Colorado River Storage Project Flaming Gorge Working Group Meeting Minutes April 19, 2022

Participation

This meeting was held Thursday, April 19, 2022, from 9:00 am to 12:30 pm. 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 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 at 9:00 a.m., discussed virtual meeting logistics, and introduced the meeting agenda and presenters: Brenda Alcorn, Tildon Jones, and himself. To avoid audio feedback, attendees were asked to introduce themselves via the chat function in the virtual meeting (attendees who identified themselves or were identified by their meeting attendee name were included in the list of attendees below).

Green and Yampa Rivers: Current Conditions and Forecasts

Brenda Alcorn, Senior Hydrologist, National Weather Service (NWS), Colorado Basin River Forecast Center (CBRFC)

Brenda presented information on 2022 weather, snow, soil moisture, and runoff forecasts, as well as upcoming weather.

Upper Green River basin water year precipitation thru March is near average overall (90% of average), due to above average October totals. November thru March precipitation totals are below average (75% of average). Yampa River basin water year precipitation thru March has fared better than the Upper Green since October (100%) with November thru March precipitation near average (90%). Average high temperatures were near normal when averaged over the entire month, with two short periods of much above normal temperatures (March 1-3 and March 26-29) which did result in a little more snowmelt than usual at the end of the month. For the first half of April, the Upper Green has seen great precipitation and the Yampa has been a little behind normal; temperatures have been slightly below normal.

Snowpack has increased in both the Upper Green and Yampa since April 1 but is still below the daily median as well as the seasonal peak value. It is important to note that snow water equivalent vs runoff is not necessarily a one-to-one relationship; spring weather and soil moisture will play a role in final runoff volumes. Model snow (CBRFC model), which includes areas above and below SNOTEL sites and indicates upper elevation snow (which typically peaks in early May) is currently much below normal. On average, over half the unregulated runoff volume for Flaming Gorge comes from the Wind River Range which is currently much below median snowpack levels.

Modeled soil moisture is generally much better than last year, but areas are still below to much below normal.

Runoff forecasts decreased from January until March but have held relatively steady since March 1st. Current runoff forecast guidance for Flaming Gorge is 570,000 acre-feet (59% of average, 58% of median) with the potential to increase to ~91% of average with wet future conditions or decrease to ~41% of average with dry future conditions. Current runoff guidance for Yampa at Deerlodge is 920,000 acre-feet (77% of average) with the potential to increase (102% of average) or decrease (64% of average) depending on future conditions. On average, Flaming Gorge and Yampa River (Maybell) April 1 runoff volume forecasts contain +/-24% and +/-20% error, respectively, with error decreasing as the season progresses. Using current snow, soil, and streamflow conditions and 30 future weather scenarios (based on 1991-2020 historical data) peak streamflow forecasts are generated; Yampa at Deerlodge is currently forecasted to peak at ~11,300 cfs, and probabilistic model guidance indicates mid- to late-May could be the timing of the peak, but ultimately the timing will be determined by this year's weather. Errors in volume and peak runoff forecasts are primarily due to future weather (uncertainty, extreme events), model snow states (verified as possible by satellite images and SNOTEL sites, new technologies are being investigated), and demand/diversion assumptions (for peak flows).

Weather is forecasted to be near to above normal through Friday with showers this weekend and temperatures rebounding early next week. The 8 to 14-day outlook indicates increased chances for below normal precipitation and above normal temperatures.

In summary, Upper Green snow conditions are below normal, especially in important runoff-producing areas of the Wind Rivers. Yampa snow conditions are below normal. Runoff volumes are expected to be below to much below normal. Peak flows are expected to be below normal. Weather forecasts indicate chances for additional precipitation followed by warm and dry in the 8- to 14-day period. There is still a lot of uncertainty in forecasts; spring weather can have a significant impact.

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

Responding to a question about the 11,300 cfs peak, it was clarified that the peak is for the Yampa River near Deerlodge upstream of the confluence with the Green.

Recovery Program 2022 Green River Flow Request

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

Tildon presented information on the listed fish and Recovery Program, smallmouth bass flows, summer base flows, spring operations, and some preliminary 2021 flow spike results.

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. Different parts of the runoff hydrograph provide different benefits: substrate cleansing, sand transport, and migration cues as flows rise; floodplain access and channel maintenance as flows peak; spawning and emergence as flows reside; and early growth and survival as flows are low and temperatures are warmer.

The Recovery Program's 2022 Flow Request considered all hydrologic conditions, but given the current hydrology, priorities for dry to average below median conditions were highlighted. Priorities for Dry to Average below median are: 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.

The flow spike experiment is designed to negatively impact smallmouth bass—an invasive species that affects native fish. Bass show higher spawning success in dry years (like this year) and have reached high numbers in some reaches. The hope is that the flow spike can have river-wide benefit. Smallmouth bass build nests in calm, warm water—timing is closely linked to temperature and flow—and males guard the fry on the nests. Bass eggs and larvae are susceptible to increased river currents due to their nests being on top of the river substrate, their low swimming ability, and their reliance on being guarded/protected. Higher flows connect channels and increase water velocity and hopefully sweep the eggs out of the nests, and cooler water helps disrupt spawning behavior. The flow spike has impacts mostly in Dinosaur National Monument and downstream. The spike is likely to occur in mid- to late-June, with a three-day duration at powerplant capacity (~4600 cfs), similar to the flow spike that occurred in 2021. There will be extra monitoring to evaluate the response of both native and nonnative fish. The water temperatures will be within previously observed changes and are not expected to negatively affect native fish or insects. There will be creel surveys to assess potential fishery changes and vegetation monitoring.

Base flows are requested with the goal to improve survival and recruitment of young Colorado pikeminnow by reaching base flows by the time pikeminnow emerge (average July 3). Improved numbers of juveniles have been observed when mean August–September flows are between 1,700 and 3,000 cfs at Jensen (Reach 2). Historically, Colorado pikeminnow larvae start drifting out of the Yampa River between mid-June and mid- to late-July (average July 3). The Flaming Gorge Technical Working Group (FGTWG) will work with Reclamation to provide Reach 2 base flows in the preferred range when larvae are present through September. The flow request is for higher base flows than would be requested under the ROD /2000 Flow and Temperature Recommendations (Muth et al.). Dam releases would be dependent on Yampa flows and available water.

Spring peak flow releases are part of normal operations (per the ROD). Spring releases are being requested to, if possible, be timed to benefit razorback sucker larvae (per the Larval Trigger Study Plan-LTSP) with flows and duration to connect wetlands and carry larvae into those habitats, with timing and magnitude dependent on Yampa flows.

Should hydrologic conditions turn dramatically wetter, the Recovery Program provided priorities for Average above median or wetter hydrologic conditions. Priorities for Average or wetter conditions are to

provide: 1) spring release, 2) revised base flows for Colorado pikeminnow, and 3) smallmouth bass flow spike.

Preliminary results of the 2022 flow spike experiment show that drift netting confirmed that bass fry were displaced. 2021 hydrologic conditions were similar to 2012 and 2013—high bass reproduction/catch-rate years—but the actual smallmouth bass catch rate was much lower. It was anticipated that timing the flow spike near the peak of bass hatching would sweep off recently hatched bass, sweep off soon to hatch eggs, and even discourage or delay spawning until later when survival rates are lower. Lodore and Whirlpool distributions of smallmouth hatching dates showed reductions similar to expected/anticipated patterns. The Lodore flow spike timing was about right, coming in the middle of the hatching distribution. The Whirlpool flow spike timing was later due to earlier bass hatching, which will be accounted for in the next flow spike. The effects on bass after the flow spike may be due to extended cooler temperatures.

In response to a question about how many years it would take to have a significant impact on the bass population, Tildon mentioned that that's still an unknown. It is believed that bass don't live long. Kevin Bestgen added that it is important to note that last year was dry which would typically have been a huge spawning year for bass, but the experiment appears to have cut the count of successful bass spawning down to a roughly average year.

Flaming Gorge Hydrology & Forecasted Operations

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

Dale presented background information on Flaming Gorge operations and the 2022 forecasted hydrology, the Recovery Program request and FGTWG proposal, and operations plan.

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 water supply conditions as currently forecasted, put Flaming Gorge near the lower end of the Moderately Dry hydrologic classification. The Yampa is also in the Moderately Dry hydrologic condition. Forecasts indicate that the Yampa at Deerlodge is likely to exceed 8,000 cfs for \sim 14 days and is likely to exceed 10,000 cfs for \sim 5 days.

The (ROD) calls for adaptive management of operations to maintain or improve conditions for the four listed fish species while minimizing negative effects to the authorized purposes of the dam. The adaptive management (four-step) process includes: 1) the Recovery Program requesting a flow regime, 2) the FGTWG proposing operations or flows to benefit the endangered fish, 3) the Flaming Gorge Working Group (this group) providing input and comments on the proposed operations, and 4) Reclamation finalizing the Flaming Gorge Operations Plan. Generally, operations consist of spring releases and ramp down rates timed with the Yampa, base flow ranges, summer temperature targets, release changes, and river stage change limits at the Jensen Gage.

The 2022 Recovery Program request and FGTWG proposal consisted of three scenarios based on hydrologic conditions: one for dry, moderately dry, or average below median conditions; one for average above median conditions; and one for moderately wet conditions. Our current hydrology indicates we'll most likely have moderately dry conditions this year which would align with the dry, moderately dry, and average below median condition Recovery Program request priorities for a 1) smallmouth bass flow spike, 2) Colorado pikeminnow summer base flows, 3) LTSP spring releases. Spring releases for moderately dry hydrologic conditions would suggest flow ranges at the Jensen Gage (Reach 2) be between 8,300 and 14,000 cfs for between 7 and 14 or greater than 14 days, which would activate the Stewart Lake, Above Brennan, and Old Charley Wash wetlands. The smallmouth bass flow spike would be a one-day ramp up from base flows, a three-day hold at full powerplant capacity (~4,600 cfs), and a ramp down back to base flows at a rate of 2,000 cfs per day. Dale asked the group about recreation on the Juneteenth holiday and if the flow spike should be adjusted for the holiday. Based on comments, it doesn't appear that the holiday should impact the timing of the smallmouth bass Flow Spike experiment. The Colorado pikeminnow summer base flows for moderately dry hydrologic conditions, per the proposed (LaGory et al.), would be between 1,800 and 2,000 cfs in reach 2. Spring peak release and summer Colorado pikeminnow base flow ranges are intended to correlate with each other.

The Flaming Gorge Operation Plan for May 2022 through April 2023 will be approved and posted online in early May. Graphs showing the two release scenarios being considered ("No Drought Response Operation" and "Drought Response Operations (DRO) Plan") were presented. For Moderately Dry hydrologic conditions, the blue curve "No Drought Response Operation", due to the current reservoir water surface elevation of 6019 feet being below the desired 6025-6027 feet range, did not fulfill all priorities, but did fulfill the LTSP spring release and smallmouth bass spike flow; the orange curve "DRO Plan" includes an LTSP spring release at full bypass release for 7 days, the same smallmouth bass release, and elevated Colorado pikeminnow baseflows.

In response to a request for clarification that the LTSP is the only driver for the bypass release, Dale stated that it is the volume proposed for release for Lake Powell drought response that is driving increased releases that are being shaped by the LTSP.

In response to a question about experimental priorities under the no drought operation, Dale stated that under the no drought response operation scenario the Colorado pikeminnow baseflow experiment (priority 3) would not be implemented in favor of storing more water in Flaming Gorge. Priorities 1 and 2 would be implemented.

In response to a question as to whether scenarios to move Drought Response Operation Agreement (DROA) water without using the bypass have been considered, Dale stated that Reclamation has considered a myriad of scenarios. A request was made by Colorado River Energy Distributors Association (CREDA) and Western Area Power Administration (WAPA) to not use the bypass due to the use of the bypass impacting power production and revenue. WAPA commented that the version of the DRO Plan they previously commented on had a spring peak release at powerplant capacity for two weeks, which they would have much more support for than a one-week release at bypass capacity and they would like more discussion on the biological imperative of the higher release in a moderately dry year. The benefit of keeping the release at powerplant capacity as opposed to bypass would be substantial. Several comments on biological benefits were shared including there being a number of wetlands that likely couldn't be used at the lower peak, National Park Service (NPS) believes using the bypass for this water is consistent with the ROD, the GREAT, and the recovery program request for this year and would provide benefits of channel width maintenance and native vegetation goals, as well as providing some improvements to fish habitat in floodplains and backwaters. NPS had previously commented that a

portion of the DRO additional water be released in a spring peak, however a later/prolonged peak is likely to push the smallmouth bass flow spike into the Colorado pikeminnow spawning period, so NPS supports leaving use of the bypass on the table. FWS expressed concerns with extending the spring peak flows and staying at powerplant capacity and potentially delaying the smallmouth bass spawning (flow spike) and pikeminnow spawning. Flow and temperature are larvae triggers for pikeminnow spawning and extending the spring peak releases may delay spawning to the detriment of the species.

In response to a question as to when we would know if the DRO Plan goes into effect, Dale stated that the hope is to have the decision finalized by the first part of May.

In response to a question about the duration of the proposed spring peak, Dale stated that it is a 7-day release at bypass capacity.

The release plans for Dry and Average below median were also briefly presented.

Moving forward, we'll continue to monitor CBRFC forecasts. Current average daily releases are at 850 cfs to achieve the target of less than 6027 feet pool elevation by May 1st. The state is conducting a fishery assessment (electro fishing) April 25-26. The Flaming Gorge Operation Plan will be finalized in early May after considering any comments from this meeting.

Flaming Gorge Drought Operations

Dale Hamilton, Division Manager, U. S. Bureau of Reclamation Bart Leeflang, Central Utah Water Conservancy District (working with the State of Utah on DROA)

Dale presented information on the status of (CRSP) reservoirs, background of the DROA, the DRO Plan Development, Flaming Gorge drought response scenario options and modeling, Flaming Gorge resource potential impacts, and the DRO Plan schedule.

The Colorado Basin is experiencing its 22^{nd} year of drought. It has been the driest 22-year period on record. The combined storage of Lake Powell and Lake Mead has dropped from 95% full in 1999 to 28% full in 2022. Lake Mead elevations have decreased from 95% full in 1999 to 32% of capacity in 2022 (April 12). Lake Powell elevation has dropped from 95% full in 1999 and went below elevation 3525 feet on March 14, 2022 (the elevation that the Drought Response Operations Agreement was intended to protect) and is at 24% of capacity.

The Lake Powell elevation projections from the April 24-month study show Lake Powell dipping below 3525 feet briefly this year and again next year with minimum probable projections approaching and crossing the minimum power pool (3490 feet) beginning in 2024. The Flaming Gorge water surface elevation hit 6018.75 feet on April 12, 2022. Dale shared aerial images of Lake Powell showing the decreasing reservoir surface area near the Bullfrog Marina and stated that as he understands it, the decision on whether the Bullfrog Marina is open or not is currently a day-by-day decision. If Lake Powell falls below elevation 3490 feet, power generation would no longer be possible. Lake Powell provides power to 5-million customers in seven states (Arizona, Colorado, Nebraska, Nevada, New Mexico, Utah, and Wyoming) as well as several Native American Tribes. And Glen Canyon was not designed to rely solely on the outlet works bypass pipes for long durations. They have less flexibility for maintenance and could potentially limit the ability to release the full 1922 Colorado River Compact allotment to the Lower Basin. The Lower Basin also has interest in maintaining Lake Powell above elevation 3490 feet.

The DROA is an element of the Drought Contingency Plan (signed into law in May 2019) to address water elevations in key Colorado River reservoirs. The purpose is to minimize the risk of Lake Powell falling below the target elevation of 3525 feet (35 feet above the minimum power pool elevation of 3490 feet) and thereby fulfill compact obligations, maintain hydropower production, and minimize adverse effects to resources and infrastructure. The Agreement directed Upper Basin States (Wyoming, Utah, Colorado, and New Mexico) and Reclamation to develop a DRO Plan. Dale highlighted two significant sections of the DROA: 1) section II.A.3.c ensures participation from all CRSPA initial units uniformly, including operational adjustments at Lake Powell (Reclamation held back 350,000 acre-feet in Lake Powell to be released later); and 2) section II.A.3.d states that releases "may not be recommended if they are ultimately determined to be futile to achieve the goals or intent of the DROA" (i.e., maintaining power generation at Lake Powell).

Since July 2021 Reclamation and the Upper Basin states have been developing a DRO Plan. The Draft Plan has two parts: 1) the Plan Framework which provides general, static guidance including authorities and outlines what information should be included in Plan Attachments, and 2) the Plan Attachments, which are specific to operations for a specific year, are developed each spring with adjustments as needed (similar to the development of the Flaming Gorge Operation Plan) based on hydrologic conditions. The Draft DRO Plan Framework can be found at https://www.usbr.gov/dcp/droa.html. The Plan Attachments for this (2022) year are still in development. The DRO Plan outlines criteria for accounting and recovery. 125,000 acre-feet of additional releases were made from Flaming Gorge last year which resulted in a 3-to-4-foot drop in Flaming Gorge. The Plan indicates two alternatives for storage recovery: 1) cumulative volume recovery, where release volumes are tracked and recovered via decreased releases in future years, and 2) initial unit operating target elevation. For Flaming Gorge, if the May 1st target elevation of 6023-6027 is hit, the storage would be considered recovered.

Bart Leeflang presented information from a modeling effort that Utah recently undertook. Utah has worked to perform modeling analysis of the potential range of releases necessary to protect critical infrastructure at Lake Powell. The model runs were based on CBRFC's 1991-2020 runoff forecast traces and an additional most probable hydrology trace. Note that the results are limited to the range of conditions experienced between 1991 and 2020. Model results were displayed as a figure showing the statistical Lake Powell elevation range from March 2022 thru March 2024, with uncertainty increasing the further the forecast extends into the future. Based on the analysis, a volume of 1 million-acre-feet would be necessary to be 100% confident of holding Lake Powell above 3490 feet through May 2023, and doing nothing, there would be 70% confident that Lake Powell would not drop below 3490 feet through May 2023. DROA parties have evaluated a range of DROA scenarios to improve confidence of maintaining Lake Powell at or above elevation 3490 feet during the January to May 2023 period including a release of 500 thousand-acre-feet (kaf) which would decrease the likelihood of going below 3490 feet in March 2023 from ~30% to ~20% (a 10% improvement in confidence).

In response to a question of whether the 500 kaf mentioned in the modeling effort includes the 350 kaf already held back, it was stated that it does not, the 350 kaf is a separate number.

Dale noted that there are two methods to address decreases in Lake Powell storage: 1) the DRO Plan (500 kaf proposed release from Flaming Gorge), and 2) Lake Powell annual release reduction under the interim guidelines cooperative action (outside of the DROA, Department of Interior (DOI) is proposing reducing the 2022 annual release volume from 7.48 million-acre-feet by 480 kaf to 7.0 million-acre-feet, with the future release of the 480 kaf to be determined). The combination of these two methods reduces the probability of Lake Powell falling below 3490 feet to nearly zero percent probability.

A myriad of DROA release scenarios have been considered with the 500 kaf release from Flaming Gorge being the most likely. Without the proposed DRO releases, the Flaming Gorge elevation would be near 6025 feet by May 2023. With the proposed DRO releases, the Flaming Gorge elevation would be near 6010 feet by May 2023.

Dale shared information on the impacts of Flaming Gorge going down to elevation 6010 feet. The Environmental Impact Statement contained low-end "facility usability thresholds" which were initially thought to be related to physical boat ramp bottom elevations. It is believed that boat ramp bottom elevations provided by the Forest Service are likely accurate, but funding is being acquired to survey the boat ramps to verify the elevations. At elevation 6010 feet, Horseshoe Canyon is impassible, the Buckboard floating barge won't pull water from as deep which could later be impacted by algae, the Cedar Springs floating restroom was moved last week to a deeper but less-preferred location. There are also primitive campsites around the reservoir rim that will likely be impacted. Please provide any additional information on impacts you may know about to Dale (dthamilton@usbr.gov) and/or Nathaniel (ntodea@usbr.gov). Flaming Gorge has been to elevation 6010 feet in the past 20 years, if you were around and remember conditions in the early 2000s, please help us understand what impacts we're likely to experience.

The DRO Plan remaining schedule includes: an Upper Colorado River Commission special session on April 21st, DOI review from April 22nd to 29th, implementation beginning in May, and ongoing DROA partner coordination meetings.

General Discussion, Comments, Questions

Following Dale's presentation, there was a wide-ranging comment and question and answer session.

Dale asked the group if they'd experienced similar reservoir conditions (elevation 6010 feet) and asked for feedback; Jack Lytle replied that it seems similar to 2003 and he'd experienced it. And it was stated that much of South Buckboard will be unusable.

In response to a question of water conservation downstream, Dale replied that the lower basin is already taking cuts, but the states regulate the water rights in each state.

It was stated that CREDA had submitted comments on the draft plan and asked if there will be a revision, Dale replied that a revision will be coming out. Chris Brown from Wyoming stated that the states are working hard to incorporate the April runoff forecast and other operation plans into the DRO Plan; the hope is to have the draft framework and draft attachments posted tomorrow; and an attempt to address comments from CREDA and WAPA has been made.

Clarification was requested on how low Flaming Gorge is expected to drop by the end of September, Dale stated that the proposed drought operation plan would put the reservoir between 6010 feet and maybe 6012.5 feet; the no drought response plan would put the reservoir at roughly 6019 feet (about where we are currently). The reservoir is currently at 6018 feet (almost 6019 feet); under the no DRO plan, the reservoir would go up about five or six feet to about a water surface elevation 6024-6025 feet; under the drought response operations, the reservoir would drop about 8 or 9 feet to about elevation 6010 feet.

Several comments were made in the chat on the use of the bypass during spring peak releases and seeking clarification on the biological benefit of the bypass this year. George Weekley (FWS) noted that there are several wetlands in Reach 2 that connect to the river at 14,000-16,000 cfs; depending on the flows from the Yampa, use of the bypass could allow for more wetlands to be connected. Rick Baxter (U.S. Bureau

of Reclamation) also mentioned that the spring peak should be commensurate with elevated base flows. T Wright stated that he is opposed to the bypass flow.

A comment was made stating that the uncertainty of known elevations (boat ramps) is concerning.

Several meeting attendees asked to be added to the email list for notifications. To be added to the list, email your contact information to Dale (dthamilton@usbr.gov).

Jack Lytle (Dagget County Commissioner) noted that a call for agricultural water is a concern; Lake Powell is low, but Flaming Gorge is experiencing high visitation; in 2003 from his recollection, all the boat ramps in Utah were still functional but could potentially have some issues now (looking at the ramps is a good idea); and the impacts can and will be great if Flaming Gorge water surface elevation falls to 6000 feet. Chris Brown noted that the potential for calls for water from the upper basin is a main reason Wyoming entered into the Drought Contingency Plan in 2019; the intent would be to first use uncommitted storage to mitigate risk downstream if needed, before shutting off uses. Jack noted that Dutch John gets water from the reservoir, and it needs to be determined how low they pull water, they have 10,000 acre-feet of water they don't want to lose; Dale stated that Dutch John can get water down to dead pool elevation 5740 feet.

In response to a question asking for the probability that the no drought response plan will be utilized, Chris Brown stated that they're getting close to deciding that 500,000-acre-foot release plan from Flaming Gorge will be implemented. And while Blue Mesa and Navajo aren't currently planned to make additional releases, if conditions improve at those reservoirs, releases could be planned for later this year or into 2023.

Comments were made that there are potential impacts to the fishery in the reservoir, particularly the kokanee population. Utah Division of Wildlife Resources and Wyoming Game and Fish have concerns about impacts to the fishery as a whole and specifically kokanee. From surveys, approximately 60% of angler preference is kokanee salmon, and the kokanee population has declined in recent years. Looking at hydroacoustic numbers, the lowest numbers of kokanee were observed in 2008, about four years after the low reservoir elevation years of ~2003-2004. It appears likely that the low reservoir levels had a direct impact on the populations in the reservoir.

In response to a question as to whether the 7-day bypass release will be made regardless of Yampa flows, Dale and George Weekley stated that it is planned to be run like an LTSP year considering Yampa flows and flow targets to inundate wetlands. For the drought response operations release of 500,000 acre-feet, if the full bypass release for 7-days is not made, coordination will need to be done to ensure the volume is released.

A chat comment asked to please pay attention to the impacts that lowering water levels will have on campground swimming beaches, especially Sunny Cove near Dutch John and Firehole in Wyoming.

In reply to a question asking if there are plans to monitor the total flow volume released and estimate the amount received at Powell, it was stated that yes, there are plans.

Dale closed the meeting by thanking the participants for their time and comments and asking that if anyone has additional comments, they be sent to him (<u>dthamilton@usbr.gov</u>).

Next Meeting

• Thursday, August 25, 2022, at 10:00 am in Vernal (tentative)

Attendees

Steve Craig	Fisherman	Matthew Webb	Utah Div. Water Rights
Woody Bair	Flaming Gorge Resort	Andrew Dutson	Utah Div. Water Rights
Cody Perry	Friends of the Yampa	Chris Keleher	Utah Div. Wildlife Resrc.
Tim Gaylord	Holiday River Expeditions	Craig Walker	Utah Div. Wildlife Resrc.
Jen Callantine	Dinosaur River Expeditions	Drew Cushing	Utah Div. Wildlife Resrc.
Darren Bowcutt	GROGA, WRF Guides	Trina Hedrick	Utah Div. Wildlife Resrc.
Tony Valdez	Buckboard Marina at FG	Matt Breen	Utah Div. Wildlife Resrc.
Jen Valdez	Buckboard Marina at FG	Ryan Mosley	Utah Div. Wildlife Resrc.
Shane DuBois	Buckboard Marina at FG	John Walrath	Wyo. Game and Fish Dept.
John Rauch	Cedar Springs Marina	Robert Keith	Wyo. Game and Fish Dept.
Stacey Rauch	Cedar Springs Marina	Chris Brown	State of Wyoming
Jerry Taylor	Lucerne Valley Marina	Danielle Bettencourt	Wyo. Coalition of Local Gvts
Jill Taylor	Lucerne Valley Marina	Leslie James	Col. Riv. Energy Dist Assoc
Brant Williams	Lucerne Valley Marina	George Weekley	U. S. Fish & Wildlife Service
Jessica Williams	Lucerne Valley Marina	Tildon Jones	U. S. Fish & Wildlife Service
Simone Griffin	BlueRibbon Coalition	Kevin McAbee	U. S. Fish & Wildlife Service
Bruce Lavoie	OARS	Julie Stahli	U. S. Fish & Wildlife Service
Laura Belanger	Western Resource Adv.	Derek Fryer	Western Area Power Admin.
	Vermillion Ranch	Shane Capron	Western Area Power Admin.
Grizz Öleen	Caerus Oil and Gas LLC	Brenda Alcorn	Col. Basin Riv. Forecast Ctr.
Ted Rampton		Rob Billerbeck	Nat. Park Service
Craig Sturm	Facebook Blogger	Melissa Trammell	Nat. Park Service
Todd Jones		Stephanie Anderson	U. S. Forest Service
Kevin Bestgen	Colorado State University	Coleson Kastelic	U. S. Forest Service
Jack Lytle	Daggett Co. Commissioner	Amee Andreason	U. S. Bureau of Reclamation
Matt Cazier	Uintah County	Dale Hamilton	U. S. Bureau of Reclamation
Kirk Robbins	Uintah County MAD	Dave Speas	U. S. Bureau of Reclamation
Lisa Herrera	Green River Chamber	Ed Warner	U. S. Bureau of Reclamation
Mark Kot	Rock Springs WWDC	Gary Henrie	U. S. Bureau of Reclamation
Brad Brooks	City of Cheyenne	Heather Patno	U. S. Bureau of Reclamation
Michelle Garrison	Colorado Water Cons. Brd.	Jared Baxter	U. S. Bureau of Reclamation
Jared Hansen	Cent. Utah Water Cons Dist	Jenny Erickson	U. S. Bureau of Reclamation
Bart Leeflang	Cent. Utah Water Cons Dist	Kathy Callister	U. S. Bureau of Reclamation
Kevin Workman	Cent. Utah Water Cons Dist	Kent Kofford	U. S. Bureau of Reclamation
Russ Franklin	Cent. Utah Water Cons Dist	Lee Traynham	U. S. Bureau of Reclamation
Shane Coors	Precision Water Resc. Eng.	Nathaniel Todea	U. S. Bureau of Reclamation
William Merkley	Uintah Water Cons. District	Peter Crookston	U. S. Bureau of Reclamation
Tom Kleinschnitz	Visit Moffat County	Rick Baxter	U. S. Bureau of Reclamation
Colleen Cunningham		Ryan Christianson	U. S. Bureau of Reclamation
Darrell Gillman	Utah Dept. Ag. And Food	Scott Elliott	U. S. Bureau of Reclamation
Ryan Jones	Utah Dept. Ag. And Food	Susan Behery	U. S. Bureau of Reclamation