

BUREAU OF RECLAMATION
NAVAJO RESERVOIR COORDINATION MEETING
April 18, 2023
SUMMARY

Dear Interested Party:

Enclosed is a summary of our April 18th, 2023 meeting to coordinate Bureau of Reclamation's (Reclamation) operation of the Navajo Unit. The meeting was virtually via Microsoft Teams video and by phone.

Summary points of the meeting:

- Precipitation in Water Year 2023 has been well-above average.
- Runoff projections range from 800 kaf (127% of average) to 1170 kaf (186% of average) with a median of 945 kaf (150% of average) as of the April forecast.
- A maintenance release of 150-180 kaf is being planned, peaking at 5,000 cfs for 7-10 days. (Length may change as forecast evolves)
- Reservoir is forecast to peak between 6060 and 6075 ft (depending on timing of runoff and release). (could be higher!)
- End of water year (September 30th) reservoir elevation is projected to be 6050 to 6060 ft.
- No DROA releases are planned.

Copies of the material presented, and past meeting notes are available online at:
<http://www.usbr.gov/uc/water/crsp/cs/nvd.html>

If you have any suggestions on improving the operation meetings or the summaries of the meetings, please let us know.

Next meeting date: Tuesday, August 22, 2023 at 1:00 PM. This meeting is currently planned to be held in-person at the Farmington Civic Center, in Farmington, NM with a video and/or phone option for those who would like to attend virtually. This is subject to change based on the situation at the time. Please contact sbehery@usbr.gov for questions or updates.

NAVAJO UNIT OPERATIONS MEETING

April 18th, 2023

Participation: This meeting was held virtually via Microsoft Teams. The attendance list is attached.

Purpose of Meeting: The purpose of these meetings, held annually in January, April, and August, is to gather input for determining upcoming operations for Navajo Reservoir. This input is used in Reclamation's development of an overall 24-month study for operation of Reclamation projects in the Upper Colorado River Basin, which includes plans for Glen Canyon, Flaming Gorge, Aspinall Unit and Navajo. Input from individuals, organizations, and agencies, along with other factors such as weather, water rights, endangered species requirements, flood control, hydro power, recreation, fish and wildlife management, and reservoir levels, will be considered in the development of these reservoir operation plans. In addition, the meetings are used to coordinate activities and exchange information among agencies, water users, and other interested parties concerning the San Juan River and Navajo Reservoir.

WY 2023 Review of Operations to Date

Susan Behery, Reclamation, Western Colorado Area Office

Water Year 2023 began on October 1, 2022, with Navajo holding 871 kaf of live storage (245 kaf active storage) at elevation 6020.56 ft. The Navajo Indian Irrigation Project (NIIP) diversion ended their diversions for the year on October 17th. The release to meet the downstream target baseflow (TBF) in the critical habitat reach has ranged between 300 and 350 cfs for the most of the winter. A temporary reduction to 250 cfs in March assisted instream work with Turley Manzanares ditch, downstream of the dam.

Releases have managed to stay below average while maintaining the authorized purposes of the Reservoir and ESA commitments. The current reservoir storage is 175 kaf higher than at the beginning of the water year. Navajo Reservoir is 15-feet higher than it was this time last year.

Around the basin, most reservoirs are gaining storage. As of the meeting date, McPhee holds 232,443 af (61% of live storage) and is expected to fill with a significant release event for boating. Lake Nighthorse is at 114,658 af (100% of live storage) and is planned for topping off this spring (though it may not have to pump more than a couple of days). Lemon is at 18,089 af (45% of live storage) and is expected to fill. Vallecito is at 33,138 af (26% live storage) and has been making room for their expected inflow. Jackson is at 6506 af (65% of live storage). Navajo is at 1,015,846 af, or 62% of live storage (41% of active storage).

Around the Upper Colorado River Drainage Basin: Flaming Gorge is 69% full, Blue Mesa is 38% full, and Lake Powell is 23% full.

Weather Outlook

Erin Walter, National Weather Service, Grand Junction

A significant dust event on April 3rd deposited on the San Juan mountains, the Uncompahgre plateau, the Grand Mesa and Dolores basin. Snowpack coverage at this time of year is still widespread and above-average.

Short term temperatures in the headwaters are still hovering around freezing at night and are at or near average during daytime hours for the coming week. The 6-10 day and 8-14 day forecasts are showing the potential for above average temperatures in the Four Corners. However, a lot of variability exists right now in the day-to-day updates to the forecast, there is not much consistency. The CPC is showing potential for delayed onset of the monsoon, which may occur if late snowmelt maintains cooler temperatures, which could reduce development of ground heating and resulting storms.

Currently we are in an El-Nino watch. If El Nino develops in the coming months, the traditional result is a wet southwest flow and cooler temperatures.

Snow Water Equivalent (SWE) for the Water Year 2023 on the meeting date is 183% of average in the San Juan Basin. Cumulative Water Year precipitation, which includes all rain/snow for the year, is 141% of average.

Snowmelt and Streamflow Outlook

Ashley Nielson, Colorado Basin River Forecast Center, Salt Lake City

March precipitation made a big difference in the forecasts for the basin this year. Animas River Basin precipitation was 225% of average in March, and precipitation above Navajo Reservoir was 230% of average. Additionally cool temperature, well below average, were prevalent throughout the month. Current snowpack is above normal at all elevations this year. Snowmelt has begun over the last week at elevations below 11,000 cfs.

Low elevation (below 9500 ft) snowmelt has impacted flows downstream in recent weeks. Not much melt yet at high elevations as of meeting date.

Water supply forecasts for the San Juan basin range from 140% to 235% of average. A significant increase in snowpack in mid-March has pushed the forecasts towards the Maximum Probable of previous forecasts. The latest (Mid-April) April-July runoff forecast for Navajo Reservoir is 985 kaf (156% of average).

The Animas River peak is currently forecast to be 6865 cfs, which is the 20th highest peak in 112 years of record. The peak itself is entirely dependent on short-term weather, and can be much higher or lower depending on how the snowpack melts. River peaks around the basin are all expected to be well-above average this year. High water and flooding are a concern but will depend on snowmelt timing and pattern.

Planned Operations for remainder of WY 2023

Susan Behery – Reclamation, Western Colorado Area Office

The latest (January 1st) CBRFC official Most Probable April-July runoff forecasts are as follows:

Navajo: 945 kaf (150% avg*)

Vallecito: 255 kaf (144% avg)

Lemon: 77 kaf (160% avg)

Animas: 590 kaf (153% avg)

McPhee: 515 kaf (202% avg)

Powell: 11,300 kaf (177% avg)

**average of the 1991 – 2020 time period*

At this point, Ashley from CBRFC noted that the Mid-April CBRFC forecast at Navajo would be 985 kaf and would be released in the next couple of days. Please note that at the time of the meeting, all information presented was based on the slightly lower forecast of 945 kaf from early April.

Back in January, we presented the potential range of operations based on the range of forecasts we had at the time. The Max Probable forecast in January, which was just over 1,000,000 af for April-July, resulted in a spring peak release. The chances of a high release were low, but it was within the range of possibilities. The winter snowpack built aggressively and resulted in a forecast very near the Max Probable from January.

While the available water is not sufficient for the specific SJRIP-recommended 21-day spring peak release as described in the SJRIP's Flow Recommendations (1999, updated 2018), there is sufficient available water to conduct a maintenance release. The intended purpose of such a release is to clear sediment from and define the channel, and meet ESA flow goals as possible, as per Reclamation's Record of Decision (2006). The last high flow release from Navajo was in 2019.

The specific details of the release will be forthcoming, as the forecast and runoff unfolds. Because of the large quantity of sediment in the channel, and after discussion with Federal, State and Local agencies, it is expected that a significant ramp-up may be required to reach 5,000 cfs. The most likely release will begin in mid-to-late May, with a long slow ramp-up to 5,000 cfs, 7-10 days at 5,000 cfs, and then a ramp back down to base releases.

Note that the peak of the release may be longer than 7-10 days.

A question about the spillway was asked. Navajo's spillway is an "uncontrolled" spillway, meaning there is no gate. All operations are designed and intended to avoid use of the spillway. The last time the spillway was used was in the late 1970's.

Notices for plans will be sent out to this email list and posted to our website as plans are developed. Coordination will be set up with appropriate Federal, State, and Local agencies.

Drought Response Operations Plan (DROA):

DROA Year 2023 is May 1, 2023 – April 30, 2024. No releases are planned at this time. The Initial Unit Workgroups (Navajo, Flaming Gorge, Aspinall) have begun meeting to update Attachments that are part of the DROA Plan. Navajo Unit is under “Attachment E”. DROA webpage: <https://www.usbr.gov/dcp/droa.html>

San Juan River Recovery Implementation Program (SJRIP) Update

Raphaela Ware, SJRIP

The San Juan River Basin Recovery Implementation Program has the following recommendation to Reclamation for Spring Operations:

“Given the above average runoff predicted for the Animas River in 2023, the SJRIP recommends Bureau of Reclamation (Reclamation) use the forecasted Available Water for Navajo Reservoir to conduct a release to meet the Animas River peak, even if Available Water is less than needed for the Flow Recommendation’s 21-day release.

We recommend Reclamation release a minimum of 7 days at 5,000 cfs if Animas River runoff peak is projected to be sufficient to meet SJRIP Flow Recommendations’ 5-days at 10,000 cfs or 10-days at 8,000 cfs flow targets. During the release, if the Animas River is no longer contributing enough to meet these targets, we recommend the release be ramped down to reach target baseflows and save the remaining water.”

The next Biology Committee (BC), Coordination Committee (CC), and Annual meeting is scheduled for May 9-10. The BC meeting will take place May 9 at Fort Lewis College in Durango and the Annual and CC meeting will take place on May 10th, at the Durango Public Library. The meetings will be in hybrid format. For more information or a link to the meetings please email james_sykes@fws.gov.

Please visit <https://coloradoriverrecovery.org/> for meeting sign up and to learn more about the Colorado River Recovery Program; this is the public facing website.

NMISC and TNC subcontract with Jicarilla Apache Nation

Colleen Cunningham, NMISC and Joe Trungale, TNC

NMISC obtained a permit to release up to 20,000 AF of water annually from Navajo Reservoir into the San Juan River beginning in 2023. Water was obtained for up to 10 yrs from the JAN through a lease agreement with the NMISC and TNC. Permitted water would meet the purposes of the Strategic Water Reserve. Water is for compact compliance and endangered species management. The leased water was previously diverted by PNM at the PNM Weir in Fruitland, NM. Parties of the agreement sought to identify alternative uses of this water to provide the most benefit to the endangered Colorado pikeminnow and the razorback sucker.

A Technical Team consisting of representatives of the NMISC, JAN, and TNC was assembled to identify alternative uses for this water. The Team elicited input from 14

experts in hydrology, geomorphology, and fisheries with direct knowledge of the San Juan River. The Team conferred with Reclamation to better understand dam operations

Three alternatives were examined:

- Supplement Winter Releases (Jan-May)
- Supplement a Spring Peak (May-Jun)
- Supplement Summer Baseflow (Jul-Sep)

Initial 2023 Release Decision is to apply to spring peak if 20K tips the scale to make a release. If not, supplement summer baseflow to benefit rearing habitats. Justification:

- Low velocity rearing habitats critical limiting factor for RBS/CPM
- High spring flow critical to create/maintain habitat, but low likelihood
- Baseflow supplement provides “biggest bang for the buck”

Waiting for more details on the volume and duration of the spring “maintenance” release. Will decide on augmenting a spring release versus summer baseflow in the next few weeks.

Agency Updates

City of Farmington: Jamie Shockey requests that Reclamation get with them soon to discuss and plan ramp-up to help the Power Plant anticipate the load.

Bloomfield Irrigation District: Stacy requests that Reclamation give a bit of extra notice to help them have time to prepare their berm.

Navajo Agricultural Products Incorporated (NAPI): Diversions will increase in coming weeks.

Turley Manzanares Ditch Company: Construction at the ditch has completed successfully.

Links

- Navajo Project Notices: https://www.usbr.gov/uc/wcao/water/rsvrs/notice/nav_rel.html
- Navajo Monthly Forecast Update: <https://www.usbr.gov/uc/water/crsp/cs/nvd.html>
- Reclamation Colorado River Basin Facebook Page: <https://www.facebook.com/coloradoriverbasin>
- UC Water Operations Home: <https://www.usbr.gov/uc/water/index.html>
- DROA: <https://www.usbr.gov/dcp/droa.html>

Attendance

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|------------------------|---|
| Aaron Chavez | San Juan Water Commission |
| Adrienne Soder | Arizona Public Service |
| Ali Effati | NMISC |
| Anna Boynton | State Tribal Liaison, Utah Division of Emergency Management |
| Anna Dunn | CONTR |
| Ashley Nielson | CBRFC |
| Bart Deming | Reclamation FCCO |
| Becki Bryant | Bureau of Reclamation |
| Bill Neyman | |
| Brandon Talley | Bureau of Reclamation |
| Brandt Hart | BLM Utah River Ranger |
| Brent Zundel | |
| Cameron Corley | APS, Four Corners Power Plant |
| Carrie Bean | Monticello BLM Office, San Juan River Permit Desk |
| Carrie Padgett | SWCD |
| Catherine Galvan | City of Bloomfield |
| Chad Niehaus | BLM San Juan River Ranger |
| Chico Quintana | Reclamation FCCO |
| Christina Noftsker | NMISC |
| Clay Cady | Arizona Public Service |
| Clayton Johnston | Turley Manzanaras |
| Cole Glenn | The San Juan Angler |
| Colleen Cunningham | NMISC |
| Conor Felletter | Bureau of Reclamation |
| Crystal Tulley-Cordova | Navajo Nation Department of Water Resources |
| David Archuleta | |
| David Gerg | San Juan Fly Fishing Federation |
| David Shoultz | NTUA, NGWSP Op's Manager |
| Delgarito Reynalden | USACE Albuquerque |
| Devin Neely | San Juan County |
| Dex Lewis | Reclamation FCCO |
| Dominique Work | NMISC |
| Doug Abe | PRCA |
| Ed Tso | NDEM |
| Elizabeth Serrano | Bloomfield Irrigation District |
| Erik Knight | Reclamation WCAO |
| Erin Walter | National Weather Service, Grand Junction |
| Evelyn Archuleta | No affiliation |
| Fisherman | |
| Fletcher Brinkerhoff | USGS |
| Heather Patno | Reclamation |
| Helen Sobien | NMISC |
| Jacob Mazzone | Jicarilla Apache Nation |

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| Jamie Shockey | City of Farmington |
| Jason Davis | US Fish & Wildlife Service, Southwest Region |
| Jason Sullivan | RSI |
| Jeanette Joe | NAPI |
| Jeff Derry | Center for Snow and Avalanche Studies |
| Jen Dumas | Jicarilla Apache Nation |
| Jenny Erickson | Bureau of Reclamation WCAO |
| Jim Dumont | Senator Martin Heinrich's Office |
| Joe Rasor | Land Owner |
| John Hall | |
| John Utton | |
| Joseph Trungale | The Nature Conservancy |
| Julie Rasor | Land Owner |
| Justyn Liff | Reclamation |
| Kathi Smith | Hammond Conservancy District |
| Les Larson | Hillside Irrigation District |
| Lionel Haskie | NAPI |
| Luanne Hook | |
| Marc Miller | Reclamation WCAO |
| Linda Corwin | Bloomfield, NM |
| Marc Wethington | New Mexico Game and Fish |
| Melissa Mata | San Juan River Recovery Implementation Program |
| Mike Stark | |
| Miles Juett | NMOSE |
| Moncef Tihami | Reclamation FCCO |
| Myron Armijo | |
| Nathaniel Todea | Reclamation |
| Norman Norvelle | Retired NMED Environmental Specialist |
| Pat Page | Local Human |
| Pauline Ellis | Fiver Rivers TU |
| Philp Richards | APS |
| Prudence Brady | City of Bloomfield |
| Raphaela Ware | San Juan River Basin Recovery Implementation Program |
| Reece Carpenter | Bureau of Reclamation |
| Renae Pablo | NAPI |
| Reynalden Delgarito | USACE |
| Robert Kirk | Navajo Nation |
| Robert Sterrett | Farmington Fire |
| Robert Wormuth | Turley Manzanares |
| Rochelle Brown | City of Farmington |
| Ryan Gladden | Reclamation |
| Ryan Seamus Royer | Reclamation FCCO |
| Ryan Unterreiner | Colorado Parks & Wildlife |
| Scott Miller | APS |
| Shannon Ben | City of Farmington |

Shannon Hatch
Shawn Williams
Shrestha Sanskriti
Stacy Dodd
Susan Behery
Tammy Gallegos
Tom Chart
Tom McCarthy
Trevor Birt

Bureau of Reclamation
NMOSE
Keller-Bliesner Engineering
Bloomfield Irrigation District
Reclamation
San Juan County Utah
Grand River Consulting, Water User Rep to SJRIP BC

NMISC