

**April 2015**  
**Aspinall Unit Operations Meeting**

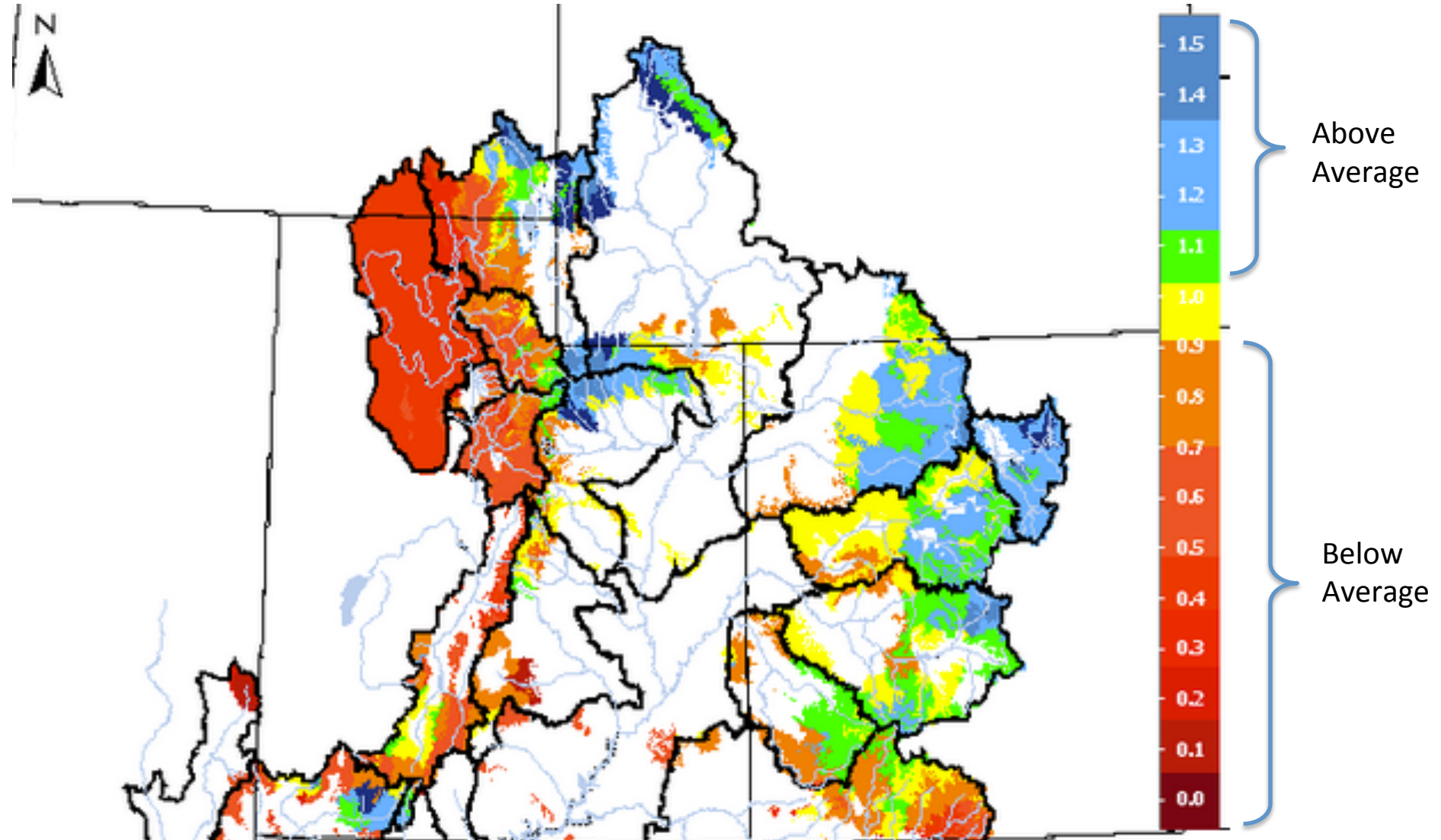
**Runoff Forecast Discussion**

**Greg Smith**

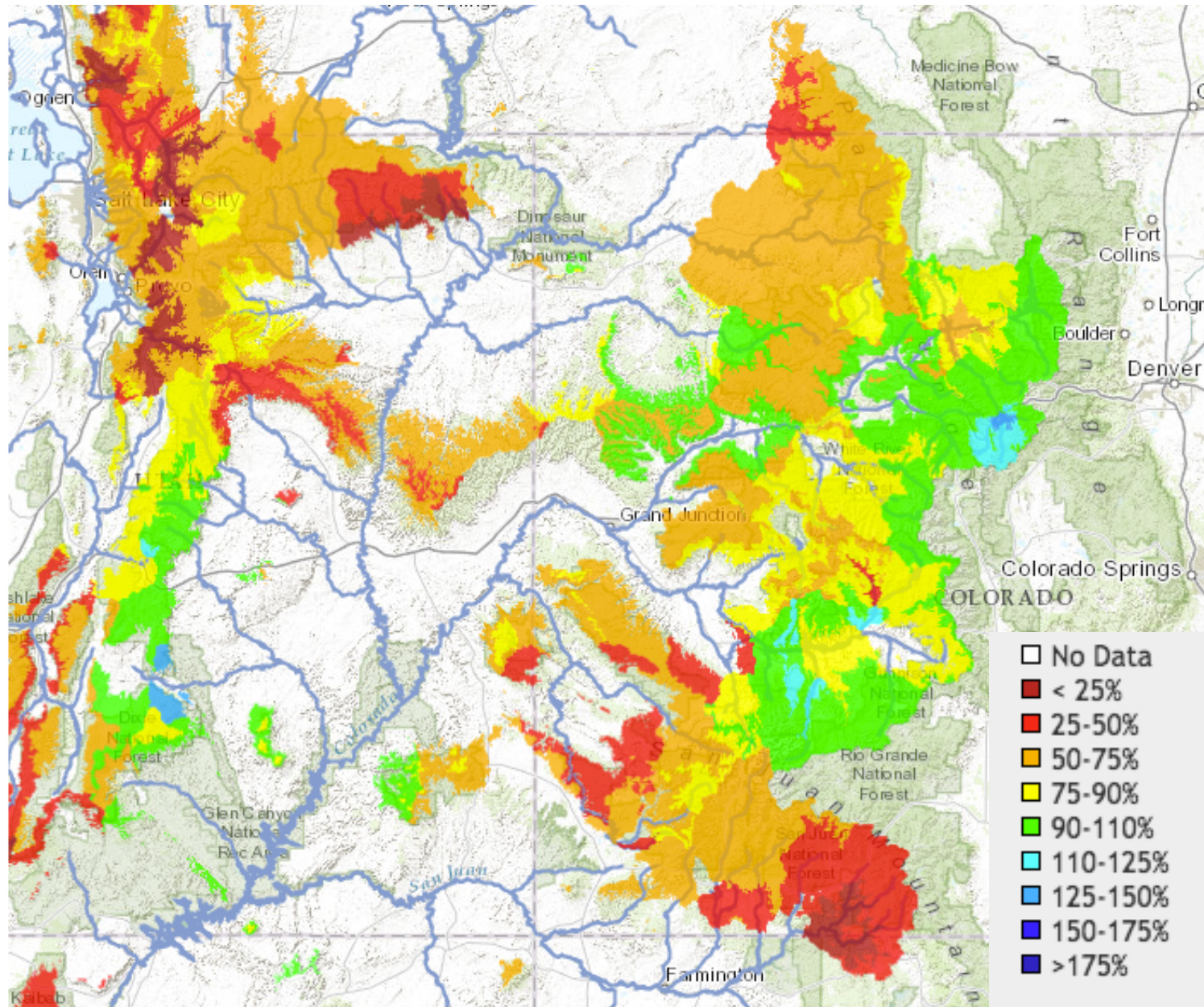
**Senior Hydrologist**

**Colorado Basin River Forecast Center**

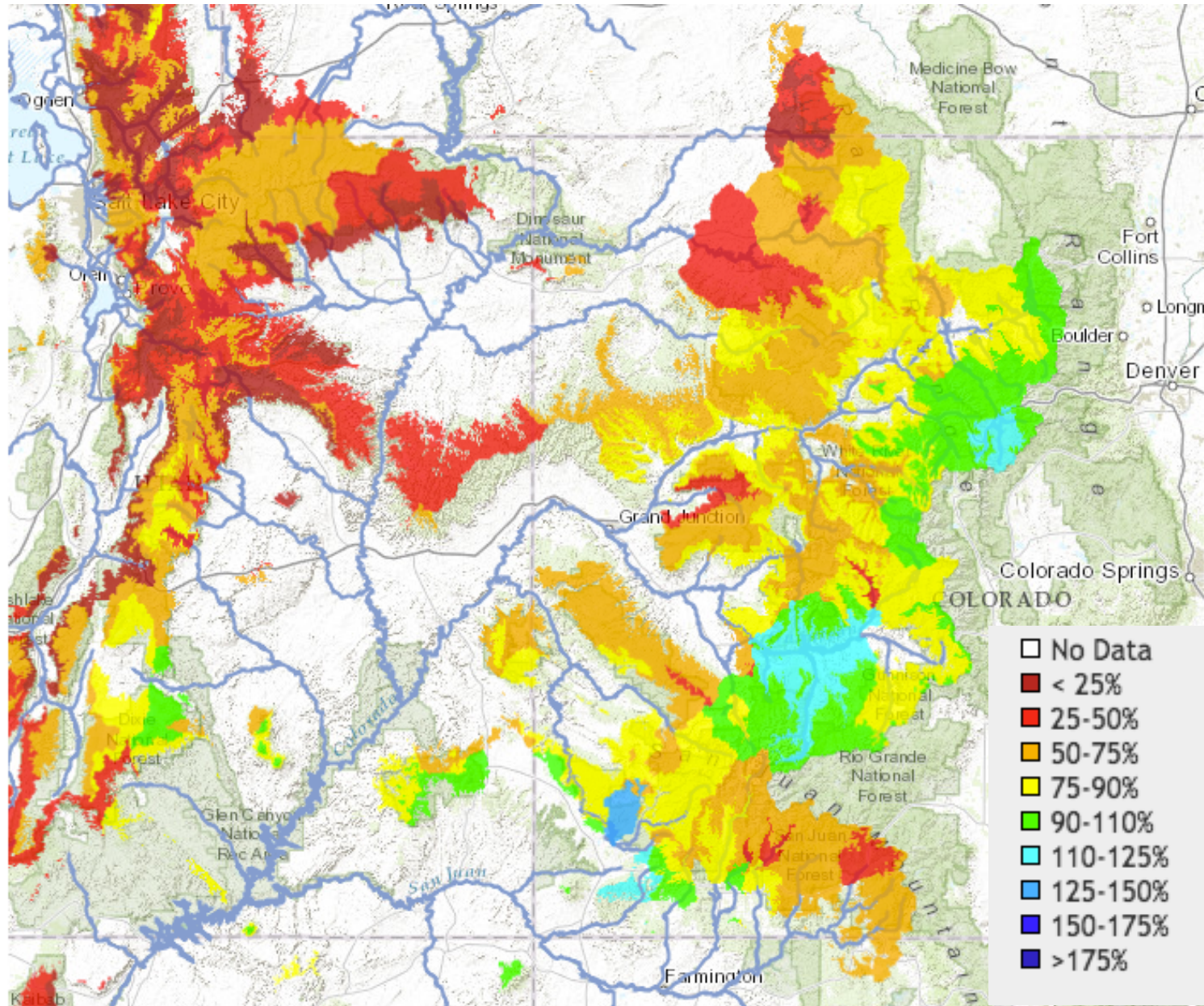
# Model Soil Moisture – Entering the Winter Season



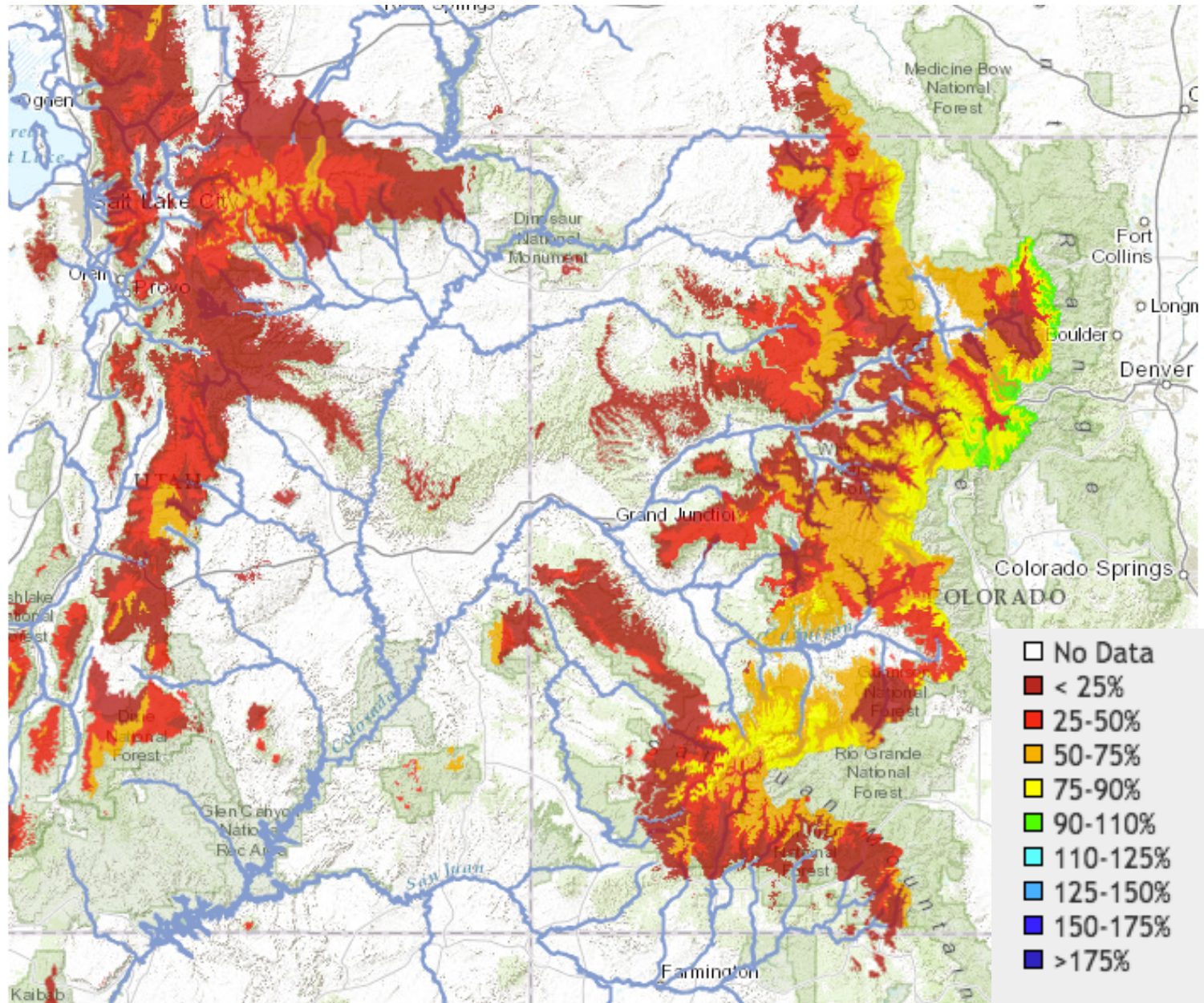
# SNOW (as a % of average) – In the CBRFC Forecast Model on 2-1-2015



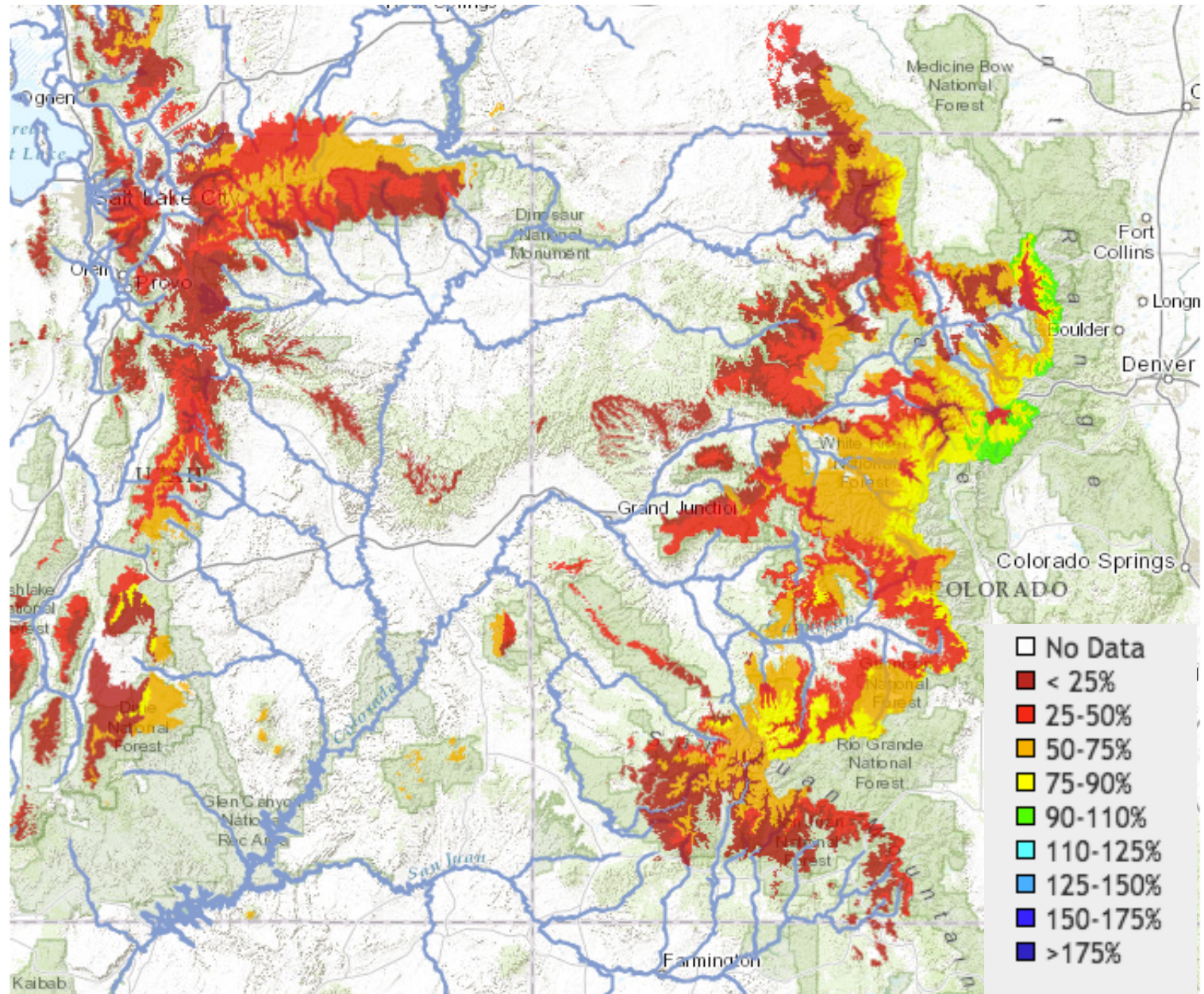
# SNOW (as a % of average) – In the CBRFC Forecast Model on 3-1-2015

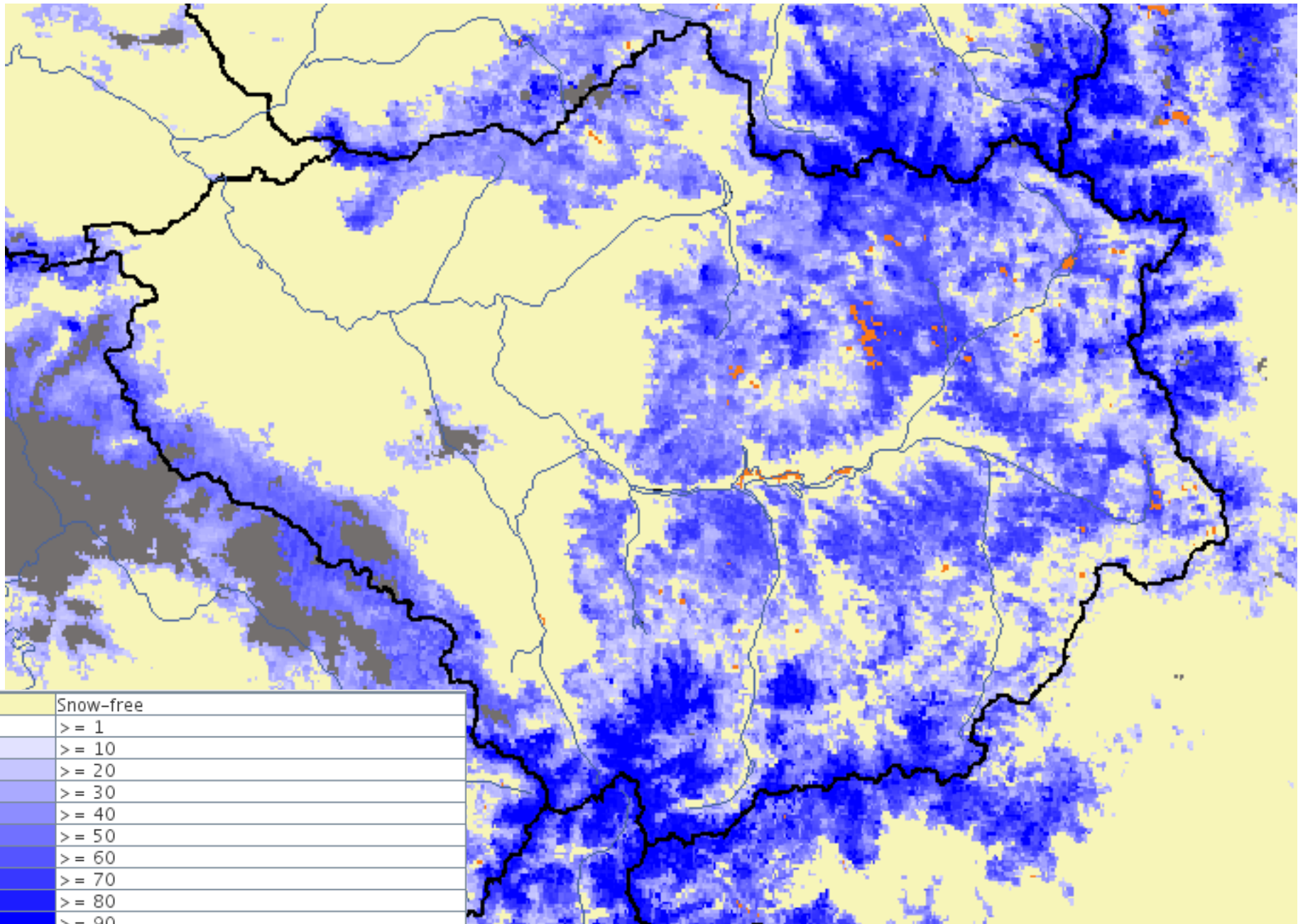


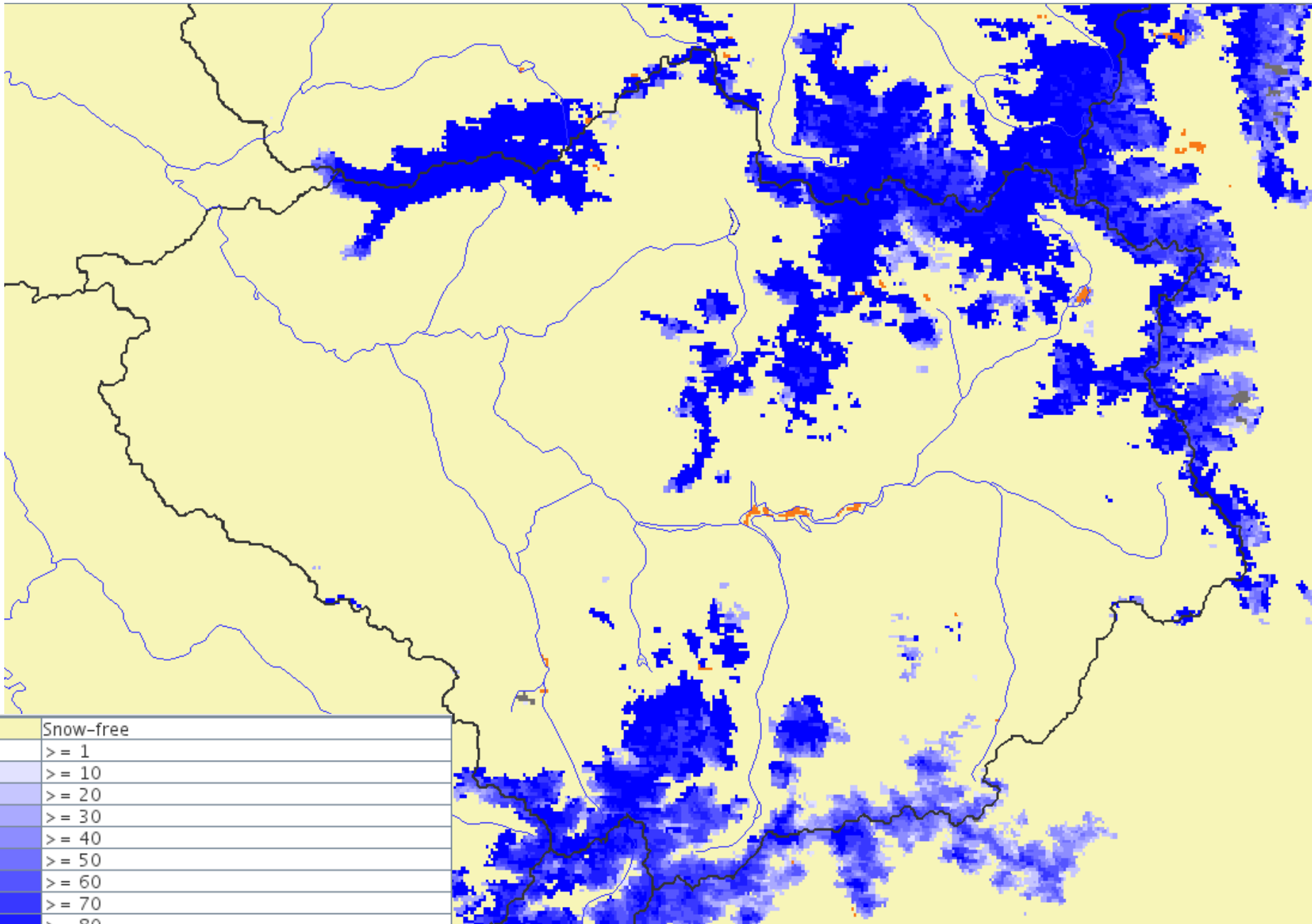
# SNOW (as a % of average) – In the CBRFC Forecast Model on 4-1-2015



# SNOW (as a % of average) – In the CBRFC Forecast Model on 4-19-2015



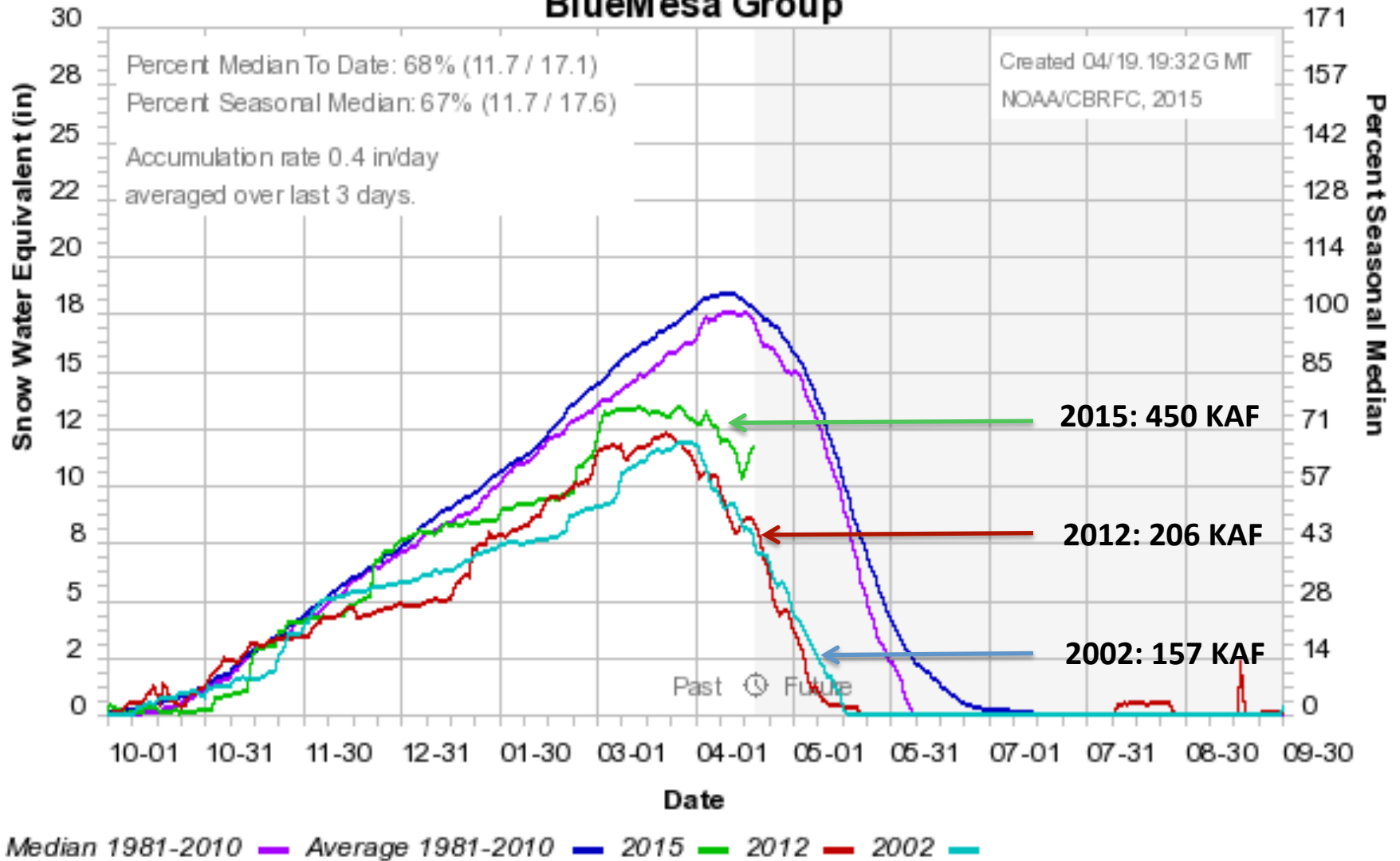






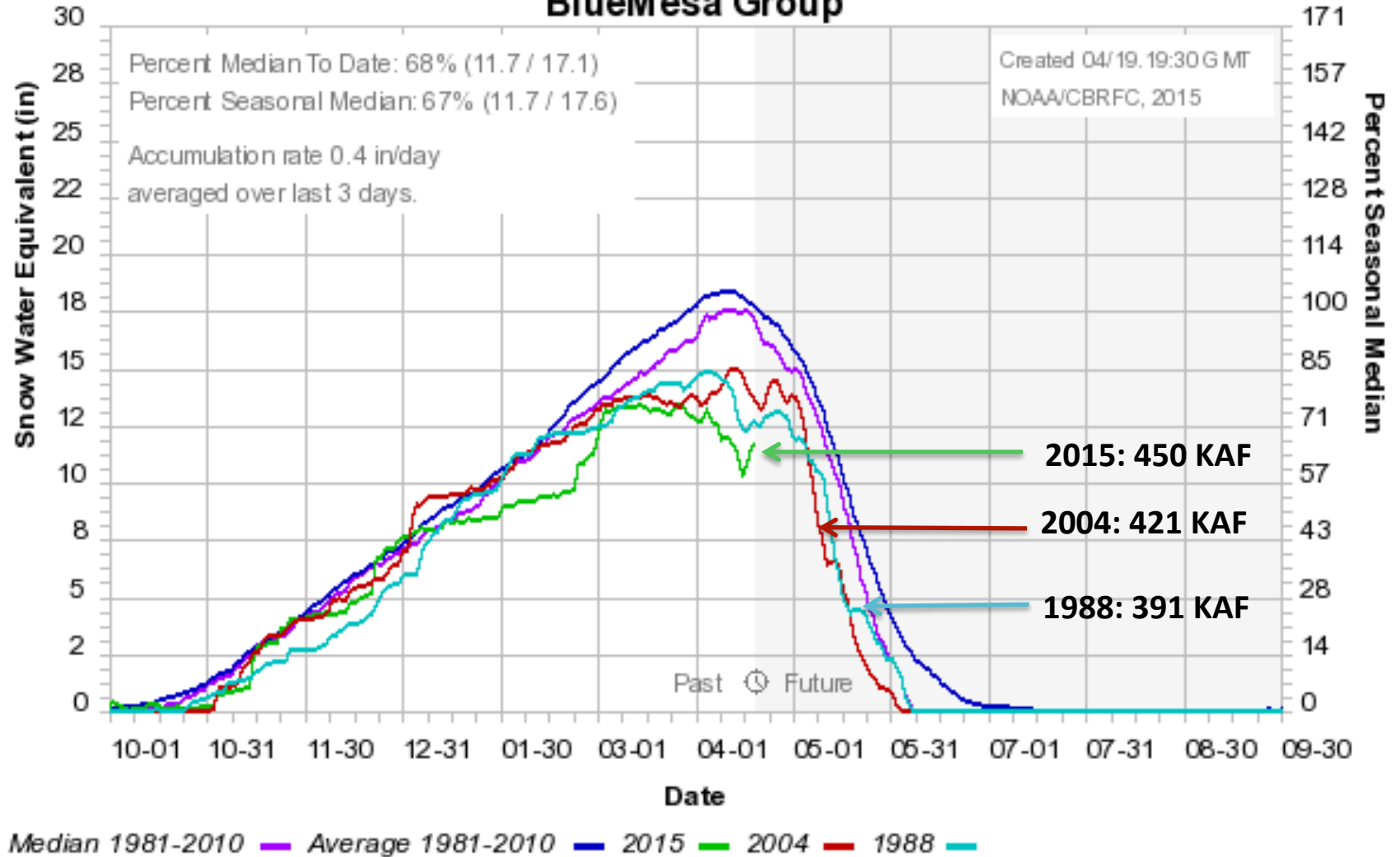
# SNOTEL GROUP COMPARISON: 2015 with **Lowest** Snow Years

## Colorado Basin River Forecast Center BlueMesa Group



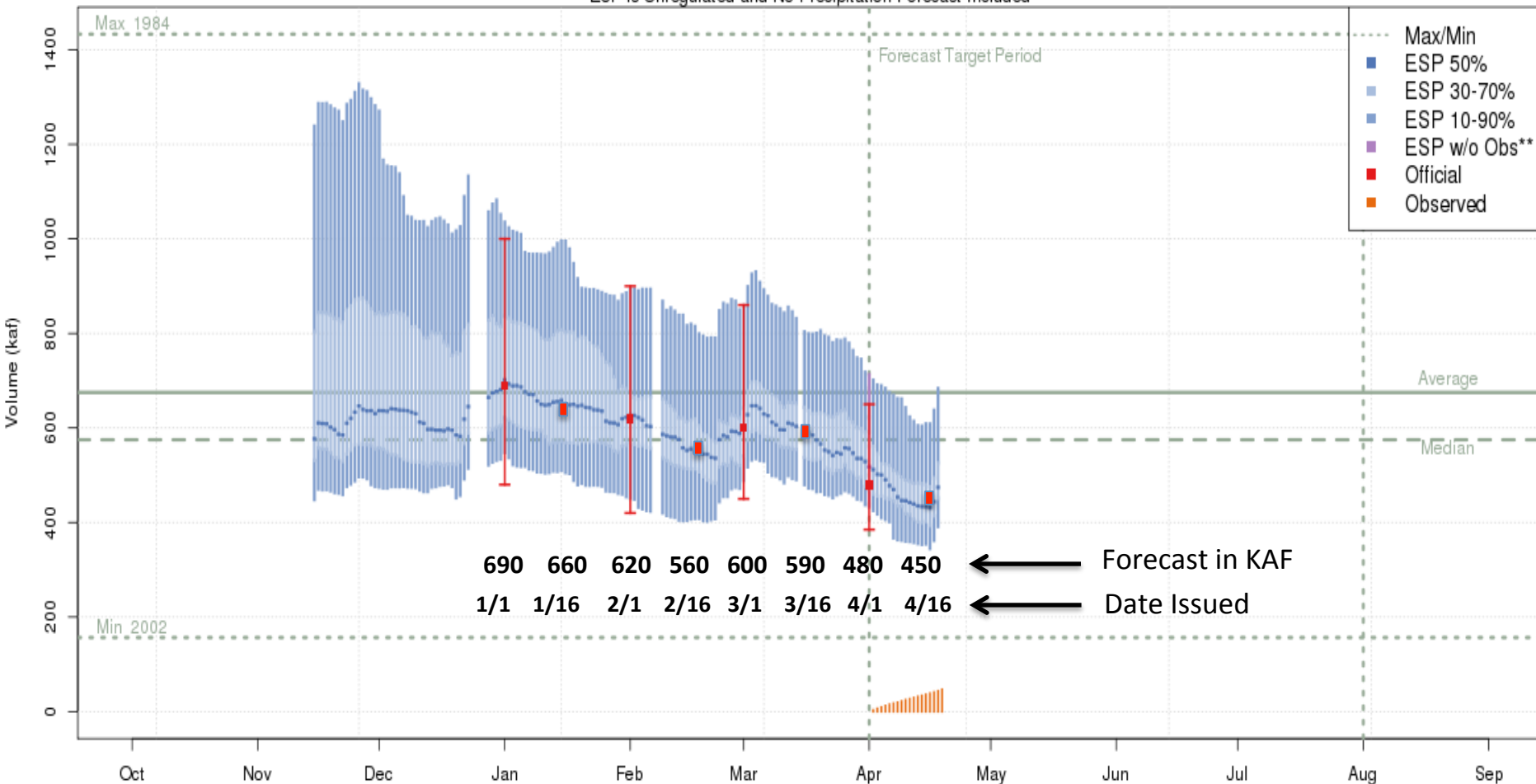
SNOTEL GROUP COMPARISON: 2015 with *Similar Patterned* Snow Years

Colorado Basin River Forecast Center  
BlueMesa Group



# Blue Mesa Inflow – Forecast Evolution 2015

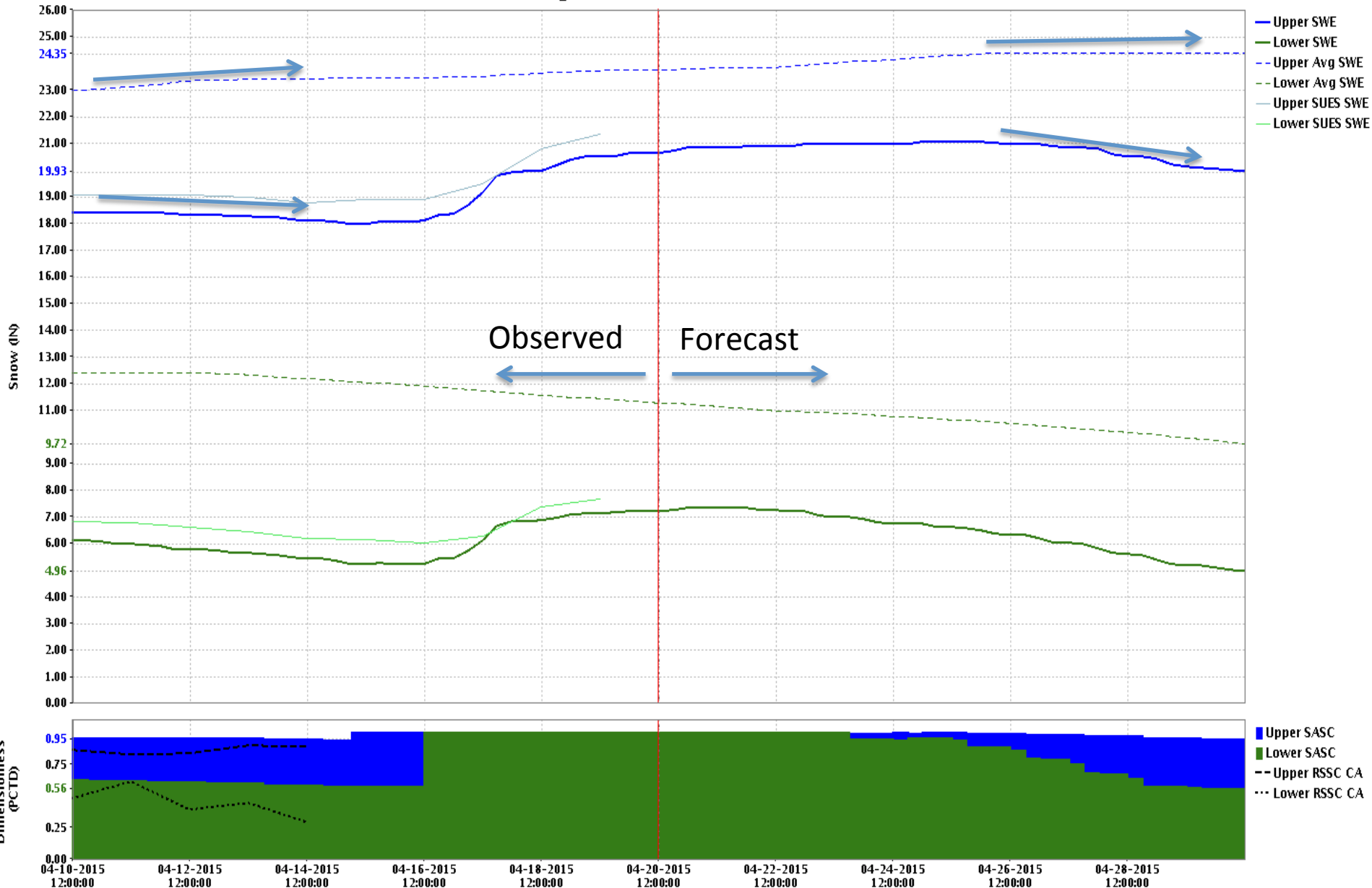
**Gunnison - Blue Mesa Res (BMDC2)**  
**2015-04-01 Apr-Jul Official 50% Forecast: 480 kaf (71% of average)**  
 ESP is Unregulated and No Precipitation Forecast Included



**The latest (2015-04-18) 50% ESP forecast is 474 kaf.**  
 Plot Created 2015-04-19 13:51:36, NOAA / NWS / CBRFC  
 Forecasts in the forecast target period include observed values.

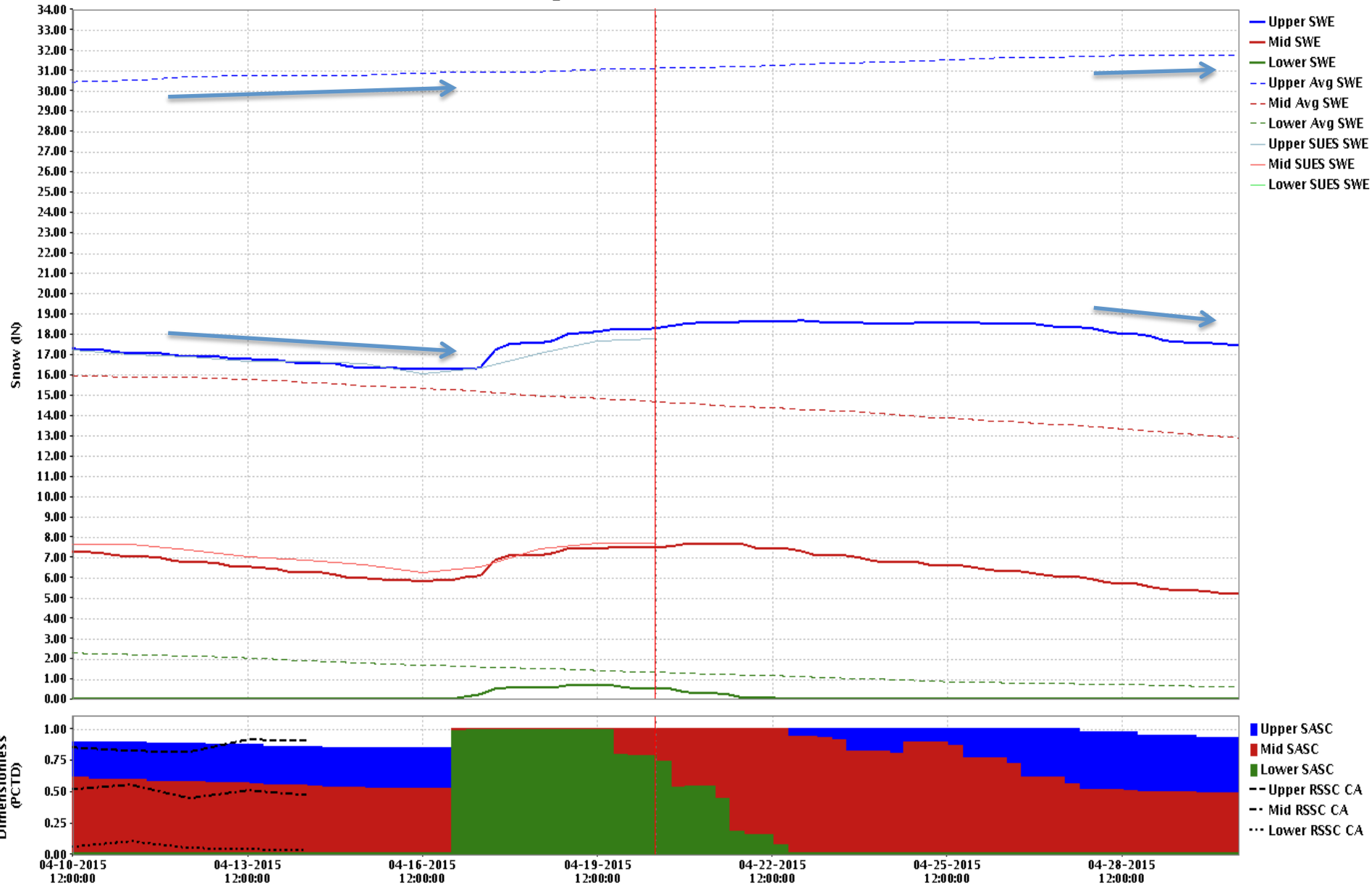
# Taylor Park: 2015 Model Snow Trend compared to the 1981-2010 calibration average

TRAC2H\_F: SWE - Snow Cover



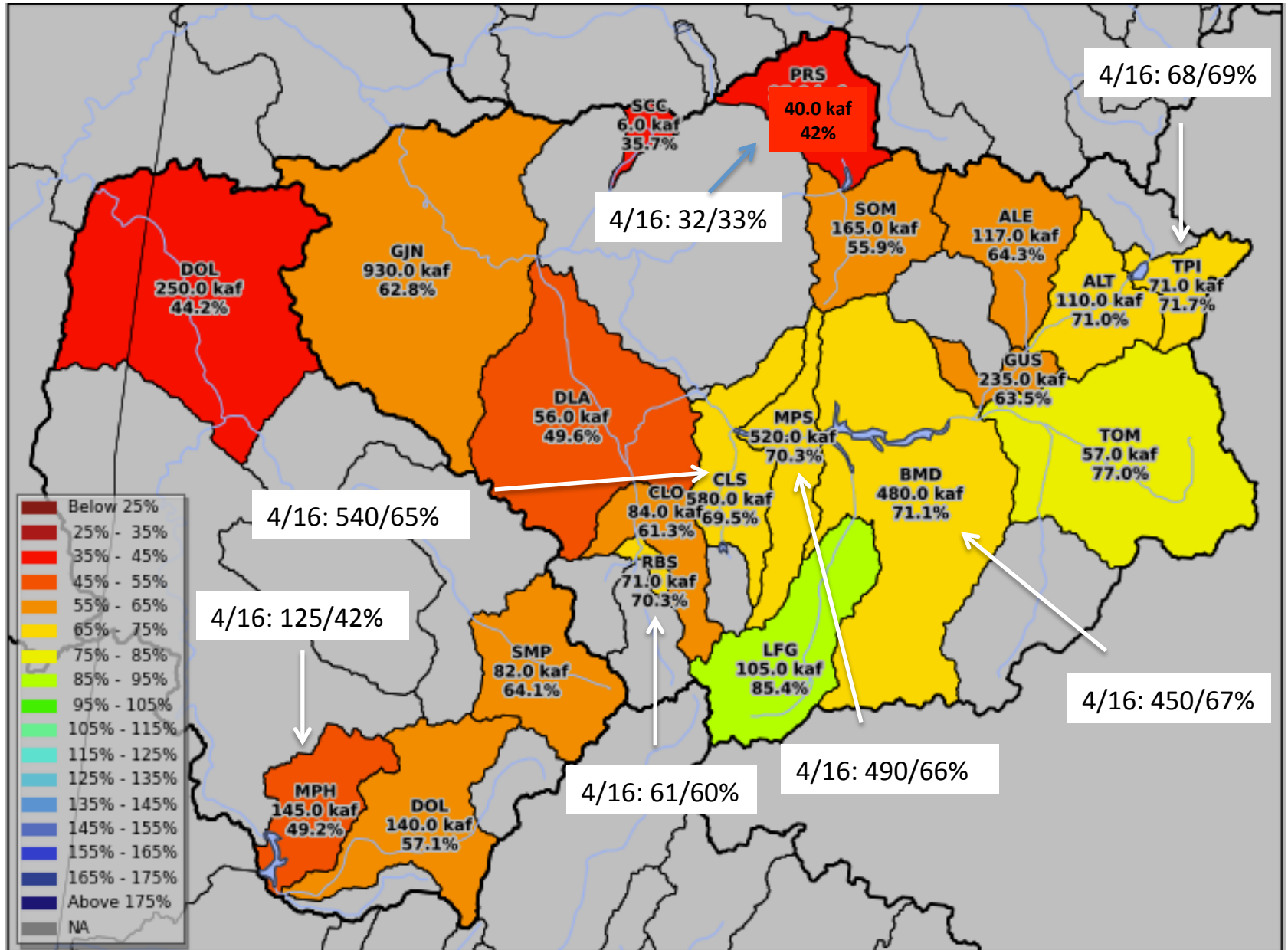
# East – Almont : 2015 Model Snow Trend compared to the 1981-2010 calibration average

ALEC2H\_F: SWE - Snow Cover



GUN\_Approved\_Forecast: [1] 04-20-2015 12:00:00 Current

# Forecast Distribution: Gunnison & Dolores Basins – April 1<sup>st</sup> & Mid-April Updates

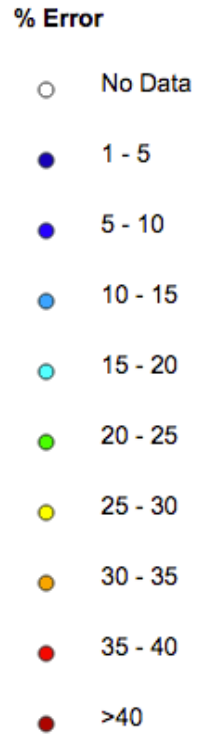
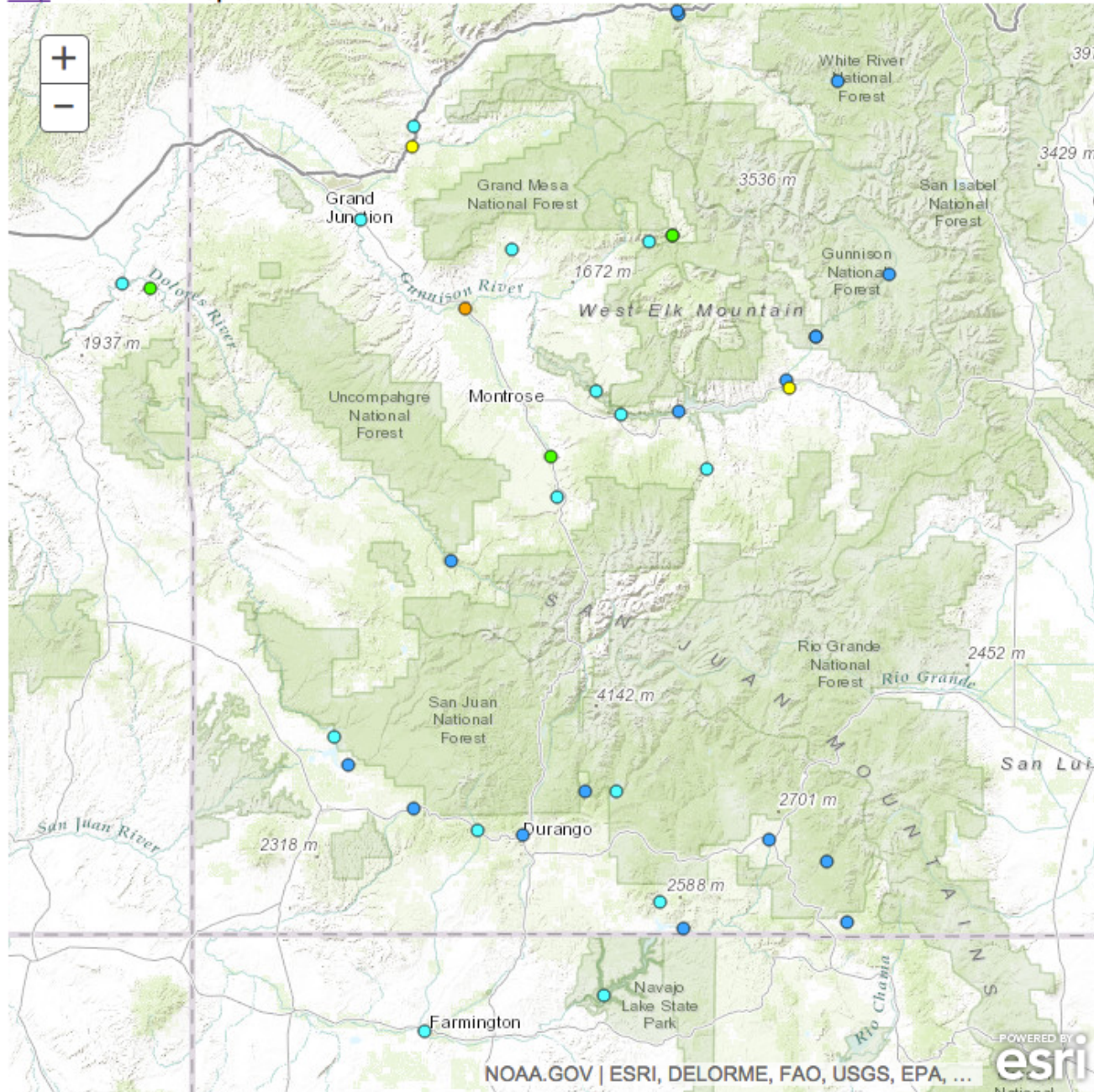


# Historical Water Supply Verification - April

[Help](#) Double Click Map to Zoom

Forecast Month

- [January](#)
- [February](#)
- [March](#)
- [April](#)
- [May](#)
- [June](#)

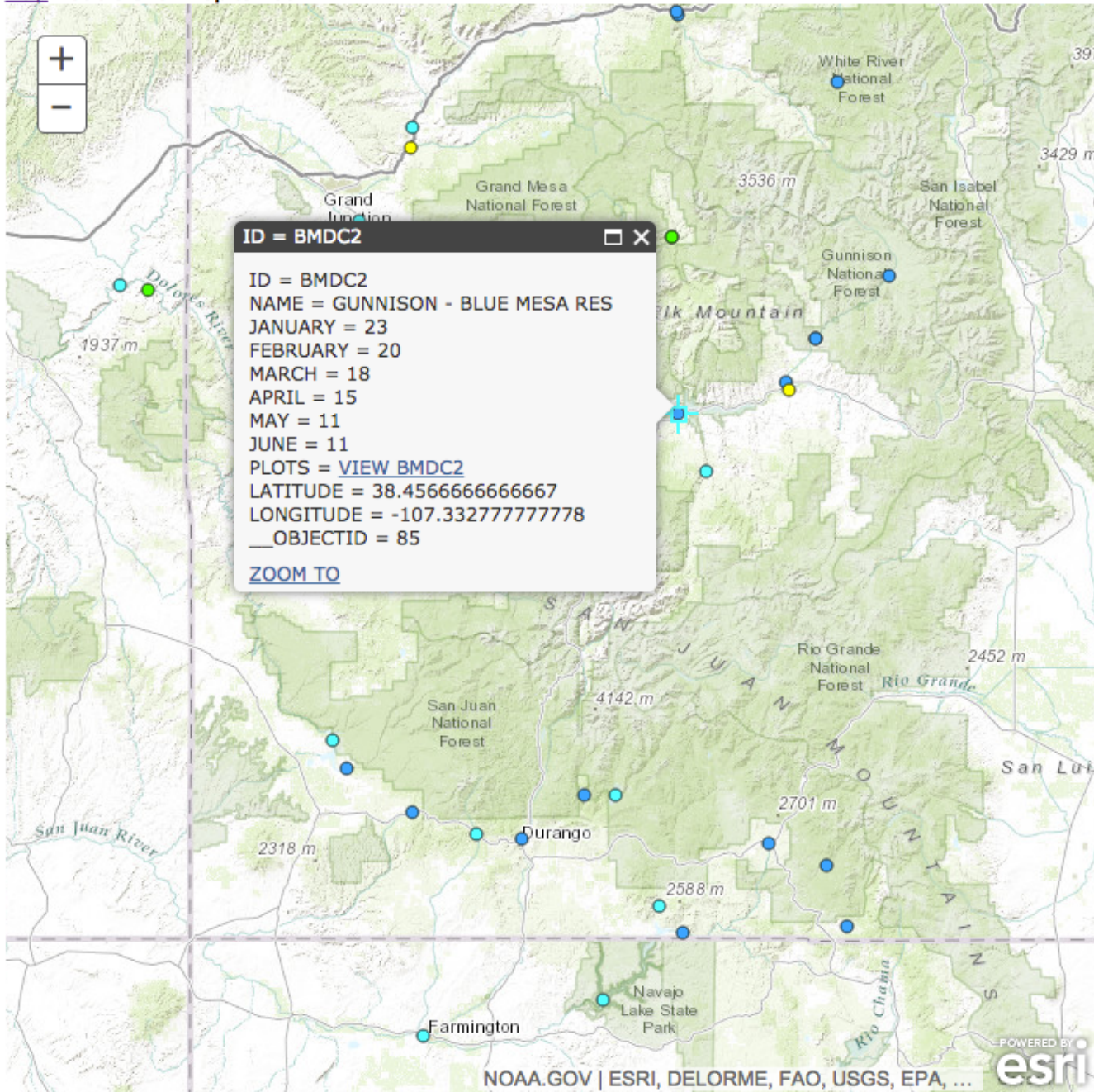


# Historical Water Supply Verification - April

[Help](#) Double Click Map to Zoom

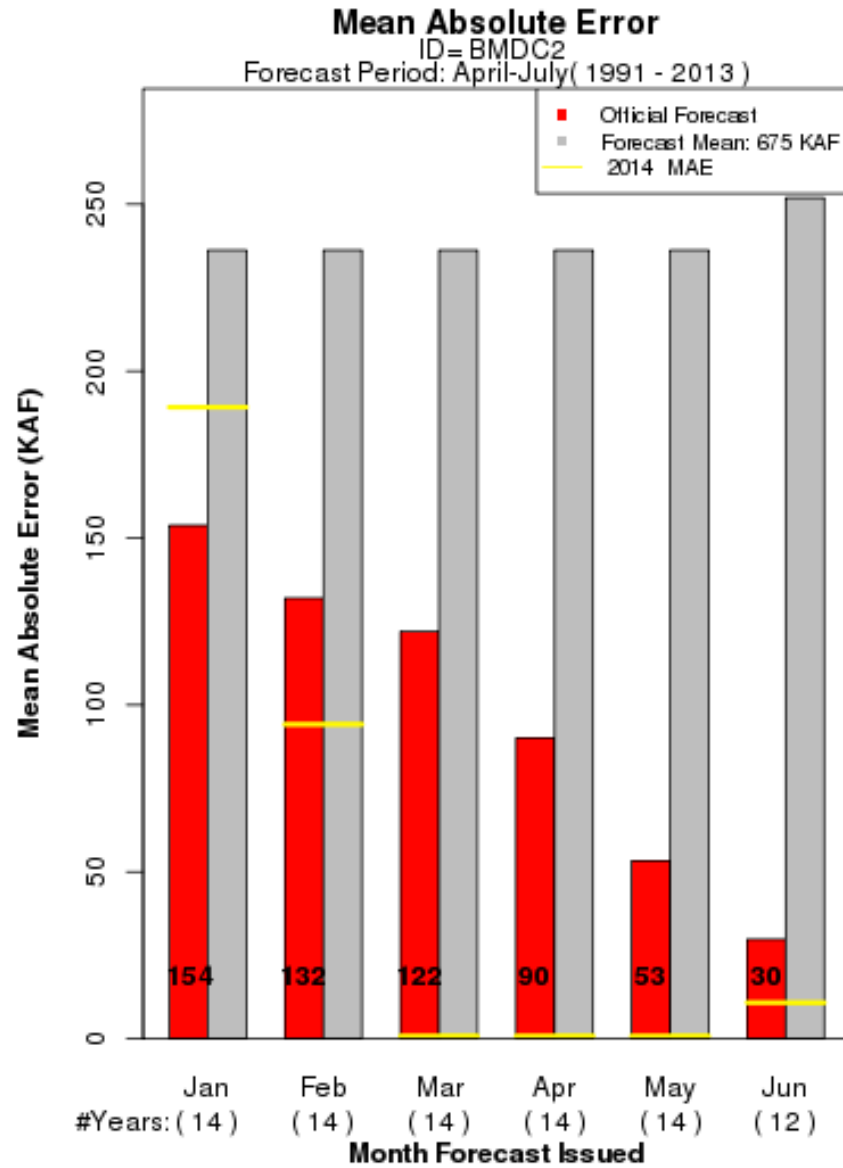
Forecast Month

- [January](#)
- [February](#)
- [March](#)
- [April](#)
- [May](#)
- [June](#)





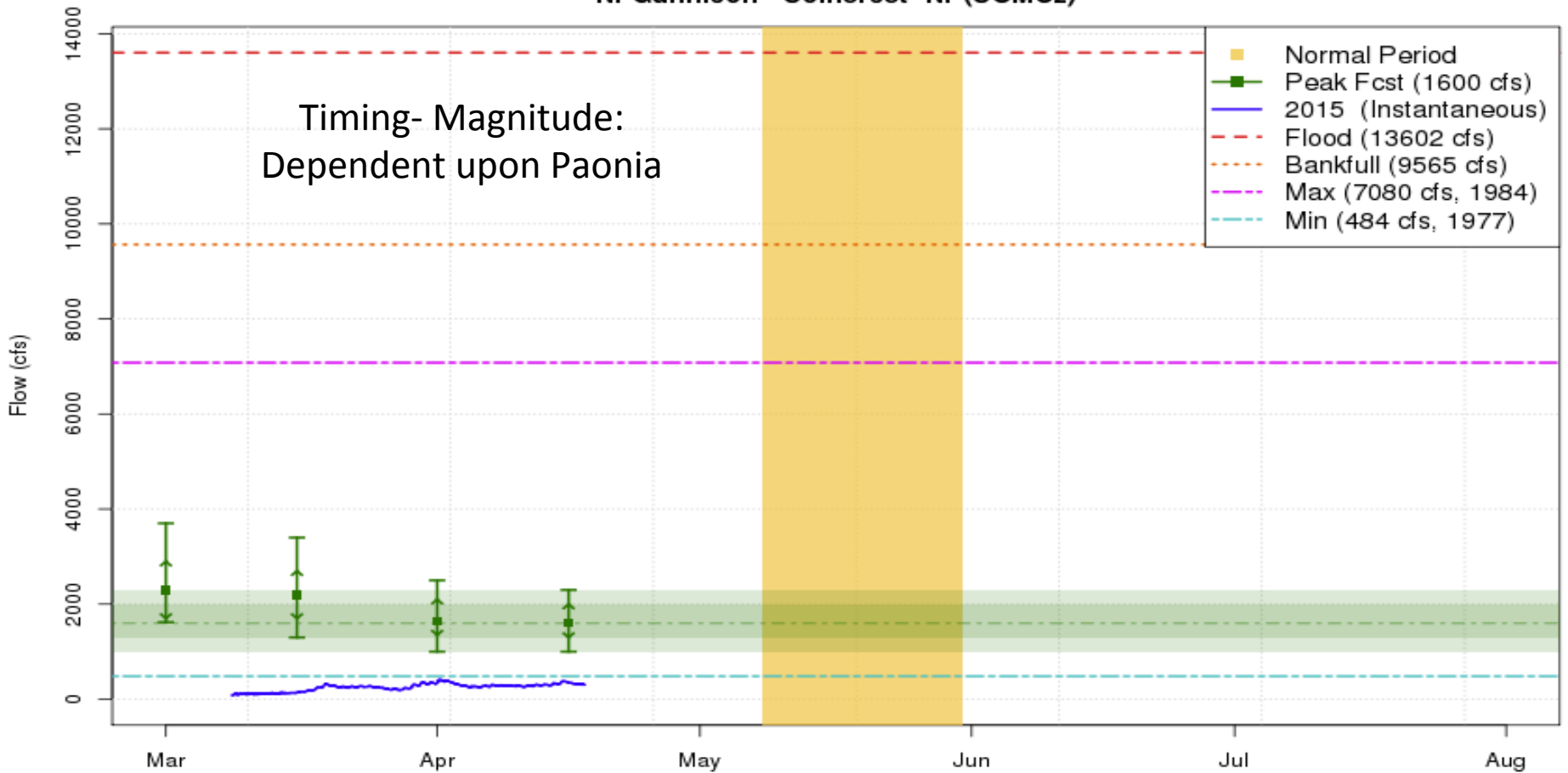
# Mean Absolute Forecast Error (last 14 years)



# **PEAK FLOW DISCUSSION**

**North Fork Gunnison near Somerset**

**2015 Mean Daily Peak Flow Forecast  
Nf Gunnison - Somerset- Nr (SOMC2)**

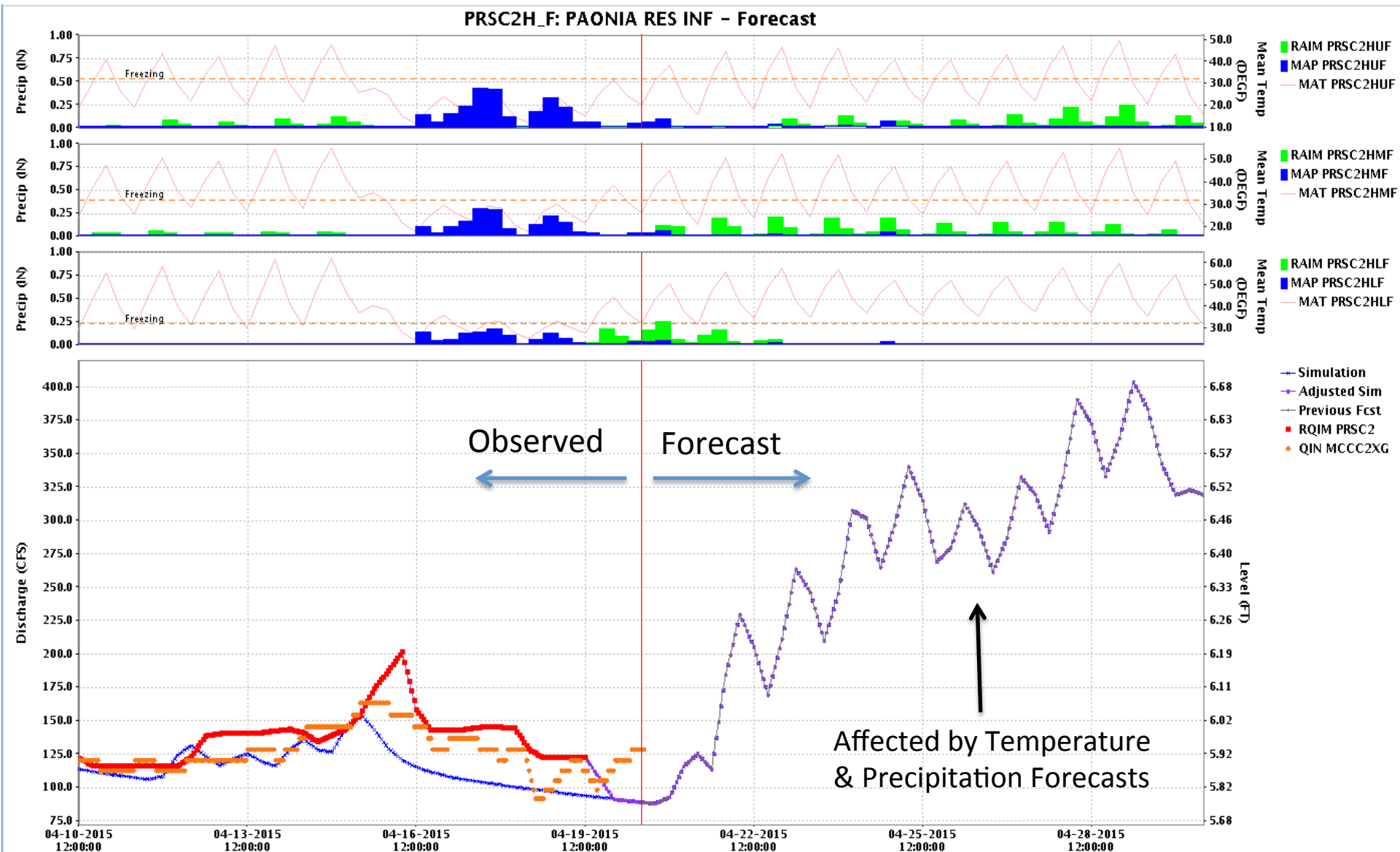


**2014 Peak  
3040 CFS**

**These graphics are updated approximately every two weeks between 3/1 and 5/1**  
Plot Created 2015-04-17 14:40:31  
CBRFC / NWS / NOAA

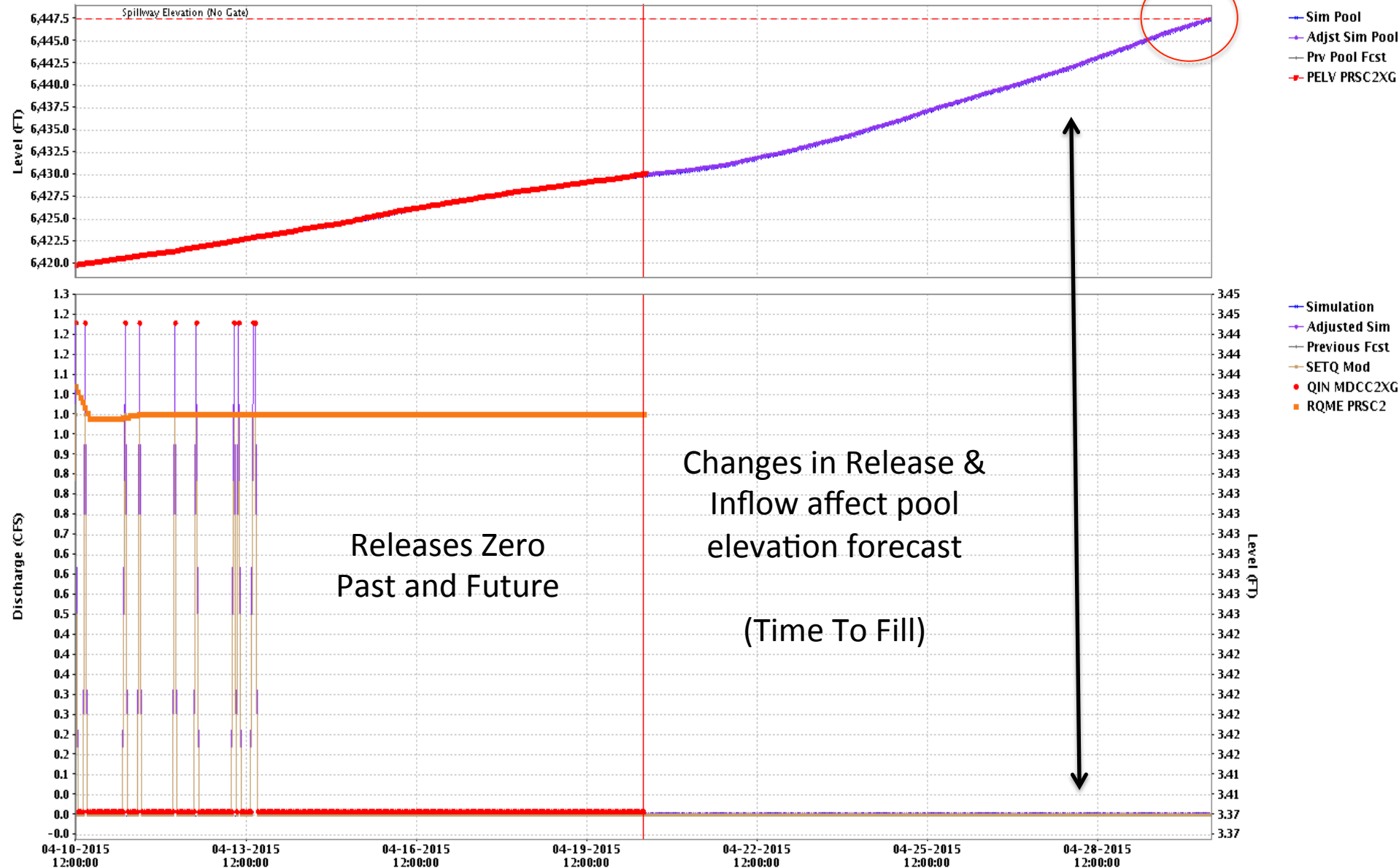
River	Location	Flood Flow	Issue Date	Mean Daily 90	Mean Daily 75	Mean Daily 50	Mean Daily 25	Mean Daily 10	Average Peak
East	Almont	3170	2015-04-16	750	900	1000	1300	1500	2000
Nf Gunnison	Somerset	13870	2015-04-16	1000	1300	1600	2000	2300	3120
Surface Ck	Cedaredge	1410	2015-04-16	45	65	90	115	160	210
Gunnison	Grand Junction	19520	2015-04-16	6000	6600	6600	7000	7500	8890

# Daily Deterministic Forecast Model – Paonia Inflow



# Daily Deterministic Forecast Model – Paonia Pool & Outflow

MDCC20\_F: PAONIA RES OPER - Pool & Outflow

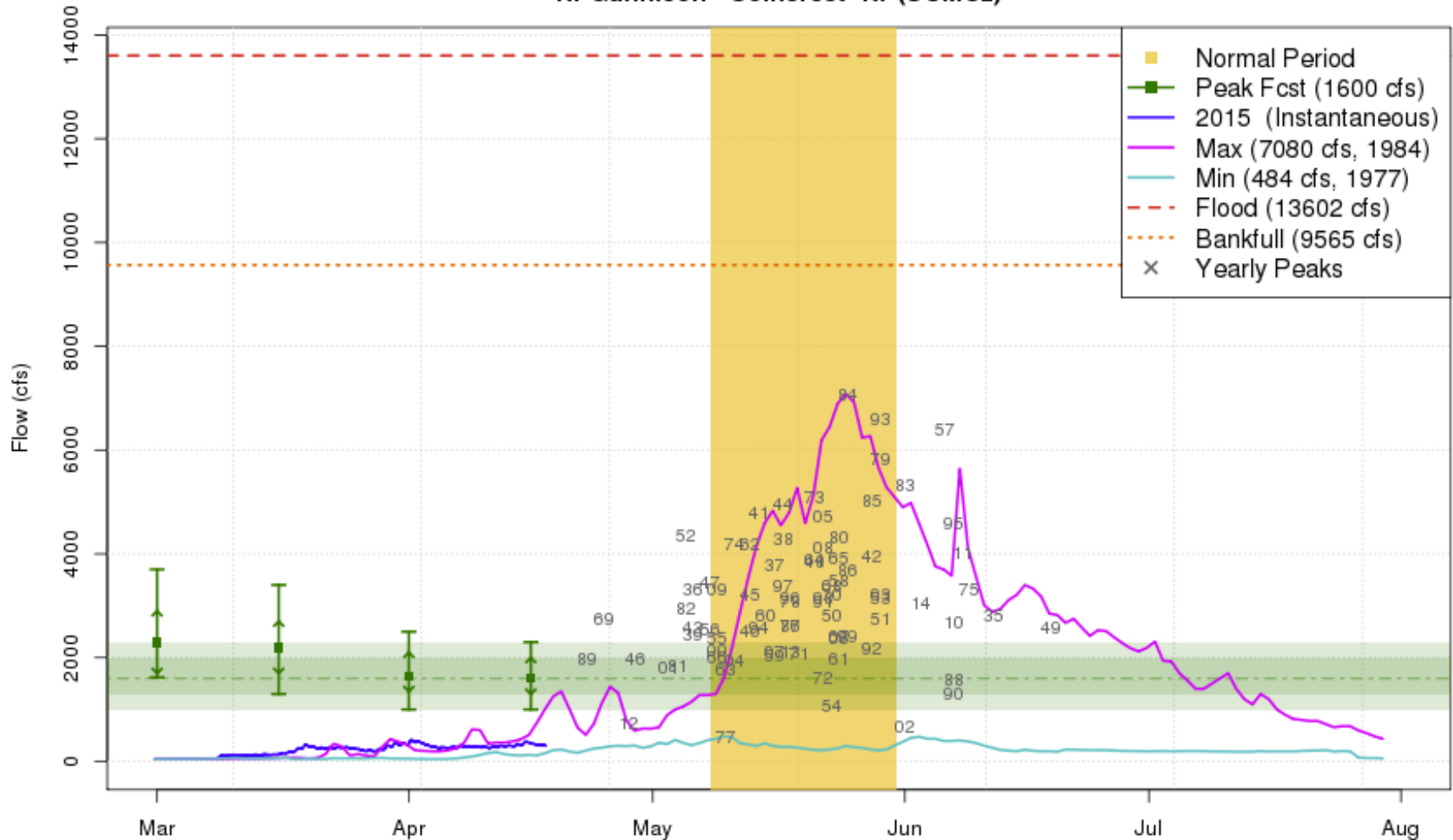


# SOMC2 Peak Flow Forecasts

[Mean Daily Plot](#) [Instantaneous Plot](#) [Forecasts](#) [Observations](#) [Help](#)

Plot Options (on/off): [Record Year Data](#) [Yearly Peaks](#) [Flood Flow](#)

### 2015 Mean Daily Peak Flow Forecast Nf Gunnison - Somerset- Nr (SOMC2)



**These graphics are updated approximately every two weeks between 3/1 and 5/1**

Plot Created 2015-04-17 14:40:32  
CBRFC / NWS / NOAA

## **Questions or Comments**

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**Senior Hydrologist**

**Colorado Basin River Forecast Center**

**801-524-5130**

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