

Colorado River Storage Project

Fontenelle Working Group

Meeting Minutes

August 23, 2022

Participation

This meeting was held Tuesday, August 23, 2022, from 10:00 am to 11:10 am. The meeting was held at the Broadway Theater in Rock Springs WY, and via Microsoft Teams virtual meeting. Attendees are listed below.

Purpose of Meeting

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

General

Dale Hamilton (United States Bureau of Reclamation - Reclamation) called the meeting to order and introduced the meeting agenda and presenters. A brief synopsis of each presentation and a list of attendees are provided below.

Fontenelle Reservoir: Spring Forecast and Runoff Review

Brenda Alcorn, Senior Hydrologist, Colorado Basin River Forecast Center (CBRFC)

Water year 2022 precipitation through July was highly variable month to month but slightly below average overall (90% of average) above Fontenelle Reservoir.

Snowpack was near normal in mid-January then flat-lined through February and peaked at 80% of normal.

Observed April through July runoff into Fontenelle was 456,000 acre-feet (62% of average, 67% of median) compared to 677,000 acre-feet (92% of average) in 2020 and 319,000 acre-feet (43% of average) in 2021. Streamflow since May is improved over last year.

Looking ahead there are increased chances for above normal temperature and below normal precipitation.

Airborne Snow Observatories, Inc. flew a portion of the Upper Green basin to measure snow depth and estimate snow water equivalent for the first time in 2022.

In response to a question about whether the snow water volume is used to determine the water volume that gets to Fontenelle, Brenda stated that that is the intent of the Colorado Basin River Forecast Center hydrologic model.

Fontenelle Reservoir Hydrology and Operations

Nathaniel Todea, Hydraulic Engineer, Reclamation

In water year 2022, the Fontenelle pool elevation peaked just below 6505 feet in July. Releases from the dam were around 800 cfs from December through May. Due to pipe replacement near the Green River releases were held low, then increased to 1200 cfs. Releases peaked at bypass flows in July to keep the pool elevation from exceeding 6505 feet, then releases were maintained at 1200 cfs through early August.

The 2022 observed inflow into Fontenelle of 456,000 acre-feet was 62% of average and 82% exceedance. The April through July runoff forecast stayed relatively stable from April forecast through the runoff season.

Currently, Fontenelle is at 94% of capacity at elevation 6503.54 feet with inflows of ~1000 cfs and releases averaging 1100 cfs.

Forecasted operations are subject to change based on inflows and forecasts but are currently planned to decrease the pool elevation to 6470 feet by late March by maintaining releases at about 1000 cfs until next March.

A comment was made that the high releases being later in the year this year may have been helpful as there was less moss and algae in the river than last year.

Colorado River Storage Project – Drought Response Operations

Dale Hamilton, Division Manager, Reclamation

2022 Upper Basin drought response actions included the release of 500,000 acre-feet from Flaming Gorge (2022 DRO Plan) and reducing Glen Canyon Dam's annual release by 480,000 acre-feet from 7.48 maf to 7.00 maf (2007 Interim Guidelines).

In June, Reclamation Commissioner requested Colorado River Basin States provide an additional 2 to 4 million acre-feet in 2023 to protect critical elevations in Lake Powell and Lake Mead. The Upper Division States replied in July with a 5-point plan (<http://www.ucrcommission.com/wp-content/uploads/2022/07/2022-July-18-Letter-to-Reclamation.pdf>).

Lake Mead is at elevation 1042.3 feet (Aug 14, 2022) in Shortage Tier 2 which decreases allocations further than the decreases experienced in Tier 1 and most probable water surface elevation projections indicate level 2 shortage conditions through 2023 and level 3 shortage conditions in 2024. Lake Powell is at elevation 3533.9 feet (Aug 15, 2022) and in the mid-elevation balancing tier with most probable water surface elevation projections indicating elevations below 3525 feet next year and minimum probable projections below 3490 feet beginning in 2023. Flaming Gorge is at elevation 6015.6 feet (Aug 15, 2022) and the most probable water surface elevation projection decreasing to 6005 feet in May 2023.

Additional projection information can be found in the 24-month studies (<https://www.usbr.gov/uc/water/crsp/studies/>).

DRO releases from month to month have differed somewhat from initial plans but are still anticipated to total 500,000 acre-feet by the end of April 2023.

Decreases in Flaming Gorge storage and water surface elevations may impact various resources. A recent hydrographic sonar survey of the boat ramps estimated the elevation of the boat ramp bottoms to the nearest half-foot (with a range of elevations provided where the bottom edge was not clearly defined). A dive survey of the boat ramps is planned to further refine ramp bottom estimates as possible.

Releases from Flaming Gorge in future years will be dependent on hydrology and conditions at Lake Powell. If over the next few years, it is possible to maintain storage at Lake Powell to levels that will

allow for power generation by releasing additional water from Flaming Gorge, additional releases will likely be made.

In response to a question about DRO releases to date being lower than planned releases, Dale stated that the releases will be made up and the full 500,000 acre-feet DRO volume will be released.

General Discussion, Comments, Questions

Dale opened the meeting for discussion, comments, or questions. No additional items were brought up.

If additional questions or comments arise, send them to Dale Hamilton (dthamilton@usbr.gov) and/or Nathaniel Todea (ntodea@usbr.gov).

Next Meeting

- Thursday, April 27, 2023, at 10:00 am at Joint Powers Water Board in Green River WY (tentative)

Attendees

Rick Lee	Rock Springs Chamber of Commerce
JT Larson	Rock Springs Chamber of Commerce
Jason Palmer	City of Green River, Utilities
Mary Thoman	Sweetwater County, Commissioner
Jessica Lockwood	Wyoming Game & Fish Department
Melinda Fegler	Wyoming State Engineer's Office
Sadie Valdez	Trout Unlimited, Seedskaadee
Ron Wild	Rocky Mountain Power
Terry Leigh	Joint Powers Water Board
Bryan Seppie	Joint Powers Water Board
Rob Young	Simplot and Joint Powers Water Board
Hilary Huckfeldt	Sisecam and Joint Powers Water Board
James Tardoni	Sisecam Wyoming
Jack McCully	Sisecam Wyoming
Kristina Barden	Sisecam Wyoming
Aaron Reichl	Genesis Alkali
Katie Theule	Seedskaadee National Wildlife Refuge
Brenda Alcorn	NWS, Colorado Basin River Forecast Center
Gus Goodbody	Natural Resources Conservation Service
Dale Hamilton	Reclamation
Nathaniel Todea	Reclamation
Ryan Luke	Reclamation
Heather Patno	Reclamation
Jenny Erickson	Reclamation
Ed Warner	Reclamation
Becki Bryant	Reclamation
Gary Henrie	Reclamation