WCD-RSwickard PRJ-13.1

Subject: Navajo Unit Operations Meeting Notes

Dear Interested Party:

Enclosed is a summary of our August 24, 2010, 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 April through July modified unregulated inflow to Navajo Reservoir, was 652,090 acrefeet, or 86% of the 30 year average.
- —The reservoir elevation on August 22, 2010 was 6,068.20 feet (104% of the 30-year average for the month of August) which corresponds to 1,456,352 acre-feet of live storage. The reservoir is 86% of total capacity.
- —Snowpack for the months of January through April in the San Juan Basin above Navajo Reservoir was greater than average with May through June being below average.
- —Adjustments to the release have been made throughout the summer to meet target base flow of 500 to 1000 cubic feet per second (cfs) in the endangered fish critical habitat area (Farmington to Lake Powell). 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 WY2011 is 1,030,000 acre-feet, which is 94% of the 30 year average. This is <u>very</u> preliminary and will likely change as updated forecasts become available.

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 25**, **2011 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-EWarner, WCG-DCrabtree, WCG-SMcCall,

WCG-JHock, WCG-Erik Knight (ea w/encl)

WCD-PPage, WCD-RSwickard, WCD-RChristianson, WCD-MChiarito,

WCD-JRottman, WCD-MVelasquez (ea w/encl)

NAVAJO UNIT OPERATIONS MEETING

August 24, 2010

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, Aspinal 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 2010 Hydrologic Conditions

The precipitation pattern over the 2010 water year was again highly variable. The fall months of October and November near record low precipitation, but rebounded in December and January with over 150% of average precipitation and helped push the snowpack to just above average for most of the spring. After an average February, March-June precipitation was much below average, but rebounded in late July and August with a moderate to strong monsoon season.

San Juan Basin snowpack above Navajo Reservoir reached a maximum snow-water equivalent (SWE) of 21.5 inches or 103% of average on April 3, 2010.

Review of Water Year 2010 Operations to date

From late October until June 24, 2010, a release of 500 cfs from Navajo Reservoir has meet target base flows in the critical habitat area.

There was no Spring Peak Release from Navajo Reservoir in 2010.

On June 24th, the release was increased to meet downstream target base flows. Adjustments to the release have been made throughout the summer to meet target base flow of 500 to 1000 cubic feet per second (cfs) in the endangered fish critical habitat area (Farmington to Lake Powell). Adjustments will be made as necessary to react to changing weather and stream flow conditions.

Navajo Reservoir elevation decreased until the spring runoff began in early March. The reservoir reached a maximum elevation of 6,075.5 on June 15, 2010 with storage of 1,558,899 acre-feet, which is 92 percent of total capacity.

Current Conditions

The reservoir elevation on August 22, 2010 was 6,068.20 feet which corresponds to

approximately 1,456,352 acre-feet of storage which was 104 percent of the 30-year average. The reservoir is 86 percent of total capacity. The current release to the river is approximately 500 cfs.

An overview of the conditions of nearby reservoirs was given, including a brief update on the Animas-La Plata Project. Pumping resumed on March 3^{rd,} for the second year of pumping for the Animas-La Plata Project, to supply water to Lake Nighthorse. The reservoir is 59 percent of full with a storage value of 72,000 acre-feet.

Brief updates on other nearby reservoirs were given.

Water Year 2011 Forecasts

Forecasts from the Climate Prediction Center indicate that is a greater probability of below average precipitation during the fall months, returning to equal chances by mid winter.

The most probable April-July 2011 modified unregulated inflow, based on the Colorado Basin River Forecast Center's ESP forecast, is 737,000 acre-feet, which is 97 percent of average. The minimum probable and maximum probable April-July inflow forecasts are 295,500 acre-feet (39% of average) and 1,200,000 acre-feet (159% 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 three weeks at 5,000 cfs spring peak release in 2011. The winter release of 500 cfs would continue into the summer unless hydrologic conditions change. A final determination on whether or not a spring peak release will be necessary will be made based on the mid-May forecast and whether 2010 was deemed a perturbation year

Maintenance Activities

The stilling basin is scheduled to be mucked out during the fall of 2010. A contract will be awarded this fall with work planned to be completed in approximately six weeks. The repair of the 6x13 Emergency Gate Bonnet will occur after the stilling basin muck out. The release will be through the auxiliary outlet works for approximately one month.

Public Law 111-11:

An overview and status report was given on the New Mexico, non-Navajo ditch improvement program under Public Law 111-11. Ten ditches have expressed interest in water efficiency improvements with analyses occurring now.

Agency/Organization Activities and Discussion of Related Activities

Colorado State Parks – Will begin 3rd season of boat inspections for mussels, which is part of a state-wide program. CDOW completed substrate testing on the Colorado side of the reservoir with all results being negative. Three boats with Quagga mussels were identified and were decontaminated. The State is working with Reclamation to construct a permanent

decontamination center at the reservoir.

New Mexico Fish & Game Department – provided a short power point, addressing the need to keep the invasive species from entering the reservoir. Mussel management is costing inhabited facilities in other locations millions of dollars. High pressure hot water can be used to remove mussels from boats and/or chlorine bleach is also effective. NMF&G, with a limited budget, are accomplishing educational meetings to inform as many people as possible. A billboard was installed near Aztec, New M with prevention information on Quagga and Zebra mussels.

Additional fish habitat will be constructed this fall or early spring below the reservoir.

NM Game and Fish will be conducting a fish study on the 30 mile stretch of the river immediately upstream of Lake Powell for fish identification.

Bloomfield Irrigation District –District has completed the installation of a siphon and repairs to their irrigation system.

Hammond Conservancy District – Needs to be notified of changes in Navajo Dam releases so their gates can be adjusted.

<u>Next Meeting</u> - Scheduled for **1:00 p.m. on Tuesday, January 25, 2011** at the Civic Center in Farmington, New Mexico (200 West Arrington Street).

Attendance List – August 24, 2010 Navajo Operations Meeting

Allen, Mason, CO State Parks, Arboles, CO

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

Chiarito, Mark, Bureau of Reclamation, Durango CO

Christianson, Ryan, Bureau of Reclamation, Durango CO

Crawford, Carroll, Bloomfield Irrigation District, Bloomfield NM

Culp, Bob, NM State Parks, Navajo Dam, NM

Cunningham, Ken, Dept of Game and Fish, Navajo Dam, NM

Davidson, Paul, Bureau of Reclamation, Salt Lake City UT

Davis, Kim, Navajo Nation, Water Resources, Fort Defiance AZ

Dennis, Neal, Navajo State Park, Arboles CO

Goen, Mike, PNM San Juan Generating Station, Waterflow NM

Goode, Doris, NM State Parks, Navajo Dam, NM

Hodges, Jimmy, NM State Engineer's Office, Aztec NM

Horner, Gary, Citizen, Farmington NM

Kimball, John, Corps of Engineers, Albuquerque NM

Lane, Teresa, Hammond Conservancy District, Bloomfield NM

Lile, Carrie, Southwest Conservation District, Durango CO

McFadden, Curtis, Corps of Engineers, Albuquerque NM

McKim, Doug, NM State Parks, Navajo Dam, NM

McKim, Kathy, NM Game & Fish, Bloomfield NM

Miller, Richard, Farmington Electric Utility, Farmington NM

Ozga, Kathleen, Bureau of Reclamation, Grand Junction CO

Oxford, Robert, Citizen, Farmington NM

Page, Pat, Bureau of Reclamation, Durango CO

Santillan, Marisol, Arizona Public Service, Phoenix NM

Secrist, Doug, Colorado State Parks, Arboles CO

Swickard, Ruth, Bureau of Reclamation, Durango CO

Wethington, Marc, NM Department of Game and Fish, Navajo Dam NM

Whitmore, Sharon, US Fish and Wildlife, Albuquerque NM

Williams, Shawn, NM State Engineer's Office, Aztec NM

Wimsatt, Marian, BHP Billiton, Farmington NM