

Approved: 3-9-99  
Date

MINUTES OF THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES.

The meeting was called to order by Chairperson Senator David Corbin at 8:09 a.m. on March 3, 1999 in Room 254-E of the Capitol.

All members were present except:

Committee staff present:

Raney Gilliland, Legislative Research Department  
Mary Ann Torrence, Revisor of Statutes Office  
Lila McClafin, Committee Secretary

Conferees appearing before the committee:

Al LeDoux, Director, Kansas Water Office  
Darrel L. Eklund, Ph.D, Kansas Water Office  
Terry Duvall, Kansas Water Office  
Clark Duffy, Kansas Water Office  
Leland E. Rolfs, Staff Attorney, Kansas Department of Agriculture

Others attending:

See attached list.

Chairperson Corbin called on Al LeDoux, Director, Kansas Water Office.

Mr. LeDoux introduced his staff and Leland Rolfs from the Kansas Department of Agriculture. He said the water presentation would consist of planning for the future water needs and the importance of water.

Darrel L. Eklund said the Kansas Water Office has prepared water demand projections for every city, rural water district and county in Kansas. The projections were developed in ten year increments starting with the year 2000 and going to the year 2040. These projections are used by the Kansas Water Office and are an important tool for all of their water resource planning programs (Attachment 1) He distributed a handout showing the projections for some of the areas that are experiencing the most rapid growth and several that are projected to have increased population (Attachment 2).

Terry Duval, Kansas Water Office, presented information on Water Supply Contracts, Water Contracting Programs, the Water Marketing Program, Water Assurance Program, and Multi Purpose Small Lakes Program. Her statement is included in (Attachment 1). She responded to questions.

Clark Duffy, Kansas Water Office, discussed briefly water supply strategies that the Kansas Water Office has conducted in recent years, and their current project in Northeast Kansas identified as the Pikitanoi project. He said as a result of all of the recent efforts the following actions have been taken to address public water supply issues:

1. The Governor has recommended establishing a public water supply team, but this will require legislative approval through the appropriation process.
2. Their office will study state public water supply policies, and determine if existing state policies and programs are sufficient to address these issues.
3. The Water Office does not have the resources to develop additional regional water supply strategies, but will focus on developing partnerships with public water suppliers and other interested parties to develop these strategies.

His testimony is included in (Attachment 1). Mr. Duffy responded to questions.

Lee Rolfs, Kansas Department of Agriculture, said the Water Banking Task Force was formed in 1996 to investigate, define and evaluate the concept of water banking in Kansas. The task force is comprised of six members. He distributed a draft of the report of the Water Banking Task Force, dated October 1998 (Attachment 3). He said in December the report was distributed to interested parties. Since that time about 15 meetings with GMD Boards, Basin Advisory Committees, Assurance Districts, and other

CONTINUATION SHEET

MINUTES OF THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES, Room 254-E Statehouse, at 8:09 a.m. on March 3, 1999.

interested groups have meet to collect public input on the draft report. Public comments should be completed by early March 1999, and they hope to finalize the report in March 1999. If a decision is made to implement the Task Force's recommendations, legislation will be necessary to create a Water Banking Act. The Task Force's goal is that legislation would be drafted to be presented to the 2000 Legislature. A summary of the Task Force's Report on Water Banking is attached (Attachment 4). Mr. Duffy responded to questions regarding how the water bank would be set up and how the market value of the water would be determined.

With a motion from Senator Pugh and a second from Senator Morris the minutes of the February 23 meeting were approved as written.

The meeting adjourned at 9:00 a.m.

The next meeting will be held on March 4, 1999.



STATE OF KANSAS



Bill Graves, Governor

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Director

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BRIEFING ON

KANSAS POPULATION & WATER DEMAND PROJECTIONS

By Darrel Eklund ..... Page 1

WATER SUPPLY CONTRACTS

By Terry Duvall ..... Page 2

PUBLIC WATER SUPPLY ISSUES

By Clark Duffy ..... Page 5

PRESENTED TO

SENATE ENERGY & NATURAL RESOURCES COMMITTEE

BY THE KANSAS WATER OFFICE

March 3, 1999

Senate Energy & Natural Resources

Attachment: /

Date: 3-3-99

## **Kansas Population and Water Demand Projections** **By Darrel L. Eklund, Ph.D.**

The Kansas Water Office has prepared water demand projections for every city, rural water district and county in Kansas. The projections were developed for the years: 2000, 2010, 2020, 2030 and 2040. These projections are used by the Kansas Water Office and are an important tool for water resource planning, including basin planning, regional public water supply planning, water marketing contracts, multipurpose small lake analyses and other Kansas Water Plan Programs.

### **Methodology**

The methodology used by the Kansas Water Office for developing the water demand projections required the preparation of population projections for every city, rural water district and county in Kansas. The methodology for the population and water demand projections was approved by the Kansas Water Authority, and is available from the Kansas Water Office, upon request.

An important step in the process of developing the projections involved contacting each public water supplier in Kansas and providing them with preliminary population and water demand projections for their review and comment, prior to the projections being finalized by the Kansas Water Office. Each public water supplier was also asked to describe the two most important problems that they are facing in the next 10 to 40 years. This review procedure was very helpful to the Kansas Water Office in documenting population and water use changes that are occurring in local communities or rural areas and in learning more about the short and long range problems that they are facing.

### **Urban Population Growth Significant**

The population projections indicate that significant population growth has occurred since the 1990 U.S. Census in most of our more urban counties in Kansas. Overall, the population in a five-county area in eastern Kansas (Douglas, Johnson, Leavenworth, Miami, and Shawnee) is projected to increase 93% by 2040, from 685,654 in 1990 to 1,324,180 in 2040. Similarly, the population in the five-county area around Wichita (Butler, Cowley, Harvey, Sedgwick and Sumner), in south-central Kansas, is projected to increase 48% by 2040, from 548,183 in 1990 to 813,731 in 2040.

### **Availability of the Projections**

The Kansas Water Office believes that many other entities may find the population and water demand projections useful in their own studies, at the local, state and federal level. For that reason, the data are available on the Kansas Water Office Web Site at <http://www.kwo.org/kwo/pop-tables/main.htm>.

There will also be a Kansas Water Office display featuring the population and water demand projections at the Kansas GIS Expo on February 10, 1999, at the Kansas Museum of History in Topeka.

A copy of the overheads to be used for this presentation are attached.

## Water Supply Contracts

by Terry Duvall

The Kansas Water Office successfully negotiated four water supply contracts under the State Water Marketing Program during calendar year 1998. In compliance with the requirements of K.S.A. 82a-1307, these contracts have been submitted to the 1999 Session of the Kansas Legislature for review. Under the law, the Kansas Water Authority approves the contracts. The 30-day review undertaken by the Legislature is for purposes of *disapproval*.

The first contract negotiated this year was number 98-1 with Public Wholesale Water Supply District Number 4 (PWWSD #4) near Cherryvale which serves Cherryvale; Edna; Altamont; Bartlett; Mound Valley; Parsons; Rural Water District Number 3 in Labette-Montgomery counties; Rural Water Districts 2, 5, 7 and 8 in Labette County; and Rural Water Districts 2, 6, and 12 in Montgomery County. The source of the water supply for this contract is Pearson-Skubitz (Big Hill) Reservoir. PWWSD #4 had an existing contract for water supply from Big Hill, which was negotiated in 1983. At that time, Cherryvale was not a member of the district. Since the City of Cherryvale wished to become a member of the wholesale district, the district was requesting additional water supply to serve Cherryvale.

During the course of the negotiations with the wholesale district, the Kansas Water Office (KWO) utilized the population and water use projections developed by our Research and Evaluation Unit to address the quantity of water needed by the district to serve its needs through the year 2040. It was discovered that the original contract quantity had been based upon enough water to guarantee three times the expected quantity needed to serve its customers or 548.5 million gallons per year (MGY). Our projections indicated that the 2040 demand for all entities to be included as members of the wholesale district was 454.6 MGY. The district insisted that they needed a total of 693.5 (MGY) because this was the amount needed to cover the guarantees they had made to their wholesale customers. In an effort to reconcile this issue, the KWO offered specific language in their contract to:

1. Allow for a graduated use schedule. This provision was not available in 1983 when the original contract with the district was negotiated. The district agreed to give up their old contract, even though this meant giving up a 10 cent per thousand gallon price cap, because the district could utilize a graduated use schedule which clearly would save the district money over the course of the 40-year period of the new contract.

2. Make provisions for set-aside storage as outlined in Article 6. d. of the contract, so that the district has right of first refusal on an additional water supply up to 238.8 MGY, if the district can demonstrate a legitimate need for the additional supply and is willing to pay for the additional quantity.

The second and third contracts negotiated in 1998 were surplus water contracts with Jost Farms to be used for irrigation of lands near Marion Lake. The intended use of water supply from

state owned storage is specifically for municipal and industrial water supply. However, water can be made available on a "surplus, short-term" basis for irrigation. Under such an arrangement, the Kansas Water Authority must first determine that "surplus water" is available in the named reservoir. Surplus water is that water within a reservoir that is not committed under an existing contract with a municipal and industrial water supply user. A surplus contract cannot be negotiated for more than a 1- year term.

Contract 98-2 with Jost Farms was for water to supplement the Farm's water right to irrigate a tract of land adjacent to the backwaters of Marion Lake. The second contract 98-3 was for water supply directly from the body of Marion Lake to irrigate a new tract of land which is totally dependant upon the contracted water. Both contracts were for a period of time coinciding with the irrigation season, June through September, 1998.

The final contract of 1998, ~~contract 98-4~~, was negotiated with Johnson County Rural Water District Number 7 near Gardner, Kansas. In this case, the district already had a contract for water supply from Hillsdale Reservoir which had been negotiated in 1983. However, the district's water use last year had exceeded the amount of their contract. This district is located in a high population growth area and it was evident the district needed additional water from Hillsdale Lake. However, when the district requested additional water, based upon the KWO's population and water use projections, it was evident the district's request would not be adequate to serve their needs for the next 40 years. The KWO found itself in a unique negotiation posture: for the first time in our negotiations with a potential purchaser, we had to convince a potential customer to contract for more water than they had originally asked for. We eventually negotiated a contract for an amount to cover our projected water need for the district, and were able to offer them the graduated use schedule to soften the financial impact of the contract.

For the upcoming year, we anticipate negotiating four new contracts. One with the City of Peabody and another with Marion County Rural Water District No. 5 for water supply from Marion Reservoir for municipal and industrial water supply. These two entities propose to have their water treated by the City of Hillsboro who already has a contract with the KWO for water supply from Marion. We expect that Jost Farms will request surplus water from Marion this year for irrigation water supply.

### **Water Contracting Programs**

Water supply is made available to municipal and industrial water users in three different ways to meet their needs under the Water Contracting Programs of the Kansas Water Office.

The State Water Marketing Program is one of three Water Contracting Programs of the Kansas Water Office that serve a population of approximately 822,000 in parts of 29 counties in the eastern third of Kansas. This includes 61 communities, 68 rural water districts and 3 public wholesale water supply districts.

With the completion of purchases of additional storage made available under a 1985 Memorandum of Understanding with the Corps of Engineers, the state currently controls 922,300

acre-feet of water supply storage space in 13 large federal lakes to provide water under two of the water contracting programs. The original construction costs of this storage is \$91,895,647. The revenue collected to date from program participants totals \$43,979,130.

Under the **Water Marketing Program**, created in 1974, purchasers contract for water service from the yield of an individual lake. Purchasers are generally a single entity, such as a city, rural water district, public wholesale water district, or an industry. The water may be taken directly from the lake by a pipeline, or may be released to the stream for the purchaser to pick up downstream. These customers operate independently and have an exclusive contract for use of the water supplies from a single lake to meet their water needs. They are also responsible to pay for any water which may be lost in transit.

Under the **Water Assurance Program**, created in 1986, water right holders along a stream reach may already have an appropriation right to the natural flow of the stream. However, a water right entitles them to water only if the river has adequate natural flow to meet their needs.

A *Water Assurance District* is made up of all water right holders who receive water from a river reach below major reservoirs. The water supplies to water assurance program users are from storage dedicated to the assurance district for making water supply releases from upstream lakes to enhance the natural flow of the stream during periods of low flow or drought. Thus, the supply to the user becomes a combination of natural flows and various releases from lakes in the program. No direct withdrawals are made from storage under this program. All water is delivered from stream flow enhanced by reservoir releases.

For most medium to large water supply users, these two programs provide excellent long-term sources of water. For small towns and rural water districts, the programs are not flexible enough. Many communities are not located close enough to the large reservoirs to make transporting the water economically feasible.

Under the **Multi-Purpose Small Lakes Program**, created in 1986, the state pays for the costs of including water supply storage in small lakes over and above the local sponsor's immediate needs, if it is determined that additional water will be needed in the area in the next 20 years. Whenever a local user is ready to utilize this additional water supply, the state sells the storage space to the user, recouping the state's investment in future use water supply.

## PUBLIC WATER SUPPLY ISSUES

By Clark Duffy

In recent years there has been a lot of activity focusing on public water supply issues in Kansas.

In 1996 the State Water Plan adopted a policy which recommended the Kansas Water Office conduct regional public water supply strategies.

- In 1997 Governor Bill Graves Vision Summit identified a number of interrelated issues regarding public water supplies (see HydroGRAM Special Legislative Issue January 1999 page 15).
- In 1998 the Kansas Water Office has completed population and water demand projections to the year 2040 for all public water suppliers in the state.
- In 1998 the Kansas Water Office also developed a pilot regional water supply strategy for the Walnut Basin. This pilot strategy has identified infrastructure improvement and drought vulnerability as two frequent means.
- Finally, the Kansas Water Office is currently conducting the Regional Water Supply Analysis in Northeast Kansas identified as the Pikitanoi project. The preliminary conclusions of this effort also identify infrastructure improvement that drought vulnerability is the two most frequent means.

As a result of all of this recent effort the Kansas Water Office has taken the following actions to focus our activities to address public water supply issues in Kansas:

1. Kansas Water Office is establishing a public water supply "team". This team would become proactive in working with public water suppliers to address their needs. This team concept is modeled after the approach of the Cascade Water alliance in Washington State. The Governor has recommended establishing this public water supply team but it will require legislative approval through the appropriation process.
2. The Kansas Water Office will study state public water supply policies. This work will include an evaluation to determine if existing state policies and programs are sufficient to comprehensively address these issues. This outcome may result in the development of a new subsection of the Kansas Water Plan.
3. The Kansas Water Office does not have the resources to develop additional regional water supply strategies. Instead the Kansas Water Office will focus on developing partnerships with public water suppliers and other interested parties to develop strategies through the state water planning process.

The Kansas Water Office would like to thank you for this opportunity to brief you on this important issue.



# **KANSAS WATER OFFICE**

**Presentation to the  
SENATE ENERGY & NATURAL RESOURCES  
COMMITTEE  
March 3, 1999**

**NOTES:**

Senate Energy & Natural Resources

Attachment: *2*

Date: *3-3-99*



# **KANSAS POPULATION & WATER DEMAND PROJECTIONS**

• **Prepared by Kansas Water Office**

• **Prepared For**

- **Cities**
- **Rural Water Districts (RWD)**
- **Counties**

• **Projection Years: 2000, 2010, 2020, 2030 &  
2040**

NOTES:



## **KWO USES FOR PROJECTIONS**

- **Basin Planning**
- **Multi-Purpose Small Lake Analyses**
- **Regional Public Water Supply Planning**
- **Water Marketing Programs**
- **Other Kansas Water Plan Programs**

NOTES:



## **METHODOLOGY FOR PREPARING THE PROJECTIONS**

- **Approved by the Kansas Water Authority**
- **Compared Population and Service Connection Growth Rates**
- **Extensive Contact with Local Officials**

NOTES:

## **CITY OF CONCORDIA CLOUD COUNTY**

<b>1990 Census Bureau Population</b>	<b>6,167</b>
<b>1997 Census Bureau Population Estimate</b>	<b>5,706</b>
<b>1997 KWO Population Estimate</b>	<b>6,104</b>
<b>2040 KWO Population Projection</b>	<b>7,028</b>

NOTES:

# **CITY OF HOLTON JACKSON COUNTY**

<b>1990 Census Bureau Population</b>	<b>3,196</b>
<b>1997 Census Bureau Population Estimate</b>	<b>3,166</b>
<b>1997 KWO Population Estimate</b>	<b>3,320</b>
<b>2040 KWO Population Projection</b>	<b>4,715</b>

NOTES:

## **CITY OF MOUNT HOPE SEDGWICK COUNTY**

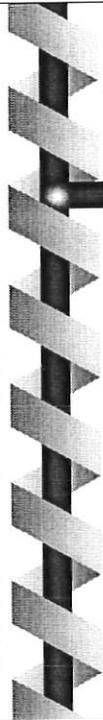
<b>1990 Census Bureau Population</b>	<b>805</b>
<b>1994 Census Bureau Population Estimate</b>	<b>1,092</b>
<b>1994 KWO Population Estimate</b>	<b>808</b>
<b>2040 KWO Population Projection</b>	<b>914</b>

NOTES:

## **CITY OF ROLLA MORTON COUNTY**

<b>1990 Census Bureau Population</b>	<b>387</b>
<b>1994 Census Bureau Population Estimate</b>	<b>379</b>
<b>1994 KWO Population Estimate</b>	<b>402</b>
<b>2040 KWO Population Projection</b>	<b>643</b>

NOTES:



## **PROJECTED POPULATION INCREASES BY COUNTY 1990 TO 2040**

- **BUTLER: 100% Increase from 50,737 to 101,476**
- **DOUGLAS: 121% Increase from 81,798 to 181,129**
- **JOHNSON: 108% Increase from 355,021 to 737,006**
- **JACKSON: 71% Increase from 11,525 to 19,691**
- **SEDGWICK: 49% Increase from 403,662 to 601,724**
- **SHAWNEE: 54% Increase from 160,976 to 247,908**

NOTES:



## **WATER MARKETING CONTRACTS**

- **Four Contracts Negotiated in 1998**
- **Submitted to 1999 Legislature for Review**
- **30 Day Review for Disapproval Only**

NOTES:



## **Public Wholesale Water Supply District # 4: Contract 98-1**

### **☼ PWWSD # 4 Serves**

- **Cherryvale**
- **Edna**
- **Altamont**
- **Bartlett**
- **Mound Valley**
- **Parsons**
- **RWD #3 in Labette & Montgomery Cos.**
- **RWD #'s 2, 5, 7 & 8 in Labette Co.**
- **RWD #'s 2, 6 & 12 in Montgomery Co.**

NOTES:

## **Public Wholesale Water Supply District # 4: Contract 98-1**

- **Water Supply Source is Big Hill Reservoir**
- **Request for New Contract Based on the  
Addition of Cherryvale to the District**
- **KWO Used Population and Water Demand  
Projections to Determine the District's  
Needs Through the Year 2040**

NOTES:

# **JOST FARMS CONTRACTS: 98-2 & 98-3**

- **Surplus Water Contracts From Marion Lake**
- **Kansas Water Authority Must Determine Surplus Water is Available**
- **Municipal or Industrial Water Supply Must Not be Impacted**
- **Surplus Water Contracts Cannot be Negotiated for More Than 1 Year**

NOTES:



## **JOHNSON COUNTY RWD #7 CONTRACT: 98-4**

- **District's Existing Contract Could not Meet Current or Future Demands**
- **KWO Population and Water Demand Projections Were Used to Determine the District's Future Needs**
- **KWO Negotiated With the District for More Water Than Originally Requested**

NOTES:



## **ANTICIPATED 1999 CONTRACTS**

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- **City of Peabody**
- **Marion County RWD #5**
- **Jost Farms**
- **Farmland Industries**

NOTES:



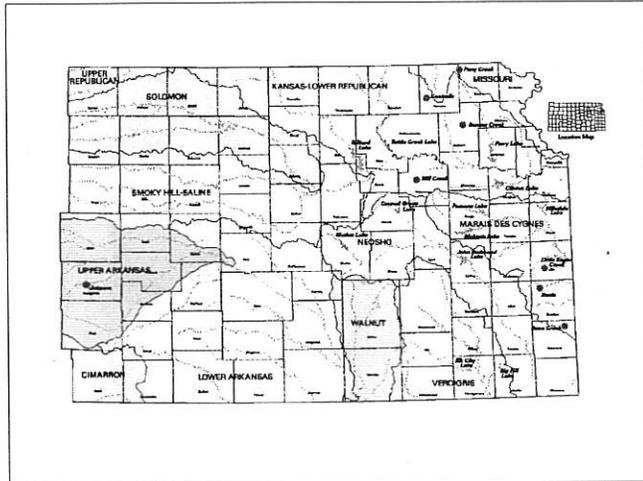
## **WATER CONTRACTING PROGRAMS**

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- **Water Marketing Program**
- **Water Assurance Program**
- **Multi-Purpose Small Lakes  
Program**

NOTES:

# KANSAS WATER CONTRACTING PROGRAM LAKES



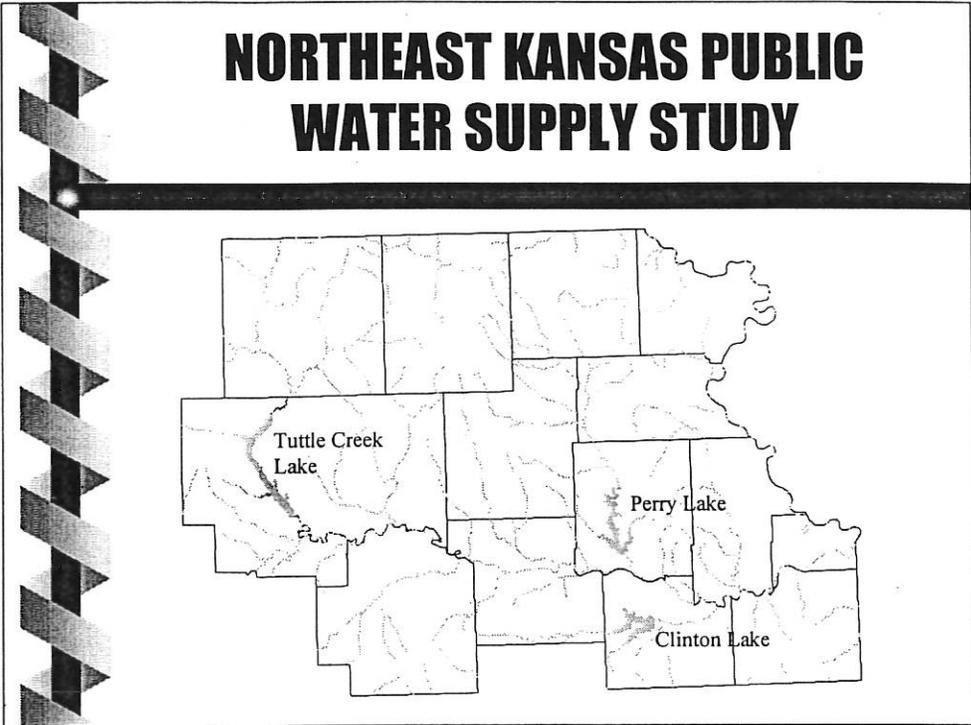
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# WALNUT BASIN WATER SUPPLY STUDY AREA

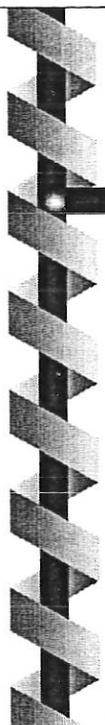


NOTES:

# NORTHEAST KANSAS PUBLIC WATER SUPPLY STUDY



**NOTES:**



## **KANSAS WATER OFFICE PWS ACTIVITIES**

- **Establish a Public Water Supply “Team”**
- **Evaluate Existing State Policies & Programs**
- **Develop Partnerships for Regional Water Supply Strategies**

**NOTES:**

**REPORT OF THE WATER BANKING TASK FORCE**  
**October 1998**

**INTRODUCTION**

Water banking and its potential use in Kansas was identified in the 1995 State Water Plan as a concept to be studied. The State Water Plan describes water banking as a tool for meeting the goals of the State Water Resource Planning Act pertaining to the efficient, economic distribution of the water supplies of the state, and the protection of the public interest by conserving the water resources of the state in a technologically and economically feasible manner.

The Water Plan identified the Department of Agriculture, Division of Water Resources (DWR), as the appropriate agency to initiate work on water banking. As a result, DWR formed a Task Force composed of members who represent agricultural interests, municipalities, Water Assurance Districts, Groundwater Management Districts, and the Kansas Water Office. Staff from the Division of Water Resources provided support and coordination. This Task Force was formed in early 1996 to investigate, define and evaluate the concept of water banking in Kansas, and was comprised of the following members:

<u>Name</u>	<u>Representing</u>
Jerry Blain	City of Wichita, Lower Arkansas Basin Advisory Committee
Wayne Bossert	Groundwater Management Districts, Upper Republican Basin Advisory Committee
Roger Mohr	Walnut Creek Basin Association
Bill Roenbaugh	Water Protection Association of Central Kansas
Tom Stiles	Kansas Water Office
Kent Weatherby	Assurance Districts and the Kansas Lower Republican Basin Advisory Committee

Since the formation of the Task Force, the group has met on a regular basis. During this time, a great deal of information was reviewed, including materials from other states that have attempted water banking, both successfully and unsuccessfully. After great deliberation, the Task Force submits the following recommendation and report concerning water banking in Kansas.

Senate Energy & Natural Resources

Attachment: 3

Date: 3-3-99

## RECOMMENDATION

Water banking can be a viable water management tool which will allow water users several options not currently available. The Task Force believes that water banking will create an incentive for conservation and will result in water being put to its most economic and beneficial use. Therefore, the Task Force recommends that up to five pilot water banks be chartered in the State of Kansas, with at least one of them being a surface water bank. These pilot banks will operate for five to seven years, at which time they will be evaluated for meeting the purpose of water banking as described below.

## PURPOSE OF WATER BANKING

The purpose of water banking is to provide water users, particularly those located in areas of the state which are over appropriated or closed to new appropriation, the opportunity to utilize functions of a water bank to obtain the right to use water, while at the same time creating an incentive for and achieving conservation by reducing the amount of net consumptive use of water.

## DEFINITIONS:

**“Bank Board”** means the governing body of a water bank.

**“Bank Boundary”** means the exclusive geographic area in which a water bank operates and conducts its water banking functions. A bank boundary may encompass one or more hydrologic units

**“Bank Charter”** means a document approved by the Chief Engineer of the Division of Water Resources, Kansas Department of Agriculture, creating a water bank as a private non-profit corporation, and which sets forth the principal functions and organization of the water bank.

**“Bankable Portion of a Water Right”** means a part of a water right that is eligible for deposit in a water bank because of its past water use.

**“Bankable Water Right”** means a water right that has been determined to be in good standing based primarily upon past water usage, is past its perfection period, and is eligible for deposit in a water bank.

**“Bulletin Board”** means a service or function of a water bank where the bank acts as a facilitator to buyers and sellers of water rights and water allocations.

**“Conservation Element”** means the portion of a deposited bankable water right, or bankable portion of a water right, that is not allowed to be withdrawn and used by subsequent users, but, instead, is taken out of use for the duration of the deposit contract to achieve conservation of water in the area.

**“Deposit”** means to enroll a bankable water right, or portion of a water right, in a water bank under the terms and conditions agreed to by the depositor and the water bank.

**“Hydrologic Unit”** means the defined area of hydraulically connected sources of water supply.

**“Negative Interest”** means the rate of decline of the amount of water that remains in a safe deposit box account each year after it is deposited.

**“Net Consumptive Use”** means the portion of the authorized quantity of the water right which is actually used or consumed by the use made of the water and does not return to the local source of supply.

**“Pilot Bank”** means one of up to five originally chartered water banks that is allowed to operate in one or more hydrologic units which do not overlap with any other bank’s boundary for five to seven years, and that is subsequently reviewed to determine if it is achieving the goals of water banking, as defined in the 1995 Kansas Water Plan.

**“Safe Deposit Box”** means a personal account held by an individual in a water bank where unused water from a water right owned by the individual can be deposited, a portion of which may be used in subsequent years, as authorized by the terms and conditions of a term permit issued by the Division of Water Resources.

**“Term Permit”** means a permit to appropriate water for beneficial use issued by the Chief Engineer, as defined in K.A.R. 5-1-1(jj), for a term equal to the length of a coinciding lease agreement.

**“Water Bank”** means a local, private, non-profit corporation with a charter approved by the Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, that leases or sells water from water rights which have been deposited and facilitates sales of water rights through a bulletin board function.

**"Withdrawal"** means a potential water user enters in a lease agreement with a water bank to use water under the terms and for the duration of the lease.

## **ENABLING LEGISLATION**

From the beginning, the Task Force agreed that, in order to implement water banking in Kansas, a new and separate piece of legislation would be needed. The Task Force believes that enacting a Water Banking Act will help to keep the laws governing water rights in Kansas clear and non-conflicting. A draft of the water banking Act legislation will be presented separately from this report. The Water Banking Act will describe the method for incorporation, chartering and establishing the governing body of water banks in Kansas. The Act shall provide that the governing body of a water bank must reasonably represent important local interests in water, both public and private. Local water management entities, including groundwater management districts, assurance districts and basin advisory committees, must have the opportunity to be represented on the Board. It is anticipated that a proposed Water Banking Act will be presented to the 2000 Legislature.

## **EVALUATION OF WATER RIGHT BANKING**

The Task Force recommends that up to five pilot water banks, with at least one of them being a surface water bank, be chartered in Kansas, as provided by the Water Banking Act. These banks will be allowed to operate for a period of five to seven years. After that time, they will be reviewed to determine if they are achieving the goals of water banking, as described in the 1995 State Water Plan, and are subsequently re-chartered. Goals of particular importance include:

1. The operations of a pilot water bank will not result in an increase in consumptive water use within its boundary. (Surface water banking transactions involving stored assurance water may result in temporary increases in consumptive use.)
2. The aggregate amount of water rights deposited in Water Bank and the length of those deposits must be equal to, or exceed, the total amount of water leased, the length of those lease agreements and the water conservation element, so that the bank is not leasing water that has not been deposited.
3. The operation of a pilot water bank cannot result in impairment of existing water rights or an increase in depletion of severely depleted groundwater aquifers or stream courses.

4. A pilot water bank's policies and operations should result in a 10 percent, or greater, savings in the total amount of water which is consumed, based on the amount of bankable water deposited in the bank.
5. A pilot water bank should have enough participation from water right holders and water users to make it practical and financially feasible.

The five-to-seven-year review of the operations of pilot water banks to determine if they are achieving the goals and objectives of water banking shall be conducted by a team comprised of, but not limited to, the following:

1. The Kansas Water Office
2. The Division of Water Resources, Kansas Department of Agriculture
3. The governing body or board of the pilot water bank
4. Representatives from any Groundwater Management Districts that are located within the pilot bank's boundaries
5. Representatives from any Assurance Districts which are located within the pilot bank's boundaries
6. A representative group of water right holders and users who have been clientele to the pilot bank
7. A representative from the Water Banking Task Force most familiar with the operations of the pilot bank to be reviewed.

### **SPECIFIC BANK FUNCTIONS**

Water Banking will provide three main bank functions for water users. **First**, water banking will allow for deposits of water rights and leases of water. Water right holders can deposit all, or a portion, of their water right in a water bank in exchange for financial compensation. Other individuals who wish to use water, who may not have a water right, or may not have a sufficient right, can lease water from a water bank. **Second**, water banks will have a function that allows individuals to place an unused portion of a water right in a safe deposit box for subsequent use. **Third**, a water bank will act as a clearing house to facilitate the sale and purchase of water rights under existing policies and procedures.

**Deposits:** An individual may deposit a bankable water right, or a portion of a bankable water right, in a water bank for a term ranging from one to five years for groundwater, and a longer, yet reasonable, time for surface water. Longer term surface water deposits will be reviewed periodically to ensure that there is no negative impact upon the hydrologic unit(s) from which it was deposited. In return, the depositor will receive from the bank payment for the water deposited. The bank will establish the price which is given to depositors of water. Factors influencing the price depositors will receive include:

- current climatic conditions
- length of time of the deposit
- time of year when the deposit is made
- location of the authorized point of diversion of the water right which is deposited
- priority of a surface water right
- any other consideration made by the bank or the depositor

Before a water right, or a portion of a water right, is accepted for deposit, several steps and determinations must be made. These include:

- A determination of the validity of the water right will be made by the bank with the assistance of the Division of Water Resources based upon past water use. Each potential depositor must submit to the water bank an affidavit which includes: the file number of the water right to be deposited, the portion of the water right to be deposited, the proposed duration of the deposit, and the actual approved water usage under the authority of that right for the past five years.
- Any prospective depositor of water in a water bank will be required to sign an agreement drafted by the bank which details any additional limitations that will be placed upon the depositor's use of the water right(s) proposed for deposit.
- The governing body of the bank, with a solicited opinion from the Division of Water Resources, will then make a decision on the proposed deposit. The bank, in a timely manner, may deny the proposed deposit, accept the proposal, or make a counter offer to the depositor of less than the proposed amount.

- Deposits which are accepted will be financially compensated through a contract between the bank and the depositor. Single-year deposits will likely be given a one-time payment, while multiple-year deposits may involve periodic payments.
- Depositing a water right in a bank will be considered due and sufficient cause to prevent the water right from being abandoned during the time the water right is deposited in the bank.

**Leases:** Water rights which have been deposited in a water bank will be put in a holding account, from which quantities of water may then be leased. There are several steps and determinations which need to be made before the water can be leased.

- Prospective lessors must propose to use leased water within the boundaries of the water bank.
- An applicant to lease water will complete an application which will include: where the water is to be used, what the use of water will be, the amount of water desired, the location and method for the diversion of water, the rate at which water is diverted, and the proposed duration of the lease.
- The bank will then inventory its available water reserves to determine if water is available to lease to the applicant from that hydrologic unit. If it is determined that the bank has water available to lease, it will then notify the Division of Water Resources of the proposed lease agreement and indicate the amount of deposited water right(s) that are to be leased, and will forward a copy of the application for lease and the application for a term permit.
- The Division of Water Resources will review the proposed lease and the term permit application and make a decision of approval or denial. The bank will be notified by the Division of Water Resources if the proposed term permit could only be approved for an amount less than that requested. The term permit will be issued in the name of the applicant for the appropriate source of supply, quantity of water, rate of diversion, location of the point of diversion, place of use, and duration of the term permit authorizing the lease of water. Consideration of the duration of the term permit and the lease agreement will be as described for deposits.
- The Division of Water Resources requires an annual Water Use Report for all term permits.

Lease holders will report their use on the annual Water Use Report form for their term permit.

**Safe Deposit Box:** A safe deposit box is a water bank function that allows an individual to hold a personal account which is separate from the general accounting of deposited bankable water rights held in the bank. A water right holder can elect to place an unused bankable portion of his or her water right in their safe deposit box account and then use a portion of that water at a subsequent time when it is presumably more needed. Only water rights which are past their perfection period can be considered for this bank function. Before a water right holder may deposit water in, or use water from, a safe deposit box, several steps and determinations must be made:

- Only unused water from one water right may be deposited in each safe deposit box. Water cannot be accumulated in a single deposit box account from several water rights. Water that is authorized for use under a lease contract and a term permit cannot be deposited in a safe deposit box. Only water which was not used from the previous calendar year may be placed in a safe deposit box.
- Someone who wishes to place some of their unused water in a safe deposit box will complete an application with the water bank which will indicate how much water is to be put in the account and from which water right the deposit is being made. Each bank will establish in its charter the percentage of unused water from the previous year which may be placed into a safe deposit box. The amount of water that can be placed into a safe deposit box shall always be less than the unused portion from the previous year and cannot cause the net consumptive use under authority of that water right to increase.
- The application to deposit water will then be forwarded to the Division of Water Resources, where it will be either approved as proposed, denied, or an amount less than the amount requested may be recommended for deposit in the account.
- Water deposited in a safe deposit box will be subject to a negative interest rate of at least 10% for each calendar year it remains in the safe deposit box. Each bank's charter shall define this interest rate.
- When the holder of a safe deposit account wishes to use water from the account, an application for a term permit will be submitted to the bank. The bank will determine if the

safe deposit box has sufficient water to satisfy the proposed term permit, and if the same point(s) of diversion and place of use are proposed as authorized by the water right from which the water was deposited into the safe deposit box and, if so, will forward the application to the Division of Water Resources, who may issue a term permit that automatically terminates at the end of the calendar year.

- The water user will be responsible for indicating on the annual Water Use Report the amount of any water used from the water right's safe deposit account. Water Banks will track the water balances in individual safe deposit accounts.
- A safe deposit account cannot accumulate a total amount of water which exceeds the maximum annual quantity authorized to be diverted under the water right.
- Each water bank shall be responsible for demonstrating that their safe deposit account function will not result in an increase in the amount of net consumptive use in each hydrologic unit.

**Bulletin Board:** The third function of a water bank is that of a bulletin board by facilitating the purchase and sale of water rights. People who do not wish to deposit water rights, or lease water, or put water in a personal safe deposit account, can use the bank to locate a seller or a buyer for a water right. Customers who use this bank service will be subject to all bank policies, including a conservation element.

### **WATER BANKING OPERATION POLICIES**

In order to provide the banking services described above, and to ensure the state water plan goals of water banking are achieved, water banks, the Division of Water Resources, and the Kansas Water Office will recognize several established operation procedures and regulations. The policies of a water bank must be consistent and compatible with all existing Groundwater Management District Policies, any Intensive Groundwater Use Area's Orders, Assurance District Operations Plans, or any other such Findings, Orders or Policies of the Chief Engineer applicable within the bank's boundaries.

**Conservation Element:** Water Banks outside of IGUCA's or assurance water storage transactions

will have a minimum conservation element of 10 percent imposed on all water that is accepted for deposit, or which is leased or sold. Individual banks may establish conservation requirements that are greater than the minimum. For example, for a deposit of 100 acre-feet of bankable water rights, the water bank will only be able to lease 90 acre-feet of water. The banks will decide whether the depositor, the lessee, or both, incurs the 10 percent reduction in water available because of the conservation element and the corresponding economic implication.

**Bank Balance:** Water banks will maintain a balance between the amount of water right deposits and water leases both in terms of amount and length of deposits. For example, a bank could have one deposit of 500 acre-feet for one year. At the same time, it could have one two-year lease for 100 acre-feet and one three-year lease for 100 acre-feet. Banks will be given some degree of leeway, but their account balances should reside within 10 percent debts versus assets during the calendar year and balance, or be positive, at the end of each calendar year.

**Dissolving Banks:** A Pilot Bank which is not re-charted cannot receive additional deposits and will have a sunset period to allow all its current deposits and leases to run the course of their contracts, prior to final dissolution. This will keep depositors and lessees from incurring injury.

**Tracking Water and Water Rights:** Water Banks will be responsible for maintaining accurate accounting of the amount of water rights deposited and the water leased and the water deposited in a safe deposit. A yearly ledger will be submitted to the Division of Water Resources by each bank by March 1<sup>st</sup> of the following calendar year.

## THE DIVISION OF WATER RESOURCES

**Review of Proposed Deposits and Leases:** The Division of Water Resources will make timely decisions concerning the approval of deposits and leases, and the issuance of term permits. A decision concerning the deposit or the withdrawal of water from a safe deposit box account will be made within 15 working days.

**Enforcement:** A consistent, fair and equitable water use enforcement program on the part of the Division of Water Resources needs to be developed along with the water rights banking concept.

Together, enforcement and banking can improve accountability and water resources management in Kansas.

**Audit:** DWR will annually audit each bank. This audit will include a review of adherence with the bank's procedures, the Water Banking Act, and any rules and regulations. The audit shall also include a comparison of water deposited and water leased to ensure that the goals of water banking are being pursued and that the Water Banking Act is complied with.

#### **THE KANSAS WATER OFFICE**

**Technical Assistance:** The Kansas Water Office may provide assistance to DWR to review proposed pilot banks to determine if a charter should be granted, will also assist in the ongoing review of pilot banks, and will assist with the final review of pilot banks to determine if they should be re-chartered.

**Financial Assistance:** The Kansas Water Office may provide financial backing for beginning pilot water banks through the State Water Fund.

**SUMMARY OF THE TASK FORCE'S REPORT**

**ON**

**WATER BANKING**

**BY**

Leland E. Rolfs

Staff Attorney

Kansas Department of Agriculture

March 3 and 4, 1999

Water Banking in Kansas was identified in 1995 by the Kansas Water Office and the Kansas Water Authority in the Kansas State Water Plan as a concept to be studied.

The State Water Plan identified the Kansas Department of Agriculture, Division of Water Resources (DWR) as the agency to begin the study.

As a result a Water Banking Task Force was formed in February of 1996, composed of members who represent municipal and agricultural interests, the Kansas Water Office (KWO), Groundwater Management Districts (GMD), Basin Advisory Committees, and Assurance Districts.

A "Water Bank" is envisioned by the Task Force to be a local, private, non-profit corporation with a charter approved by the Chief Engineer, DWR, that leases water from water rights which have been deposited and also facilitates sales of water rights.

Senate Energy & Natural Resources

Attachment: 4

Date: 3-3-99 4-1

The purpose of a water bank is to provide water users, particularly those located in areas of the state where no new permits are available, to utilize the water bank to obtain the right to use water, while at the same time providing the incentive for, and achieving water conservation by, reducing the amount of net consumptive use of water in the area.

After numerous Task Force meetings, a draft Report of the Water Banking Task Force was completed in October of 1998.

The Task Force found that water banking can be a viable management tool which will allow water users several options not currently available, and that it will create an incentive for conservation, while putting water to its most economic and beneficial use.

It is recommended by the Task Force that up to five Pilot Water Banks should be allowed to form. These Pilot Banks will be allowed to operate for a period of up to seven years, after which time they will be evaluated to determine if they are achieving the goals and objectives of water banking as described in the State Water Plan which are: 1) utilizing water to achieve economic growth, and 2) promoting water conservation. The goals of water banking identified by the Task Force include: a) no increase in consumptive use, b) that the banks stay in balance, both financially and in terms of water, c) no impairment of other water rights, d) at least a 10% savings in water use, and e) that banks be practical and financially feasible.

The Task Force identified four main water bank functions.

1) Deposits of water into a water bank (Only viable water rights may be deposited. The maximum length of deposit will be 1 to 5 years for ground water. The bank sets the price paid for deposits. Depositing a right protects the right from abandonment during the term of deposit).

2) Leases of water from a water bank (Leased water must be used within bank boundaries. The bank decides if water is available to lease. DWR issues a term permit to allow the withdrawal of leased water and requires users to report annual water use on term permits.)

3) The establishment of personal safe deposit box accounts for water right holders to place a portion of unused water from their own water rights for subsequent personal use. (Only viable rights may be deposited. Only one right may be deposited in each safe deposit box. A negative interest rate of 10% or more per year will apply. Water will be used under a term permit. Deposits will be limited to face amount of water right. Net consumptive use can not go up.)

4) A bulletin board service to facilitate permanent sales of water rights.

Depositors will receive financial compensation for depositing water into a water bank. Those who lease water from the bank will pay the bank for the right to use water for the term of a lease agreement.

A portion of the water deposited into a water bank will be retained by the bank for the length of the

deposit to create a water conservation savings (a minimum of 10%).

Division of Water Resources' duties: enforcement of all water rights, review of proposed leases and deposits, and conducting an annual audit of the water banks.

Kansas Water Office duties: technical and financial assistance

In December 1998 the Report of the Water Banking Task Force was distributed to interested parties in Kansas. Since then there have been about 15 meetings held with GMD Boards, Basin Advisory Committees, Assurance Districts, and other interested groups to collect public input on the draft report. Public comments should be complete by early March 1999.

The Task Force hopes to finalize the Report in March 1999.

If a decision is made to implement the Task Force's recommendations, legislation will be necessary to create a Water Banking Act. The Task Force's goal is that draft legislation would be presented to the 2000 Legislature.