



# United States Department of the Interior

BUREAU OF RECLAMATION  
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OCT 08 2013

IN REPLY REFER TO:

NK- Thompson  
WTR-4.10 RR

Brian P. Dunnigan, P.E.  
Director  
Nebraska Department of Natural Resources  
301 Centennial Mall South  
P.O. Box 94676  
Lincoln, NE 68509-4676

Subject: Update on Nebraska's 2013 Republican River Compact Compliance Projections

Dear Mr. Dunnigan:

At the recent Republican River Compact Administration meetings you indicated your staff would be updating Department of Natural Resources' (DNR) compliance projections. Now that the irrigation season has ended there is a significant amount of data available in regards to your compliance projections and your January Forecast. The August 23 DNR letter did not address the information requested in our August 16 letter pertaining to how the actual conditions compared to Nebraska's January Forecast. In order to gain a better understanding of the potential water supplies that will be available in 2014, Reclamation is once again requesting an update of DNR's analysis to determine how the current compliance projections compare to the components of DNR's January Forecast. Specifically, Reclamation is requesting an update of DNR's projection of needed stateline streamflows to ensure Compact compliance in 2013 and the projected benefits of Nebraska's management actions (e.g. Rock Creek augmentation project).

In January, DNR indicated 13,600 acre-feet of additional water was needed to ensure compliance in 2013, as acknowledged (basic "new" water concept that goes to KS Bostwick Irrigation District) by your January 4<sup>th</sup> letter. It was also our understanding at that time, as indicated by Dr. Schneider at a RRCA meeting held in early 2013 that, "the Natural Resources Districts (NRDs) will be developing management actions to offset that shortfall into the river and we (DNR) will be administering the stream to pull that water through." Whereas he later indicated at the recent arbitration hearings in Denver that: "We're not trying to provide physically that exact water. We're not trying to take water out of that pipe and make sure it flows all the way down the system to Kansas. What we do is start surface water administration early in the year and start bringing water downstream so it's there and ready to deliver. Then this augmentation water just kind of backfills the system. It's also been known as front loading, bringing that water down early, making sure we're not going to dig ourselves a bigger hole by having that water

cross the Rock Creek gauge and not making it down stream and causing another problem for us.” The Integrated Management Plans (IMPs) were designed so the NRDs in the basin would make-up any projected Compact shortfall; however this has simply not been the case in 2013.

As you are aware, the water supplies available to the surface water users in the basin were limited in 2013 as a result of Nebraska’s projected Compact shortfall and DNR’s subsequent Compact Call administration. Pursuant to the basin IMPs, the NRDs developed management actions, which were approved by DNR in February, to address Nebraska’s expected shortfall of 9,060 acre-feet. However, it appears to Reclamation these planned management actions were insufficient to offset Nebraska’s actual shortfall as evidenced by DNRs surface water administration throughout 2013. In fact, a majority of Nebraska’s compliance shortfall has been mitigated by curtailing surface water users in the basin. Approximately 31,000 acre-feet of basin surface water, that was temporarily stored in the Federal reservoirs, was released for Compact compliance purposes in the spring of 2013 as ordered by DNR. In addition, nearly 25,000 acre-feet of water remains in temporary storage in the basin reservoirs under Order from DNR. Even today it remains unclear whether any inflows to the reservoir during the remainder of the year will be available to be stored and carried over to 2014.

The streamflow projection is a critical component of Nebraska’s forecast, and it appears during the first year of implementation, Nebraska’s Forecast has overestimated the stateline streamflow component. Averaging the last five years of stateline streamflows does not necessarily correlate to a dry-year scenario. From 2009 through 2012 Harlan County Lake (HCL) had some of the flood storage occupied and flood releases were made prior to the irrigation season to maintain the reservoir elevation within one foot into the flood pool. Consequently, approximately 240,000 acre-feet of flood flows that were released from HCL were included in Nebraska’s 2013 dry-year streamflow projections. Utilizing years with a significant amount of floods flows to predict a dry-year scenario is counter intuitive. Unless DNR refines its forecast procedures, the likelihood there will be any beneficial surface water supplies available to the Federal projects in 2014 will be minimal.

We look forward to your response as well as your continued cooperation and further dialogue on this matter.

Sincerely,

A handwritten signature in blue ink that reads "Aaron M. Thompson". The signature is fluid and cursive, with the first name "Aaron" being the most prominent.

Aaron M. Thompson  
Area Manager