

# Colorado River Storage Project Flaming Gorge Working Group Meeting Minutes March 13, 2025

## Participation

This meeting was held Thursday, March 13, 2025, from 10:00 am to 12:00 am MT, via Microsoft Teams virtual meeting. Attendees are listed on the last page.

## Purpose of Meeting

The purpose of these working group meetings is to inform the public and other interested parties on Reclamation's current and future operational plans and to gather input from the public and interested parties regarding resources associated with the dam [Flaming Gorge].

### **Introductions – Alex Pivarnik and Katrina Grantz (Bureau of Reclamation)**

This is the first Flaming Gorge Working Group meeting this year. A draft Flaming Gorge Operations Plan was distributed before the meeting. Comments on the draft plan were requested by April 8 so that Reclamation can address the comments by the next meeting on April 15.

The federal agencies, which are participants in the Flaming Gorge Technical Working Group, are in the process of briefing new leadership on agency operations to ensure consistency with new administrative priorities, including energy development and use. The draft Operations Plan was prepared consistent with the 2006 Record of Decision on the Operation of Flaming Gorge Dam (ROD) but is subject to change as the federal agencies receive further direction from new leadership.

The Flaming Gorge Working Group meeting is an important step in developing the Flaming Gorge Operations Plan.

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

Brenda presented on the Water Year (WY) 2025 hydrologic conditions to date and forecasted conditions.

Brenda reviewed the previous fall's soil moisture conditions. The soil conditions can impact runoff efficiency in the following spring but are not as important as the amount of precipitation and the rate of runoff. Fall soil moisture conditions in both the Green and Yampa basins are below average. In the Green, conditions are worse than last year, but in the Yampa, they are similar to last year.

For precipitation, the Upper Green has fluctuated a lot, but is coming in around average for the WY. Precipitation in the Yampa has been more consistent, also resulting in near normal conditions.

Modeled Snow Water Equivalent (SWE) is also tracking near normal. In the Upper Green, snowpack development has been heavily reliant on a few large storms.

The water supply forecast from raw model guidance is tracking to be similar to last year at Flaming Gorge, with the March 11 guidance of 703 thousand acre-feet (kaf) for April-July unregulated runoff. Last year the fall soil moisture conditions were better, but we are currently seeing a better snowpack, especially above Fontenelle. The water supply forecast for the Yampa is expected to be worse than last year (at 1095 kaf) due to a worse (but still close to average) snowpack.

Brenda presented the water supply forecast evolution plot.

The verification of the forecast shows that the error is reduced as we move into the April-July period. On March 1, the error is 26% at Flaming Gorge but reduces to 18% by May 1. There is a similar trend for forecasts on the Yampa, though those generally have less error than Flaming Gorge. The primary sources of forecast error are future weather (largest source of error) and model states.

The peak flow forecast is a long-lead forecast tool that is largely statistics based. The forecast is updated daily for sites with minimal upstream regulation. The current forecast shows a peak on the Green to be near to below normal and on the Yampa to be near normal. Ultimately, spring weather will play a large role in peak flow magnitude and timing. The long-lead forecasts are helpful, but more accurate information on flows can be found in the 10-day streamflow forecast.

The 10-day forecast shows an increase inflows, due to some early melt and precipitation. It was also highlighted that the Jensen forecast incorporates Flaming Gorge releases provided by Reclamation.

Weather forecasts show some precipitation, mostly in the next 24 hours. The 8-14 day forecast shows above normal chances for precipitation, so we may continue to see a more active pattern through the end of the month.

### Questions

Scott Chew (Utah Representative) asked about the daily variability in Flaming Gorge releases that could be seen in the CBRFC 10-day flow chart. Alex Pivarnik (USBR) clarified that Reclamation sets the daily release, but WAPA schedules the hourly releases (based on the daily average) to meet power demand contracts and power grid needs. Fluctuations on the hourly release are constrained by the Flaming Gorge Record of Decision (ROD). Michael Callahan (USBR) added that the scale of the chart is fairly small and that the variation is tenths of a foot.

Scott Chew (Utah Representative) asked a clarification on the fall soil moisture chart. Brenda clarified that the chart displays the different basins.

T. Wright Dickinson asked about ASO (airborne snow observatories) in the Green River Basin and its impacts to the CBRFC's modeling. Brenda noted that there was one flight in 2023 that was used to inform the forecast. The information from the ASO flight was not directly input into the forecast model but did inform the adjustment to the forecast. There was another flight in

2024, but information from that flight was not shared with the CBRFC and was not included in any forecast. There have also been flights in the Uintahs. It was noted that much of the Upper Green Basin is very high elevation wilderness area with poor coverage of snow sensors to inform the CBRFC's models, so this area would benefit from ASO-like surveys. T. Wright noted that the ASO flights are helpful.

### **Green River Research and Endangered Fish – Tildon Jones (Recovery)**

Tildon started with a background on the listed fish, the threats to those species, the Recovery Program, and the native fish lifecycle in comparison to idealized flow and river temperatures.

The Recovery Program's request for this year (which is currently expected to be in the average below median or drier classification from the Recovery Program Flow Request) prioritized 1) the smallmouth bass (SMB) flow spike, 2) the Colorado Pike Minnow (CPM) base flow, and 3) the Larval Trigger Study Plan (LTSP).

#### SMB Flow Spike

There are three invasive fish species that Recovery focuses on, with SMB being one of the highest concerns. SMB have better success in average to drier years. The SMB flow spike request focuses on temperature and flow. The SMB flow spike consisted of 72 hours of Flaming Gorge release at power plant capacity.

#### CPM Base Flow

The CPM base flows are intended to improve survival and recruitment of young CPM by targeting flows at Jensen, based on hydrologic classification, through the end of September.

#### LTSP

The LTSP is intended to shift flows from the Yampa peak to being timed based on the presence of Razorback Sucker, with the intent to push larvae into wetlands

#### Questions

T. Wright Dickinson asked about the CPM. Where they hatch and where the nursery habitat that the base flows target is. Tildon clarified that the adult CPM migrate up the Yampa River to the Dinosaur National Monument area to spawn. The larvae drift to the nursery reach between Jensen and Ouray. The CPM flows are intended to fill and maintain the backwater habitat in this area. Tildon also noted that the flow targets are at Jensen, which includes the contributions from the Yampa.

T. Wright Dickinson asked about what has been learned from the CPM base flow and SMB flow spike experiments from last year. Tildon noted that, for SMB flow spike, they are still working on samples. The SMB flow spike effectiveness is measured by determining the age of the fish in days (using a small ear-bone) to ascertain if there are less fish from the time of the SMB flow spike. Tildon did not have the results from the CPM base flows immediately available.

Scott Chew (Utah Representative) asked about the locations of the introduced fish. Tildon explained that the bass are everywhere, the northern pike are mostly in a small section of the Yampa (there have been flare-ups, but they are largely contained), and the walleye are in Powell and expanding upstream into the lower Green and Colorado Rivers. These introduced species are

largely controlled through netting and electrofishing. Predation is mostly a concern for CPM and bonytail.

Scott Chew (Utah Representative) asked what we need to fix to help recover the CPM. Tildon noted that it seems to be a combination of habitat and flows (which are interrelated) and control of nonnative fish. Bass are very fast-growing, voracious predators, while CPM take ~7 years to mature, and face a high predation risk until they are larger.

Scott Chew (Utah Representative) asked about the trends of the CPM and the effectiveness of the summer base flows. In 2000, there was an estimated 3,500-4,000 CPM adults, but as of 2018 (the latest estimate available) CPM are down to ~1,000 adults. The summer base flows are a newer experiment and have only been in place since 2022.

There was a question about the CPM base flow ranges in the ROD (Muth) and the experiments (LaGory). The timing for these flows is similar, but in drier conditions the experimental flow range is higher.

### **Flaming Gorge Reservoir Operations – Michael Callahan (Bureau of Reclamation)**

Michael Callahan reviewed Flaming Gorge operations, starting with a background of the project.

In the Draft Flaming Gorge Operations Plan, the Dry year would attempt the LTSP and SMB flow spike. Summer flows for CPM may not be able to be met due to a tight water budget and low contributions from the Yampa.

The forecast currently indicates a Moderately Dry classification. This would target LTSP and SMB flow spike. Summer flows for CPM would start at the lower range and move up to the higher range after 2-3 weeks. Autumn flows would use the lower end of the baseflow range. Winter flows would be at the higher end of the range.

In Average Below Median would likely need bypass to meet the LTSP targets. The SMB flow spike would be included. The plan would target the low end of CPM range.

In Moderately Wet, the Recovery Request does not include the SMB spike flow. Spring Flows are intended to be timed to match and extend peak flows but may extend to encompass larval drift. Flows would decrease for the fall and increase for the winter.

### Questions

Tim Gaylord (Holiday River Expeditions) requested higher water at the minimums for rafting. Tim asked why flows between the spring peak/LTSP and the SMB flow spike were so low in the mod-dry scenario. Michael clarified that flows between the LTSP and SMB are currently projected at ~900 cfs. Flaming Gorge releases are currently expected to increase because we are in the transition period and trying to meet the May 1 storage target in the ROD. Flows between the LTSP and SMB are after the May 1 target, when Reclamation is trying to balance water needs through the end of the operations year. Brenda Milligan, Patrick Krause, and T. Wright Dickinson supported trying to increase the lower flows. Patrick additionally noted that he would prefer 1,000 cfs as the minimum release. T. Wright expressed concern with moss issues at lower flows.

T. Wright Dickinson objected to any use of bypass. T. Wright noted that the lower storage in Flaming Gorge caused by the Drought Response Operations Agreement (DROA) allowed more of the high flows in 2023 to be captured. Continuing to target lower elevations in Flaming Gorge could reduce the need for storage management/flood control releases. Cody Wilkins (with land in Reach 2) supported the reduced use of bypass. Alex Pivarnik (USBR) clarified that DROA was a unique case. The releases, and resulting lower storage level, were to protect critical elevations at Powell. Flaming Gorge continues to be operated under its ROD.

For power reasons, Leslie James (CREDA) also supports not using bypass. The power market is in flux due to changing energy sources. CRSP hydropower is important to CREDA customers and grid stability. Hydropower provides more stability than other less-carbon generating resources. CREDA understands that Reclamation has many things to consider when determining operations, but they support reduced bypass. Leslie noted that she expects to provide comments on the Operations Plan and encourages Reclamation to generate hydropower with every drop.

## Questions/Comments

Mike Brown (Senator Lee's Office) asked if anyone in the call was involved in the Post-2026 (P26) discussions. Alex Pivarnik (USBR) explained that Reclamation is involved, but the P26 process is focused on the operations at Powell and Mead. While Operations staff are involved, the Research and Modeling Team is more involved. Leslie Jones (CREDA) noted that P26 should take hydropower into account at all CRSP units, including Flaming Gorge.

Tildon Jones (Recovery) asked, and Alex Pivarnik (USBR) clarified, that the April meeting starts at noon and Reclamation is still awaiting guidance on if it can be held in person.

## Next Meeting

April 15, 2025 at noon.

## Attendees

Alcorn, Brenda-CBRFC
Andrews, Jaron-USFWS
Arnold, Tyler-BLM/Green River District
Bair, Woody-Flaming Gorge Resort
Becker, Amanda-USBR
Behery, Susan-USBR
Billerbeck, Rob-NPS
Bonomo, Cherette-ANF-FGRD
Boren, Natalie-Utah Division of Wildlife
Brown, Chris-Wyoming
Brown, Joel-Senator Lee's Office
Callahan, Mike-USBR
Callister, Kathy-USBR
Chew, Scott-Utah Representative

Chitrakar, Suman-WY SEO
Clegg, Kevin-ANF-FGRD
Cowley, Jeff-WY SEO
Cunningham, Colleen-OSE
Deppe, Val-USBR
Detlor, Jordan-UT DWR
Dickinson, T. Wright-unknown
Engelbert, Bryan-UT DWR
Ferrantelli, Charlie-SEO
Foster, Georgia-BLM/Green River District
Fryer, Derek-WAPA
Garrison, Michelle-CWCB
Gaylord, Tim-Holiday River Expeditions
Gibney, Nicki-NPS

Gillman, Darrell-UT
Graf, David-Recovery
Grantz, Katrina-USBR
Harris, Courtney-WAPA
Henriquez, Tony-WAPA
Herrera, Lisa-Green River Wyoming Chamber of Commerce/Visitor Center
Hines, Brian-USBR
Hyder, Saidee-UT
Isaacson, Leondard-Daggett SO
James, Leslie-CREDA
Jones, Katherine-USGS
Jones, Ryan-Utah Department of Agriculture and Food
Jones, Tildon-Recovery
Keith, Robert-Wyoming Game and Fish Department
Knight, Erik-USBR
Kot, Mark-WWDC
Krause, Patrick-unknown
Lawry, Katherine-FWS
LeFevre, Willis-Uintah County Commissioner
Lockwood, Jessica-Wyoming Game and Fish Department
Lundberg, Heidi-Uintah County Utah Emergency Manager
Lunz, Kate-FWS
Miller, Mechelle-Utah Department of Public Safety
Milligan, Brenda-unknown
Mortenson, Valton-Ashely National Forest
Mower, Shane-USBR

Moyer, Amy- Colorado River Water Conservation District
Newkirk, Braxton-Trout Unlimited
Palmer, Jason-City of Green River, WY
Partlow, Mike-UT DWR
Patno, Heather-USBR
Pedro, Will-Dinosaur NM
Perry, Cody-Living Rivers
Pivarnik, Alex-USBR
Rauch, John-Cedar Springs Marina
Reid, Cheyenne-USU Extension
Reid, Roxann-USBR
Rowland, Ryan-USGS
Schelly, Bob-NPS
Sitterud, Lynn-unknown
Smith, Chris-USFWS
Smith, Rod-DOI
Spencer, Emily-unknown
Todea, Nathaniel-USBR
Trammell, Melissa-NPS
Walrath, John-Wyoming Game and Fish Department
Warner, Ed-USBR
Weekley, George-USFWS
Wilhite, Jerry-WAPA
Wilkins, Cody-unknown
Wilkowske, Chris-USGS
Wills, Melissa-Colorado River District
Wilson, Bryan-FS, UT
Wilson, Lisa-USFWS
Wullschleger, John-NPS
Young, Emily-unknown