

Colorado River Storage Project Flaming Gorge Working Group Meeting Minutes April 18, 2019

Participation

This meeting was held Thursday, April 18, 2019, at the Uintah Conference Center in Vernal, Utah. 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 Flaming Gorge 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 (USBR) called the meeting to order at 10:00 a.m. and introduced Nathaniel Todea (USBR) and Beau Uriona (USBR) as the new operators for Flaming Gorge for the Reclamation Upper Colorado Power Office. Dale gave an update on operation recommendations received by Reclamation – compiled responses will be provided by email to the working group. The website will be updated with March meeting minutes to be added soon. All present and on the phone introduced themselves and their affiliations. Dale requested that comments or recommendations for operations be provided in writing for documentation purposes. Presentations were given in the following order: Ashley Nielson, National Weather Service, Colorado Basin River Forecast Center; Tildon Jones, Recovery Program; Dale Hamilton, Reclamation; and Nathaniel Todea and Beau Uriona, Bureau of Reclamation.

Current and Forecasted Hydrology Presentation – Ashley Nielson

Ashley Nielson, Hydrologist, Colorado Basin River Forecast Center

Water year precipitation in the upper Colorado river basin is above average, with exception of the Upper Green River basin. December through March are the most important in snowpack development. December precipitation started slowly in the Upper Green and Yampa basins, but Yampa improved in January, February, and March. The storm track throughout the winter wasn't high enough to hit the Upper Green basin. Most of our storms were subtropical, coming up from the southwest and didn't really get up to the Upper Green and Yampa, they mostly hit areas to the south. February and March temperatures were cool and held onto much of the snow, even low elevation snow. April precipitation has shifted a little, the Upper Green is now seeing more precipitation, more than we saw during the winter. Temperatures have stayed cool. SNOTELs above flaming gorge have been tracking with normal until the past couple weeks – the snow has not begun to melt as normal. SNOTELs above the Yampa are above normal, with some record precipitation in early March. We're not close to 2011 or 2017 in either basin. The CBRFC model shows above normal snow at this point, typically the snow has begun to melt by this time of year, but hasn't this year.

Ashley gave a brief explanation of the Colorado Basin River Forecast Center's forecast plots—model guidance and Official forecasts. Flaming Gorge began with a below average runoff forecast, but since early April, the forecasts have been increasing. The official April mid-month forecast has some uncertainty and is somewhat lower than the model guidance. The Yampa at Deerlodge forecast increased to above normal in March, we'll likely see higher than normal runoff in the Yampa this year. The Colorado Basin River Forecast Center's April-July runoff volume error is typically about 18% at Flaming Gorge. Yampa at Maybell error is about 17%. Primary sources of model and forecast error are uncertainty/variability of future weather, accuracy of model snow states, and demands/diversions assumptions (smaller error than the other two). There are possible soil moisture impacts that will be highly dependent on spring weather and snowmelt pattern. We're not as certain on soil moisture as we are in most years.

The Yampa at Deerlodge most probable mean daily peak is estimated to be 14,000 cfs this year—we're expecting a bigger peak than both last year and average. We'll have a warming and storming weather pattern for a while. No indication of prolonged cool wet weather, we'll start seeing warm temperatures and low elevation snow will be melting off, stream flows will be picking up.

There was a question of what flows we'll likely see at the City of Green River, Utah. Ashley responded that 33,000 cfs is likely the worst case for this year.

Green River Research and Endangered Fish – Tildon Jones

Tildon Jones, USFWS, Upper Colorado River Endangered Fish Recovery Program

Tildon provided an overview of Recovery Program Basics, including an overview of endangered fish found only in the Colorado river basin. Program established in 1988, with several partners. The goal is to recover the fish while water development proceeds and provide ESA compliance. There are over 2000 water projects in Colorado Utah and Wyoming. Recovery elements include habitat development, habitat flow management, stocking endangered fish, managing nonnative fish, and research and monitoring. Flaming Gorge is one of the places we have flow agreements.

The 2019 flow request for spring operations includes larval-triggered spring operations (and not this year, but in the future, there will likely be requests to conduct flow spike experiments to disadvantage smallmouth bass). Rising flows clean substrate, transport sand, and cue migration. Flow peaks are a big driver for the fish lifecycle/spawning. Razorback Suckers spawn near the peak, hatch a little later, then larvae disperse. Larvae were moving as the river flow is dropping. Peak reservoir releases are timed to when the larvae are in the river to help them access the desired flood plain habitat. Would like the gather data to analyze above and below 18,600 cfs flows. Typically, 80 percent of larvae first capture dates are from mid-May to early-June. The request to go to full bypass release is not made in all study years. USFWS will propose that Razorback Sucker be reclassified as a threatened species, there is a successful population in Lake Mead.

The hatchery program ramped up in the mid-2000s. The success of the Razorback population in Lake Mead is likely due to the muddy inflow that provides cover for the fish.

Colorado Pikeminnow adult populations have been declining, likely due to poor survival rates of the young. Summer baseflow requests are made with the intent to improve survival of age-0 Colorado Pikeminnow. There are many non-native fish in the Green River. There is intent in the future to propose early summer flow spikes to negatively impact Smallmouth bass. Smallmouth bass larvae are susceptible to spikes in flow and turbidity. In the past, when the flow spike happened, there were few to no year-0

smallmouth bass found. Bass spawn in low flow warm water. Future requests will likely involve three items—a peak for Razorback suckers, a second smaller peak for disadvantaging Smallmouth bass, and summer base flows for Colorado Pikeminnow.

Flow targets below 18,600 cfs have generally been met, flow targets above 18,600 cfs haven't been hit as well.

A request was made to make a presentation to the group to explain what is being looked at and why with regards to vegetation and river conditions. There is also interest in seeing a presentation about fish movement.

Working Group Proposals and Responses – Dale Hamilton

Dale Hamilton, Division Manager, U. S. Bureau of Reclamation

Dale reviewed some of the recent changes to the process of providing feedback on Flaming Gorge operations, including the addition of the March meeting. He mentioned that the response to proposal from T. Wright Dickinson and others has been prepared and will be provided to the group by email and added to the website. Dale then asked if there are additional proposals.

Flaming Gorge Operations – Nathaniel Todea, Beau Uriona, Dale Hamilton

Nathaniel Todea and Beau Uriona, Hydraulic Engineers, U. S. Bureau of Reclamation

Dale Hamilton, Division Manager, U. S. Bureau of Reclamation

Background was given on the 1956 Colorado River Storage Project Act, and Green River reaches 1, 2, and 3. Last year (2018) was a relatively dry year and releases, as requested, went to full powerplant release. Currently, snowpack is near median but based on historical patterns could vary from here. If forecasts were steady throughout the year, operations would be simple, but changes in weather lead to changes in forecast that lead to a change in reservoir operations. A quick recap was given of snow, and runoff, and peak runoff forecasts. Information was provided on the Flaming Gorge Technical Working Group Proposal – recovery request to Reclamation (spring peak and base flow). A request was made that a reach 1 column be added to tables if possible to indicate what is likely to happen in reach 1. It was mentioned that what happens in reach 1 depends on what happens with Yampa flows. We'll likely be in the average hydrologic condition and average flow regime. It is still possible that we could get to the moderately wet hydrologic condition and regime for flow and temperature.

Current and future operations consider requests/recommendations from the Recovery Program FWS and Flaming Gorge Technical Working Group – WAPA, USFWS, USBR; and input from others including the Flaming Gorge Working Group. Reclamation takes recommendations and comes up with a plan. The process has been formalized into a plan which is signed by Reclamation leadership (Kathleen Callister – RMD, Wayne Pullan – PAO, Talmadge Oxford – Power, approved by Brent Rhees – Regional Director). The four-step process was described – a Recovery Program request is sent to Reclamation by Feb 28, FGTWG sends proposal to FGWS by mid-March, FGWG convenes in mid-April to finalize comments/input, Reclamation Decision and Operation Plan completed in early-May.

Flaming Gorge Working Group Comments

Concerns were raised about long-duration full bypass releases at Flaming Gorge. Long-duration, high flows would lead to additional bank erosion and potential loss of irrigation pivot. Concerns were raised about flooding—flooding is one of the stated purposes of the dam—and the frustration that operations for fish recovery seem to trump flood control. Impacts of high flows in reach 1 need to be considered –

erosion of stream banks, negative impacts to fishing, etc. It was expressed that concerns and recommendations from the working group won't change from year to year. The concerns have been the same for years. A request was made to provide as much notice as possible of flow changes. Flow changes can have significant impact on fishing conditions and it would be nice to have enough notice to give customers notice. Also, try to avoid the weekends (Friday included). There's interest in hearing about how the Green River Block and any additional water use might come in to play as far as impacts to high releases/flows.

Immediate Updates – directive on Friday 4/19 – 1600 cfs, electro fishing – April 22-23, sustained flows for monitoring periods, then back to 1600 cfs.

Discussion and Next Meeting

The next meeting of the Flaming Gorge Work Group will be held on Thursday, August 15, 2019 in Green River (tentatively).

Attendees

(Apologies for any misspellings or errors.)

Name	Representing
Curtis Rozman	Green River CD
Roger Barton	UDAF Green River CD
Carolyn Phippen	U.S. Senator Mike Lee
Scott Chew	Utah Representative Scott Chew
Jack Lytle	Self
Ross Watkins	Uintah County
Mike Silliman	Green River City
Kathy Ryan	City of Green River
Brad Horrock	Uintah County Commissioner
Duane Moss	Ute Tribe
Rob Billerbeck	National Park Service
Paul Scolari	National Park Service – Dinosaur
Lisa Baldwin	National Park Service – Dinosaur
Ashley Nielson	NWS - Colorado Basin River Forecast Center
Aldis Strautins	National Weather Service
George Weekley	U.S. Fish & Wildlife Service
Tildon Jones	U.S. Fish & Wildlife Service
Chrystal Dean	Western Area Power Administration
John Hunting	Uintah Water Conservancy District
Dennis Sorensen	Utah Division of Water Rights
Ryan Mosley	Utah Division of Wildlife Resources
Matt Breen	Utah Division of Wildlife Resources
Darrell Gillman	Utah Division of Agriculture and Food
Kirk Robbins	Uintah MAD
Dean Bell	Uintah MAD
Jordan Nielson	Trout Unlimited
Woody Bair	Flaming Gorge Resort
Steve Habovstak	Trout Creek Flies
Tim Gaylord	Holiday River Expeditions

Jen Callantine	Dinosaur River Expeditions
Cindy Scott	Farmer
T. Wright Dickinson	Vermillion Ranch
Paul Davidson	Reclamation
Dale Hamilton	Reclamation
Beau Urionia	Reclamation
Nathaniel Todea	Reclamation
Rick Baxter	Reclamation
Peter Crookston	Reclamation
Preston Feltrop	Reclamation
Chris Curtis	Reclamation
Keith Babcock	Reclamation
Scott Elliott	Reclamation
Gary Henrie	Reclamation
Chris Watt	Reclamation
Richie Burgula	Reclamation
Ryan Christianson	Reclamation
Webinar Attendees	
Brian Anderson	Recovery Program
Chris Keleher	Utah Division of Natural Resources
Jason Palmer	City of Green River, Wyoming
Cathleen Callister	Reclamation
Jed Parker	Reclamation