Weather and Climate Impacts on Water Supply

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The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

http://drought.unl.edu/dm
Water Year 2005 temperature departures from 1971-2000 average

Water Year 2005

- Departure (Degrees Fahrenheit)

- Eastern Plains
- Foothills
- Mountains
- Western Valleys

Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep
Colorado Statewide Winter Temperature Average
Colorado Statewide Average Summer (Jun-Aug) Temperature

Temperature (deg F)

Temperature Average Temperature

1885 1900 1915 1930 1945 1960 1975 1990 2005
Joe Wright Snotel

JOE WRIGHT SNOTEL as of 10/25/2005

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

**HOOSIER PASS SNOTEL as of 10/25/2005**

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

**Graph Description:**

- **Y-axis:** Inches
- **X-axis:** Date (mm/dd)
- **Legend:**
  - Red: Precip WY2006
  - Blue: SWE WY2006
  - Purple: Precip WY2005
  - Green: SWE WY2005
  - Orange: Precip Avg 71-00
  - Light Blue: SWE Avg 71-00
Upper San Juan Snotel

UPPER SAN JUAN SNOTEL as of 10/25/2005

*** Provisional Data, Subject to Change ***
April 1 Snowpack

Snowpack
April 1, 2005

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

Statewide: 107% of Average
167% of Last Year
Water Year 2005 precipitation as a percent of the 1971-2000 average.

Leroy 5SW
2005 Water Year

- 30 Year Averages-1971-2000
- Max Year - 1995
- Min Year - 1894
- Period of Record Average - 1890-2002
- 2005 Water Year Accumulated
- 2002 Water Year Accumulated

Accumulated Precipitation (Inches)

Months
- OCT
- NOV
- DEC
- JAN
- FEB
- MAR
- APR
- MAY
- JUN
- JUL
- AUG
- SEP

Period of Record Average - 1890-2002
Colorado Statewide Water Year Precipitation Totals

Colorado Statewide Water Year (Oct-Sep) Precipitation from 1896 - 2005

Year

Precipitation (inches)
Provisional Data Subject to Revision
South Platte River at Englewood

USGS 06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO.

--- EXPLANATION ---
- MEDIAN DAILY STREAMFLOW BASED ON 21 YEARS OF RECORD
- DAILY MEAN DISCHARGE

Provisional Data Subject to Revision
St. Vrain Creek below Longmont

USGS 06725450 ST. VRAIN CREEK BELOW LONGMONT, CO.

DAILY Discharge, cubic feet per second

Nov 2004 to Sep 2005

EXPLANATION

- Red line: Median daily streamflow based on 26 years of record
- Blue line: Daily mean discharge

Provisional Data Subject to Revision
South Platte River at Fort Morgan

USGS 06759500 SOUTH PLATTE RIVER AT FORT MORGAN, CO.

DAILY Discharge, cubic feet per second

Nov 2004 to Sep 2005

EXPLANATION

- MEDIAN DAILY STREAMFLOW BASED ON 17 YEARS OF RECORD
- DAILY MEAN DISCHARGE

Provisional Data Subject to Revision
Reservoir Storage Levels

Colorado Statewide Reservoir Levels on October 1st for Years 1997-2004 and Oct 1, 2005

Percent of Average

Summary

- Snow blitz across southern Rockies.
- Near-average snowpack in the South Platte basin.
- Mild winter (12th in a row).
- Beneficial April and early June precipitation.
- A hot and dry July.
- Below average growing season precipitation.
- A saving Denver-metro rain August 3-5th.
- Overall – Above average temperature, near to slightly below average precipitation.
- October 2005 – Great moisture on the Plains!
48-Month SPI

Fraction of Colorado in Drought
Based on 48 month SPI
(1890 - September 2005)
U.S. Drought Monitor

October 18, 2005
Valid 8 a.m. EDT

Intensity:
- Yellow: Abnormally Dry
- Light Brown: Drought - Moderate
- Brown: Drought - Severe
- Red: Drought - Extreme
- Dark Brown: Drought - Exceptional

Drought Impact Types:
- ~: Delineates dominant impacts
- A: Agricultural (crops, pastures, grasslands)
- H: Hydrological (water)
(No type = Both impacts)

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Temperature
Nov-Jan 2006

From the Colorado Prediction Center
Precipitation
Nov-Jan 2006

From the Colorado Prediction Center
Temperature
Feb-Apr 2006

From the Colorado Prediction Center
Temperature
May-Jul 2006

From the Colorado Prediction Center
Precipitation
May-Jul 2006

From the Colorado Prediction Center
And How About CoCoRaHS?
For more information visit the CoCoRaHS 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”