Drought Update

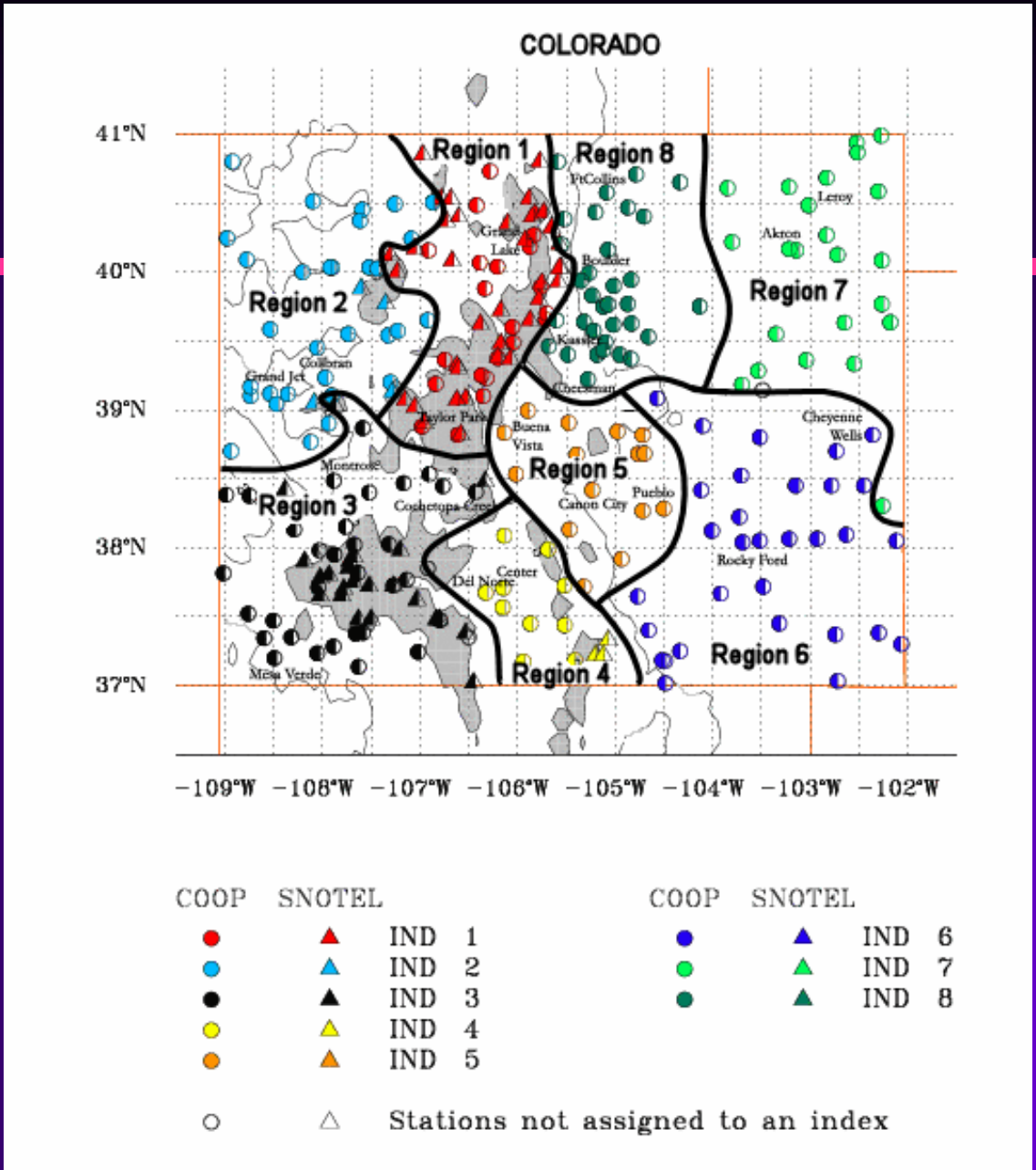
June 15, 2004 WATF meeting

Nolan J. Doesken
Colorado Climate Center

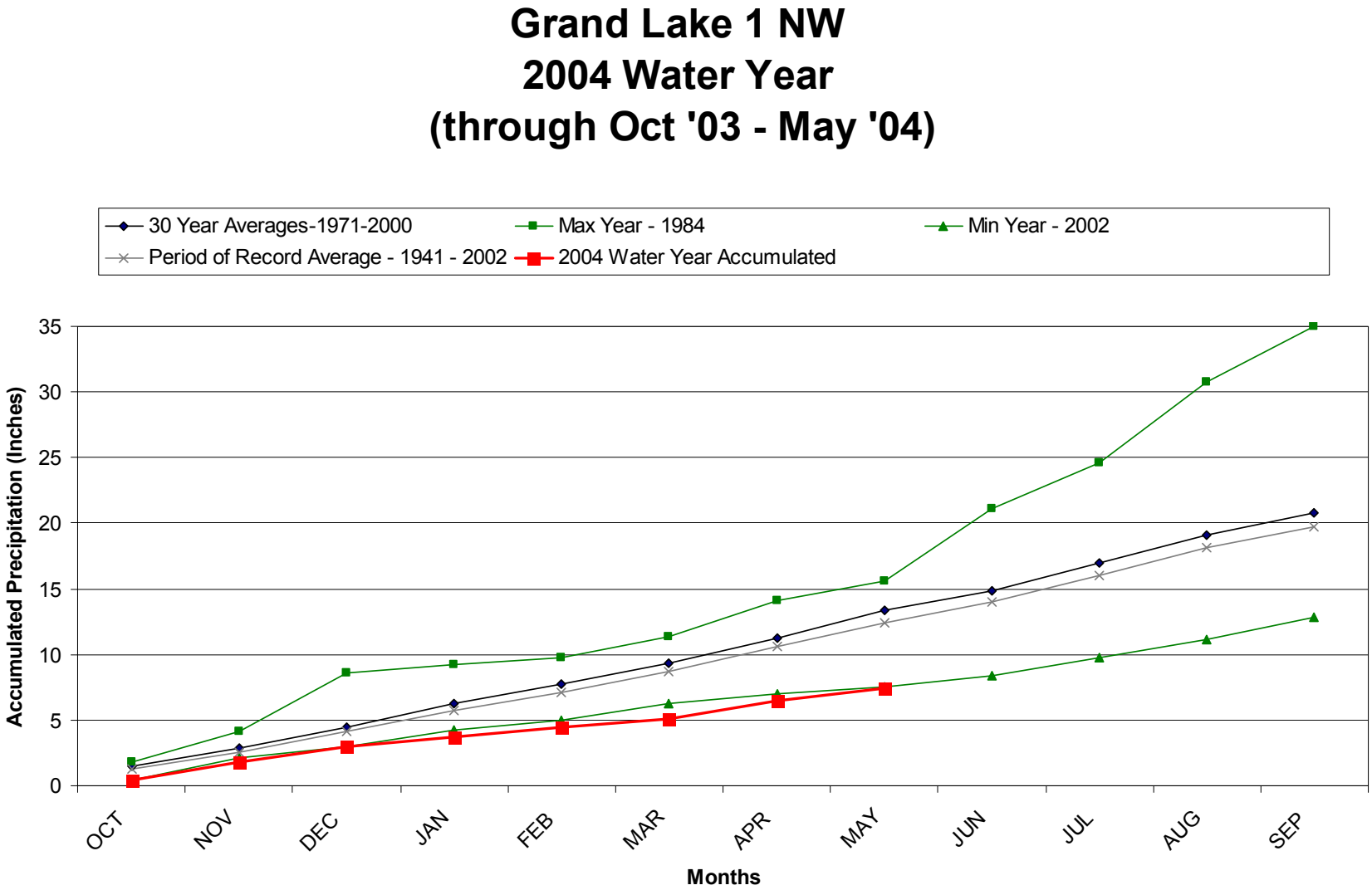
(presented at the WATF meeting, DOW Headquarters, Denver)
Prepared by Odie Bliss

http://ccc.atmos.colostate.edu

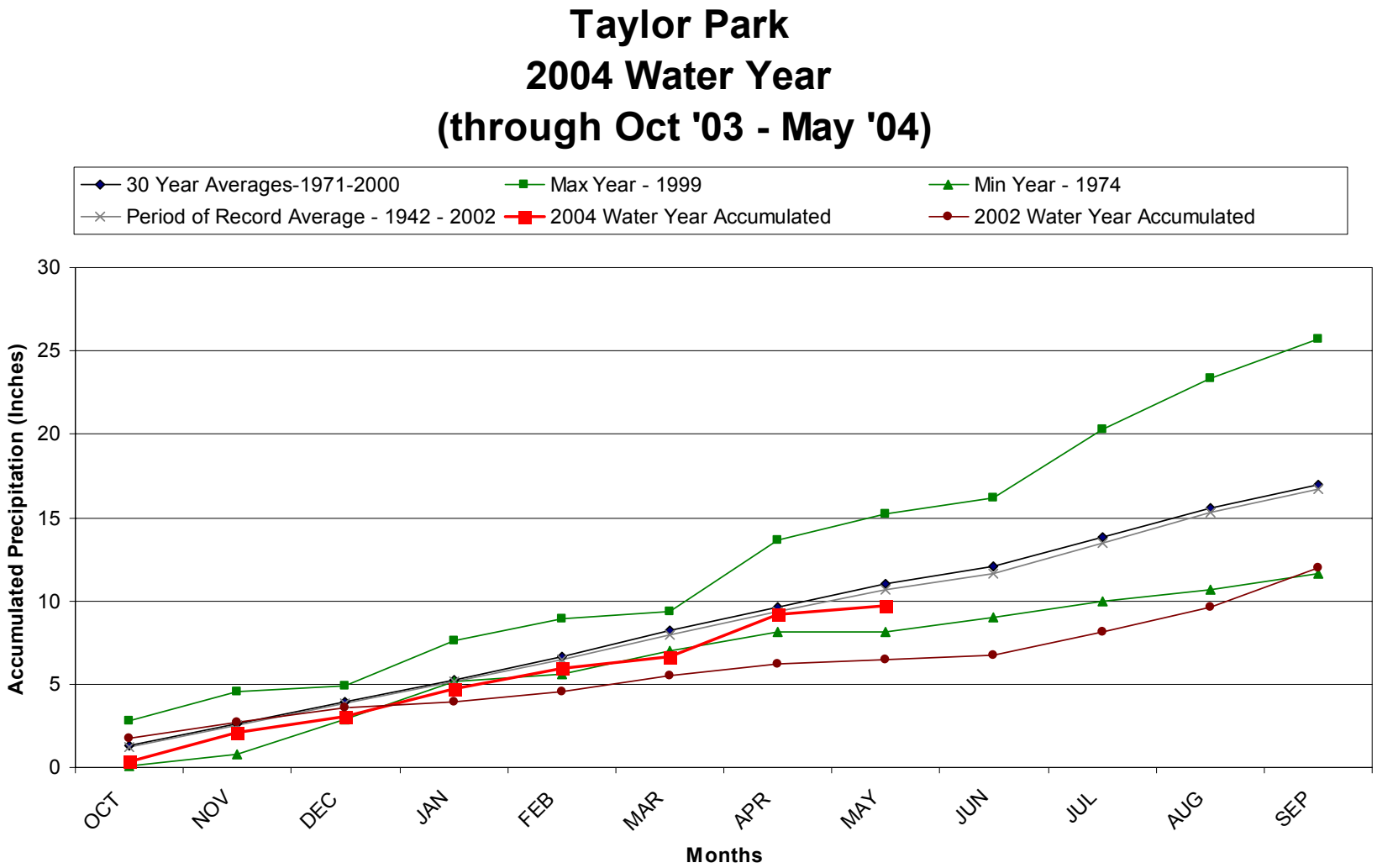
Climate divisions defined by Dr. Klaus Wolter of NOAA's Climate Diagnostic Center in Boulder, CO



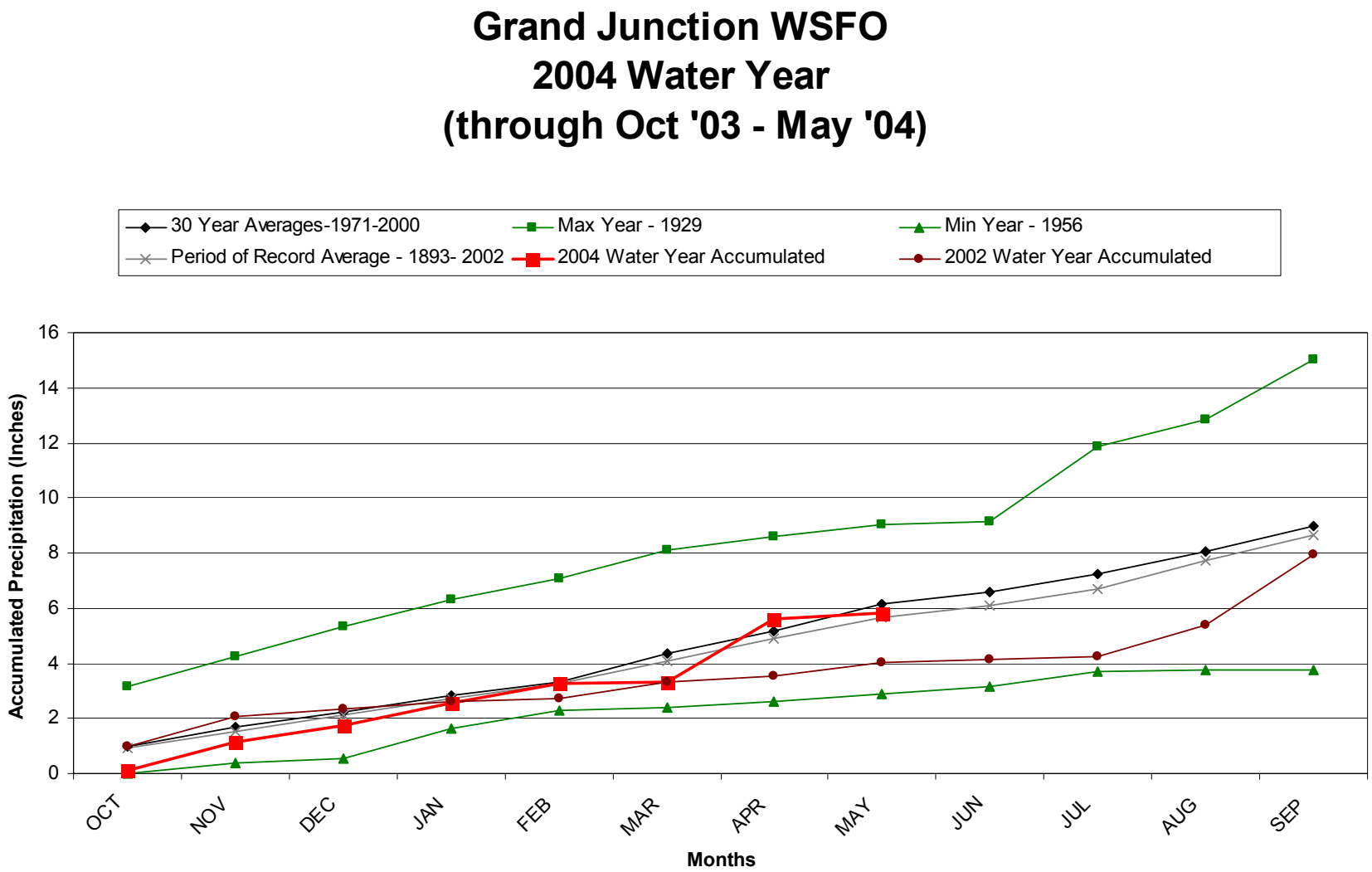
Division 1- Grand Lake 1NW



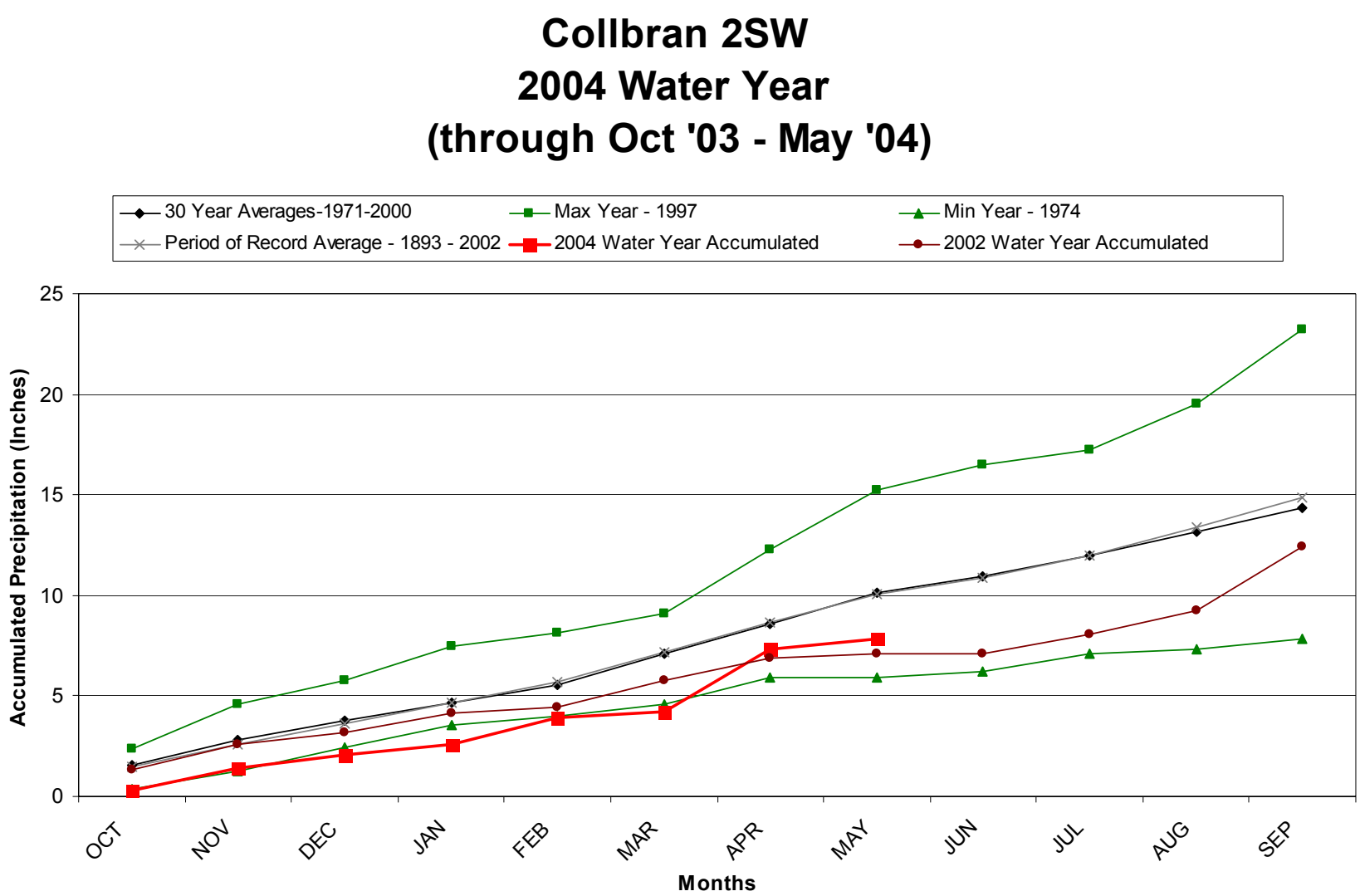
Division 1- Taylor Park



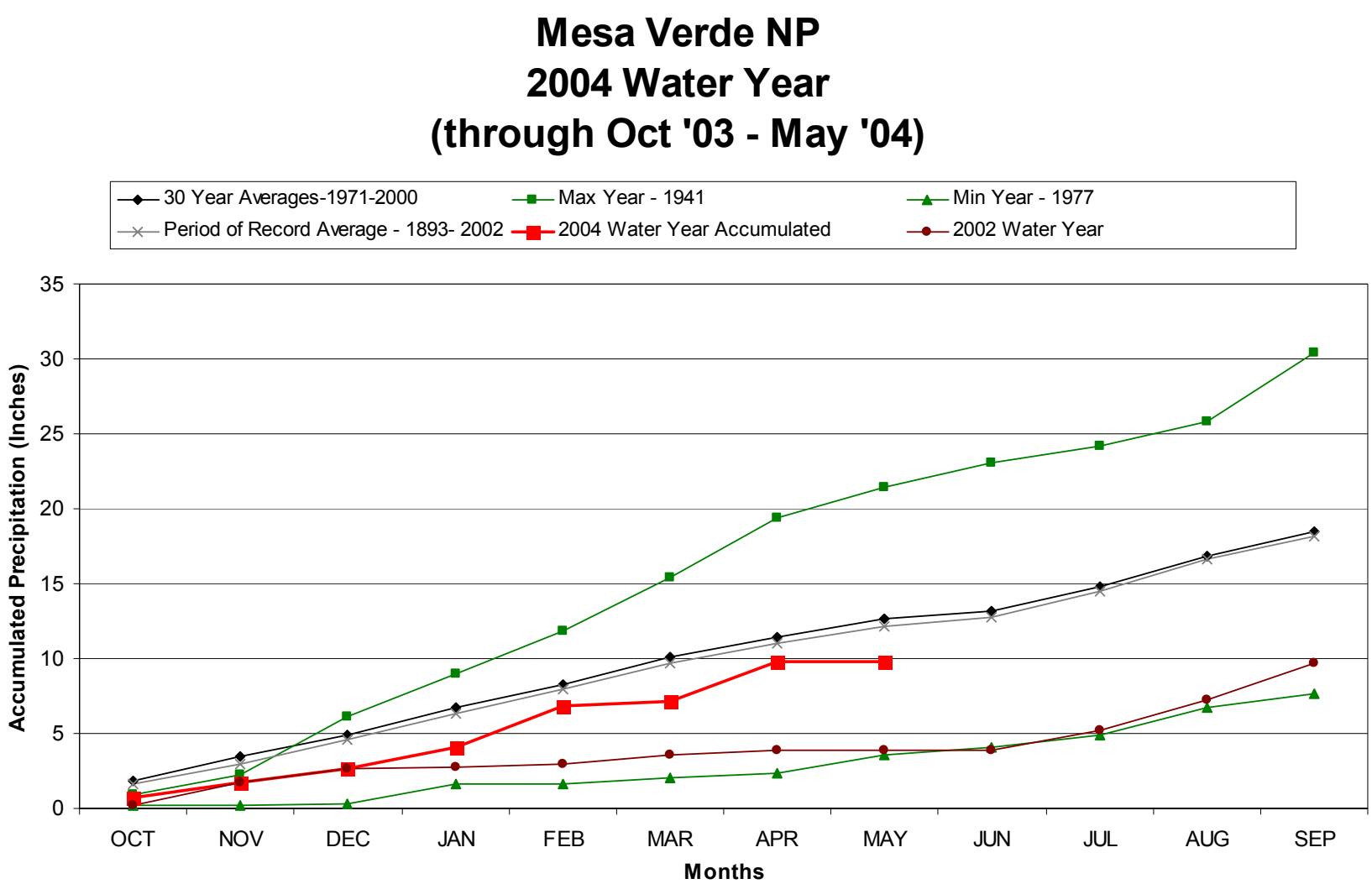
Division 2 – Grand Junction



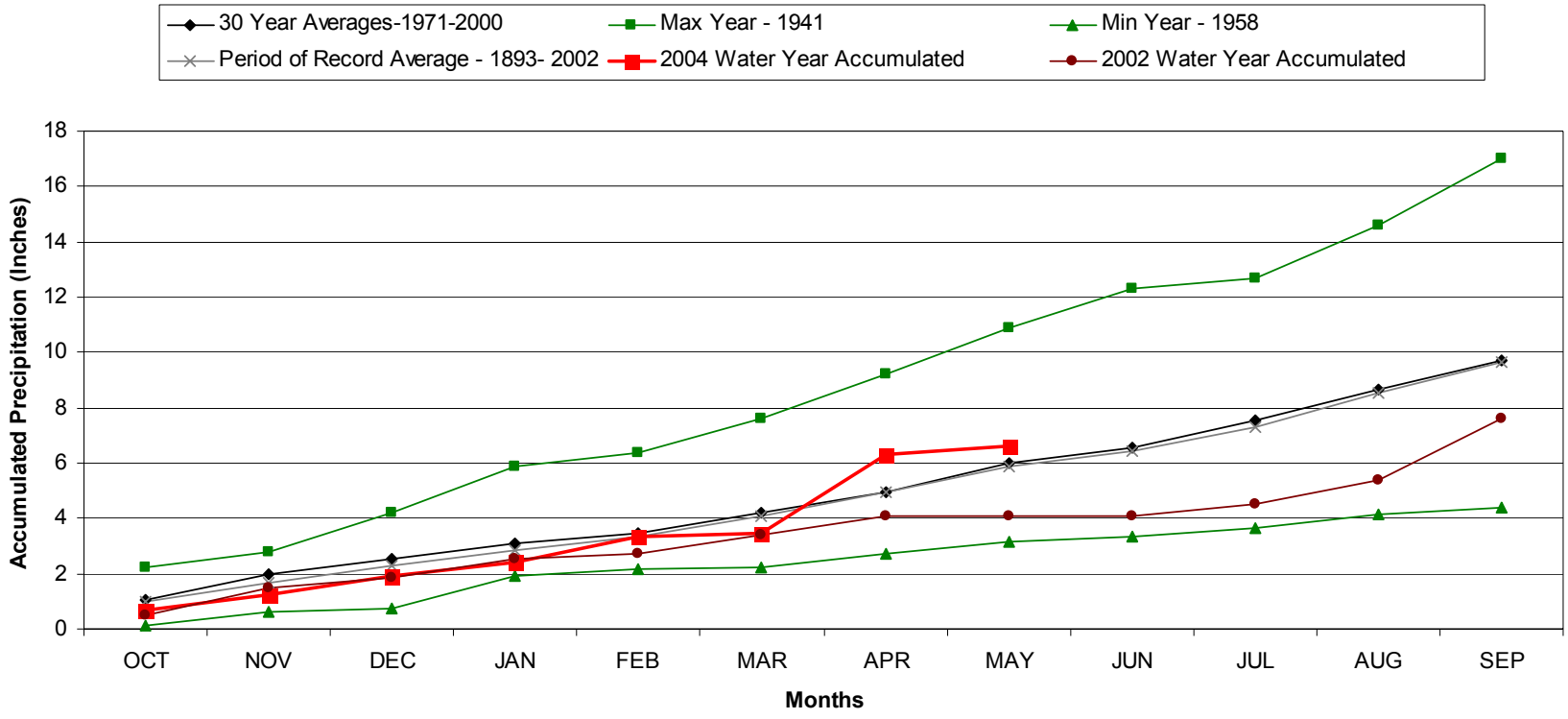
Division 2 – Collbran



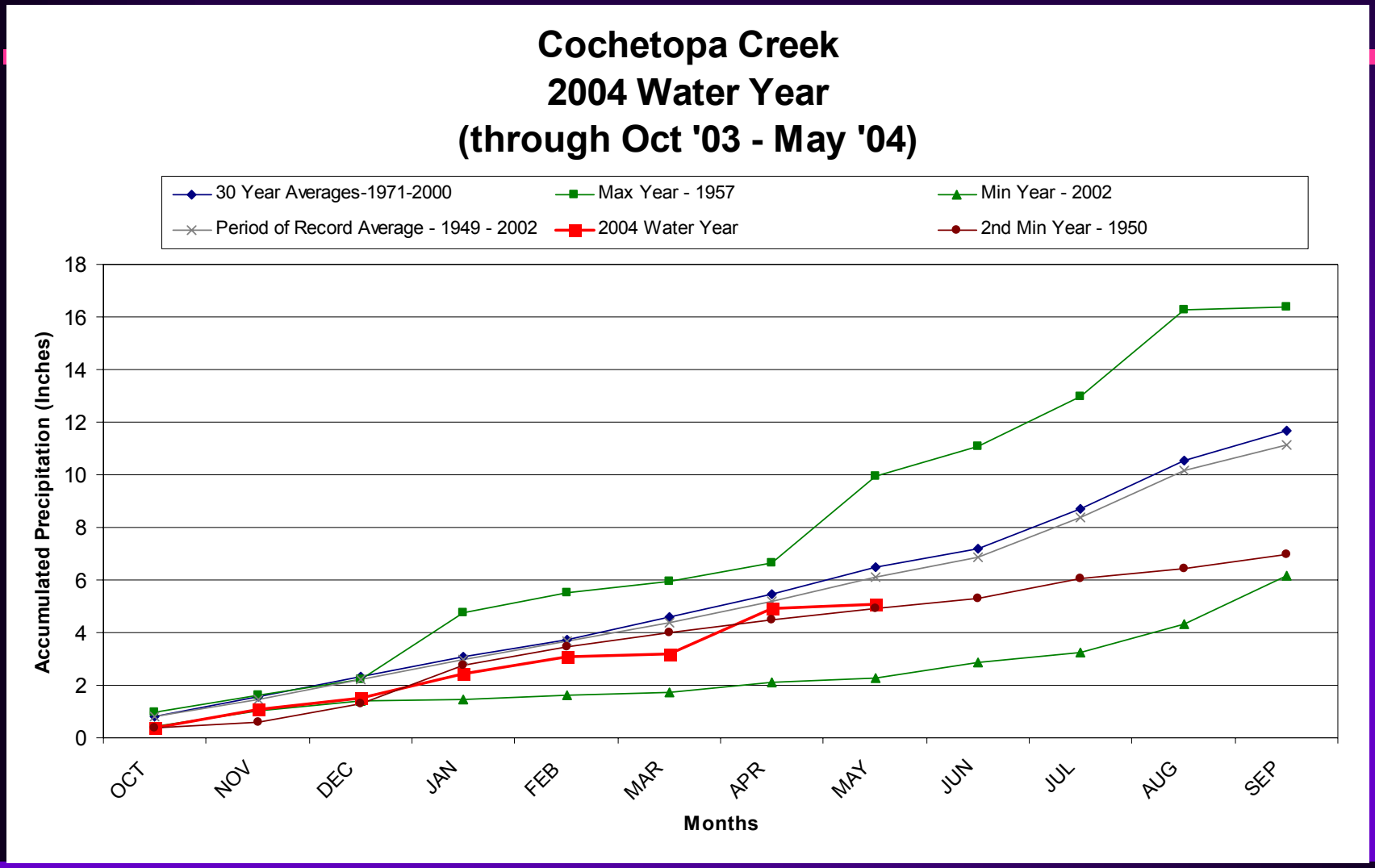
Division 3 – Mesa Verde



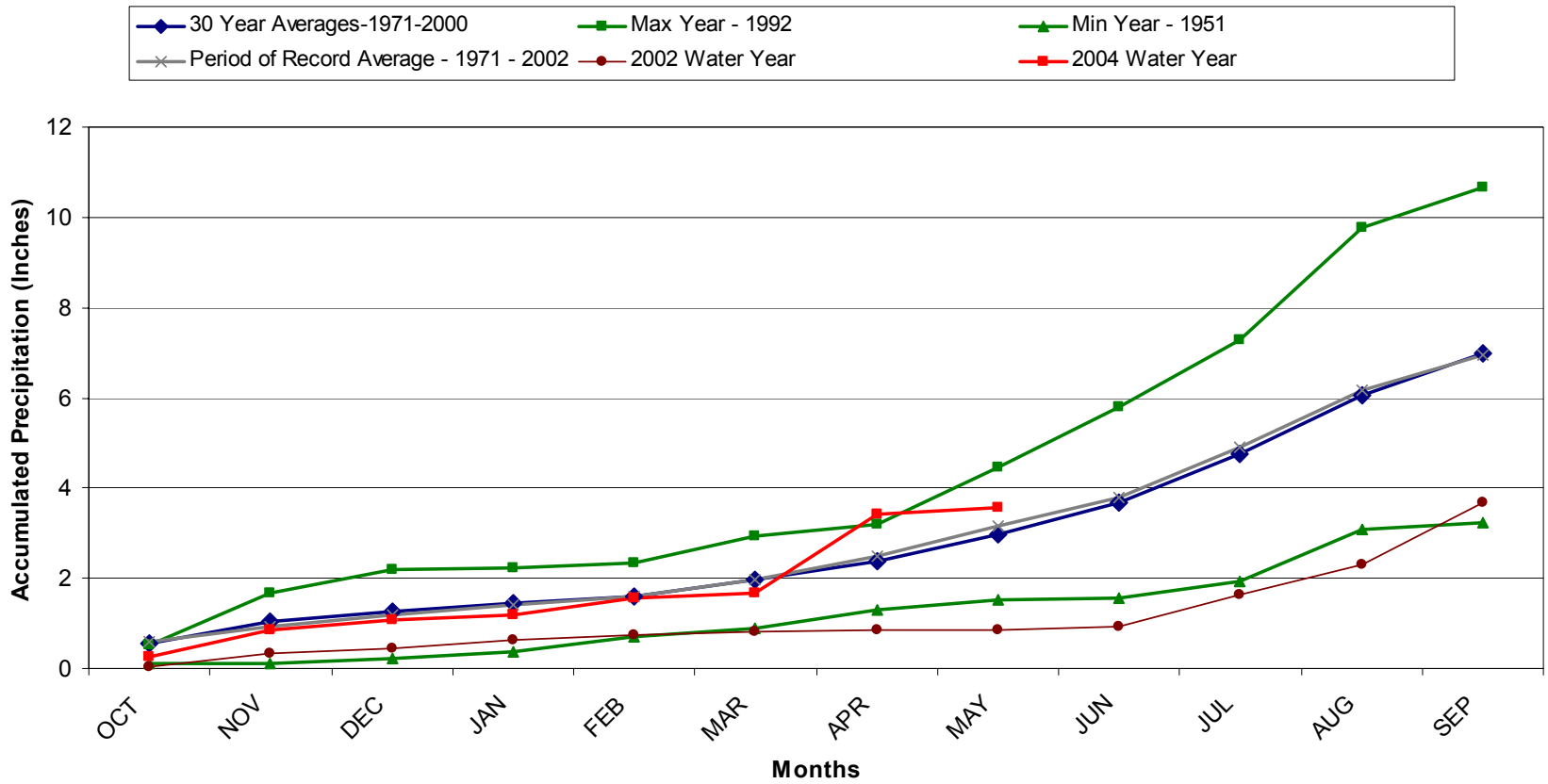
Division 3 - Montrose



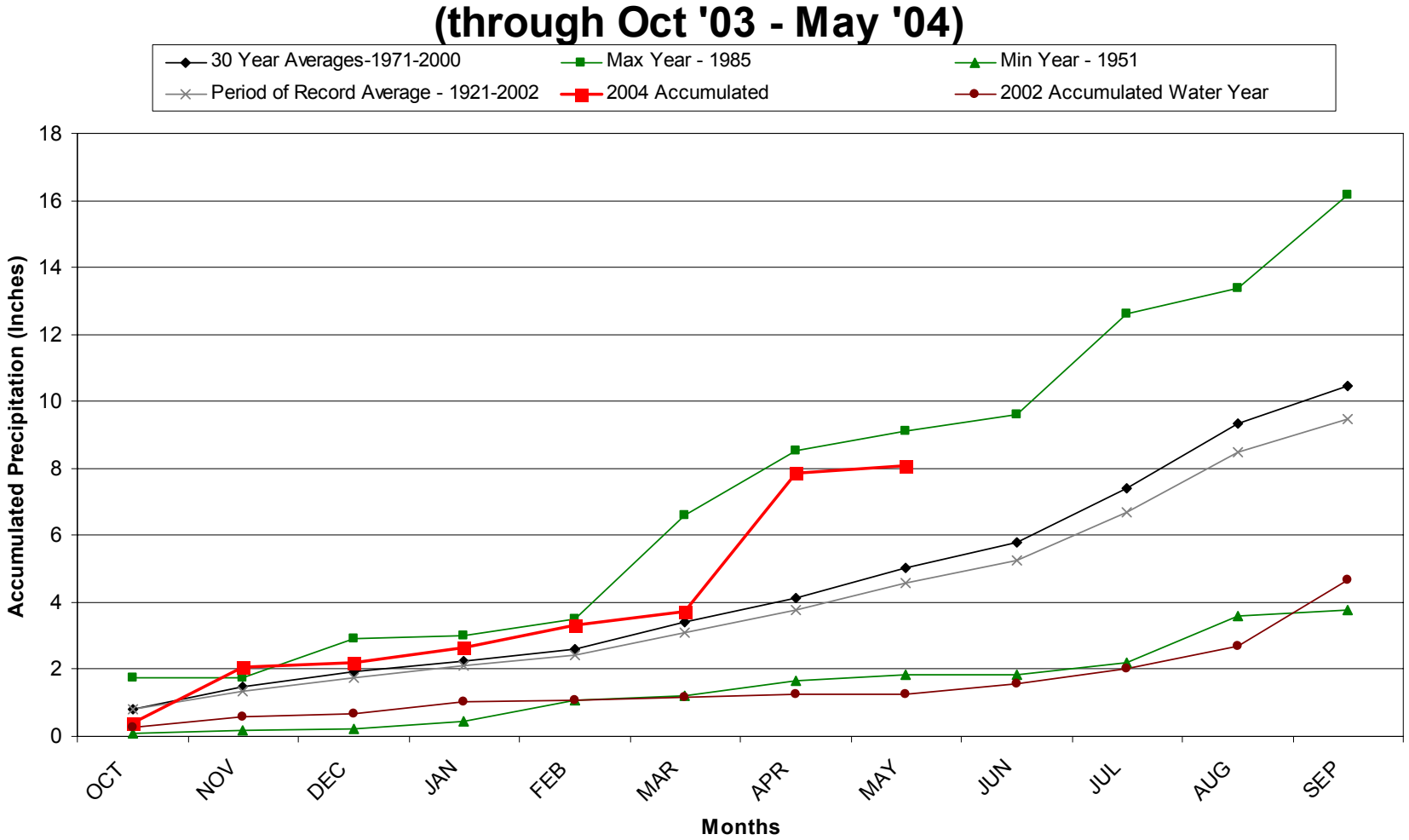
Division 3 – Cochetopa Creek



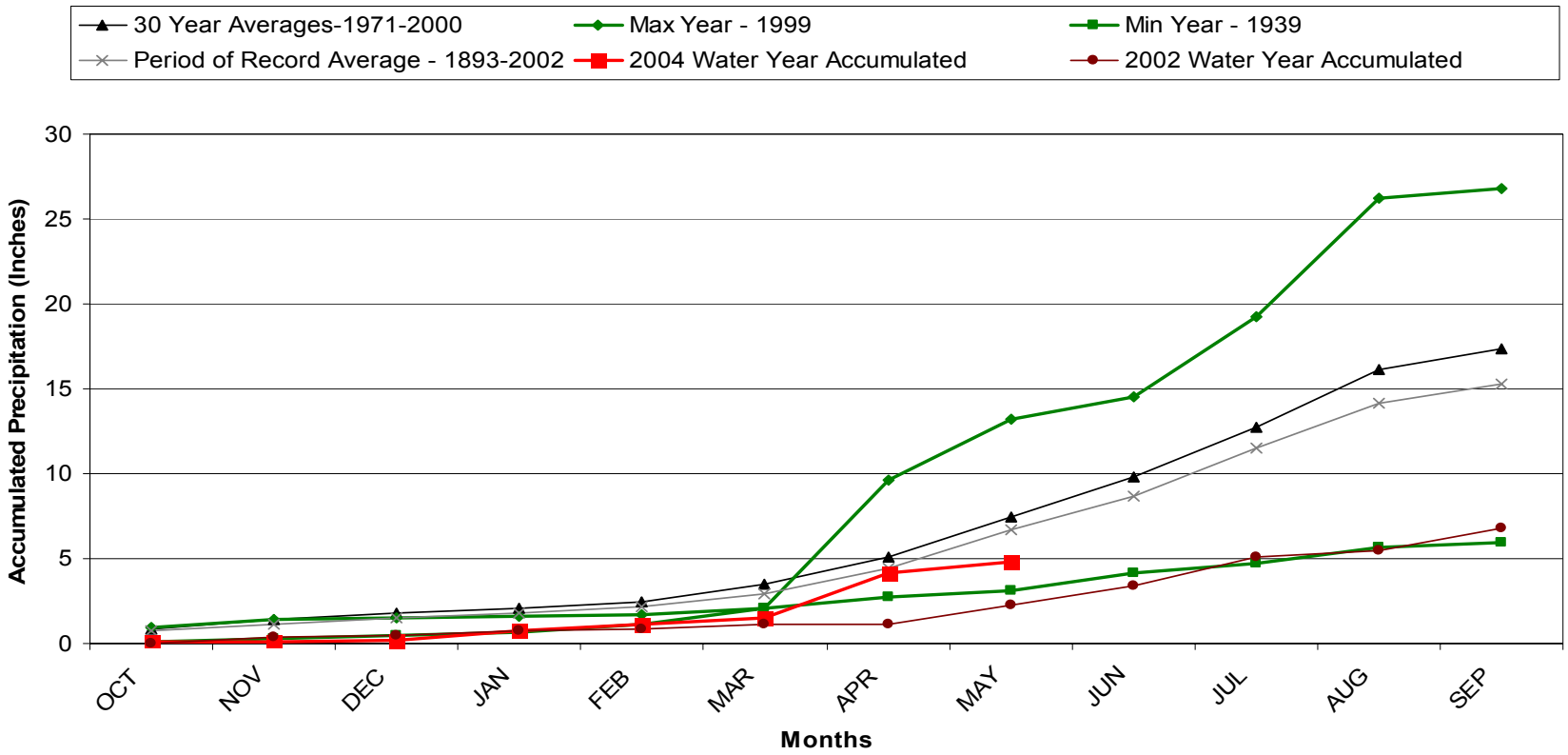
Division 4 - Center



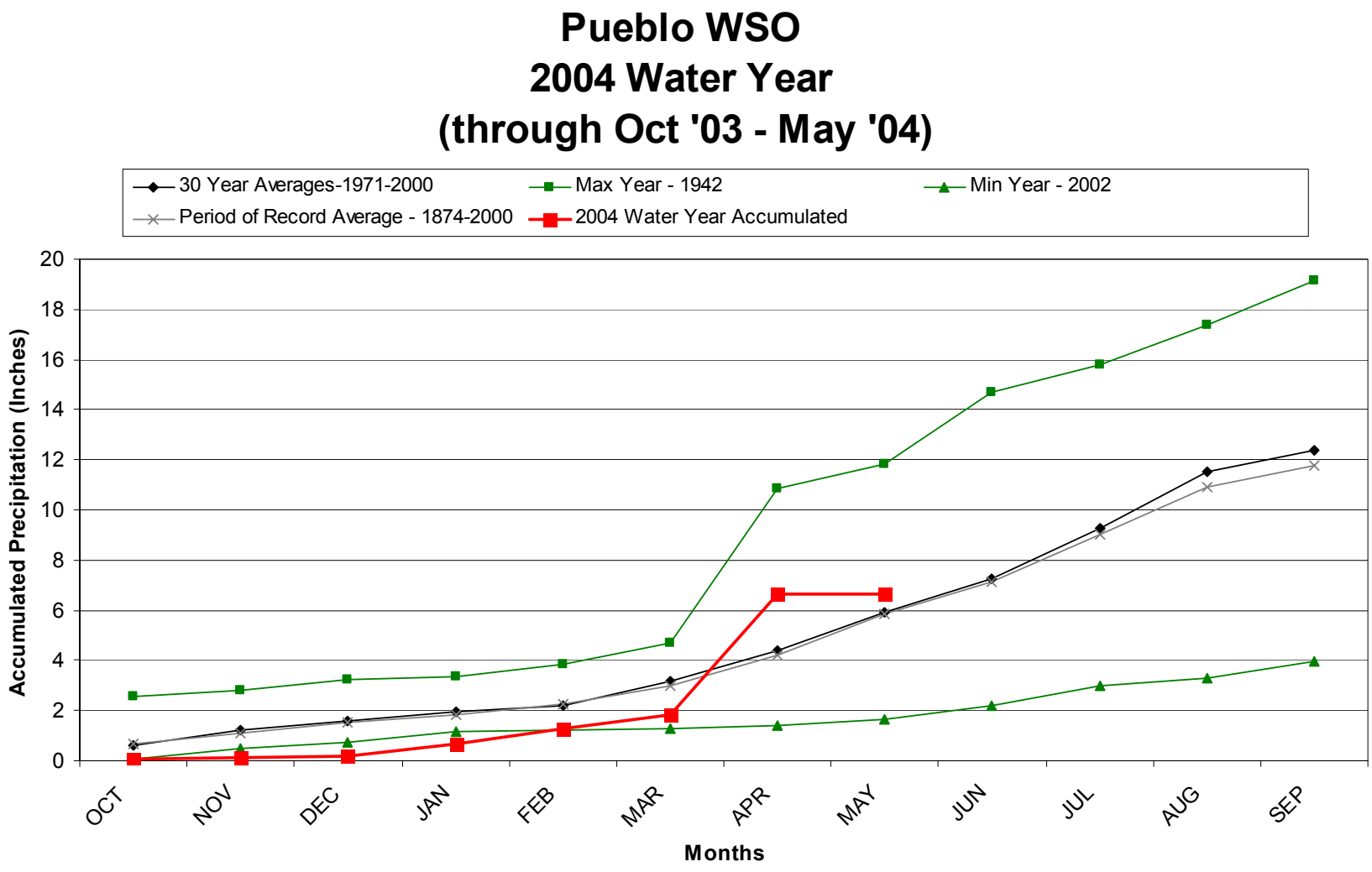
Division 4 – Del Norte



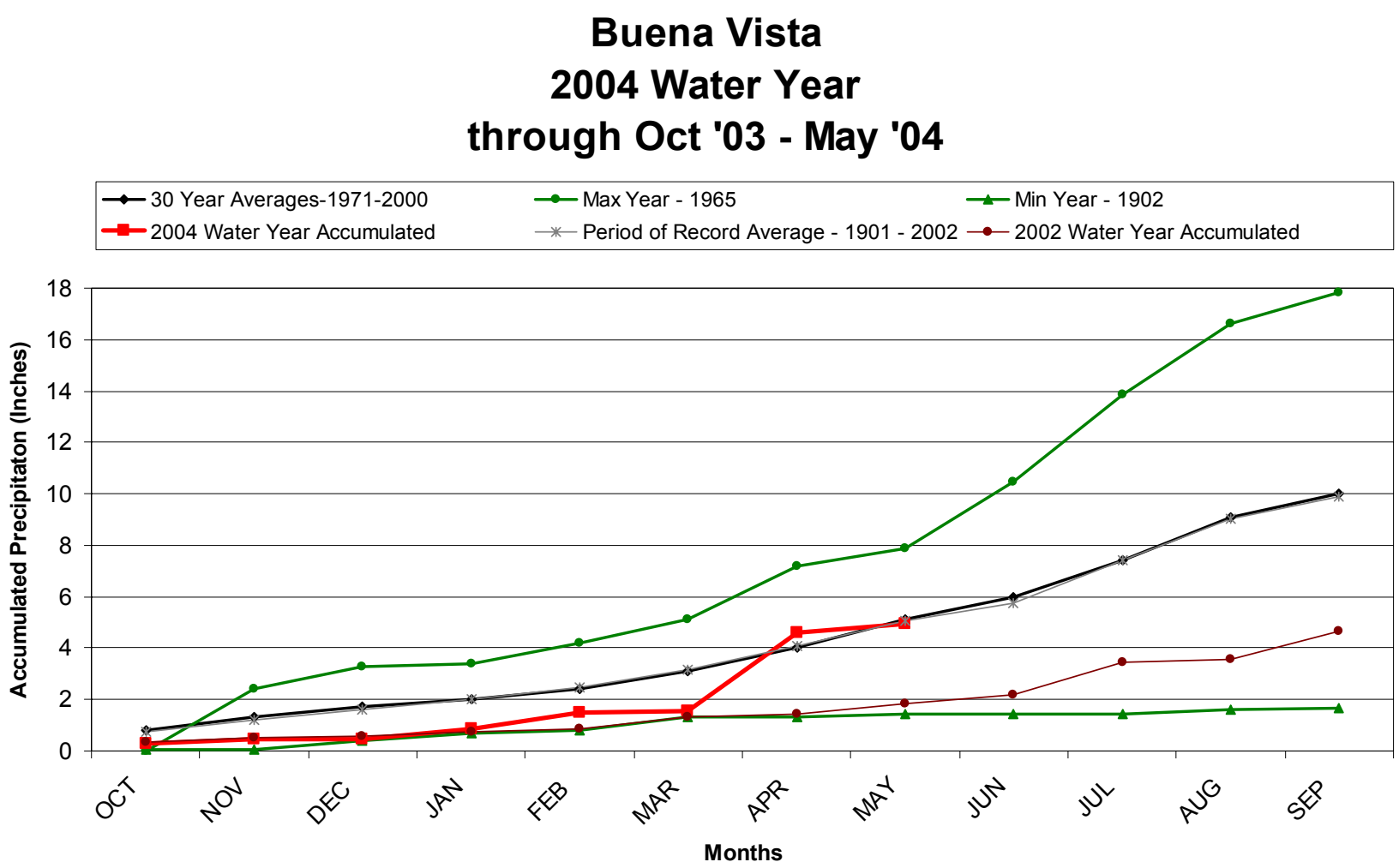
Division 5 – Colorado Springs



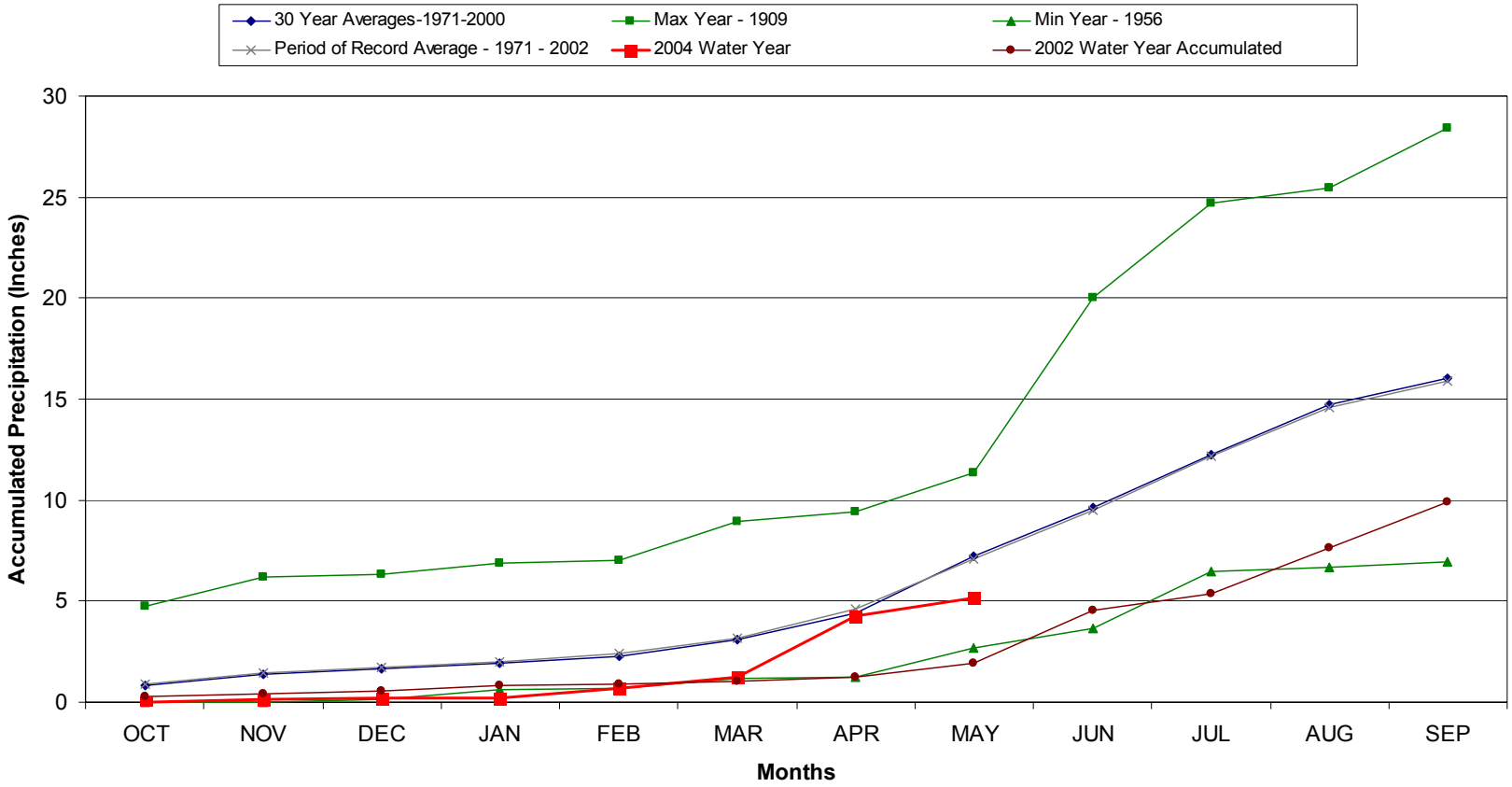
Division 5 - Pueblo



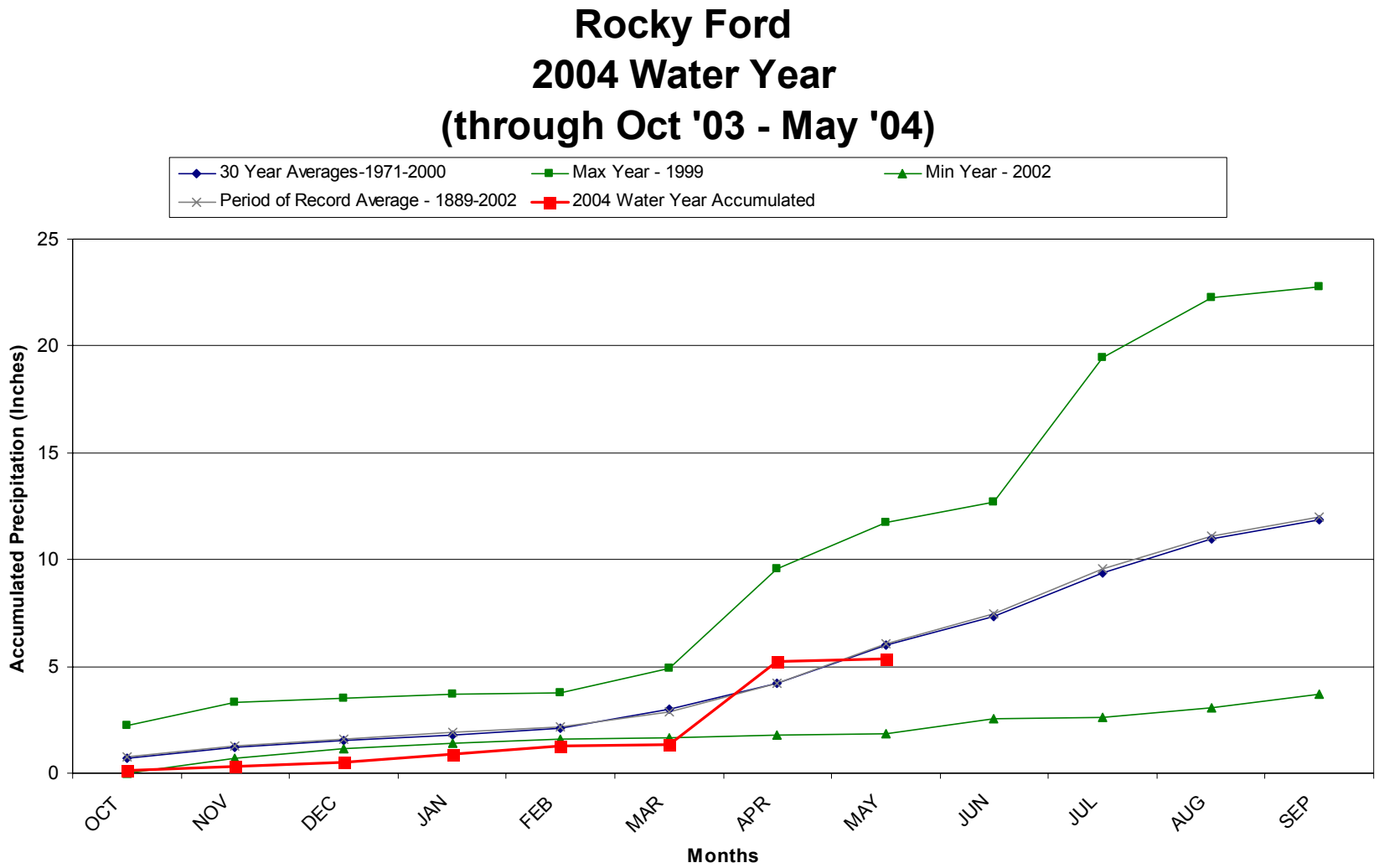
Division 5 – Buena Vista



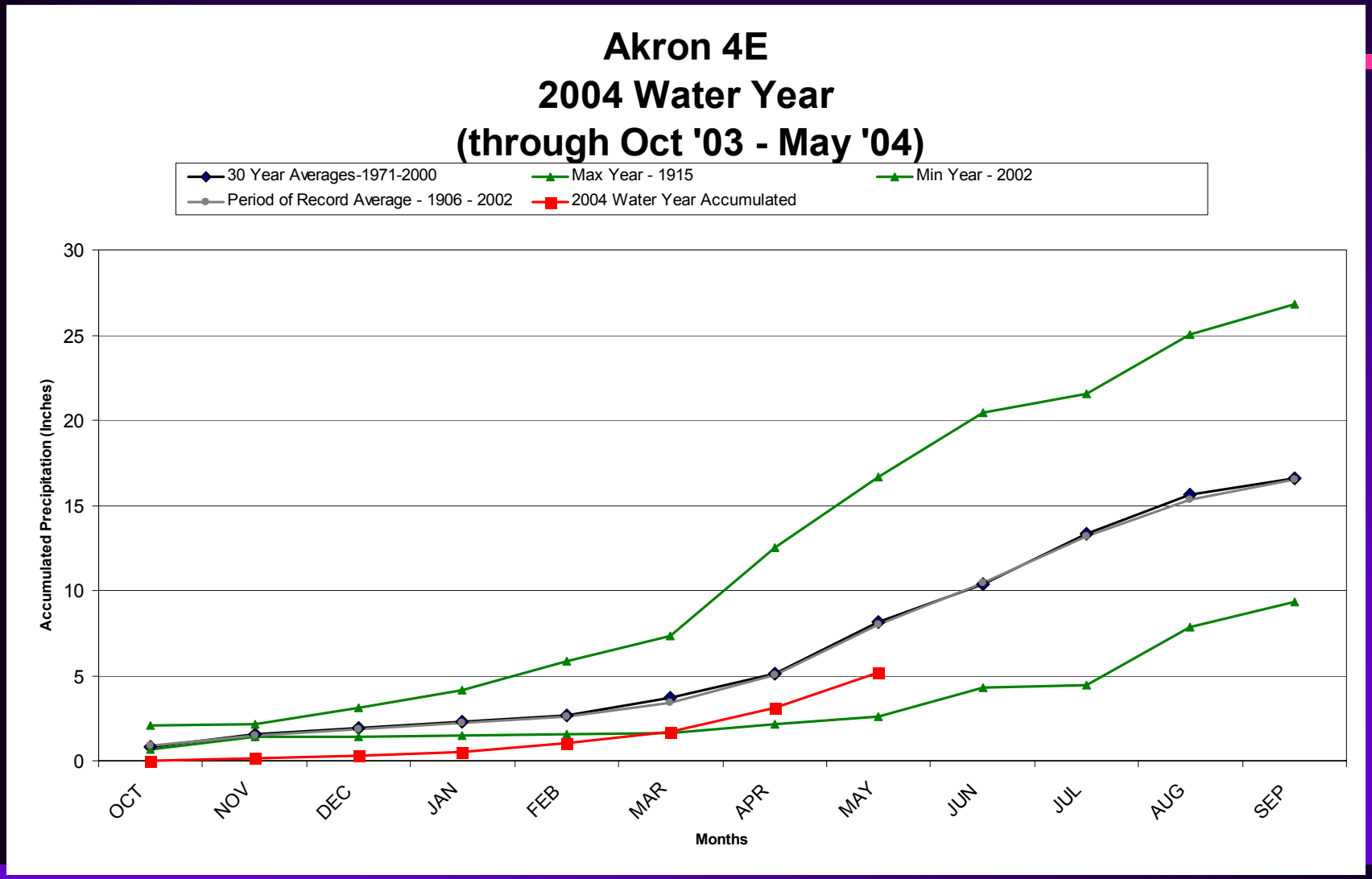
Division 6 – Cheyenne Wells



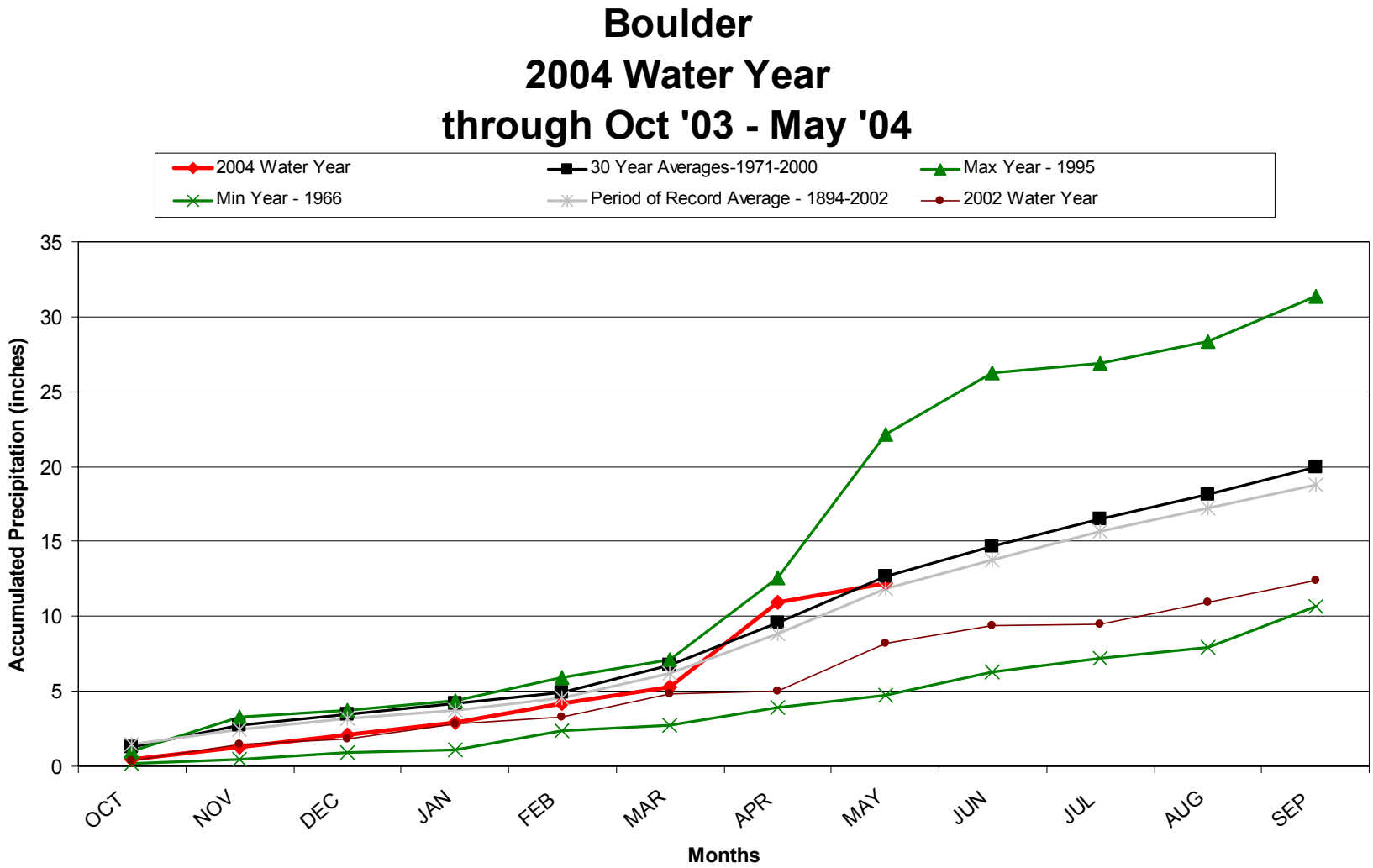
Division 6 – Rocky Ford



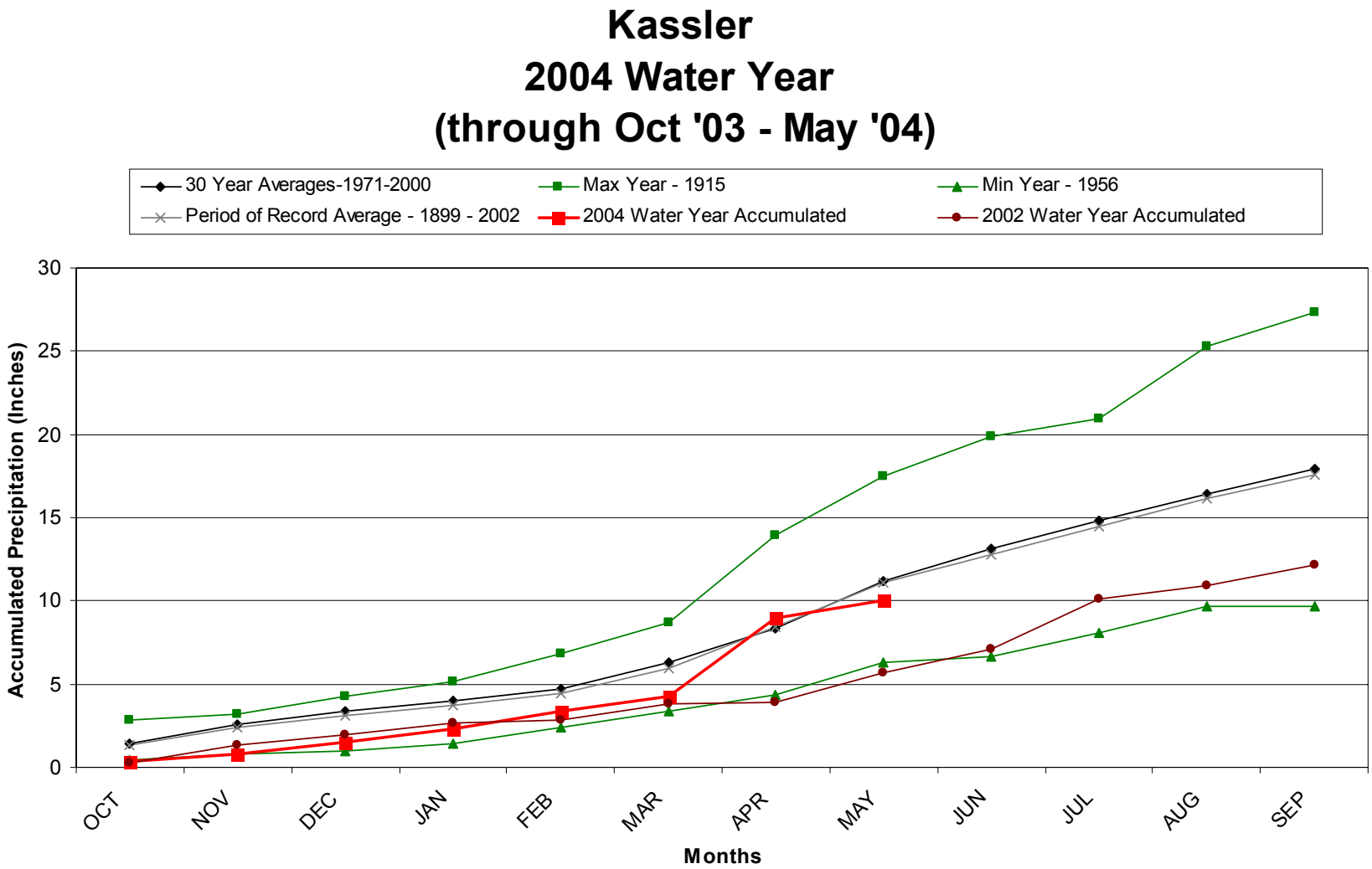
Division 7 – Akron



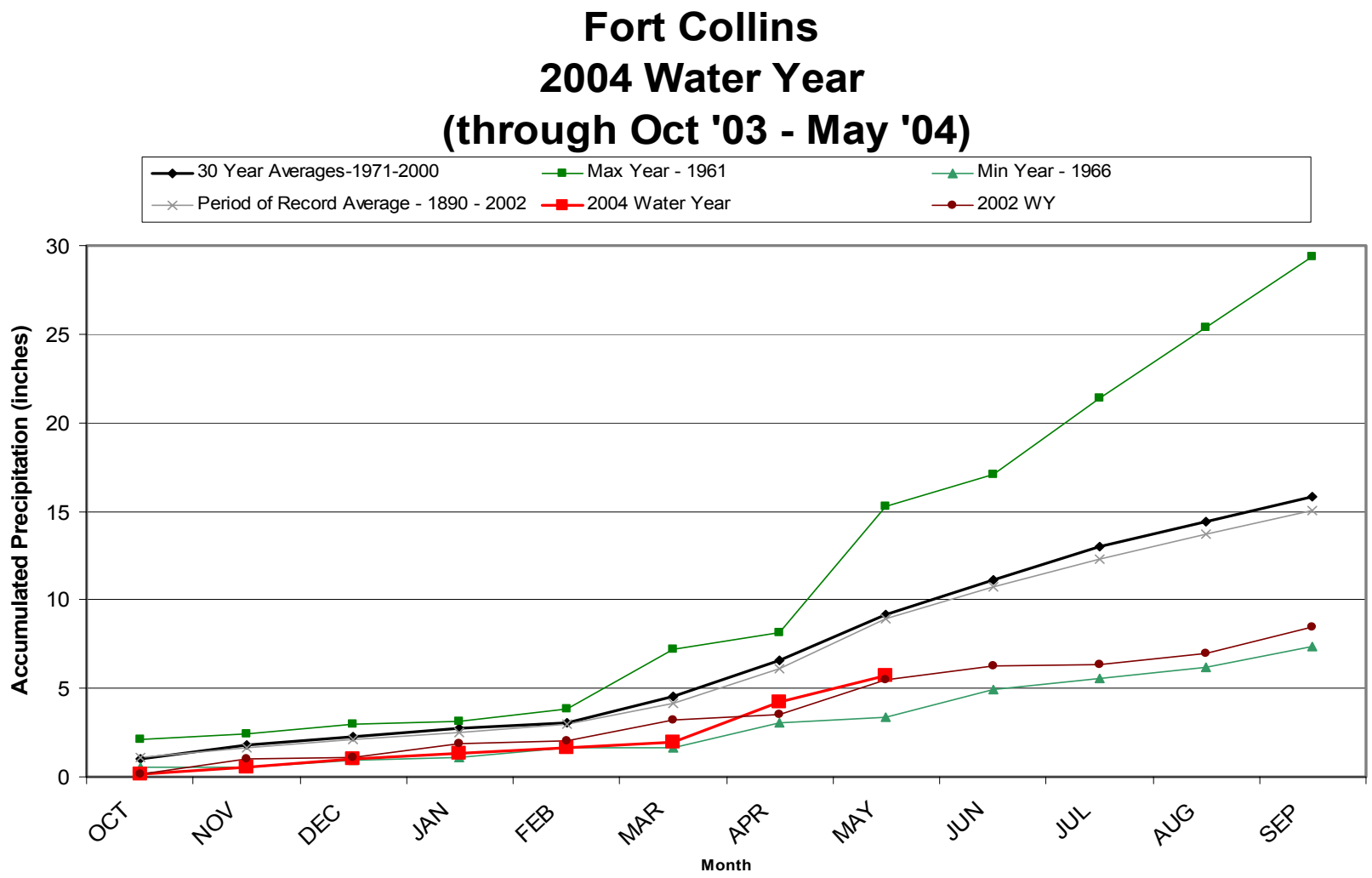
Division 8 – Boulder



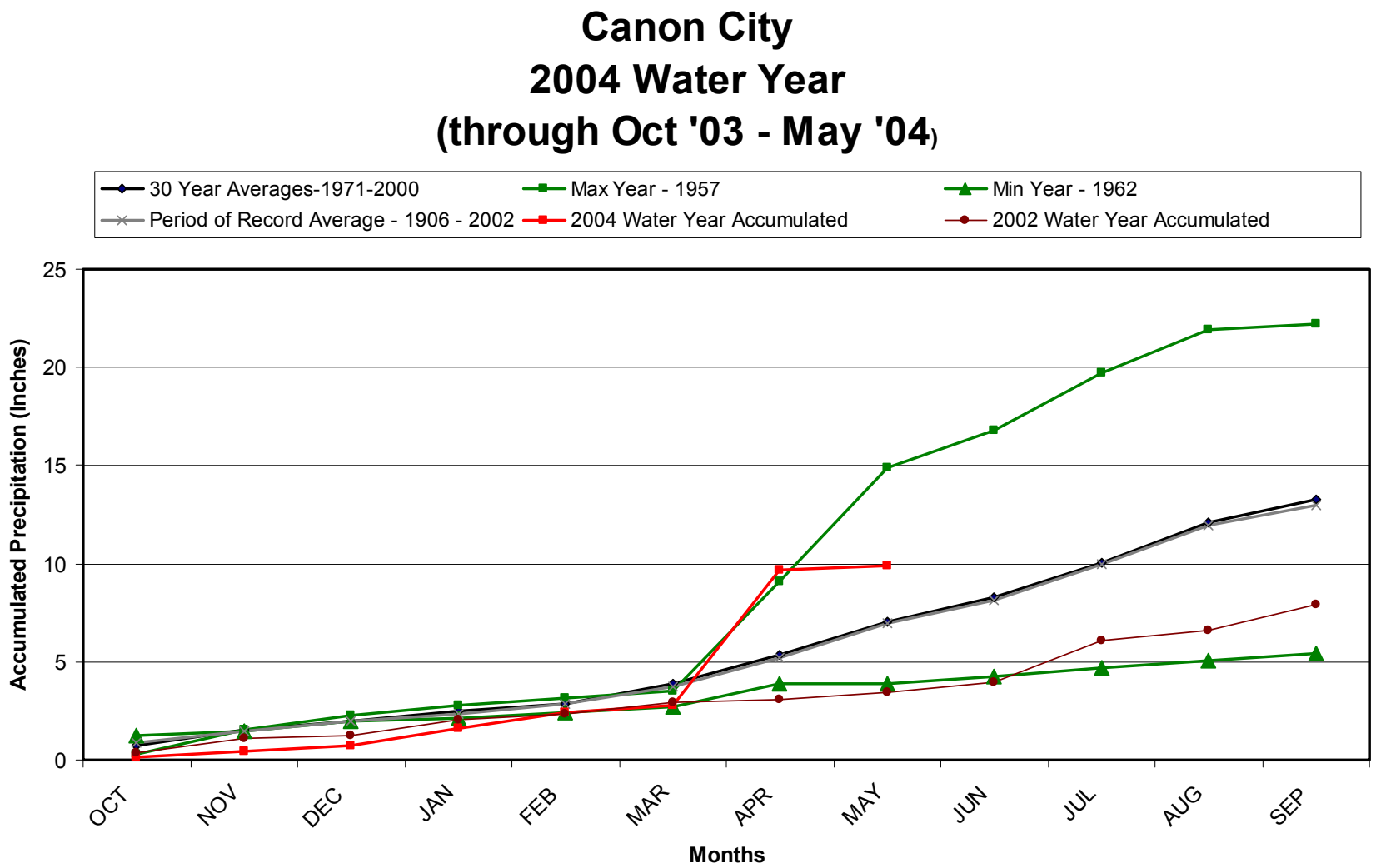
Division 8 – Kassler

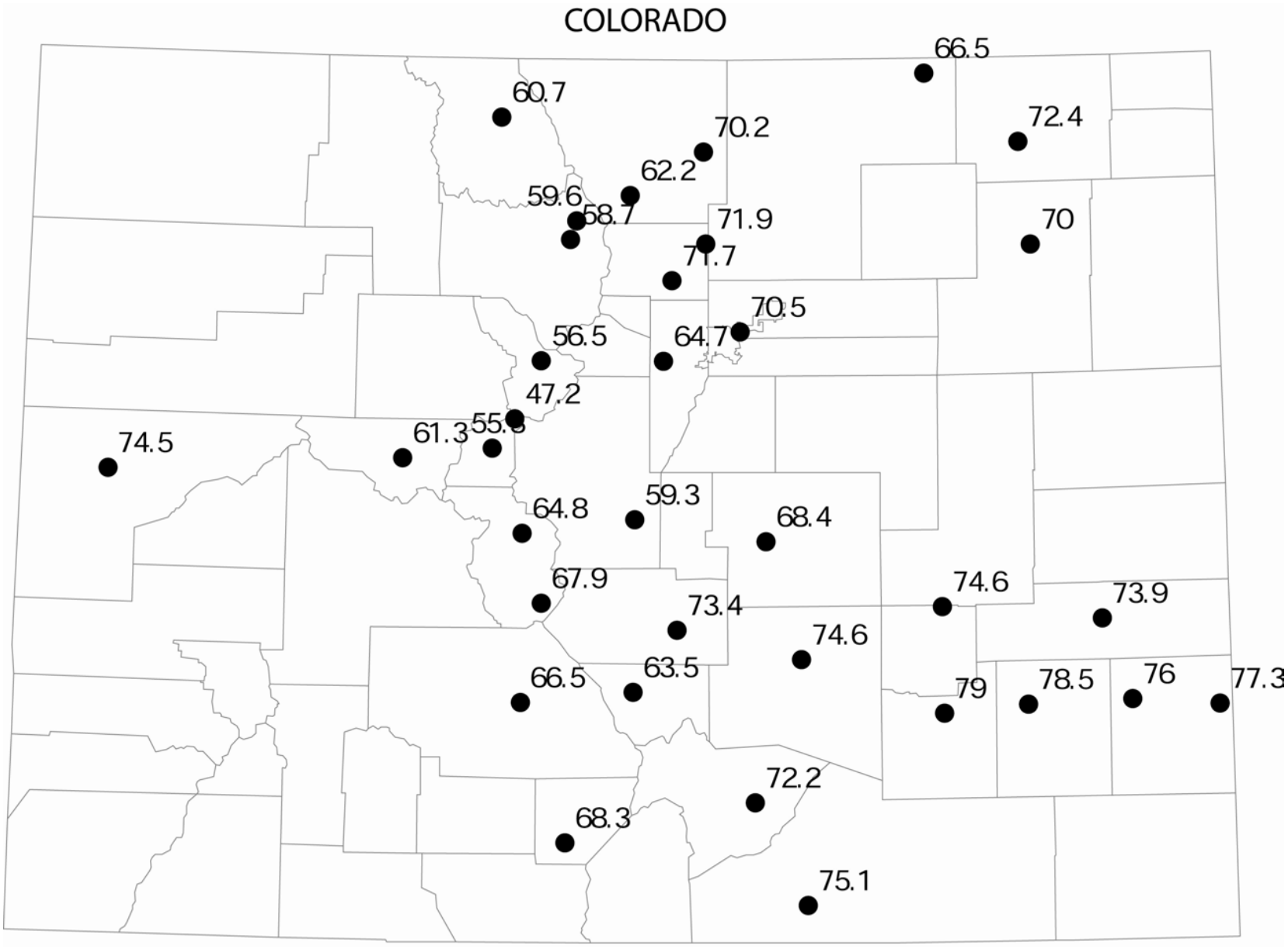


Division 8 – Fort Collins

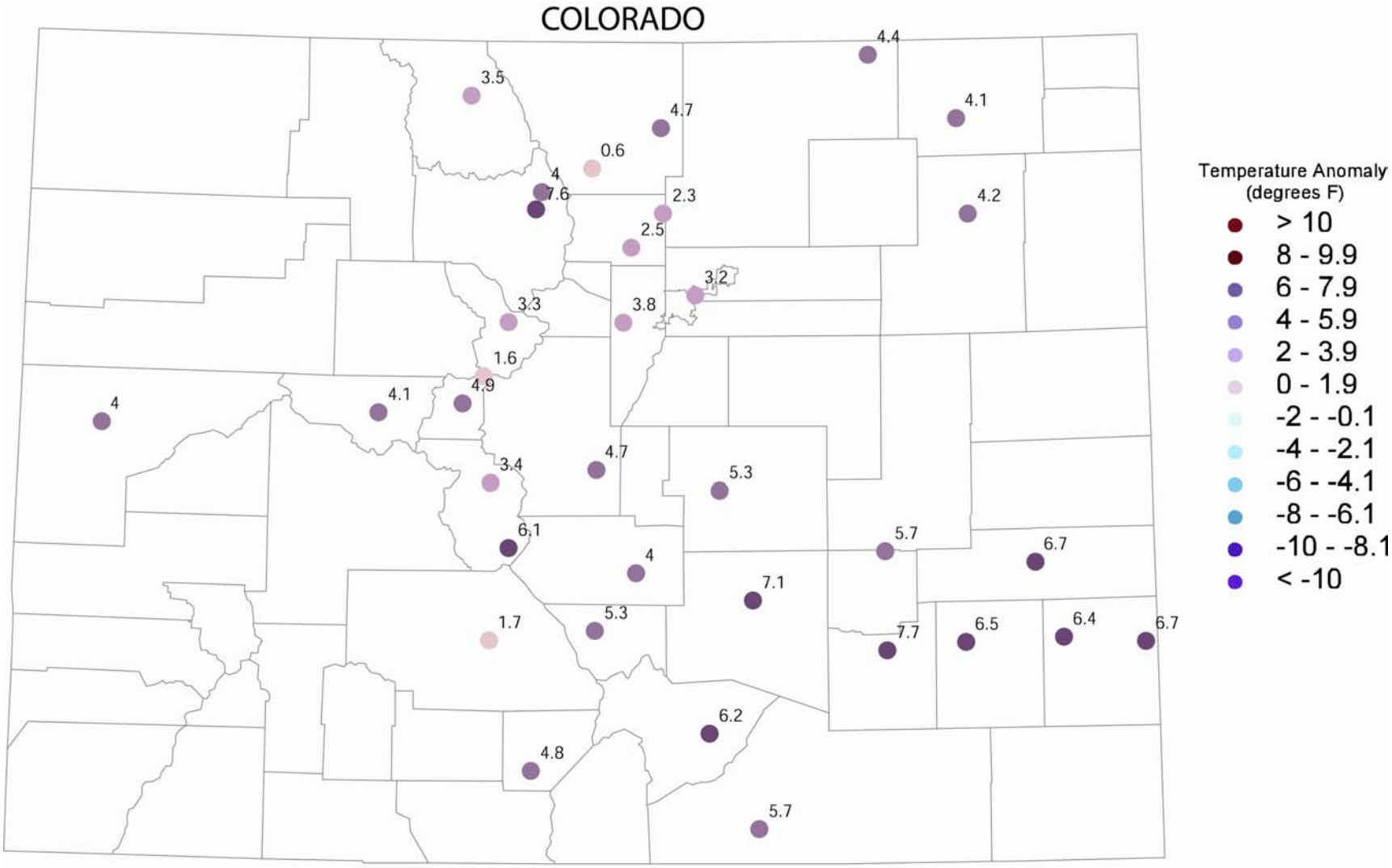


Division 5 – Canon City

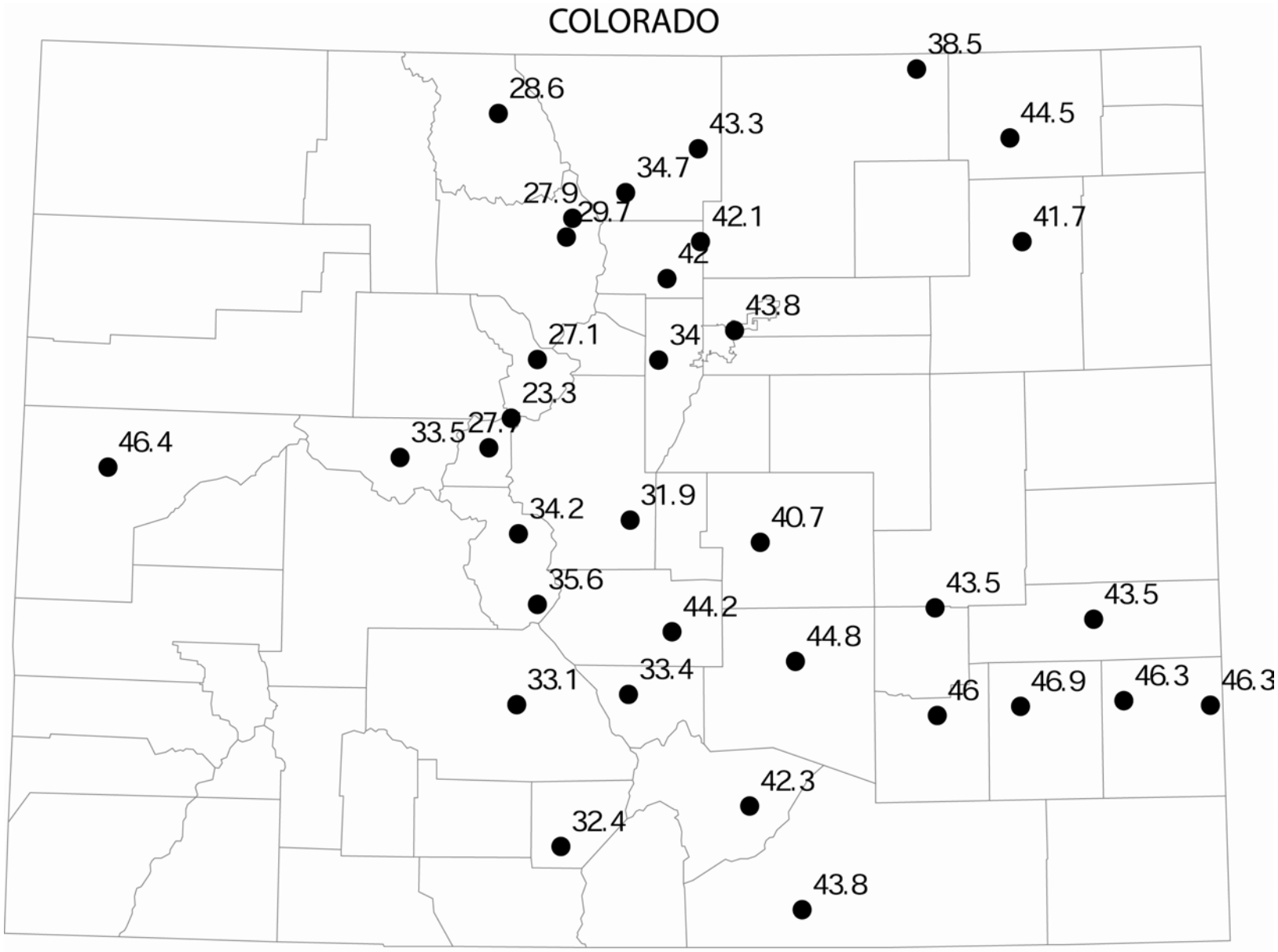




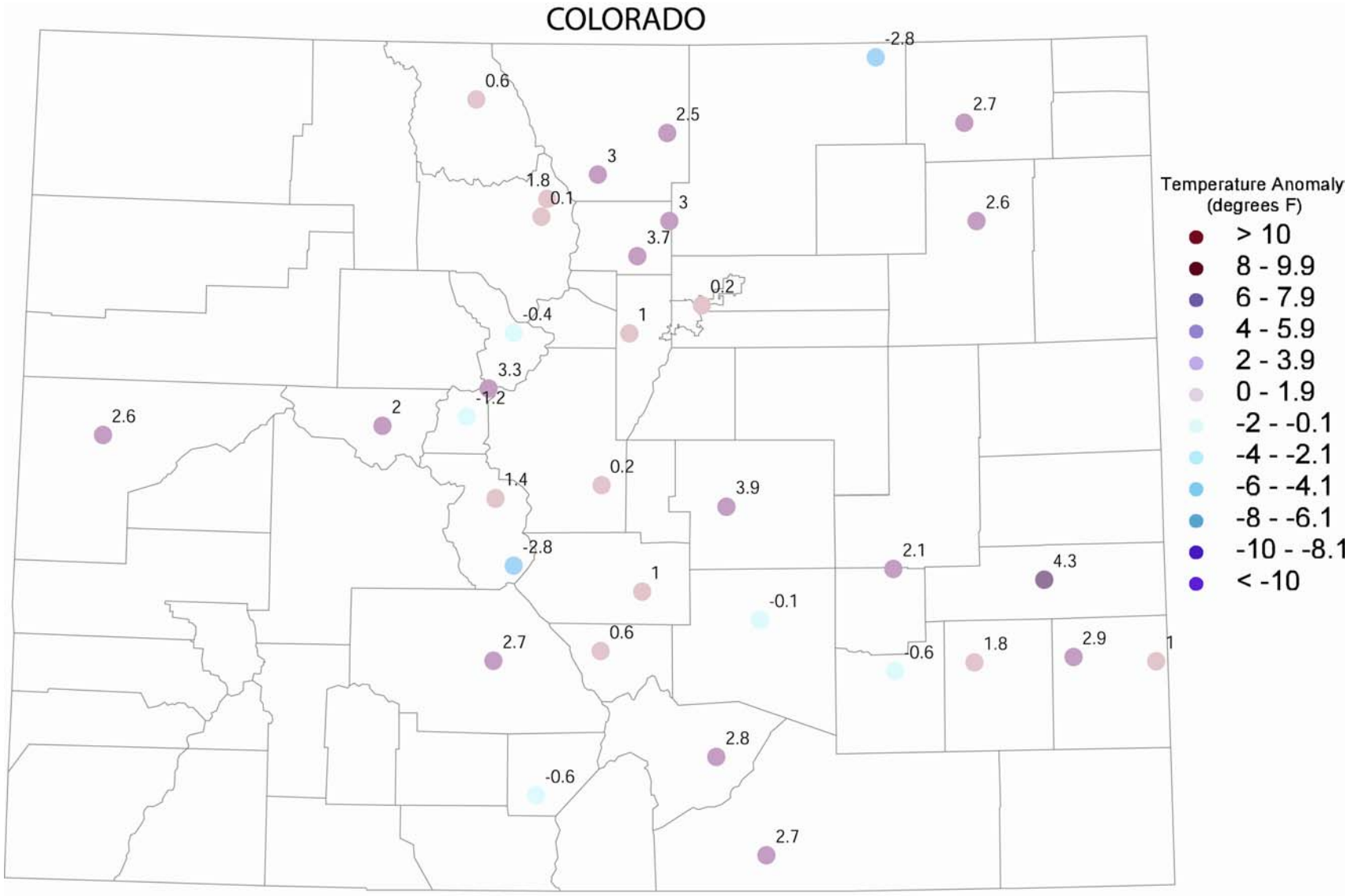
May maximum temperatures in degrees F (1971-2000 average).



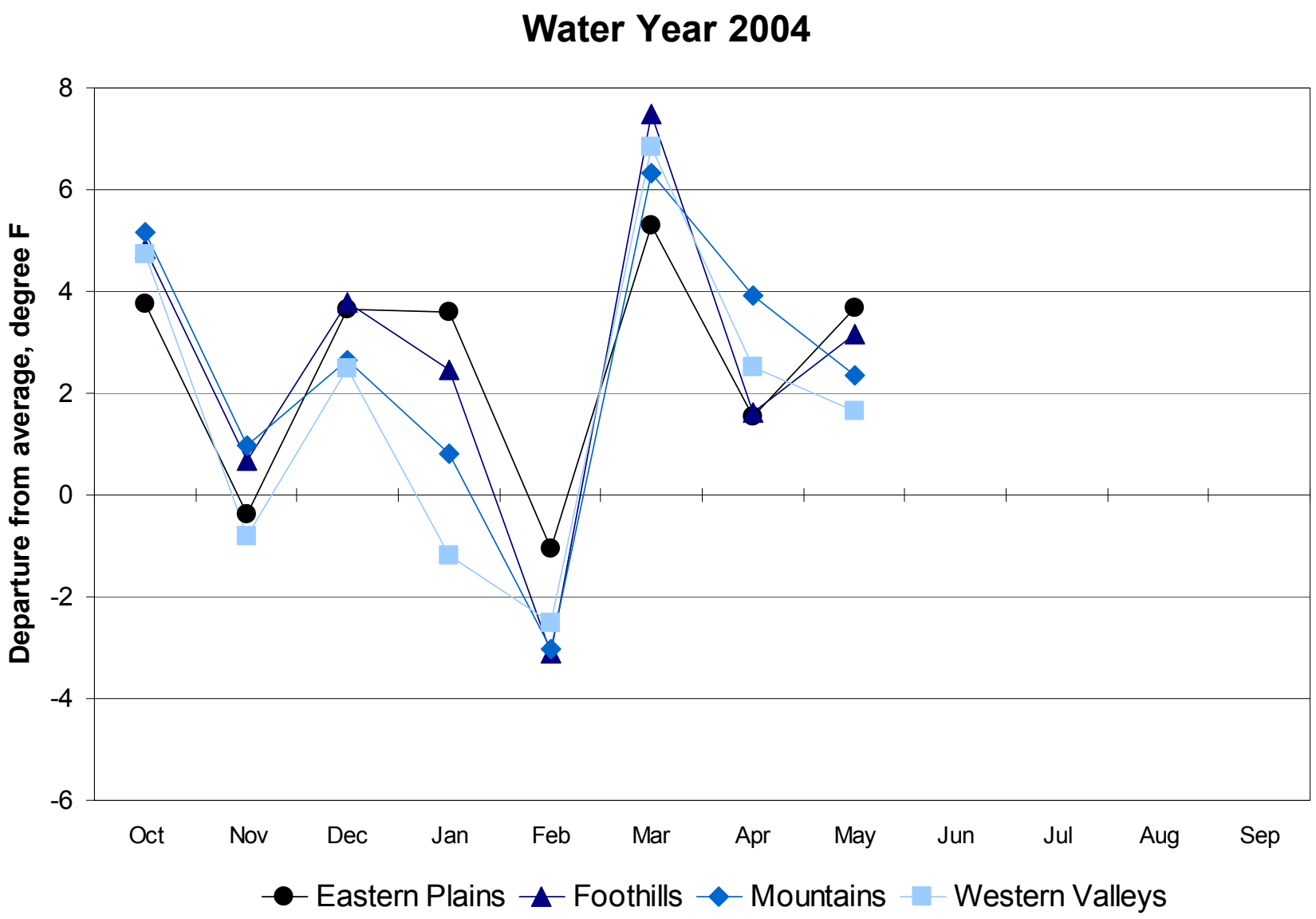
May 2004 maximum temperature departures from the 1971-2000 averages.

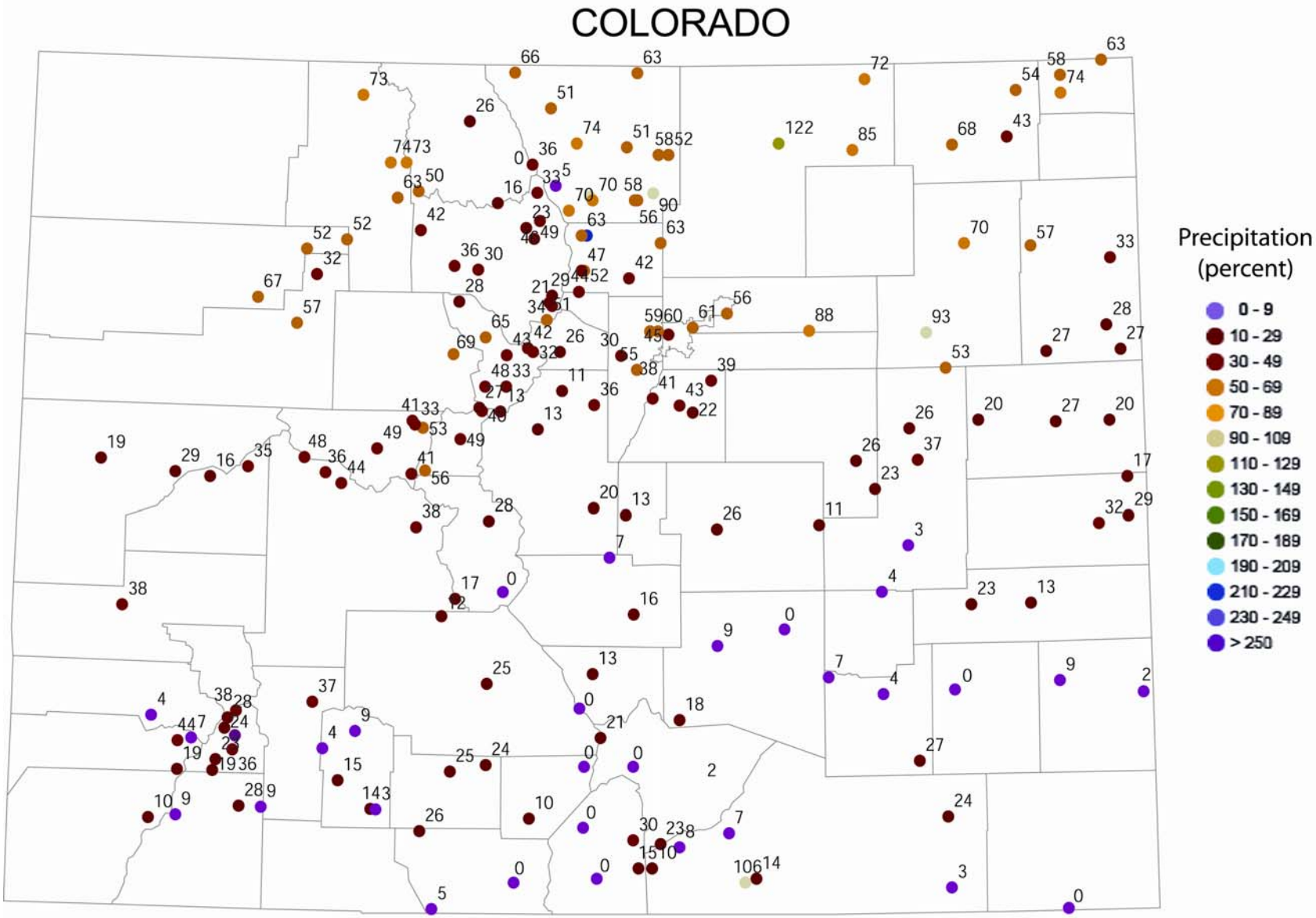


May minimum temperatures in degrees F (1971-2000 average).



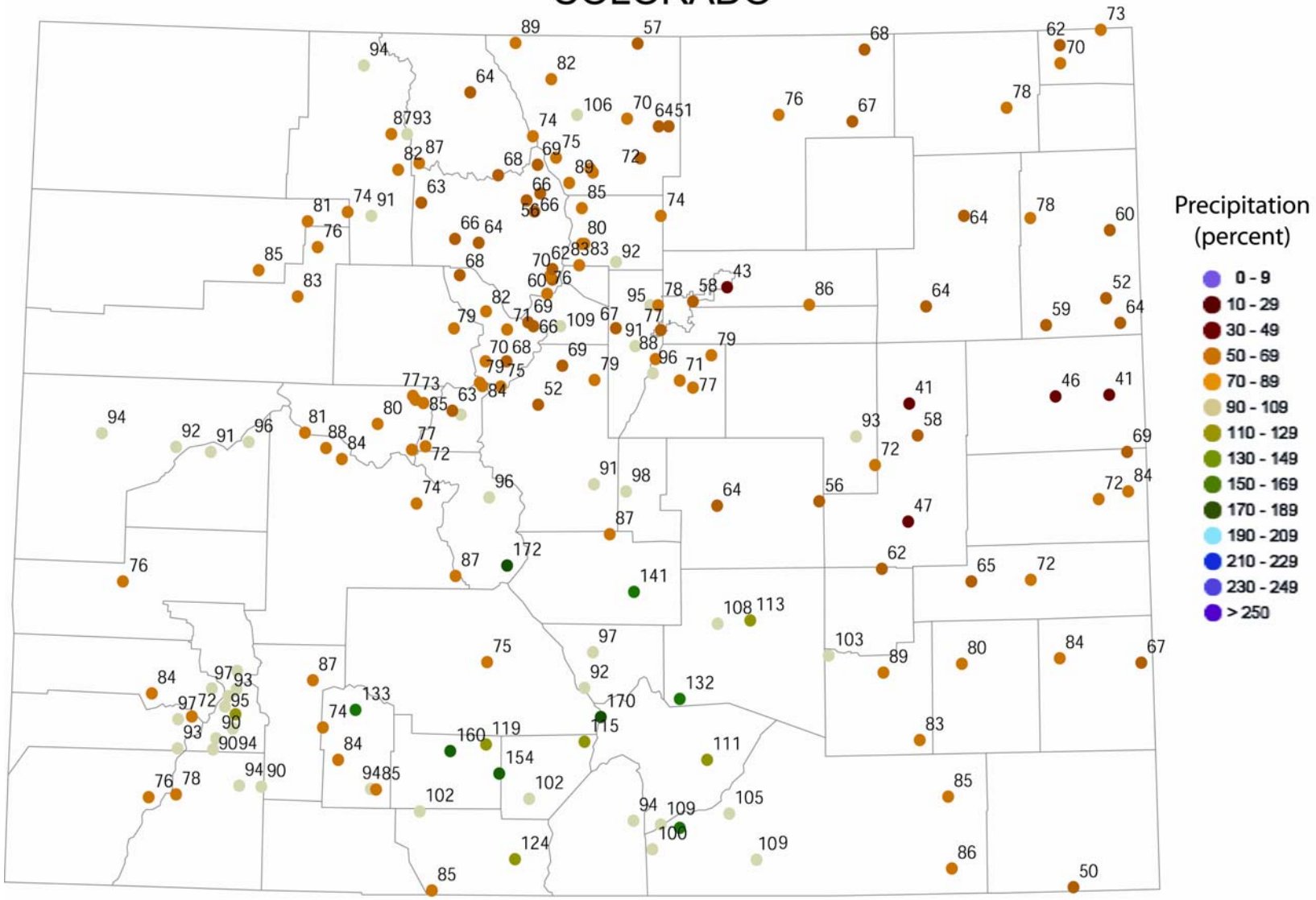
May 2004 minimum temperature departures from the 1971-2000 averages.


Water Year 2004
Departure from average, degree F
8
6
4
2
0
-2
-4
-6
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Eastern Plains
Foothills
Mountains
Western Valleys



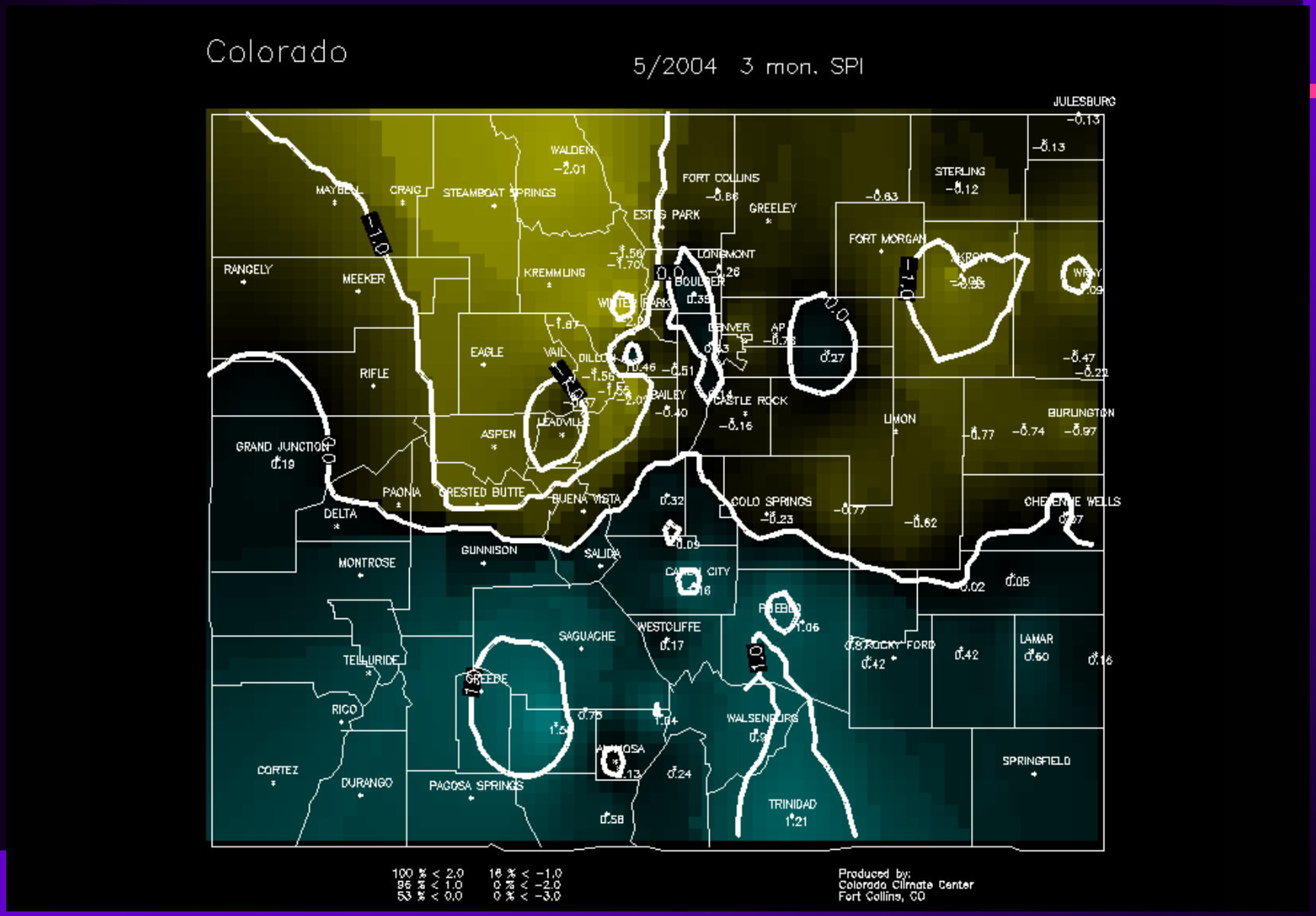
May 2004 precipitation as a percent of the 1971-2000 average.

COLORADO

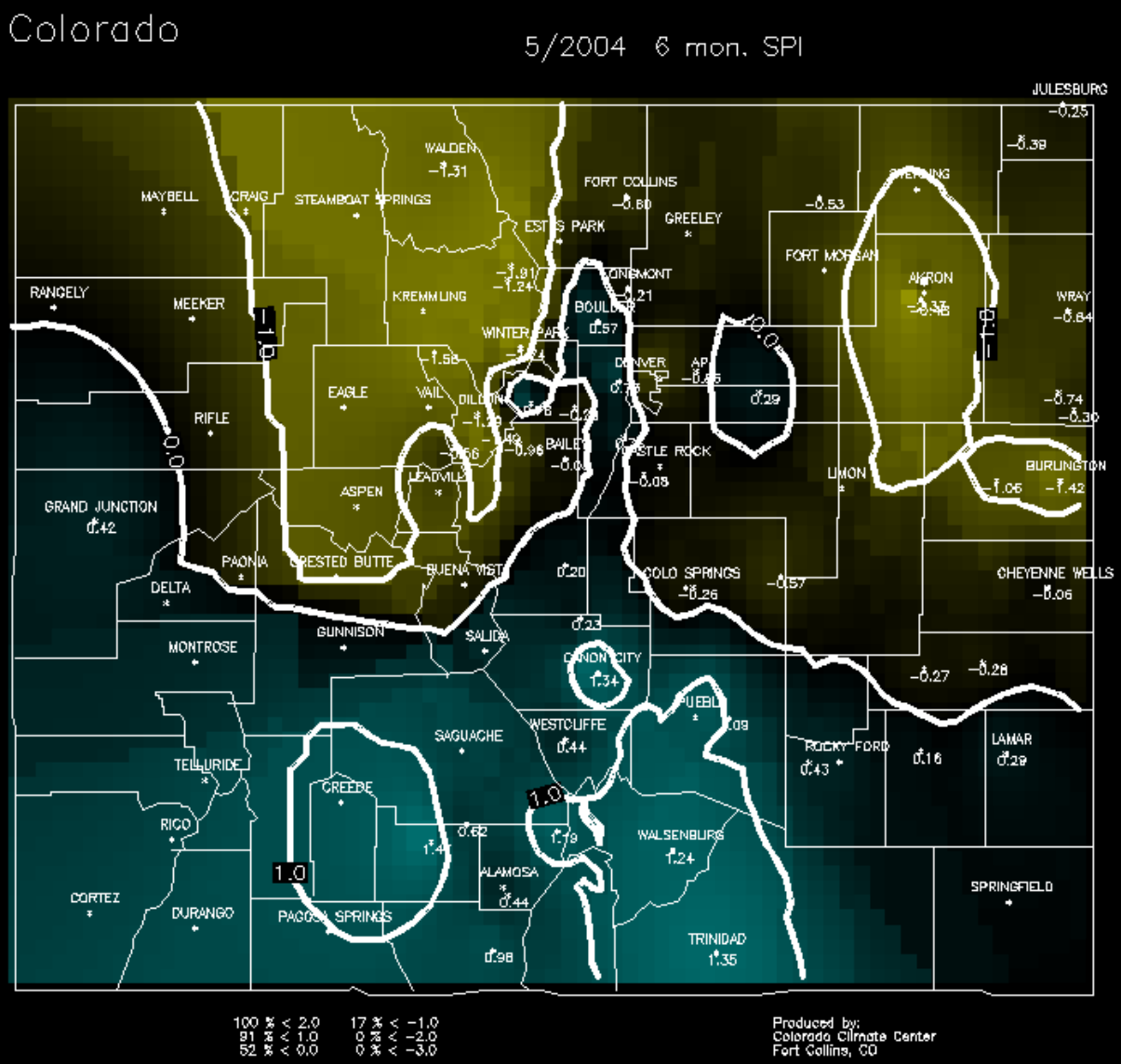


Water Year 2004 (October 2003 through May 2004) precipitation as a percent of the 1971-2000 average.

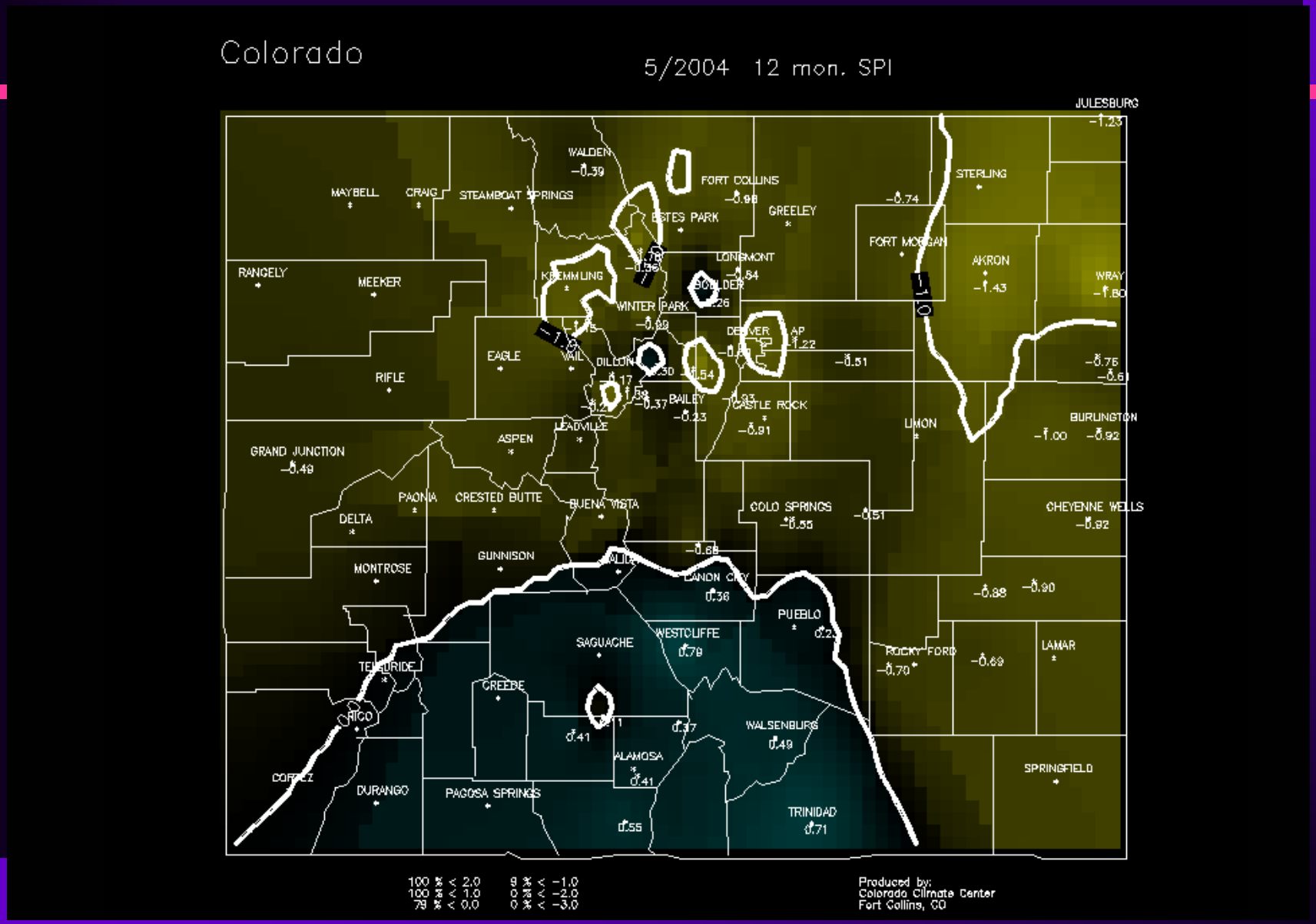
3 Month SPI


Colorado
5/2004 3 mon. SPI
JULESBURG
STERLING
FORT COLLINS
GREELEY
FORT MORGAN
WALDEN
STEAMBOAT SPRINGS
CRAIG
MAYBELL
RANGELY
MEEKER
KREMMLING
LONGMONT
BOULDER
DENVER
EAGLE
VAIL
RIFLE
ASPEN
LEADVILLE
BAILEY
CASTLE ROCK
LIMON
BURLINGTON
GRAND JUNCTION
PAONIA
CRESTED BUTTE
BUENA VISTA
COLO SPRINGS
CHEYENNE WELLS
DELTA
GUNNISON
SALIDA
MONTROSE
CANON CITY
PUEBLO
WESTCLIFFE
SAGUACHE
ROCKY FORD
LAMAR
TELLURIDE
GREEBE
RICO
WALSENBURG
AMMOSA
CORTEZ
DURANGO
PAGOSA SPRINGS
TRINIDAD
SPRINGFIELD
100 % < 2.0
96 % < 1.0
53 % < 0.0
16 % < -1.0
0 % < -2.0
0 % < -3.0
Produced by:
Colorado Climate Center
Fort Collins, CO

6 Month SPI

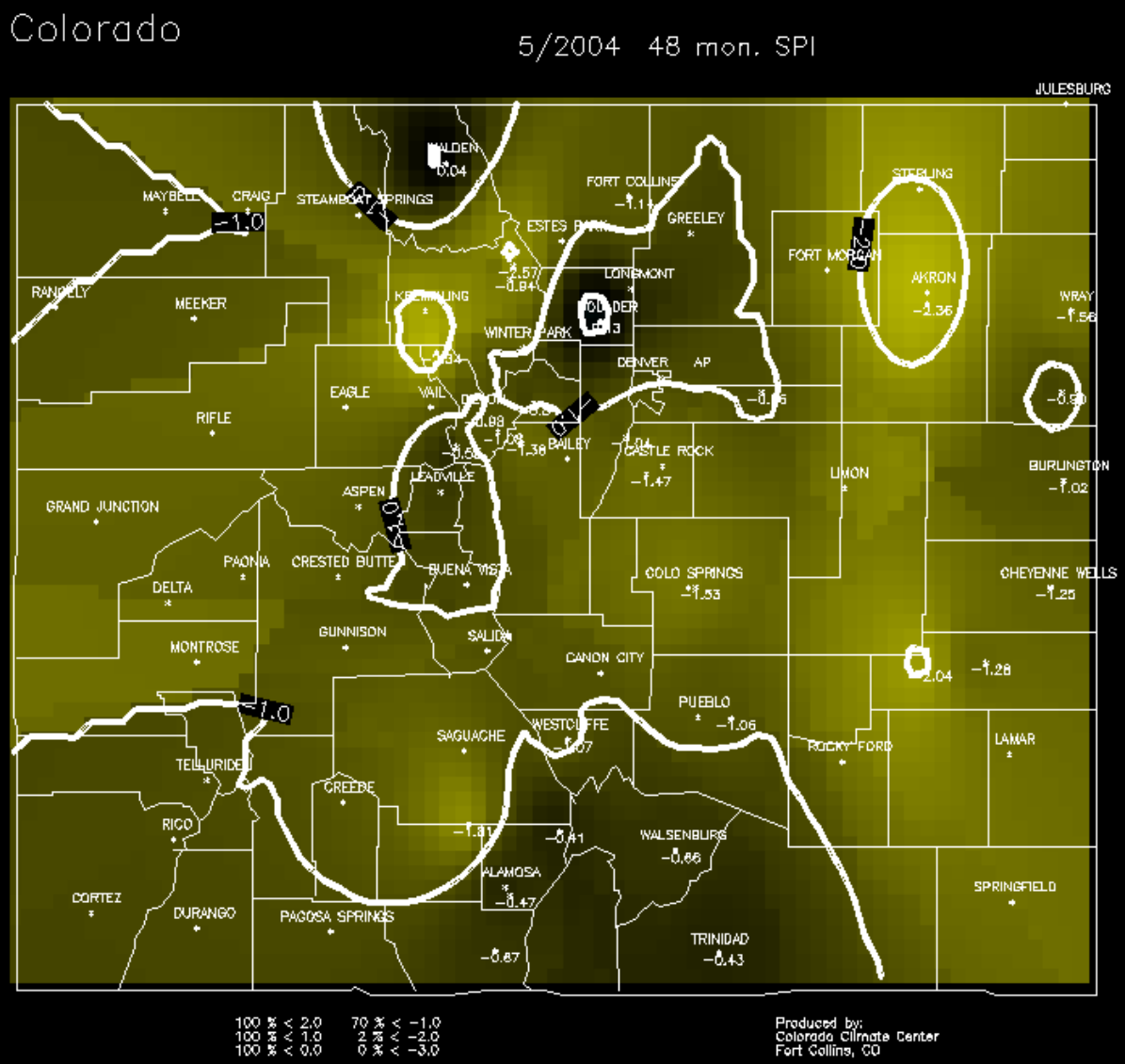

Colorado
5/2004 6 mon. SPI
JULESBURG
WALDEN
MAYBELL
CRAIG
STEAMBOAT SPRINGS
FORT COLLINS
GREELEY
ESTES PARK
FORT MORGAN
AKRON
WRAY
RANGELY
MEEKER
KREMMLING
BOULDER
WINTER PARK
DENVER
EAGLE
VAIL
RIFLE
BAILEY
CASTLE ROCK
LIMON
BURLINGTON
GRAND JUNCTION
ASPEN
LEADVILLE
PAONIA
CRESTED BUTTE
BUENA VISTA
COLO SPRINGS
CHEYENNE WELLS
DELTA
GUNNISON
SALIDA
MONTROSE
CANON CITY
PUEBLO
WESTCLIFFE
SAGUACHE
ROCKY FORD
LAMAR
TELLURIDE
CREEDE
RICO
WALSENBURG
ALAMOSA
CORTEZ
DURANGO
PAGOSA SPRINGS
TRINIDAD
SPRINGFIELD
100 % < 2.0
91 % < 1.0
52 % < 0.0
17 % < -1.0
0 % < -2.0
0 % < -3.0
Produced by:
Colorado Climate Center
Fort Collins, CO

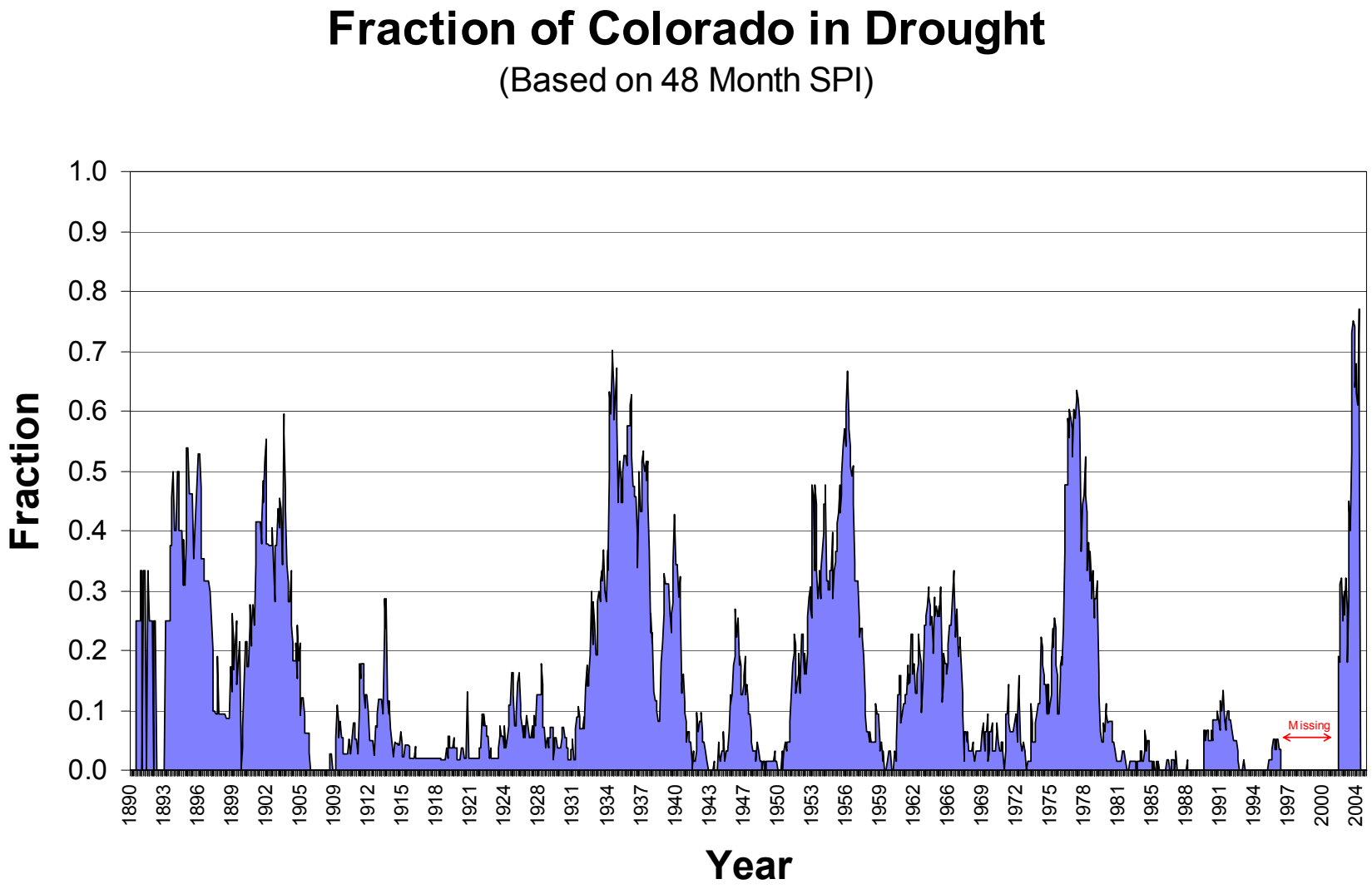
12 Month SPI



Colorado
5/2004 12 mon. SPI
JULESBURG
WALDEN
FORT COLLINS
STERLING
MAYBELL
CRAIG
STEAMBOAT SPRINGS
ESTES PARK
GREELEY
FORT MORGAN
AKRON
RANGELY
MEEKER
KREMMLING
LONGMONT
BOULDER
WRAY
WINTER PARK
DENVER
AP
EAGLE
VAIL
DILLON
RIFLE
BAILEY
CASTLE ROCK
LIMON
BURLINGTON
LEADVILLE
ASPEN
GRAND JUNCTION
PAONIA
CRESTED BUTTE
BUENA VISTA
COLO SPRINGS
CHEYENNE WELLS
DELTA
GUNNISON
MONTROSE
CANON CITY
PUEBLO
WESTCLIFFE
SAGUACHE
ROCKY FORD
LAMAR
TELLURIDE
CREEDE
RICO
WALSENBURG
ALAMOSA
SPRINGFIELD
CORTEZ
DURANGO
PAGOSA SPRINGS
TRINIDAD
100 % < 2.0
100 % < 1.0
79 % < 0.0
9 % < -1.0
0 % < -2.0
0 % < -3.0
Produced by:
Colorado Climate Center
Fort Collins, CO

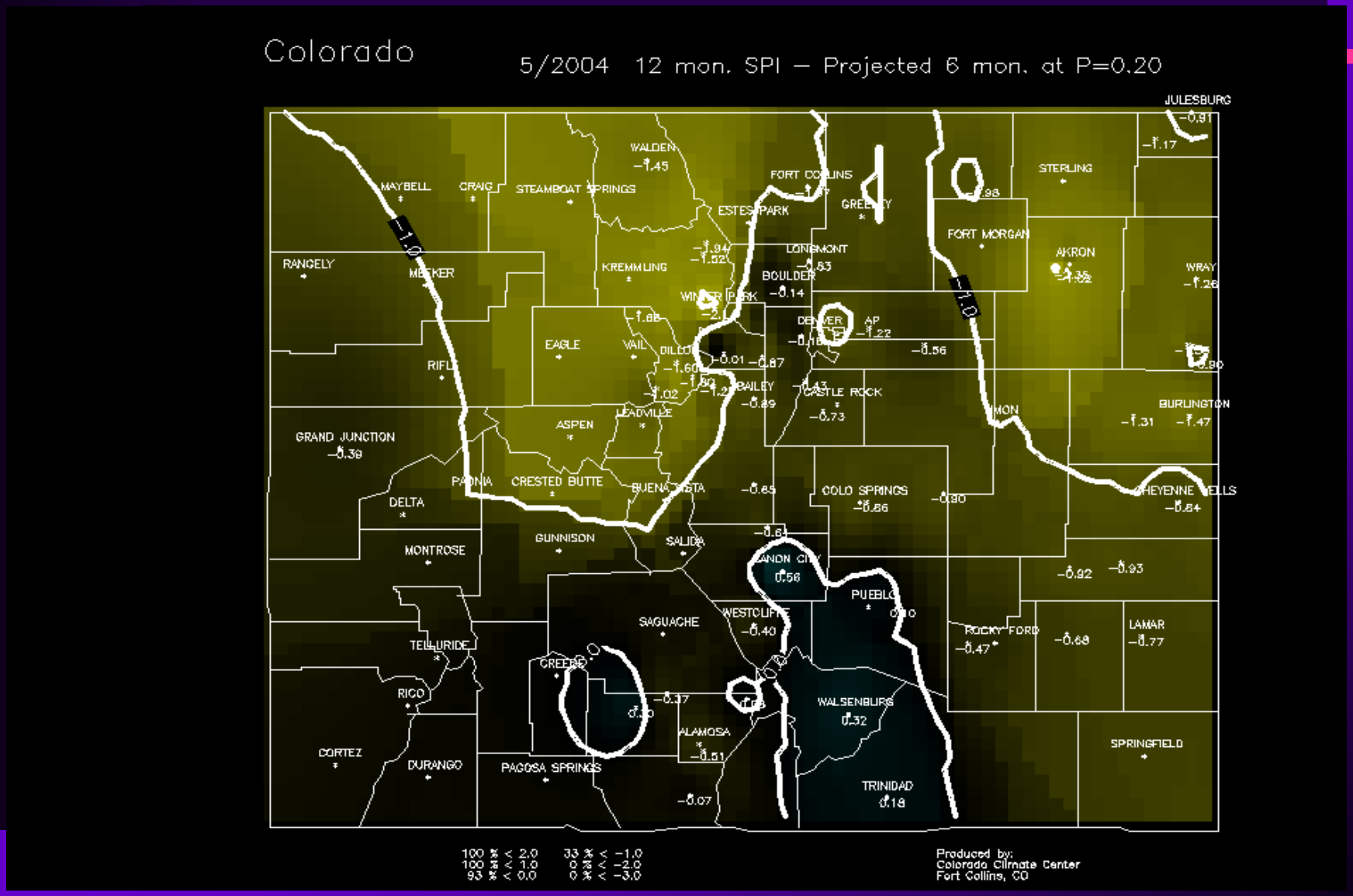
48 Month SPI


Colorado
5/2004 48 mon. SPI
JULESBURG
WALDEN
0.04
MAYBELL
CRAIG
-1.0
STEAMBOAT SPRINGS
FORT COLLINS
-1.11
GREELEY
STERLING
ESTES PARK
FORT MORGAN
AKRON
-2.36
LONGMONT
RANGELY
MEEKER
KREMMLING
BOULDER
WRAY
-1.56
WINTER PARK
DENVER AP
EAGLE
VAIL
RIFLE
BAILEY
CASTLE ROCK
-1.47
LIMON
BURLINGTON
-1.02
LEADVILLE
ASPEN
GRAND JUNCTION
PAONIA
CRESTED BUTTE
BUENA VISTA
COLO SPRINGS
-1.53
CHEYENNE WELLS
-1.25
DELTA
GUNNISON
SALIDA
MONTROSE
CANON CITY
-1.28
PUEBLO
-1.06
WESTCLIFFE
SAGUACHE
ROCKY FORD
LAMAR
TELLURIDE
CREEDE
RICO
WALSENBURG
-0.66
ALAMOSA
-0.47
SPRINGFIELD
CORTEZ
DURANGO
PAGOSA SPRINGS
TRINIDAD
-0.43
100 % < 2.0
100 % < 1.0
100 % < 0.0
70 % < -1.0
2 % < -2.0
0 % < -3.0
Produced by:
Colorado Climate Center
Fort Collins, CO

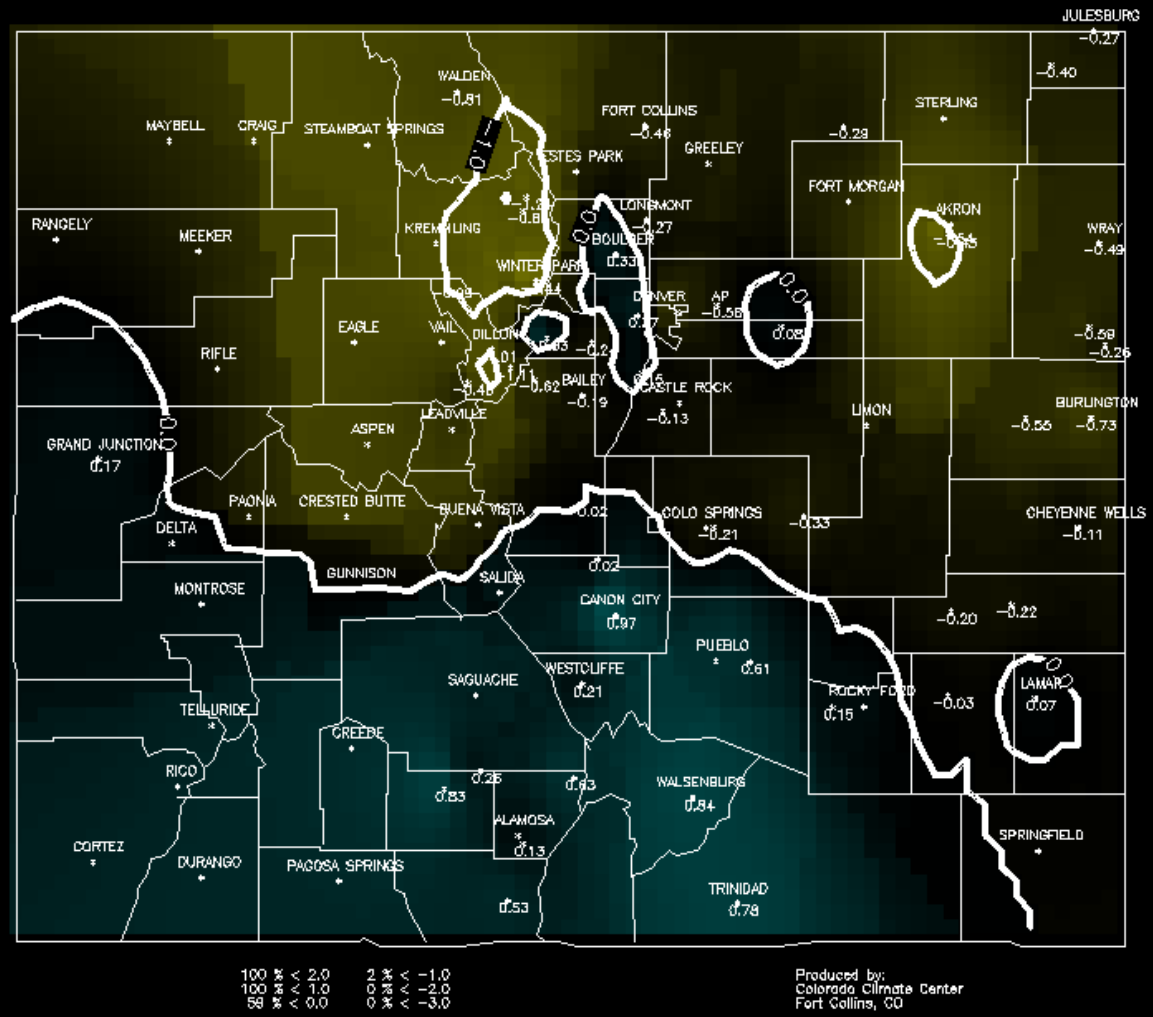


Caution: This graph is preliminary and should not be used for public presentation. Change in computation after 1996 and with some missing data.

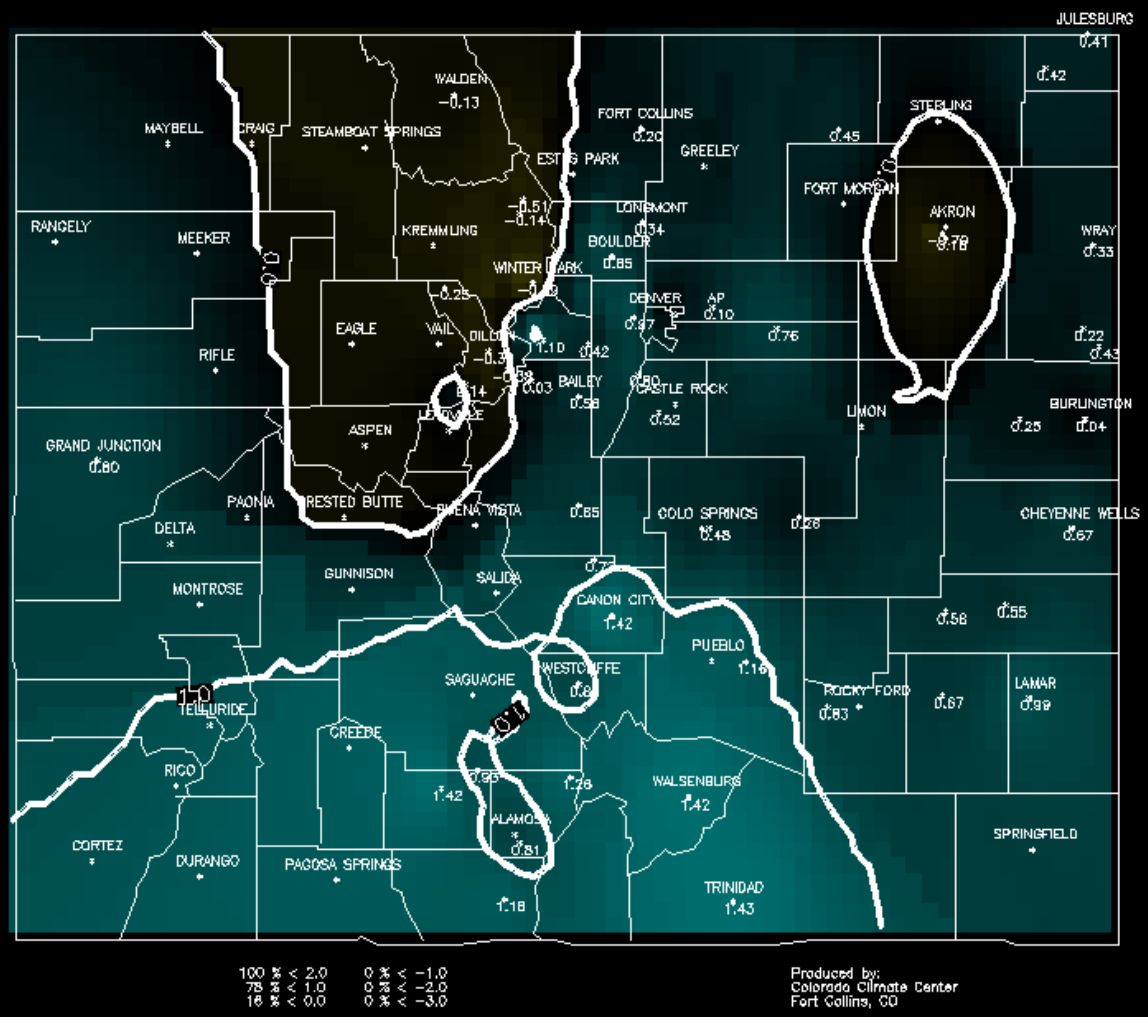
Projected Conditions at 0.2 Probability Level
12 Month SPI at 6 months



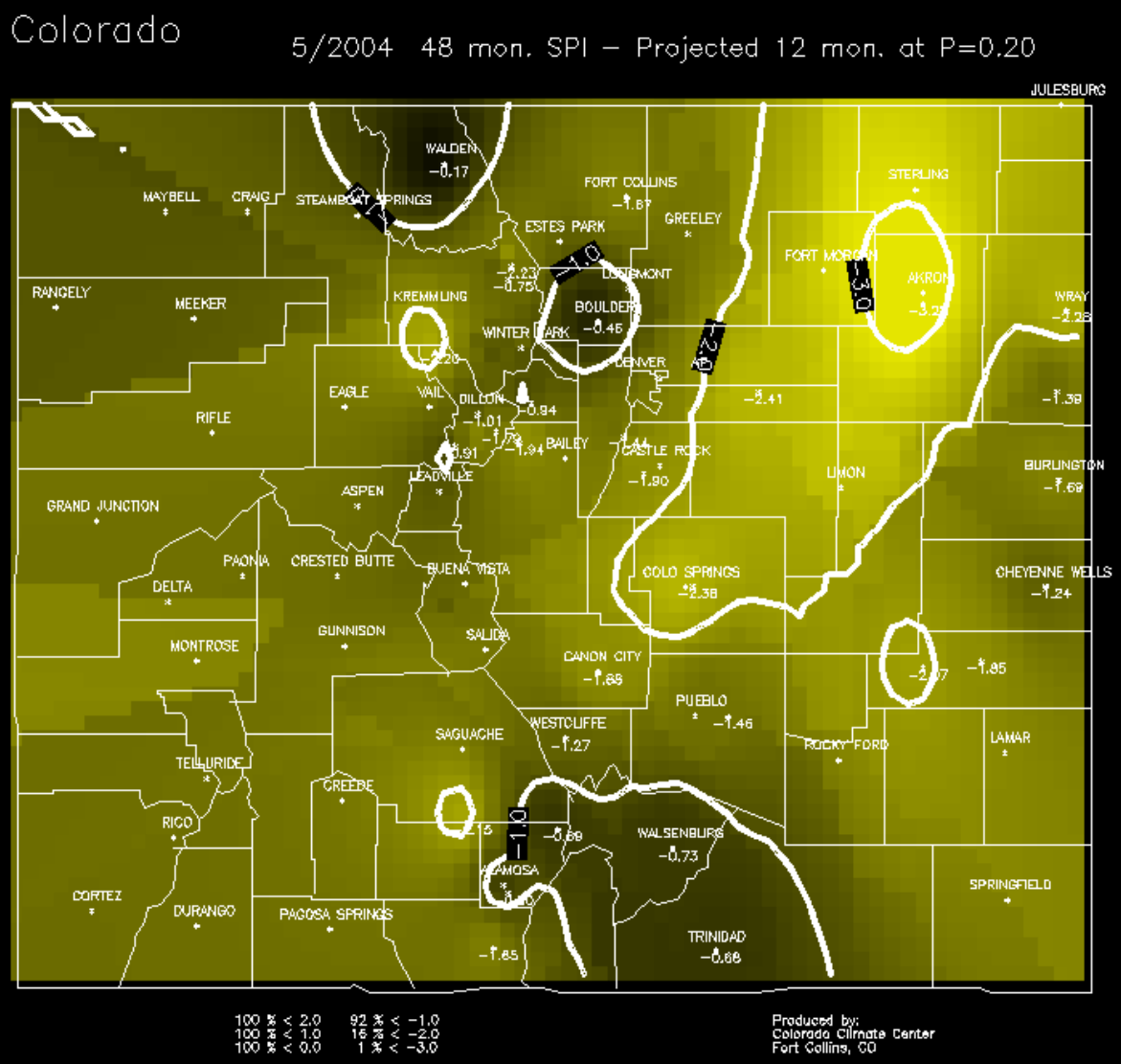
Projected Conditions at 0.5 Probability Level
12 Month SPI at 6 months



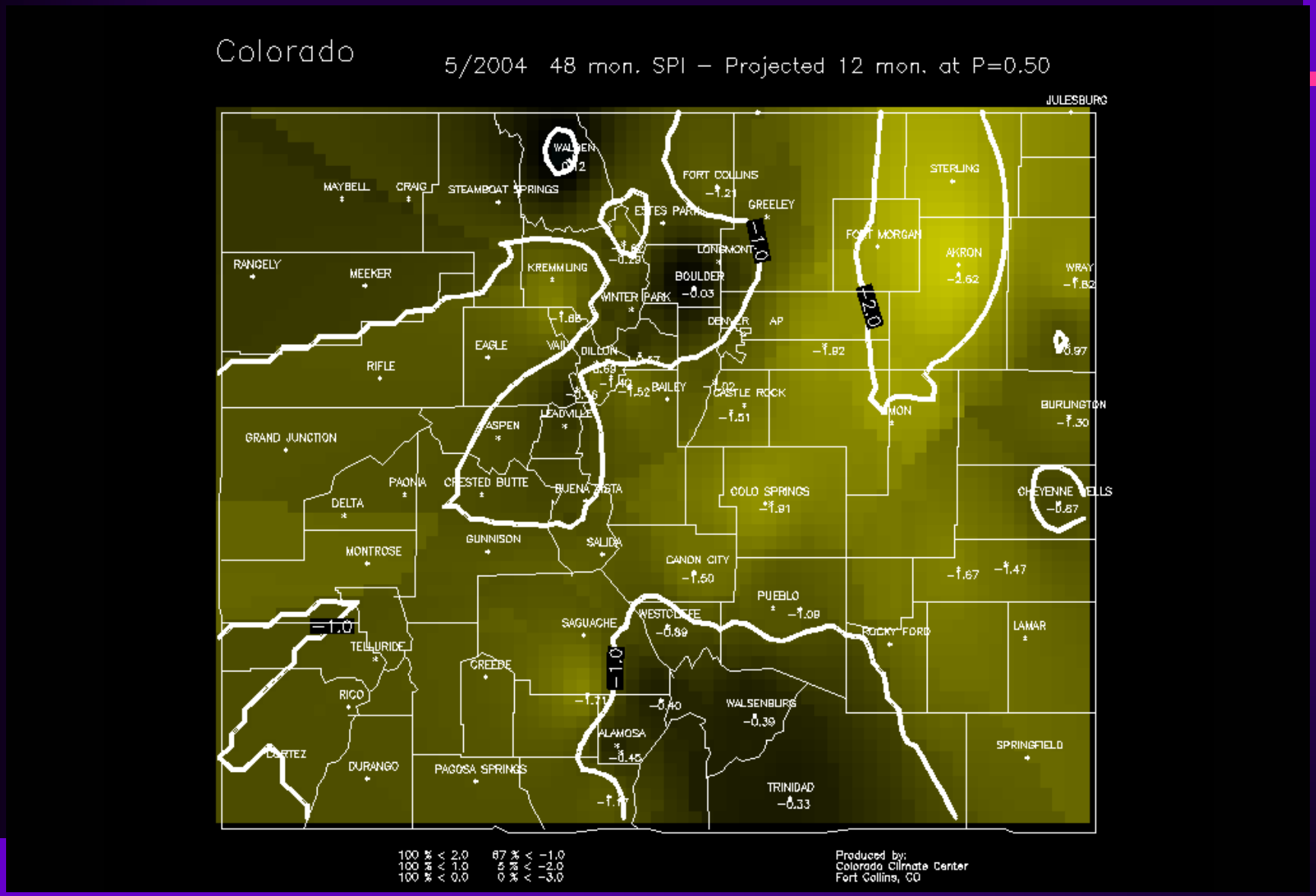
Projected Conditions at 0.8 Probability Level
12 Month SPI at 6 months



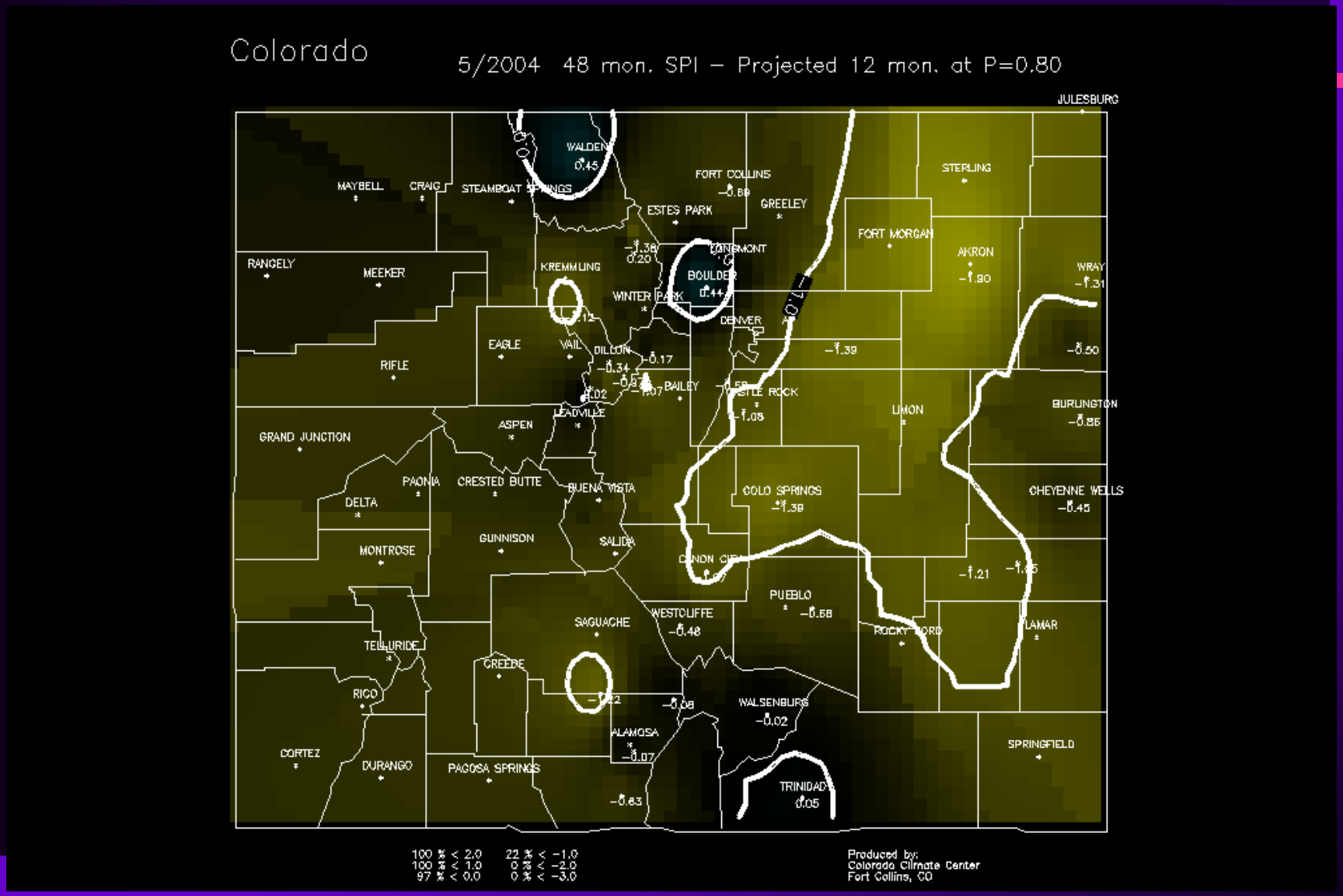
Projected Conditions at 0.2 Probability Level
48 Month SPI at 12 months



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



Projected Conditions at 0.8 Probability Level
48 Month SPI at 12 months



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”