Climate Update

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http://ccc.atmos.colostate.edu

Presented to Water Availability Task Force,
Denver, CO, May 15, 2007

Prepared by Odie Bliss
What has happened since we last met?

Weather Events:

- April 23 – 25, Central and Northeast Colorado major storm
- April 26 – 30, Dry and warming
- May 1, Southern Colorado major storm
- May 4 – 6, Front Range major storm
- May 8 – 14, Very warm, snowmelt underway
Daily Precipitation (inches x.xx), for the 24 hour period ending ~7:00 am

Colorado 5/6/2007

CoCoRaHS, May 6, 2007
Daily Precipitation (inches x.xx), for the 24 hour period ending -7:00 am

Colorado 5/7/2007
April Average Temperature History for Colorado

Period of record 1895-2007

Above average last 8 years
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
2007 Water Year

30 Year Averages-1971-2000
Period of Record Average - 1941 - 2002
2007 Water Year Accumulated
Max Precip
Min Precip

Accumulated Precipitation (Inches)

Months

OCT  NOV  DEC  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP
Division 1 – Taylor Park

Taylor Park
2007 Water Year

Accumulated Precipitation (Inches)

- 30 Year Averages-1971-2000
- Period of Record Average - 1942 - 2002
- 2007 Water Year Accumulated
- Max Precip
- Min Precip

[Graph showing accumulated precipitation for Taylor Park in 2007 Water Year, comparing 30-year averages and period of record averages with the actual data for the current year.]
Division 2 – Grand Junction

Grand Junction WSFO
2007 Water Year

Accumulated Precipitation (Inches)

Months

30 Year Averages-1971-2000
Period of Record Average - 1893-2002
2007 Water Year Accumulated
Max Precip
Min Precip
Division 2– Collbran

Collbran 2SW
2007 Water Year

30 Year Averages-1971-2000
Period of Record Average - 1893 - 2002
2007 Water Year Accumulated
Max Precip
Min precip

Accumulated Precipitation (Inches)
Months

OCT  NOV  DEC  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP
Division 3 – Mesa Verde

Mesa Verde NP
2007 Water Year

- 30 Year Averages-1971-2000
- Period of Record Average - 1893-2002
- 2007 Water Year Accumulated
- Max Precip
- Min Precip

Accumulated Precipitation (Inches)

Month of Record Average – 1893-2002

2007 Water Year Accumulated Precipitation

Months:
- OCT
- NOV
- DEC
- JAN
- FEB
- MAR
- APR
- MAY
- JUN
- JUL
- AUG
- SEP
Division 3 – Cochetopa Creek

Cochetopa Creek
2007 Water Year

Accumulated Precipitation (Inches)

- 30 Year Averages-1971-2000
- Period of Record Average - 1949 - 2002
- 2007 Water Year
- Max Precip
- Min

Months

OCT  NOV  DEC  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP
Division 5 – Colorado Springs

Colorado Springs
2007 Water Year

Months

Accumulated Precipitation (Inches)

- 30 Year Averages-1971-2000
- Period of Record Average - 1893-2002
- 2007 Water Year Accumulated
- Max Precip
- Min Precip
Division 5 – Pueblo

Pueblo WSO
2007 Water Year

30 Year Averages-1971-2000 Period of Record Average - 1874-2000
Max Precip Min Precip

Accumulated Precipitation (inches)

Months

OCT  NOV  DEC  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP
Division 5 – Canon City

Canon City
2007 Water Year

Accumulated Precipitation (Inches)

- 30 Year Averages-1971-2000
- Period of Record Average - 1906 - 2002
- 2007 Water Year Accumulated
- Max Precip
- Min Precip
Division 5 – Buena Vista

Buena Vista
2007 Water Year

Accumulated Precipitation (Inches)

30 Year Averages-1971-2000
Max Precip
Period of Record Average - 1901 - 2
2007 Water Year Accumulated
min precip
Division 7 – Leroy

Leroy 5SW
2007 Water Year

- 30 Year Averages-1971-2000
- Period of Record Average - 1890-2002
- 2007 Water Year Accumulated

Accumulated Precipitation (Inches)

Months

OCT  NOV  DEC  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP
Division 8 – Boulder

Boulder
2007 Water Year

Accumulated Precipitation (inches)

Months

- 2007 Water Year
- 30 Year Averages-1971-2000
- Period of Record Average - 1894-2002
- Max Precip
- Min P
Division 8 – Fort Collins

Fort Collins
2007 Water Year

 accumulated precipitation (inches)

Period of Record Average - 1890 - 2002

Max Precip

30 Year Averages-1971-2000

Min Precip

Month

OCT

NOV

DEC

JAN

FEB

MAR

APR

MAY

JUN

JUL

AUG

SEP

0

5

10

15

20

25

30

Accumulated Precipitation (inches)
April 2007 Percent of Average (Prism)

1-month Percent of Average Precipitation: Apr 2007
Provisional Data

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

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http://www.ocs.oregonstate.edu/prism – Map created May 14 2007
April 2007 Percent of Average (Prism)
April 2007 Percent of Average
Water Year 2007 (Oct-Apr) Prism

7-month Percent of Average Precipitation: Apr 2007
Provisional Data

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

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http://www.ocs.oregonstate.edu/prism – Map created May 14 2007
Water Year 2007 (Oct-Apr) Prism
Summary:

- Fairly typical spring weather so far, with combination of regional storms and dry periods
- Recent weather, abnormally warm statewide
- Overall, reasonable moisture conditions Front Range eastward, but still dry parts of Larimer and Weld County
- Western Colorado very dry, especially northwest
3 Month SPI

Colorado

4/2007 3 mon. SPI

Produced by:
Colorado Climate Center
Fort Collins, CO
12 Month SPI
Standardized Precipitation Index

Fraction of Colorado in Drought

Based on 48 month SPI

(1890 - Apr 2007)
U.S. Drought Monitor

May 8, 2007
Valid 8 a.m. EDT

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 10, 2007
Author: Brian Fuchs, National Drought Mitigation Center
Data and Power Point Presentations available for downloading

http://ccc.atmos.colostate.edu

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