

**INTEGRATED MANAGEMENT PLAN for
The Platte River Basin**

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**Jointly Developed by the
NE DEPARTMENT OF NATURAL RESOURCES
And the
TRI-BASIN NATURAL RESOURCES DISTRICT
And the Hydrologically Connected Groundwater
Resources Management Plan for the
Republican and Little Blue River Basins
Developed by Tri-Basin NRD**

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5/27/05 revised 6/2/05, 8/12/05, 9/14/05, 1/11/06, 3/9/06, 6/12/06, 9/25/06,
11/3/06, 3/6/07 6/27/07

I. - AUTHORITY

The Platte basin is-integrated management plan was jointly prepared by the Board of Directors of the Tri-Basin Natural Resources District (TBNRD) and the Nebraska Department of Natural Resources (NDNR) in accordance with Sections 46-715 through ,46-716, 46-717, and 46-720, R.S.Supp., 2004. The Platte Basin west of Highway 183 in Tri-Basin NRD was declared overappropriated by NDNR on September 15, 2004. The Platte Basin east of Highway 183 was declared fully appropriated by NDNR on April 21, 2006.

The Hydrologically Connected Groundwater Resources Management Plan for the Republican and Little Blue Basins was prepared by Tri-Basin Natural Resources District as an amendment to the district Groundwater Management Plan under the authority of state statutes 46-707 to 46-712. This plan amendment was approved by the Department of Natural Resources on . Even though the planning process for the Republican and Little Blue Basins is conducted under different legal authorities than the joint integrated management planning process for the Platte Basin, this document has been assembled by the NRD as a single, coherent plan for the entire district for the convenience of its constituents.

II.—BACKGROUND

Tri-Basin Natural Resources District encompasses portions of the Republican, Platte and Little Blue River Basins (see map #1). The district also contains an area commonly referred to as the "Groundwater Mound", a large area spanning portions of all three basins that is characterized by groundwater levels that are higher than historic "pre-development" groundwater elevations.

A. The Republican Basin

The Republican River originates in eastern Colorado and traces a course through southern Nebraska on the way to its confluence with the Kansas River. The Republican River does not pass through Tri-Basin NRD, but approximately 40% of the district lies within the Republican watershed. Several tributaries of the Republican originate in or pass through the district. Base flows in some of these tributaries (Muddy Creek, Elk Creek, Turkey Creek and Spring Creek) have increased through time, likely due to a rise in the groundwater table. This rise resulted primarily from delivery and irrigation with surface water from the Platte River by Central Nebraska Public Power and Irrigation District (CNPPID) and its customers in the Platte Basin in Gosper, Phelps and Kearney Counties. The increase in baseflows in these tributaries has been so significant that it has created annual credits averaging 10,000 acre-feet in Republican Basin Compact Accounting for the State of Nebraska.

In 1943 the States of Colorado, Kansas and Nebraska, with the approval of Congress, entered into the Republican River Compact (hereinafter the Compact) ~~with the approval of Congress~~. The Compact provides for the equitable apportionment of the "virgin water supply" of the Republican River Basin. Following several years of dispute about Nebraska's consumptive use of water within the basin, Kansas filed an original action in the United States Supreme Court against the states of Nebraska and Colorado in 1998. After several rulings by the Court and its Special Master and several months of negotiation, all three states entered into a comprehensive Settlement Agreement. That Agreement was approved by the Court on May 19, 2003 and the Special Master's final report approving the Joint Groundwater Model developed by all three states for use in computing stream flow depletions resulting from groundwater use was submitted to the Court on September 17, 2003.

In July, 1996, the TBNRD and the other three Natural Resources Districts in the Republican River Basin, initiated a joint action planning process with the Department of Water Resources (DWR), a predecessor agency of NDNR, pursuant to then Section 46-656.28 of the Nebraska statutes. In accordance with that process, DWR ~~first~~ made a preliminary determination in 1996 that

"there was reason to believe that the use of hydrologically connected ground water and surface water resources is contributing to or is in the reasonably foreseeable future likely to contribute to disputes over the Republican River Compact." When the studies required by Section 46-656.28 had been completed, NDNR issued its conclusions on May 20, 2003 in the form of a report entitled: "Republican River Basin, Report of Preliminary Findings." Those conclusions included the following determination:

"Pursuant to Section 46-656.28 (this section was repealed by LB 962 in 2004), and the preliminary findings in this report, the Department determined that present and future Compact disputes arising out of the use of hydrologically connected ground water and surface water resources in the Republican River Basin can be eliminated or reduced through the adoption of a joint action plan."

Following four hearings on that report, NDNR made final the preliminary conclusions in the report and the four basin Natural Resources Districts were so informed. The TBNRD and the other three Districts each then adopted orders to proceed with developing a joint action plan for integrated management of hydrologically connected surface water and ground water resources in the basin; preparation of a joint action plan for the TBNRD began soon thereafter. TBNRD and NDNR agreed on the objective for a joint action plan on July 13, 2004.

B. The Platte Basin

More than 100,000 acres of cropland within the Platte Basin portion of Tri-Basin Natural Resources District are irrigated with water diverted from the Platte River and distributed through the canals of the Central Nebraska Public Power and Irrigation District (CNPPID or Central). Surface irrigation water and the canals that distribute it enhance recharge of groundwater supplies within the district. In addition to helping sustain groundwater supplies, this incidental recharge has increased streamflows in Platte and Republican tributaries. High groundwater levels have also saturated soil and sub-soil in parts of northern Phelps and Kearney counties, requiring the NRD to construct drainage ditches (Improvement Project areas or IPAs) in an attempt to stabilize groundwater levels below the crop root zone. The NRD has designated portions of the Platte Basin as a "High Groundwater Management Area" pursuant to NRD rule 8.6 for purposes of groundwater quantity management.

Water disputes in the Platte River Basin date back to early Nebraska history. Tri-Basin NRD has been involved in Platte Basin water issues since it was established in 1972. Most recently, Tri-Basin NRD directors have participated in meetings and negotiations associated with development of the Platte River Cooperative Agreement and the ~~proposed~~ Platte River Recovery Implementation Program (Program). ~~If implemented, the proposed~~ This program ~~would~~ manage certain land and water resources to provide defined benefits for four species in Nebraska that are listed as threatened or endangered by the federal government. The program is intended to provide ESA compliance for water users in the Platte River Basin upstream of Columbus, Nebraska.

C. The Little Blue Basin

The headwaters of the Little Blue River Basin rise in south-central Kearney County. A major tributary of the Little Blue, Sand Creek, also originates near Minden in Kearney County. Sand Creek is influenced by the "groundwater mound", but the Little Blue River itself does not appear to have higher levels of streamflow than it did historically. This conclusion is based on district local groundwater level observations made in that basin, as well as a review of data from the closest downstream gauge at DeWeese, Nebraska.

Water use in the Little Blue River Basin is subject to an interstate compact between Nebraska and Kansas, which was enacted in 1962. ~~Tri-Basin NRD will assist NDNR in its efforts to insure that the state maintains compliance with this interstate compact.~~

III. GOALS AND OBJECTIVES

A. Integrated Management Plan and Hydrologically Connected Groundwater Management Plan Goals:

Tri-Basin NRD Vision Statement

The vision (overall goal) for Tri-Basin NRD is to **"work cooperatively with District residents and others to promote good stewardship of land and water resources."**

Tri-Basin NRD Mission Statement

Tri-Basin NRD's mission is to **"manage, conserve and protect the District's land and water resources."** This mission will be accomplished by protecting the quality and quantity of surface water and groundwater, reducing soil erosion and flooding, promoting agricultural best management practices, forestry and wildlife habitat preservation. These tasks can only be accomplished by working cooperatively with local residents and agencies of local, state and federal government.

Pursuant to Section 46-715, R.S. Supp., 2004, the goals and objectives of an integrated management plan must have as a purpose "sustaining a balance between water uses and water supplies so that the economic viability, social and environmental health, safety, and welfare" of the residents of Tri-Basin Natural Resources District are assured for both the near short term and the long term. The following goals and objectives are adopted by the TBNRD and the NDNR to achieve that purpose.

The goals of the Tri-Basin NRD Integrated Management Plan are:

- 1. Tri-Basin NRD and NDNR will work with district residents, Central Nebraska Public Power and Irrigation District and other stakeholders to sustain a balance between the uses and supplies of groundwater and**

surface water, while protecting the viability of production agriculture and the general economy, as well as the social and environmental health, safety and welfare of district residents. Tri-Basin NRD and NDNR will work to achieve this goal while accommodating, to the greatest extent possible, economic development needs of the district for the near and long term future.

NOTE: The current benchmark for groundwater quality is that groundwater resources should contain less than 9 ppm nitrate-nitrogen. The benchmark for groundwater quantity is that groundwater table elevations should equal or exceed average springtime groundwater table elevations during the period 1981-85.

2. Tri-Basin NRD and NDNR, in collaboration with CNPPID and other affected water users, will develop and implement plans to continue and enhance groundwater recharge from surface water sources in quantities that are adequate and at locations that are appropriate to enable NDNR and the NRD to achieve the other goals and objectives of this plan. This goal will be achieved in a manner that accounts for the water supply requirements of Central and its customers and which provides Central customers equitable access to groundwater supplies.

3. Tri-Basin NRD will assist the State of Nebraska, in cooperation with other Natural Resources Districts, in maintaining compliance with:

A. The Republican River Compact as adopted in 1943 and as implemented in accordance with the settlement approved by the United States Supreme Court on May 19, 2003,

B. The Platte River Recovery Implementation Program and any applicable successor agreements or programs that are legally binding upon the state and its political subdivisions,

C. The Blue River Compact and

D. Other lawful interstate compacts, decrees and agreements relevant to management of the integrated water resources of the district.

Furthermore, with respect to interstate compacts, agreements and court decrees, Tri-Basin NRD and NDNR agree:

E. That they will ensure that ground water and surface water users within the TBNRD will only be expected to assume their fair share of the burden to keep Nebraska in compliance with the Republican River Compact, Blue River Compact and the Platte River Recovery Implementation Program (and applicable successor interstate agreements for the Platte River system).

F. That neither TBNRD nor NDNR will require the integrated management plan to be amended solely for the purpose of changing the responsibility of water users within the TBNRD based on the failure of other NRDs to implement or enforce an integrated

management plan to meet their share of the responsibility to keep Nebraska in compliance with these interstate agreements, and G. That TBNRD's share of that burden will be distributed in an equitable manner, minimizing to the extent possible, adverse economic, social and environmental consequences.

4. Tri-Basin NRD and NDNR will continue to support the development and maintenance of digital water management models, databases, stream gauges, observation wells and other tools and facilities needed to accurately measure and clearly depict the current state of groundwater and surface water resources as well as potential future water resource trends and conditions. These tools will be essential for decision makers as they consider whether and how to regulate consumption of integrated water resources. They will also serve as one mechanism to monitor and measure the progress of this plan.

5. Tri-Basin and DNR will, with limited exceptions allowed by law, will limit net consumptive water use within the NRD to 2005 levels, except for the Overappropriated portion of the Platte Basin (west of Highway 183), where net consumptive water use will be reduced to 1997 levels by 2018, and to fully appropriated levels, which levels will be agreed upon by DNR and Tri-Basin, by 2028.

or less

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In the area beyond
commenced in
Platte

The goals of the Tri-Basin NRD Integrated Management Plan are:

- ~~1. All water supplies within the Tri-Basin NRD, whether their origin be groundwater or surface water, will be utilized to preserve the present quality and quantity of this vital resource. This goal will be achieved through equitable adjustments in irrigated cropland acres and allocation of groundwater resources, if necessary. (Source: Tri-Basin NRD Groundwater Management Plan, 1995). NOTE: The current benchmark for groundwater quality is that groundwater resources should contain less than 9 ppm nitrate-nitrogen. The benchmark for groundwater quantity is that groundwater table elevations should equal or exceed average springtime groundwater table elevations during the period 1981-85.~~
- ~~2. Tri-Basin NRD and NDNR, in collaboration with CNPPID and other affected water users, will develop and implement plans to continue and enhance groundwater recharge from surface water sources in quantities that are adequate and at locations that are appropriate to enable NDNR and the NRD to achieve the other goals and objectives of this plan.~~
- ~~3. Tri-Basin NRD will assist the State of Nebraska, in cooperation with other Natural Resources Districts, in maintaining compliance with:

 - A. the Republican River Compact as adopted in 1943 and as implemented in accordance with the settlement approved by the United States Supreme Court on May 19, 2003,~~

- B. ~~the Platte River Cooperative Agreement and any applicable successor agreements or programs that are legally binding upon the state and its political subdivisions;~~
- C. ~~the Blue River Compact and~~
- D. ~~other lawful interstate compacts, decrees and agreements relevant to management of the integrated water resources of the district.~~

Furthermore, with respect to interstate compacts, agreements and court decrees, Tri Basin NRD and NDNR agree:

E. ~~That they will ensure that ground water and surface water users within the TBNRD assume their share of the burden to keep Nebraska in compliance with the Republican River Compact, Blue River Compact and the Platte River Cooperative Agreement (and applicable successor interstate agreements for the Platte River system).~~

F. ~~That neither TBNRD nor NDNR will require the integrated management plan to be amended solely for the purpose of changing the responsibility of water users within the TBNRD based on the failure of the other NRDs to implement or enforce an integrated management plan to meet their share of the responsibility to keep Nebraska in compliance with these interstate agreements, and~~

G. ~~That TBNRD's share of that burden will be distributed in an equitable manner and, by minimizing to the extent possible, adverse economic, social and environmental consequences.~~

4. ~~Tri Basin NRD and NDNR will manage integrated water resources to protect the economic viability, social and environmental health, safety and welfare of Gosper, Phelps and Kearney counties and, to the greatest extent possible, accommodate foreseeable future economic development needs.~~

5. ~~Tri Basin NRD and NDNR will continue to support the development and maintenance of digital water management models, databases, stream gauges, observation wells and other tools and facilities needed to accurately measure and clearly depict the current state of groundwater and surface water resources as well as potential future water resource trends and conditions. These tools will be essential for decision makers as they consider whether and how to regulate consumption of integrated water resources.~~

~~Nothing in this plan will compel Tri Basin NRD or NDNR to continue regulations or limitations on consumption or utilization of integrated water resources if future climatic conditions or changes in technology or land use increase integrated water supplies to such an extent that portions of the district designated by NDNR as fully appropriated or overappropriated no longer warrant such designations.~~

B. Integrated Management Plan and Hydrologically Connected Groundwater Management Plan Objectives:

1. Republican Basin Objectives

Tri-Basin NRD and NDNR ~~agree will work~~ to accomplish the following objectives for the Republican River Basin portion of the district in order to achieve the goals of this integrated management plan.

A. Republican Basin Joint Action Plan Objective

Tri-Basin NRD and the NDNR agreed on July 13, 2004 that the objective of a joint action plan for the Republican River Basin portion of TBNRD is as follows: *"The key objective of the Plan is to maintain, at sufficient levels to offset depletions to the Republican River caused by ground water pumping within the Tri Basin NRD, the Republican River Compact credit that Nebraska receives because of discharges from the "ground water mound" to the surface water supplies in the Republican River Basin. To achieve this objective, the Tri Basin NRD will utilize the ground water management authorities available to it to maintain the water levels in its portion of that "ground water mound" at or above the average water levels for the years 1981 through 1985."*

The NDNR accepted that agreement between NDNR and Tri-Basin NRD on this objective fulfilled the requirements for creation of a joint action plan for the Republican River portion of the NRD, as described in Neb. Rev. Stat. Sec. 46-720.

Furthermore, the latest draft (June, 2007) of "A Proposed Plan to Keep Nebraska in Compliance With The Republican River Compact", developed by NDNR Director Ann Bleed and staff, states the following in relation to Tri-Basin NRD's obligation to help Nebraska maintain compact compliance:

"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."

- B. ~~P~~Prohibit landowners, with limited exceptions, from initiating new or expanded uses of water that increase Nebraska's computed beneficial consumptive use of water within the Republican Basin portion of TBNRD;
- C. ~~Ensure that surface water appropriations in the Republican Basin are administered in compliance with the Republican River Compact and state law.~~
- CD. After taking into account any reduction in beneficial consumptive use achieved through basin-wide incentive programs, make such additional adjustments in ground water use as are necessary to maintain groundwater levels at or above 1981-85 average levels.
- DE. TBNRD and the NDNR will investigate or explore methods to reduce the impact of vegetative growth, particularly invasive species infestations, on streamflows in the Republican River and its tributaries.
- ~~F. TBNRD, NDNR and CNPPID will develop and implement plans to continue groundwater recharge from surface water supplies to the Republican River basin in amounts that are comparable to recharge that occurred before and during 1997.~~

2. Platte Basin Objectives

Tri-Basin NRD and NDNR agree to accomplish the following objectives for the Platte River Basin portion of the district in order to achieve the goals of this joint integrated management plan. Tri-Basin NRD and NDNR further agree that use of groundwater by CNPPID customers to supplement surface water deliveries on existing irrigated acres is not a new depletion to stream flows in Tri-Basin NRD, because the incidental recharge water rights CNPPID holds on behalf of its customers predate 1997.

new groundwater use could increase consumptive use

- A. Objectives for the entire Platte Basin within Tri-Basin NRD
 - 1). Prohibit landowners, with limited exceptions, from initiating new or expanded uses of water that increase beneficial consumptive use of water within the overappropriated and fully appropriated portions of the Platte River Basin within TBNRD;
 - 2). Ensure that administration of surface water appropriations in the Basin is in full compliance with Nebraska law.
 - 3). The TBNRD and the NDNR will investigate methods to reduce the impact of vegetative growth, particularly invasive species infestations, on streamflows in the Platte River and its tributaries.
 - 4). TBNRD and NDNR, in collaboration with CNPPID and other affected water users will develop and implement plans to continue

groundwater recharge from surface water supplies in amounts sufficient to sustain existing groundwater uses.

B. Objectives for the Overappropriated (O.A.) Basin

The need to reduce water use in the overappropriated portion of the district to fully appropriated levels of water use (at least 1997 levels of water use by 2018) may lead the board to develop separate rules and regulations for that portion of the district.

In addition to the overall objectives for the Platte Basin listed above, Tri-Basin NRD and NDNR agree that the joint integrated management plan should include the following additional objectives for the overappropriated portion of the Platte Basin (the "O.A. Basin"). These objectives are:

1) maintain the groundwater aquifer at or above 1981-85 average springtime water table elevations, except in that portion of the district designated by the NRD as a High Groundwater Management Area (see map 2) and,

2) to limit net water consumption to 1997 levels or lower levels, if necessary, to reach fully appropriated status. This objective will be accomplished by carrying out the following tasks:

a1). TBNRD and NDNR, working in cooperation with CNPPID, will develop and implement plans to continue groundwater recharge from surface water supplies to the overappropriated basin in amounts that are comparable to recharge that occurred before and during 1997.

b2). Make incentive programs available to TBNRD water users that will help them reduce water consumption. Any reductions in water consumption resulting from implementation of such programs within Tri-Basin NRD shall be credited toward Tri-Basin NRD's objective of offsetting depletions to streamflows due to groundwater pumping.

c3). Continue to implementation and enforcement of current TBNRD integrated water management rules and NDNR regulations, which prohibit development of additional irrigated cropland or hayland, unless landowners convert an equal amount of existing irrigated land to a non-irrigated land use. If groundwater levels drop below 1981-85 average springtime levels in those portions of the Platte Basin not designated as a High Groundwater Management Area, NRD phase II groundwater quantity management rules will be implemented.

d). Work with NDNR to estimate as accurately as possible the difference between 1997 levels of water use and fully appropriated levels of use and reduce water use incrementally to reduce net water consumption to fully appropriated levels of use.

This objective will be considered achieved when sufficient reductions in groundwater consumption have been secured using the processes mentioned above, or when other programs, processes or projects that may be initiated by the NRD or NDNR at a later time fully offset impacts to Platte River flows resulting from 1997 and later water uses, as estimated by the COHYST model.

C. Objective for the Fully Appropriated Basin

NDNR designated the ~~remaining~~ portion of the Platte Basin east of US Highway 183 within Tri-Basin NRD as "fully appropriated" pursuant to NE State Statute 46-713 (1) (a) in January, 2006. Tri-Basin NRD directors disagree with the criteria used by NDNR to determine the fully appropriated portion of the Platte Basin within the district, particularly the use of 10% depletion to streamflows over 50 years as the standard for interconnection of groundwater and surface water resources, and the inclusion of land outside the Platte Basin within the designated fully appropriated area. Because Upper Big Blue NRD has filed suit against NDNR contesting NDNR's authority to designate land outside of a fully appropriated river basin as part of that basin, the boundaries of the fully appropriated area may be altered by a court ruling.

Tri-Basin NRD ~~will, nevertheless,~~ expanded the boundaries of the district's Integrated Management Area to include that portion of the Platte basin within its boundaries ~~so~~ designated as fully appropriated. The district will certify existing irrigated land uses and prohibit the development of additional irrigated cropland and hayland within the fully appropriated portion of the Platte Basin, unless landowners convert an equal amount of existing irrigated land to a non-irrigated land use.

The integrated management plan objective for the fully appropriated portion of the Platte Basin is to maintain the groundwater aquifer at or above 1981-85 average springtime water table elevations and to limit net groundwater consumption at or below 2005 levels. This objective will be accomplished by continued implementation and enforcement of current TBNRD integrated water management rules, which prohibit development of additional irrigated cropland or hayland. If water levels drop below 1981-85

levels, NRD phase II groundwater quantity management rules will be implemented.

3. Little Blue Basin Objectives

Tri-Basin NRD ~~and NDNR agree to~~ will work to accomplish the following objectives for the Little Blue River Basin portion of the district in order to achieve the goals of this integrated management plan.

- A. Objectives for the entire Little Blue River Basin within Tri-Basin NRD
1. Ensure that administration of surface water appropriations in the Basin is in accordance with the Blue River Compact and in full compliance with Nebraska law.
 2. Protect existing groundwater supplies through a combination of incentives to reduce irrigated water consumption, regulation of water use, limitations on irrigated cropland and intentional recharge of groundwater supplies.
 3. TBNRD ~~and the NDNR~~ will investigate or explore methods to reduce the impact of vegetative growth, particularly invasive species infestations, on streamflows of the Little Blue River and its tributaries.
 4. To maintain the groundwater aquifer water table within five feet of 1981-85 average springtime water table elevations and to limit water consumption at or below 2006 levels. This objective will be accomplished by continued implementation and enforcement of current TBNRD integrated water management rules, which prohibit development of additional irrigated cropland or hayland. If water levels drop more than five feet below 1981-85 levels, NRD phase II groundwater quantity management rules will be implemented.

~~B. The Groundwater Mound influenced area~~

~~Rising groundwater levels in this portion of the Little Blue River basin indicate that the "Groundwater Mound" is expanding south and east into this area. Historic data is sparse, but there are indications that Sand Creek has higher baseflows now than it did in the 1970s.~~

~~The integrated management plan objective for the groundwater mound influenced portion of the Little Blue River Basin will be to maintain groundwater levels at or above 1981-85 average levels. This objective will be accomplished using a combination of voluntary incentives to landowners to reduce the number of irrigated cropland acres and continued implementation and enforcement of current TBNRD groundwater quantity management rules. If water levels drop below 1981-85 levels, NRD phase II groundwater quantity management rules will be implemented.~~

C. ~~The Eastern Little Blue Basin (undifferentiated Pleistocene deposits)~~

~~The eastern portion of the Little Blue River basin in Kearney County is not affected by the groundwater mound. The groundwater aquifer generally lacks Ogallala Formation deposits, and in some areas has limited amounts of Pleistocene age water bearing gravels. The aquifer in this portion of the district has been drawn down significantly during drought periods, but readily recovers during periods of average rainfall.~~

The integrated management plan objective for the ~~Eastern Little Blue River Basin~~ will be to maintain groundwater levels within five feet of or above 1981-85 average springtime levels. This objective will be accomplished using a combination of voluntary incentives to landowners to reduce groundwater pumping and irrigated cropland acres and continued implementation and enforcement of state law and current TBNRD groundwater quantity management rules. If water levels drop below 1981-85 levels, NRD phase II groundwater quantity management rules will be implemented. This area would benefit from an intentional groundwater recharge project, possibly in the Sand Creek or Cottonwood Creek drainages. Tri-Basin NRD, CNPPID and NDNR will investigate options for enhancing groundwater recharge in the Little Blue River Basin.

IV. MAPS - see maps 1 and 2.

The area subject to this integrated management plan is the entire geographic area within the boundaries of the Tri-Basin Natural Resources District (all of Gosper, Phelps and Kearney counties). The joint integrated management plan developed by NDNR and Tri-Basin NRD encompasses only those portions of the district that lie within the Platte River Basin.

V. GROUND WATER CONTROLS

The authority for the ground water component of this integrated management plan is Section 46-715 and Section 46-739, R.S. Supp., 2004. The ground water controls that ~~will be have been~~ adopted and implemented by the Tri-Basin Natural Resources District are those found in Sections 1 through 11 the *Rules and Regulations - Ground Water Management in the Tri-Basin Natural Resources District*. Tri-Basin NRD utilizes several statutorily authorized groundwater management controls to protect groundwater quality and quantity. The only control measure currently utilized by Tri-Basin NRD for integrated ground and surface water management is certification of irrigated land and a

limitation on development of additional irrigated land or other consumptive water uses, unless such new water uses are offset in their entirety by cessation of an equivalent amount of existing consumptive water uses. Tri-Basin NRD reserves the right to adopt additional controls identified in state statutes if the board of directors determine that such controls will help the district achieve the goals and objectives of this plan.-

The rules and regulations of Tri-Basin Natural Resources District are separate and distinct from this plan. This plan establishes the inter-related water management goals, objectives, while the rules and regulations create the regulatory framework and precise mechanisms that will be used to implement this plan and other plans and policies established by the board of directors.

Tri-Basin Natural Resources District may, from time to time, change its rules and regulations to better achieve the purposes of this plan or other plans and policies of the district. Tri-Basin NRD also reserves the right to rescind portions of its rules and regulations, as long as such changes in rules do not interfere with the NRD's ability to meet the goals and objectives of this plan.

Finally, nothing in this plan will compel Tri-Basin NRD to continue regulations or limitations on consumption or utilization of integrated water resources if future climatic conditions, changes in technology or changes in land use increase integrated water supplies to such an extent that portions of the district designated by NDNR as fully appropriated or overappropriated no longer warrant such designations. Nor will anything in this plan compel Tri-Basin NRD to continue to pursue the goals and objectives of this plan if changes are made in state or federal law that make the integrated management planning process unnecessary.

Tri-Basin NRD has developed a process to facilitate transfers of certified irrigated acres between landowners. The district will also track water savings and new consumptive water uses for all purposes, including municipal and industrial uses which consume less than 25 million gallons of water per year and which, therefore, are exempted by state law from offset requirements. A water use tracking and accounting process ("water bank") could enable the NRD to offset existing consumptive water uses, help water users find offsets for new consumptive water uses and reconfigure irrigated acres to achieve maximum water use efficiency. The NRD board is considering whether to develop a water bank and how to structure its administration.

What's
Discussion?

VI. SURFACE WATER CONTROLS – Department of Natural Resources

THIS IS DNR'S THE PORTION OF THE PLAN WHERE NDNR IDENTIFIES OR REFERENCES SURFACE WATER CONTROLS THAT WILL BE USED TO ACHIEVE THE GOALS AND OBJECTIVES OF THIS PLAN, AS SPECIFIED IN NE STATE STATUTES 46-715 (2) (d) AND 46-716.

VII. INCENTIVE PROGRAMS

Tri-Basin NRD and NDNR intend to continue to promote existing conservation programs that result in reductions in use of integrated water resources, such as the Conservation Reserve Enhancement Program (CREP) and Environmental Quality Incentives Program (EQIP), which are primarily funded by the U.S. Department of Agriculture. Tri-Basin NRD and NDNR may establish and implement financial or other incentive programs to reduce beneficial consumptive use of water within the TBNRD. As a condition for participation in an incentive program, water users or landowners may be required to enter into and perform such agreements or covenants concerning the use of land or water as are necessary to produce the benefits for which the incentive program is established.

Such incentive programs may include any program authorized by NRD rules and policies, state law and/or Federal programs,

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-As a condition for participation in an incentive program, water users or landowners may be required to enter into and perform such agreements or covenants concerning the use of land or water as are necessary to produce the benefits for which the incentive program is established. Any net water savings resulting from participation by landowners within Tri-Basin NRD in conservation programs shall be credited to Tri-Basin NRD for purposes of offsetting new or existing depletions to the Platte River, the Republican River, the Little Blue River or their respective tributaries.

such as the Conservation Reserve Enhancement Program (CREP) and Environmental Quality Incentives Program (EQIP) operated by the U.S. Department of Agriculture.

VIII. INFORMATION CONSIDERED

Information used in the preparation and to be used in the implementation of this integrated management plan can be found in the simulation runs of the Republican River Compact Administration Ground Water Model and the COHYST

model, ~~the data tables of the Final Settlement Stipulation for the Republican River Compact~~*Kansas v. Nebraska* lawsuit, Chapters 2 and 3 of the 1996 Tri-Basin NRD Ground Water Management Plan and additional data and information on file with TBNRD and NDNR.

IX. MONITORING AND MEASUREMENT

Tri-Basin NRD and NDNR will utilize data from a variety of sources to monitor and measure the progress made by the district and its constituents toward achieving the goals and objectives of this plan. A key performance measure for the district is maintaining groundwater levels in those portions of the Platte and Republican River Basins not designated by the NRD as a High Groundwater Management Area at or above 1981-85 springtime average water levels. Tri-Basin NRD will utilize groundwater level data collected by the NRD, CNPPID, USGS and other agencies to insure that the district continues to meet this objective.

Tri-Basin NRD also monitors the location of the headwaters of Platte and Republican tributaries that originate in this district. The locations of these headwaters are identified every spring and fall using GPS locators. A significant movement of any of these headwaters upstream or downstream could indicate changes in local groundwater levels.

Tri-Basin NRD and NDNR cooperatively operate several stream gages within the district. Average streamflow trends measured by these gages will provide a measure of the effectiveness of this plan in protecting flows of interconnected surface water resources.

Tri-Basin NRD works closely with county assessors to track the location and number of irrigated acres in the district. Comparison of NRD certified irrigated acres to assessed irrigated acres provides Tri-Basin NRD with a measure of the district's conformance to its objective of preventing development of additional irrigated land uses, unless those new uses are offset by retirement of an equivalent amount of existing water uses.

Tri-Basin NRD will work with other agencies and private landowners to reduce the density and coverage of infestations of noxious weeds and invasive plants in riparian areas within the district. The NRD will also work with landowners, agencies and others to implement sustainable, long-term riparian land management plans that have as their goal returning these lands to their native condition. Progress made toward meeting this objective will be measured in terms of acres of riparian land treated using herbicides and other methods to reduce invasive plant infestations and the number of acres planted to native grasses. Another measure of progress toward meeting this objective will be acres of riparian land upon which sustainable, long-term management plans are being implemented that will improve the condition of riparian ecosystems. Any

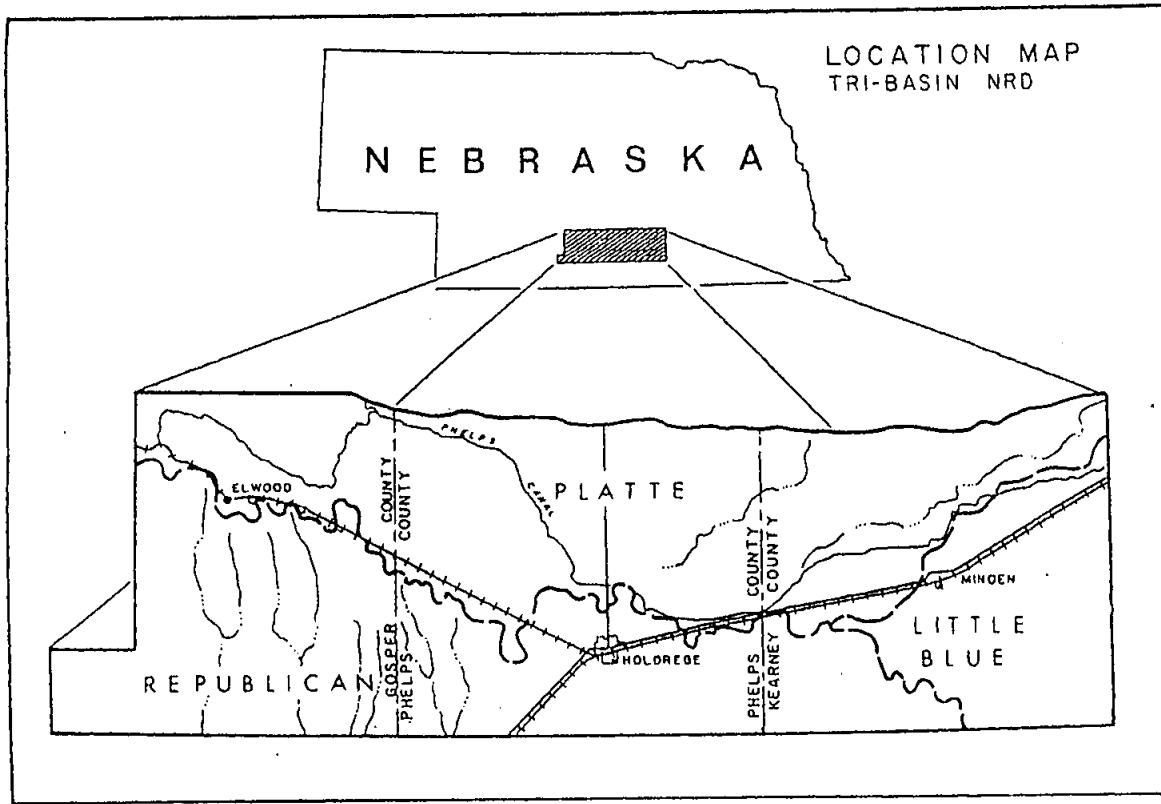
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water saved as a result of these activities can serve as a water use credit to offset depletions to streamflows resulting from groundwater pumping.

X. PLAN REVISIONS

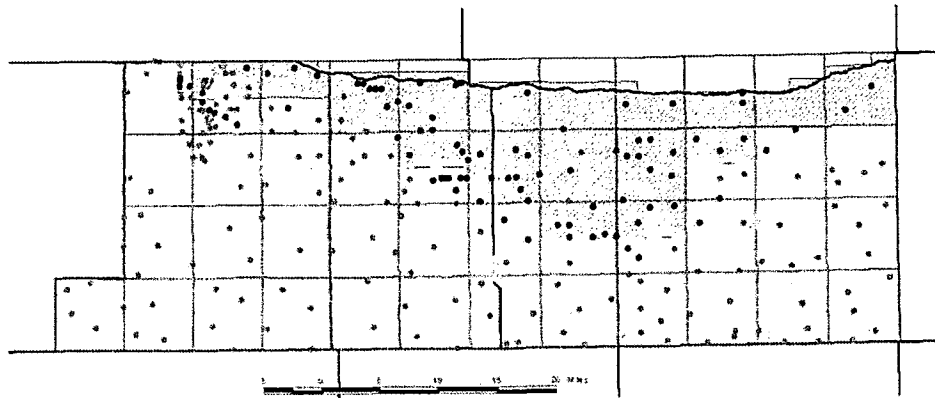
Joint integrated management plan sections (for the Platte Basin) will be reviewed at least every ten years by NDNR and Tri-Basin NRD to insure that they conform with the joint integrated management plan for the overappropriated portion of the Platte River Basin. The joint sections of the plan will be revised when NDNR and Tri-Basin NRD agree that such revisions are needed and after consulting with affected stakeholders. The integrated management plan for the Republican and Little Blue River basins will be revised by the Tri-Basin NRD board of directors when they determine that such revisions are needed to better achieve the overall goals of the plan, or when such revisions are needed to assure compliance with interstate compacts or agreements.

Map 1. Management Area Boundaries



Map 2. Tri-Basin NRD High Groundwater Management Area

Tri-Basin NRD depth to groundwater



2002-2004 ave DTW

- 0 - 40
- 40.1 - 250

roads

counties

Management area DRAFT

Depth to water based on 2002-2004 average groundwater elevations. Where the depth is 40 feet or less, the well is shaded red, the remainder are shaded green. Updated 04NOV04

