CBRFC
February 2015
CUWCD Briefing/Meeting

1pm February 11, 2015
Ashley Nielson
February Call Outline

• Fall/Winter Weather
• Current conditions driving forecasts
  • Soil Moisture, Snow Conditions
• Water Supply Forecasts
• Upcoming weather (short and long range)
• Website Updates
Late Summer/ Fall Precipitation

Monthly Precipitation for August 2014
(Averaged by Hydrologic Unit)

<table>
<thead>
<tr>
<th>% Average</th>
<th>Duchesne</th>
<th>Provo</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 150%</td>
<td>240%</td>
<td>270%</td>
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<tr>
<td>129 - 150%</td>
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<tr>
<td>110 - 129%</td>
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<td>100 - 109%</td>
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<td>90 - 99%</td>
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<td>70 - 89%</td>
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<td>50 - 69%</td>
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<td>&lt; 50%</td>
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Monthly Precipitation for September 2014
(Averaged by Hydrologic Unit)

<table>
<thead>
<tr>
<th>% Average</th>
<th>Duchesne</th>
<th>Provo</th>
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</thead>
<tbody>
<tr>
<td>&gt; 150%</td>
<td>220%</td>
<td>210%</td>
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<tr>
<td>129 - 150%</td>
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<td>110 - 129%</td>
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<tr>
<td>&lt; 50%</td>
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</tbody>
</table>
Fall Precipitation

Monthly Precipitation for October 2014
(Averaged by Hydrologic Unit)

% Average
- > 160%
- 129 - 150%
- 110 - 129%
- 100 - 109%
- 90 - 99%
- 70 - 89%
- 50 - 69%
- < 50%
- Not Reported

Duchesne: 18%
Provo: 20%

Monthly Precipitation for November 2014
(Averaged by Hydrologic Unit)

% Average
- > 150%
- 129 - 150%
- 110 - 129%
- 100 - 109%
- 90 - 99%
- 70 - 89%
- 50 - 69%
- < 50%
- Not Reported

Duchesne: 86%
Provo: 82%
Winter Precipitation

Monthly Precipitation for December 2014
(Averaged by Hydrologic Unit)

% Average
- > 150%
- 129 - 150%
- 110 - 129%
- 100 - 110%
- 90 - 99%
- 70 - 99%
- 50 - 69%
- < 50%
- Not Reported

Duchesne: 105%
Provo: 120%

Monthly Precipitation for January 2015
(Averaged by Hydrologic Unit)

% Average
- > 150%
- 129 - 150%
- 110 - 129%
- 100 - 110%
- 90 - 99%
- 70 - 99%
- 50 - 69%
- < 50%
- Not Reported

Duchesne: 45%
Provo: 50%
Seasonal Precipitation

Seasonal Precipitation, October 2014 - January 2015
(Averaged by Hydrologic Unit)

% Average

- > 150%
- 129 - 150%
- 110 - 129%
- 100 - 110%
- 90 - 99%
- 70 - 89%
- 50 - 69%
- < 50%
- Not Reported

Duchesne: 64%
Provo: 70%
January Weather

Jan 7 2015 – Big Ridge of High Pressure

Jan 20 2015 – Ridge Flattens – Weak Storm

Jan 27 2015 – Tropical Moisture South
January Temperatures

* several daily temperature records established *

Monthly Max Temp Deviation for January 2015
(Averaged by Hydrologic Unit)

Degrees (F)
- Above 9
- 7-9 Above
- 5-7 Above
- 3-5 Above
- 1-3 Above
- Normal
- 1-3 Below
- 3-5 Below
- 5-7 Below
- 7-9 Below
- Below 9
- Not Reported

Monthly Min Temp Deviation for January 2015
(Averaged by Hydrologic Unit)

Degrees (F)
- Above 9
- 7-6 Above
- 5-7 Above
- 3-6 Above
- 1-3 Above
- Normal
- 1-3 Below
- 3-6 Below
- 5-7 Below
- 7-9 Below
- Below 9
- Not Reported
February Precipitation/Temperature

SLC February Min/Max Temperatures

Last 7 days % of Normal Precipitation
Forecast Drivers: Soil Moisture Entering Winter

How will this affect water supply forecasts?

Positive (+):
- Green above Fontenelle
- Upper Colorado/Yampa/Gunnison
- Uinta Range (Bear, Provo, Duchesne)

Negative (-):
- Northern Great Basin (Weber, Provo)
- Sevier/Virgin
- San Juan
Forecast Drivers: Snow Conditions
Limited low elevation snow
SNOTELs: Lowest on record for 2/9/15

- Chepeta
- Mosby Mountain
- Trout Creek
- Kings Cabin
February 1st Water Supply Forecasts
Duchesne and Provo River Basins

All Feb 1st April-July volume forecasts are below average
Forecasts:
Daily Ensemble Streamflow Prediction (ESP) Model Run & Official

Available at: www.cbrfc.noaa.gov Select: Water Supply  Click: Point of Interest

Colorado - Lake Powell- Glen Cyn Dam- At (GLDA3)
2015-01-01 Apr-Jul Official 50% Forecast: 6500 kaf (91% of average)
ESP is Unregulated and No Precipitation Forecast Included

The latest (2015-01-06) 50% ESP forecast is 6445 kaf.
Plot Created 2015-01-06 18:12:28, NOAA / NWS / CBFRC
Forecasts: Provo nr Hailstone

Feb 1 Forecast:
10% - 128 KAF
50% - 92 KAF (84% Average)
90% - 65 KAF
Forecasts: Strawberry nr Solider Springs

Feb 1 Forecast:
10% - 80 KAF
50% - 40 KAF (56% Average)
90% - 23 KAF
Forecasts: Starvation Reservoir

Feb 1 Forecast:
10% - 128 KAF
50% - 72 KAF (64% Average)
90% - 43 KAF
Forecasts: West Fork below Vat

Feb 1 Forecast:
10% - 20 KAF
50% - 12.4 KAF (67% Average)
90% - 7.5 KAF
Forecasts: Upper Stillwater Reservoir

Feb 1 Forecast:
10% - 93 KAF
50% - 62 KAF (84% Average)
90% - 47 KAF
Weather

Medium Range Weather Forecast Model

Ridge of High Pressure through the Weekend

More dry and warm conditions
Weather

Medium Range Weather Forecast Model

Ridge shifts west early next week

Possibility for active weather next week
Quantitative Precipitation Forecast

Weather Prediction Center (WPC)

7 Day Total February 11-18
A 50-60% chance of weak El Nino conditions for February-March
Neutral conditions likely through the summer
Long Range Weather
90 Day Outlooks (Feb-Apr)
February Summary

Soil Moisture Impacts
- Positive in high elevation basin such as Upper Stillwater, Lake Fork
- Negative lower elevation basins (Strawberry, Starvation, Great Basin)

Snow
- Below normal conditions
- Record low snow in Eastern Uintas
- Limited low elevation snow left

Forecasts
- Below average forecasts
- Daily ESP guidance shows decreases since Feb 1

Weather
- Warm and dry conditions through the weekend
- Possibility for unsettled weather next week
Website Updates

**News**
Water Supply Webinar February 5, 1pm MST. [Read More...](#)
CBRFC presentation are posted here. [Read More...](#)
CBRFC Webinars are posted here. [Read More...](#)

**Conditions Map**

**River Conditions**
- **Data Updated:** Thu, 05 Feb 2015 11:20:01 -0700
- **Hide Other Types**
  - Show
  - Data
  - Forecast
  - Reservoir
  - Official Flood
  - Active
  - Not Available
  - Normal
  - Significant Rise
  - Near Bankfull
  - Above Bankfull
  - Above Flood Stage
  - Outlook (> 3 days)

**Snow Conditions**

**Water Supply Forecasts**

**Peak Flood Probability**

**Reservoir Conditions**

**Weather Conditions**

**Map Options**

**Search Points**
Discussion

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• Forecast discussion
• Operations discussion
• 2014 Observed Peaks
• Next briefing date?
  – March 9, 10, 11?