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January 14, 2013

Brian P. Dunnigan, P.E.
Nebraska Commissioner
Republican River Compact Administration
Nebraska Department of Natural Resources
301 Centennial Mall South
PO Box 94676
Lincoln NE 68509-4676

RE: Republican River Compact, Nebraska augmentation plans

Dear Commissioner Dunnigan:

On the evening before the December 11, 2012 Special Meeting of the Republican River Compact Administration (RRCA) requested by Nebraska, Nebraska provided to Colorado and Kansas, via email, three documents related to possible augmentation plans by Nebraska to offset consumptive use by Nebraska in excess of its allocation, that Nebraska wished to discuss. One of those documents is entitled "Inclusion of Imports of Platte River Basin Water Supplies into the RRCA Accounting," ("Imports Document") dated December 10, 2012. The Imports Document outlines a concept by Nebraska to "enhance" the "Imported Water Supply Credit" that is calculated under the current RRCA Accounting Procedures. The Imports document refers to a map, labeled "Project Area Map," which was also one of the three documents provided on December 10. The third document was entitled "Outline for Augmentation Plan to RRCA" ("Augmentation Outline") and offered Nebraska's vision of the topics and issues that need to be addressed in order for the RRCA to agree upon an augmentation plan.

At the special meeting of the RRCA, Nebraska asked that Kansas and Colorado evaluate the Imports Document and the Augmentation Outline and provide Nebraska with their initial responses. Kansas also asked that Nebraska provide the calculations and backup for Nebraska's preliminary and final Republican River Basin Forecast. Although Nebraska initially agreed to this request, I now understand from your letter of January 7, 2013, that Nebraska is declining to do so. Also, I note that no response to Nebraska's request has been forthcoming from Colorado. Nevertheless, Kansas is responding to Nebraska's request as fully as practicable given the shortness of time, the lack of specifics provided by Nebraska, and the fact that Nebraska's documents raise issues that are presently before the Special Master or likely to be affected by rulings of the Special Master and the Supreme Court in the pending litigation. With those substantial caveats, Kansas now provides an initial response to Nebraska in order to alert Nebraska to Kansas' initial reactions to Nebraska's submittals.

With regard to the Imports Document's new proposal to convert some 62 wells shown on the Project Area Map from irrigation to augmentation purposes, it may be helpful to note the following. The proposed pumping would be mostly from wells in the Republican River Basin, not the Platte River Basin (55 of the 62 wells shown on the Project Area Map are in the Republican River Basin). There is no evidence that these wells pump water that was recharged from the Platte River canals.

The Imported Water Supply Credit established in the Final Settlement Stipulation (FSS) was a result of negotiations regarding Nebraska's assertion that the irrigation projects in the Platte River Basin have artificially created additional water supplies within the Republican River Basin. This specific credit was designed to address the uncontrolled effects of these irrigation projects on the groundwater levels in the area straddling the two basins and on stream baseflows. The FSS contains no provisions addressing the artificial "enhancement" of these baseflows to produce an altered IWS credit.

The concept described by Nebraska's Imports document appears to be a proposal for an augmentation project, i.e., a plan to pump groundwater and deliver it as surface flow for the sole purpose of offsetting stream depletions in order to comply with the Compact. Based only on an initial review of the concept, it appears to Kansas that it would be a poor fit to combine the proposed augmentation pumping concept with the existing Imported Water Supply Credit calculation of uncontrolled irrigation effects. As an augmentation project that pumps groundwater, we believe that Nebraska must show that pumping from these wells will not cause any new net depletions to streamflow either annually or long-term. Kansas is interested in discussing further with Nebraska how best to accomplish Nebraska's desire to augment streamflow in a way that protects the interests of Kansas.

Nebraska's Augmentation Outline seems to be a general characterization of a generic proposal for an augmentation plan and includes many of the broad topics about which Kansas would be concerned.

Of course, any specific augmentation plan will need to include sufficient detail to allow identification of all relevant issues and concerns and a thorough review by the technical staff of each state. For example, an augmentation project downstream of the storage afforded by Harlan County Reservoir would have different considerations than projects above that storage.

Moreover, Kansas needs to see the specifics of each augmentation plan in order to ensure that it will not reduce the usability of Kansas' allocation under the Compact in quantity, timing, or location. In addition, given the lack of experience the states have with augmentation plans under the FSS and the complexity of operations, periodic review and a limited term of approval would be appropriate.

To begin addressing the issues identified above, the following topics should be included in the outline:

- Location and extent of the stream depletions that the project is intended to offset;
- Records and analysis of the historical use of the wells to be used for augmentation;
- Proposed operational limits and proposed project accounting to ensure that the usability to Kansas will not be impaired by planned operations. Supporting analysis should accompany the proposed limits and accounting;
- Other operational details should include but not be limited to: Seasonal operating plans, considerations for water short and normal years, flow rates, and location of discharge;
- Plan for periodic review and evaluation of the project; and
- Consumptive use of the augmentation water and how it will be modeled.

More meaningful comments by Kansas would be facilitated by a more detailed presentation by Nebraska of its specific plans, including operational aspects and proposed accounting changes.

Kansas recognizes Nebraska's efforts in these documents to raise issues that are important to all the states. Nebraska should recognize that this brief response was prepared in a compressed time frame to accommodate Nebraska's request.

Sincerely,



David Barfield, P.E.
Kansas Chief Engineer

pc: Dick Wolfe