

Climate Update

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Colorado Climate Center**

**Atmospheric Science Department
Colorado State University**

**Presented to Water
Availability Task Force
June 26, 2008
Denver, CO**

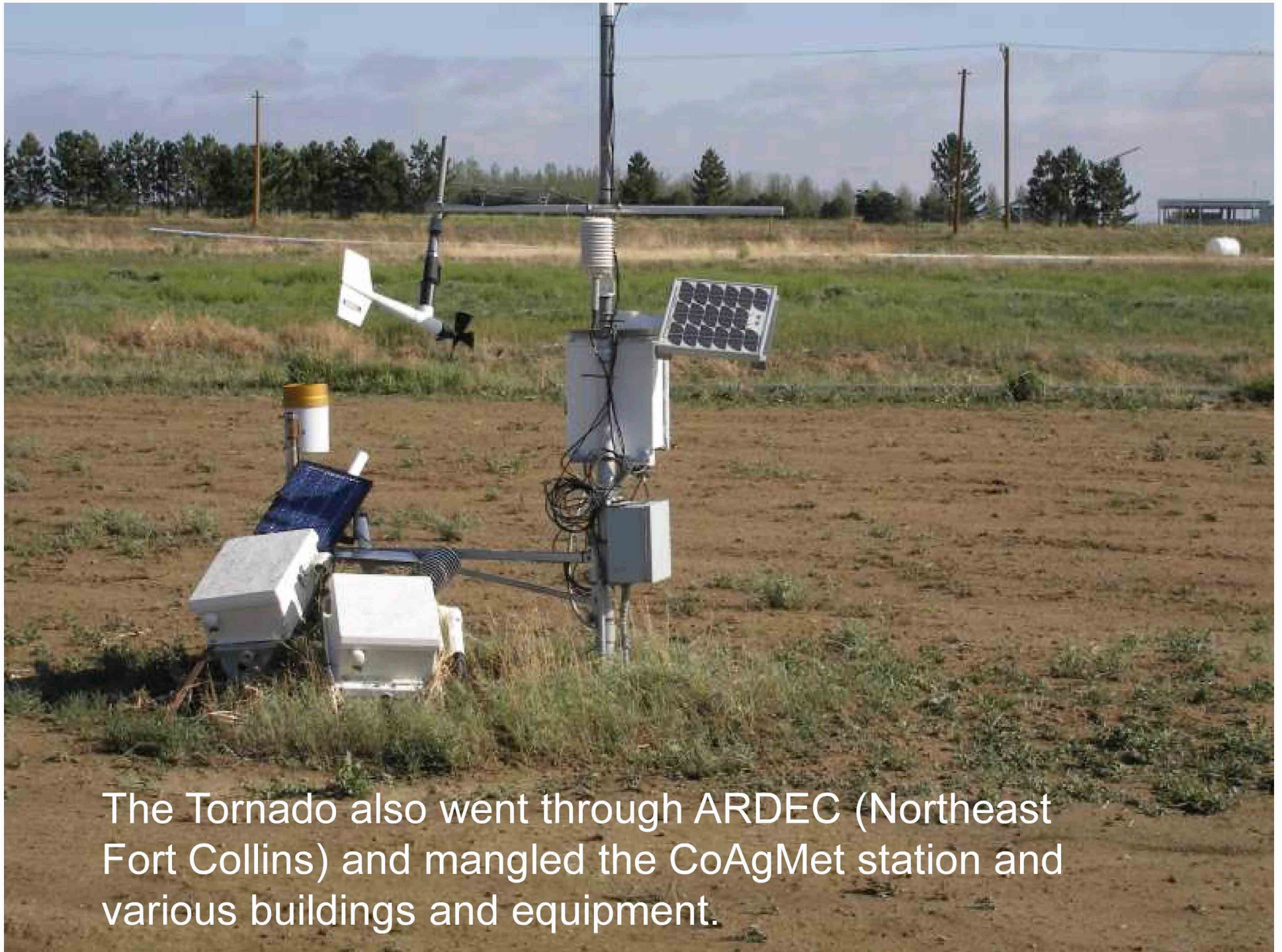


**Colorado
State
University**
Knowledge to Go Places

Prepared by Odie Bliss

May 22, 2008 Tornado

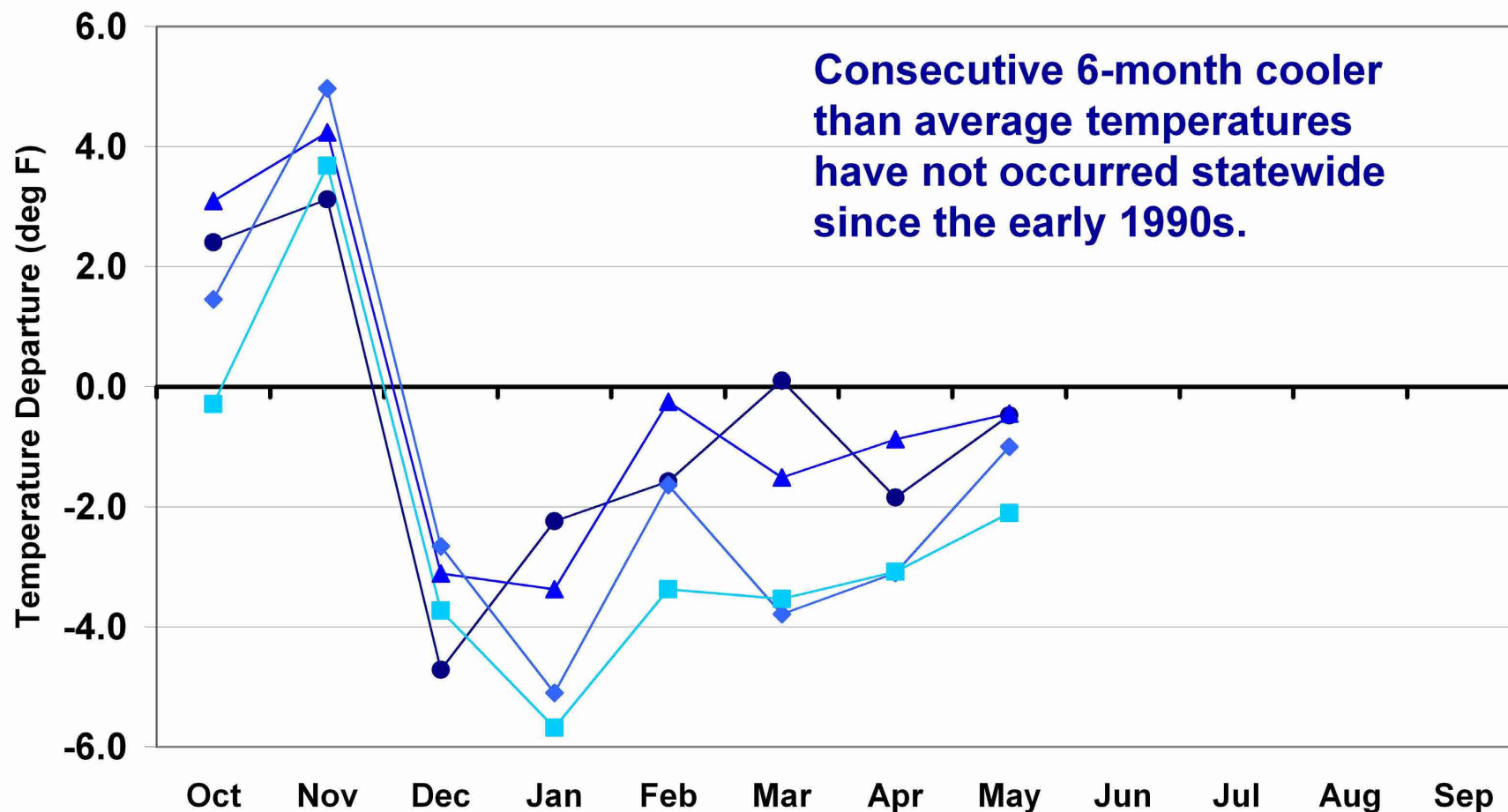
- Unusual path traveled from southeast to northwest (from Platteville, CO to Laramie, WY)
- Hit east side of Windsor pretty hard
- 1 loss of life; ~800 homes damaged; numerous businesses, churches, etc.
- Small to Large damaging hail in the storm system



The Tornado also went through ARDEC (Northeast Fort Collins) and mangled the CoAgMet station and various buildings and equipment.

Water Year 2008 Temperature Departures

Water Year 2008



● Eastern Plains

▲ Foothills

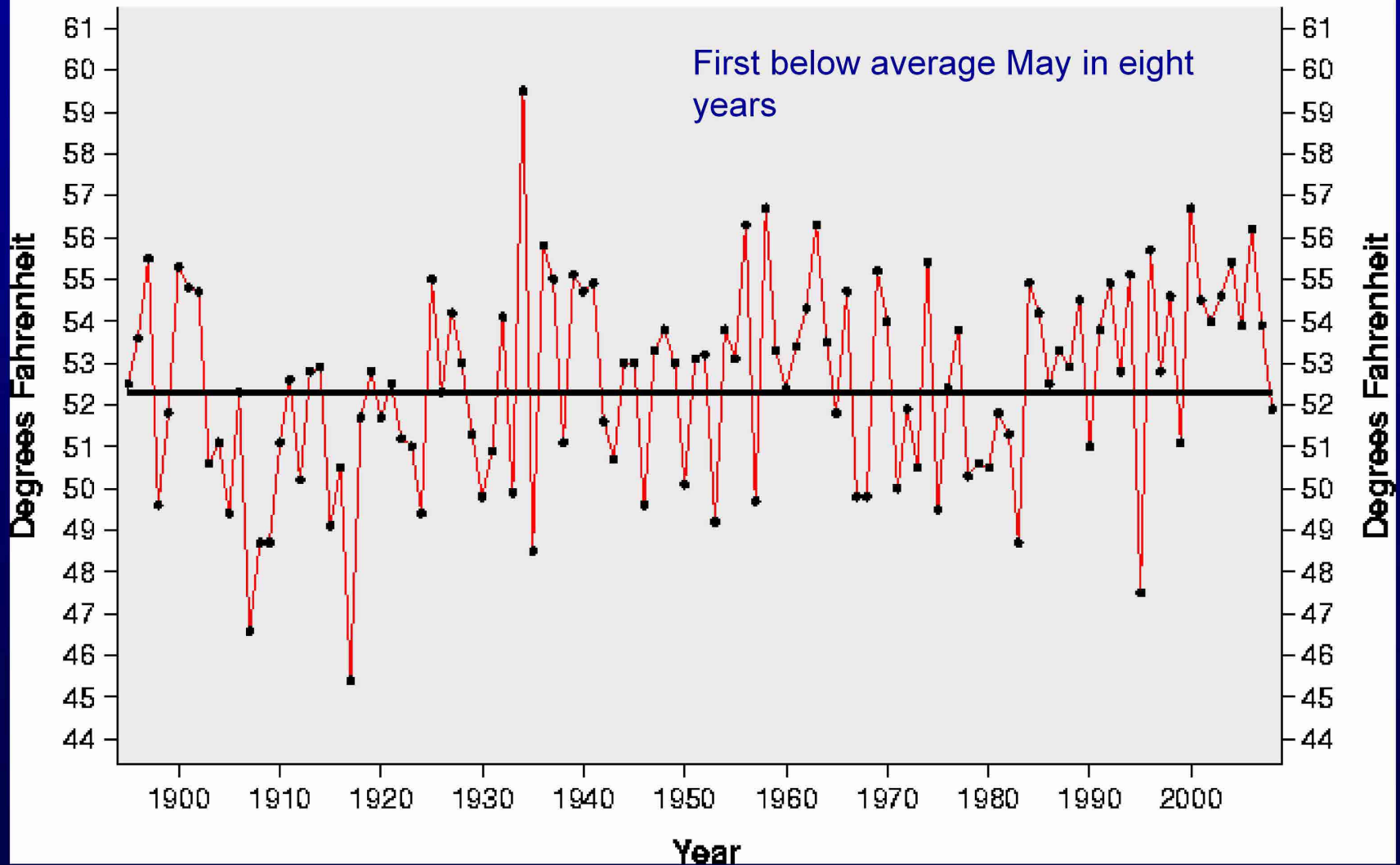
◆ Mountains

■ Western Valleys

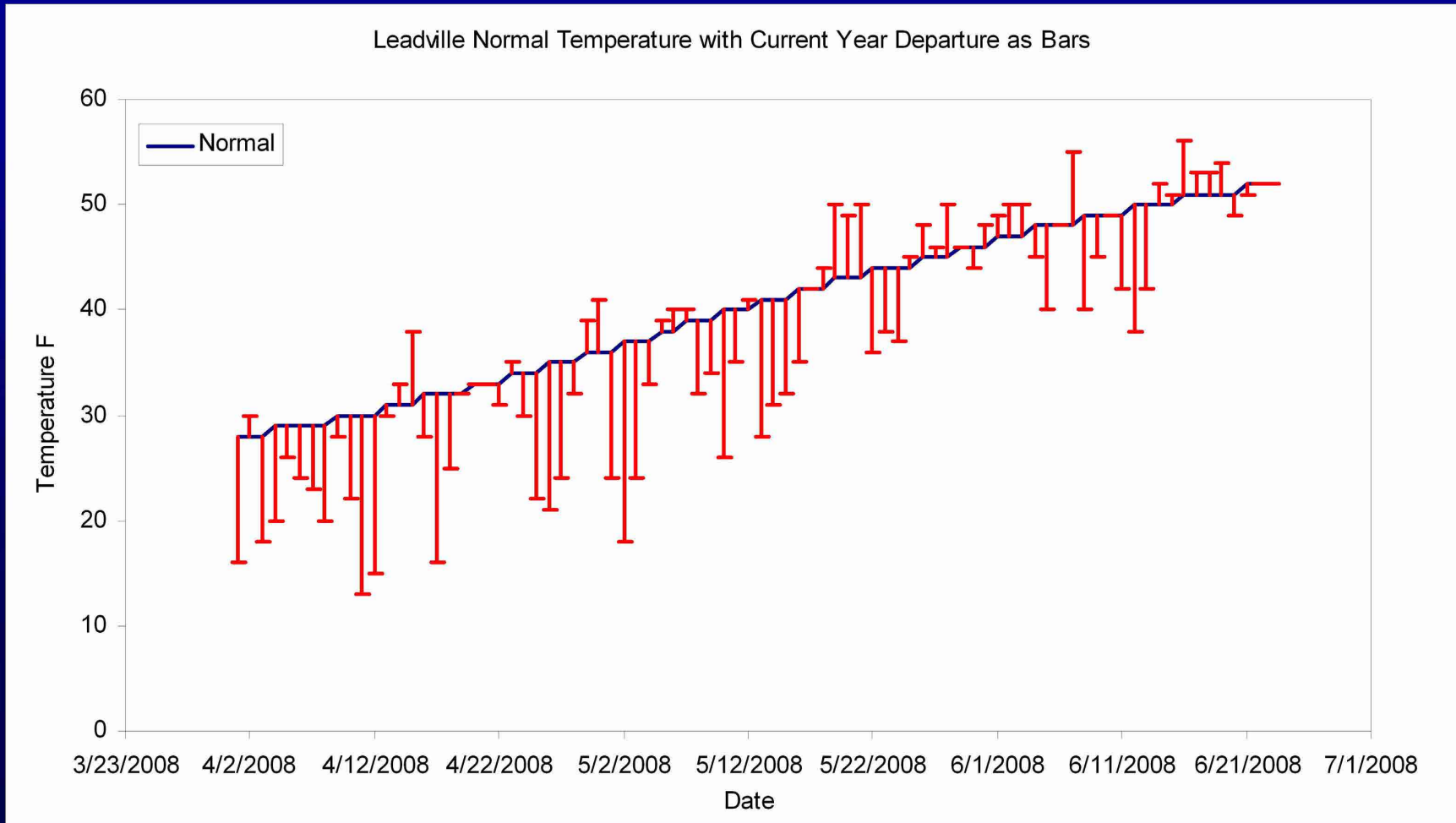
May Average Temperature History for Colorado (NCDC)

— Actual Temperature
— Average Temperature

May 2008: 51.9 deg F Rank: 46th coolest in 114 years. Period of record 1895-2008

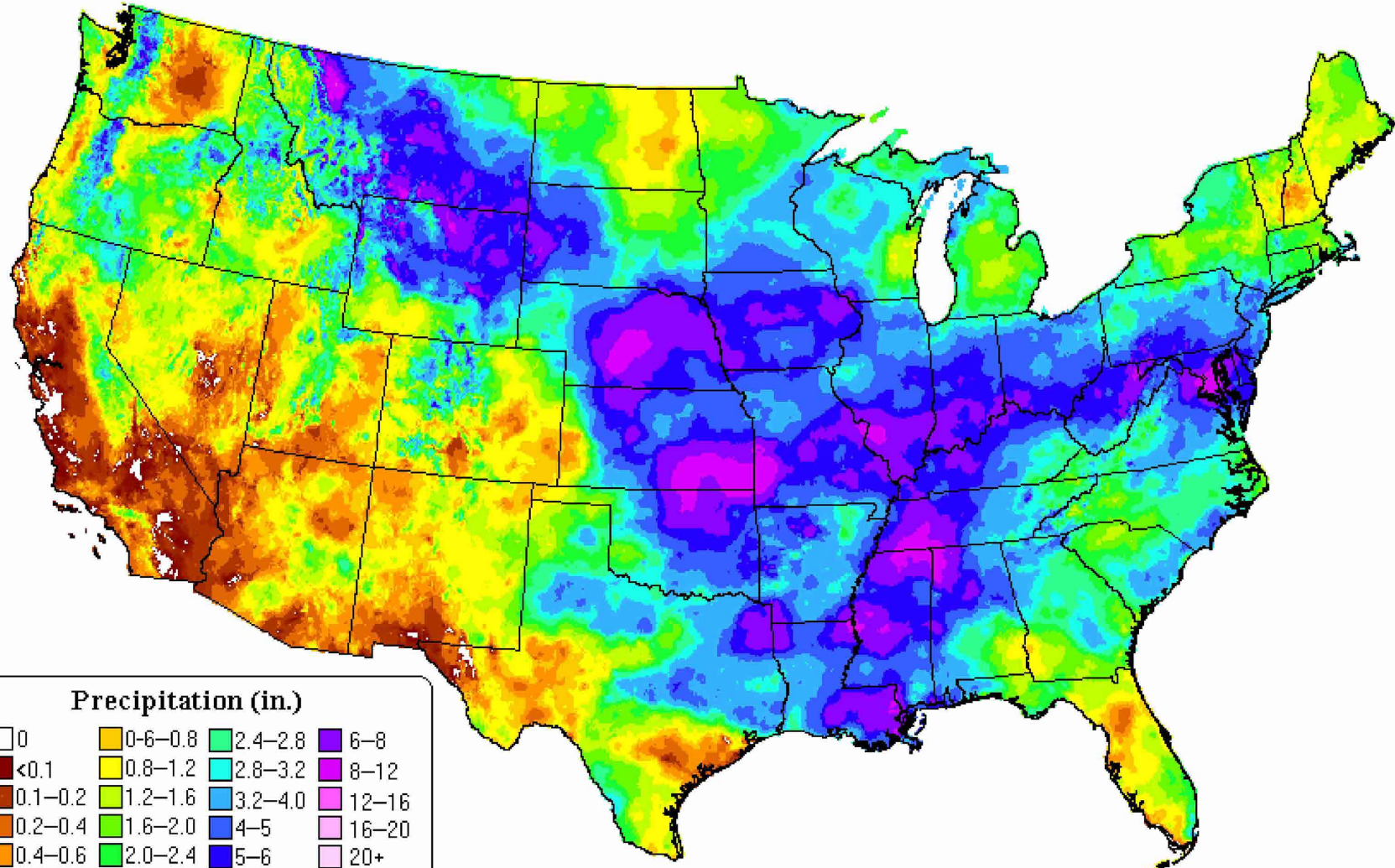


Late spring temperatures have been only slightly below average. With alternating warmer and colder than average temperatures all spring, snow melt has been delayed and large peaks in runoff that could have caused flooding have largely been averted.



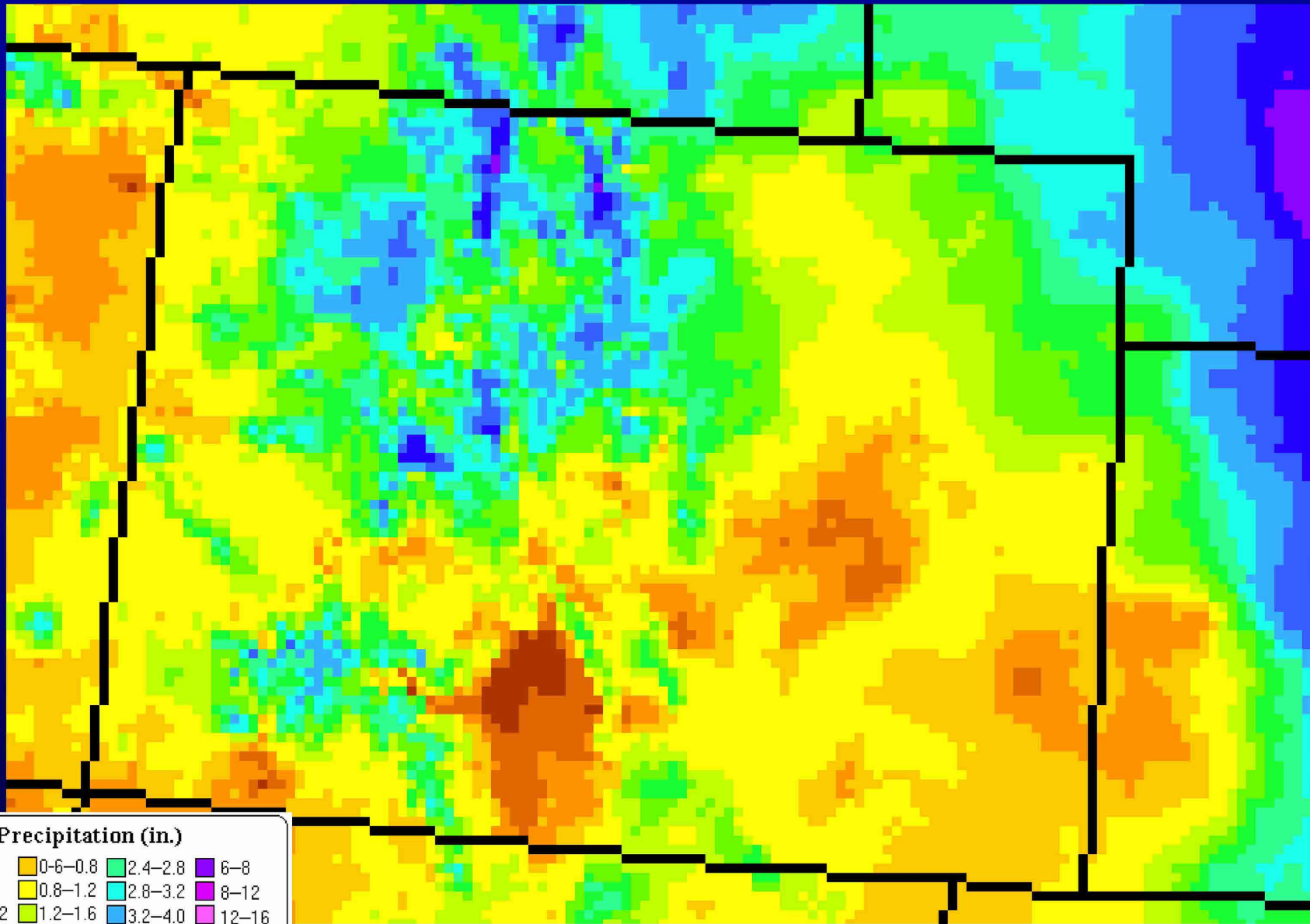
May 2008 Precipitation (inches)

Precipitation: May 2008
Provisional Data



Copyright (c) 2008, PRISM Group, Oregon State University
<http://www.prismclimate.org> - Map created Jun 12 2008

May 2008 Precipitation (inches)

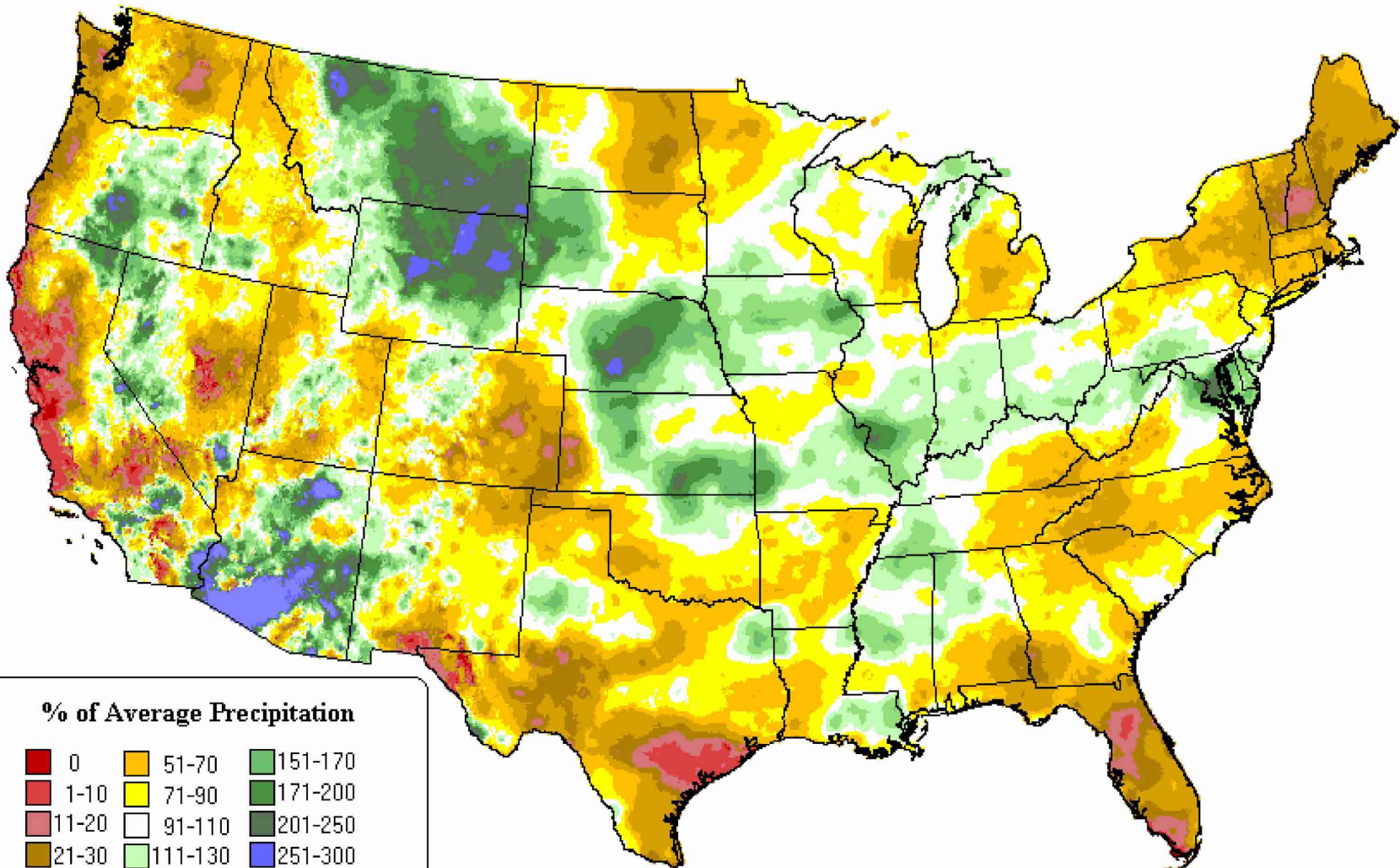


Precipitation (in.)

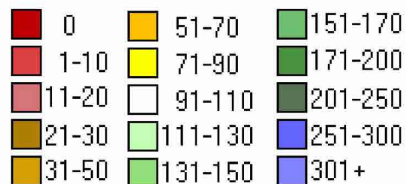
0	0-0.6-0.8	2.4-2.8	6-8
<0.1	0.8-1.2	2.8-3.2	8-12
0.1-0.2	1.2-1.6	3.2-4.0	12-16
0.2-0.4	1.6-2.0	4-5	16-20
0.4-0.6	2.0-2.4	5-6	20+

May 2008 Percent of Average (Prism)

1-month Percent of Average Precipitation: May 2008
Provisional Data

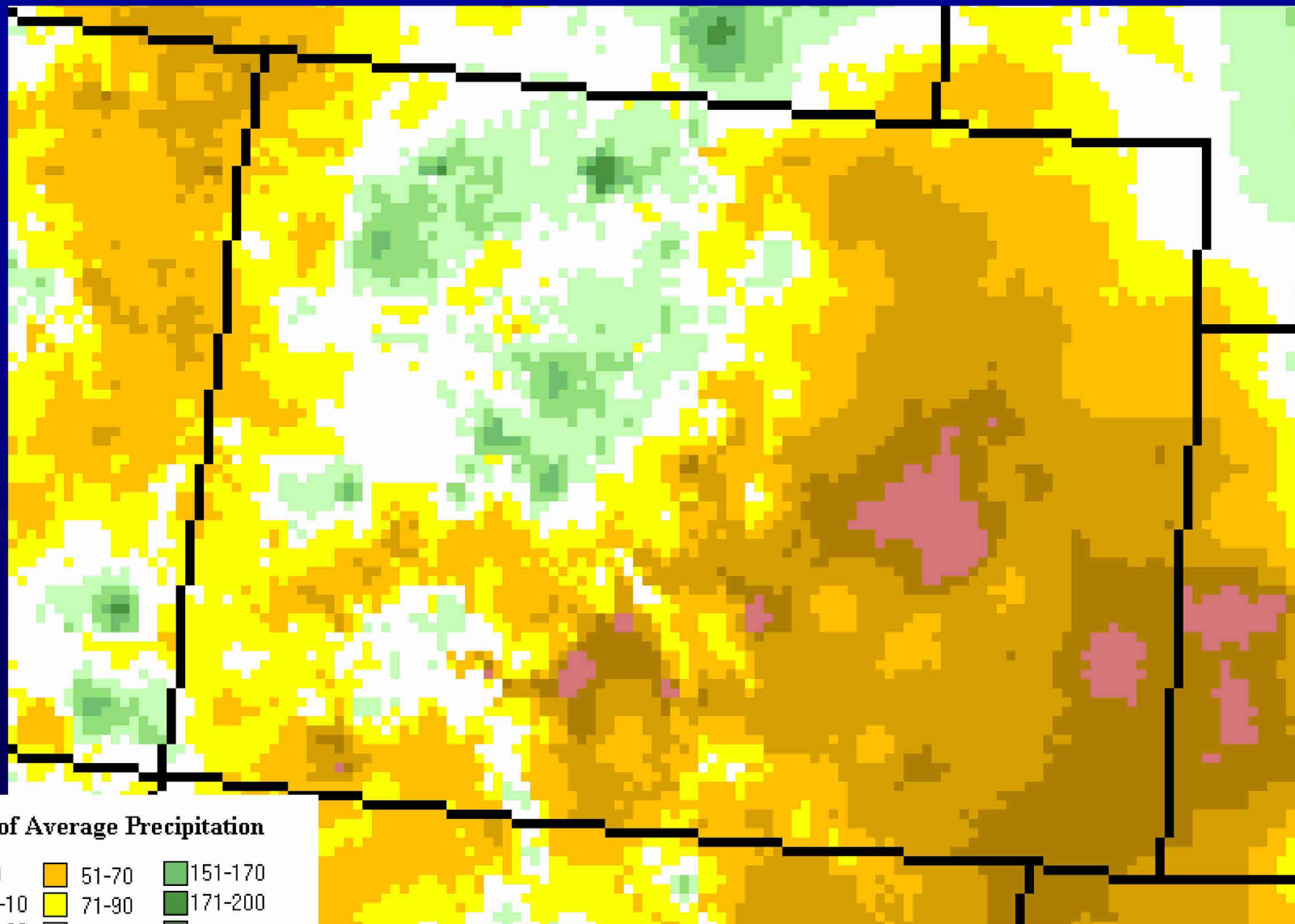


% of Average Precipitation



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<http://www.prismclimate.org> - Map created Jun 12 2008

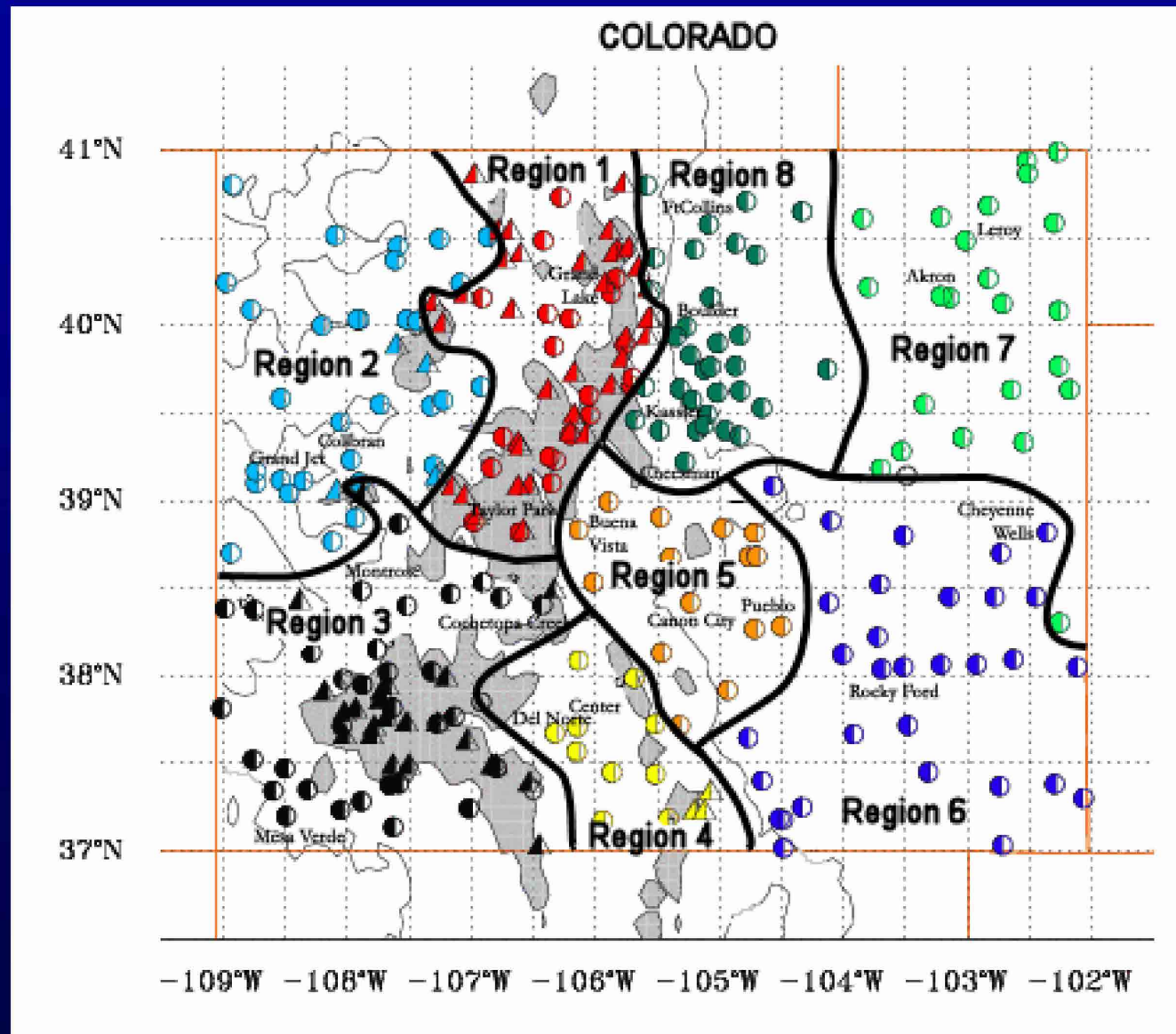
May 2008 Percent of Average (Prism)



% of Average Precipitation

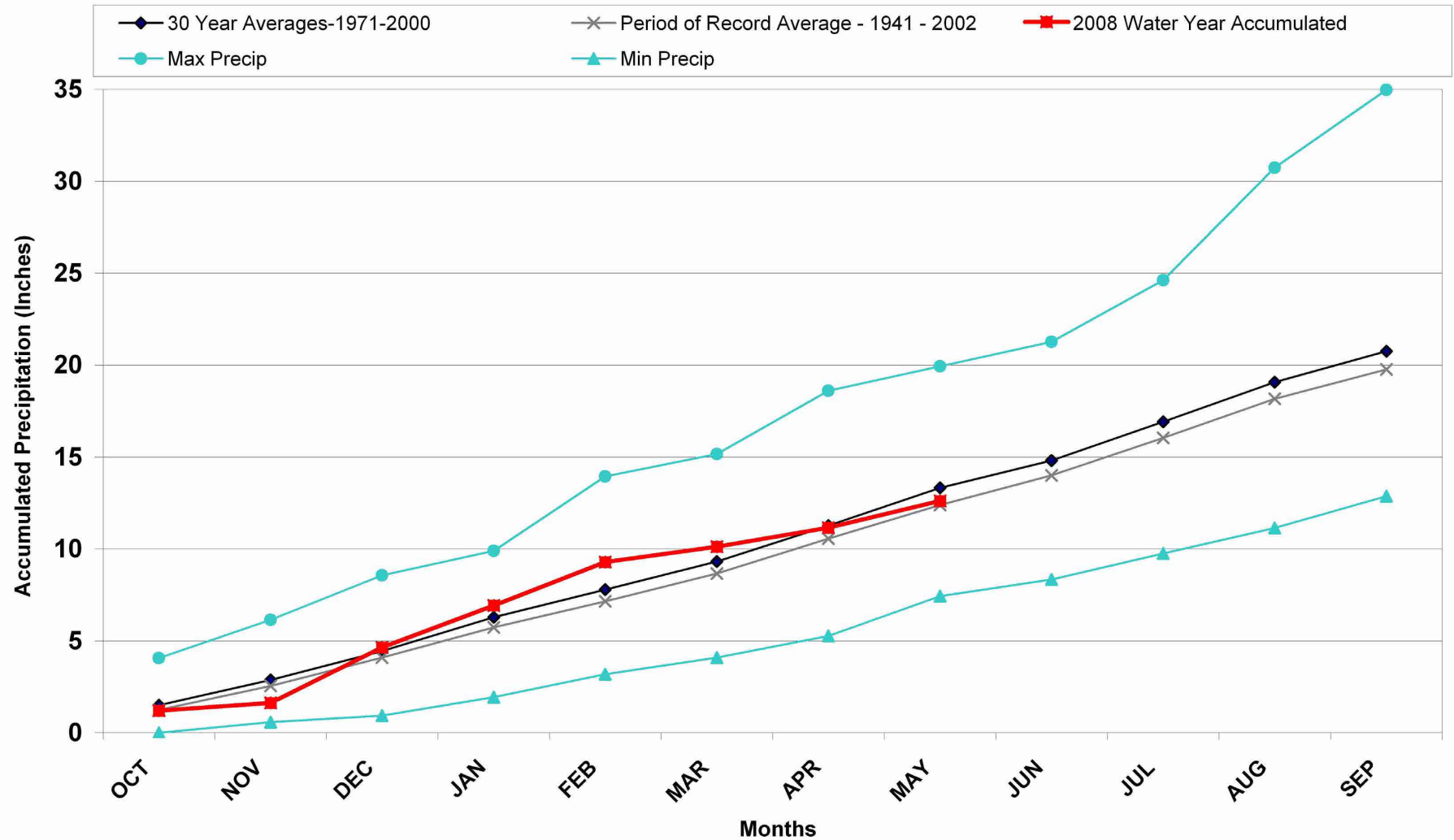
0	51-70	151-170
1-10	71-90	171-200
11-20	91-110	201-250
21-30	111-130	251-300
31-50	131-150	301+

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



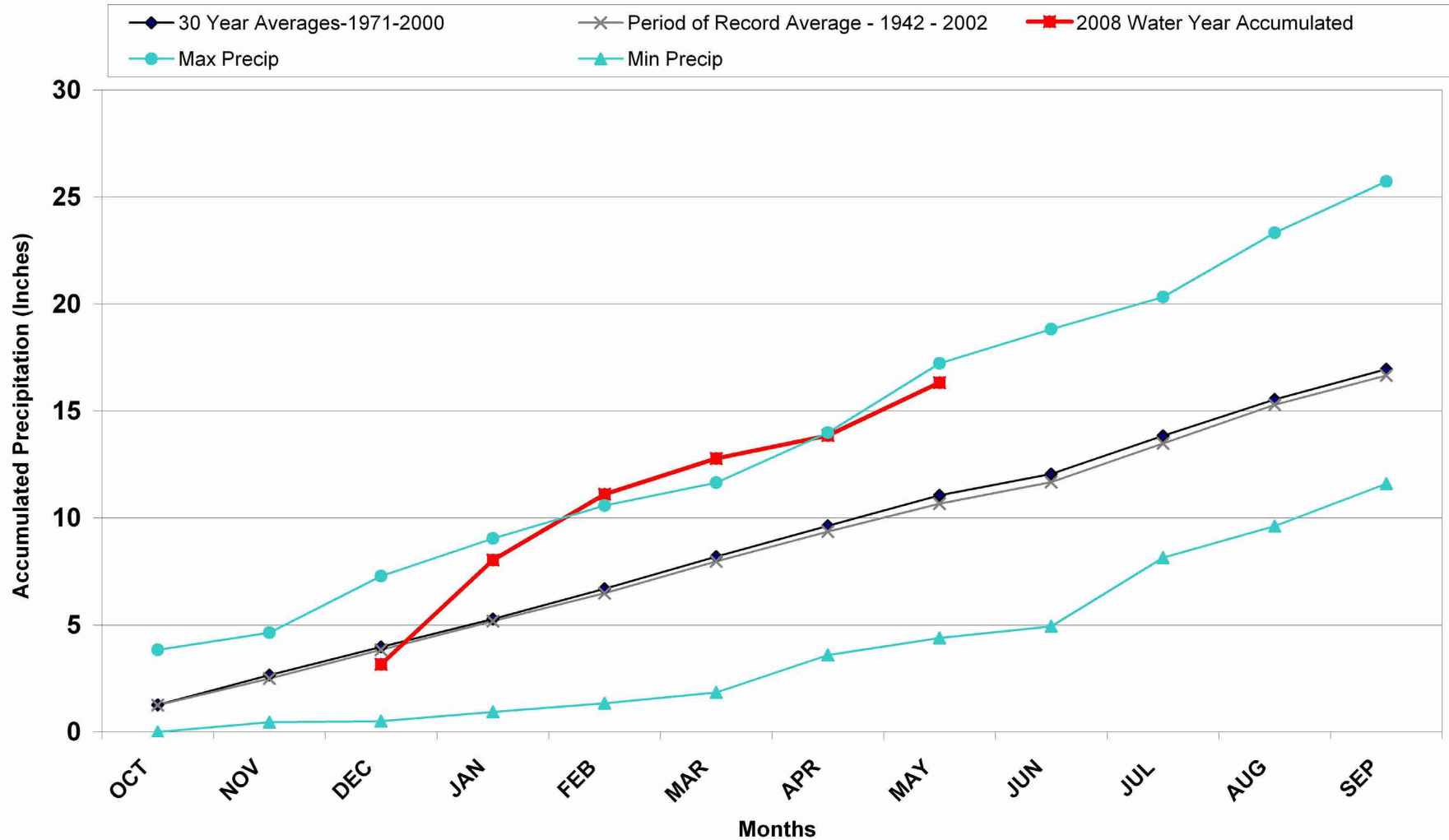
Division 1– Grand Lake 1NW

Grand Lake 1 NW 2008 Water Year



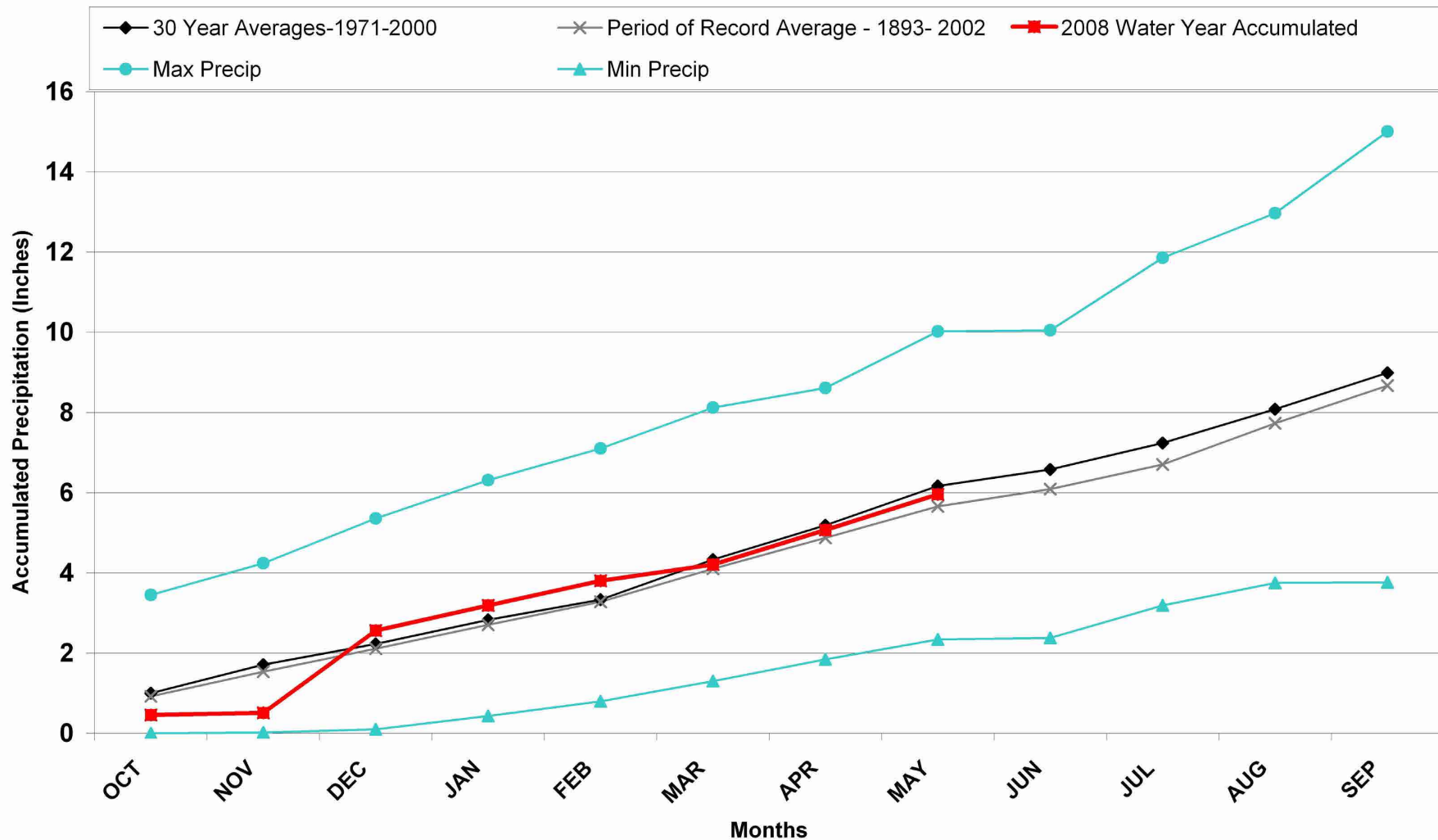
Division 1 – Taylor Park

Taylor Park 2008 Water Year



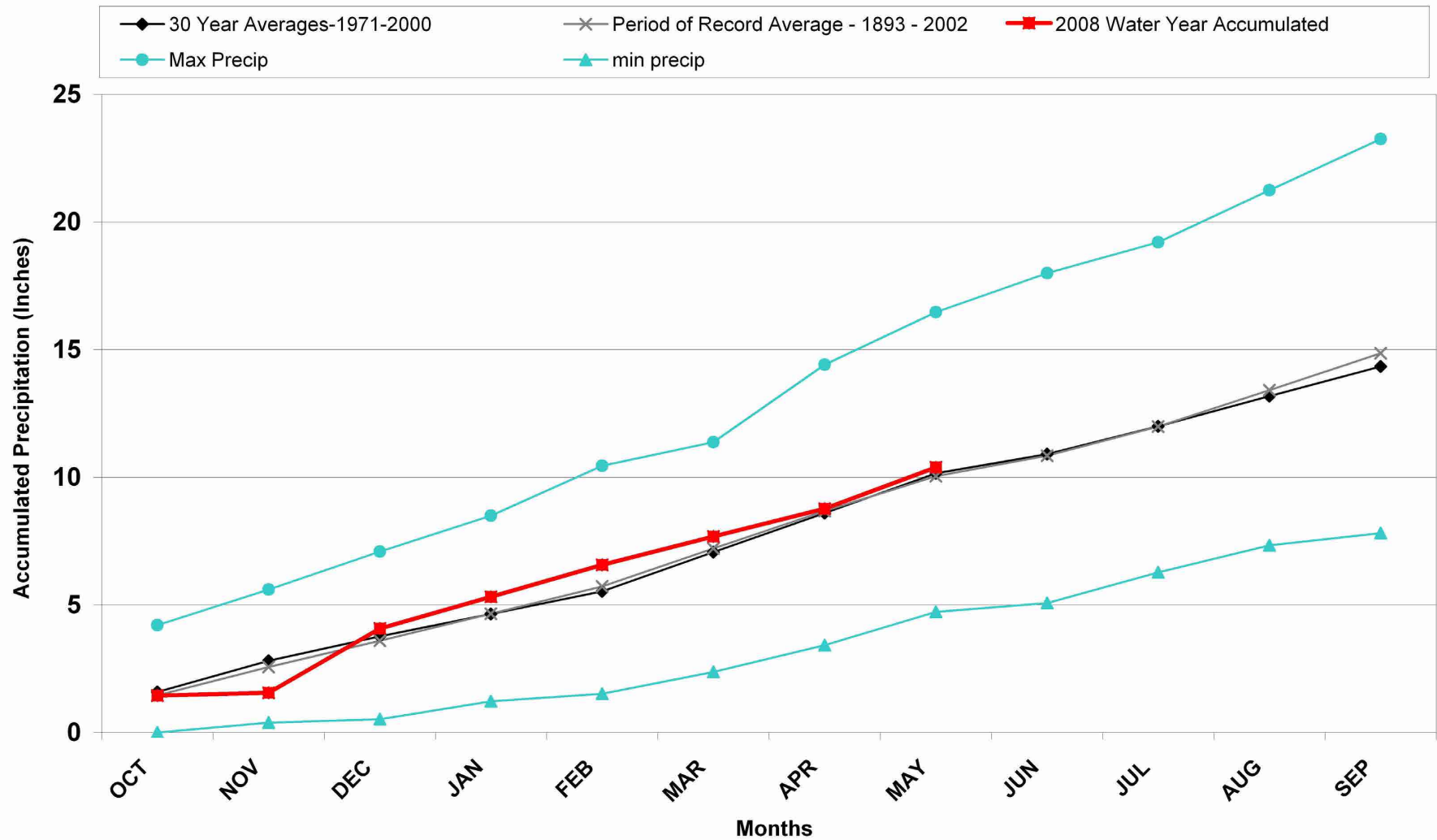
Division 2 – Grand Junction

Grand Junction WSFO 2008 Water Year



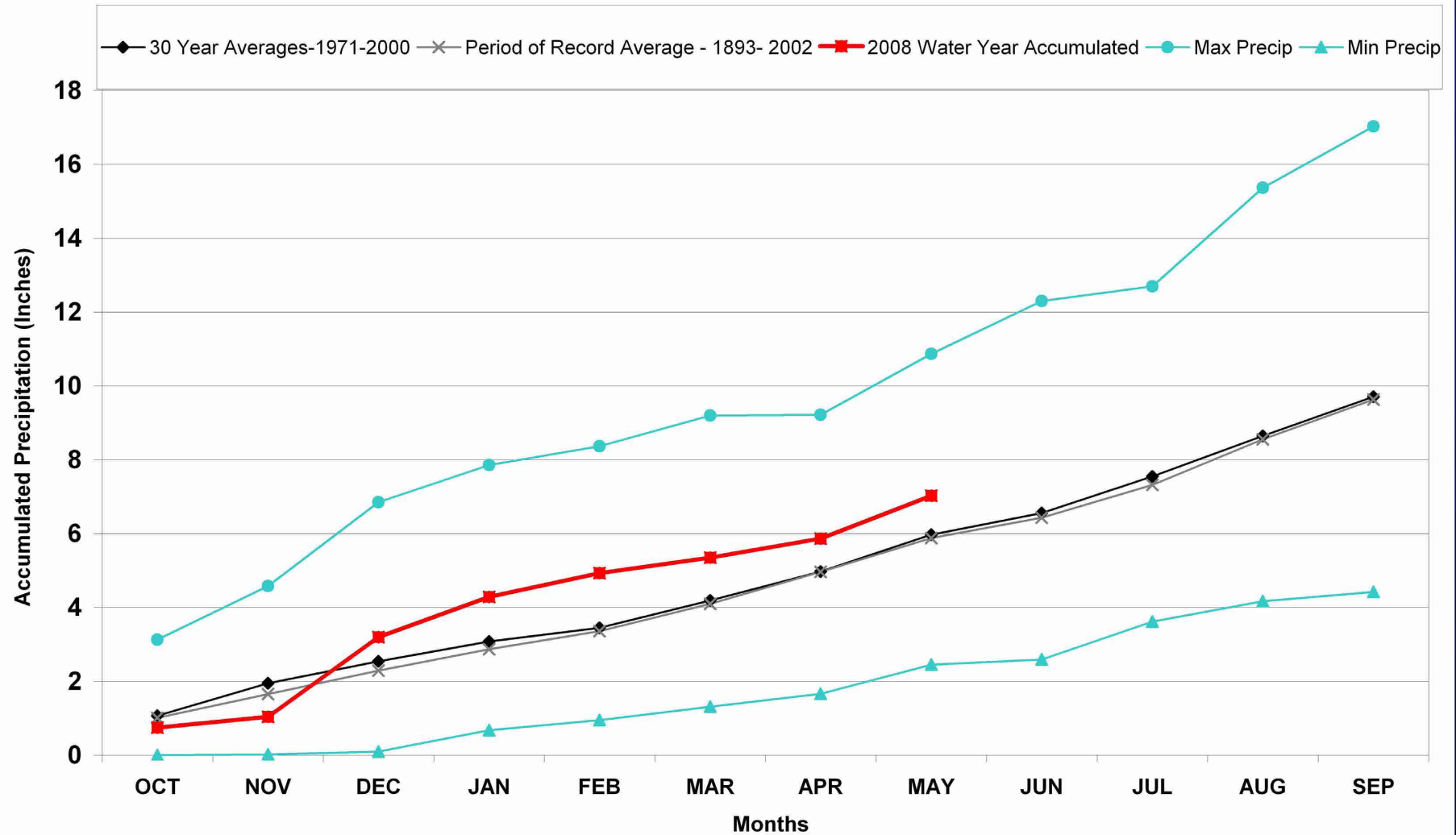
Division 2 – Collbran

Collbran 2SW 2008 Water Year



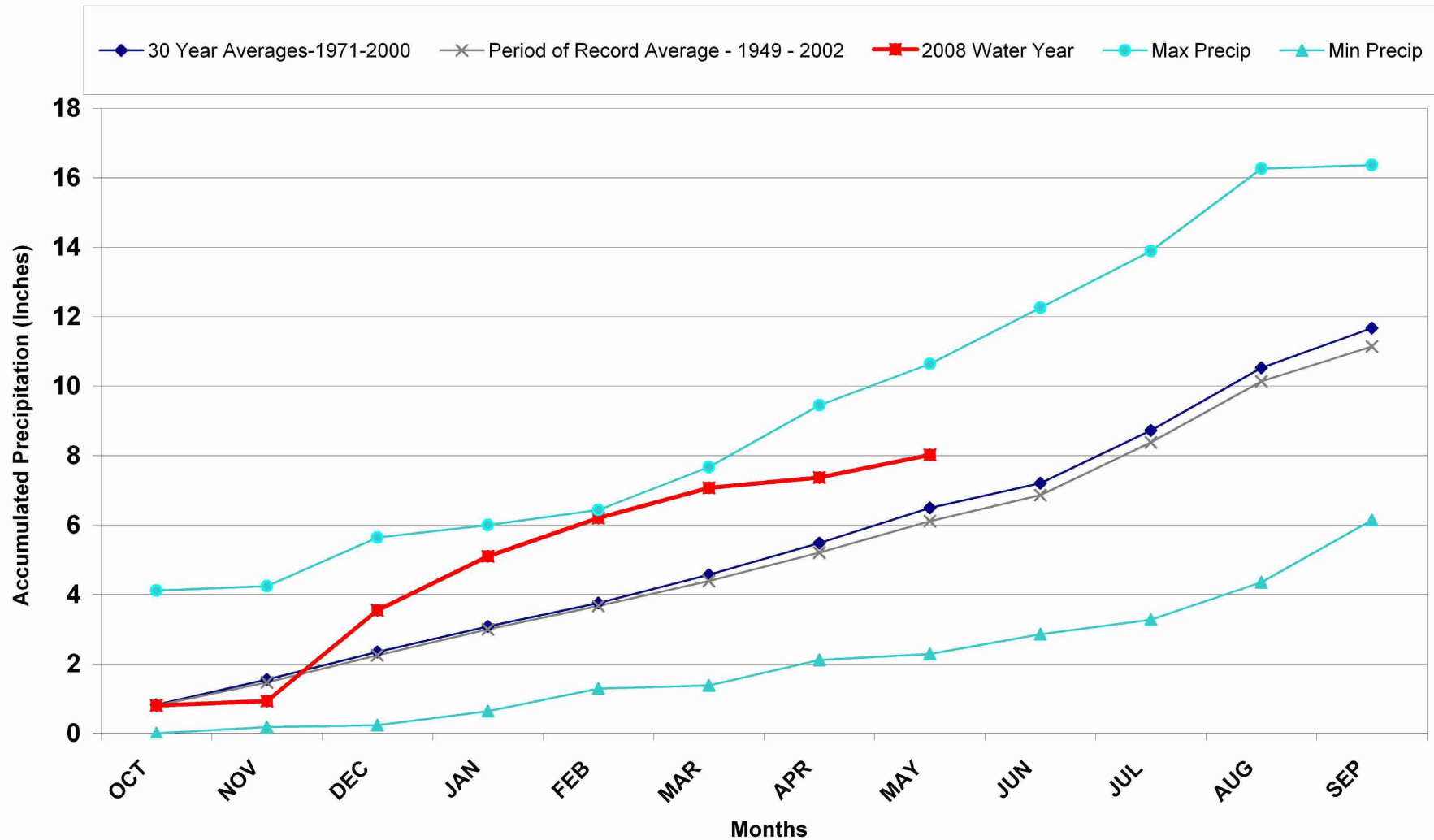
Division 3 – Montrose

Montrose #2 2008 Water Year



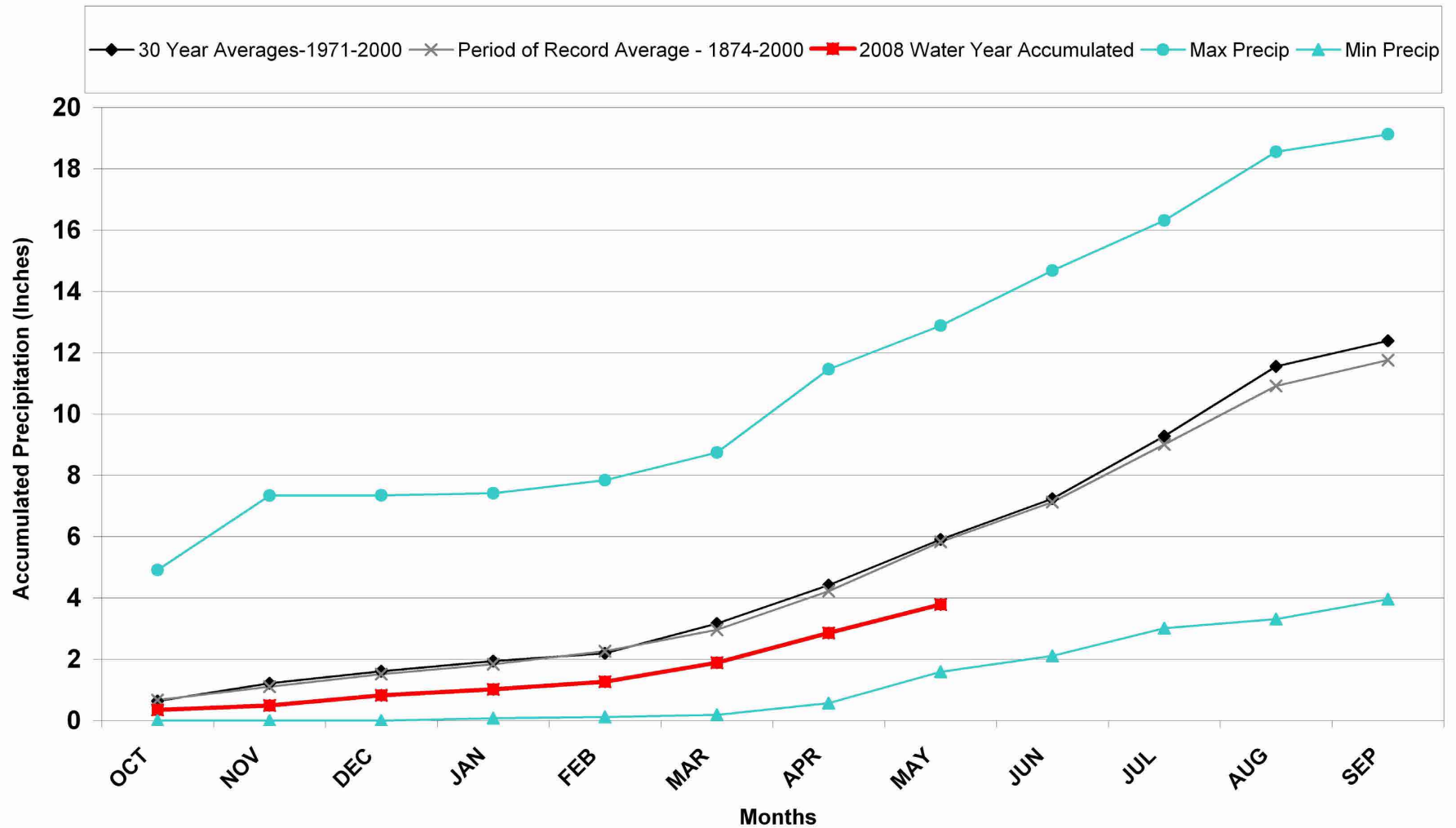
Division 3 – Cochetopa Creek

Cochetopa Creek 2008 Water Year



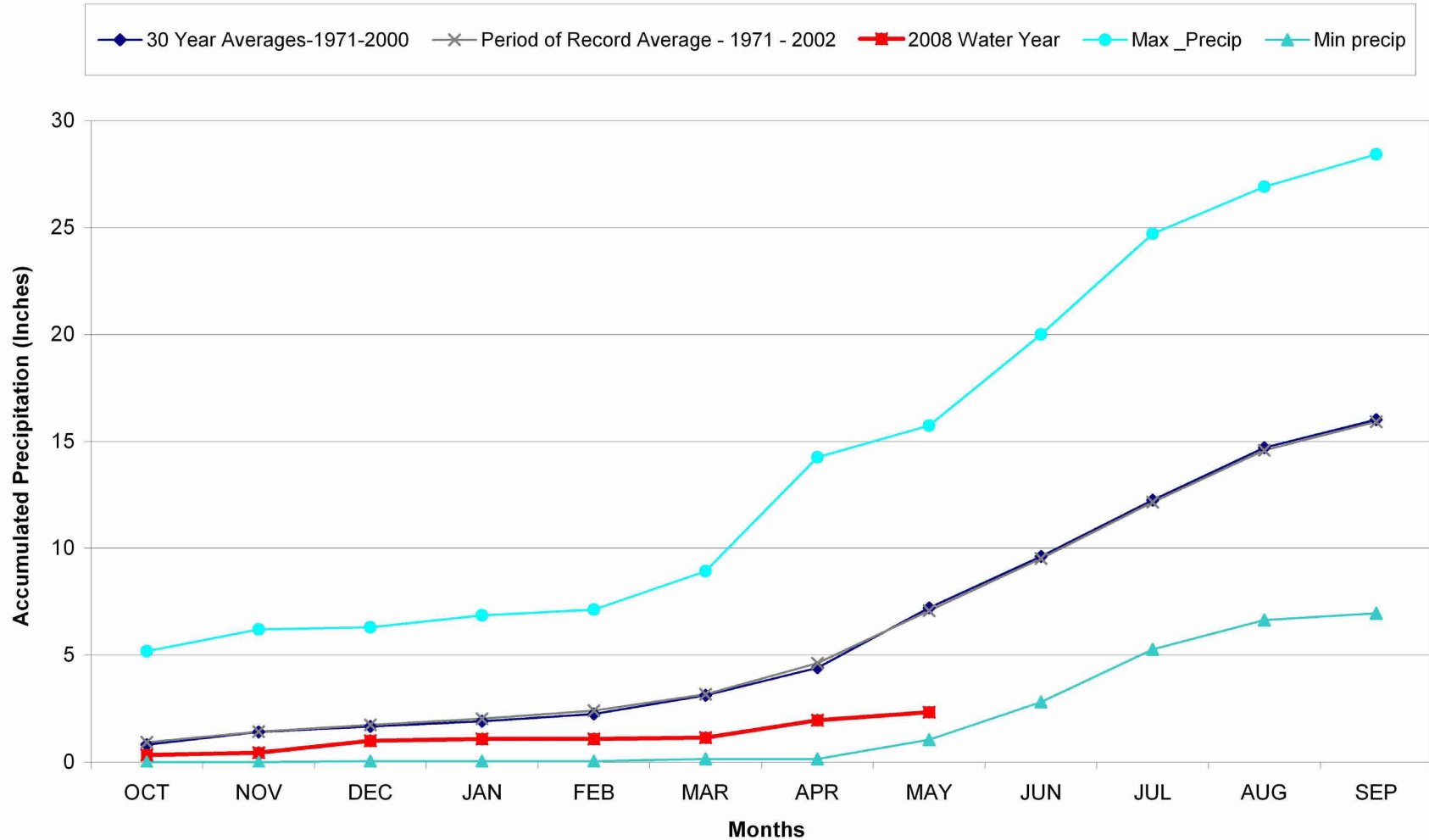
Division 5 – Pueblo

Pueblo WSO 2008 Water Year



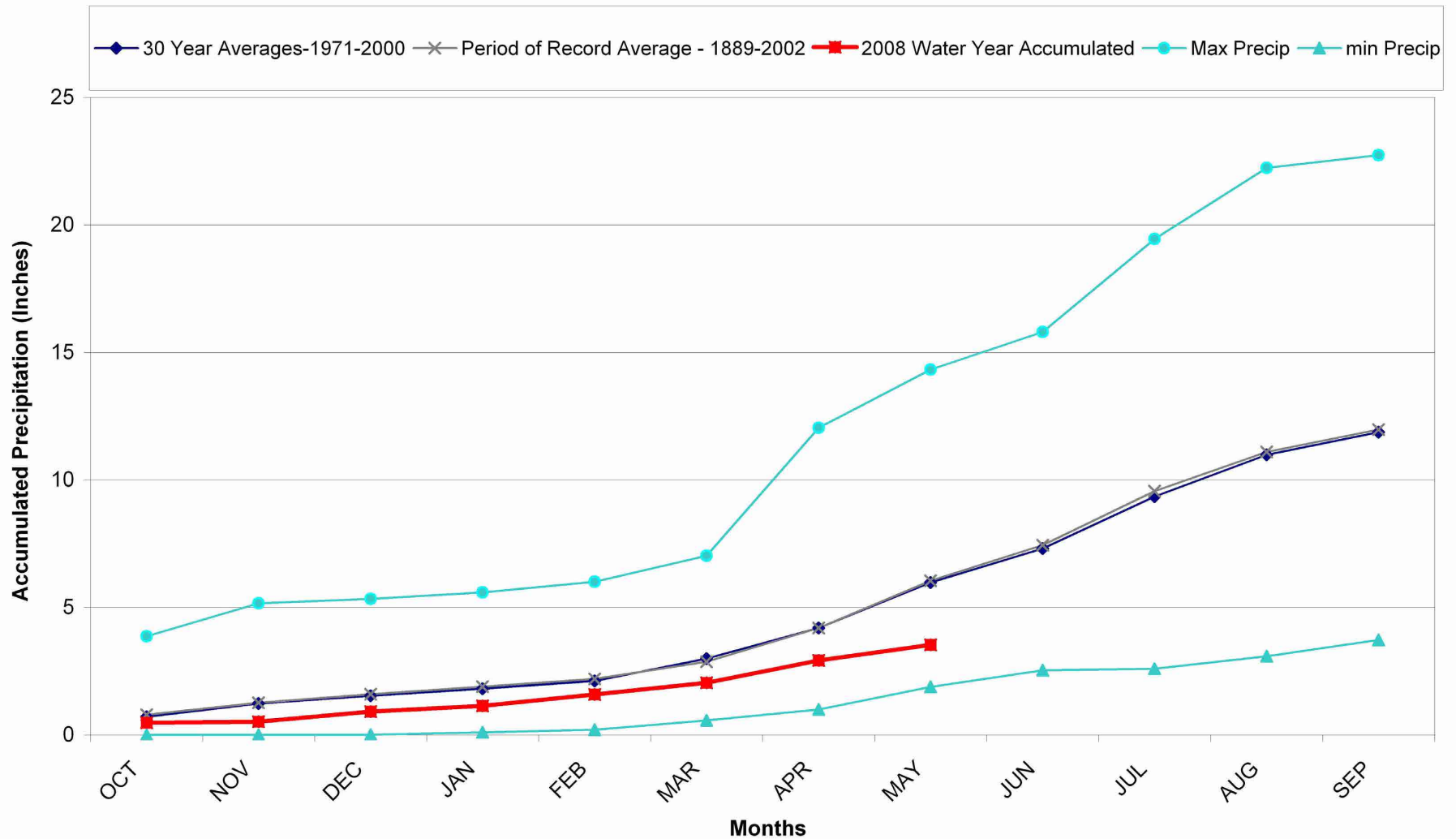
Division 6 – Cheyenne Wells

Cheyenne Wells 2008 Water Year



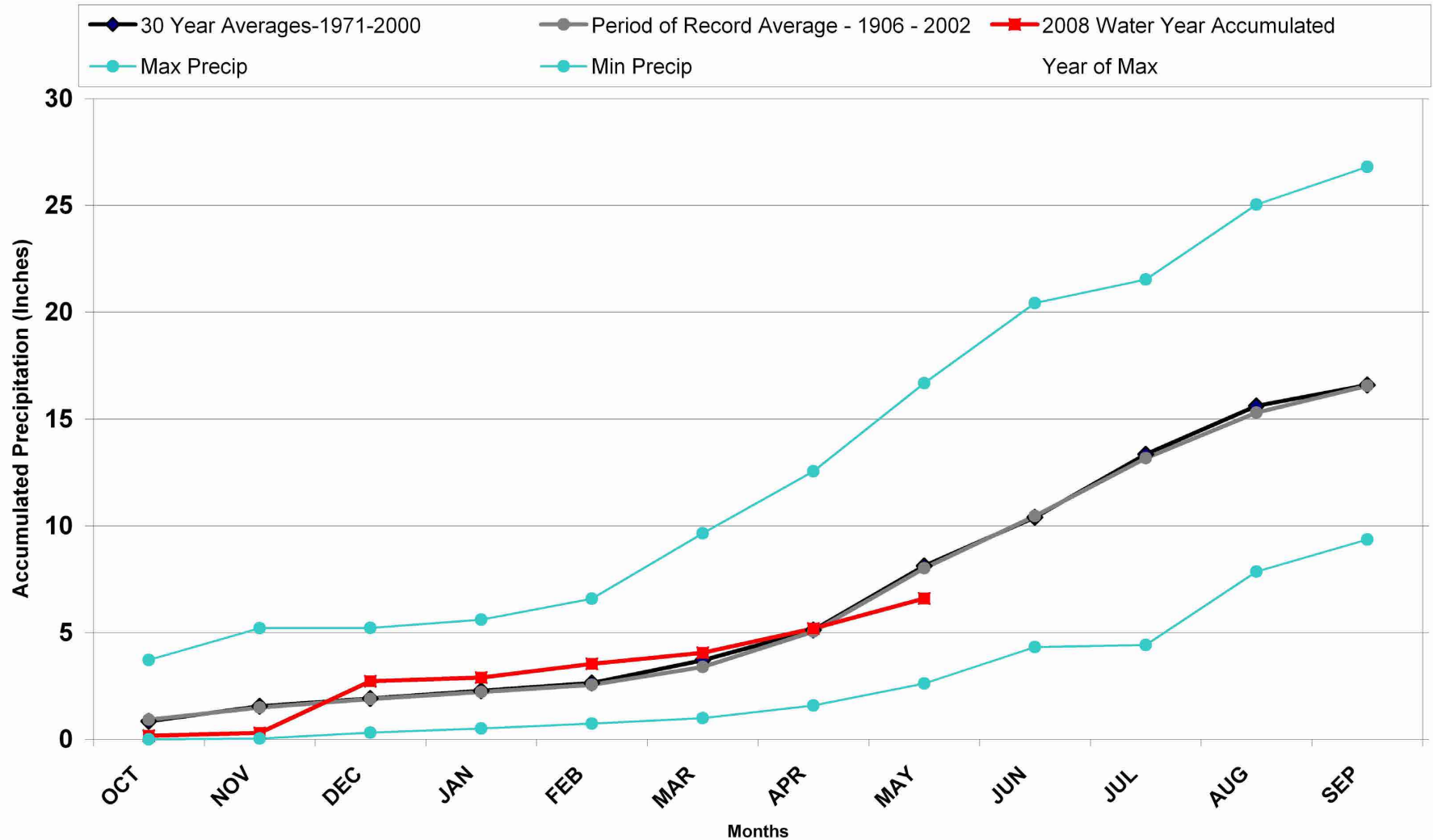
Division 6 – Rocky Ford

Rocky Ford 2008 Water Year



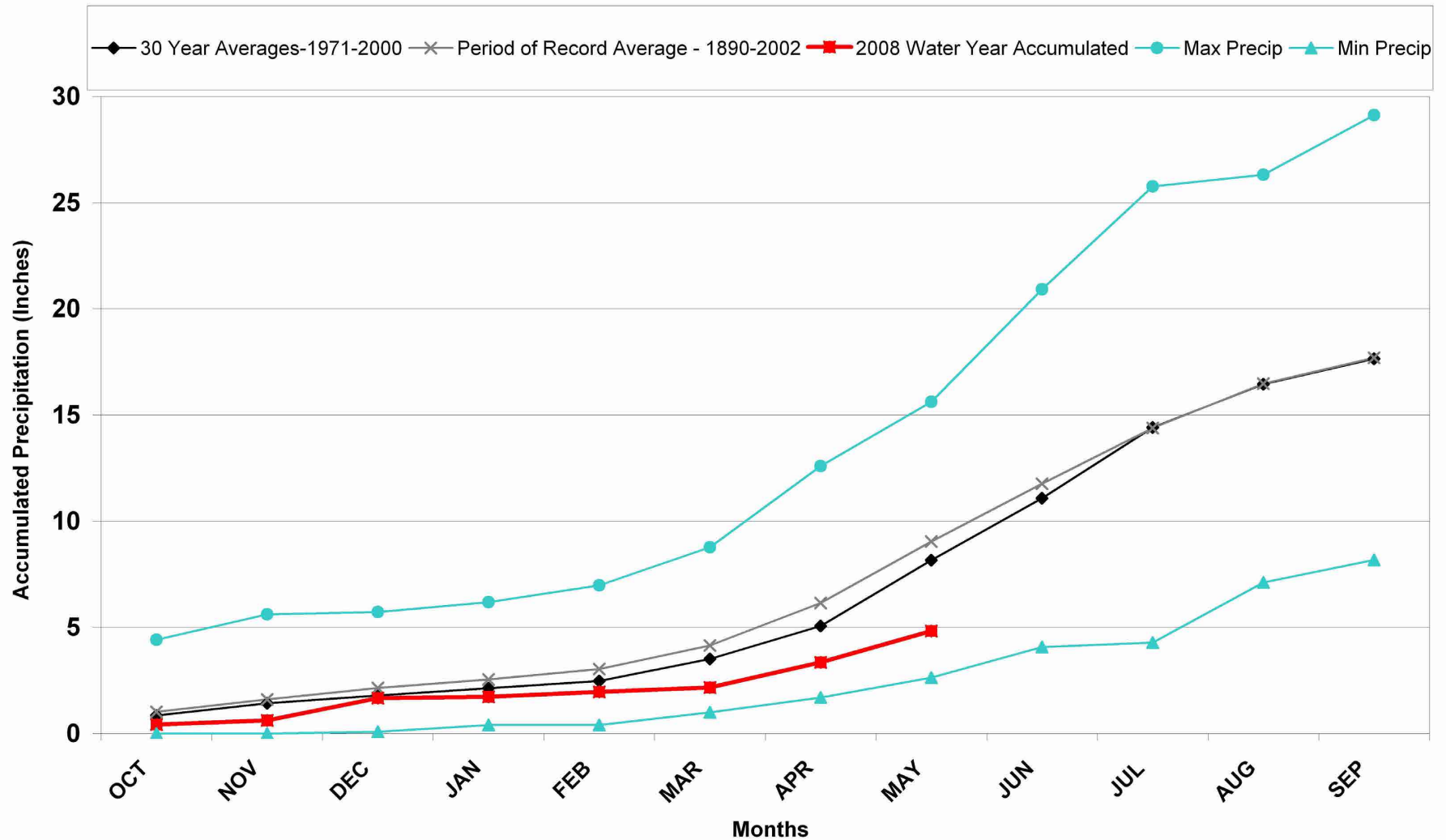
Division 7 – Akron

Akron 4E 2008 Water Year



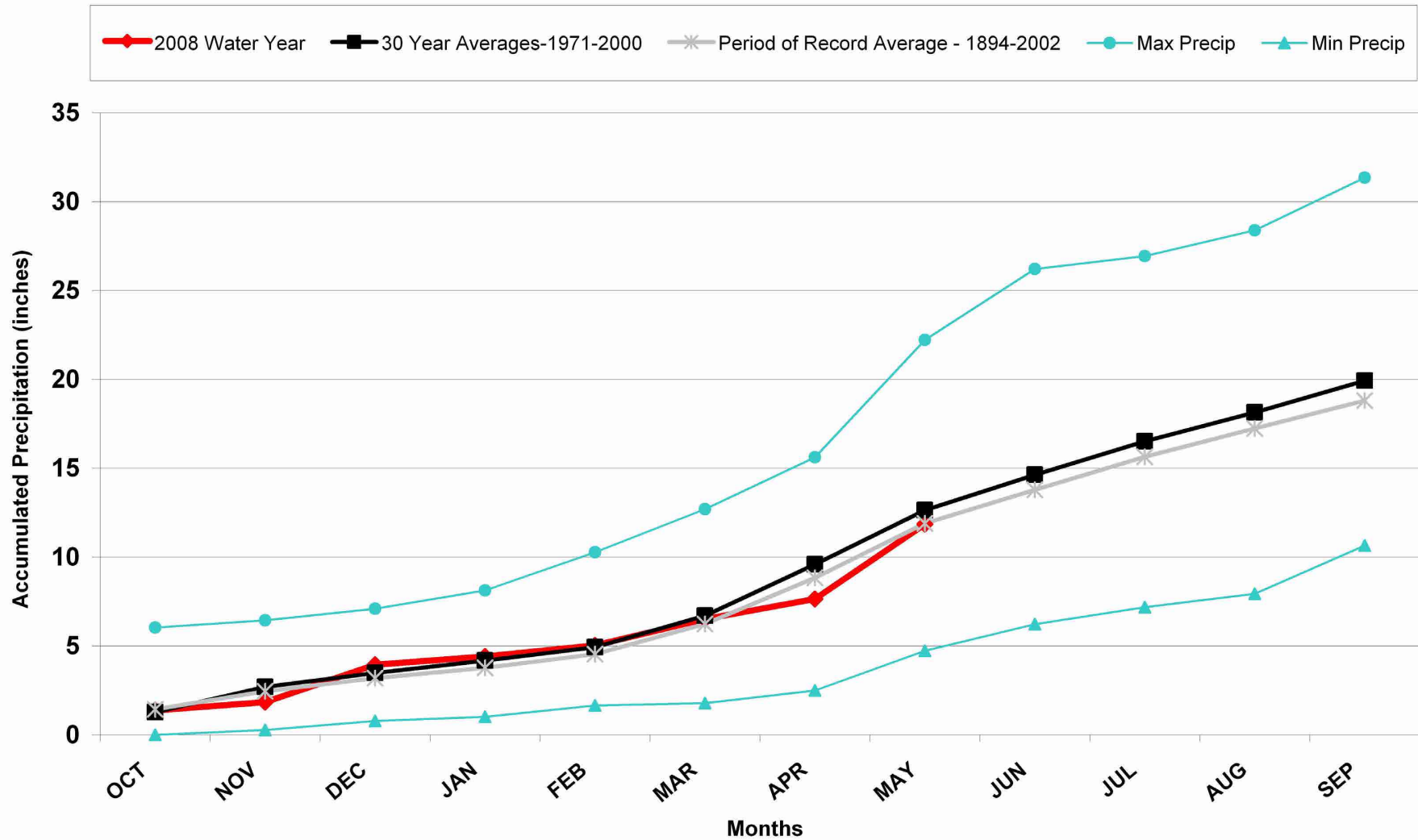
Division 7 – Leroy

Leroy 5SW 2008 Water Year



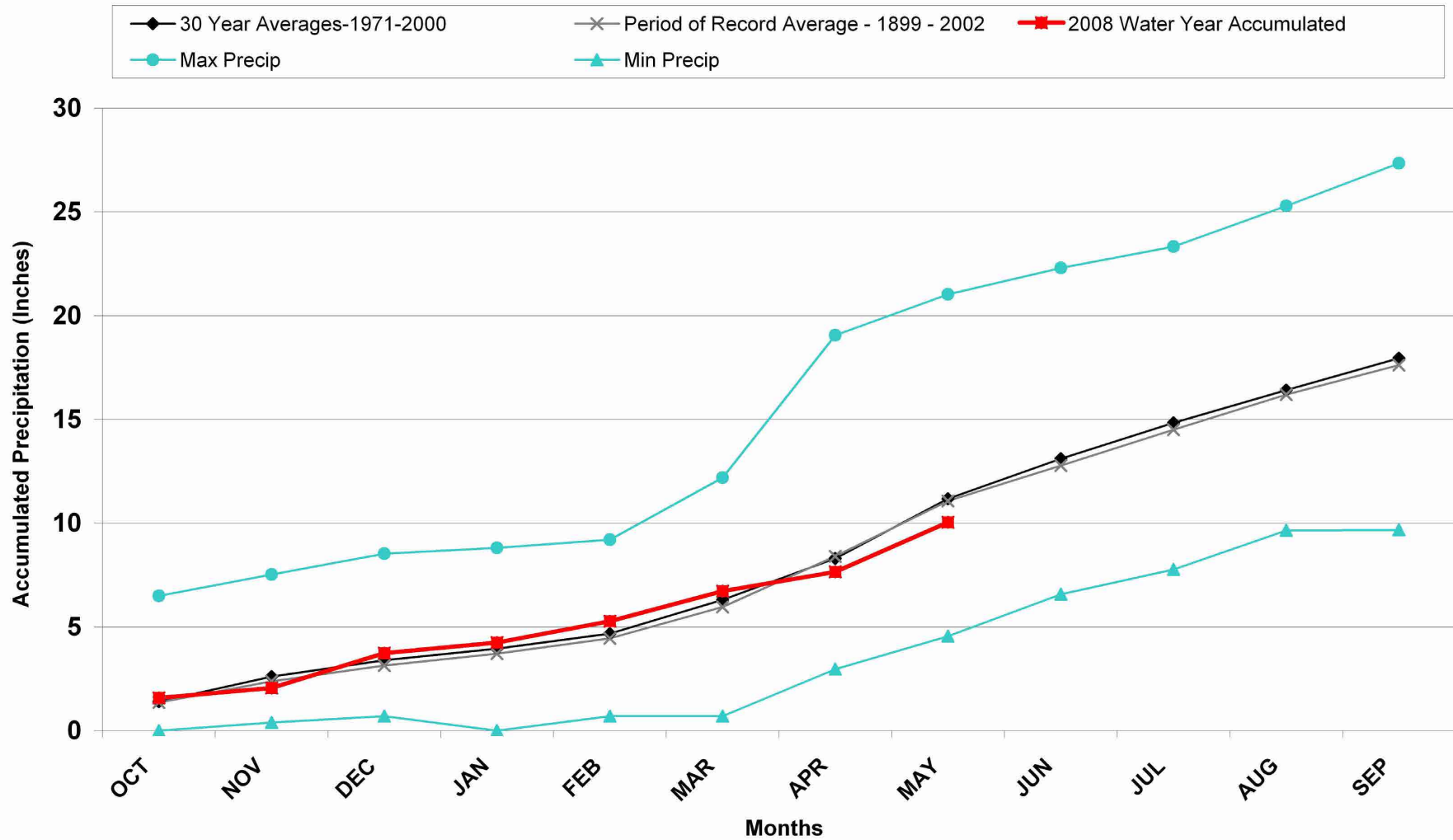
Division 8 – Boulder

Boulder 2008 Water Year



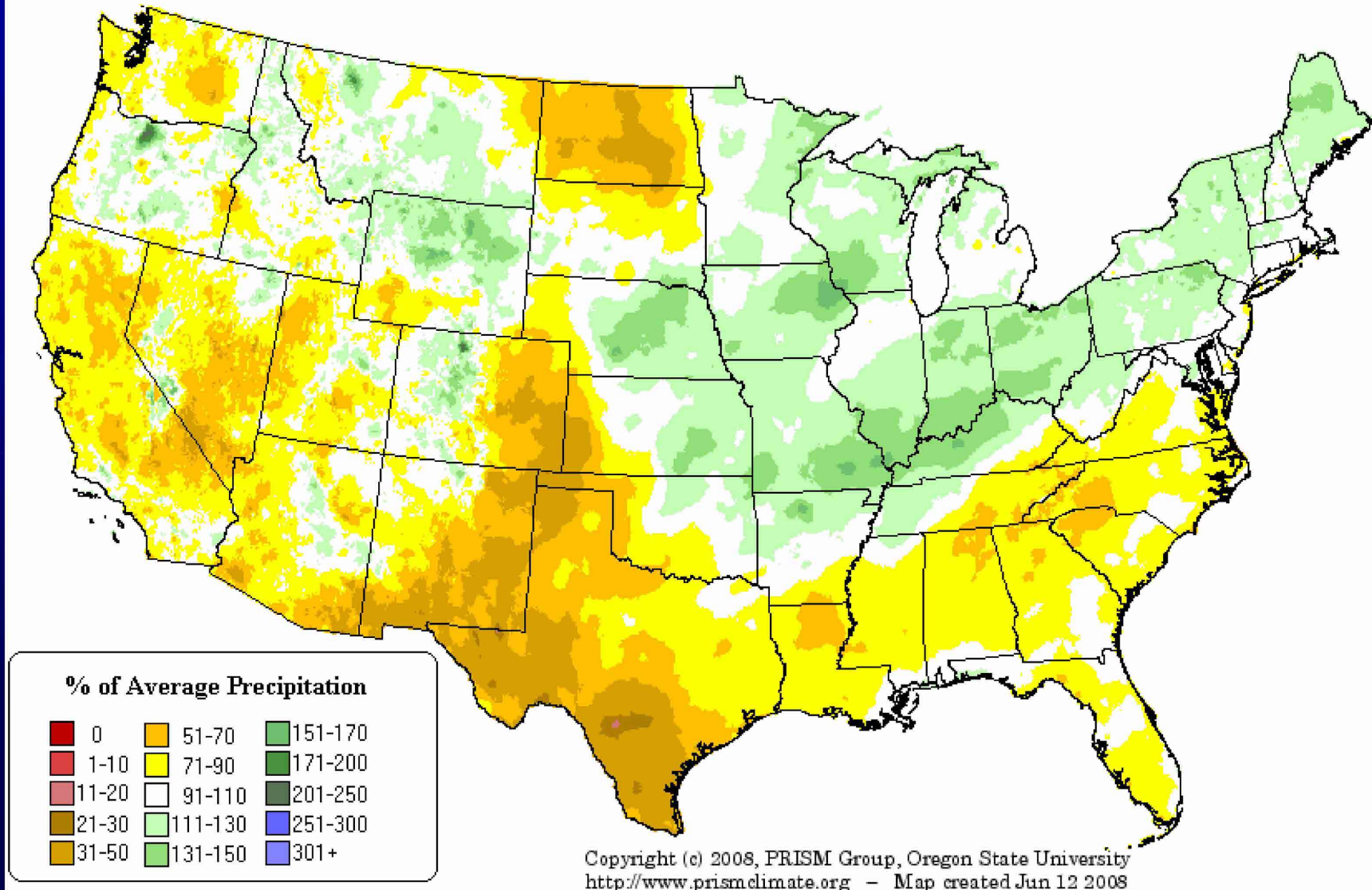
Division 8 – Kassler

Kassler 2008 Water Year

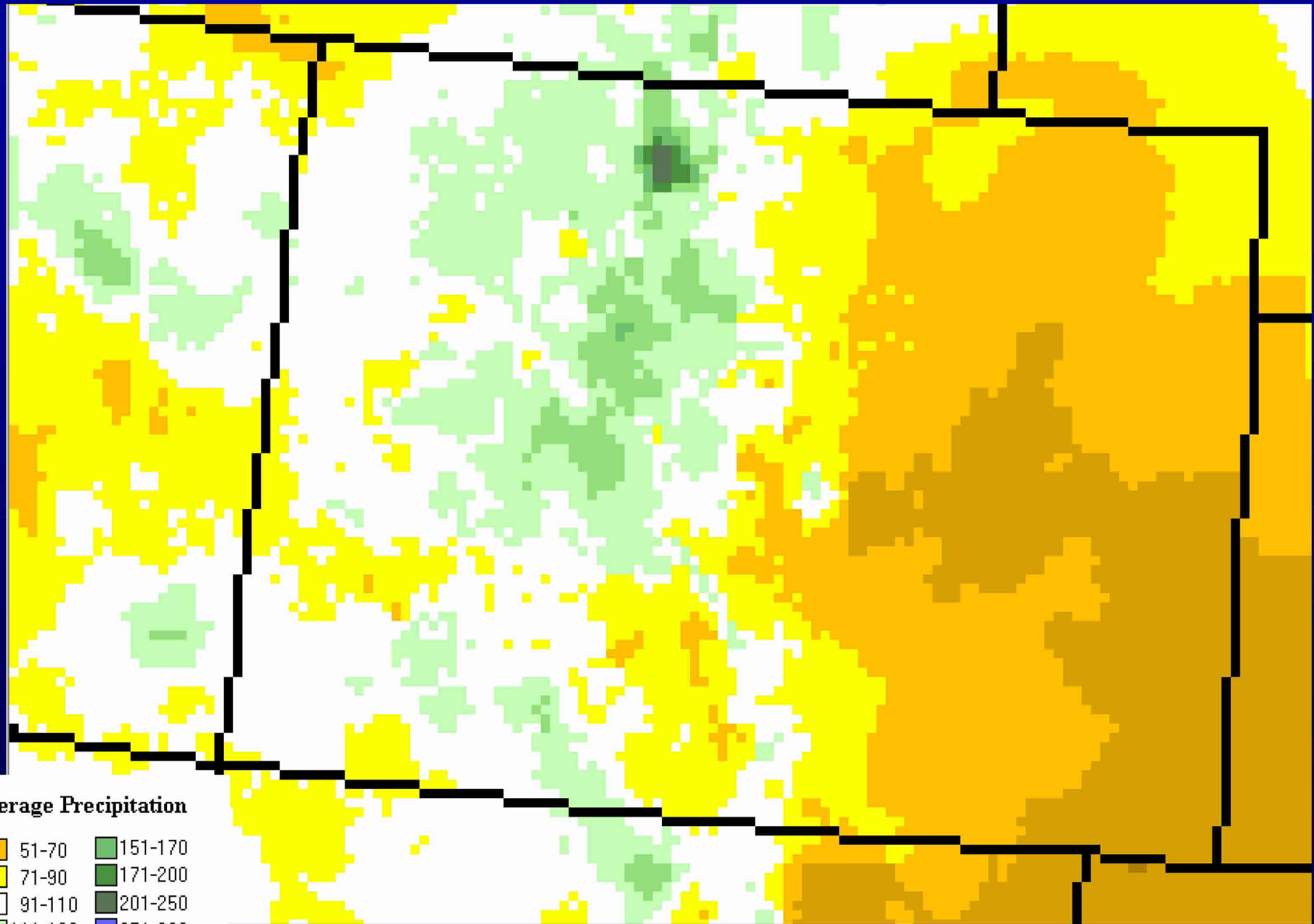


Water Year 2008 (Oct 07-May 08) Prism

8-month Percent of Average Precipitation: May 2008
Provisional Data



Water Year 2008 (Oct 07-May 08) Prism



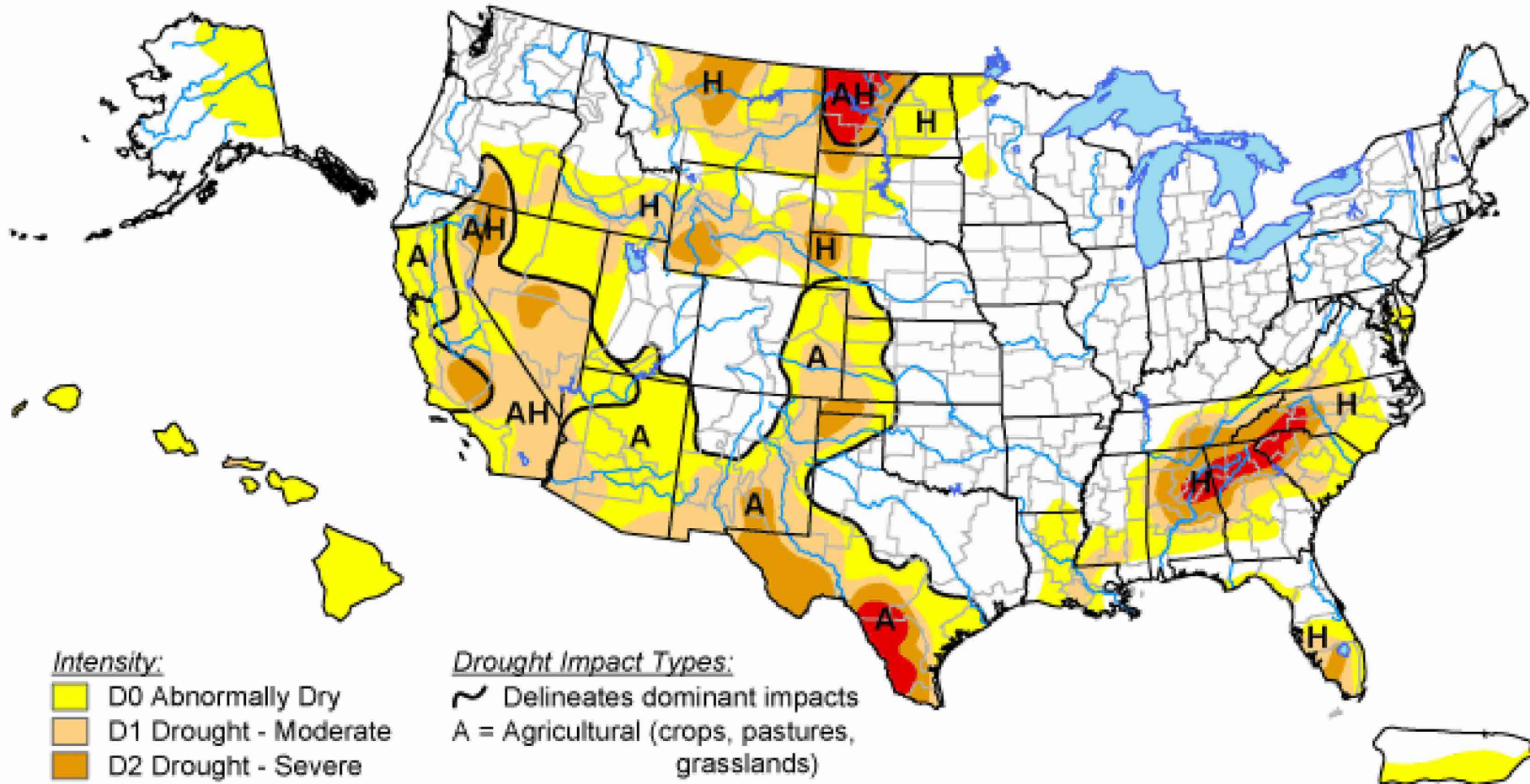
% of Average Precipitation

0	51-70	151-170
1-10	71-90	171-200
11-20	91-110	201-250
21-30	111-130	251-300
31-50	131-150	301+






U.S. Drought Monitor

May 13, 2008


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.

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



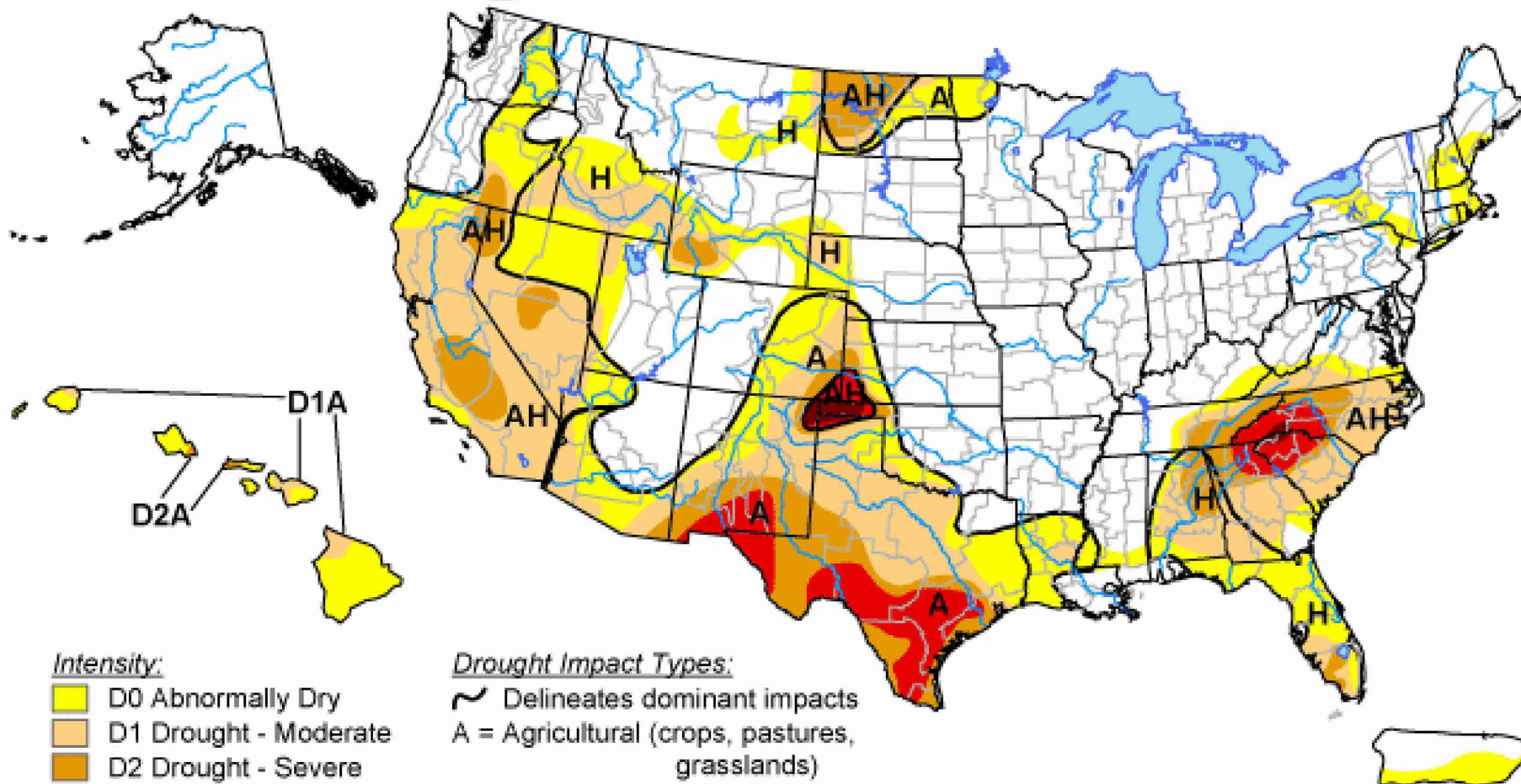
Released Thursday, May 15, 2008

Author: Michael James, JAWF/CPC/NOAA






U.S. Drought Monitor

June 17, 2008


Valid 8 a.m. EDT



Intensity:

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

Drought Impact Types:

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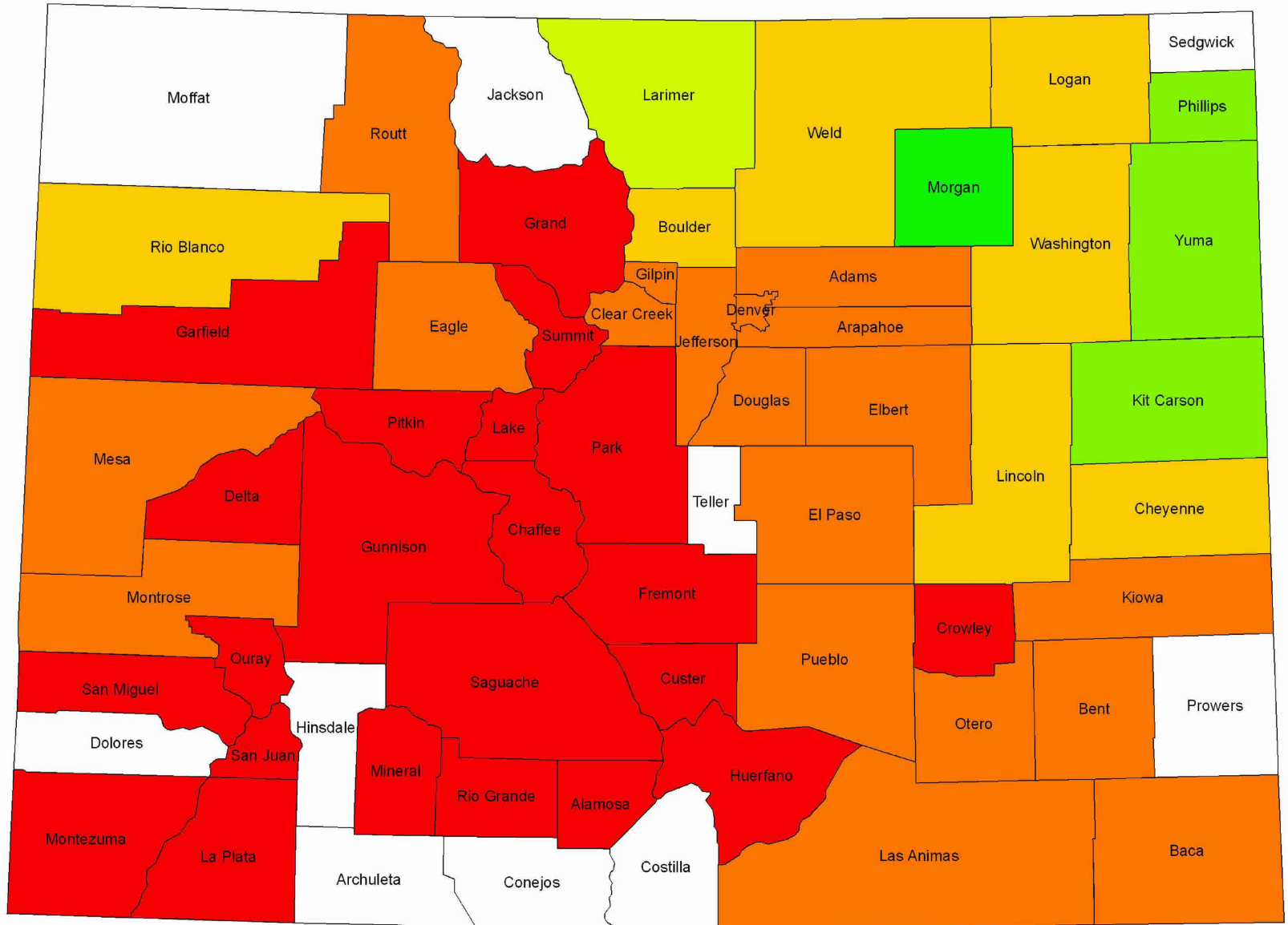
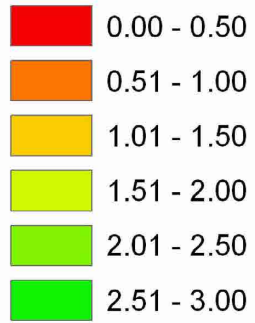
Released Thursday, June 19, 2008

Author: Rich Tinker, CPC/NOAA

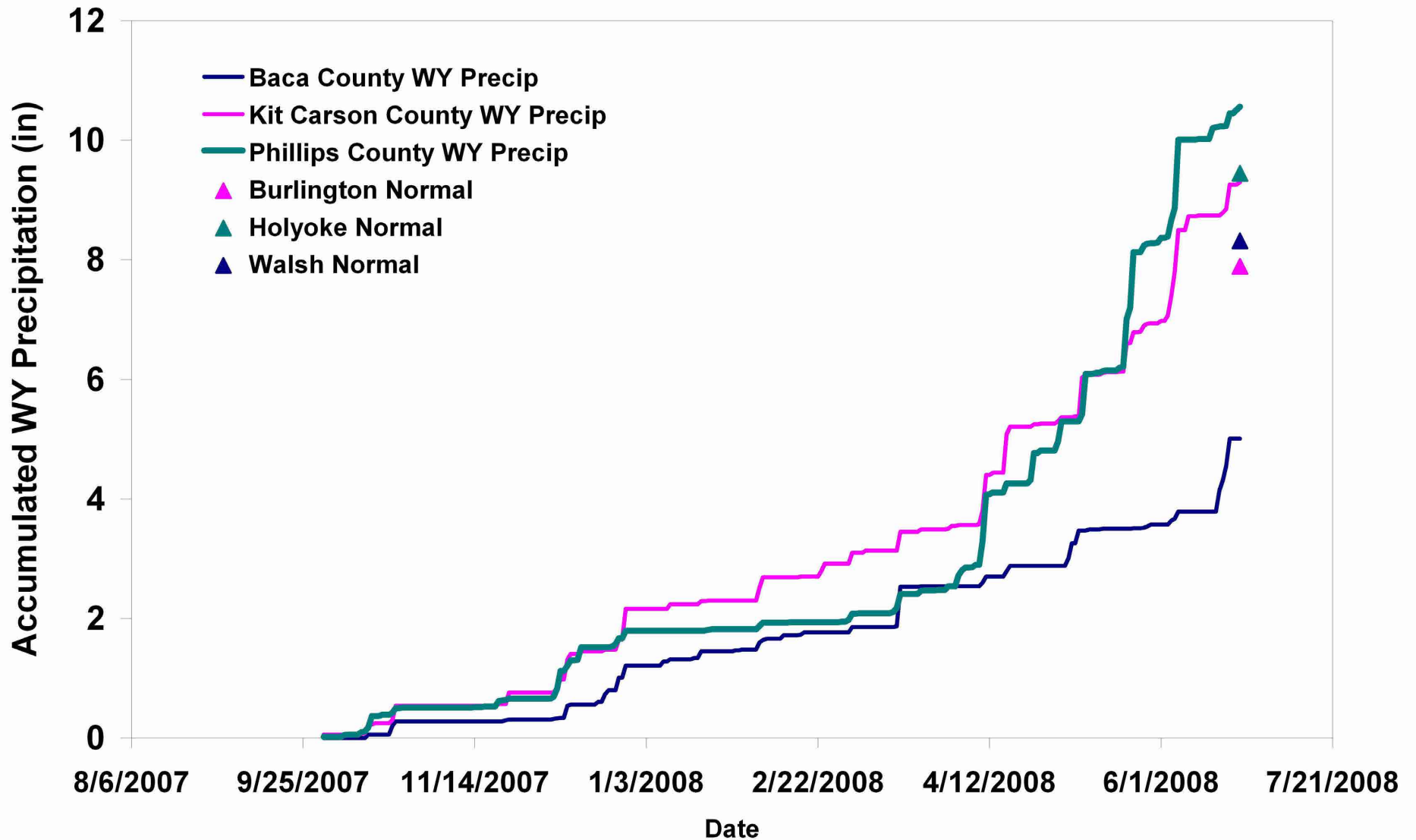
Average Cocorahs June 1- June 24 2008 Precipitation by County

Colorado_Counties

CO_county_avgppt_1_24June08.JUNE_PPT

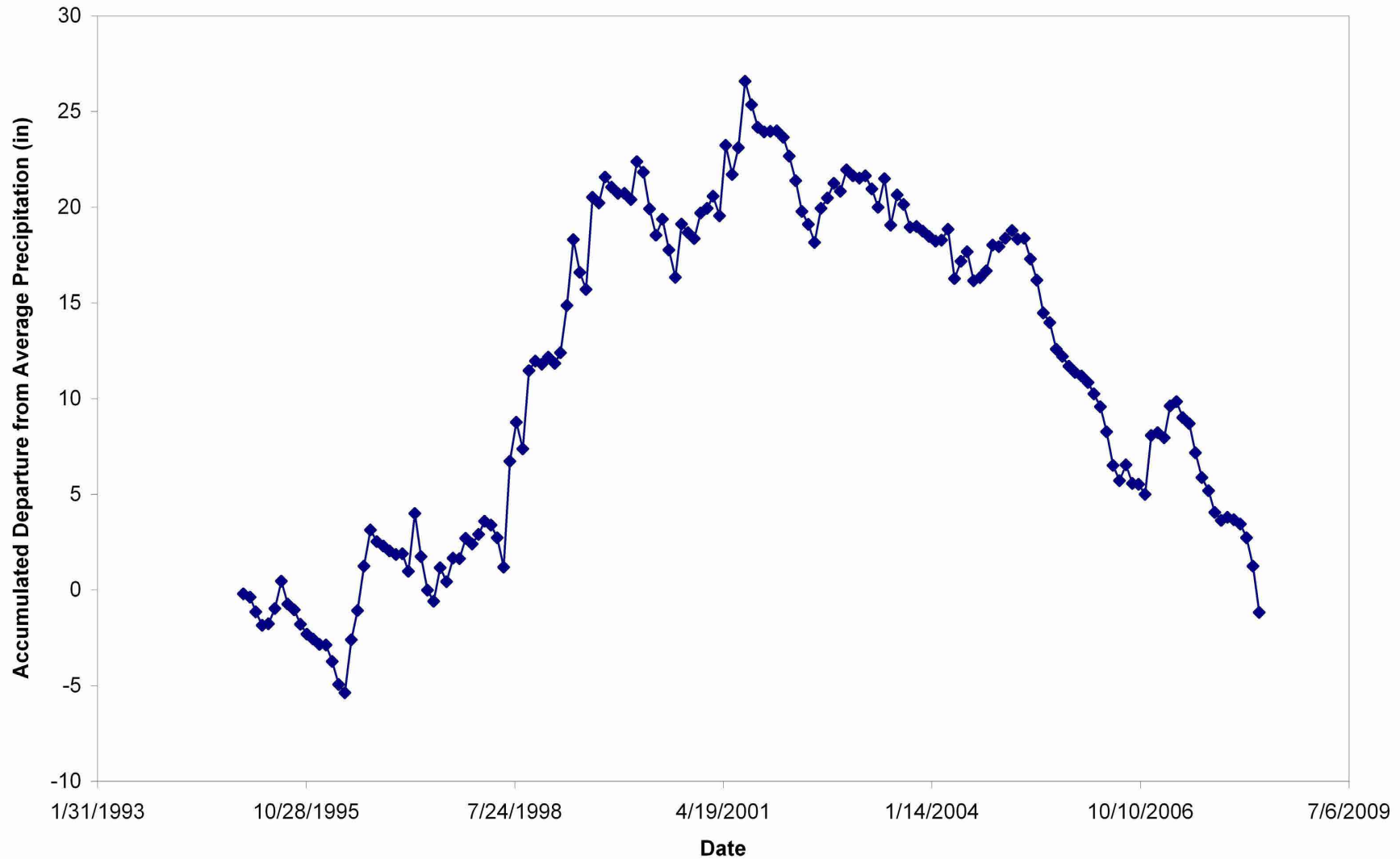


CoCoRaHS Accumulated WY Precipitation for Selected Counties



Campo Accumulated Precipitation Deficit

Campo, CO Accumulated Departure from Average



Drought Monitor Archives

Maps

Tables

1999 Archive

GIS Data

Select an area and click the 'Update' button to view the archive.

Contiguous United States

Region

Northeast

State

Alabama

Update

Drought Severity

D0 Abnormally Dry

D1 Drought - Moderate

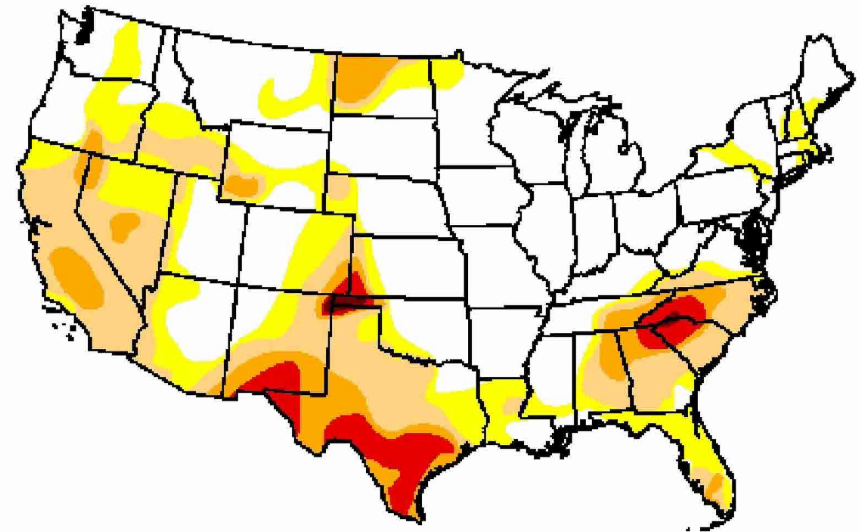
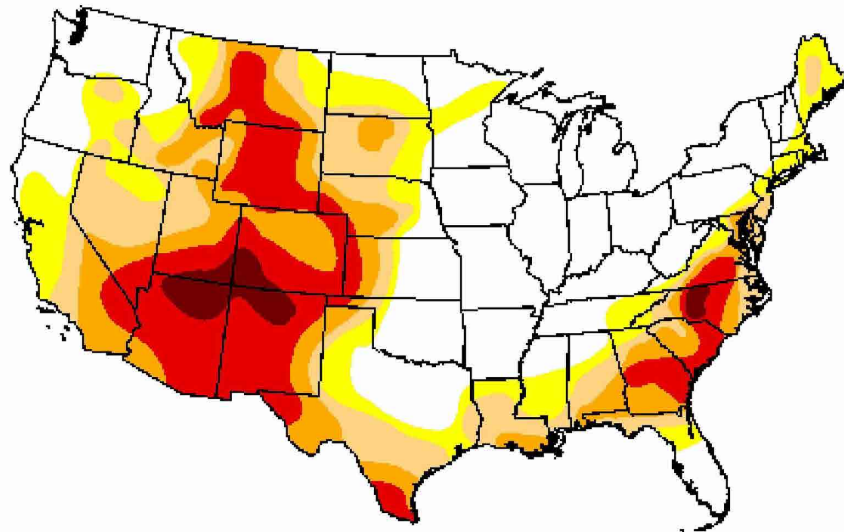
D2 Drought - Severe

D3 Drought - Extreme

D4 Drought - Exceptional

June 18, 2002

June 17, 2008



Summary

- Cool weather has continued for Colorado
- No prolonged spring heat waves to produce large peak flows.
- Delayed snowmelt generally good for water supplies.
- Severe weather has been a problem for parts of eastern Colorado.

Summary continued

- Western Slope drying now underway.
- Drought vulnerability continues over SE Colorado.
- Next anticipated weather change – onset of “North American Monsoon” with increased chances of precipitation, especially over SW and Central Colorado.

Colorado Climate Center

**Data and Power Point Presentations
available for downloading**

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

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