

# CBRFC 2013 Runoff Recap: Upper Green

August 22, 2013

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NWS Colorado Basin River Forecast Center





# Outline

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## 2013 Conditions Recap

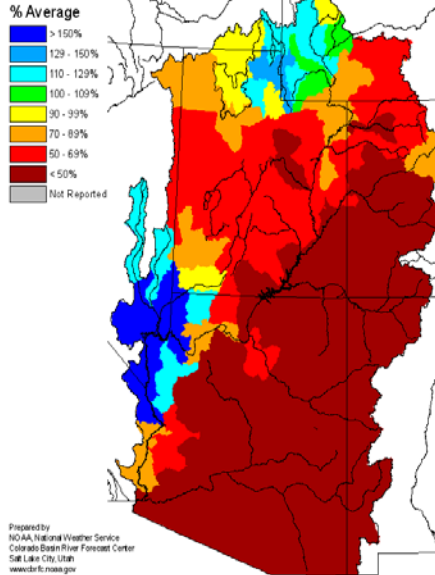
- Precipitation/Temperature
- Snow
- Streamflow

## April-July Forecast Performance

Future forecasts (water supply and climate)

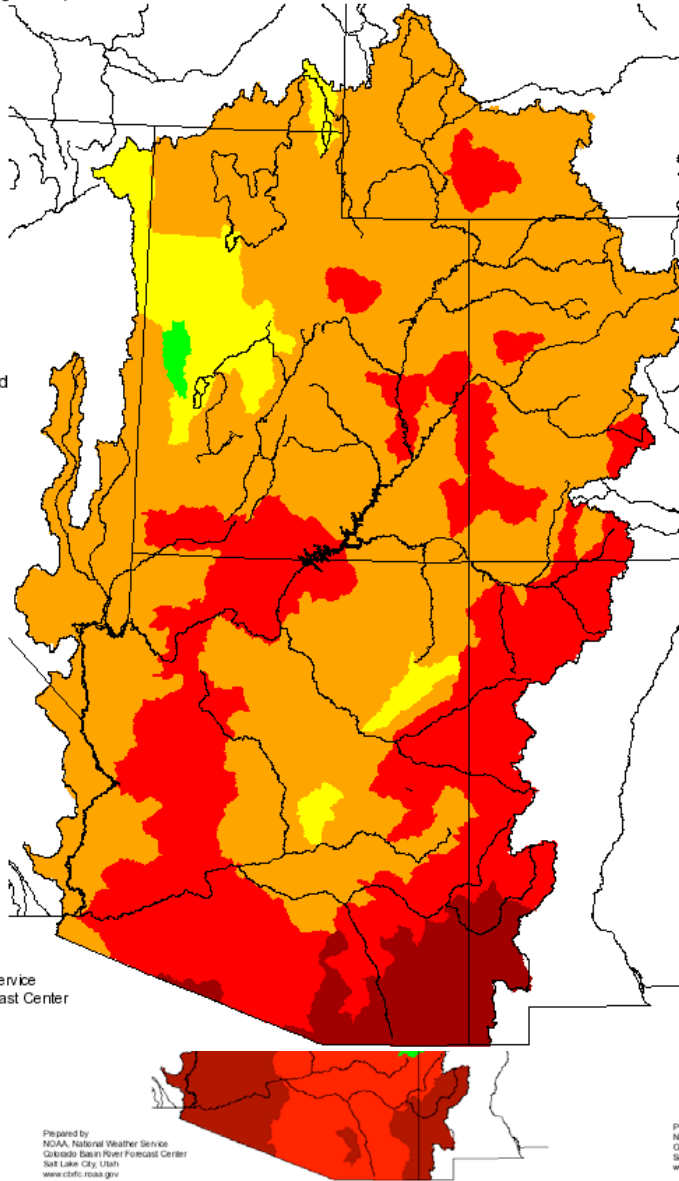
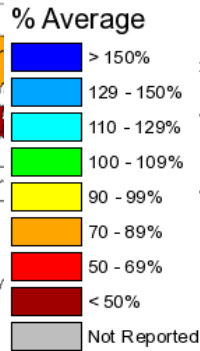
# PRECIPITATION

Monthly Precipitation for October 2012  
(Averaged by Hydrologic Unit)

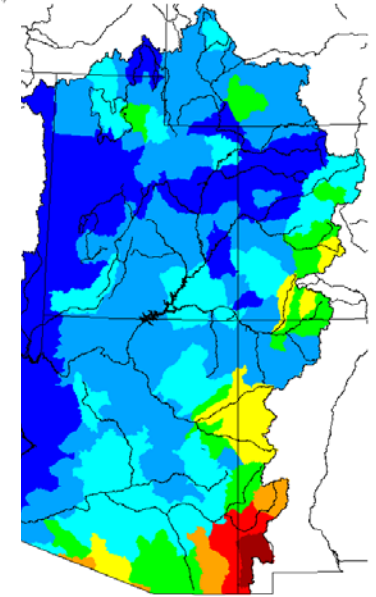


Monthly Precipitation for November 2012  
(Averaged by Hydrologic Unit)

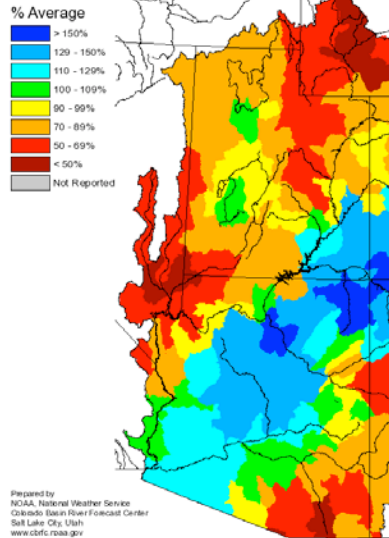
Seasonal Precipitation, October 2012 - March 2013  
(Averaged by Hydrologic Unit)



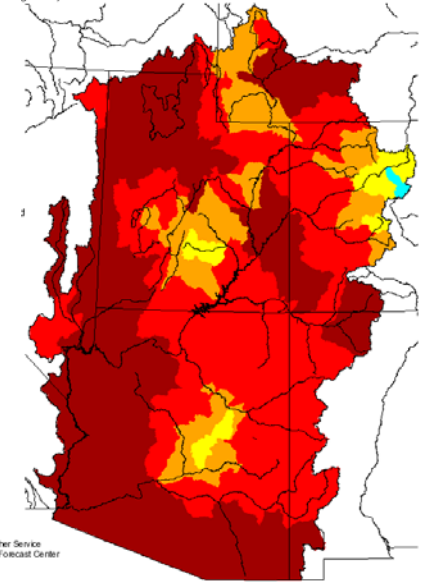
Monthly Precipitation for December 2012  
(Averaged by Hydrologic Unit)



Monthly Precipitation for January 2013  
(Averaged by Hydrologic Unit)

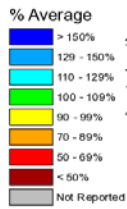


Precipitation for March 2013  
(Averaged by Hydrologic Unit)



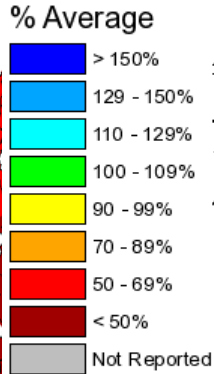
# PRECIPITATION

Monthly Precipitation for April 2013  
(Averaged by Hydrologic Unit)



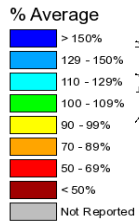
Monthly Precipitation for May 2013  
(Averaged by Hydrologic Unit)

Seasonal Precipitation, October 2012 - July 2013  
(Averaged by Hydrologic Unit)



Prepared by  
NOAA, National Weather Service  
Colorado Basin River Forecast Center  
Salt Lake City, Utah  
www.cbafc.noaa.gov

Monthly Precipitation for June 2013  
(Averaged by Hydrologic Unit)

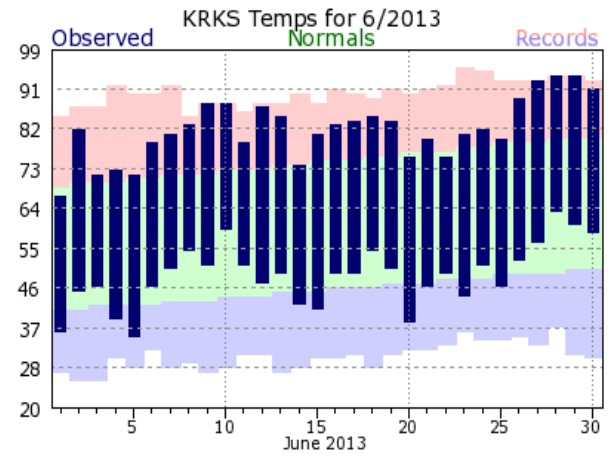
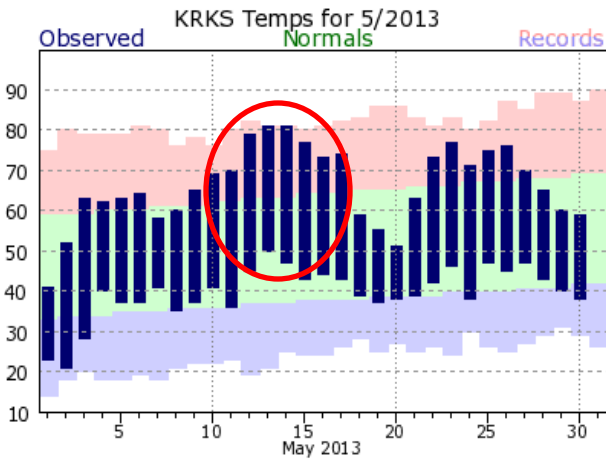
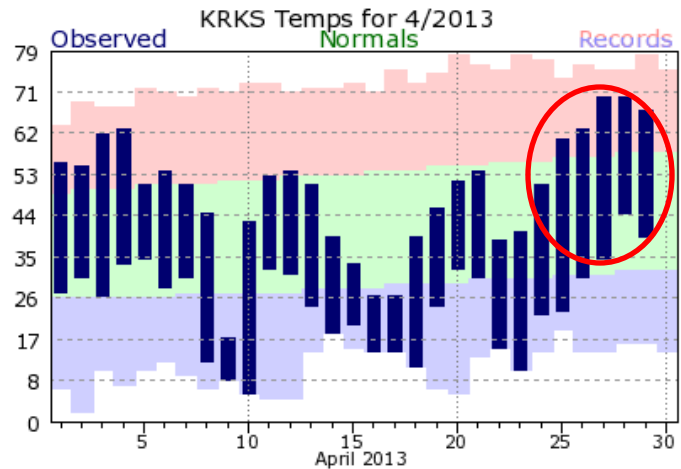
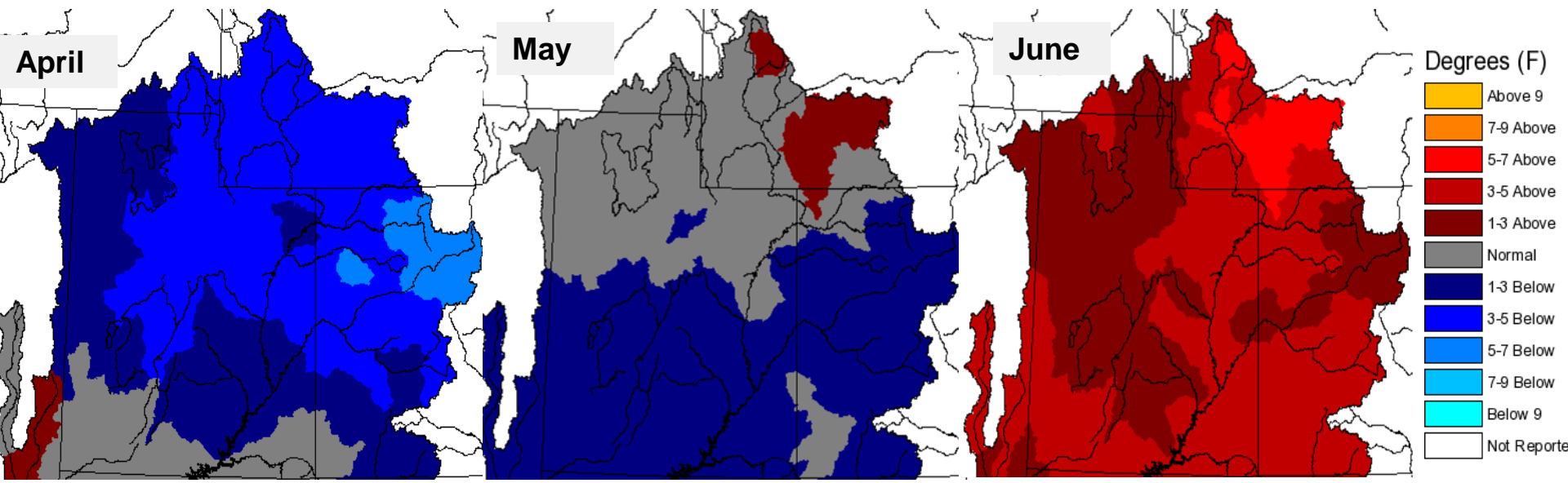


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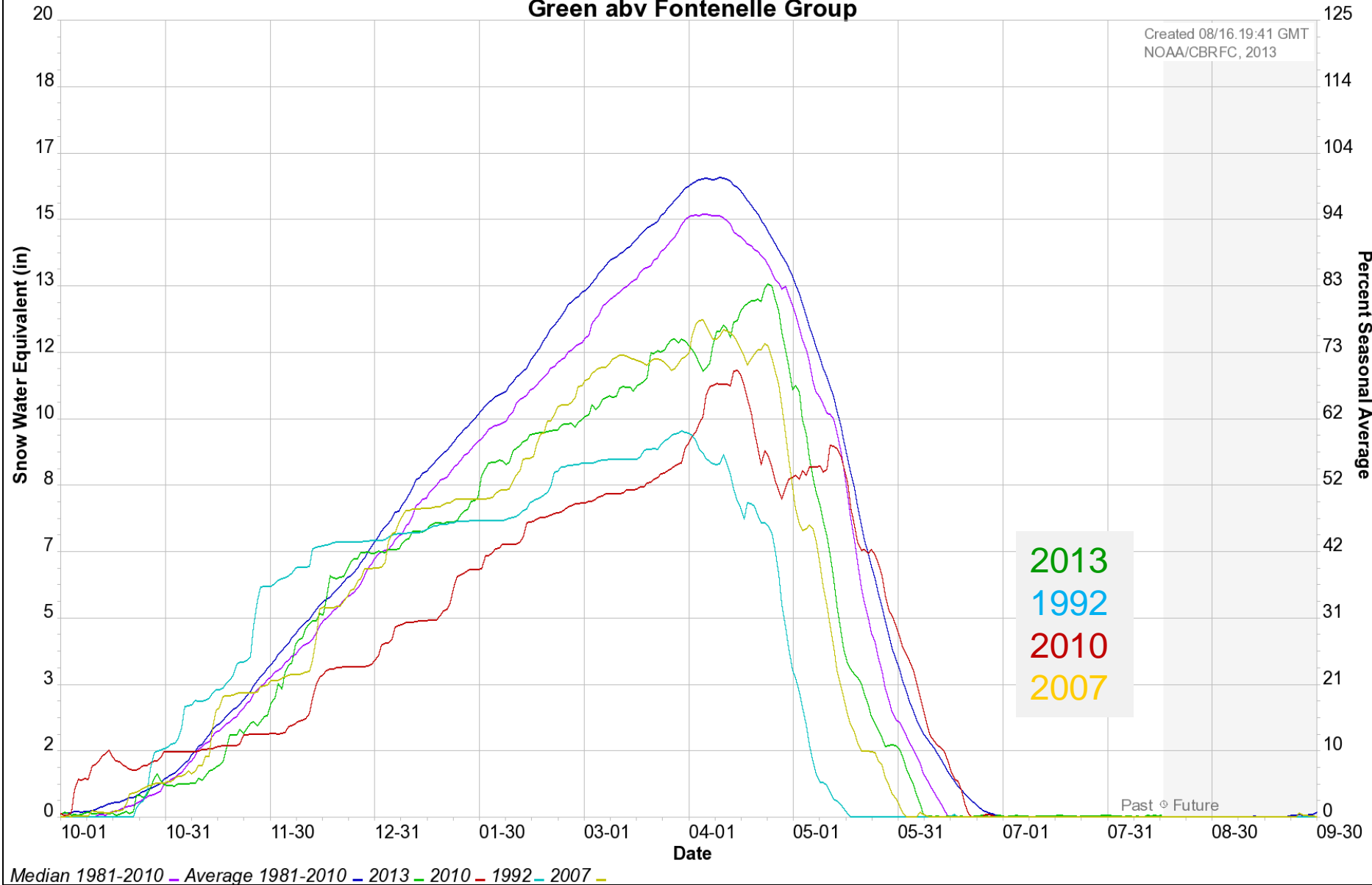
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# Monthly Max Temperature Deviation



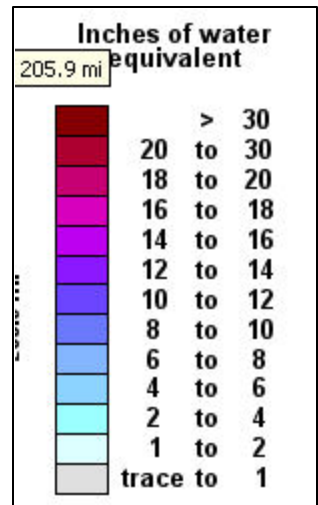
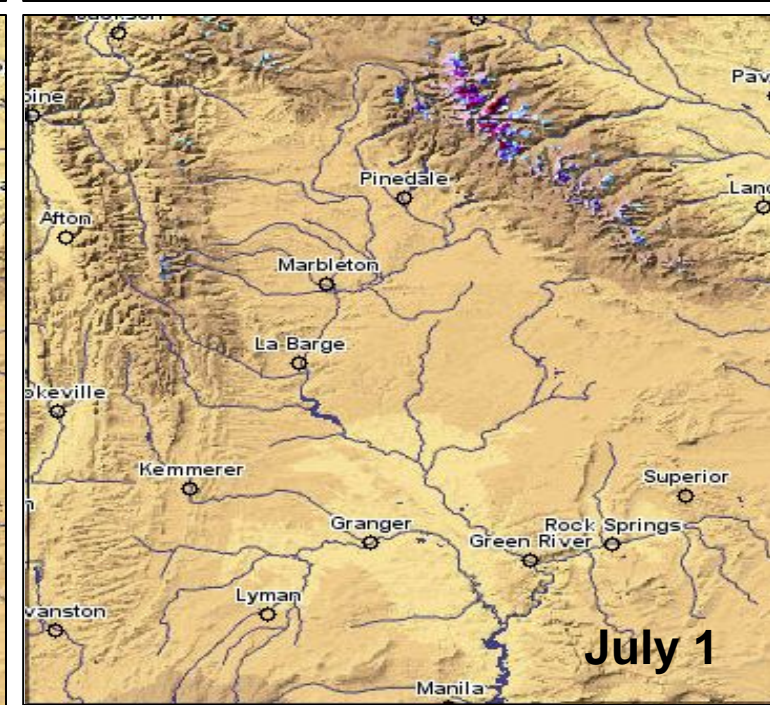
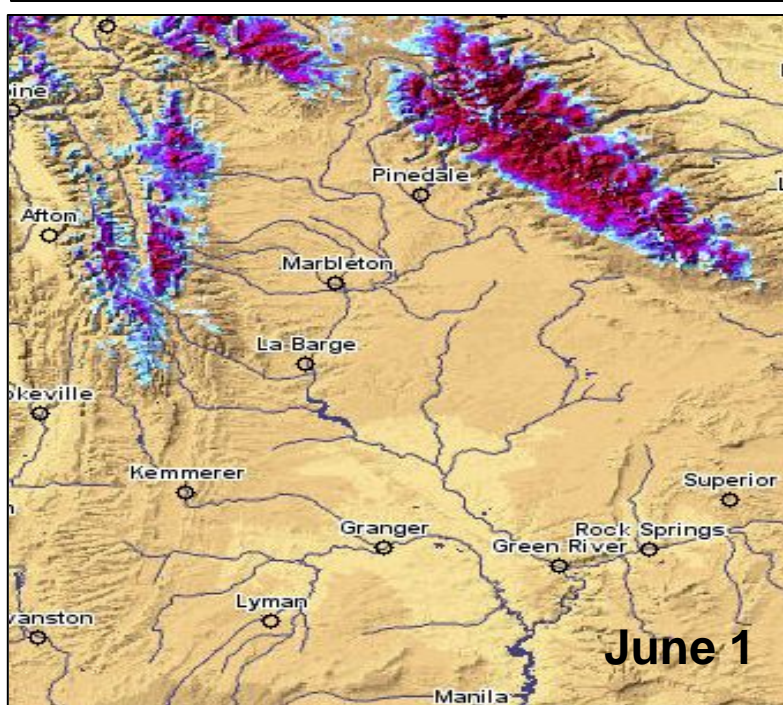
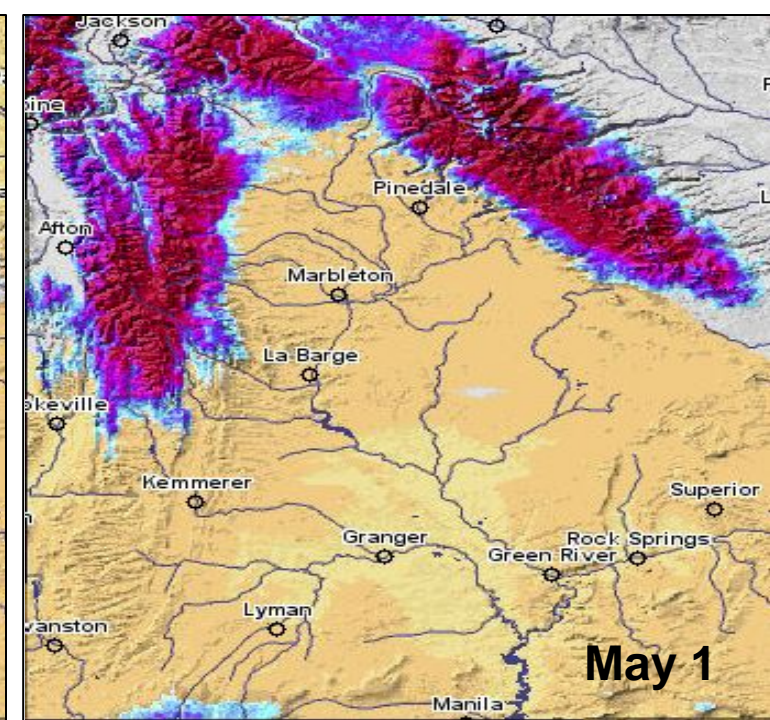
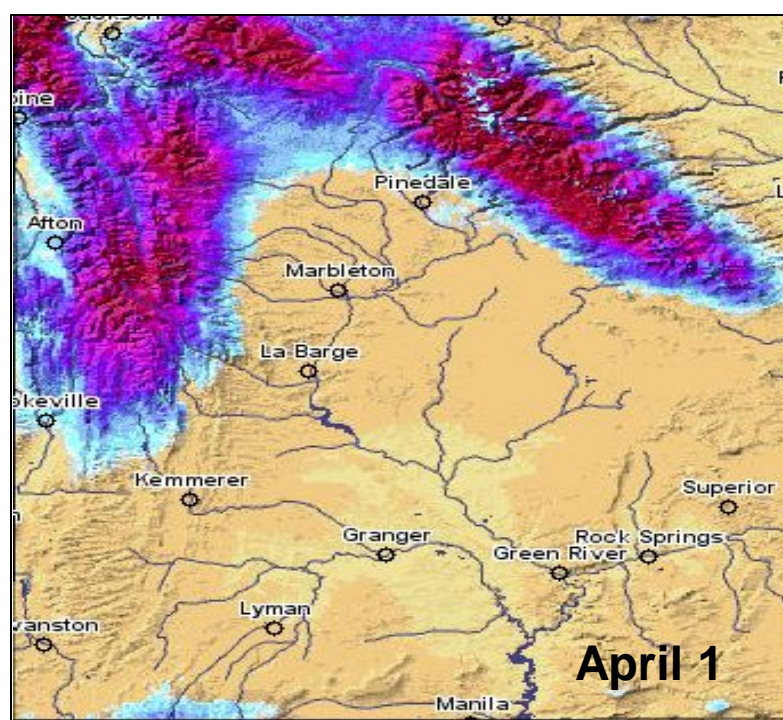
# SNOW: Upper Green

## Colorado Basin River Forecast Center Green abv Fontenelle Group





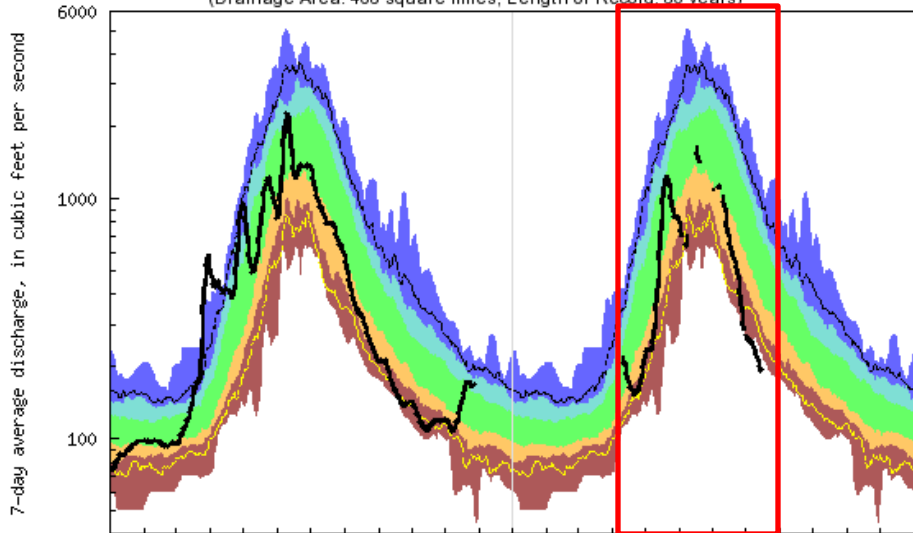
# SNOW: Melt Progression





# STREAMFLOW: Green River

USGS 09188500 GREEN RIVER AT WARREN BRIDGE, NEAR DANIEL, WY  
(Drainage Area: 468 square miles, Length of Record: 80 years)

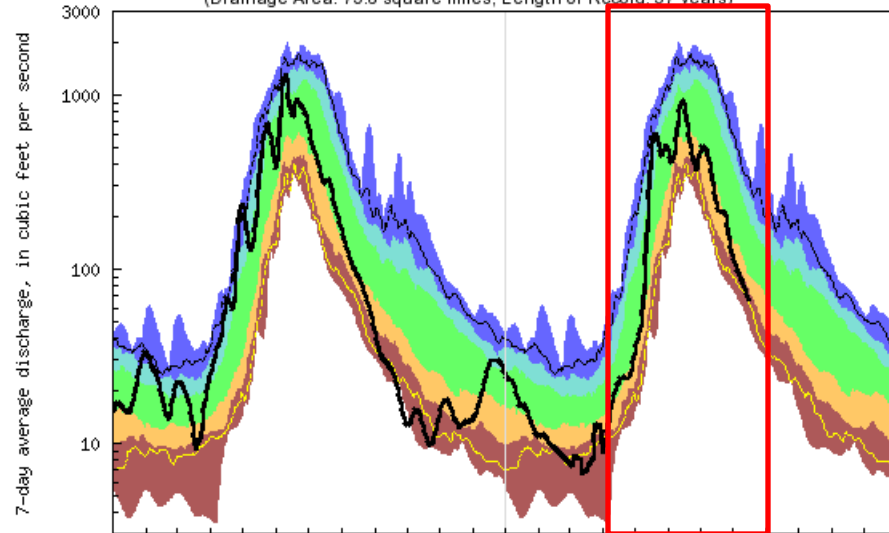


Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec 2012 2013

USGS WaterWatch

Last updated: 2013-08-08

USGS 09196500 PINE CREEK ABOVE FREMONT LAKE, WY  
(Drainage Area: 75.8 square miles, Length of Record: 57 years)

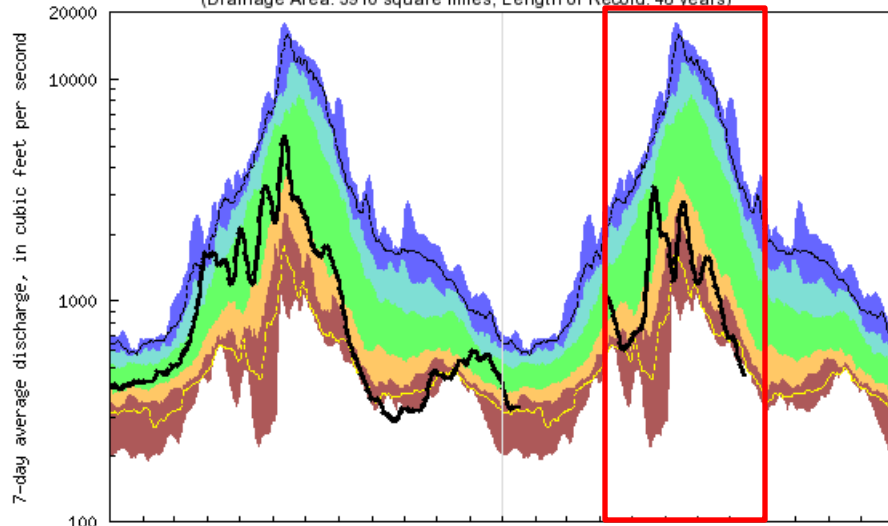


Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec 2012 2013

USGS WaterWatch

Last updated: 2013-08-16

USGS 09209400 GREEN RIVER NEAR LA BARGE, WY  
(Drainage Area: 3910 square miles, Length of Record: 48 years)



Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec 2012 2013

USGS WaterWatch

Last updated: 2013-08-15

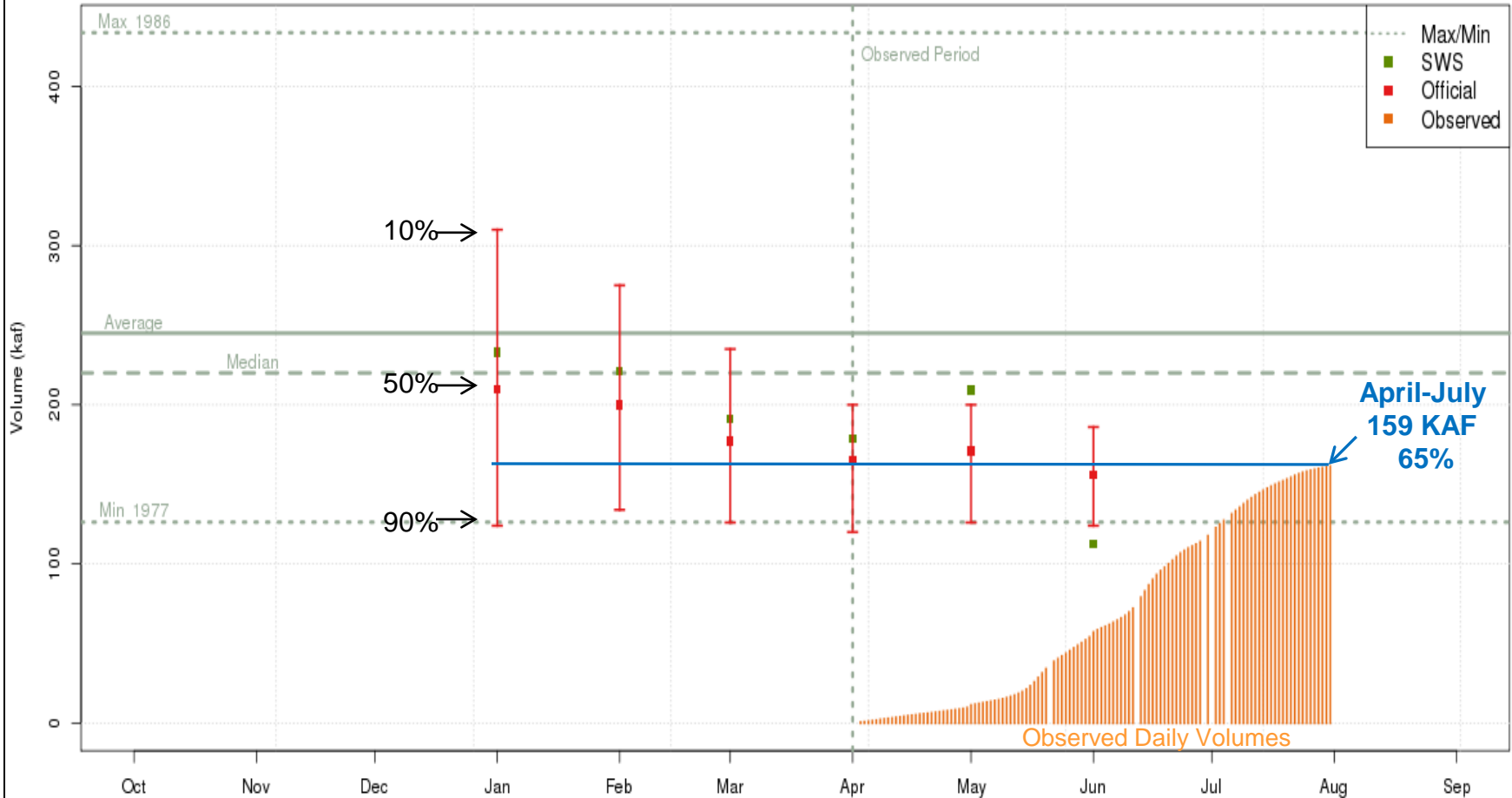
Explanation - Percentile classes

lowest-10th percentile	5	10-24	25-75	76-90	95 90th percentile - highest
Much below Normal	Below normal	Normal	Above normal	Much above normal	Flow



# April-July Water Supply: Warren Bridge

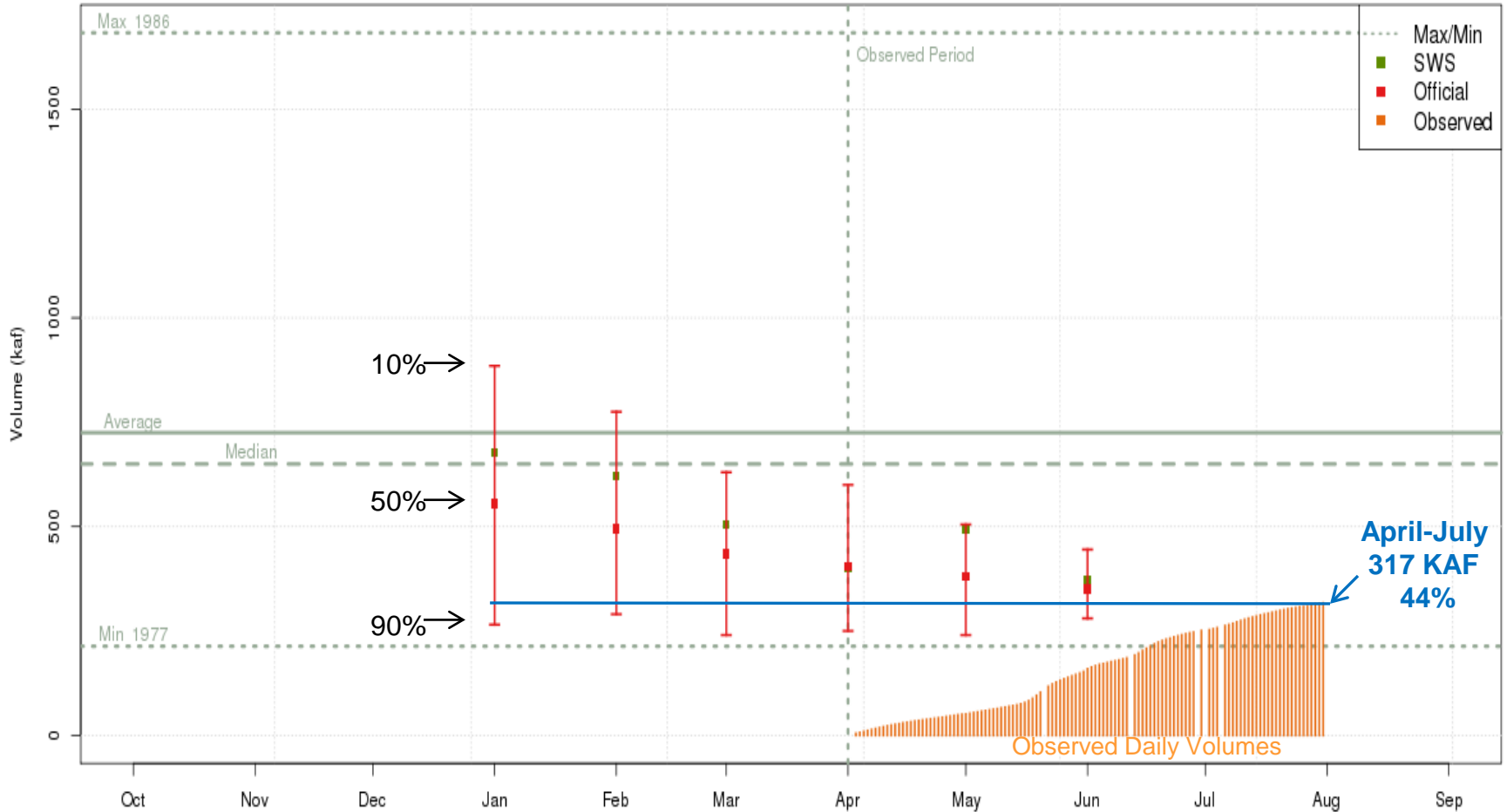
2013 Runoff Forecast Apr-Jul  
Green - Daniel- Nr- Warren Bridge- At (WBRW4)



Plot Created 2013-08-16 13:48:52, Lastest ESP Run from 2013-07-31, CBRFC / NWS / NOAA  
 Maximum of 433.8 in 1986, Minimum of 126.2 in 1977, Average/Median for 1981-2010.  
 \*\*These ESP forecasts do not include observed and are not total runoff.

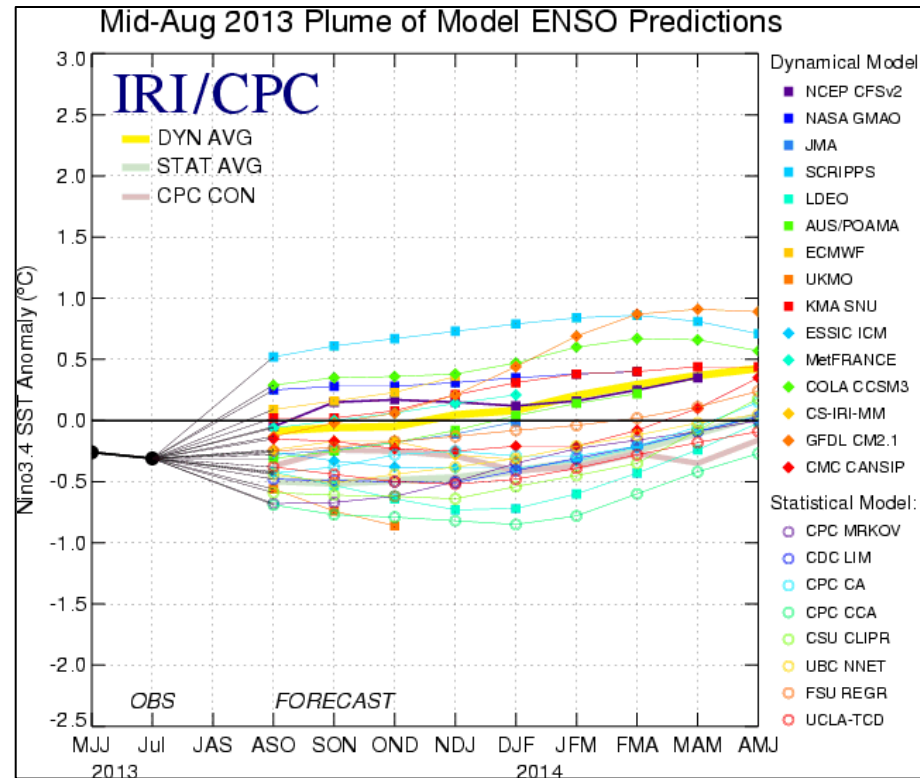
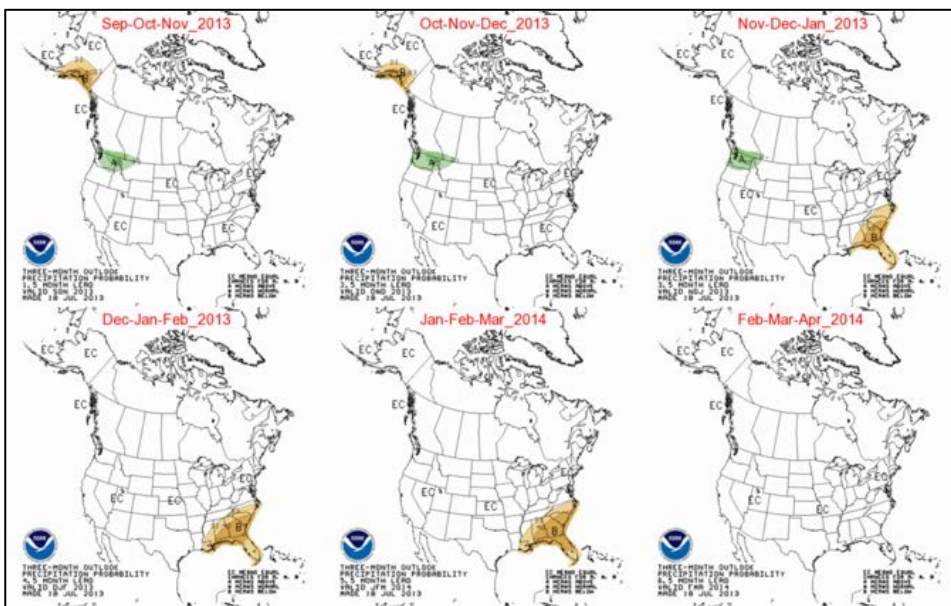
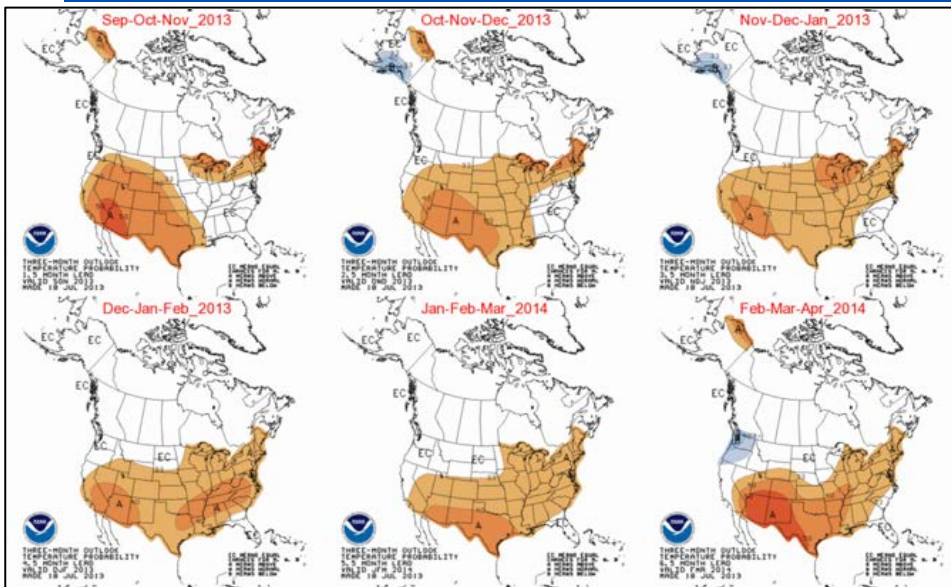
# April-July Water Supply: Fontenelle

2013 Runoff Forecast Apr-Jul  
Green - Fontenelle Res- Fontenelle Nr (GBRW4)



Plot Created 2013-08-16 14:05:55, Lastest ESP Run from 2013-07-31, CBRFC / NWS / NOAA  
Maximum of 1682.9 in 1986, Minimum of 213.3 in 1977, Average/Median for 1981-2010.

\*\*These ESP forecasts do not include observed and are not total runoff.



**ENSO FORECAST :**  
**WY 2014 = Neutral Conditions**



# Water Supply Forecasts: 8/19



## Fontenelle Inflow

August	September	October
30 KAF 39%	25 KAF 55%	30 KAF 62%

Below average flows forecasted





Feedback, Questions, Concerns always welcome....

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