

Drought Update

May 17, 2004 WATF meeting

Roger A. Pielke, Sr., Director
Colorado Climate Center

(presented at the WTF meeting, Thornton Civic Center)
Prepared by Odie Bliss

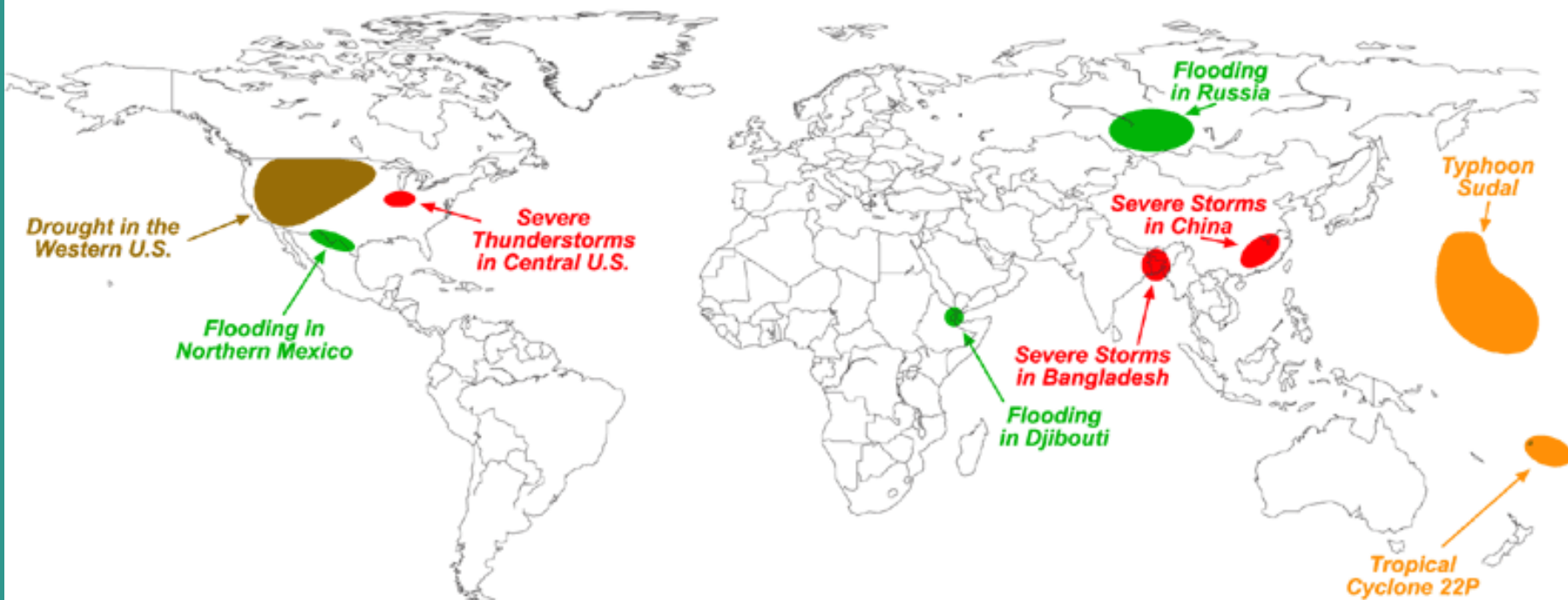


<http://ccc.atmos.colostate.edu>



Selected Global Significant Events

April 2004



Click On A Shaded Area For More Information



Drought



Heavy Rain / Flooding



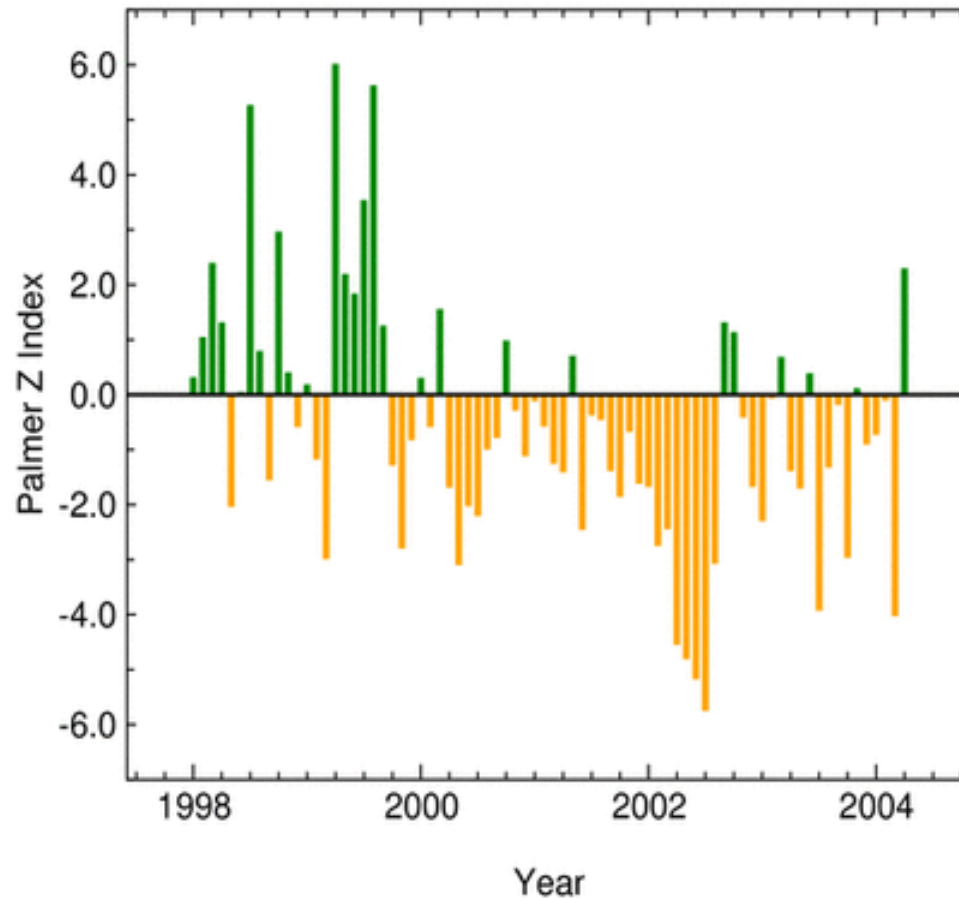
Tropical Systems



Storms

Colorado Statewide Z Index*

January 1998 - April 2004



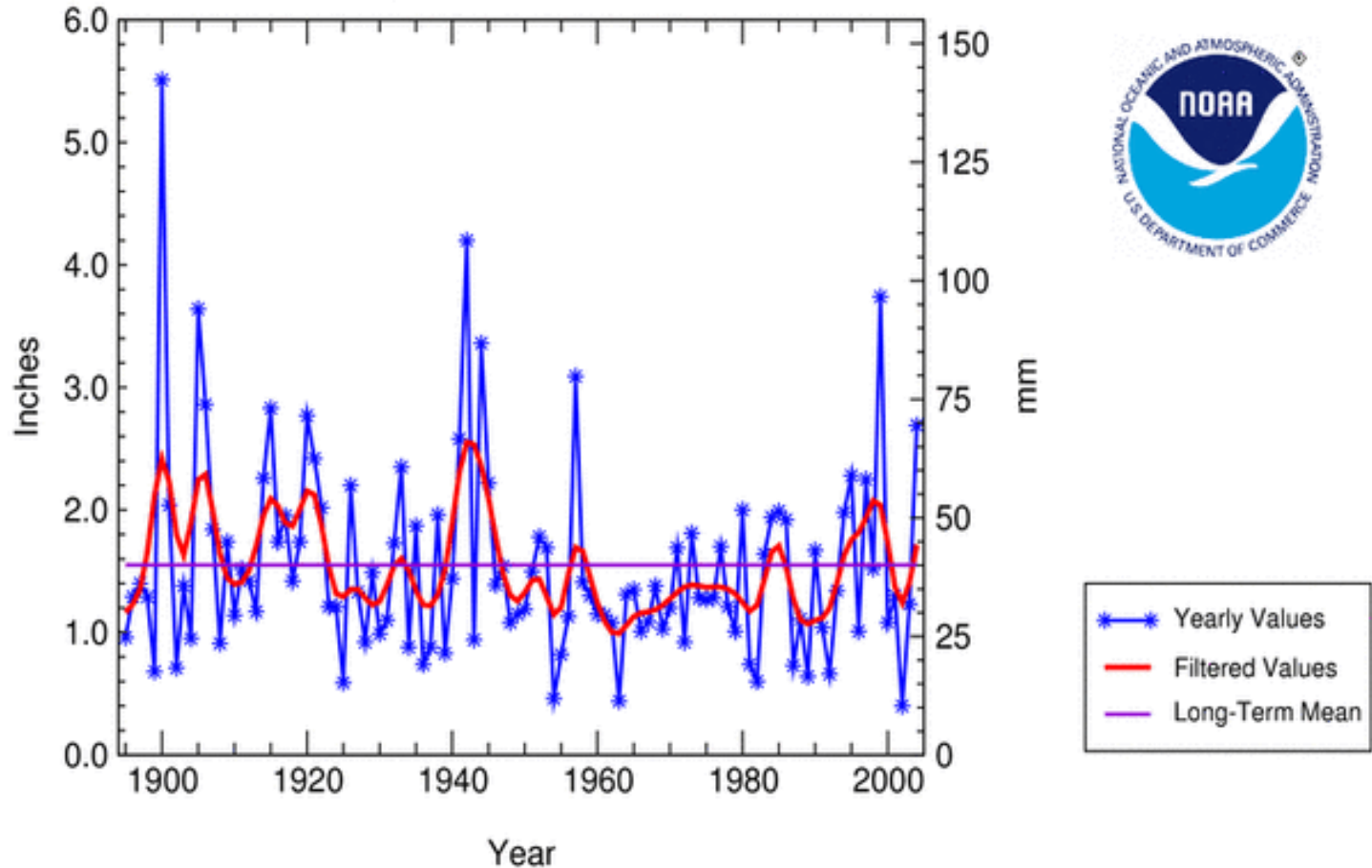
*Palmer Z Index
Short-Term Drought



National Climatic Data Center / NESDIS / NOAA

Colorado Statewide Precipitation

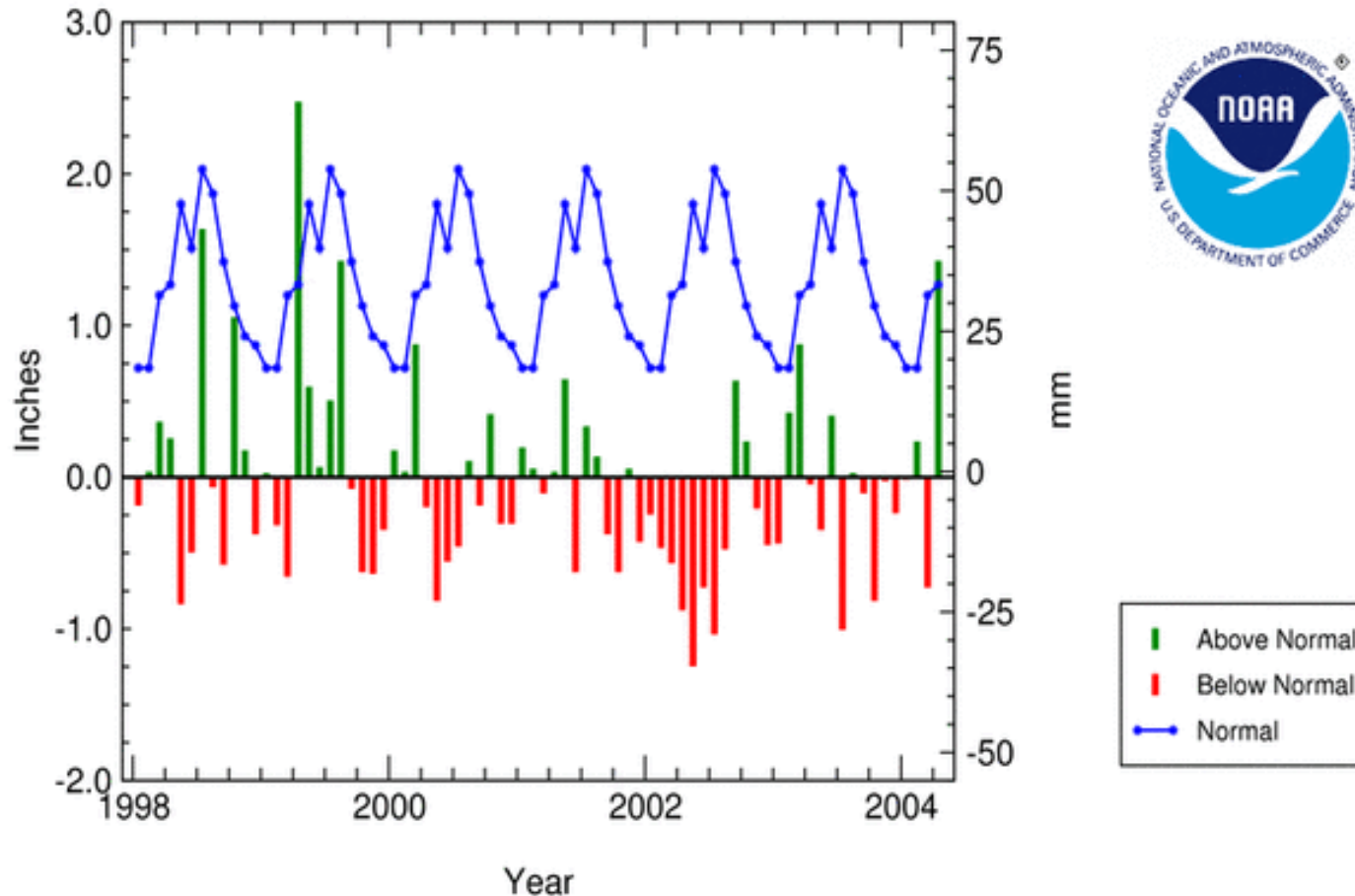
April, 1895 - 2004



National Climatic Data Center / NESDIS / NOAA

Colorado Statewide Precipitation

Normal & Departure, Jan 1998 - Apr 2004



National Climatic Data Center / NESDIS / NOAA

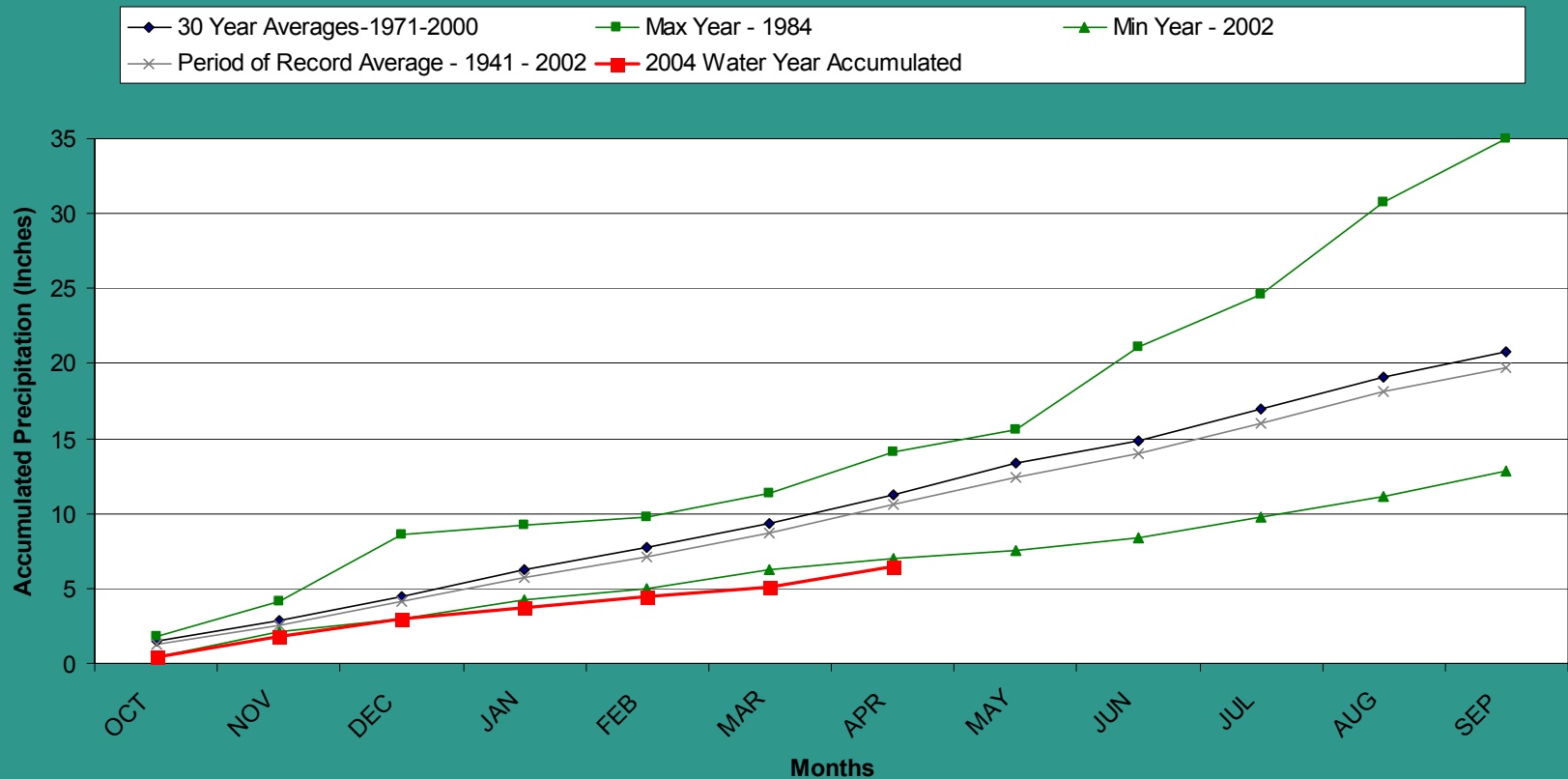
Colorado
Precipitation
Ranking
1895-2004

Statewide Precipitation Ranks
for Colorado , 2003-2004

Period	Rank
Apr	<u>10th</u> wettest (<u>101st</u> driest)
Mar-Apr	<u>31st</u> wettest (<u>80th</u> driest)
Feb-Apr	<u>28th</u> wettest (<u>83rd</u> driest)
Jan-Apr	<u>32nd</u> wettest (<u>78th</u> driest)
Dec-Apr	<u>41st</u> wettest (<u>69th</u> driest)
Nov-Apr	<u>43rd</u> wettest (<u>67th</u> driest)
Oct-Apr	<u>45th</u> driest
Sep-Apr	<u>46th</u> driest
Aug-Apr	<u>44th</u> driest
Jul-Apr	<u>29th</u> driest
Jun-Apr	<u>39th</u> driest
May-Apr	<u>34th</u> driest

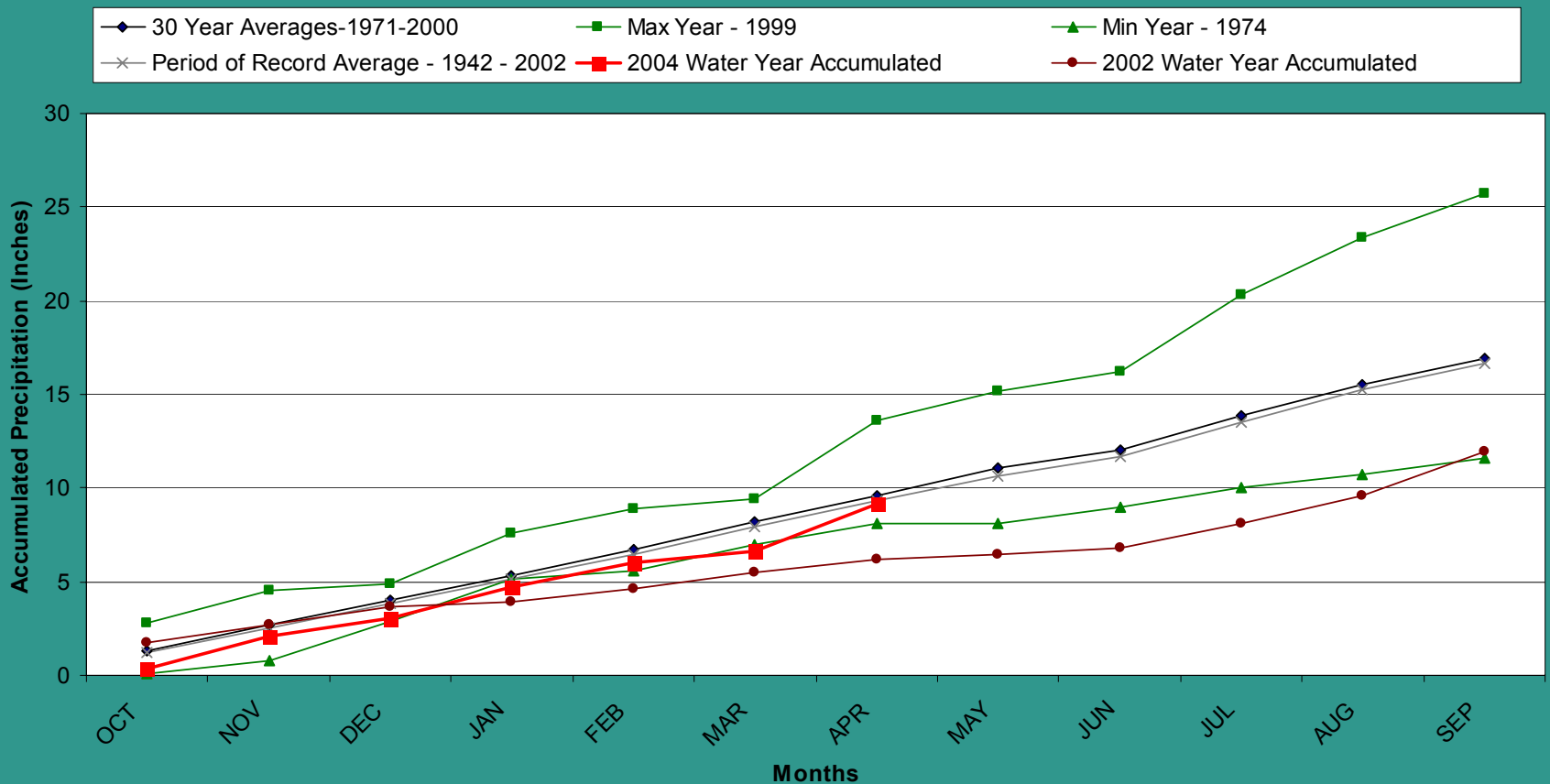
Division 1- Grand Lake 1NW

Grand Lake 1 NW 2004 Water Year (through Oct '03 - Apr '04)



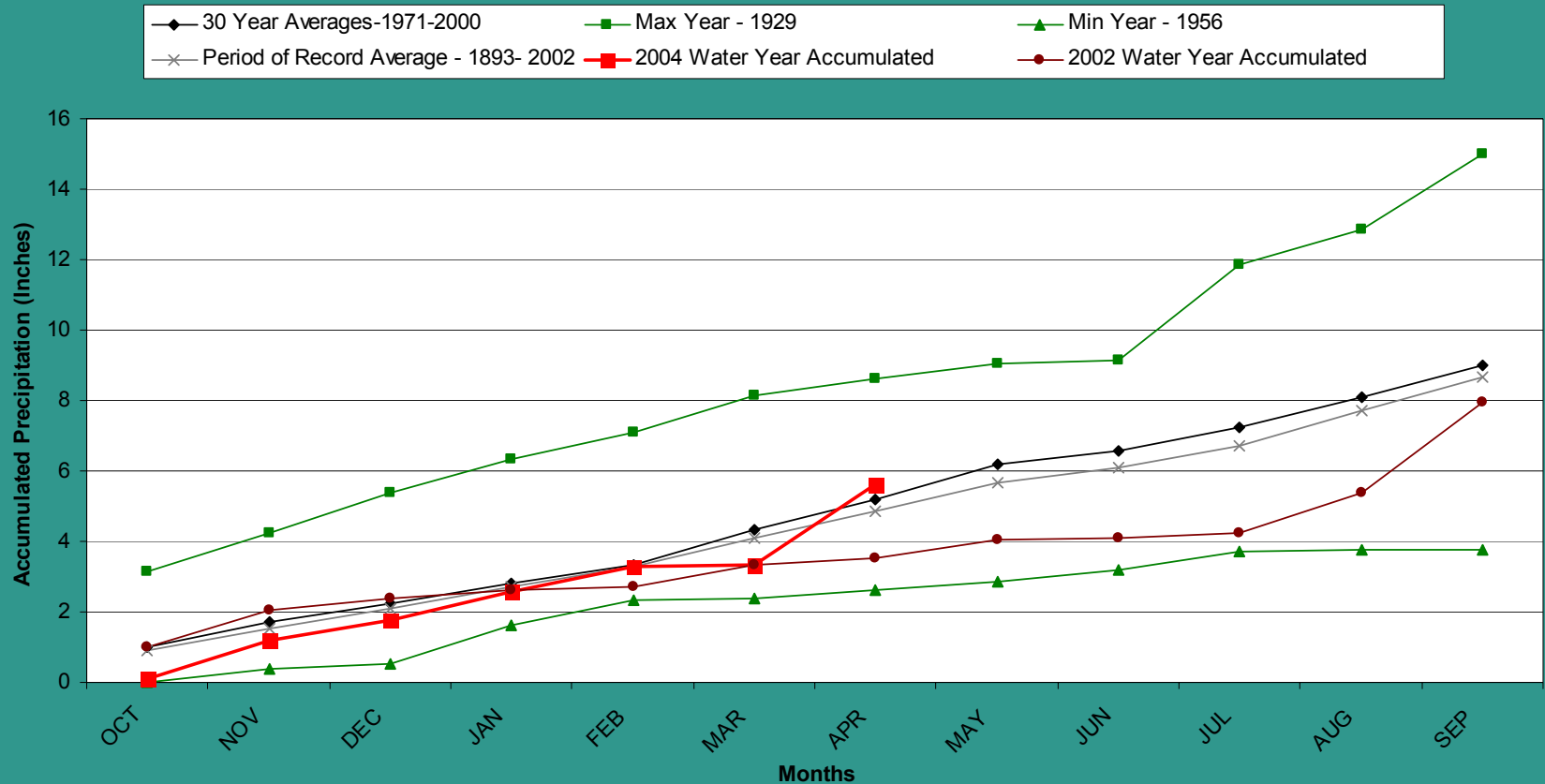
Division 1- Taylor Park

Taylor Park 2004 Water Year (through Oct '03 - Apr '04)



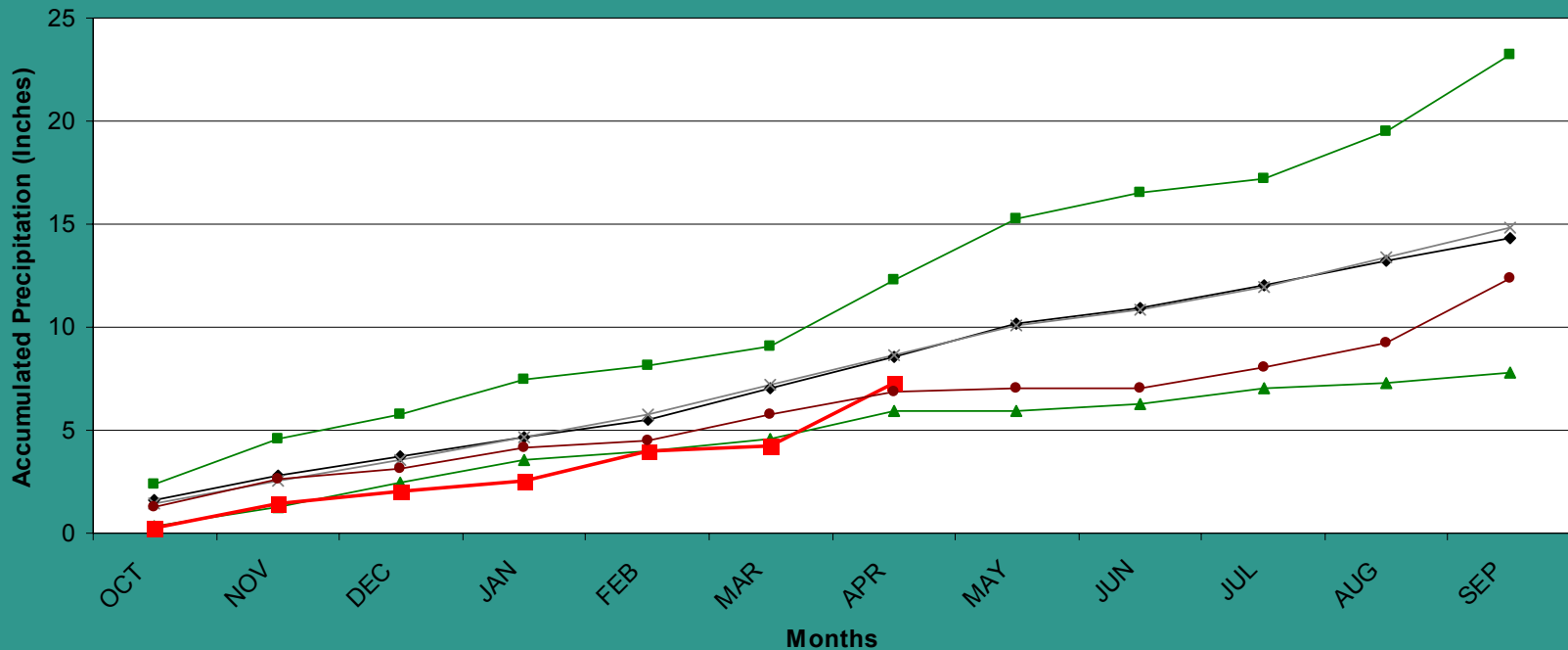
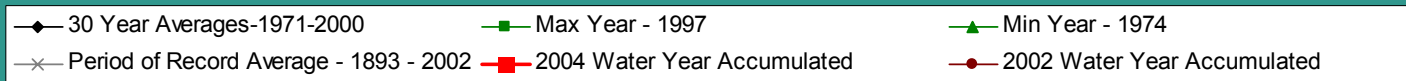
Division 2 – Grand Junction

Grand Junction WSFO 2004 Water Year (through Oct '03 - Apr '04)



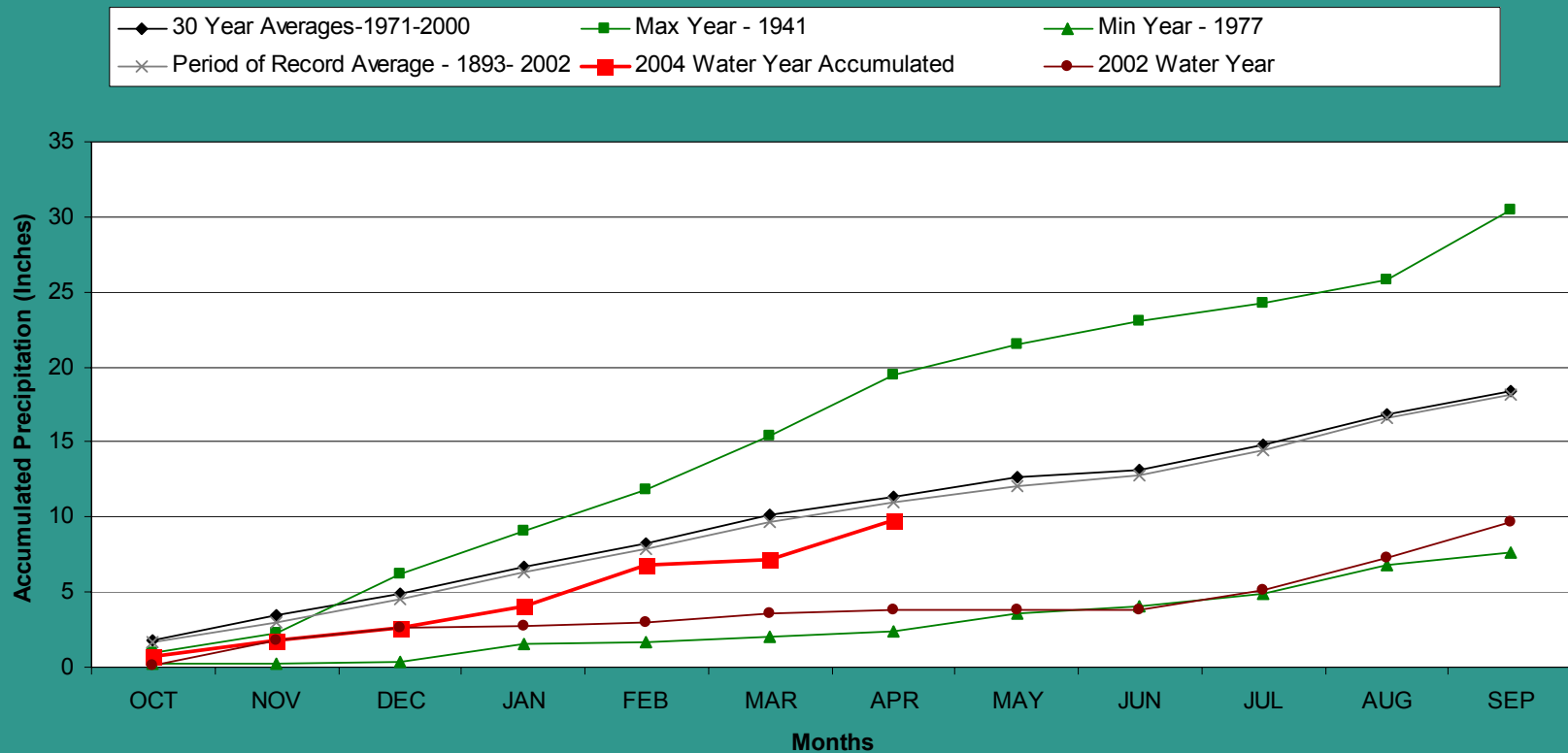
Division 2 – Collbran

Collbran 2SW 2004 Water Year (through Oct '03 - Apr '04)



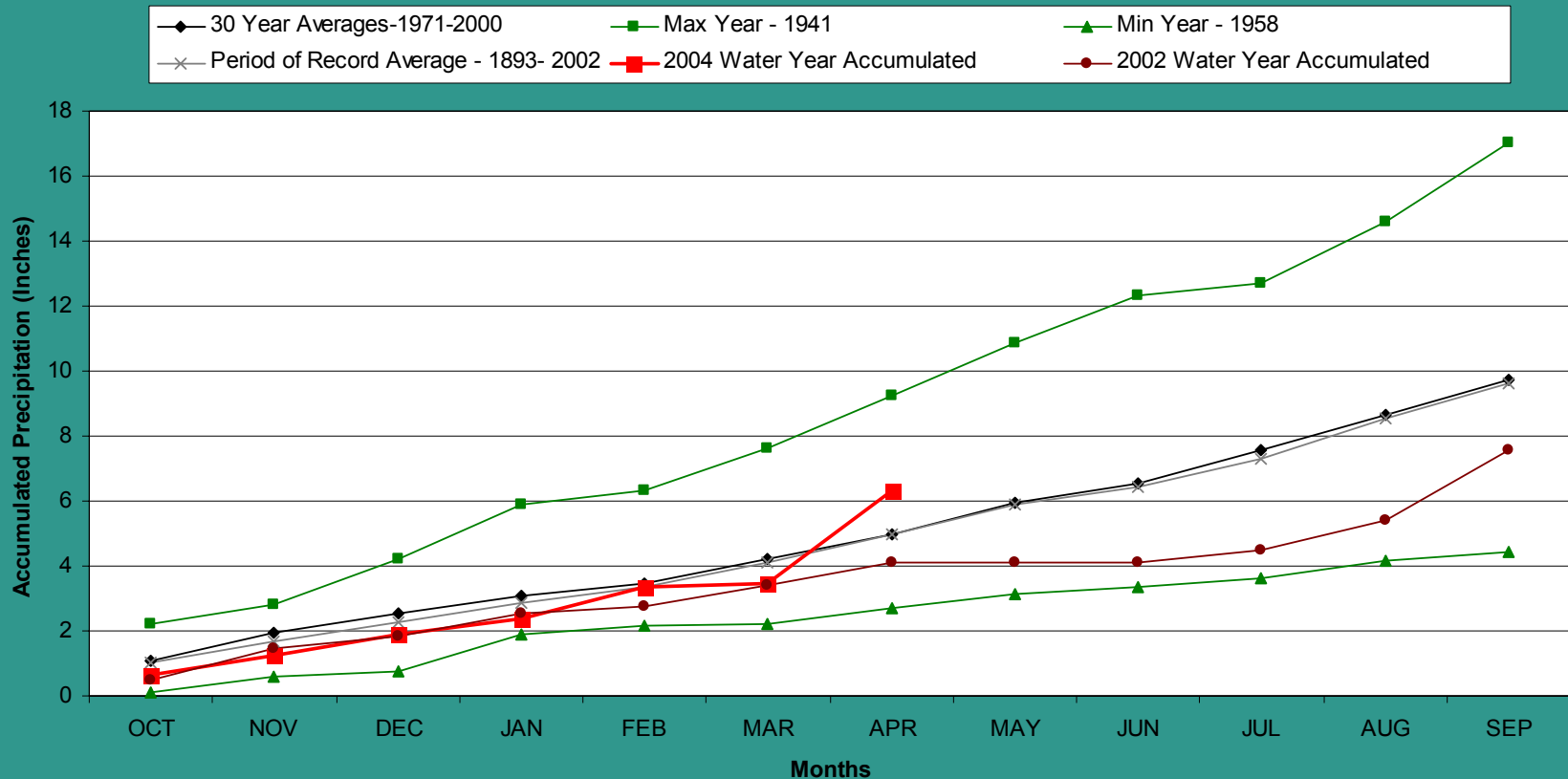
Division 3 – Mesa Verde

Mesa Verde NP 2004 Water Year (through Oct '03 - Apr '04)



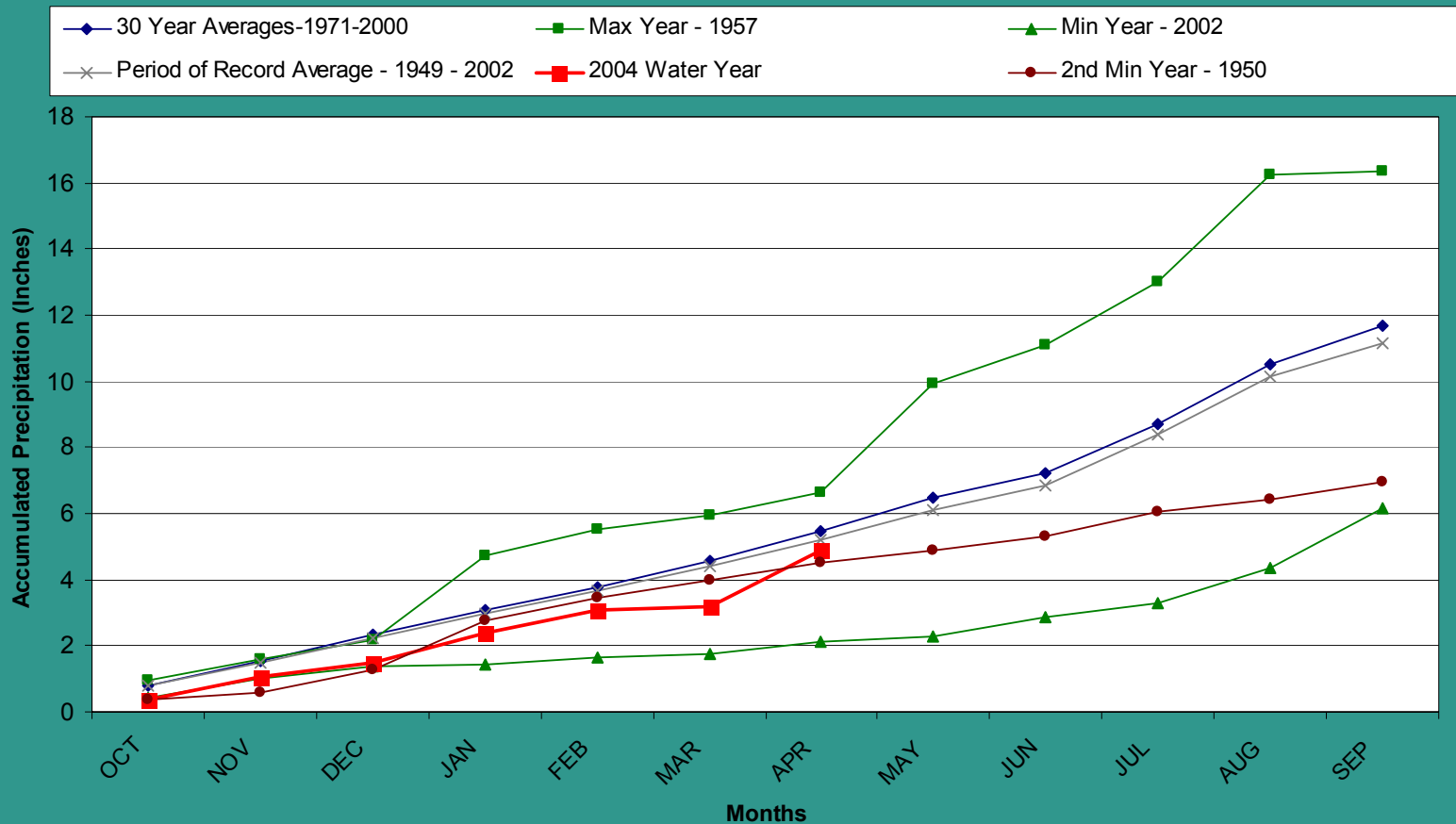
Division 3 - Montrose

Montrose #2 2004 Water Year (through Oct '03 - Apr '04)



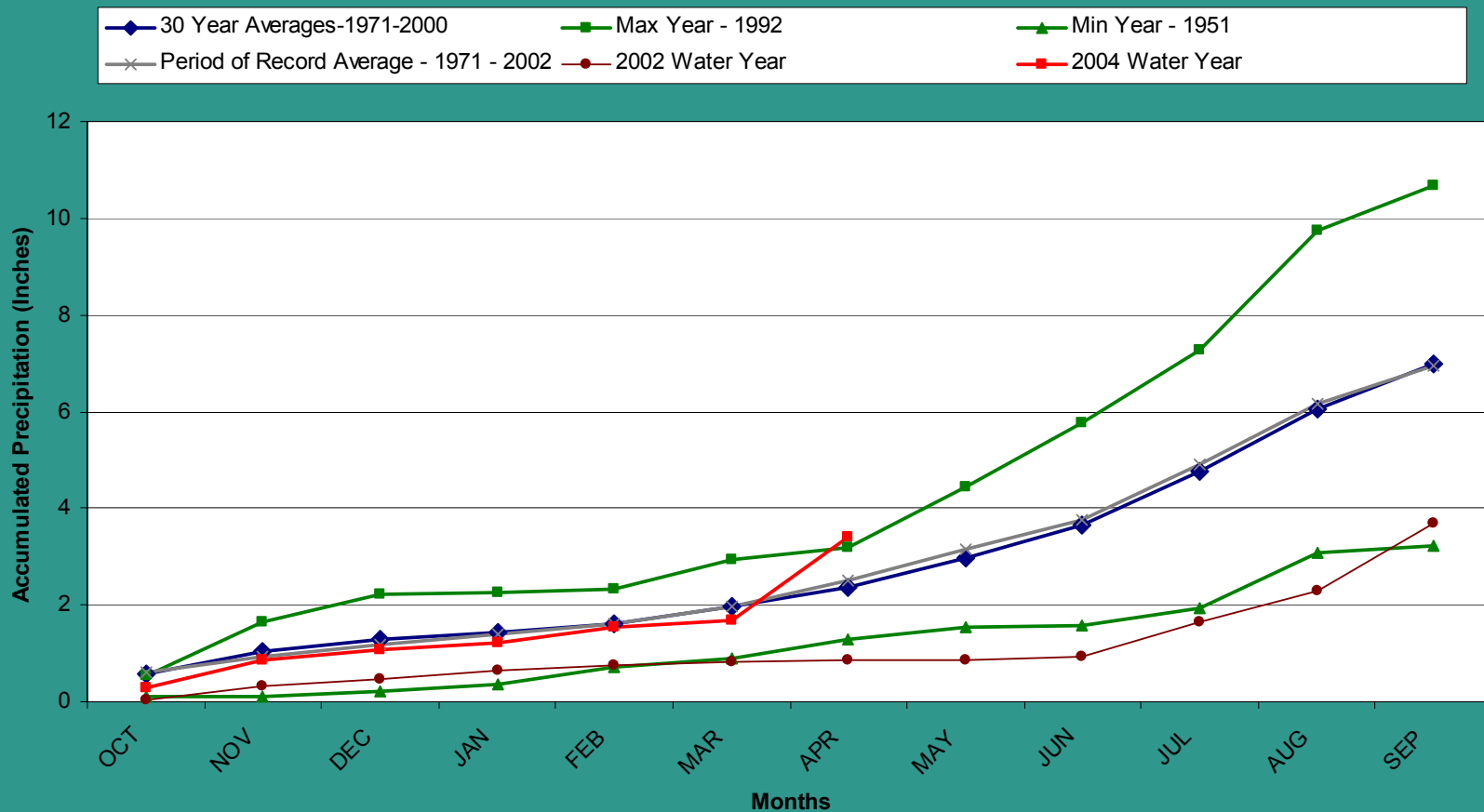
Division 3 – Cochetopa Creek

Cochetopa Creek 2004 Water Year (through Oct '03 - Apr '04)



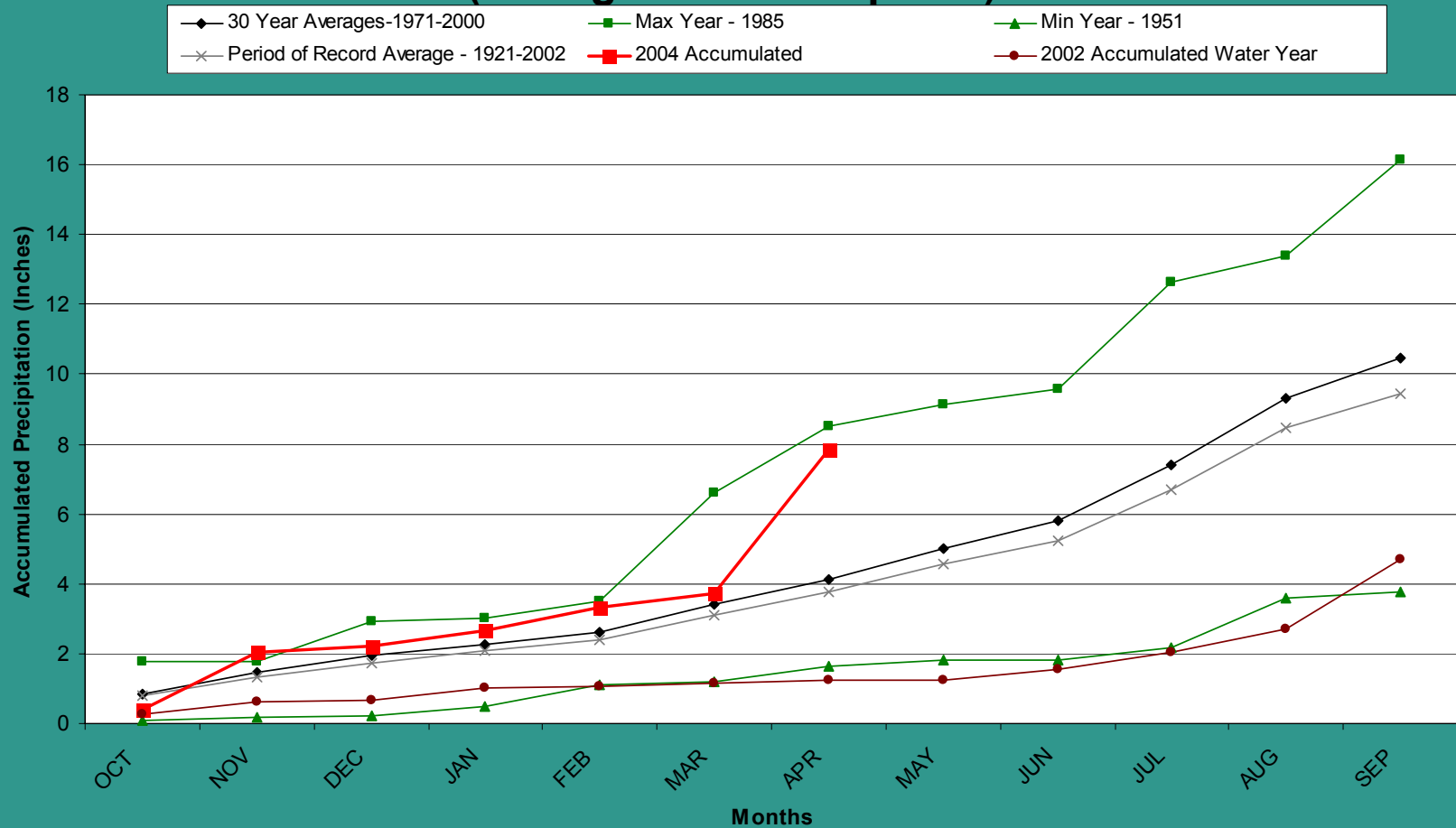
Division 4 - Center

Center 4SSW 2004 Water Year (through Oct '03 - Apr '04)



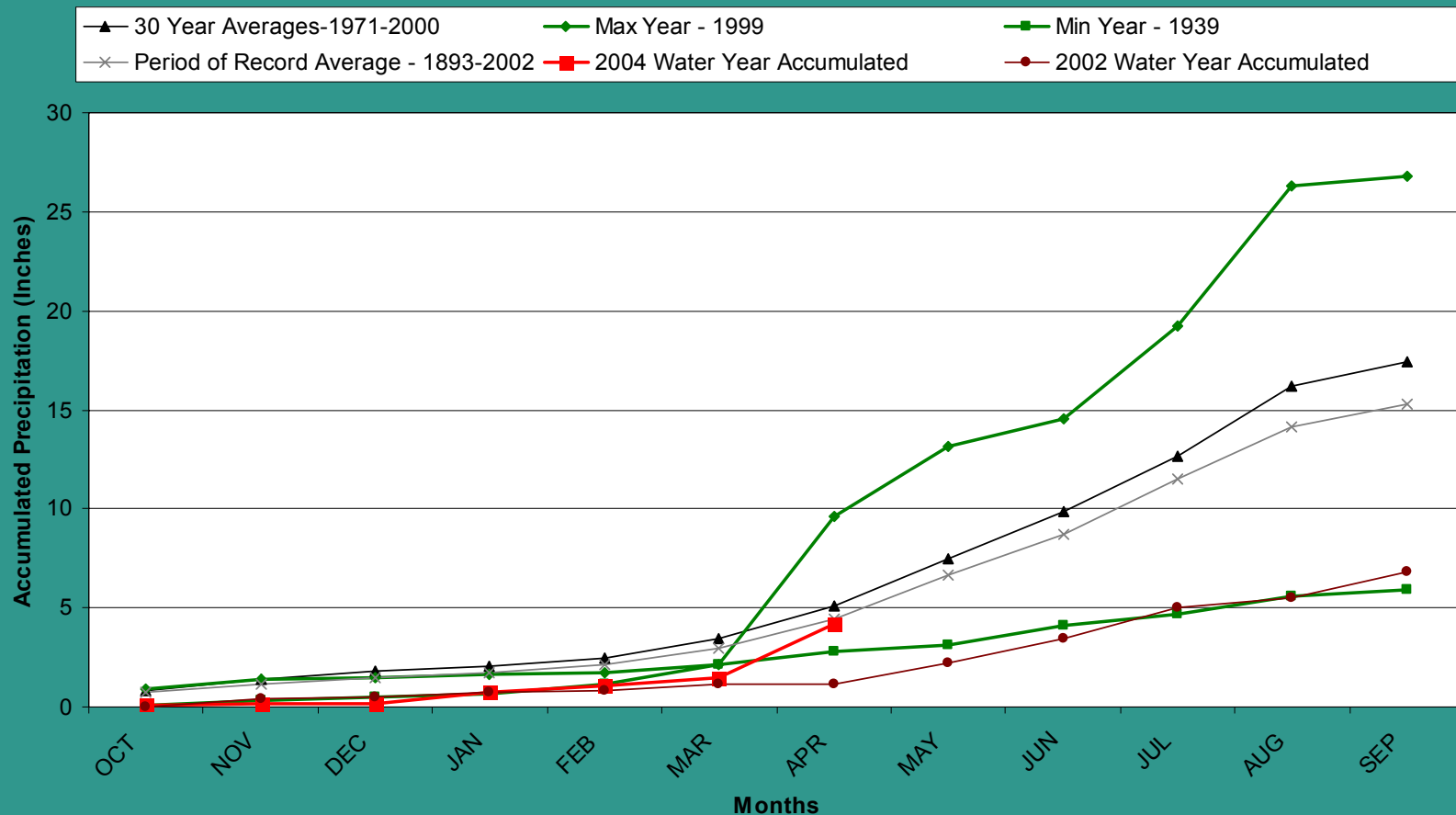
Division 4 – Del Norte

Del Norte 2004 Water Year (through Oct '03 - Apr '04)



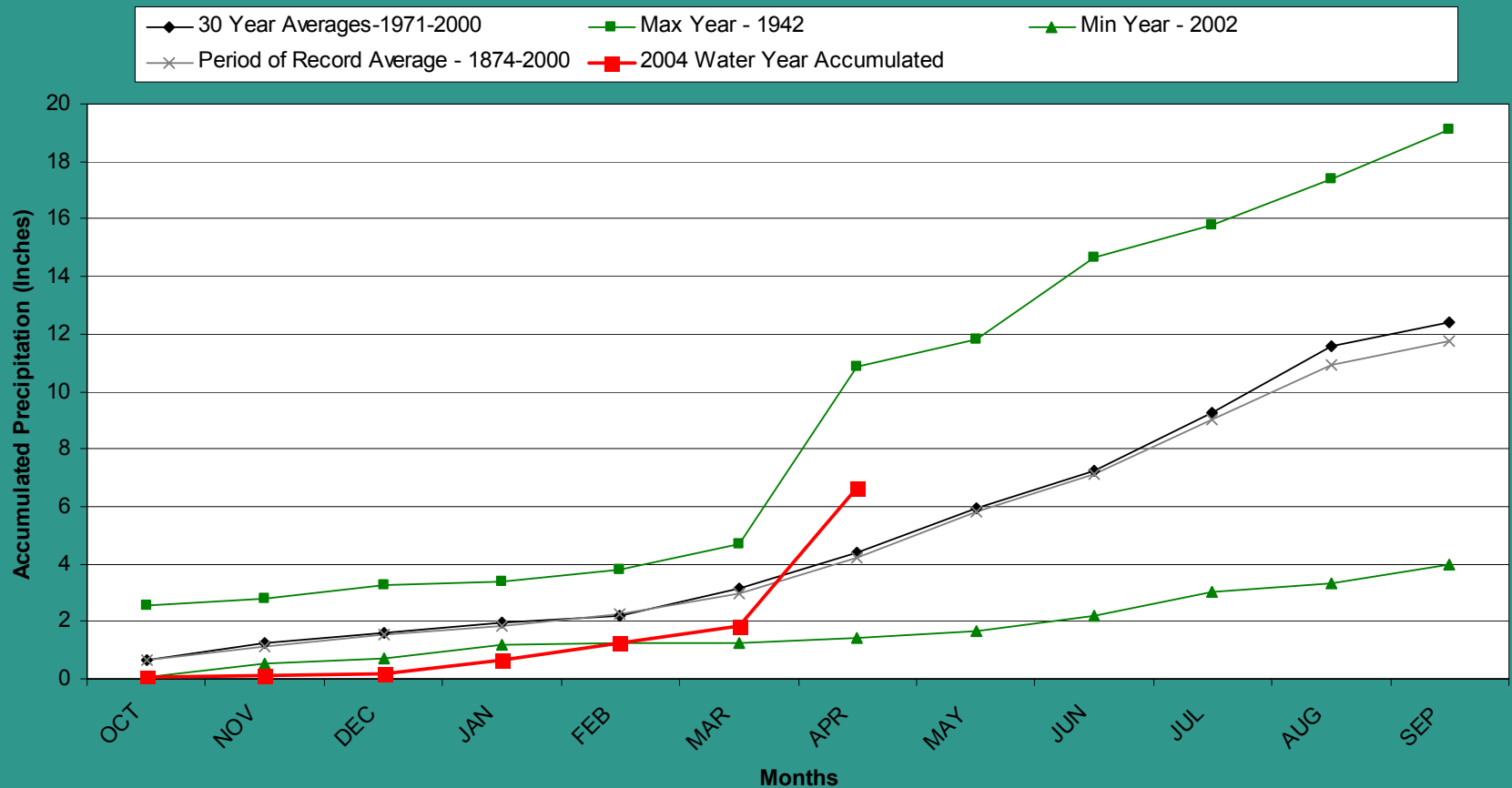
Division 5 – Colorado Springs

Colorado Springs 2004 Water Year (through Oct '03 - Apr '04)



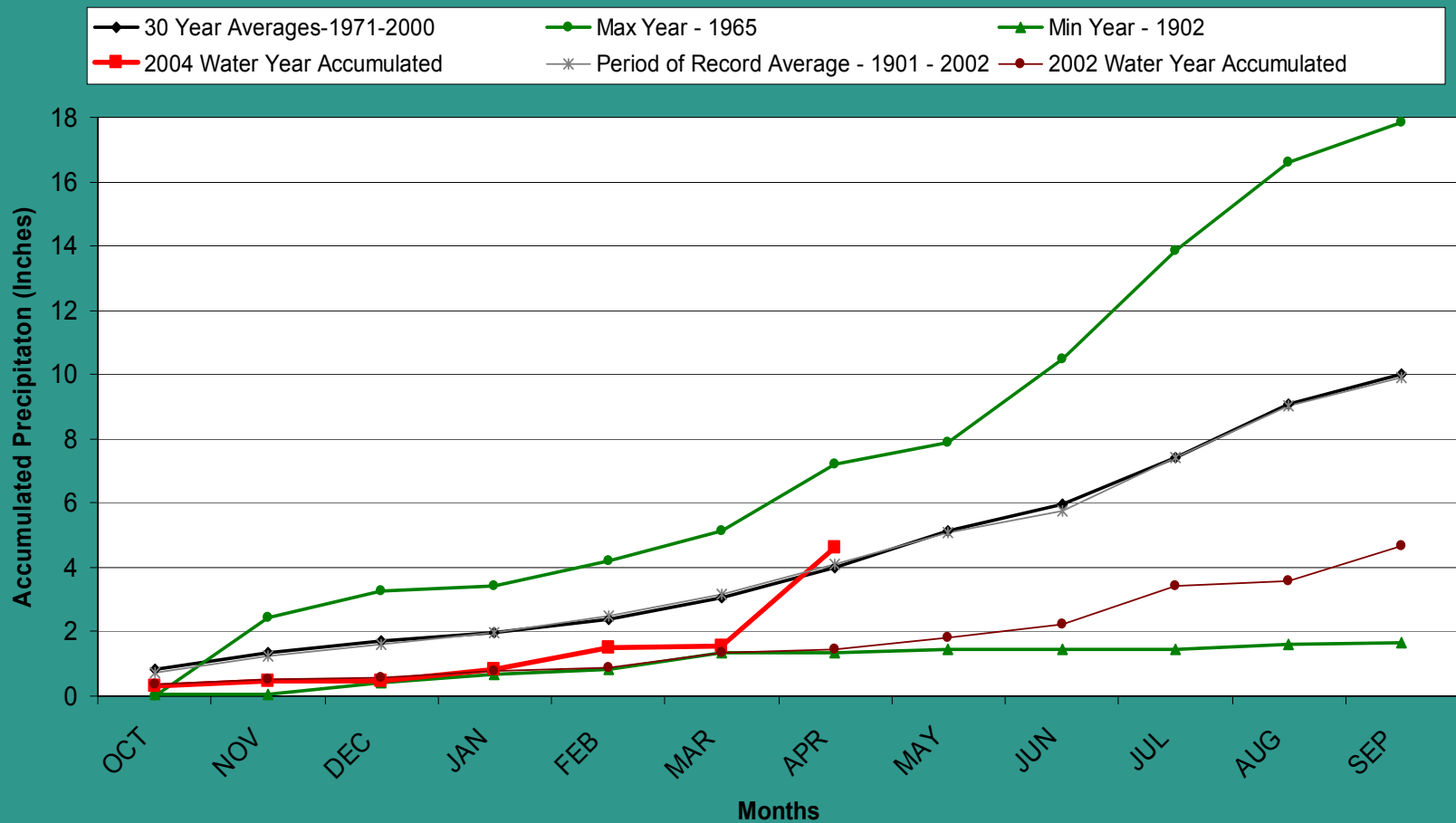
Division 5 - Pueblo

Pueblo WSO 2004 Water Year (through Oct '03 - Apr '04)



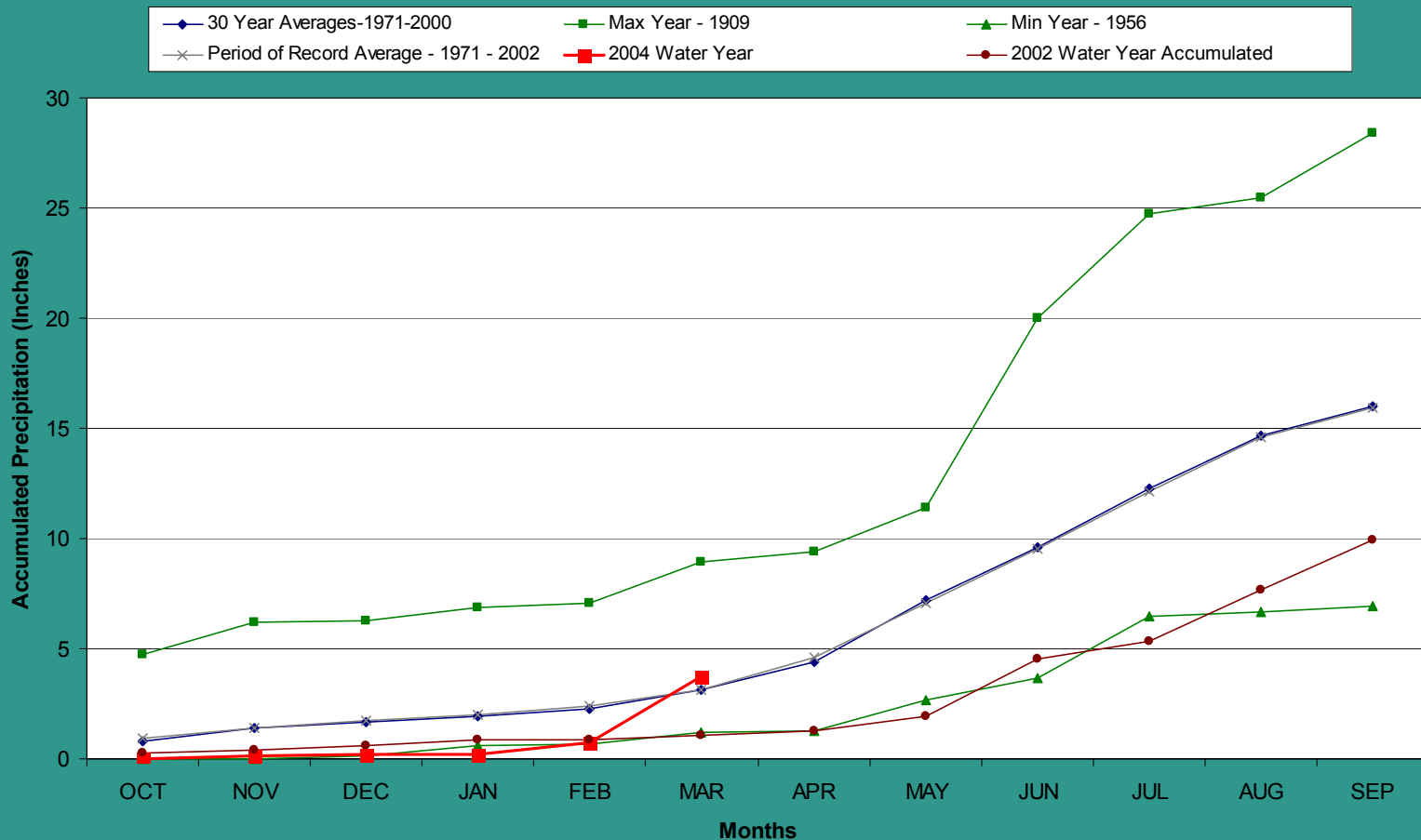
Division 5 – Buena Vista

Buena Vista 2004 Water Year through Oct '03 - Apr '04



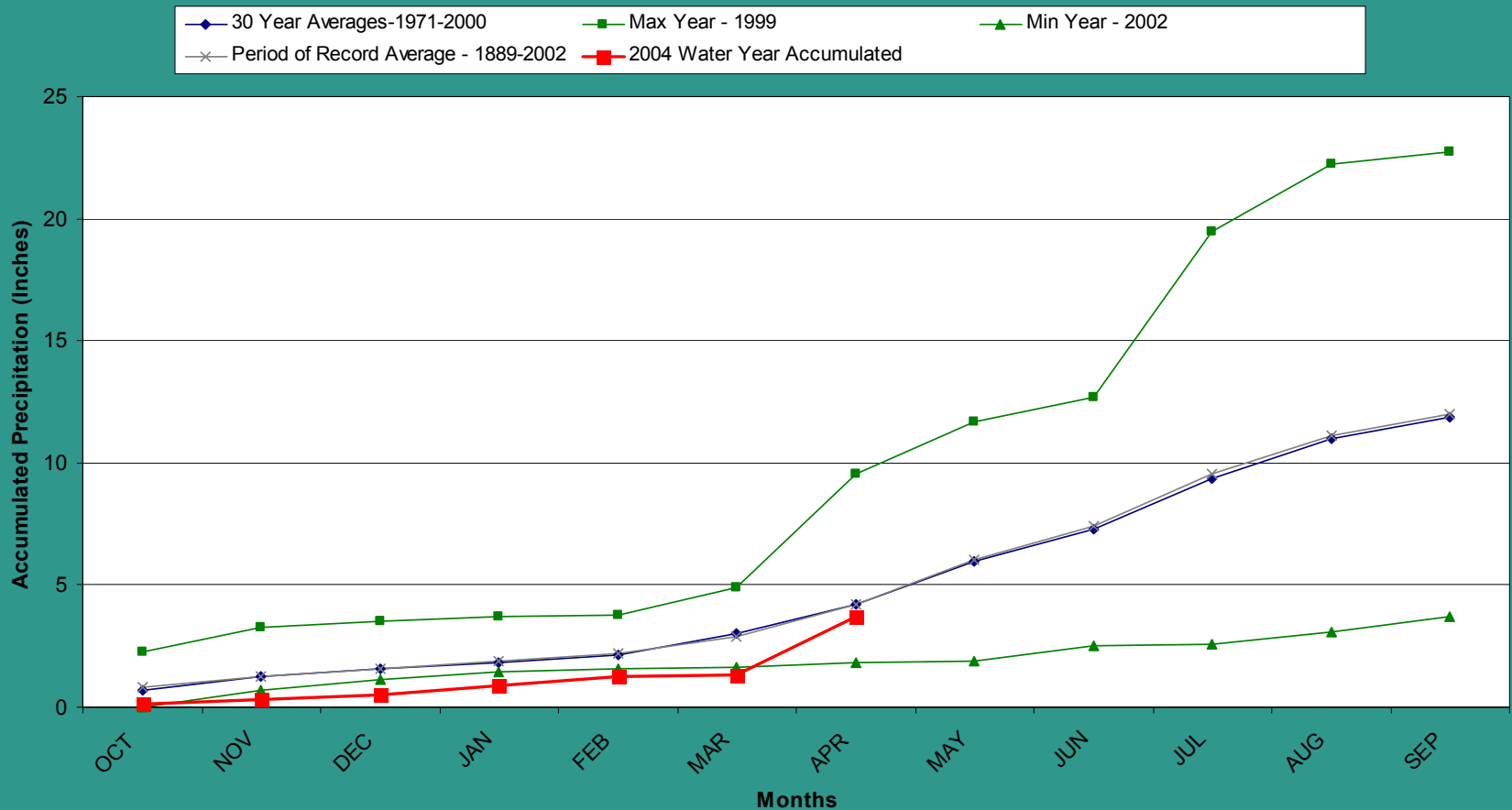
Division 6 – Cheyenne Wells

Cheyenne Wells 2004 Water Year (through Oct '03 - Apr '04)



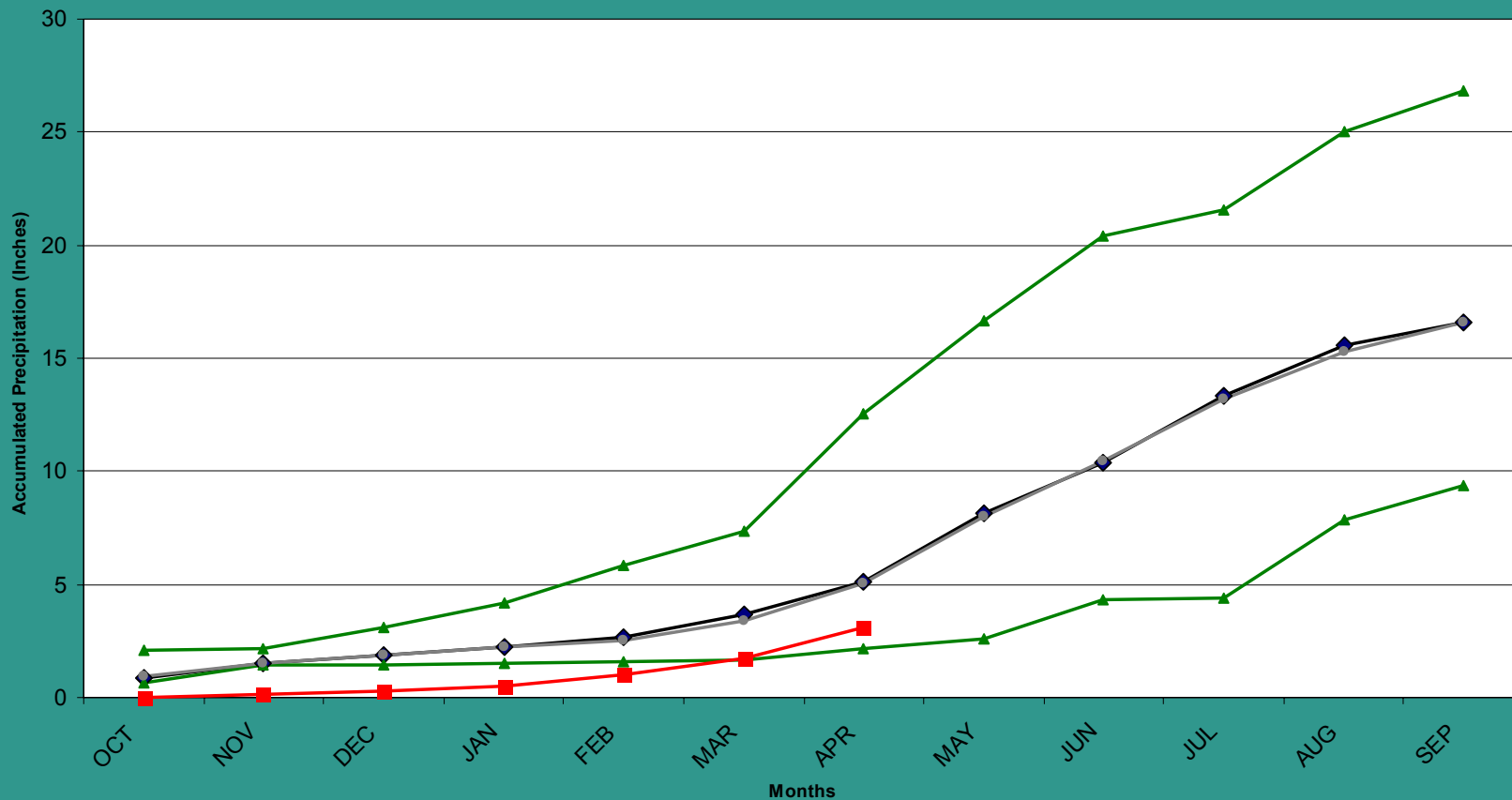
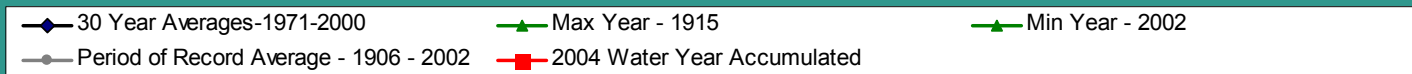
Division 6 – Rocky Ford

Rocky Ford 2004 Water Year (through Oct '03 - Apr '04)



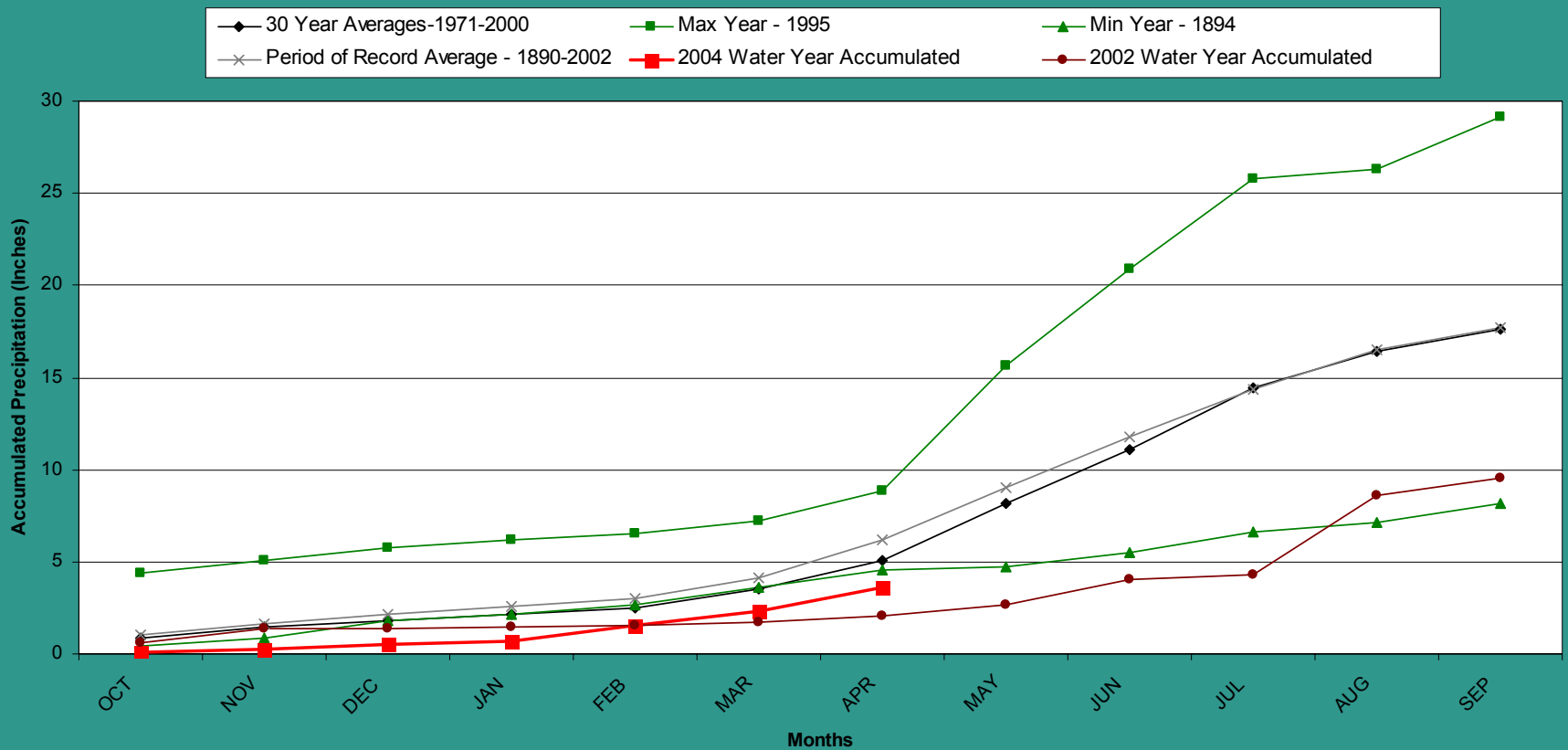
Division 7 – Akron

Akron 4E 2004 Water Year (through Oct '03 - Apr '04)



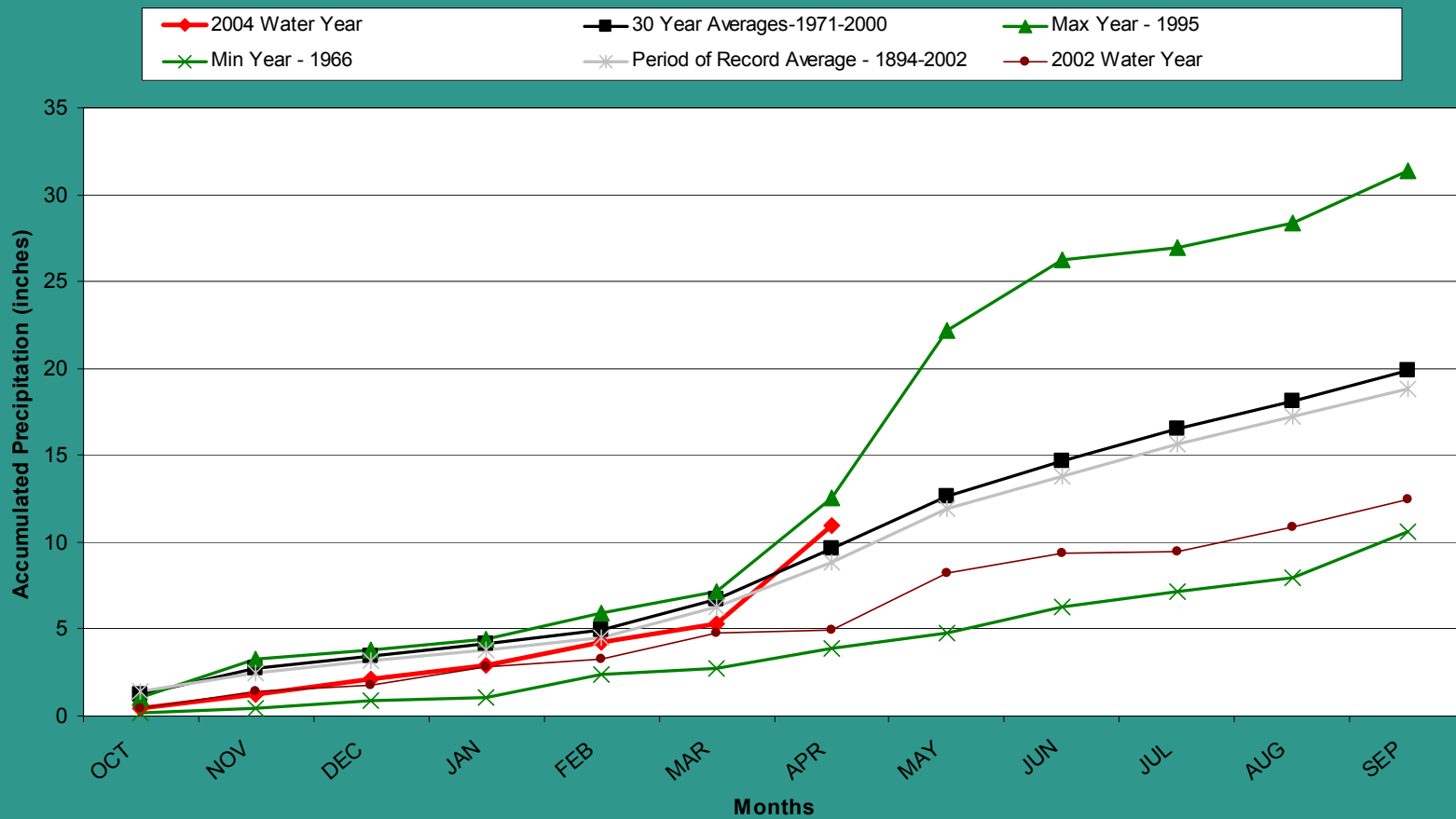
Division 7 - Leroy

Leroy 5SW 2004 Water Year (through Oct '03 - Apr '04)



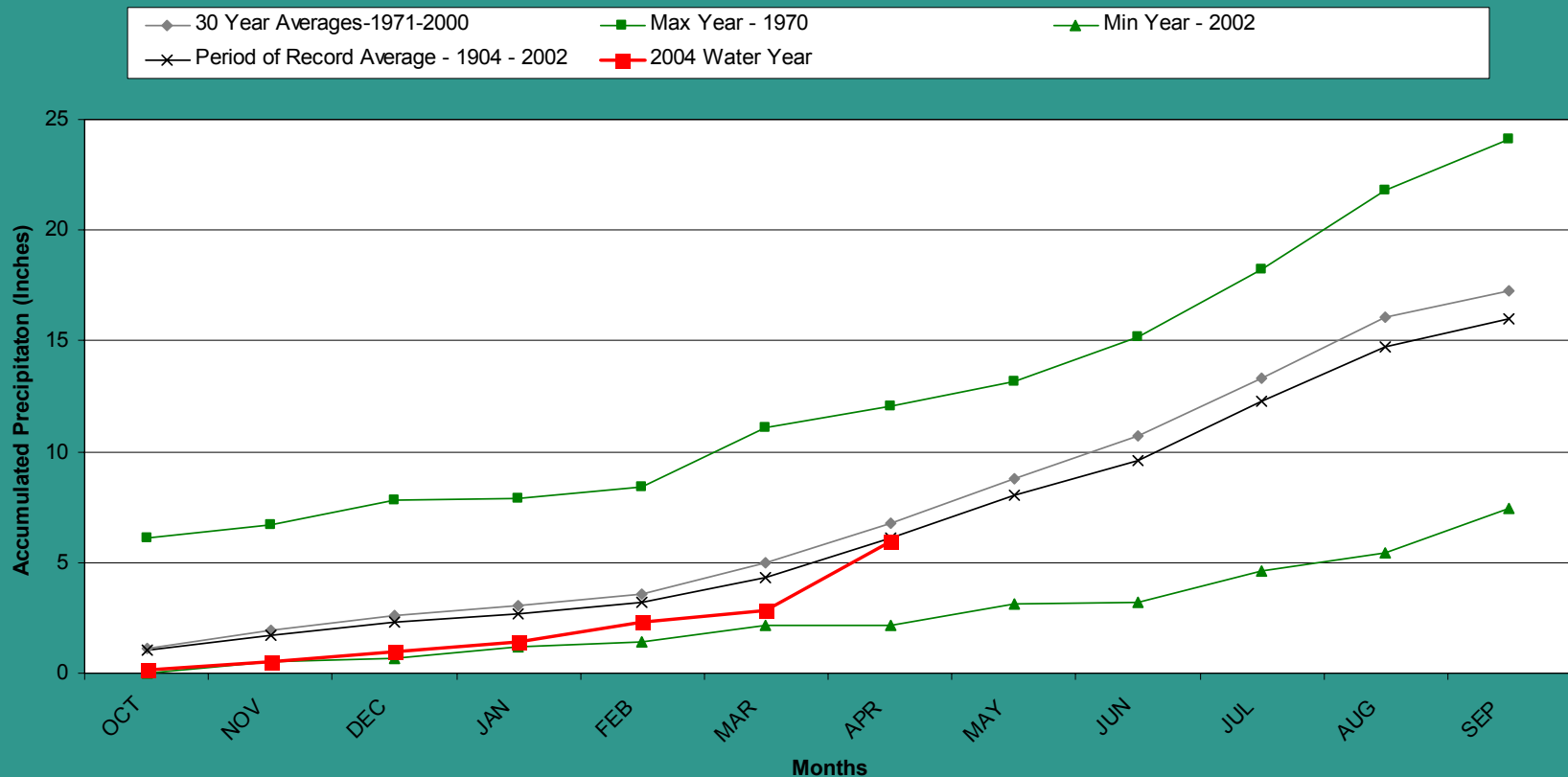
Division 8 – Boulder

Boulder 2004 Water Year through Oct '03 - Apr '04



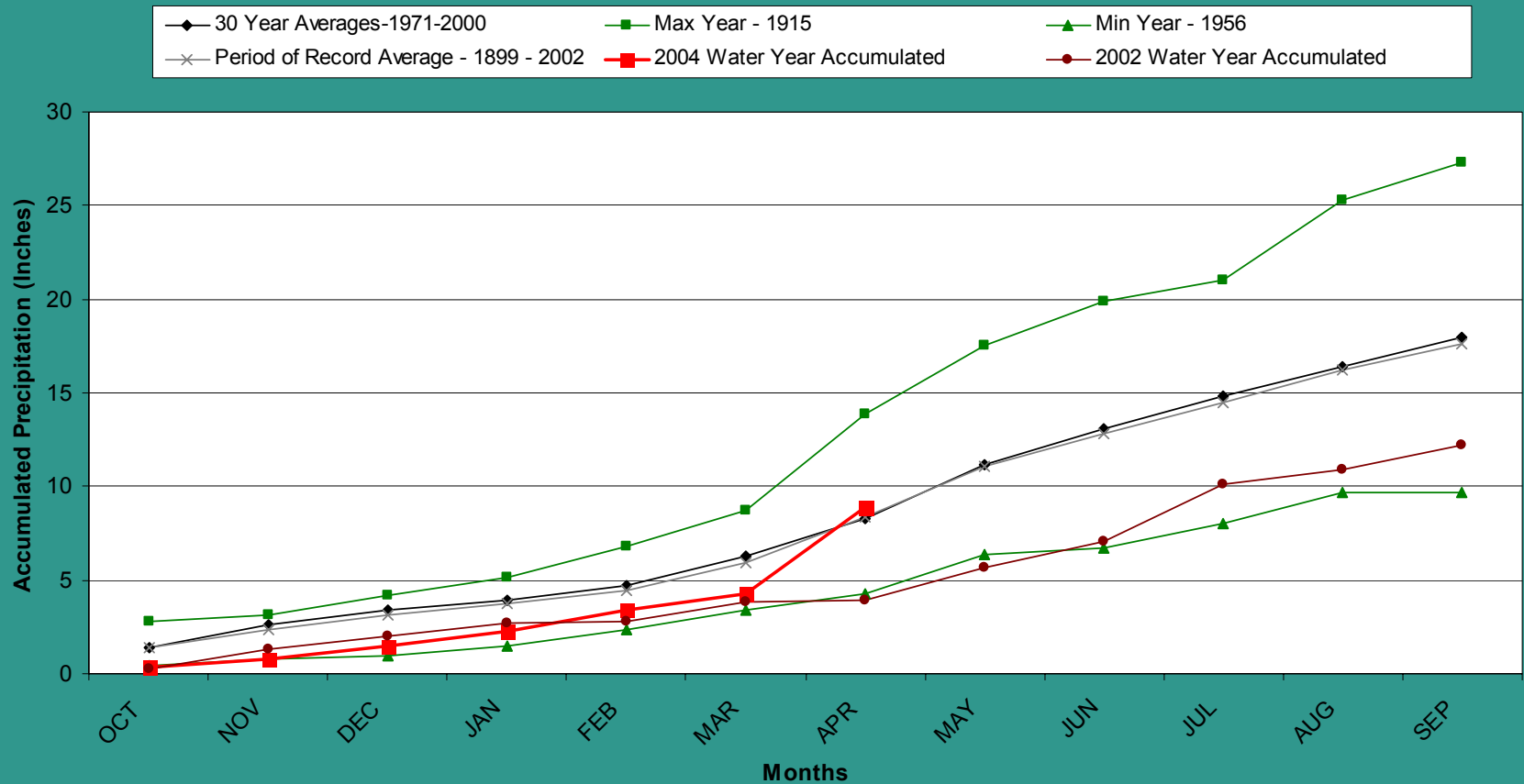
Division 8 – Cheesman

Cheesman 2004 Water Year (through Oct '03 - Apr '04)



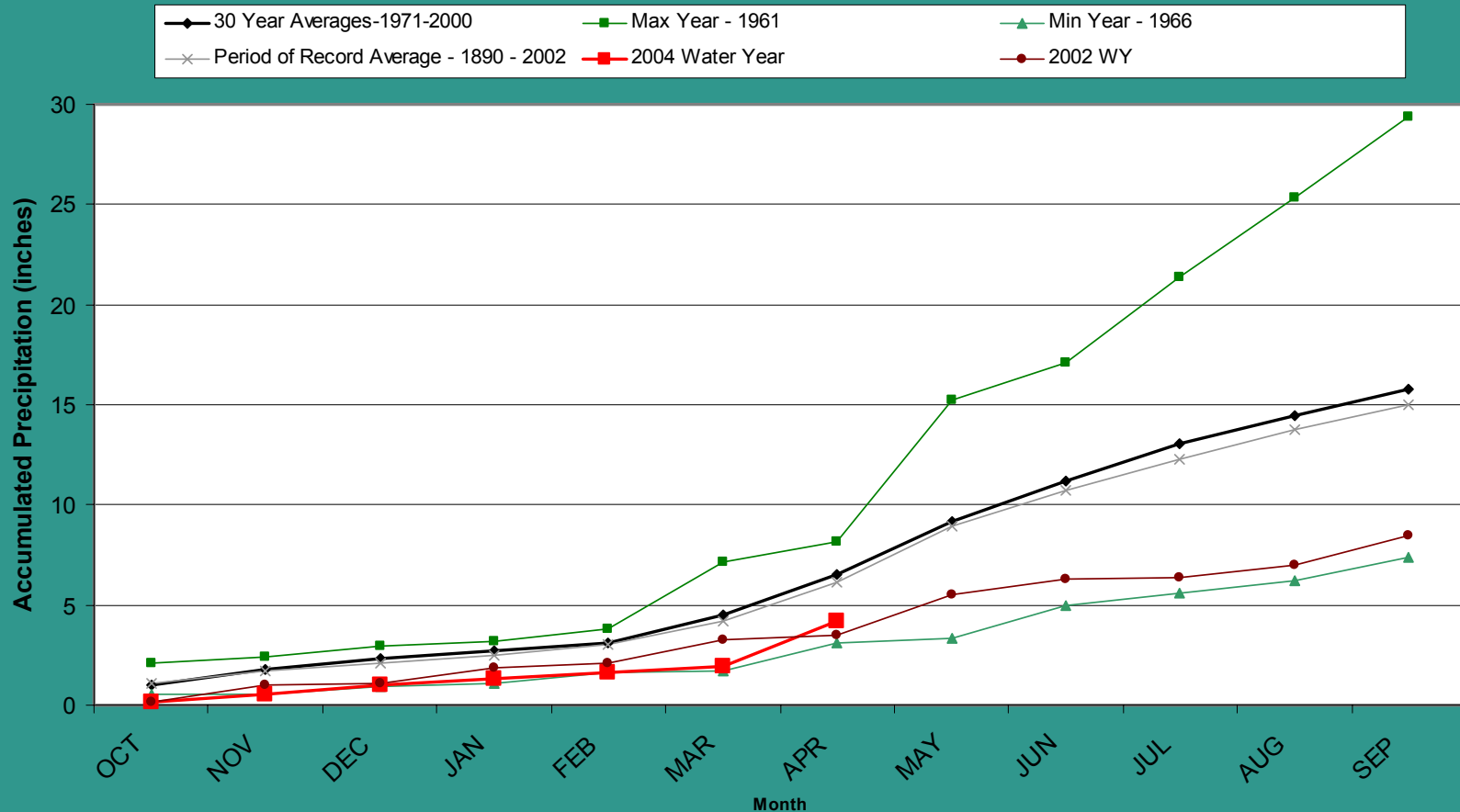
Division 8 – Kassler

Kassler 2004 Water Year (through Oct '03 - Apr '04)



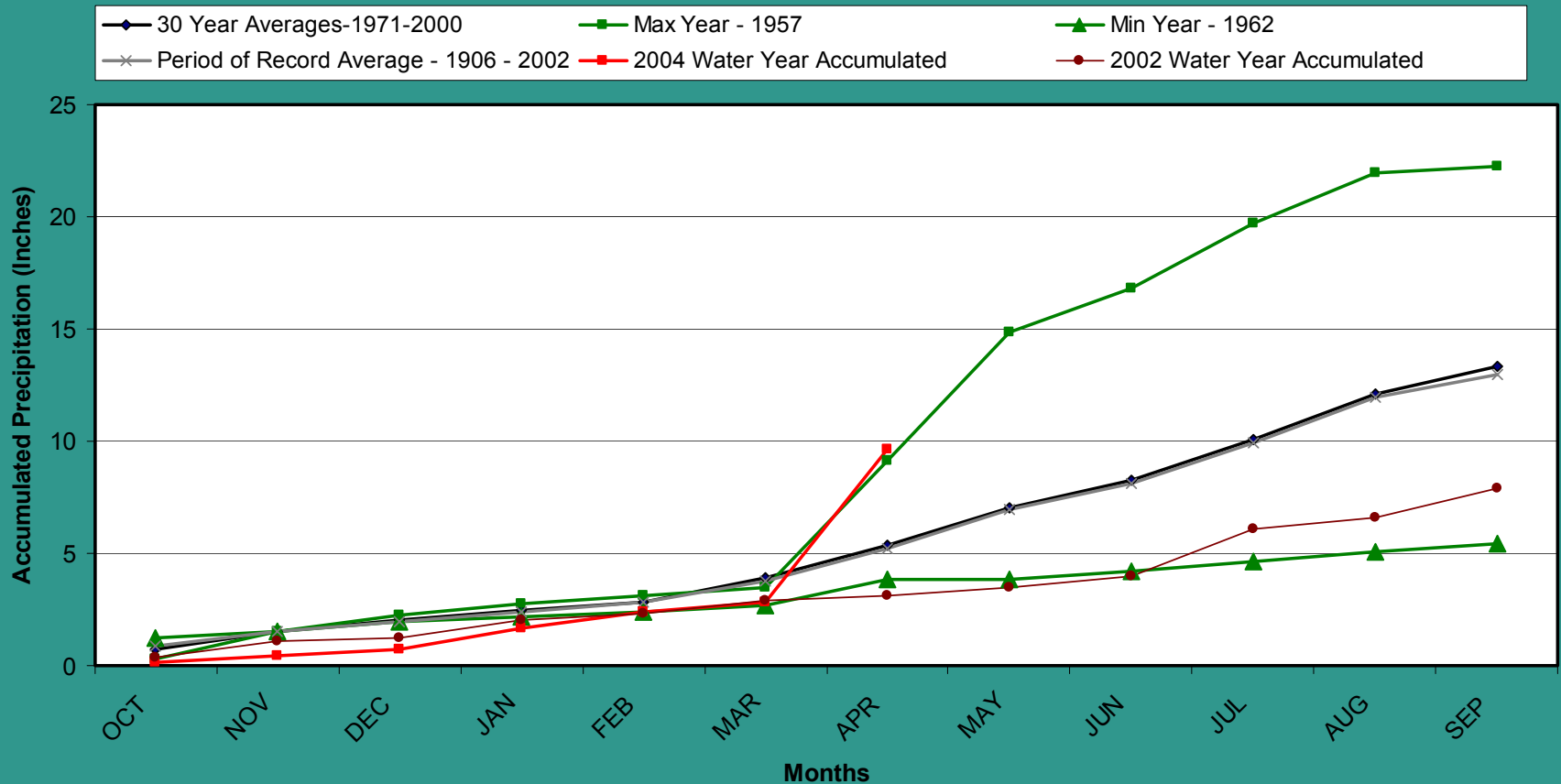
Division 8 – Fort Collins

Fort Collins 2004 Water Year (through Oct '03 - Apr '04)

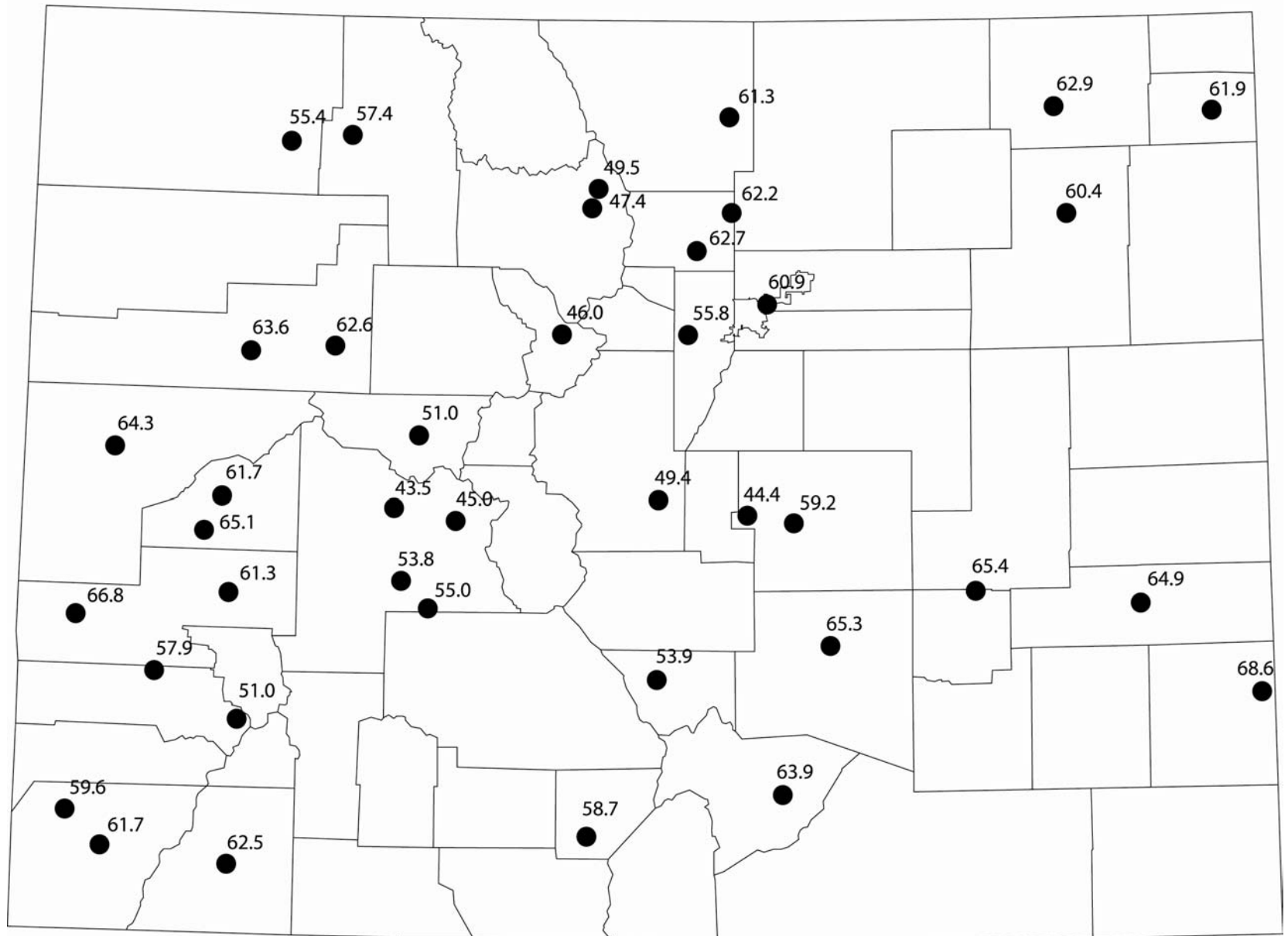


Division 5 – Canon City

Canon City 2004 Water Year (through Oct '03 - Apr '04)

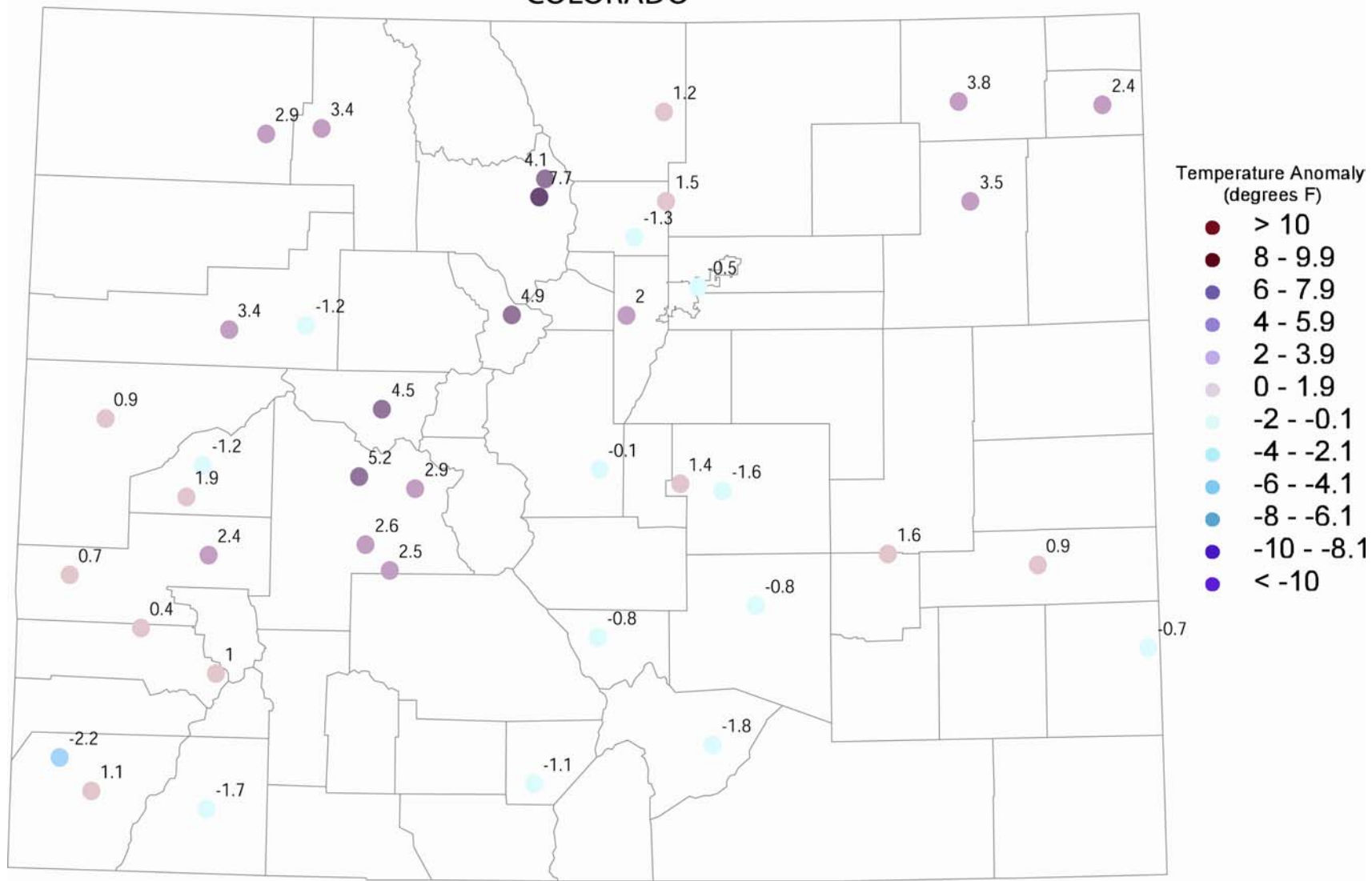


COLORADO



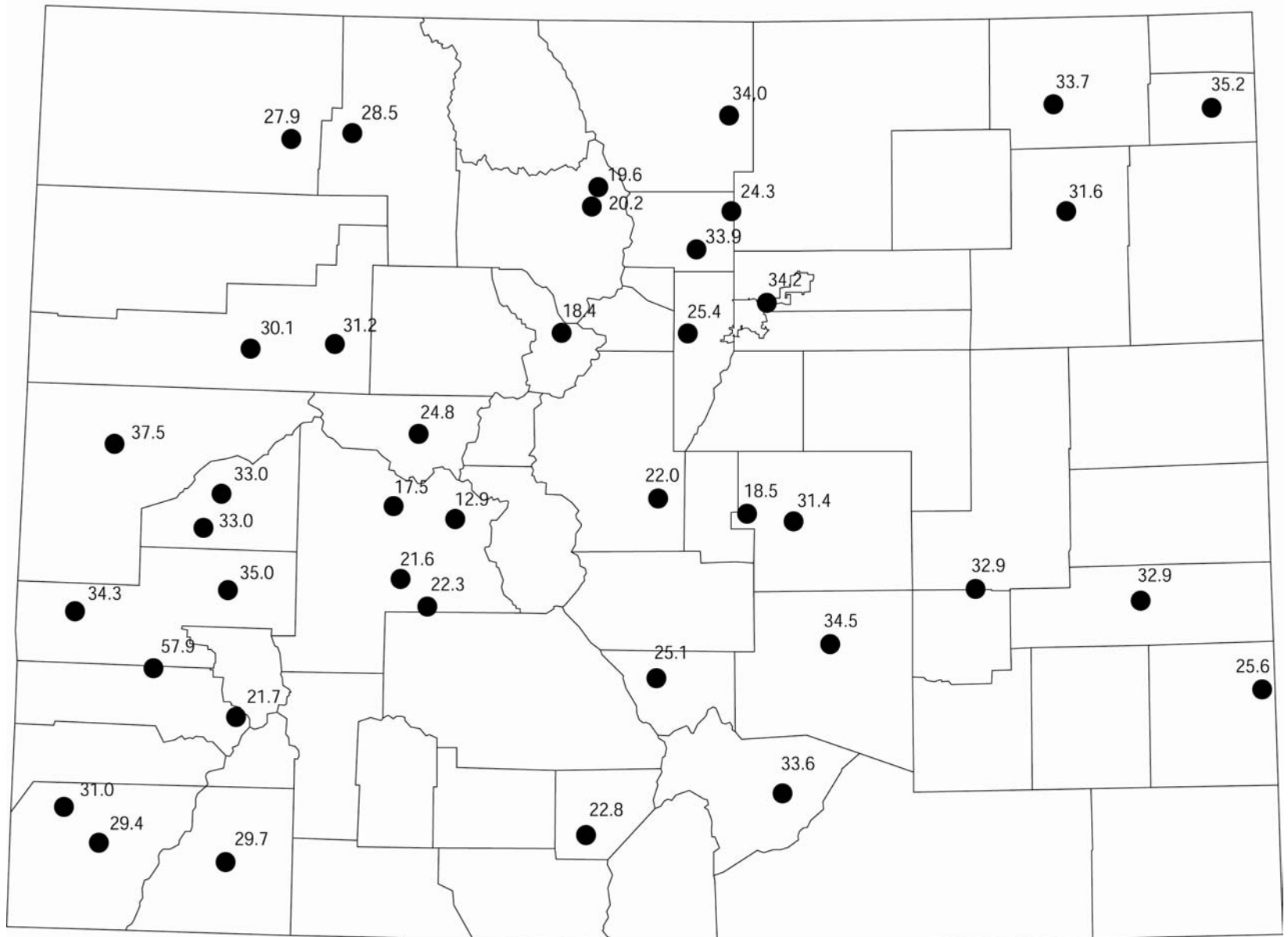
April average maximum temperatures (1971-2000 average).

COLORADO



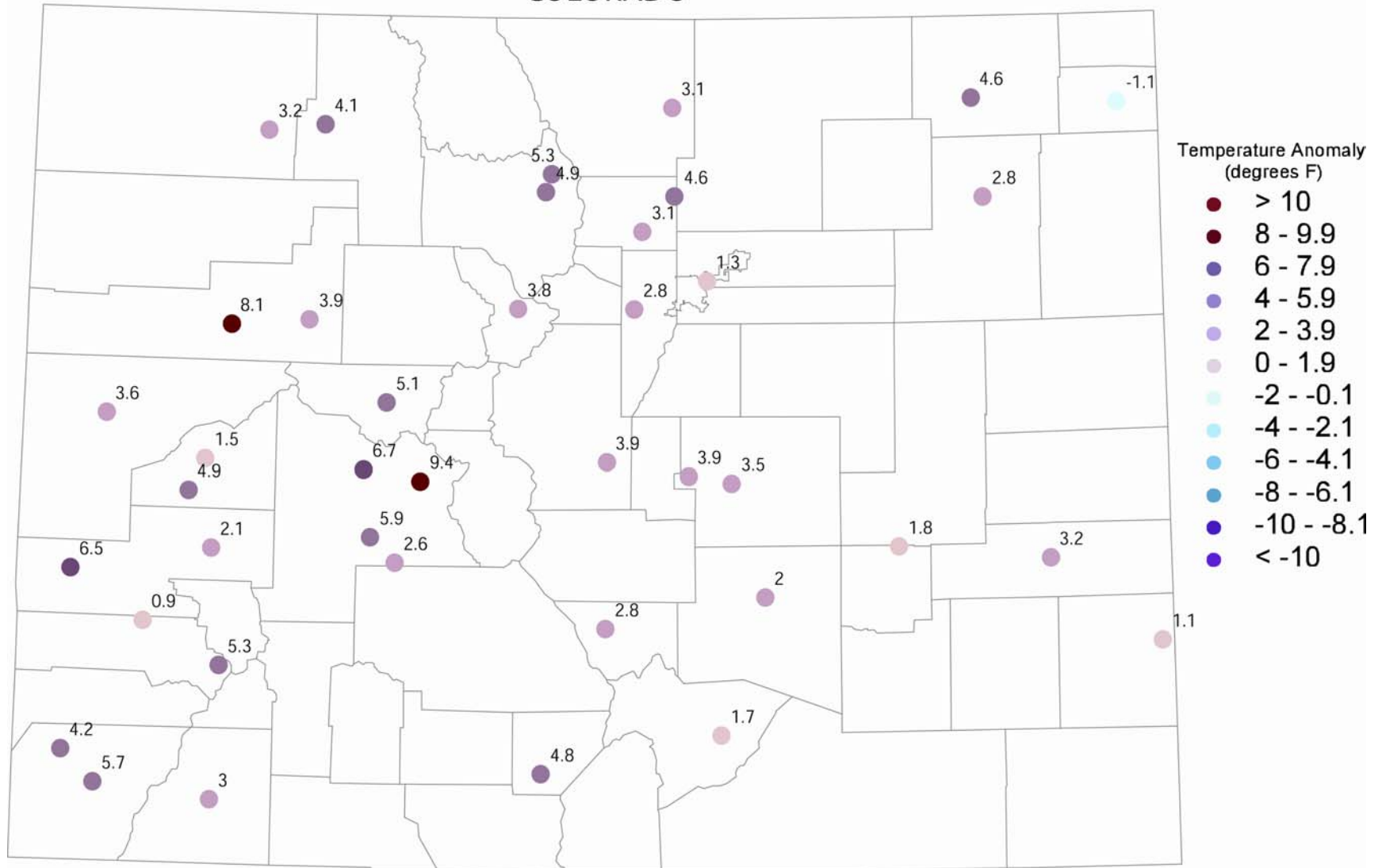
April 2004 Maximum temperature departures from the 1971-2000 averages.

COLORADO



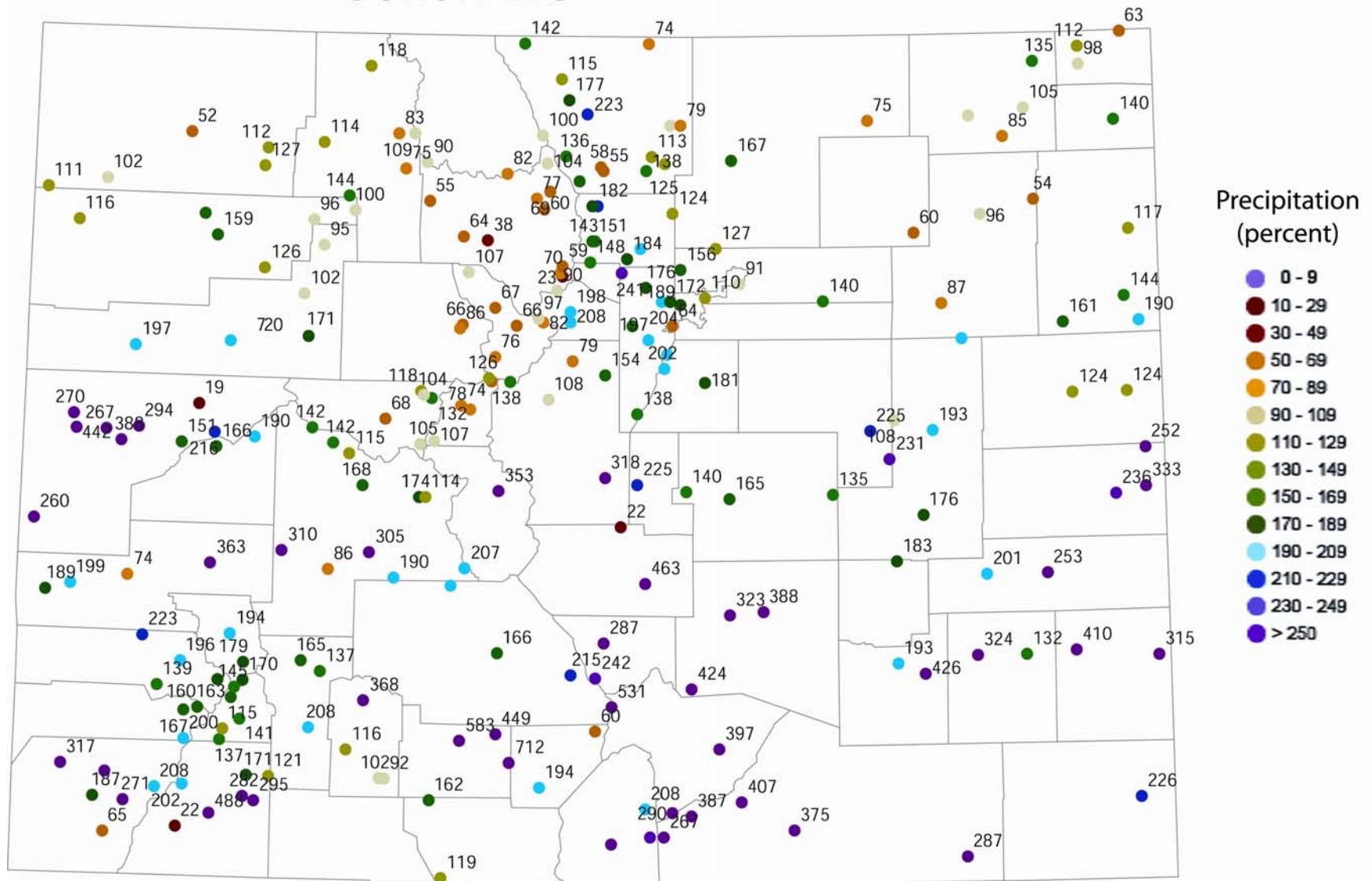
April average minimum temperatures (1971-2000 average).

COLORADO



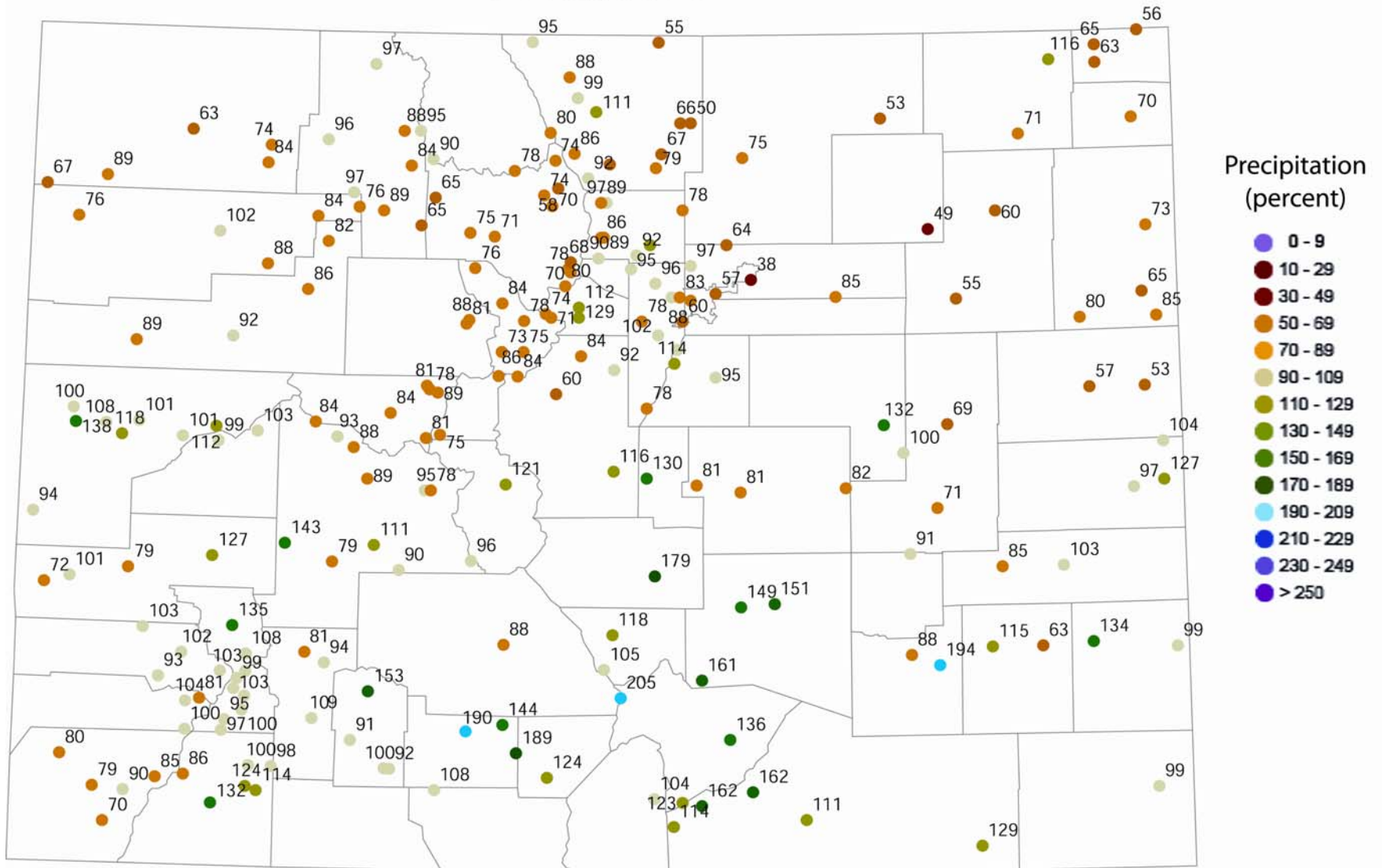
April 2004 Minimum temperature departures from the 1971-2000 averages.

COLORADO



April 2004 precipitation as a percent of the 1971-2000 average.

COLORADO



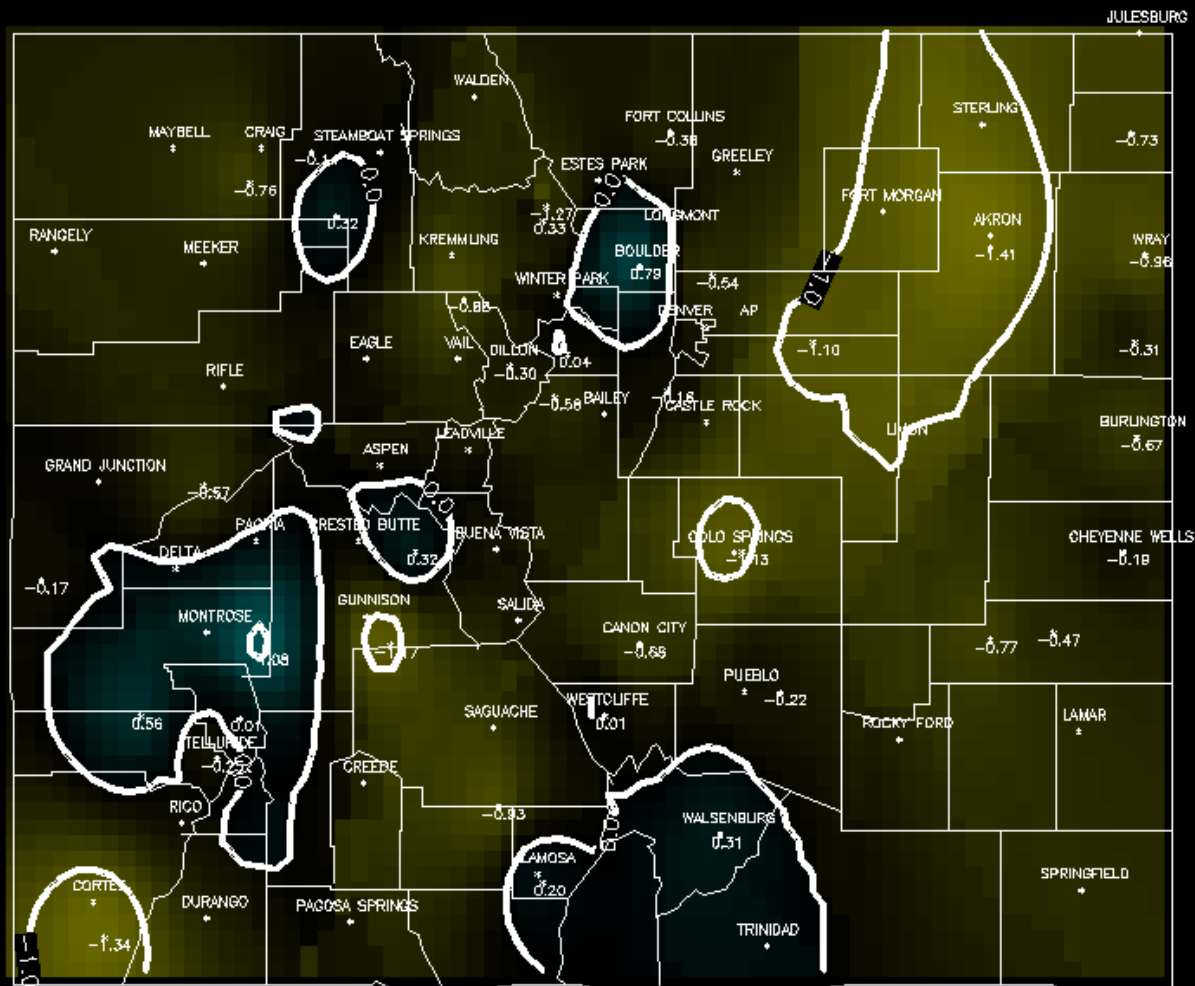
Water Year 2004 (October 2003 through April 2004) precipitation as a percent of the 1971-2000 average.

Projected Conditions at 0.8 Probability Level

48 Month SPI at 12 months

Colorado

4/2004 48 mon. SPI - Projected 12 mon. at P=0.80



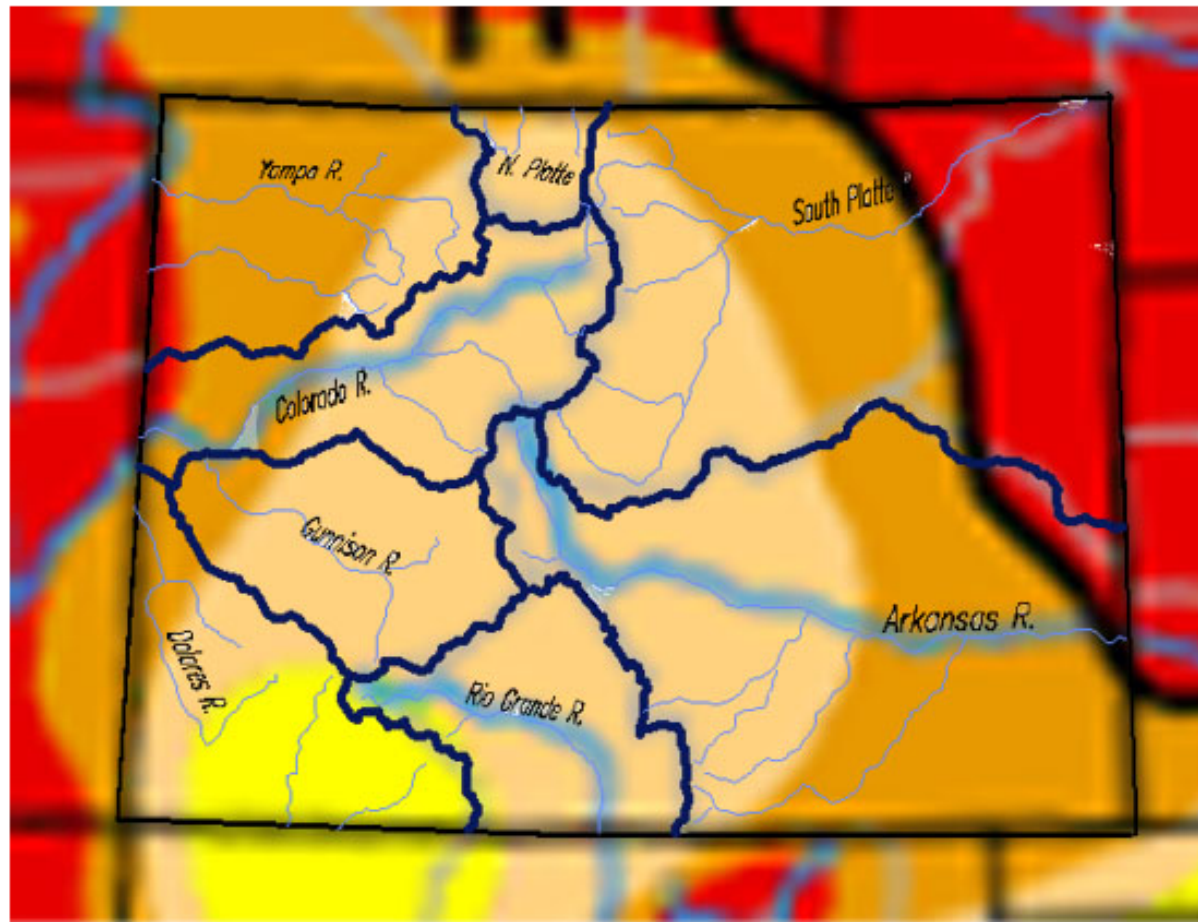
100 % < 2.0	0 % < -1.0
100 % < 1.0	0 % < -2.0
87 % < 0.0	0 % < -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO

Drought Monitor

May 4, 2004

Valid 8 a.m. EDT



Intensity:

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

Drought Impact Types:

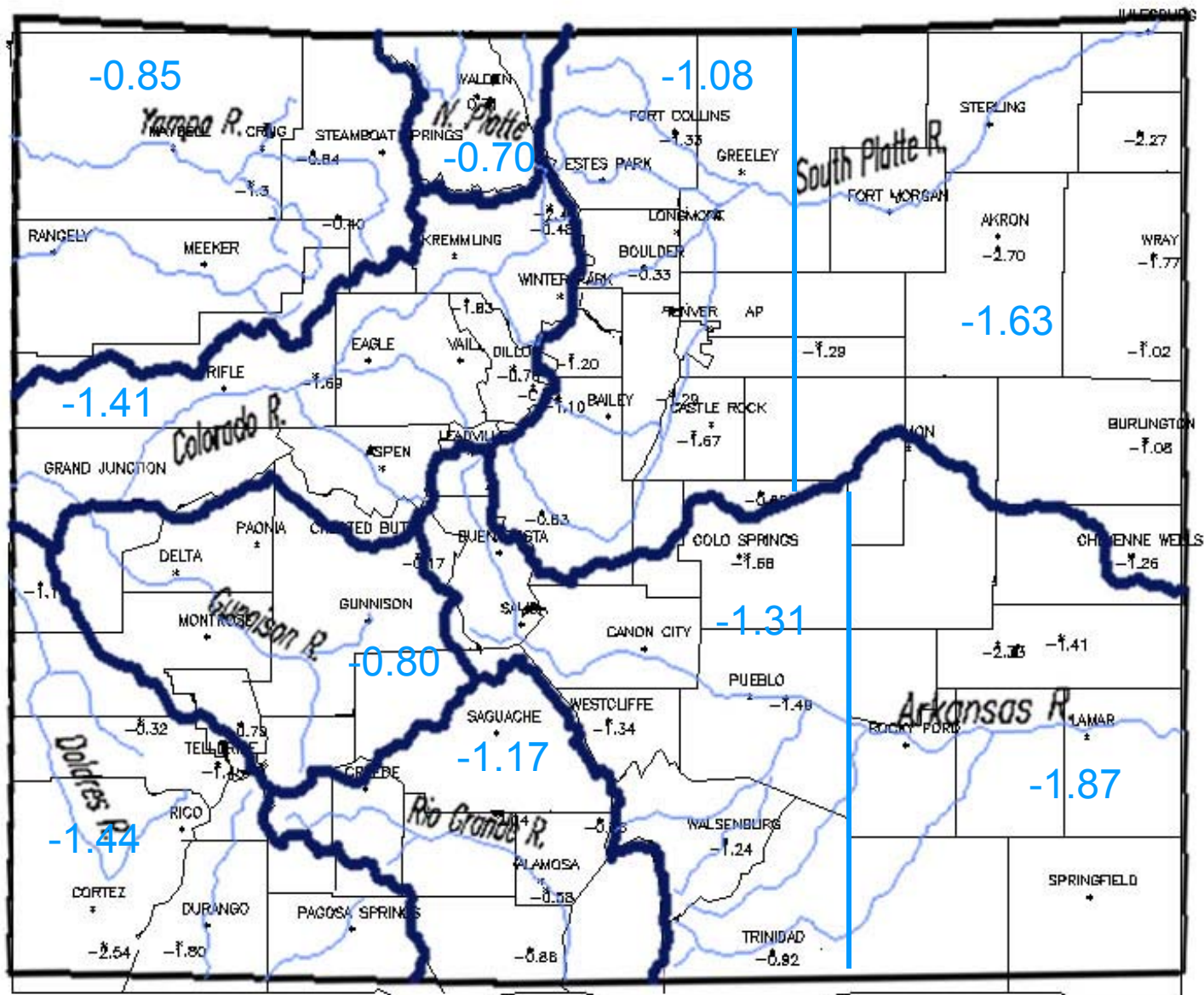
- Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)
- (No type = Both impacts)

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

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

Colorado

3/2004 48 mon. SPI



100 % < 2.0	77 % < -1.0
100 % < 1.0	9 % < -2.0
99 % < 0.0	0 % < -3.0

Produced by:
Colorado Climate Center
Fort Collins, CO

Expected Frequency (Probability) of SPI Values

<u>SPI</u>	<u>Probability</u>
± 0.5	0.3830
± 1.0	0.6826
± 1.5	0.8664
± 2.0	0.9544
± 2.5	0.9876
± 3.0	0.9974

Impact Committees

- Wildlife
- Agriculture
- Tourism
- Drinking Water
- Economics
- Local Affairs
- Denver Water
- Colorado Parks
- Energy
- Wildfires

Level of Drought

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

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”

