

WCD-RSwickard
PRJ-13.1

Subject: Navajo Unit Operations Meeting Notes

Dear Interested Party:

Enclosed is a summary of our August 30, 2011, meeting to coordinate Reclamation's operation of the Navajo Unit. The meeting was held at the Civic Center in Farmington, New Mexico.

In an effort to lower the cost of distribution of the Navajo Unit Operations Meeting Notes, a decision has been made to provide this document in an electronic form. If you would like to continue to receive these notes by mail, please contact Ruth Swickard of my staff at 970-385-6523 or rswickard@usbr.gov. In order to receive your electronic version beginning with the next Navajo Unit Operations meeting in January 2012, please provide Ruth with the email address for where you would like this document to be sent. This document will be sent as an Adobe .pdf file type.

Highlights of the meeting include:

≠Precipitation for the 2011 water year was below average in most locations within the San Juan Basin. The months of December, April and May were the only months to register above average. The cooler temperatures and above average precipitation in April and May brought the snowpack greater than 100% of average, but the maximum accumulation was still short of the average.

≠The April through July modified unregulated inflow to Navajo Reservoir, was 576,275 acre-feet, or 78% of the 30-year average. The recent trend of higher volume forecasts in the early part of the season continued this year.

≠The reservoir elevation on August 28, 2011 was 6,061.10 feet (97% of the 30-year average for the month of August) which corresponds to 1,362,353 acre-feet of live storage. The reservoir is 80% of total capacity.

≠A one week, 5,000 cfs spring peak release was made beginning on June 6th reaching 5,000 cubic feet per second (cfs) on June 9th for seven days with a three day ramp down starting on June 15th reaching 500 cfs on June 17th. The release was later than previous peak releases due to cool weather causing a late runoff on the Animas River.

≠A temporary increase to the release was made in mid April, increasing the flow to 650 cfs to meet target base flows. After the spring peak release no adjustments were required until August 9th when the release was increased to 800 cfs to meet target base flows. Adjustments will be made as necessary to react to changing weather and stream flow conditions. The minimum release is anticipated to be 500 cfs for the fall and winter.

≠The most probable unregulated inflow forecast (based on the CBRFC's ESP August Model Run) for Water Year 2012 is 1,036,000 acre-feet, which is 96% of the 30-year average. This is very preliminary and will likely change as updated forecasts become available. Climate models

indicate near equal chances for above or below normal precipitation this fall going into winter. Models also suggest a continued light La Niña anomaly for the next year.

Copies of these meeting notes and the material presented at the 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, January 24, 2012 at 1:00 at the Farmington Civic Center, Farmington, New Mexico (200 West Arrington Street)**. If you have questions, please call me at 970-385-6590.

Sincerely,

Ryan Christianson
Water Management Group Chief

Enclosure

bc: 86-68140

UC-400, UC-434, UC-438, UC-436, UC-600, UC-723, UC-720, UC-726 (ea w/encl)
WCG-EWarner, WCG-DCrabtree, WCG-SMcCall,
WCG-JHock , WCG-Erik Knight (ea w/encl)
WCD-RSwickard, WCD-RChristianson, WCD-MChiarito,
WCD-JRottman, WCD-MVelasquez (ea w/encl)

NAVAJO UNIT OPERATIONS MEETING

August 30, 2011

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.

Water Year 2011 Hydrologic Conditions

The precipitation pattern over the 2011 water year was again highly variable, but mostly falling below average. Again, most winter precipitation fell in December, and cool, wet spring helped to preserve the snowpack with above average precipitation in April and May.

San Juan Basin snowpack above Navajo Reservoir had near to below average snowpack for most of the year. Average SNOTEL sites recorded a maximum snow-water equivalent (SWE) of 17.5 inches on March 31st.

The April through July modified unregulated inflow to Navajo Reservoir, was 576,275 acre-feet, or 78% of the 30-year average. The recent trend of higher volume forecasts in the early part of the season continued this year.

Review of Water Year 2011 Operations to date

A one week, 5,000 cfs spring peak release was made starting on June 6th reaching 5,000 cubic feet per second (cfs) on June 9th for seven days with a three day ramp down starting on June 15th reaching 500 cfs on June 17th. The release was later than previous peak releases due to cooler weather causing a late runoff on the Animas River.

The one week released was required by the San Juan RIP flow recommendations, since the previous year was determined to be a perturbation year. Otherwise, a release would not have been made. The timing of the release matched the Animas peak flow well, providing approximately 9000 cfs at the Four Corners gage on the San Juan. The goal of greater than 2500 cfs for 10-days was the only SJRIP goal met. Seven days at greater than 8000 cfs was recorded, but duration of 10 days was required to meet that goal.

A temporary 5-day release increase to 650 cfs in mid-April was necessary to meet the target base flows, due to a late runoff caused by cooler temperatures. After the spring peak release, the release remained at 500 cfs until August 9th, when an increase to 800 cfs was necessary to meet

downstream target base flows. This was increased to 900 cfs on August 17th. Adjustments will be made as necessary to react to changing weather and stream flow conditions.

The reservoir reached a maximum elevation of 6,068.67 on July 1, 2011 with storage of 1,462,231 acre-feet.

Current Conditions

The reservoir elevation on August 22, 2011 was 6,061.1 feet which corresponds to approximately 1,362,353 acre-feet of storage which was 97 percent of the 30-year average. The reservoir is 80 percent of total capacity. The current release to the river is approximately 900 cfs.

A brief update on nearby reservoirs was provided. At the Animas-La Plata Project, the reservoir (Lake Nighthorse) is now full. No further pumping Lake Nighthorse from the Animas River is anticipated until the transfer to the Animas La-Plata Operation, Maintenance and Replacement Association (OM&RA). The reservoir reached total capacity on June 29, 2011 with a storage value of 123,541 acre-feet at 100% full.

Water Year 2012 Forecasts

Forecasts from the Climate Prediction Center indicate that there is equal probability of above or below average precipitation during the fall months. Models also suggest a continued light La Niña anomaly for the next year.

The most probable April-July 2012 modified unregulated inflow, based on the Colorado Basin River Forecast Center's ESP forecast, is 747,000 acre-feet, which is 101 percent of average. The minimum probable and maximum probable April-July inflow forecasts are 253,180 acre-feet (34% of average) and 1,251,550 acre-feet (170% of average), respectively. This is a very preliminary forecast that will likely change as the season progresses.

Under the most probable inflow forecast, there would be a full hydrograph spring peak release, consisting of three weeks at 5,000 cfs. A base release of 500 cfs would continue through the winter and into the summer unless hydrologic conditions change.

Maintenance Activities

The stilling basin was successfully mucked and all debris was removed successfully in May 2011. A contract was awarded and completed in less than six weeks. The inspection and repair of the 6x13 Emergency Gate Bonnet started on August 15th. The current projected construction completion date is September 16th, if no unforeseen problems arise. The release will be through the auxiliary outlet works until completion of the repairs. UPDATE: Due to some complications, the new completion estimate is mid-October.

Agency/Organization Activities and Discussion of Related Activities

New Mexico Interstate Stream Commission – Kevin Flanigan introduced himself. He will be manager of the Colorado and San Juan River Basins. He was selected to replace John Whipple, who held this position for a number of years.

New Mexico Fish & Game Department – Additional fish habitat and settlement control will be constructed this October and November in San Juan River, below the dam which may require lower releases from the reservoir. These activities will be completed by mid-December.

Bloomfield Irrigation District – District has completed additional repairs to their irrigation system. Reservoir #1 was filled in July. Still have a problem with the siphon.

Hammond Conservancy District – Ditches will be turned off around October 15th.

NAPI – Water releases thru the Navajo Indian Irrigation Project (NIIP) gate will be discontinued for the irrigation season on approximately October 17th.

City of Farmington – Completed the connection to the Navajo Nation Municipal Pipeline. Minor accounting issue should be cleared up in September.

Senator Bingaman's Office – Met with 22 tribes/pueblos. \$15 million for 3 water settlements, on agenda for next session beginning on September 6th.

Next Meeting - Scheduled for **1:00 p.m. on Tuesday, January 24, 2012** at the Civic Center in Farmington, New Mexico (200 West Arrington Street).

Attendance List – August 30, 2011 Navajo Operations Meeting

Armijo, Myron, New Mexico Interstate Stream Commission, Albuquerque NM
Ashcroft, Nick, West Hammond Domestic Water Assoc., Bloomfield NM
Becker, Herb, Jicarilla Apache Nation, Dulce NM
Broughton, Brian, CO Division of Water Resources, Durango CO
Christianson, Ryan, Bureau of Reclamation, Durango CO
Crawford, Carroll, Bloomfield Irrigation District, Bloomfield NM
Dennis, Neal, Navajo State Park, Arboles CO
Dumont, Jim, Senator Bingaman Representative, Farmington NM
Durst, Scott, U.S. Forest Service, Albuquerque NM
Flanigan, Kevin, Mexico Interstate Stream Commission, Albuquerque NM
Greenburg, Andy, CSR, Bloomfield NM
Hodges, Jimmy, NM State Engineer's Office, Aztec NM
Joe, Jeanette, Navajo Agricultural Production Industry, Farmington NM
Lane, Teresa, Hammond Conservancy District, Bloomfield NM
Lile, Carrie, Southwest Conservation District, Durango CO
Montoia, Paul, City of Farmington, Farmington NM
Prder, Sam, West Hammond Water Assoc., Bloomfield NM
Smith, Brad, Arizona Public Service, Phoenix, AZ
Swickard, Ruth, Bureau of Reclamation, Durango CO
Valencia, Pete, Congressman Lujan Representative, Farmington NM
Wethington, Marc, NM Department of Fish and Game, Navajo Dam NM
Williams, Shawn, NM State Engineer's Office, Aztec NM