

# 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

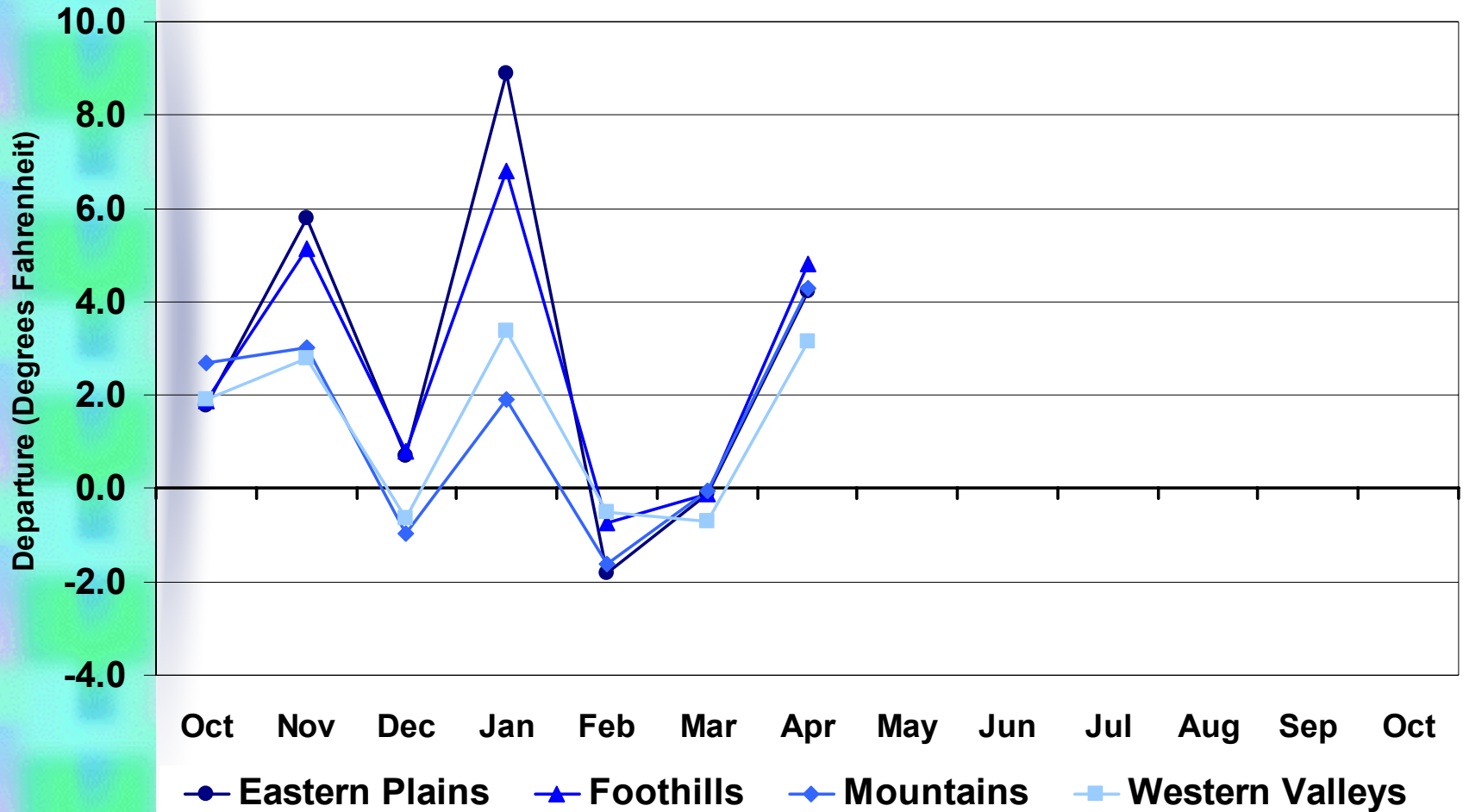
Prepared by Odie Bliss

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

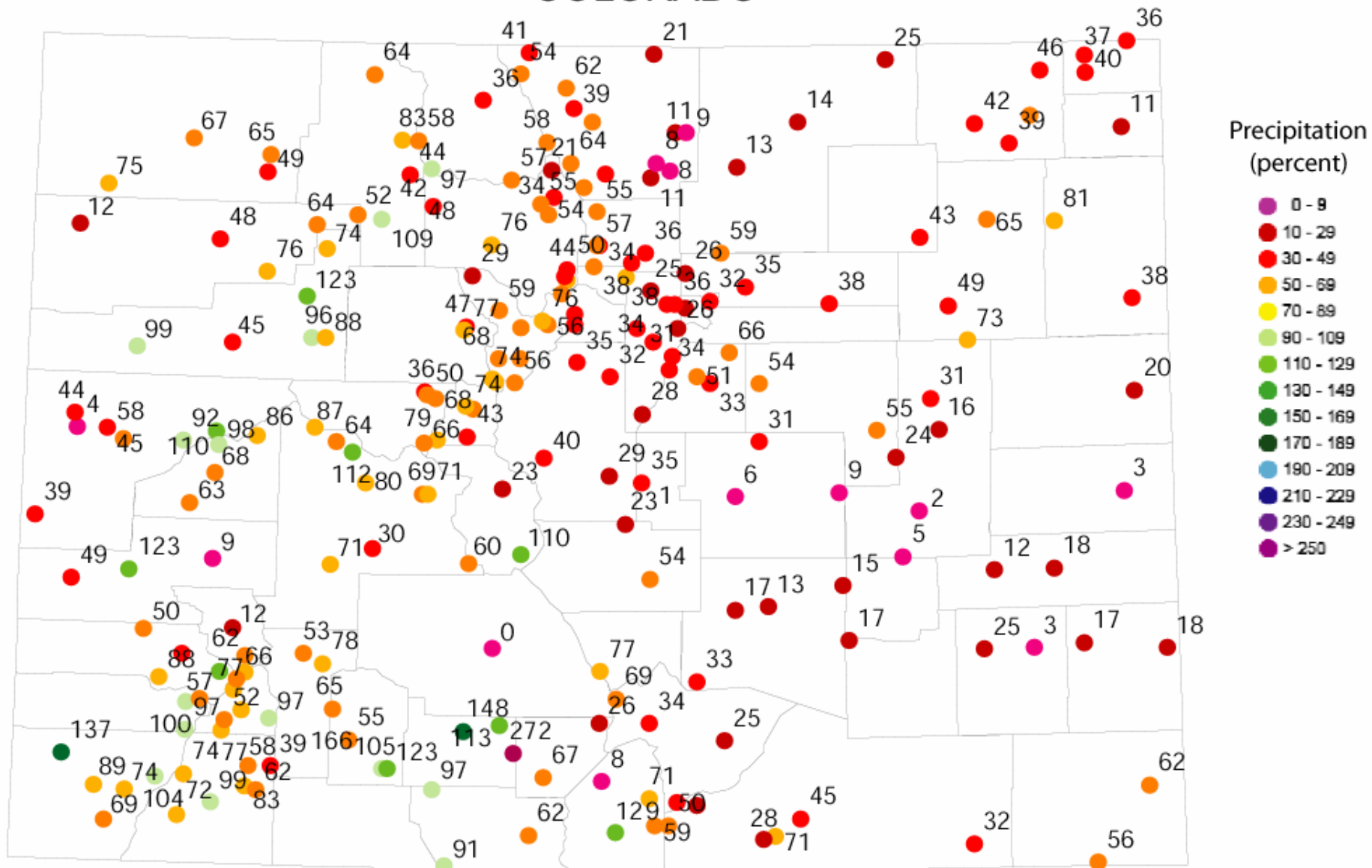


# Temperature Departures

Water Year 2006



# COLORADO

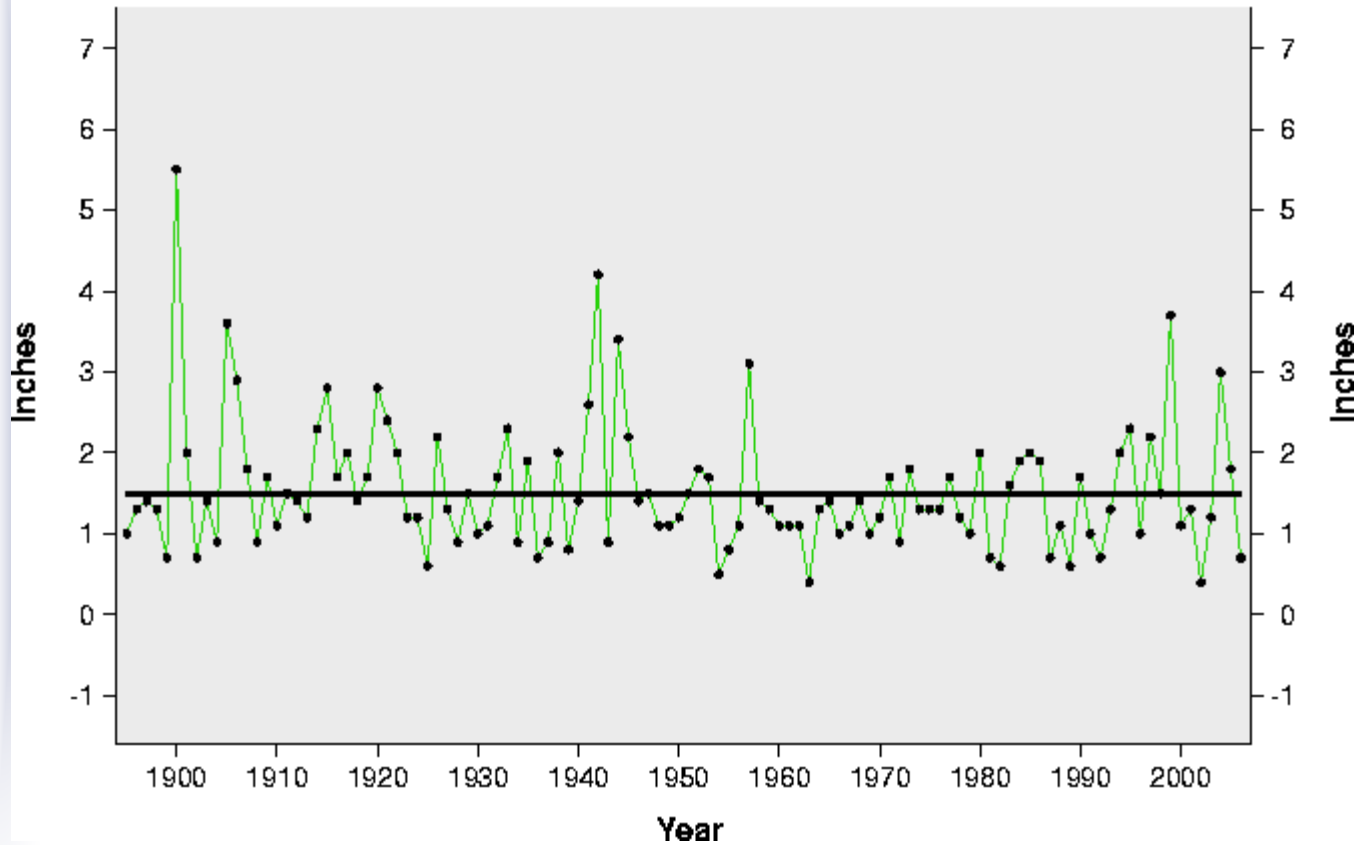


April 2006 precipitation as a percent of the 1971-2000 average.

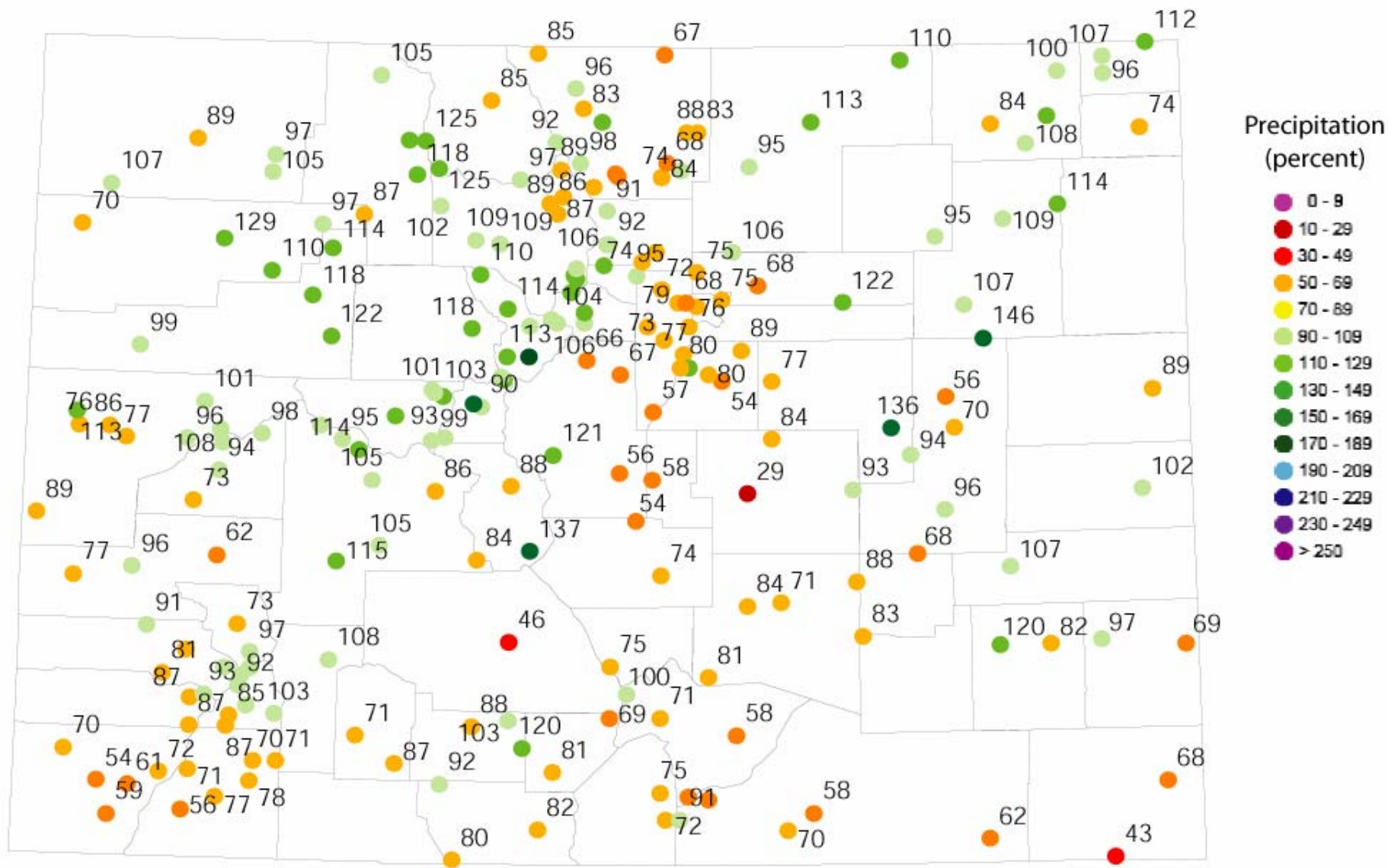
# Colorado Total Precipitation

— Actual Precipitation  
— Average Precipitation

April 2006 Rank 11<sup>th</sup> Driest



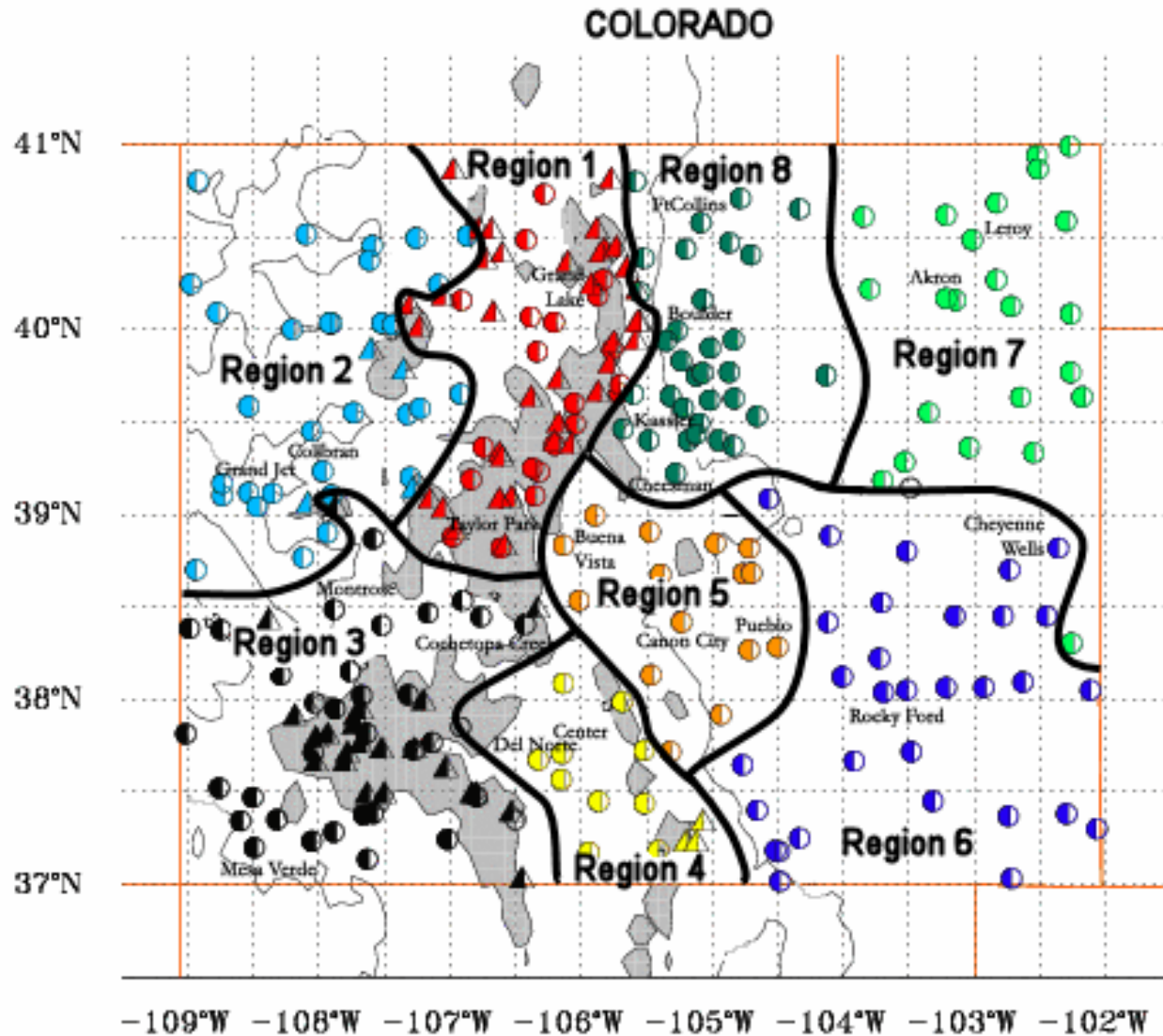
# COLORADO



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

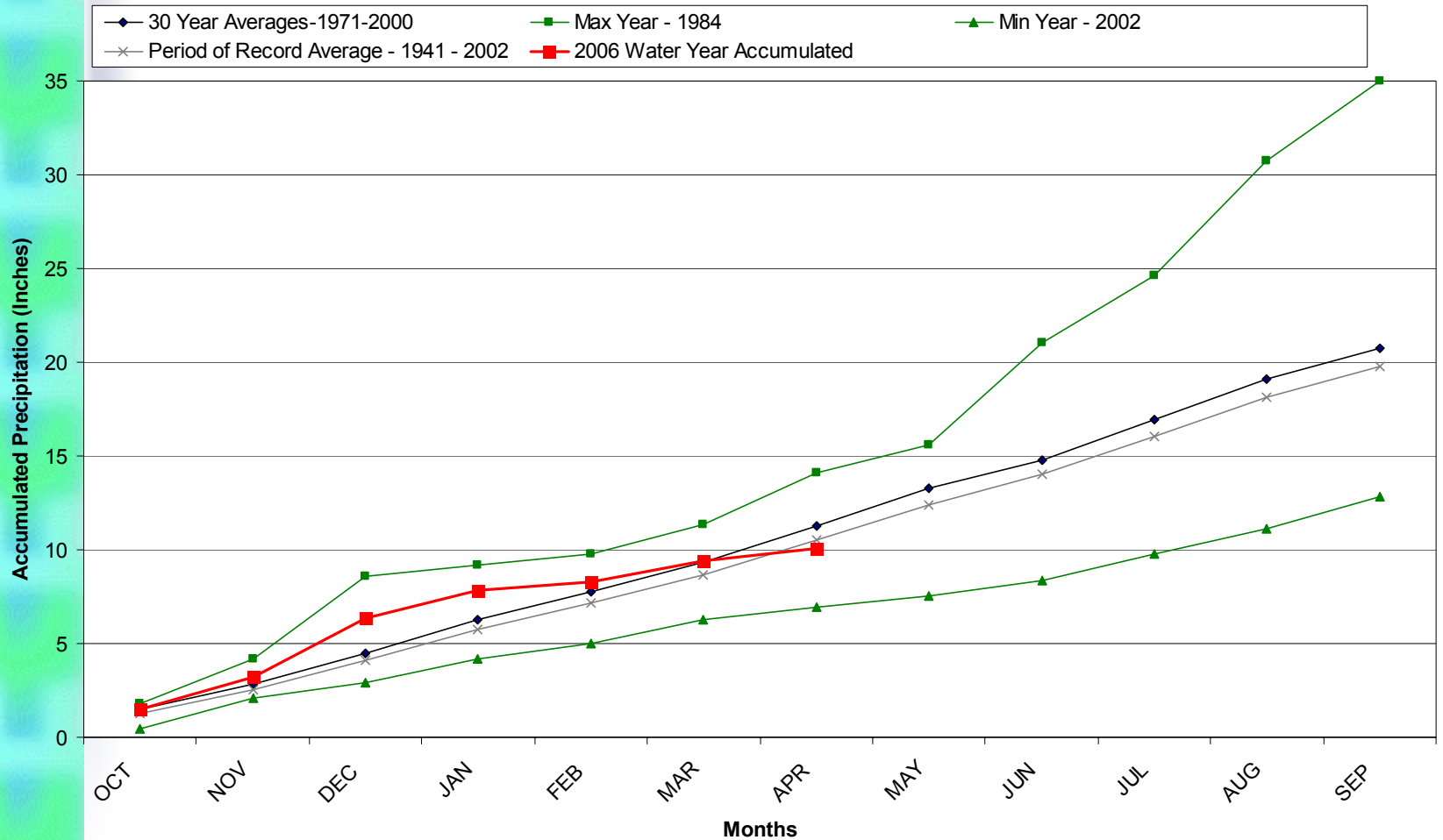


# Climate divisions defined by Dr. Klaus Wolter of NOAA's Climate Diagnostic Center in Boulder, CO



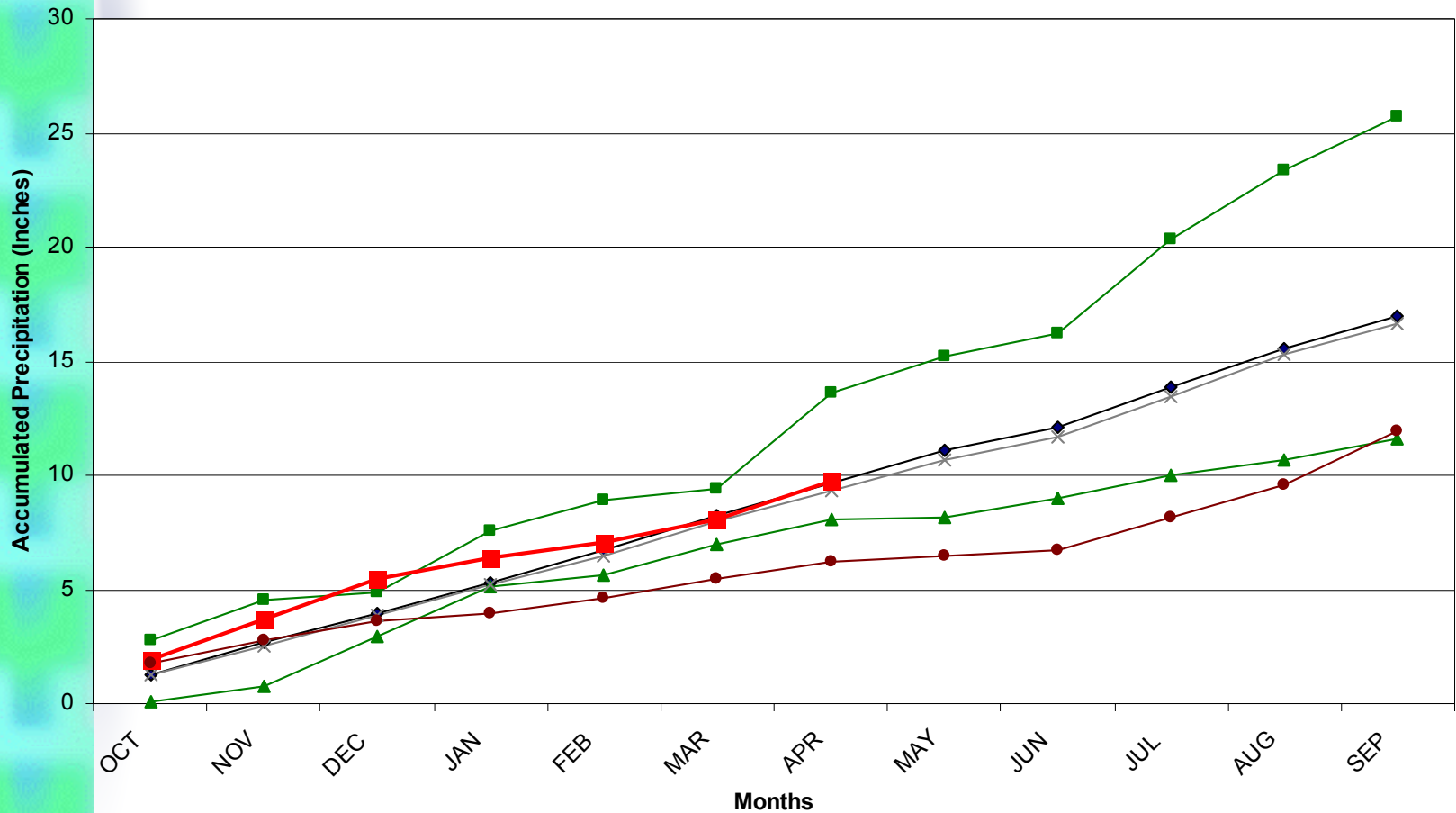
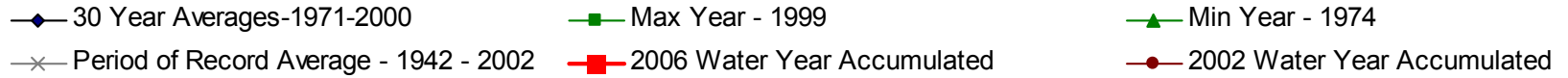
# Division 1– Grand Lake 1NW

## Grand Lake 1 NW 2006 Water Year



# Division 1 – Taylor Park

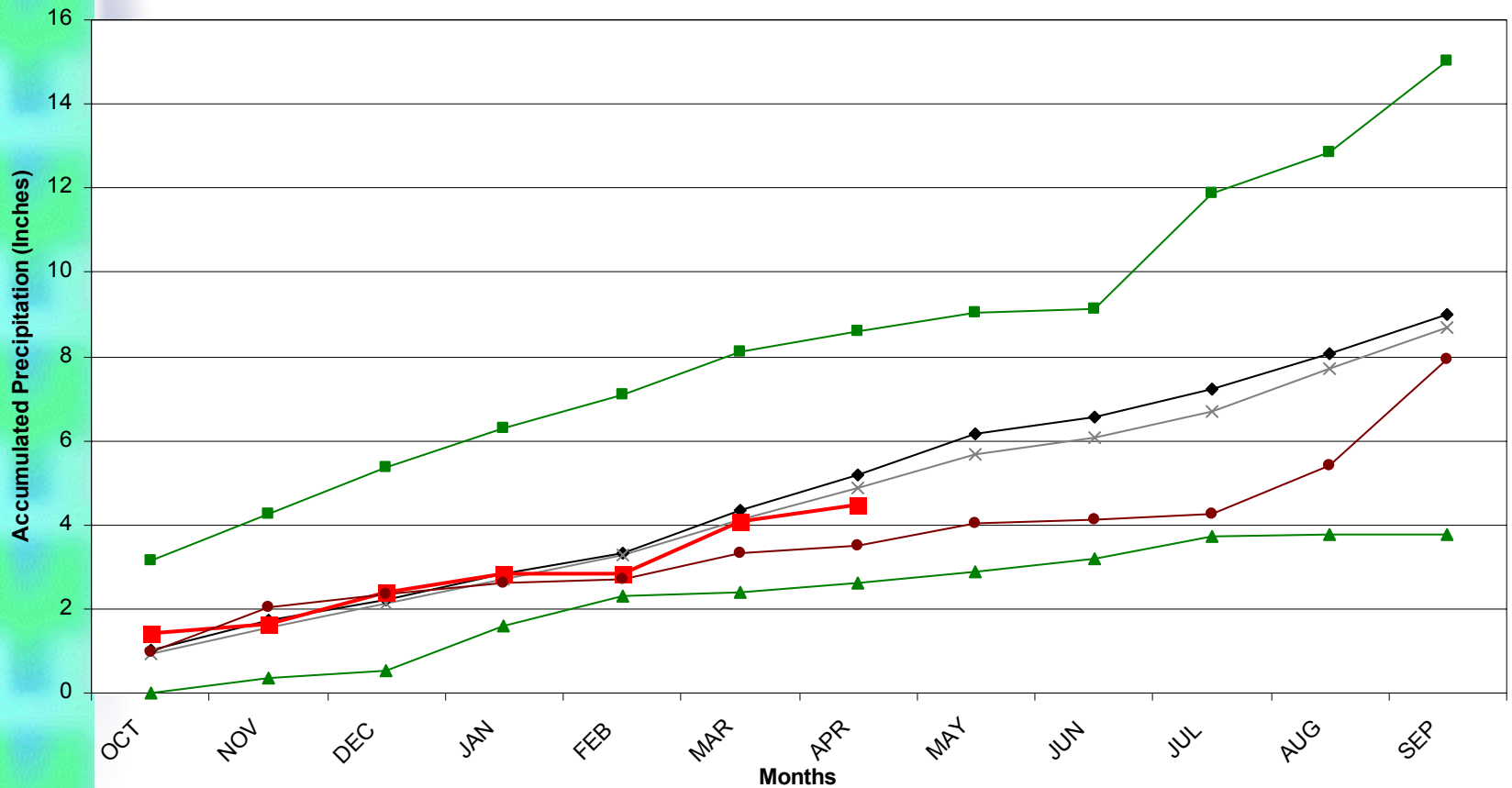
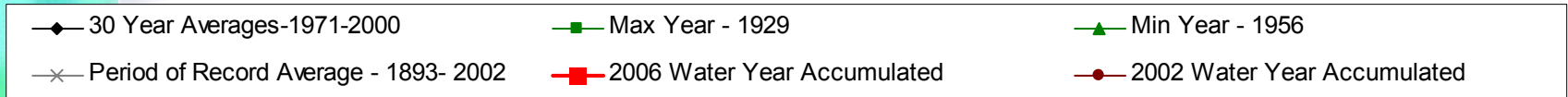
## Taylor Park 2006 Water Year





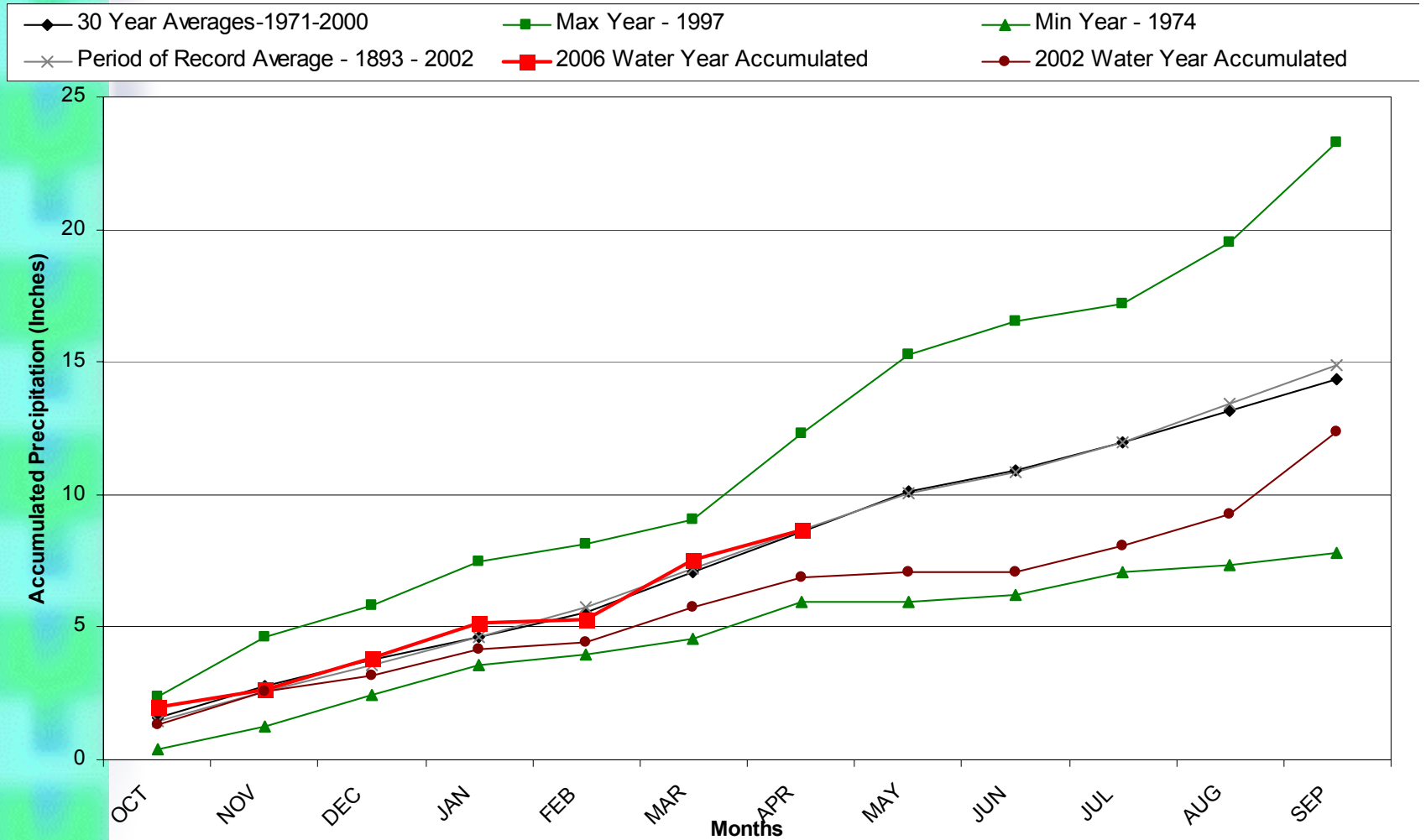
# Division 2 – Grand Junction

## Grand Junction WSFO 2006 Water Year



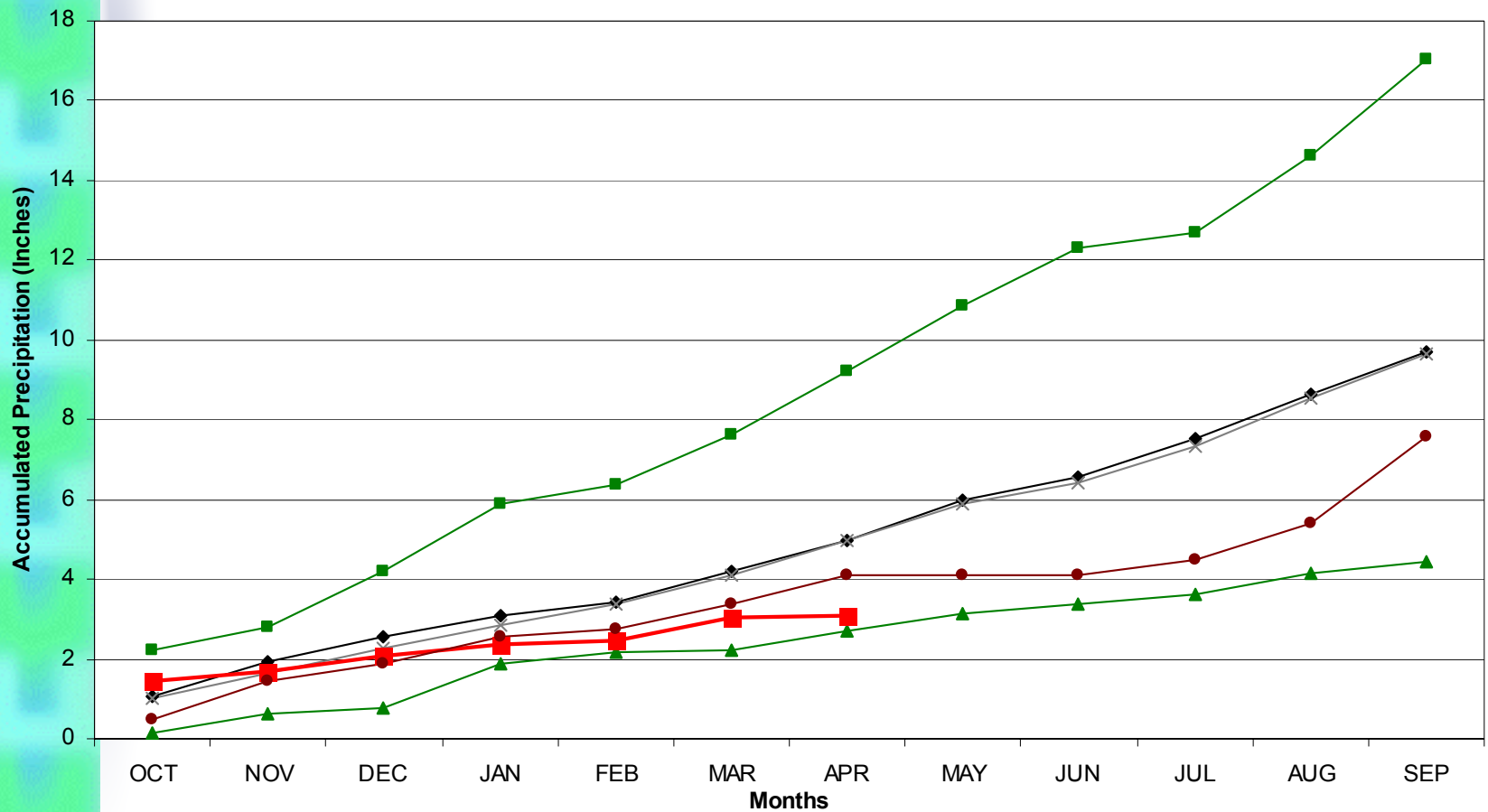
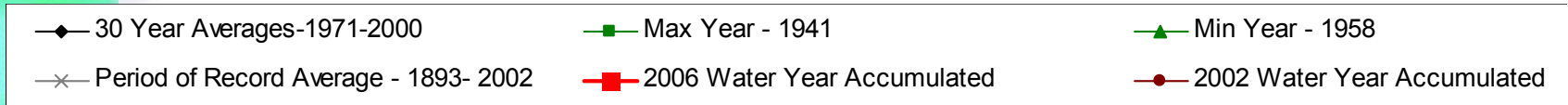
# Division 2 – Collbran

## Collbran 2SW 2006 Water Year



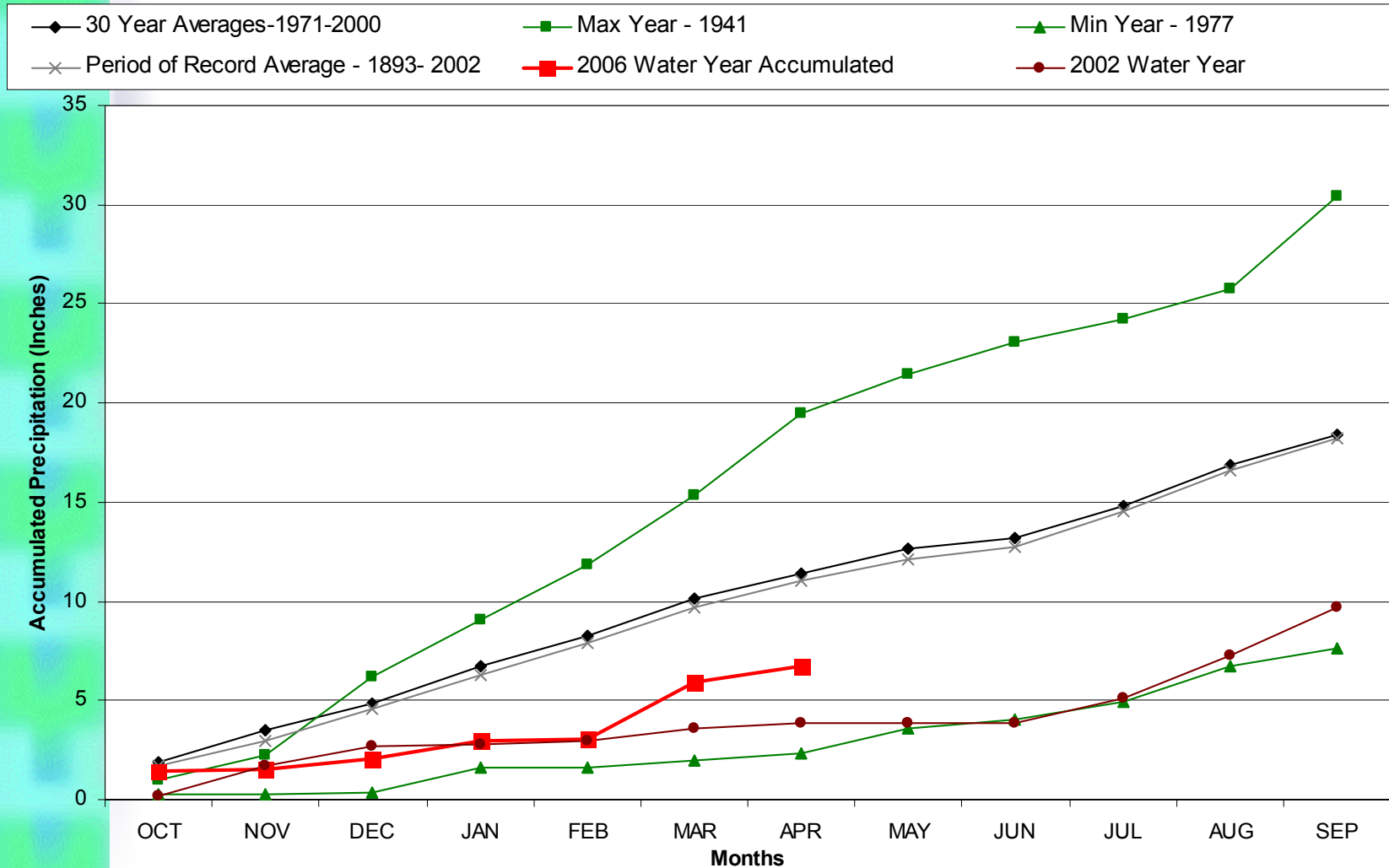
# Division 3 – Montrose

## Montrose #2 2006 Water Year



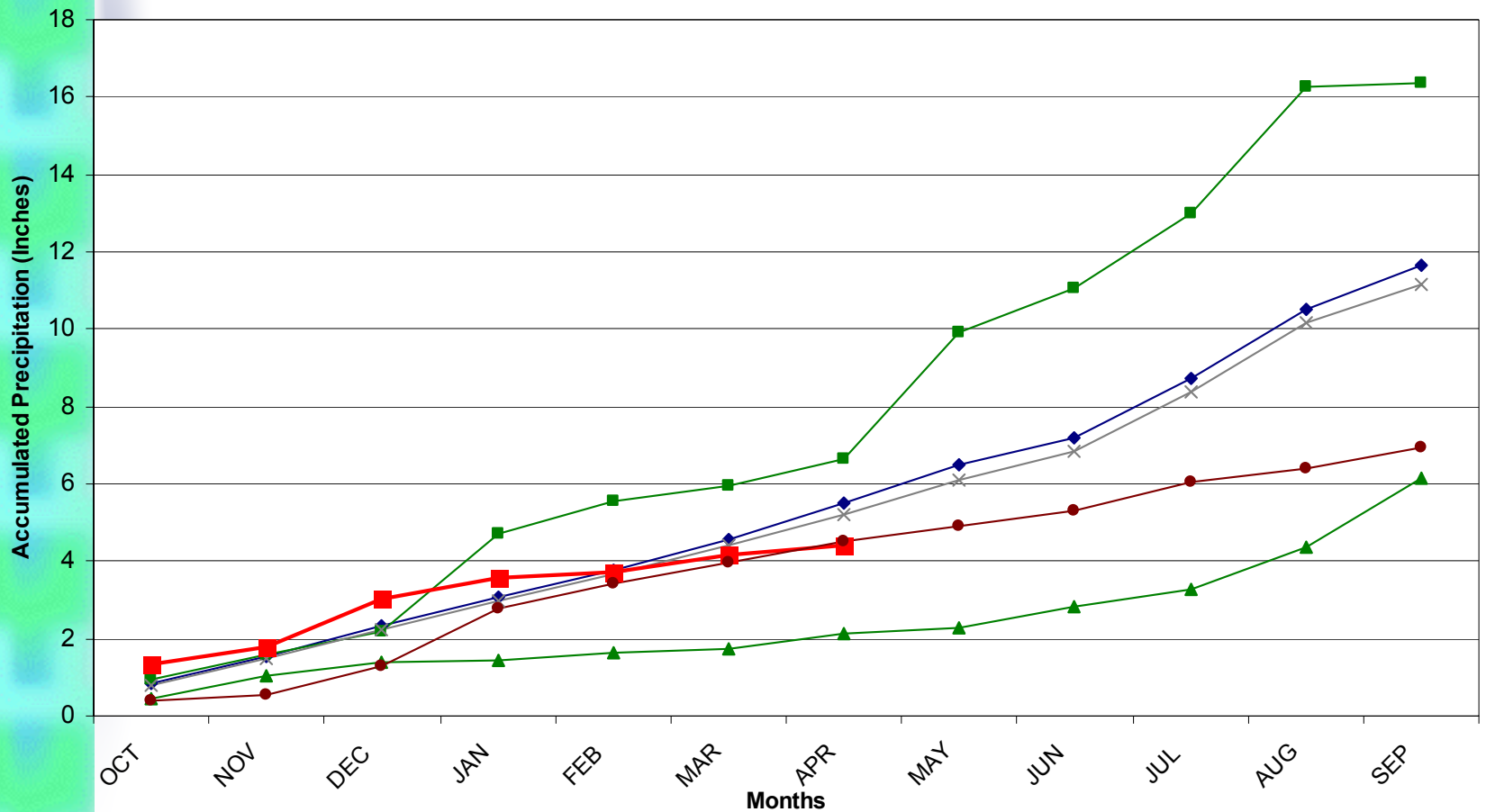
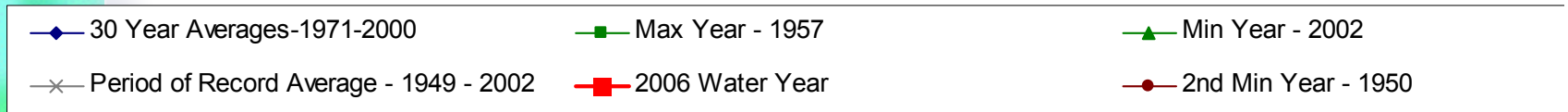
# Division 3 – Mesa Verde

## Mesa Verde NP 2006 Water Year



# Division 3 – Cochetopa Creek

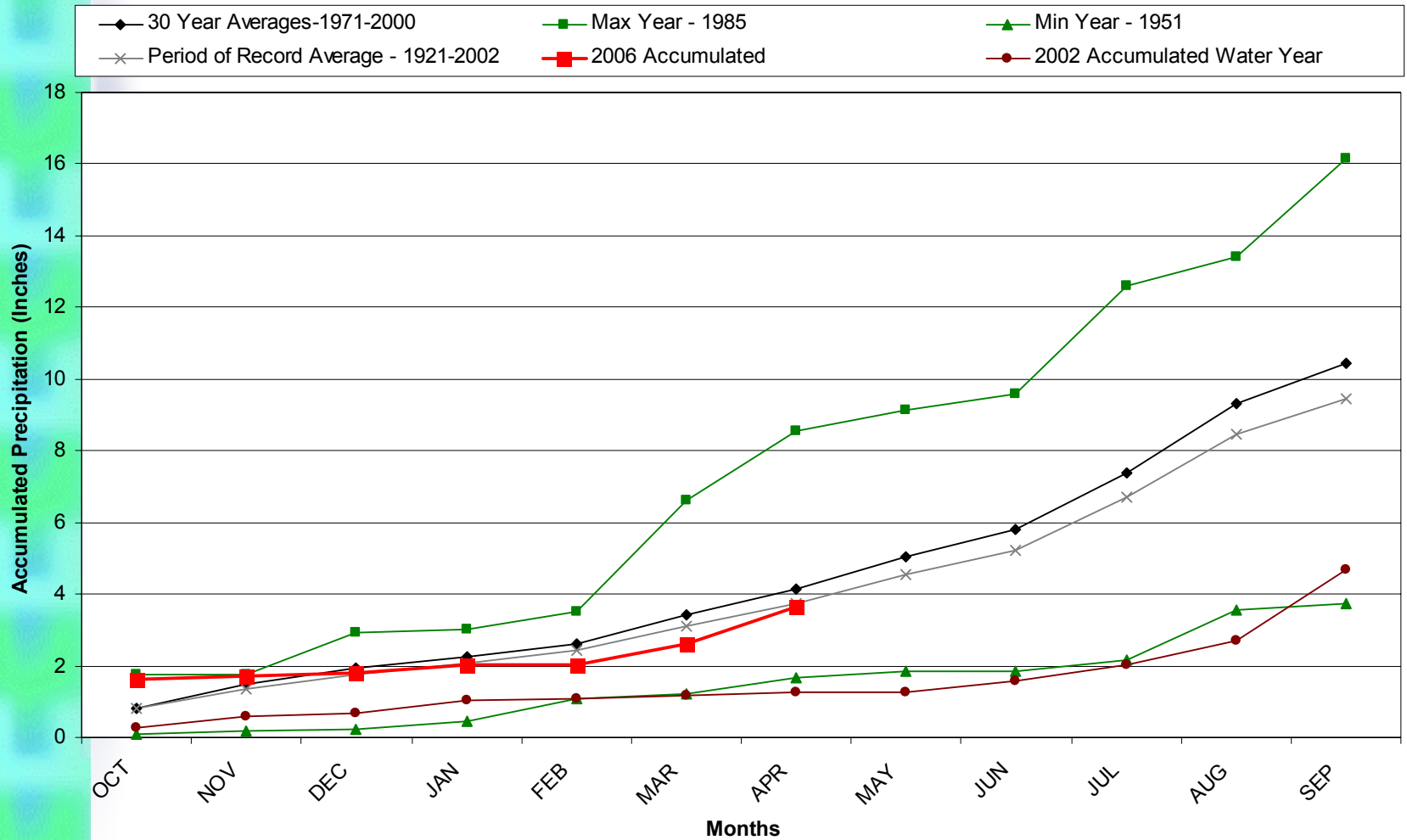
## Cochetopa Creek 2006 Water Year





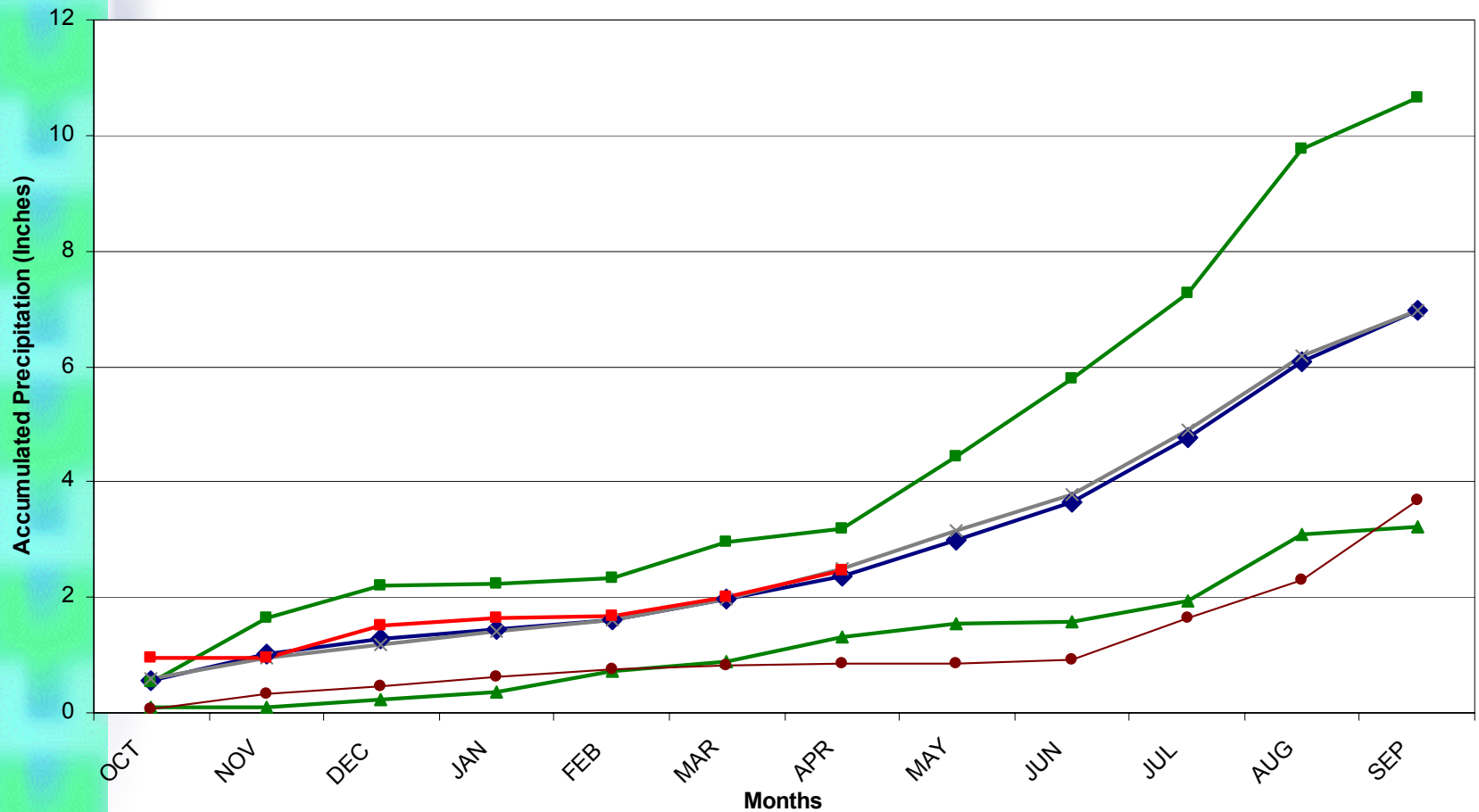
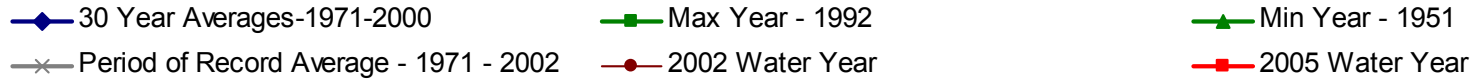
# Division 4 – Del Norte

## Del Norte 2006 Water Year



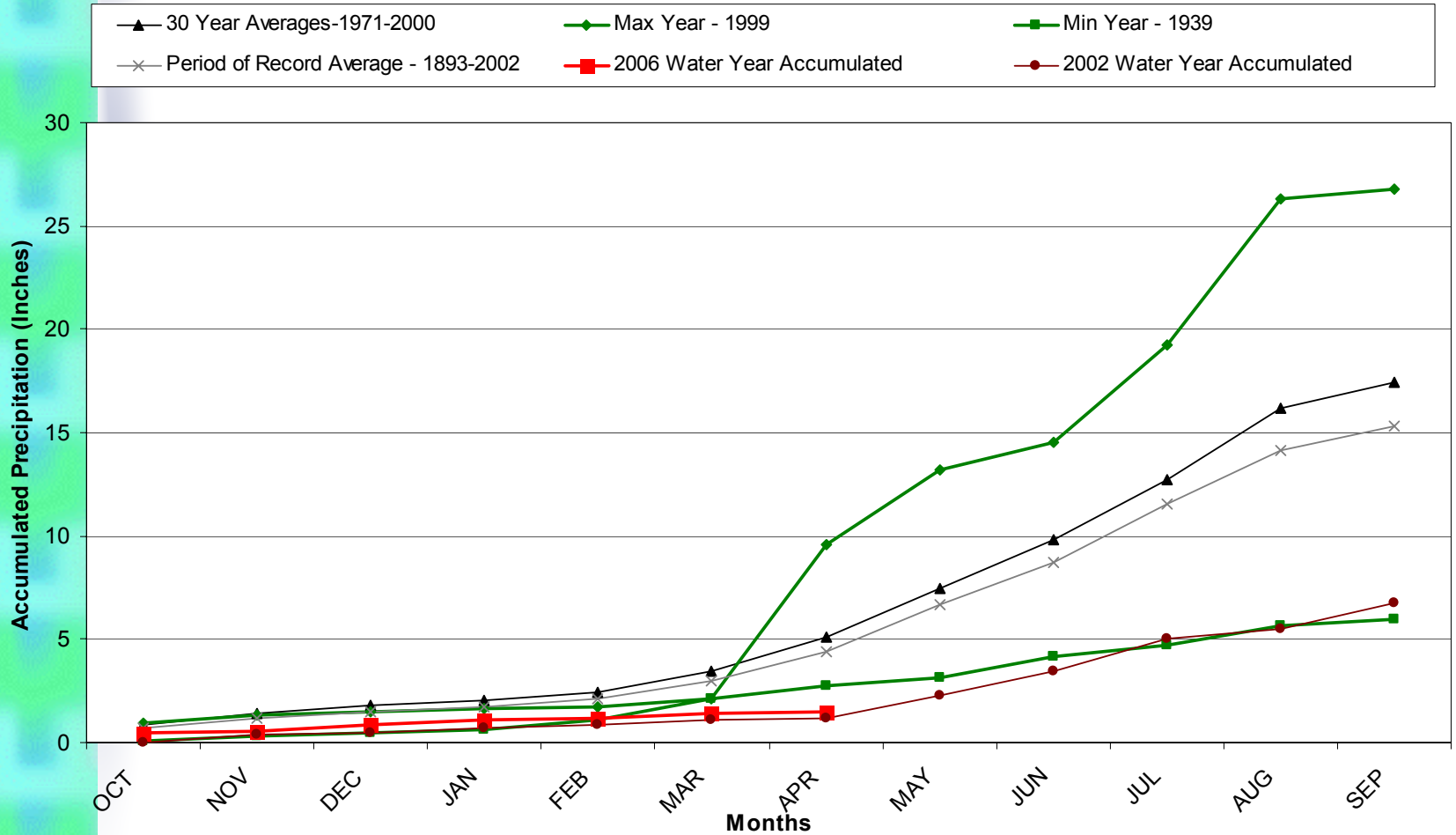
# Division 4 – Center

## Center 4SSW 2006 Water Year



# Division 5 – Colorado Springs

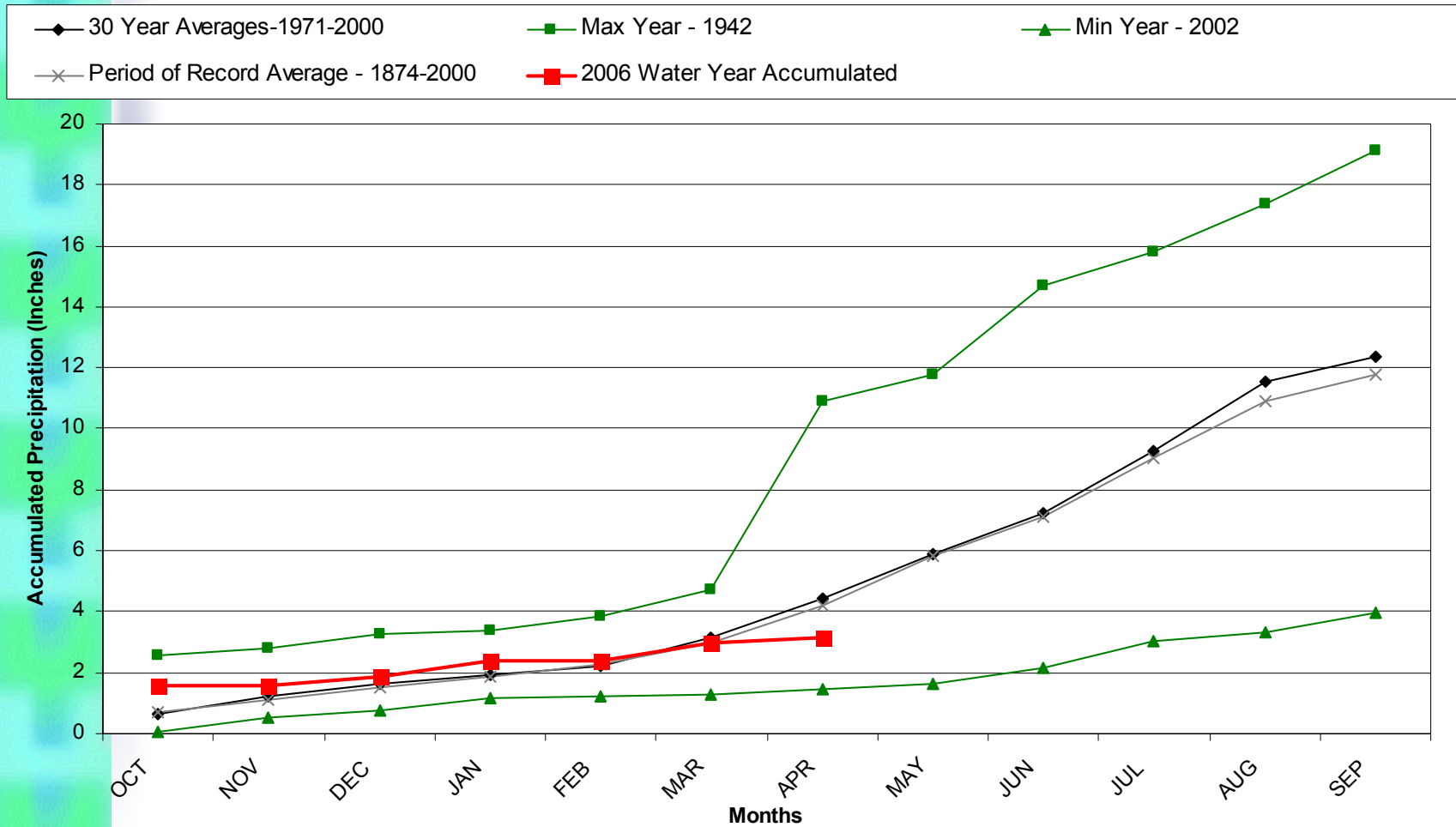
## Colorado Springs 2006 Water Year



# Division 5 – Pueblo

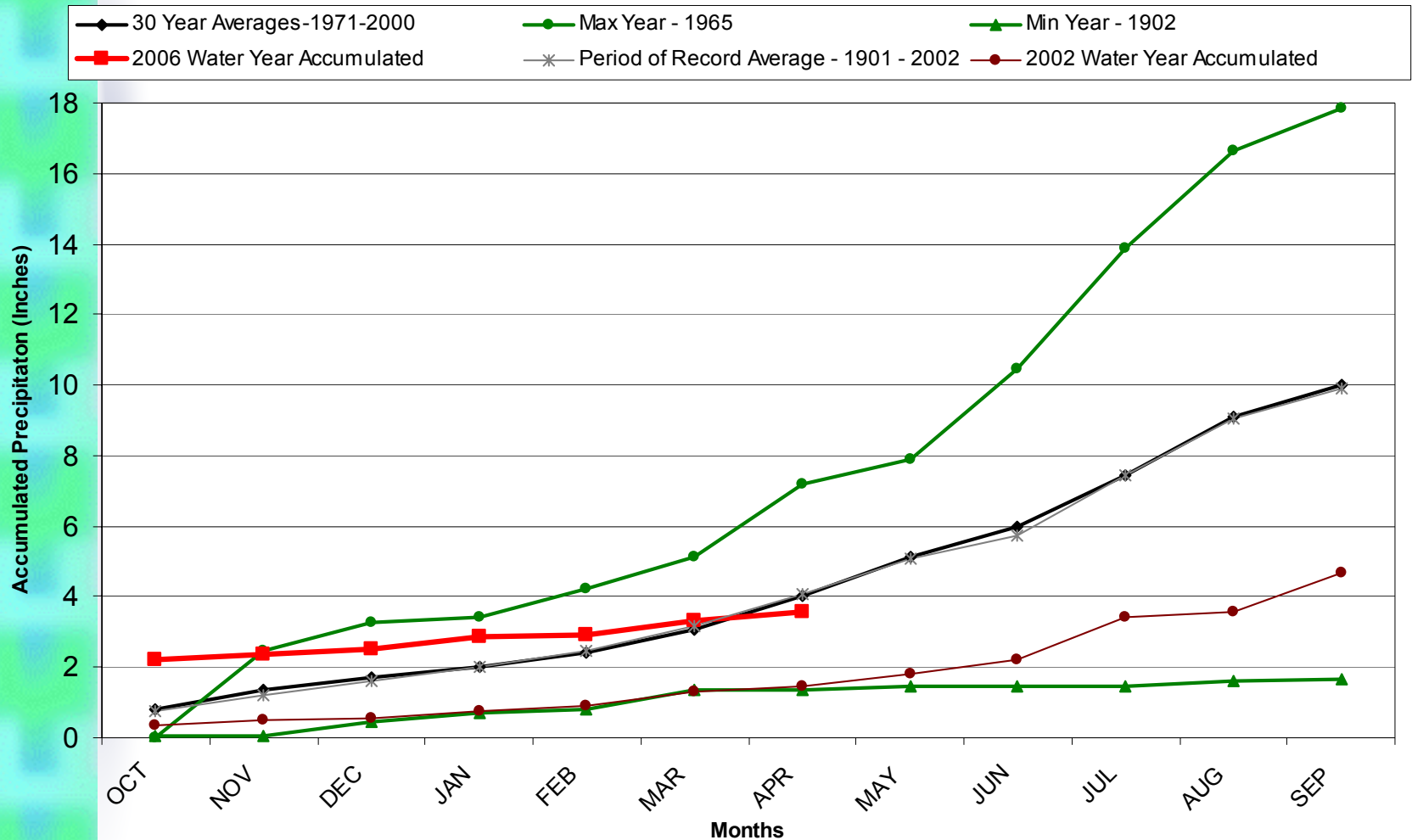
## Pueblo WSO

### 2006 Water Year



# Division 5 – Buena Vista

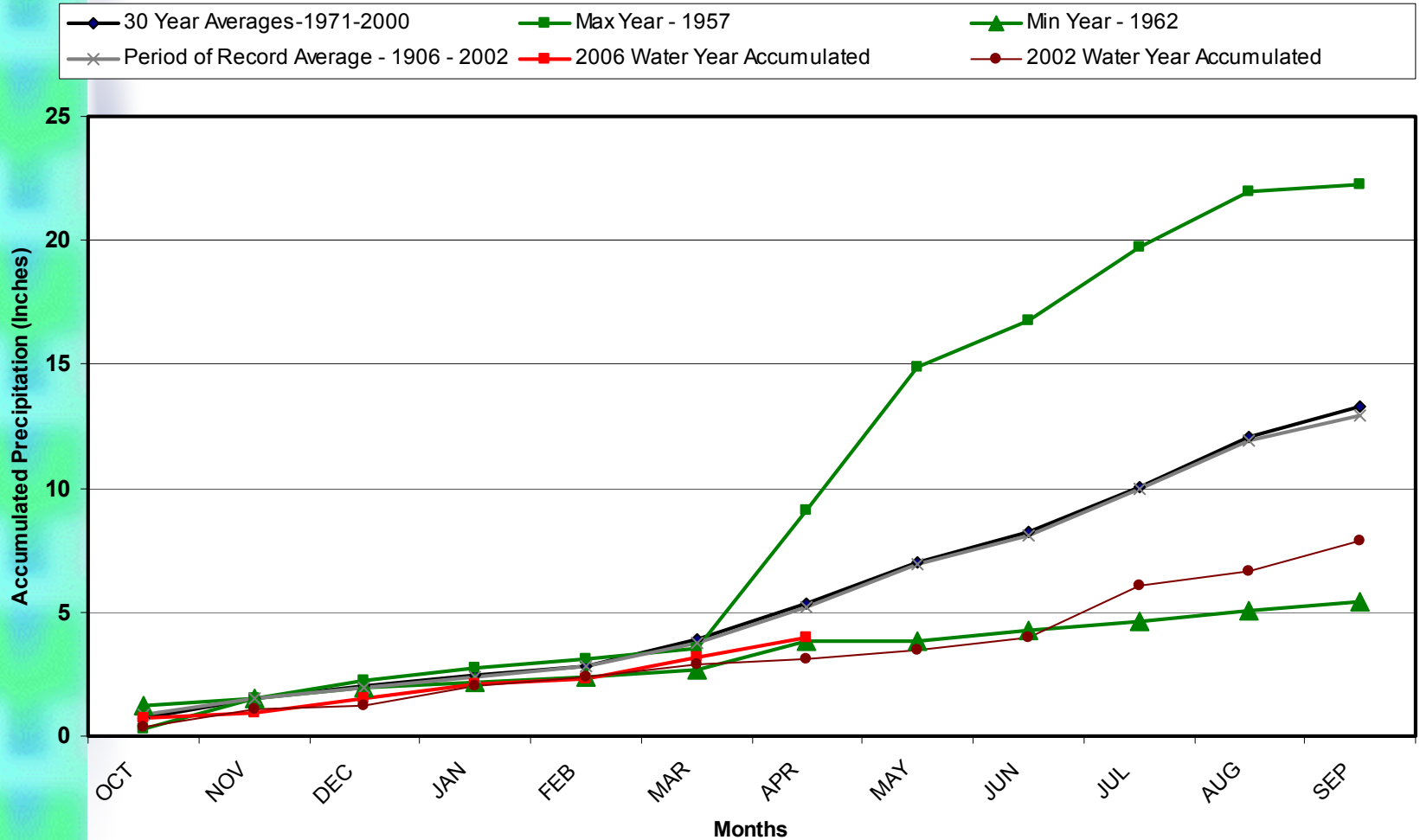
## Buena Vista 2006 Water Year





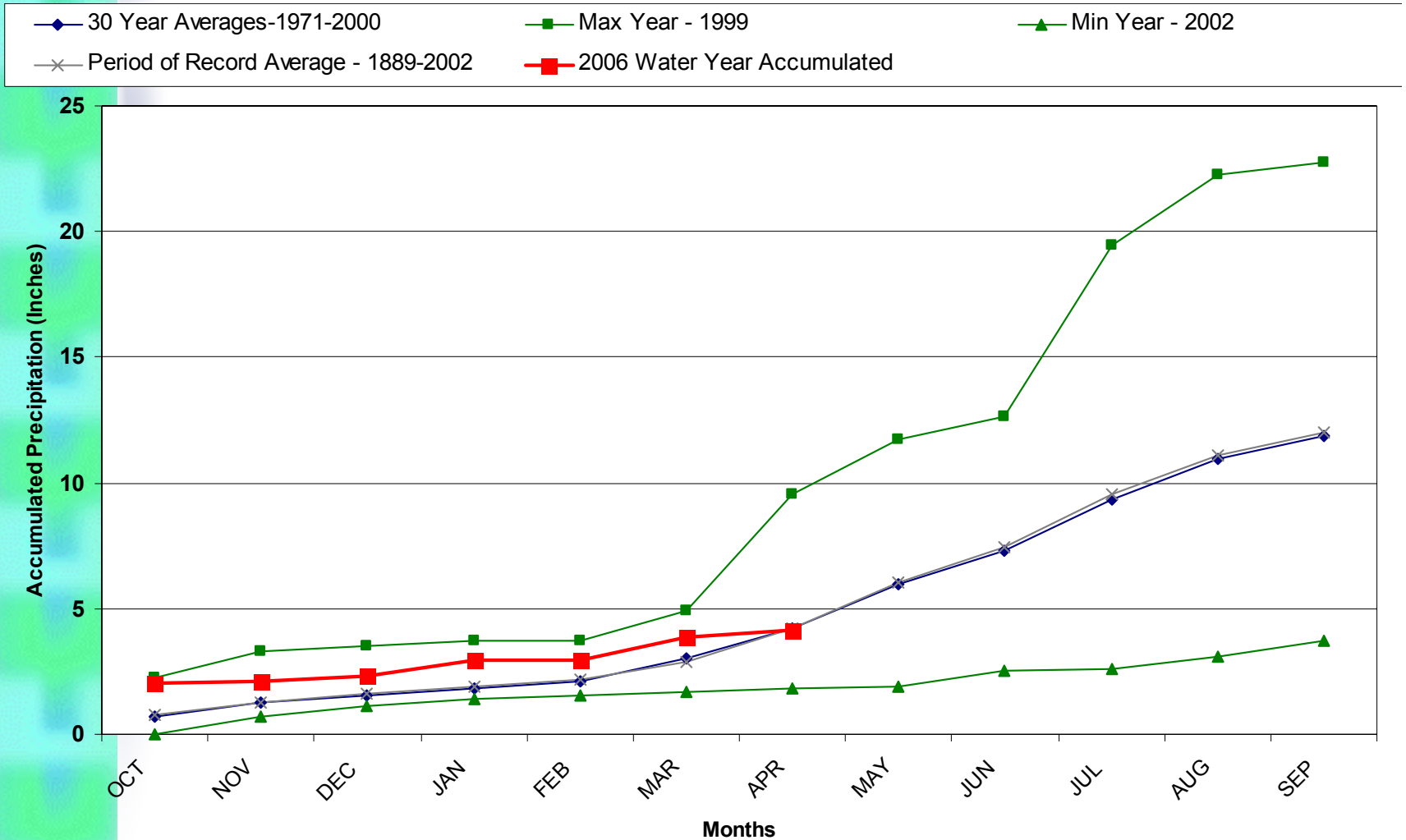
# Division 5 – Canon City

## Canon City 2006 Water Year



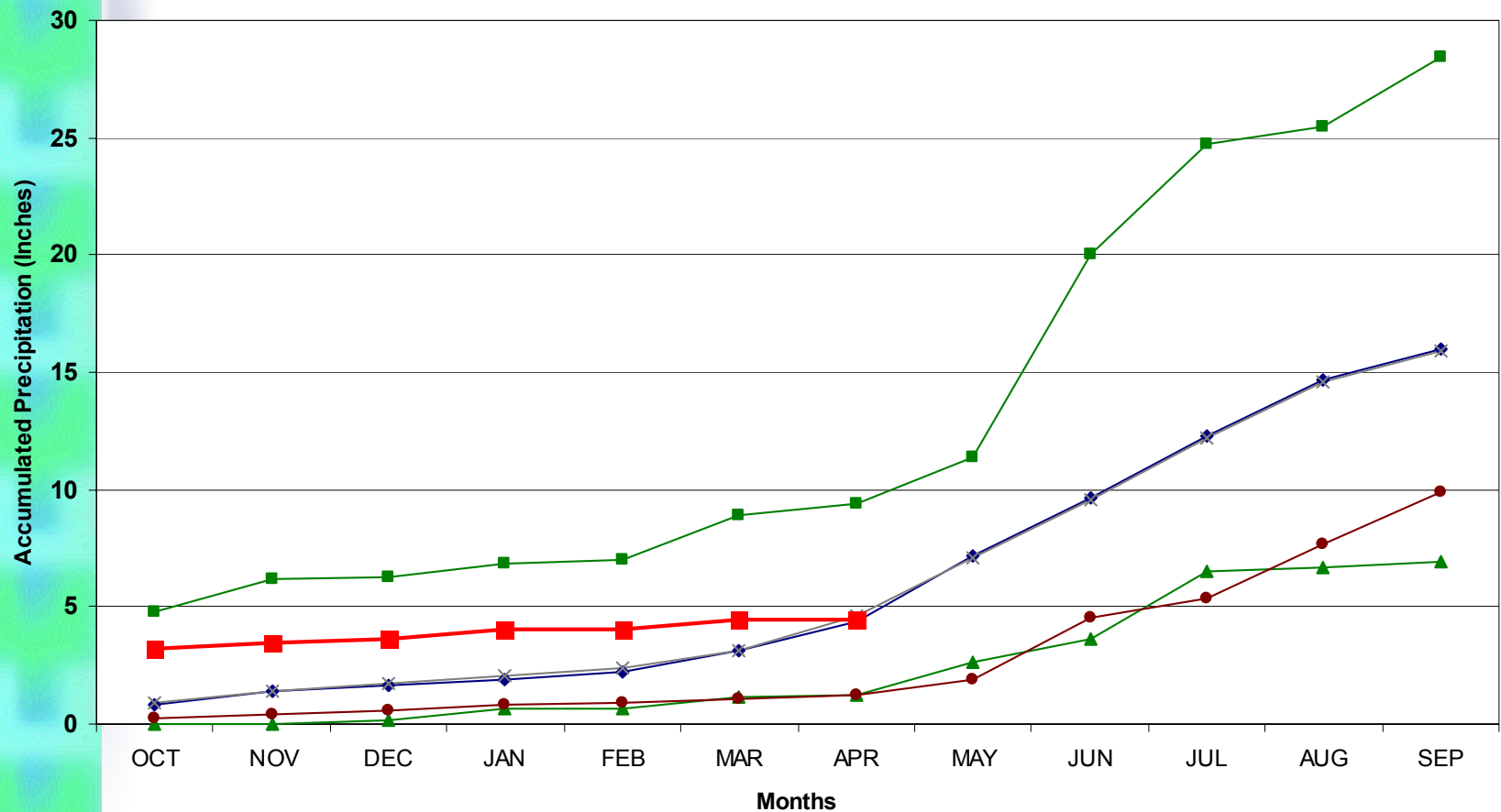
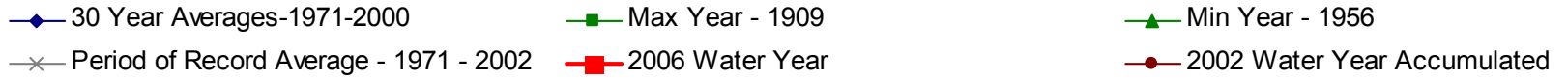
# Division 6 – Rocky Ford

## Rocky Ford 2006 Water Year



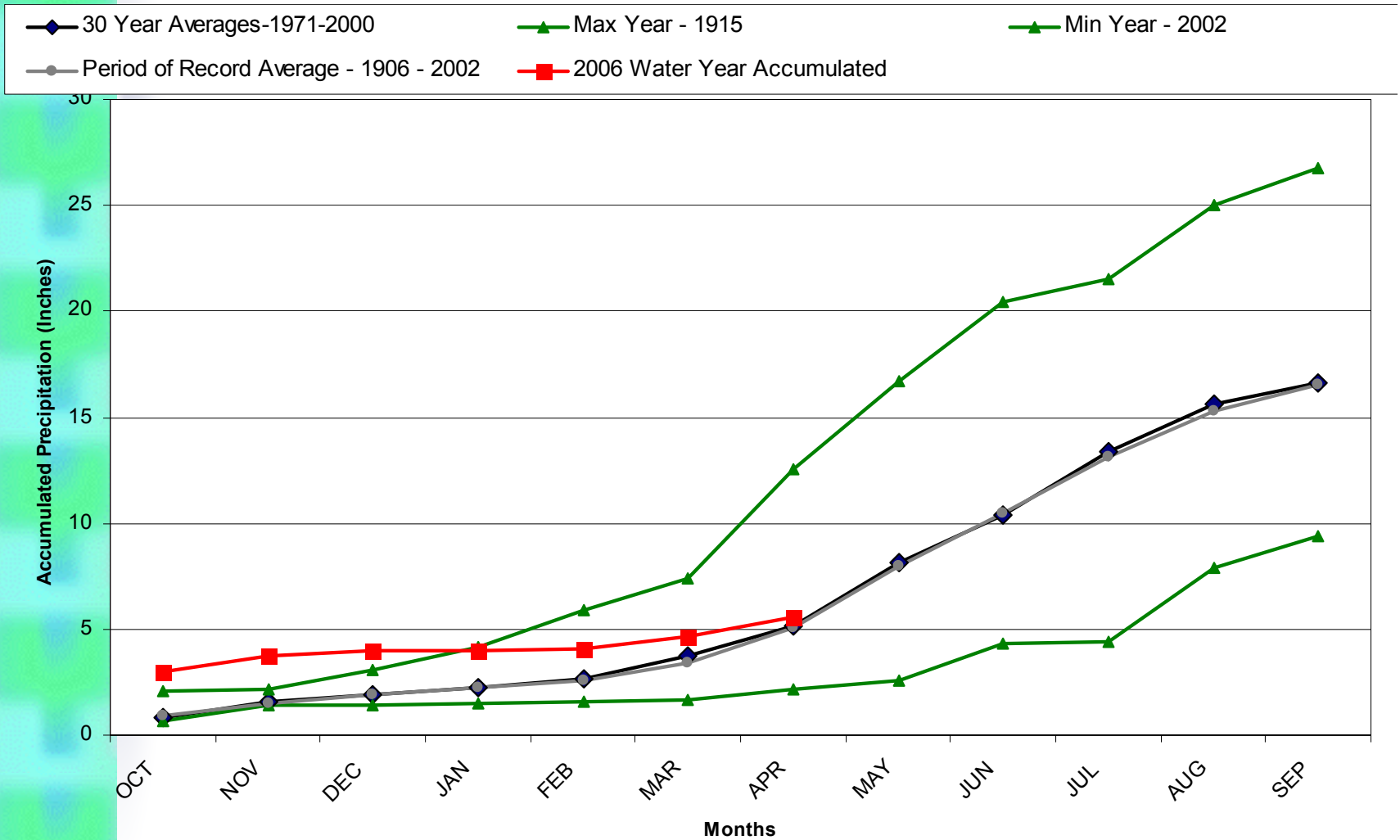
# Division 6 – Cheyenne Wells

## Cheyenne Wells 2006 Water Year



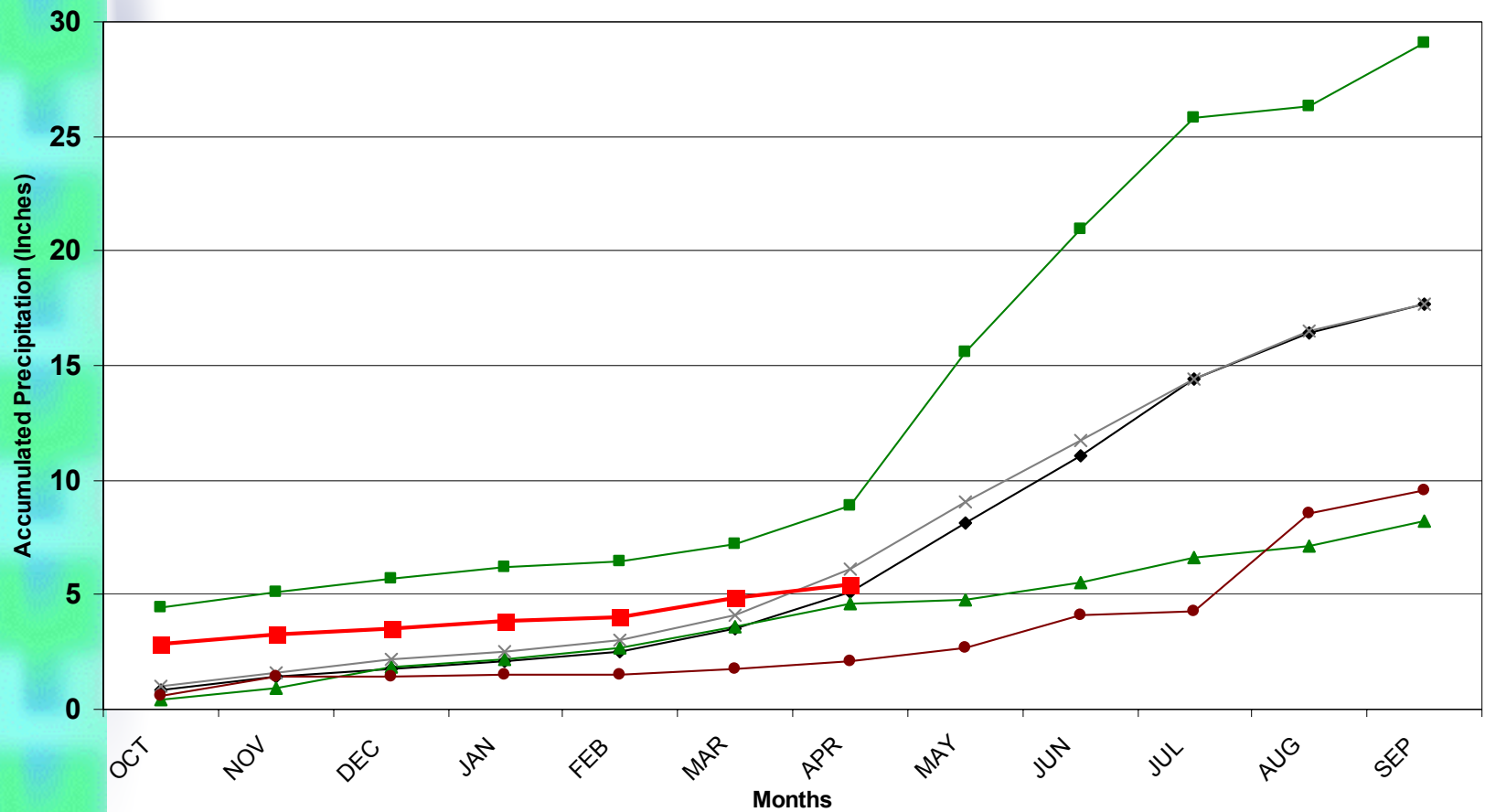
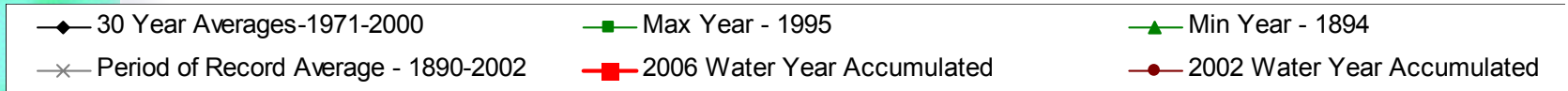
# Division 7 – Akron

## Akron 4E 2006 Water Year



# Division 7 – Leroy

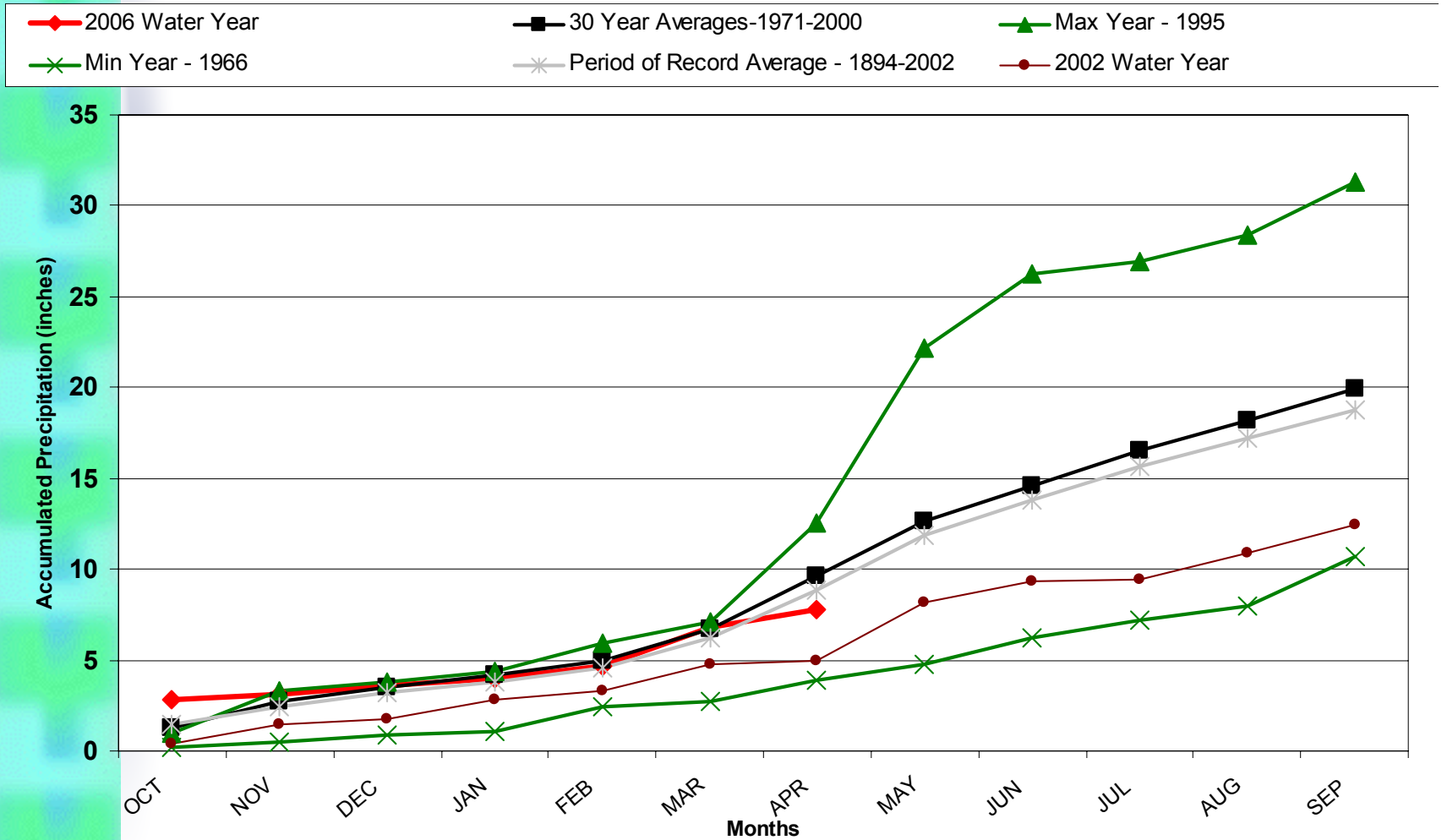
## Leroy 5SW 2006 Water Year





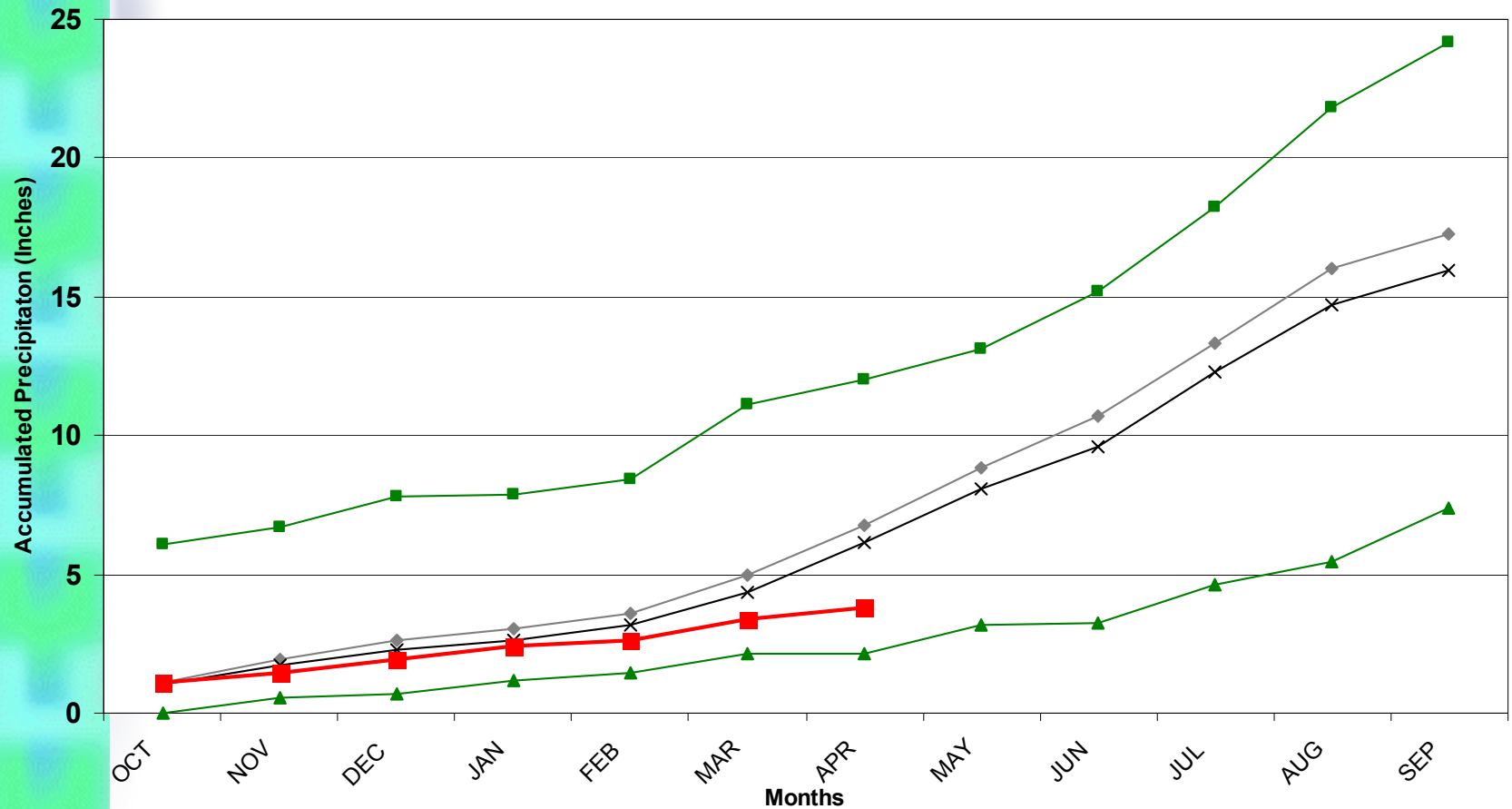
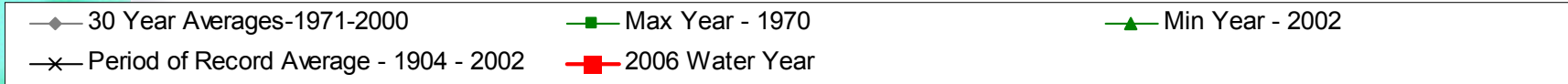
# Division 8 – Boulder

## Boulder 2006 Water Year



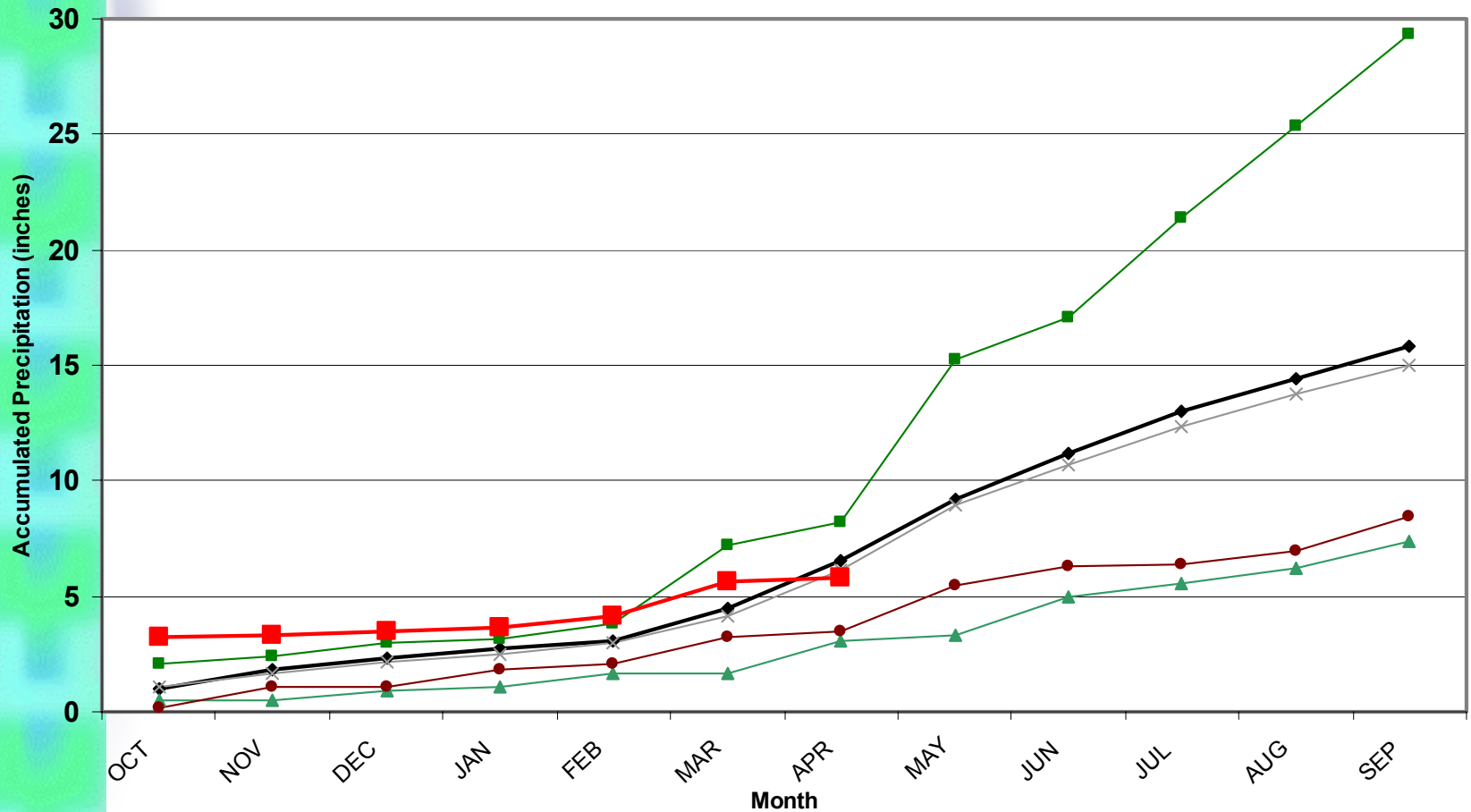
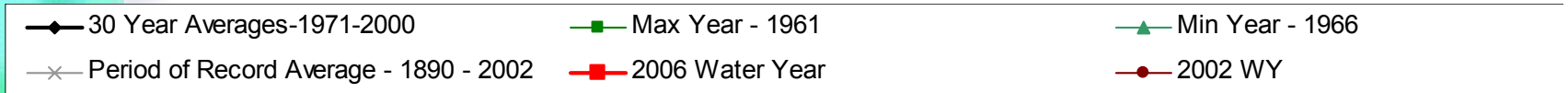
# Division 8 – Cheesman

## Cheesman 2006 Water Year



# Division 8 – Fort Collins

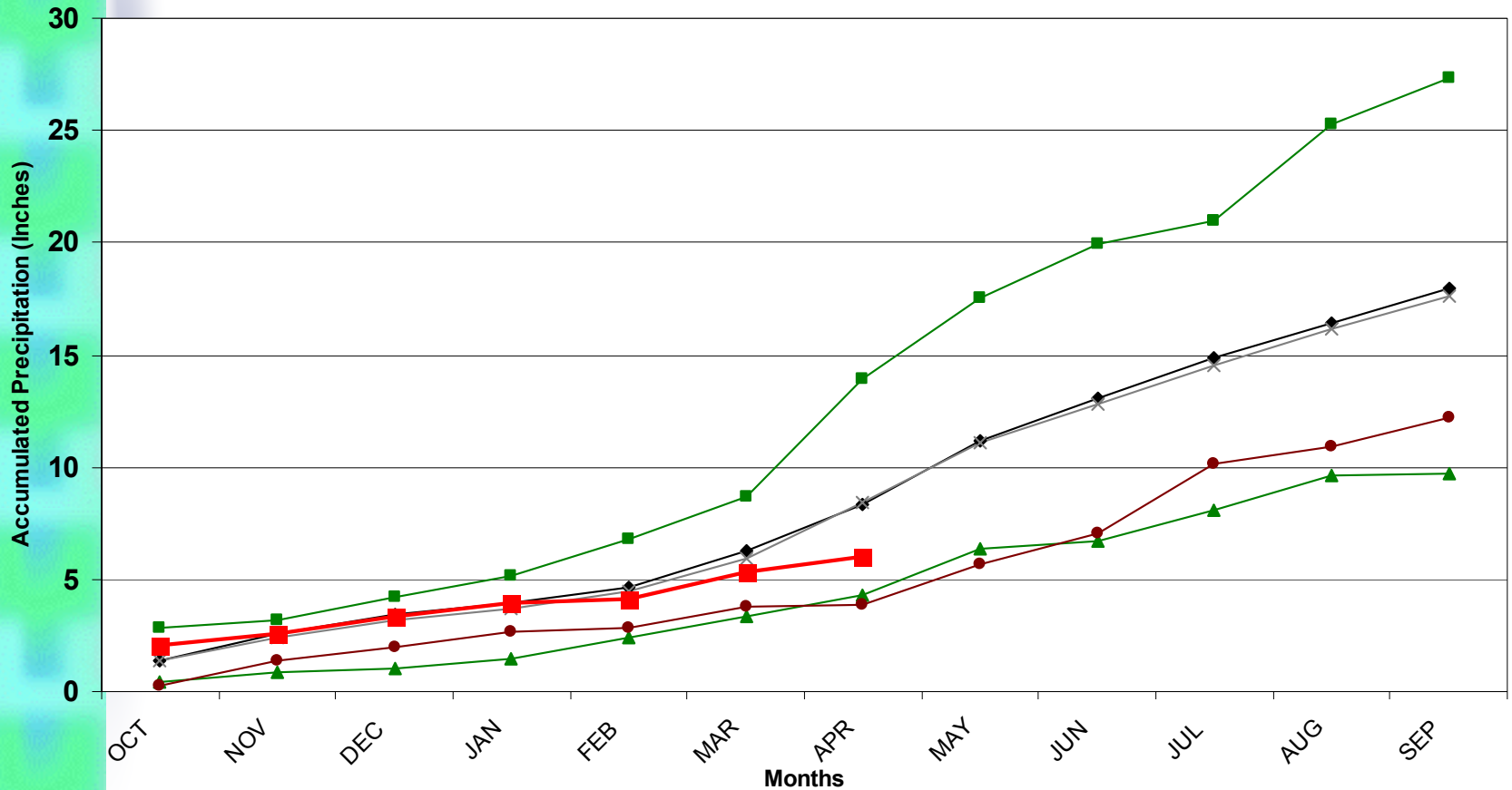
## Fort Collins 2006 Water Year



# 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







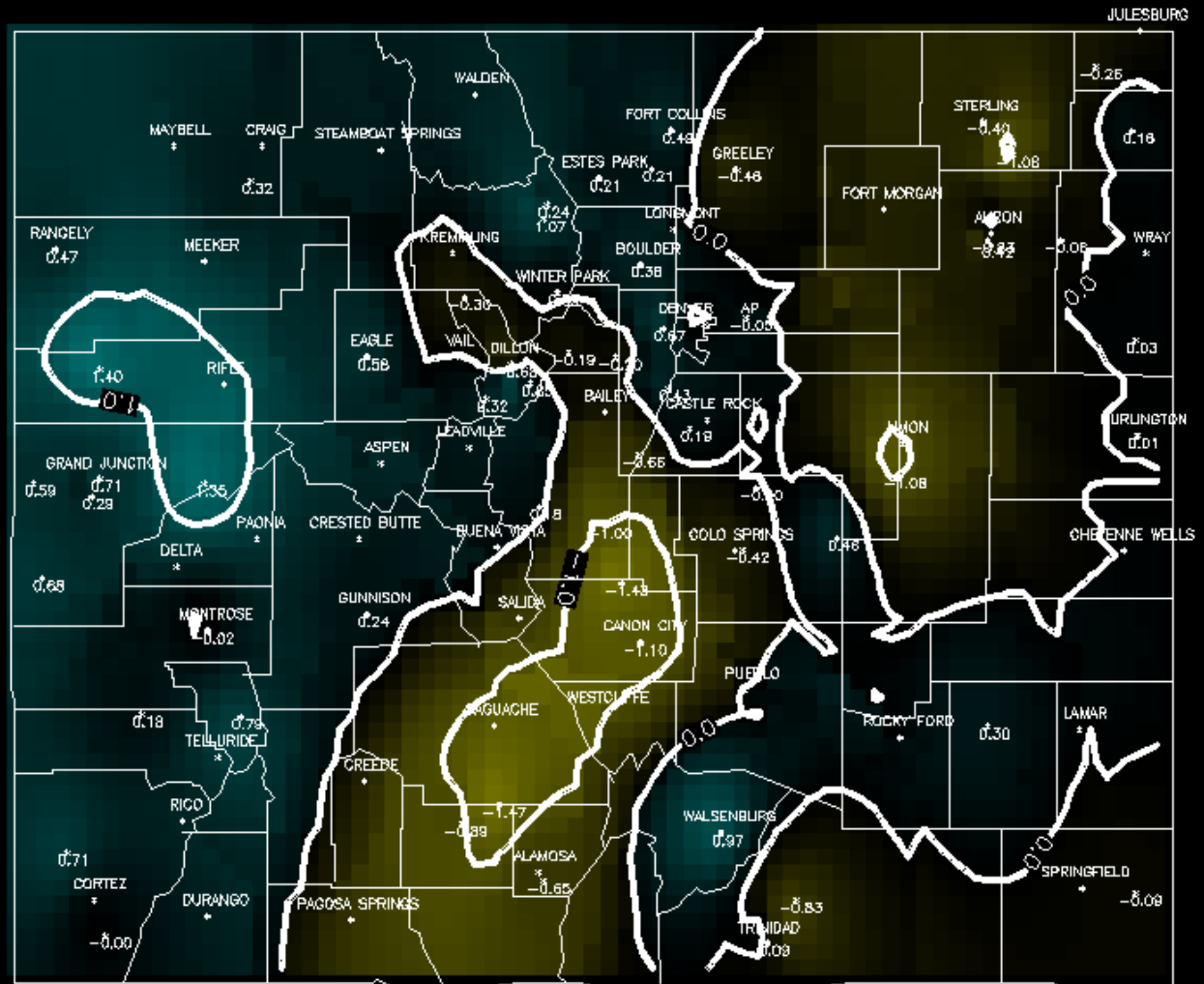




# 24 Month SPI

Colorado

4/2006 24 mon. SPI



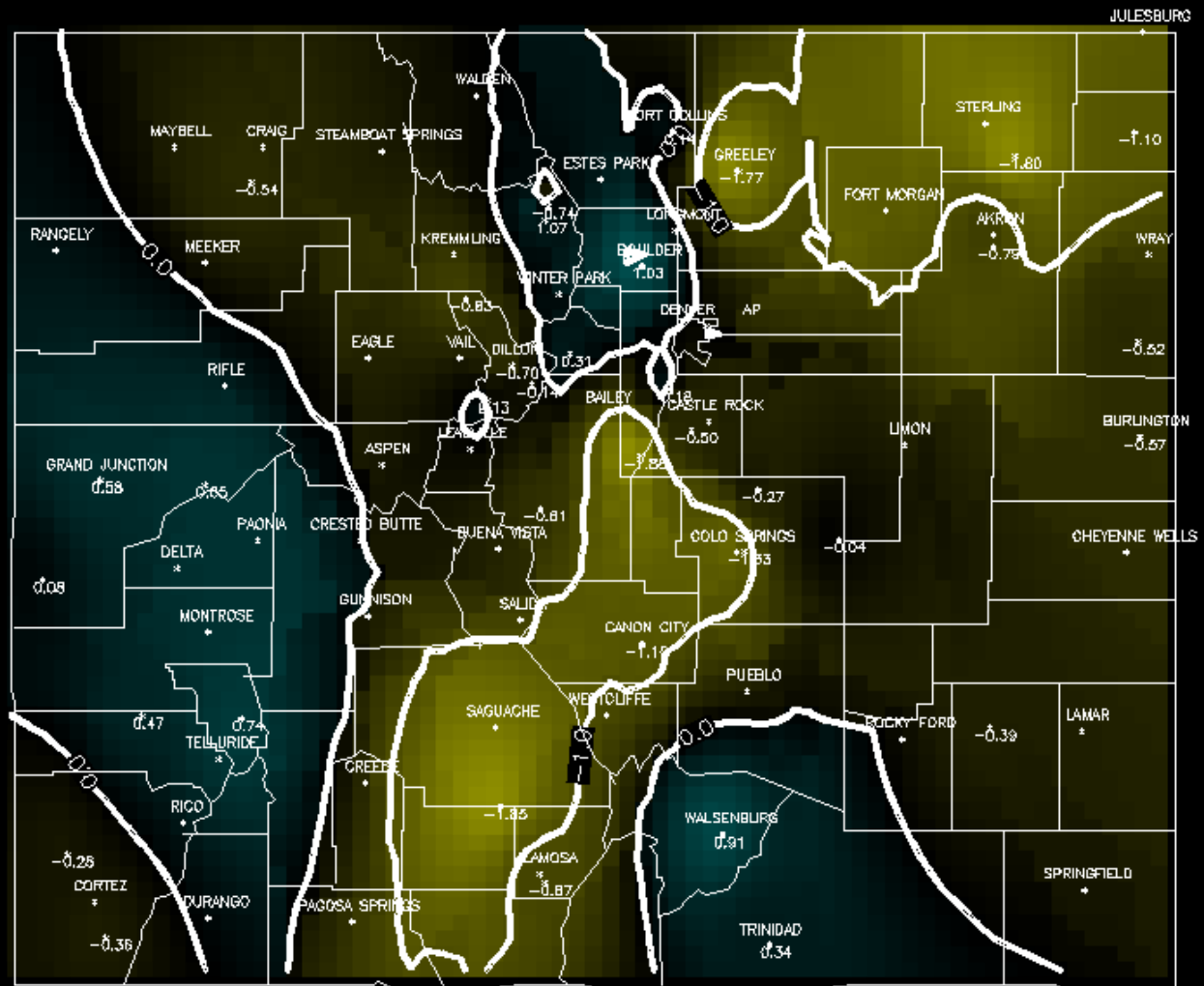
100 % < 2.0	3	MIN	-1.0
97 % < 1.0	4	MAX	-2.0
41 % < 0.0	5	MOD	-3.0

Produced by:  
Colorado Climate Center  
Fort Collins, CO

# 48 Month SPI

Colorado

4/2006 48 mon. SPI



100% < 2.0  
100% < 1.0  
89% < 0.0

15% < -1.0  
3% < -2.0  
3% < -3.0

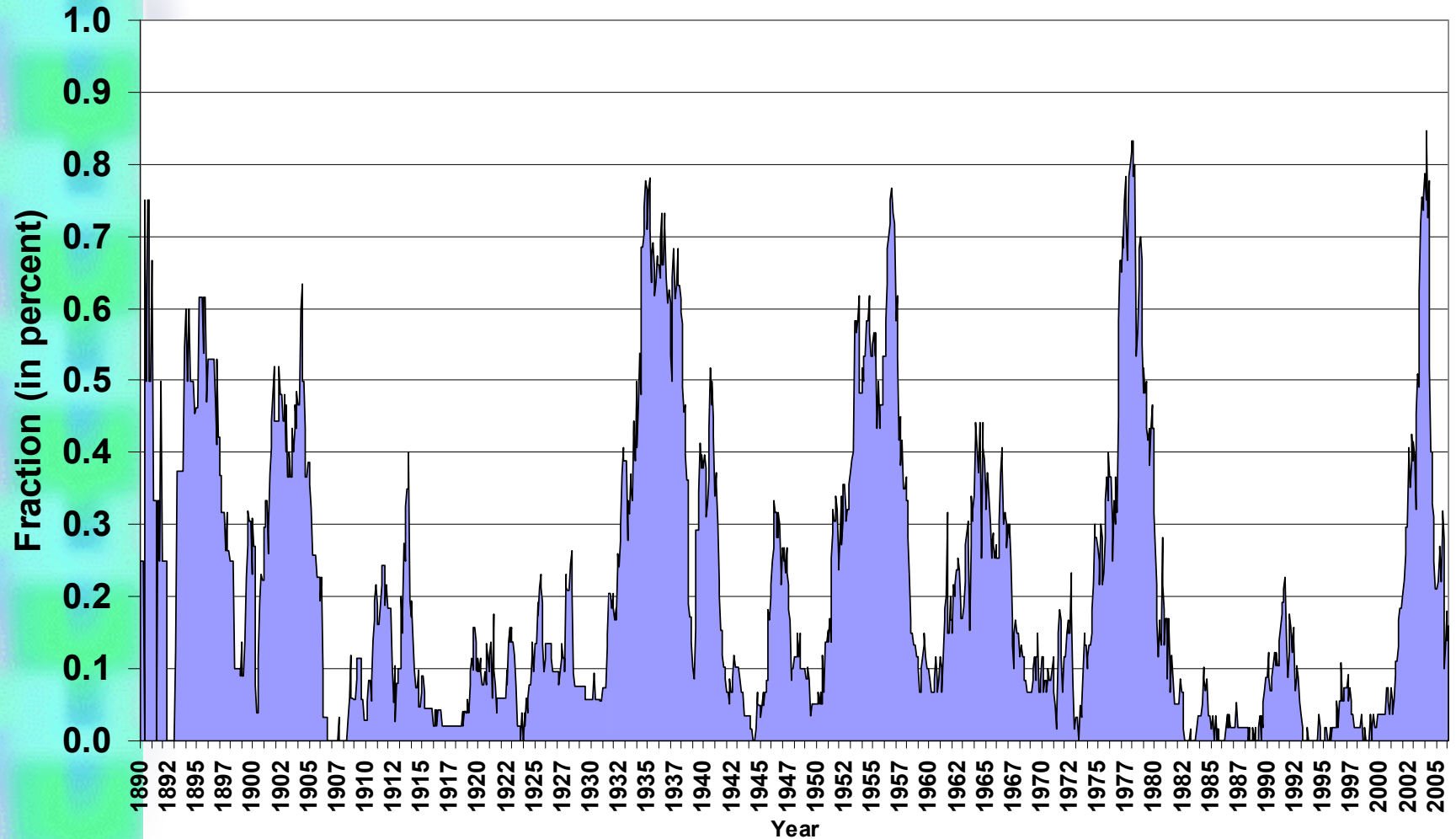
Produced by:  
Colorado Climate Center  
Fort Collins, CO

# Fraction of Colorado in Drought

## Fraction of Colorado in Drought

Based on 48 month SPI

(1890 - April 2006)









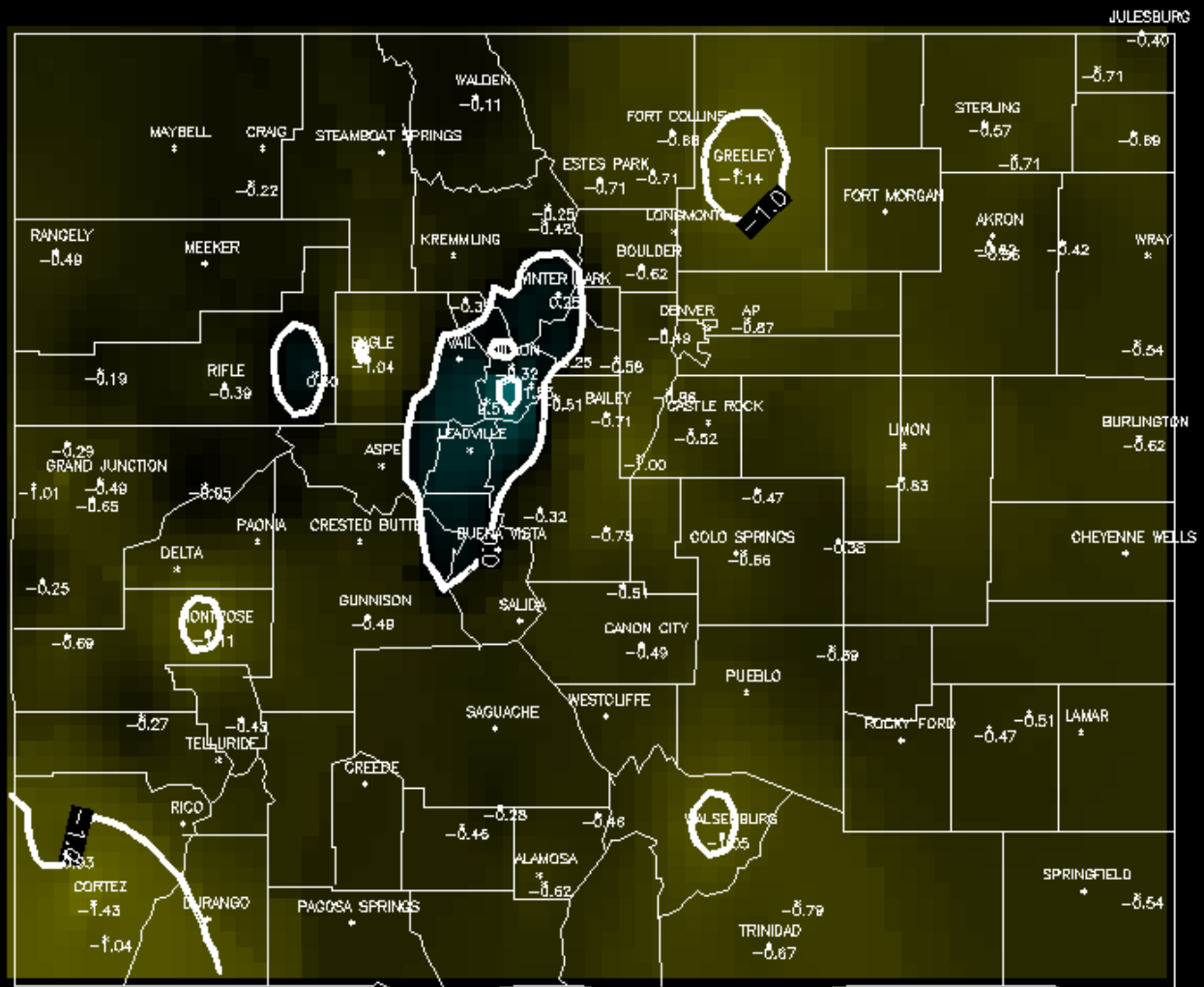


# Projected Conditions at 0.5 Probability Level

## 12 Month SPI at 6 months

Colorado

4/2006 12 mon. SPI - Projected 6 mon. at P=0.50



100% < 2.0  
 100% < 1.0  
 97% < 0.0  
 3.0 < 1.0  
 2.0 < 1.0  
 1.0 < 0.0

Produced by:  
 Colorado Climate Center  
 Fort Collins, CO





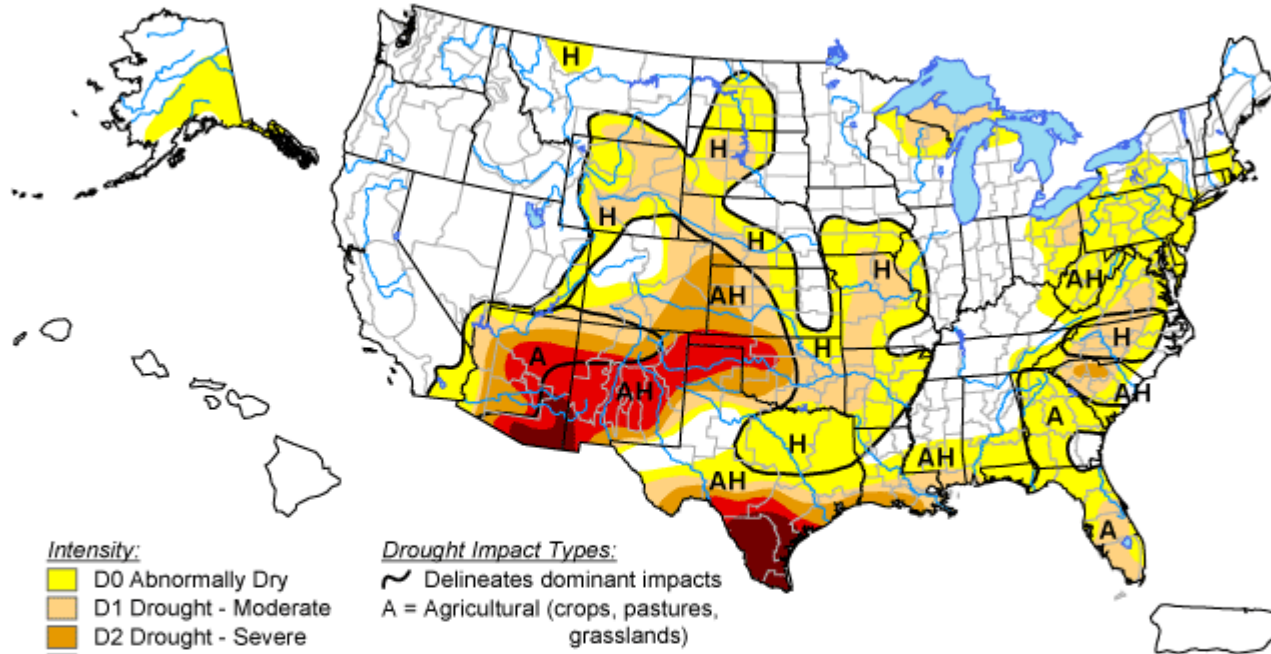
# Conclusions

- **April above average temperatures; below average precipitation – not good! (Precipitation only 25% of 2005)**
- **One beneficial storm in southern Colorado on April 28<sup>th</sup>**
- **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.



Released Thursday, May 11, 2006

Author: Mark Svoboda, National Drought Mitigation Center

<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”**



*www.colostate.edu*

