BUREAU OF RECLAMATION
NAVAJO RESERVOIR COORDINATION MEETING
JANUARY 16, 2024
SUMMARY

Dear Interested Party:

Enclosed is a summary of the January 16th, 2024 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:

- Storage in Navajo on this date is 240 thousand acre-feet (kaf) higher than it was this time last year.
- Precipitation so far in Water Year 2024 on the whole has been below average. Snow conditions have improved in the last week due to a favorable weather pattern in early January. Snowpack is still below normal as of today. We are less than halfway through snow accumulation season.
- Soil moisture conditions are below average and generally worse than they were last year. Soil moisture, along with spring weather and other factors, can have significant effects on the runoff efficiency.
- The first April-July runoff forecast of the year (January 1st) has a range of 235 kaf (37% of average) to 770 kaf (123% of average) with a median forecast of 375 kaf (60% of average).
- There is potential for sufficient water for a spring peak release (currently a 15% chance based on forecasts). We would need quite a bit more snow for that to happen but don't rule it out.
- Reservoir is expected to peak at a minimum of 6045 feet (just slightly higher than the current elevation) under the min probable forecast, and 6055 ft or higher under the max probable forecast. The peak under the max probable forecast could be much higher, and will depend entirely on timing of runoff into the reservoir and the releases.

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 23rd 2024 at 1:00 PM. This meeting is currently planned to be held in-person at the Farmington Civic Center, in Farmington, NM with a virtual option. Please contact sbehery@usbr.gov for questions or updates.

NAVAJO UNIT OPERATIONS MEETING
January 16th, 2024

Participation: This meeting was held in person and 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 2024 so far and Current Conditions in the Basin

Susan Behery, Reclamation, Western Colorado Area Office

The meeting began with a review of the past week's storm cycle. Over the last seven days, the average snow water equivalent (SWE) in the Upper Colorado Region as a whole increased from 68% of median to 90% of median. The SWE in the San Juan Basin increased from 73% of median to 86% of median.

Water Year 2024 began on October 1, 2023, with Navajo holding 1,146 kaf of live storage (520 kaf active storage) at elevation 6046.6 ft. The Navajo Indian Irrigation Project (NIIP) ended their diversions for the year on October 27th. 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. Releases are made for the authorized purposes of the Navajo Unit, and to attempt to maintain a target base flow through the endangered fish critical habitat reach of the San Juan River (Farmington to Lake Powell). The San Juan River Basin Recovery Implementation Program recommends a target base flow of between 500 cfs and 1,000 cfs through the critical habitat area. The target base flow is calculated as the weekly average of gaged flows throughout the critical habitat area from Farmington to Lake Powell.

So far inflows this water year have been 47% of average. Releases have managed to stay below average while maintaining the authorized purposes of the Reservoir and ESA commitments. The reservoir has lost approximately 55 kaf of storage (just under 5 feet of elevation) since the beginning of the water year. Navajo storage is approximately 240 kaf higher than this time last year.

Around the basin, most reservoirs are in a similar or improved state over last year. As of the meeting date, McPhee holds 292,145 af (77% of live storage). Lake Nighthorse is at 111,759 af (97% of live storage) and is planned for topping off this spring. Lemon is at 15,645 af (39% of live storage). Vallecito is at 62,044 af (49% live storage), and Jackson is at 4,561 af (46% of live

storage). Navajo is at 1,093,365 af, or 66% of live storage (46% of active storage).

Around the Upper Colorado River Drainage Basin: Flaming Gorge is 86% full, Blue Mesa is 69% full, and Lake Powell is 36% full.

Hydrologic Outlook

Erin Walter, National Weather Service (NWS), Grand Junction

The Upper San Juan Basin 82% of median after this latest storm as compared to 1991-2020. The Piedra is closest to median with 98% and the Animas is the lowest with 80% of median on this date. Overall, all basins within the San Juan River Basin experienced a significant bump from the latest round of storms pushing SWE in the right direction.

The recent drought monitor updates show the Four Corners in drought levels ranging from D1 to D3, increasing in intensity towards the southeast side of the basin.

There was discussion on the interplay between the current El Nino and other meteorological phenomenon including the Madden Julien Oscillation (MJO) and the Pacific-North American teleconnection pattern (PNA). The ENSO status alone does not dictate weather patterns, especially in Western Colorado and the San Juan Basin.

The Climate Prediction Center (CPC) is showing chances for above average temperatures and above average precipitation for the next two weeks. The seasonal outlook for January, February, and March shows equal chances for above average or below average temperatures, and a chance for above average precipitation. This outlook was last updated on December 21st, and at the meeting time, it had not been updated to the latest information.

The day following the meeting, the CPC guidance was updated and now shows equal chances for above and below average temperatures and precipitation. Go to https://www.cpc.ncep.noaa.gov/ for more information.

Since spring is often the time that windy conditions bring dust throughout the San Juans, a map was shown of 500mb heights on the horizon through March. The map does not show significant anomalies that would indicate higher elevation winds in the forecast.

Streamflow Forecast and Weather Outlook

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

Precipitation departures from average for this year are much higher than last water year. We have not seen the precipitation we would have liked to see for this time of year. Consequently, we are seeing below average soil moisture conditions, worse than this time last year. Soil moisture can have a significant impact on runoff efficiency. The soil moisture deficit must be fulfilled before runoff can occur. The timing and magnitude of runoff is ultimately a result of spring weather (both precipitation and temperature), snow conditions, soil moisture, and dust conditions.

The mid-January water supply forecasts range from 55 to 75% of average and reflect the recent storm cycle with a slight increase over the official January forecasts from two weeks ago. However, it is still early in the snow accumulation season and the forecast range is still quite wide. By January 1st, only 40% of snow accumulation season has occurred. As we move through the season and weather materializes (or doesn't), that range will narrow.

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: 375 kaf (60%* avg)
Vallecito: 118 kaf (67% avg)
Lemon: 30 kaf (63% avg)
Animas: 265 kaf (69% avg)
McPhee: 145 kaf (57% avg)
Powell: 4,200 kaf (66% avg)
**average of the 1991 – 2020 time period*

Water Supply forecasts are much lower than this time last year due to the slow start to the snow accumulation season. NRCS water supply forecasts largely agree with CBRFC forecasts though are slightly higher for the Navajo Unit inflow.

Releases the remainder of this winter are likely to range between 350 and 400 cfs until early spring. At this point there may be an increase in the release to maintain the downstream target baseflows until runoff begins.

Navajo spring operations are made in accordance with the Record of Decision (2006). Spring operations will depend on if there is any "available water" after calculating storage levels, upstream reservoir operations, and after calculating that all contract releases and minimum ESA requirements are met, as well as several other factors.

Based on the current streamflow conditions, storage levels, and statistical outlooks based on 30 years of historical hydrology, Navajo Reservoir runoff projections range from 235 kaf (37% avg) to 770 kaf (123% avg) with a median projection of 375 kaf (60% avg). While sufficient Available Water for a spring peak release under the Min or Most probable forecasts, there is sufficient Available Water for a 21-27 day long release predicted under the Max probable forecast. It is important to note that the three forecasts (Min, Most, and Max) are calculated to provide a range of possibilities, and one of these single forecasts is unlikely to occur itself.

Under each forecast, no project shortages are expected to occur in WY2024. The reservoir forecast to peak between 6045 and 6055 ft in spring, though it could peak higher depending on the timing of snowmelt runoff. Storage in the reservoir is expected to end the water year between 925 kaf (6025 ft, 56% full) and 1,170 kaf (6055 ft, 71% full).

Project managers for the Turley Manzanares Ditch Company Diversion Dam Rehabilitation Project have requested a very short reduction in the release to 250 cfs for instream work. The

release will be made through the Auxiliary 4x4 during this time. This reduction from 350 cfs to 250 cfs will begin Monday, January 29th at 3:00 PM. The release will be restored to 350 cfs on Tuesday, January 30th at 8:00 AM.

An exploratory drilling project has begun on the dam face. You may see drill rigs and official personnel working along the face and crest of the dam through summer of 2025. Periodic extended road closures will occur on CR511 (crossing the dam) and CR539 (dam crest). No road closures are planned during the summer recreational season (between Memorial Day and Labor Day).

Kelsey Deckert, O&M Group Chief for Reclamation's Western Colorado Area Office answered several questions regarding this work. The latest information includes a likely road closure on 539 between Mid-February and continuing into May. There may be some openings in between when drill crews are switching over. Additional closures or updates may occur. NMDOT's website is your best source of information on the current closures.

Agency Updates

San Juan River Recovery Implementation Program (SJRIP): The Researchers meeting with SJRIP's sibling program the Upper Colorado Endangered Fish recovery program meeting will be in Grand Junction on January 30th-31st. The purpose of that meeting is to broadly cover research and monitoring results over the entire Colorado River Basin related to endangered fish recovery. There is a virtual option for that meeting if folks are interested or you can attend in person in Grand Junction. The SJRIP BC meeting will be held in Albuquerque on February 6-8, and there are virtual options for that meeting as well. Lastly, the Program's partners are working to reauthorize the recovery programs future funding for recovery activities.

NM Office of the State Engineer (NMOSE): There may be up to a weeklong outage on the website's realtime diversion information as the switch is made to radio from satellite telemetry. This change is being made to hopefully get rid of some of the issues with stations not reporting properly.

Navajo Agricultural Products Incorporated (NAPI): Diversions from Navajo to NIIP- gate will be opening on February 12th.

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
Cameron Corley	APS, Four Corners Power Plant
Carrie Bean	Monticello BLM Office, San Juan River Permit Desk
Carrie Padgett	SWWCD
Chico Quintana	Reclamation FCCO
Chris Wilkowske	USGS Moab, Utah Water Science Center
Christina Noftsker	NMISC
Colleen Cunningham	NMISC
David Shoultz	NTUA, NGWSP Op's Manager
Diane Agnew	Albuqerque Bernalillo County Water Utility Authority (ABCWUA)
Dominique Work	NMISC
Ed Bulloch	San Juan Watershed Group
Elizabeth Serrano	Bloomfield Irrigation District
Erin Walter	National Weather Service, Grand Junction
Garret Ross	USACE Albuquerque
Jamie Shockey	City of Farmington
Jason Sullivan	RSI
Jeanette Joe	NAPI
Jeff Derry	Center for Snow and Avalanche Studies
Jen Dumas	Jicarilla Apache Nation
Jim Dumont	Senator Martin Heinrich's Office
Joe and Julie Razor	Local Landowners
Joe Trungale	TNC
Justyn Liff	Reclamation
Kathi Smith	Hammond Conservancy District
Kelsey Deckert	Bureau of Reclamation
Kerri Pedersen	Bureau of Reclamation
Kilian Carey	Farmington Fire
Lee Bryand	Local Landowner
Les Larson	Hillside Irrigation District
Marc Miller	Reclamation WCAO
Michele Truby-Tillen	San Juan County
Pam Norris	APS
Paul Montoia	Retired, City of Farmington
Robert Sterrett	Farmington Fire
Ryan Seamus Royer	Reclamation FCCO
Scott Durst	FWS, SJRIP
Scott Miller	APS
Shawn Williams	NMOSE
Sherice Snell	San Juan Water Commission
Stacy Dodd	Bloomfield Irrigation District
Steve Austin	Navajo Nation EPA
Susan Behery	Bureau of Reclamation

Tammy Gallegos	San Juan County Utah
Tom Miller	Farmington Fire