- Assessment of current water conditions
- Precipitation Forecast
- Recommendations for Drought Monitor
Precipitation/Snowpack Update
Colorado Precipitation (in) March 2010

Produced by the Colorado Climate Center utilizing Snotel, NWS, CoCoRaHS and CoAgMet® Preliminary Precipitation Data
Analysis: Inverse Distance Weighting
*Summer only
March 2010 Precipitation as Percent of Average

Produced by the Colorado Climate Center utilizing Snotel, NWS, CoCoRaHS and CoAgMet. Preliminary Precipitation Data Analysis: Inverse Distance Weighting

*Summer only
7 Day Precipitation 29 March – 4 April 2010

Colorado 7 Day Precipitation (in)
29 March - 4 April 2010

Produced by the Colorado Climate Center utilizing Snotel, NWS, CoCoRaHS and CoAgMet* Preliminary Precipitation Data Analysis: Inverse Distance Weighting
*Summer only
Upper Colorado River Basin
Green River Basin above Flaming Gorge
Green River Basin above Flaming Gorge

Basin Snowpack: 61%
Basin snowpack: 91%
Upper Colorado above Kremmling
Colorado River above Kremmling

Snow Water Equivalent (in)

Date

1-Oct 1-Nov 1-Dec 1-Jan 1-Feb 1-Mar 1-Apr 1-May 1-Jun 1-Jul 1-Aug 1-Sep

Basin Snowpack: 80%
San Juan Basin

Basin Snowpack: 97%
Rabbit Ears Pass

Rabbit Ears
view snotel plot >>

RESC2, Snow Point, 9400ft
17.1 in, 28.23 Avg, 60.6%, 0.5 in/dy
Observed on 6

Overlays
- Rivers
- RFC
- Basins
- Active Basins
- Grids (Precip etc.)

Display Options
- Show NWS ID
- Show Data

Snow Point %Avg SWE
- No Data
- < 25
- 25-50
- 50-75
- 75-90
- 90-110
- 110-125
- 125-150
- 150-175
- > 175

Snow Point Options
- All
- < 7000
- 7000-8000
- 8000-9000
- 9000-10000
- > 10000

NATIONAL WEATHER SERVICE
Colorado Basin River Forecast Center
Rabbit Ears Pass

Snow Water Equivalent (in)

Date

1-Oct 1-Nov 1-Dec 1-Jan 1-Feb 1-Mar 1-Apr 1-May 1-Jun 1-Jul 1-Aug 1-Sep

Snowpack: 61%
Snotel WYTD Precipitation % Average

Snotel Water Year Precipitation as Percent of Average
6 April 2010
Snotel WYTD Precipitation % Average

Snotel Water Year Precipitation as Percent of Average
6 April 2010

Upper Colorado
82% of Average Overall
Snotel WYTD Precipitation % Average 1 Week Change

Snotel WYTD Precipitation as Percent of Average
1 Week Change  (6 April 2010)
Western Snotel Percentiles

Water Year (Oct 1) to Date Precipitation Ranking Percentile

- ☑ wettest 5%
- ▲ 91% - 95%
- ▲ 81% - 90%
- ▲ 71% - 80%
- ▲ 51% - 70%
- ▲ 31% - 50%
- ▲ 21% - 30%
- △ 11% - 20%
- ▼ 6% - 10%
- ★ driest 5%

Provisional Data Subject to Revision

http://www.wcc.nrcs.usda.gov/gis/precip.html
Upper Colorado Basin
7-day average streamflow (all gages) compared to historical streamflow for the day of the year

<table>
<thead>
<tr>
<th>Explanation - Percentile classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
</tr>
<tr>
<td>Regular</td>
</tr>
</tbody>
</table>

Monday, April 05, 2010
Upper Colorado Basin 7-day average streamflow (HCDN gages only) compared to historical streamflow for the day of the year.
Time series plot of real-time streamflow compared to historical streamflow for the day of the year.
Upper Colorado Basin
Below normal 7-day average streamflow compared to historical conditions for the day of the year

Explanation - Percentile classes

<table>
<thead>
<tr>
<th>Percentile Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>New low</td>
</tr>
<tr>
<td>&lt;=5</td>
</tr>
<tr>
<td>6-9</td>
</tr>
<tr>
<td>10-24</td>
</tr>
<tr>
<td>Boreal non-ideal</td>
</tr>
</tbody>
</table>

Note: The map shows various locations within the basin with different levels of hydrological conditions.
4 April 2010
Percentage of Streamgages per Percentile Class
7-day Average Streamflow
Green Mountain March Reservoir Storage

Max Capacity

Green Mountain Res. Levels

- Actual Level
- 1971-2000 Ave
- Max Capacity

WY 2009 - Current

Thousand AF

Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar
March Temperature Departure

Departure from Normal Temperature (°F)

Generated 4/5/2010 at HPRCC using provisional data.
7 Day Temperature Departure

Departure from Normal Temperature (F)
3/30/2010 - 4/5/2010

Generated 4/6/2010 at HPRCC using provisional data. NOAA Regional Climate Centers
1-3 Day Outlook

http://www.hpc.ncep.noaa.gov/
5 Day Outlook

http://www.hpc.ncep.noaa.gov/
6-10 Day Outlook
11 April - 15 April 2010

http://www.cpc.ncep.noaa.gov/
8-14 Day Outlook
13 April – 19 April 2010

http://www.cpc.ncep.noaa.gov/
Recommendations

U.S. Drought Monitor

March 30, 2010
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)

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, April 1, 2010
Author: Matthew Rosencrans, NOAA/NWS/NCEP/CPC
Western-WY: recent prcp is helpful, though may not warrant changes to current drought depiction. Recent storms have taken area from ~55% of historical average to only about ~65% in driest parts of area (local input). Minor trimming/refinement of D1 in sw part of state is being considered, but would like to get input from nearby CO and UT before doing so.
INFO

CONTACT:
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COLORADO STATE UNIVERSITY
FORT COLLINS, CO 80523
970-491-8545

NIDIS - UPPER COLORADO BASIN PILOT PROJECT

For more information
Summary

A series of storms since last Tuesday brought significant precipitation to regions of northwestern Colorado, northeastern Utah and western Wyoming. This moisture helped boost both snowpack and precipitation percent of averages at many sites in the tri-state area that have been lagging behind average. The Provo River Basin in Utah saw a 16% increase in snowpack percent of average from last week. The Green River Basin in Wyoming saw an 11% increase. In the Upper Colorado River basin in Colorado, most snotel stations experienced a 5 to 10% increase in water year precipitation percent of average from last week. Significant precipitation continues today but a drying and warming trend is expected later in the week. Many streamgages are still iced up, but overall streamflow for this time of year remains below to significantly below average for this time of year over most of the upper Colorado River Basin (CO, WY, UT). With warming temperatures expected and recent significant deposits of dust on snow over much of Colorado's high country, the start of the 2010 snow melt season is now imminent. Seasonal streamflow projections as of April 1 indicate much below average streamflow for many forecast points. Most recent reservoir numbers in the Colorado River basin show that levels are staying fairly steady from the previous months and are near average for this time of year. Thanks to a cold winter and generous precipitation east of the mountains since last summer, heavy early demand for irrigation water is not expected. Flaming Gorge Reservoir levels in WY/UT, while still near average, fell from February to March, which is a departure from the past few years and may be an indication of the low inflows that are occurring and are likely in the coming months.

Despite liberal amounts of precipitation that fell this week, there are no suggestions to decrease any of the D1 in Colorado or change the D0 boundaries. Much of the precipitation that fell was concentrated from Moffat County (east of the D1 that is in the extreme northwestern part of the county) and east into the Park and Gore ranges. Though there may be suggestions to subtly re-shape the D1 in Routt, Jackson and Grand Counties, there are no suggestions to decrease any of the D1 in the area. The region did see some improvements from last week, but since the area was well into D1 (with even some justification to introduce D2 into certain parts), the consensus is that the improvements are not enough to take us out of that category yet.