## Colorado River Storage Project Fontenelle Working Group Meeting Minutes April 18, 2024

## Participation

This meeting was held Thursday, April 18, 2024, from 10:00 am to 1:00pm MT, at the Joint Powers Water Board, 2 Telephone Canyon Rd, Green River, Wyoming and via Microsoft Teams virtual meeting. Attendees are listed on the last page.

## Purpose of Meeting

The purpose of the working group meeting is to inform the public and other interested parties of Reclamation's current and future operational plans and to gather input from the public/stakeholders and interested parties regarding specific resources associated with Fontenelle Reservoir and the river corridor below. In addition, the meetings are used to coordinate activities and exchange information among agencies, water users, and other interested parties concerning the Green River.

#### Welcome, Purpose, Agenda – Alex Pivarnik (Bureau of Reclamation)

Alex began the meeting by thanking attendees and reviewing the agenda: 1) Current and forecasted hydrology on the Green River, 2) Fontenelle operational information, 3) Drought Response Operation Update, and 4) General discussion, comments, and questions.

# Current and Forecasted Hydrology – Brenda Alcorn (Colorado Basin River Forecast Center)

Brenda presented on the 2024 water year to date, current snow conditions, 2024 water supply and peak flow forecasts, and upcoming weather.

As of this meeting, Upper Green water year precipitation is near average overall, but there has been a wide variation in the monthly values. There was a poor start to the winter and, so far, April has been very dry, as well.

As shown in the Upper Green River Basin Snow Conditions, SNOTEL observed on April 16th, 2024, for the Green above Fontenelle was showing 89% and the Wind Rivers SWE was 90%.

Brenda also presented Raw Model Guidance for the April-July forecasted water supply. The April 1st forecast for Fontenelle was 710kaf (97% of average) and the April 15th forecast was 650 kaf (88% of average). The Flaming Gorge April-July water supply forecast for April 1st was 960 kaf (99% of average) and the April 15th forecast was 880 kaf (91% of average).

For the Water Supply Forecast Evolution of Fontenelle Inflow, the Official 50% forecast (2024-04-01): 710 kaf (97% avg, 104% med). ESP 50% forecast (2024-04015): 643 kaf (87% avg, 94% med). Observed volume: 32 kaf (4% average, 5% median). 10% forecast: 785 KAF/107% avg.

50% forecast: 650 KAF/88% avg. 90% forecast: 480 KAF/65% avg. Reached near normal April 1st but dry conditions since then have brought it back down.

Brenda also discussed forecast verification. The April 1st average error is 17%. The primary sources of forecast error discussed were: 1) future weather uncertainty/extreme events, 2) Model assumptions (specifically tied to snow and soil moisture), and 3) unknown upstream operations.

Peak Flow Forecasts come in daily points and special points. The daily points are raw model guidance. The special points have significant upstream regulation and are issued ~2 times/month as they require forecaster interaction and agency coordination

Peak Flow Forecast: Green River – La Barge information was provided (La Barge is a daily point). The peak flow forecast is for mean daily peak based on snowmelt. Instantaneous peaks will be higher. Rain on snow could cause higher peaks. Time of peak is highly dependent on spring weather and the timing provided is largely based on historical timing. As the time of peak nears, the 10-day forecast hydrograph is a better source of information. Currently, we are expecting a below average peak flow.

The 7 day forecast precipitation from April 17-24, 8-14 day precipitation outlook and 8-14 day temperature outlook reviewed. Current weather models are forecasting very little precipitation for the next week with warming temperatures by the weekend. In the 8-14 day period they are favoring chances for above normal precipitation over the area as multiple weak storm systems are possible, however above normal temperatures overall are also favored during this time.

#### Fontenelle Reservoir Operations – Mike Callahan (Bureau of Reclamation)

Mike Callahan reviewed Fontenelle operations from the previous year (5/2023-4/2024).

Future Operations for 5/2024 - 4/2025 were provided based on the April 2024 Most Probable (50% exceedance) forecast from the CBRFC. All future operations are subject to real time hydrology (snow melt time and additional April/May accumulation were noted for their potential to change operations).

With a near median snowpack and forecasted April through July runoff, bypass will be necessary for spring operations. The winter (11/2024-3/2025) baseflows are currently projected to be around 1,050 cfs. There are planned reductions in release during the April 2025 maintenance period, subject to temperature and hydrology.

There was a comment on-line showing concern for the "drastic drop or increase in releases as this affects streambanks and downstream users. A more gradual change in releases would be better." Mike explained that these were daily flows and releases would be stepped down over a day. This is also a naturally peaky system, and we try to mimic the natural hydrograph.

The group also discussed that the melt seemed abrupt and early (end of February instead of March and over a weekend). Mike did note that it was a warmer winter (the river didn't fully cap over) and releases were consistent, but slightly higher than average because of the previously wet year.

#### DROA Recovery – Alex Pivarnik (Bureau of Reclamation)

DROA Recovery regarding Flaming Gorge reviewed:

- Total DROA release 588 KAF
- Incremental recovery achieved end of day 2/28/24

• Per ROD, Reclamation's goal is to achieve the May 1 Drawdown Target of 6,027 (mod-dry target)

The completed Drought Response Operations Agreement (DROA) recovery volumes between 2021 and February 2024 were presented along with Flaming Gorge and Aspinall Unit Most Probable Inflow Scenarios.

There was a question in the room about the losses between Flaming Gorge and Glen Canyon. While Reclamation does not have firm numbers, it is believed that DROA contributed  $\sim 10$  additional feet of storage in Powell.

## Questions

An online question: "Is BOR aware of Exxon Disposal well 7-34 near Fontenelle Dam (virtual scoping meeting yesterday) and are you commenting on it???" Alex replied that we are not aware but will follow up on that.

#### Next Meeting

10 a.m. August 29, 2024, at Seedskadee National Wildlife Refuge (scheduled on June 12, 2024).

#### Attendees

Amanda Becker, BOR	Hilary Huckfeldt, Sisecam	Ron Wild, Rocky
Michael Callahan, BOR	Wyoming LLC and RS/GR Joint Powers Water Board	Mountain Power
Alexander Pivarnik, BOR	Courtney Harris	Rob Young, Joint Powers Water Board & Simplot
Tana Allen, BOR	Jessica Lockwo	Phosphates
Brenda Alcorn, CBRFC	John Walrath	Heather Patno, BOR
Emily Bain	Mark Westensk	Nathaniel Todea, BOR
Blake Gelinas, Sisecam	Mary Thoman	Catherine Dun
Wyoming LLC	Mile Freinsch Line 2	Ryan Luke
Bryan Seppie, Joint Powers Water Board	Mike Freimuth, Lives 3 miles below dam	Jason Maes
Craig Rood Roxann Reid, BOR	Aaron Reichl	Louis Warner
	Rick Lee	Lee E. Traynham
	Stephen Core	Eugene Smith

Walter Findlay	Joe Tessari	Valerie Deppe, BOR
Ryan Taucher	UpperGreenResOps, BOR	Courtney Harris, WAPA
AnGoodbody	UCR	John Walrath – Wyoming
JoAnna DeWald	David Klein	Game and Fish
Katie Theule, FWS	Marianne Shan	Department, Green River
	Jason Palmer	Riley Martin
Richard Clayton, BOR	Cory Anderson, BOR	Clifton (Shane) Mower,
David Graf	•	BOR
Dave Latorre	Cody Allred	Rick Lee
Jennifer Erickson	Gary Henrie	Sawyer Schafer
Jason Kimura	Central Files, BOR-UCR	Tyler Schiltz
Katrina Grantz, BOR	Becki Bryant, BOR	Katie Theule, Seedskadee
Dale Hamilton, BOR	Amee Andreason	Robert Keith, WGFD