

BUREAU OF RECLAMATION
NAVAJO RESERVOIR COORDINATION MEETING
AUGUST 21, 2019
MEETING NOTES

Dear Interested Party:

Enclosed is a summary of our August 21, 2019, meeting to coordinate Reclamation's operation of the Navajo Unit. The meeting was held at the Civic Center in Farmington, New Mexico.

Highlights of the meeting include:

- The snowpack peaked at 144% of average in the San Juan Basin. The snowpack peak was one of the highest on record.
- Greg Smith, Senior Hydrologist from the Colorado River Basin Forecast Center (CRBFC) in Salt Lake City, Utah presented a slide show explaining how the inflow forecasts were derived and upcoming impacts of the remainder of the monsoon season and forecast winter weather patterns.
- The final April-July modified unregulated inflow into Navajo Reservoir totaled 1.16 million acre-feet (maf), which was 158% of average.
- A maintenance release peaking at 5,000 cfs was conducted in June. Volume released over base was 85 thousand acre-feet (kaf). When combined with Animas River, flow targets for ESA species achieved.,
- SJRIP request for increased baseflows to move excess water. (Navajo Operations ROD, 2006. Adaptive management component of SJRIP Flow Recommendations, 1999, revised 2018)

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, **January 21, 2020 at 1:00 at the Farmington Civic Center, Farmington, New Mexico (200 West Arrington Street).**

NAVAJO UNIT OPERATIONS MEETING

August 21, 2019

Participation: This meeting was held in Farmington, New Mexico at the Civic Center. 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 Spring 2019 Operations

Water Year (WY) 2019 included record snowpack for much of the basin. The forecast increased every month and followed along the Max Probable forecast.

Snowpack peaked at 29.9 inches of snow water equivalent (SWE) or 144% of average. While the snowpack was above average, the forecast range included influences by the low snowpack and record dry conditions of 2018. As the season progressed, cool spring temperatures and delayed runoff caused the forecast to increase and increasingly higher inflows were observed. By July 31st, a total April-July modified unregulated inflow of 1.16 million acre-feet (maf) was observed for Navajo Reservoir.

Reclamation conducted a maintenance release from Navajo Dam from June 3rd to June 15th. The release peaked at 5,000 cfs on June 11th and totaled 85 thousand acre-feet (kaf) over the base release. The release was not prescribed by the San Juan River Recovery Implementation Program (SJRIP) flow recommendations but was timed to coincide with the Animas River peak to hopefully meet some of those flow goals anyways. The Animas peak, an essential component to meeting the flow goals, was flowing high. The top flow goal of 10,000 cubic feet per second (cfs) at the San Juan at Four Corners gage was recorded for a total of 6 days, fulfilling that goal for 2019.

Due to record high snowpack and inflows, the storage recovery at Navajo Reservoir for WY 2019 was one of the fastest in the history of the project.

Guest Speaker – Greg Smith, Senior Hydrologist from the Colorado River Basin Forecast Center (CRBFC) in Salt Lake City, Utah presented a review of forecast methods, assumptions, and results from the 2019 spring runoff year. Because 2019 was such a record high year, forecasting methodologies and models have a difficult time handling exact volumes. The same was said of 2018, as it was a record low year. Additionally, a record high year following a record low year

presented its own set of questions and issues. However, having these two record years in the books, and having them back to back, adds a significant amount of information to the models and forecaster experience in years going forward. Record years are when forecasters and models learn the most and gain the newest insight and information going forward.

Operational Plans through WY 2020

Releases remain high through the next few months due to the high resulting total inflow into Navajo Reservoir. The SJRIP Flow Recommendations (revised 2018) recommend entering the following year at an elevation no higher than 6063 ft to avoid the possibility of spilling in the spring. Reclamation follows a similar guideline. The SJRIP has recommended targeting a downstream baseflow of 1500 cfs as long as this water is available to move. *(The target baseflow is calculated as a weekly average of the downstream gages from Farmington to Lake Powell.)*

At the time of the meeting, Reclamation estimates that these higher releases will be required to maintain this baseflow and move excess water through the first two weeks of September. After mid-September, the release will resume that which is required to maintain the minimum target baseflow range of 500 cfs – 1000 cfs.

For the first two weeks of November, Reclamation will reduce the release as low as possible, to a minimum of 250 cfs if necessary, to achieve the lowest target baseflow possible, of 500 cfs. The SJRIP will be conducting a fixed-wing flight of the area during this time period. As soon as this flight has been completed, normal operations will resume, and the downstream release will target the normal 500 – 1000 cfs target baseflow range. The release after November will likely be 400-500 cfs.

Storage at Navajo Reservoir will be going into the spring of 2020 at a comfortable storage level. Water users and residents can expect a high likelihood of spring peak release of at least 21 days, peaking at 5,000 cfs, most likely in May and/or June of 2020.

Current Conditions around the San Juan River Basin

At the time of the meeting, Navajo Reservoir elevation was near 6071.2 ft and falling. The release was 1,450 cfs, the minimum required to meet the SJRIP requested baseflow of 1500 cfs downstream.

Despite their low (nearly empty!) starting conditions, every Reclamation reservoir in the San Juan River Basin filled in 2019. McPhee released flows for boating throughout May and June.

Lake Nighthorse pumped to refill in June. Nearly 60% of the vacant space in Nighthorse was filled with natural inflows from low elevation snowpack. Only 1700 af was required to be pumped from the Animas to top off the reservoir at an elevation of 6882 ft.

Maintenance Activities

The 72-inch Hollow jet valve (HJV) and 30-inch HJV rehabs have been completed. Some release occurring through the 4x4 this week is due to some work being done over the HJV gates. That work should be completed relatively soon, and releases in excess of power plant capacity will resume through the main outlet works.

Reclamation is working with New Mexico Department of Transportation (NMDOT) to repair fences along the spillway and to address the issue of oversized loads going over the spillway bridge.

New gravel on the parking lot on top of the dam and new pavement in the turnaround area has been completed.

Agency/Organization Activities and Discussion of Related Activities

NIIP – Tentative plans to shut off NIIP on October 1st.

BID – Requests coordination on release change timing

Next Meeting - Scheduled for **1:00 p.m. on Tuesday, January 21, 2020** at the Civic Center in Farmington, New Mexico (200 West Arrington Street).

Attendance List – August 21, 2019 Navajo Operations Meeting

Adkins, Allen, NM State Park, Navajo Dam NM
Archuleta, Evelyn, Citizen, Bloomfield NM
Behery, Susan, Bureau of Reclamation, Durango CO
Branham, Scott, Bureau of Reclamation, Navajo Dam NM
Brinkerhoff, Fletcher, USGS, Albuquerque NM
Brown, Rochelle, KB-Walkoma, Farmington NM
Bulloch, Ed, SJWG, Farmington NM
Carter, Robb, CO State Parks, Arboles NM
Corley, Cameron, Arizona Public Service, Albuquerque NM
Corwin, Linda, Citizen, Bloomfield NM
Cowboy, Vincent, Navajo Agricultural Products Industry, Farmington NM
Day, Henry, Arizona Public Service, Phoenix AZ
Dickson, Lynlana, Upper Fruitland, Fruitland NM
Dodd, Stacy, Bloomfield Irrigation District, Bloomfield NM
Durst, Scott, US Fish and Wildlife Service, Albuquerque NM
Etcitty, Albert, Navajo Agricultural Products Industry, Farmington NM
Hart, Brandt. BLM, Monticello UT
Horner, Gary, Citizen, Farmington. NM
Kupfer, Barb, West Hammond, Bloomfield NM
Jim, Angilene, Navajo Agricultural Products Industry, Farmington NM
Juett, Miles. NM State Engineer's Office, Aztec NM
Lobato, Ike, Turley Ditch Company, Blanco NM
Lapahie, Donnie, Navajo Agricultural Products Industry, Farmington NM
Lee, Keith, Lower Valley Water, Farmington NM
Lee, Tyrell, Navajo Agricultural Products Industry, Farmington NM
Miller, Gordon, San Juan Water Commission, Aztec NM
Miller, Marc, Bureau of Reclamation, Durango CO
Montoia, Paul, City of Farmington, Farmington NM
Padgett, Carrie, Southwestern Water Conservancy District, Durango CO
Prda, Sam, West Hammond Water Users, Bloomfield NM
Razor, Julie, Homeowner, Farmington NM
Royer Seamus, Ryan, BOR Four Corners Construction Office, Farmington NM
Sagg, Corey, KB-Walkoma, Farmington NM
Serrano, Elizabeth, Bloomfield Irrigation District, Bloomfield NM
Shockey, Jamie, City of Farmington, Farmington NM
Smith, Greg, CRBFC-National Weather Service, Salt Lake City, UT
Smith, Kathi, Hammond Conservancy District, Bloomfield NM
Tso, Edmond, Emergency Management, Navajo Nation, Shiprock NM
Truby-Tiller, Michele, NM Office of the State Engineer, Aztec NM
Wethington, Marc, NM Department of Game and Fish, Navajo NM
Yazzie, Letisha, NM State Engineer's Office, Aztec NM
Yazzie, Roselyn, Navajo Agricultural Products Industry, Farmington NM
Zeller, Dave, Navajo Agricultural Products Industry, Farmington NM