

## STATE OF NEBRASKA

DEPARTMENT OF NATURAL RESOURCES
Ann Bleed
Acting Director

IN REPLY TO:

May 1, 2006

Mr. Hal D. Simpson, State Engineer Colorado Division of Water Resources 1313 Sherman St., Rm. 818 Denver, CO 80203

Mr. David Pope, Chief Engineer Division of Water Resources Kansas Department of Agriculture 901 S. Kansas Avenue, 2<sup>nd</sup> Floor Topeka, KS 66612-1283

Mr. Steve Raunshagen, Acting Area Manager Great Plains Region Nebraska – Kansas Area Office P.O. Box 1607 Grand Island, NE 68802-1607

Subject: Water Short Year Administration Measures

Dear Hal, David and Steve:

This letter is to formalize what we previously discussed with you on an informal basis. As identified in the Final Settlement Stipulation Section V.B.2.d., Nebraska is advising you of the following measures Nebraska plans to take in anticipation of a Water Short Year. The measures are cited by the corresponding Section in the Final Settlement Stipulation:

V.B.2.a.i. – "supplementing water for Nebraska Bostwick Irrigation District by providing alternate supplies from below Guide Rock or from outside the Basin". Nebraska intends to enter into an agreement with the Nebraska Bostwick Irrigation District whereby it is unlikely that Superior Canal will be diverting surface water during 2006. It is estimated that 5,000 AF of natural flow would have been available for diversion into Superior Canal. This action will allow Kansas to divert the natural flow into Courtland Canal. Some irrigators in the Superior Canal surface water delivery area will be using an alternate supply from ground water wells located below Guide Rock Diversion Dam.

clrshare/patterson

St. Balling and a state of the same of the

Surface Water Appropriator in the Republican River Basin May 1, 2006 Page 2

V.B.2.a.iv. - "reducing use of storage by Nebraska Bostwick Irrigation District above Guide Rock". As previously stated, Nebraska intends to enter into an agreement with the Nebraska Bostwick Irrigation District to purchase the use of storage available from Harlan County Lake based on the January 2006 estimate of storage from the U.S. Bureau of Reclamation. The January 2006 estimated irrigation storage supply in HCL is 15,700 AF. Nebraska Bostwick would be entitled to approximately 10,118 AF of the total.

As discussed with State of Kansas and Kansas Bostwick Irrigation District Officials, it is expected that those supplies relinquished for the 2006 irrigation season will be diverted by Kansas Bostwick at the Guide Rock Diversion Dam along with the natural flow previously mentioned.

V.B.2.a.v. — "dry year leasing of water rights that divert at or above Guide Rock". Nebraska will enter into two additional agreements with surface water users. The first is an agreement with the Riverside Canal Company to forgo diversion from Frenchman Creek during the 2006 irrigation season. The diversion is immediately above the confluence of Frenchman Creek with the Republican River. It is estimated that action will maintain 2,000 AF in the river above HCL, which would have been diverted into Riverside Canal.

The second agreement above HCL is with Frenchman Valley Irrigation District (FVID). FVID's Culbertson Canal diverts from Frenchman Creek above the Riverside Canal headgate. It is estimated that would maintain 8,000 AF in the river above HCL, which would have been diverted into Culbertson Canal.

If you have any questions please feel free to contact me.

Sincerely,

Ann Bleed, Acting Director

an Blees



## Upper Republican NATURAL RESOURCE DISTRICT

P.O. Box 1140
135 W. 5th St.
Imperial, NE 69033
Phone 308-882-5173
308-882-5584
FAX Number 308-882-4521

September 22, 2005

Ann Bleed Nebraska Department of Natural Resources P.O. Box 94676 Lincoln, NE 68509-4676



## Dear Ann:

The Republican River Natural Resources Districts met on September 16<sup>th</sup>, 2005 to proactively discuss and coordinate Republican River Compact (RRC) compliance issues. The group will continue the discussion at the NARD conference, at 3:00 p.m. on September 21, 2005 (room TBA). Your presence would be appreciated as we continue to work toward identifying activities necessary to keep the State of Nebraska in compliance with the RRC.

The NRD representatives discussed several alternative approaches, including regulation, incentive programs to retire acres or reduce irrigation, transferring use from the "Quick Response" area to upland areas, transferring water ground water or surface water from the Platte Basin, and pumping ground water into the stream to increase Nebraska's allocation. The group further acknowledged the importance of the timing of benefits each alternative could offer, taking into account temporary constraints, legislative or other, that might make an alternative infeasible to implement within the timeframe necessary to achieve compliance.

The alternatives were broadly categorized as most feasible for attaining immediate short-term, future short-term, and long-term objectives. Immediate alternatives we felt were limited to stream flow mitigation and leasing of surface water rights. Future short-term alternatives were identified as transfers, stream flow mitigation, and/or leasing surface water rights. The most efficient long-term alternatives are likely regulation and incentive programs. No formal action was taken and these alternatives have not been approved by any of the NRD Boards. However, we feel the most likely alternatives need to be identified and discussed.

There was also some discussion centering around the availability of technical information. The Republican Basin NRDs need technical information from the Department of Natural Resources. Several requests have been made for model runs to analyze the effects of some of the alternatives already employed, primarily regulation. The RRCA model is a valuable resource that can be used to run simulations for alternative solutions or sets of solutions.

RECEIVED

SEP 26 2005

DEPARTMENT OF NATURAL RESOURCES This technical assistance and information is needed by the NRD's in a timely fashion so that we can make our best efforts to be proactive in the State of Nebraska's compliance efforts. The growing concern over the ability of the State of Nebraska to comply with the compact in the face of the continuing drought should serve as ample notice that an increased amount of technical information and assistance is needed in the Republican Basin. As you are aware, the first compliance measure occurs at the end of 2006. Thus, time is of the essence in analyzing the alternatives available to achieve compliance.

The Republican River Natural Resource Districts request immediate assistance from the Department of Natural Resources in analyzing alternative solutions, described above. Specifically, we need to identify areas where stream flow supplementation and the leasing of surface water would be most efficient, quantify the impacts to Nebraska's consumptive use of retirement or regulation schemes, and evaluate the feasibility of transfers.

We realize there are several unknowns involved in the modeling process. However, we must not forgo the benefits of using the model as a simulation tool due to the lack of complete information, as we possess historical information and can compute reasonable estimates for most of the unknowns. If there is anything the NRD's can do to assist the Department with this request, please contact us with your requests.

Sincerely,

Jacper Fanning, Manager Upper Republican NRD

Dan Smith, Manager Middle Republican NRD

Mike Clements, Manager Lower Republican NRD

John Thorburn, Manager Tri-Basin NRD

Cc: Governor Dave Heineman
Dean Edson

## Dear Dan

Thanks for your letter of January 9, 2007 assuring us that the Middle Republican Natural Resources District will work with the Department to try to develop scenarios that will allow us to maintain compliance with the Republican River Compact. We welcome that assurance. We also agree that an open exchange of information is critical to the decision making process. Let me assure you that as Director I will make sure that open communication and exchange of data among all the parties does occur. We will strive to work closely with the Republican River Natural Resources Districts, irrigation districts and other stakeholders in the basin to do what we must to achieve compliance with the Compact.

With that in mind, we will try to answer the questions you posed in your letter.

- You stated that there was no response to the letter you sent the Department in September of 2005. We believed we had provided whatever data was available at the time to address your questions at subsequent meetings with the Natural Resources Districts. We have subsequently developed additional data, which we have posted on the Department's ftp site. We will strive to understand what data you are seeking and to the extent possible, get you the answers you are seeking. We have also hired two additional ground water modelers that will facilitate our ability to do model runs and other analyses.
- You asked about previous actions taken by the state and the subsequent impact of those actions. As you know, along with a number of partners, including the natural resources districts we initiated two EQIP programs and the CREP programs to retire irrigated acres in the basin. The department has shared the status of the enrollment with you and others on numerous occasions. The actual retirement of most of these acres did not really start until 2005 and 2006. Also as you know, in 2006 the state initiated the project and provided funds to buy out existing surface water for release to Kansas. The Attorney General's office provided funds for clearing vegetation, which was also initiated in 2006. As Mike Thompson informed you, we have just finished analyzing the impacts or potential impacts of these programs and have posted the results of the analysis on the Department's ftp site. We look forward to discussing these results with you. Finally, the Department continues to regulate surface water diversions and have had most surface water irrigators shut off for a large portion of the irrigation season for many years. We have also undertaken a massive adjudication program and have cancelled for non-use more that 17,000 acres of surface water rights
- As you state in your letter, the settlement requires that the Department have water short-year administration measures and a report of those measures filed with the Republican River Compact Administration. Enclosed is a copy of that filing.
- With regard to basic information on the transfer process, both Jim Cook and I have provided information on the laws of the transfer process by e-mail you and as handouts at a public meeting last summer. The information provided by Jim Cook was also made available in the latest packet of information posted on the Department's ftp site.

- Your letter indicates you believe that the State should take the lead with regards to transfers and augmentation projects. As the analysis by Jim Cook states, the law does not permit surface water to be transferred out of the basin of origin and ground water cannot be transferred from a fully or over appropriated area without the permission of the NRD from which the water is being transferred. We have stated that if you can get such permission, the Department would assist in the engineering required to develop the project. To date we are unaware of any NRD willing to allow ground water to be transferred out of the basin. Furthermore, as we discussed at meetings in fall and winter of 2005, our initial evaluation of the feasibility of transfers and augmentation plans indicated that the costs of developing wells at some distance from the stream and pumping the water to the stream would be high and that it would probably be more efficient to simply retire uses close to the river. Nevertheless the Department recommended that the Natural Resources Commission fund your Republican River Augmentation Appraisal study to further explore these options with \$136,000 of a total project cost of \$170,000 from the Interrelated Water Management Program funds and the Department has stated we are willing to work with you on this study and has already provided assistance to the consultant hired to do the study. As far as protecting any water that results from these augmentation plans, the law allows the developer of the "new" water to apply for a "conduct-water permit" that would protect this water from diversion by others, and if it is new water, it could be protected through a reservoir. The Department is also working with the U.S. Bureau of Reclamation on the Frenchman Valley Appraisal Study to hopefully develop a plan for a more effective use of Enders Reservoir.
- You also asked for further information regarding vegetation control. As you know we are working with the Republican River Natural Resources Districts on the Republican River Basin Riparian Management Study and Demonstration project. The total cost of the project is \$999,868 with \$174,000 being funded by the Interrelated Water Management Funds and \$621,068 that the Department is committed to provide if our future budget requests are granted. With regard to the modeling process for the Quick-Response Area and the basis for the recent example of what it would take to achieve compliance with the Compact, we have posted the data that provided the basis for our analysis on the ftp site. We look forward to discussing these data with you.
- As far as the controls that the Natural Resources Districts and the Department jointly agreed upon in the Republican River Integrated Management Plans, these controls were based on the assumption of a normal water supply. Your plan also includes the following objective: After taking into account any reduction in beneficial consumptive use achieved through basin-wide incentive programs make such addition reductions in ground water use in Water Short Years as are necessary to achieve a reduction in beneficial consumptive use in the LRNRD in an amount proportionate to the total reduction in consumptive use that is needed in Nebraska above Guide Rock in such years. Finally, the statement that the Natural Resources Districts are the only entities to enact regulations is not correct. As stated above, the Department has actively restricted surface water diversions in the basin in accordance with the Integrated Management Plan and State law.

In conclusion, let me again assure you that the Department is committed to working closely with you and the other Republican River Natural Resources Districts to develop scenarios and implement plans to achieve compliance with the compact.

Sincerely,

Ann Bleed

cc: Governor Dave Heineman Dean Edson David Cookson Justin Lavene