

Climate Update

Nolan Doesken and Wendy Ryan

Colorado Climate Center
Atmospheric Science Department
Colorado State University

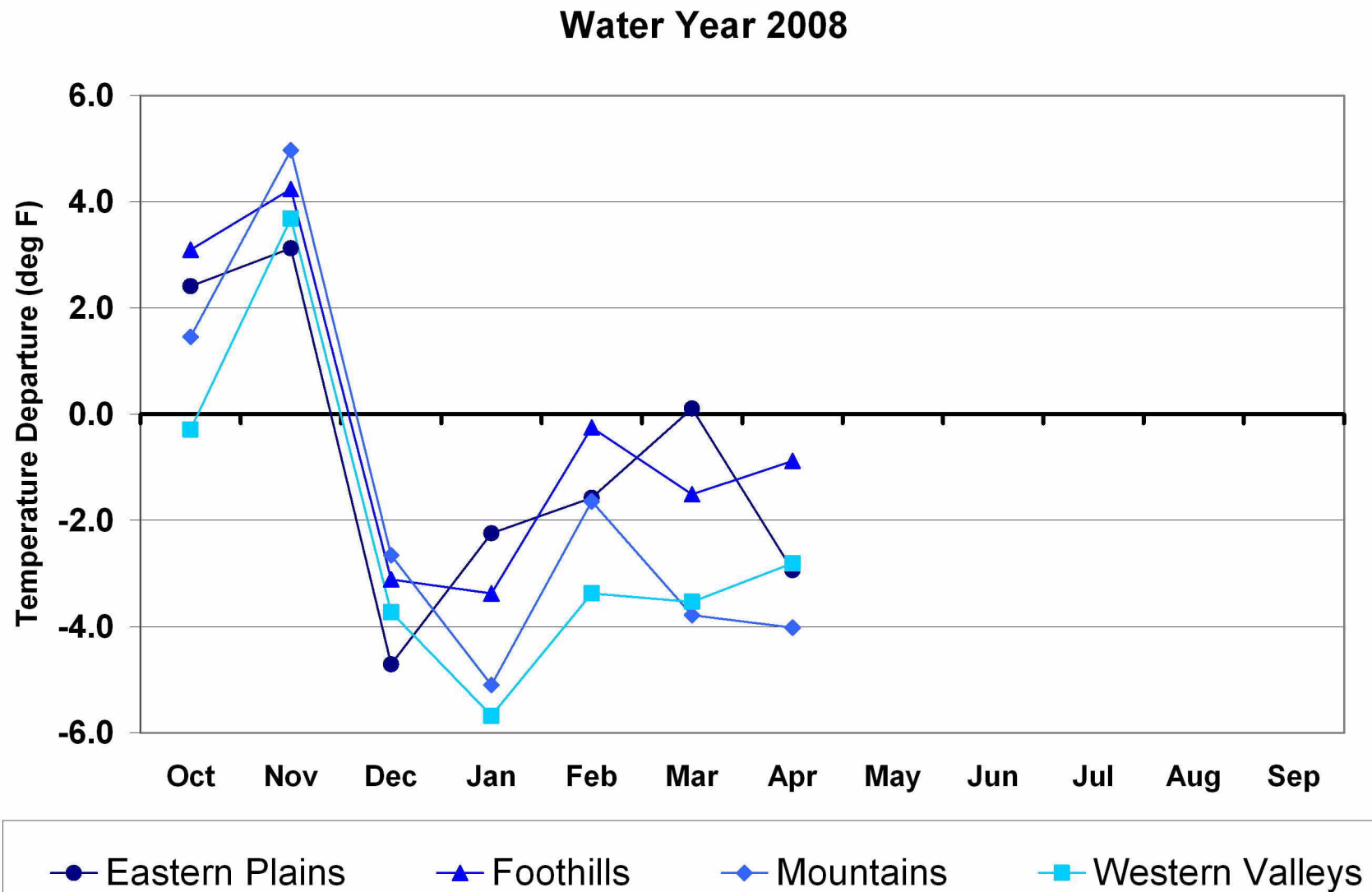
Presented to Water
Availability Task Force
May 19, 2008
Denver, CO



Colorado
State
University
Knowledge to Go Places

Prepared by Odie Bliss

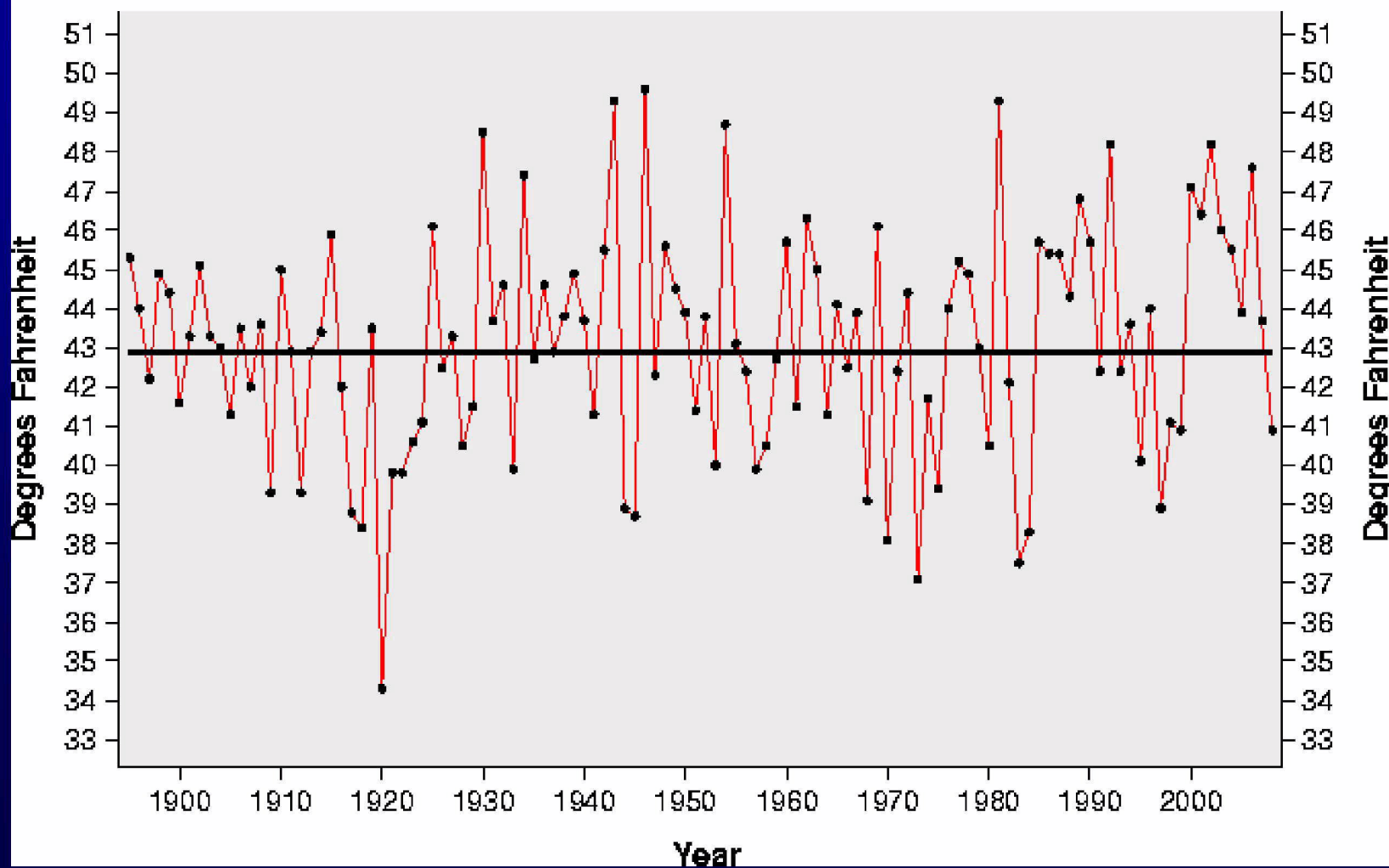
Water Year 2008 Temperature Departures



April Average Temperature History for Colorado (NCDC)

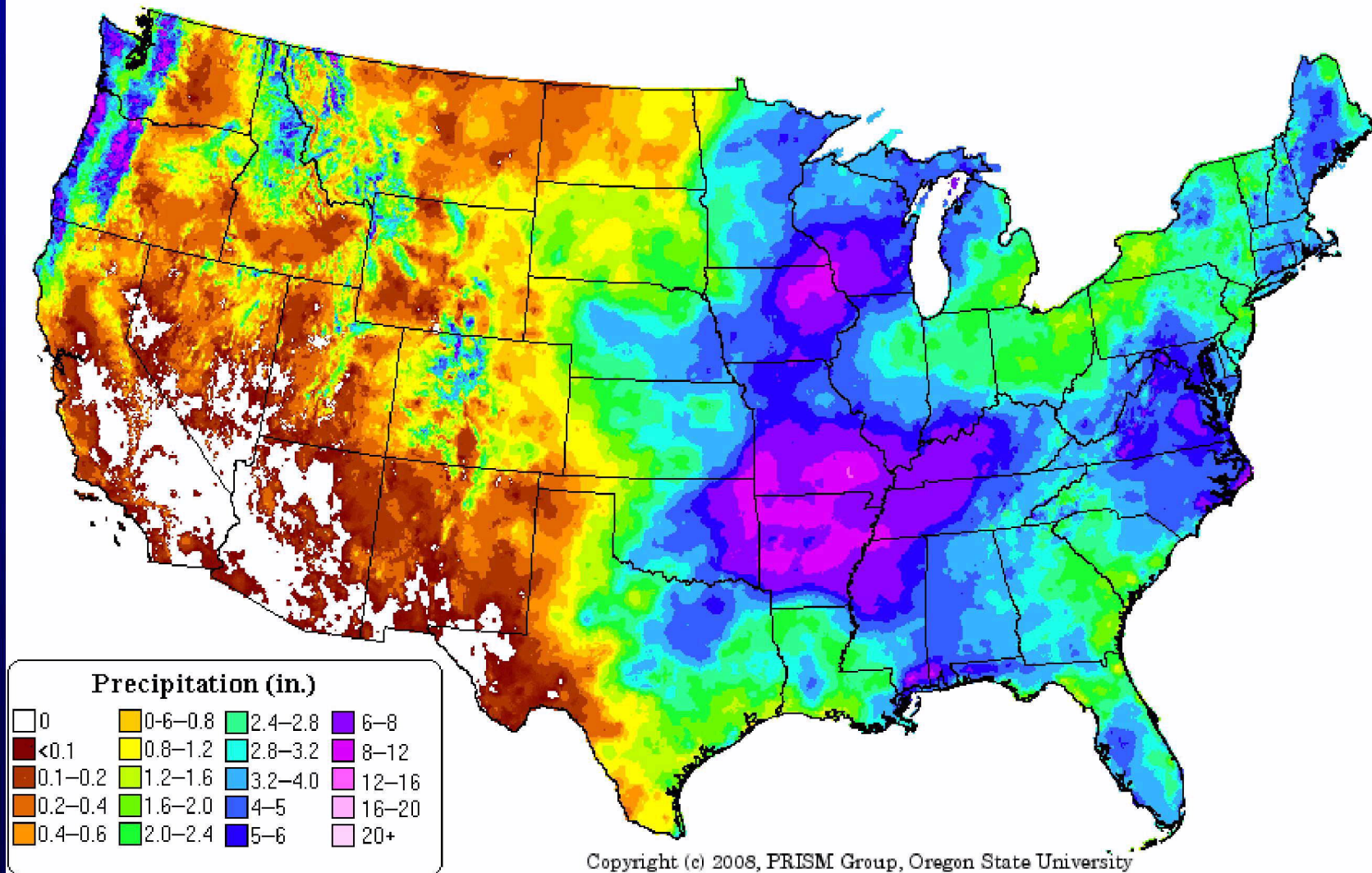
— Actual Temperature
— Average Temperature

April 2008: 40.9 deg Rank: 25
Period of record 1895-2008



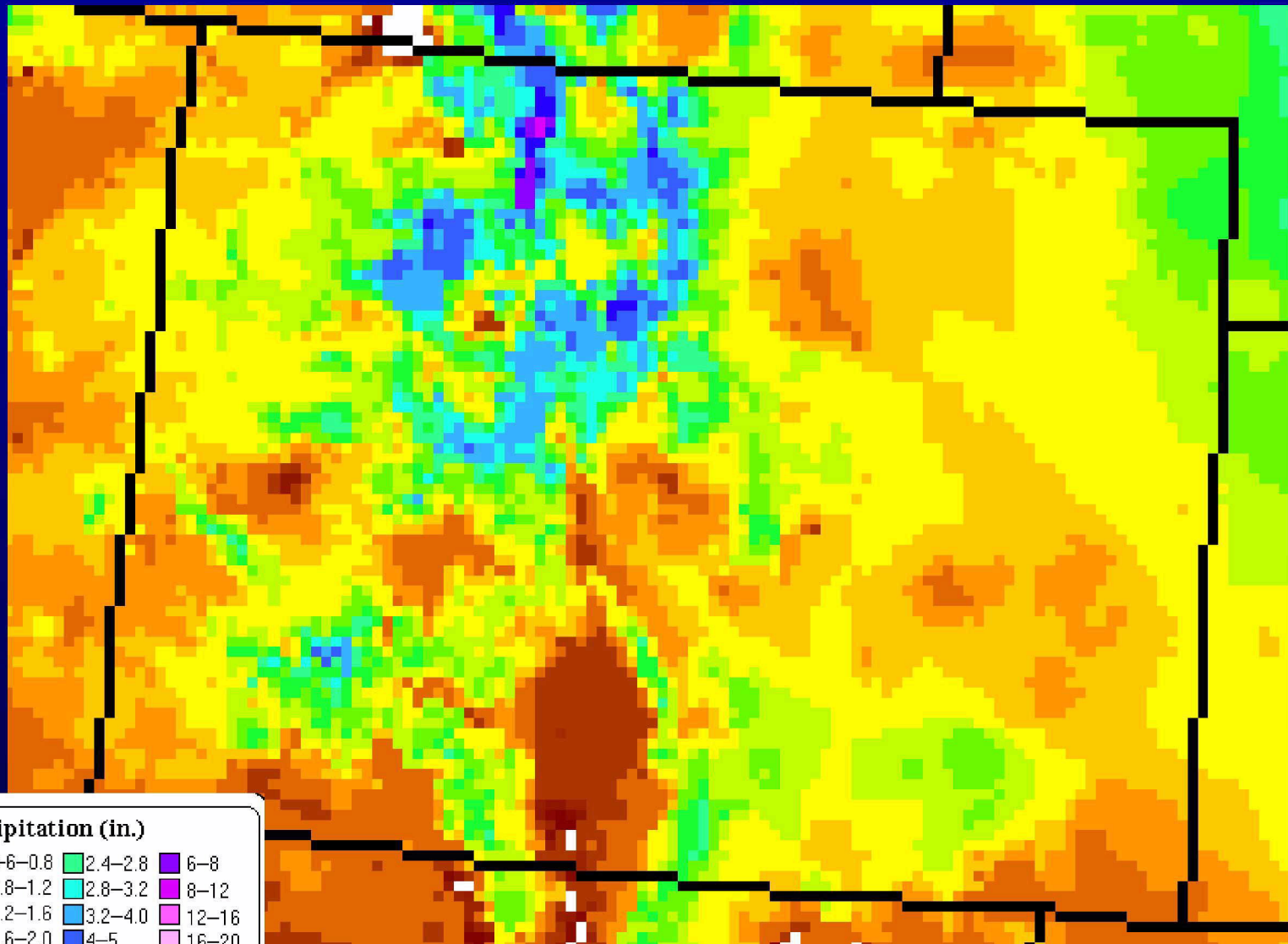
April 2008 Precipitation (inches)

Precipitation: Apr 2008
Provisional Data



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

April 2008 Precipitation (inches)

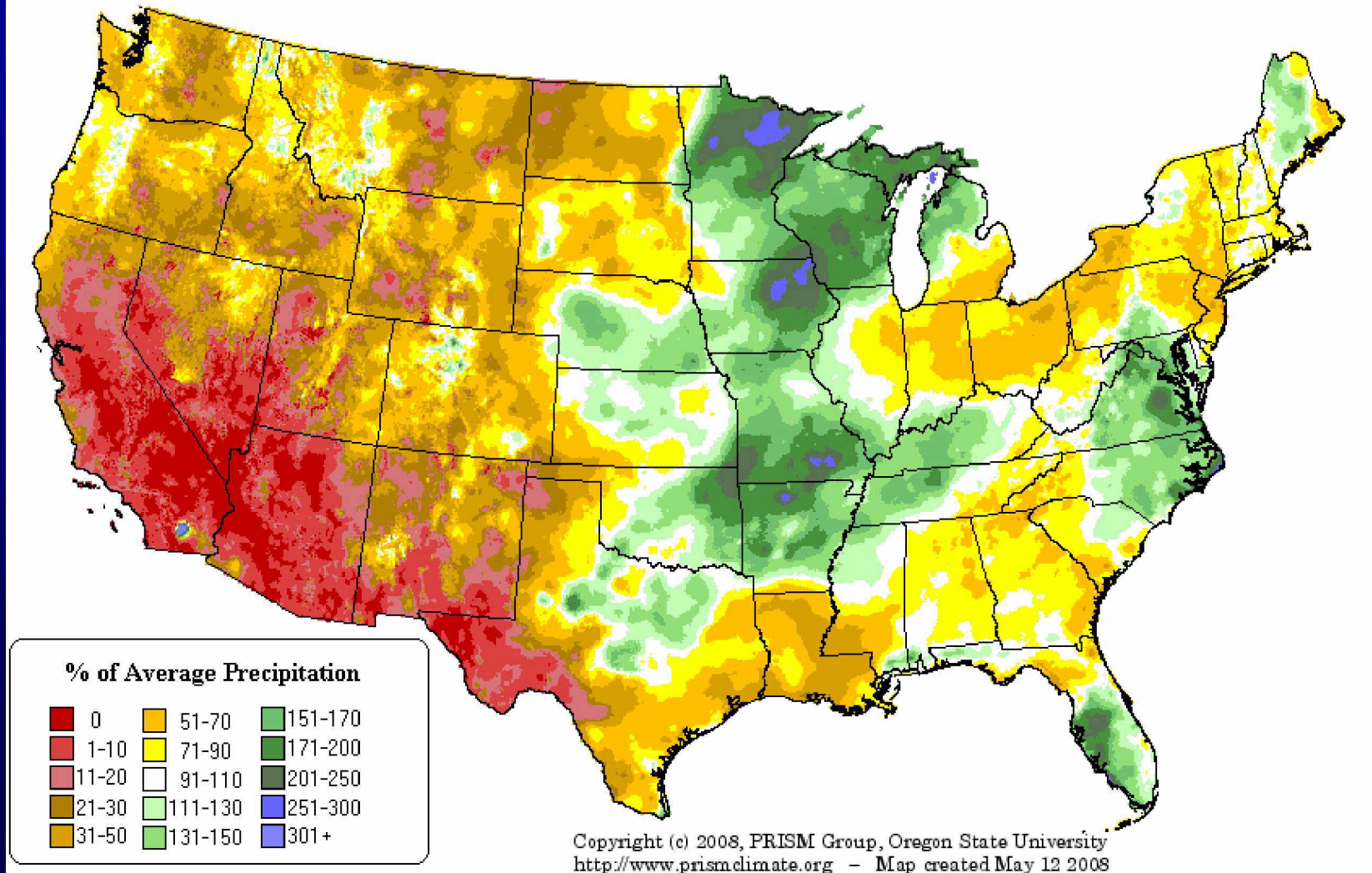


Precipitation (in.)

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+

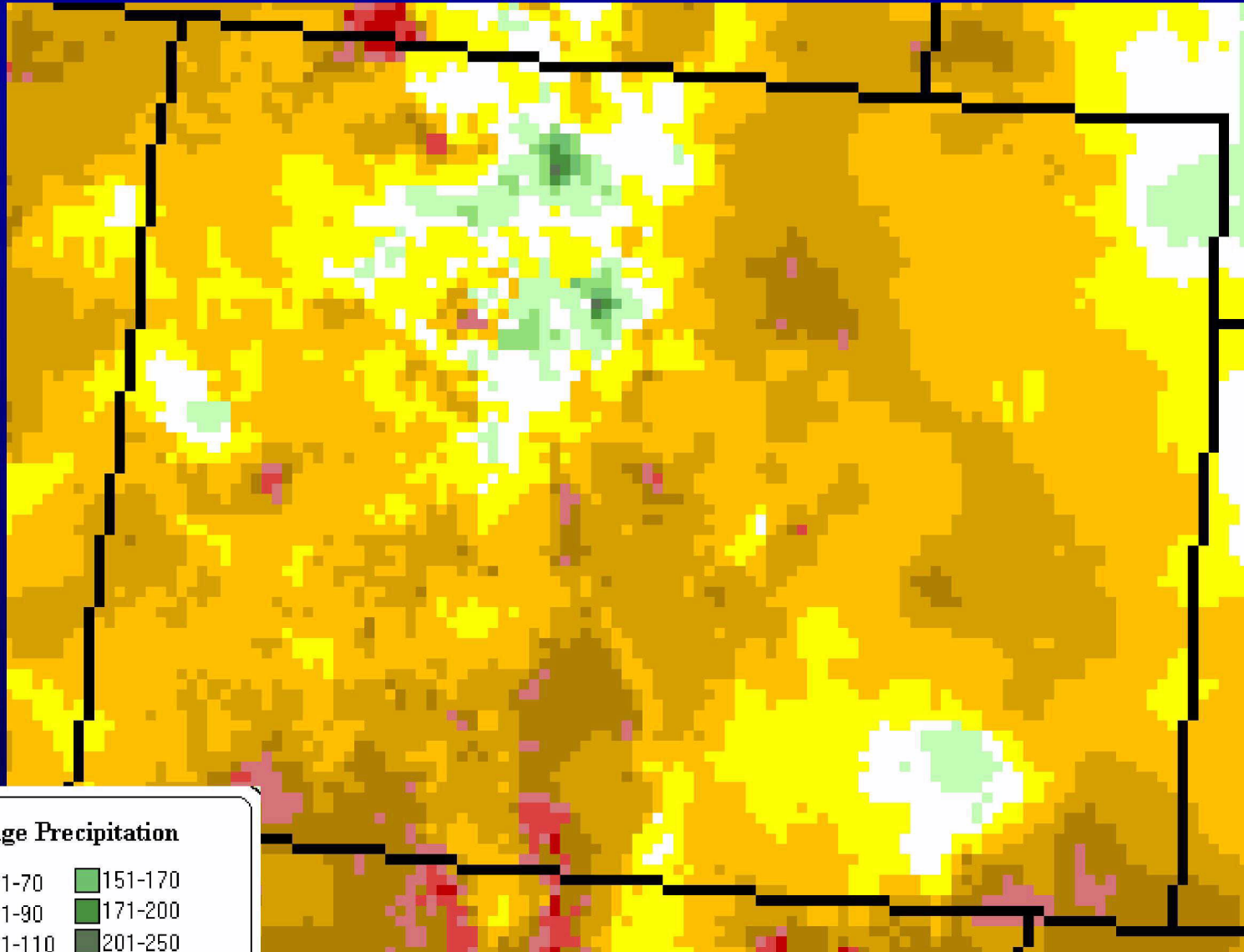
April 2008 Percent of Average (Prism)

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



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

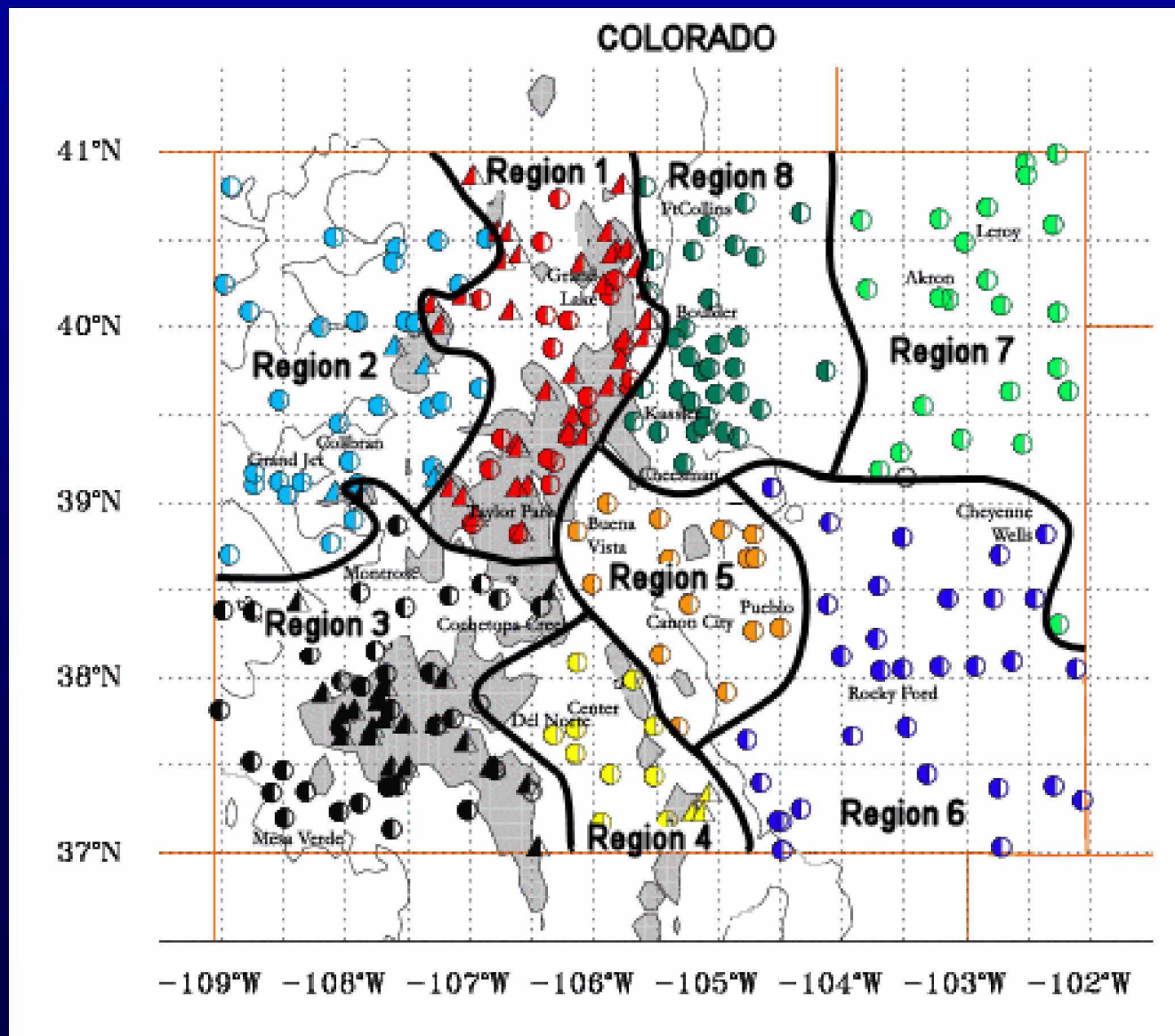
April 2008 Percent of Average (Prism)



% of Average Precipitation

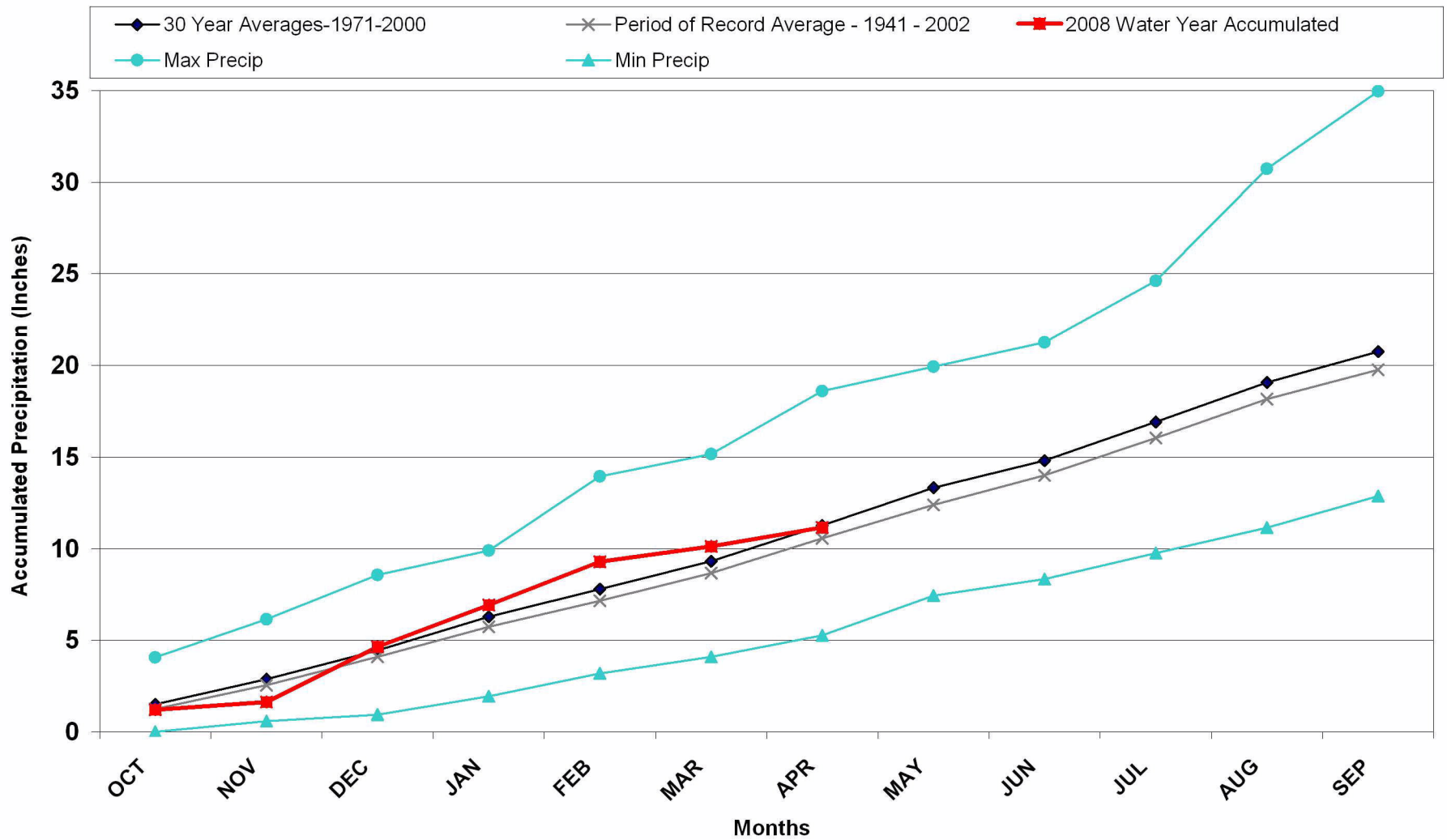
0	51-70	151-170
1-10	71-90	171-200
11-20	91-110	201-250
21-30	111-130	251-300
31-50	131-150	301+

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



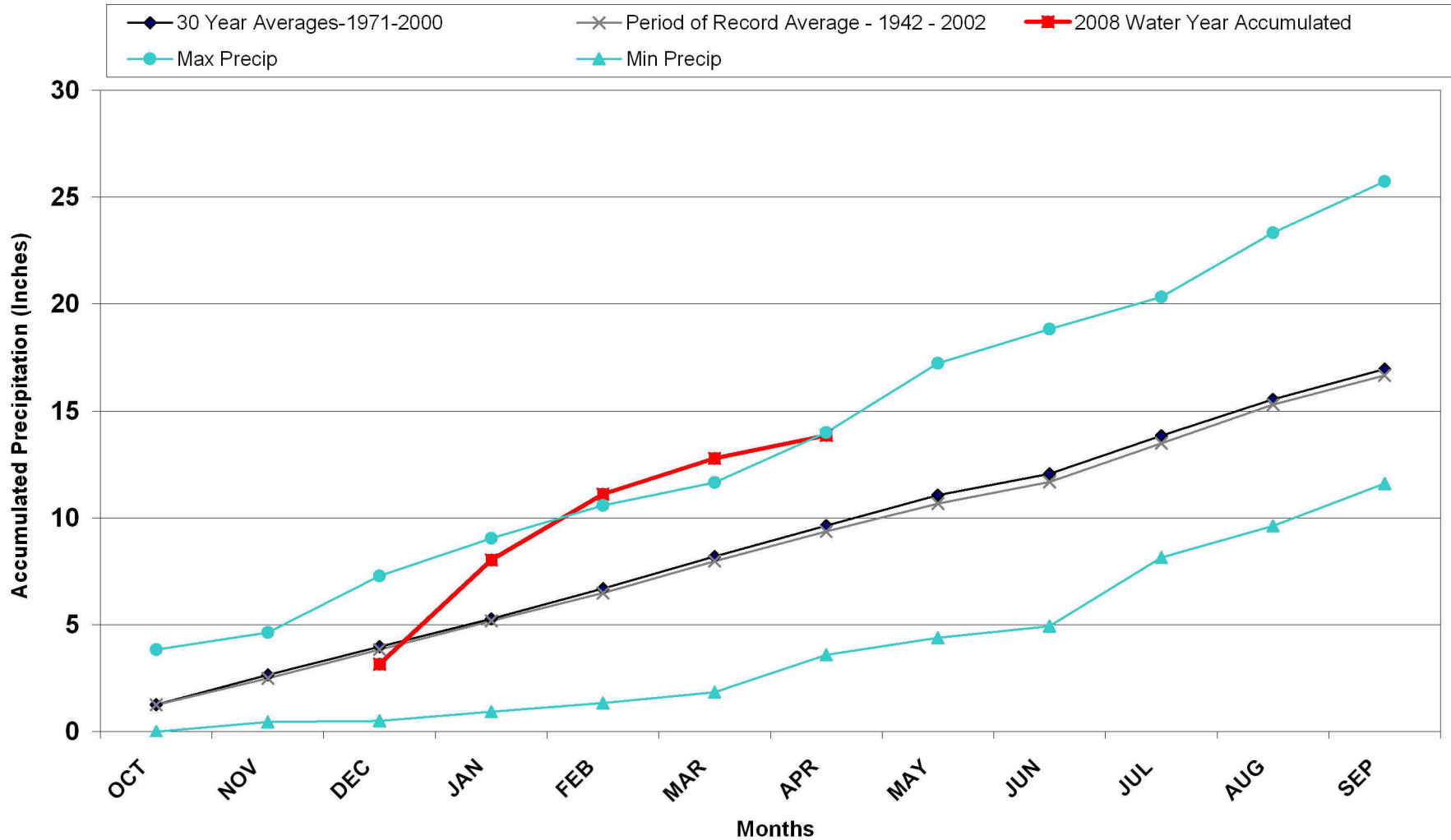
Division 1– Grand Lake 1NW

Grand Lake 1 NW 2008 Water Year



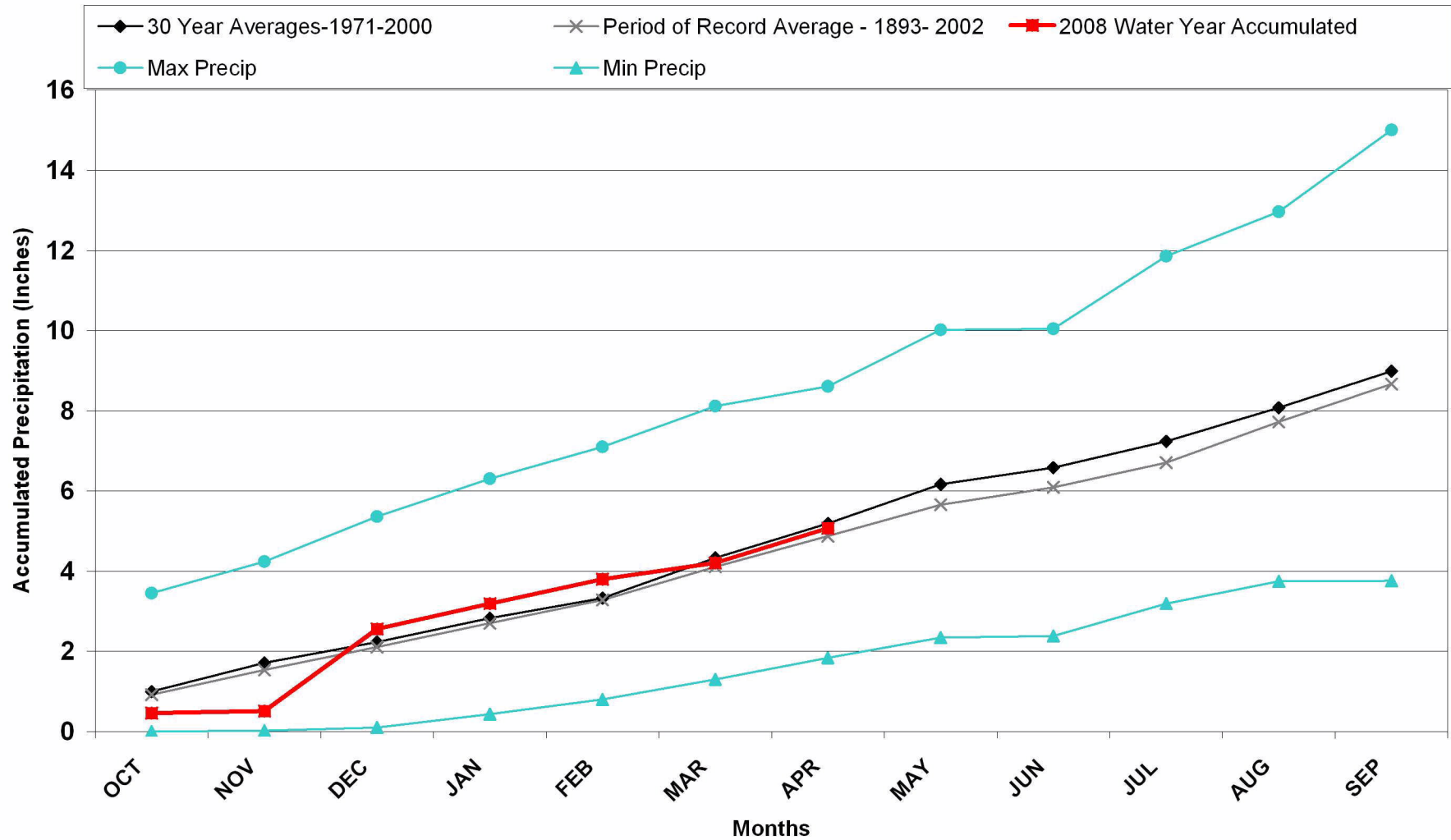
Division 1 – Taylor Park

Taylor Park 2008 Water Year



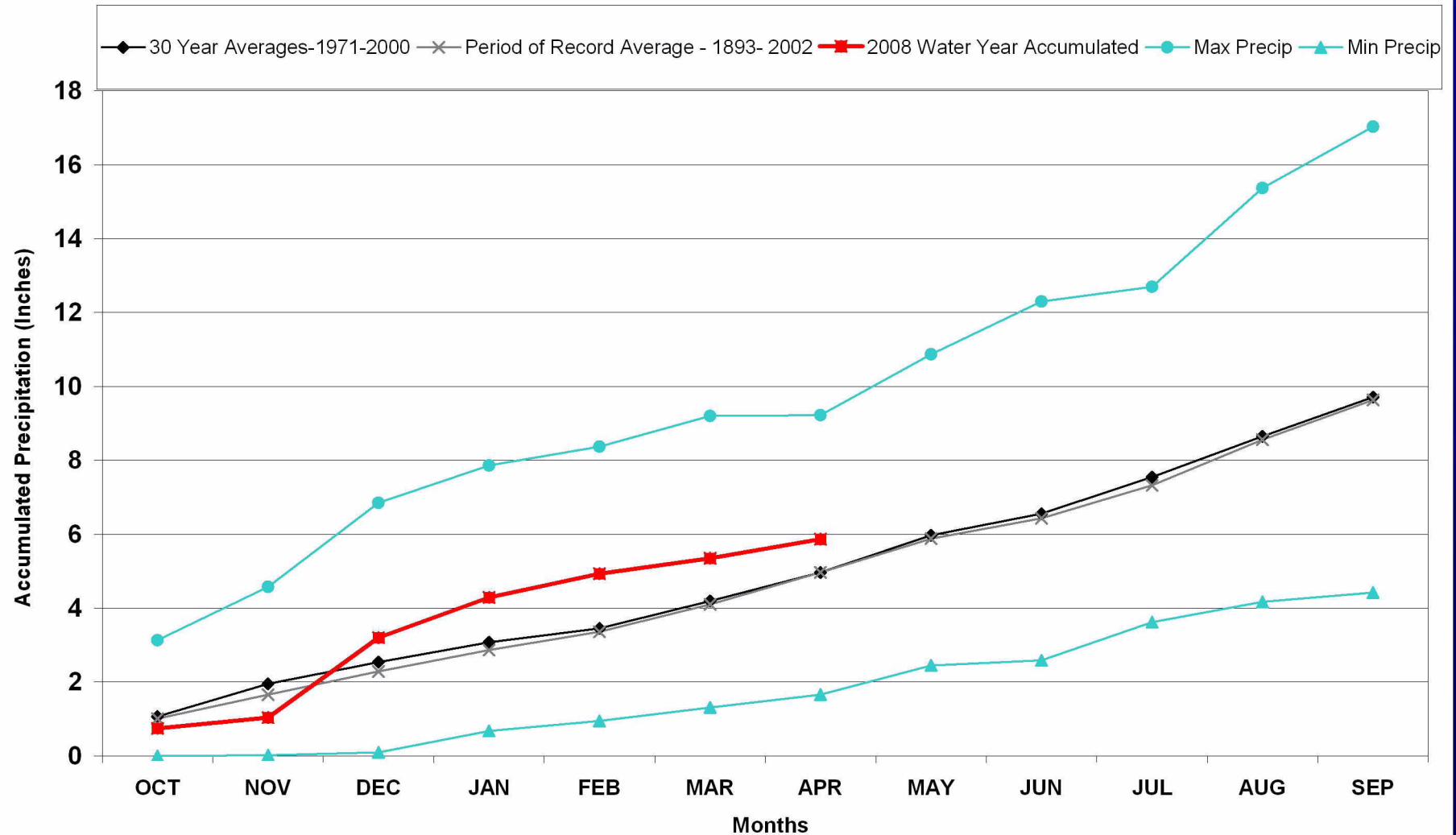
Division 2 – Grand Junction

Grand Junction WSFO 2008 Water Year



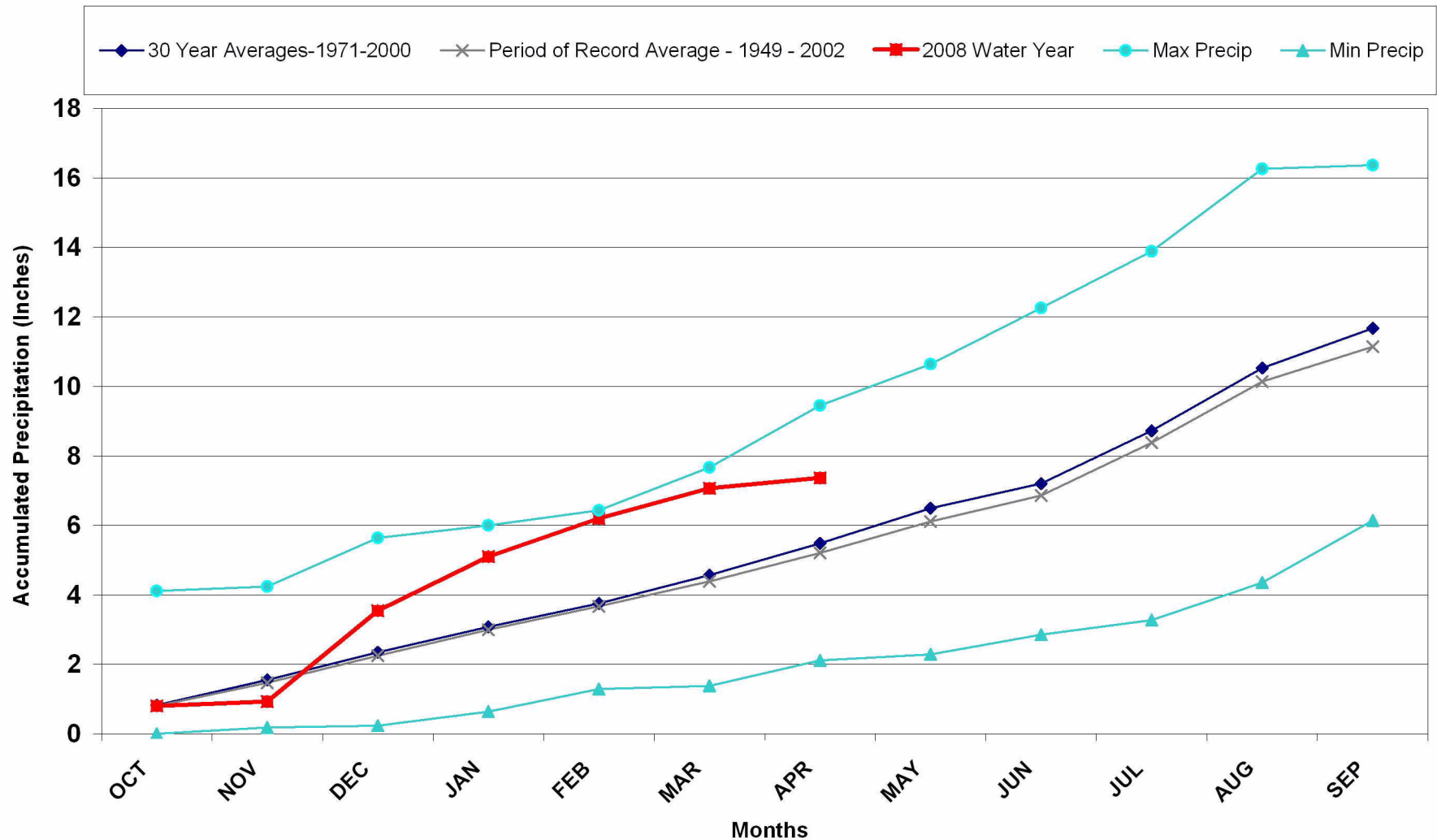
Division 3 – Montrose

Montrose #2 2008 Water Year



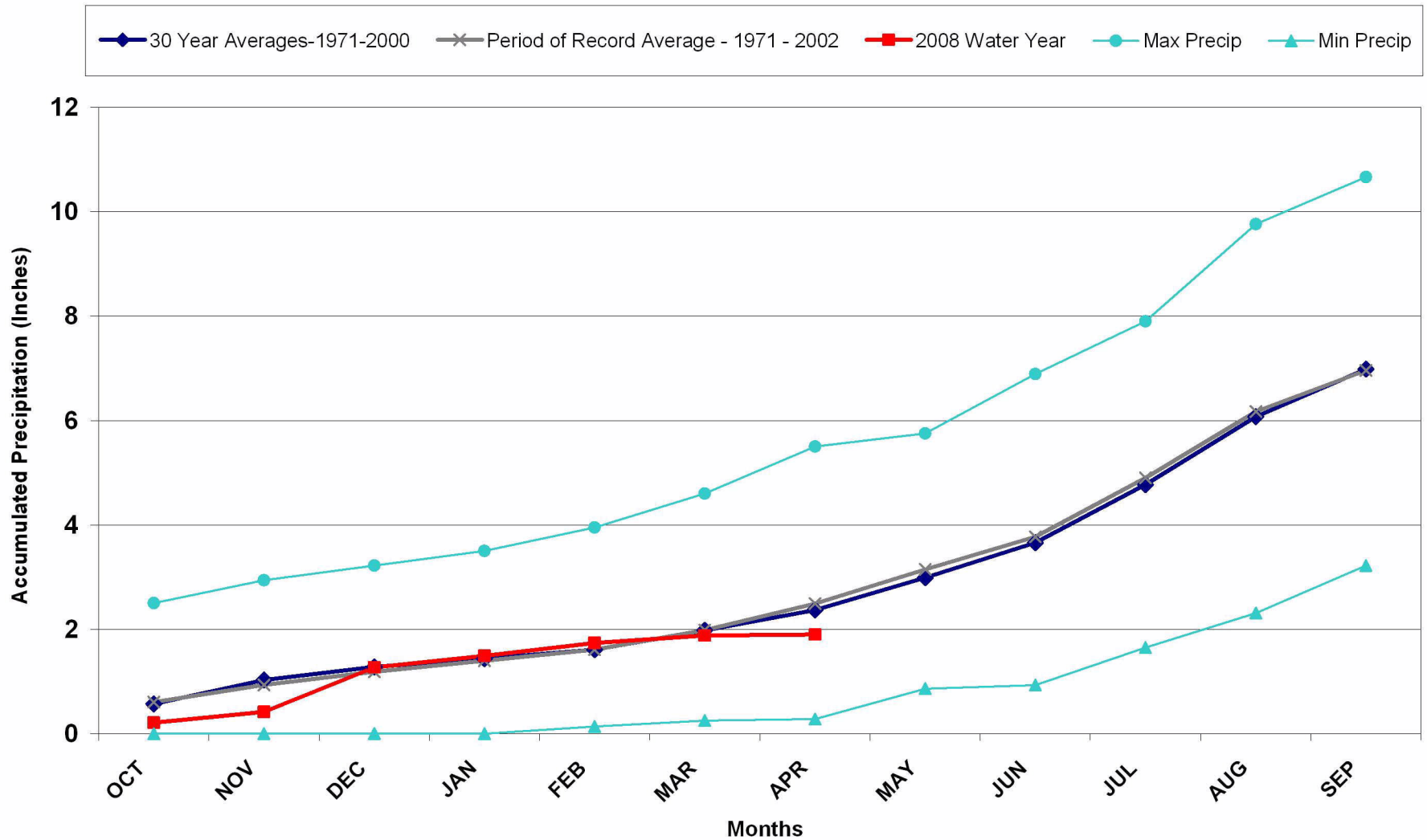
Division 3 – Cochetopa Creek

Cochetopa Creek 2008 Water Year



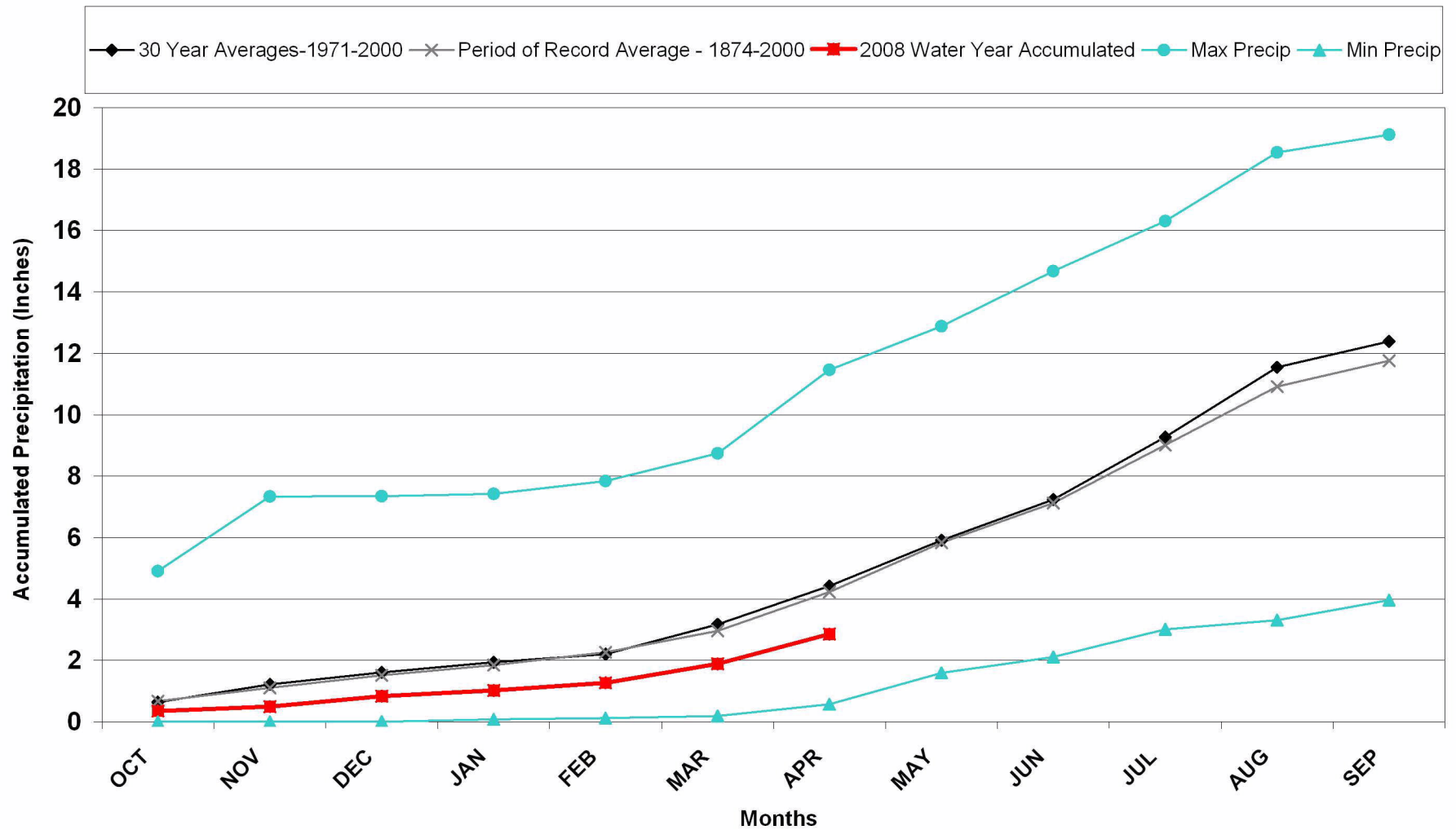
Division 4 – Center

Center 4SSW 2008 Water Year



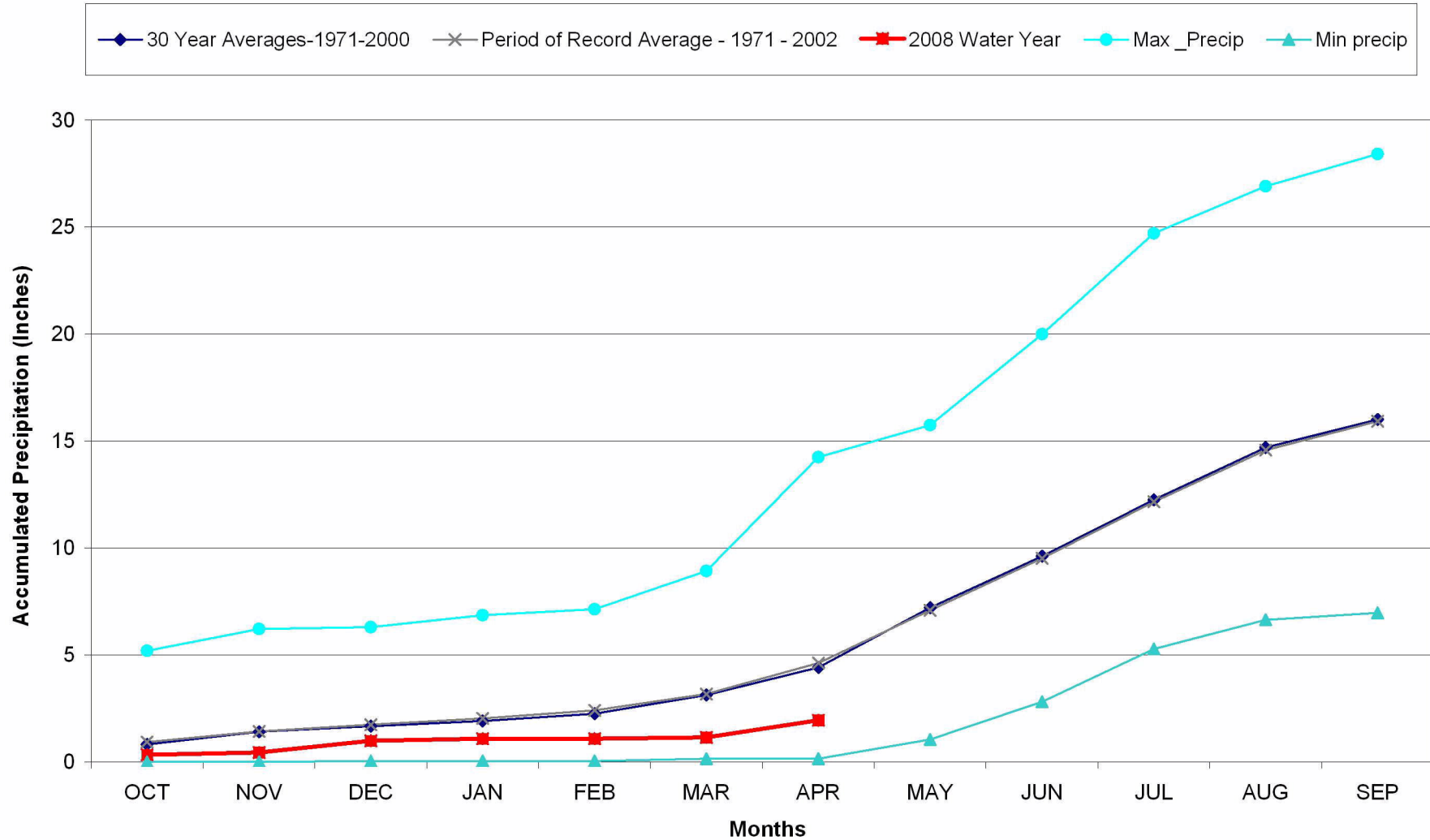
Division 5 – Pueblo

Pueblo WSO 2008 Water Year



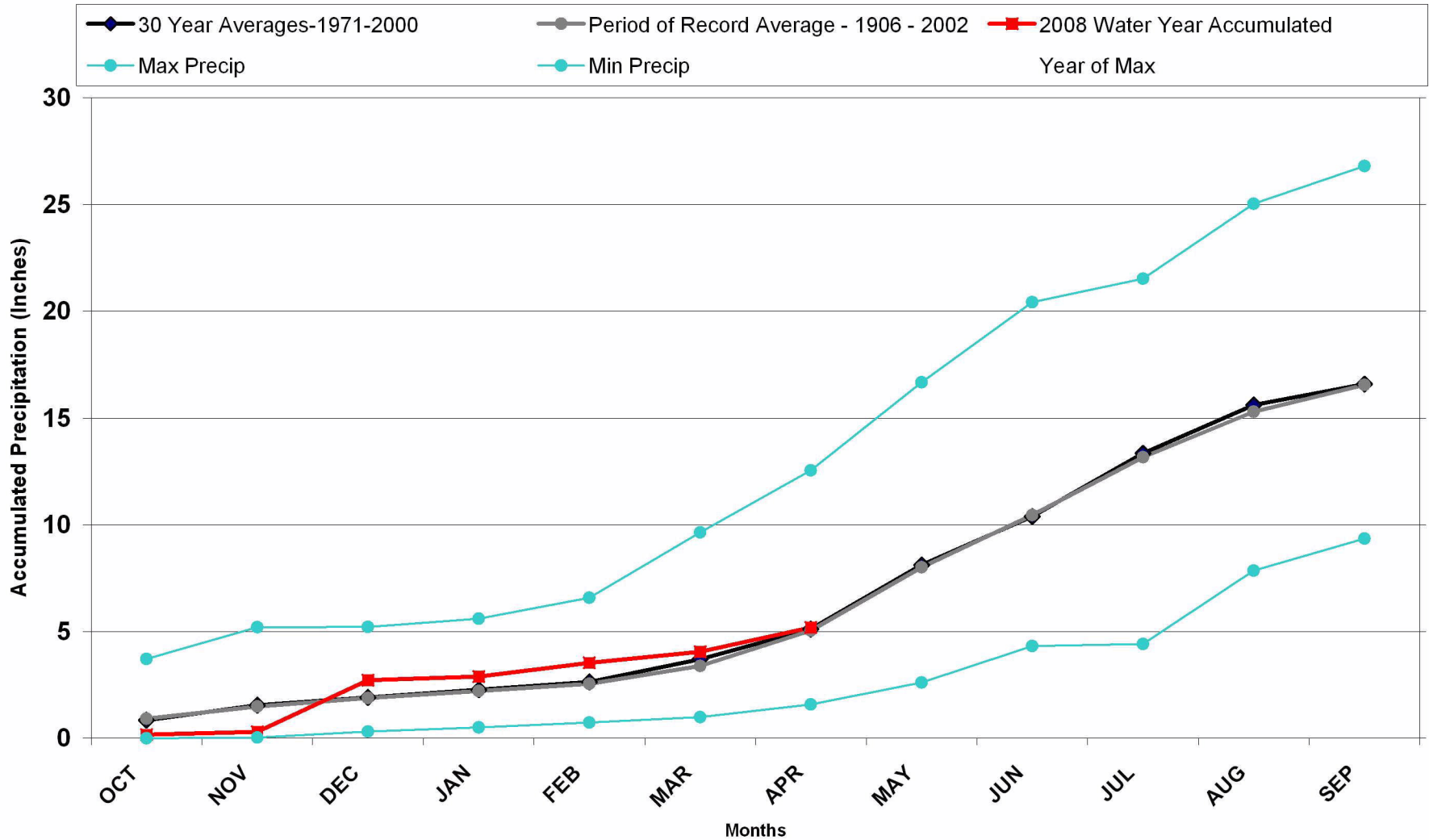
Division 6 – Cheyenne Wells

Cheyenne Wells 2008 Water Year



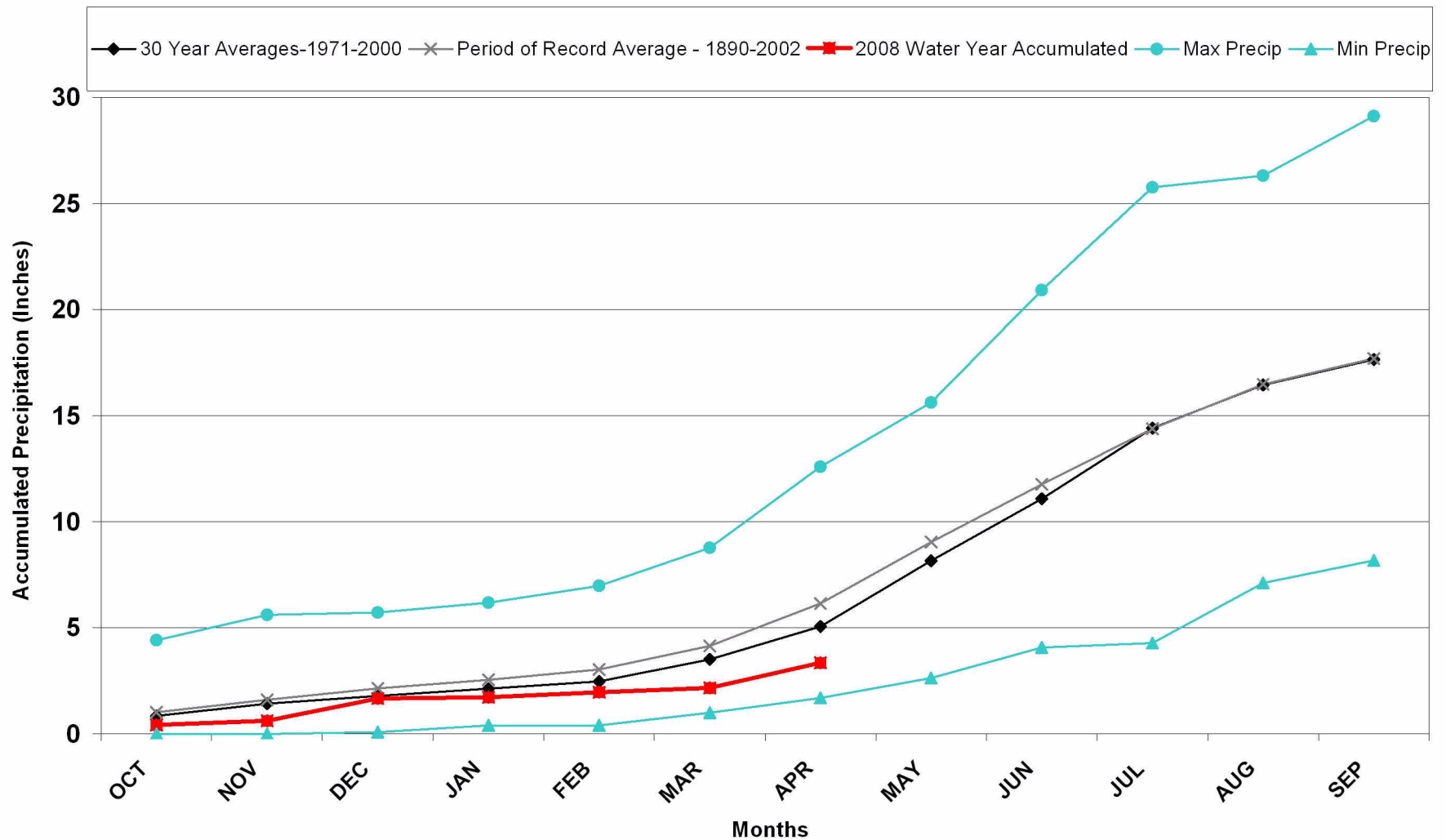
Division 7 – Akron

Akron 4E 2008 Water Year



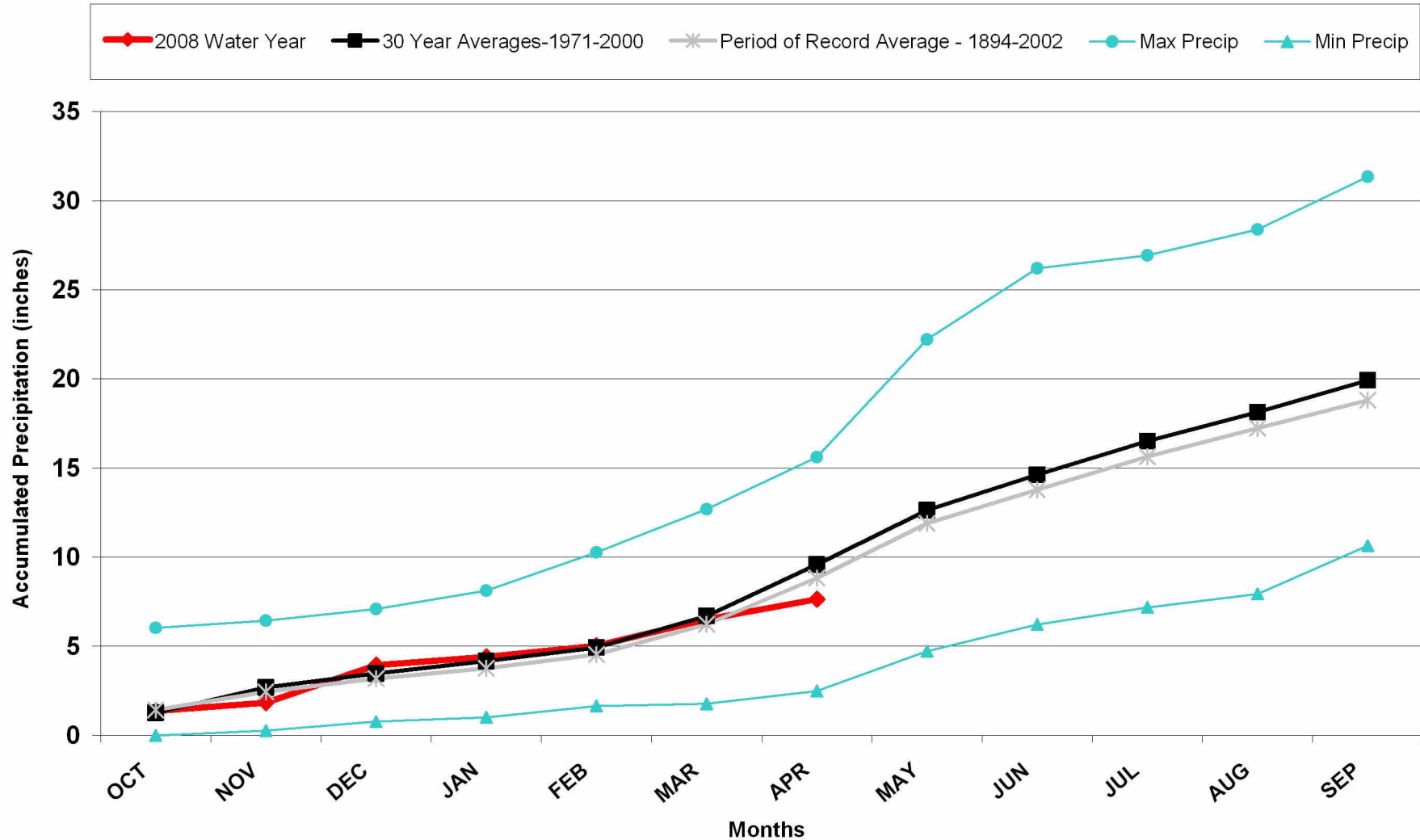
Division 7 – Leroy

Leroy 5SW 2008 Water Year



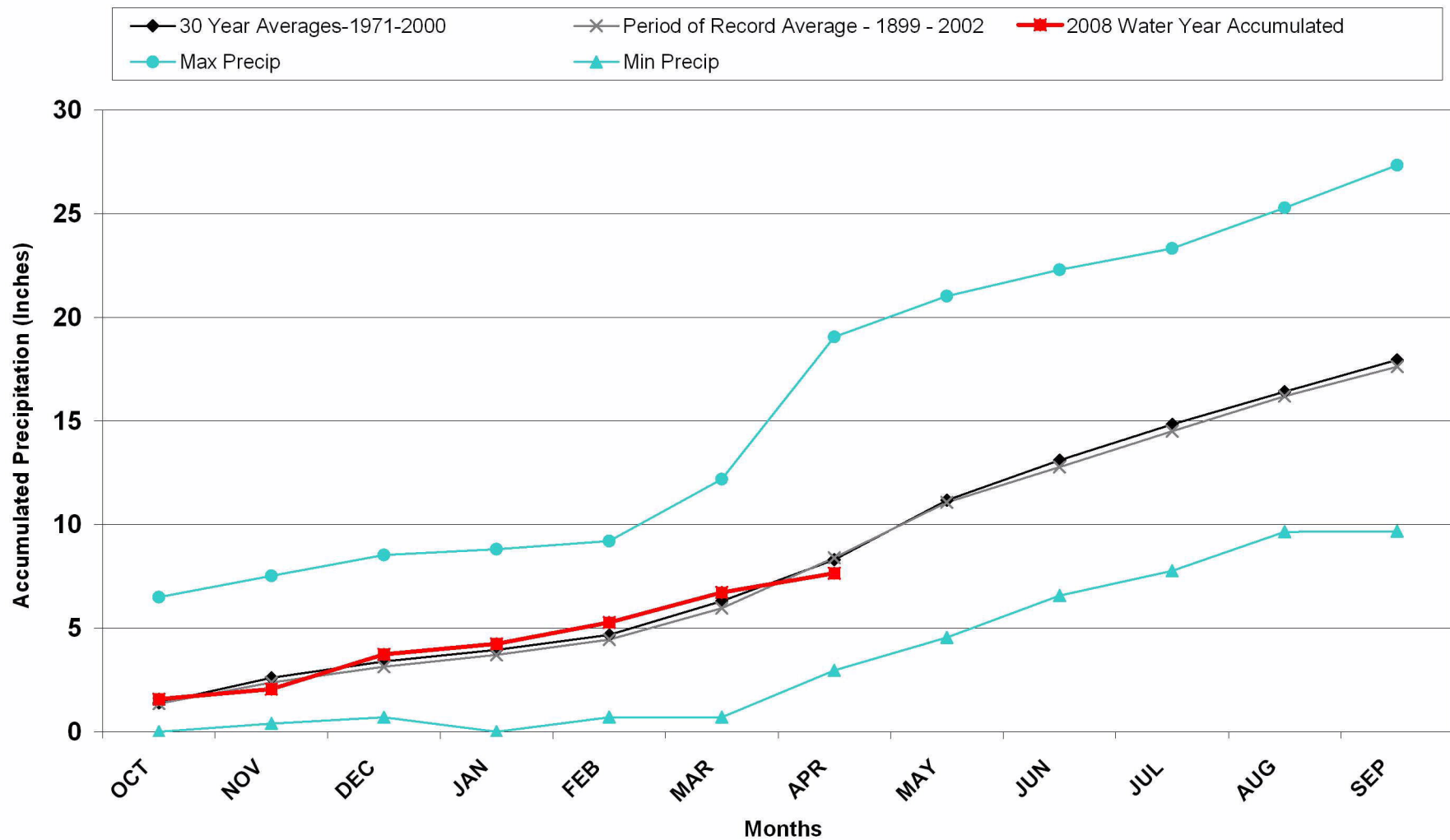
Division 8 – Boulder

Boulder 2008 Water Year



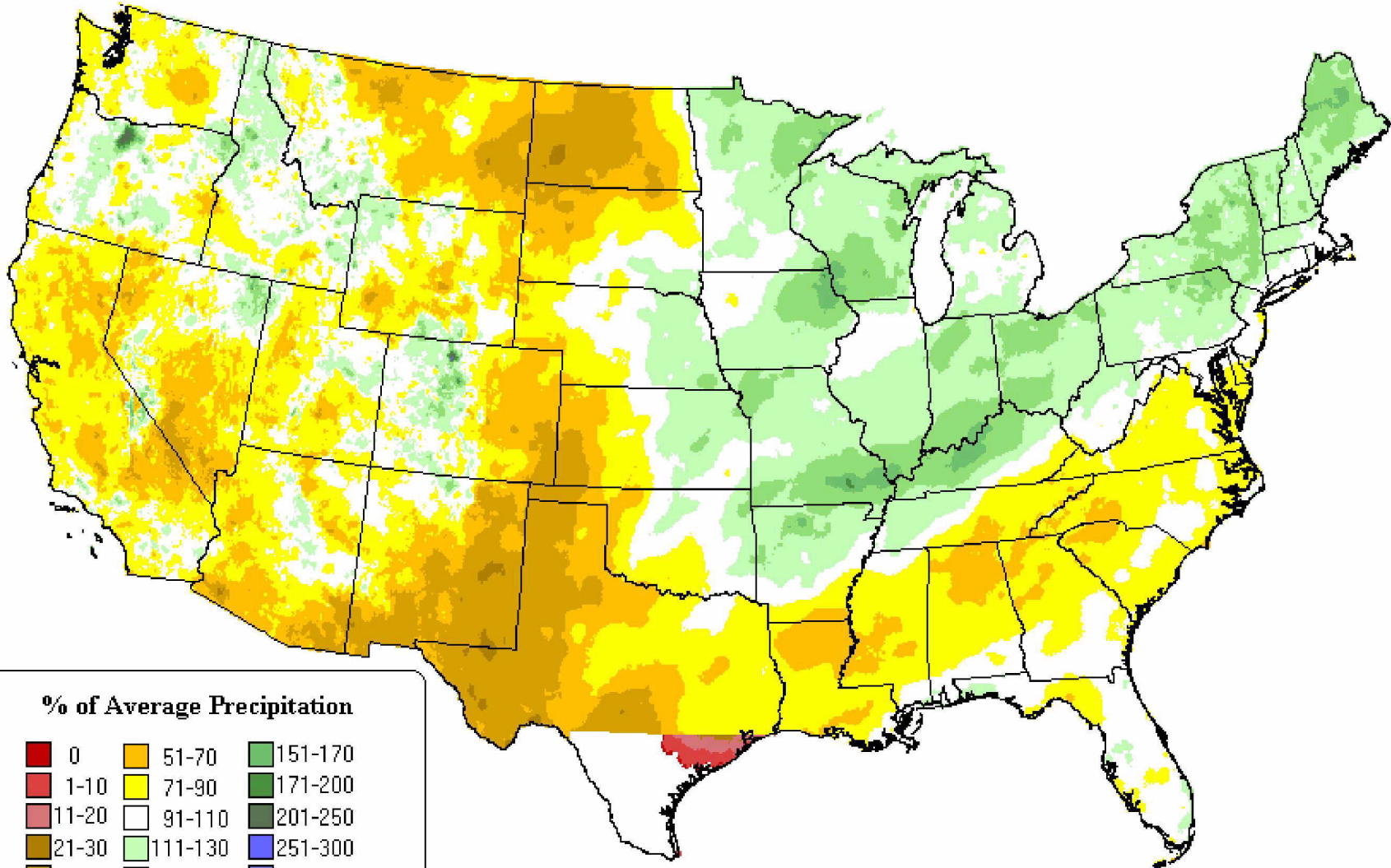
Division 8 – Kassler

Kassler 2008 Water Year

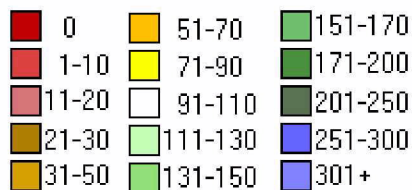


Water Year 2008 (Oct 07-Apr 08) Prism

7-month Percent of Average Precipitation: Apr 2008
Provisional Data

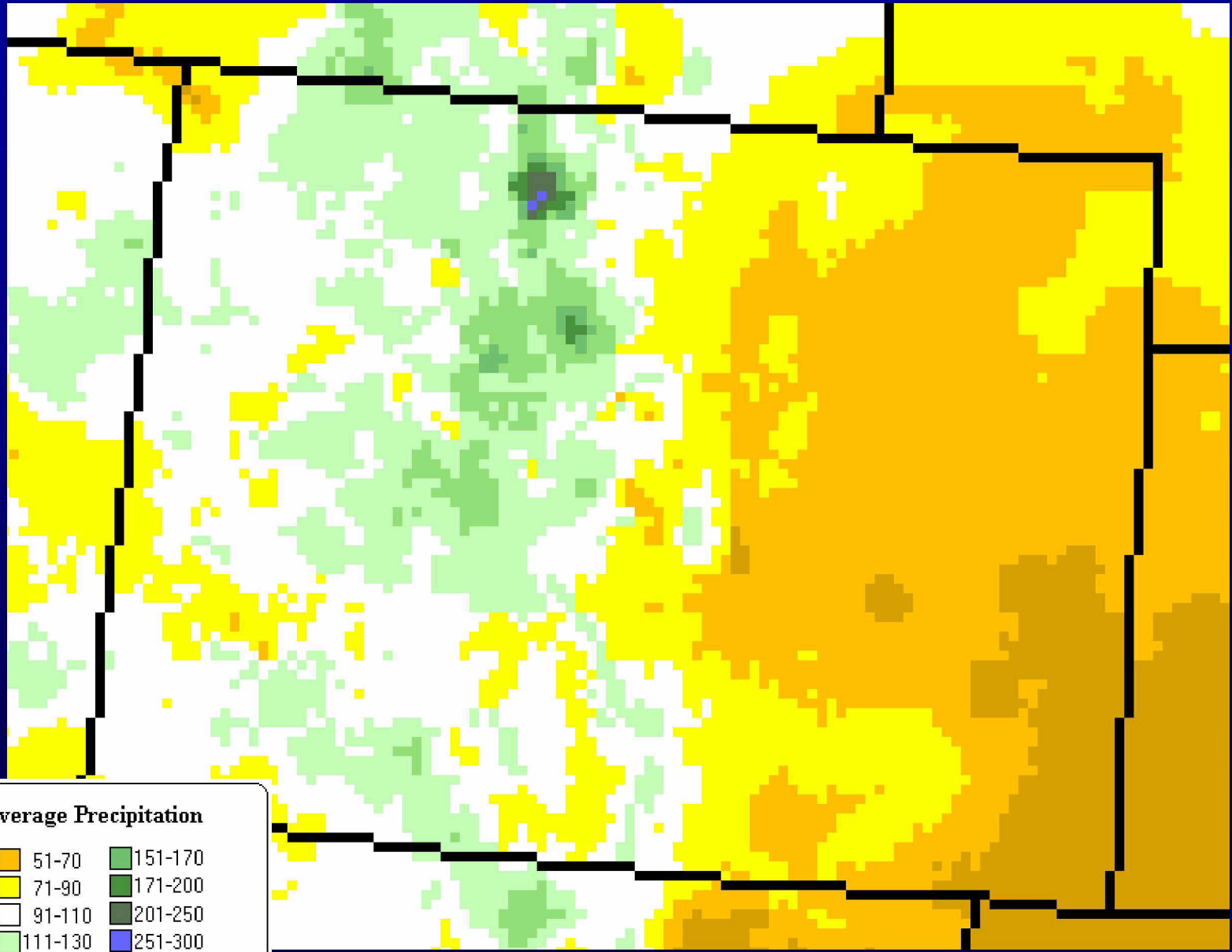


% of Average Precipitation



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

Water Year 2008 (Oct 07-Apr 08) Prism

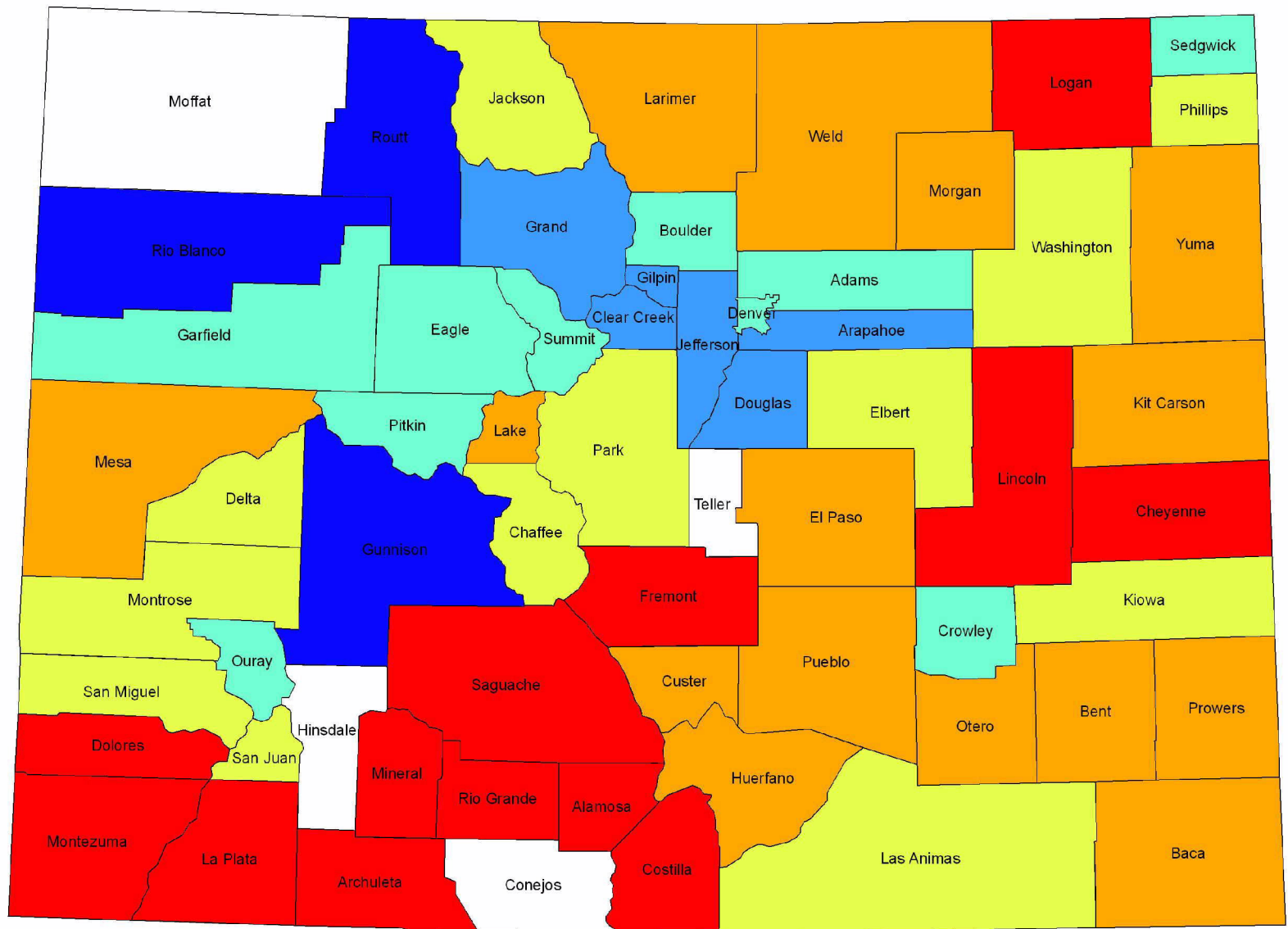
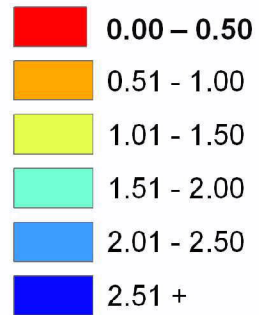


% of Average Precipitation

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+

Average Cocorahs May 1- May 15 2008 Precipitation by County

Colorado_Counties



Summary

- Cooler than average temperatures have continued through mid May (longest string of consecutive cooler than average months in many years)
- Spring precipitation through mid May has been highly variable
 - Above average precipitation in much of northern and central mountains
 - Southwest and south central Colorado very dry since March
 - Considerably drier than average since March over much of eastern Colorado
 - Average or better precipitation mid Front Range counties and extreme NE Colorado

Summary continued

- Most low elevation snow has melted in its typical uneventful manner
- High elevation melt out is now underway
- No large spring storms so far this spring. Early summer mountain dry spell usually begins now.

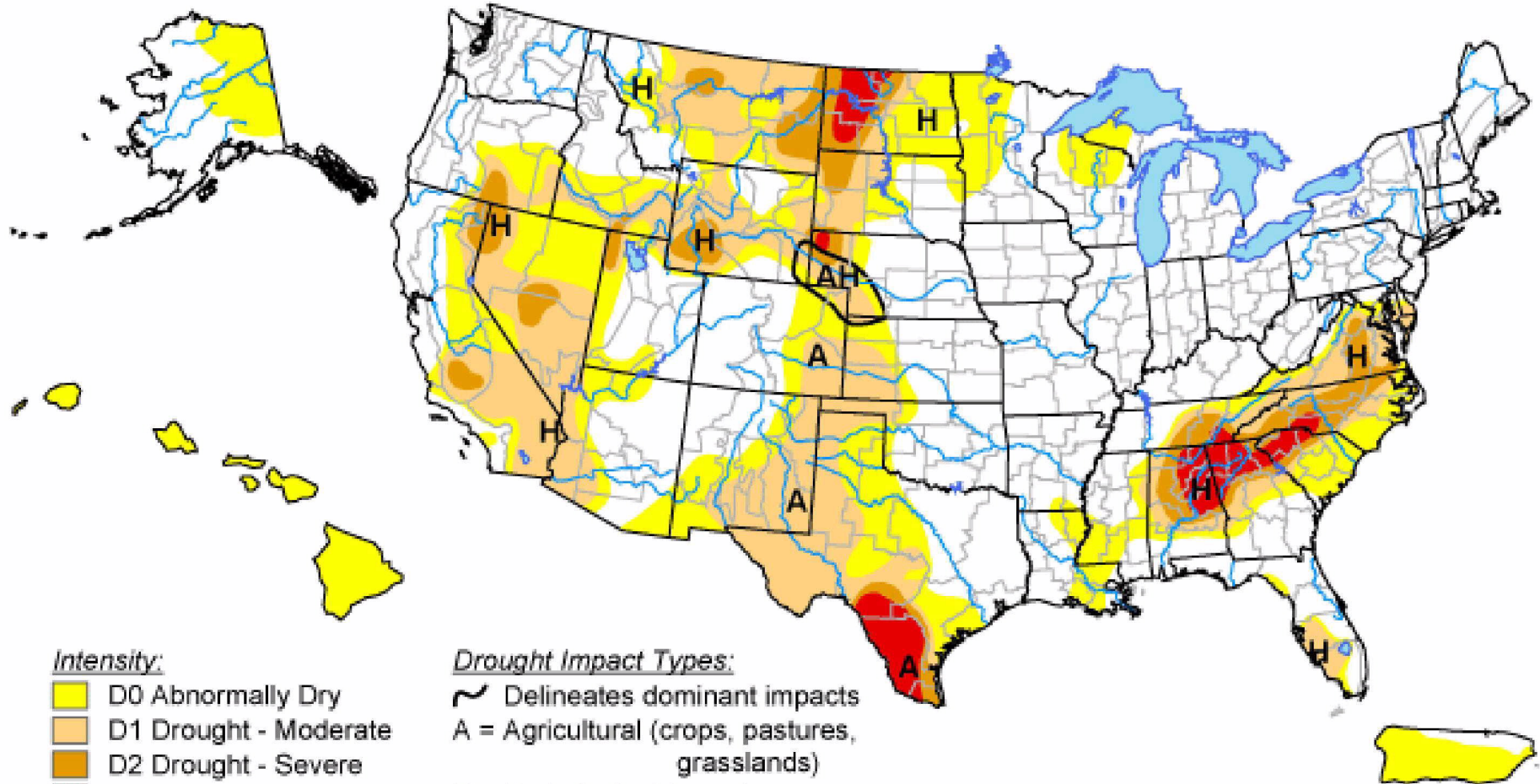
Summary continued

- Only four weeks remain in eastern Colorado's typical "Wet season." Thereafter, we shift to primarily convective precipitation – storms locally intense but usually not widespread.
- June – peak tornado season – Watch out for HAIL.






U.S. Drought Monitor


April 8, 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.



Released Thursday, April 10, 2008

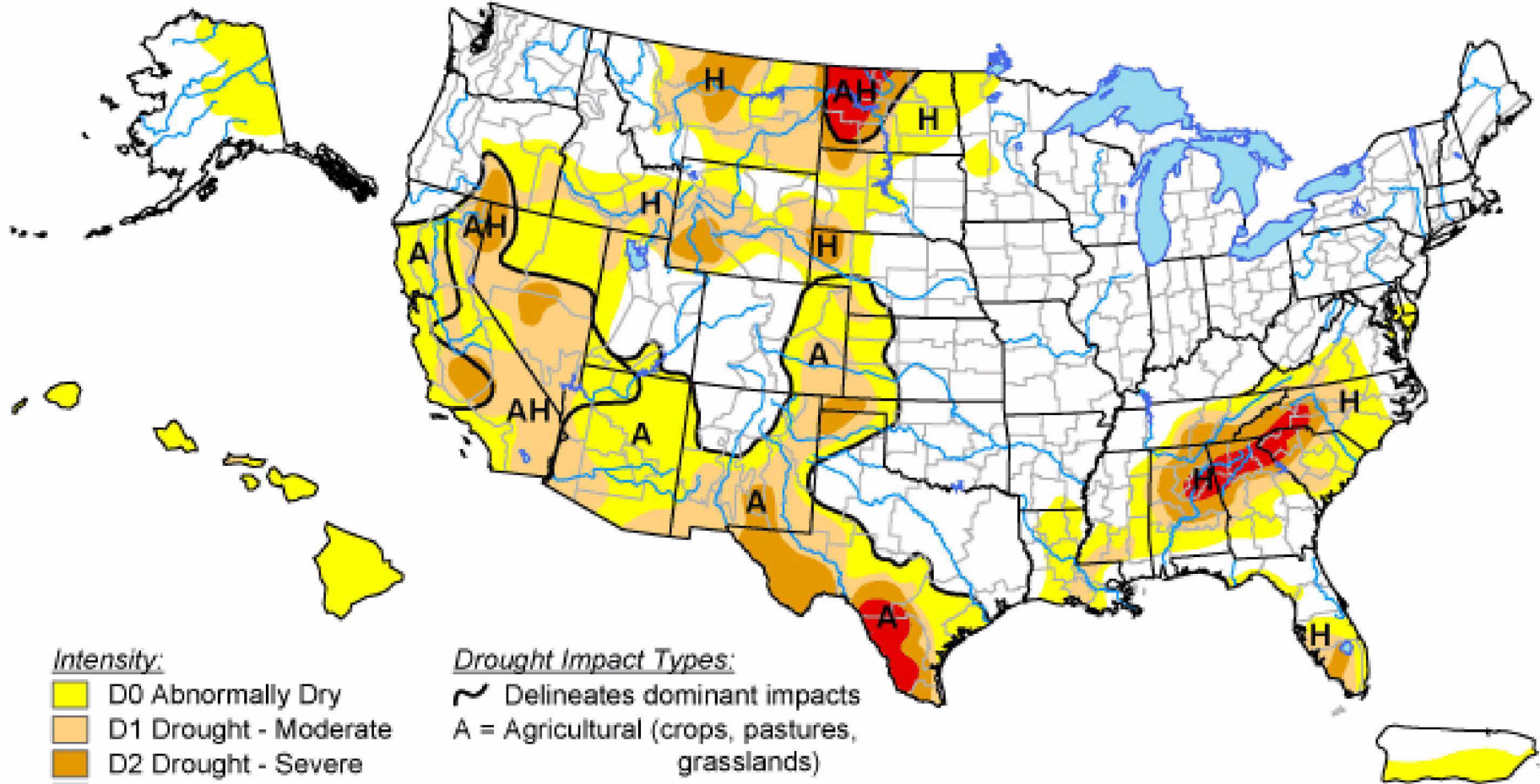
Author: Rich Tinker, Climate Prediction Center, NOAA

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






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

Colorado Climate Center

Data and Power Point Presentations
available for downloading

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

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