# Flaming Gorge Technical Working Group

## May 25, 2018 Hydrology Summary

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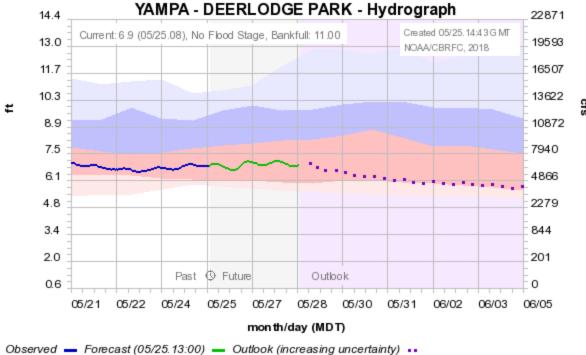
This hydrologic update provides information regarding current conditions and fulfills the requirements detailed in the 2005 Flaming Gorge Final Environmental Impact Statement (FEIS) in Section 2.5.3 related to an operational plan for Flaming Gorge Dam ("Hydrology Summary"). The Hydrology Summary is to describe the current hydrologic classification of the Green River and Yampa River Basins, including the most probable runoff patterns for the two basins.

Hydrologic determinations for both the Yampa River Basin and Green River Basin above Flaming Gorge have been made and are unlikely to change unless significant, unexpected precipitation occurs in either basin. The Green River Basin above Flaming Gorge Reservoir is expected to receive 1,120,000 acre-feet in the April through July runoff period (May mid-month forecast), placing it in the average (below median) hydrologic classification. The Yampa River Basin is expected to receive 841,000 acre-feet for the same April through July runoff period, placing it in the moderately dry hydrologic classification. These projections are based off of the Colorado River Forecast Center's May Final Forecast.

#### 10-Day Streamflow Forecasts

The following, Figure 1, illustrates 10-day forecasted flow values for the Yampa River at the Deerlodge Park gage, May 25 through June 5, 2018. Table 1 shows a comparison between the 5/23 and 5/25/2018 15-day ESP outputs from the CBRFC Daily Model for the Yampa River. A CBRFC projection for the Green River at the Jensen, UT gage is provided in Figure 2.

## Colorado Basin River Forecast Center



Historical Exceedance Probability (USGS): 90-75% \_\_\_ 75-50% \_\_\_ 50-25% \_\_\_ 25-10% \_\_\_

Figure 1 - Streamflow forecast for the Yampa River, May 25 – June 5, 2018.

Table 1- CBRFC Yampa River 15-Day ESP comparison (5/23, 5/25/2018)

	Yampa Flow Projection		
Date	5/23 Run	5/25 Run	Difference
5/24/2018	6246		
5/25/2018	6482		
5/26/2018	6218	6491	273
5/27/2018	6010	6818	808
5/28/2018	6076	6854	778
5/29/2018	5981	6562	581
5/30/2018	5650	5893	243
5/31/2018	5032	5332	300
6/1/2018	4434	4887	453
6/2/2018	4114	4631	517
6/3/2018	4066	4486	420
6/4/2018	4063	4337	274
6/5/2018	3752	4118	366
6/6/2018	3382	3929	547
6/7/2018	3098	3539	441
6/8/2018		3185	
6/9/2018		2944	

### CBRFC Green River flow projection at Jensen, UT

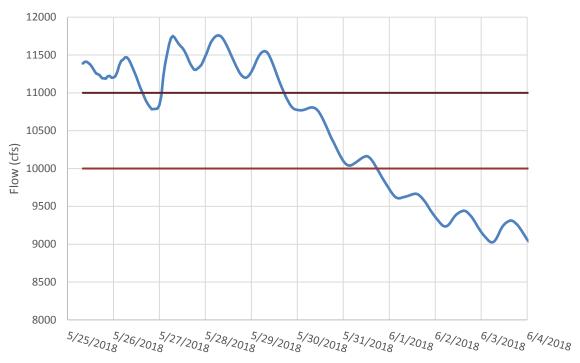
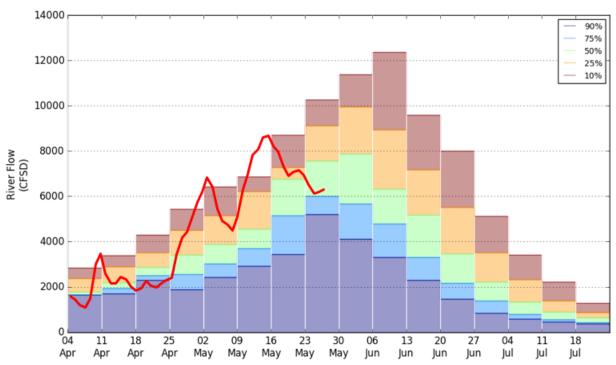


Figure 2 - CBRFC projection for the Green River at Jensen, UT, May 25 - June 05, 2018.

## Yampa projections compared to actual flows

The following figures are provided for discussion on the potential of devising release schemes in April for release to the general public. Actual flows for 2018 are presented over CBRFC peak exceedance figures produced on April 4 and April 24, 2018 (placed in hydrology summaries).

Chance of Exceeding River Levels for: YDLC2L\_F Forecast Period: 2018-04-04 - 2018-07-31 Simulation date: 2018-04-04



Chance of Exceeding River Levels for: YDLC2L\_F Forecast Period: 2018-04-24 - 2018-07-31 Simulation date: 2018-04-24

