

# Drought and Flood Update May 2005

CLEARANCE 6'8" RIVERSIDE

Nolan J. Doesken  
Colorado Climate Center

presented at the Joint Meeting of the Flood Task Force and WATF,  
Division of Wildlife, Denver, CO, June 8, 2005

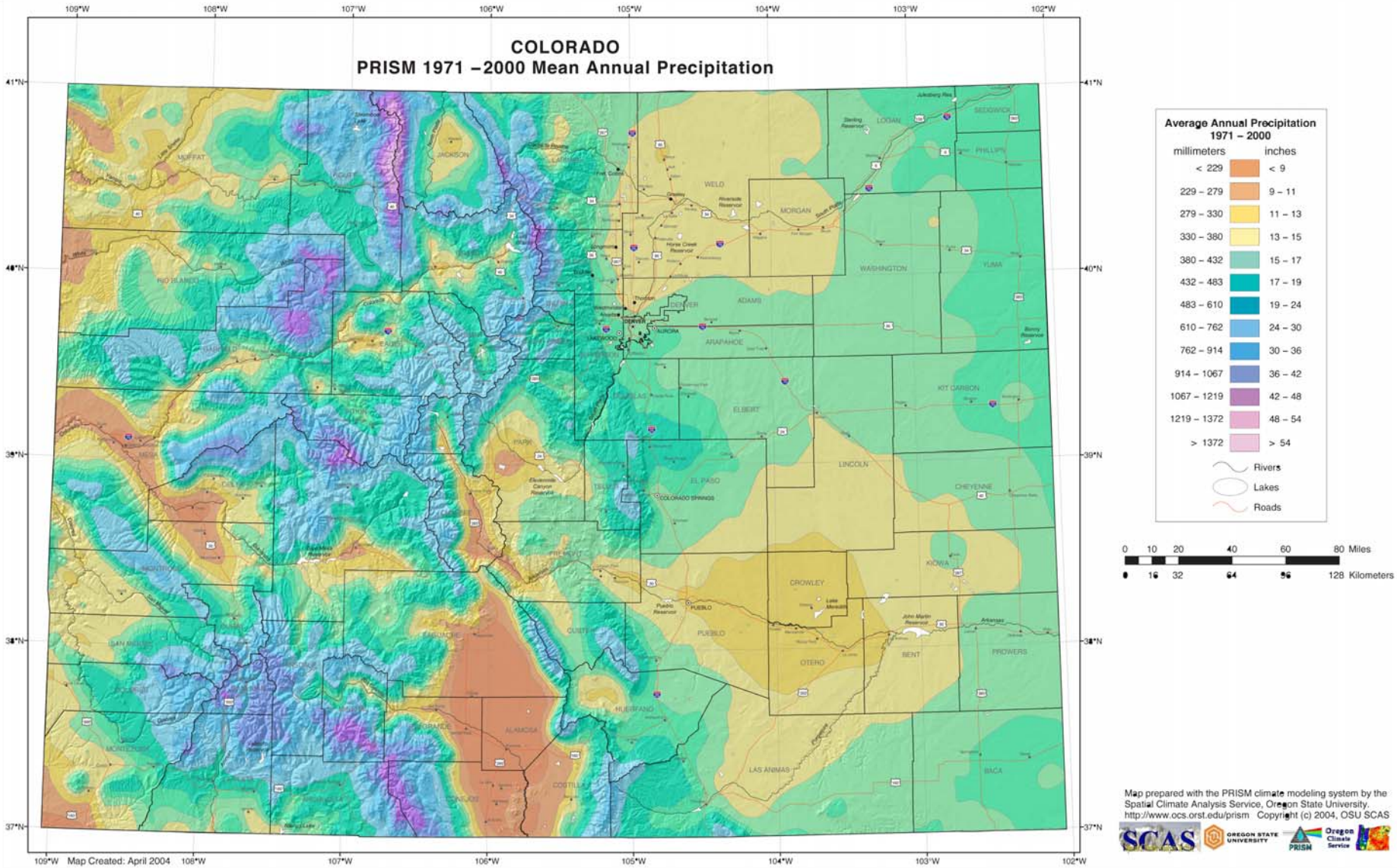
Prepared by Odie Bliss

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

Photo courtesy Brian McNoldy, 6/4/05

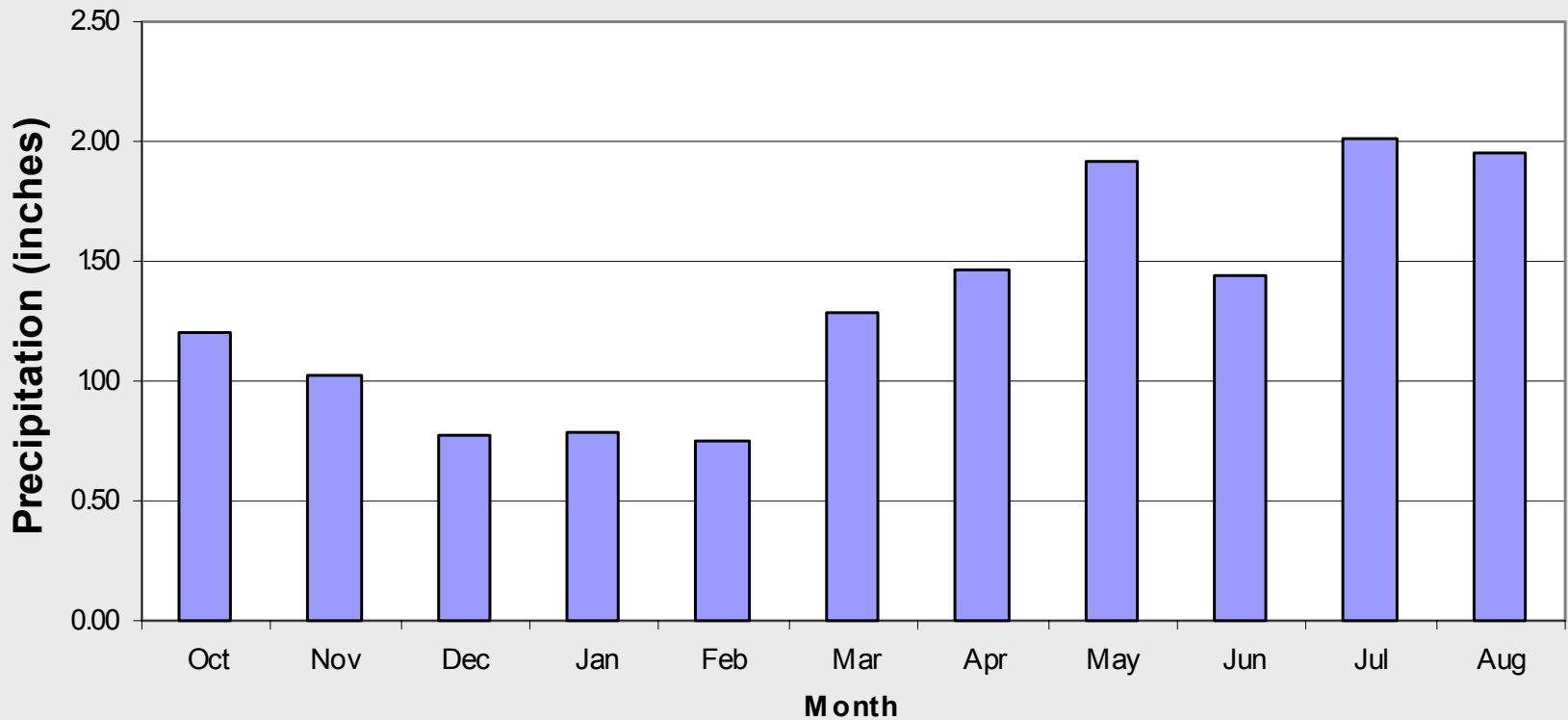
# Colorado Average Annual Precipitation

**COLORADO**  
**PRISM 1971 - 2000 Mean Annual Precipitation**

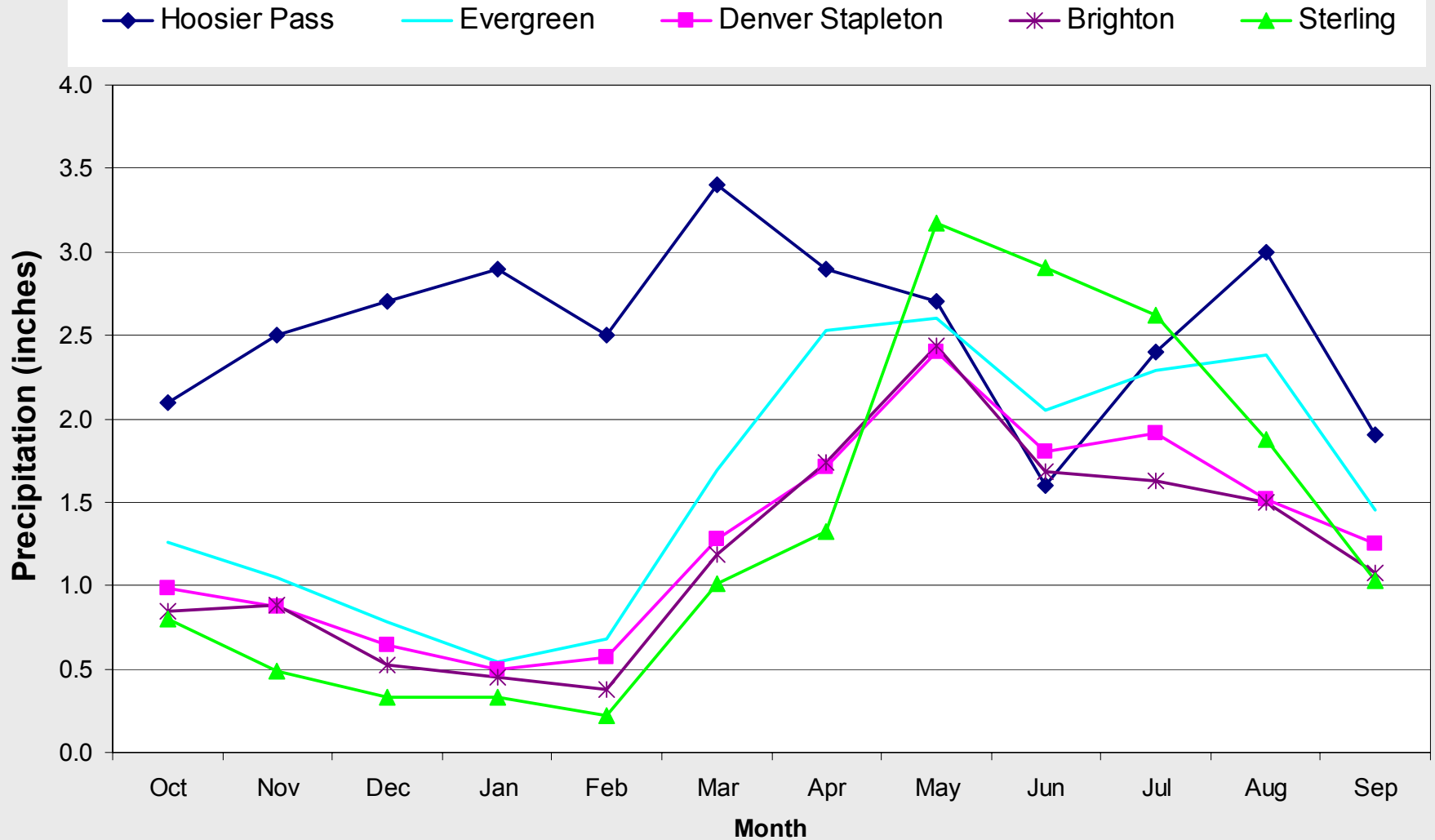


# Colorado Average Monthly Precipitation (1971-2000)

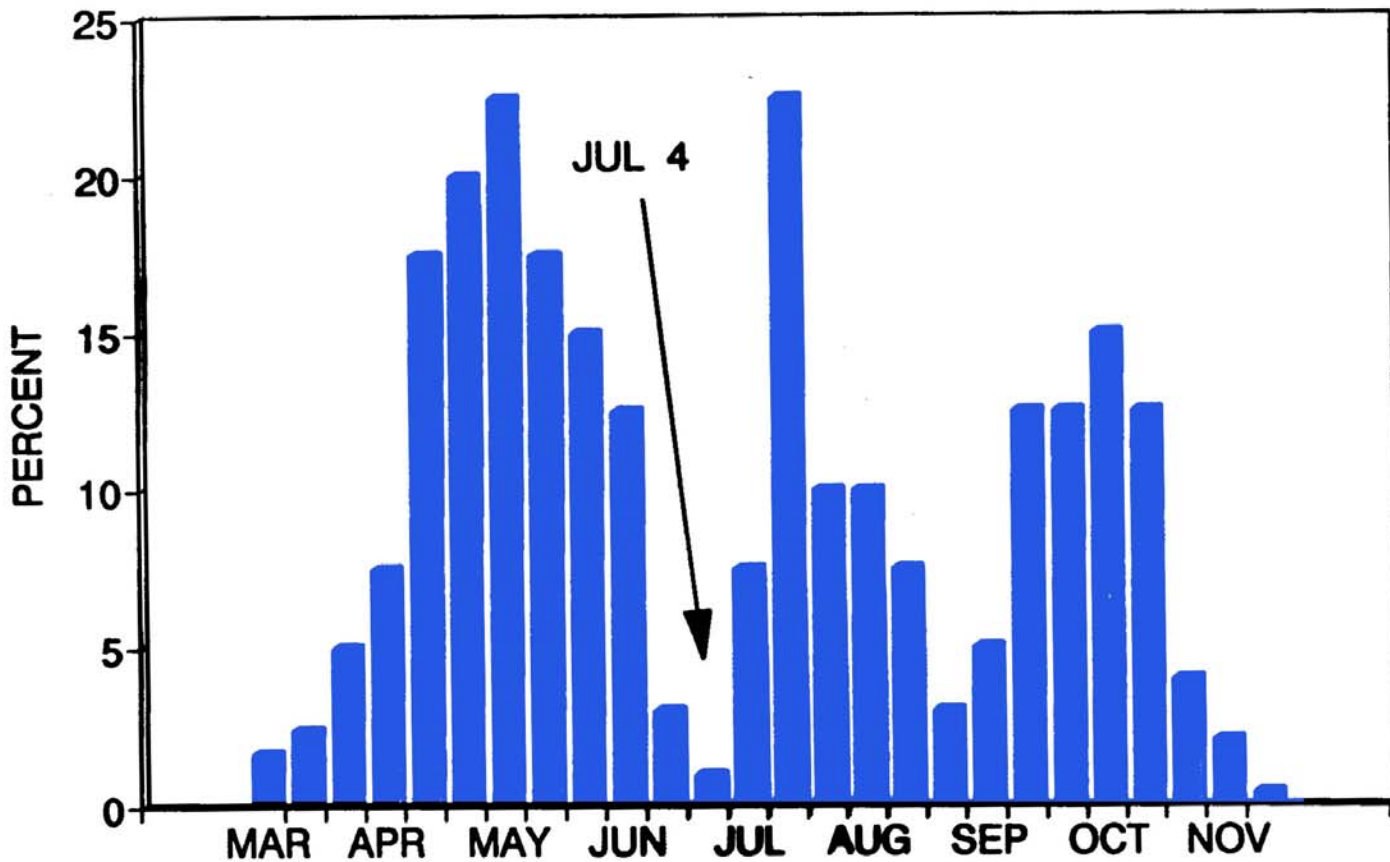
**Colorado Average Monthly Precipitation for 1971-2000**



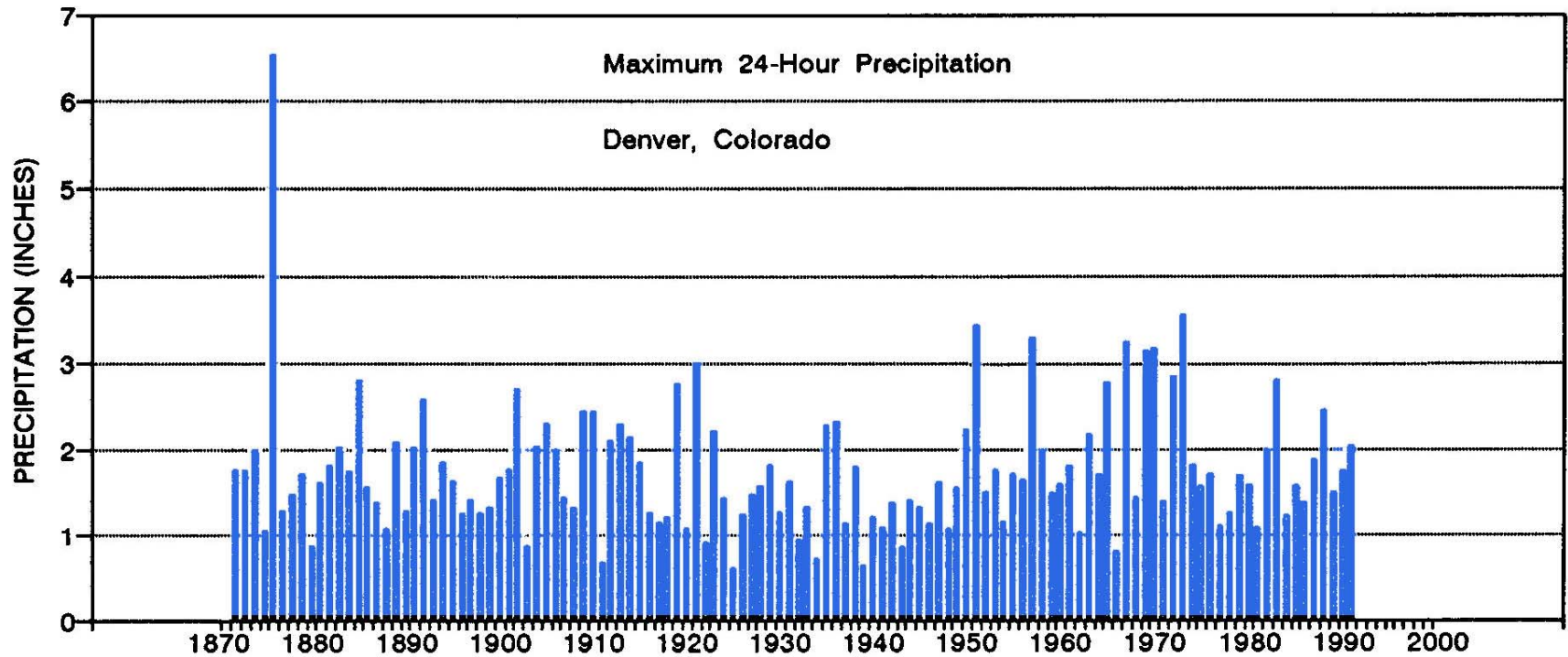
# Monthly Average Precipitation for Selected Sites in the South Platte Basin



**HEAVY RAIN PROBABILITIES  
> 2" IN 24 HOURS SOMEWHERE IN COLORADO  
DURING CONSECUTIVE 10-DAY PERIOD**

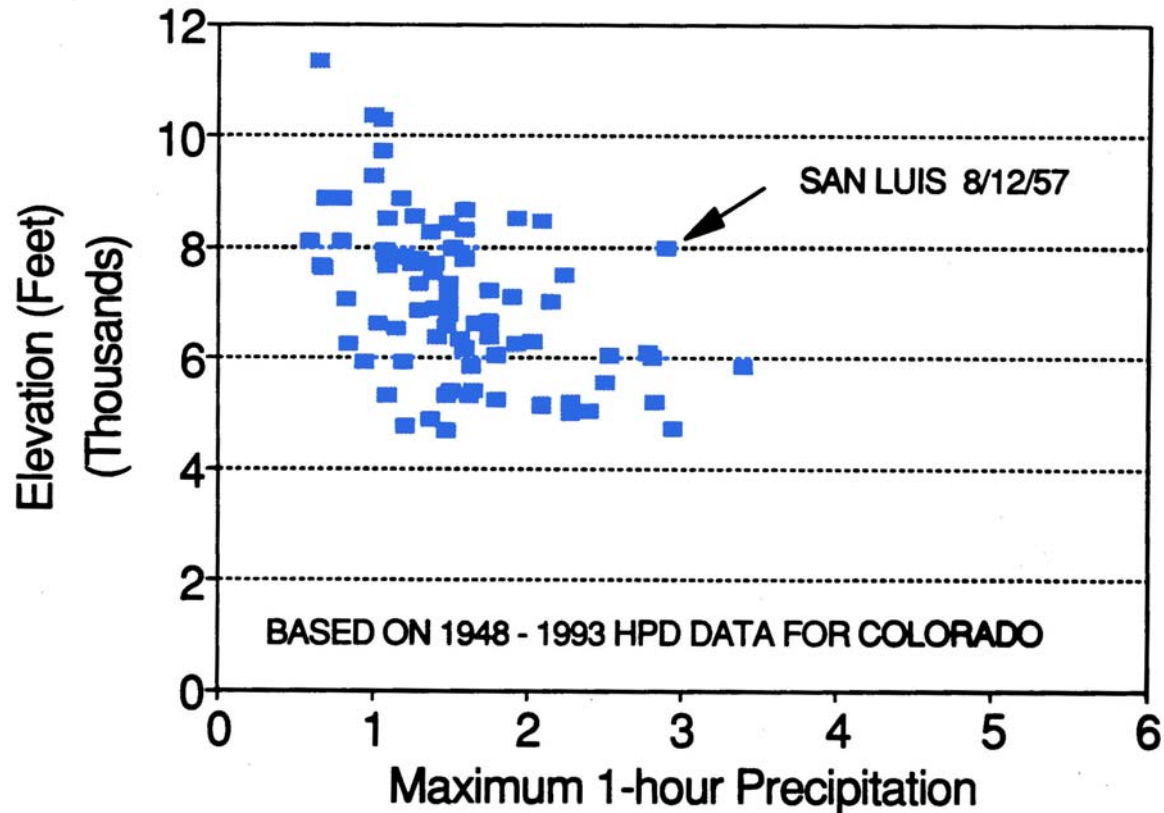


# Denver Maximum 1-day Precipitation History

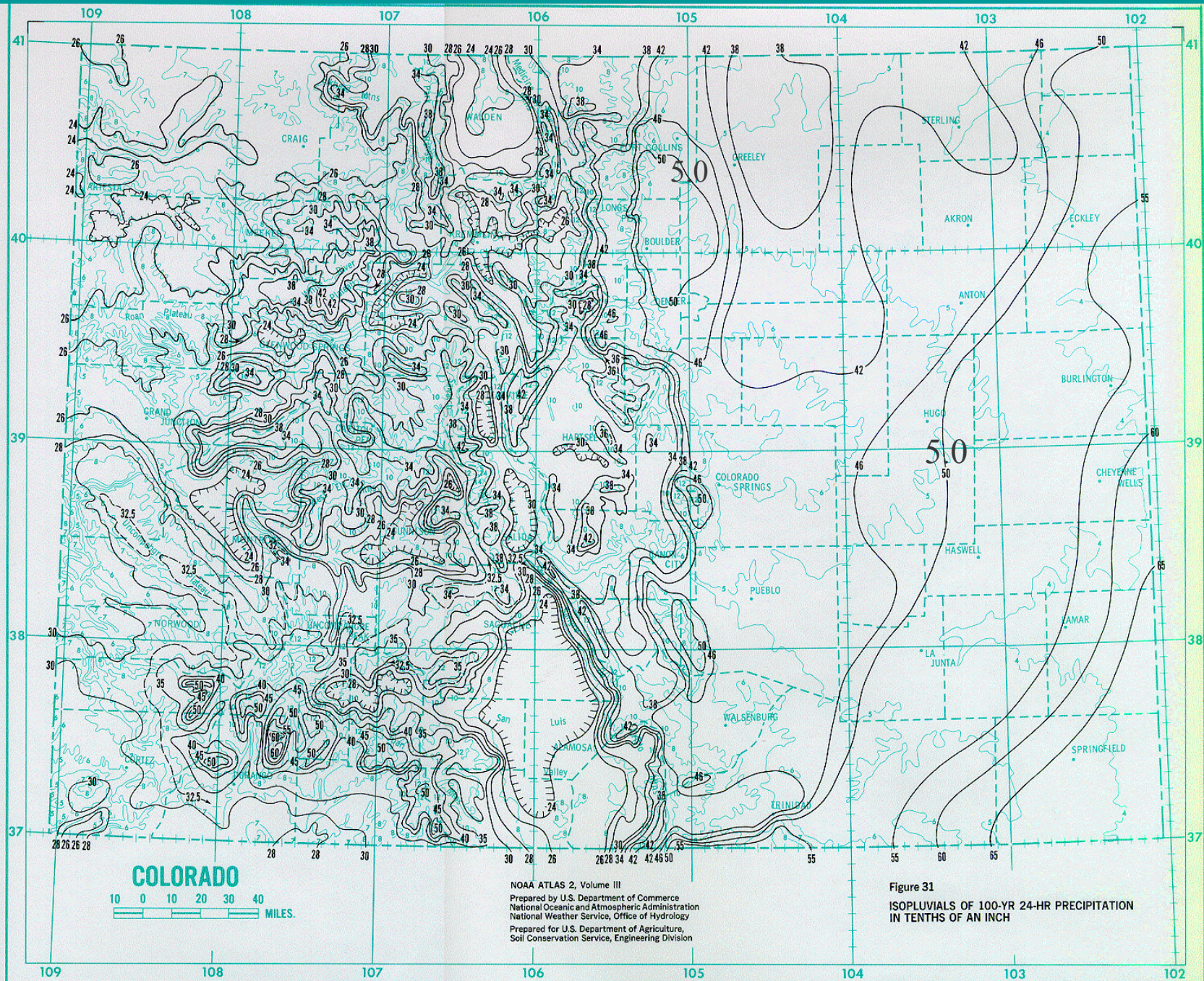


# Maximum 1-hour Precipitation vs. Elevation

## Max. 1-hour Precipitation vs. Elevation

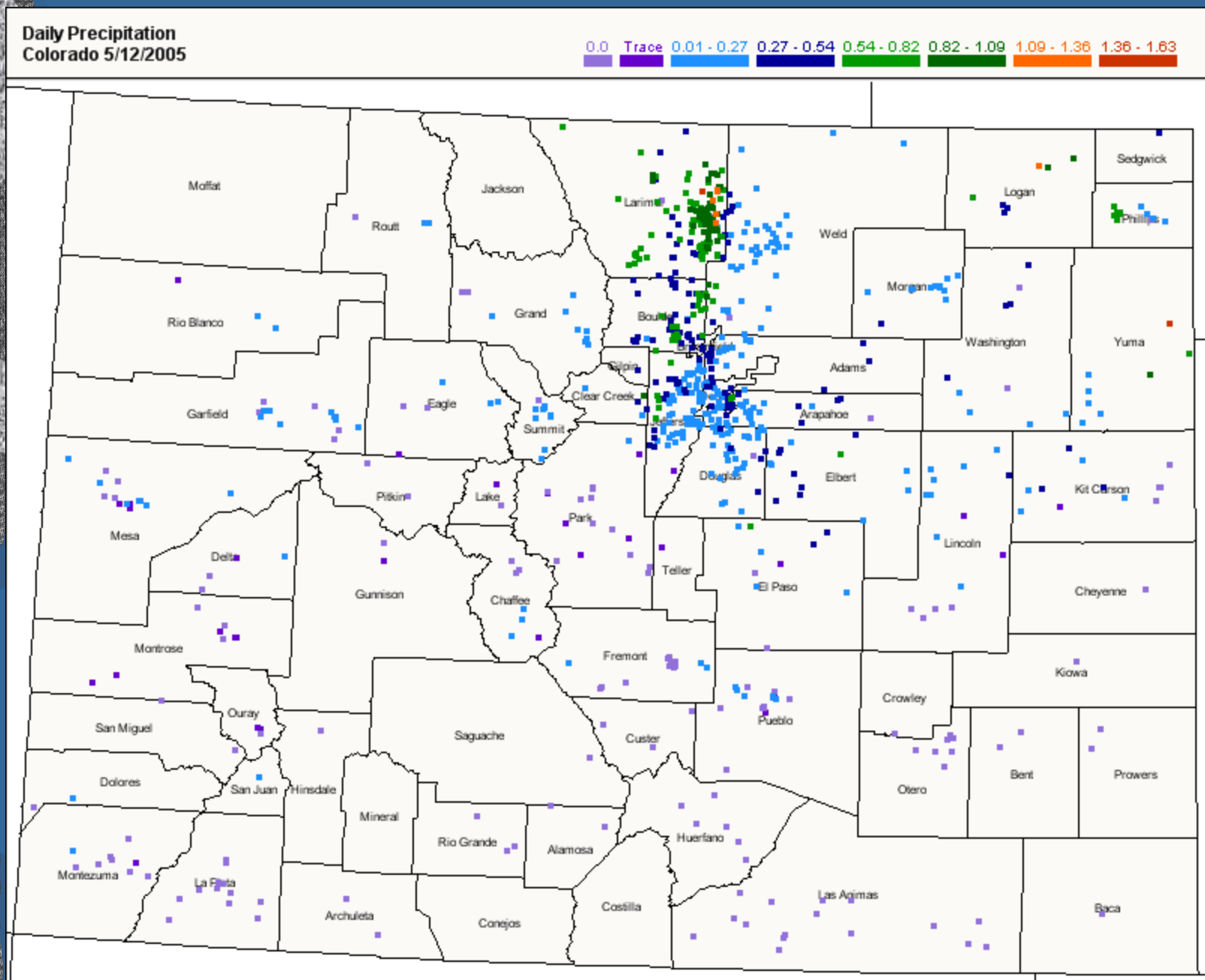


# 100-year 24-hour Precipitation, in tenths of an inch

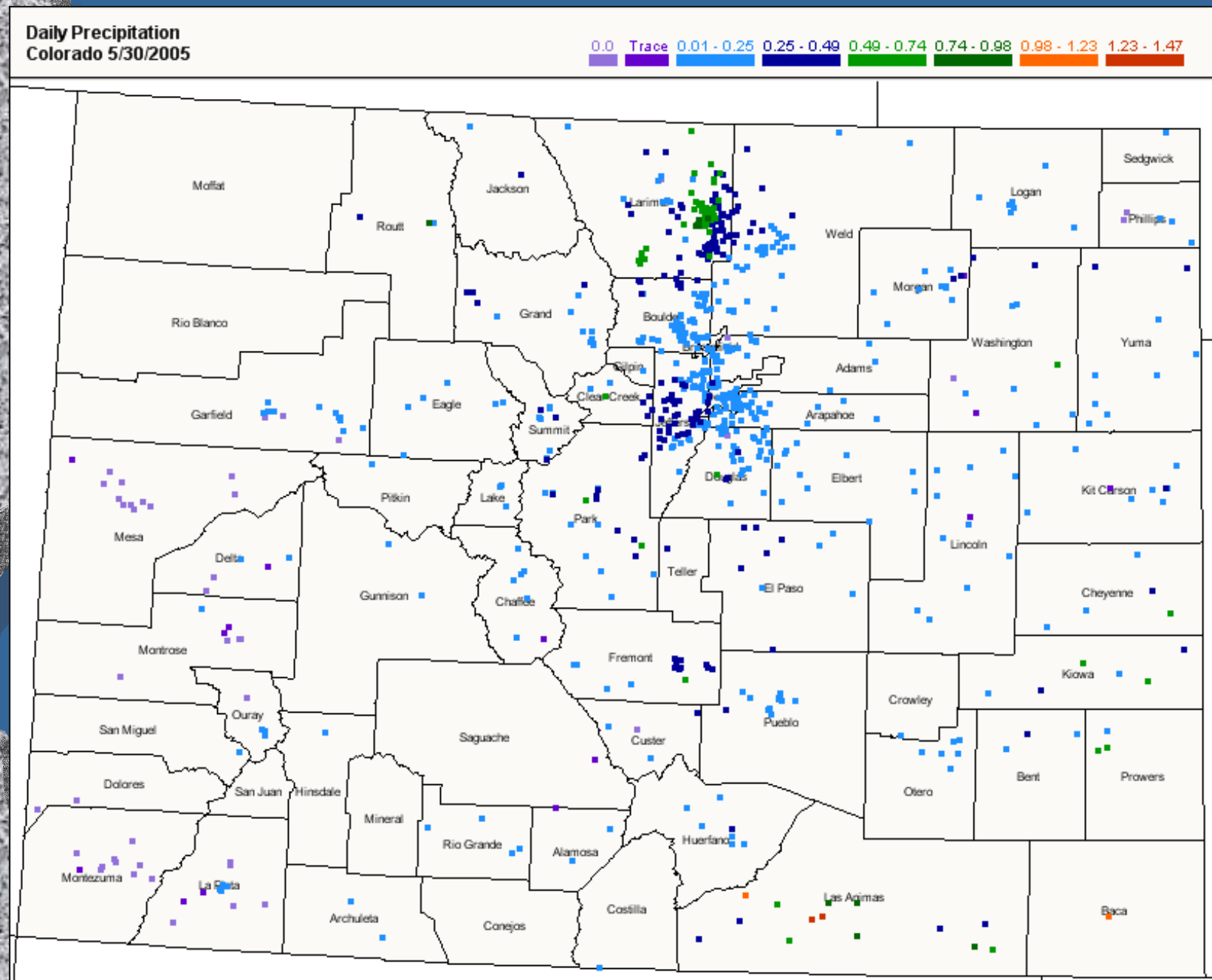




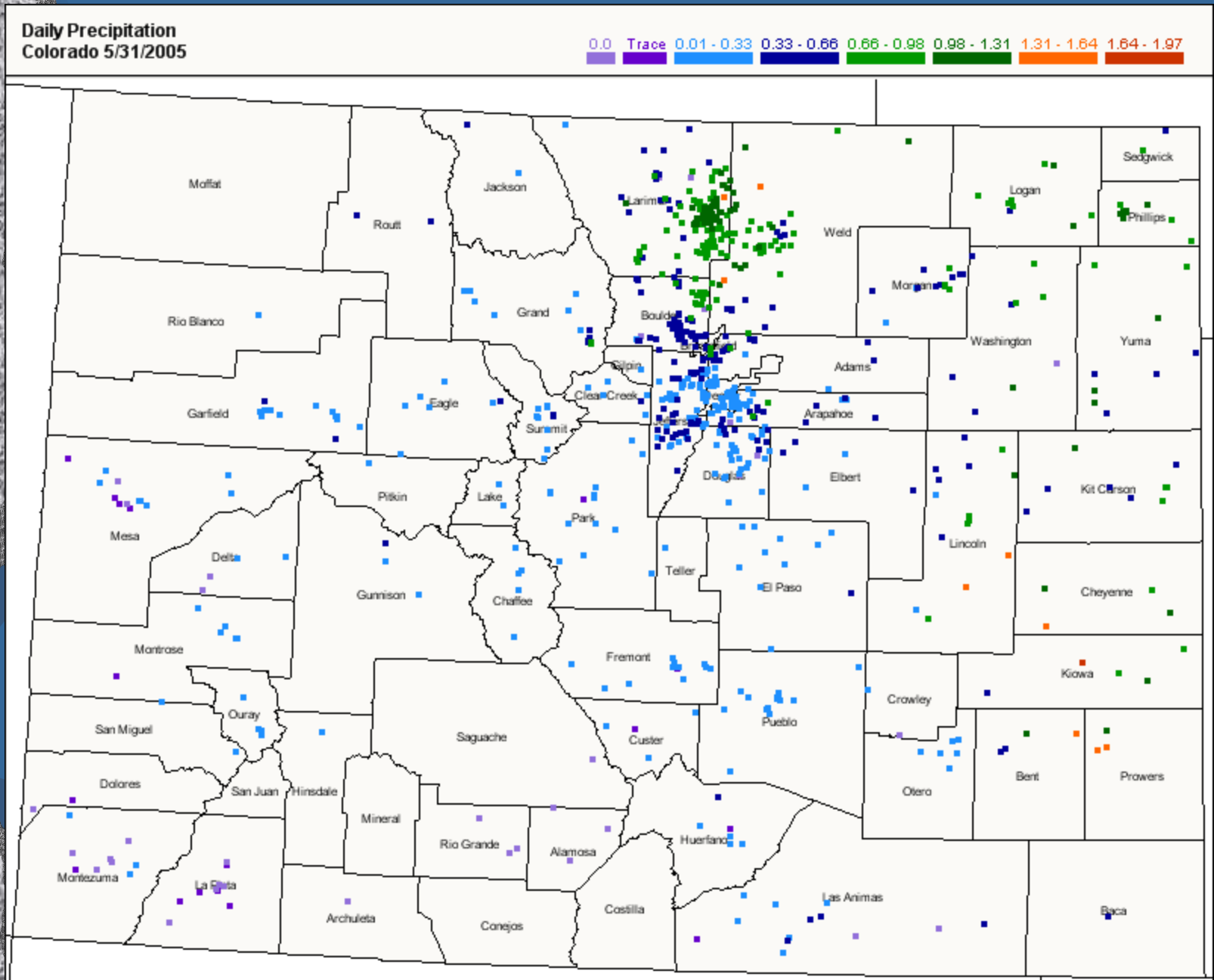
# CoCo RaHS Daily Precipitation Map for Colorado, May 12, 2005



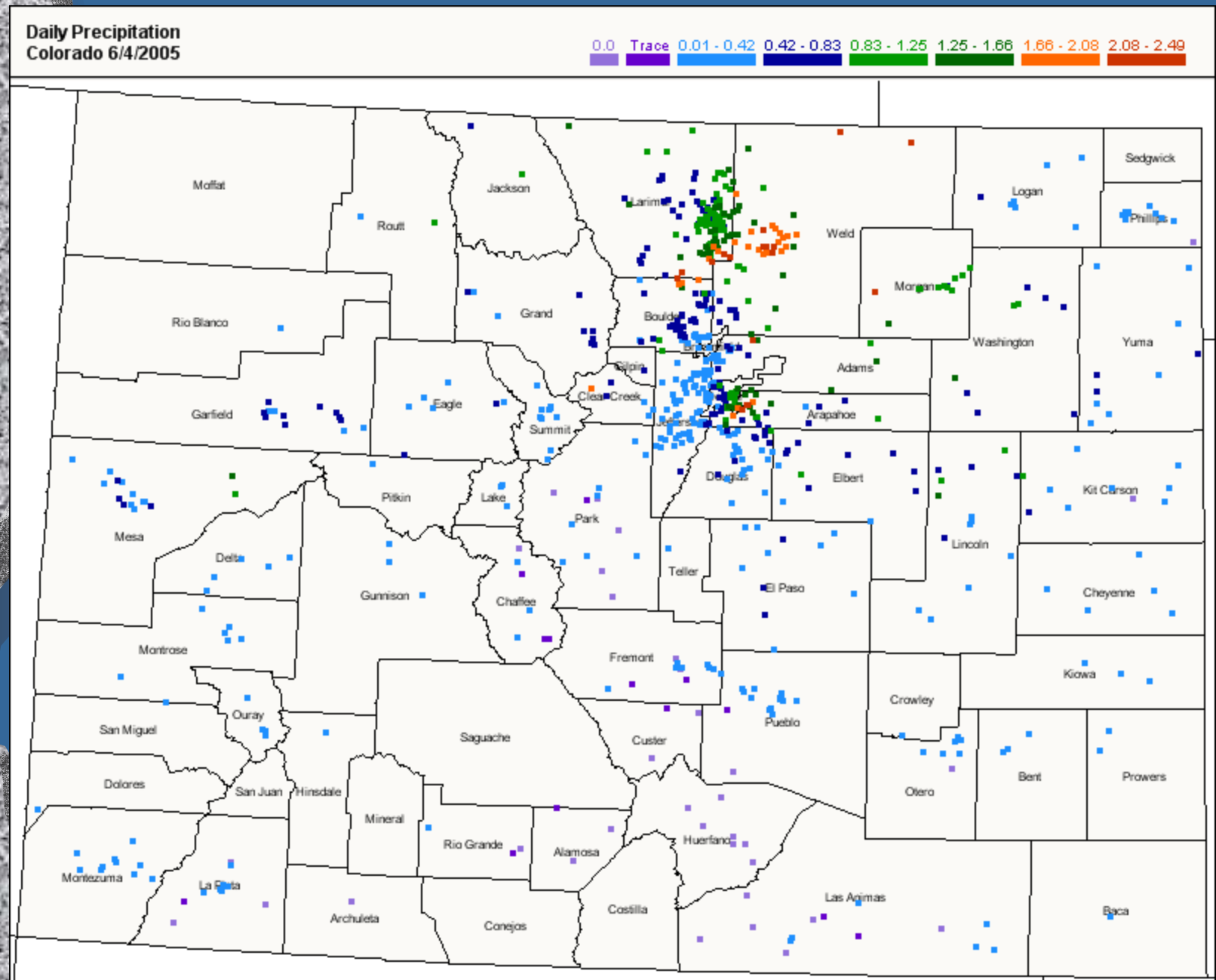
# CoCo RaHS Daily Precipitation Map for Colorado, May 30, 2005



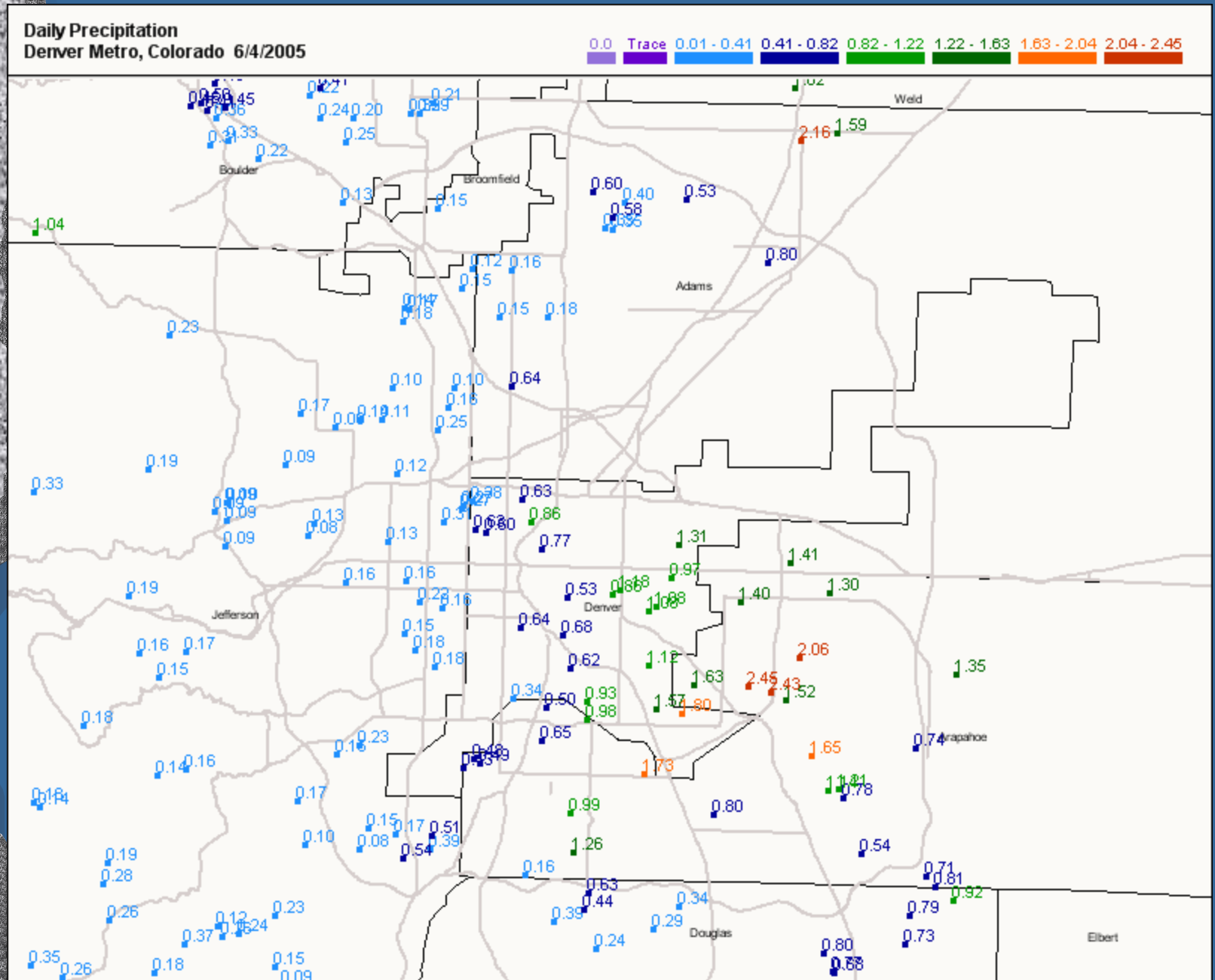
# CoCo RaHS Daily Precipitation Map for Colorado, May 31, 2005



# CoCo RaHS Daily Precipitation Map for Colorado, June 4, 2005



# CoCo RaHS Daily Precipitation Map for Denver Metro Area, June 4, 2005

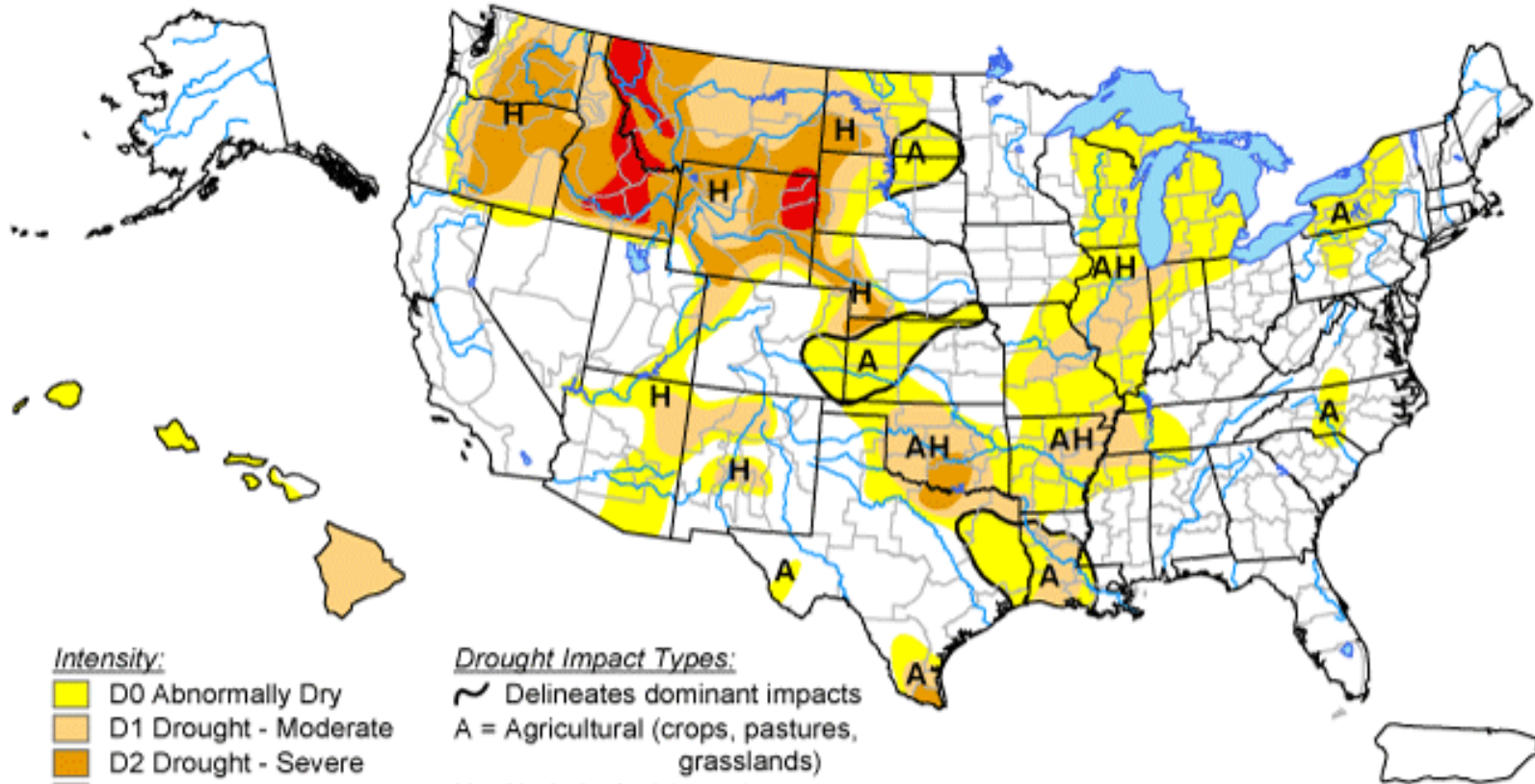


# Drought Monitor Map






## U.S. Drought Monitor

May 31, 2005


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.

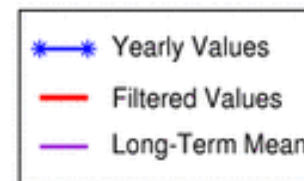
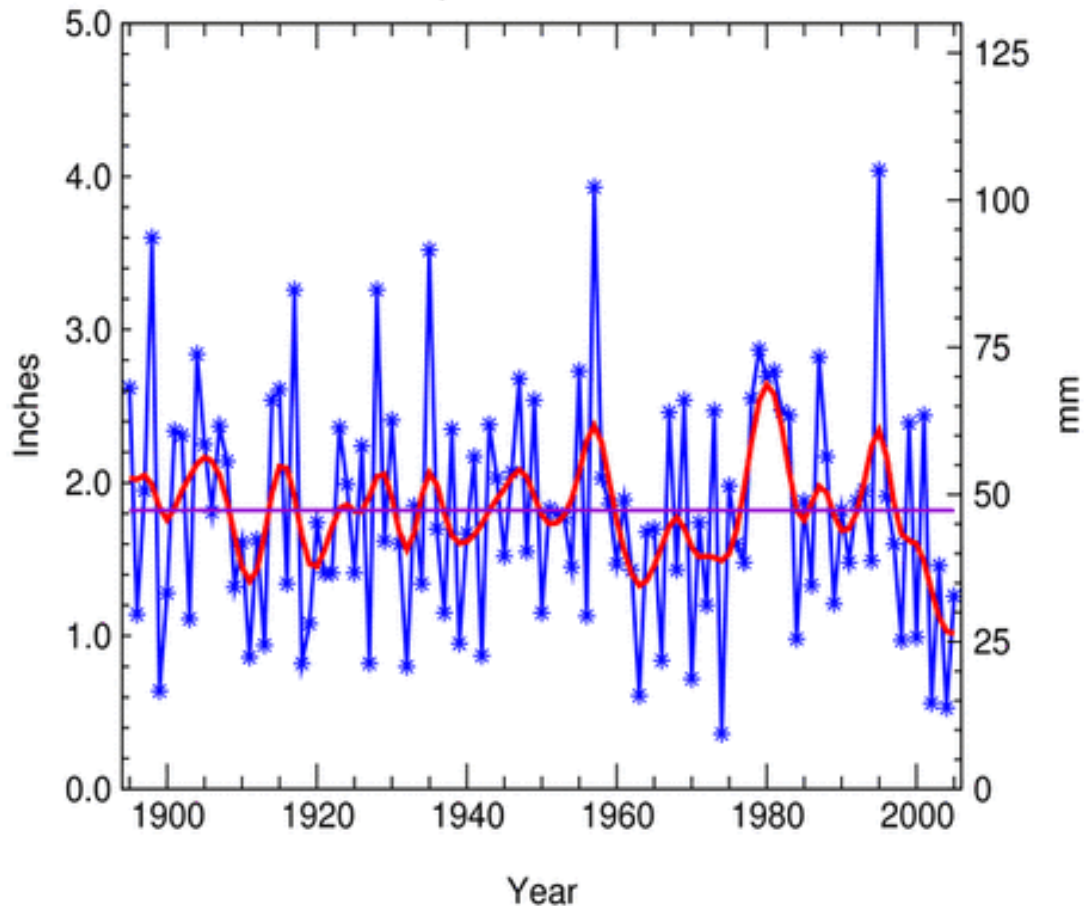


<http://drought.unl.edu/dm>

Released Thursday, June 2, 2005

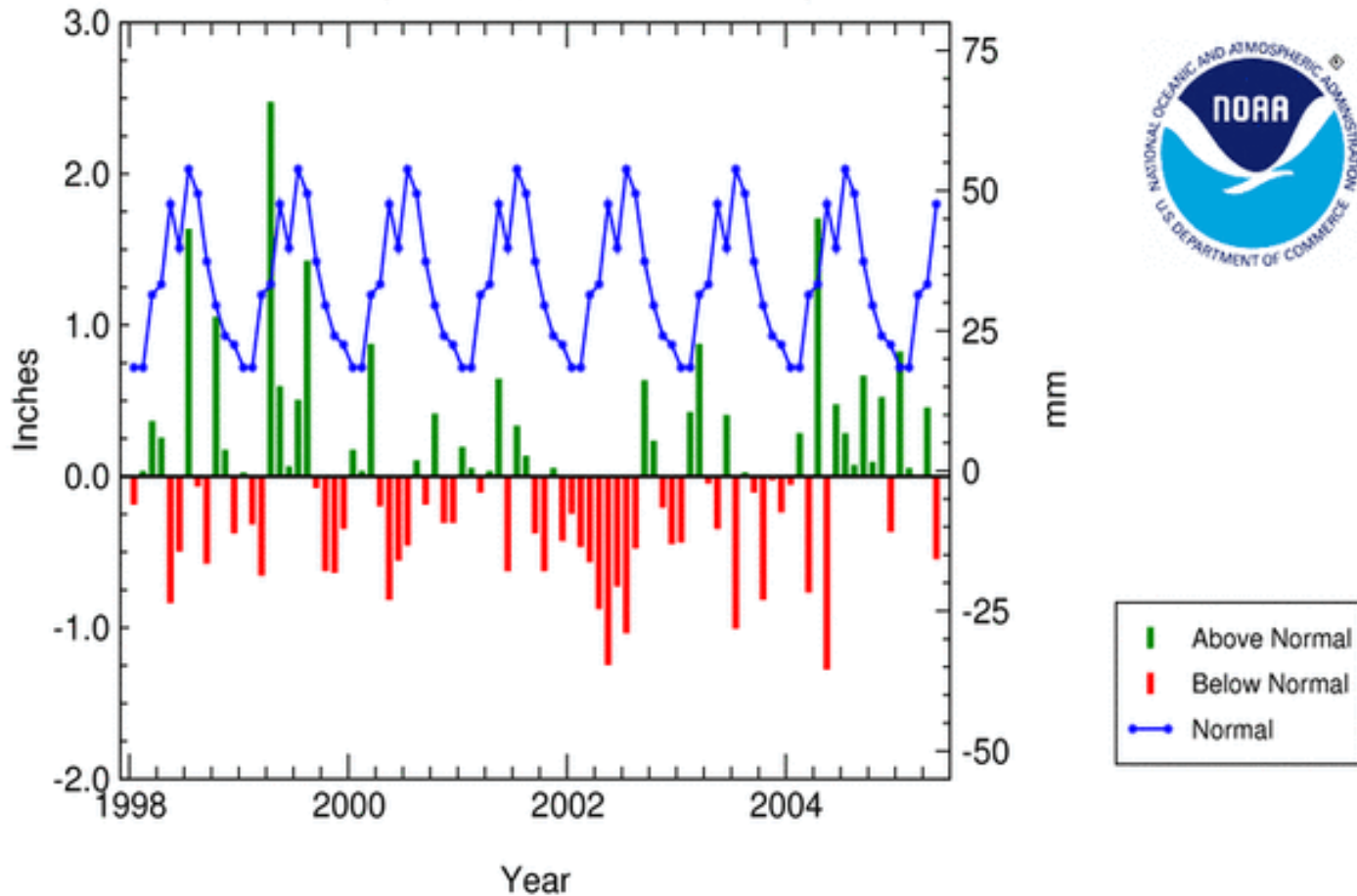
Author: Brad Rippey, U.S. Department of Agriculture

# Colorado Statewide Precipitation May, 1895 - 2005



National Climatic Data Center / NESDIS / NOAA

# Colorado Statewide Precipitation Normal & Departure, Jan 1998 - May 2005



National Climatic Data Center / NESDIS / NOAA

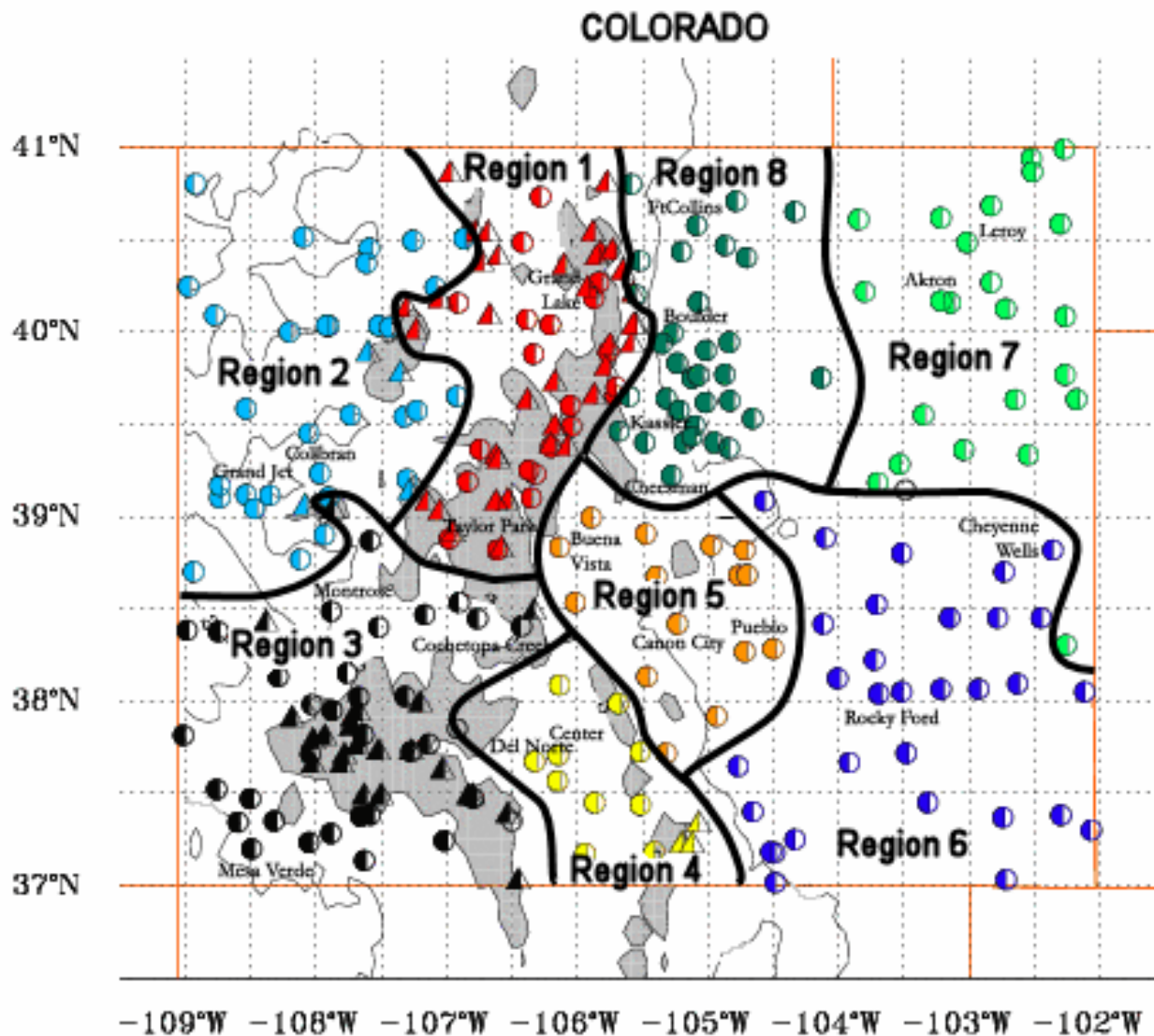


Statewide Precipitation Ranks  
for Colorado , 2004-2005

Period	Rank
May	<u>26<sup>th</sup> driest</u>
Apr-May	<u>39<sup>th</sup> driest</u>
Mar-May	<u>45<sup>th</sup> driest</u>
Feb-May	<u>41<sup>st</sup> driest</u>
Jan-May	<u>45<sup>th</sup> wettest</u> ( <u>67<sup>th</sup> driest</u> )
Dec-May	<u>51<sup>st</sup> wettest</u> ( <u>60<sup>th</sup> driest</u> )
Nov-May	<u>37<sup>th</sup> wettest</u> ( <u>74<sup>th</sup> driest</u> )
Oct-May	<u>39<sup>th</sup> wettest</u> ( <u>72<sup>nd</sup> driest</u> )
Sep-May	<u>27<sup>th</sup> wettest</u> ( <u>84<sup>th</sup> driest</u> )
Aug-May	<u>31<sup>st</sup> wettest</u> ( <u>80<sup>th</sup> driest</u> )
Jul-May	<u>28<sup>th</sup> wettest</u> ( <u>83<sup>rd</sup> driest</u> )
Jun-May	<u>24<sup>th</sup> wettest</u> ( <u>86<sup>th</sup> driest</u> )

Colorado  
Precipitation  
Ranking  
1895-2005

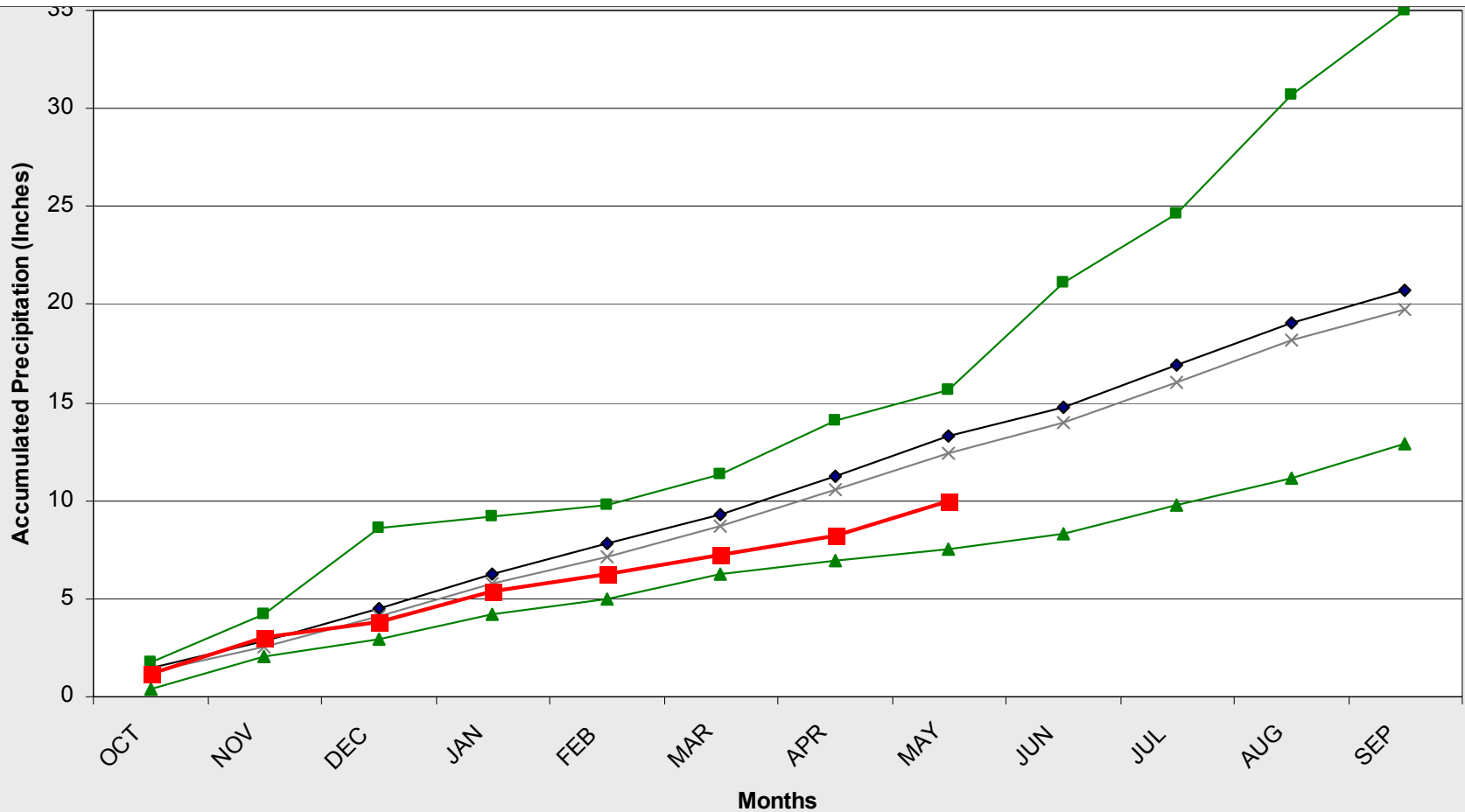
# Climate divisions defined by Dr. Klaus Wolter of NOAA's Climate Diagnostic Center in Boulder, CO



# Division 1 – Grand Lake 1NW

## Grand Lake 1 NW 2005 Water Year

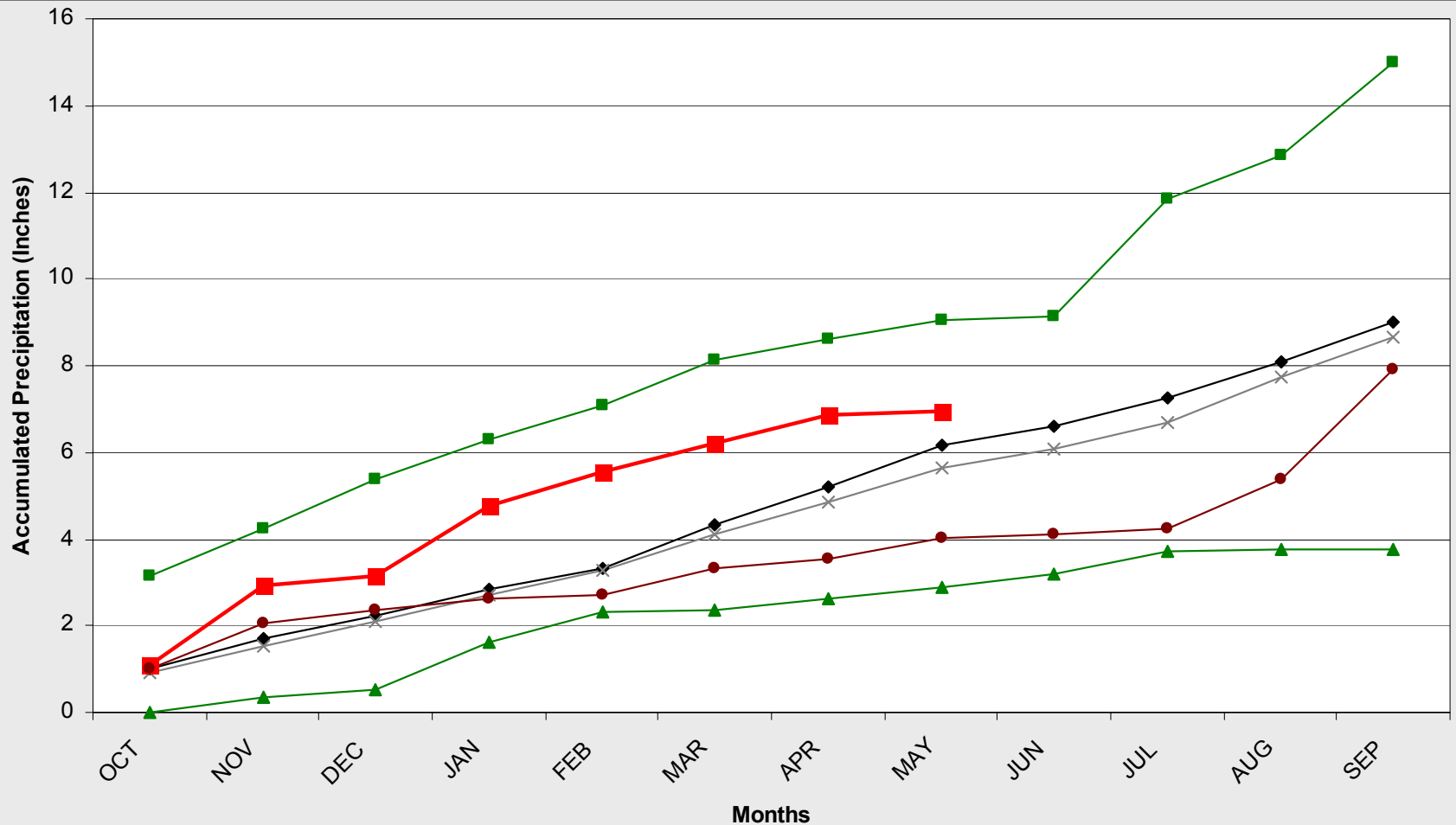
- ◆ 30 Year Averages-1971-2000
- Max Year - 1984
- ▲ Min Year - 2002
- × Period of Record Average - 1941 - 2002
- 2005 Water Year Accumulated



# Division 2 – Grand Junction

## Grand Junction WSFO 2005 Water Year

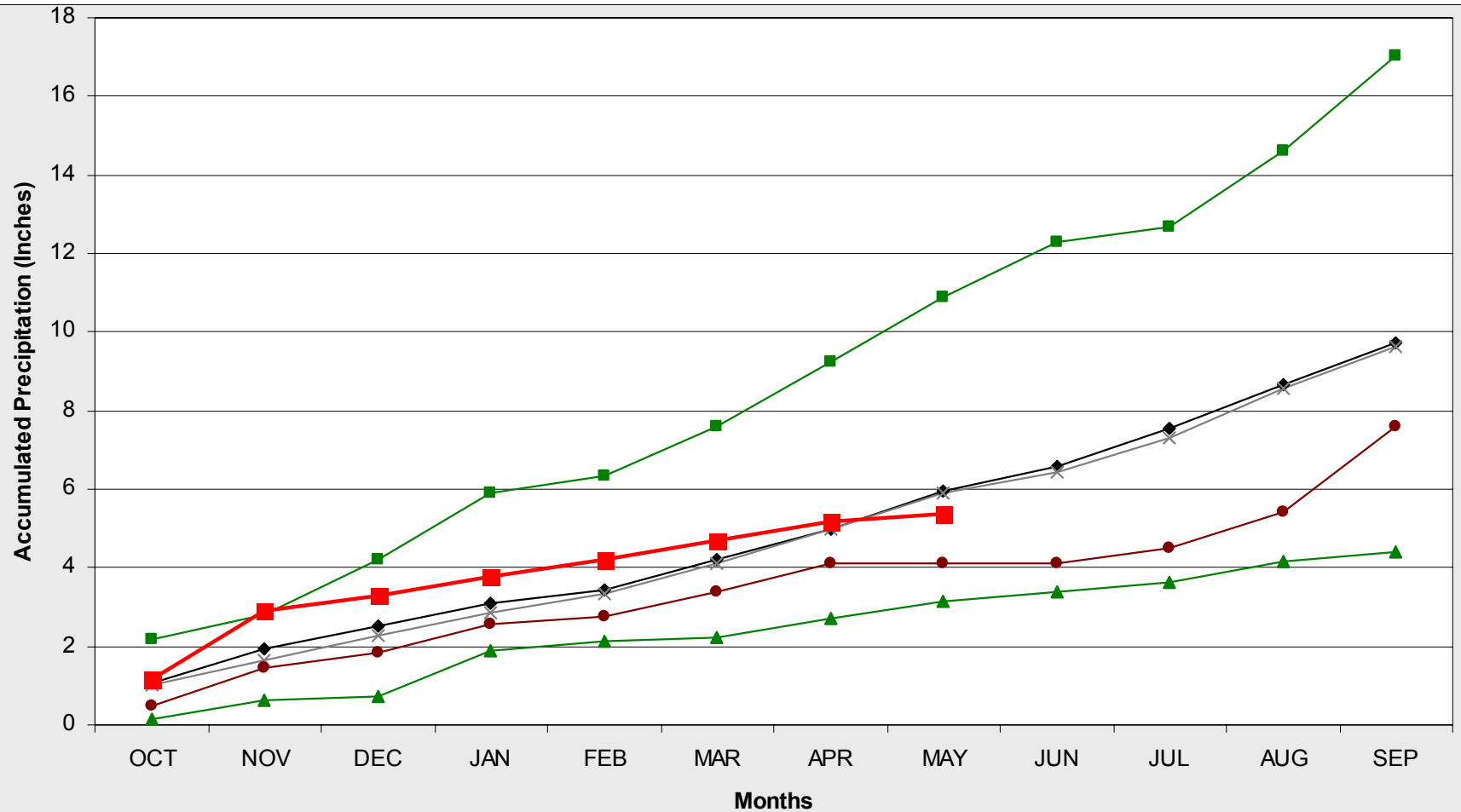
◆ 30 Year Averages-1971-2000      ■ Max Year - 1929      ▲ Min Year - 1956  
× Period of Record Average - 1893- 2002      ■ 2005 Water Year Accumulated      ● 2002 Water Year Accumulated



# Division 3 – Montrose

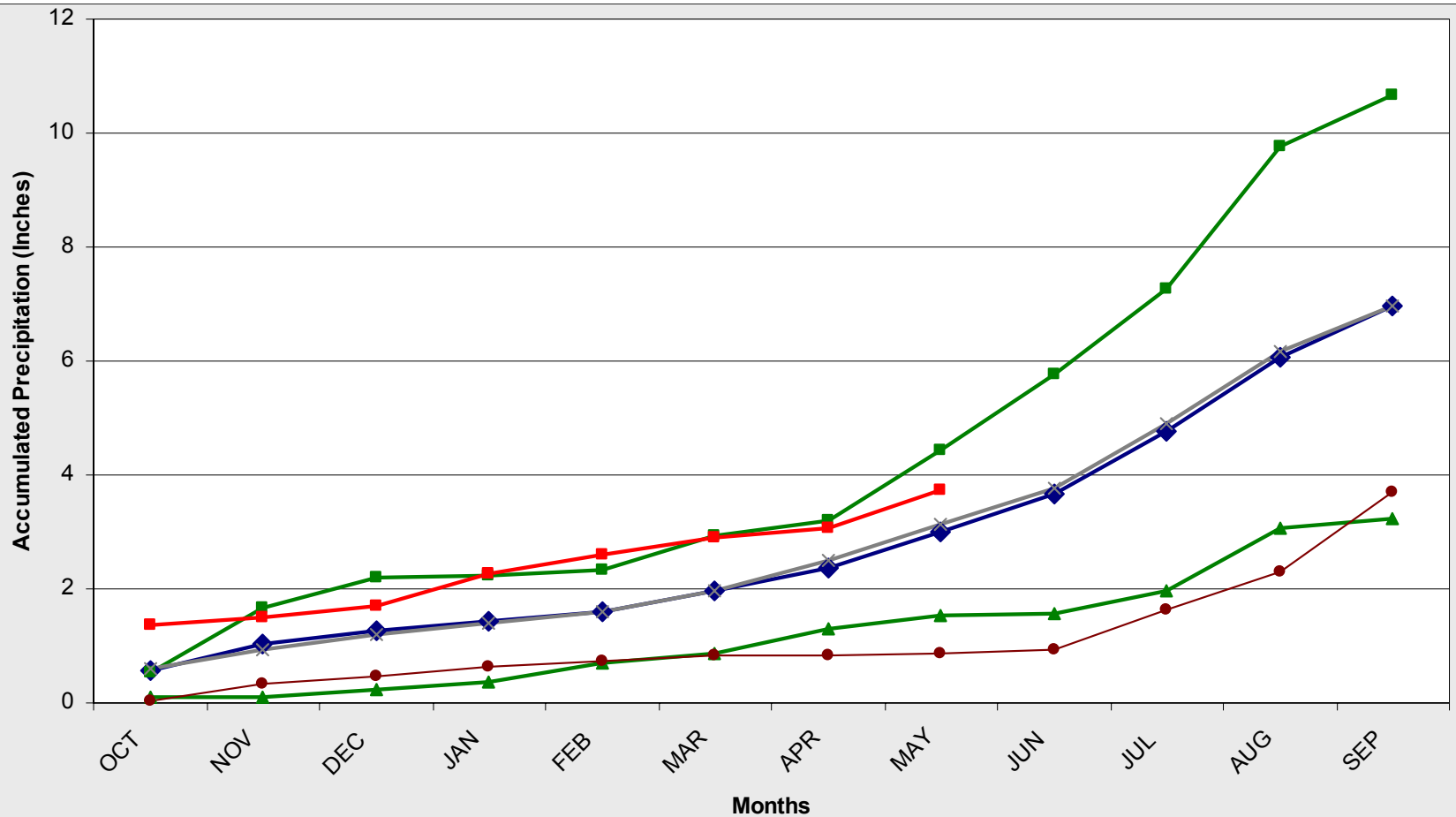
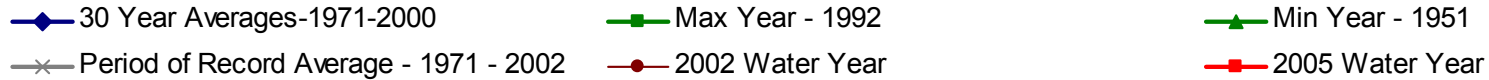
## Montrose #2 2005 Water Year

◆ 30 Year Averages-1971-2000      ■ Max Year - 1941      ▲ Min Year - 1958  
× Period of Record Average - 1893- 2002      ■ 2005 Water Year Accumulated      ● 2002 Water Year Accumulated



# Division 4 – Center

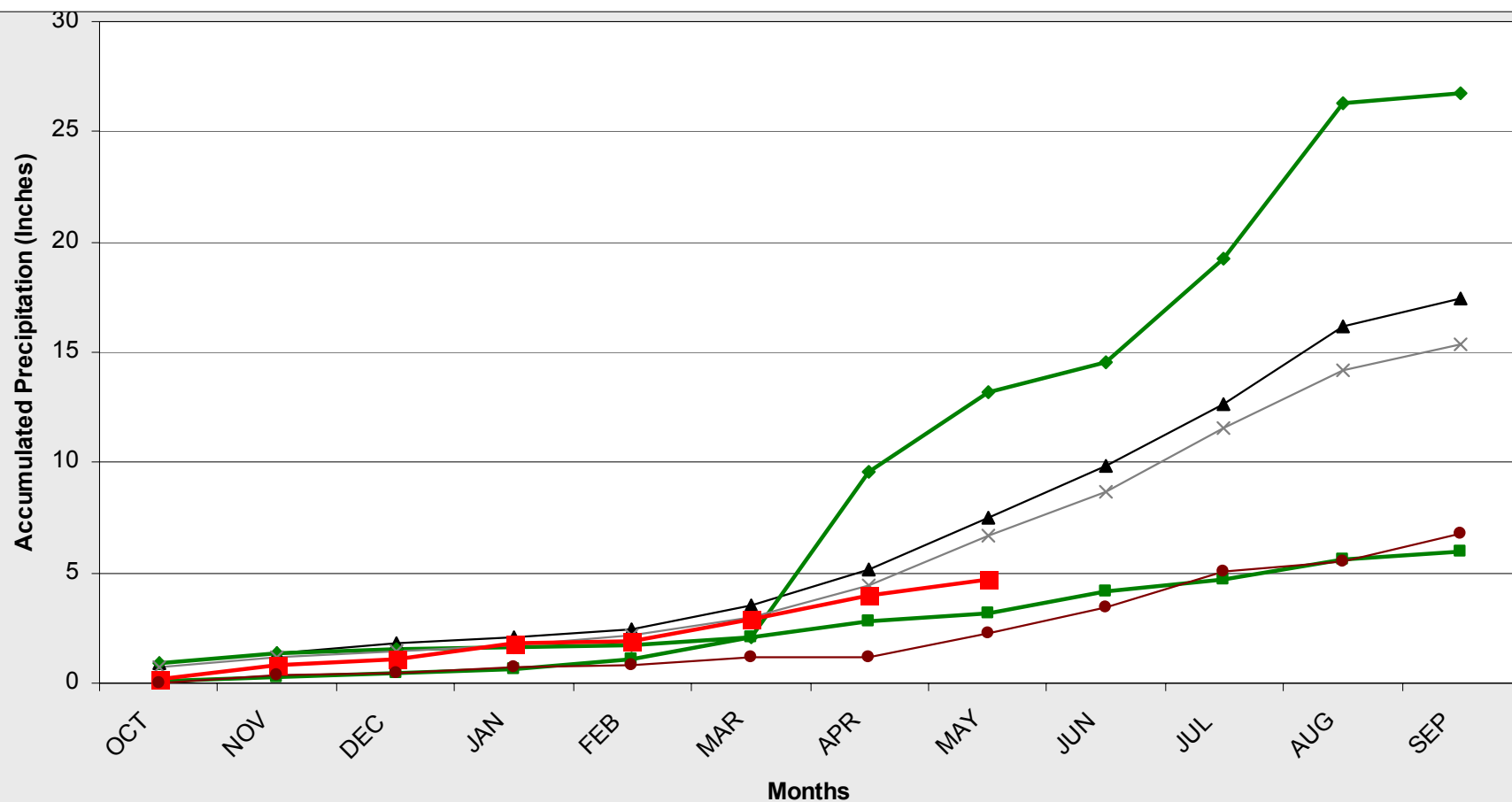
## Center 4SSW 2005 Water Year



# Division 5 – Colorado Springs

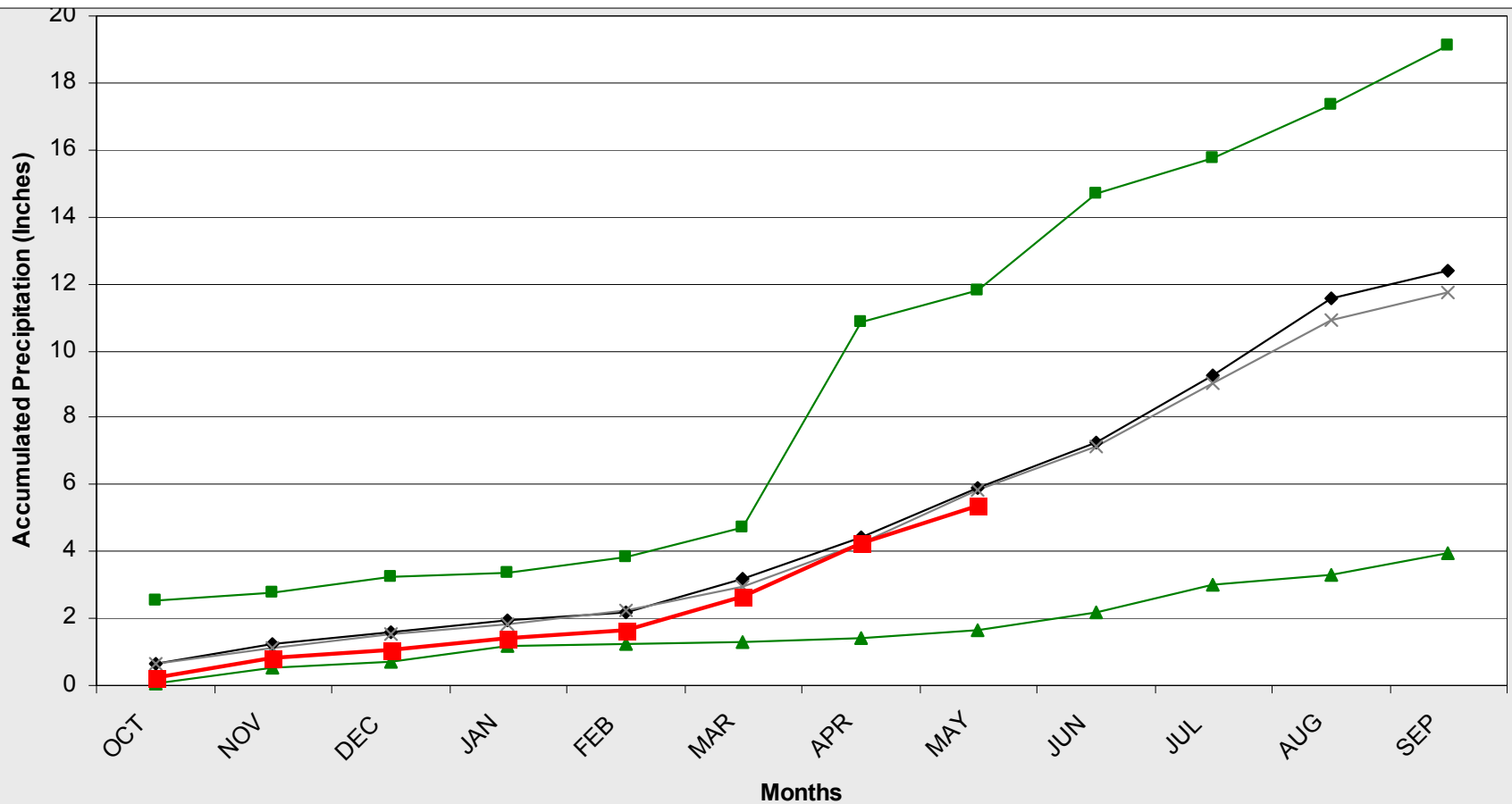
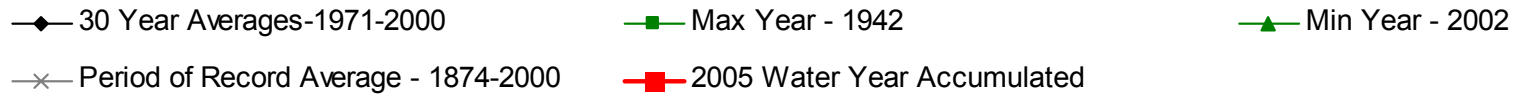
## Colorado Springs 2005 Water Year

- ▲ 30 Year Averages-1971-2000
- ◆ Max Year - 1999
- Min Year - 1939
- × Period of Record Average - 1893-2002
- 2005 Water Year Accumulated
- 2002 Water Year Accumulated



# Division 5 – Pueblo

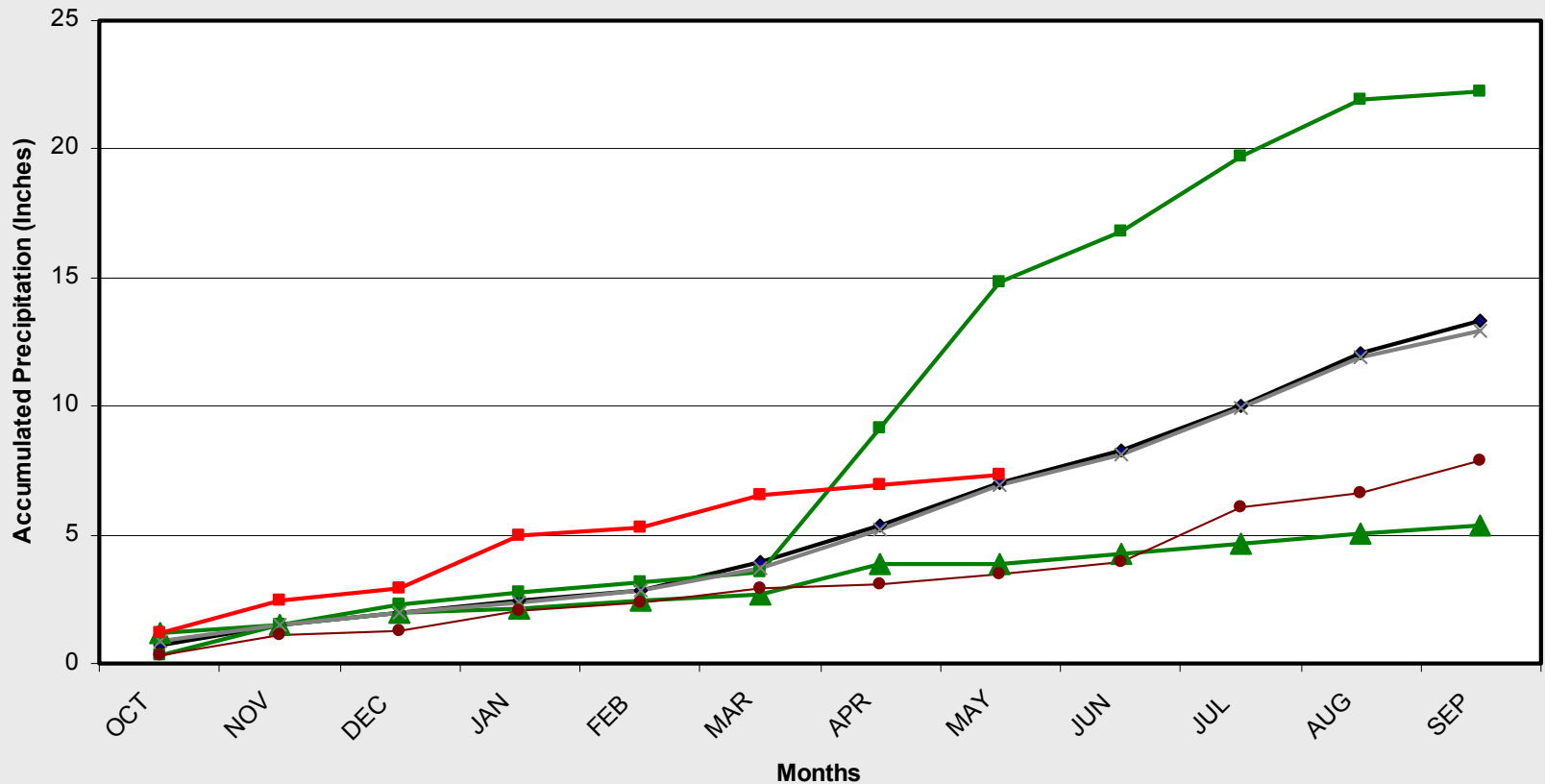
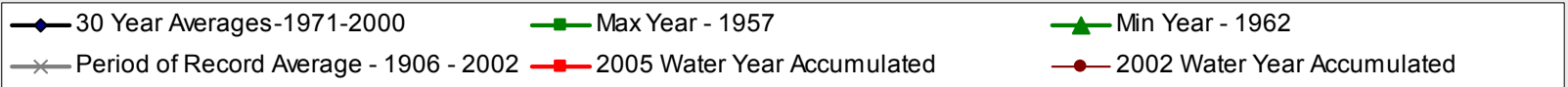
## Pueblo WSO 2005 Water Year





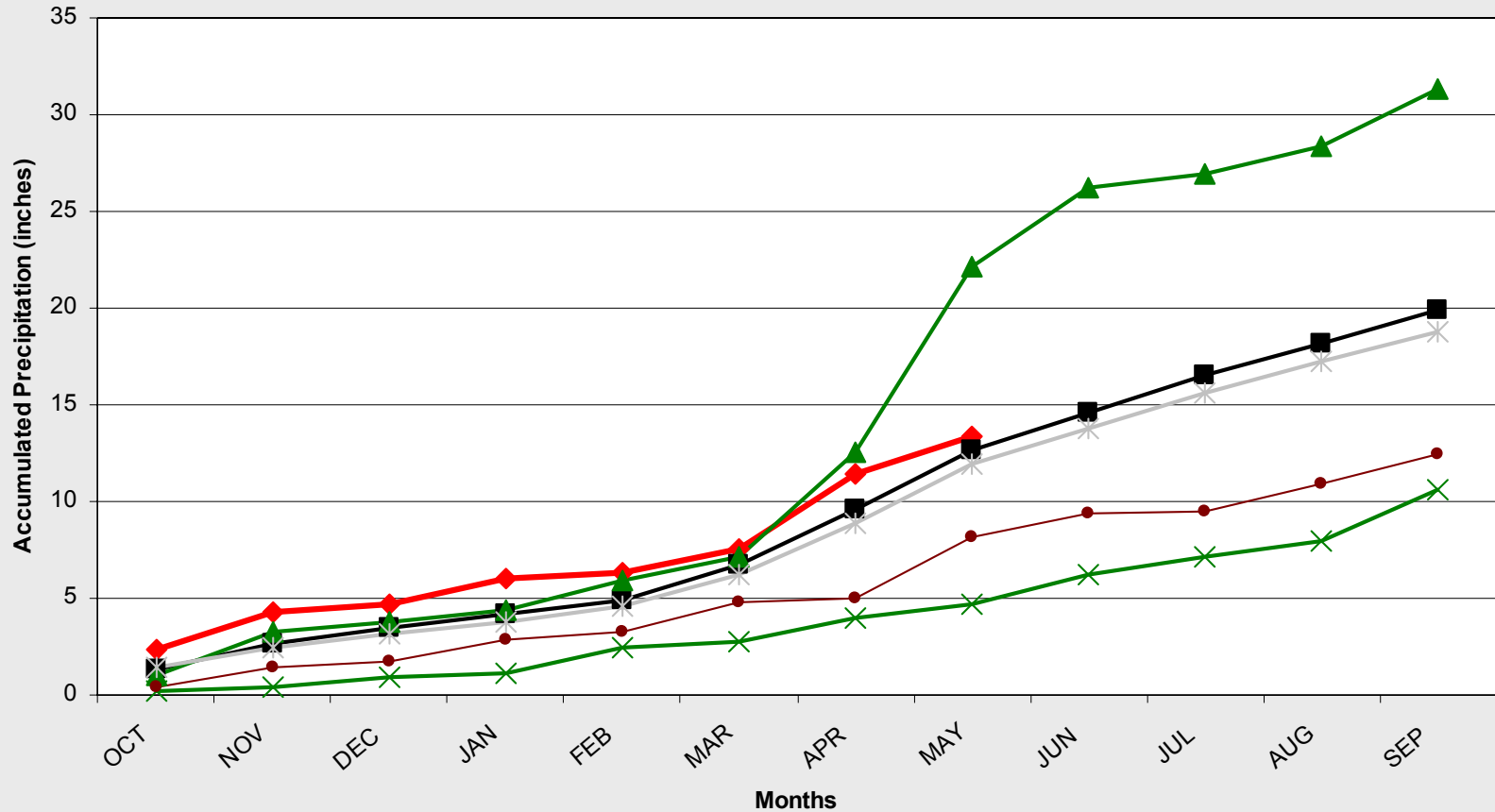
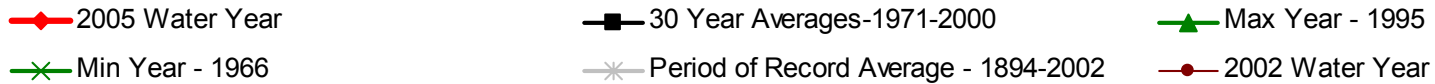
# Division 5 – Canon City

## Canon City 2005 Water Year



# Division 8 – Boulder

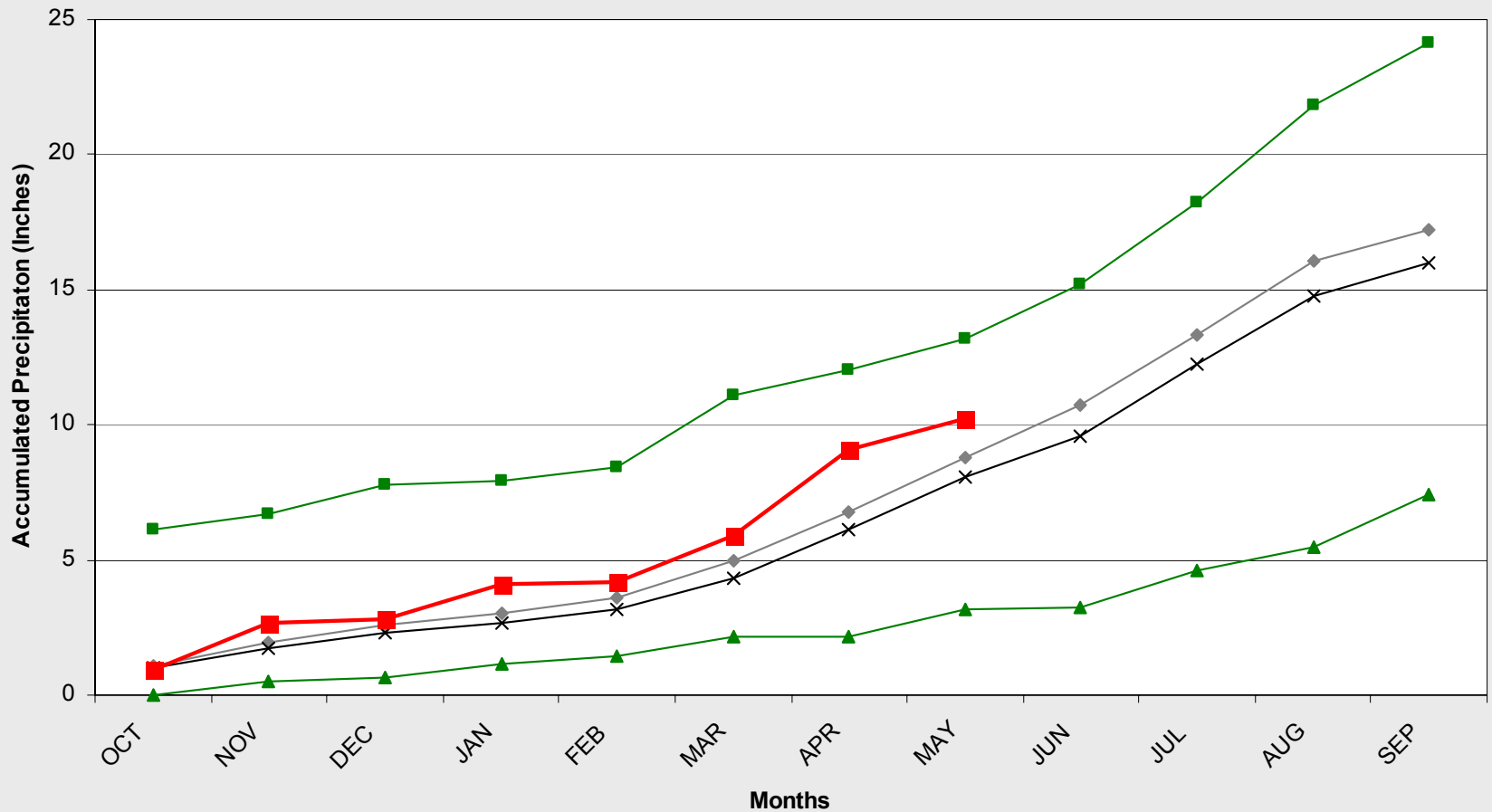
## Boulder 2005 Water Year



# Division 8 – Cheesman

## Cheesman 2005 Water Year

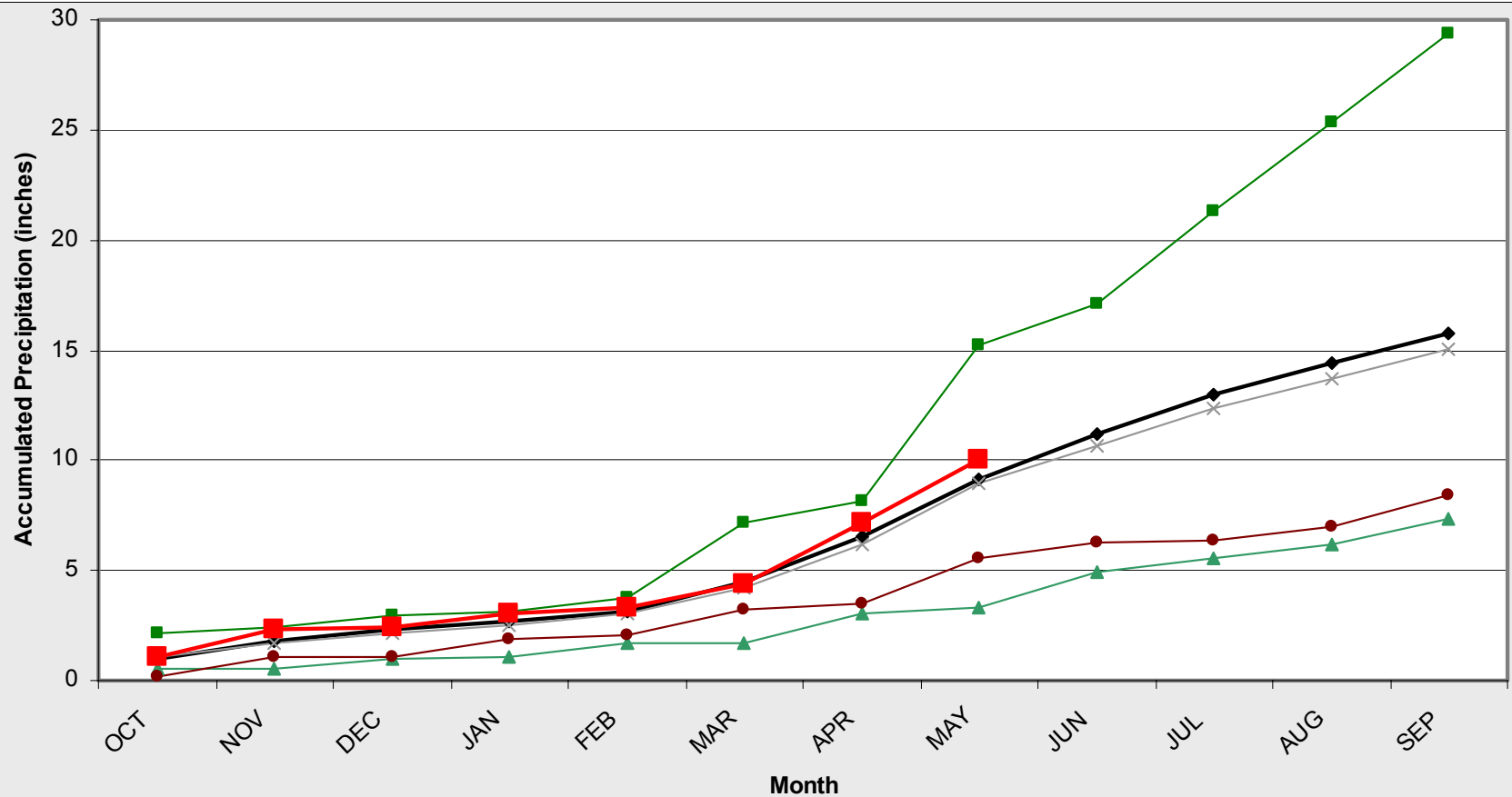
◆ 30 Year Averages-1971-2000      ■ Max Year - 1970      ▲ Min Year - 2002  
× Period of Record Average - 1904 - 2002      ■ 2005 Water Year



# Division 8 – Fort Collins

## Fort Collins 2005 Water Year

◆ 30 Year Averages-1971-2000      ■ Max Year - 1961      ▲ Min Year - 1966  
× Period of Record Average - 1890 - 2002      ■ 2005 Water Year      ● 2002 WY



# 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”

