BUREAU OF RECLAMATION NAVAJO RESERVOIR APRIL 22, 2014 MEETING NOTES

SENT VIA FAX AND E-MAIL

Enclosed is a summary of our April 22, 2014, 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:

- Greg Smith, Senior Hydrologist from the Colorado River Basin Forecast Center (CRBFC) in Salt Lake City, Utah gave a presentation on how forecasts were derived for Water Year 2014 inflows to Navajo Reservoir. The operations at Navajo influence forecasts and planning for the Colorado River Basin, including Lake Powell and Lake Mead.
- The reservoir elevation on April 22, 2014 was 6,032 feet which corresponds to approximately 1,030,739 acre-feet of live storage (61% full, 35% of active).
- Snowpack has been below average for much of the winter in the San Juan River Basin. On April 22nd, the snow level above Navajo Reservoir was showing an average of 11.5 inches of snow water equivalent (SWE), which is 65% of average (1987 to present) for this time of year. The current SWE is the 4th lowest for this date since 1987. The seasonal peak snow SWE above Navajo was 14.0 inches on April 9th.
- The most probable April through July modified unregulated inflow to Navajo Reservoir, based on the mid-April forecast was 495,000 acre-feet (67% of average).
- The SJRIP and Reclamation have determined that there will be no spring peak this year, due to the low storage in the reservoir.
- Most long-term climate models are showing an emergence of El Niño in the coming months, though the impact on the San Juan River Basin is unclear.
- A shortage is not currently forecasted but preventative measures are being taken to reduce the risk of a shortage occurring.

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**, **August 26**, **2014 at 1:00 at the Farmington Civic Center**, **Farmington**, **New Mexico (200 West Arrington Street)**. If you have questions, please call Ryan Christianson at 970-385-6590 or Susan Behery at 970-385-6560 or Ruth Swickard at 970-385-6523.

NAVAJO UNIT OPERATIONS MEETING April 22, 2014

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.

Guest Speaker

A special presentation was presented by Senior Hydrologist Greg Smith from the Colorado Basin River Forecasting Center (CBRFC) in Salt Lake City, Utah. He discussed WY 2014 hydrologic conditions to date.

A very wet monsoon season and early season snowfall in October and November made for optimistic forecasts for the spring runoff season. As the snowfall failed to materialize over the winter and into early spring in the San Juan River Basin, the forecasted runoff for the spring of 2014 fell dramatically.

Forecast verification over the last decade shows a tendency for the CBRFC models to overforecast this basin in the early season. The CBRFC is working on a way to improve these forecasts, especially in light of the recent drought.

Long-term forecasts indicate the probability of an El Niño forming in the fall months. The impact on Navajo Reservoir is unclear, as El Niño events do not necessarily correlate with higher precipitation in the San Juan River Basin.

Review of Water Year 2014 Operations to date

The release was reduced to 250 cfs in late September 2013, and remained at that level through late January 2014. This release was sufficient to meet target base flows in the critical habitat area. Since late January, the release has varied between 250 and 350 cfs, and was continually adjusted to meet target base flows downstream.

The reservoir maintained and even gained storage through most of the winter. This was very unusual historically for Navajo Reservoir, but occurred due to the very low releases that were maintained over the winter.

Water Year 2014 Hydrologic Conditions and Forecast

Above-average precipitation in the fall, along with some leftover monsoonal moisture, gave way to a very dry winter and early spring. While the upper Colorado received well above-average snow, most of the San Juan River Basin saw below-average precipitation from December through April. SNOTEL sites above Navajo Reservoir have tracked closely to 2013 over the winter months. The peak SWE for 2014 occurred on April 9th and was 14.0 inches (71% of average peak).

The most probable April-July 2014 modified unregulated inflow, based on the mid-April forecast, is 495,000 acre-feet (67% of average). The minimum probable and maximum probable April-July inflow forecasts are 355,000 acre-feet (48% of average) and 640,000 acre-feet (87% of average), respectively.

The long-term Climate Prediction Center (CPC) forecasts indicate warmer-than average temperatures in the San Juan River Basin through early Fall, and then average temperatures for the rest of the year. The CPC also indicates the possibility of higher-than-average precipitation through September in the San Juan River Basin.

Water Year 2014 Proposed Operations

After discussion with the SJRIP, there will be no spring peak release for 2014. This decision was made to aid in recovering the reservoir, protect user needs, and protect the target base flow releases for 2014.

With no spring peak release, the most probable reservoir elevation is currently forecast to peak at 6050 ft near the end of June. The most probable end-of-water-year (EOWY) reservoir elevation is forecast to be 6044 ft. Under the minimum probable forecast, the EOWY reservoir elevation could be as low as 6014 ft. Under the maximum probable forecast, it could be as high as 6065 ft.

Current Conditions

The reservoir elevation on April 22, 2014 was 6,032 feet which corresponds to approximately 1,030,739 acre-feet of storage which was 61% full. The reservoir is at 35% of active capacity. The current release to the river is approximately 250 cfs and will most likely remain at this release through the runoff season.

An overview of the conditions of nearby reservoirs was presented. The Animas-La Plata Project, Lake Nighthorse is currently at 6,875 (91% full) with the storage of 105,139. Pumping from the Animas River is scheduled to occur in May and June of this year, in order to top off the reservoir.

On April 21, 2014, Vallecito Reservoir elevation was 7,654 ft which correspond to 95,357 acrefeet of storage which is 76% full or 162% of average. Vallecito's new ice-preventing bubbler system is allowing higher storage levels than in previous years. Vallecito will most likely reach full capacity this summer.

Lemon Reservoir elevation was 8,113 ft which correspond to 20,945 acre-feet of storage which is 53% full or 96% of average. Lemon Reservoir will most likely not fill this summer.

Maintenance Activities

A security fence will be installed on the west side of the downstream access road for safety and security purposes. Work will begin on the right groin repairs this fall.

San Juan River Recovery Implementation Program (SJRIP) Update

U.S. Fish and Wildlife Service announced their annual SJRIP meeting is May 22nd This meeting will occur at Fort Lewis College in Durango, Colorado. All interested parties are invited to attend. For additional information on ongoing SJRIP activities, visit the program website: http://www.fws.gov/southwest/sjrip/

Agency/Organization Activities and Discussion of Related Activities

BLM - The agency is trending towards using Recreation.gov for lottery and permitting.

Colorado State Parks – The marina will be completed before the summer season begins.

New Mexico Parks and Wildlife - Conducting an in-river project on Hammond Wildlife tract, new ramp, instream work, waterfowl habitat, parking lot. It will be closed to the public until mid-to-late June. Hammond tract is full of Russian Olive.

NMOSE – Gaging stations are all up and running.

City of Farmington Utility – The turbines are offline due to low release.

NAPI – The system has been charged, Cutter Reservoir has filled, and irrigation has started.

SJRIP – The habitat restoration has been successful. The installation of the fish passages and tagging the fish has helped in the counting process. The endangered fish have increased in numbers. The reproduction is increasing. Many of the side streams are being improved; the smaller fish are utilizing these areas for reproducing.

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

PNM – Mike Greene's "Tin Cup Tour" in Washington DC to promote funding for the SJRIP was fruitful. Washington sees the program as a good example of interagency cooperation.

<u>Next Meeting</u> - Scheduled for **1:00 p.m. on Tuesday, August 26, 2014** at the Civic Center in Farmington, New Mexico (200 West Arrington Street).

Attendance List - April 22, 2014 Navajo Operations Meeting

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

Becker, Herb, Jicarilla Apache Nation, Dulce NM

Behery Novak, Susan, Bureau of Reclamation, Durango CO

Benally, Ray, Navajo Water Resources, Fort Definance AZ

Bitsuie, Cherie, NAPI, Farmington NM

Brown, Dave, USGS, Grand Junction CO

Christianson, Ryan, Bureau of Reclamation, Durango CO

Cuylear, Natasha, Jicarilla Apache Nation, Dulce NM

Day, Henry, Arizona Public Service, Phoenix AZ

Dodd, Stacey, Bloomfield Irrigation District, Bloomfield NM

Durst, Scott, US Fish and Wildlife Service, Farmington NM

Garcia, Ryan, NAPI, Farmington NM

Green, Kristin, NM Interstate Stream Commission, Santa Fe NM

Greene, Mike, PNM Resources, Albuquerque NM

Horner, Gary, Citizen, Farmington NM

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

Krakow, Bob, Western Refining, Farmington NM

Krakow, Matt, Western Refining, Farmington NM

Lane, Teresa, Hammond Conservancy District, Bloomfield NM

Lile, Carrie, Southwest Water Conservation District, Durango CO

McFadden, Curtis, Corp of Engineers, Albuquerque NM

Miller, Richard, City of Farmington, Farmington NM

Moline, Cheryl, NM State Parks, Navajo Lake NM

Montoia, Paul A., City of Farmington NM

Oxford, Robert, Citizen, Farmington NM

Prder, Sam, West Hammond Water Users, Bloomfield NM

Richmond, Linda, Bureau of Land Management, Bluff UT

Smith, Greg, NWS-CO River Basin Forecast Center, Salt Lake City UT

Swickard, Ruth, Bureau of Reclamation, Durango CO

Travis, Nigel, Navajo State Park, Navajo Dam NM

Wethington, Marc, NM Dept of Game & Fish, Navajo Dam NM

Whitmore, Sharon, USFS, Albuquerque NM

Williams, Michael, Soaring Eagle Lodge, Navajo Dam NM

Williams, Shawn, NM State Engineers Office, Aztec NM

Wimsatt, Marian, BHP Billiton, Farmington NM