

Colorado River Storage Project
Fontenelle Working Group
Meeting Minutes
April 22, 2020

Participation

This meeting was held Wednesday, April 22, 2020, at 10:00 am. Due to the current COVID-19 (Coronavirus) pandemic, the meeting was held via WebEx 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 began the meeting at 10:00 am and introduced the meeting agenda and presenters: Brenda Alcorn and Mark Delorey. To avoid audio feedback, attendees introduced themselves via the chat function in the virtual meeting (attendees who identified themselves or commented in the meeting are listed below).

Fontenelle Reservoir: Current Conditions and Forecasts – Brenda Alcorn

Brenda Alcorn, Senior Hydrologist, National Weather Service, Colorado Basin River Forecast Center

Brenda presented information on past weather, current snow conditions, current runoff forecasts, and upcoming weather.

Water year 2020 (October-March) precipitation above Fontenelle has been 95% of average overall but only 85% of average in the Wind River range. Except for a little warmer than average November, average monthly temperatures have been near normal, and have not been a big factor in snow accumulation/melt so far. So far, April has had near to above average precipitation (very wet in the northern end of the basin) and below to much below average temperature (no big, early melt has occurred).

SNOTEL snow conditions above Fontenelle are currently at 121% of median snow water equivalent (averaging all SNOTEL sites), but lower (currently 75-85% of median) in the drier Wind River range. It is important to note that snow-to-runoff is not a one-to-one relationship, spring weather will impact runoff. The Colorado Basin River Forecast Center model accounts for snow in areas above and below SNOTEL sites and indicates that snow is at ~126% of median in the north and west parts of the drainage that typically provide ~15% of the Fontenelle inflow, but only ~85-88% of median in the eastern (Wind River) portion of the drainage that typically provides 40-50% of the Fontenelle inflow.

The official runoff volume forecast began the year at 78% of average on January 1, rose to 86% on January 15, held steady until March 15, then rose to 90% on April 1, and rose again to 94% on April 15. Future forecasts have the potential to increase to ~115% with wet future conditions or decrease to ~71% with dry future conditions. The May 1 forecast will likely be near the April 15 forecast (94%). On

average, Fontenelle April 1 runoff volume forecasts contain +/-21% error with error decreasing as the season progresses. Errors in runoff forecast are primarily due to future weather (uncertainty, extreme events), model snow states (verified as possible by satellite images and SNOTEL sites), and demand/diversion assumptions.

Upcoming weather is anticipated to bring ~0.5-inches of precipitation in higher elevations by Friday morning, near to above average temperatures through the weekend, temperatures up to 10-15 degrees above average by the end of next week, and likely below normal precipitation and above normal temperatures through early May.

In summary, snow conditions above Fontenelle are variable—above normal conditions overall, but below normal conditions in important runoff-producing areas (Wind Rivers)—weather will be wet for a few days but will warm and dry into May, and there is still a lot of uncertainty in the runoff forecasts—spring can have a significant impact.

The Colorado Basin River Forecast Center provides monthly water supply briefings this time of year. See the 'News' banner at the top of the CBRFC website (<https://www.cbrfc.noaa.gov/>) for more information or to join the CBRFC email list.

Fontenelle Reservoir Hydrology and Forecasted Operations – Mark Delorey

Mark Delorey, Hydraulic Engineer, U. S. Bureau of Reclamation

Mark Delorey presented information on 2019 operations, runoff forecasts, forecasted 2020 operations, and temperature monitoring.

In 2019, Fontenelle reached elevation ~6503 feet (93% full), inflows peaked above 10,200 cfs, and releases reached 6,400 cfs for ~12 days.

Snowpack in the Upper Green basin is at 124% of median. Over the next three months, precipitation will likely be near normal with above normal temperatures. The unregulated April thru July runoff volume into Fontenelle is currently forecasted to be 685,000 acre-feet (94% average, 105% median) which is in the average dry hydrologic classification. Forecasted peak inflow is greater than 7,000 cfs, and is likely to come in June.

Fontenelle is currently at elevation 6475.08 feet, 142,000 acre-feet of storage (41% full), with inflows around 1,225 cfs and rising, and releases averaging 1,400 cfs. Based on the April most probable runoff forecast, Fontenelle releases will likely continue at current levels (~1,400 cfs) thru May, increase to ~3,600 cfs for much of June (~25 days, depending on runoff), and ramp down to ~1,200 cfs by early August. If the forecast remains the same, the September through March average daily baseflow forecasted to be around 1,100 cfs.

Temperature monitoring equipment is being added to the USGS stream gage Green River near Green River, Wyoming (USGS 09217000) this spring to monitor temperatures from May 1 to October 31. It is anticipated that the temperature data will be made publicly available on the USGS website.

Rhett Bain commented that fishing conditions in the river drastically change when bypass releases begin, and notification prior to bypass releases begin would be appreciated. Several attendees provided email addresses to be added to the notification email distribution list.

General Discussion, Comments, Questions

Following the two presentations, Dale opened the meeting for discussion, comments, or questions. No additional items were mentioned. If questions or comments arise, send them to Dale Hamilton (dthamilton@usbr.gov) and/or Mark Delorey (mdelorey@usbr.gov).

Next Meeting

- Thursday, August 27, 2020 (tentative) 10:00 am at Seedskadee National Wildlife Refuge (may be changed to WebEx virtual meeting if COVID-19 conditions necessitate)

Attendees

Rhett Bain	Reel Deal Anglers
Jason Palmer	City of Green River Utilities
Mark Westenskow	City of Green River
Tammy Valdez	Rock Springs Chamber of Commerce
Bryan Seppie	Joint Powers Water Board
Mark Kot	Sweetwater County
Judy Roderick	Sweetwater County Emergency Management
Emily Covey	Sweetwater County Emergency Management
Tom Koerner	Seedskadee National Wildlife Refuge
Sadie Valdez	Trout Unlimited - Seedskadee
Tyler Schiltz	Ciner
Tara Nelson	Ciner
Ron Wild	Rocky Mountain Power
Brenda Alcorn	NWS - Colorado Basin River Forecast Center
Dale Hamilton	Reclamation
Mark Delorey	Reclamation
Nathaniel Todea	Reclamation
John Morton	Reclamation
Kirk Jensen	Reclamation
Tom Davidowicz	Reclamation
Scott Elliott	Reclamation
Gary Henrie	Reclamation