Colorado River Storage Project Fontenelle Working Group Meeting Minutes August 24, 2023

Participation

This meeting was held Thursday, August 24, 2023, from 10:00 am to 11:00 am. The meeting was held at the Seedskadee National Wildlife Refuge, 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

Alexander Pivarnik (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)

Session consisted of review of past season, weather conditions, snowpack and forecast, and current conditions.

Discussed April 1 Conditions – WY precipitation Oct-March is 105% of normal. Month of March precipitation was estimated to be 145% of average. Temperature was 7-9 degrees below average. Lower elevation snow water equivalent (SWE) was 300-500 % of median. Higher elevation SWE was near 115% of median, not significantly high. At this point average runoff was predicted.

Discussed June 1, April / May forecast. April precipitation was near at 95% of median and was less in the Wind River Range. Temperature in April was below normal. May precipitation was dry and 65% of median. June snow conditions were 65% at high elevations. April-May water supply was observed was about 150 % of runoff. June 1, forecast is below average, 91% runoff predicted for June-July, but the April-July forecast is 113%.

June, precipitation is 110 % of average. Winds, rank #1 for June 2023 with precipitation around 5-7 inches. June observed runoff was 134% of average.

Snow conditions, ten SNOTEL stations, with equal weight from a range of elevation, 7800-9500 feet, is 115% at time of peak. At 7500-13800 feet, the entire range, later peak seen. Segement zone plot, three elevation zones, 7500-8500, 8500-10000, 10000-13000. This results on max out another month later.

This discussion included an overview of the April – July Water Supply evolution plot. January was below average, March 85% of average. Model guidance is increasing. April forecast is 109% of average,

near average, followed by May a small increase. May was dry and lower elevation resulted in running off. Still a high uncertainty in model. June remained at 113% of average. Then July increased to 131% of average. The observed was about 950 kaf or 130% of average. This Fell outside 10% range from previous forecast, but this should be expected.

Streamflow to date from Jan 2022 was discussed. August precipitation has been above normal in the Upper Green so far this month. Streamflow in the Upper Green was near the 25th percentile at the beginning of the year, similar to where it was in 2022. Current flows are above where they were a year ago. Chances appear good to enter winter with higher base flows than last year.

<u>Days 1-7:</u> Forecast precipitation totals <0.5" in the area above Fontenelle. <u>Longer term:</u> Increased chances for above normal temperatures and above normal precipitation in the 8-14 day period. Increased chances for below normal temperatures and above normal precipitation in the Upper Green in weeks 3-4.

Fontenelle Reservoir Hydrology and Operations

Mike Callahan, Hydraulic Engineer, Reclamation

Comparison was shown between information that was presented in April's Working Group Meeting vs observed inflow and operations for spring and summer seasons. This included highlights from CBRFC presentation on the forecast comparison.

FN Observed Operations May through August 2023: Inflow to start the runoff season was lower than 9/10 years in the statical period but then quickly increased to being higher the 9/10 years statical period. The quick swing from extreme lows to extreme highs made operations challenging at Fontenelle this runoff season. Operations followed a similar pattern to the operation's plan that was presented in the April 2023 Working Group Meeting, but at a much higher scale due to the additional inflow that was not forecasted in April. Maximum release occurred at the end of June at above 7,000 cfs. Maximum pool elevation was reached in mid-August at 6,503.98'. This was lower than the overall yearly target due to lower than forecasted inflows in July. However, August inflow were greater than expected and brought pool elevations back on track for late August and September operations.

FN Future Operation: Future operations presented are based on the August Final Forecast, most probable run of the 24 Month Study. A reduction from 1,200 cfs to 1,100 cfs expected at the end of September. Constant baseflow of 1,100 cfs +/-100 cfs to be set in mid-November. Baseflow will be held throughout winter until ice in the Green River melts/ breaks up in spring, this is expected to occur in mid-March. Releases will be reduced to 600 cfs in April maintenance period but is pending icing. Ramp up for spring release will occur after the maintenance period.

Questions - none

Colorado River Storage Project -- Drought Response Operations

Alexander Pivarnik, River Operation Group Supervisor

Introductions

DROA 2023 plan focuses on recovery. No plans for release at this point and time. Graph showing theoretical and planned/observed operations from May 2023 through April 2024. Accumulated DRO recovery is also displayed. By the end of February 2023 Flaming Gorge is expected to have recovered. The recovery includes 2021/2022 DRO releases.

DROA Accounting, release volumes with elevation were discussed. Theoretical versus observed / planned releases was illustrated. There are two ways to constitute recovery, incremental recovery and pool elevation. The elevation based it to meet the drawdown target and for the April through July forecast having an exceedance value greater than 40%. The elevation will lower pending wetter hydrology. Note that recovery is expected to occur at the February end of month and that at that point March and April compare.

DROA release in calendar year 2021 was 125,000 acre feet at Flaming Gorge. In DROA year 2022, the planned DROA volume was 500,000 acre feet. The DROA 2022 was suspended in March and recovery was also started in March. The DROA volume in operation year 2022 was 328,000 acre feet, thus 463,000 is the total DROA volume released at Flaming Gorge. The DROA Recovery through July 2023 is 193,000-acre feet. By March 2024 260,000-acre feet is planned to be recovered. At Blue Mesa (Aspinall Units) full recovery is expected to occur at the end of December 2023 the water surface elevation at 6490 feet as well as incremental recovery.

The April 2024 meeting time and location will be determined later.

The session was open for questions.

Robert Keith, Wyoming Game and Fish Department, stated the Kokanee is struggling at Flaming Gorge. Lost recruitment due to low elevation at Flaming Gorge last year from October 2022 through May 2023.

It was stated that slides will be sent out.

Dale Hamilton, stated that historically April meetings are held in either Rockspring, WY or Green River, WY

Attendees

Mary Thoman, Sweetwater County, Commissioner

Rob Young, Joint Powers Water Board, JR Simplot

Bryan Seppie, Joint Powers Water Board

Hilary Huckfeldt, Sisecam and Joint Powers Water Board

Jack McCully, Sisecam Wyoming

Tyler Schiltz, Sisecam Wyoming

Ron Wild, Rocky Mountain Power

Suman Chitrakar, WY SEO

Mark Westenskow - City of Green River

Mel Fegler, Wyoming State Engineer's Office

Jason Palmer, City of Green River, Utilities

Chris Brown, Wyoming Attorney General's office

Craig Rood, Project West

Robert Keith, WGFD

Katie Theule, U.S. Fish and Wildlife Service

Roxann Reid, Reclamation

Becki Bryant, Reclamation

Clifton (Shane) Mower, Reclamation

Dale Hamilton, Reclamation

Tom Koerner, Seedskadee National Wildlife Refuge

Mike Freimuth

Travis Staheli