

# Drought Update

(January 21, 2004 WATF meeting)

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

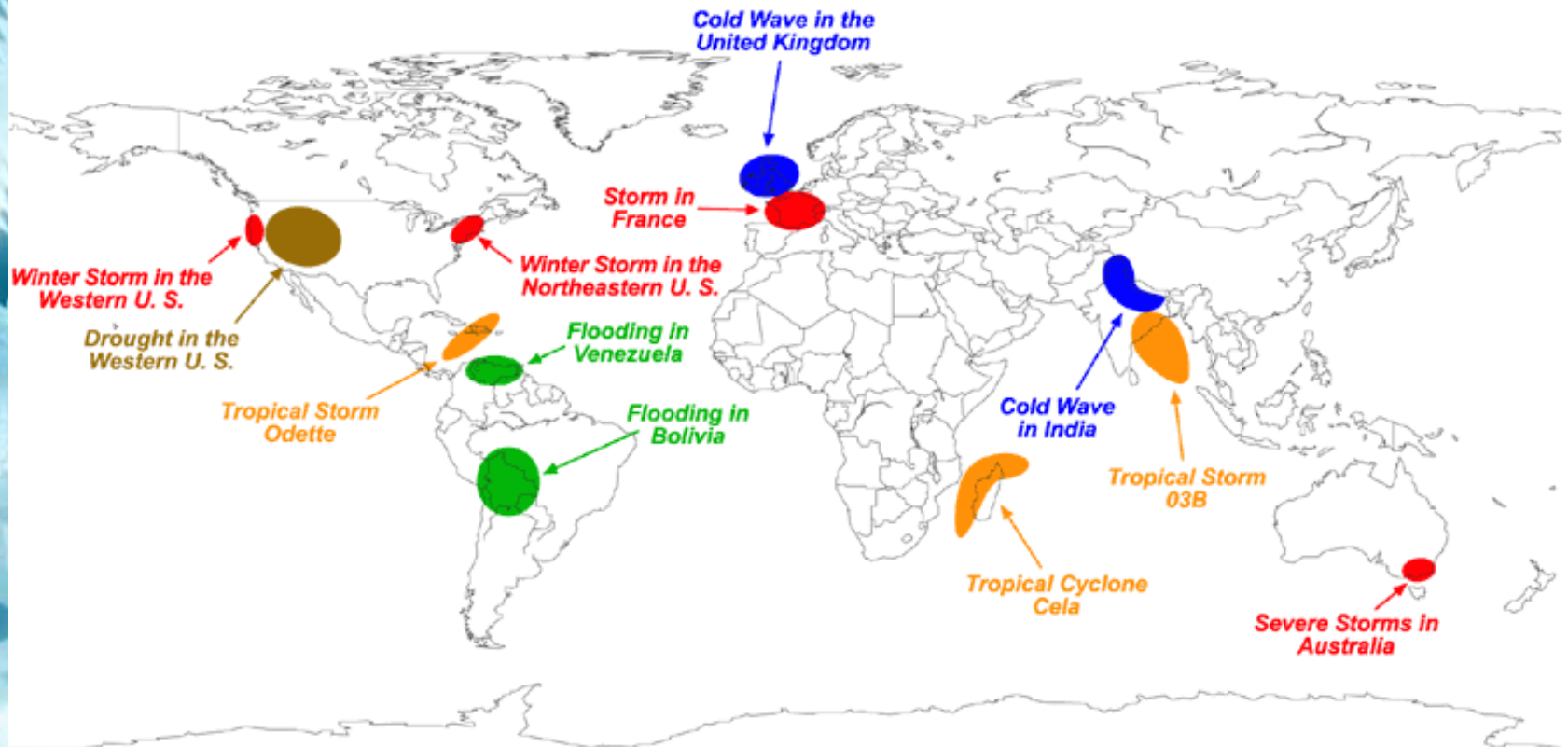
Prepared by Odie Bliss

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





# Selected Global Significant Events December 2003

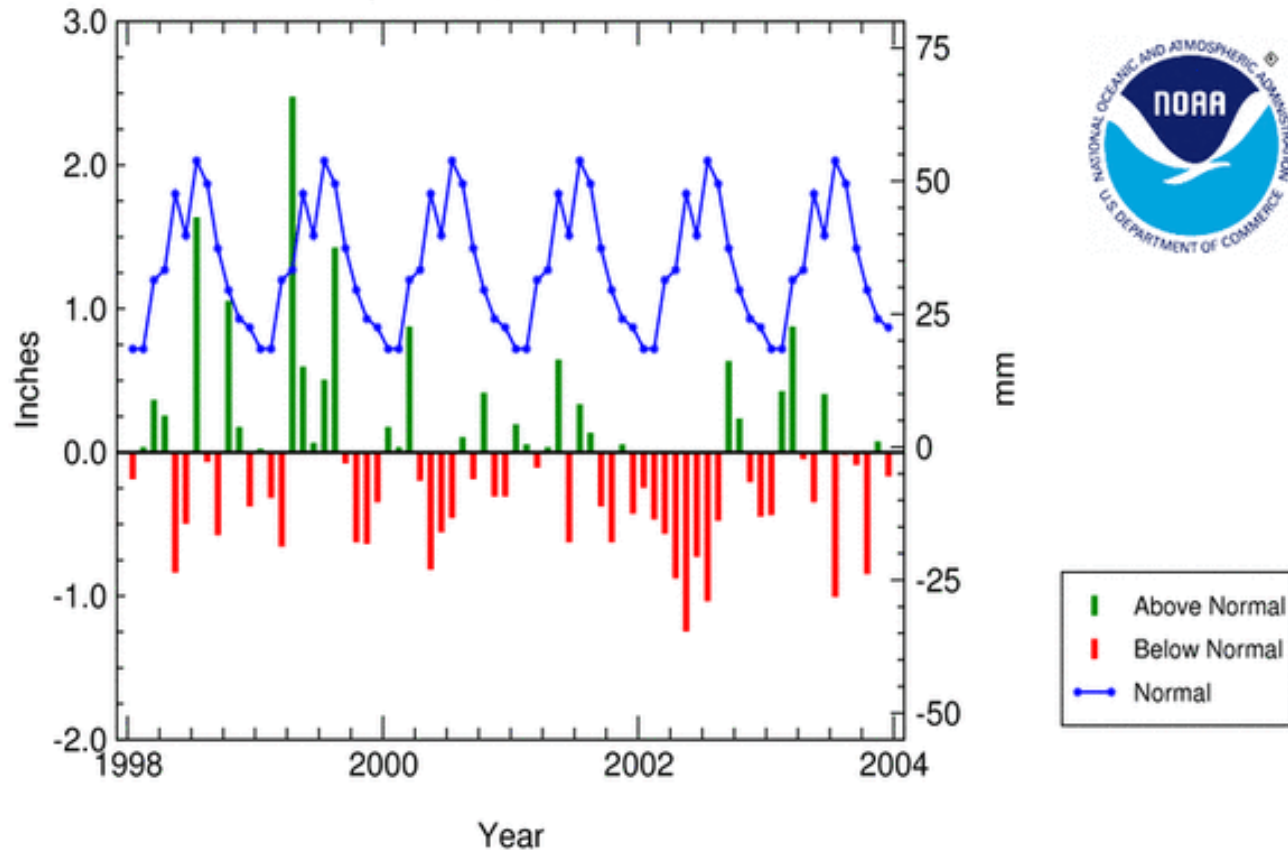


**Click On A Shaded Area For More Information**



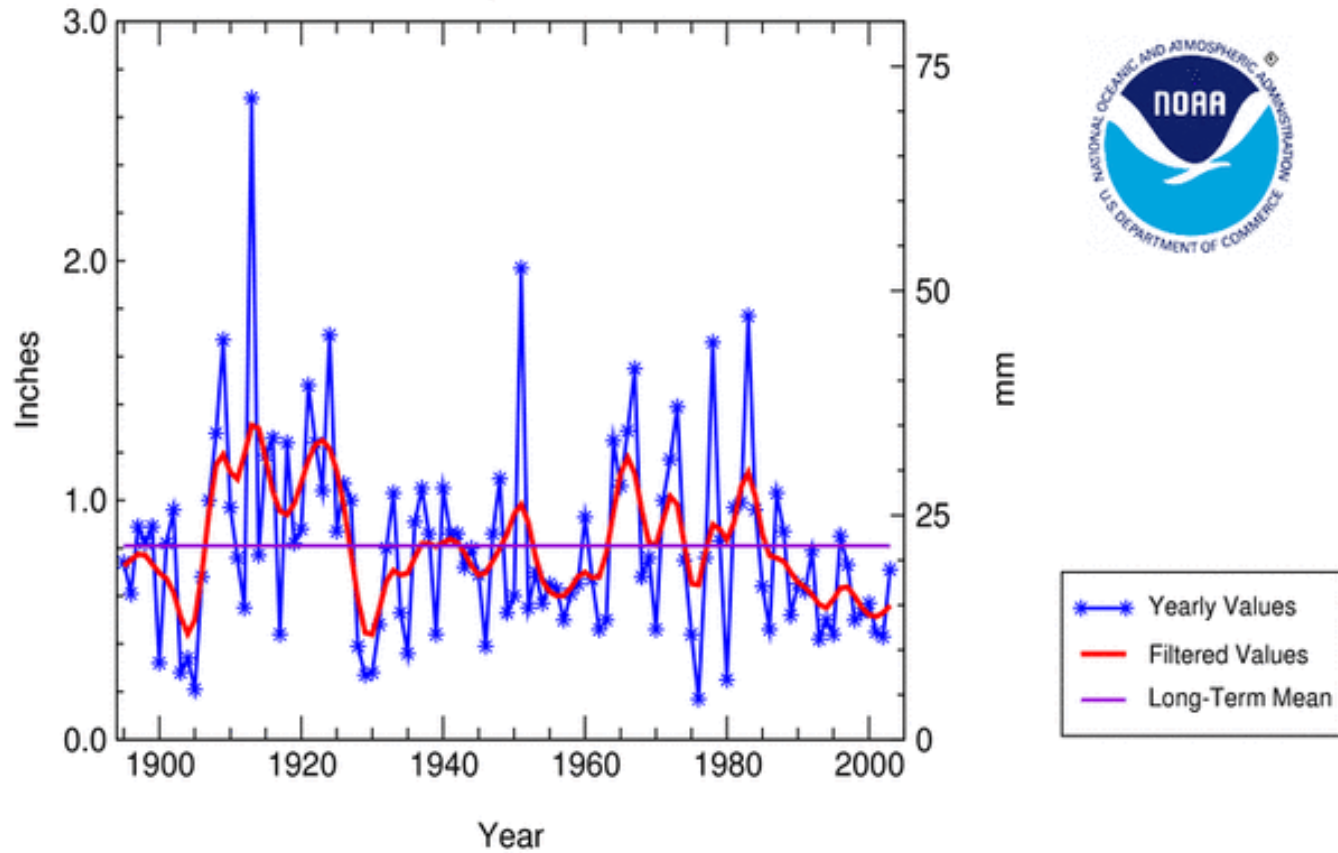


## Colorado Statewide Precipitation Normal & Departure, Jan 1998 - Dec 2003



National Climatic Data Center / NESDIS / NOAA

## Colorado Statewide Precipitation December, 1895 - 2003

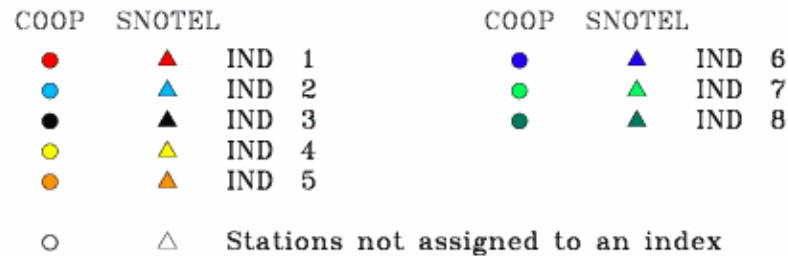
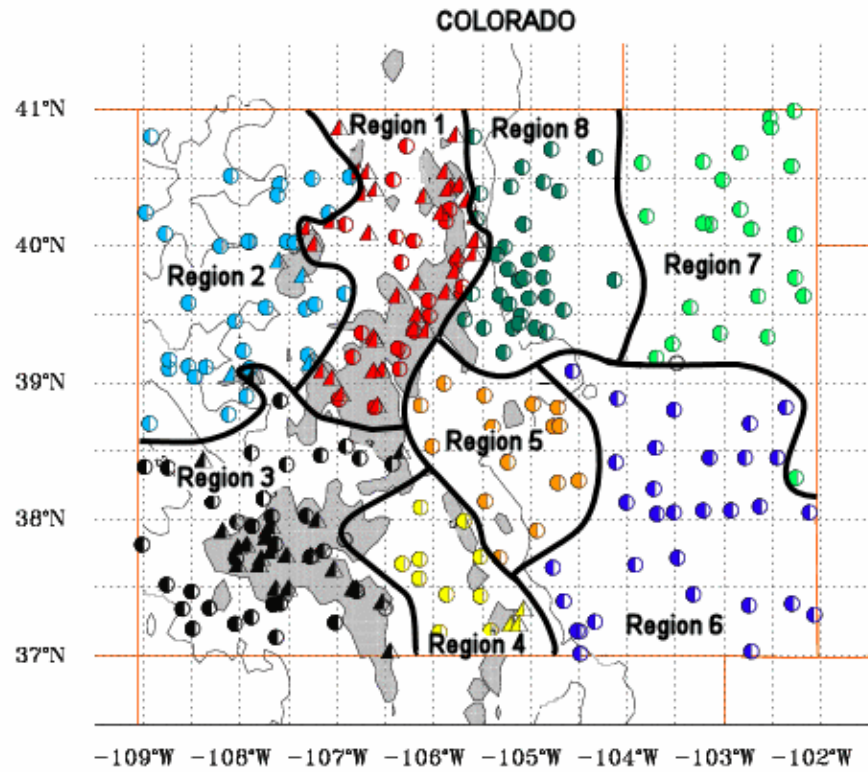


National Climatic Data Center / NESDIS / NOAA

## Period of record 1895-2003

### Statewide Precipitation Ranks for Colorado , 2003

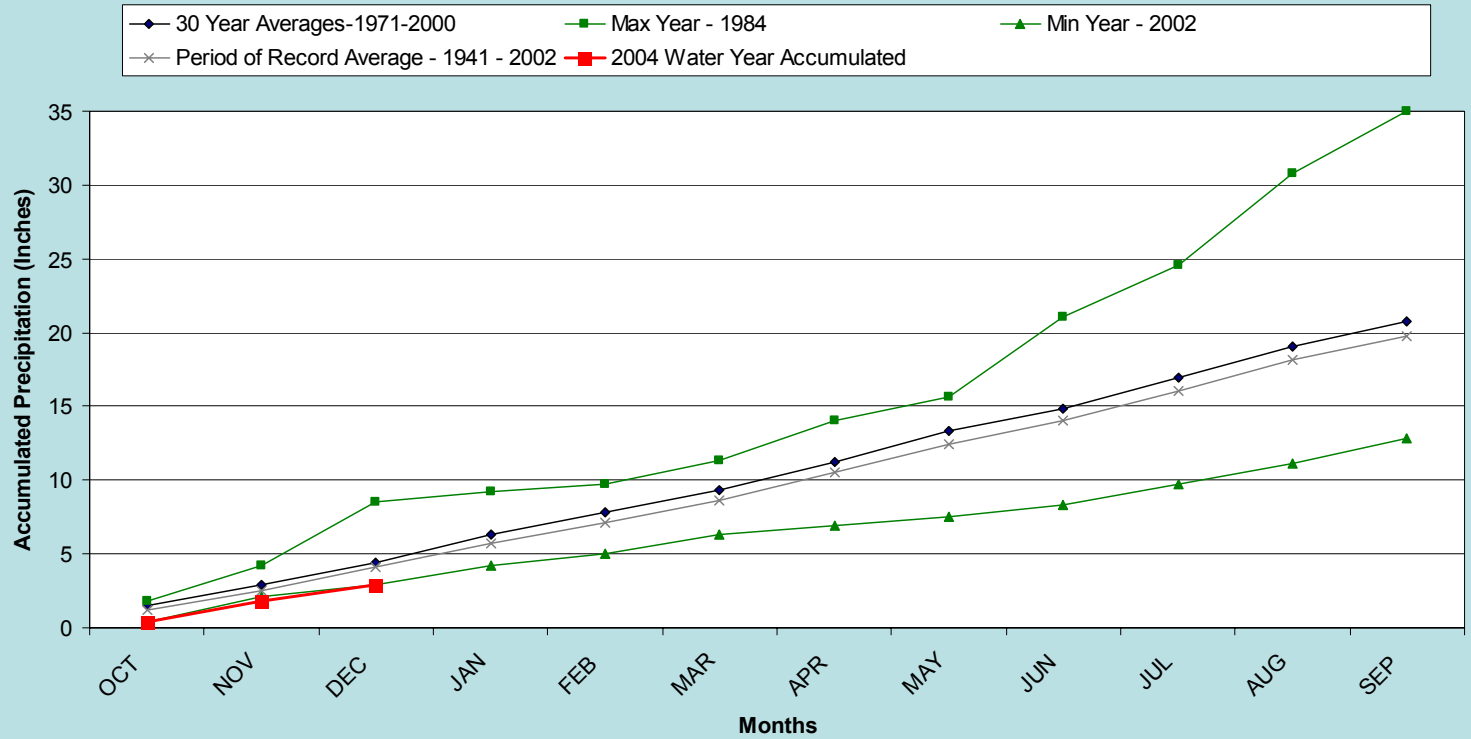
Period	Rank
Dec	<u>49<sup>th</sup> driest</u>
Nov-Dec	<u>54<sup>th</sup> wettest</u> ( <u>56<sup>th</sup> driest</u> )
Oct-Dec	<u>23<sup>rd</sup> driest</u>
Sep-Dec	<u>32<sup>nd</sup> driest</u>
Aug-Dec	<u>30<sup>th</sup> driest</u>
Jul-Dec	<u>12<sup>th</sup> driest</u>
Jun-Dec	<u>27<sup>th</sup> driest</u>
May-Dec	<u>22<sup>nd</sup> driest</u>
Apr-Dec	<u>22<sup>nd</sup> driest</u>
Mar-Dec	<u>37<sup>th</sup> driest</u>
Feb-Dec	<u>44<sup>th</sup> driest</u>
Jan-Dec	<u>34<sup>th</sup> driest</u>



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

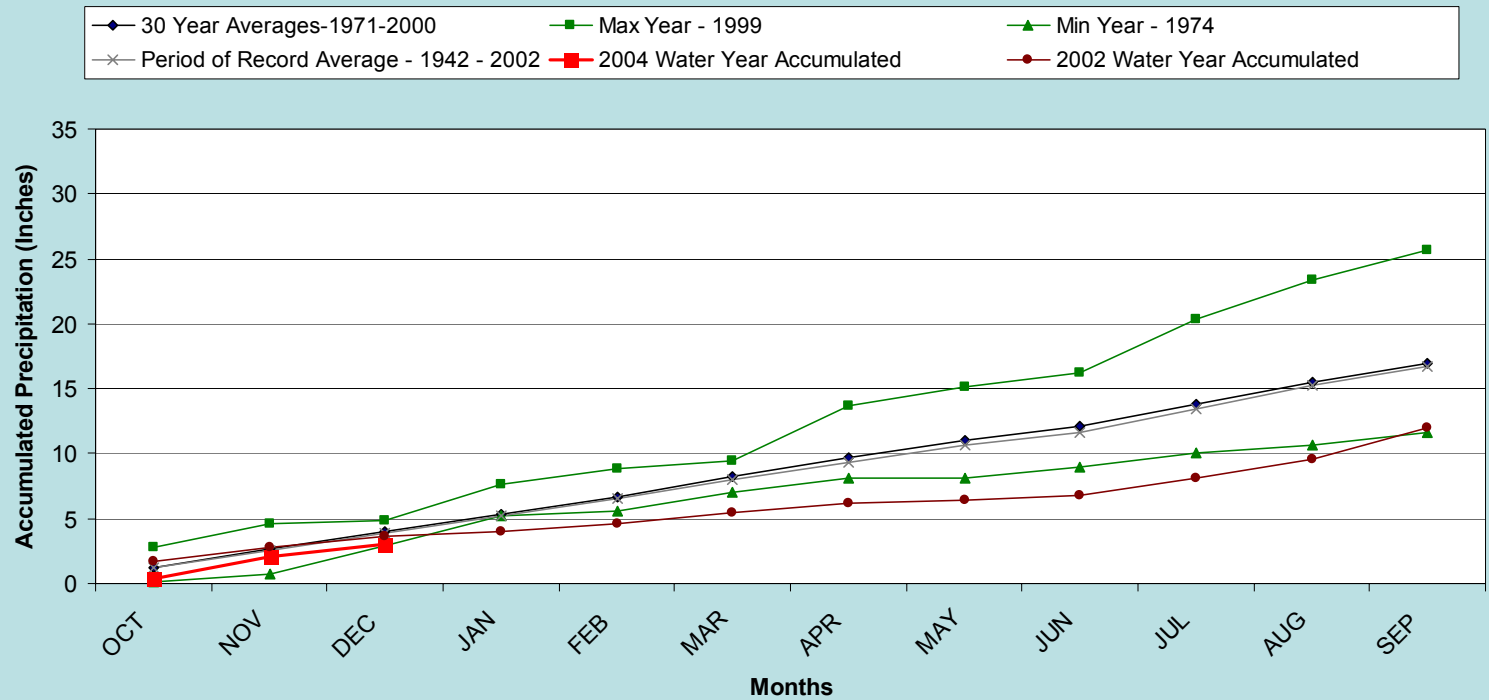
# Division 1

## Grand Lake 1 NW 2004 Water Year (through Oct '03 - Dec '03)



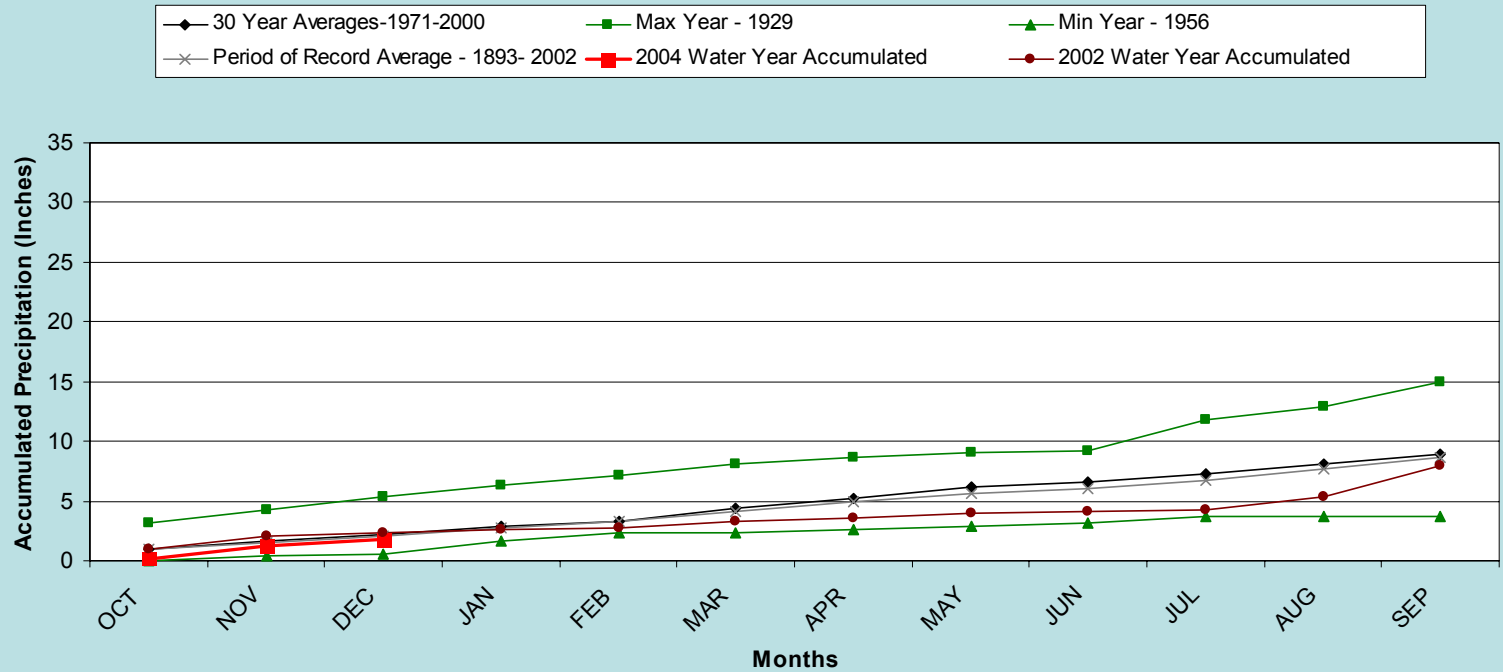
# Division 1

## Taylor Park 2004 Water Year (through Oct '03 - Dec '03)



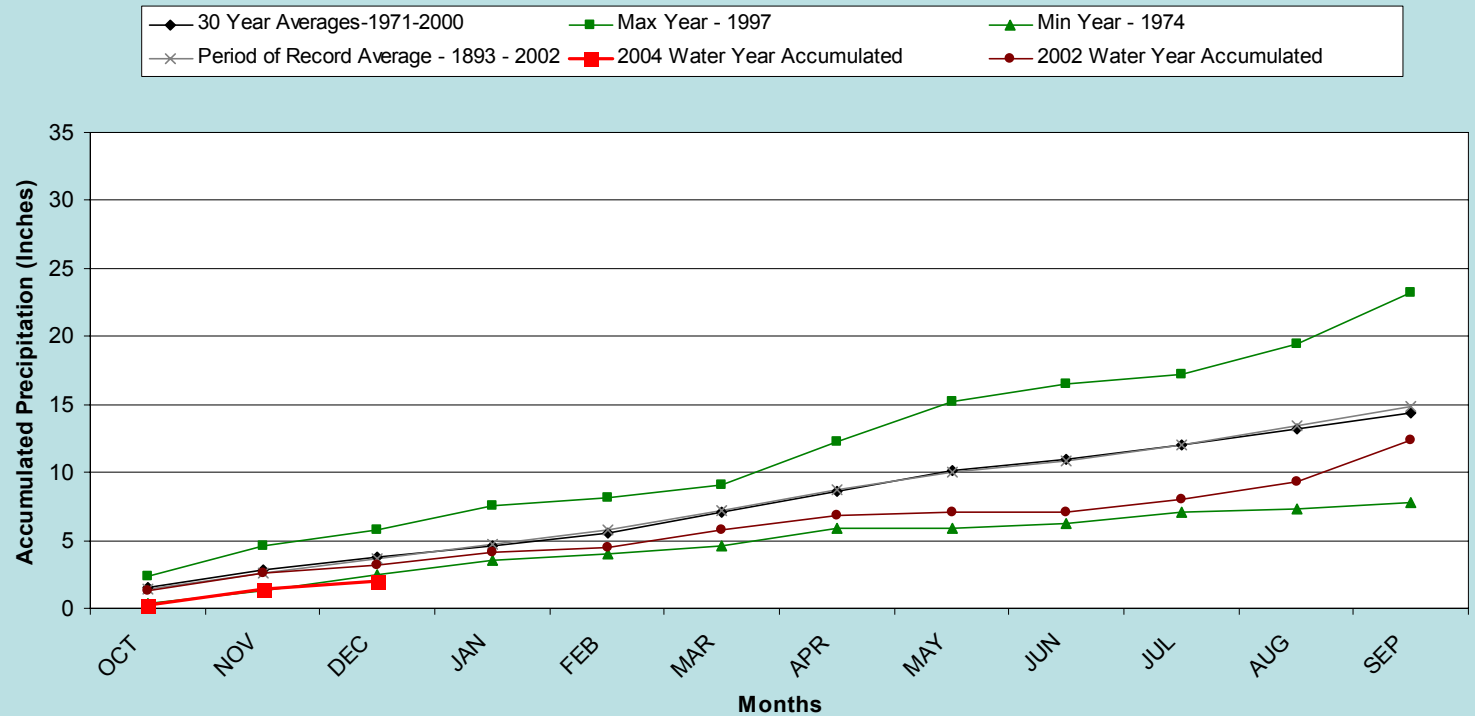
# Division 2

## Grand Junction WSFO 2004 Water Year (through Oct '03 - Dec '03)



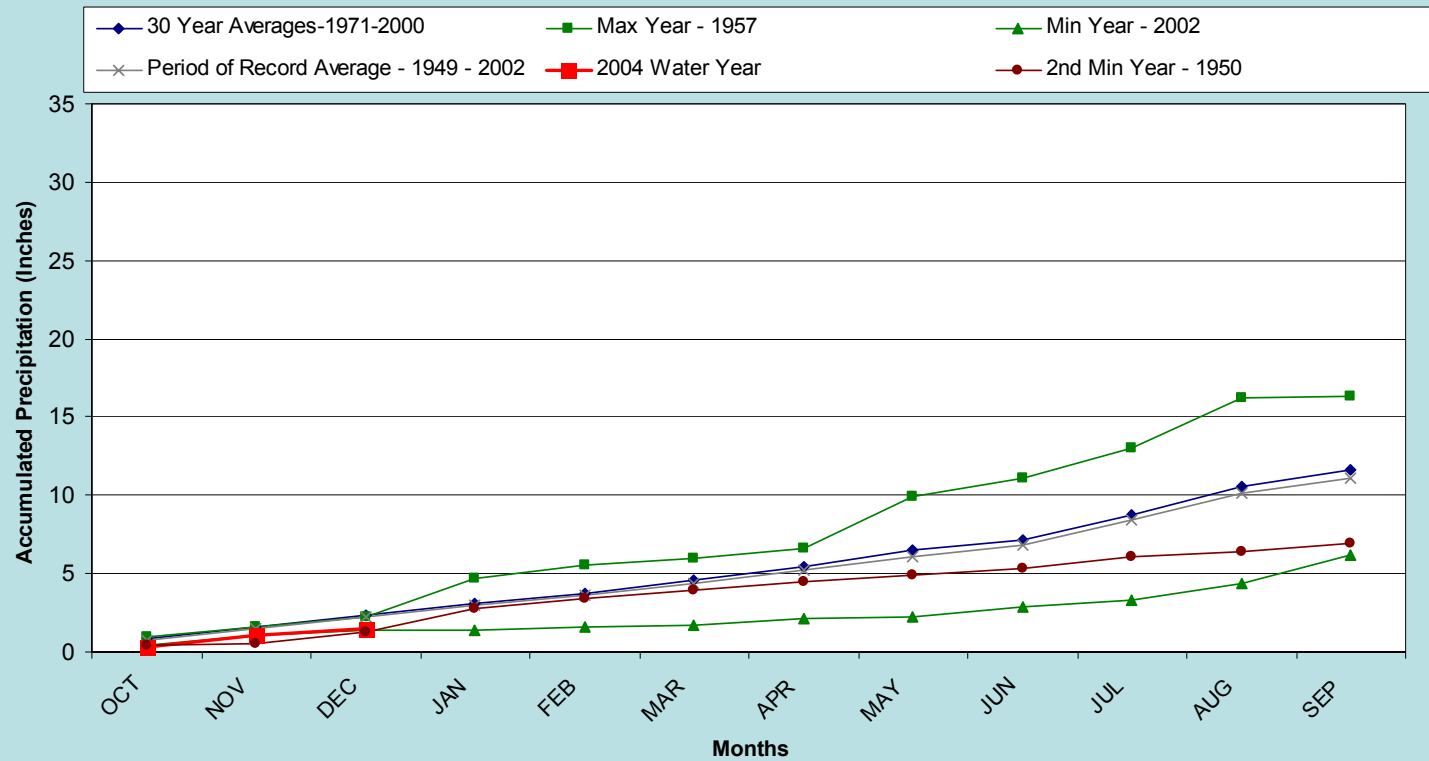
# Division 2

## Collbran 2SW 2004 Water Year (through Oct '03 - Dec '03)



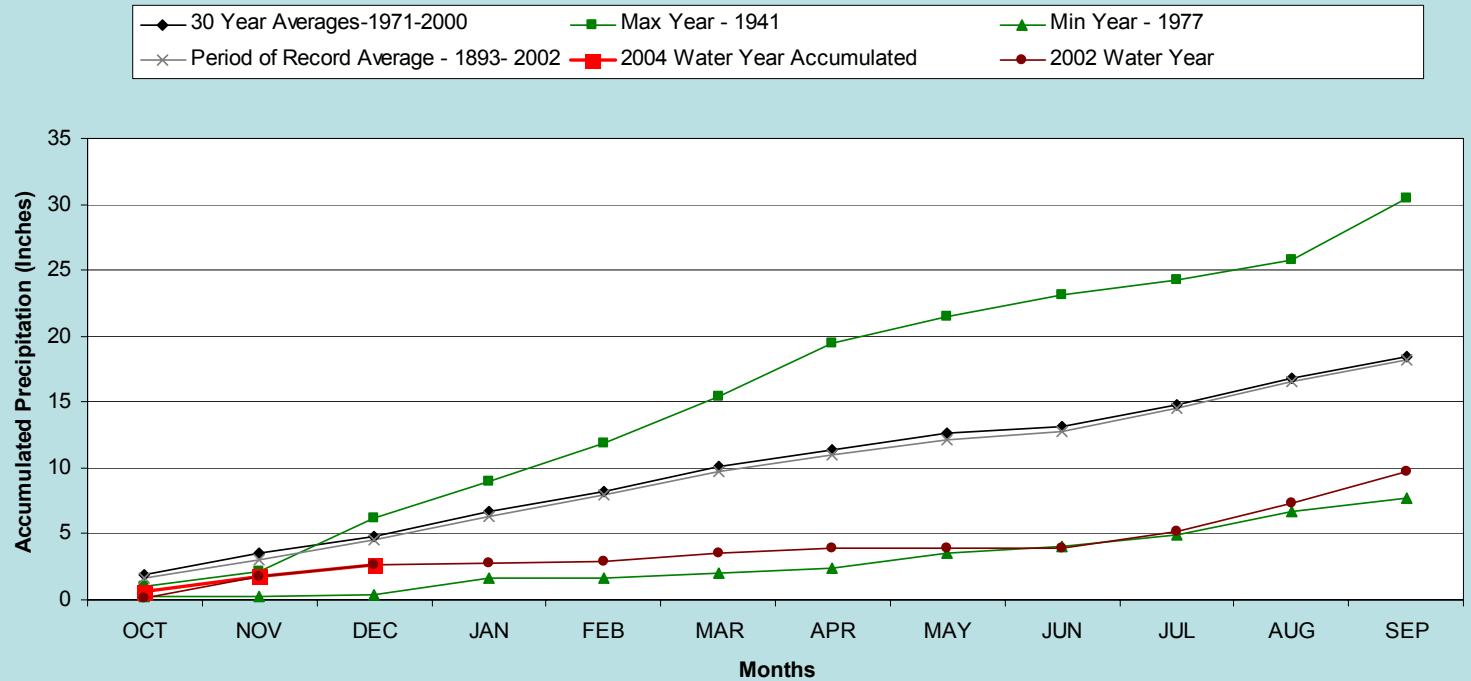
# Division 3

## Cochetopa Creek 2004 Water Year (through Oct '03 - Dec '03)



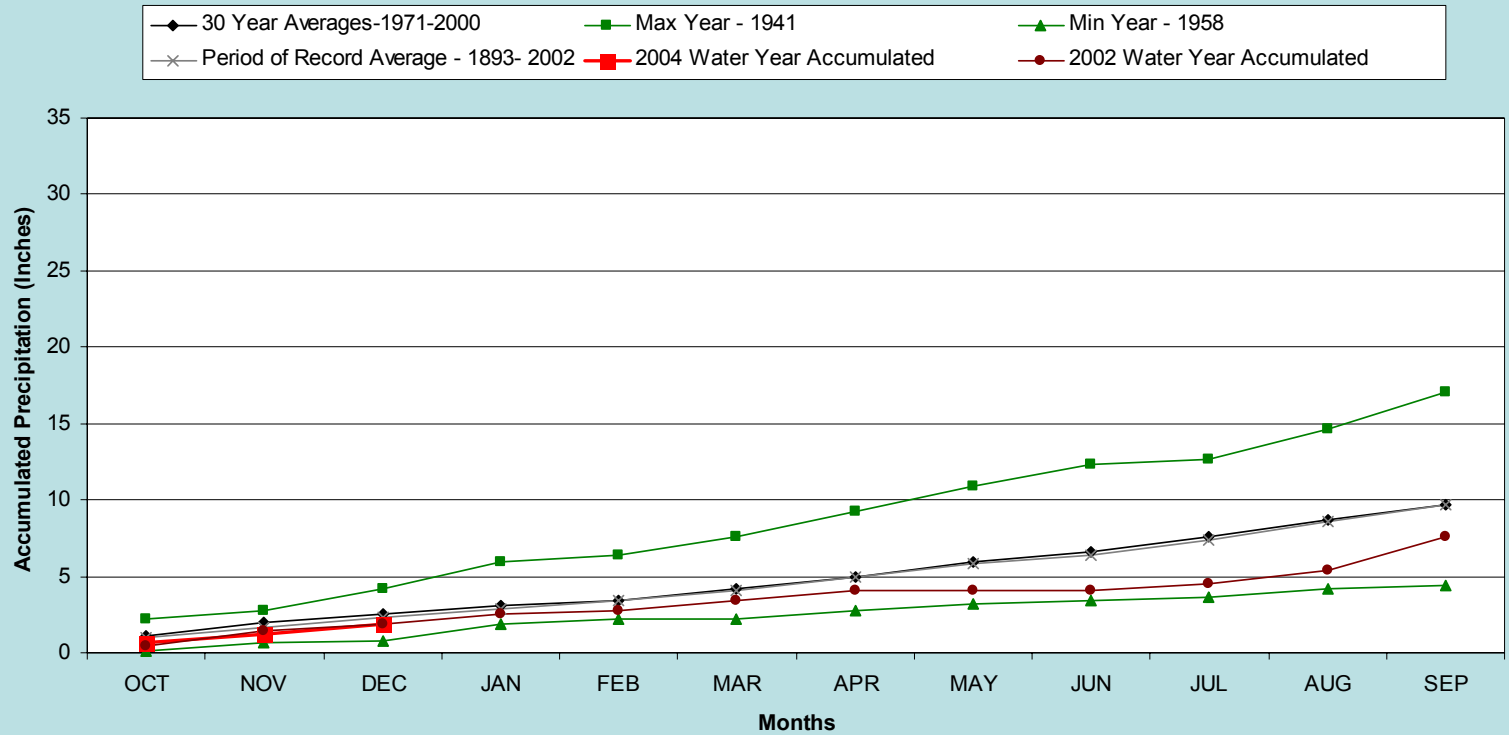
# Division 3

## Mesa Verde NP 2004 Water Year (through Oct '03 - Dec '03)



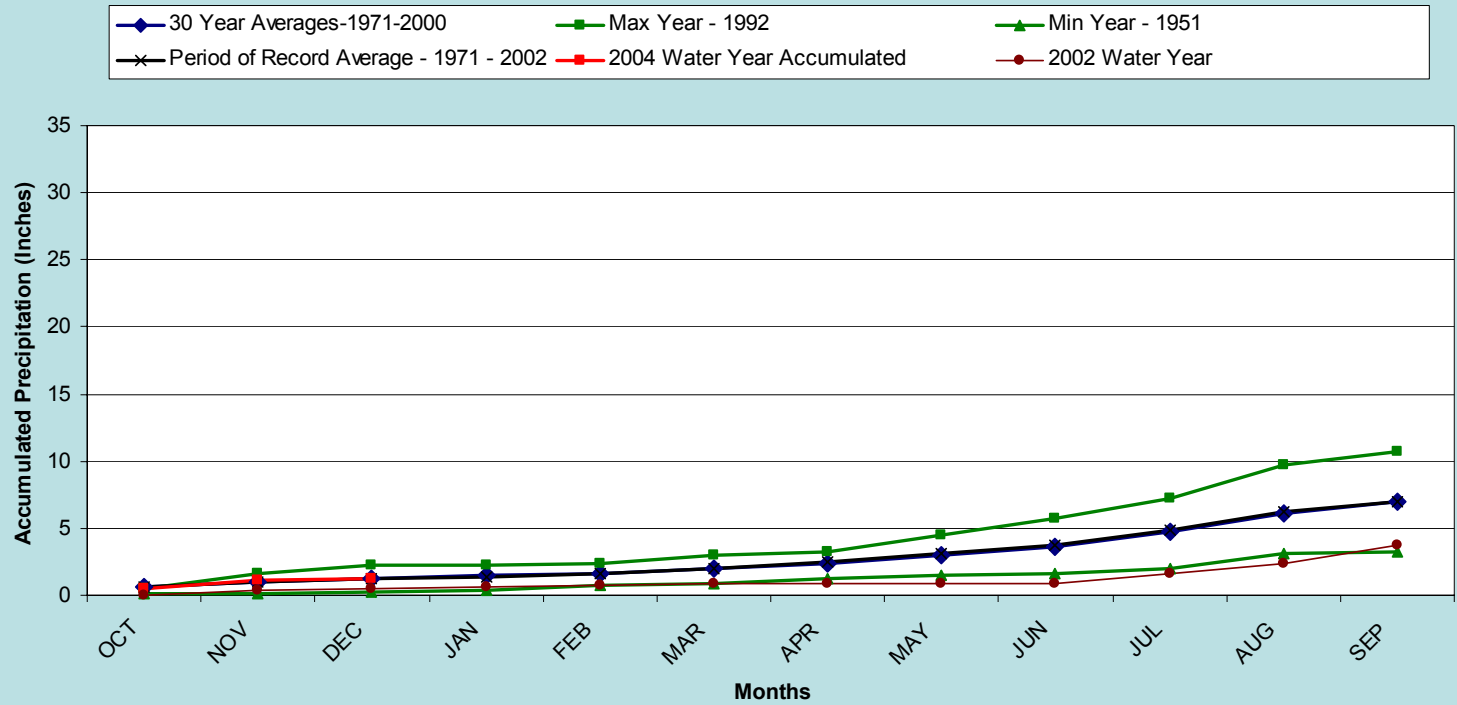
# Division 3

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



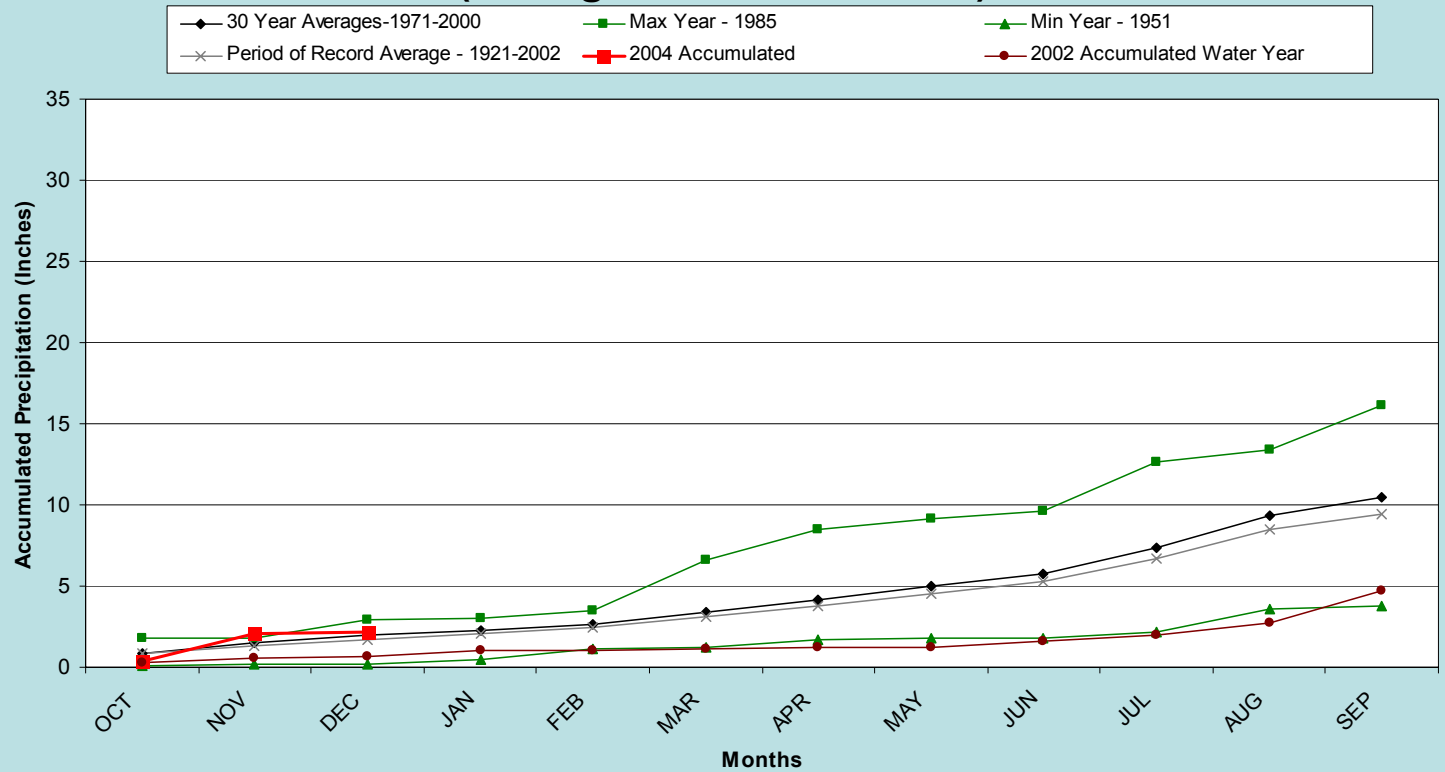
# Division 4

## Center 4SSW 2004 Water Year (through Oct '03 - Dec '03)



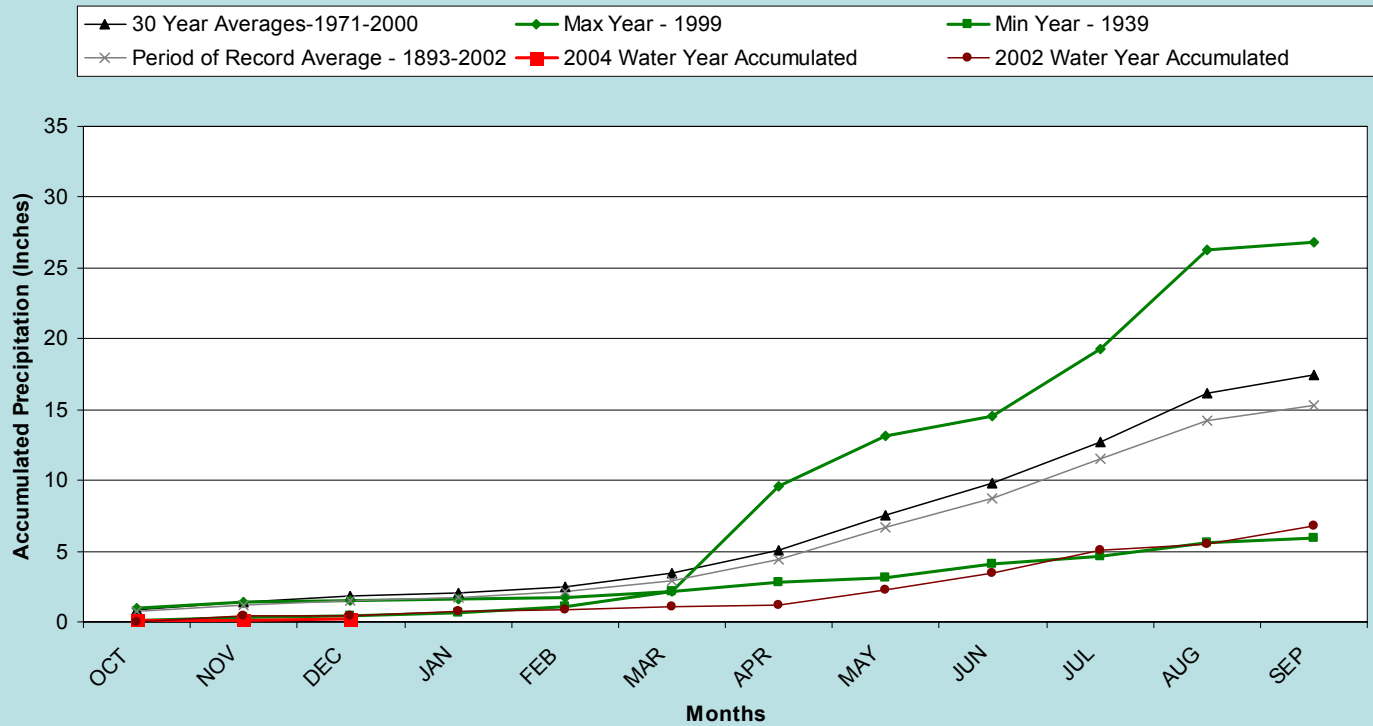
# Division 4

## Del Norte 2004 Water Year (through Oct '03 - Dec '03)



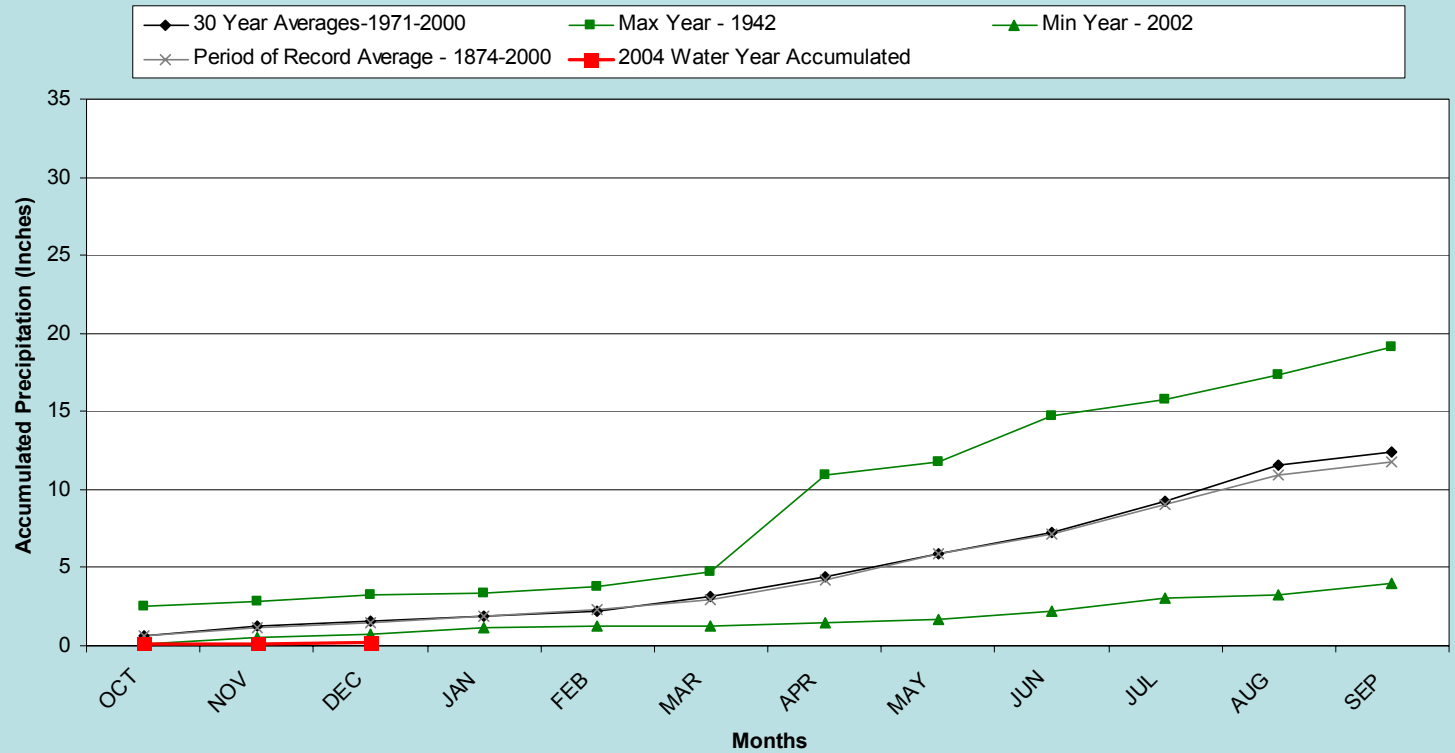
# Division 5

## Colorado Springs 2004 Water Year (through Oct '03 - Dec '03)



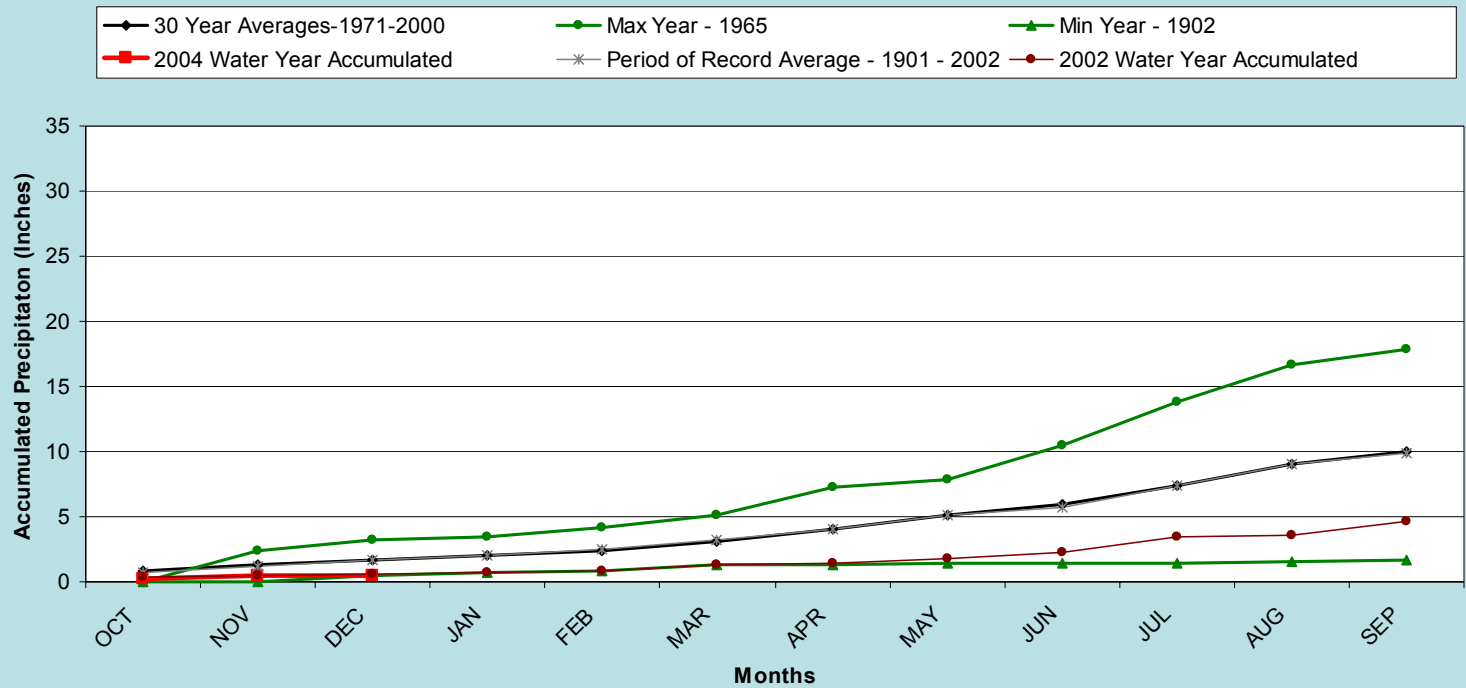
# Division 5

## Pueblo WSO 2004 Water Year (through Oct '03 - Dec '03)



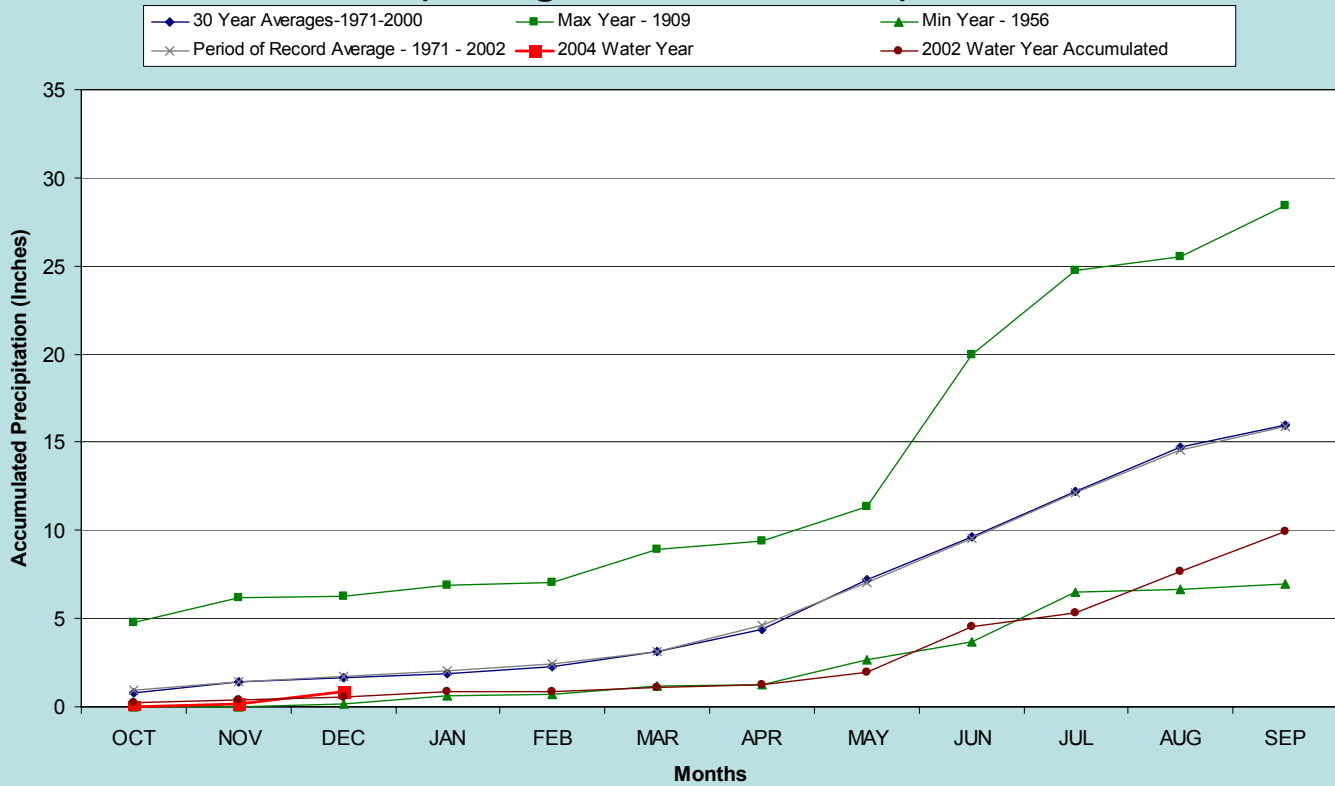
# Division 5

## Buena Vista 2004 Water Year through Oct '03 - Dec '03



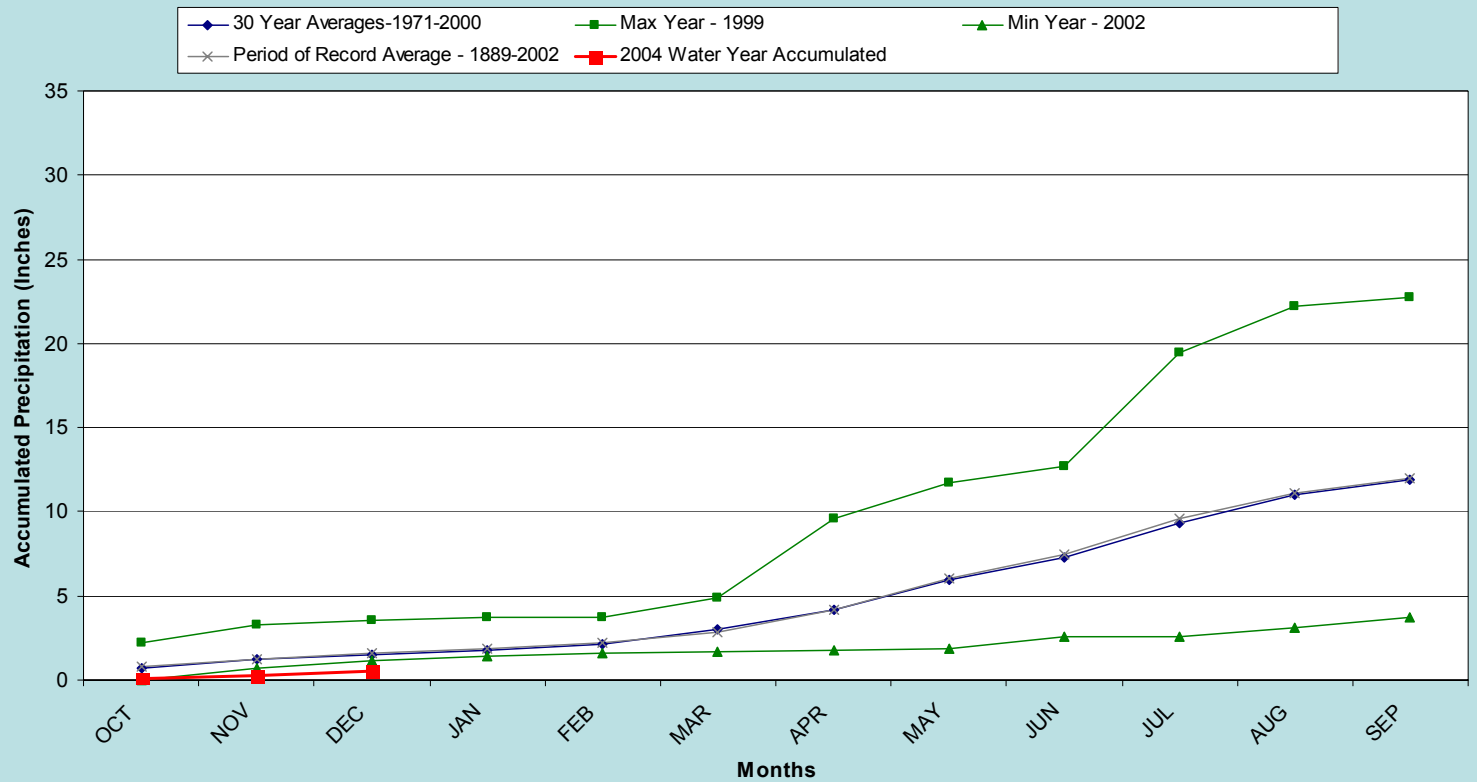
# Division 6

## Cheyenne Wells 2004 Water Year (through Oct '03 - Dec '03)



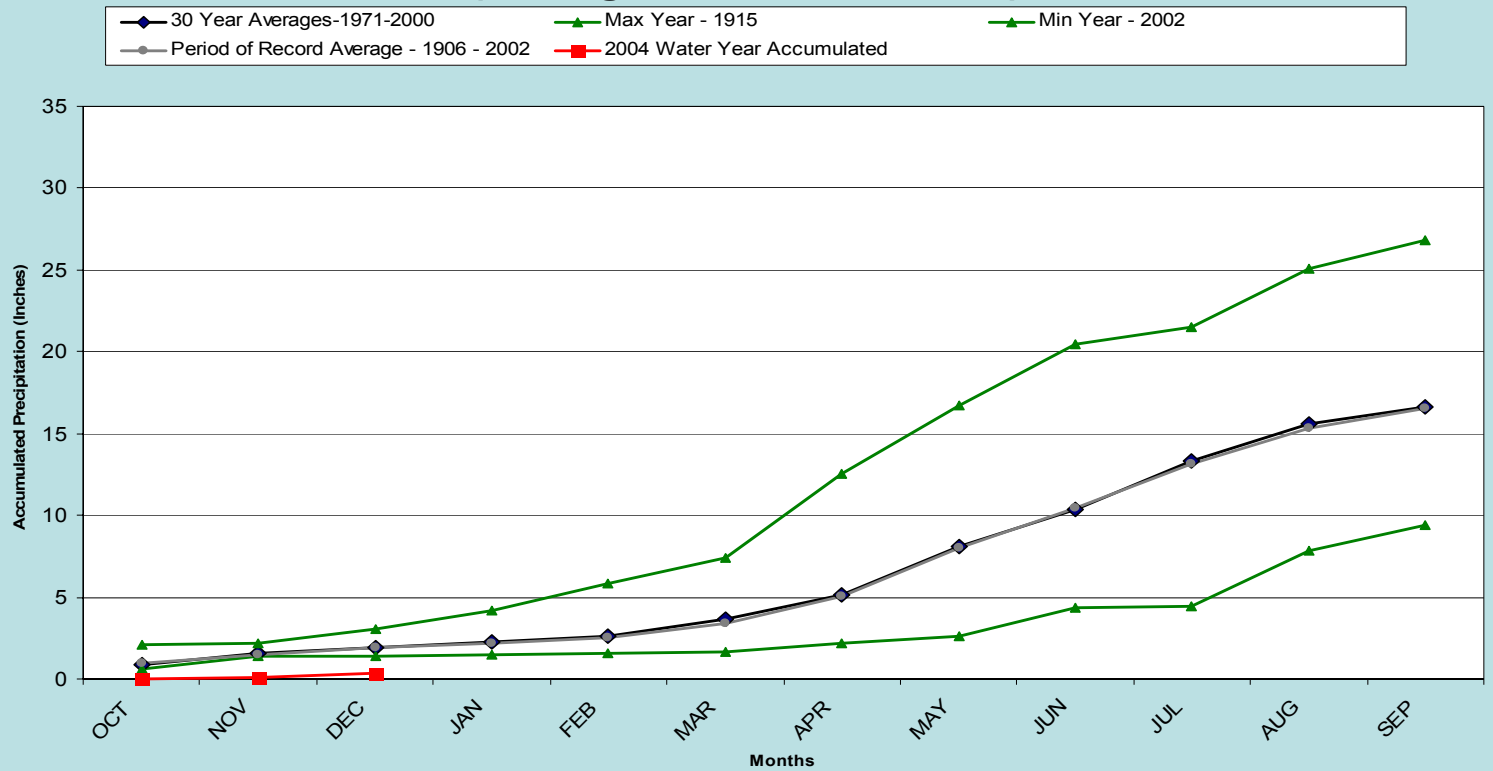
# Division 6

## Rocky Ford 2004 Water Year (through Oct '03 - Dec '03)



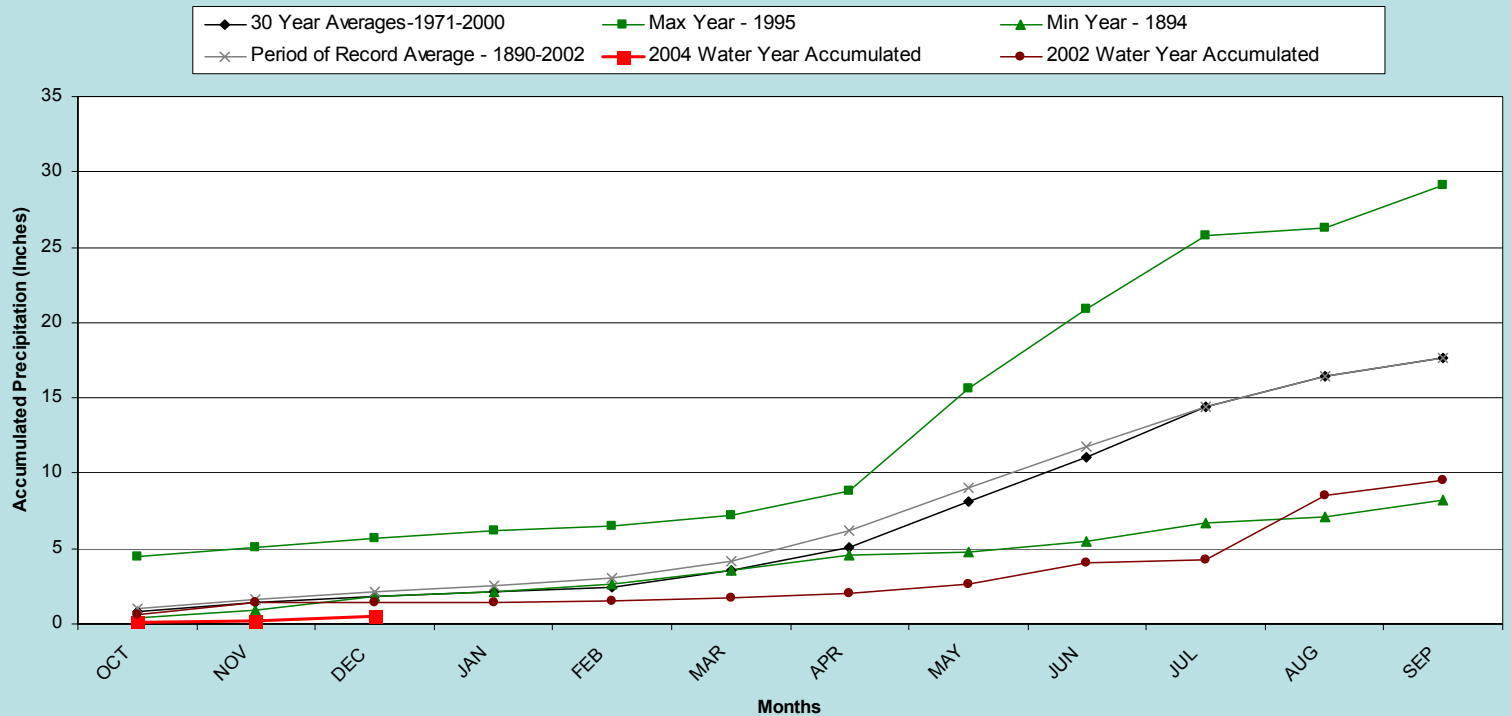
# Division 7

## Akron 4E 2004 Water Year (through Oct '03 - Dec '03)



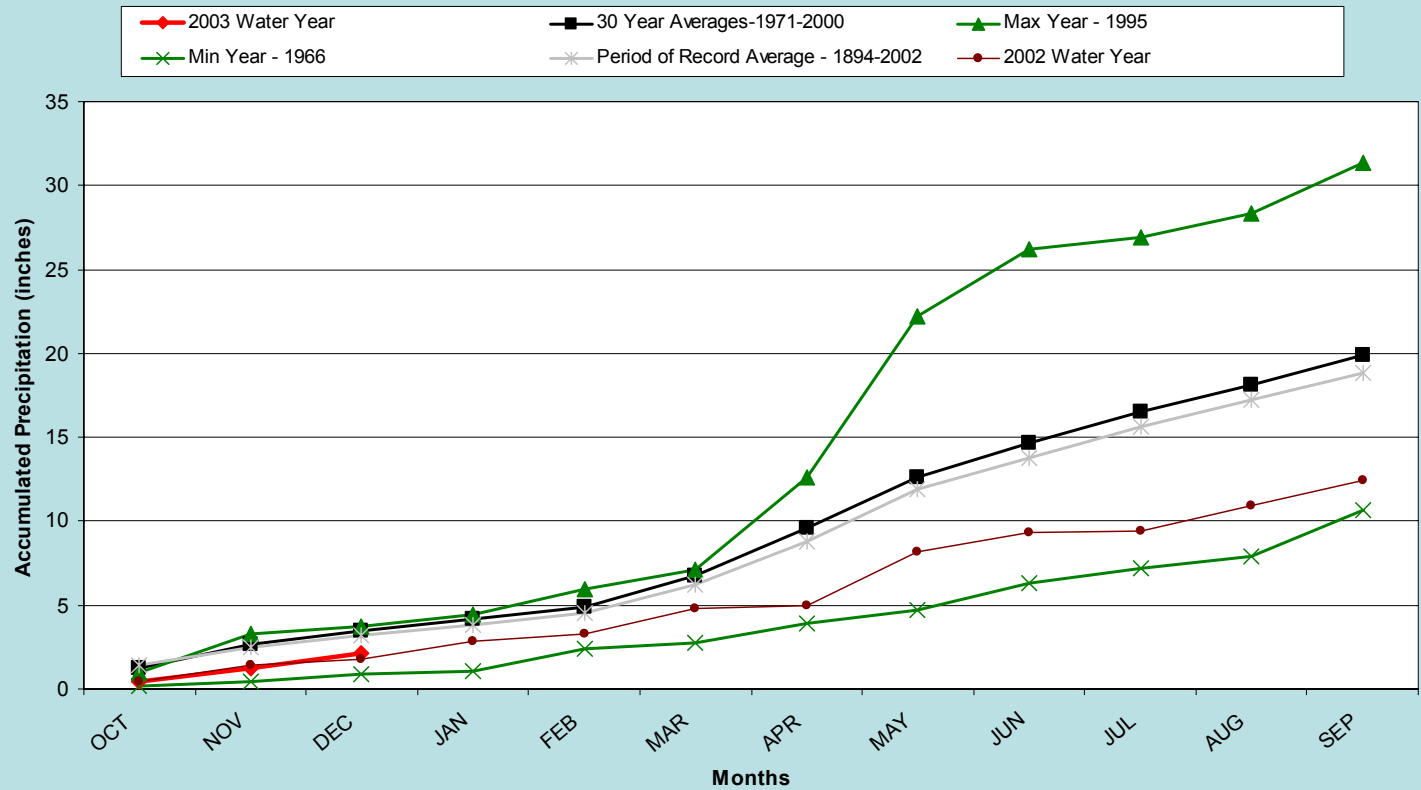
# Division 7

## Leroy 5SW 2004 Water Year (through Oct '03 - Dec '03)



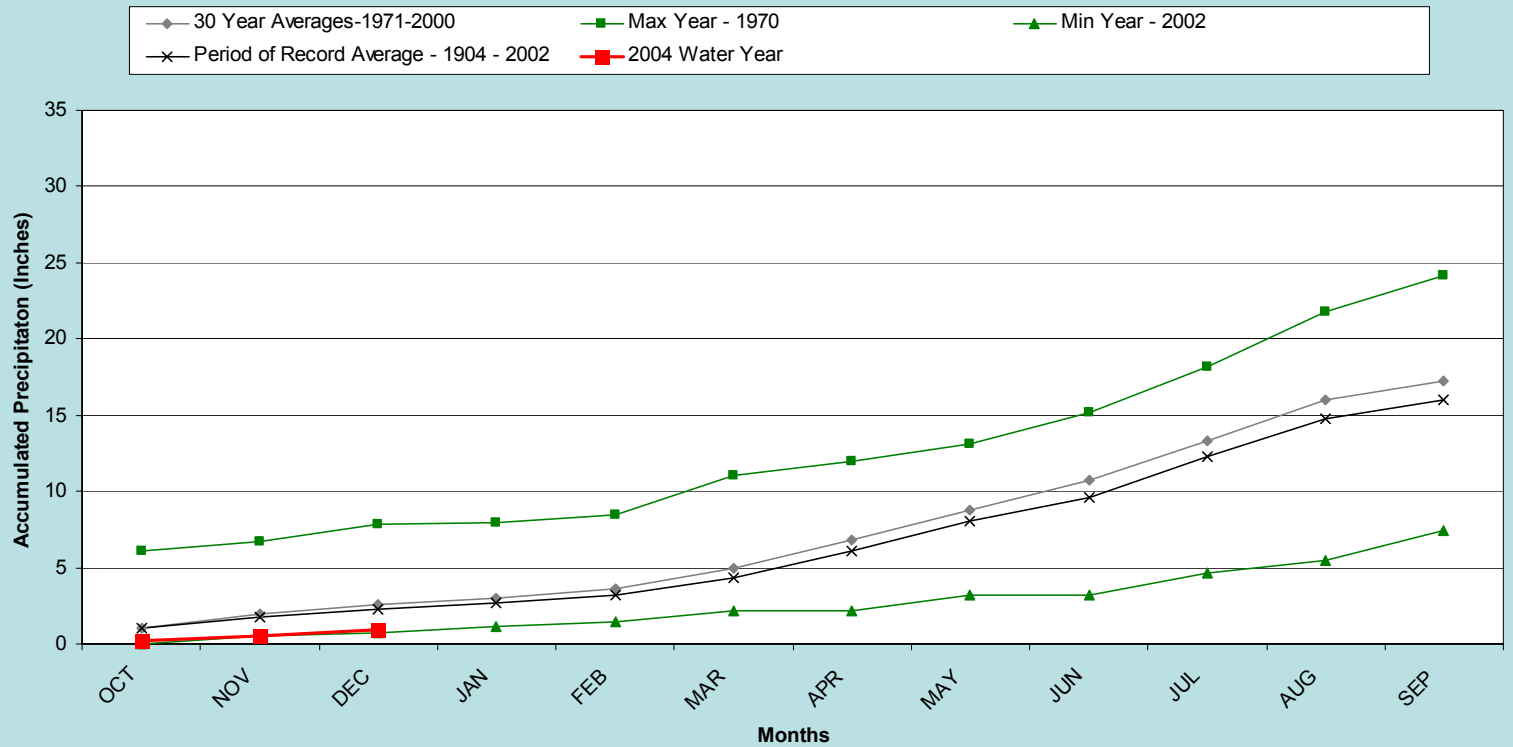
# Division 8

## Boulder 2004 Water Year through Oct '03 - Dec '03



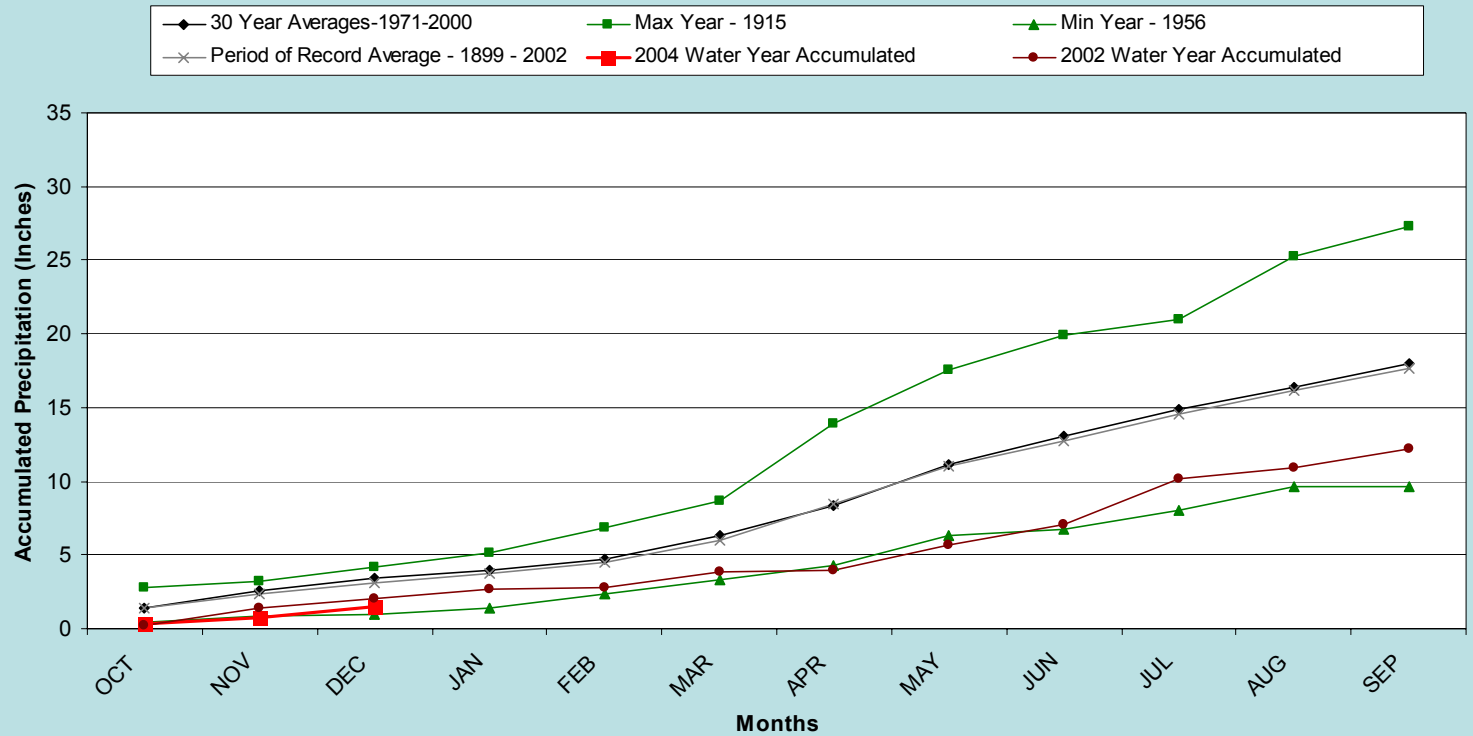
# Division 8

## Cheesman 2004 Water Year (through Oct '03 - Dec '03)



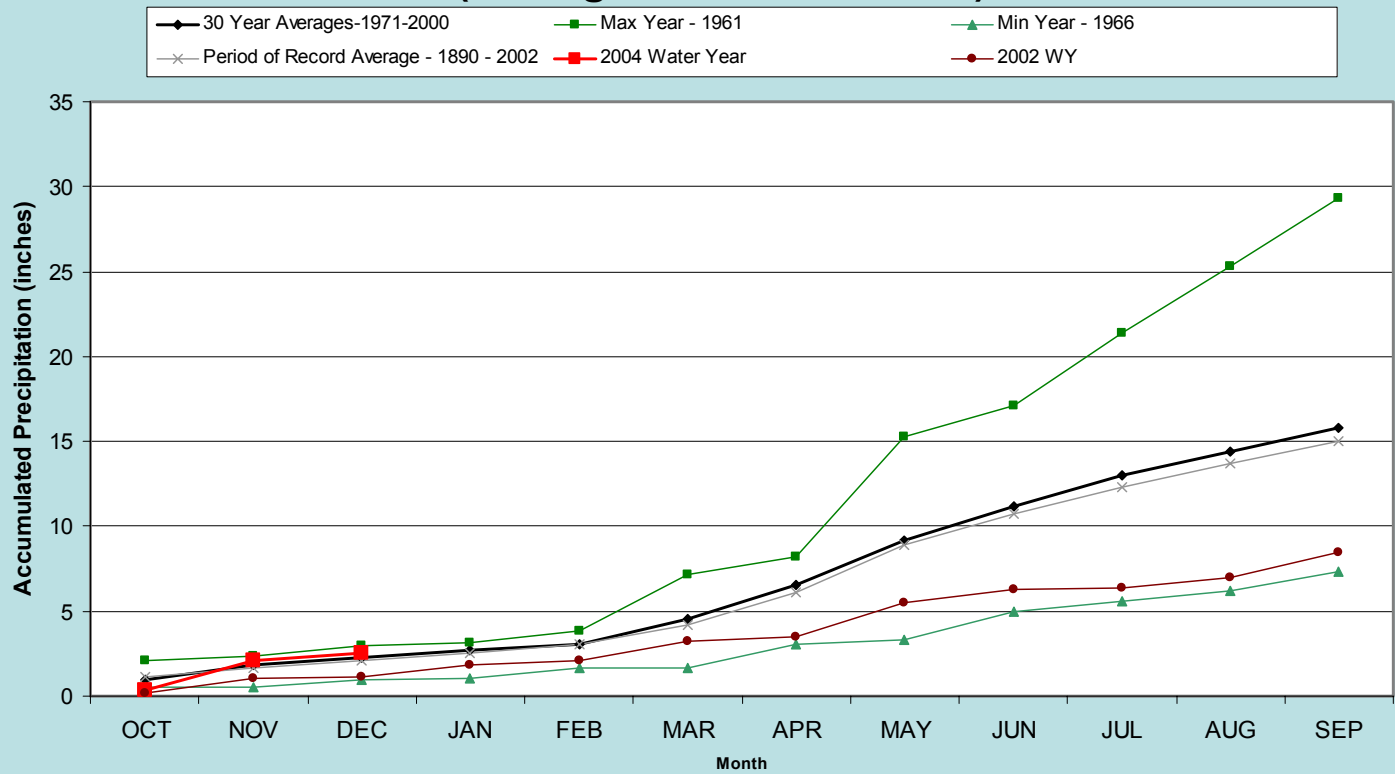
# Division 8

## Kassler 2004 Water Year (through Oct '03 - Dec '03)

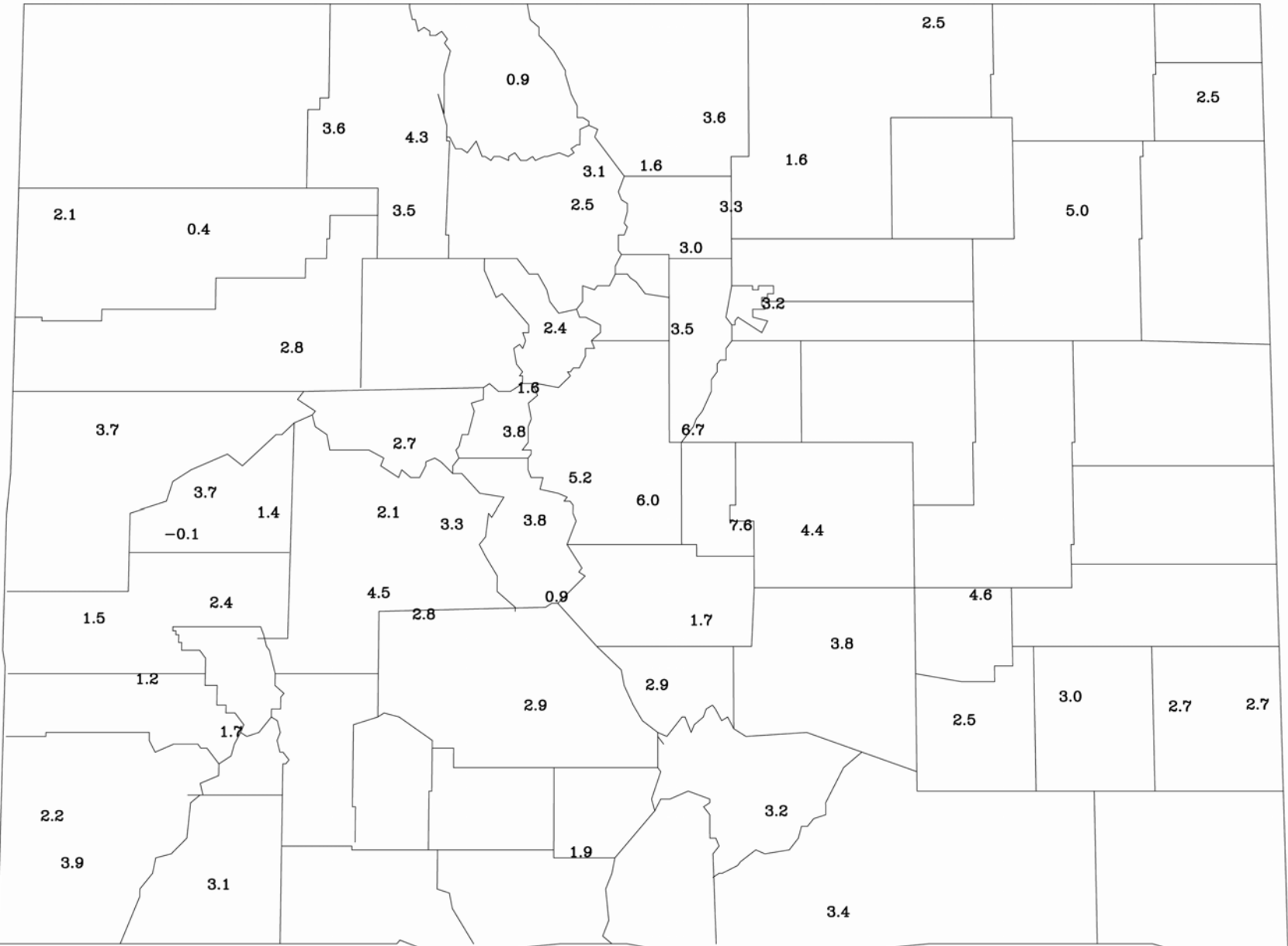


# Division 8

## Fort Collins 2004 Water Year (through Oct '03 - Dec '03)

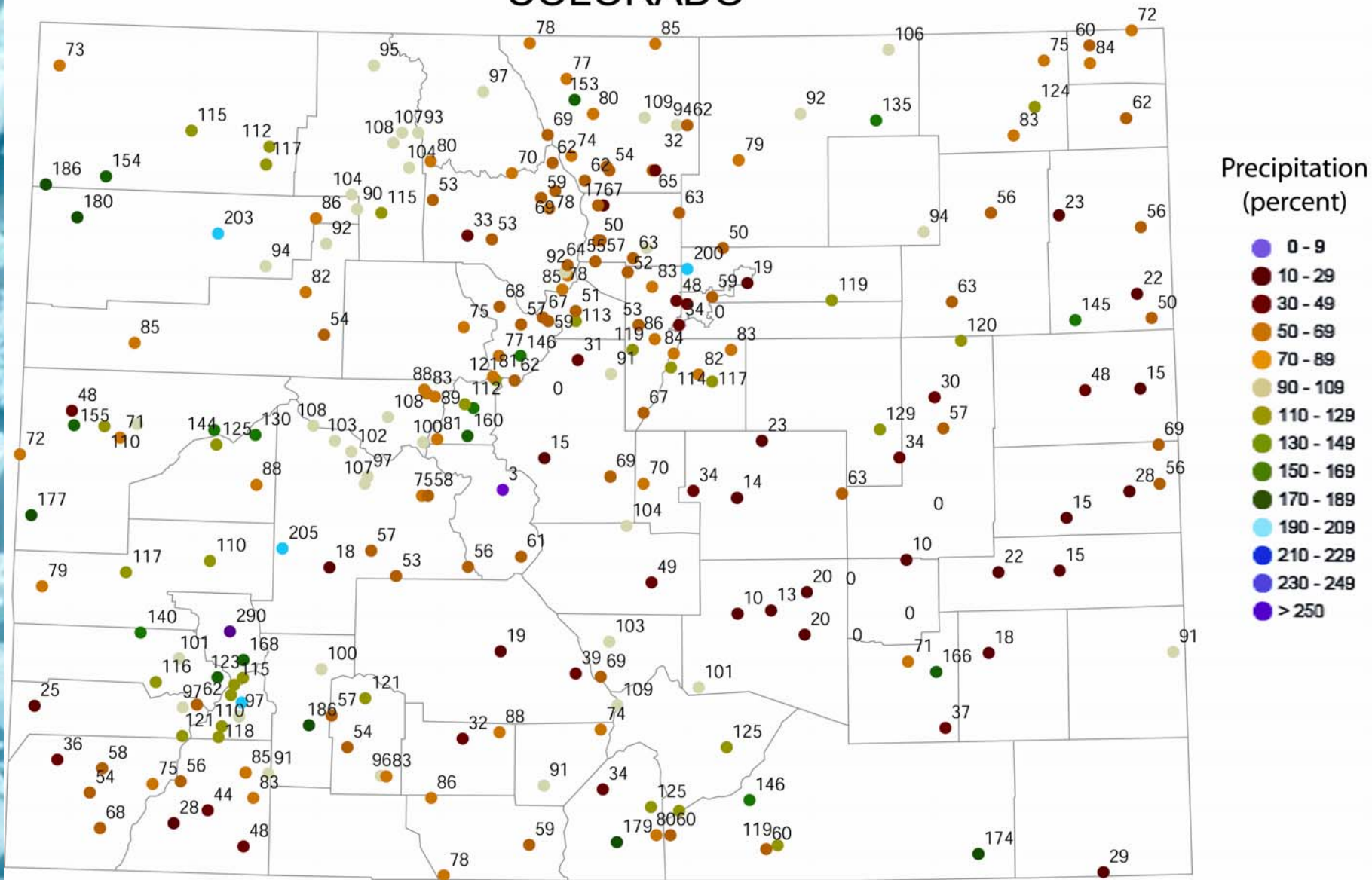


# COLORADO



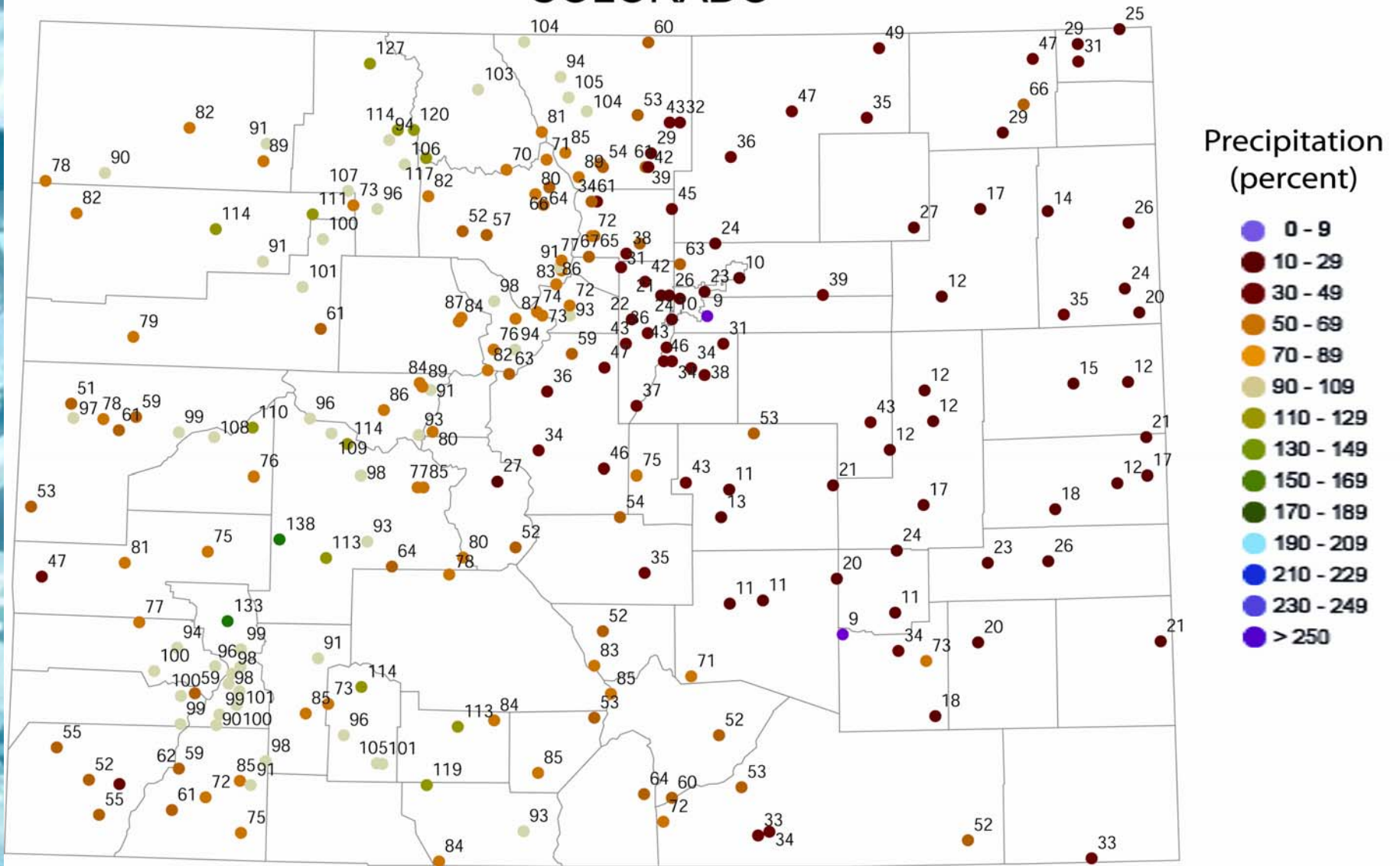
December 2003 average mean temperature departures from the 1971-2000 average.

# COLORADO



December 2003 precipitation as a percent of the 1971-2000 average.

# COLORADO



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

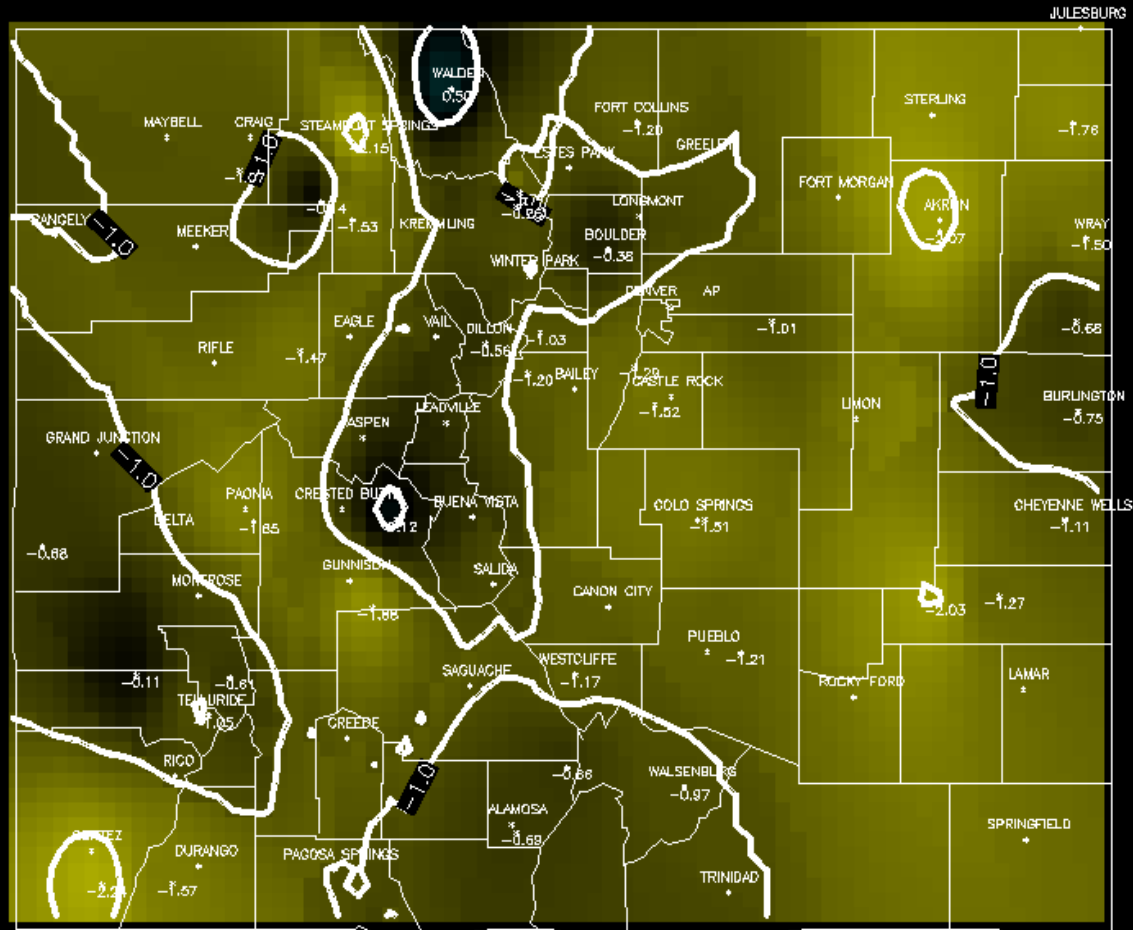




# 48 Month SPI

Colorado

12/2003 48 mon. SPI



100	2.0	88	-1.0
100	1.0	1	-2.0
99	0.0	0	-3.0

Produced by:  
Colorado Climate Center  
Fort Collins, CO

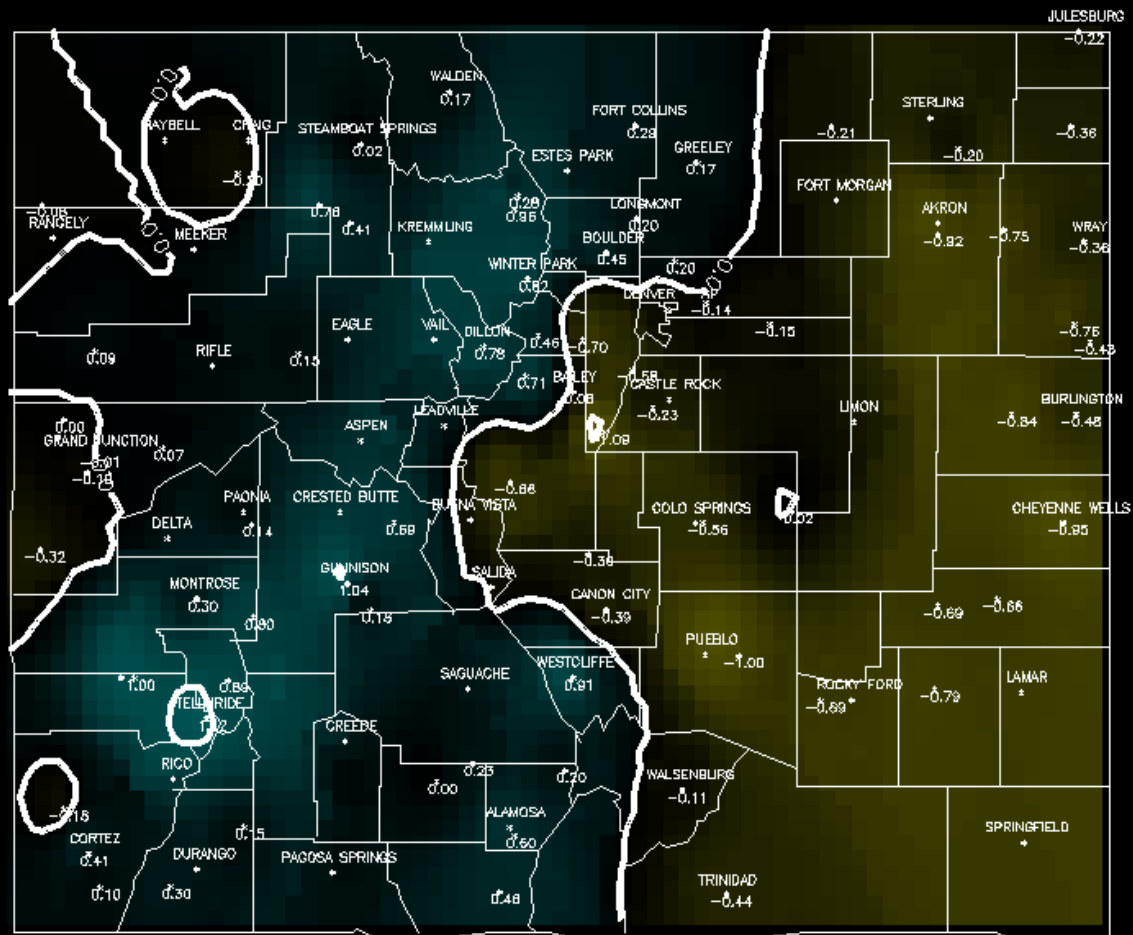




# Projected Conditions at 0.8 Probability Level 12 Month SPI at 6 months

Colorado

12/2003 12 mon. SPI – Projected 6 mon. at P=0.80



100 % < 2.0  
100 % < 1.0  
50 % < 0.0

0 < 1.0  
0 < 2.0  
0 < 3.0

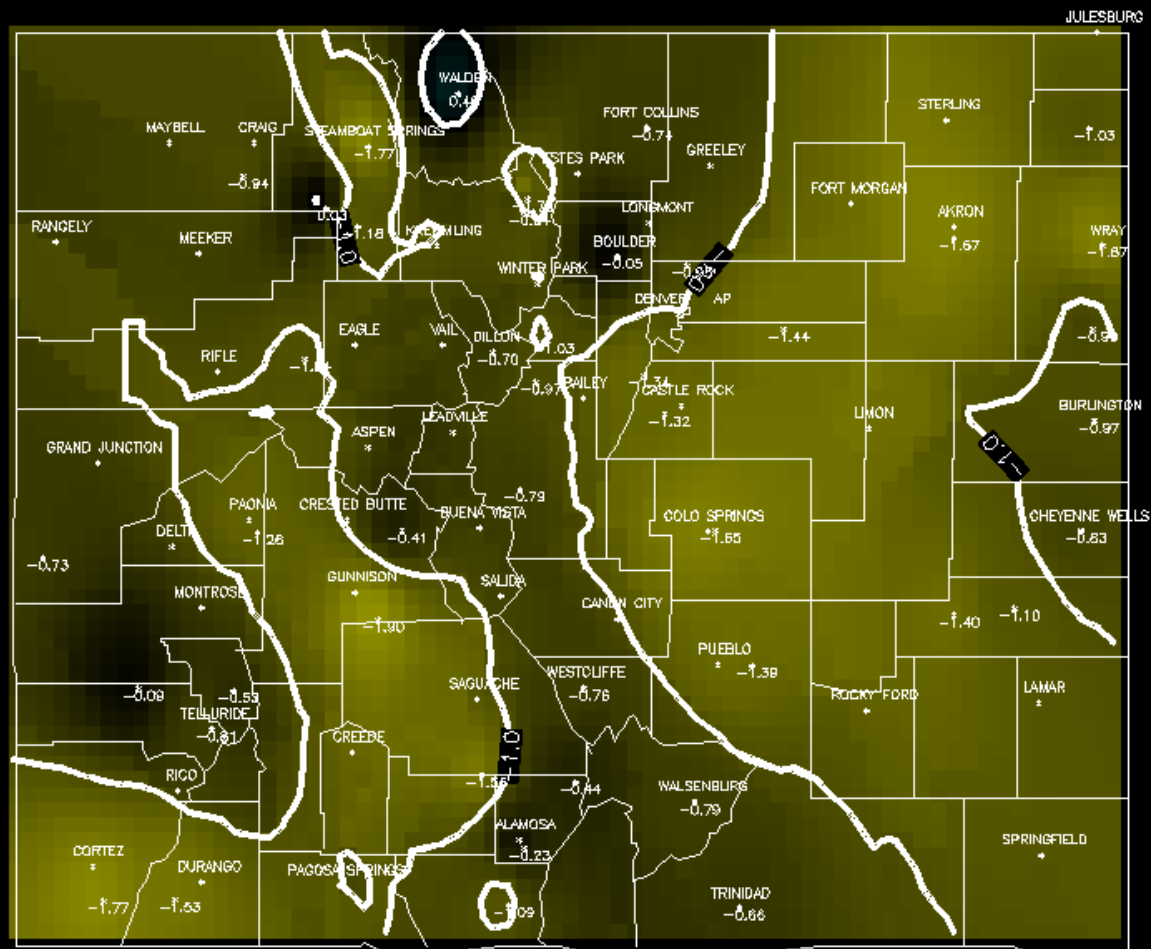
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Colorado Climate Center  
Fort Collins, CO



# Projected Conditions at 0.5 Probability Level 48 Month SPI at 12 months

Colorado

12/2003 48 mon. SPI – Projected 12 mon. at P=0.50

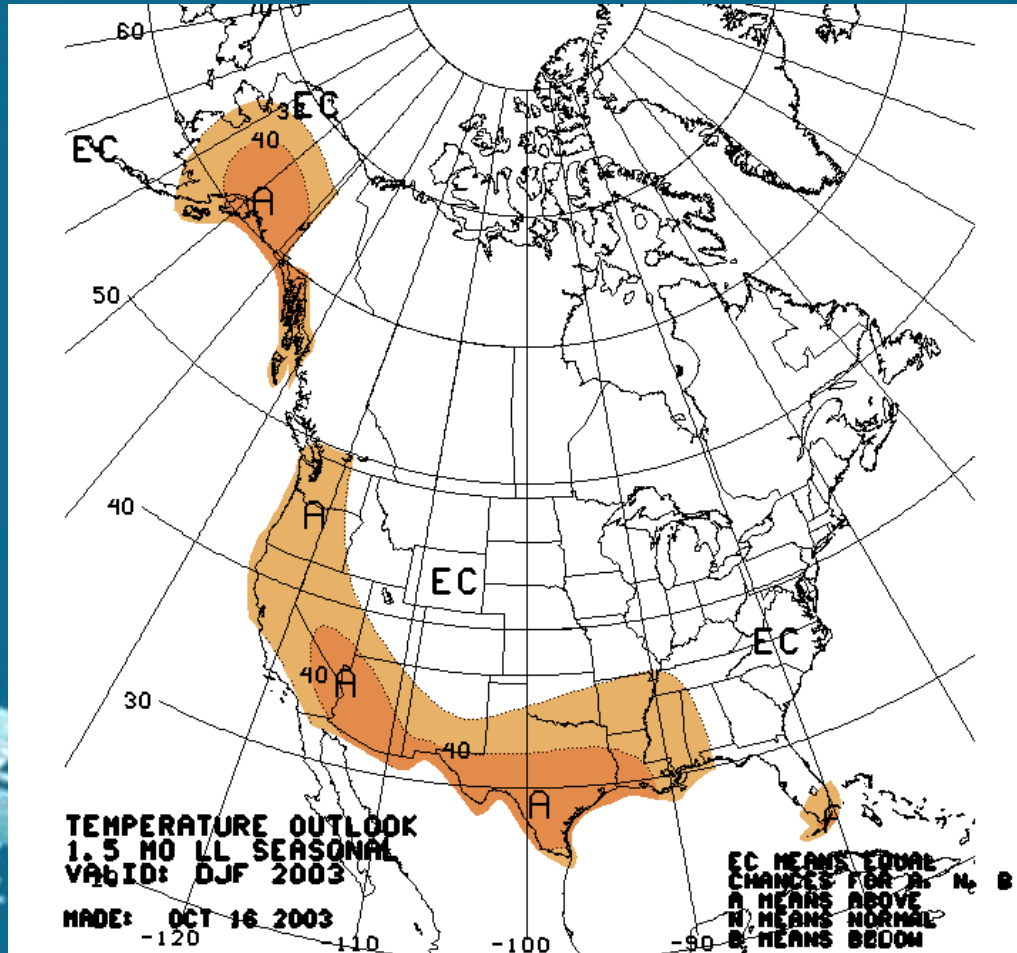


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Fort Collins, CO



# Temperature

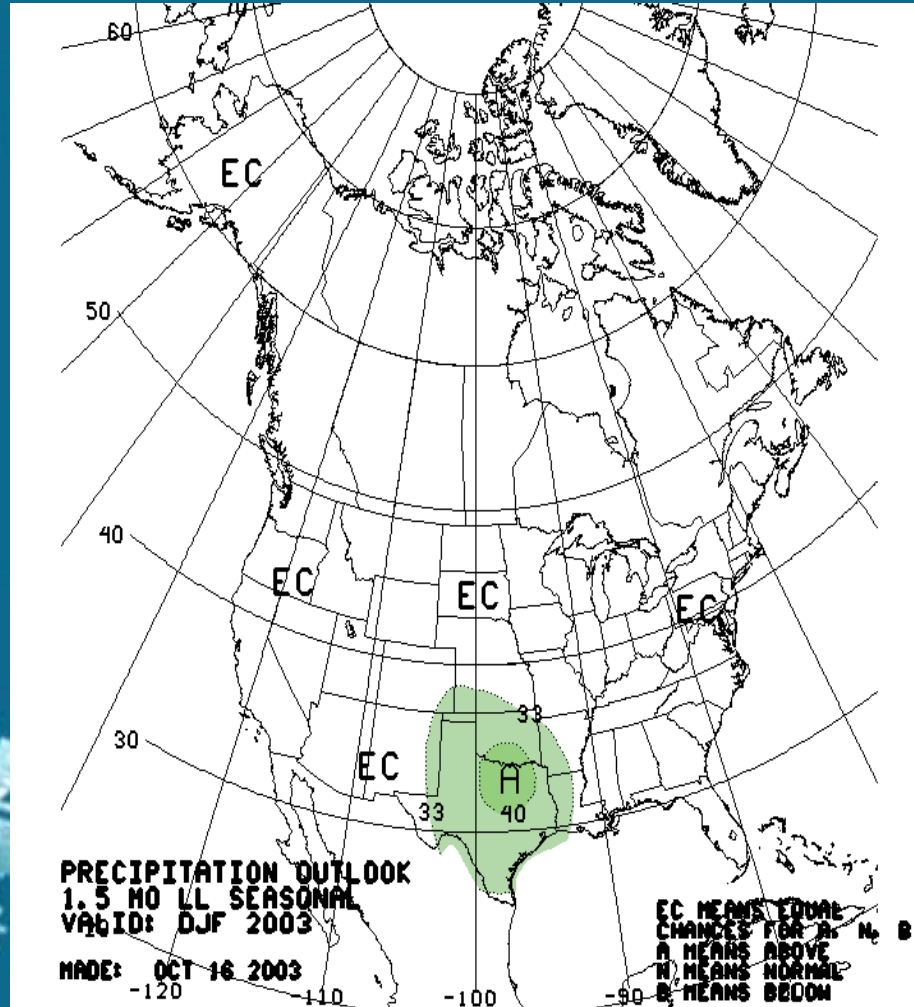
## Dec 2003 – Feb 2004



From the Colorado Prediction Center

[http://www.cpc.ncep.noaa.gov/products/predictions/multi\\_season/13\\_seasonal\\_outlooks/color/churchill.html](http://www.cpc.ncep.noaa.gov/products/predictions/multi_season/13_seasonal_outlooks/color/churchill.html)

# Precipitation Dec 2003 – Feb 2004



From the Colorado Prediction Center

[http://www.cpc.ncep.noaa.gov/products/predictions/multi\\_season/13\\_seasonal\\_outlooks/color/churchill.html](http://www.cpc.ncep.noaa.gov/products/predictions/multi_season/13_seasonal_outlooks/color/churchill.html)



# 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”