

BUREAU OF RECLAMATION
NAVAJO RESERVOIR COORDINATION MEETING
JANUARY 17, 2023
SUMMARY

Dear Interested Party:

Enclosed is a summary of the January 17th, 2023 meeting to coordinate Bureau of Reclamation's (Reclamation) operation of the Navajo Unit. The meeting was held virtually via Microsoft Teams video and by phone.

Summary points of the meeting:

- Precipitation so far in Water Year 2023 on the whole has been above average.
- Soil moisture conditions are much improved over this time last year but still remain below-average. Soil moisture, along with spring weather and other factors, can have significant effects on the runoff efficiency.
- The first water supply forecast of the year (January 1st) has a range of 385 kaf (60% of average) to 1,010 kaf (160% of average) with a median forecast of 570 kaf (90% of average). With the verification of the large early January storms, plan for an increase in the forecast in mid-January and February.
- Snowpack throughout the basin is well above average, owing mostly to the large storm in early January, however, don't get comfortable because we are still very early in the snow accumulation season.
- Right now, the odds are not in favor of a spring peak release. However, another large storm or two like the one we saw in January could tip us towards that possibility. If a large release becomes likely, Reclamation will send out notices.
- The median (Most Probable) forecast shows a peak elevation this spring of 6046 ft and an end of water year elevation of 6039 ft.

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, April 18th, 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

January 17th, 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.

Operations in WY 2023 so far and Current Conditions in the Basin

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) 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 remainder of the fall and early winter.

Inflows to Navajo Reservoir have been largely on average for the water year as a whole. Releases have managed to stay below average while maintaining the authorized purposes of the Reservoir and ESA commitments. The reservoir has lost approximately 20.5 kaf of storage (approximately 2 feet of elevation) since the beginning of the water year. Navajo Reservoir is 2-feet lower than it was this time last year.

Around the basin, most reservoirs are half-full (or half empty). As of the meeting date, McPhee holds 188,761 af (50% of live storage). Lake Nighthorse is at 113,160 af (98% of live storage) and is planned for topping off this spring. Lemon is at 16,956 af (43% of live storage). Vallecito is at 69,555 af (55% live storage), and Jackson is at 5,555 af (56% of live storage). Navajo is at 850,740 af, or 52% of live storage (22% of active storage).

Around the Upper Colorado River Drainage Basin: Flaming Gorge is 69% full, Blue Mesa is 35% full, and Lake Powell is 24% full.

Streamflow Forecast and Weather Outlook

Ashley Nielson, Colorado Basin River Forecast Center (CBRFC), Salt Lake City

Observed precipitation at the end of the last water year (July-September of 2022) was above-average in July due to heavy monsoonal activity. August and September were drier and had just

below average precipitation for those months. These last months of WY 2022 helped set up better soil moisture conditions than we had seen in previous years, though still below-average on the whole.

As Water Year 2023 began, October saw average precipitation, and November was quite dry with only 65% of average precipitation. Overall, for Water Year 2023 to date, the San Juan Basin as a whole has had average or just above average precipitation.

Drought conditions have improved significantly over the past several years, with most of the basin in D1, and some D2-D3 in the southern portions of the basin.

Modeled soil moisture conditions in the CBRFC's hydrologic model are near to below normal across many of the major runoff producing areas. While these soil moisture deficits still exist, they have improved over previous years.

The January 1st Water Supply Forecast for Navajo Reservoir is 570 kaf (90% of average) with a range of 385 kaf (60% of average) to 1,010 kaf (160% of average). The forecast has increased since January 1st due to wet conditions. The water supply forecast will increase if these next storm systems verify. It is still early in the water supply season, thus the wide range in the forecast.

The Climate Prediction Center (CPC) weather outlook for January-March is showing classic La Nina conditions- a cool and wet northwest and a warm and dry southwest. That being said, it does look like the active weather pattern should continue through the end of the month, though there will be a shift to colder storm systems from the northwest that may be lower producing.

Proposed 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: 570 kaf (90%* avg)

Vallecito: 170 kaf (96% avg)

Lemon: 48 kaf (100% avg)

Animas: 385 kaf (100% avg)

McPhee: 260 kaf (102% avg)

Powell: 6,700 kaf (105% avg)

**average of the 1991 – 2020 time period*

Water Supply forecasts are very similar, though slightly higher, than this time last year. The mid-January update is anticipated to include the most recent storm totals and should increase.

Releases the remainder of this winter are likely to range between 300 and 350 cfs until spring irrigation begins. At that point, the release may increase if runoff has not yet begun to compensate for irrigation.

With the January official Most Probable inflows and subsequent operations, the reservoir is expected to peak at 6046 ft. There is no spring peak projected under the Most Probable inflow. Under the Min Probable inflow (385 kaf), there is no spring peak release and the reservoir peaks at 6035 ft this spring. The Max Probable inflow forecast of 1,010 kaf is sufficient to conduct a spring peak release of 27 days at 5,000 cfs.

The subsequent flows at the San Juan Four Corners gage are projected to peak at 3,500 cfs under the Most Probable forecast. The range is wide from the Min to the Max Probable forecast (2,500 cfs to 9,000 cfs respectively).

Based on current streamflow conditions, storage levels, and statistical outlooks based on 30 years of historical hydrology,

- Runoff projections range from 385 kaf (61% avg) – 1,010 kaf (161% avg) with a median projection of 570 kaf (91% avg).
- Potential for a spring peak release under the Max Probable forecast. No spring peak under Min or Most Prob forecast.
- Reservoir forecast to peak between 6035 and 6051 ft in spring with a median projection of 6046 ft
- End of Water Year storage range 771 kaf (6009 ft, 47% full) – 1,200 kaf (6050 ft, 73% full) with a median projection of 1,040 kaf (6038 ft, 63% full)

Reduced Releases for instream work are likely this winter. Project managers for the Turley Manzanaras Ditch Company Diversion Dam Rehabilitation Project are planning to request a reduction in the release to 250 cfs for several days this winter for instream work (dates have not yet been set). The City of Farmington Power Plant will take this opportunity to do maintenance as they will not be able to generate power. The release will be through the Auxiliary 4x4 during this time. Anticipated project completion date is April 1, 2023. The project description and contact information are in the agency updates section below.

Drought Response Operations Plan (DROA): No decisions have been made yet regarding releases from the initial units to Lake Powell for this upcoming year. Meetings and discussions are currently ongoing regarding potential releases, accounting, and recovery. More information should be available by the April meeting.

Dominique Work of the New Mexico Interstate Stream Commission (NMISC) added that the DROA parties are currently looking at drafting the plan, but the Upper Division States of the Upper Colorado River Commission (UCRC) need resolution over accounting and recovery before considering additional DROA releases in the future, and that is being worked on along with Reclamation.

Agency Updates

San Juan River Recovery Implementation Program (SJRIP): The winter Biology Committee meeting is scheduled for February 21-23 in Durango at the Public Lands Center. The joint San Juan-Upper Colorado Recovery Program's Researchers meeting will be on January 31-Feb 1,

and will be in Grand Junction at the DoubleTree. For more information or a link to either of these meetings please email james_sykes@fws.gov.

Navajo Agricultural Products Incorporated (NAPI): Diversions from Navajo to NIIP- gate will be opening on February 13th.

Julie and Joe Rasor: Concern about large, downed cottonwoods on BLM property that may cause issues or damage to their private property if high flows occur this spring.

Turley Manzanares Ditch Company: The Turley Manzanares Ditch Company has entered into a construction contract with Sanchez Demolition to perform a rehabilitation of the Turley Manzanares Diversion Dam located about 10 miles downstream of Navajo Dam on the San Juan River. The scope of the project includes temporary bypass of water, demolition and removal of existing grade control structure, excavation and installation of boulder weir grade control structure and site restoration including grading and native plantings. A no permit required letter was received from the US Army Corps of Engineers, dated February 1, 2022 (Action No. SPA-2022-00024). Sanchez Demolition will be mobilizing to the site in late January 2023 and is currently preparing a control of water schedule. Date of final project completion is April 1, 2023.

Project contacts:

Owner: Turley Manzanares Ditch Company, David Arnold,
President, winesofthesanjuan@gmail.com

Contractor: Sanchez Demolition, Joshua Sanchez, sanchezdemolition@gmail.com

Engineer: William J. Miller Engineers, Inc., John Critchfield, P.E.,
CFM john@wjmillereengineers.com

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>
- UC Water Operations Home: <https://www.usbr.gov/uc/water/index.html>
- Teacups: <https://www.usbr.gov/uc/water/basin/index.html>
- 24-Month Study: <https://www.usbr.gov/uc/water/crsp/studies/index.html>
- DROA: <https://www.usbr.gov/dcp/droa.html>

Attendance List

Adrienne Soder	Arizona Public Service
Ali Effati	NMISC
Ashley Nielson	CBRFC
Carolyn Donnelly	Reclamation, Albuquerque Area Office
Carrie Padgett	SWWCD
Clay Cady	APS Water Resource Management Hydrologist
Clay Johnston	Turley Manzanares
Crystal Tulley-Cordova	Navajo Nation Department of Water Resources
Dawn Knuppel	San Juan County

Dex Lewis	Reclamation
Dineh John	NAPI
Dominique Work	NMISC
Ed Warner	Reclamation
Erik Knight	Reclamation
James Miller	FWS
Jeanette Joe	NAPI
Jeff Derry	Center for Snow and Avalanche Studies
Jen Dumas	Jicarilla Apache Nation
Joe Trungale	TNC
John Critchfield	William J. Miller Engineers, Inc
Julie and Joe Rasor	Landowners
Justyn Liff	Reclamation
Kathi Smith	Hammond Conservancy District
Lee Traynham	Reclamation
Les Larson	Hillside Irrigation District
Linda Corwin	Bloomfield, NM
Lionel Haskie	NAPI
Liz Serrano	Bloomfield Irrigation District
Marc Miller	Reclamation
Marc Wethington	New Mexico Game and Fish
Michele Truby-Tillen	San Juan County
Moncef Tihami	Reclamation
Nate Franssen	FWS, SJRIP
Norman Norvelle	Retired NMED Environmental Specialist
Pamela Norris	APS
Pat Page	Local Human
Pauline Ellis	Fiver Rivers TU
Prudence Brady	City of Bloomfield
Renae Pablo	NAPI
Reynalden Delgarito	USACE
Robert Kirk	Navajo Nation
Robert Wormuth	Turley Manzanares
Roselyn Yazzie	NAPI
Ryan Gladden	Reclamation
Scott Durst	FWS, SJRIP
Scott Miller	APS
Stacy Dodd	Bloomfield Irrigation District
Susan Behery	Reclamation
Tami Gideon	Reclamation
Tom Chart	Water Users rep to the SJRIP Biology Committee