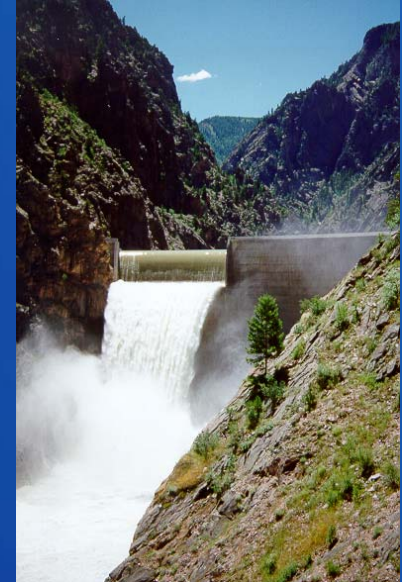


Aspinall Operations Meeting

April 24, 2014



RECLAMATION

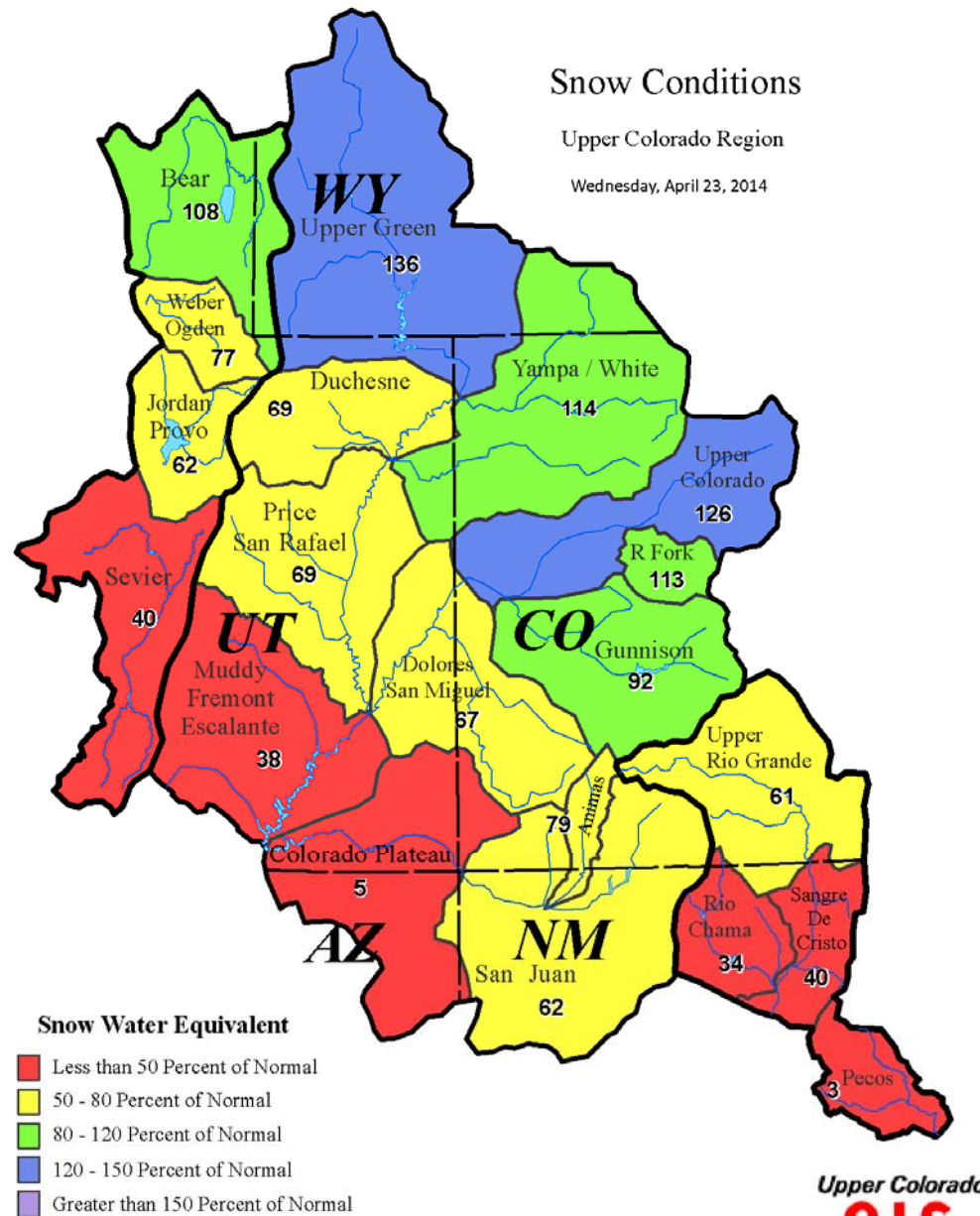
CURRENT CONDITIONS

RECLAMATION

Snow Conditions

Upper Colorado Region

Wednesday, April 23, 2014



Snow Water Equivalent

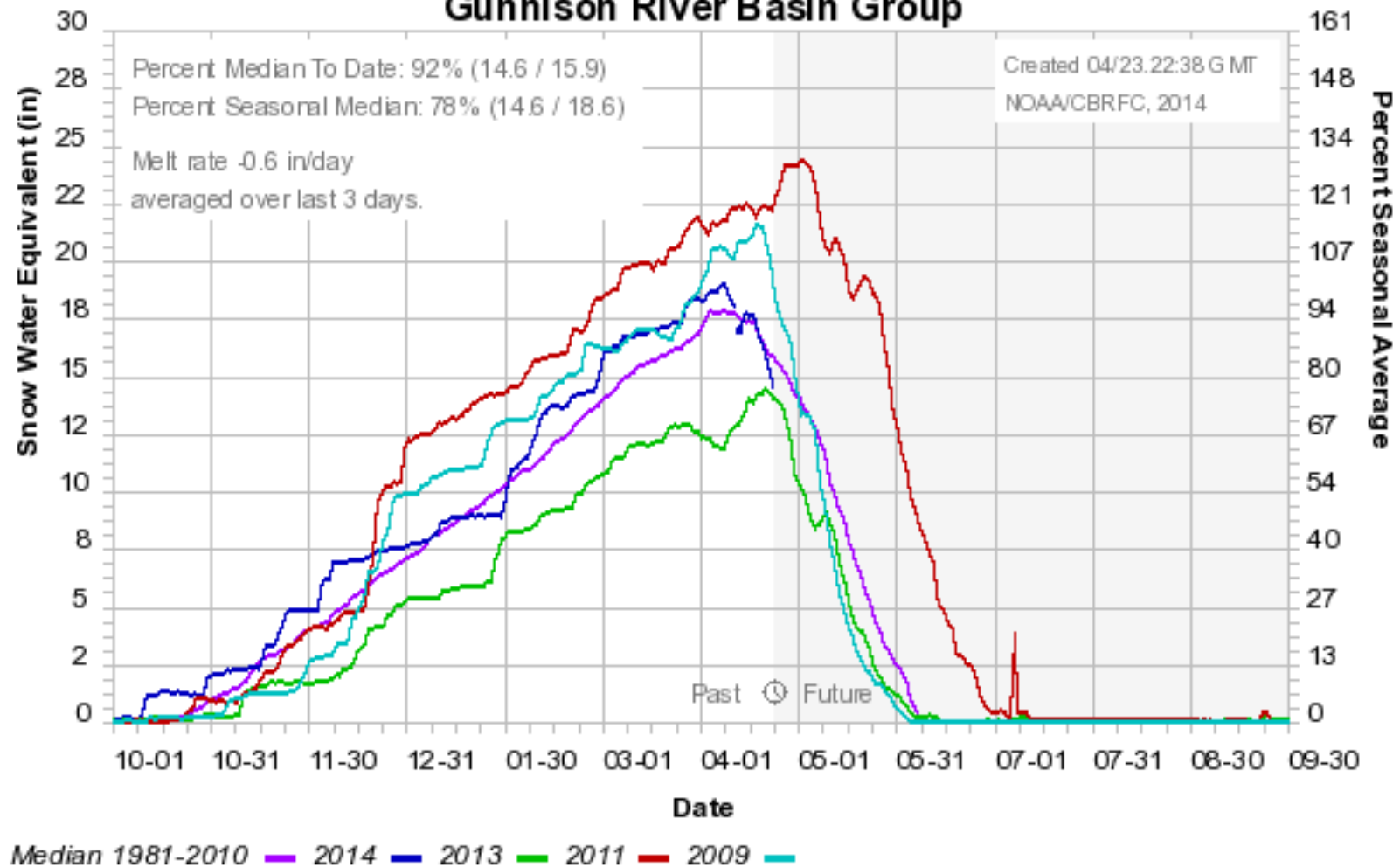
- Less than 50 Percent of Normal
- 50 - 80 Percent of Normal
- 80 - 120 Percent of Normal
- 120 - 150 Percent of Normal
- Greater than 150 Percent of Normal

Data Provided by the Natural Resource Conservation Service

Upper Colorado
GIS
Region

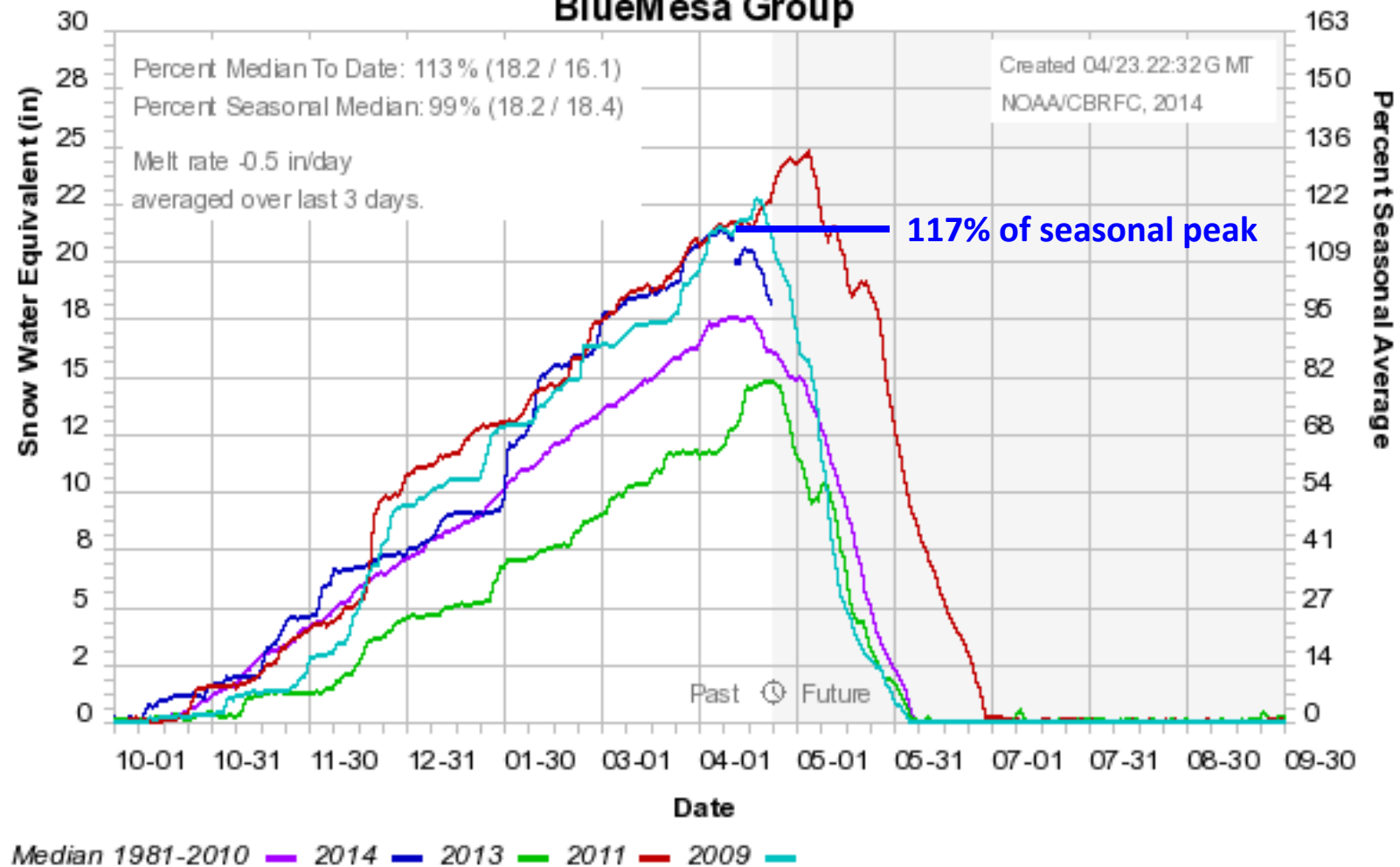
RECLAMATION

Colorado Basin River Forecast Center Gunnison River Basin Group



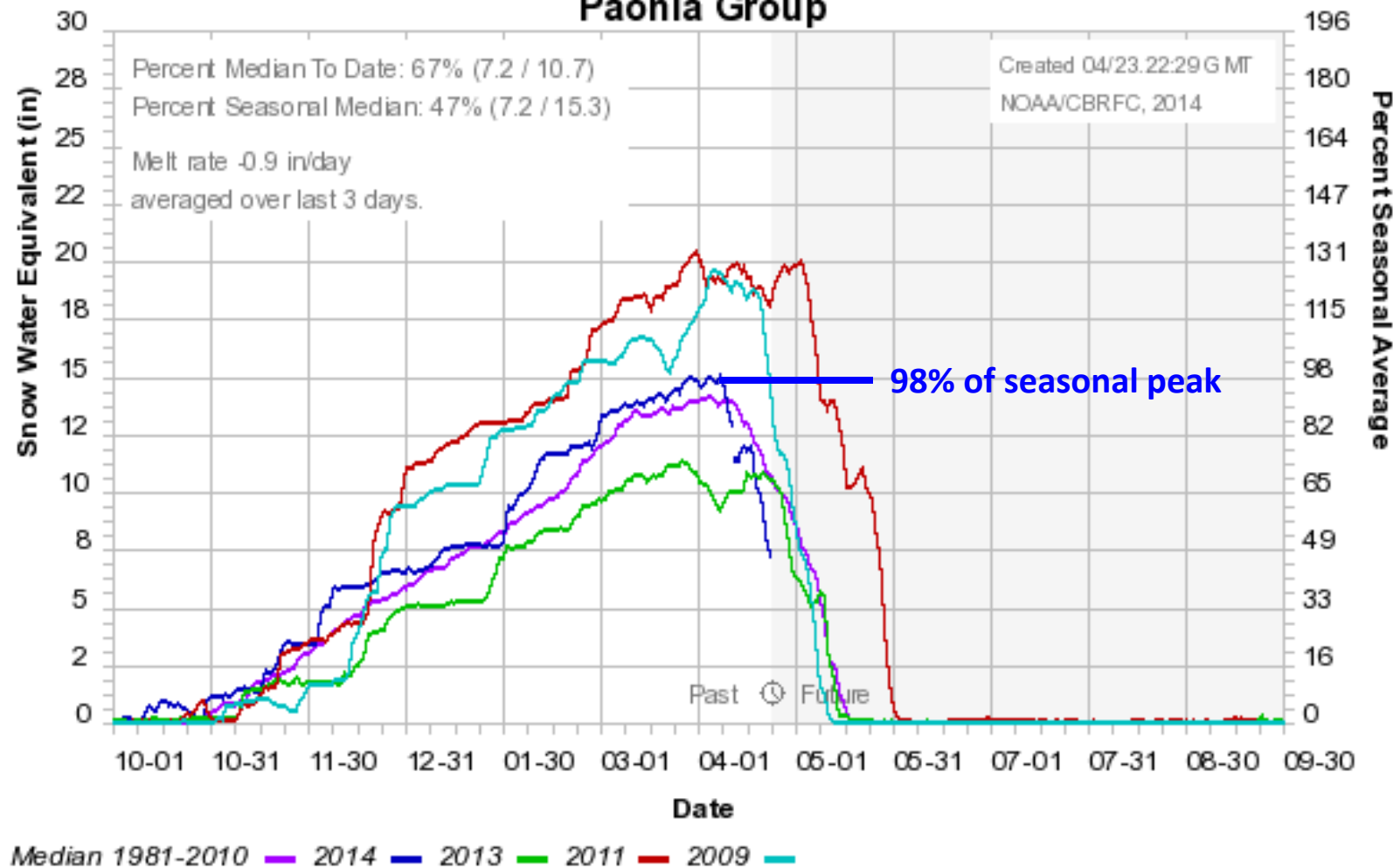
RECLAMATION

Colorado Basin River Forecast Center BlueMesa Group



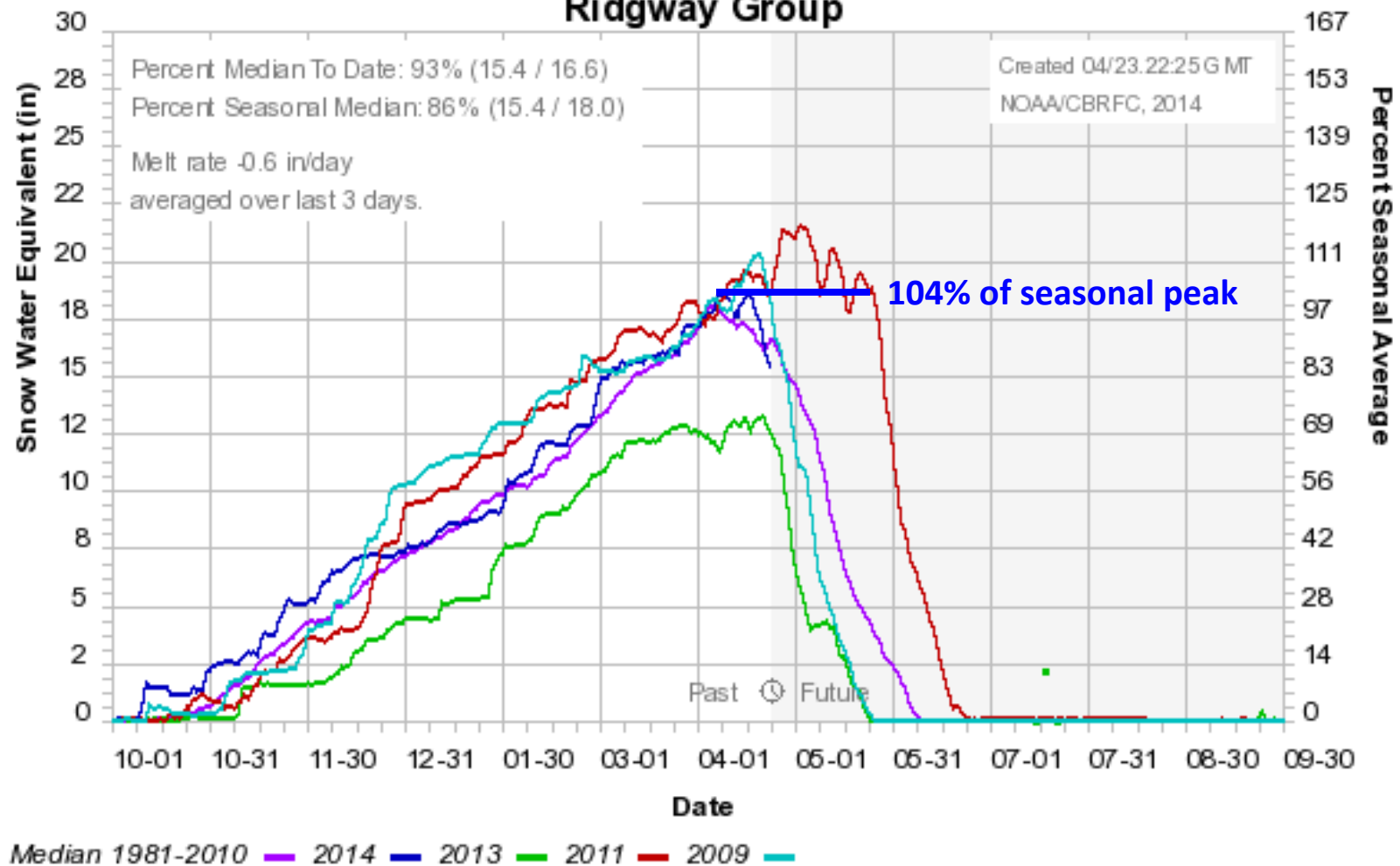
RECLAMATION

Colorado Basin River Forecast Center Paonia Group



RECLAMATION

Colorado Basin River Forecast Center Ridgway Group

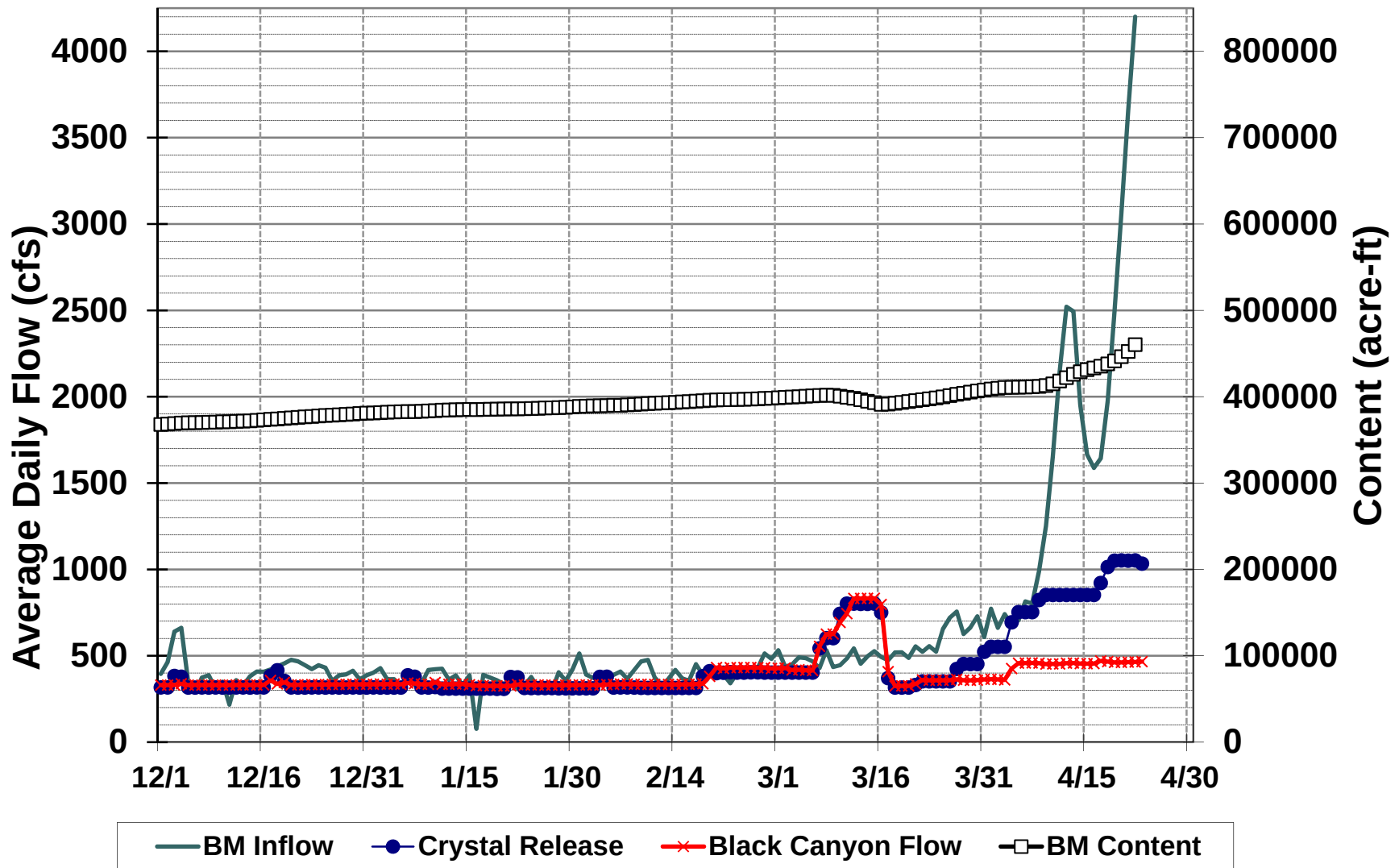


RECLAMATION

RESERVOIR AND RIVER STATUS

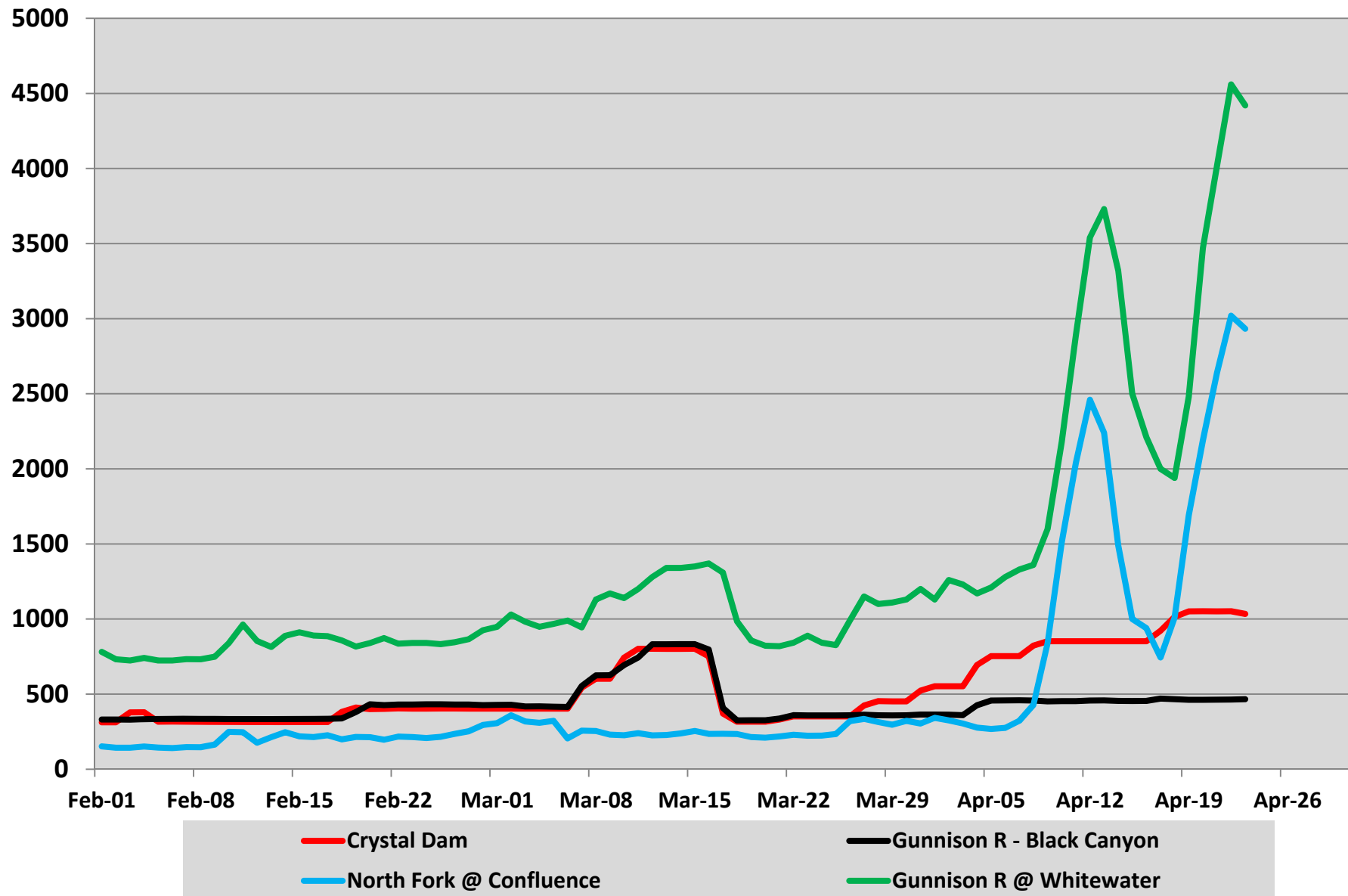
RECLAMATION

December 2013 - April 2014



RECLAMATION

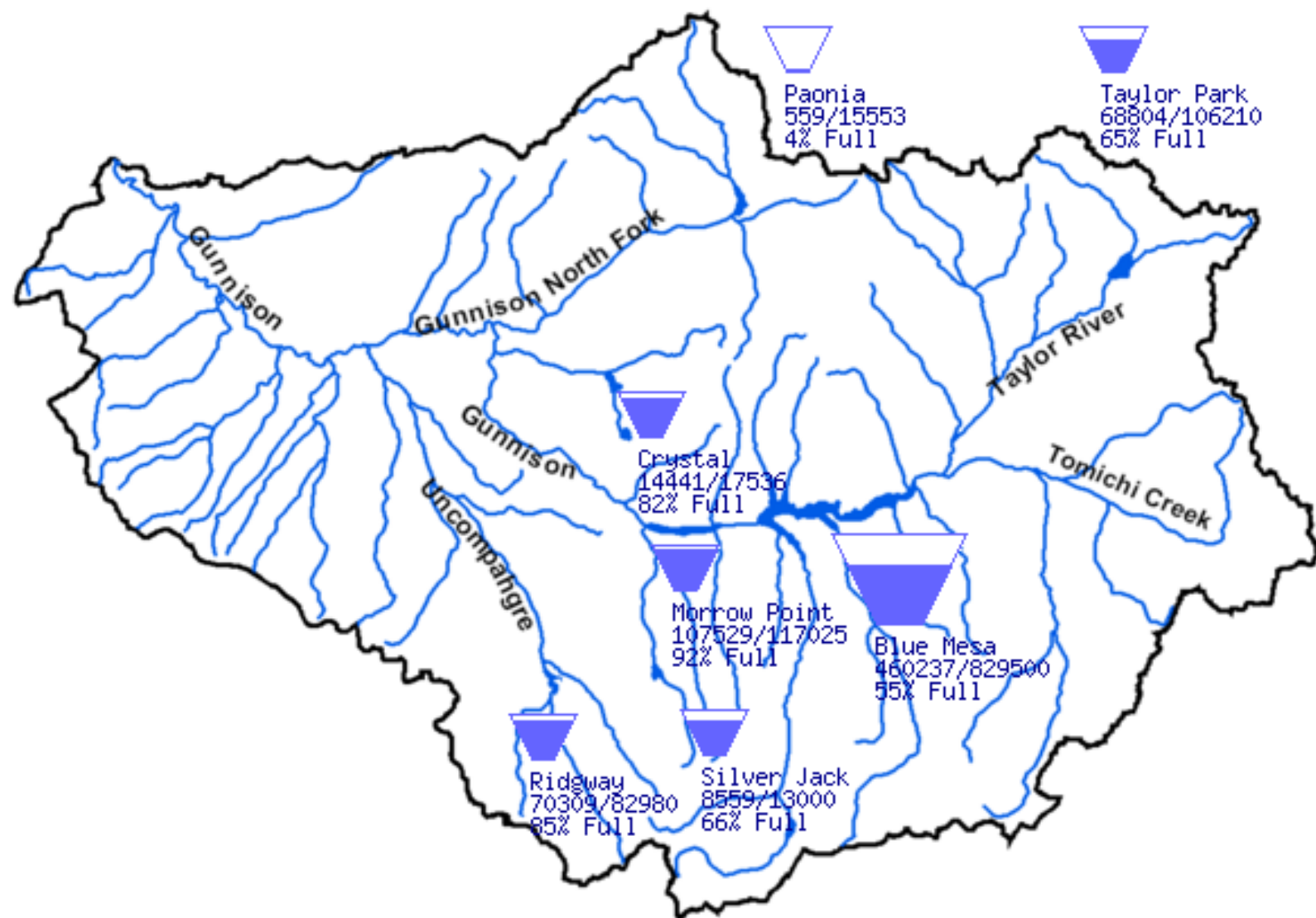
Gunnison River Flows



RECLAMATION

Data Current as of:
04/22/2014

Gunnison River Basin, CO

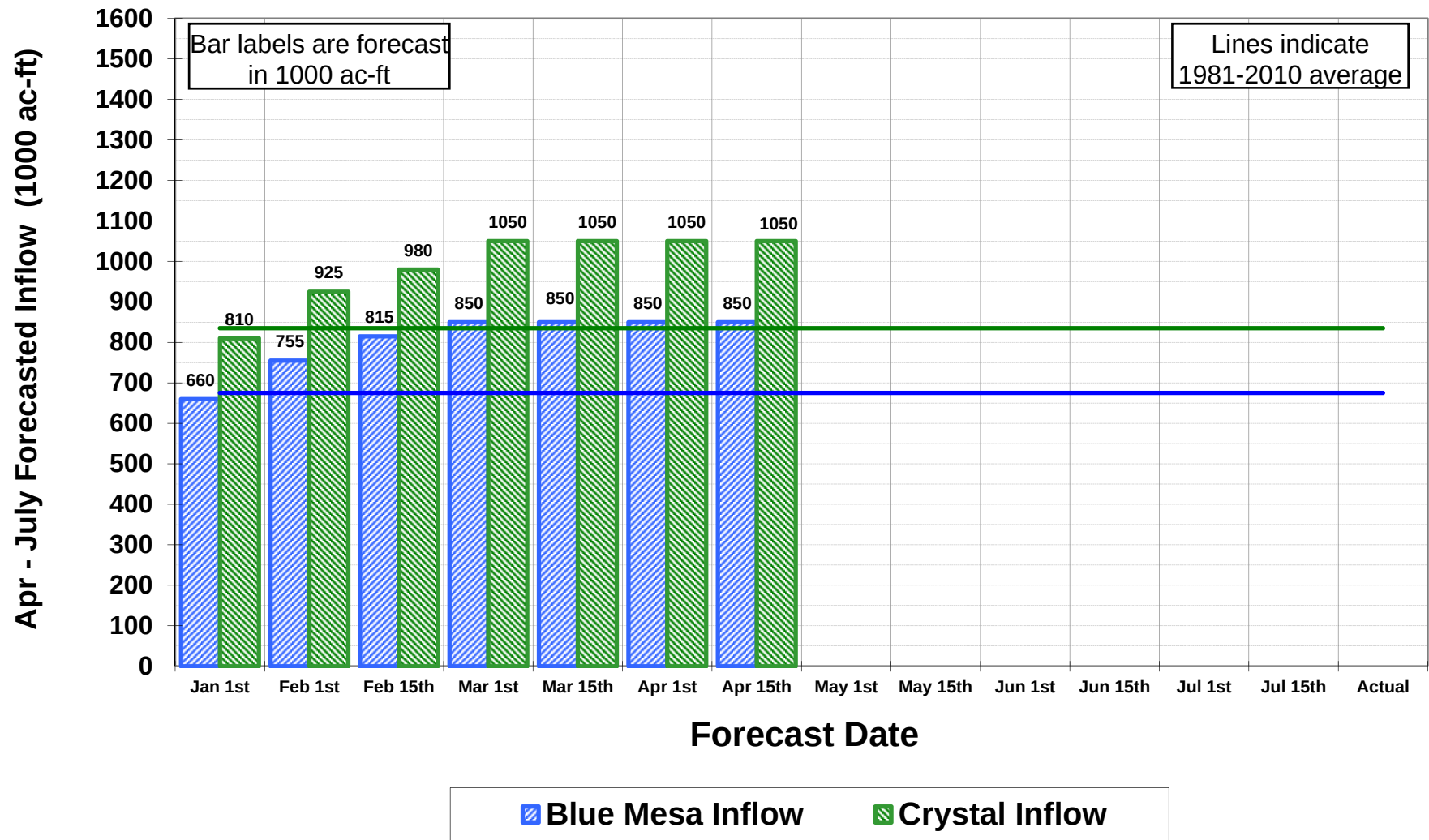


RECLAMATION

RUNOFF FORECASTS

RECLAMATION

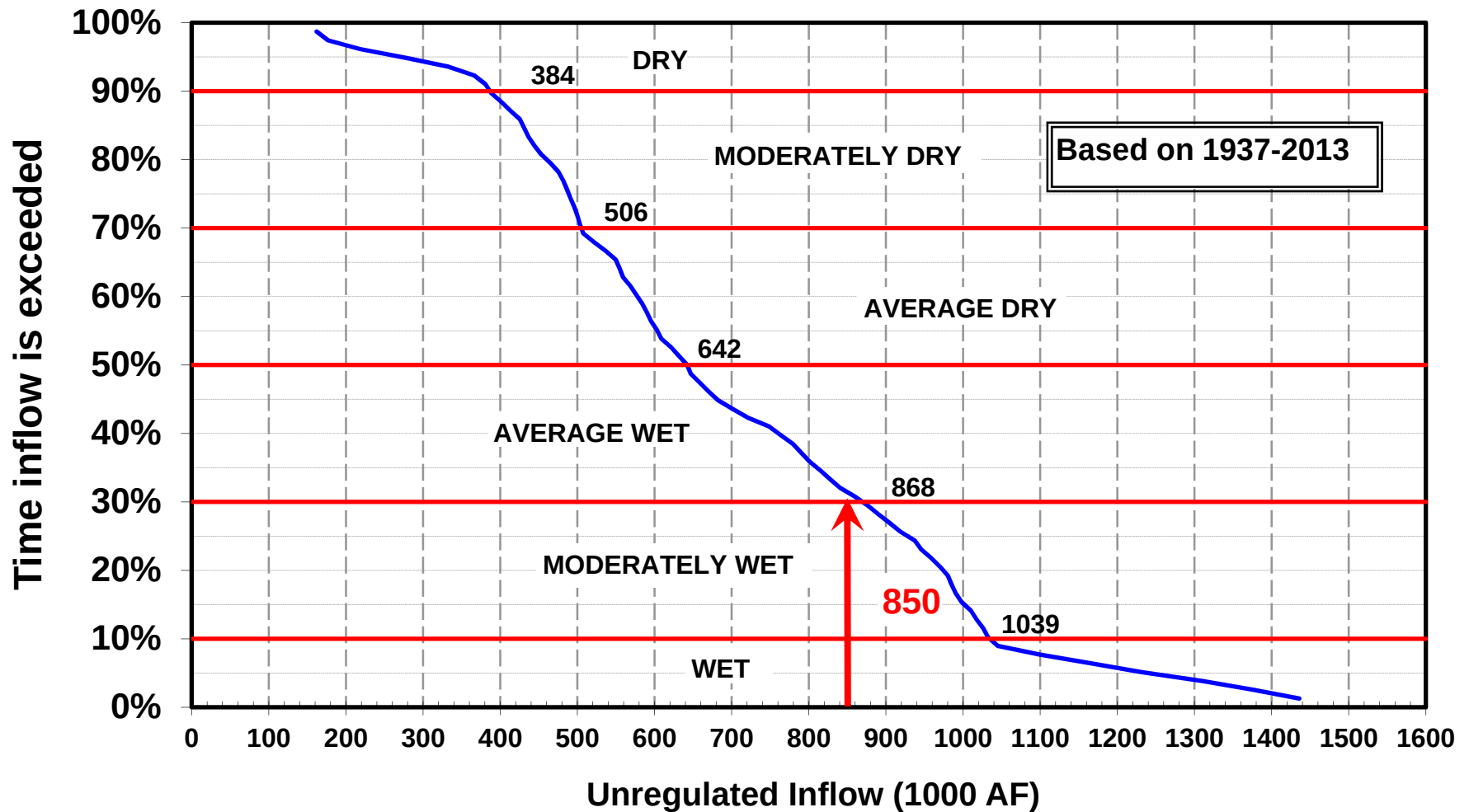
Aspinall Unit Forecasted Unregulated Inflow



RECLAMATION

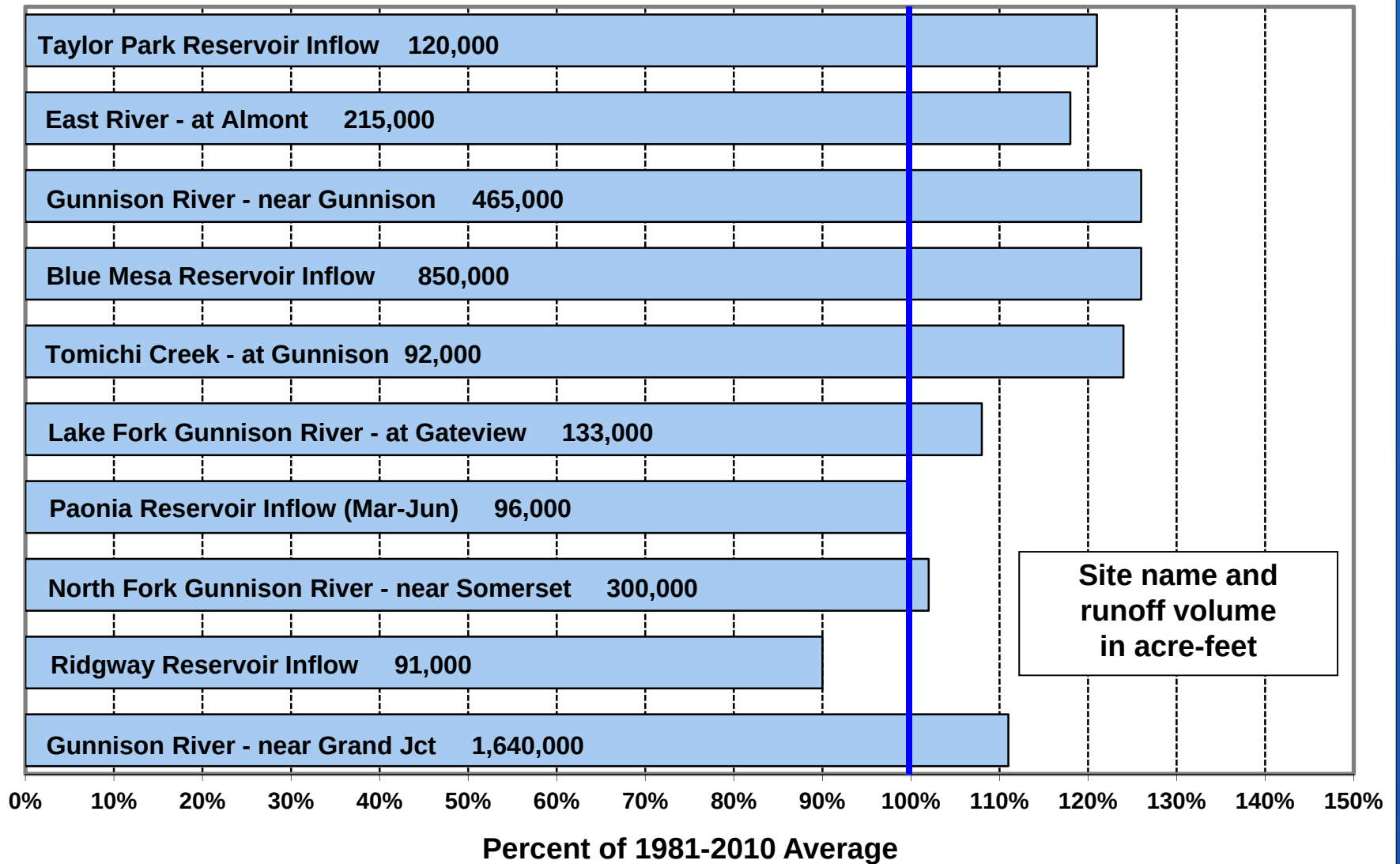
Blue Mesa Reservoir

April - July Unregulated Inflow



RECLAMATION

Forecasted April-July Runoff As of April 1st

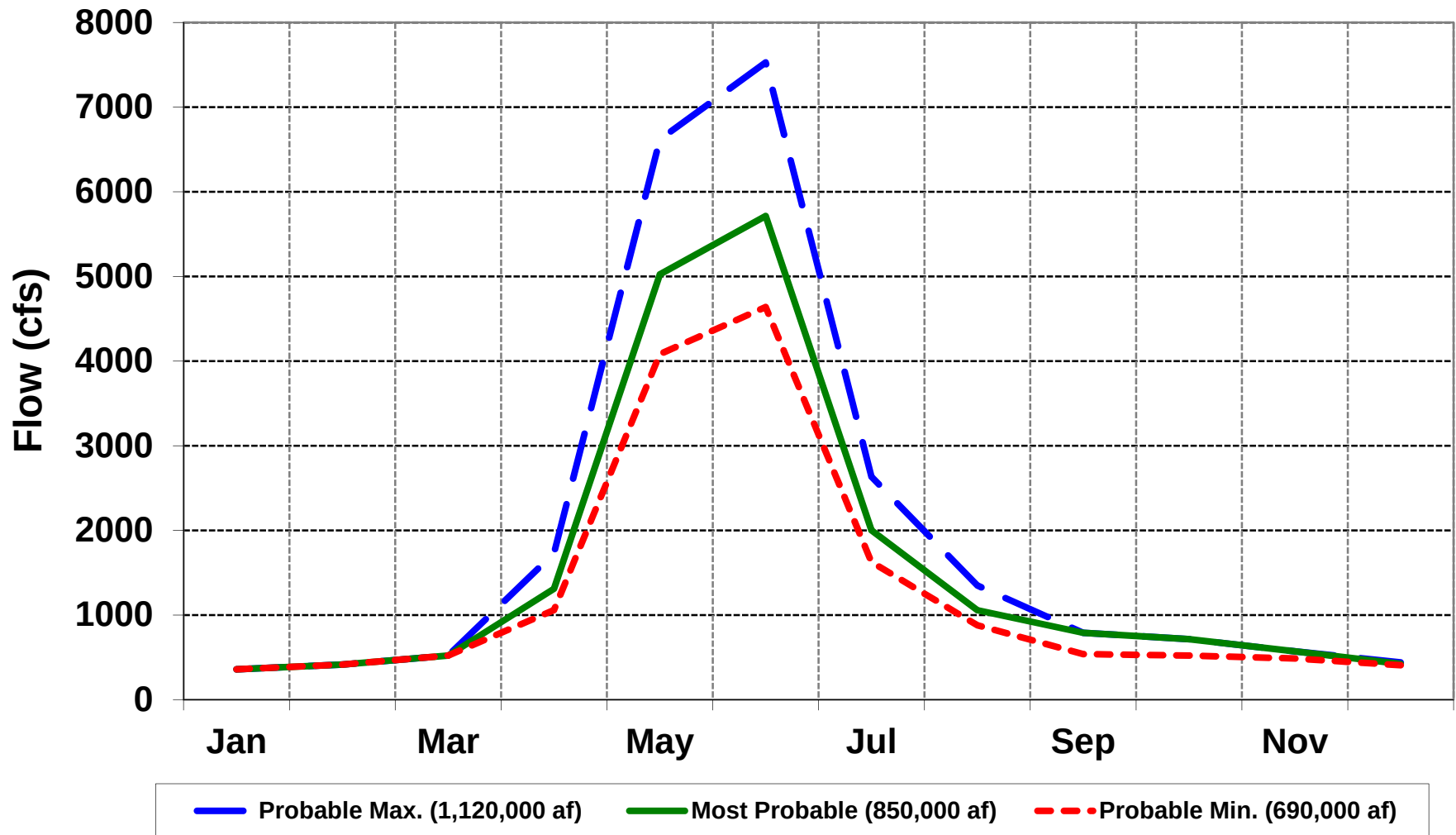


RECLAMATION

24 MONTH STUDY

RECLAMATION

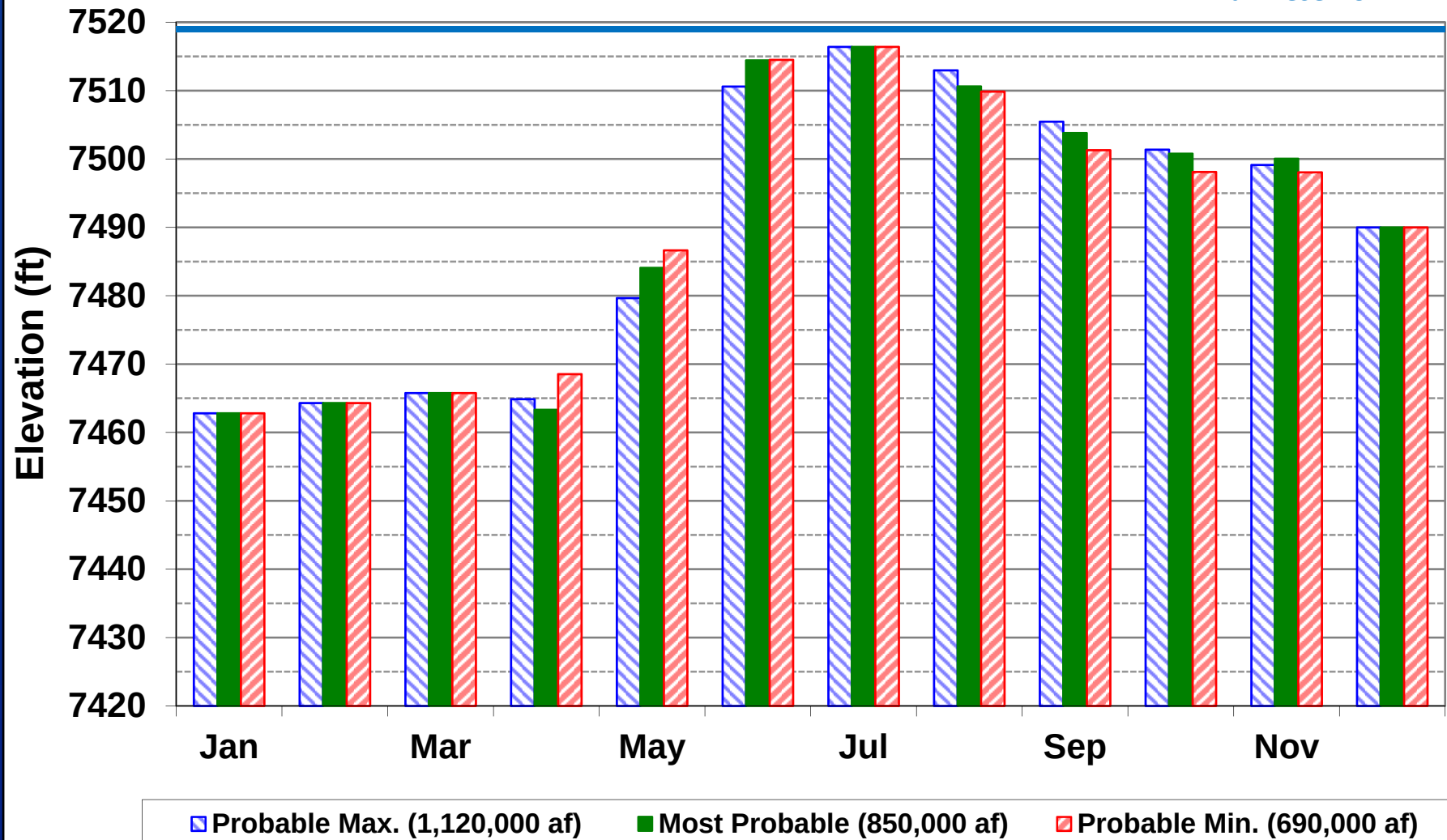
Unregulated Blue Mesa Inflow Monthly Average



RECLAMATION

Blue Mesa Elevation End of Month

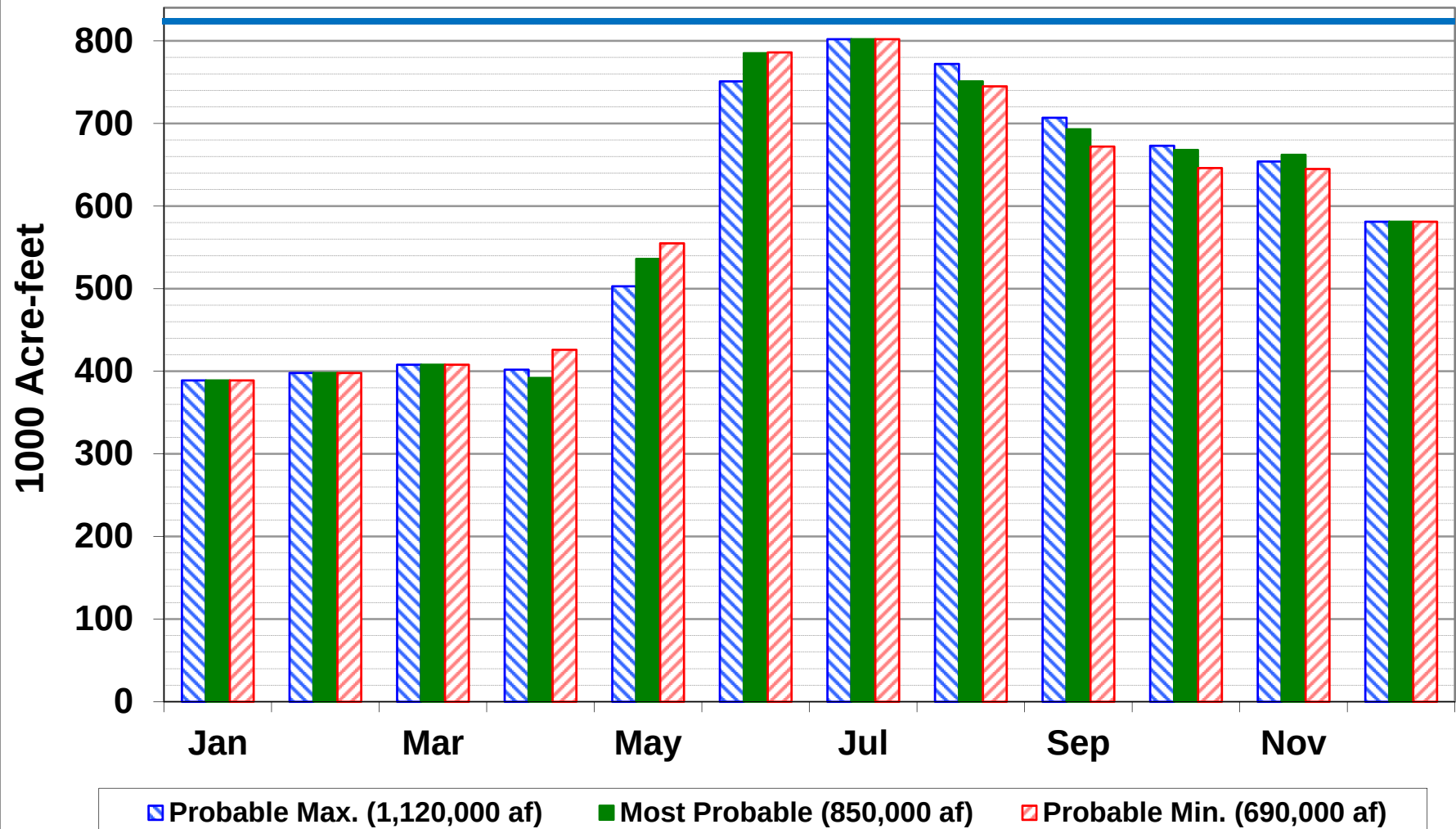
Full Reservoir



RECLAMATION

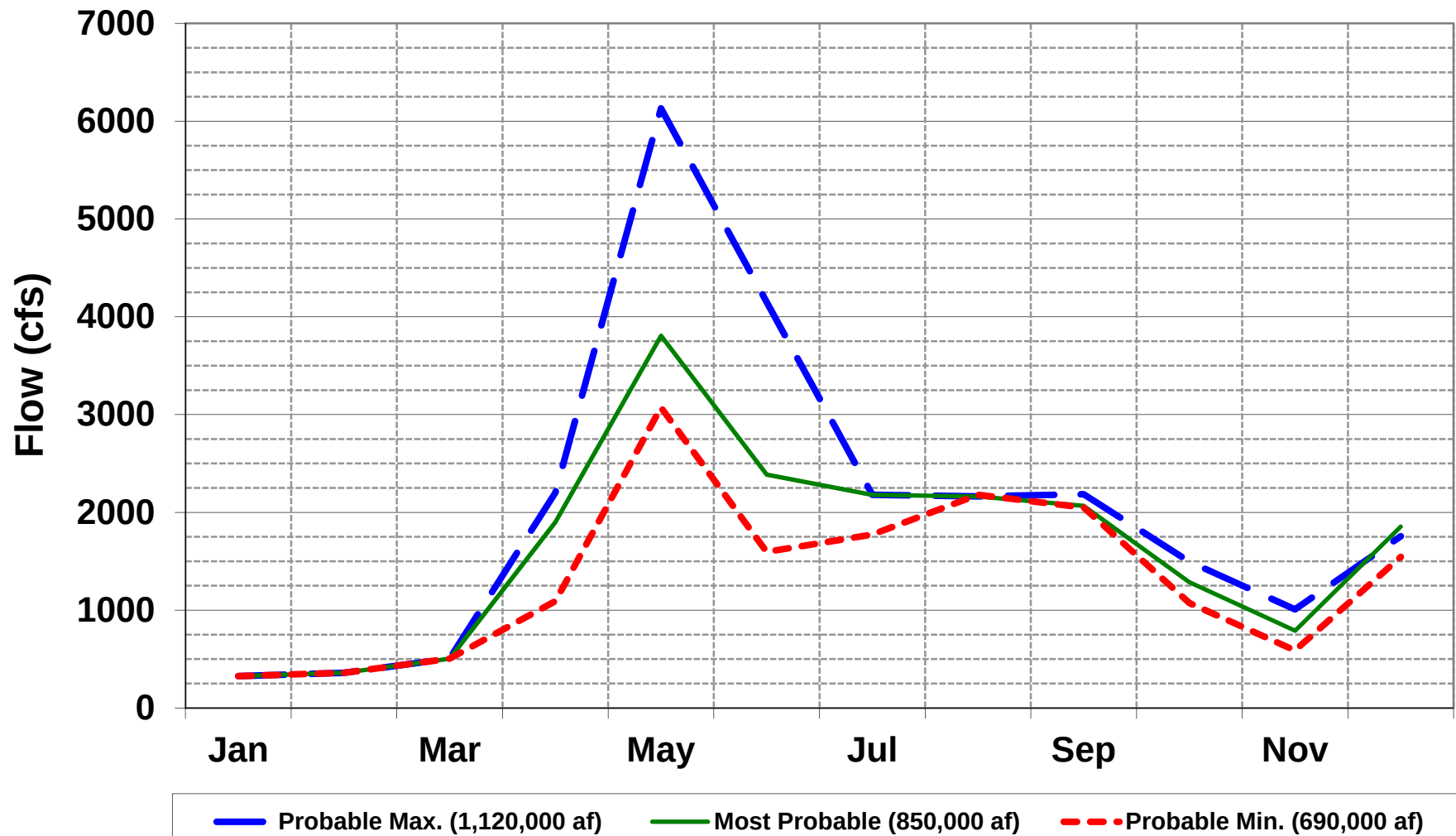
Blue Mesa Content End of Month

Full Reservoir



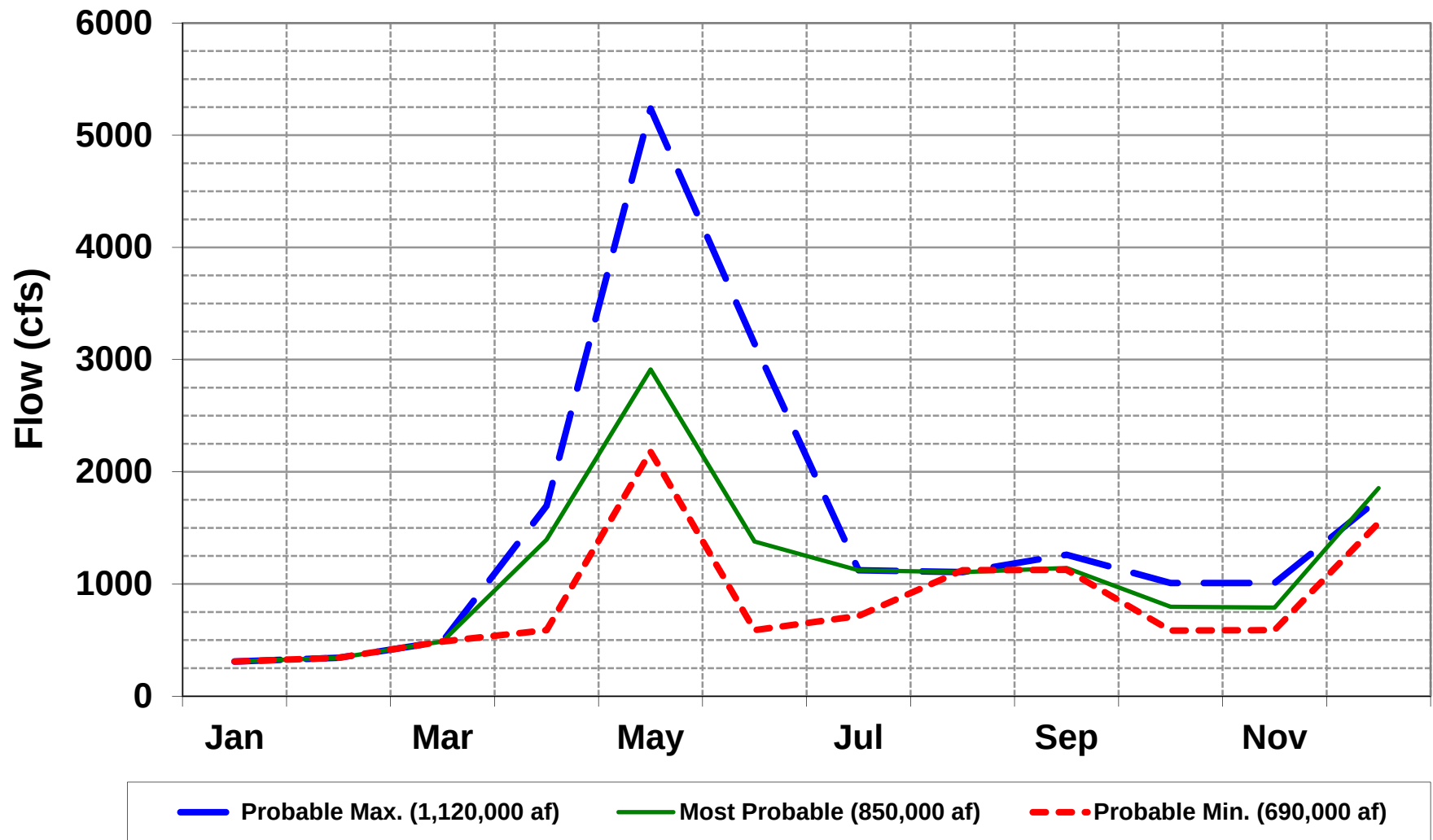
RECLAMATION

Crystal Release Monthly Average



RECLAMATION

Black Canyon Monthly Average



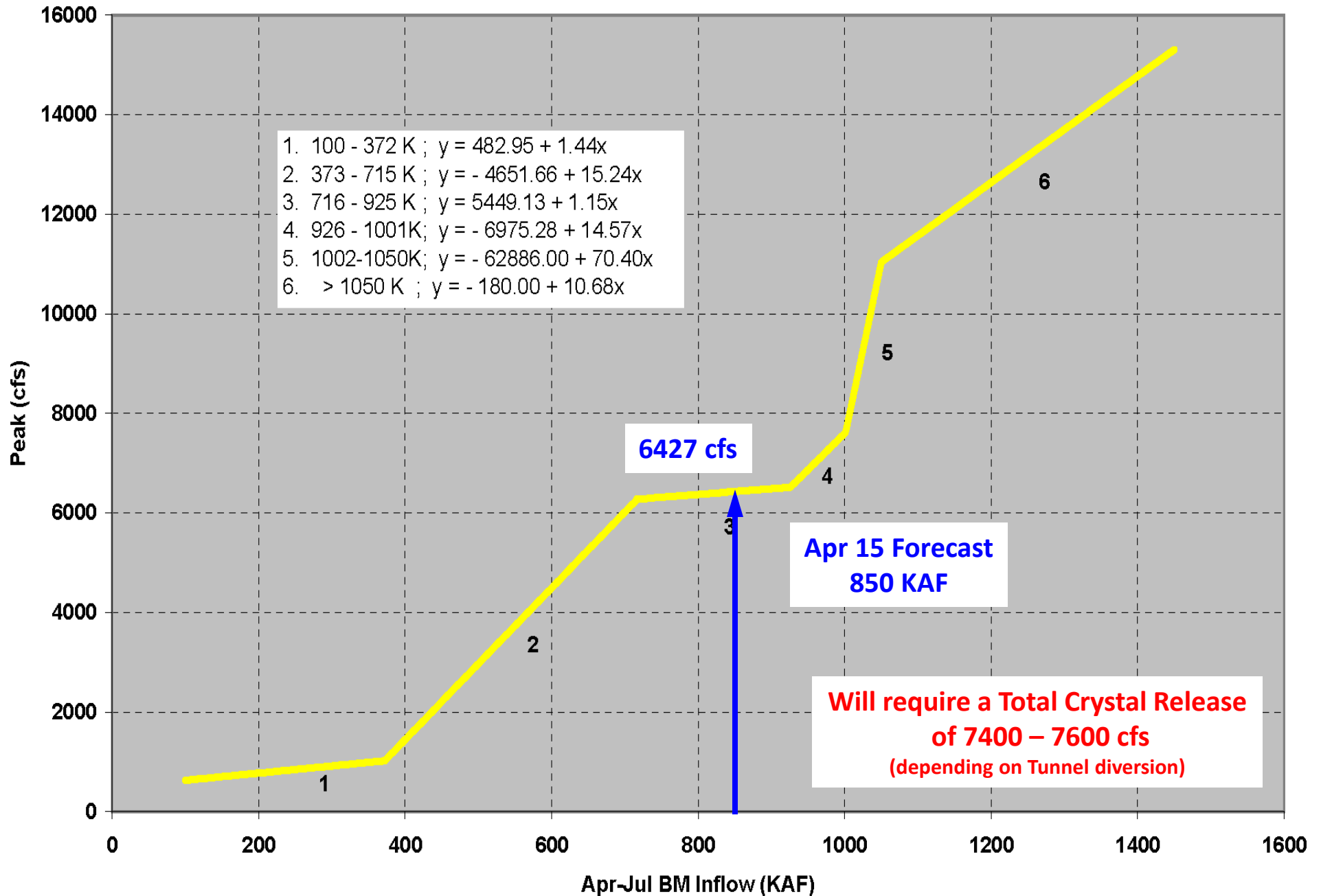
RECLAMATION

PROJECTED OPERATIONS

RECLAMATION

Black Canyon Peak Flow Determination

based on Blue Mesa May 1 forecast

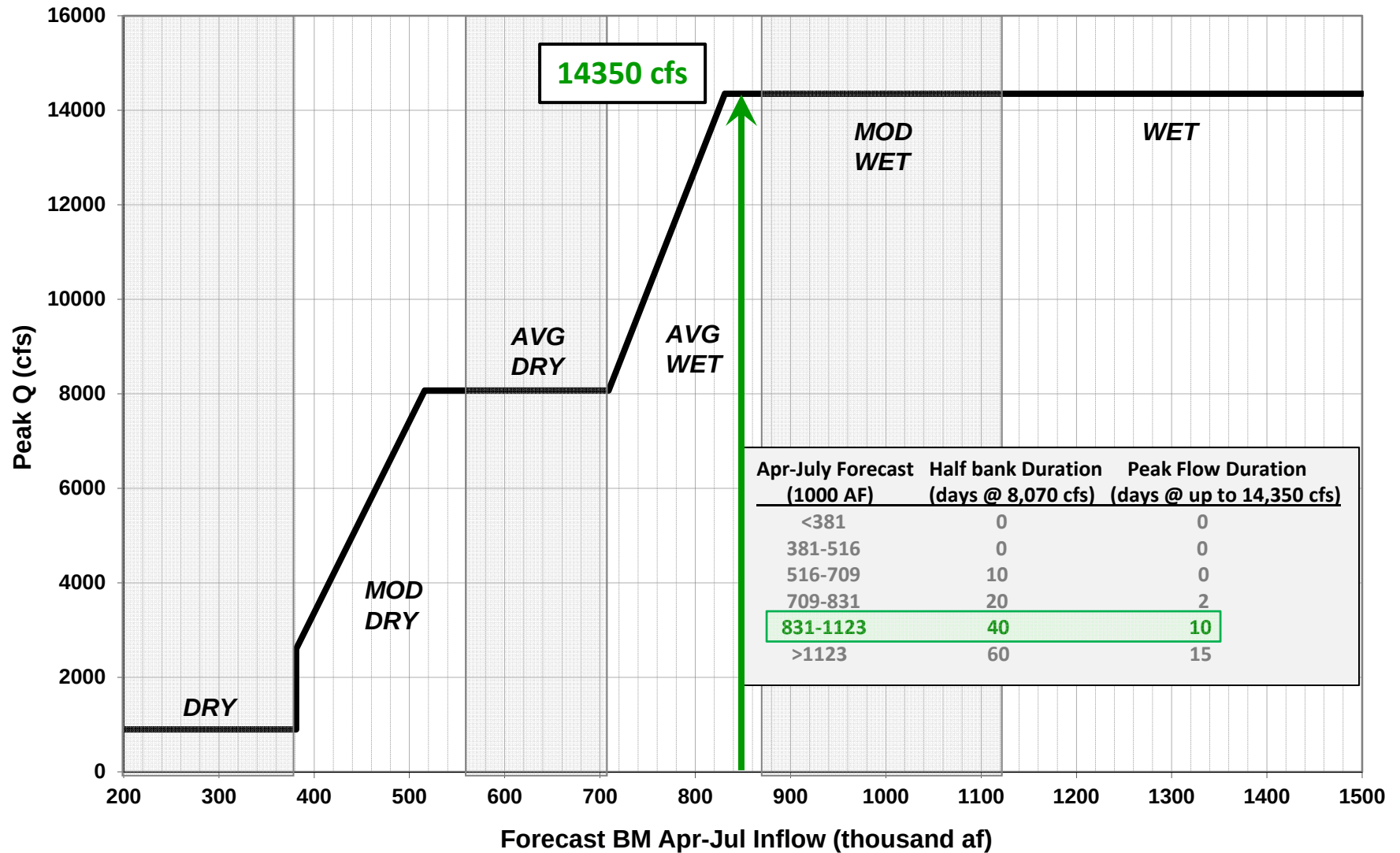


Release Capability at the Aspinall Unit

Outlet Capacities (cfs)	Blue Mesa	Morrow Point	Crystal
Powerplant	3400 cfs	5000 cfs	2150 cfs
Powerplant + Bypass	6100 cfs	6500 cfs (7000 cfs?)	4350 cfs
Spillway Elevation	7487.9 ft	7123 ft	6756 ft

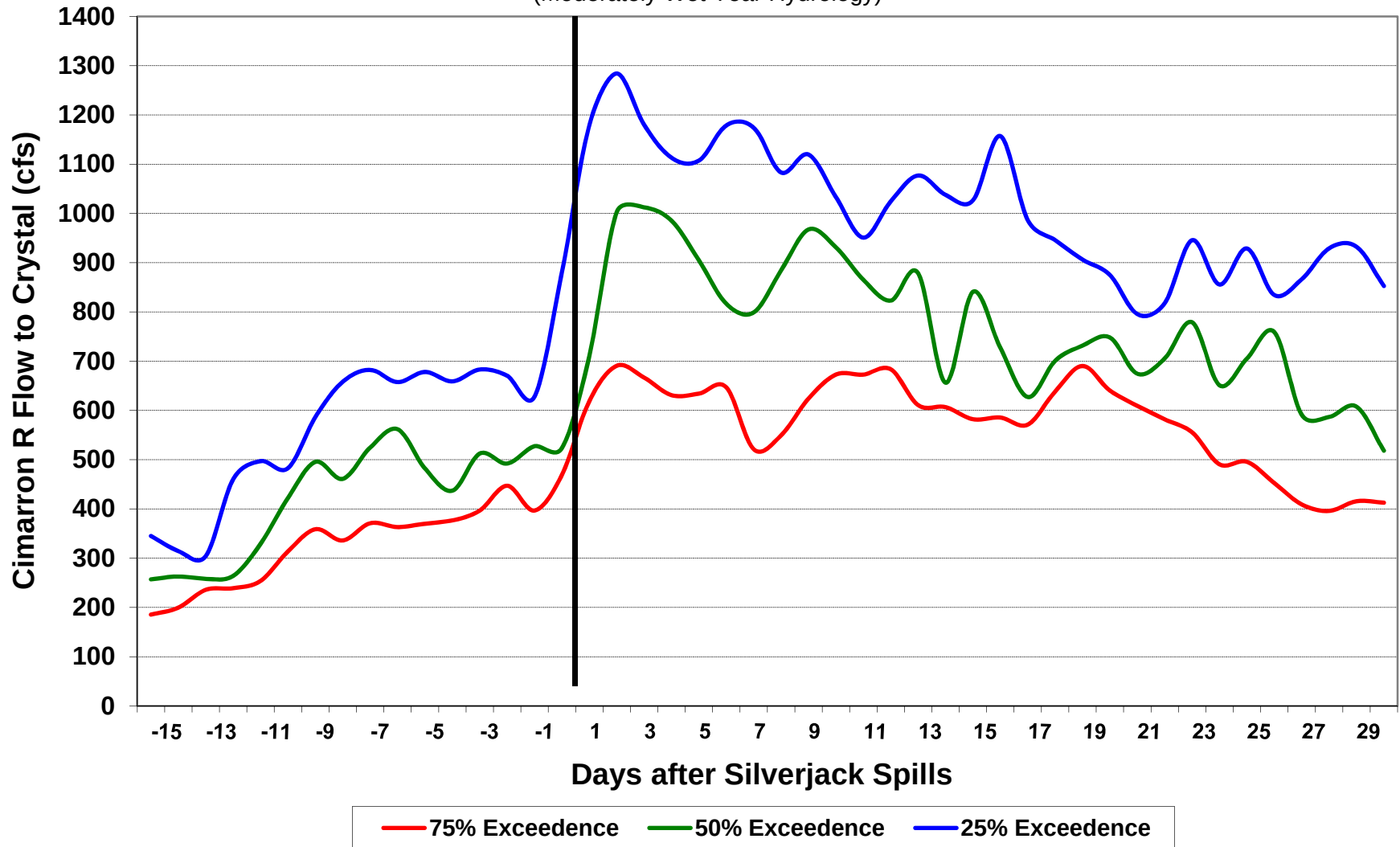
RECLAMATION

Peak Flow and Duration Day Targets at Whitewater



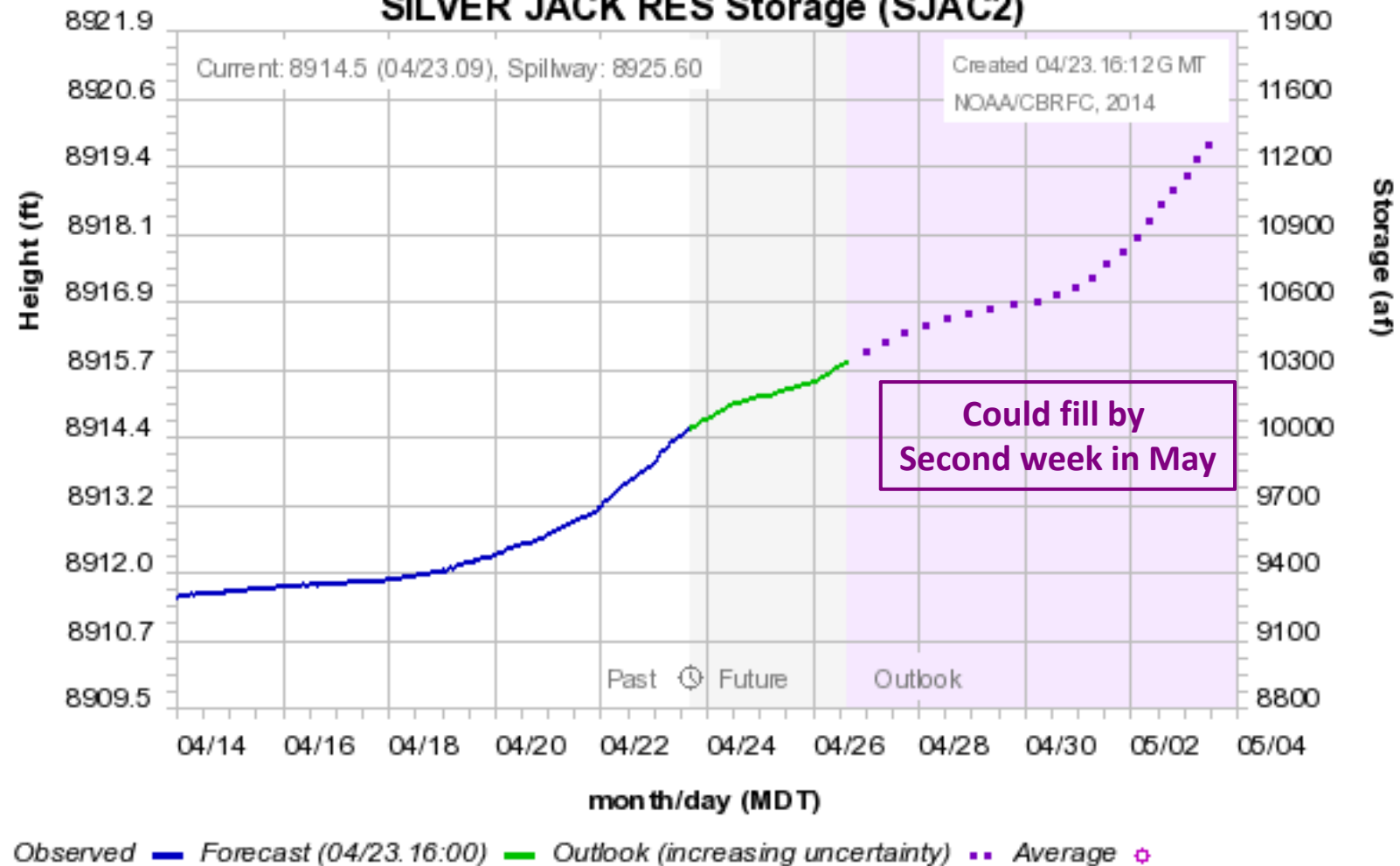
RECLAMATION

Cimarron R Flows to Crystal Reservoir after Silverjack Spills (Moderately Wet Year Hydrology)



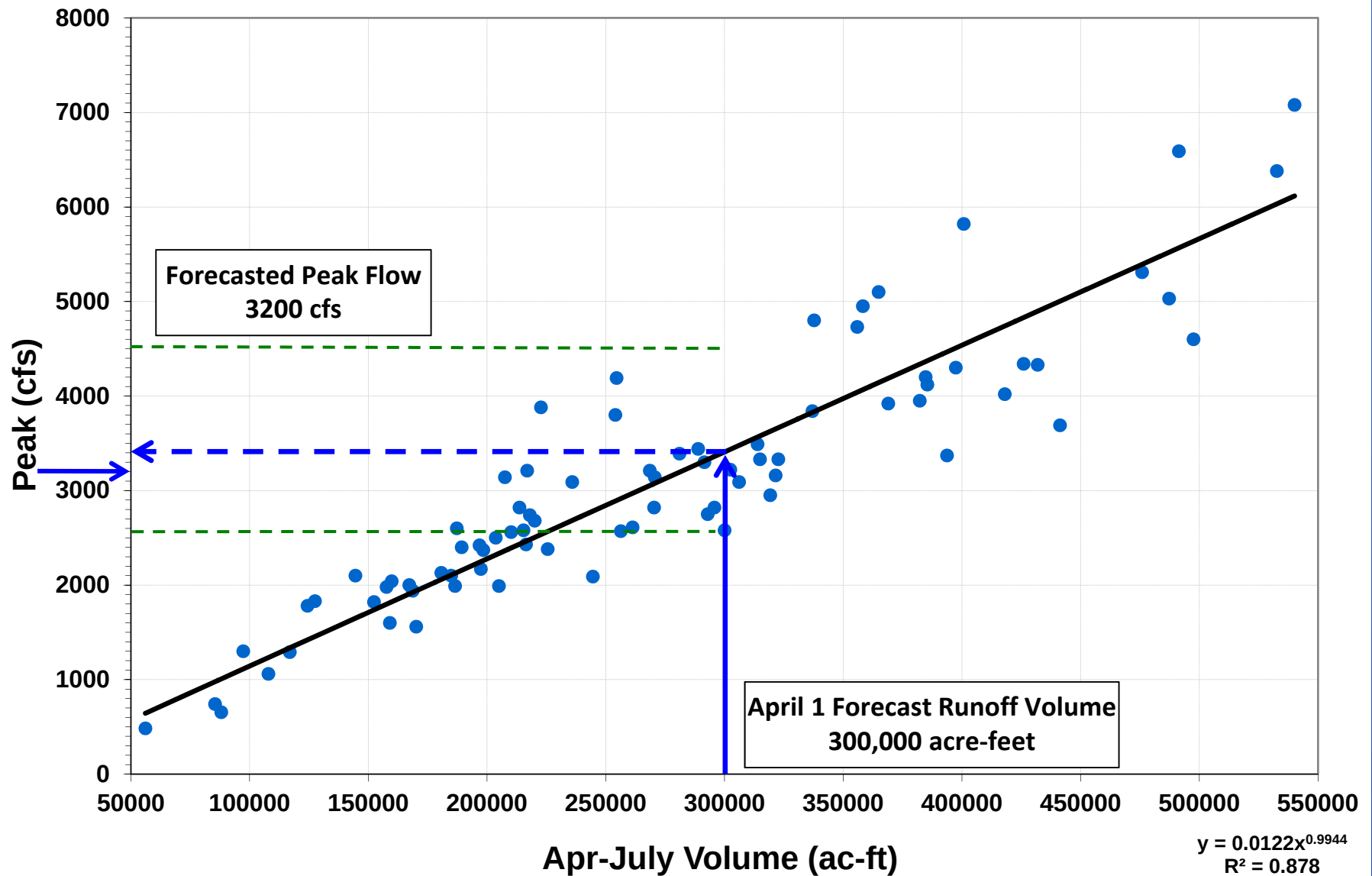
RECLAMATION

Colorado Basin River Forecast Center SILVER JACK RES Storage (SJAC2)



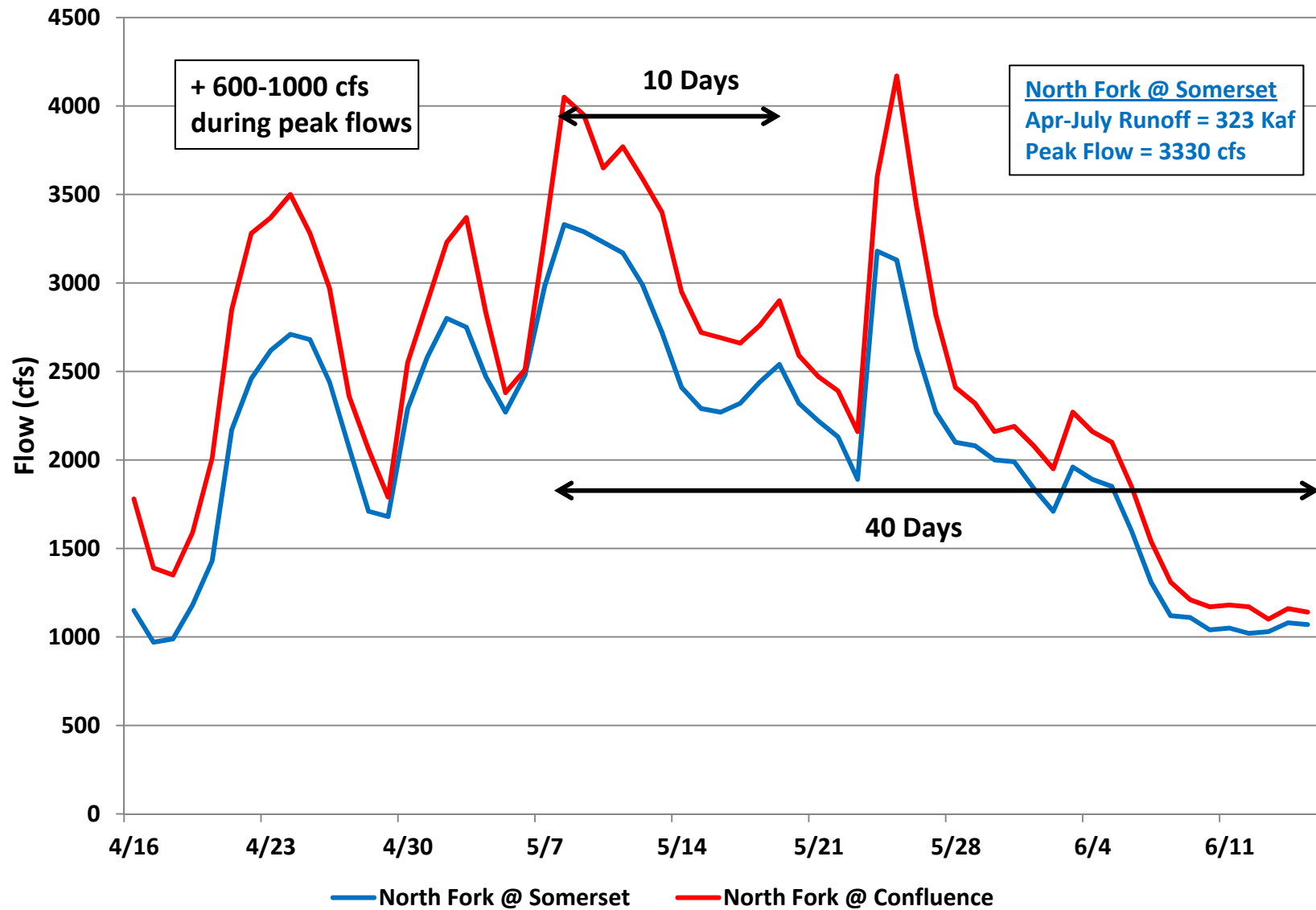
RECLAMATION

North Fork of the Gunnison River @ Somerset

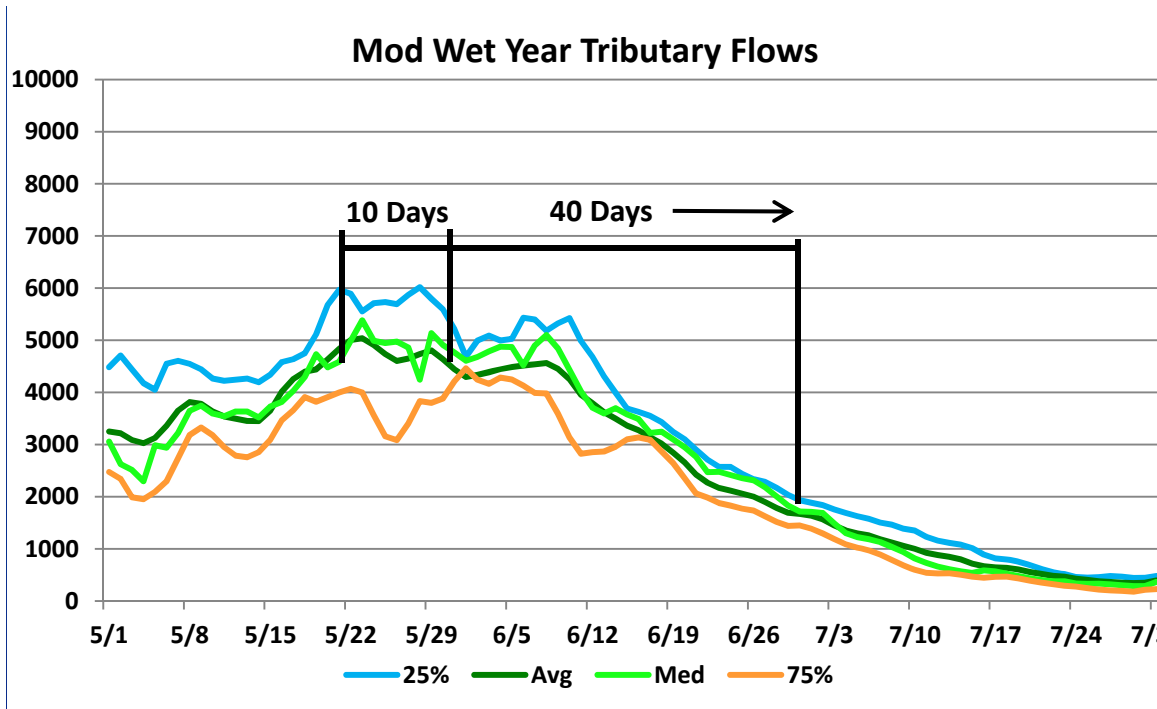


RECLAMATION

North Fork of the Gunnison River - 2009

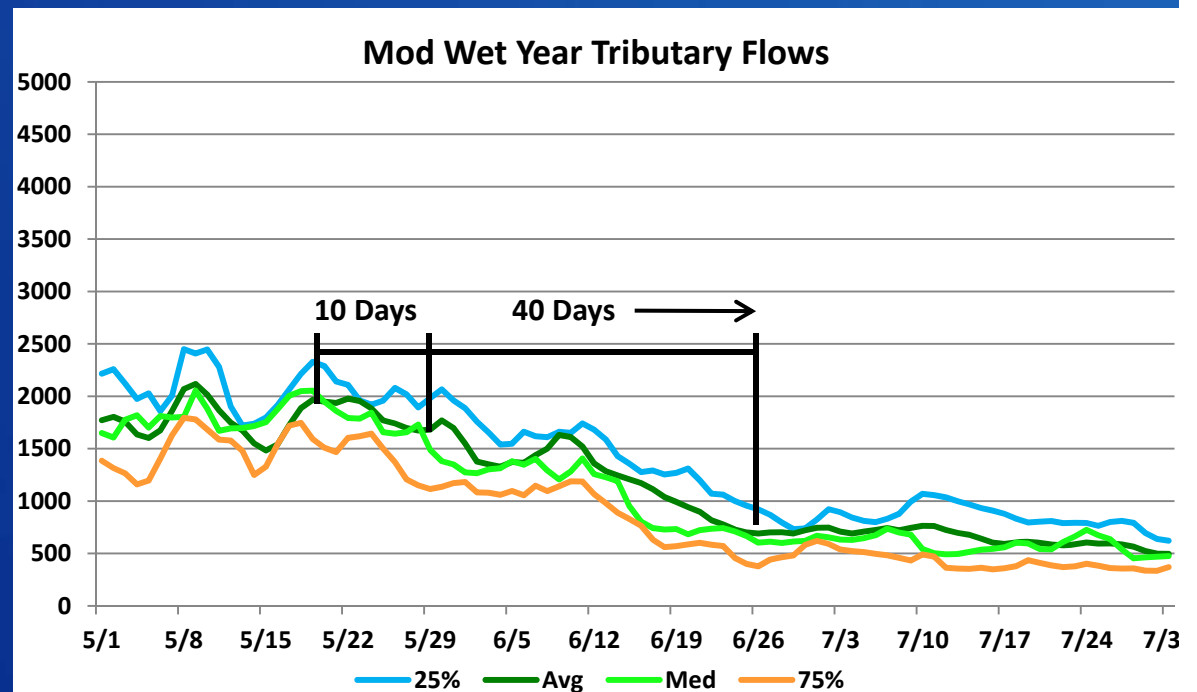


RECLAMATION

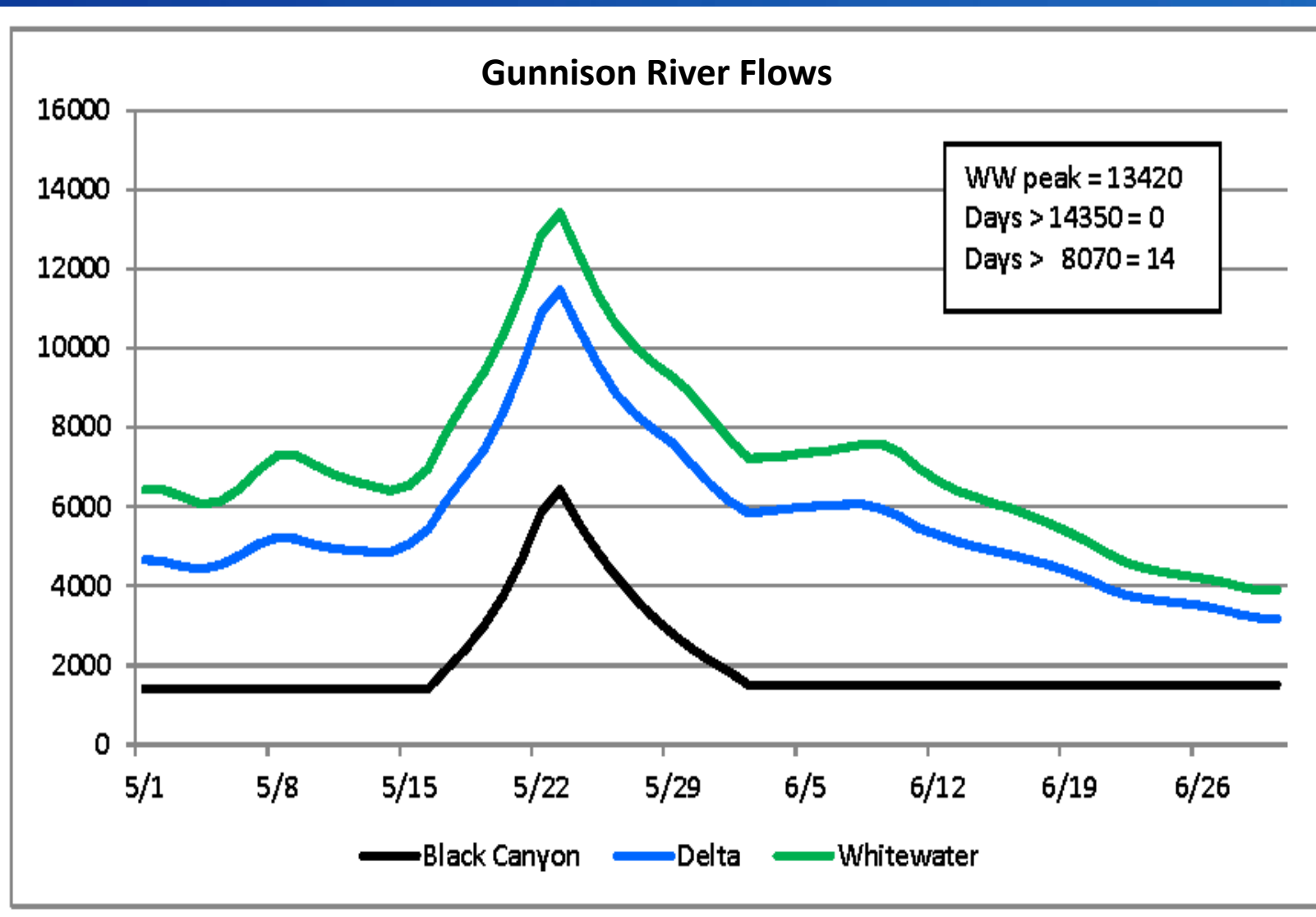


**Tributary Flows between
Black Canyon and Delta**

**Tributary Flows between
Delta and Whitewater**

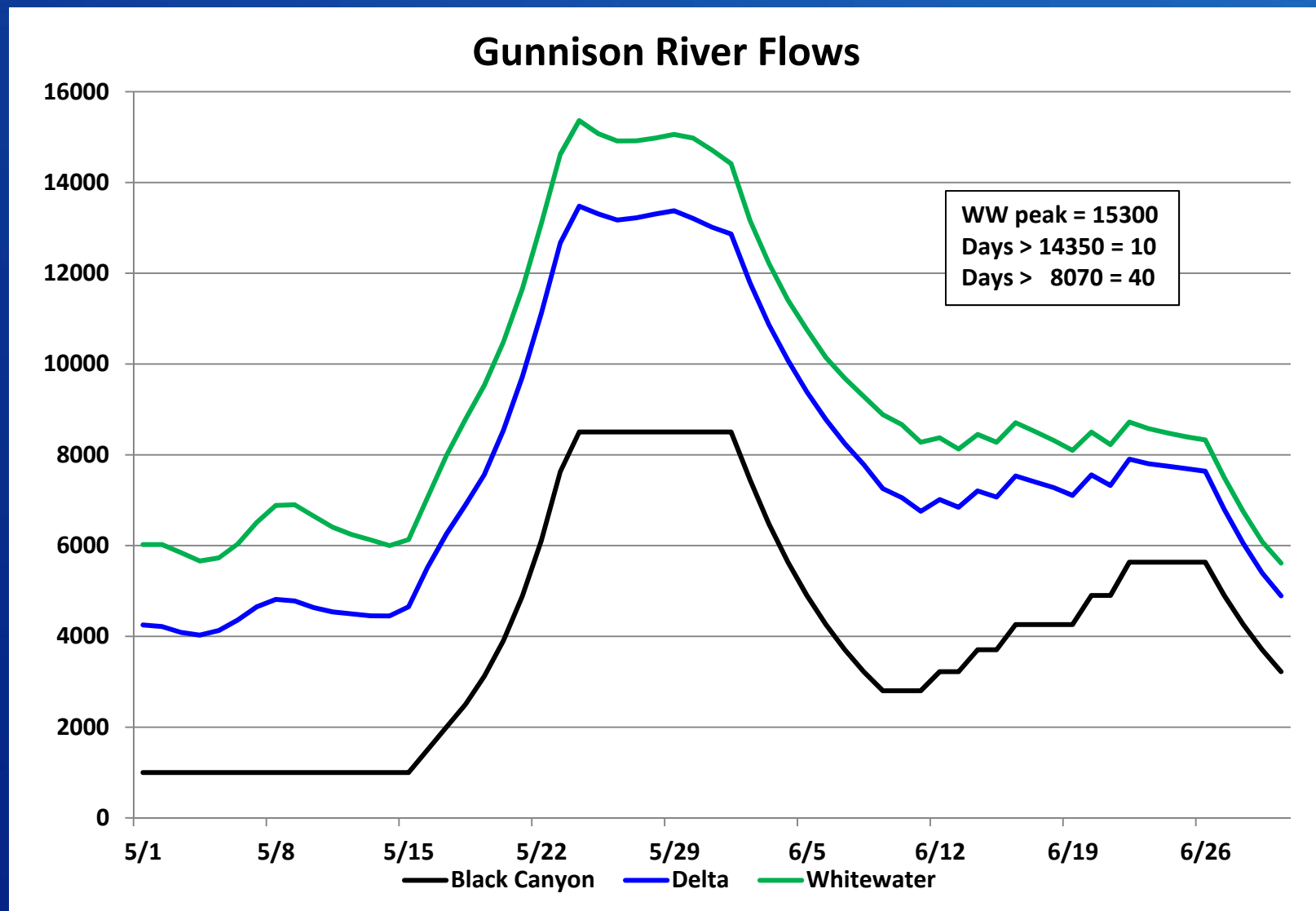


Projection of Flows in the Gunnison River while meeting the Black Canyon Water Right Peak Flow Target only



RECLAMATION

Projection of Flows in the Gunnison River while meeting the Aspinall ROD Flow Targets



RECLAMATION

Release Capability at the Aspinall Unit

Outlet Capacities (cfs)	Blue Mesa	Morrow Point	Crystal
Powerplant	3400 cfs	5000 cfs	2150 cfs
Powerplant + Bypass	6100 cfs	6500 cfs (7000 cfs?)	4350 cfs
Spillway Elevation	7487.9 ft	7123 ft	6756 ft

- Tributary flows can fluctuate by 1000 cfs during peak runoff
- Tributary flows will probably drop significantly during 40 days past peak
- Timing of North Fork and Cimarron R will be critical
- Extended releases from Crystal > 7500 cfs may require spilling at Morrow Pt
- If Morrow Pt spills, Blue Mesa spillway releases may be needed to prevent excessive drawdown at Morrow Pt

RECLAMATION



RECLAMATION