BUREAU OF RECLAMATION NAVAJO RESERVOIR JANUARY 26, 2016 MEETING NOTES

SENT VIA FAX AND E-MAIL

Dear Interested Party:

Enclosed is a summary of our January 26, 2016, 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 current snowpack above Navajo was 102% of average for most of the San Juan River Basin.
- The modeled soil moisture is near average for most of the snow producing parts of the basin, except for the eastern mountains which are slightly below average.
- The most probable April through July modified unregulated inflow forecast for water year 2016 is 725,000 af, which is 98% of average, and the calculated available water is enough to qualify for a Type 4 full spring peak release. This is preliminary and will change as updated forecasts become available.
- The reservoir elevation on January 24, 2016 was 6,063.77 feet which corresponds to 1,396,496 acre-feet of live storage. The reservoir is presently at 82% of the live capacity and 71% of active capacity. The release is at approximately 400 cfs and will probably be raised to 500 cfs in the next couple of weeks.
- The NOAA Climate Prediction Center (CPC) is forecasting above-average precipitation and warmer temperatures throughout the summer in the San Juan Basin.

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 for the operation meetings or the summaries of the meetings, please let us know. The next meeting will be held on **Tuesday, April 26, 2016 at 1:00 at the Farmington Civic Center, Farmington, New Mexico (200 West Arrington Street).** If you have questions, please call Marc Miller at 970-385-6541 or email mbmiller@usbr.gov or Susan Behery at 970-385-6560 or email sbehery@usbr.gov or Ruth Swickard at 970-385-6523 or email rswickard@usbr.gov.

NAVAJO UNIT OPERATIONS MEETING

January 26, 2016

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.

Review of Water Year 2016 Operations to date

Since mid-October 2015 releases to the river have been 350 cubic feet per second (cfs) from Navajo Reservoir, which has been sufficient to meet target base flows in the critical habitat area.

The snowpack above Navajo as of January 25, 2016 was at 102% percent of average with a snow water equivalent (SWE) of 12.3 inches.

Current Conditions

Navajo was at 6063.77 feet of pool elevation and 1,396,496 acre-feet of storage on January 24, 2016, which was 82% full and 71% active storage. Most probable forecasted inflow for April-July into Navajo was 725,000 acre-feet, which was 98% of average. The release averaged close to 350 cfs so far this year. NIIP stopped diverting water by mid-October 2015; plans are currently being developed for their water year release.

A brief update on nearby reservoirs was provided. At the Animas-La Plata Project (ALP), the reservoir (<u>Lake Nighthorse</u>) pool elevation was 6,880.70 feet and the current storage was 113,146 ac-feet, which was 98% of live capacity. Lake Nighthorse does not currently plan to pump or release any water during 2016. <u>Vallecito Reservoir</u> was at 7,679.48 feet and 85,726 acre-feet of storage on January 24, 2016, putting the reservoir storage at 68% full. <u>Lemon Reservoir</u> was at 8,113.17 feet pool elevation and 21,046 acre-feet of storage, putting the reservoir storage at 53% full. <u>McPhee Reservoir</u> was at 6889.33 feet pool elevation and 245,783 acre-feet of storage at 64% full.

Water Year 2016 Forecasts

The most probable modified-unregulated inflow forecast for January at Navajo Reservoir is 22,000 acre-feet (100% of average), for February is 25,000 acre-feet (83% of average), and for March is 85,000 acre-feet (92% of average).

The most probable forecast inflow for April through July in 2016 is predicted to be 725,000 acre-feet (98% of average). The most probable forecast would likely allow a Type-4 spring peak release. A Type 4 (or "Full") release consists of a month-long ramp up, followed by 3 weeks at 5,000 cfs, and a 2-week ramp-down. The minimum and maximum are a wide range from a Type 1 release (1-week at 5,000 cfs)(to a full Type 4 release plus a long nose reaching back as early as March. This is a preliminary forecast that will change as the season progresses. Additionally, the shaping of these hydrographs is subject to change.

The Climate Prediction Center is forecasting above average precipitation through the summer months with temperatures registering warmer than previous years. The San Juan Basin area is no longer shown as being in a drought.

Maintenance Activities

Drilling at the downstream face of the dam and up to 500 yards downstream will be occurring during May through August. This operation will be audible and visible from the road and along the river immediately downstream.

The San Juan Archuleta is drifting due moss buildup and die-off near the gage. The rating curve values are adjusted once each month after the USGS personnel has performed field measurements, but as the gage drifts, it may not match the actual release from the dam. A large spring peak release will hopefully clean out the channel and reduce drift at Archuleta. The current releases are calculated using a rating curve at the dam. Plans are being generated for the installation of a flowmeter at the main outlet works during FY2017.

Agency/Organization Activities and Discussion of Related Activities

<u>City of Farmington Utilities</u> – During February 2-4, 2016, the flow will vary as low as 250 cfs and up to 600 cfs. Commissioning and testing of the power plants unit 1 will occur during these days. The plan includes maintaining the target base flows.

<u>City of Farmington</u> – The New Mexico Environmental Department is hosting a forum on the Animas River at San Juan College May 17th – 19th and will include a Tour of the Gold King Mine.

<u>Navajo Agricultural Products Inc (NAPI)</u> – 68,000 acres of crop are planned this year. Working on Navajo Indian Irrigation Project (NIIP) schedule and volume.

New Mexico Office of the State Engineer (NMOSE) – Contractor upgrades to flume stations,

repairs, and new installations will possibly be underway this year.

<u>San Juan River Recovery Implementation Program (SJRIP)</u> – The SJRIP is reviewing flow recommendations, which includes several workshops in 2015-2016. The next work shop is scheduled for April. The SJRIP Annual Meetings are scheduled for May 10-12, 2016 at Fort Lewis College in Durango.

<u>Next Meeting</u> - Scheduled for **1:00 p.m. on Tuesday, April 26, 2016** at the Civic Center in Farmington, New Mexico (200 West Arrington Street).

Attendance List – January 26, 2016 Navajo Operations Meeting

Ashcroft, Nick, West Hammond Domestic Water Assoc., Bloomfield NM

Banks, Ben, City of Farmington, Farmington NM

Behery, Susan, Bureau of Reclamation, Durango CO

Christianson, Ryan, Bureau of Reclamation, Grand Junction CO

Chambers, Chris, Southern Ute Tribe, Ignacio CO

Day, Henry, Arizona Public Service, Phoenix AZ

Dodd, Stacy, Bloomfield Irrigation District, Bloomfield NM

Franssen, Nate, 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, Public Service of New Mexico, Bloomfield NM

Harry, Elden, Navajo Indian Irrigation Project, Farmington NM

Hayes, Sky, Navajo Agricultural Products Industry Farmington NM

Hodges, Jimmie, Office of NM State Engineer, Aztec NM

Jim, LeeAnderson, Navajo Agricultural Products Industry Farmington NM

Johnston, Clay, Turley Manzanares Ditch Co., Blanco NM

Joe, Jeanette, Navajo Agricultural Products Industry O&M, Farmington NM

Lane, Teresa, Hammond Conservancy District, Bloomfield NM

Lee, Aaron, Lee Acres Water Users Assoc., Farmington NM

Jim, LeeAnderson, Navajo Agricultural Products Industry Farmington NM

Lobato, Ike, Turley Manzanares Ditch Co., Blanco NM

Miller, Gordon, San Juan Water Commission, Aztec NM

Miller, Scott, Arizona Public Service, Phoenix AZ

Moline, Cheryl, NM State Park, Navajo Dam NM

Montoia, Paul, City of Farmington, Farmington NM

Nez, Eric J., Navajo Agricultural Products Industry, Farmington NM

Norris, Marie, Turley Manzanares Ditch Co., Blanco NM

Shockey, Jamie, Public Service of New Mexico, Bloomfield NM

Skiba, Gary, Navajo Lake State Park, Navajo Dam NM

Swickard, Ruth, Bureau of Reclamation, Durango CO

Tsinnijinnie, Ty, Navajo Agricultural Products Industry O&M, Farmington NM

Vandever, Rochelle, Keller-Bliesner Engineering, Farmington NM

Watson, Blaine, NM Office of the State Engineer, Aztec NM

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

Williams, Shawn, NM Office of the State Engineer, Aztec NM

Wimsatt, Marian, BHP Billiton NM Coal, Farmington NM

Yazzie, Letisha, Office of NM State Engineer, Aztec NM

Yazzie, Roselyn, Navajo Agricultural Products Industry Farmington NM

Young, Rick, US Army Corp of Engineers, Albuquerque NM