Colorado River Storage Project
Flaming Gorge Working Group
Meeting Minutes
August 25, 2022

Participation

This meeting was held Thursday, August 25, 2022, from 10:00 am to 12:45 pm. The meeting was held 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 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 (U. S. 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.

Green and Yampa Rivers: 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) in the Upper Green basin and near (100% of average) in the Yampa River basin.

Snowpack was near normal in mid-January then flat-lined through February and briefly peaked at 85% of normal in the Upper Green basin and 90% of normal in the Yampa River basin.

Observed April through July runoff into Flaming Gorge was 553,000 acre-feet (57% of average, 56% of median) compared to 833,000 acre-feet (86% of average) in 2020 and 363,000 acre-feet (38% of average) in 2021. Observed April through July runoff in the Yampa at Deerlodge was 910,000 acre-feet (76% of average, 82% of median) compared to 1,124,000 acre-feet (94% of average) in 2020 and 357,000 acre-feet (30% of average) in 2021.

The Yampa at Deerlodge stream flow peaked at 11,300 cfs on May 20, 2022, compared to the average of 12,800 cfs and the 2021 peak of 4,930 cfs which was the 2nd lowest peak on record.

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 the difference between the ASO and CBRFC-modeled snow, Brenda stated that the ASO was definitely higher; the ASO data was not used in the model but did confirm

CBRFC decisions to increase model snow. Brenda also stated that forecasts do indicate a third straight La Nina year this year.

Recovery Program 2022 Green River Flow Request: Implementation and Results

Tildon Jones, U. S. Fish & Wildlife Service (FWS), Upper Colorado River Endangered Fish Recovery Program (Recovery Program)

There are four listed fish (3 endangered, 1 threatened) in the Colorado River that are all native to the basin and found nowhere else: Colorado pikeminnow (*Ptychochelius lucius*, endangered), Razorback sucker (*Xyrauchen texanus*, endangered), Bonytail (*Gila elegans*, endangered), and Humpback chub (*Gila cypha*, threatened). They all live up to 40+ years and the Colorado pikeminnow and the Razorback sucker are highly migratory.

The Recovery Program was established in 1988 among several partners with the goal to recover the endangered fish while water development proceeds by balancing Endangered Species Act compliance with the Law of the River. The Recovery Program provides Endangered Species Act compliance in a holistic way instead of individual entities being required to manage recovery efforts in smaller areas; the Program covers over 2,000 projects and over 2.8 million acre-feet of water used in Colorado, Utah, and Wyoming. There are five recovery elements: Habitat/Flow Management, Habitat Development, Stocking Endangered Fish, Managing Nonnative Fish, and Research and Monitoring. Instream flow management occurs throughout the Upper Colorado River Basin—Flaming Gorge is one of six points of flow control in the basin and is an important area as it impacts 300 to 400 miles of habitat.

The Recovery Program's 2022 Flow Request priorities for dry to average below median conditions were: 1) conduct a flow spike experiment to disadvantage smallmouth bass reproduction in Reaches 1 and 2, 2) exercise flexibility in the 2006 Record of Decision (ROD) to achieve preferred summer base flow range at the correct time for Colorado pikeminnow juveniles, and 3) Larval-triggered spring peak flows for razorback sucker nursery habitat.

Larvae were captured May 21 and the Larval Trigger flows were accomplished May 25-June 4 as the dam released full bypass for 7 days and flow at Jensen exceeded 14,000 cfs for 5 days (max 17,000 cfs). The spring release connected 5 wetlands (4 managed: Steward Lake, Stirrup, Johnson Bottom, Old Charley; and 1 non-managed: Above Brennan).

The smallmouth bass flow spike occurred June 21-24 as the dam released full powerplant for 3 days with the SWS lowered to decrease water temperature about 3 degrees.

Base flows for the Colorado pikeminnow targeted 2,100 cfs at Jensen.

Monitoring is ongoing and data will continue to be collected to assess flow experiment effects.

In response to a question, Tildon stated that the wetlands were not filled completely but did see 5 or 5.5 out of about 7.5 feet of depth. In response to a question, Tildon clarified that the 2022 flow request had three ranked priorities pending water availability and Reclamation determines water availability and meets priorities as possible; Reclamation would not have only met the smallmouth bass flow spike request if not for the additional DRO releases. A comment was made that bypass releases and lost power generation are having a direct impact on CRSP power customers and the FGTWG should consider the issue in the future more than it did this year. A comment was made that while we are considering making additional DRO releases, it is also important to consider recovery at Flaming Gorge as well should conditions warrant.

Flaming Gorge Hydrology & Operations

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

The 1956 Colorado River Storage Project Act (CRSPA) authorized construction of Flaming Gorge Dam and other projects for: allowing Upper Basin States to utilize their 1922 Colorado River Compact apportionments, regulating Colorado River (and main tributaries) flow, storing water for beneficial consumptive use, reclamation of arid and semiarid lands, flood control, and hydroelectric power generation.

For operations, the Green River below Flaming Gorge is divided into three reaches: Reach 1 from Flaming Gorge Dam to the Yampa River confluence, Reach 2 from the Yampa River confluence to the White River confluence, and Reach 3 from the White River confluence to the confluence with the Colorado River.

The 2022 Flaming Gorge Observed April-July inflow put it in the Moderately Dry hydrologic classification. The Yampa (Maybell plus Lilly) observed April-July inflow was in the Moderately Dry hydrologic condition.

The 2022-2023 operational plan increased Colorado pikeminnow base flows by a hydrologic condition from Moderately Dry (1,800-2,000 cfs) to Average (2,000-2,600 cfs) to meet drought release targets.

500,000 acre-feet of Drought Operations Response releases will be made by the end of April 2023.

Looking forward, there will be a fish monitoring (tailwater assessment) September 6-7, and base flow releases are anticipated to be 1,800 cfs through September, 1,600 cfs in October, and 1,700 cfs from November through February with March through April transition period flows of about 1,500 cfs.

In response to a question as to whether Reclamation has determined what flexibility it has for reducing releases under DROA recovery conditions (only Hydrologic Condition steps up/down or reduced to minimum power releases), Dale stated that the flexibility has not been determined. In response to a question as to balance of inflows and releases this year, it was clarified that the 500,000 acre-feet release is the additional water released for Drought Response Operations and the reservoir will see a net decrease in storage. A comment was made that there is interest in seeing the Selective Withdrawal Structure (SWS) repaired to allow for more control of release water temperatures. There were a couple comments expressed that the lower than initially planned releases from Flaming Gorge in September are a concern for power generation and a second look would be appreciated. There was some confusion about release volumes and timing that will be discussed further off-line after the meeting.

Flaming Gorge Drought Operations

Dale Hamilton, Division Manager, U. S. Bureau of Reclamation
Gary Henrie, U.S. Bureau of 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). Gary Henrie provided an overview of survey results and information to be provided in a survey report. 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 of what future releases may be, Dale stated that potential future Drought Response Operations release volumes are uncertain (the Reclamation Commissioner has called for 2-4 million acre-feet of additional conservation). DRO releases but could be in the range of 500,000 acre-feet but are pending conversations with the DROA partners. No DRO releases but no recovery releases would result in releases aligned with hydrologic condition and roughly no net increase or decrease in storage. DRO recovery would require Reclamation Regional directors of the Upper and Lower Colorado Basins to agree to recover upstream volume and input would be sought from this group to determine releases that would likely be lower than those driven by hydrologic condition.

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, March 16, 2023, at 10:00 am in-person and virtual (tentative)
- Thursday, April 20, 2023, at 10:00 am in-person and virtual (tentative)

Attendees

Woody Bair	Flaming Gorge Resort	John Rauch	Cedar Springs Marina
Hattie Johnson	American Whitewater	Jerry Taylor	Lucerne Valley Marina
TJ Valdez	BMF Outfitters	Brant Williams	Lucerne Valley Marina
Tony Valdez	Buckboard Marina at FG	Jessica Williams	Lucerne Valley Marina
Shane DuBois	Recon Angling	Simone Griffin	BlueRibbon Coalition

T. Wright Dickinson	Vermillion Ranch
Grizz Oleen	Caerus Oil and Gas LLC
Ted Rampton	
Jen Dumas	Jicarilla Apache Nation
Christy Leonard	Utah State University
Cheyenne Reid	Utah State University
Jack Lytle	Daggett Co., CRA Utah Cent.
Kirk Robbins	Uintah County MAD
Jason Palmer	City of Green River
Lisa Herrera	Green River Chamber
Mark Kot	Rock Springs WWDC
Sarah Bargsten	Cheyenne Brd. of Pub. Util.
Amy Haas	Colorado River Auth. of Utah
Jared Hansen	Cent. Utah Water Cons Dist
Bart Leeflang	Cent. Utah Water Cons Dist
Bryan Seppie	Joint Powers Water Board
Darrell Gillman	Utah Dept. Ag. And Food
Ryan Jones	Utah Dept. Ag. And Food
Chris Keleher	Utah Div. Wildlife Resrc.
Matt Breen	Utah Div. Wildlife Resrc.
Ryan Mosley	Utah Div. Wildlife Resrc.
Carly Sands	Utah Dept. Emerg. Man.
Robert Keith	Wyo. Game and Fish Dept.
Chris Brown	State of Wyoming
Jeff Cowley	Wyo. State Engineer's Office
Leslie James	Col. Riv. Energy Dist Assoc
Michelle Brown-Yazzie	Navajo Nation
Cora Tso	Navajo Nation DOJ Water
Kenneth Asay	Bureau of Indian Affairs
George Weekley	U. S. Fish & Wildlife Service
Tildon Jones	U. S. Fish & Wildlife Service
Kevin McAbee	U. S. Fish & Wildlife Service
Julie Stahli	U. S. Fish & Wildlife Service
Rob Bundy	U. S. Fish & Wildlife Service
Danielle Fujii-Doe	U. S. Fish & Wildlife Service
Derek Fryer	Western Area Power Admin.
Tony Henriquez	Western Area Power Admin.
Brenda Alcorn	Col. Basin Riv. Forecast Ctr.
Aldis Strautins	Nat. Weather Service
Bob Schelly	Nat. Park Service, Dino. NM
Will Pedro	Nat. Park Service, Dino. NM
Jo Foster	Bureau of Land Management
Kevin Clegg	U. S. Forest Service
Stephanie Anderson	U. S. Forest Service
Coleson Kastelic	U. S. Forest Service
Brett Heath	U. S. Forest Service
Ron Griffiths	U. S. Geological Survey
Becki Bryant	U. S. Bureau of Reclamation
Chris Garcia	U. S. Bureau of Reclamation
Dale Hamilton	U. S. Bureau of Reclamation
Erik Knight	U. S. Bureau of Reclamation
Gary Henrie	U. S. Bureau of Reclamation
Jared Baxter	U. S. Bureau of Reclamation
Kasey Frandsen	U. S. Bureau of Reclamation
Nanette Gale	U. S. Bureau of Reclamation
Nathaniel Todea	U. S. Bureau of Reclamation
Paul Christensen	U. S. Bureau of Reclamation
Rick Baxter	U. S. Bureau of Reclamation
Scott Elliott	U. S. Bureau of Reclamation