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This DRAFT has not been approved by any irrigation district or natural resources district.

A Proposed Plan to Keep Nebraska in Compliance with The Republican River Compact

Jointly Developed by Republican River Natural Resources Districts and
The Nebraska Department of Natural Resources

5/22/07

Introduction: Nebraska has been challenged to stay in compliance with the terms of the Republican River Compact and the *Kansas v Nebraska* lawsuit settlement because of the severe drought that has plagued southwest Nebraska since 2000. The state and basin Natural Resources Districts (NRDs) have completed all the tasks called for in the lawsuit settlement, including establishing a moratorium on development of new wells, limiting and certifying all irrigated cropland and regulating diversions of surface water below Harlan County Dam to protect streamflows for Kansas Bostwick Irrigation District.

In spite of these regulatory actions and the voluntary efforts of basin residents to conserve irrigation water and enroll over 50,000 irrigated acres in conservation programs like CREP and EQIP, Nebraska is still in danger of being unable to maintain compliance with its legal obligations to the State of Kansas. Drought has diminished streamflows, drastically reducing Nebraska's allocation of Republican River water. Nebraska's allocation of Republican River water supplies set consecutive record lows in 2004 and 2005. Preliminary data indicate that the allocations are likely to remain at record low levels in 2006.

The Nebraska Department of Natural Resources (DNR) and Republican Basin NRDs are committed to work together to insure that Nebraska remains in compliance with the compact. The NRDs recognize that they have roles to play in both implementation and financing compact compliance programs. The NRDs and DNR also recognize that additional regulation of water users will be necessary to achieve the goal of maintaining compact compliance.

Maintaining compact compliance will be costly. Republican Basin NRDs are near or at their levy limits, so they are unable to raise additional funds unless they are given additional taxing authority. Governor Heineman has proposed creation of a Water Resources Cash Fund to provide state money to assist local government with water resources management. Increases in both state and local funding will be critical to insure Nebraska's continued compliance with the interstate compact. Following are lists of regulatory and voluntary actions that can be taken over the next six years to maintain compact compliance.

Plan Goal: *The State of Nebraska and Republican Basin Natural Resources Districts will work together to reach a sustainable balance between water use in Nebraska's portion of the Republican River Basin and the amount of water allocated to Nebraska by the Republican River Compact by the year 2012.*

2007 Plan objectives

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Legislative Actions

▪ With the passage of LB 701 the NRDs and the DNR were given additional authorities. The legislation pertinent to the Republican River planning and management can be found in Appendix A.

Regulatory Actions

• Republican Basin NRDs and DNR will continue to enforce existing moratoriums on new water uses and limits on groundwater pumping.

Voluntary Actions

- The DNR will purchase 12,500 acre-feet of storage water and the natural flow available to the Nebraska Bostwick Irrigation District below Harlan County Lake from the Nebraska Bostwick Irrigation District for delivery to the Kansas Bostwick Irrigation District.
- The NRDs will purchase the natural flow available to the Frenchman Valley Irrigation District and the Riverside Irrigation District and the natural flow above and the storage water available from Harry Strunk Lake from the Frenchman Cambridge Irrigation District for delivery to the Kansas Irrigation District. The DNR will work with the Bureau of Reclamation to track and protect the consumptive use portion of this water to and through the Harlan County Lake for Kansas Bostwick Irrigation District.
- The NRDs and the DNR will continue and expand projects to control vegetation in the Republican River and tributary stream channels. (The approximate cost is believed to be \$750,000 in the initial year.)
- The NRD and DNR will continue and expand programs to inform and educate landowners about irrigation best management practices and encourage additional water conservation. (Approximately \$50,000)
- The DNR will continue to work with pivot manufacturers and the University of Nebraska to develop new methods to make better use of whatever water is available to the basin and to develop programs to educate landowners about the availability of these practices.

2008-2012 Plan objectives

Legislative Actions

Guidelines for Planning Actions

Every five years, starting in 2007 the DNR, in consultation with the NRDs shall forecast the maximum amount of water that may be depleted from streamflow for beneficial consumptive use and still achieve and maintain an annual balance between Nebraska's Allocation and Computed beneficial Consumptive Use (CBCU) so that the State can be in compliance with the Republican River Compact. In 2007 this forecast will be for period from January 1, 2008 to December 31 2012.

To make this forecast the Department will examine the supply expected to be available under an average and a below average annual precipitation scenario.

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For future planning purposes, the DNR will also make forecasts of the amount of water that will be available over the next 20 years.

The forecasted streamflow depletions available for use by Nebraska under the Republican River Compact shall be allotted on a five-year basis starting in 2008 to surface water users and ground water users in each NRD in accordance with the following guidelines:

- ① The estimated depletion due to reservoir evaporation from both Bureau of Reclamation Reservoirs and other reservoirs in the Basin will be subtracted from the forecasted streamflow depletions. The remaining available depletions to streamflow will be allotted to surface water and ground water irrigated acres based on the amount of depletions used by each during the years 1998-2002 as calculated by the RRCA accounting program.

The depletions from ground water uses shall be distributed to the Upper Republican NRD, Middle Republican NRD and Lower Republican NRD based on each NRD's percentage of the total depletions to stream flow that occurred for the 1998-2002. Currently these percentages are set as:

- LRNRD = 26%
- MRNRD = 30%
- URNRD = 44%.

However, these percentages will be reviewed to insure fairness of the distribution among the NRDs using several different modeling scenarios and the metered pumping data. These estimates may be adjusted by mutual agreement if the review determines an adjustment needs to be made to insure fairness among the NRDs.

- The Tri-Basin NRD will not be allotted a depletion and will have no requirement to live within an allotted depletion as long as the Imported Water Supply as computed by the Republican River Compact Administration Model is greater than or equal to zero. To achieve this objective the Tri-Basin NRD shall maintain water levels in its portion of the ground water mound as delineated in the Republican River Settlement at or above the average water levels for the years 1981 through 1985. If however, the Imported Water Supply from Tri-Basin (Not Imported Water Supply Credit) not consumed by Tri-Basin becomes less than the amount needed to offset any Computed Beneficial Consumptive Uses of Virgin Water Supply by wells within the Tri-Basin NRD as computed by the Republican River Compact Administration, the Tri-Basin NRD will be given a share of the allotted percentage allocations and the Tri-Basin NRD will be treated the same as the other three NRDs.

*1st
reservoir
Evap.
used on usage
2002 what
remaining
used by SWP*

*USE CONSUMPTIVE
CALCS FROM
RRCA/COMPACT
5-YR ROLLING
AVERAGE*

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- Accretions to the stream may be used to offset depletions to the stream
 - Any accretions to the stream developed as a result of programs funded by the State, such as State-funded CREP and EQIP programs or other surface water or ground water use buyout programs or augmentation projects will be used to offset any overuse by the State. When Nebraska's CBCU does not exceed the CAS and the State is in Compliance with the Republican River Compact, accretions to the stream resulting from State funded programs will be used to offset depletions by surface water users if streamflow is too low to allow surface water users to use their full allowable depletion. Otherwise, accretions from State-funded programs will be used to offset depletions for surface water users and ground water users in each NRD according to the percentages established to distribute the allowable depletions.
 - Any streamflow accretions developed through programs funded by an NRD, may be used to offset depletions by the NRD funding the program.
 - Any streamflow accretions developed through programs funded by a surface water user may be used to offset the depletions caused by that surface water user.
- By January 1 of 2008 and each year thereafter the DNR in consultation with the NRDs shall forecast the maximum amount of water that may be available from streamflow for beneficial consumptive use for the next year in order to comply with the Republican River Compact.
- Compliance with the Integrated Management Plan will be based on a five year running average as in the Republican River Compact and, in water-short-years, a two or three year running average, depending of which is controlling for Compact compliance.

At the end of each year the DNR will estimate the previous years Allocation and CBCU for surface water users and each NRD and determine whether the surface water users or an NRD exceeded its allotted supply or was under its Allotted supply. Any unused allotted water may be carried over for use in the subsequent years. Any over use of water must be offset in subsequent years so that the five year running average CBCU is less than the allotted supply for the five years or if it is a water short year, the two or three year CBCU is less than the two or three year allotted supply.

Regulatory Actions

Administration of Ground Water

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- The regulations used to administer ground water use will be determined by the local Natural Resources Districts and the DNR in accordance with Neb. Rev. Stat. § 46-715. In accordance with Neb. Rev. Stat. § 46-739, the plan shall include regulations that together with other augmentation or voluntary reduction incentive programs, will assure that depletions to the stream from ground water pumping does not exceed the depletions allotted to the NRD so that each NRD is assuming their share of the responsibility to keep Nebraska in compliance with the Republican River Compact. Neither the individual NRD or the DNR will require the integrated management plan to be amended solely for the purpose of changing the responsibility of water users within the NRD based on the failure of another basin NRD to implement or enforce an integrated management plan to meet their share of the responsibility to keep Nebraska in compliance with the Republican River Compact.

After taking into account any augmentation plans or reductions in beneficial consumptive use achieved through basinwide incentive programs, make such additional reductions in ground water use in water short years as are necessary to achieve a reduction in beneficial consumptive use in the NRD in an amount proportionate to the total reduction in consumptive use that is needed in Nebraska above Guide Rock in such years.

Administration of Surface Water

- The State will administer surface water diversions first in time first in right, but will not allow the total depletions to stream flow from surface water use to exceed the stream flow depletions allotted to surface water use for each five-year period to stay within Compact compliance.