

**BUREAU OF RECLAMATION  
NAVAJO RESERVOIR  
JANUARY 15, 2013 MEETING NOTES**

**SENT VIA FAX AND E-MAIL**

Enclosed is a summary of our January 15, 2013, 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 440,000 acre-feet, or 59 percent of the 30-year average. However, this is very preliminary and will change as updated forecasts become available.

≐ The reservoir elevation on January 13, 2013 was 6,024 feet which corresponds to approximately 950,176 acre-feet of storage which was 75% of average and 56% full.

≐ Precipitation for the months of October and November in the San Juan River Basin was less than average. Precipitation for December in the San Juan River Basin was slightly above average. As of January 15, 2013, the current snowpack above Navajo was at 68 percent of average with a snow water equivalent (SWE) of 6.8 inches.

≐ The release from Navajo Reservoir was approximately 500 cfs until November 7 when the release was decreased to approximately 350 cubic feet per second (cfs). The possibility of reducing the release to 250 cfs during the winter months for water conservation was discussed.

≐ Based on the January mid-month inflow forecast, a spring peak release would only occur if the maximum predicted inflow is received.

Copies of the material presented and meeting notes from the January 15 meeting are available online at:

<http://www.usbr.gov/uc/wcao/water/rsvrs/mtgs/pdfs/archieves/NavajoJan15Meeting.pdf>

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 23, 2013 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 15, 2013

**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 tri-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 2012 Operations

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

A graph was presented showing daily data, demonstrating adjustments to the post-runoff release were used to keep downstream flows within the target base flow range.

### Water Year 2013 Conditions & Forecasts

The fall 2012 and January 2013 precipitation pattern was below average with limited precipitation received. Soil moisture levels were showing dry conditions.

The average snowpack above Navajo Reservoir, as of January 15, 2013, was at 68 percent of average with a snow water equivalent (SWE) of 6.8 inches, which is slightly lower than neighboring river basins.

The most probable April-July inflow, based on the mid-January forecast, is 440,000 acre-feet, which is 59 percent of the 30-year average. The minimum probable and maximum probable April-July inflow forecasts are 310,000 acre-feet (42% of average) and 815,000 acre-feet (110% of average), respectively.

The Climate Prediction Center indicates precipitation will continue to have a greater than average probability of below average precipitation for the next few months. ENSO models are all showing a trend back to neutral (El Nino/ La Nina) conditions by summer.

### Current Reservoir Status

The reservoir elevation on January 13, 2013 was 6,024 feet which corresponds to approximately 950,176 acre-feet of storage, which is 56% of average or 75% percent full. The current release to the river is approximately 350 cfs.

An overview of the conditions of nearby reservoirs was presented. Vallecito Reservoir's most probable forecasted inflow indicates it will not fill. Currently, the Vallecito Reservoir is approximately 33% full, which is 78% of average for mid-January. Forecasted inflow for Lemon Reservoir remains below average, making it unlikely the reservoir will fill this year. Currently, Lemon is approximately 19% of full, which is only 39% of average. Lake Nighthorse is 94% full. Some pumping is anticipated during the spring. No releases are presently scheduled. The project is in the process of being transferred to the OM&R Association.

### **Water Year 2013 Operations**

Based on the most and minimum probable inflow forecast, no spring peak release is expected. However, if the current maximum inflow were to be received the flow recommendations define a peak release for 1-week at 5,000 cfs. This is very preliminary and as updated inflow forecasts become available, the spring peak release can change. Under the January forecast, the reservoir is not currently projected to have shortages this year, however, the forecast is likely to change as spring approaches.

Using the current most probable forecast, the San Juan River at Four Corners would see below normal flows, peaking at just over 2,000 cfs in late May or early June. This estimate is based on models using comparable historical years, and the current peak release hydrograph, which is likely to change throughout the season. Downstream river flows are anticipated to be lower than normal.

#### *Shortage Sharing Discussion*

The possibility of a shortage occurring was discussed. While a shortage is not currently forecasted, the possibility of a forecasted shortage exists if water supply forecasts decrease. A shortage occurs when under Minimum Probable Conditions, the pool elevation at Navajo drops to below 5990 ft at any time during the year. If this possibility exists, several water-saving measures are implemented.

The first water-saving measure was discussed during the August 2012 Operations meeting, and involved invoking the Record of Decision "goal" base release of 350 cfs. This measure is applied under the condition that target base flows are still being met through the critical habitat reach of the San Juan River.

The second water-saving measure is to reduce the base release further to 250 cfs. This is the minimum agreed-upon release documented in the Record of Decision. This measure is applied when the flexibility no longer exists to release anything beyond the absolute minimum required to maintain target base flows through the critical habitat reach.

The third water –saving measure would be a resulting release based on a joint discussion between the Fish and Wildlife Service biologists and Reclamation. The agreement would involve temporarily reducing the goal target base flow through the critical habitat reach in order to save water in the reservoir.

If the previous water-saving measures are not enough to prevent elevations from dropping below 5990 ft at any time of the year, shortage-sharing measures will go into effect. The calculated

amount of shortage still unaccounted for by the previous three water-saving measures will be distributed equitably as agreed upon by the endorsing parties. Visit Reclamation's website for more information regarding the 2012 Shortage Sharing agreement.

### **Maintenance Activities**

The left seepage area near the highway was reconstructed for prevention of a larger seepage problem. No major maintenance work has been scheduled during the remainder of the year.

### **Agency/Organization Activities and Discussion of Related Activities**

SJRIP – The committee has requested a temporary release reduction to 250 cfs from Navajo Reservoir for instream work February 11-15, 2013 at PNM fish ladder and for four days in late March or early April in Mexican Hat. Releases will be reduced addressing these requests. The target base flow requirements in the habitat reach may be suspended during each project.

Farmington Electric Utility System – Power plant will be offline from January through April for technical upgrades.

Bloomfield Irrigation District – The district is working on improving their water conveyance system.

San Juan River Water Users at Shiprock – Awarded 3.8 million for Colorado River Salinity Control Program. Starting the project this year, despite stolen equipment.

**Next Meeting** - Scheduled for **1:00 p.m. on Tuesday, April 23, 2013** at the Civic Center in Farmington, New Mexico (200 West Arrington Street).

## **Attendance List – January 15, 2013 Navajo Operations Meeting**

Artichoker, Tyler, Bureau of Reclamation, Durango CO  
Becker, Herb, Jicarilla Apache Nation, Dulce NM  
Behery Novak, Susan, Bureau of Reclamation, Durango CO  
Christianson, Ryan, Bureau of Reclamation, Durango CO  
Crawford, Carroll, Bloomfield Irrigation District, Bloomfield NM  
Deyo, Emma, San Juan SWCD, Aztec NM  
Duncan, Martin, San Juan River Dineh Water Users, Shiprock NM  
Durst, Scott, US Fish and Wildlife Service, Farmington NM  
Harvey, Jason, BHP Billiton, Farmington NM  
Hodges, Jimmy, NM State Engineer's Office, Aztec NM  
Horner, Gary, Citizen, Farmington NM  
Howe, Michael, NIIP, Bureau of Indian Affairs, Farmington NM  
Green, Kristen, NM Interstate Stream Commission, Santa Fe NM  
Greenberg, Andy, Soaring Eagle Lodge, Navajo Dam, NM  
Greene, Mike, PNM, Albuquerque NM  
Joe, Jeanette, Navajo Agricultural Products Industries, Farmington NM  
Johnson, Larry, Soaring Eagle Lodge, Navajo Dam NM  
Manwell, Judy, Jicarilla Apache Tribe, Dulce NM  
Lasater, Stevy, Lee Acres Water Users, Farmington NM  
Lile, Carrie, Southwest Water Conservation District, Durango CO  
May, Melissa, San Juan SWCD, Aztec NM  
Miller, Gordon, San Juan Water Commission, Farmington NM  
Miller, Richard, City of Farmington, Farmington NM  
McFadden, Curtis, Army Corp of Engineers, Albuquerque NM  
Moline, Cheryl, Navajo Lake State Park, Navajo Dam NM  
Montoia, Paul, City of Farmington, Farmington NM  
Oxford, Bob, Citizen, Farmington NM  
Rider, Warren, BHP Billiton, Farmington NM  
Smith, Brad, Arizona Public Service, Phoenix AZ  
Swickard, Ruth, Bureau of Reclamation, Durango CO  
Teresa Lane, Hammond Irrigation District, Bloomfield NM  
William, Soaring Eagle Lodge, Navajo Dam NM  
Williams, Shawn, NM State Engineer's Office, Aztec NM  
Young, Rick, Army Corp of Engineers, Albuquerque NM