

**BUREAU OF RECLAMATION
NAVAJO RESERVOIR
JANUARY 21, 2014 MEETING NOTES
SENT VIA FAX AND E-MAIL**

Enclosed is a summary of our January 21, 2014, 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 most probable April through July unregulated inflow to Navajo Reservoir, based on the January forecast, is 650,000 acre-feet, or 88 percent of the 30-year average. However, this is very preliminary and will change as updated forecasts become available.

≐ The reservoir elevation on January 20, 2014 was 6,025.53 feet which corresponds to approximately 964,376 acre-feet of storage which was 76% of average and 57% full (29% active).

≐ Precipitation for the months of October was below average; the precipitation for November in the San Juan River Basin was well over 100% of the 30-year average for the month. However, December was another very dry month for the San Juan River Basin. As of January 20, 2014, the current snowpack above Navajo was at 77 percent of average with a snow water equivalent (SWE) of 8.1 inches.

≐ The release from Navajo Reservoir has been 250 cfs since late September.

≐ Based on the January mid-month most probable inflow forecast, a one week spring peak release is possible, though considering the current snowpack conditions, and the likelihood of a decreasing forecast, this outcome is unlikely.

Copies of the material presented and meeting notes from the January 21 meeting are available online at: <http://www.usbr.gov/uc/wcao/water/rsvrs/mtgs/nmcurrnt.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 22, 2014 at 1:00pm at the Farmington Civic Center, Farmington, New Mexico (200 West Arrington Street)**. If you have questions, please call Ryan Christianson at 970-385-6590 or Susan Novak Behery at 970-385-6560 or Ruth Swickard at 970-385-6523.

NAVAJO UNIT OPERATIONS MEETING

January 21, 2014

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 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, hydropower, 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 2013 Operations

A quick overview was given of the Navajo operations since the last meeting.

A graph was presented showing daily data, demonstrating adjustments to downstream flows within the target base flow range. Base flow is the weekly average flow of the San Juan River from Farmington to Lake Powell. It includes the outflow from Navajo, as well as the inflow from the Animas River at Farmington. The target base flow is 500 to 1,000 cfs from the San Juan Basin Recovery Implementation Project (SJRIP) Flow Recommendations dated 1999.

Water Year 2014 Conditions & Forecasts

The October precipitation was below average, but well above average in November. December was dry again as most storms passed to the north of the San Juan River Basin. The month of January up through the meeting was also well-below normal for precipitation. Soil moisture levels were in good shape at the beginning of the snowfall season due to higher precipitation amounts during 2013's monsoon season.

The average snowpack above Navajo Reservoir, as of January 20, 2014, was at 77 percent of average with a snow water equivalent (SWE) of 8.1 inches, which is slightly higher than the conditions at this time last year. The fall monsoons helped but did not provide enough precipitation to recover the reservoir from the low elevation.

The most probable modified-unregulated inflow forecast for January at Navajo is 23,000 acre-feet (106% of average), for February is 26,000 acre-feet (86% of average), and for March is 80,000 acre-feet (87% of average). The April-July inflow forecasts are as follows: Min Probable: 440,000 acre-feet (60% of average), Most Probable, 650,000 acre-feet (88% of average), and Max Probable: 930,000 acre-feet (126% of average). Under the SJRIP Flow Recommendations, the most and maximum probable inflow forecasts call for a 1-week at 5,000 spring peak release. Typically the San Juan River Basin's snowpack is overforecast this time of year, so it is likely that the most probable forecast will decrease as the season progresses. Modified unregulated inflow is defined as the predicted hydrologic inflow volume into Navajo plus the change in storage at Vallecito Reservoir and the San-Juan Chama diversion volume.

The Climate Prediction Center indicates decreased odds for moisture in the San Juan River Basin for the next few months and increased odds for above-average temperatures. ENSO models are all showing neutral conditions through summer 2014.

Current Reservoir Status

The reservoir elevation on January 20, 2014 was 6,025.53 feet which corresponds to approximately 964,376 acre-feet of storage, which is 76% of average or 57% percent full with 29% active. The current release to the river is approximately 250 cfs.

An overview of the conditions of nearby reservoirs was presented. Currently, Vallecito Reservoir is approximately 75% full, which is 178% of average for mid-January. Vallecito's new ice-preventing bubbler system is allowing higher winter storage levels than in previous years. Currently, Lemon is approximately 43% of full, which is 86% of average. Lake Nighthorse is 92% full. Some pumping is anticipated during May and June of 2014 to bring the reservoir up to full storage. No releases are presently scheduled.

Water Year 2014 Operations

Based on the most and maximum probable inflow forecast, there is a possibility of a peak release of 1-week at 5,000 cfs. There is no release forecast under minimum probable conditions. Because recent history has shown that the basin is typically over forecast during this time of year, it is unlikely that a spring peak release will remain in the most probable operational forecast. . Downstream river flows are anticipated to be lower than normal. This is very preliminary and will change as the updated inflow forecasts become available. While the reservoir elevation at Navajo has improved over the last several months, it is still in the lowest operational range it has been since 2003.

At the last meeting (August 2013), a shortage was projected in the San Juan River Basin under minimum probable conditions. Due to conservation efforts by water users, tight operations and lower releases at Navajo throughout 2013, and a favorable monsoon season in 2013, a shortage is no longer forecast in the San Juan River Basin. The forecast is still preliminary and can change as snowpack accumulates throughout the winter season. Navajo will continue to be operated in a conservative manner in 2014 to reduce the risk of shortage.

Maintenance Activities

The right abutment rehabilitation will begin in the late fall. Refurbishing of the hydraulic system 30 inch hollow jet valves will be worked on at the shop as time allows.

Agency/Organization Activities and Discussion of Related Activities

New Mexico Office of the State Engineer – new office assistants will start in March.

Colorado Parks and Wildlife – due to the low reservoir elevation the marina had to be closed but is planning to open this summer.

Fish and Wildlife Service -- will be installing tags and readers for fish counting near Mexican Hat during the year. Previous work has been successful.

Blue Sky Fly Fishing - Low flows in the San Juan River have affected local tourism.

NAPI- diversion will begin the first of March to recharge their system for the growing season.

PNM -Pending approval by the US EPA in Q3 of 2014, Units 2 & 3 will discontinue operation. This is tentatively planned to occur by the end of 2017

Gary Horner - wanted to know if by PNM discontinuing 2 units, if this has any effect on PNM's water rights. The answer was no.

Farmington Electric Utility System - currently the power plant is off-line.

Bloomfield Irrigation District - will start diverting water next week for stock ponds.

San Juan River Water Users at Shiprock - are pursuing funding to begin converting an irrigation system west of Farmington into pipe.

Next Meeting - Scheduled for **1:00 p.m. on Tuesday, April 22, 2014** at the Civic Center in Farmington, New Mexico (200 West Arrington Street).

Attendance List – January 22, 2014 Navajo Operations Meeting

Adams, Erica, Arizona Public Service, Phoenix AZ
Adeky, Rhoda, Navajo Agricultural Products Industry, Farmington NM
Ashcroft, Nick, West Hammond Domestic Water Assoc., Bloomfield NM
Becker, Herb, Jicarilla Apache Nation, Dulce NM
Bitsoi, Marcus, Navajo Agricultural Products Industry, Farmington NM
Bitsue, Cherri, Navajo Agricultural Products Industry, Farmington NM
Campbell, David, US Fish and Wildlife Service, Albuquerque NM
Chavez, Aaron, San Juan Water Commission, Farmington NM
Christianson, Ryan, Bureau of Reclamation, Durango CO
Coleman, Dennis J., Wilbur-Ellis Co, San Francisco CA
Cuylear, Natasha, Jicarilla Apache Nation, Dulce NM
Day, Henry, Arizona Public Service, Phoenix AZ
Dodd, Stacy, Bloomfield Irrigation District. Bloomfield NM
Duncan, Martin, San Juan River Water Dineh Water Users, Inc., Shiprock NM
Durst, Scott, U.S. Fish and Wildlife Service, Albuquerque NM
Etcitty, Albert, Navajo Agricultural Products Industry, Farmington NM
Garcia, Ryan, Navajo Agricultural Products Industry, Farmington NM
Gould, Stacey, Navajo Agricultural Products Industry, Farmington NM
Greene, Mike, Public Service of New Mexico, Bloomfield NM
Greenberg, Andy, Soaring Eagle Lodge, Navajo Dam NM
Harry, Elden, Navajo Agricultural Products Industry, Farmington NM
Haskie, Lionel, Navajo Agricultural Products Industry, Farmington NM
Hayes, Sky, Navajo Agricultural Products Industry, Farmington NM
Hodges, Jimmy, NM Office of the State Engineer, Aztec NM
Horner, Gary, Citizen, Farmington NM
Howe, Michael, BIA, Navajo Indian Irrigation Project, Farmington NM
Joe, Jeanette, Navajo Agricultural Products Industry, Farmington NM
Johnson, Morris, San Juan River Water Dineh Water Users, Inc., Shiprock NM
Kirby, Kim, NM Office of the State Engineer, Aztec NM
Lane, Teresa, Hammond Conservancy District, Bloomfield NM
Lile, Carrie, Southwest Water Conservation District, Durango CO
Martin, George, Navajo Agricultural Products Industry, Farmington NM
Miller, Richard, City of Farmington, Farmington NM
Moline, Cheryl, Navajo Lake State Park, Navajo Dam NM
Montoia, Paul, City of Farmington, Farmington NM
Nesbit, Mark, Blue Sky Fly Fishing, Navajo Dam NM
Oxford, Robert E., Citizen, Aztec NM
Pablo, Renea, Navajo Agricultural Products Industry, Farmington NM
Prde, Sam, West Hammond Domestic Water Assoc., Bloomfield NM
Secrist, Doug, CO Parks and Wildlife, Arboles, CO
Skeet, Raynaldo, Navajo Agricultural Products Industry, Farmington NM
Swickard, Ruth, Bureau of Reclamation, Durango CO
Todachine, Heather, Navajo Agricultural Products Industry, Farmington NM
Toney, Lorenzo, Navajo Agricultural Products Industry, Farmington NM
Trujillo, Leonard, Bloomfield Irrigation District. Bloomfield NM
Whitmore, Sharon, US Fish and Wildlife Service, Albuquerque NM
Williams, Shaun, NM Office of the State Engineer, Aztec NM
Wimsatt, Marian, BHP Billiton, Farmington NM
Yazzie, Roselyn, Navajo Agricultural Products Industry, Farmington NM
Yellowhorse, Rafurt, Navajo Agricultural Products Industry, Shiprock NM