

BUREAU OF RECLAMATION
NAVAJO RESERVOIR COORDINATION MEETING
JANUARY 19, 2021
MEETING NOTES

Dear Interested Party:

Enclosed is a summary of our January 19th, 2021 meeting to coordinate Bureau of Reclamation's (Reclamation) operation of the Navajo Unit. The meeting was held virtually over Microsoft Teams video conferencing.

Summary points of the meeting:

- Snowpack is well-below average (65% above Navajo Reservoir) and dry soils coming into the season further reduce the spring inflow forecasts.
- CPC outlook is showing a chance for drier than average conditions through the spring and a high chance for warmer than average temperatures.
- The April-July runoff most probable forecast for Navajo is 450kaf (61% of average).
- Based on current conditions (snowpack and reservoirs), and the range of forecast possibilities provided by Colorado Basin River Forecast Center CBRFC, a spring peak release in 2021 is very unlikely.
- Expect low releases throughout the winter (300-500 cfs) as minimum releases to meet the target baseflows will be made.
- Currently no model runs result in a shortage for WY 2021.

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. The next meeting will be held on **Tuesday, April 20th, 2021 at 1:00 PM, in a virtual format. A meeting notice with conferencing details will be sent out prior to the meeting date.**

NAVAJO UNIT OPERATIONS MEETING

January 19th, 2021

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.

Review of Water Year 2021 Operations to date

The release at the beginning of the water year was 750 cfs. By early mid-November, irrigation tapered off and the release was decreased to 300 cfs, while maintaining the downstream target baseflow minimum of 500 cfs, as recommended by the San Juan River Recovery Implementation Program (SJRIP). The SJRIP 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. As a precipitation deficit has materialized and baseflows have continued to decline throughout the winter, the release has slowly been increased to maintain the downstream target baseflows. At the time of the meeting, the dam is releasing 400 cfs.

Navajo has been slowly losing storage over the winter. The reservoir began the water year (October 1st, 2021) at an elevation of 6043 ft (1.145 maf of live storage). This is 20 feet lower than the reservoir elevation at the start of the previous water year.

Due to the below-average runoff from last spring and the below-average precipitation through the fall, baseflows in the basin have been below-average.

Water Year 2021 Current Conditions

As of the meeting date, the snowpack above Navajo Reservoir is at 10 inches of snow water equivalent (SWE), which is 77% of median on this date. Snowpack above the Animas River Basin is at 6.5 inches of SWE, which is 65% of median for this date.

Reservoirs in the San Juan River Basin are all at below average storage levels for this time of year. Navajo Reservoir is 63% full, or 39% of active storage. Other area reservoirs are as follows: Vallecito, 30% full; Lemon, 27% full; Nighthorse, 93% full; McPhee, 44% full, and Jackson, 27% full.

Winter baseflows throughout the basin have been well below normal. The Animas River has shown the lowest flows in its 120-year record this fall. As of the meeting date, the Animas River at Durango is at 107 cfs, the Animas River at Farmington is at 184 cfs, the San Juan at Farmington is at 542 cfs, and the San Juan at Four Corners is at 483 cfs. Navajo Dam is releasing 400 cfs.

Soil moisture conditions are below normal and are generally in the bottom three years for the 1981 – 2020 time period. Soil moisture conditions are similar to last year in the eastern headwaters but worse over the remainder of the basin. Two consecutive years of poor monsoon seasons have exacerbated antecedent soil moisture conditions. There has been limited groundwater recharge since 2019 runoff. It is expected that extreme dry soils will play a significant role in decreasing spring runoff.

Since the first of the water year, temperatures over southeastern Utah were cooler than normal and over southwestern Colorado temperatures were warmer than normal. Precipitation has been well below normal over the headwaters since the beginning of the water year.

The latest storm in late December brought some brief relief to southwestern Colorado, but the first half of January has been dry. Temperatures in January have been below normal. Near record dry conditions have plagued the San Juan River Basin from April – December of 2020.

Exceptional drought remains entrenched over the headwaters and Four Corners region.

Water Year 2021 Weather and Hydrologic Forecast

Slides and presentations by Aldis Strautins, NWS and Ashley Nielson, CBRFC

ENSO- La Nina conditions are present and are expected to continue this winter. A transition to neutral is forecast in the spring.

A more progressive weather pattern is indicated for the second half of January, which would allow more storms and increased precipitation chances.

The forecast into spring and summer show higher chances of below normal precipitation and a higher chance of above normal temperatures. This is contributing to the seasonal drought outlook for the Four Corners area, in which drought is expected to persist.

January water supply forecasts across the basin range from 45-85% of normal. The best conditions are in the eastern headwaters, and forecasts deteriorate moving west towards the Animas Basin.

Weather patterns for the next 7-10 days look more favorable for the San Juans, with chances for widespread precipitation.

Given the dry antecedent soil and baseflow conditions, an above normal snowpack or a wet spring would be needed to see near average water supply volumes.

Current Most Probable inflow forecasts (as of January 1st) for the April-July runoff season are as follows:

Navajo:	450 kaf (61% avg)
Vallecito:	110 kaf (57% avg)
Lemon:	31 kaf (57% avg)
Animas:	240 kaf (56% avg)
McPhee:	170 kaf (58% avg)
Powell:	3,800 kaf (53% avg)

Water Year 2021 Proposed Operations

Based on current storage levels and the latest forecast from the CBRFC, an SJRIP-prescribed spring peak release of at least 21 days at 5,000 cfs is unlikely this year. Though the chances are low, it is not out of the question, and should hydrologic conditions improve this spring it may become a possibility.

If a spring peak release is conducted, it will be timed to peak with the Animas River. At our meeting in January of 2020, State Parks requested that if we can avoid holiday weekends (Memorial Day, Father's Day, Mother's Day) that we try to do so.

Based on latest information, there is a 30% chance the reservoir pool elevation will peak at 6050 ft or higher. There is a 10% chance it will peak at a pool elevation of 6060 ft or higher.

There is a 25% chance the Sept 30th (end of Water Year 2021) pool elevation will be 6050 ft or higher. There is a 5% chance the Sept 30th pool elevation will be 6060 ft or higher.

As the likelihood of a spring peak release is very low, and the forecast for Animas runoff is also very low, flows at Four Corners this spring are unlikely to meet the SJRIP recommended targets this year.

No runs in the modeling currently result in a shortage for WY 2021.

The release over the rest of the winter and into early spring will likely range from 300 to 500 cfs.

Agency/Organization Reports

NAPI – Will open the gates to start filling Cutter on February 15th (relayed to Reclamation by Jeanette Joe, NAPI, prior to meeting)

NM State Engineer's Office, Aztec – Shawn Williams- New metering activities in the spring, new meters installed last year on the San Juan to aid NM modeling efforts. Shawn expects

Animas River shortages this coming summer, some ditch rotations possible.

SJRIP (FWS)- Nate Franssen - COVID-19 has caused issues for field work. Nonnative fish removal was done early in the year, some fish sampling done in the fall. Overall, some field work was unable to be performed due to travel restrictions. Second year since the program started that young of year razorback sucker have been detected. Next Biology Committee meeting will be virtual on February 17th.

Next Coordination Meeting - The next meeting will be held on **Tuesday, April 20th, 2021 at 1:00 PM, in a virtual format. A meeting notice with conferencing details will be sent out prior to the meeting date.**

Attendance List – January 19, 2021 Navajo Operations Meeting

Aaron Chavez	San Juan Water Commission
Ashley Nielson	NOAA- CBRFC- Salt Lake City
Cameron Corley	APS
Christina Noftsker	New Mexico Interstate Stream Commission
Crystal Tulley-Cordova	Navajo Nation Department of Water Resources
Ed Warner	Reclamation - WCAO
Erik Knight	Reclamation - WCAO
Gordon Miller	San Juan Water Commission
Grant Ross	Corps of Engineers, Albuquerque District
Henry Day	APS
Jeff Derry	Center for Snow and Avalanche Studies
Jeff Smaka	City of Farmington
Kathi Smith	Hammond Conservancy District
Les Larson	Hillside Irrigation District
Linda Corwin	Bloomfield
Marc Miller	Reclamation - WCAO
Michele Truby-Tillen	SJC Community Development Director
Mike Greene	PNM
Nate Franssen	SJRIP - USFWS
Paul A. Montoia	City of Farmington
Richard P Smith	San Juan River Runner for 40 years (!)
Ryan Seamus Royer	Reclamation - Four Corners Construction Office
Scott Miller	APS
Shannon Hatch	Reclamation - WCAO
Shawn Williams	NM State Engineer's Office - Aztec
Stacy Dodd	Bloomfield Irrigation District
Susan Behery	Reclamation - WCAO
Tom Fowlds	Reclamation - WCAO