

RECLAMATION

Managing Water in the West

**Wyoming Water Forum
Fontenelle Operations
April 10, 2018**



U.S. Department of the Interior
Bureau of Reclamation

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Upper Colorado Region

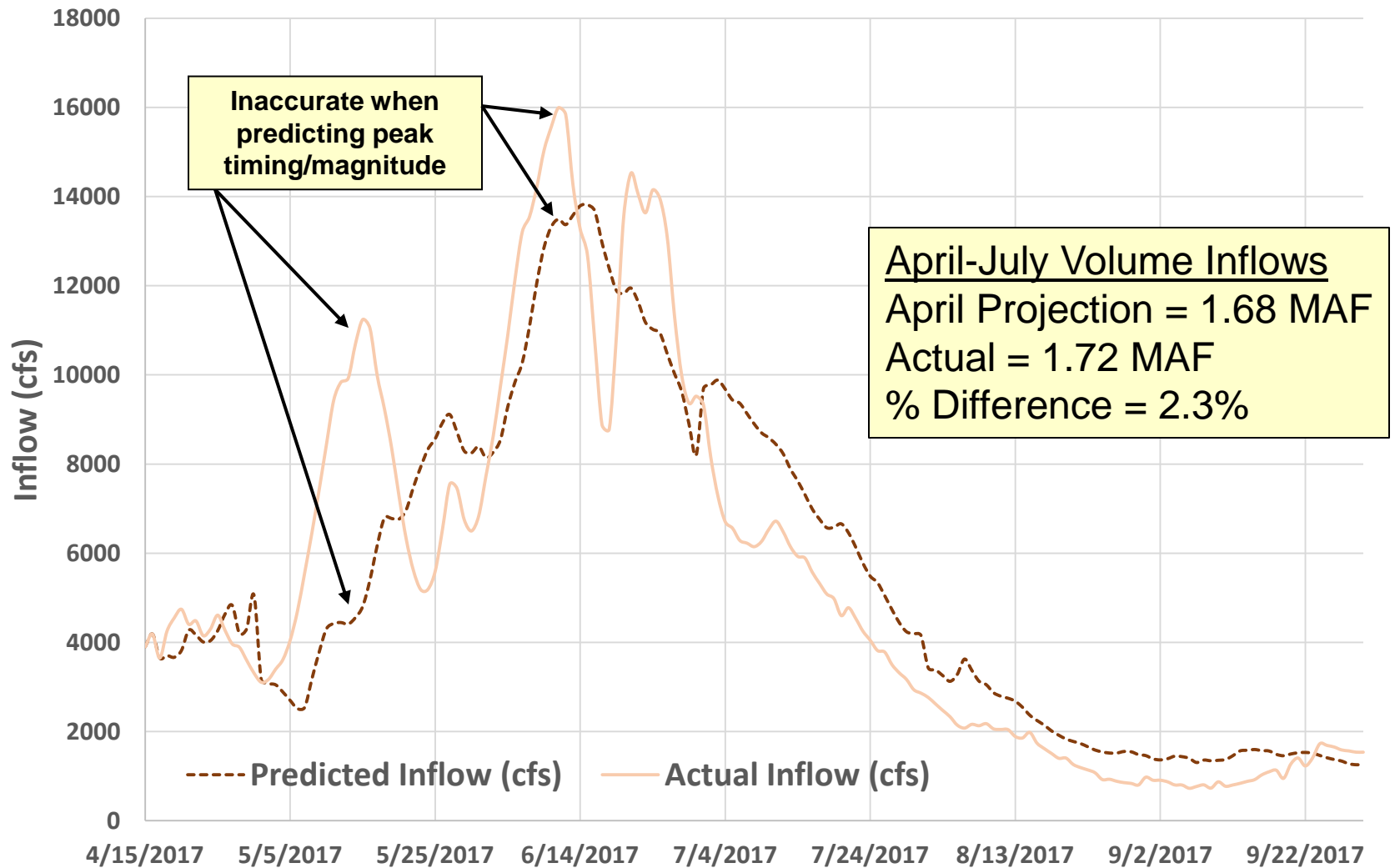
Presentation Overview

- *Review of WY 2017 operations*
- Overview of WY 2018 snow progression
- Climate forecast
- Fontenelle current status
- Planned WY 2018 operations

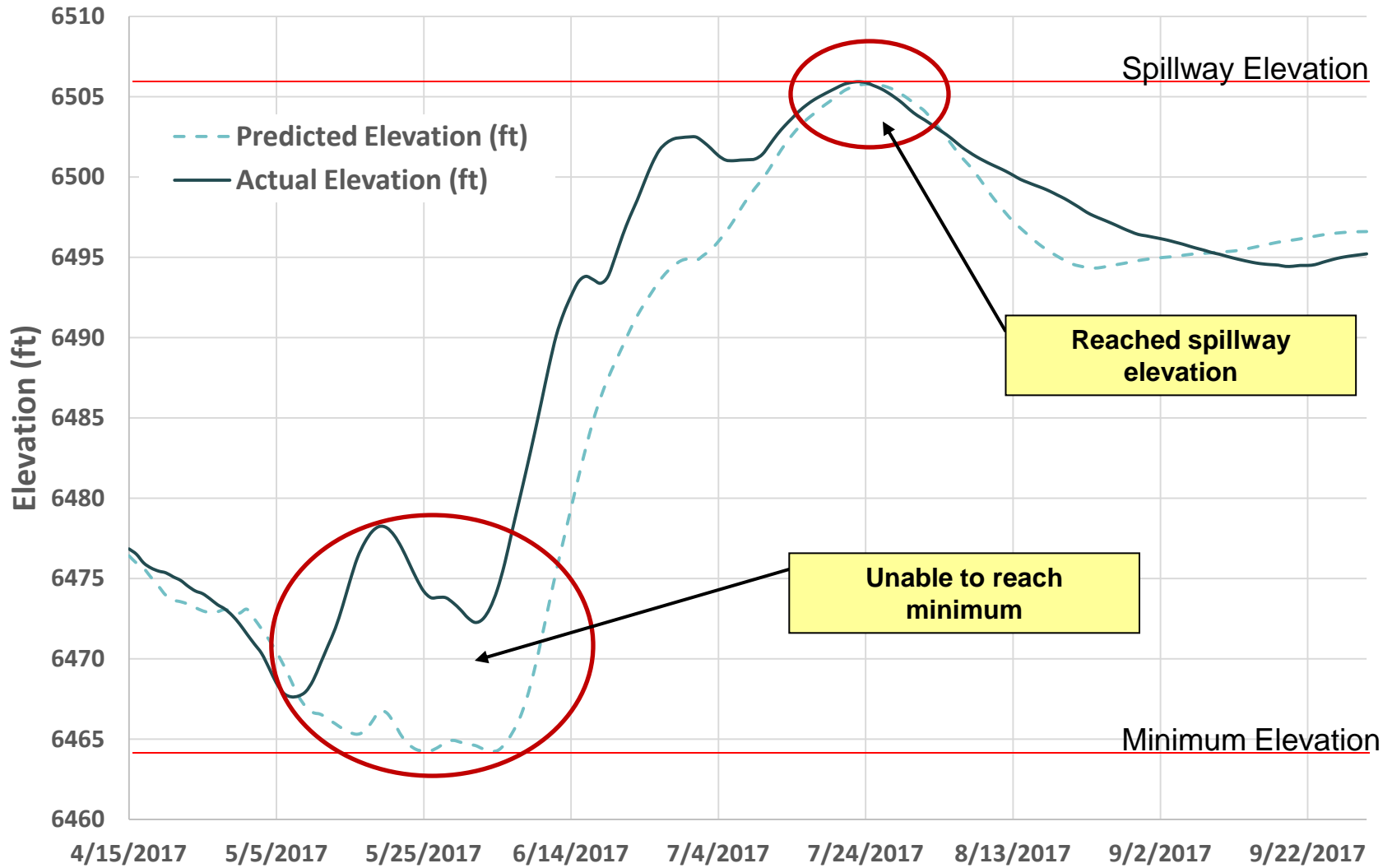
2017 Water Operations

- Record April - July Runoff = 1.72 MAF
 - 1986 April - July = 1.68 MAF
 - Average Apr - July = 0.73 MAF
- Peak Inflow = 15,995 cfs (06/11/2017)
- Peak Release = 9,775 cfs (06/26/2017)
- Peak flow at Green River, WY Gage = 10,500 cfs
 - Stage = 6.86 ft on 06/25/2017
 - Flood Stage = 7 ft

2017 Inflows, Actual vs Planned



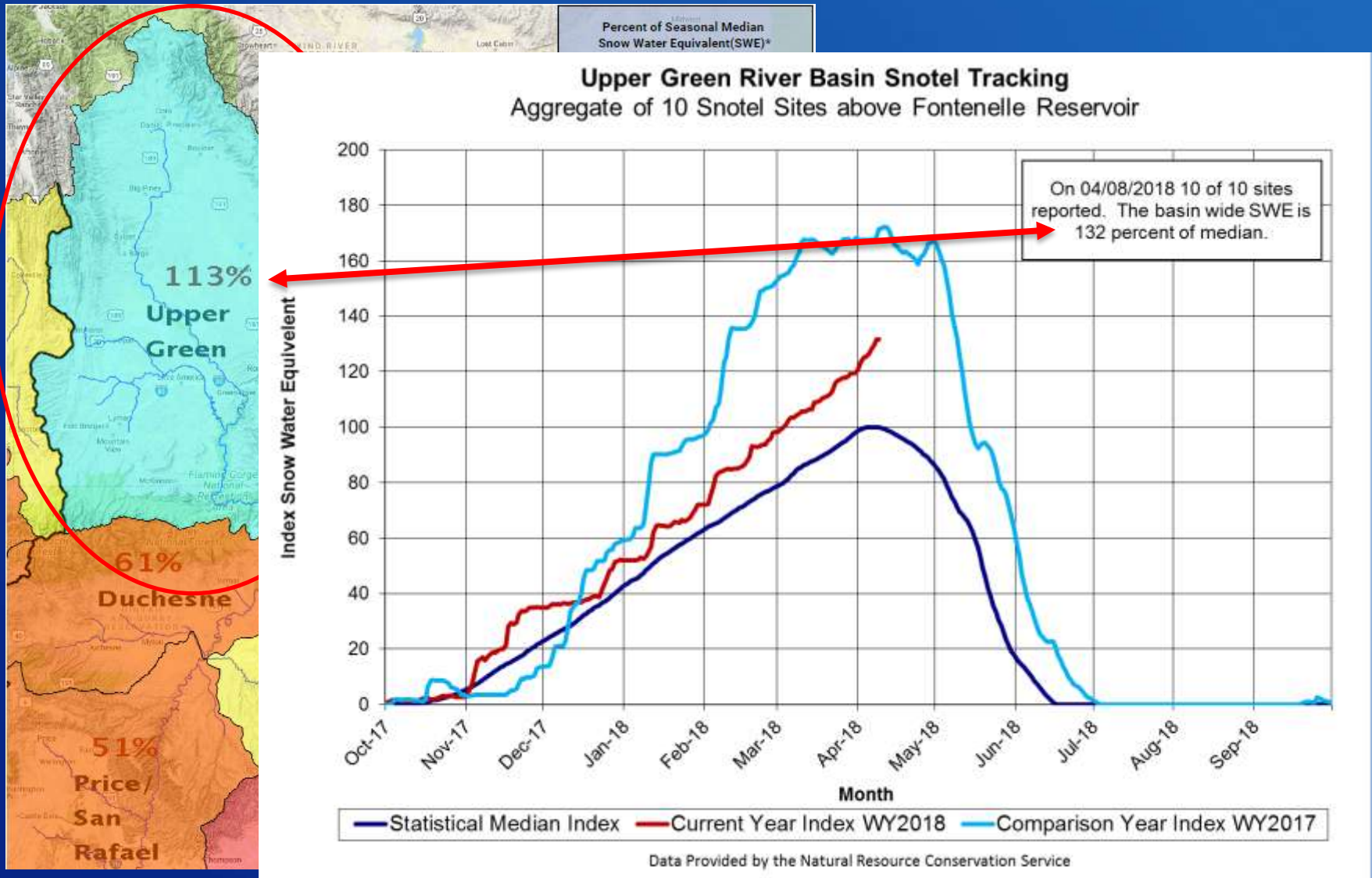
2017 Pool Elevation, Actual vs Planned



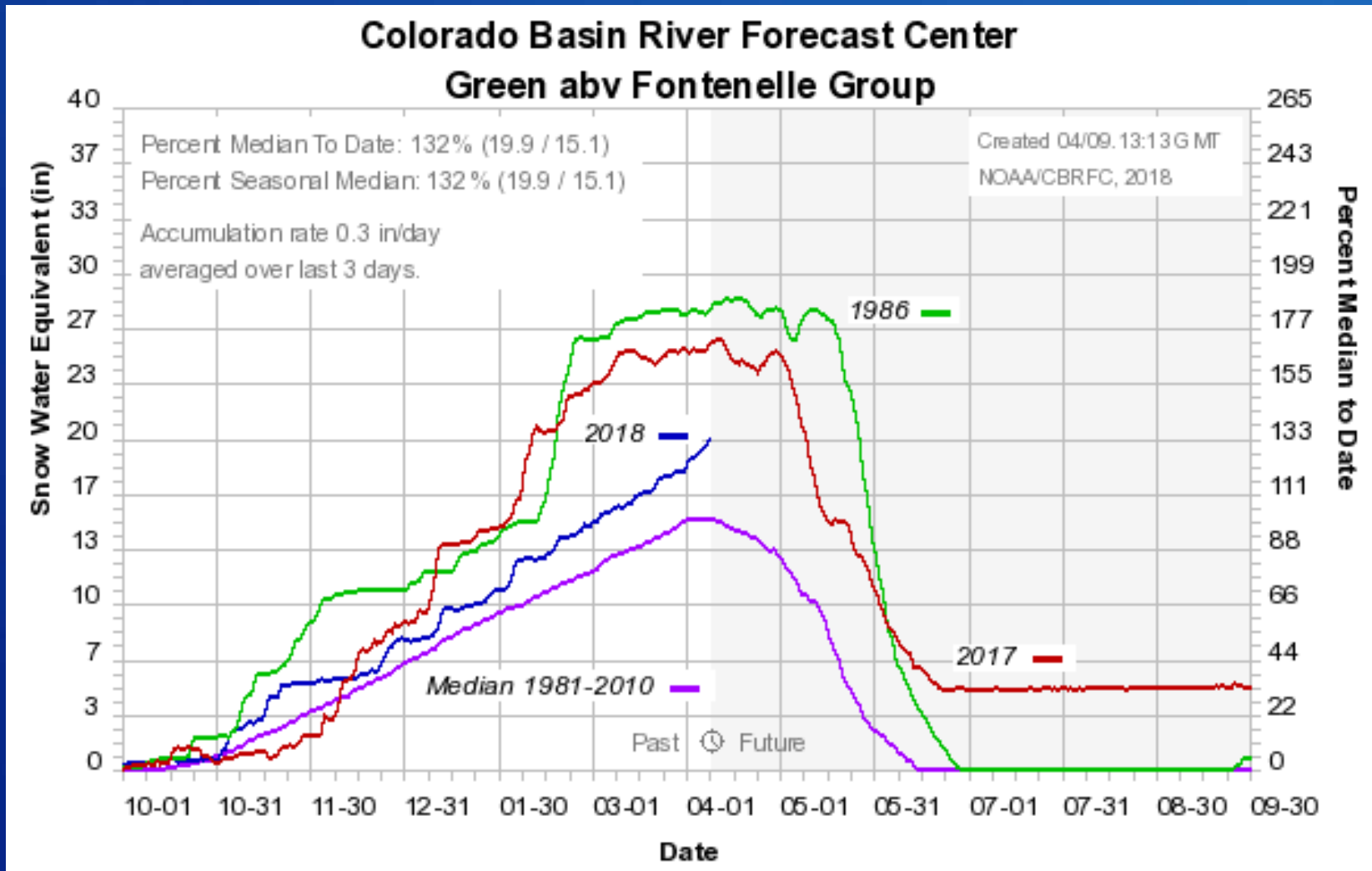
Presentation Overview

- Review of WY 2017 operations
- *Overview of WY 2018 snow progression*
- Upcoming weather
- Fontenelle current status
- Planned WY 2018 operations

Snow Water Equivalent (SWE)



Current Snowpack

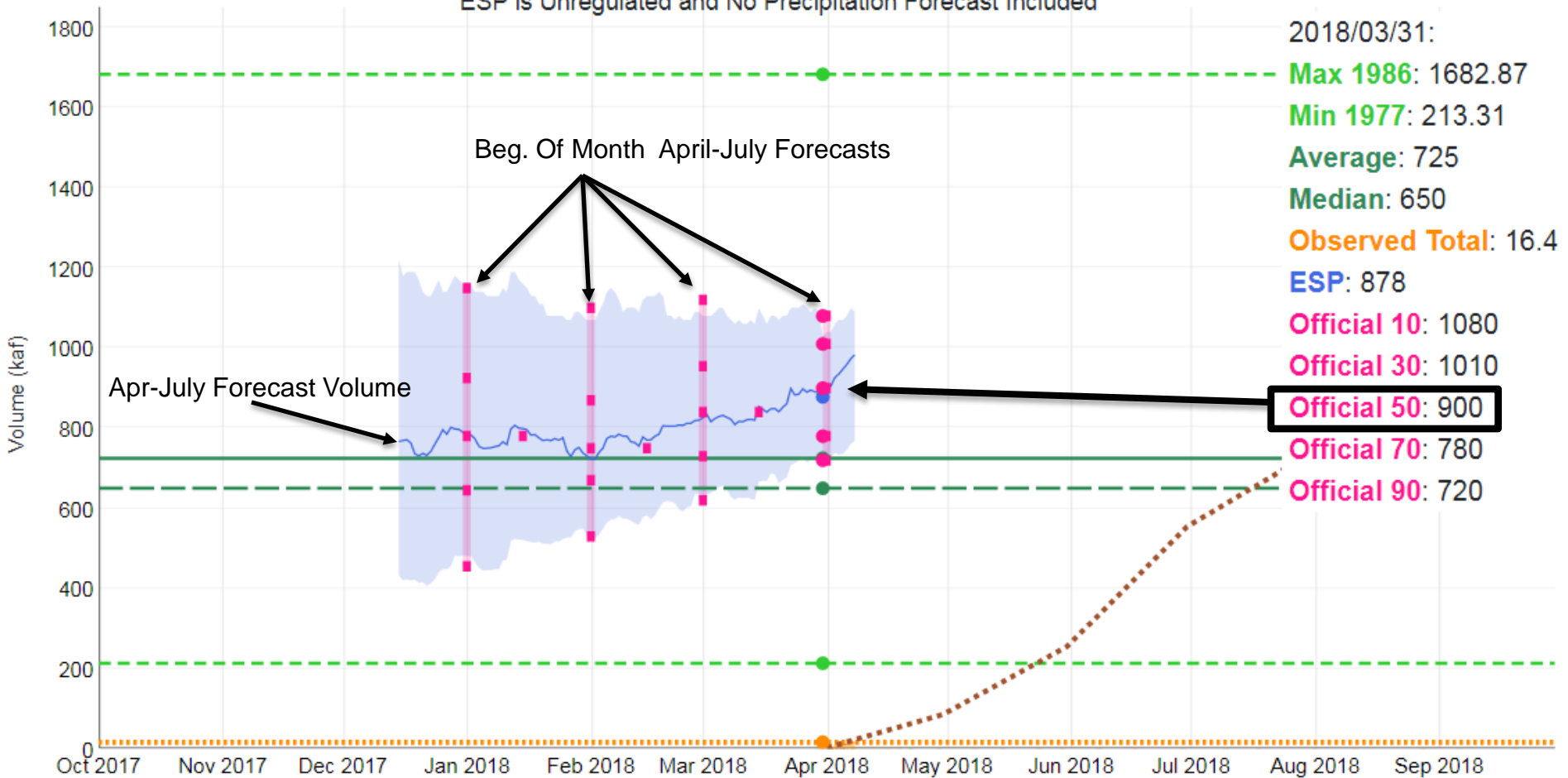


Forecast Evolution

~~Green - Fontenelle Res, Fontenelle Nr (GBRW4)~~

Period: Apr-Jul, Official 50% Forecast (2018-04-01): 900 kaf (124% Average, 138% Median)

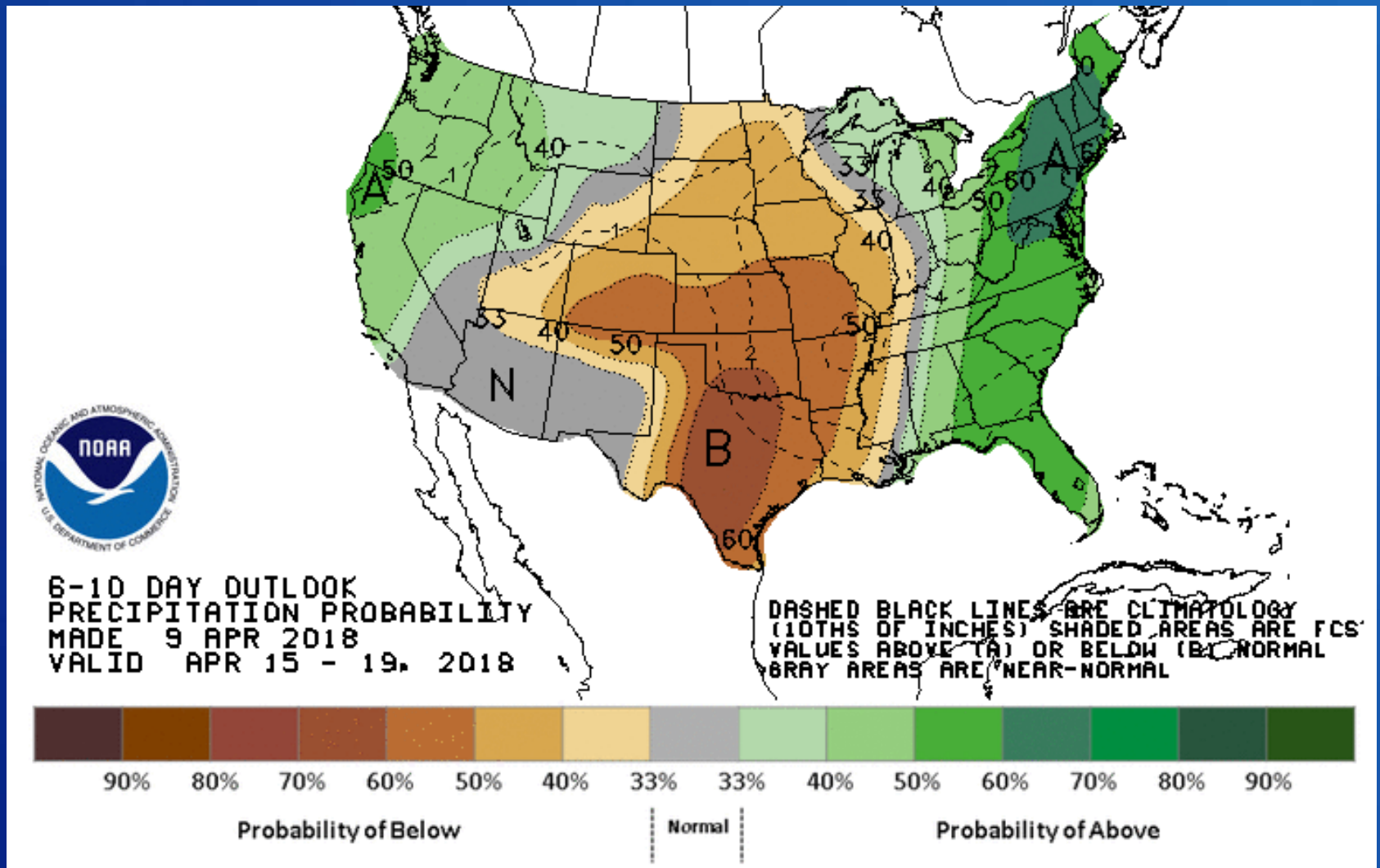
ESP is Unregulated and No Precipitation Forecast Included



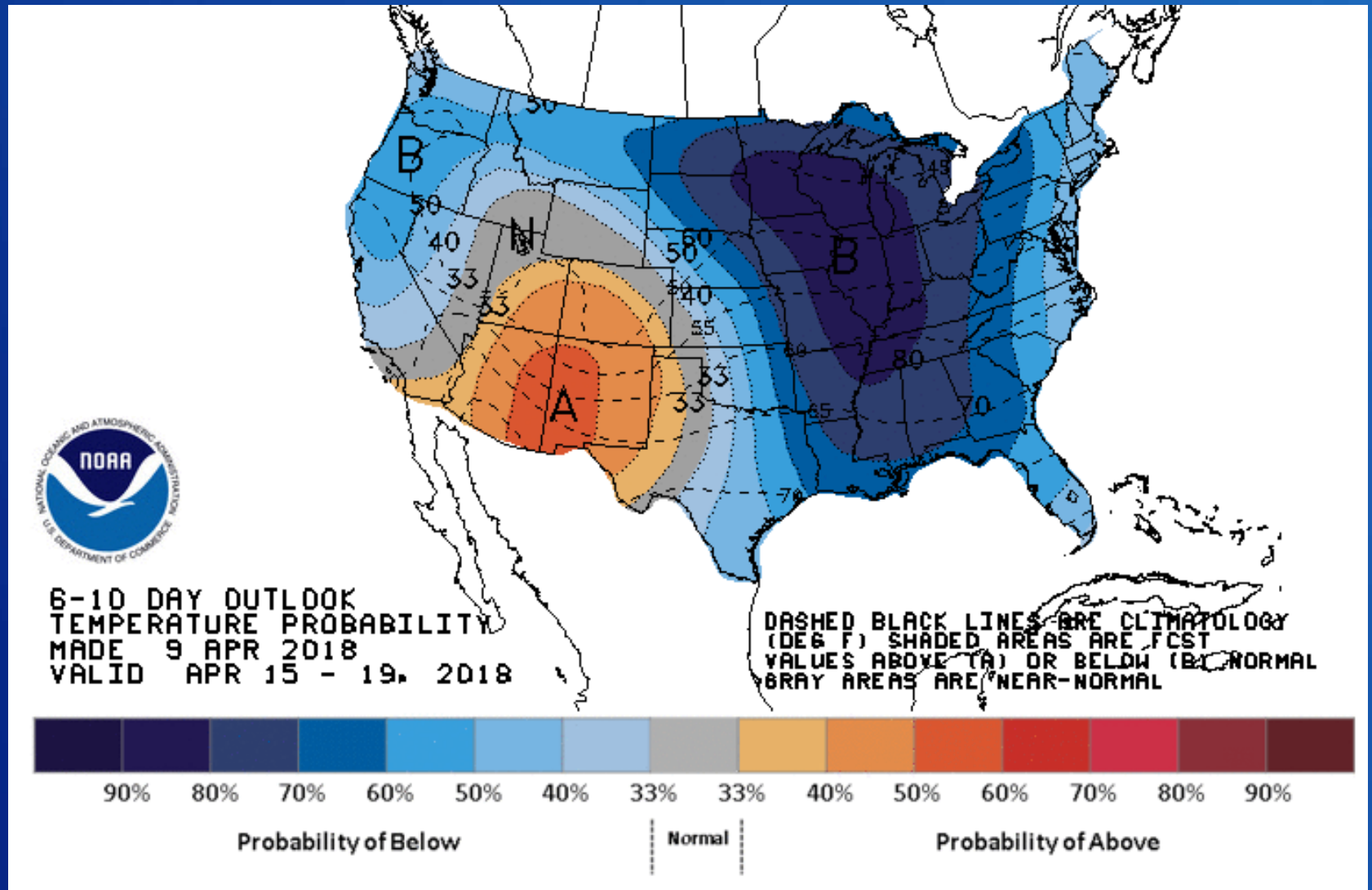
Presentation Overview

- Review of WY 2017 operations
- Overview of WY 2018 snow progression
- *Climate forecast*
- Fontenelle current status
- Planned WY 2018 operations

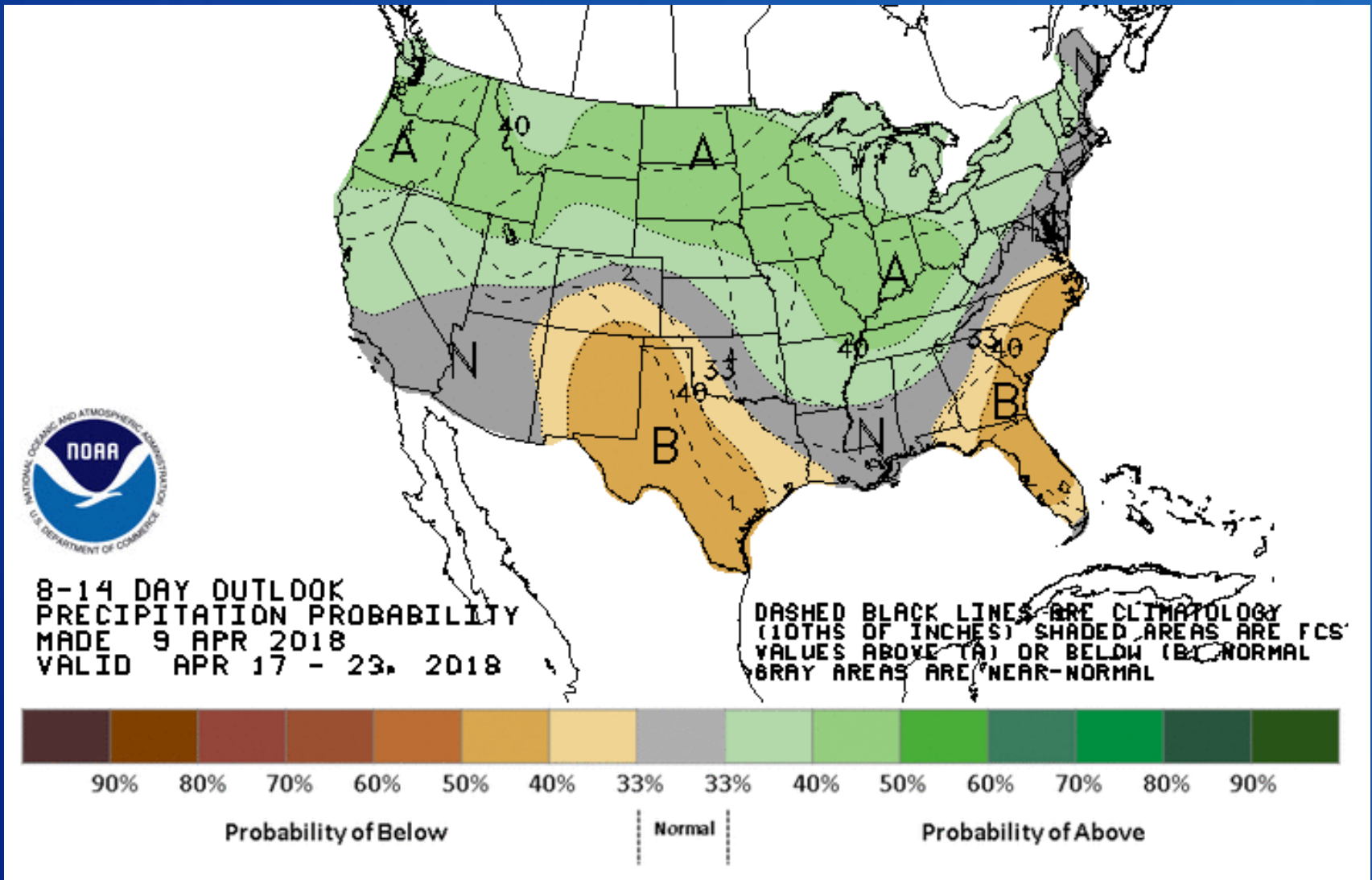
April 15-19 Precipitation Outlook



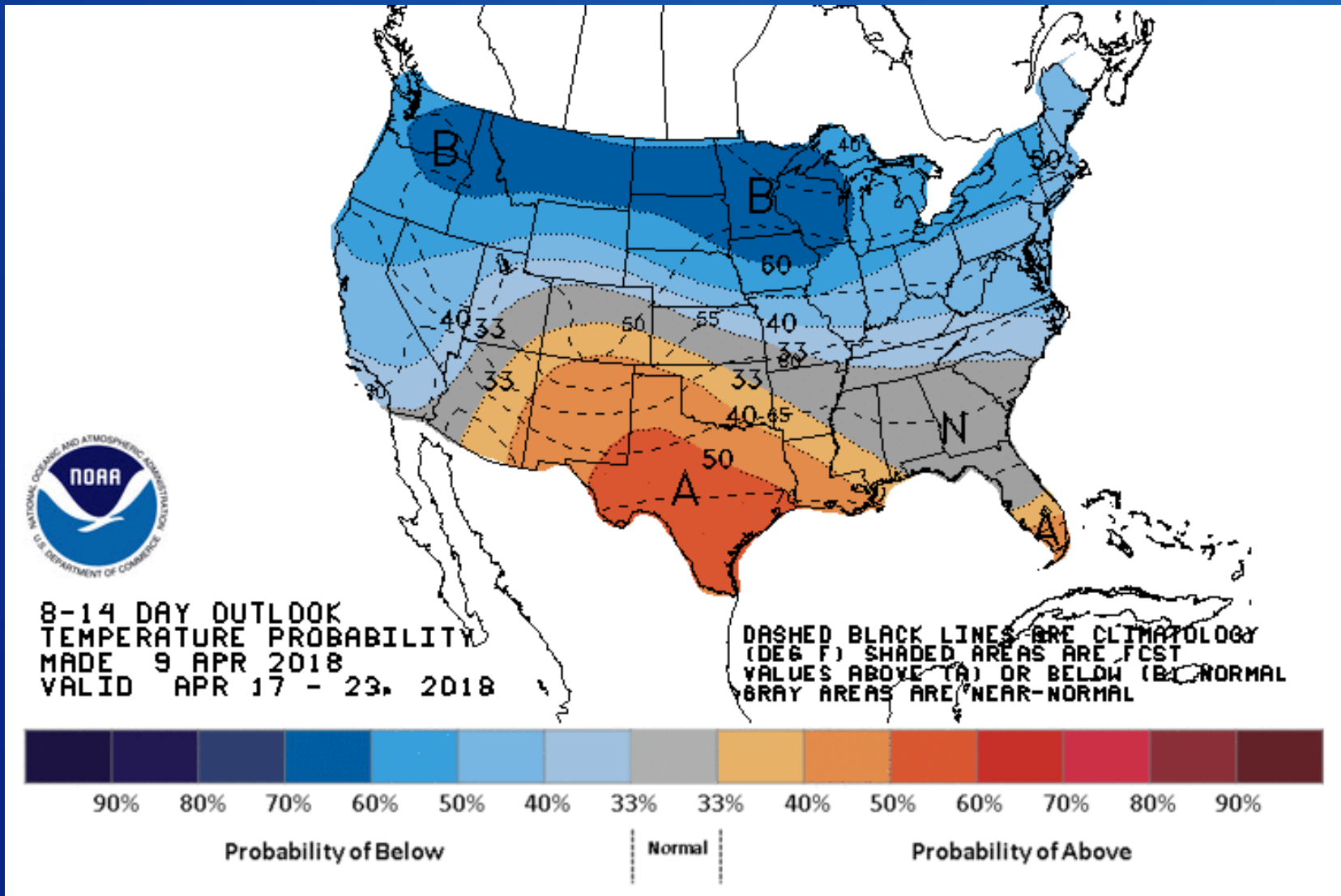
April 15-19 Temperature Outlook



April 17-23 Precipitation Outlook



April 17-23 Temperature Outlook



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Fontenelle Reservoir Current Status

Storage

Live capacity	345,000	AF
Storage on 4/9/2018	<u>118,963</u>	AF
	34% full	

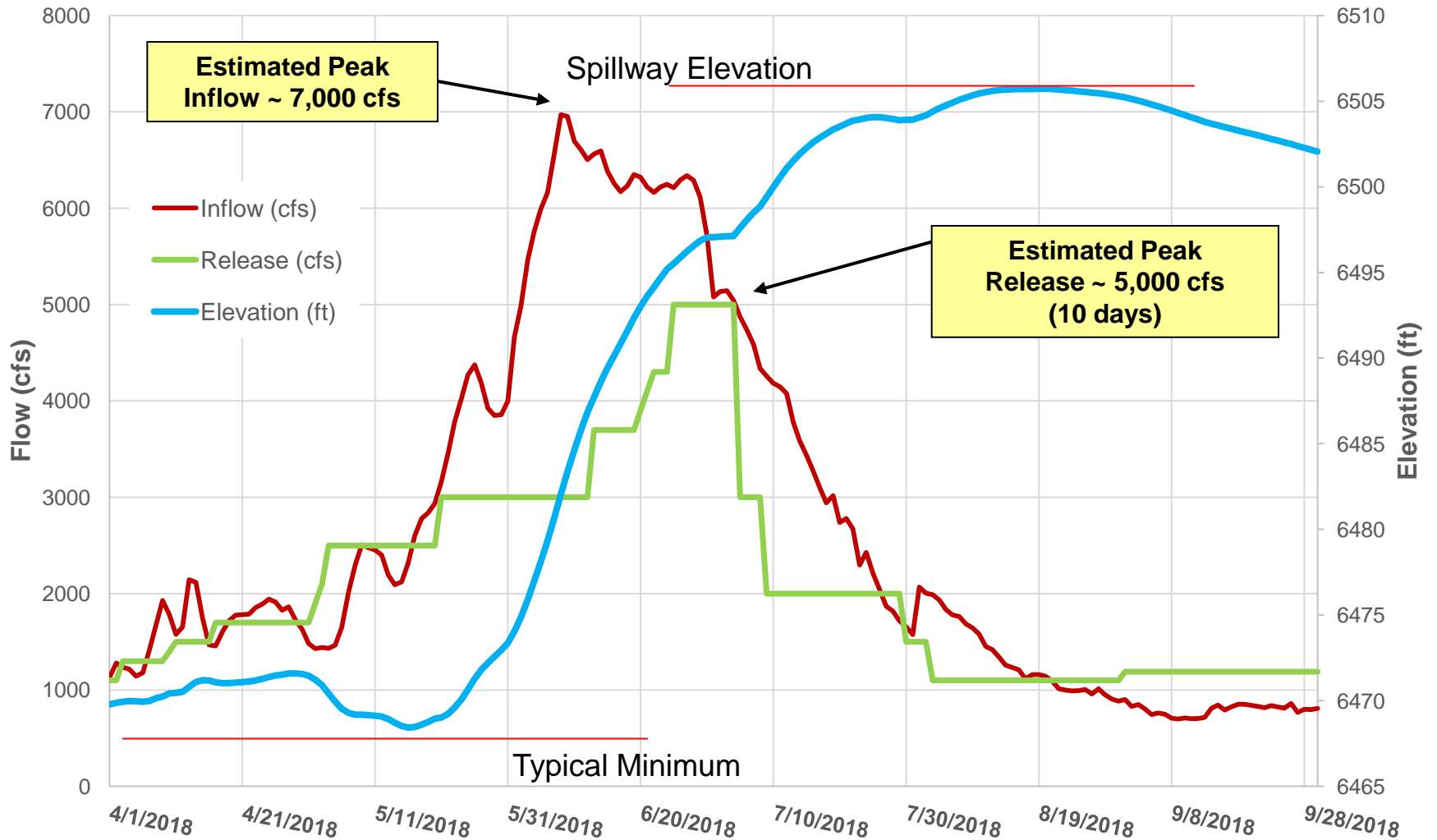
Pool elevation

Reservoir elev. (Min)	6468.00	feet
Elevation on 4/9/2018	<u>6470.15</u>	feet
Elevation above (Min)	2.15	feet

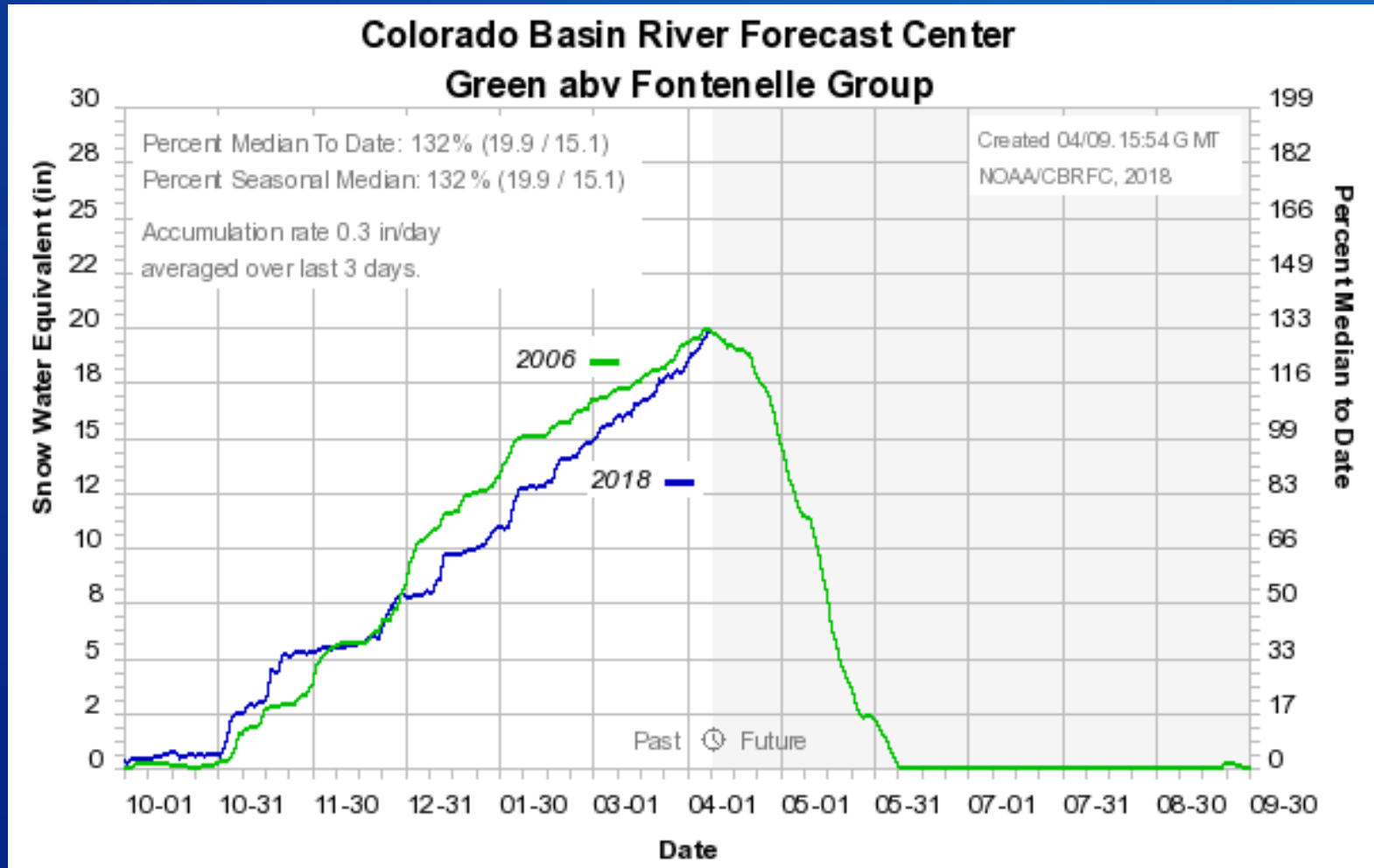
Inflow and release

Average inflow	1,500	cfs
Average release	1,500	cfs

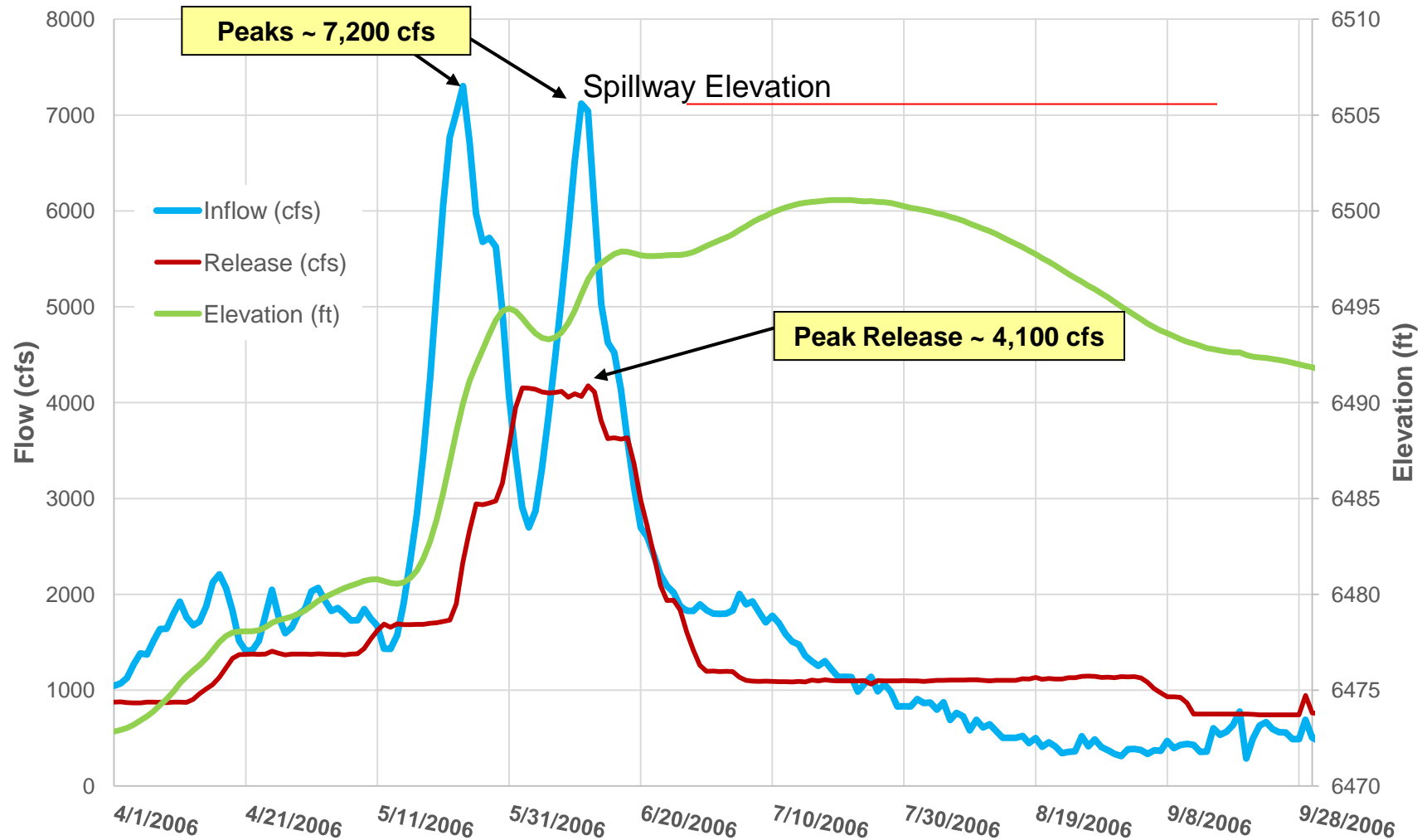
Planned 2018 Operations



Comparison Year – 2006 SWE



Comparison Year – 2006 Operations



Review

- Larger than average snowpack for WY 2018
- Larger than average runoff projected
 - Apr-Jul runoff projection = 900 KAF (124% of Average)
 - Upcoming climate may add to snow and runoff
- Planning to safely pass flows without use of the spillway (5,000 cfs peak release)
 - No foreseeable downstream flooding projected

Wyoming Water Forum

April 2018

Questions / Comments ?

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<https://www.usbr.gov/uc/water/crsp/cs/ftd.html>