

WCD-PPage
PRJ-13.10

Subject: Navajo Unit Operations Meeting Notes

Dear Interested Party:

Enclosed is a summary of our January 27, 2009, 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-January forecast, is 900,000 acre-feet, or 117 percent of the 30-year average. However, this is very preliminary and will change as updated forecasts become available.
- The reservoir elevation on January 26, 2009 was 6,053.46 feet which corresponds to approximately 1,266,774 acre-feet of storage which was 94% percent of the 30-year average. .
- Snowpack for the month of December in the San Juan Basin was greater than 150 percent of average. As of January 26, 2009, the current basin snowpack was at 123 percent of average with a snow water equivalent (SWE) of 16.1 inches.
- The release from Navajo Reservoir has been approximately 500 cfs since early in October 2008. It should remain around 500 cfs until the peak spring release.
- Based on the most recent inflow forecast, the maximum hydrograph spring peak release will occur this year. The San Juan River Basin Recovery Implementation Program's (SJRIP) Flow Recommendations define a full hydrograph release as 5,000 cfs for twenty one days with a one-month ramp up. The reservoir is currently at a manageable elevation, so no additional volume of water is anticipated to be released prior to the spring peak release.

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, April 28, 2009 at 1:00 at the Farmington Civic Center, Farmington, New Mexico (200 West Arrington Street)**. If you have questions, please call me at 970-385-6560.

Sincerely,

Pat Page
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-CDeAngelis, WCG-EWarner, WCG-DCrabtree, WCG-SMcCall,
WCG-JHock , WCG-Erik Knight (ea w/encl)
WCD-PPage, WCD-RSwickard, WCD-RChristianson, WCD-MChiarito,
WCD-BDodd, WCD-MVelasquez (ea w/encl)

NAVAJO UNIT OPERATIONS MEETING

January 27, 2009

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 2008 Operations

A quick overview was given of the 2008 Water Year.

Beginning August 19, 2008, the release was increased from 500 cfs to 700 cfs to meet target base flows in the critical habitat area. On August 26th, the release was increased to 900 cfs until September 2nd, when it was reduced back to 700 cfs. After another dry period, the release was increased to 800 cfs until September 23rd, when it was reduced to 700 cfs and then back to 500 cfs on October 7th, where it has remained to date.

Water Year 2009 Conditions

The fall 2008 precipitation pattern was very similar to what was observed during the same time period in 2007. Precipitation in October and November was below average in the basin (<89% of average). The month of December had greater than 150% of average precipitation.

Snowpack for the month of December in the San Juan Basin was greater than 150 percent of average. As of January 26, 2009, the basin snowpack was at 123 percent of average with a snow water equivalent (SWE) of 16.1 inches.

Inflow into Navajo Reservoir has been below average for the months of October through January.

Water Year 2009 Forecasts

The most probable April-July 2009 inflow, based on the mid-January forecast, is 900,000 acre-feet, which corresponds to 117 percent of the 30 year average. The minimum probable and maximum probable April-July inflow forecasts are 540,000 acre-feet (70% of average) and 1,390,000 acre-feet (180% of average), respectively. Each of these forecasts is less than the mid-January forecasts for 2008, and is comparable to the January forecasts of 2004 and 2005. The

year 2004 had actual inflow significantly less than what was forecasted in January 2004, and 2005 had actual inflow greater than what was forecasted in January 2005.

For WY2009, the reservoir is at a more manageable elevation (than in 2008) to handle variable conditions and large fluctuations in the forecast.

Under the current most probable inflow forecast, the maximum spring peak release hydrograph (5,000 cfs for 21 days), as identified in the San Juan River Basin Recovery Implementation Program (SJRIP) flow recommendations, would be implemented. The ramp up would begin in the last part of April. However, this is very preliminary and as updated forecasts become available, the spring peak release schedule may change. The current release of 500 cfs is scheduled to continue until the beginning of the spring peak release.

Only under the maximum probable forecast would additional releases be required in conjunction with the maximum hydrograph, and at this point, this is very unlikely to occur. Under the minimum probable forecast, there would not be a spring peak release, which is equally unlikely to occur.

Our operation models indicate that, based on the inflow forecasts, fluctuations in the reservoir elevation should remain relatively steady compared to past years. Under the most probable forecast, an increase of approximately 10 feet may be expected in the early spring, prior to the spring peak release, when inflow increases significantly.

Using the current most probable forecast, the San Juan River downstream of Farmington is expected to peak near 8,000 cfs near the end of May or first of June. This estimate is based on models using comparable historical years and the current forecast and is likely to change.

Current Conditions

The reservoir elevation on January 26, 2009 was 6,053.46 feet which corresponds to approximately 1,266,774 acre-feet of storage which was 94% percent of the 30-year average. The release to the river during December 2008 was 500 cfs.

An overview of the conditions of nearby reservoirs was given, including a brief construction update of the Animas-La Plata Project.

Maintenance Activities

Outlet works inspections will continue this year (similar to last year) when releases are greater than 3,400 cfs. Under the most probable forecast, this would require one auxiliary outlet works inspection toward the middle of the 21-day 5,000 cfs release, which would cut the release to 3,400 cfs for one day.

The stilling basin is scheduled to be mucked out during 2009. Last year, divers after inspecting the stilling basin, recommended it be cleaned out of excess debris. The bolts on the penstocks are scheduled to be replaced sometime around 2010.

Agency/Organization Activities and Discussion of Related Activities

The Coordination Committee meeting for the SJRIP will be held on February 26, 2009 in Ignacio, CO. The Biology Committee meeting for the SJRIP will be held on February 18 and 19, 2009 in Farmington, NM in the civic center.

The SJRIP's Annual meeting is scheduled to be held on May 13 and 14, 2009 in Durango CO.

Colorado Division of Water Resources – The Division has relocated to the Technical Center at 160 Rock Point Drive, near the Forest Service building in Durango, CO.

Bloomfield Irrigation District – all their canals have been cleaned.

Navajo Nation – The Navajo Nation Municipal Pipeline, a feature of the Animas-La Plata Project, is currently being constructed.

NAPI - has been performing maintenance on the NIIP headwork's gates and anticipates being completed in March.

New Mexico State Engineer's Office – Monitoring of diversions will occur throughout the irrigation season.

Colorado State Parks – will be conducting watercraft inspection and decontamination procedures as a preventive measure in the spread of the highly adaptive invasive species of zebra and quagga mussels. At present there are few, if any, proven control methods to destroy the mussels. Several reservoirs in Colorado have tested positive for mussels.

New Mexico State Parks – concerned about the State cutting funds and positions due to the economic crises. At this point, watercrafts will not be checked for mussel species before entering the lake in New Mexico.

Concerned Citizen – asked how the evaporation rates were composed. Answer: The daily evaporation values are derived from previously collected field data by calculating those values using coefficients. Also, he wanted to know if the inflow to the Animas-La Plata (ALP) Ridges Basin Dam will have an affect on our ability to meet the Flow Recommendations with releases from Navajo Reservoir. Answer: There will need to be some level of coordination between the operation of Navajo Reservoir and the ALP to ensure that the target base flow is met, however, it remains to be seen what affects the operation of ALP will have on the daily operations of the Navajo Reservoir.

The Hammond Project – will start irrigation season on April 15th.

Next Meeting - Scheduled for **1:00 p.m. on Tuesday, April 28, 2009** at the Civic Center in Farmington, New Mexico (200 West Arrington Street).

Attendance List – January 27, 2009 Navajo Operations Meeting

Ashcroft, Nick, West Hammond Domestic Water Assoc., Bloomfield NM
Becker, Herb, Jicarilla Apache Nation, Dulce NM
Bloomfield, Dave, Arizona Public Service, Fruitland NM
Brinton, Scott, CO Department of Water Resources, Durango CO
Brown, Carol, NM State Parks, Navajo Dam, NM
Chavez, Aaron, San Juan Water Commission, Farmington NM
Christianson, Ryan, Bureau of Reclamation, Durango CO
Crawford, Carroll, Bloomfield Irrigation District, Bloomfield NM
Cunningham, Kenneth, Dept of Game and Fish, Santa Fe NM
Davis, Kim, Navajo Nation, Dept. of Water Resources, Window Rock, AZ
Dennis, Neal, Navajo State Park, Arboles CO
Fritzner, April, US Corp of Engineers, Albuquerque
Goen, Mike, PNM San Juan Generating Station, Waterflow NM
Goode, Doris, NM State Parks, Navajo Dam, NM
Harris, Steve, Southwestern Water Conservation District, Durango CO
Hodges, Jimmy, NM State Engineer's Office, Aztec NM
Horner, Gary, Citizen, Farmington NM
Jaquez, Bruce M., Rep NIIP-BIA, Farmington NM
Johnson, Clay, Citizen, Blanco NM
Kimball, John, Corps of Engineers, Albuquerque NM
Lane, Teresa, Hammond Conservancy District, Bloomfield NM
LeFevre, Andrea, Jicarilla Apache Nation, Dulce NM
McKinnon, Kristen, Wild River Expeditions, Bluff UT
Miller, Richard, City of Farmington Navajo Powerplant, NM
Montoia, Paul, City of Farmington, Farmington, NM
Dennis, Neal, Navajo State Park, Arboles CO
Nez, Marvin, NAPI, Farmington NM
Nigel, Warren, Jicarilla Apache Nation, Water Division, Dulce NM
Novak, Andreas, Concerned Citizen, Farmington NM
Oxford, Bob, Citizen, Farmington NM
Page, Pat, Bureau of Reclamation, Durango CO
Renfro, Jim, Lee Acres Water Users, Farmington NM
Start, Jack, West Hammond Domestic Water Assoc., Bloomfield NM
Sorrelhorse, James, Navajo Nation Emergency Management, Shiprock NM
Swickard, Ruth, Bureau of Reclamation, Durango CO
Tillen- Truby, Michele, San Juan County Office of Emergency Management, Aztec NM
Vigil, Warren, Jicarilla Apache Nation, Dulce NM
Wethington, Marc, NM Department of Game and Fish, Navajo Dam NM
Wimsatt, Marian, BHP Billiton, Farmington NM
Williams, Michael, Soaring Eagle Lodge, Navajo Dam NM
Williams, Shawn, NM State Engineer's Office, Aztec NM