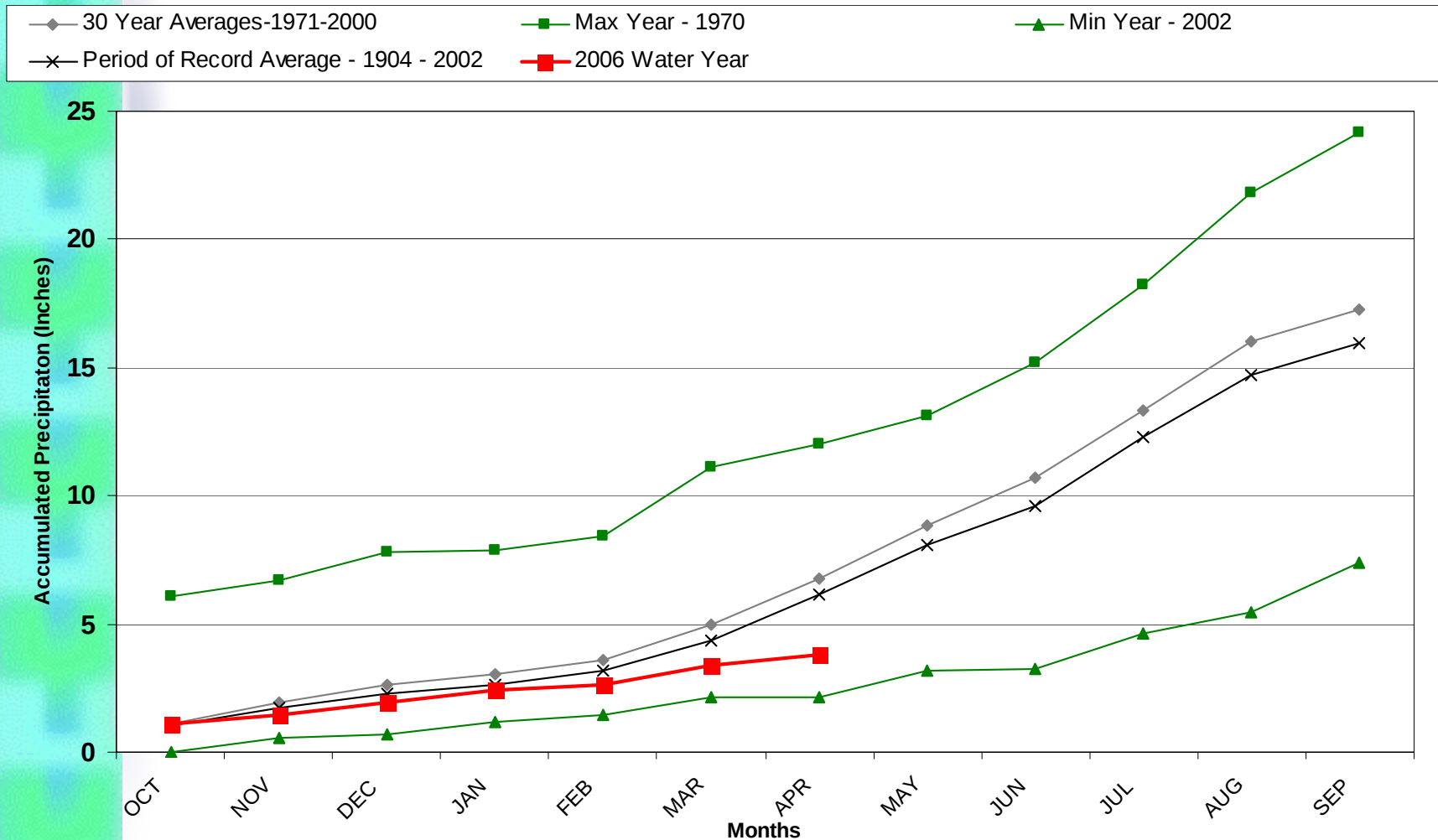
Division 8 – Boulder

Boulder 2006 Water Year



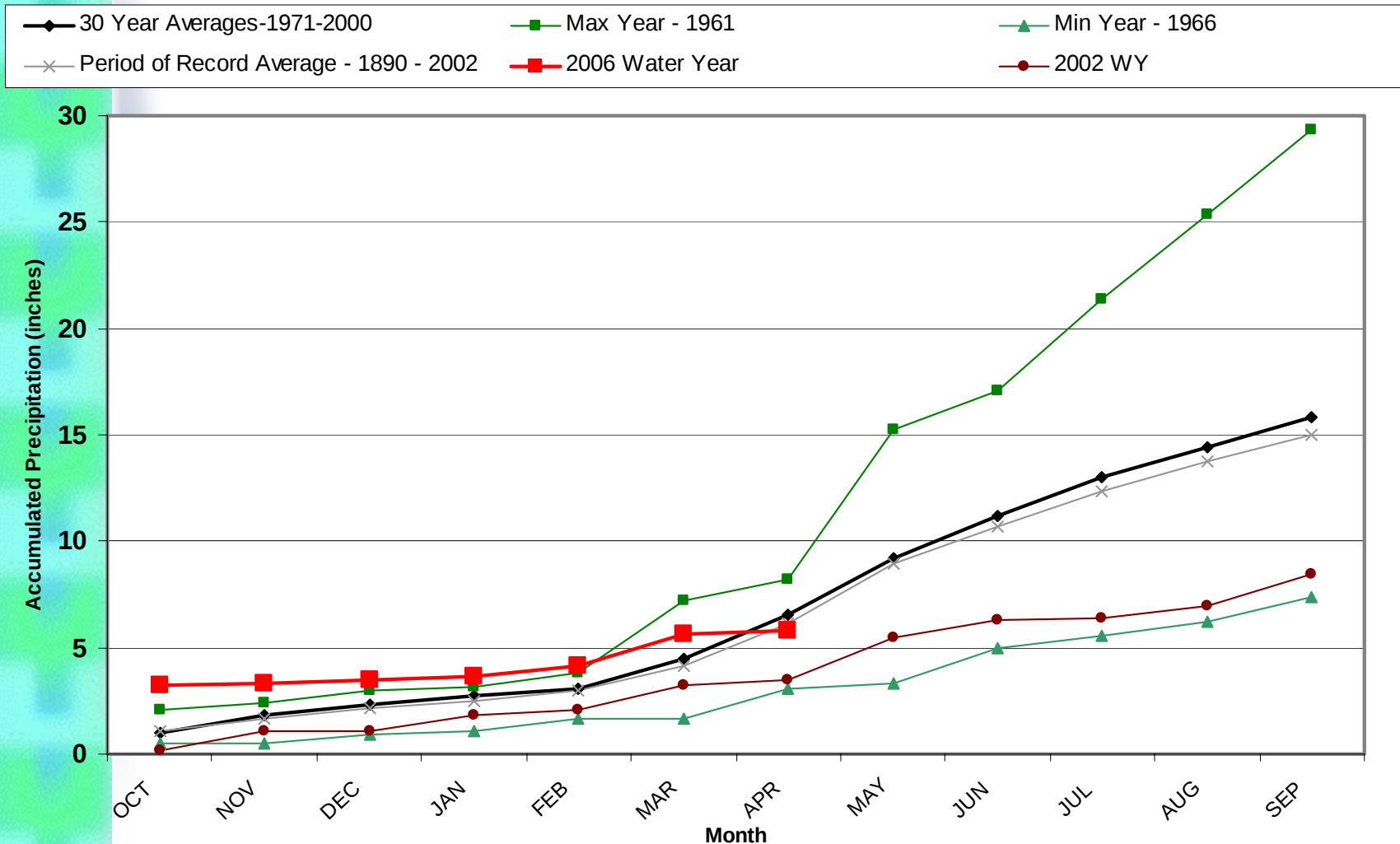
Division 8 – Cheesman

Cheesman 2006 Water Year



Division 8 – Fort Collins

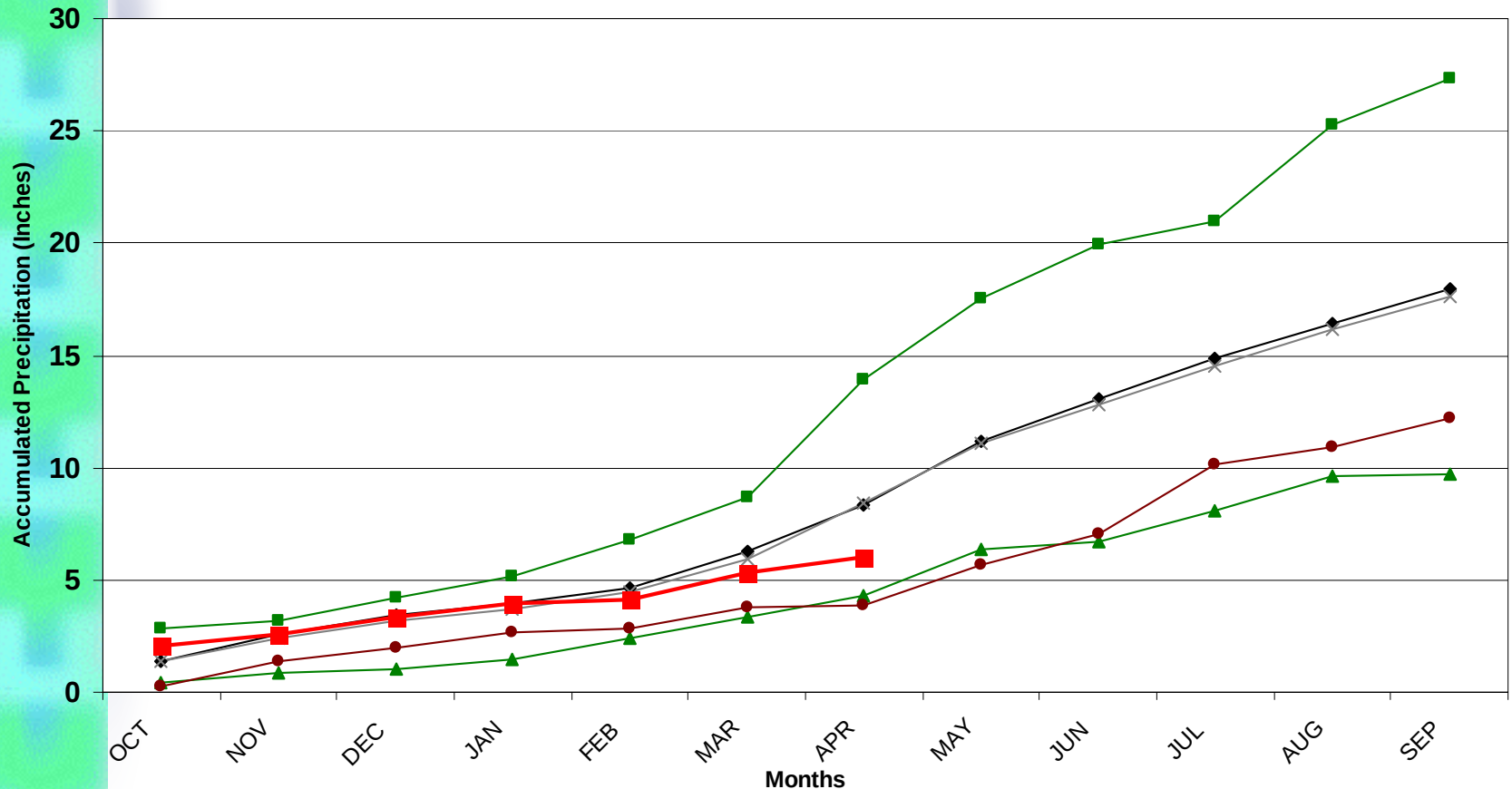
Fort Collins 2006 Water Year



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

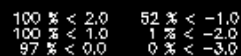


4/2006 3 mon. SPI



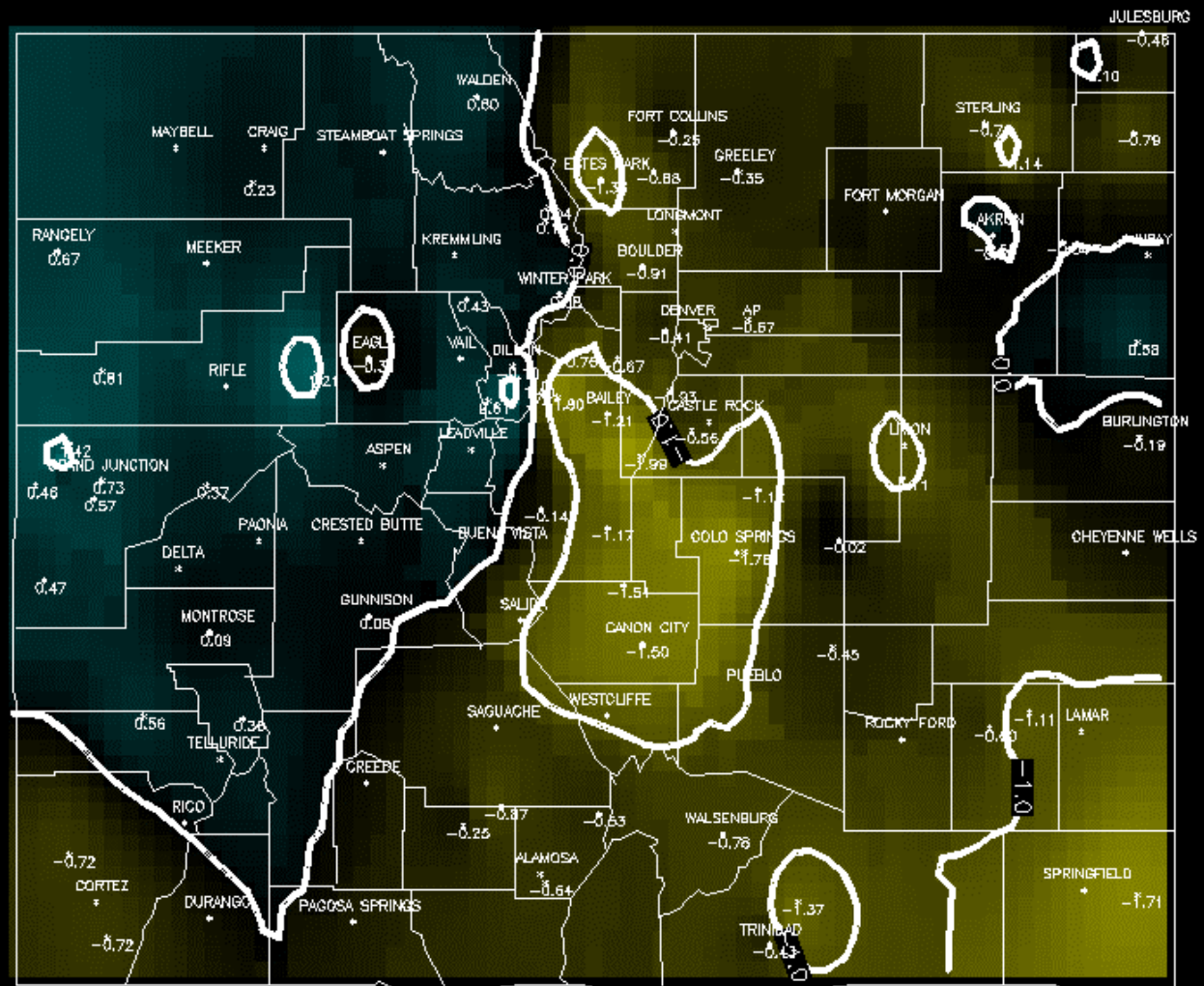
Produced by:
Colorado Climate Center
Fort Collins, CO

4/2006 6 mon. SPI



Produced by:
Colorado Climate Center
Fort Collins, CO

4/2006 12 mon. SPI

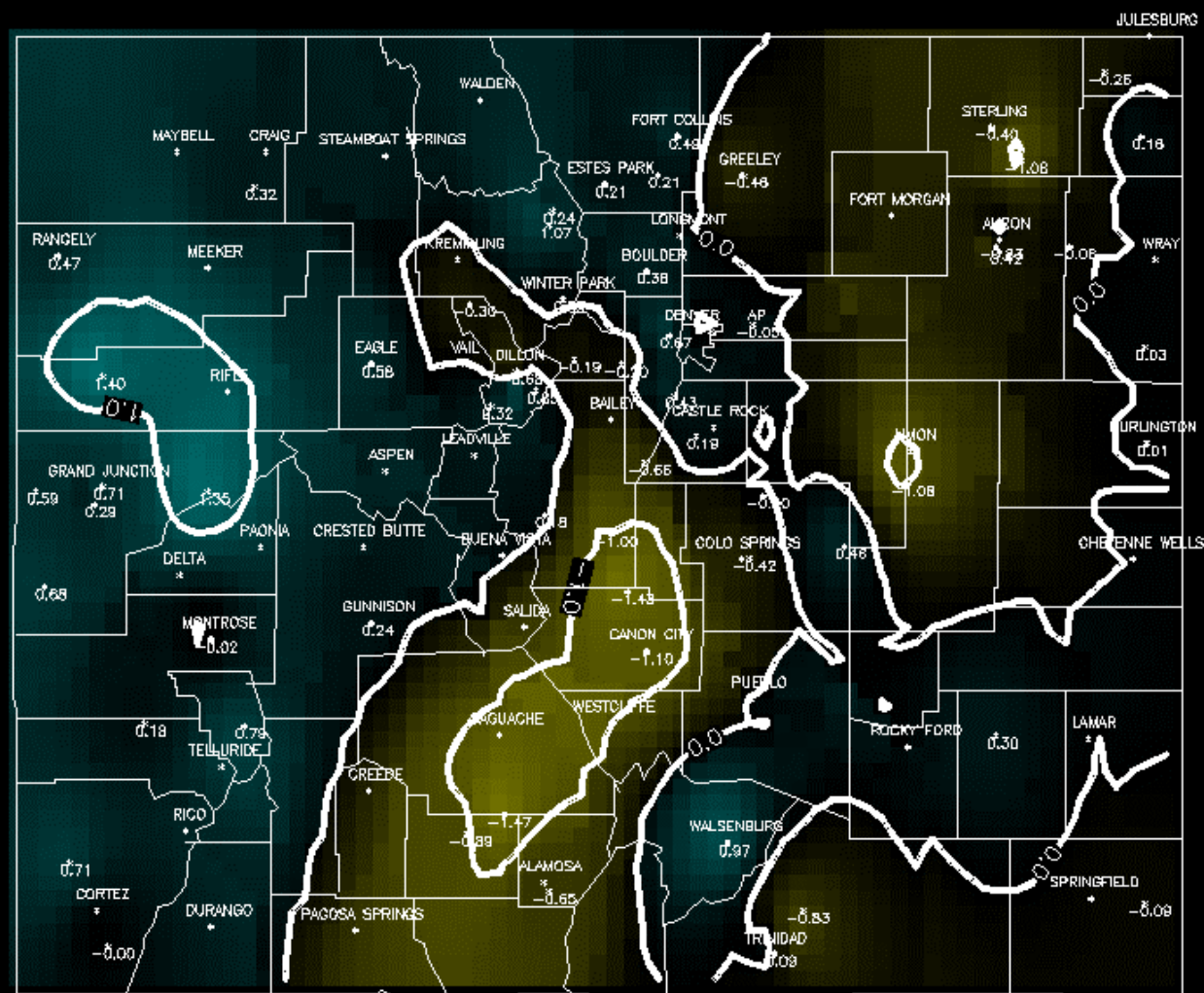


Produced by:
Colorado Climate Center
Fort Collins, CO

24 Month SPI

Colorado

4/2006 24 mon. SPI



100 % < 2.0
97 % < 1.0
41 % < 0.0

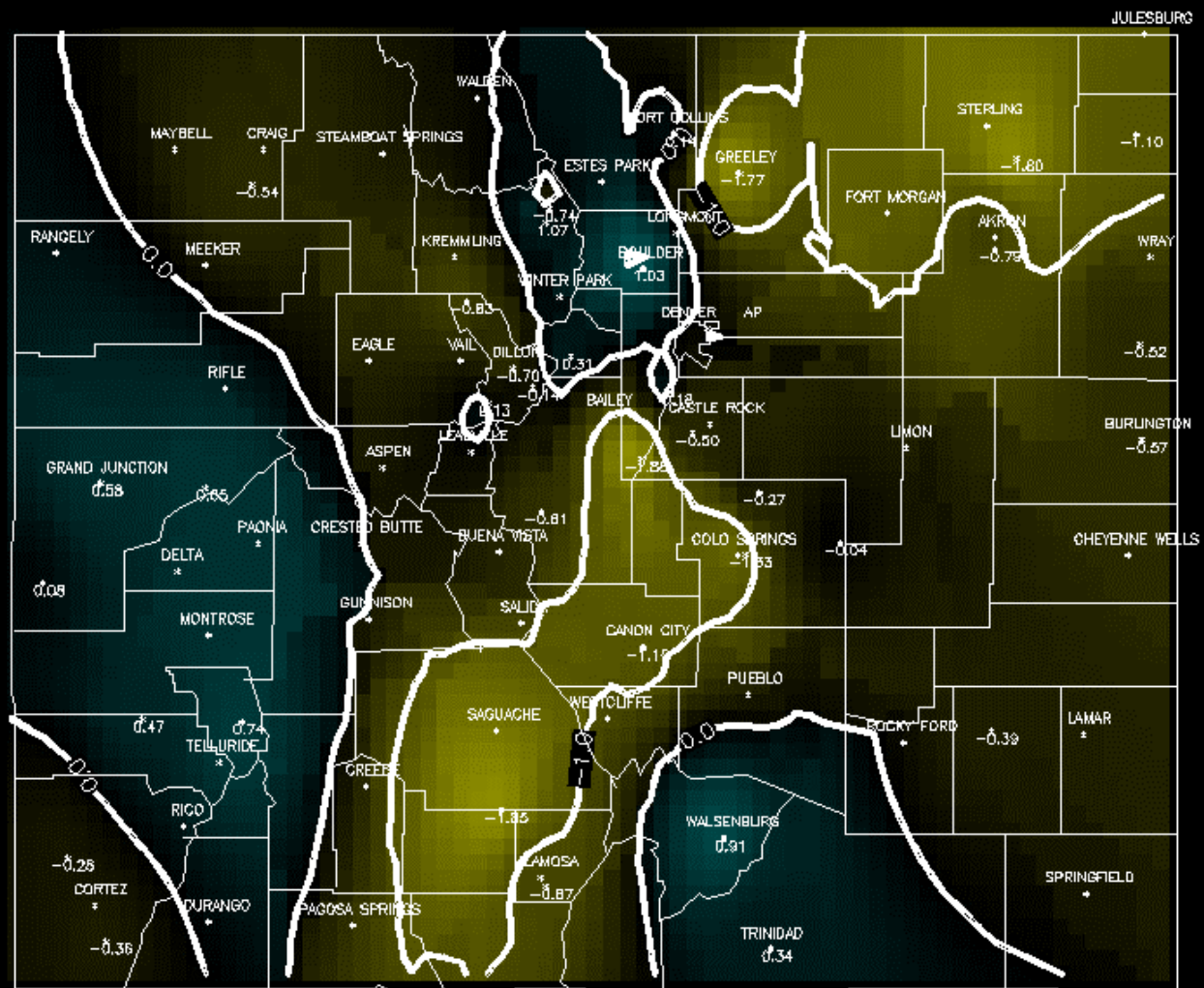
3 % < -1.0
0 % < -2.0
0 % < -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO

48 Month SPI

Colorado

4/2006 48 mon. SPI



100 % < 2.0
100 % < 1.0
88 % < 0.0

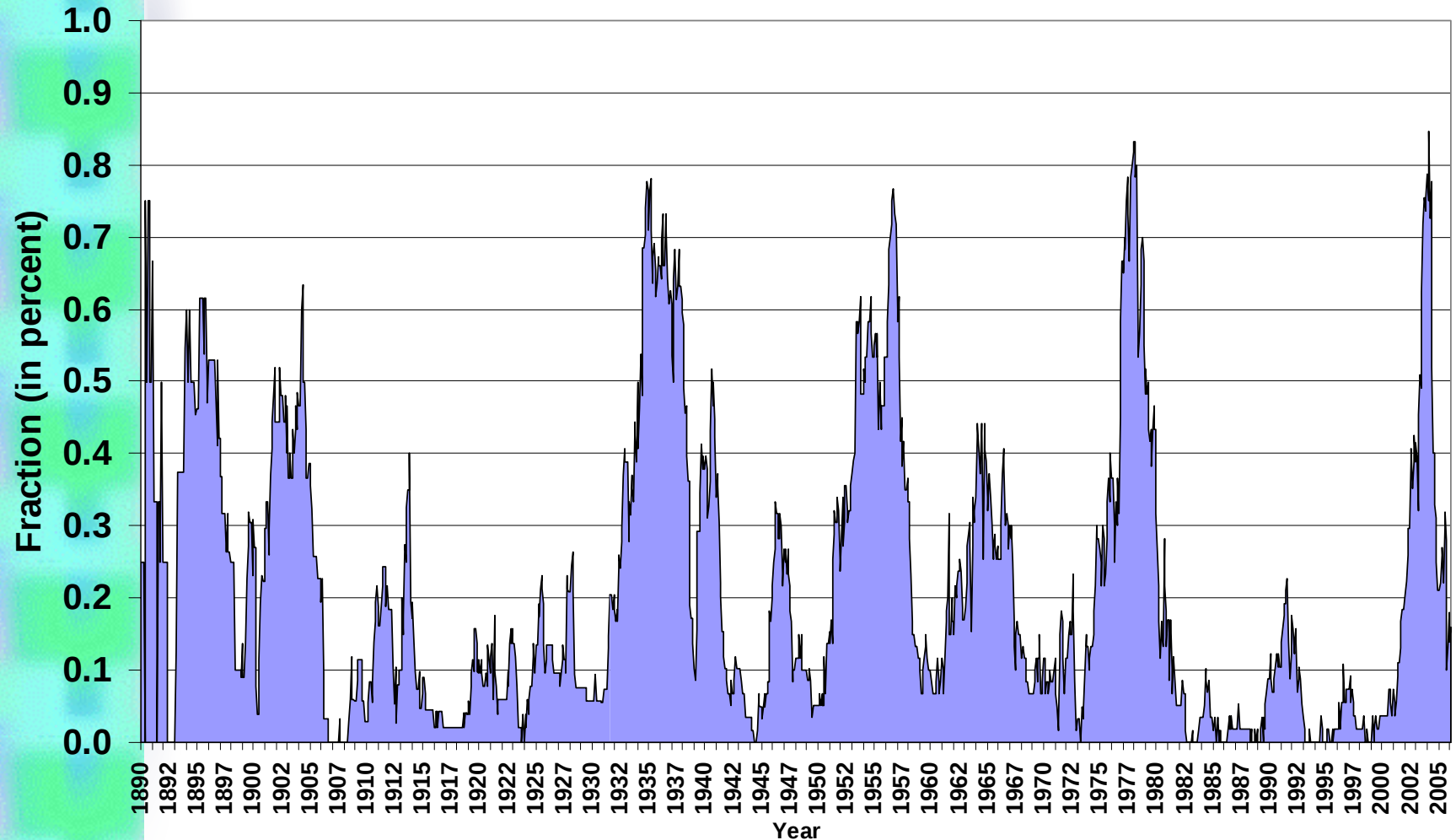
15 % < -1.0
0 % < -2.0
0 % < -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO

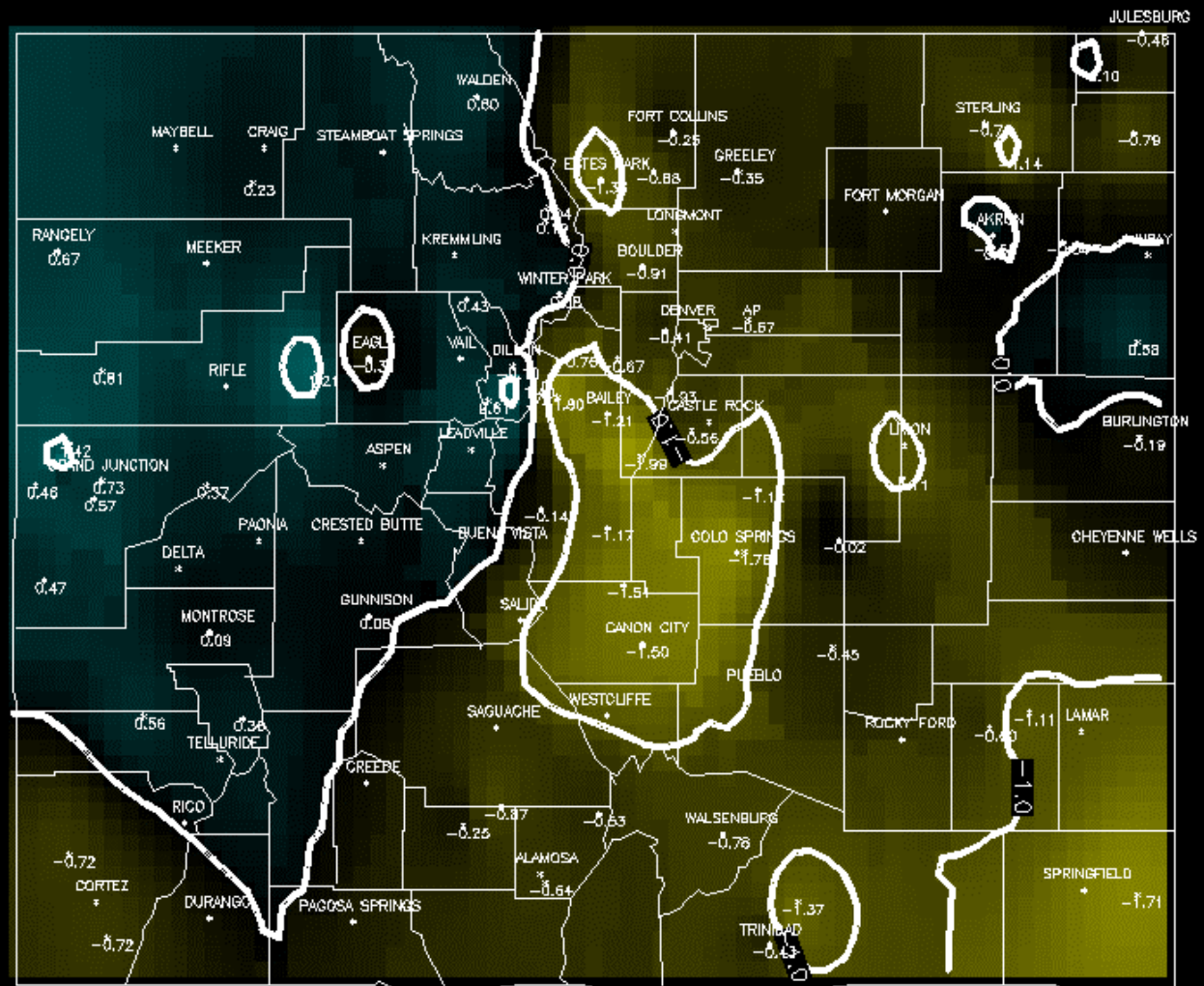
Fraction of Colorado in Drought

Fraction of Colorado in Drought Based on 48 month SPI

(1890 - April 2006)



4/2006 12 mon. SPI



Produced by:
Colorado Climate Center
Fort Collins, CO

4/2006 12 mon. SPI – Projected 6 mon. at P=0.20



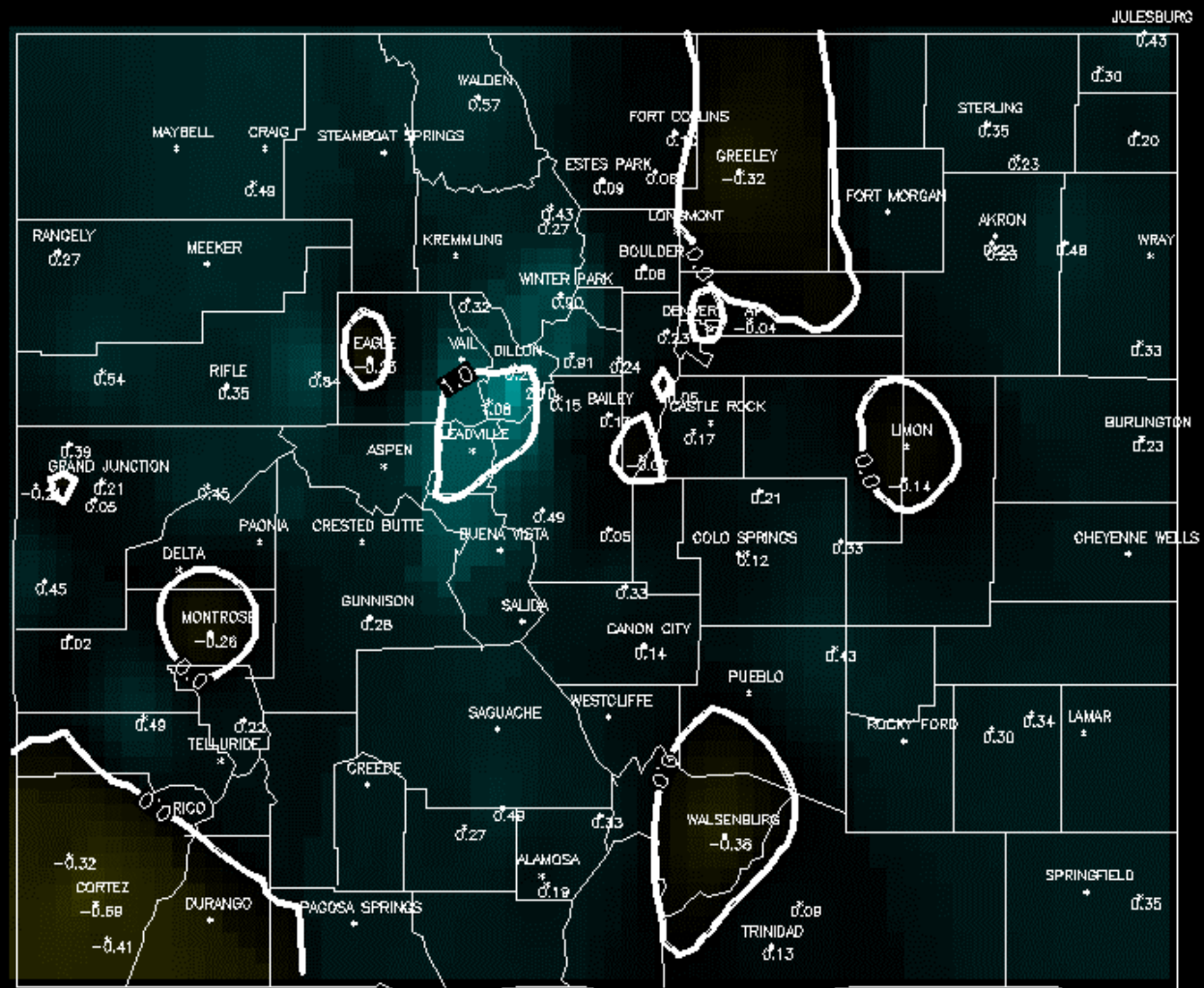
Produced by:
Colorado Climate Center
Fort Collins, CO



Projected Conditions at 0.8 Probability Level 12 Month SPI at 6 months

Colorado

4/2006 12 mon. SPI – Projected 6 mon. at P=0.80



100 % < 2.0
99 % < 1.0
98 % < 0.0
0 % < -1.0
0 % < -2.0
0 % < -3.0

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Fort Collins, CO



Conclusions

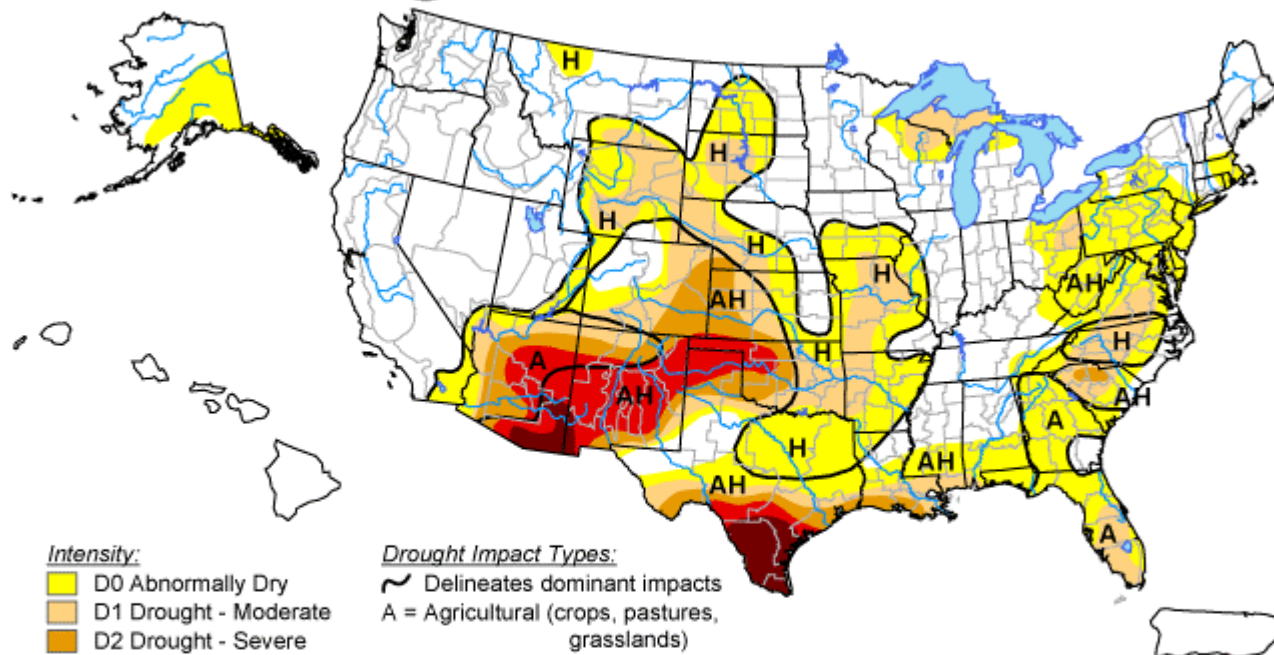
- April above average temperatures; below average precipitation – not good! (Precipitation only 25% of 2005)
- One beneficial storm in southern Colorado on April 28th
- May temperatures near average but precipitation remains below average
- Since October 11, 2005, eastern plains precipitation far below average
- Conditions are deteriorating rapidly
- Front Range urban forest interface very dry

Drought Monitor Map

U.S. Drought Monitor

May 9, 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)
- (No type = Both impacts)

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

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



Released Thursday, May 11, 2006

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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”**

