Highlights of the 2004 Water Year in Colorado

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http://ccc.atmos.colostate.edu
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Prepared by Odie Bliss
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summaries for forecast statements.

http://drought.unl.edu/dm

USDA
National Drought Mitigation Center
NOAA NCDC
WY2004 Highlights

- Record warmth in October
- Freezing drizzle storm for Halloween, cloudy
- Good early snows over SW Colorado
- Cold and snowcovered on the Western Slope midwinter
- Fairly dry and dull midwinter elsewhere
- A cold February
- Very warm and dry March
- Wet April -- Hurray!
- Oops, warm and dry again in May
- Cool and damp summer east of mountains
- Hot and dry to the west
- Moisture onslaught into Western Colorado in September
Water Year 2004 temperature departures from 1971-2000 average

![Graph showing temperature departures for different regions in Water Year 2004.](image-url)

- Eastern Plains
- Foothills
- Mountains
- Western Valleys
UNIVERSITY CAMP SNOTEL as of 10/21/2004

*** Provisional Data, Subject to Change ***

Inches

Date (mm/dd)

Precip WY2005
SWE WY2005
Precip WY2004
SWE WY2004
Precip Avg 71-00
SWE Avg 71-00
Upper San Juan Snotel

UPPER SAN JUAN SNOTEL as of 10/21/2004

*** Provisional Data, Subject to Change ***
Tower Snotel

TOWER SNOTEL as of 10/21/2004

*** Provisional Data, Subject to Change ***
Hoosier Pass Snotel

HOOSIER PASS SNOTEL as of 10/21/2004

*** Provisional Data, Subject to Change ***

Inches

Date (mm/dd)


Precip WY2005
SWE WY2005
Precip WY2004
SWE WY2004
Precip Avg 71-00
SWE Avg 71-00
April 1 Snowpack

Snowpack
April 1, 2004

Legend
- > 150% of Average
- 130 - 150% of Average
- 110 - 129% of Average
- 90 - 109% of Average
- 70 - 89% of Average
- 50 - 69% of Average
- < 50% of Average
- Not Surveyed

Major Basin Boundary
Watershed Boundary

Statewide: 65% of Average
69% of Last Year
April 2004 precipitation as a percent of the 1971-2000 average.
May 1 Snowpack

Statewide: 68% of Average
78% of Last Year
Summer 2004 (May–Sep) precipitation as a percent of the 1971-2000 average
Water Year 2004 precipitation as a percent of the 1971-2000 average
Animas River at Durango Hydrograph

Note the surge in late season runoff
Colorado River at Dotsero Hydrograph
Colorado Statewide Reservoir Levels on October 1st for Years 1997-2004
Summary

- A mild winter again
- Another year with below average snowmelt runoff
- Generous growing season precipitation east of the mountains
- Coolest summer in a looong time
- Improvements in soil moisture
- Reservoirs hung in there
- Significant runoff from rains
Overall: Continued Softening Of Drought Intensity
U.S. Drought Monitor

October 5, 2004
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)

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And How About CoCoRaHS?
CoCoRaHS!

- A great year for CoCoRAHS!
- Over 400 new volunteers
- Now statewide and spreading to Wyoming, Nebraska and Kansas

4-state map from new CoCoRaHS web site
NeRAIN
Nebraska Rainfall Assessment and Information Network

http://dnrdata.dnr.state.ne.us/NeRAIN/index.asp
Example of Adams County Data from Nebraska -- NeRAIN
CoCoRaHS map for August 19, 2004
Jefferson County

Jefferson & Douglas County Precipitation Map
For the 24 hour period ending ~7:00 am on 08/19/2004
CoCoRAHS map for August 19, 2004 Boulder County
For more information visit the CoCo RaHS Web site

http://www.cocorahs.org

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Colorado Climate Center

Data and Power Point Presentations available for downloading

http://ccc.atmos.colostate.edu
- click on “Drought”
- then click on “Presentations”