

**BUREAU OF RECLAMATION**  
**NAVAJO RESERVOIR**  
**MEETING NOTES**  
**April 28, 2015**

**SENT VIA FAX AND E-MAIL**

Enclosed is a summary of our April 28, 2015, 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 mid-April forecast, is 280,000 acre-feet (acre-ft), or 38 percent of the 30-year average. However, this is preliminary and will change as updated forecasts become available.
- The reservoir elevation on April 26, 2015 was 6,045.40 ft which corresponds to approximately 1,172,392 acre-ft of storage which was 69% full and 49% of active.
- Precipitation for most of the winter and into spring has been below average; the San Juan River Basin was well below 30-year average for the April-July. As of April 28, 2015, the current snowpack above Navajo was at 35 percent of average.
- The release from Navajo Reservoir has been at the goal base release of 350 cfs throughout most of the winter months. To meet the targeted base flow through the habitat area the release has been increased starting in Mid-April and at the time of the meeting it is 450 cfs.
- Based on the April mid-month most probable inflow forecast, a spring peak release is not going to occur. The current snowpack conditions are extremely low. The downstream flows will likely be below average for the spring and summer months.

Copies of the material presented and meeting notes from the April 28 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, August 11, 2015 at 1:00pm at the Farmington Civic Center, Farmington, New Mexico (200 West Arrington Street)**. If you have questions, please call Ryan Christianson at 970-248-0652 or Susan Novak Behery at 970-385-6560 or Ruth Swickard at 970-385-6523.

## NAVAJO UNIT OPERATIONS MEETING

April 28, 2015

**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.

### Guest Speakers

- A special presentation was presented by Senior Hydrologist Greg Smith from the Colorado Basin River Forecasting Center (CBRFC) in Salt Lake City, Utah. The presentation explained how forecasts were derived for Water Year 2015 inflows to Navajo Reservoir. The operations at Navajo influence forecasts and planning for the Colorado River Basin, including Lake Powell and Lake Mead.
- Aldis Strautins from the NOAA National Weather Service in Grand Junction, Colorado presented an overview of the upcoming weather and drought conditions. A weak El Nino has been declared, but potential effects on the San Juan River Basin are unclear. Some long term forecasts do appear to include the El Nino signature of increased moisture in the southwest. NOAA's drought monitor shows the San Juan River Basin is still in a moderate-to-severe drought.

### Review of 2015 Operations

Over the winter months, Navajo typically released the goal base release (according to the Record of Decision, 2006) of 350 cfs. Navajo Reservoir elevation remained relatively constant throughout the winter. In late April, the release was increased slightly to meet the downstream target base flows. The target base flow is 500 to 1,000 cfs from the San Juan Basin Recovery

Implementation Project (SJRIP) Flow Recommendations. NIIP began irrigating March 1<sup>st</sup>.

In early April it became apparent that the USGS gage at Archuleta and the gate curves that determine the release at Navajo were severely diverging. The USGS makes monthly measurements at Archuleta to calibrate their gage. Reclamation requested an extra impromptu measurement to determine the cause of the divergence. A severe increase in vegetation around the gage itself caused a reading that was 135 cfs higher than what was actually in the river. Reclamation adjusted the release to match the actual physical measurement, and requested that the USGS make frequent (twice monthly) measurements at the gage throughout the summer season to ensure the gage is accurately reflecting the flow in the river.

### **Water Year 2015 Conditions & Forecasts**

Water Year 2015 precipitation so far has been below average. The snowpack above Navajo Reservoir, as of April 28, 2015, was at 35 percent of average. The modeled soil moisture entering the 2015 season is also below average.

The April-July inflow forecasts are as follows: Min Probable: 173,000 acre-ft (23% of average), Most Probable, 280,000 acre-ft (38% of average), and Max Probable: 395,000 acre-ft (54% of average).

### **Interim 2015 Operations at Navajo**

During a workshop over the winter, Reclamation and the SJRIP have arrived at a new interim method of determining releases made for the SJRIP that will be more flexible in times of drought. The Flow Recommendations are still in place; however, the decision tree will not be used to prescribe the annual spring peak release. Available water for spring peak release will be calculated using the End of Water Year Storage Target (EWYST) of 6063 feet (ft) (with flexibility to drop to 6050 ft if requested by the SJRIP). The “End of Water Year” is on September 30th. Navajo will be operated to meet the EWYST by the end of each water year (with all contracts and target base flow met). Any volume over the EWYST is available for peak spring releases or other adaptive management. In dry years, the reservoir may come short of EWYST. These elevations were calculated to minimize the risks of both shortage and spill in the reservoir.

Because the reservoir is well below-average and a low-inflow forecast is predicted, no spring peak release will be made in 2015 under these Interim 2015 Operations.

However, it is important to note that under the original 1999 SJRIP Flow Recommendations decision tree, there would be no spring peak release due to the current conditions in the reservoir and the low inflow forecast.

Shortage sharing is not expected, as the lowest reservoir elevation over next winter is forecast to be 6,022 ft under minimum probable conditions, which is 32 ft above the minimum active storage elevation of 5990 ft.

### **Current Reservoir Status**

The reservoir elevation on April 26, 2015 was 6,045.40 ft which corresponds to approximately 1,172,392 acre-ft of storage, which is 69% full and 49% active. The elevation is 12 ft higher than this time last year.

An overview of the conditions of nearby reservoirs was presented. Currently, Vallecito Reservoir is approximately 86% full, which is 178% of average for mid-April. Vallecito's new ice-preventing bubbler system is allowing higher winter storage levels than in previous years. Currently, Lemon is approximately 70% of full, which is 126% of average. Lake Nighthorse is 98% full. Some pumping is anticipated during May and June of 2015 to bring Lake Nighthorse up to full storage. No releases are presently scheduled.

### **Maintenance Activities**

No significant maintenance activities have been scheduled at Navajo during the rest of the year.

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

Colorado State Parks and Wildlife – the boat ramp resurfacing has been completed. The marina is ready for the summer recreation. Renovations of the Aquatic Nuisance Species decontamination stations have been completed. Construction of a new inspection facility is expected to occur this fall.

Bloomfield Irrigation District – the ditches have begun filling with water for the beginning of the irrigation season.

Hammond Irrigation District – the irrigation season has started; water is being delivered.

Farmington Electric Utility System – currently the power plant is off-line for maintenance through June.

Fish and Wildlife Service- SJRIP Annual Meeting held May 13<sup>th</sup> at FLC. The program will begin re-evaluating the Flow Recommendations this year.

New Mexico Interstate Stream Commission- The ISC has a new director, Deborah Dixon.

New Mexico Office of the State Engineer – Gages are all online and reporting for the season.

National Weather Service- Promoting a Weather Ready Nation- need for volunteers. Interested can contact the NWS office in Grand Junction.

**Next Meeting** - Scheduled for **1:00 p.m. on Tuesday, August 11, 2015** at the Civic Center in Farmington, New Mexico (200 West Arrington Street).

## **Attendance List – April 28, 2015 Navajo Operations Meeting**

Ashcroft, Nick, West Hammond Domestic Water Assoc., Bloomfield NM  
Behery, Susan, Bureau of Reclamation, Durango CO  
Carter, Robb, Navajo CO Parks and Wildlife, Arboles, CO  
Christianson, Ryan, Bureau of Reclamation, Durango CO  
Day, Henry, Arizona Public Service, Phoenix AZ  
Dodd, Stacy, Bloomfield Irrigation District. Bloomfield NM  
Durst, Scott, US Fish and Wildlife Service, Albuquerque NM  
Garcia, Ryan, Navajo Agricultural Products Industry, Farmington NM  
Green, Kristin, NM Interstate Stream Commission, Santa Fe, NM  
Greene, Mike, PNM, Bloomfield NM  
Harry, Elden, Navajo Agricultural Products Industry, Farmington NM  
Horner, Gary, Citizen, Farmington NM  
Howe, Michael, BIA, Navajo Indian Irrigation Project, Farmington NM  
Joe, Jeanette, Navajo Agricultural Products Industry O&M, Farmington NM  
Johnston, Clay, Citizen, Blanco NM  
Krakow, Matt, Western Refining, Farmington NM  
Lane, Teresa, Hammond Conservancy District, Bloomfield NM  
Lee, Aaron, Lee Acres Water Users Association, Farmington NM  
Lile, Carrie, Southwest Conservation District, Durango CO  
Miller, Gordon, San Juan Water Commission, Aztec NM  
Miller, Scott, Arizona Public Service, Phoenix AZ  
Nez, Eric J., Navajo Agricultural Products Industry, Farmington NM  
Oxford, Robert E., Citizen, Aztec NM  
Prde, Sam, West Hammond Domestic Water Assoc., Bloomfield NM  
Richmond, Linda, BLM, Monticello UT  
Secrist, Doug, Navajo CO Parks and Wildlife, Arboles, CO  
Smith, Greg, CO Basin River Forecast Center NOAA, Salt Lake City UT  
Steele, Karen, Bloomfield Irrigation District. Bloomfield NM  
Strautins, Aldis, NOAA, National Weather Service, Grand Junction CO  
Swickard, Ruth, Bureau of Reclamation, Durango CO  
Vigil, Warren, Jicarilla Tribe Water Division, Dulce NM  
Watson, Blaine, NM Office of the State Engineer's, Aztec NM  
Wethington, Marc, NM Department of Game and Fish, Navajo Dam NM  
Whitmore, Sharon, US Fish and Wildlife Service, Albuquerque NM  
Williams, Shaun, NM Office of the State Engineer's, Aztec NM  
Young, Rick, Corp of Engineers, Albuquerque NM