CBRFC
January 2012
Water Supply Webinar

1pm, January 6, 2012

Kevin Werner

These slides: www.cbrfc.noaa.gov/present/present.php
Outline

- December Weather Review
- Snow States
- Water Supply Forecasts

Snow

January 5, 2012

Snow: Upper Green Basin (above Flaming Gorge)

Colorado Basin River Forecast Center
Upper Green Group

To Date: 74% (4.9 / 6.6)
Seasonal: 34% (4.9 / 14.3)
Accumulation rate 0.0 in/day averaged over last 3 days.

Average 1981-2010  2012  2011  2010

Web Reference: http://www.cbrfc.noaa.gov/station/sweplot/sweplot.cgi???open
Snow: Upper Green Basin (above Flaming Gorge)
Snow: Colorado Mainstem (above Cameo)

Colorado Basin River Forecast Center
Upper Colorado Mainstem Group

To Date: 59% (4.5 / 7.6)
Seasonal: 26% (4.5 / 18.9)
Accumulation rate 0.0 in/day averaged over last 3 days.

Average 1981-2010  blue  2012  green  2011  red

Web Reference: http://www.cbrfc.noaa.gov/station/sweplot/sweplot.cgi???open
Snow:
Gunnison Basin
Snow: San Juan Basin

Web Reference: http://www.cbrfc.noaa.gov/station/sweplot/sweplot.cgi

Colorado Basin River Forecast Center
San Juan Basin Group

To Date: 81% (7.5 / 9.3)
Seasonal: 37% (7.5 / 20.2)
Accumulation rate 0.0 in/day averaged over last 3 days.

Created 01/06/23 38 UTC
NOAA/CRFC, 2012


Date

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

Percent Seasonal

Snow Water Equivalent (in)
Snow:
Lower Colorado

Web Reference: http://www.cbrfc.noaa.gov/station/sweplot/sweplot.cgi???open
Snow:
Six Creeks in Salt Lake County

Web Reference: http://www.cbrfc.noaa.gov/station/sweplot/sweplot.cgi??open
Forecast Precipitation

Web Reference: www.hpc.noaa.gov
Forecast Precipitation

- Long wave ridge continues to prevail over western United States
- Two small storms: Saturday/Sunday

Web Reference: www.hpc.noaa.gov
Forecast Precipitation

- Long wave ridge continues to prevail over western United States
- Two small storms:
  - Saturday/Sunday
  - Next Wednesday

Web Reference: www.hpc.noaa.gov
Forecast Precipitation

• Long wave ridge continues to prevail over western United States
• Two small storms:
  • Saturday/Sunday
  • Next Wednesday
• Major ridge forecast to follow – Confidence is somewhat higher given global circulation pattern and average positioning of ridging atmospheric western United States

Web Reference: www.hpc.noaa.gov
La Nina Update

Initial conditions: 27Dec2010–5Jan2011
Last update: Fri Jan 7 2011

CFS monthly standardized Prec

Web Reference: http://www.cbrfc.noaa.gov/climate/climoForecasts.cgi
January 1, 2012
Water Supply Forecasts

Highlights:
• Below average/median forecasts nearly everywhere
• Major factors:
  • Low snow in upper and Great Basins
  • La Nina and low antecedent conditions in lower basin
Baseflow:
- 2011 lower than average
- 2012 higher than average (but trending toward normal)
Seasonal Water Supply Forecast

Forecast Period: Apr–Jul

- **1750 kaf**
  - 50% Exceedance (Official Forecast)
- **82%**
  - of Historical Median
- **1050 kaf**
  - 90% Exceedance
- **2630 kaf**
  - 10% Exceedance
- **60th of 78**
  - Official Historical Flows

Forecast Issued: Jan 1 2012

Seasonal Water Supply Forecast

650 kaf
50% Exceedence (Official Forecast)

107% of Historical Median
88% of Historical Mean

335 kaf 90% Exceedence
965 kaf 10% Exceedence

37th of 64 Official Historical Flows

Forecast Issued: Jan 1 2012

Seasonal Water Supply Forecast

Forecast Period: Apr-Jul

5050 kaf
50% Exceedence (Official Forecast)

66% of Historical Median

71% of Historical Mean

2400 kaf
50% Exceedence

8670 kaf
10% Exceedence

80th of 102 Official Historical Flows

Forecast Issued: Jan 1 2012

View Water Supply Forecast Plot

COLORADO - LAKE POWELL, GLEN CYN DAM, AT (GLDA2)

Water Years 2011-2012, Forecast Period Apr-Jul (highlighted)

Seasonal Water Supply Forecast

83 kaf
50% Exceedence (Official Forecast)
70% of Historical Median
70% of Historical Mean

45 kaf
90% Exceedence

130 kaf
10% Exceedence

89th of 108
Official Historical Flows

Forecast Issued: Jan 1 2012

WEBER - OAKLEY, NR (OAWU1)
Water Years 2011-2012, Forecast Period Apr-Jul (highlighted)

Seasonal Water Supply Forecast

Forecast Period: Jan–May

250 kaf
50% Exceedence (Official Forecast)

94 kaf
90% Exceedence

525 kaf
10% Exceedence

55th of 98
Official Historical Flows

98% of Historical Median
55% of Historical Mean

Forecast Issued: Jan 1 2012

SALT - ROOSEVELT, NR (SLRA3)
Water Years 2011-2012, Forecast Period Jan–May (highlighted)

No data before 2010-10-01

CBRFC/NIWS/NOAA 01/09 12:15:34 UTC

Online Publication

Upper Colorado Water Supply Outlook, January 1, 2011

Prepared by Brenda Alcorn, Tracy Cox  
NOAA, National Weather Service  
Colorado Basin River Forecast Center  
Salt Lake City, Utah  
www.cbrfc.noaa.gov

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- Upper Colorado Mainstem Basin Conditions
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- Reservoir Contents
- Monthly Streamflows
- Precipitation Maps
- Definitions
- Additional Information
- Questions or Comments

Upper Colorado Mainstem Specific Site Forecasts (kaf)

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Forecast Period</th>
<th>90% Exceedance Volume</th>
<th>50% Exceedance Volume</th>
<th>Percent Average</th>
<th>10% Exceedance Volume</th>
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<tr>
<td>Colorado</td>
<td>April-July</td>
<td>200</td>
<td>260</td>
<td>124</td>
<td>370</td>
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<td>Willow Ck</td>
<td>April-July</td>
<td>44</td>
<td>70</td>
<td>137</td>
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<td>Fraser</td>
<td>April-July</td>
<td>15</td>
<td>23</td>
<td>115</td>
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<td>Williams Fork Res, Parshall, Nr</td>
<td>April-July</td>
<td>76</td>
<td>110</td>
<td>116</td>
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<td>Muddy Ck</td>
<td>April-July</td>
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<td>Blue</td>
<td>April-July</td>
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<td>Green Mtn Res</td>
<td>April-July</td>
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<td>335</td>
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<td>Kremmling, Nr</td>
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<td>380</td>
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<td>535</td>
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<td>Dotsco, Nr</td>
<td>April-July</td>
<td>1140</td>
<td>1720</td>
<td>119</td>
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<td>Frying Pan</td>
<td>April-July</td>
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<td>160</td>
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<td>215</td>
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<td>Roaring Fork</td>
<td>April-July</td>
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<td>118</td>
<td>1160</td>
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<td>Glenwood Springs</td>
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<td>3600</td>
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<td>Cameo, Nr</td>
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<td>Cisco, Nr</td>
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<td>Lake Powell, Glen Cyn Dam, At</td>
<td>April-July</td>
<td>5860</td>
<td>9500</td>
<td>120</td>
<td>14000</td>
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CBRFC News

• Basin Focal Points (Available to discuss forecasts: 801.524.5130)
  – Upper Colorado: Brenda Alcorn / John Lhotak
  – Green: Ashley Nielson
  – San Juan / Gunnison: Greg Smith
  – Great Basin: Brent Bernard
  – Sevier / Virgin: Stacie Bender
  – Lower Colorado (below Lake Powell): Tracy Cox

• Misc:
  – New CBRFC webpage (www.cbrfc.noaa.gov) - “How to use the webpage” webinar / recorded tutorial coming later this month
  – Sign up for next webinar Feb 7
  – Weekly ESP model guidance
  – Email product updates via govdelivery
  – Blog
More Resources

• www.cbrfc.noaa.gov
• Wateroutlook.nwrfc.noaa.gov

• Tentative February webinar: 10am Feb 7
Feedback, Questions, Concerns always welcome....

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