

# CBRFC 2013 Runoff Recap: Upper Green and Yampa

August 21, 2013

Ashley Nielson

NWS Colorado Basin River Forecast Center





# Outline

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## 2013 Conditions Recap

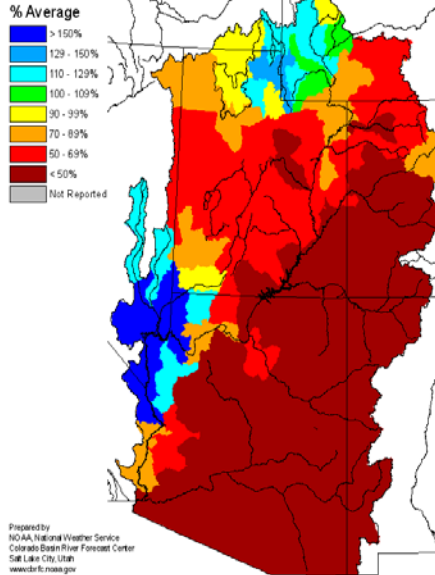
- Precipitation/Temperature
- Snow
- Streamflow

## April-July and Peak Flow Forecast Performance

Future forecasts (water supply and climate)

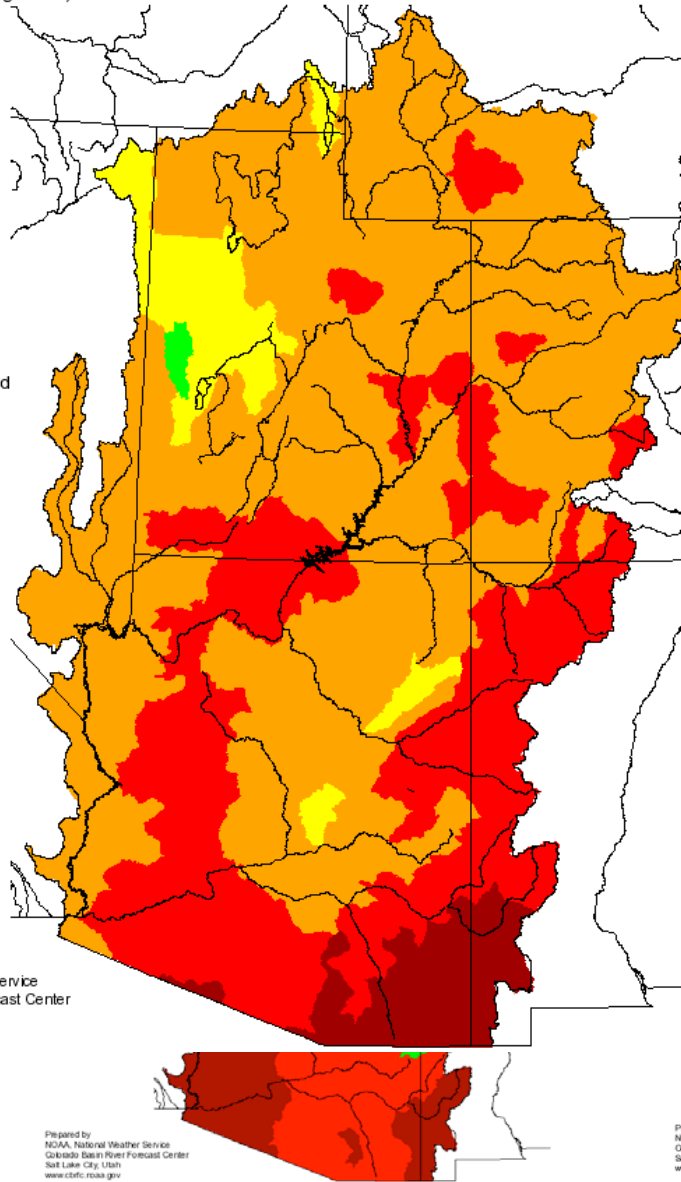
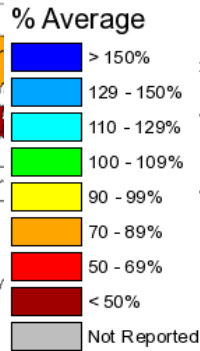
# PRECIPITATION

Monthly Precipitation for October 2012  
(Averaged by Hydrologic Unit)

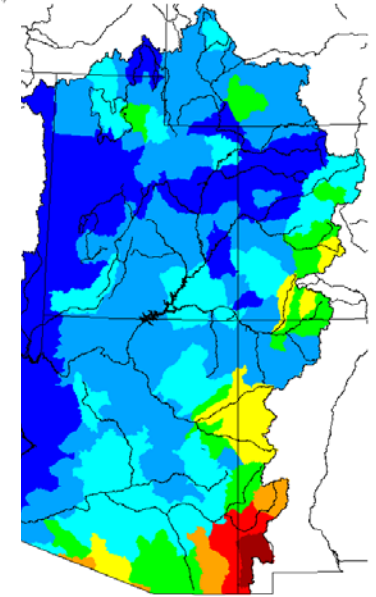


Monthly Precipitation for November 2012  
(Averaged by Hydrologic Unit)

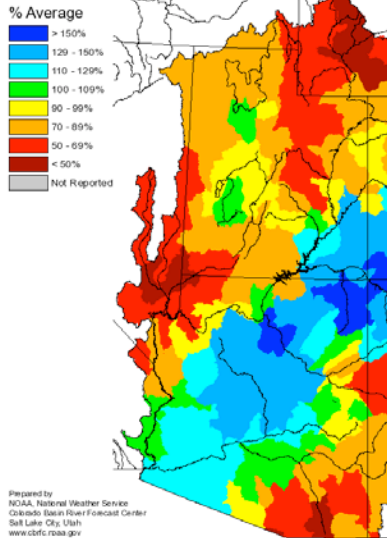
Seasonal Precipitation, October 2012 - March 2013  
(Averaged by Hydrologic Unit)



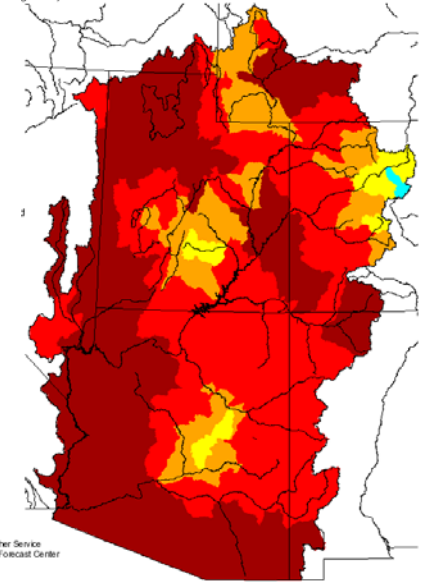
Monthly Precipitation for December 2012  
(Averaged by Hydrologic Unit)



Monthly Precipitation for January 2013  
(Averaged by Hydrologic Unit)

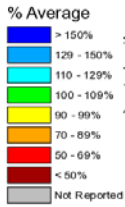


Precipitation for March 2013  
(Averaged by Hydrologic Unit)

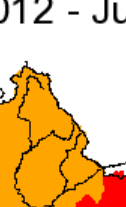


# PRECIPITATION

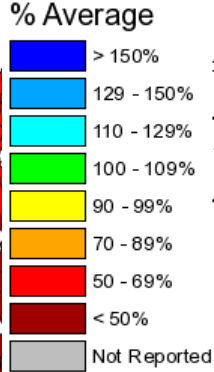
Monthly Precipitation for April 2013  
(Averaged by Hydrologic Unit)



Monthly Precipitation for May 2013  
(Averaged by Hydrologic Unit)

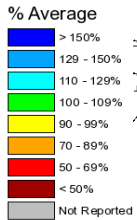


Seasonal Precipitation, October 2012 - July 2013  
(Averaged by Hydrologic Unit)



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)

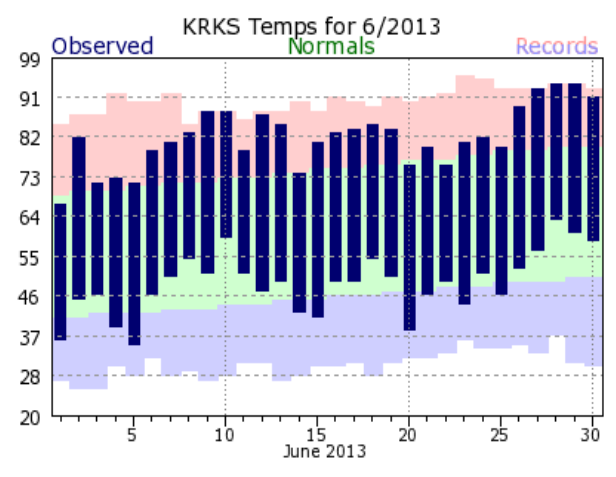
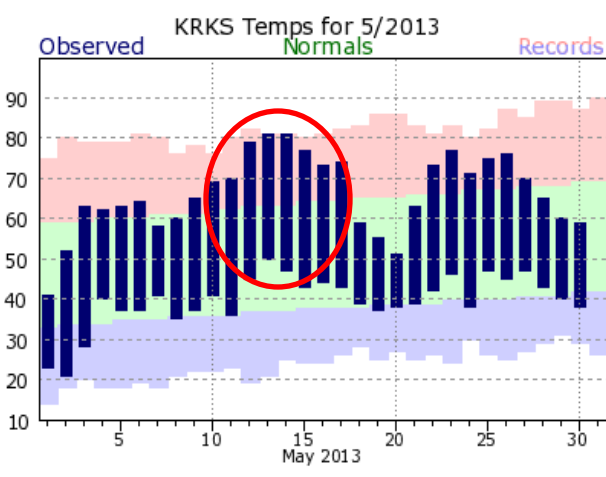
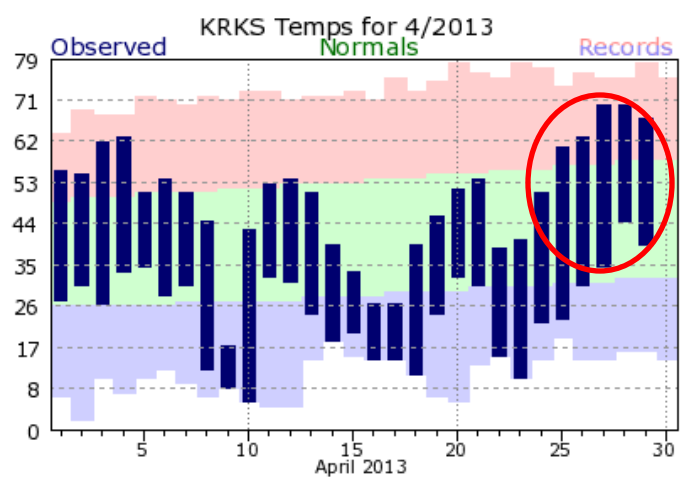
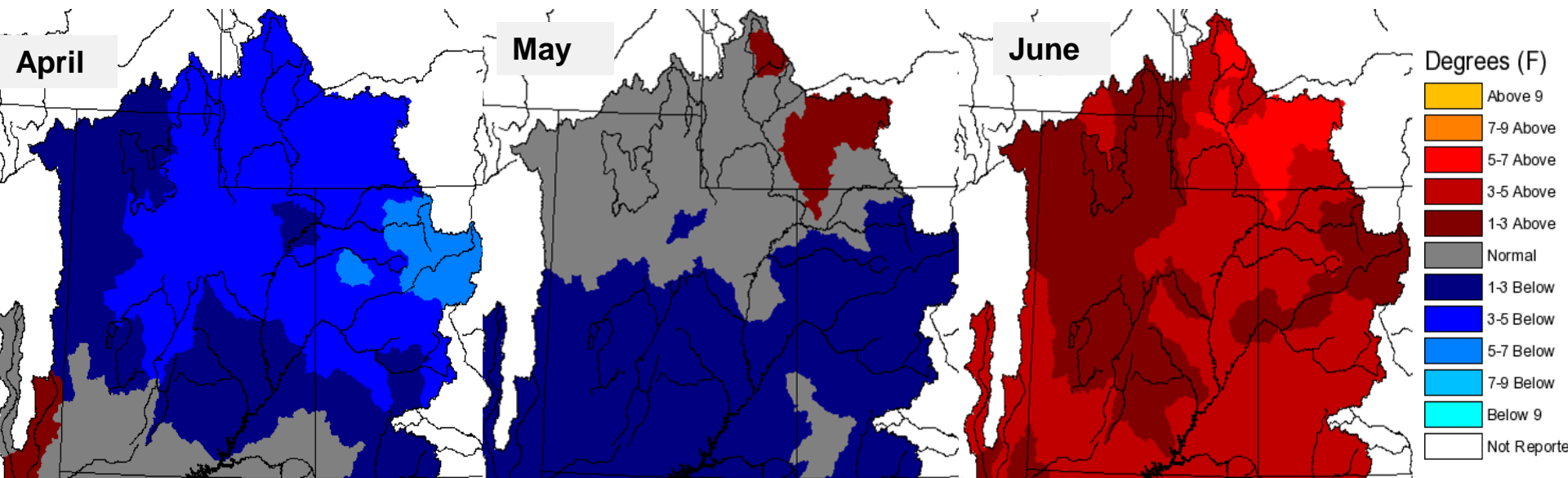


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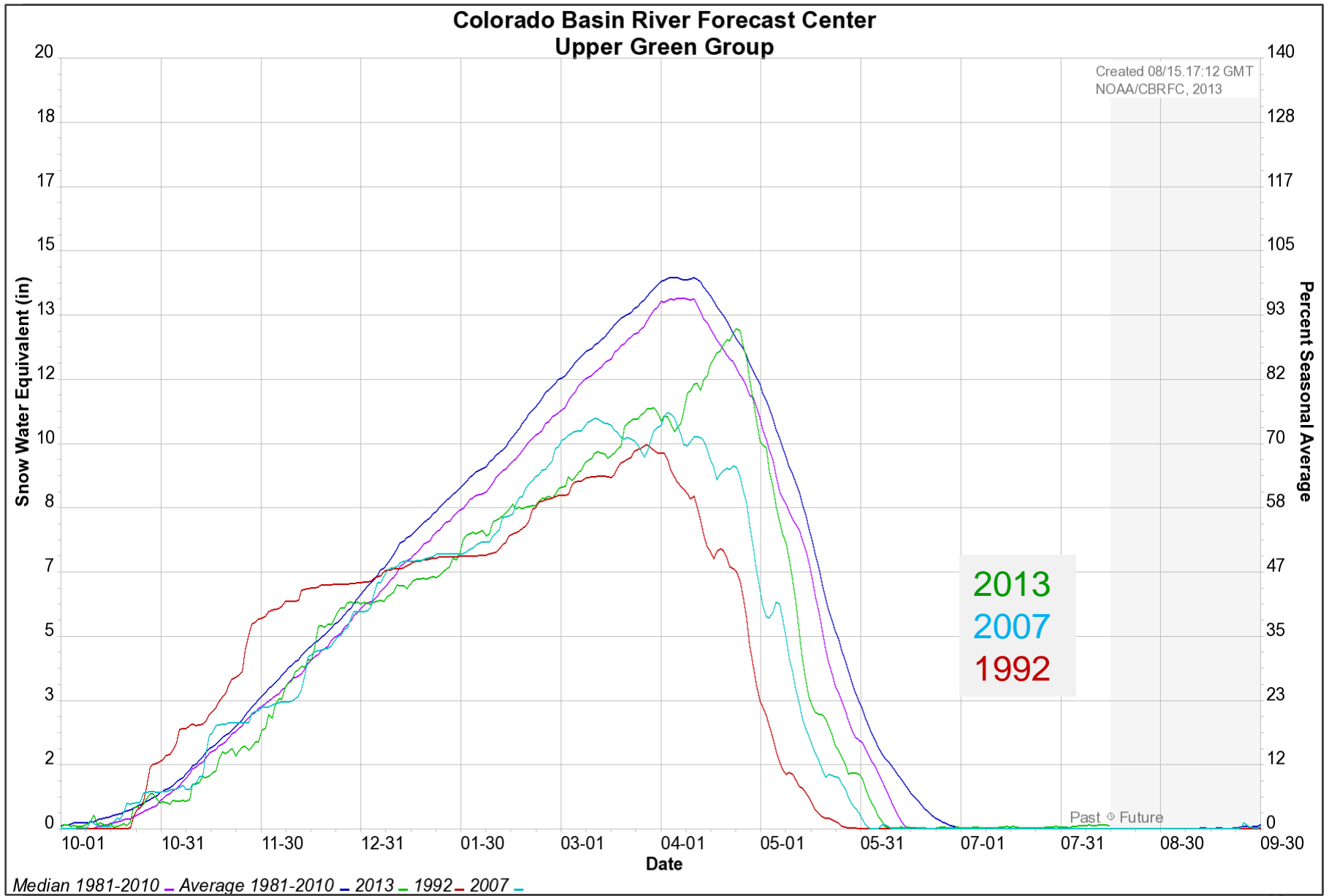
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# Monthly Max Temperature Deviation

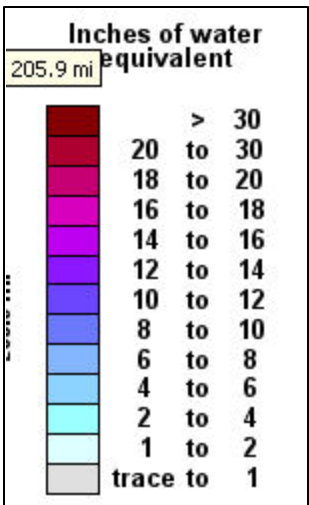
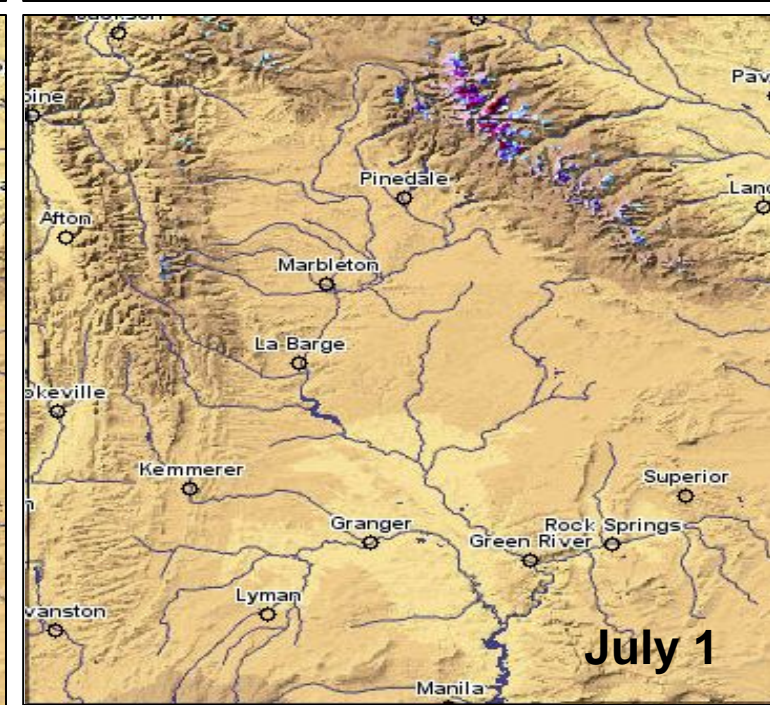
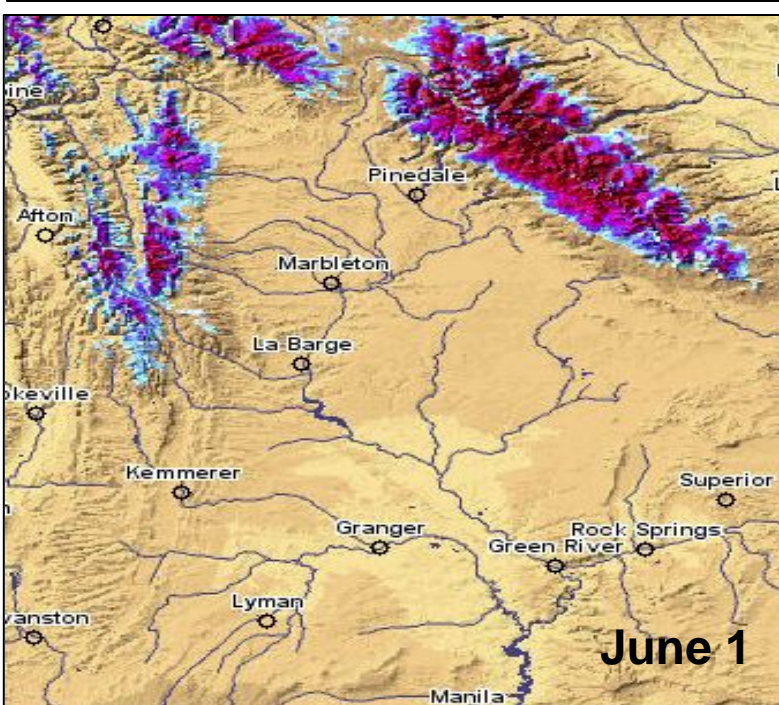
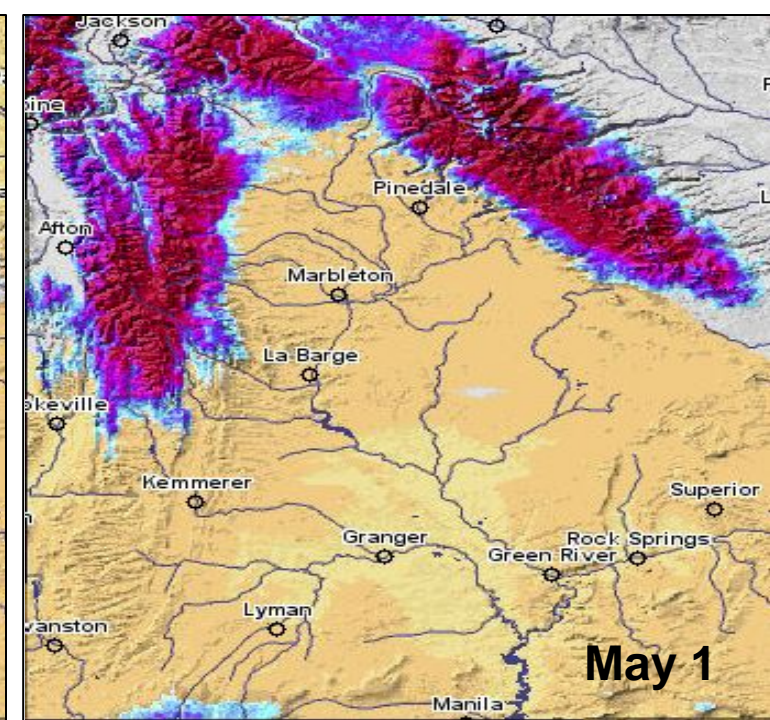
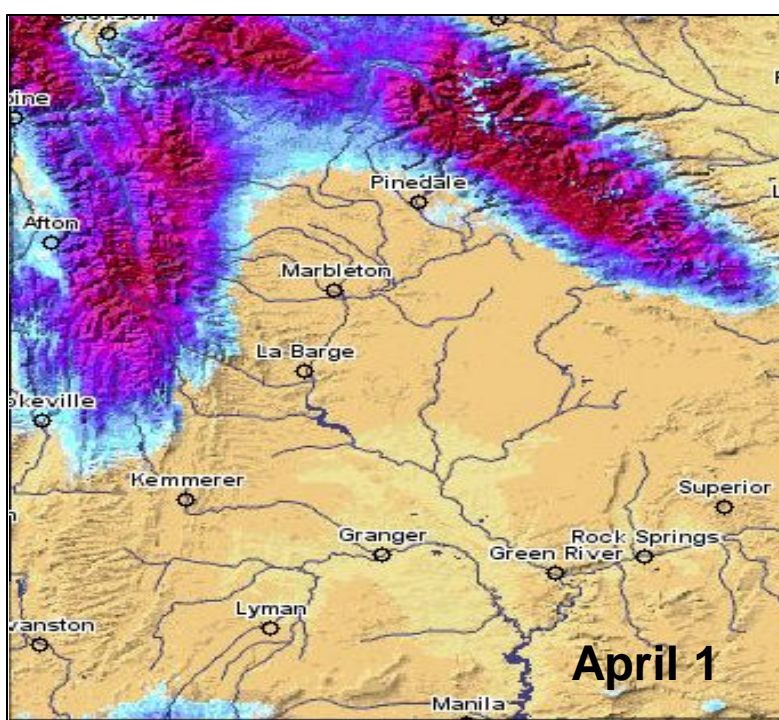


# SNOW: Upper Green





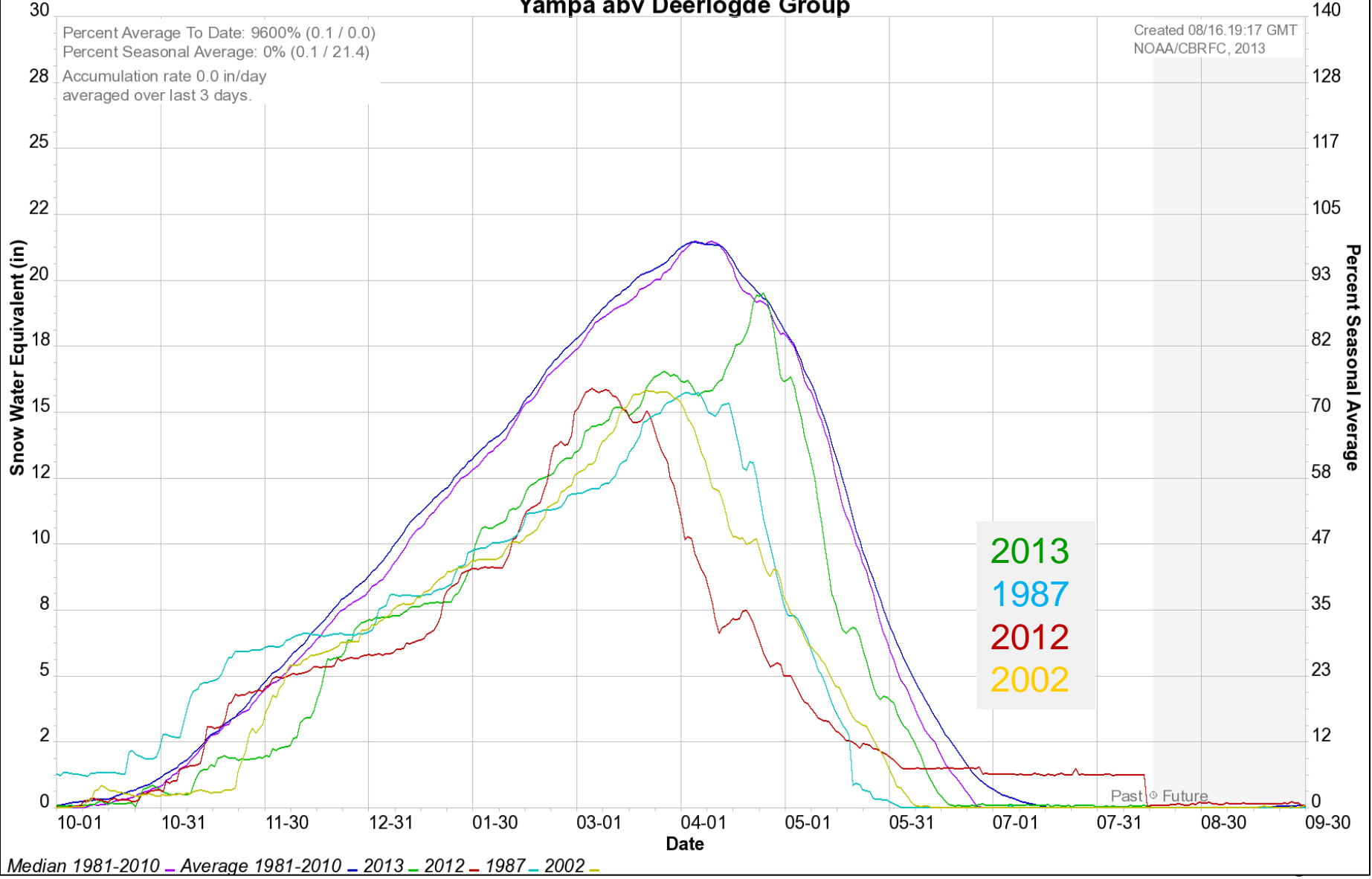
# SNOW: Melt Progression Upper Green





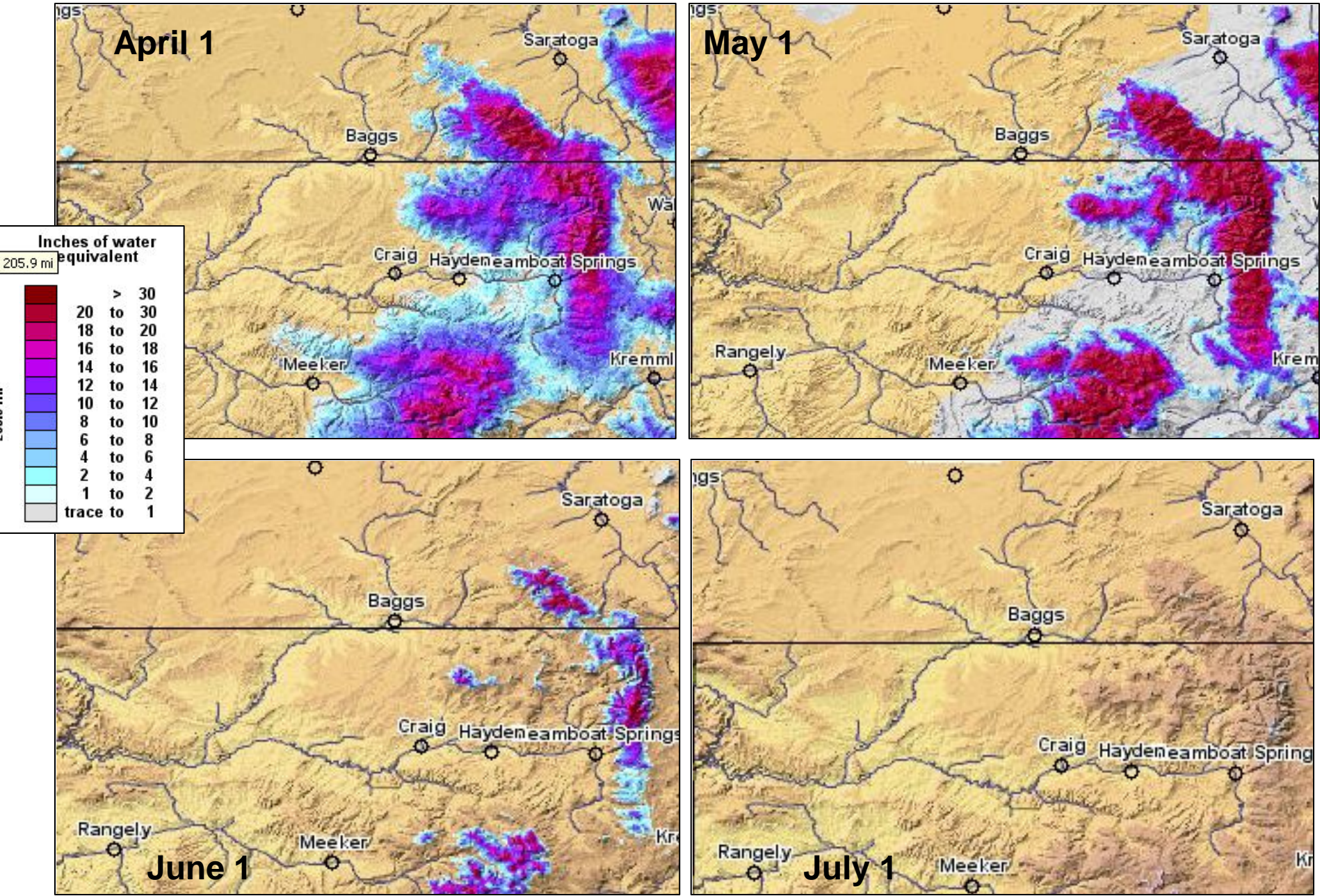
# SNOW: Yampa

## Colorado Basin River Forecast Center Yampa abv Deerlogde Group

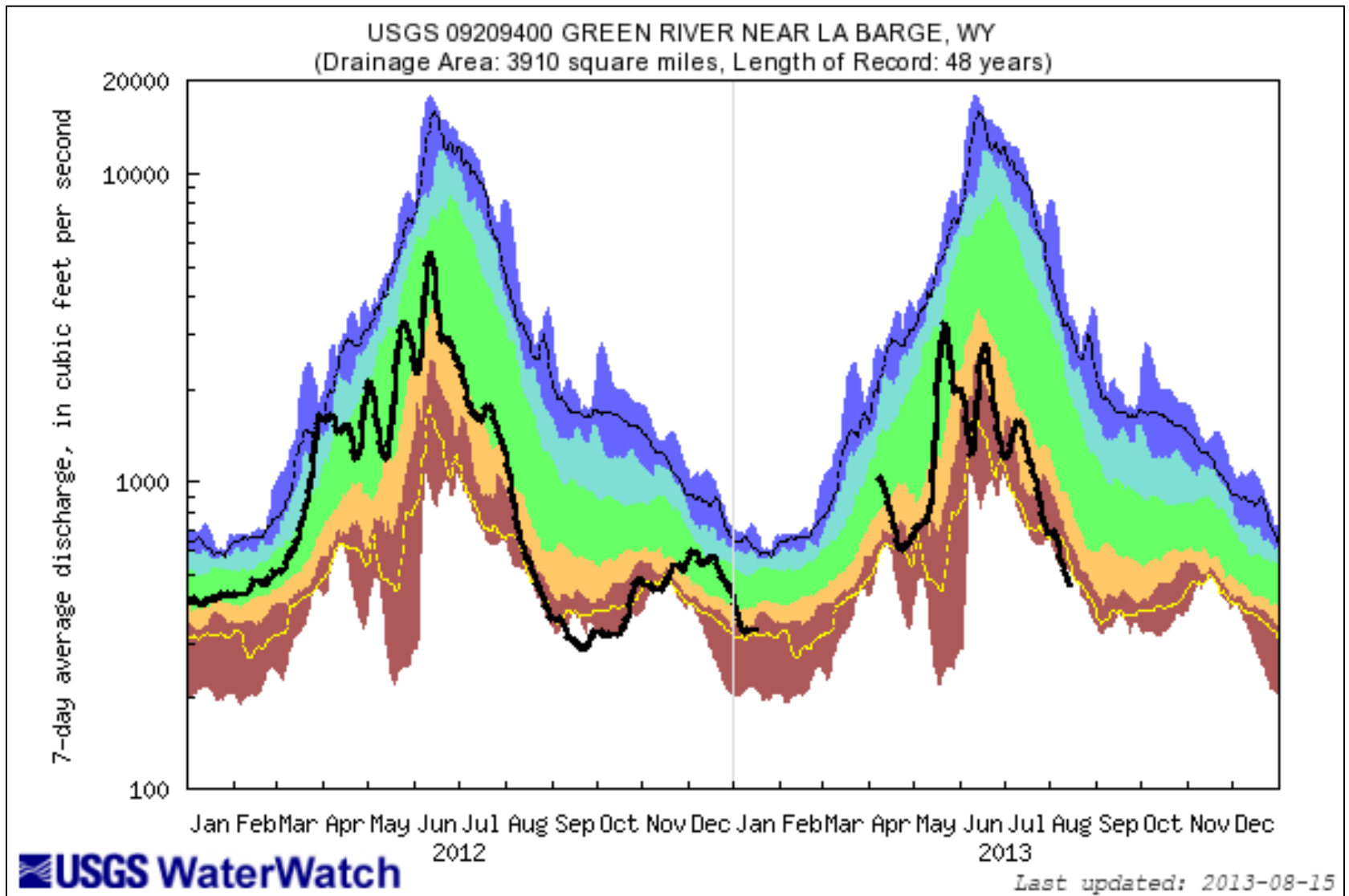




# SNOW: Melt Progression Yampa



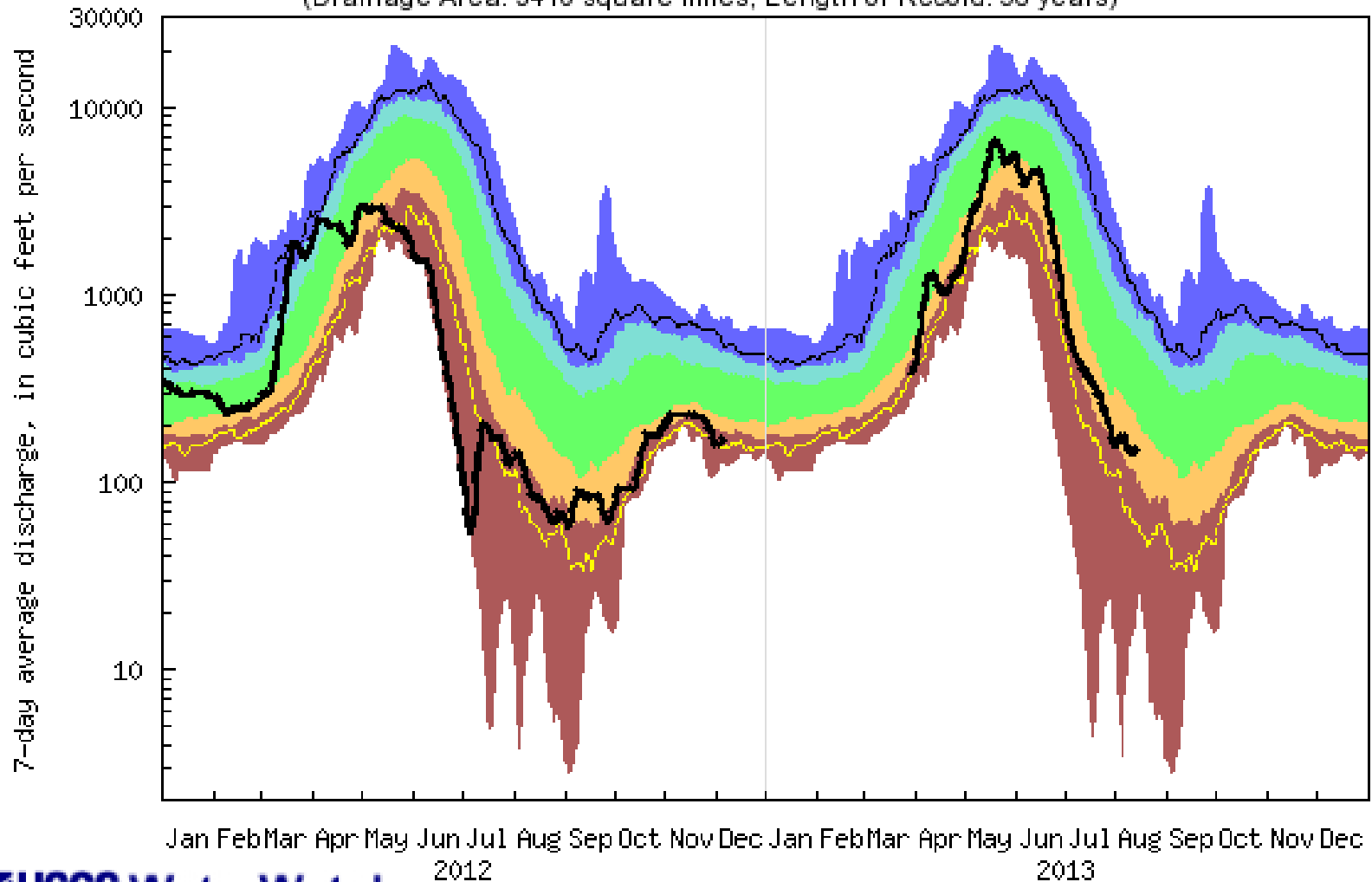
# STREAMFLOW: Green River nr LaBarge



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

# STREAMFLOW: Yampa River nr Deerlodge

USGS 09251000 YAMPA RIVER NEAR MAYBELL, CO  
(Drainage Area: 3410 square miles, Length of Record: 96 years)



**USGS WaterWatch**

Last updated: 2013-08-15

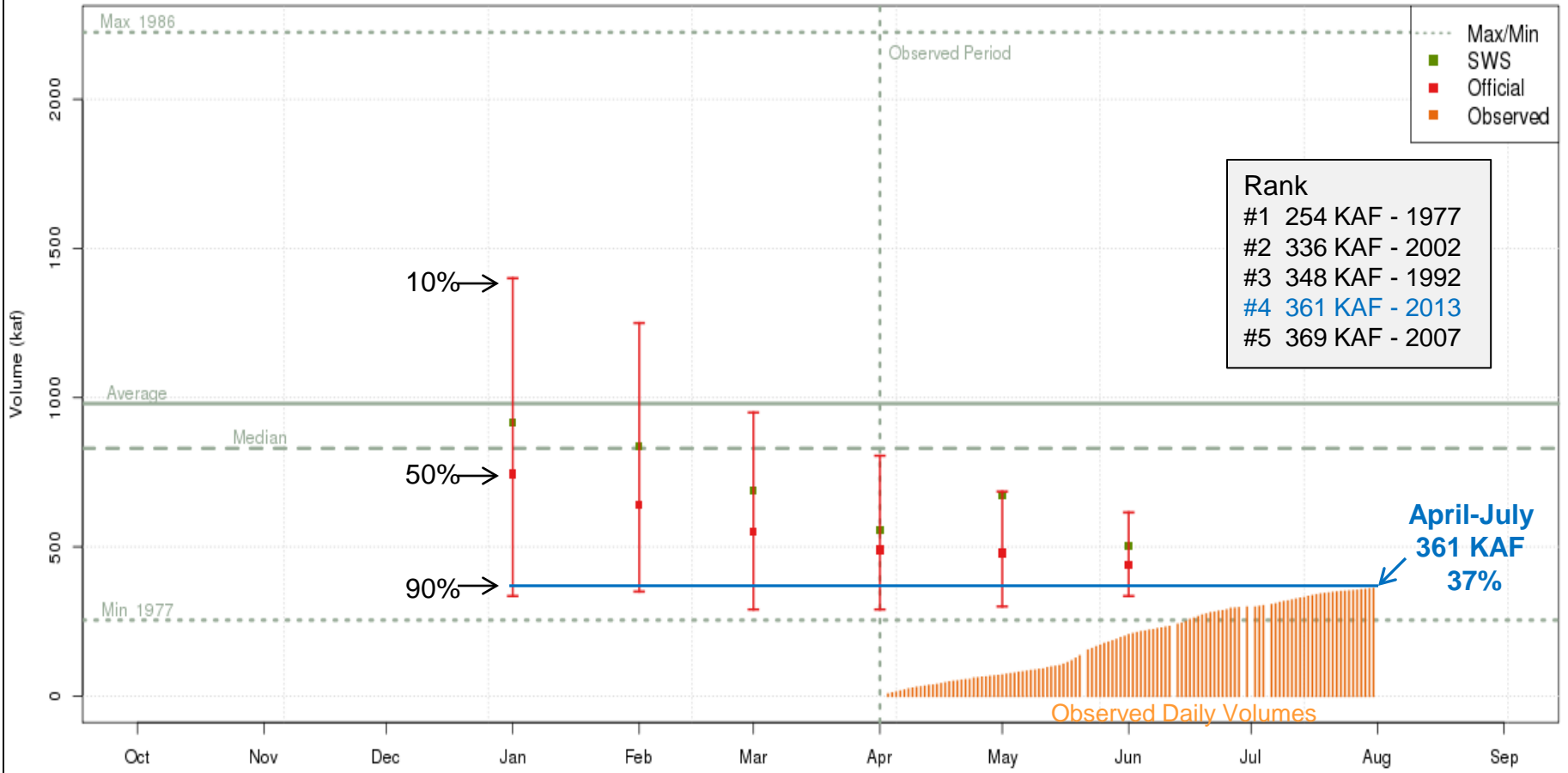
Explanation - Percentile classes							
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest	Flow
Much below Normal	Below normal	Normal	Above normal	Much above normal			





# April-July Water Supply: Flaming Gorge

2013 Runoff Forecast Apr-Jul  
Green - Flaming Gorge Res- Flaming Gorge Dam- At (GRNU1)



Plot Created 2013-08-15 14:38:53, Lastest ESP Run from 2013-07-31, CBRFC / NWS / NOAA

Maximum of 2224.3 in 1986, Minimum of 254.3 in 1977, Average/Median for 1981-2010.

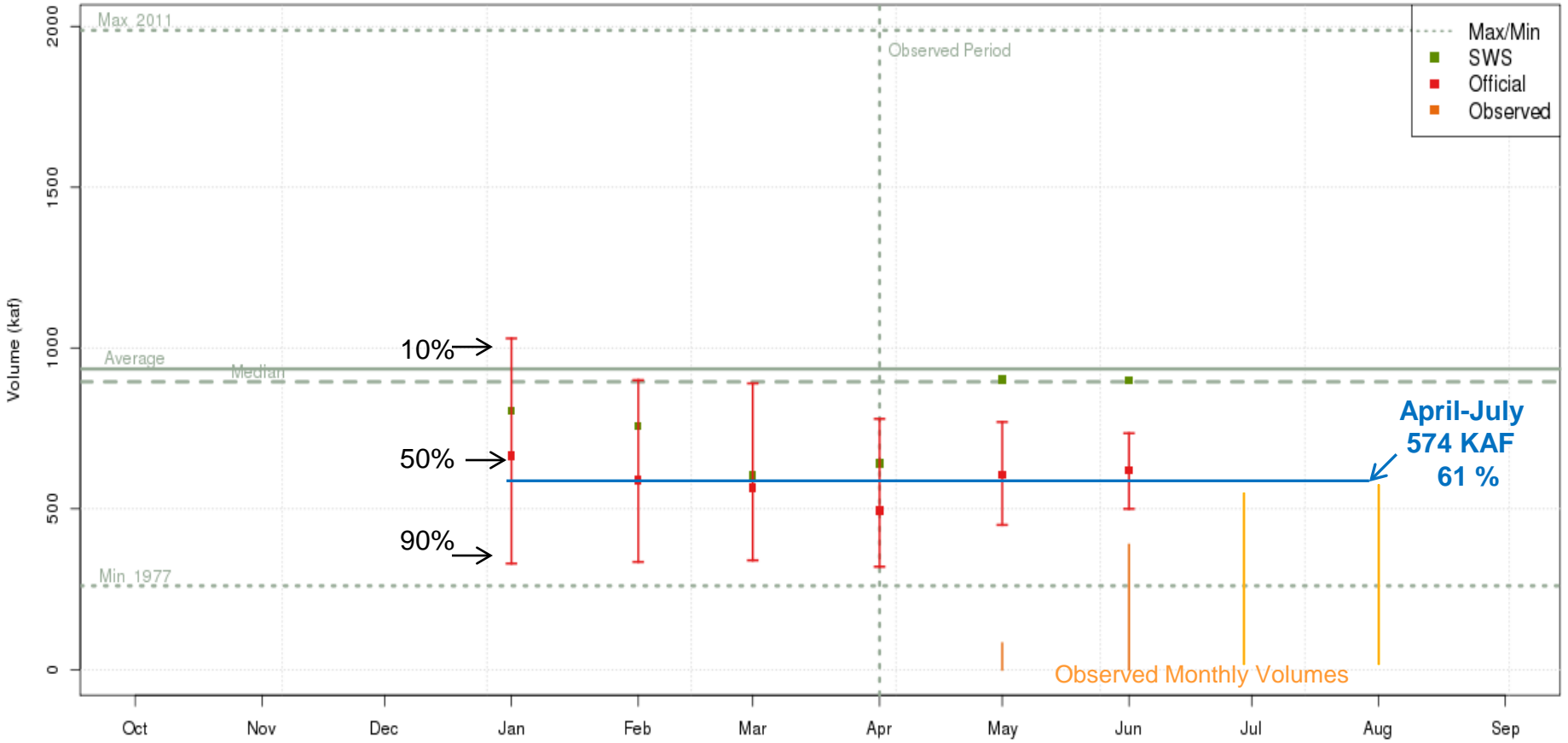
\*\*These ESP forecasts do not include observed and are not total runoff.





# April-July Water Supply: Yampa

2013 Runoff Forecast Apr-Jul  
Yampa - Maybell- Nr (MBLC2)

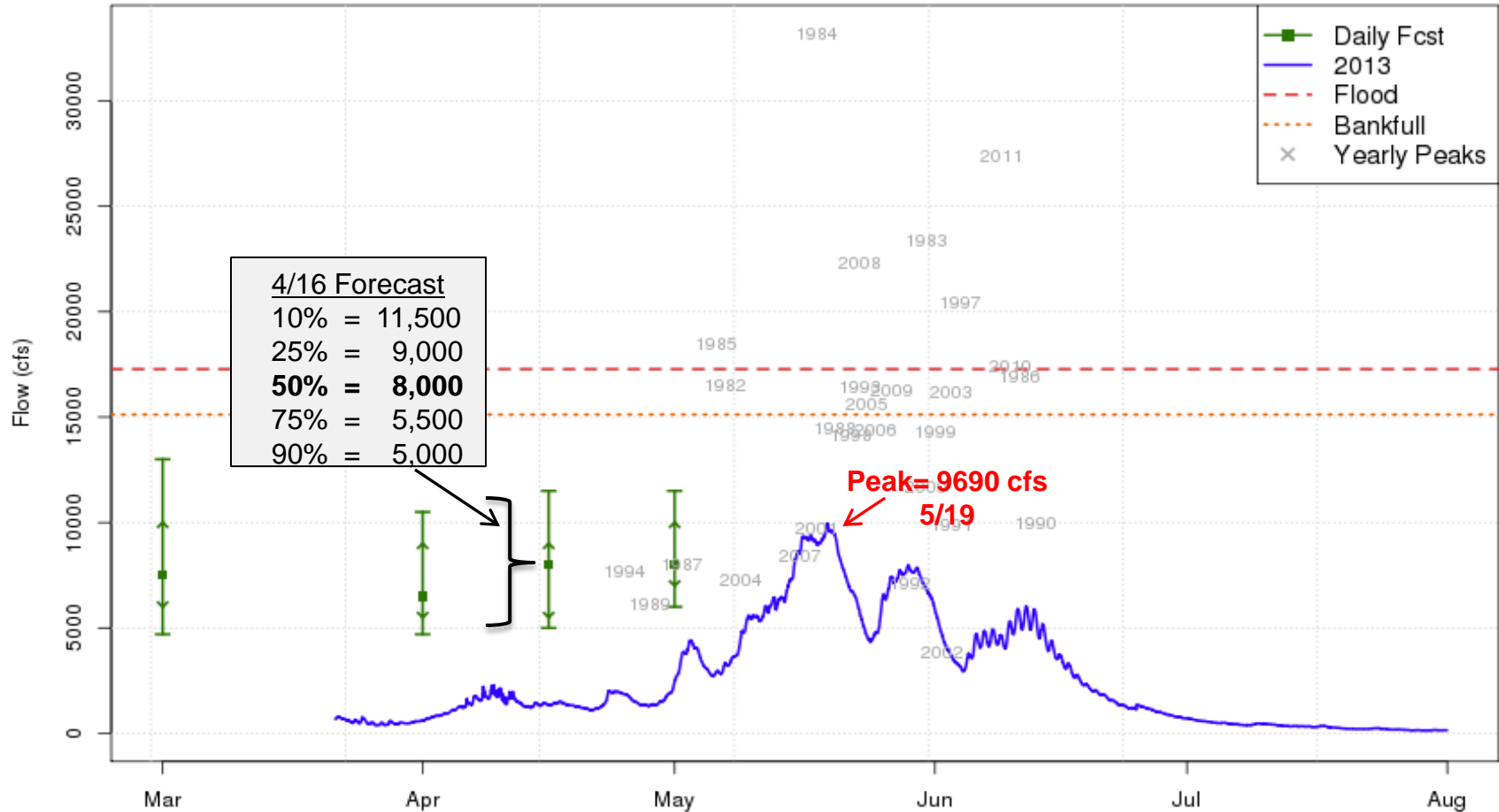


Plot Created 2013-08-15 14:45:49, Lastest ESP Run from 2013-07-31, CBRFC / NWS / NOAA  
Maximum of 1987.9 in 2011, Minimum of 260.6 in 1977, Average/Median for 1981-2010.  
\*\*These ESP forecasts do not include observed and are not total runoff.



# Yampa-Deerlodge Peak Flow Forecast

2013 Peak Flow Forecast  
Yampa - Deerlodge Park (YDLC2)

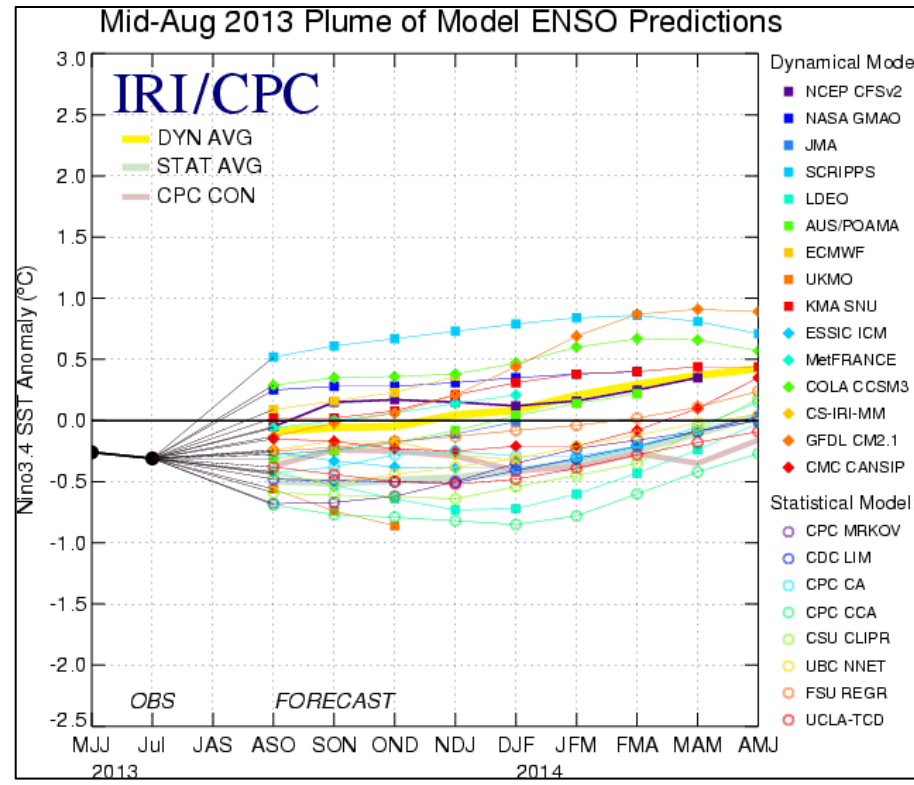
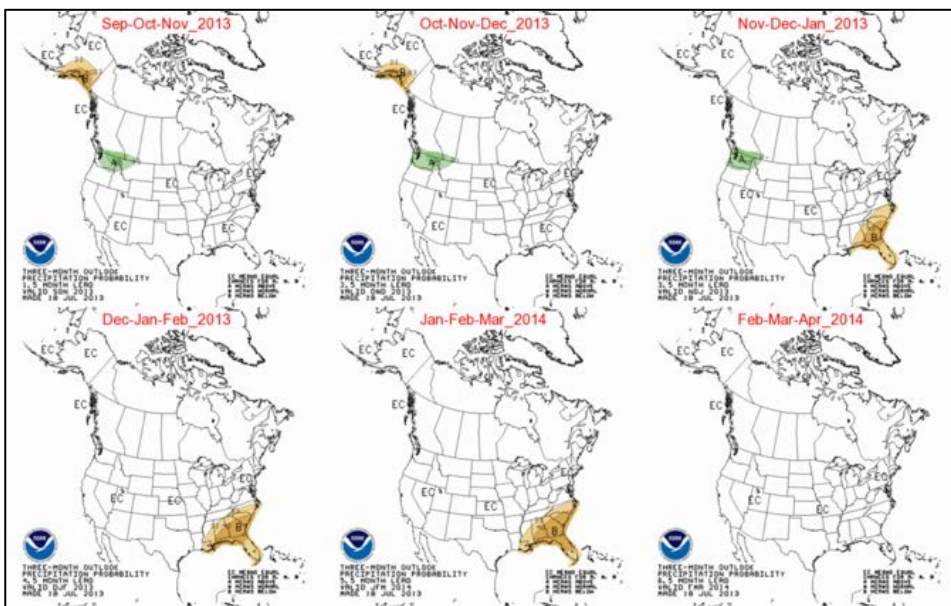
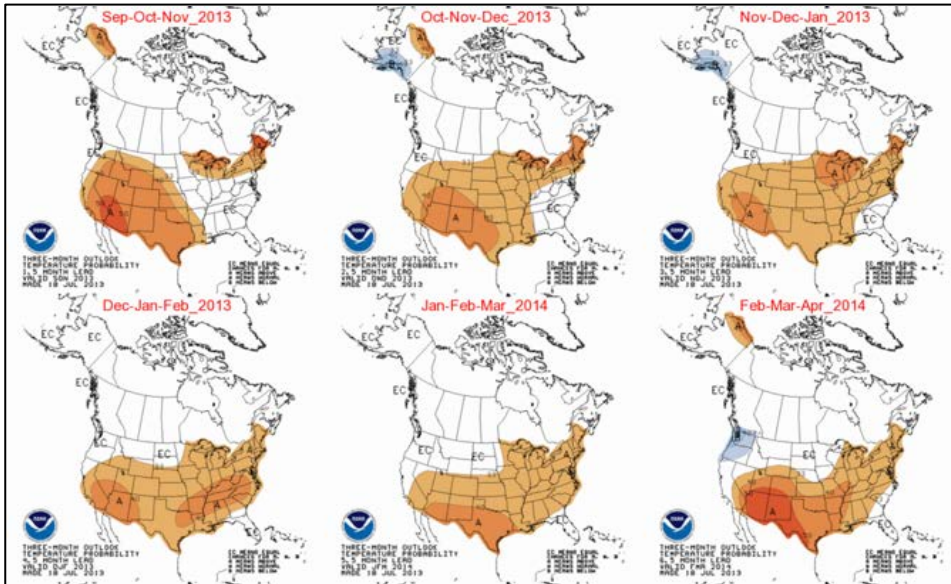


Plot Created 2013-08-16 11:02:17, CBRFC / NWS / NOAA

Maximum peak of 33200 on 1984-05-18, Minimum peak of 3810 on 2002-06-02

Earliest peak of 7670 on 1994-04-25, Latest peak of 9960 on 1990-06-13

Yearly Peaks are Instantaneous (Inst). Previous year data are Mean Daily (Daily).



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



# Water Supply Forecasts: 8/1



## Flaming Gorge Inflow

August	September	October
30 KAF 34%	24 KAF 44%	28 KAF 48%

## Yampa nr Maybell

October	November	December
14 KAF 57%	15 KAF 65%	12 KAF 64%

Below average flows forecasted for both basins





Feedback, Questions, Concerns always welcome....

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**Ashley Nielson**

CBRFC Hydrologist

Phone: 801.524.5130 ext 333

Email: [ashley.nielson@noaa.gov](mailto:ashley.nielson@noaa.gov)

