



Kathleen Sebelius, Governor
Adrian J. Polansky, Secretary

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August 1, 2008

By Email and US Mail

Brian Dunnigan, Acting Director
Nebraska Department of Natural Resources
301 Centennial Mall South
Lincoln, Nebraska 68509-4676

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DEPARTMENT OF
NATURAL RESOURCES

Dear Mr. Dunnigan:

In keeping with the provisions of Article IX of the Republican River Compact and the Section I.E. of Republican River Settlement Stipulation related to records pertaining to the annual data exchange, I would like to request additional data files and assistance in verification of data submitted for use in the Republican River Groundwater Model and Accounting procedures.

For the changes made to the Non-Federal dam inventory for 2005 and 2006 please provide the methodology and supporting documentation for the changes made. It is our understanding that a review was made of NAIP imagery and dams were delisted from the inventory for not having any visible water in storage during the times the imagery was taken or were delisted because of the visible water in storage was calculated to a volume to be less than the minimum size for inclusion. It is also our understanding based upon discussion with your staff that the 2007 inventory was unchanged from the preceding 2006 inventory that you have provided to us this spring. Please provide verification of our understanding and outline the procedures taken if it in fact differs from this understanding. Given that 2005-2006 were drought years, we do not believe it appropriate to continue to exclude dams in the wetter year of 2007 unless you verified this through a similar process. Please provide documentation for each change made in your basin wide Non-Federal dam inventory since 2004 explaining each change in detail and its basis.

For dams that were in the inventory, it is our understanding that for both the 2006 and 2007 accounting years the surface area of storage within each reservoir was calculated by a measurement of actual water in storage during the time the NAIP imagery was taken for each respective year. We understand that these surface areas were then used to compute the surface area of impounded water within each structure to be representative of the entire year. We believe that this one point in time measurement is problematic to be used to represent the reservoir surface acres for the entire year since it is measured during the summer period when reservoir conditions are typically lower than

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average. Since this procedure differs from the prescribed "presumptive average" calculation as outlined in IV.2.f. in the accounting procedures, we would like to propose this procedure to be discussed during the Engineering Committee meeting as part of the August RRCA Compact meeting prior to approval of the 2007 accounting.

Clarification of the Nebraska inventory and evaporative calculations are not only necessary for accounting verification, but also to the study of the impacts of land terraces and non-Federal reservoirs in their final analysis.

For the reported groundwater and surface water diversion records you provided us for 2007 accounting year, there were no records for zero volume pumped wells or surface water diversions and no records provided for municipal and industrial wells. Please provide those records so we can use for verification purposes.

Furthermore, I have included shapefiles of groundwater wells and irrigated acreages within the Republican River Basin in Nebraska that we have questions on regarding amount of water use reported in 2006 and 2007, accounting years. These questions are based upon our review of NAIP imagery and the reported well records provided by NDNR for each year. From our initial analysis, these acres appear to have been irrigated in either 2006 and/or 2007 but it is unclear to us that the water use was reflected in the reported records.

For the groundwater wells please verify to us:

1. The amount pumped in 2006 and 2007 including the beginning and ending meter readings for each year.
2. The acres or place of use to which the wells are associated with along with the appropriate NRD permit number.

For the irrigated acreage shapefiles (includes pivot and non-pivot tracts) please verify to us:

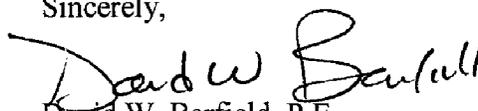
1. The source of water, including identification of all associated wells and/or surface water diversions with the applicable identifying information (i.e. well ids, surface water diversion numbers, etc.) and the appropriate NRD permit number.
2. The quantity of water pumped from the above wells or diversions with the identifiable id numbers that serves these acres or portions of these acres specific to each well or surface water diversion, including beginning and ending meter readings for both the 2006 and 2007 years.

As part of the Republican River Compact Administration annual accounting procedures, I believe that the facilitation of open data exchange and review is essential and in the overall best interest of all involved States. Your prompt attention to this matter is appreciated.

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After the follow up information is provided, Kansas may wish in the future to request for accompanied field visits to examine the appropriate well or surface water diversion records and possibly accompanied field visitations if deemed necessary.

Sincerely,

A handwritten signature in black ink that reads "David W. Barfield". The signature is written in a cursive style with a large, sweeping initial "D".

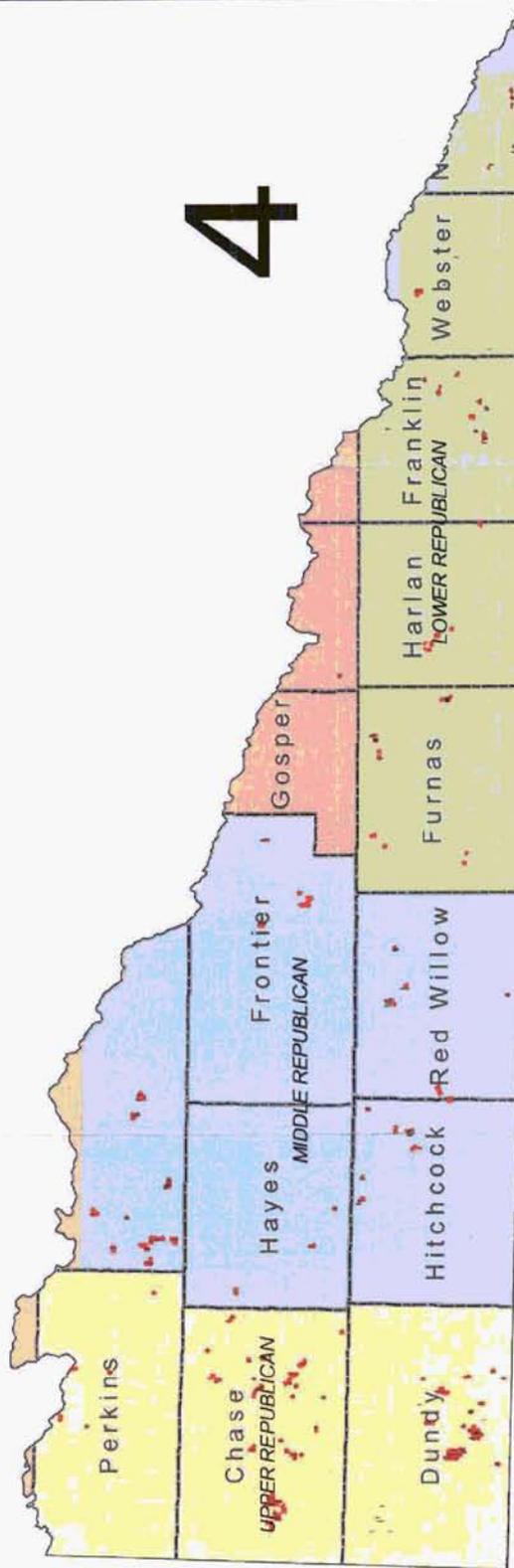
David W. Barfield, P.E.
Chief Engineer

Attachment
DWB/mb

Cc: Dick Wolfe

Nebraska Well Registry Records and Irrigated Acre Tracts
Identified by Kansas for Follow Data Request for the 2006 and
2007 Accounting Years.

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Portion of Republican River Basin in Nebraska



Legend

! Wells identified for follow up data

■ Tracts identified for follow up data



Kansas Department of Agriculture
Division of Water Resources
Interstate Water Issues
August 1, 2008



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