

Approved: 4-8-99
Date

MINUTES OF THE HOUSE COMMITTEE ON ENVIRONMENT.

The meeting was called to order by Chairperson Joann Freeborn at 3:30 p.m. on March 9, 1999 in Room 423-S of the Capitol.

All members were present except: Rep. Douglas Johnston - excused
Rep. Henry Helgerson - excused

Committee staff present: Raney Gilliland, Legislative Research Department
Emalene Correll, Legislative Research Department
Mary Torrence, Revisor of Statutes
Mary Ann Graham, Committee Secretary

Conferees appearing before the committee: David Pope, Chief Engineer, Water Resources Division,
Dept. of Agriculture, 901 S. Kansas, 2nd Floor, Topeka, KS
66612-1283
Dr. Darrell Ecklund, Kansas Water Office, 109 SW 9th, Suite
300, Topeka, KS 66612-1249
Terry Duvall, Public Service Executive, Kansas Water
Office, 109 SW 9th, Suite 300, Topeka, KS 66612-1249
Clark Duffy, Assistant Director, Kansas Water Office, 109
SW 9th, Suite 300, Topeka, KS 66612-1249

Others attending: See attached list

Chairperson Joann Freeborn called the meeting to order at 3:30 p.m. She called the committee's attention to several documents that had been distributed; a public briefing discussing the establishment of Total Maximum Daily Loads, scheduled March 10, at the Historical Society; testimony from Ron Klataske, Director, Kansas Audubon Council, on **HB2490** from the February 18 committee meeting; and a copy of the Committee Rules for the House Environment Committee. (See attachment 1) She asked if anyone had a motion to approve the Committee Rules.

Rep. Tom Sloan made a motion the Committee Rules be approved. Rep. Dan Johnson seconded the motion. Motion carried.

The Chairperson reviewed the committee meeting agenda for Thursday, March 11. There will be a hearing on **SB132**, concerning drycleaners; hearings and possible action on **SB296**, concerning hazardous waste; **SB246**, concerning solid waste; and **SCR1611**, encouraging the US EPA to take certain actions relating to sulfur levels in gasoline.

Chairperson Freeborn opened **SB70** for discussion and possible action:

SB70: An act concerning big game permits; amending K.S.A. 1998 Supp. 32-937 and repealing the existing section.

Rep. Sharon Schwartz explained changes in proposed **Substitute for SB70**, that had been distributed.

Rep. Sharon Schwartz made a motion to adopt the substitute bill. Rep. Dan Johnson seconded the motion. Motion carried.

Rep. Sharon Schwartz made a motion to pass **Substitute for SB70**. Rep. Becky Hutchins seconded the motion. Motion carried.

The Chairperson welcomed David Pope, Chief Engineer, Division of Water Resources, Department of Agriculture, to the committee. He presented an information overview of water issues and concerns in preparation for hearings on **SB287**, concerning the chief engineer of the Division of Water Resources of the

CONTINUATION SHEET

MINUTES OF THE HOUSE COMMITTEE ON ENVIRONMENT, Room 423-S Statehouse, at 3:30 p.m. on March 9, 1999.

Department of Agriculture; and **HB2518**, concerning appropriation of water for beneficial use; relating to issuing certificates of appropriation. (See attachment 2) Questions and discussion followed.

Chairperson Freeborn thanked Mr. Pope for his presentation. Due to the lack of time she asked if he could return another day for further briefing.

The Chairperson welcomed staff members from the Kansas Water Office to the committee. They briefed the committee on water issues. (See attachment 3)

Dr. Darrel Eklund briefed the committee on Kansas Population and Water Demand Projections. 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. (See page 1 attachment 3) He distributed copies of overviews also used in the presentation. (See attachment 4) Questions and discussions followed.

Terry Duvall, Public Service Executive, briefed the committee on Water Supply Contracts. 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. (See pages 2, 3, and 4 attachment 3) Questions and discussions followed.

Clark Duffy, Assistant Director, briefed the committee on Public Water Supply Issues. 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. He discussed these strategies. (See page 5 attachment 3) Questions and discussion followed.

Al LeDoux, Director, Kansas Water Office, was in attendance and answered questions concerning water issues.

Chairperson Freeborn thanked the Kansas Water Office staff for their presentation.

The meeting adjourned at 5:55 p.m.

The next meeting is scheduled for March 11, 1999.

HOUSE ENVIRONMENT COMMITTEE GUEST LIST

DATE: March 9, 1999

NAME	REPRESENTING
Wendy Harms	KS Ready Mix Concrete Assn.
Woodly Moses	KS Aggregate Producers Assn.
Jerry Blain	Wichita Water Dept.
WAYNE BOSSERT	NW KS GMA 4
Jennifer Honas	Steve Montgomery
Coru Schloeger	League of Women Voters
STEVE WILLIAMS	LEDWP
David Pope	KS Dept of Agriculture
Mary Jane Stattelman	KS Dept of Agriculture
Chris Wilson	GMD 3
Alan Steppat	Water PACK
Pon Klataske	Ks Audubon Council
Janet Stubbs	Ks. Bldg. IND. ASSN.
Aike Beam	Ks. Ruth Ann.
Jon McClure	Water PACK
Richard Antonio	Water PACK
Bernie Koch	Wichita Area Chamber
Jury Duwall	Ks Water Office
Daniel Eklund	" " "

HOUSE ENVIRONMENT COMMITTEE GUEST LIST

DATE: March 9, 1999

NAME	REPRESENTING
Cathy Tucker-Vogel	KS Water Office
Charles Benjamin	KNRC / KS Sierra Club

COMMITTEE RULES
1999
KANSAS HOUSE ENVIRONMENT COMMITTEE

1. In any case where committee rules do not apply, House Rules shall govern. All powers, duties and responsibilities not addressed herein are reserved to the Chair
2. Use of cellular phones is prohibited in the House Environment Committee room. Audible tones or ringers must be disabled.
3. The Chair shall determine the committee agenda, including scheduling and the order of business.
4. The Chair reserves the right to limit testimony that is cumulative in nature and may limit testimony, when necessary, to a specific number of minutes.
5. Committee members shall not address conferees until and unless permission is granted by the Chair.
6. The Chair reserves the right to limit questioning of conferees by committee members in the interest of time and in the interest of fairness to conferees and other committee members.
7. Committee members shall not be approached during committee hearings or deliberations by anyone other than fellow legislative members or legislative staff.
8. No conferee shall be interrupted during presentations of their testimony, except with the permission of the Chair.
9. Questioning of a conferee shall be limited to the subject matter of the agenda item for the day, except as may otherwise be allowed by the Chair.
10. No bill or resolution shall be taken up for a committee vote unless announced by the Chair.
11. All motions require a second to be in order.
12. A substitute motion is not in order.
13. Amendments to motions are not in order except upon consent of the member making the motion and his or her second.
14. A motion to table or take from the table shall be in order only when such item is on the agenda or is taken up by the Chair. The motion requires a simple majority and is non-debatable.
15. A request from any member that their own vote be recorded shall be granted.
16. Contact Chair for excused absences.
17. The Chair reserves the right to take such action as may be necessary to prevent disruptive behavior in the committee room during hearings and deliberations.
18. Adjournment is reserved to the Chair.

House Environment
3-9-99
Attachment 1

ADMINISTRATION OF KANSAS WATER LAW

Before the House Committee on Environment

Organizational Structure
Appropriation of Water for Beneficial Use
 General Concepts
 Kansas Water Appropriation Act
 Water Appropriation Process
Special Water Issues and Concerns
 Certification
 Abandonment
 Subbasin Water Resources Management Program
 Overpumping
 Water Banking
Water Structures

by

David L. Pope
Chief Engineer-Director
Division of Water Resources
Kansas Department of Agriculture

March 9, 1999

House Environment
3-9-99
Attachment 2

2-2

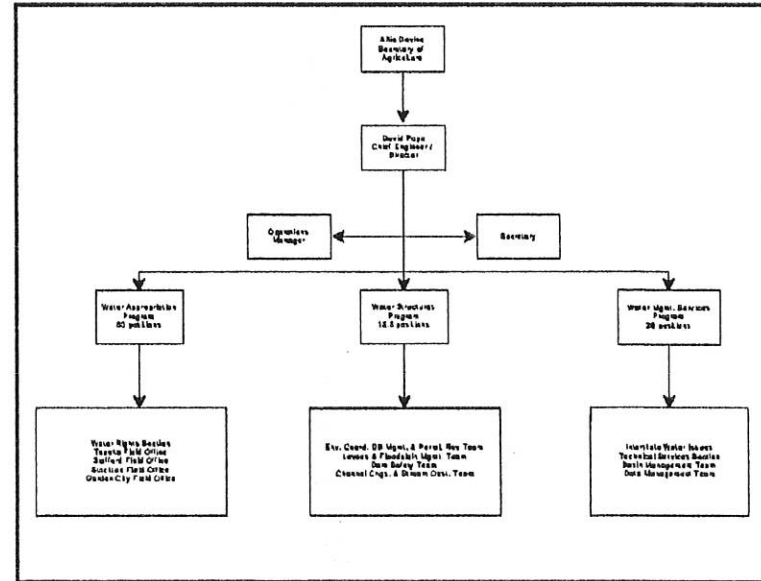
KANSAS DEPARTMENT OF AGRICULTURE
Division of Water Resources
Organizational Changes

The Division of Water Resources was established in 1927 and has authorization in 28 Kansas laws including:

- the Kansas Water Appropriation Act and other statutes related to water allocation
- statutes concerning dams and structures that span or alter streams
- interstate river compacts

The Division activities reflect the character of water resources in the state--

arid in the west dominated by groundwater supplies
 abundant rainfall in the east with more surface water supplies
 Kansas is a downstream state in three of the four interstate river compacts



The Division of Water Resources activities are divided into three Programs:

Water Appropriation

Tom Huntzinger, Program Manager

All water in the state is dedicated for use by the people of Kansas on the basis of prior appropriation, "first in time, first in right."

Since 1978, it has been illegal to use water for any purpose other than domestic use without a permit or other authorization by the Division of Water Resources which:

- processes permits
- approves changes
- certifies water rights
- regulates the use of water

Water Commissioners in the Field Offices administer water rights in times of shortage based on the priority date of the water rights, distributing the available water to satisfy owners of the earliest water rights first.

Water Structures

Sam Sunderraj, Program Manager

The Stream Obstruction Act requires a permit from the Division of Water Resources to:

- construct a dam or stream obstruction
- change the course, cross section, or the current of a river

The Division also regulates dam operations and maintenance to insure public safety.

The Environmental Coordination Act designates the Division of Water Resources to coordinate with other agencies to minimize adverse environmental impacts of water control structures.

The Division provides floodplain management assistance to communities and approves floodplain ordinances.

Water Management Services

Jim Bagley, Acting Program Manager

Addresses water management concerns such as:

- groundwater declines
- surface water depletions
- hydrological analysis
- data management

Represents Kansas on four interstate river compacts:

- Arkansas River, with Colorado
- Arkansas River, with Oklahoma
- Republican River with Nebraska and Colorado
- Big Blue River with Nebraska

Represents Kansas in the Missouri River Basin Association.

APPROPRIATION OF WATER FOR BENEFICIAL USE IN KANSAS

GENERAL CONCEPTS

Water in Kansas is a public resource "... dedicated to the use of the people of the state, subject to the control and regulation of the state..." (K.S.A. 82a-702)

Water Appropriation is-- setting water aside for a specific purpose or use (K.S.A. 82a-707)

"...appropriation shall not constitute ownership of such water, and appropriation rights shall remain subject to the principle of beneficial use..." Therefore this natural resource is made available to use by the people for beneficial purposes as specifically defined by the state.

Prior appropriation doctrine-- first in time, first in right (K.S.A. 82a - 701(f) and 707(c))

Water supplies of the state are distributed to individual users based on the doctrine of prior appropriation which defines each users right to its use, relative to a priority system based on the earliest priority in time. The priority date is established based upon the time the application is filed in the office of the Chief Engineer. A water right with a date earlier than another is a senior water right and a later priority date is a junior water right. When water supplies are limited, water is made available, without waste, to the most senior water rights up to the limits of the water rights before water is made available to a junior water right.

Kansas state law requires the Chief Engineer to administer and enforce water law (K.S.A. 82a-706)

The Chief Engineer of the Division of Water Resources, Kansas Department of Agriculture, administers and enforces the law pertaining to beneficial use of water and to control, conserve and regulate its use and distribution. The Chief Engineer's authorities serve to protect water rights from any unlawful use of water or changes in use that would decrease the availability of water. Field offices have been established and water commissioners appointed to serve as his agent in water administration and enforcement--they are located in Topeka, Stafford, Stockton and Garden City.

Rules, regulations and standards (K.S.A. 82a-706a)

The Chief Engineer has the authority to adopt rules, regulations and standards needed to administer or enforce the statutes and to aid in the discharge of his or her duties. Formal rules and regulations were adopted initially in 1978, with several subsequent amendments and additions. Administrative procedures are written as instructions to staff on administration of the rules and regulations.

Groundwater Management Districts (K.S.A. 82a-1020)

Groundwater Management Districts were authorized in 1972. Their purpose is to preserve basic water use doctrine and to determine their destiny with respect to the use of the groundwater insofar as it does not conflict with the basic laws and policies of the state. The Districts operate with elected Boards of Directors that must be landowners or water users within the District. They levy special water use charges and land assessments to fund District activities, develop a water management plan, and recommend rules and regulations to the Chief Engineer. The Chief Engineer determines whether proposed policies are compatible with the basic laws and policies of the state. The Chief Engineer may adopt regulations recommended by the District which are effective only within that District.

APPROPRIATION OF WATER FOR BENEFICIAL USE IN KANSAS

KANSAS WATER APPROPRIATION ACT (Chapter 82a, Article 7 of the Kansas Statutes Annotated)

Vested Rights -- water uses prior to the "Appropriations Act" (K.S.A. 82a-704a)

Kansas Water Appropriation Act was passed in 1945, with many amendments since then. All verifiable diversions of water for beneficial use prior to June 28, 1945 are called vested rights. All vested rights were determined (quantified) by the Chief Engineer for all who claimed beneficial use of water by July 1, 1980 and could provide records or other verifiable proof of the maximum diversions prior to 1945. These early water uses, now quantified as vested rights, are senior to all appropriation rights acquired for uses established after the "Appropriation Act" was passed in 1945. All vested rights, the most senior in the state, are considered equal in priority, unless adjudicated through the court system.

Appropriation Rights --water use requires approval by the Chief Engineer (K.S.A. 82a-705)

The "Appropriation Act" provides a statutory process for obtaining a right to divert water for beneficial use. This process establishes the priority date and other aspects of water use that specifically define the water right. Steps include an application, a permit to divert water, construction of diversion works, a requirement to demonstrate beneficial use by which a water right is established. Prior to January 1, 1978, a permit was not required to divert water for any purpose. However, water users were required to file an application and obtain a permit in order to acquire a water right. Water users without a permit or a water right were not entitled to protection by the state from impairment of their right to use water. Since January 1, 1978, it has been unlawful to divert water without a vested or appropriation right, with minor exceptions.

Specific types of beneficial use recognized by the Division of Water Resources are: (K.A.R. 5-1-1(f))

domestic, stockwatering, municipal, irrigation, industrial, recreational, water power, artificial recharge, hydraulic dredging and contamination remediation.

Domestic use does not need a permit (K.S.A. 82a-705a and K.S.A. 82a-705e)

Water used for household and farmstead purposes is termed a domestic use and such a user is not required to obtain a permit or water right, although a domestic user may do so to document their use. However, a domestic user does acquire a right to use water to the extent of actual use for beneficial purposes. Domestic rights can be vested (pre-1945). Appropriation rights for domestic purposes have a priority date based upon the first use of water or the date an application is filed, whichever is first. In order to protect domestic rights from impairment, the owner must submit some acceptable form of documentation upon which the Division can rely to determine priority date and amount of domestic use if the domestic use is not permitted.

APPROPRIATION OF WATER FOR BENEFICIAL USE IN KANSAS

WATER APPROPRIATION PROCESS (K.S.A. 82a-708a, K.S.A. 82a-711, 712, 713, 714)

A series of steps are necessary to obtain a water right. The steps listed are those a person would follow in acquiring a water right from the Division of Water Resources. Criteria for approval are used and constraints are put on permits and the final water right, as protection to existing water rights and to ensure the new use is reasonable. These criteria and constraints appear as terms, limitations and conditions on the permit and the water right.

Process for Obtaining a Water Right

Steps	Water User	Division of Water Resources (DWR)	Typical time
1 Apply	Application for permit to divert water for beneficial use Receipt acknowledged by DWR	Assign priority date when received	Up to 2 weeks
2 Permit	Permitted to divert water	Review application and apply approval criteria Permit approved or rejected by Chief Engineer*	90 days, unless complex
3 Construct	Construct diversion works as defined on permit Notify DWR upon completion of diversion (notice and proof)	Inspect and verify completion of diversion works (compliance check)	User given the remainder of current year plus one more year to complete. Time may be extended. After receipt of notice and proof
4 Perfect	Develop (perfect) the water right-demonstrating beneficial use by diverting water within the terms of the permit, keeping records and filing annual water use reports.	Verify diversion rate (pump test), and place of use (field inspection) a the end of perfection period.	Municipal users have up to 20 years; all others have 5 years. Users can request an extension, must justify the need. Variable
5 Certify	Draft Certificate received with opportunity to appeal to Chief Engineer.	Review water use record, pump test results, field inspection and other data. Chief Engineer quantifies the terms, conditions, and limitations of the water right and issues a draft certificate. Chief Engineer considers users' appeals and issues final Certificate of Appropriation.	Variable 30 days Variable
6 Record	Water right certificate filed with Register of Deeds as real property.	State recognizes the water right as real property right.	At time of final issue.

* Remaining steps not applicable if the application cannot be approved.

APPROPRIATION OF WATER FOR BENEFICIAL USE IN KANSAS

Criteria and Constraints on Obtaining a Water Right

1. Important items to be submitted with the application are: a) identity of the applicant, b) source of water to be used, c) maximum rate and annual quantity at which water is diverted, d) location of the diversion works and the place water will be used, e) description of type of beneficial use, and information to establish the reasonable need for the water such as past, present, and projected population if it is municipal use.
2. Water available for appropriation in the area surrounding the location of the permit is determined by comparing the amount of water supply available for each year, as defined by rules and regulations, with the maximum quantity of water already appropriated. This concept applies to surface and groundwater and varies throughout the state.

Safe yield rules limit water availability for new appropriations to the amount of water supply that is replenished-- full appropriation. Regulations describe it as the long term sustainable (average) yield of the water supply. When the appropriations exceed this limit, the area is closed to further appropriation.

Allowable depletion rules allow appropriations to exceed the amount of water supply that is replenished, but there are constraints on the rate at which the water in long term storage will deplete over time. When appropriations cause the rate of depletion of long term storage to exceed the regulatory limits, the area is closed to further appropriation.

The area is fully appropriated or over appropriated when the maximum quantity of water appropriated is equal to or more than the average amount of water supply available for appropriation. Water management policies of the past have resulted in full or over appropriation in some areas of Kansas where water has historically been taken from long term aquifer storage in excess of the rate of replenishment.

Water management policies for new appropriations have reflected local input to help determine the public interest. Rules currently in place have closed many areas to further appropriation, particularly in western Kansas.

Groundwater Management Districts set policies within their boundaries and implement them through rules and regulations recommended to the Chief Engineer. Many areas are over appropriated resulting from early development prior to allowable constraints, even though policies now in place may limit new appropriation to a safe yield.

Western Kansas Groundwater Management District No. 1 has recently proposed a safe yield policy-- a change from the past and current allowable depletion policy.

Equus Beds Groundwater Management District No. 2 and Big Bend Groundwater Management District No. 5 have safe yield policies.

Southwest Kansas Groundwater Management District No. 3 has an allowable depletion policy that limits the rate of depletion to 40% of aquifer storage within 25 years.

Northwest Kansas Groundwater Management District No. 4 currently has a safe yield policy but had an allowable depletion policy until 1991.

Some areas are designated as intensive groundwater use control areas (IGUCA) with special controls unique to them. These areas of the state have been identified either at the request of a Groundwater Management District or by the Division of Water Resources to address problems related to water supply that require special protection and regulation.

In all other areas, management policies are set by the state, and rules and regulations of the Chief Engineer apply. These areas are under safe yield rules. Some areas of the state were fully appropriated at the time safe yield was imposed; these areas were closed to further appropriations.

Impairment of other water rights in the area is a major consideration in the approval of a proposed permit. Vested and senior water rights are protected from unreasonable economic and operational damage by junior water rights. Wells in an aquifer or diversion points in a stream must be spaced a sufficient distance apart to not unreasonably interfere with one another. Reasonable decreases in stream flow or drop in groundwater level are expected. However, the rate of diversion of junior water rights must be within limits that will not decrease the rate of diversion of senior rights in the area to the extent that unreasonable economic or operational damages occur to senior water rights. Spacing rules apply in all areas.

(K.S.A. 5-4-4) Well Spacing - the spacing between wells shall be sufficient to prevent direct impairment between wells located in a common source of supply or hydraulically connected sources of supply and to protect the public interest. The following guidelines shall be used to determine the spacing required between wells permitted by the Chief Engineer outside groundwater management districts in a common source of supply, unless it is determined by the Chief Engineer in any specific instance that the spacing guidelines set forth in this regulation are insufficient to prevent direct impairment or are not necessary to prevent direct impairment.

MINIMUM SPACING BETWEEN PROPOSED WELLS AND NON-DOMESTIC PERMITTED WELLS OUTSIDE GMDs*	AQUIFER SOURCE
4 miles	confined Dakota
½ mile	unconfined Dakota
1,320 feet	any others
MINIMUM DISTANCE CONSTRAINTS BETWEEN PROPOSED WELLS AND DOMESTIC WELLS**	AQUIFER SOURCE
½ mile	confined Dakota
1,320 feet	unconfined Dakota
660 feet	any others

*Separate well spacing regulations apply within each GMD, some of which are more restrictive.

**Exception is if the domestic well owner has given permission to reduce the spacing interval.

Changes in the point of diversion must meet the above requirements or not decrease distances to other wells more than 300 feet.

3. Construction of the diversion works is the initial demonstration of intent to divert water for beneficial use. Extensions of the time to complete diversion works are often granted when reasonable justification for delay is provided. However, repeated extensions are questioned more intensely after the second request.
4. The time to perfect (develop) the water right is one of the most important times in the permit process. The demonstration of ability to use water beneficially during this period provides the factual basis for the terms, conditions and limitations of the certification, within the limits of those stated on the permit. If the user fails to demonstrate beneficial use to the full extent of the permit during this time, the water right has not been fully developed and will be certified for a lesser amount. However the user can request an extension of time to perfect if justification can be shown that the user did not have a valid opportunity to fully demonstrate beneficial use. Examples would be wet years when crops did not need much irrigation, or the water supply was abnormally limited.
5. Users have an opportunity to provide information and review the terms, conditions, and limitations of the water right and discuss them with the Chief Engineer. Terms, conditions, and limitations of a water right are: a) rate of diversion, b) maximum authorized annual quantity, c) place of use, d) type of use and e) point of diversion. After the certificate is issued (and any appeal is resolved), the terms, conditions and limitations are final— changes may be made only with approval of the Chief Engineer.
6. The water right is recorded with the county similar to other real estate. It is a real property right that can be used separate from the land, purchased or sold, transfer ownership, inherited, and leased. However any modification in the location of use, purpose of use or point of diversion requires approval of the change to the water right.

Water use reporting (K.S.A. 82a-732)

Beneficial use of water within the terms, limitations and conditions of a permit or water right is a fundamental principle of water administration. These constraints on permits and water rights ensure that the protections provided by the State are not compromised by the unexpected use of additional quantities of water, particularly in areas where water supplies are limited or the possibility of impairment is great. Water use reporting provides documentation of the quantity of water being used in the state. The owner of a water right or permit, except for domestic use, must file an annual water use report with the Division of Water Resources by March 1 each year. Records of annual water use are maintained by the Division of Water Resources for each vested and appropriation right.

Changes to Existing Water Rights (K.S.A. 82a-708b)

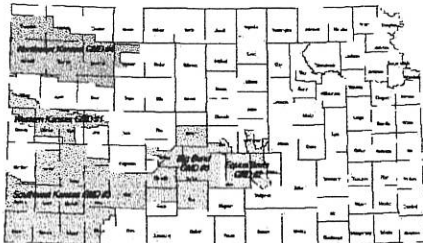
The Certificate of Appropriation defines the final terms, conditions, and limitations of a water right. However changes may be made to the point of diversion, place of use, or the type of use if the proposed change relates to the same local source of supply and will not impair other water rights. It is the users responsibility to demonstrate to the Chief Engineer that such change will be within the same local source of supply and that it will not impair others. Change requests are processed in a similar manner to original applications for a water right, but the water right maintains the same priority date.

Spacing and amount of consumptive use are key criteria in assessing the potential for impairment resulting from a proposed change. Consumptive use is prevented from increasing substantially so that the “net” effect of the change does not cause an additional demand on the source of supply.

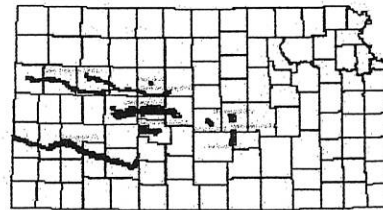
Water Conservation (K.S.A. 82a-733 and K.A.R. 5-7-4)

Conservation plans and implementation of conservation practices may be required for approval of an application for a permit or for an existing water right. The plans are intended to assure public benefit. Priority for such plans are: 1) drought, 2) water use that is higher than peers, and 3) when state supported loans, grants, or cost share are involved. Groundwater Management Districts and the Chief Engineer approve conservation plans that apply within the Groundwater Management District boundaries. The Kansas Water Office is to provide technical assistance.

Water users who prefer not to divert water in a closed area may enroll in the water rights conservation program. The user agrees to suspend water use authorized by the water right for the duration of the agreement. These water rights are protected from loss of the right for non-use.



Groundwater Management Districts provide local water management leadership



Intensive groundwater use control areas (IGUCA) are identified areas that have water problems that require special actions to protect the public interest.

SPECIAL ISSUES AND CONCERNS

CERTIFICATION (“Project Zeroed Out”)

There are approximately 31,000 active water right files in the following categories: (1) 500 pending applications for permits; (2) 1,500 permits-diversion works not completed; (3) 2,500 permits-time not expired to perfect; (4) 3,500 permits-time to perfect has expired-of which 2,000 have had a field inspection and 275 have a “proposed” certificate and (5) 23,500-certified water rights. Some of these permits have been in use for 20 and 30 years and the Division of Water Resources will be working closely with the owners and tenants to review these water rights files, particularly for the old permits that need certified. Many of these are complex cases or ones that have had special problems that have not been easily resolved in the past. This is an on-going process which will change as new permits are granted and completed.

Water right certification sets forth the final amount of a water right. Files for all permits need to be reviewed to ensure that all pertinent information is updated. Some of these permitted water rights will require an appointment with owners for a field inspection to determine appropriate locations of wells, pumping plant characteristics, and crop land areas.

When demand for water exceeds the supply available, it is important to clear up uncertainties about water rights. In areas that are fully appropriated, water supply needs must be met from the existing water rights. Certification of these permits will assist in protecting the water rights against impairment, especially in times of shortage. A Certificate of Appropriation for Beneficial Use of Water can be very important when water rights relative to their authorized place of use are transferred or water rights are sold.

Phase I. Oct. '97 to Sept. '98

Stockton Field Office
Complete all files in field office

Topeka Field Office
Complete all files prior to 1978



Garden City Field Office:
All files in Arkansas River corridor
Upstream of Garden City

Stafford Field Office:
All files in Rattlesnake, Pawnee and
Walnut Creek Basins

Phase II. Oct '98 to Sept. 99

Stockton Field Office
Complete all files in lower Rep-
ublican River Valley to Milford Dam

Topeka Field Office
All files from '78 to '88
in Kansas-Smoky Hill Valley



Garden City Field Office:
Arkansas River Valley down-
stream of Garden City
& Haskell County

Stafford Field Office:
Middle Arkansas River Valley &
restricted areas in south central Kansas

SPECIAL WATER ISSUES AND CONCERNS

ABANDONMENT (K.S.A. 82a-718)

Water is a life sustaining natural resource. Every Kansan is entitled to the opportunity to beneficially use the water resource to the limits of its availability. If water is not to be used as prescribed under the terms, conditions, and limitations of a water right, the owner must show due and sufficient cause for non use so as not to deprive others that opportunity. Prior appropriation doctrine and related statutes define water held by the state as a public resource to be beneficially used by the people. This fact obligates the Chief Engineer to protect the water right owner's opportunity to use the water beneficially. It is further provided in the statutes that if the water resource is not used beneficially for three consecutive years without due and sufficient cause, the owner shall forfeit his or her right to its use in order to ensure others are not deprived of the opportunity to use it for their beneficial use.

The concept of beneficial use is considered so important that it is defined specifically in the statutes by type of use, some of which are non consumptive. However, it is also recognized that users may endure circumstances that would prevent them from reasonably maintaining beneficial use even after three years. Therefore, regulations set forth a number of acceptable reasons (due and sufficient cause) for not using water beneficially that will protect the water right against forfeiture.

Specific circumstances that are considered due and sufficient cause for non use (K.A.R. 5-7-1)

- 1) Adequate moisture is provided by natural precipitation for production of crops normally requiring full or partial irrigation within the region of the state in which the place of use is located;
- 2) A water right has been established or is in the process of being perfected for use of water from one or more preferred sources in which a supply is available currently but is likely to be depleted during periods of drought;
- 3) water is not available from the source of water supply for the authorized use at times needed;
- 4) water use is temporarily discontinued by the owner for a definite period of time to permit soil, moisture and water conservation, as documented by:
 - a) enrollment in a multi-year federal or state conservation program;
 - b) enrollment in the Division of Water Resources water right conservation program (K.A.R. 5-7-4);
 - c) any other conservation method acceptable to the Chief Engineer in advance;
- 5) management and conservation practices are being applied which require the use of less water than authorized;
- 6) a well has been previously approved as a standby well;
- 7) physical problems exist with the point of diversion, distribution system, place of use or operator; reasonable efforts must be taken to correct the problems;
- 8) conditions exist beyond the control of the owner which prevent access to the place of use or point of diversion; reasonable efforts must be taken to gain access;
- 9) an alternate source of water supply was not needed and was not used because the primary source was adequate;
- 10) any other reason constituting due and sufficient cause as determined by the Chief Engineer.

Every effort is made to provide a way to protect a water right if the circumstances for non use are legitimate. However, the Division of Water Resources is obligated to ensure that negligence or selfish interests are not depriving others of an opportunity for beneficial use of water.

The water right owner is statutorily entitled to a notice and hearing before a final decision is made on abandonment. The Division is not pro-actively seeking abandoned water rights. However, water rights that are part of a property transaction, seeking a certificate of appropriation, or have a change application pending are examples of circumstances when the water right must be in good standing and not abandoned for the transaction to proceed.

SPECIAL ISSUES AND CONCERNS

OVERPUMPING— Blatant and Recurring Over Pumping Project Description

The Kansas Department of Agriculture's Division of Water Resources (DWR) has developed what it believes will be an effective public awareness, technical assistance and enforcement plan to curb use of ground or surface water in excess of appropriated amounts. Groundwater Management Districts have decided to join in this compliance enforcement strategy on over-pumping. The Division has data which allows it to identify and rank water right owners by the degree to which they have in the past used more water than they are authorized under their water right. This project is focused on very large abusers and repeat offenders. It is designed as a short term precursor to a broader based compliance enforcement program that will use a random selection process which will become a part of the normal course of administration of water rights.

This project has an emphasis on public awareness and technical assistance to achieve compliance, with an enforcement component to ensure participation and owner response. Numerous formal notices of over pumping have been sent to the water right owners involved in this project with no apparent change in water management.

The project has four basic parts or components: technical assistance, compliance monitoring, enforcement actions, and final closure.

Strategy for Addressing Blatant Recurring Overpumping

1. Identification of blatant and recurring overpumpers and compilation of facts from 1997 and 1998 irrigation seasons.

DWR selects a given number of files whose water use reports reflect the most blatant exceedence of authorized quantities as determined from the 1997 water use reports.

DWR and GMD field personnel conduct field observations and read meters for 1998 irrigation season. DWR and GMD staff compile available information and discuss water use with water right owners to verify water use reports for 1997 and 1998 irrigation seasons.

DWR sends legal notice to overpumpers explaining requirements of compliance and enforcement.

2. Consultation and compliance planning during November 98-January 99.

Advisory panel (DWR, GMD, KWO, KSU Ext.) recommends a compliance strategy for each owner. DWR, KWO and GMD provide consultation with water right owners to design and agree on a conservation plan that includes specific solutions for overpumping. Owner signs an agreement to implement the conservation plan and its overpumping solutions.

3. Implementation of conservation plan and compliance process for 1999 irrigation season.

Require meter inspection and test by DWR before irrigation season starts.

Require monthly water use reports by owner.

GMD and DWR conduct unannounced compliance checks as needed.

- a. Owner complies with authorized quantity and successfully implements compliance actions.
- b. Owner exceeds authorized quantity--required to cease pumping immediately. Administrative action is taken for blatant and recurring overpumping which is a violation of the terms, conditions and limitations of the permit.

4. Compliance enforcement process during 2000 irrigation season.
 - a. Owner continues to successfully implement compliance plans, monthly water use reports no longer required. Owner required to stay within authorized quantity.
 - b. Require monthly water use reports by owner. If owner exceeds authorized quantity—required to cease pumping immediately or administrative action is taken for blatant and recurring overpumping which is a violation of the terms, conditions and limitations of the permit. Suspension of water right for the following season or other appropriate enforcement action will be considered.
5. Enforcement follow-up during 2001 irrigation season.
 - a. No enforcement required if previous season's use is in compliance.
 - b. If the water right is suspended, no use is allowed.
 - c. If not suspended, enforcement follow-up as consequence of other appropriate enforcement actions required. Monthly water use report required by owner.
6. Continuation of enforcement follow-up during 2002 irrigation season.
 - a. No enforcement required if use is in compliance from 4a above.
 - b. Reinstated if suspended in 5b, annual water use report required. Must successfully implement compliance actions and stay within authorized quantity.
 - c. If not suspended in 5c and authorized quantity was exceeded--required to cease pumping immediately or suffer immediate dismissal. Water right is suspended for the following season.
7. Conclusion of enforcement and water right dismissal during 2003 irrigation season.
 - a. No enforcement required if use is in compliance from 4a above.
 - b. If authorized quantity is exceeded after reinstatement in 6b, water right is dismissed and well is permanently disabled.
 - c. Water right suspended for this season as consequence of previous season failure to stay within authorized quantity.
8. Conclusion of enforcement and water right dismissal during 2004 irrigation season.
 - a. Water right reinstated, annual water use report required. Must stay within authorized quantity. If authorized quantity is exceeded after reinstatement in 7c. Water right is dismissed and well is permanently disabled.

SPECIAL ISSUES AND CONCERNS

SUBBASIN WATER RESOURCES MANAGEMENT PROGRAM

The Division of Water Resources is charged with enforcing and administering Kansas laws pertaining to the beneficial use of water and to control, conserve, regulate, allot and aid in the distribution of the water resources of the state for the benefits and beneficial uses of all of its inhabitants in accordance with the rights of priority.

The Division of Water Resources initiated a Subbasin Water Resources Management Program (Program) to develop comprehensive, long-term water management strategies to implement solutions to water problems within the framework of existing state law. It is a proactive program to address issues identified in the State Water Plan, in contrast to historic regulatory programs that have been reactive in nature.

This program utilizes a hydrologic basin approach to deal with groundwater declines, streamflow depletions and related water quality concerns in targeted basins. Community involvement is a crucial component in the philosophy of this program. It is designed to be holistic in nature so that the best available technical information and expertise is combined with a cooperative effort by local, state, federal government agencies and input from interested parties and citizens affected by the program. This is accomplished by creating basin teams of environmental scientists who can focus on one basin, become thoroughly familiar with the basin from a geologic and hydrologic perspective, establish a working relationship with interested parties, enhance water resources education efforts, identify water resources issues, develop strategies to address issues and then implement those strategies. The result of this program will be the development and implementation of a comprehensive water management strategy to address identified water issues in each targeted basin. Enforcement of water right conditions in each targeted basin will encourage the best possible use of the available water resources.

The methodology consists of 5 phases:

Phase I	Compile and review all existing data and information about a subbasin
Phase II	Collect and compile additional data
Phase III	Analyze data, including the development of an appropriate hydrologic computer model to be used as a tool, if necessary
Phase IV	Develop new, comprehensive, long term management strategies which address the water resources issues in the basin
Phase V	Implement the new management strategies

To date, the Program has established projects in four areas of the state:

- 1) Rattlesnake Creek Subbasin - began summer 1993 - Current Status: Phase IV
- 2) Middle Arkansas River Subbasin - began winter 1997 - Current Status: Phase II and III
- 3) Pawnee and Buckner Creek Subbasins - began summer 1994 - Current Status: Phase III
- 4) Upper Arkansas River IGUCA - began December 1996 - Current Status: Phases II and III
- 5) Solomon River Basin and Smoky Hill - Saline River Basin - Planned for the future

Special Issues and Concerns

Summary Report of Water Banking in Kansas

Water banking in Kansas was identified in the 1995 Kansas State Water Plan as a concept to be studied. The State Water Plan identified the Division of Water Resources 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, Groundwater Management Districts, Basin Advisory Committees and Assurance Districts. Additionally, a sub-committee of members with surface water concerns was formed.

After numerous meetings and deliberation, a draft report of the Water Banking Task Force was compiled in October of 1998. An attachment of recommendations specific to surface water banking will be made a part of the final report and submitted to the Secretary of Agriculture and the Chief Engineer, Division of Water Resources. 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 of water banking as described in the State Water Plan and those goals specific to individual pilot banks.

The Task Force identified four main water bank functions. These include deposits of water into a water bank, leases of water from a water bank, the establishment of personal safe deposit box accounts for water right holders, and a bulletin board service to facilitate permanent sales of water rights. Depositors will receive financial compensation for depositing water into a water bank, while those who wish to lease water will pay the bank for the right to use water for the term of a lease agreement. A portion of the water placed into a water bank will be retained by the bank for the length of the deposit to create a conservation savings. Water right holders may place a portion of unused water from their own water rights into a safe deposit box for subsequent personal use.

Beginning in December, the report of the Water Banking Task Force has been distributed to interested parties in Kansas. There have been several meetings held with Groundwater Management District Boards, Basin Advisory Committees, Assurance Districts and other interested groups. The Task Force is now collecting public input and will finalize the report before submitting it to the Secretary of Agriculture and the Chief Engineer for their consideration. Public comments should be received by March 1, 1999.

If water banking is supported by the Kansas Department of Agriculture and the Division of Water Resources, proposed legislation will be drafted which would create a Water Banking Act for debate in the 1000 Legislative Session.

Water Structures Program

Obstructions in Streams Act: - (KSA 82a-301 through 305a) Regulates dams and man-made water projects that would change or diminish the course, current, or cross section of a stream or water course in the state. Compliance and enforcement with this program are carried through out the permitting process and inspections.

Permits are issued for construction or modification of:

- Bridges
- Culverts
- Low water crossings
- Low head Dams
- Dams over 30 acre-feet
- Pipeline crossings
- Changes in channels of streams
- Boat ramps
- Sandplants in/near streams

Kansas Levee Law: - (KSA 24-126)

Permits are issued for construction of:

- Levees
- Fills in Floodplains

Environmental Coordination Act: - (KSA 82a-325 to 327)

All water development projects permitted by the department are coordinated with 7 state agencies to consider the environmental effects of the plan/project before approval.

Floodplain Management:

- Designated National Floodplain Insurance Program (NFIP) Coordinating Agency by Gubernatorial Executive Order
- By agreement with the Federal Emergency Management Agency (FEMA), assist FEMA in carrying out the NFIP program in participating communities in KS.
- Assist in floodplain management studies/mapping as part of the NFIP program and as part of the State Water Plan.
- Approve local floodplain ordinances.

Watershed District Act: - (KSA 24-1201 to 1237)

- Coordinate approval of Formation of Districts with Secretary of State
- Approve General Plan (preliminary engineering report)
- Approve modifications to General Plan

Dams:

Hazard Classifications:

- class "c" - failure of dam has potential for extensive loss of life, etc.
- class "b" - failure of dam has potential for loss of few lives, etc.
- class "a" - failure of dam has no potential for loss of life

- In 1997, a total of 34 dams were rated "unsafe" by the department
- In 1976 the National Dam Safety Program Act was passed with monies authorized for assistance to states

- Starting in 1998, Federal Funds have been appropriated and allocated to states based on a state's program and number of regulated dams - Kansas is to receive \$75,139

Activities

Floodplain Management:

- Focus is on community technical assistance
- Focus is on updating floodplain maps
- Focus is on floodplain studies that study entire watersheds
- Pilot projects to remap floodplains - Wellington, Hoisington, Stranger Creek and Santa Fe Lake

Levees:

- Coordinating with the Attorney General's office to implement the levee law as it pertains to unapproved levees.
- Studying the impact of levees on upstream and downstream areas with the Corps of Engineers and the Kansas Water Office - Upper Black Vermillion, Stranger Creek

Environmental Coordination:

- Working with statutorily designated agencies to get environmental comments
- Refining process to use e-mail and internet to facilitate efficient processing
- Including relevant comments in approvals of projects to ensure consideration of environmental issues in water development projects

STATE OF KANSAS



Bill Graves, Governor

KANSAS WATER OFFICE
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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

HOUSE ENVIRONMENTAL COMMITTEE

BY THE KANSAS WATER OFFICE

February 23, 1999

*House Environment
3-9-99
Attachment 3*

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 (PWWSO #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. PWWSO #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 adquate 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
House Environment Committee
March 9, 1999**

NOTES:

*House Environment
3-9-99
Attachment 4¹*



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

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

NOTES:

CITY OF HOLTON JACKSON COUNTY

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

NOTES:

CITY OF MOUNT HOPE SEDGWICK COUNTY

1990 Census Bureau Population	805
1994 Census Bureau Population Estimate	1,092
1994 KWO Population Estimate	808
2040 KWO Population Projection	914

NOTES:

CITY OF ROLLA MORTON COUNTY

1990 Census Bureau Population	387
1994 Census Bureau Population Estimate	379
1994 KWO Population Estimate	402
2040 KWO Population Projection	643

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

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

NOTES:

WATER CONTRACTING PROGRAMS

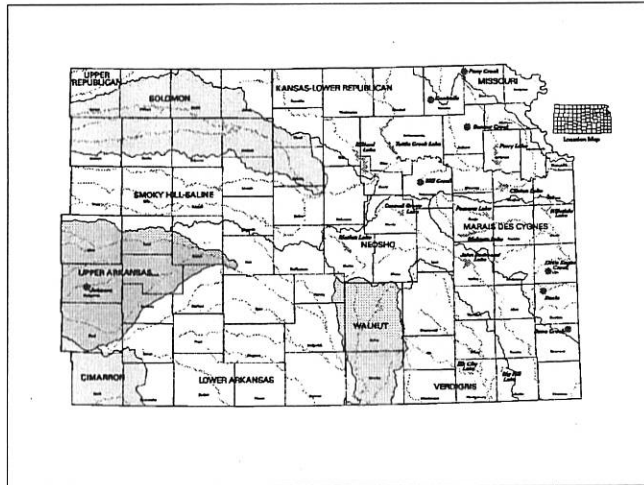
• **Water Marketing Program**

• **Water Assurance Program**

• **Multi-Purpose Small Lakes
Program**

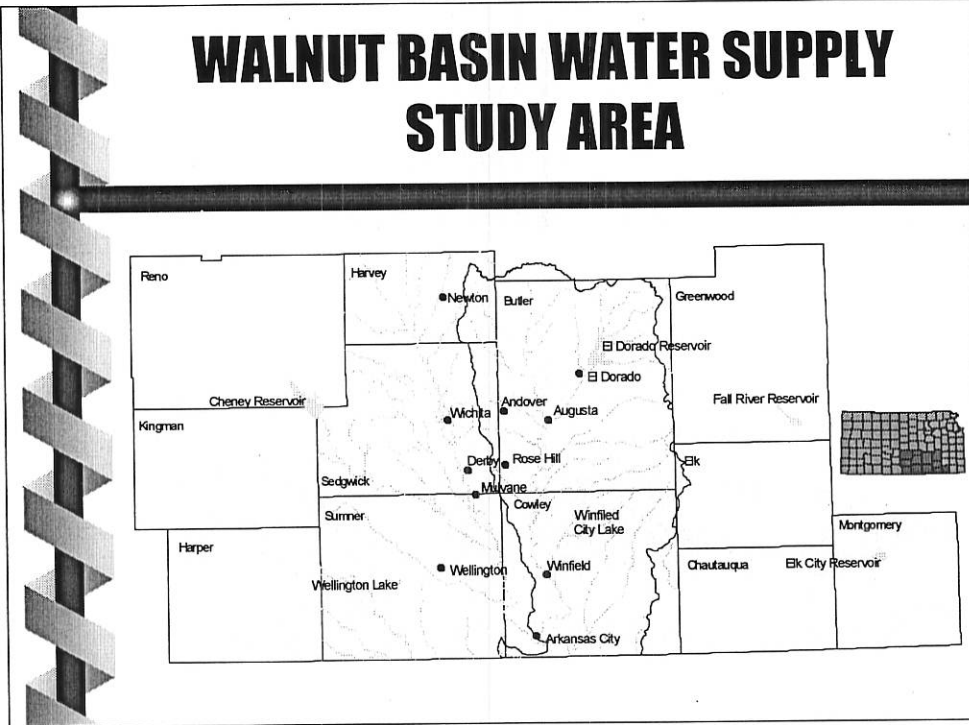
NOTES:

KANSAS WATER CONTRACTING PROGRAM LAKES



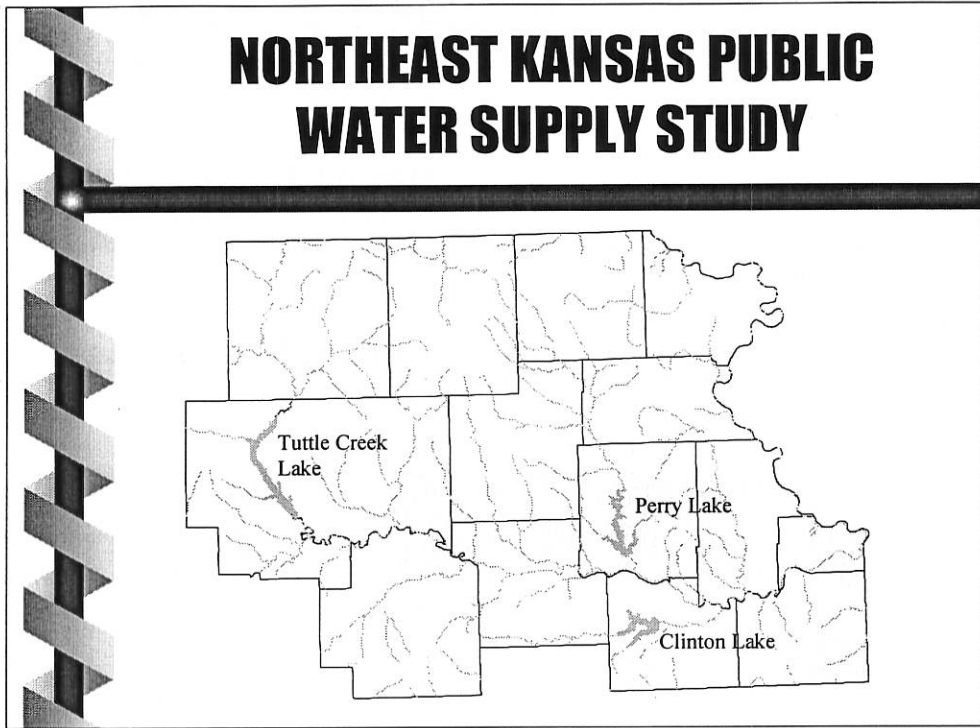
NOTES:

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: