

Approved: 1-28-99
Date

MINUTES OF THE HOUSE COMMITTEE ON ENVIRONMENT

The meeting was called to order by Chairperson Joann Freeborn at 3:30 p.m. on January 19, 1999 in Room 423-S of the Capitol.

All members were present except:

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

Conferees appearing before the committee: Al LeDoux, Director, Kansas Water Office, 109 SE 9th, Ste 300, Topeka, KS 66612-1249
Kent Lamb, Chairman, Kansas Water Authority, RR 1, Box 69, Macksville, KS 67557
Dale Lambley, Kansas Dept. of Agriculture, 901 SW Kansas, 7th Floor, Topeka, KS 66612-1280

Others attending: See attached list

The meeting was called to order by Chairperson Joann Freeborn at 3:30 p.m. She asked Rep. Dennis McKinney, Rep. Clay Aurand, and Rep. Henry Helgerson, who were not present in the January 14 meeting, to introduce themselves and give a little of their legislative background. She announced there will be a briefing, in the Thursday January 21 meeting, by Secretary Steve Williams of the Department of Wildlife and Parks on deer hunting and deer population. Also Agency bill requests and committee bill requests will be heard. She announced there will be further briefings next week, the week of January 25. On Thursday, January 28, **HB2021**, concerning rendering plants, will be heard.

Chairperson Freeborn announced that Raney Gilliland will serve as the follow up person on questions asked of conferees by the committee. He will keep a list of the questions and will inform the committee when he receives answers to those questions.

The Chairperson welcomed Al LeDoux, Director, Kansas Water Office. He briefed the committee on the State Water Plan (See attachment 1). The Kansas Water Office is the water planning, policy and coordination agency for the State of Kansas. It prepares a state plan of water resources development, management, and conservation; reviews all water laws; and makes recommendations to the Governor and Legislature for new or amendatory legislation. Mr. LeDoux discussed three issues of which he feels the committee may like further briefings. First, the total Maximum Daily Loads; second, the issue of water distribution; and third, the issue of water banking. He introduced members of his staff, Cathy Tucker-Vogel, Water Resource Planner; Clark Duffy, Assistant Director; Bob McDaneld, accounting department; Cheryl Buttonhoff, irrigating activities; Dr. Darrel Eklund, Evaluation & Conservation Manager; and Glen Kirk, Assistant Engineer.

Mr. LeDoux, assisted by Cathy Tucker-Vogel, played a 12 minute video on the planning and management of water resources for the committee.

The Chairperson welcomed Kent Lamb, Chairman, Kansas Water Authority. He introduced members of the Kansas Water Authority in attendance today (page 17 and 18 of attachment 1), Gerald Blain, Wichita; Tom Bogner, Dodge City; William Hamm, Newton; Don Paxson, Penokee; David Mueller, Tampa; John Spurling, Fort Scott; and Dick Weisser, Stillwell.

Clark Duffy, Assistant Director, Kansas Water Office, reviewed the table of contents of a Special Legislative Issue of the Hydrogram (See attachment 1). The Hydrogram is a quarterly journal of the Kansas Water Office.

Chairperson Freeborn welcomed Dale Lambley, Kansas Department of Agriculture, to the committee. He

CONTINUATION SHEET

MINUTES OF THE HOUSE COMMITTEE ON ENVIRONMENT, Room 423-S Statehouse, at 3:30 p.m. on January 19, 1999.

reviewed Nutrient Utilization Planning and Confined Animal Feeding Operations; and Pesticide Management Plans. (See attachment 2) Questions by the committee for staff members, Al LeDoux, Dale Lambley, Clark Duffy, Kathy Tucker-Vogel and Tracy Streeter, Executive Director, State Conservation Commission, followed.

The Chairperson welcomed Don Pitts, Assistant Attorney General. He gave an update on the status of Kansas Interstate Lawsuits. The U. S. Supreme Court has accepted the state's lawsuit against Nebraska over that state's alleged depletion of water in the Republican River. Questions and discussion followed.

Chairperson Freeborn announced that no committee bill requests were heard. She thanked all of the guests for their participation and attention.

The meeting adjourned at 5:05 p.m.

The next meeting is scheduled for January 21, 1999.

HOUSE ENVIRONMENT COMMITTEE GUEST LIST

DATE: January 19

NAME	REPRESENTING
Al LeDoux	KWO
Daniel J Ekland	KWO
Cathy Tucker Vogel	KWO
CR Duffly	KWO
Kent Lamb	KWA
Bill Hamm	KWA
Tom Bogner	KWA
Jerry Blain	KWA
Don J Pearson	KWA
David Mull	KWA
Donald H. Pitts	AG
Margaret Fast	KWO
Bob McDonald	KWO
Marsha Jackson For John Small	
Dale Limbley	KIDA
Brenden Owing	Schwartz
Wendy M Harms	KAPA
Glen Kirk	KWO
John Spurling	KWA

Dick Weisser
Cheryl Battenhoff

KWA
KWO

HydroGRAM

The quarterly journal of the Kansas Water Office

Special Legislative Issue

January 1999



*House Environment
1-19-99
Attachment 1*

HydroGRAM

Special 1999 Legislative Issue

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Publication Policy

The *HydroGRAM* is the Quarterly Journal of the Kansas Water Office. It encourages and accepts articles and comments on all facets of Kansas water and related land resources. Opinions expressed in the *HydroGRAM* do not necessarily reflect the views or policies of the Kansas Water Office, the Kansas Water Authority or the State of Kansas. All information in the *HydroGRAM* may be reproduced without permission (unless otherwise noted). Credit would certainly be appreciated.

About the *HydroGRAM*

The *HydroGRAM* is produced in Corel WordPerfect 8 and printed on a HP color LaserJet 5/5m printer. All production, editing, and photography, unless otherwise noted, is by John Gottschamer, Public Information Program Coordinator of the KWO.

The Kansas Water Office Vision

To provide the leadership to ensure that water policies and programs address the needs of all Kansans for the present and into the 21st century.

The Kansas Water Office Mission

The Kansas Water Office works to achieve proactive solutions for water resource issues of the State and to ensure good quality water to meet the needs of the people and the environment of Kansas. The Office evaluates and develops public policies, coordinating the water resource operations of agencies at all levels of government.

The *HydroGRAM* is published quarterly by the Kansas Water Office. You may receive the *HydroGRAM* by contacting the KWO and requesting to have your name placed on the mailing list. Please advise of any address changes.

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Cover photo: Bill Utech
Topeka, Kansas

Introduction to the Special 1999 Legislative Issue

Welcome to Topeka

Al LeDoux, Director
Kansas Water Office

On behalf of the Kansas Water Office and the Kansas Water Authority, welcome to the Capital of Kansas and the start of the 1999 Legislative Session.

Deciding who uses water for what purpose is increasingly difficult as growing demands converge on limited supplies. A rational approach to resolving water use conflicts is more important now than ever before. The state water planning process provides a coherent approach to making complex choices. By increasing the public's awareness of the long-term costs and benefits, and the socioeconomic and environmental impacts of alternative courses of action, planning allows us to make our choices based on the consequences for all those involved.

What we do

The KWO is the water planning, policy, and coordination agency for the State of Kansas. It prepares a state plan of water resources development, management, and conservation; reviews all water laws; and makes recommendations to the Governor and Legislature for new or amendatory legislation. The Office administers the Kansas Water Plan Storage Act, the Kansas Weather Modification Act and the Water Assurance Act. We also review the plans of any state or local agency for the management of the water and related land resources of the State.

The Kansas Water Office Vision

Our vision is to provide the leadership to ensure that water policies and programs address the needs of all Kansans for the present and into the 21st century.

The Kansas Water Office Mission

Our mission is to work to achieve proactive solutions for water resources issues of the State and to ensure good quality water to meet the needs of the people and the environment of Kansas. The Office evaluates and develops public policies, coordinating the water

resource operation of agencies at all levels of government.

Looking forward

Kansas has enough water to support great economic growth, but not enough to be careless with it. Years of progress in addressing water resources problems, issues, and concerns help to ensure that we can continue to meet the needs of providing folks with an adequate supply of good quality water and to ease the pain of future floods and droughts.

We hope you have an enjoyable and productive legislative session. Please feel free to call upon us anytime if we can be of service to you.

Kansas Water Issues for the 1999 Legislative Session

The Governor's Recommendations on Appropriations from the State Water Plan Fund

Duane Goossen, Director
Division of Budget

The Governor's recommendations for expenditures from the State Water Plan Fund total \$18,018,444 for FY 2000. The amount available in the fund to cover these expenditures, combining carry forward balances and new receipts, totals \$18,021,551, leaving a balance of \$3,107 at the end of FY 2000.

State Water Plan Fund Revenue	
	FY 2000
Projected Carryover:	\$1,475,825
New Receipts:	
Municipal Water Use Fees	3,390,000
Industrial Water Use Fees	1,115,000
Stockwater Use Fees	290,000
Fertilizer Fees	2,750,000
Pesticide Fees	660,000
Pollution Fines and Penalties	20,000
Sand Royalty Fund	320,726
EDIF Transfer	2,000,000
State General Fund Transfer	\$6,000,000
Subtotal New Receipts	\$16,545,726
Total Revenue	\$18,021,551

Under the Governor's FY 2000 recommendations for State Water Plan Fund expenditures, six state agencies receive State Water Plan Fund appropriations. Expenditures proposed by the Governor are detailed below.

State Conservation Commission

Of the approximately \$18.0 million in water plan fund expenditures recommended for FY 2000, the majority of expenditures are by the State Conservation Commission. The Governor recommends \$9.7 million in State Water Plan expenditures for the State Conservation Commission in FY 2000.

Water Resources Cost Share Program

Major projects include \$4.45 million for the Commission's Water Resources Cost Share Program. Increased emphasis has shifted toward water quality issues, with the targeting in 1996 of water quality improvement at Cheney and Hillsdale lakes.

Expanded emphasis on water quality occurred in 1997 with the Governor's Water Quality Initiative in the Kansas-Lower Republican Basin. Techniques of terracing, grass waterways, range and pasture management, and grass planting all retard the loss of sediment and nutrients bound to soil particles from agricultural lands. In 1998, additional emphasis was placed on livestock waste management and sediment control. That program emphasis will continue in future years.

Nonpoint Source Pollution Control Program

The Governor also recommends \$3.0 million for Nonpoint Source Pollution Control Program for the State Conservation Commission. The program has provided technical assistance to conservation districts in the development of nonpoint source pollution plans. The program has experienced massive demand for assistance in upgrading failing septic systems and livestock waste systems. Subsequent efforts will focus on targeted resources within each of the conservation districts.

Additional resources have been directed toward priority areas above Cheney, Hillsdale, Perry, and Tuttle Creek lakes.

Other SCC Programs

The State Conservation Commission also receives \$1,023,250 from the State Water Plan for its Aid to Conservation Districts Program, \$804,000 for its Watershed Dam Construction Program, and \$231,000 for the second year of a three-year funding match for a multi-purpose small lakes project at Cedar Creek near the City of Fort Scott. Further, \$80,000 is provided to continue the Buffer Initiative Program, and \$125,000 is recommended for the Riparian and Wetland Program.

Kansas Water Office

The Kansas Water Office also receives significant funding from the State Water Plan Fund. The majority of State Water Plan Fund projects recommended by the Governor for the Kansas Water Office are under the categories of data and research and public information/education. These projects include \$400,000 for 70 stream gauge stations, \$145,000 for the Geographic Information Systems Data Access and Support Center located on the campus of the University of Kansas, \$267,800 for the Geographic Information Systems Database Development/GIS Manager, and \$75,000 for groundwater condition evaluation. Operation and maintenance costs totaling \$446,224 are authorized by the Governor for the Kansas Water Office from the State Water Plan Fund on certain reservoirs, and the Pooled Money Investment Board (PMIB) loan payment of \$267,394 are obligations that fall under the water management category related to public water supply.

Health & Environment

Local Environmental Protection Program

The Governor provides \$1.8 million in expenditures from the State Water Plan Fund for this Program, which makes grants to counties to develop and implement local environmental protection plans. Primary emphasis has been on development, adoption, and enforcement of sanitary/environmental codes.

Nonpoint Source Program

The establishment of Total Maximum Daily Loads (TMDLs) and development of Use Attainability Analyses (UAA) procedures will be additional tools to help target *Kansas Water Plan* water quality programs. Recent litigation with the U.S. Environmental Protection Agency has resulted in a court settlement regarding certain aspects of the Clean Water Act. Furthermore, the court decree establishes an eight-year schedule for the State to establish TMDLs on all stream segments listed as water quality impaired, relative to their beneficial uses. The Department is seeking to use the *Kansas Water Plan* water planning process and the Basin Advisory Committees to help carry out its responsibilities. It is anticipated that TMDL subsections will be developed for the *Kansas Water Plan* Basin Sections for each of the 12 major basins in Kansas. The Governor recommends \$925,000 for the Nonpoint Source Program, some of the funds will target these recent initiatives.

Department of Agriculture

The Governor recommends \$988,776 from the State Water Plan Fund to finance existing programs in the Department of Agriculture. Two of these programs determine the water rights management strategies of the State. The remaining program involves the management of water resources in several subbasins in the State.

State Water Plan Fund Expenditures				
Agency/Program	Actual FY 1998	Approved FY 1999	Request FY 2000	Governor FY 2000
<i>State Conservation Commission</i>				
Aid to Conservation Districts	1,016,500	1,023,250	0	1,023,250
Watershed Dam Construction	1,016,037	829,000	829,000	804,000
Multipurpose Small Lakes	733,214	231,000	861,550	231,000
Nonpoint Source Pollution Control	2,772,450	3,001,461	3,200,000	3,000,000
Buffer Initiative	0	80,000	265,000	80,000
Water Resources Cost Share	1,735,897	4,450,000	4,800,000	4,450,000
Riparian and Wetland Program	198,849	110,956	200,000	125,000
Water Rights Purchases	0	0	320,000	0
Total-Conservation Commission	\$7,472,947	\$9,725,667	\$10,475,550	\$9,713,250
<i>Kansas Water Office</i>				
Public Information	29,224	40,000	40,000	30,000
Water Resource Education	50,000	70,000	110,000	70,000
PMIB Loan Payment for Storage	92,808	252,000	267,394	267,394
Water Qual. Planning Assist. Supply Viability	33,336	20,000	0	0
Technical Assistance to Water Users	424,802	440,000	480,000	440,000
Milford & Perry Storage Acquisition Costs	0	0	1,860,600	0
MOU-Storage Operations & Maintenance	289,677	446,091	446,224	446,224
Feedlot Water Quality	100,000	70,000	0	0
Stream Gauging Program	349,745	364,000	400,000	400,000
GIS Data Access and Support Center	135,000	139,000	147,200	145,000
GIS Data Base Development/GIS Manager	311,253	316,026	330,085	267,800
Republican Sub. Eval./Wtr Qual. Initiative	45,284	0	0	0
Walnut Creek Water Availability Study	54,000	40,000	0	0
Neosho Subbasin Study	50,000	50,000	0	0
Basin Assessment	50,327	25,000	25,000	25,000
State Water Plan Direction and Evaluation	28,595	0	0	0
Salt Water Intrusion in Equus Beds Aquifer	38,755	25,000	0	0
Water Quality in Upper Arkansas	75,000	75,000	75,000	75,000
Weather Modification	320,000	390,000	390,000	360,000
Groundwater Condition Evaluation	0	25,000	149,000	75,000
Cheney Agricultural Nonpoint Source	0	0	36,000	25,000
Total-Kansas Water Office	\$2,477,806	\$2,787,117	\$4,756,503	\$2,626,418
<i>Kansas Wildlife and Parks</i>				
Stream Monitoring	44,856	50,000	50,000	50,000
River Recreation	0	0	150,000	0
Total-Wildlife and Parks	\$44,856	\$50,000	\$200,000	\$50,000
KSU-Western KS Irrigation Research Project	\$28,057	\$91,000	\$0	\$0
<i>Department of Agriculture</i>				
Floodplain Management	80,889	107,969	110,614	110,619
Interstate Water Issues	354,748	203,550	193,157	193,157
Subbasin Water Resources Management	583,127	660,899	696,206	685,000
Total-Department of Agriculture	\$1,018,764	\$972,418	\$999,977	\$988,776
<i>Kansas Health and Environment</i>				
Assessment of Sediment/Cheney and Perry	0	90,000	150,000	125,000
Contamination Remediation	1,472,826	1,420,128	1,600,000	1,390,000
Nonpoint Source Program	461,387	910,000	1,050,000	925,000
Local Environmental Protection Program	1,991,481	1,900,000	2,000,000	1,800,000
Total-Health and Environment	\$3,925,694	\$4,320,128	\$4,800,000	\$4,240,000
KS Corporation Commission	\$400,000	\$400,000	\$400,000	\$400,000
TOTAL WATER PLAN EXPENDITURES	\$15,368,124	\$18,346,330	\$21,632,030	\$18,018,444

Kansas Water Issues for the 1999 Legislative Session

Water for the People: Maintaining Adequate Supplies of Good Quality Water

Terry Duvall, Public Water Supply Manager
Kansas Water Office

Introduction

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 process 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) near Cherryvale which serves Cherryvale; Edna; Altamont; Bartlett; Mound Valley; Parsons; Rural Water District No. 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 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.

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 their contract amount. These four

contracts were entered into under the **State Water Marketing Program**.

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 construc-

tion costs of this storage was \$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 supply 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.

Status of Key *Kansas Water Plan* Issues

Progress Report on the Governor's Water Quality Initiative

Margaret Fast, Basin Planning Manager
Kansas Water Office

The Governor's Water Quality Initiative, begun by Governor Bill Graves in October, 1995, is a multi-agency initiative designed to protect and restore the quality of Kansas surface waters. The initiative is incentive-based, relying on local voluntary efforts, enhanced public awareness, technical and financial assistance and appropriate monitoring and evaluation of programs, practices, participation and pollutants. State agencies cooperating in the effort are the Kansas Department of Agriculture (KDA), Kansas Department of Health and Environment (KDHE), State Conservation Commission (SCC), Kansas Department of Wildlife and Parks (KDWP), Kansas Water Office (KWO) and Kansas State University (KSU). From the start, state agencies involved in the program have made it a top priority to work together in a cooperative and coordinated fashion.

The pilot basin for the effort is the Kansas-Lower Republican (KLR) Basin in Northeast Kansas. The focus in the KLR Basin is on three major pollutants: sediment, the crop herbicide atrazine and fecal coliform bacteria found in human and animal waste. Prevention and remediation efforts are targeted to concentrate resources on the three priority pollutants and within those geographic areas which are producing disproportionate loads of these pollutants. Water quality data indicate that the Delaware River, Big Blue River and the Kansas River mainstem corridor (Junction City to Kansas City) contribute the highest levels of contaminants. Additional water quality data and land use information was used to further target efforts into the Black Vermillion and the Grasshopper Creek watersheds.

From January, 1996 through December, 1998, KDHE conducted bi-weekly sampling at 7 new sites in the Grasshopper Creek, 8 sites in the Black Vermillion watersheds and at Kansas River bridges between Junction City and Kansas City. The KDWP conducted biological monitoring for three years at 45

sites. KSU is still sampling during runoff events. Monitoring of flow is also being conducted.

A Kansas Cropping Practices Survey was completed by the Kansas Corn Growers and Grain Sorghum Producers Associations and their counterparts in Nebraska, Kansas State University, University of Nebraska, the Kansas and Nebraska Departments of Agriculture, Kansas and Nebraska Ag Statistics, National Ag Statistics and the Environmental Protection Agency. It inventoried the number of acres planted, tillage practices, and the amount of pesticide and fertilizer used. The inventory will be used by farmers for information and technical assistance and as a baseline for measuring progress.

Technical And Financial Assistance

Both technical and financial assistance is made available to property owners. The main instrument for implementation comes from the State Water Plan Fund, and whenever possible, State funds are used to leverage federal and private funding for activities that

will achieve the goals of pollution reduction. Some highlights of assistance are:

1. Buffer Initiative focused in the Black Vermillion and Grasshopper Creek watersheds provides supplemental funding for NRCS Conservation Reserve Program contracts for the installation of riparian buffer strips.
2. Mission Lake and Atchison County Lake - visited one on one with farmers on atrazine Best Management Practices - \$5.00 per acre incentive to install - Mission Lake complete, Atchison winding up this year.
3. Urban water quality protection in Baldwin Creek in Douglas County (developed a model to predict changes as urban development occurs) and Wanamaker Corridor in Topeka (identification of impact of urban development on water quality; includes the feasibility of constructed wetland).
4. Environmental Quality Incentive Program projects in Black Vermillion, Upper Delaware, Little Delaware-Mission Creek and Mill Creek.
5. Horseshoe Creek Watershed District to incorporate water quality protection measures into the general plan.
6. Targeting of SCC Water Resource Cost Share, Nonpoint Source and Riparian and Wetland program funds to the KLR Basin.
7. KDHE 319 projects targeted to priority in the KLR Basin.
8. Teacher education through Kansas Geographic Alliance and Kansas Association of Conservation and Environmental Education in the KLR.
9. Trees for Clean Water - promotion project designed to educate and inform landowners of the important role trees play in maintaining healthy and stable riparian areas and the programs available to assist in tree planting projects.

Current discussion is on determining what level of maintenance is required in the Kansas Lower Republican Basin and what efforts could be enhanced in another basin.

Status of Key *Kansas Water Plan* Issues

Changes in Kansas Water Quality Management

Tom Stiles

Kansas Department of Health and Environment

Recent litigation against the U.S. Environmental Protection Agency (EPA) has resulted in a court settlement regarding certain aspects of the Clean Water Act. Kansas, having primacy on the implementation of the Act within the State and having intervened in the litigation, is charged with the responsibility of submitting an updated Continuing Planning Process (CPP) to EPA by the end of this calendar year. Furthermore, the court decree establishes an eight-year schedule for the State to establish Total Maximum Daily Loads (TMDLs) on all stream segments listed as water quality impaired, relative to the beneficial uses, designated for those segments. The Department is seeking to use the *Kansas Water Plan* water planning process and the Basin Advisory Committees to help carry out its responsibilities.

The *Kansas Water Plan* has always highlighted water quality as a principal component in managing the State's water resources. The Water Resources Planning Act calls for formulation of the *Kansas Water Plan* to consider: "the safeguards to public health, aquatic and animal life established by K.S.A. 65-161 to K.S.A. 65-171t, . . . , and the Kansas Water Quality Management Plan approved and adopted as provided by chapter 351 of the 1979 Session Laws"; [K.S.A. 82a-907(c)].

The same Act declares as policy: "the maintenance of the surface waters of the state within the water quality standards adopted by the secretary of health and environment as provided by K.S.A. 65-164 to 65-171t, . . ." [K.S.A. 82a-928(j)] in order to achieve the long range goal of "the protection and the improvement of the quality of the water supplies of the state"; [K.S.A. 82a-927(c)].

The statutory references cited within those considerations, goals and policies empower the secretary of health and environment to establish water quality standards for the waters of the State to protect their beneficial uses. In many ways, those water quality standards (the subject of the recent Surface Water Quality Commission and undergoing the triennial review required by the Clean Water Act) establish the water quality goals of the State. The *Kansas Water Plan* has anticipated that policies and programs which seek to achieve such goals would undertake the path of the water planning process, which, in its simplest form, can be described as: **Plan, Implement, Operate and Evaluate with a feedback loop** from the evaluation phase to the planning phase.

Continuing Planning Process (CPP)

In 1972, Section 303 of the Clean Water Act, dealing with water quality standards and implementation plans, called for each state to have a continuing planning process. Such a process was to result in plans related to certain aspects of water

quality. Subsequent federal regulations interpreting the statute called for nine processes to be described within each state's CPP:

1. Developing effluent limitations and compliance schedules related to achievement of water quality standards.
2. Incorporating elements of any applicable area wide waste treatment plans (208 plans) or applicable basin plans (209 plans).
3. Developing Total Maximum Daily Loads and individual water quality based effluent limitations.
4. Updating and maintaining Water Quality Management (WQM) Plans.
5. Assuring adequate authority for intergovernmental cooperation in implementing the State WQM Program.
6. Establishing and assuring adequate implementation of new or revised water quality standards.
7. Assuring adequate controls over disposition of all residual waste from any water treatment processing.
8. Developing an inventory and ranking, in order of priority of needs for construction of wastewater treatment works.

9. Determining the priority of permit issuance.

The Regional Administrator of EPA is to review and approve the State CPP from time to time. Kansas submitted a CPP in 1976. EPA never acted upon it, thus it became an issue in the recent litigation. Kansas also conducted 208 planning in the 1970's, developed its NPDES Permit Program, submitted and revised a Water Quality Management Plan in 1979 and 1984 and developed a Revolving Loan Program for wastewater plant construction as federal grants for that activity disappeared.

The Department has conducted its triennial review of the 1994 water quality standards, including consideration of the recommendations of the Surface Water Quality Commission. The Department has drafted a revision of the water quality standards, which was released for public comment in December 1998, as required by House Bill 2368. These revised standards need to be in effect by June 30, 1999, otherwise they will revert to the water quality standards of 1994. Associated with the issue of water quality standards are the underlying designated uses assigned to the waters of the State. Changes to those designations are made through a Use Attainability Analysis (UAA). The Surface Water Quality Commission made a point of recommending that the Basin Advisory Committees assist the Department in examining the designated uses of streams within their basin. The Kansas Water Office is to develop a stakeholder participation process for conducting and evaluating use attainability analyses.

The Department has also developed TMDLs in compliance with the schedule laid out by the court decree. The CPP is to clearly describe the process of identifying water quality limited stream segments, their associated TMDLs and allocations of loads, monitoring and analysis requirements, priority ranking, submittal to EPA, incorporation of such loads in the State Water Quality Management Plan and NPDES Permits and public and stakeholder participation.

The processes for establishing water quality standards and TMDLs predominated the CPP document submitted in December, 1998 to EPA. The Department also feels that the ultimate

development of nine processes dealing with aspects of water quality is counterproductive and considerable use of the existing state water planning process should be employed by the CPP, particularly to provide forums for public and stakeholder participation.

Total Maximum Daily Loads (TMDLs)

In its simplest form, a TMDL is the maximum amount of pollution a water body can receive without violating water quality standards.

TMDLs are to be established where technology-based limitations, effluent limitations and best management practices are not stringent enough to achieve the water quality standards applicable to given streams. Under state management of water quality, surface waters have certain uses designated for them (contact and non-contact recreation, aquatic life support, domestic water supply, food procurement,

etc.). The water quality standards which are applicable to a given water body depend upon which designated uses apply to that water body. Water quality monitoring assesses the level of pollutants present in the water against the applicable standards. If such assessment shows consistent nonachievement of the standards, the water is deemed water quality impaired relative to its designated uses. In this case, a water body may be a stream, lake, pond or wetland (except private ponds).

Under the Clean Water Act, beginning in 1992, the State has had to list such segments every two years. This "303(d) list" is actually a priority list identifying those waters bodies which are not meeting water quality standards, setting in motion, the need to establish maximum loads to limit the pollution entering the water. The State has never established such TMDLs, hence, the recent litigation. Since pollution can arrive in a water body via point sources and non-point sources, the TMDL process also allocates the maximum load among those sources influencing quality in the water. Under the court decree and the current 303(d) list, Kansas will be establishing TMDLs on stream segments and lakes, either in or on an individual basis or within the context of a watershed. **The court decree outlines the eight-year schedule of accomplishing this task on a basin scale, beginning with the Kansas-**

The development and implementation of TMDLs will also work toward the revised Water Quality Protection goal recommended by the Kansas Water Office which seeks to increase the percent of water bodies in the state supporting their designated uses over the next decade.

Lower Republican Basin (to be submitted by June 30, 1999). After that, the schedule calls for two basins to be done in the next year, one basin in the following year, then two basins, and so forth until all twelve basins are completed by 2006. The Department currently plans on establishing TMDLs in the Upper and Lower Arkansas Basins in 2000 and likely the Marais des Cygnes Basin in 2001. There is a possibility of trying to accelerate the schedule if the process allows and complete the Cimarron in 2000 as well and perhaps the Missouri in 2001.

Implications

Besides the obvious consequence of complying with the court decree, there are several implications of establishing these TMDLs. TMDLs may be viewed as quantitative water quality objectives to achieve the goals expressed in the Water Resources Planning Act and water quality standards. The development and implementation of TMDLs will also work toward the revised Water Quality Protection goal recommended by the Kansas Water Office which seeks to increase the percent of water bodies in the state supporting their designated uses over the next decade.

Implementation of TMDLs also provides a means of further targeting resources to waters of highest priority. These implications will influence future direction of *Kansas Water Plan* activities, notably Basin Planning and the Annual Implementation Process, directing State Water Plan Funds to those locations and practices which will best achieve the TMDLs.

The Department viewed the submittal of TMDLs to EPA as incomplete if some plans for implementation were not incorporated as well. Such plans will fully recognize the existing efforts underway under the guise of water quality protection and improvement and will reference current agency programs and authorities, including those of the *Kansas Water Plan*. Follow up monitoring is also required as a means to evaluate the long term achievement of the TMDLs, and by extension, water quality standards and designated uses of the waters of the State.

BACs and the Role of the Water Planning Process

The Department has briefed the Basin Advisory Committees on these developments and discussed the roles of the committees in the context of water quality standards, Use Attainability Analysis and TMDLs applicable to their basins as well as how these activities might fit in the bigger picture of the water planning process.

Relative to water quality standards, briefings were made by the Department to each of the BACs in January, 1999 and will be made to the

KWA at their January meetings. Discussion of designated uses of streams, use attainability analyses, BAC and stakeholder participation and possible revision in uses for streams within their basins is expected to be an ongoing part of the process. The Kansas Water Office is inclined to use its water planning process to engage stakeholders in discussions on designated use issues on specific water bodies over time.

Specific briefings on TMDLs will be made to the committees whose basins are scheduled for TMDL development. The KLR BAC, being the first to engage in the TMDL process, has accepted the challenge of assisting the Department in that endeavor. The BAC did note that the detailed and complex nature of the TMDL issue will require additional meetings beyond those scheduled under the normal water planning process. **The first of these meeting was on December 3, 1998, in Manhattan. As the TMDL process moves to other basins, the respective BACs can expect to conduct additional meetings beyond the typical schedule.**

It is anticipated that more detail will be provided with each meeting. The winter meetings will likely describe the scope of defining the basin TMDLs in terms of pollutants and impaired water bodies within the basin. Meetings in the spring will be more detailed regarding the actual TMDL values and possible allocations between point and non-point sources, as well as probable implementation actions. The June meeting provides an opportunity for the BAC to make final comments regarding the TMDLs for its basin prior to KDHE submitting them to EPA. The public meetings and hearings held under the *Kansas Water Plan* will also be used as public forums to the maximum extent possible. Additionally, basin specific forums, following the format of last year's Vision Summit, are anticipated to be held in the spring in those basins where TMDL work is underway.

The Department is looking forward to working with the Kansas Water Office, the Kansas Water Authority and the Basin Advisory Committees through the water planning process to aid in the establishment of these goals of water quality management. At their October 1998, meeting, the Kansas Water Authority was briefed on these matters and sought KWA endorsement of the concepts and approach the Department has chosen to take in water quality protection. The comments of the Authority were incorporated in the Continuing Planning Process document submitted to EPA in December.

Status of Key *Kansas Water Plan* Issues

Kansas Water Plan Objectives for the year 2010

Kent Lamb, Chairman
Kansas Water Authority

Introduction

In November 1997 Governor Bill Graves sponsored "The Water 2010: A *Kansas Water Plan* Vision Summit." This Vision Summit solicited input from interested parties to determine the priority needs and direction the *Kansas Water Plan* should address and achieve by the year 2010. The Vision Summit affirmed the value of the state water planning process and the key role of public participation within the process.

On January 23, 1998 the Kansas Water Authority submitted a "Report on Recommended Direction of Activities Under the *Kansas Water Plan*" to the Kansas Legislature. This report summarized the input received from the Vision Summit and presented preliminary goals for the *Kansas Water Plan* for the year 2010.

The Vision Summit and subsequent report served as the framework for development of the *Kansas Water Plan* Objectives. They also helped focus future state water planning activities.

KANSAS WATER PLAN OBJECTIVES

The *Kansas Water Plan* objectives listed below were approved by the Kansas Water Authority on October 30, 1998, after extensive public input.

These objectives were developed to define targets to quantify achievements of the *Kansas Water Plan* long-range goals contained in K.S.A. 82a-927. These objectives may periodically be revised through the state water planning process as new information becomes available in future years.

These objectives will be used as guidance:

- For development of measurable objectives for each basin.
- For a review of the *Kansas Water Plan* to identify and clarify priority issues.
- For evaluation of the condition of the water resources of the State and evaluation of the effectiveness of water programs.

PUBLIC WATER SUPPLY

- By 2010, ensure that sufficient surface water storage is available to meet projected year 2040 public water supply needs.
- By 2010, over 95 percent of public water suppliers dependent upon surface water supplies and alluvial aquifers shall have a

source of supply sufficient to meet their needs during a drought having a 2 percent chance of occurrence.

- By 2010, ensure that all public water suppliers have adequate water treatment, storage and distribution systems and the managerial, operational and financial capability to meet Safe Drinking Water Act regulations.

WATER CONSERVATION

- By 2010, reduce the number of public water suppliers with excessive "unaccounted for" water by first targeting those with 30 percent or more.
- By 2010, reduce the number of irrigation points of diversion for which the acre feet per acre (AF/A) water use exceeds the respective regional AF/A standard (1.0 AF/A in eastern Kansas, 1.5 AF/A in central Kansas, 2.0 AF/A in western Kansas) and those that overpump the amount authorized by their water rights.

WATER RIGHT MANAGEMENT

- By 2010, reduce water level decline rates within the Ogallala Aquifer and implement enhanced water management in targeted areas.

WATER QUALITY PROTECTION

- By 2010, significantly increase the percentage of stream miles and lake acres as recommended by the basin advisory committees which fully support their designated uses as identified in the Kansas Surface Water Quality Standards.

WATER QUALITY REMEDIATION

- By 2010, significantly reduce the percentage of monitoring network wells (all networks) contaminated by nitrates, chlorides, sulfates or volatile organic chemicals caused by human activity.

FLOOD MANAGEMENT

- By 2010, reduce the risk of damage from floods within identified priority communities or areas.

WETLAND AND RIPARIAN MANAGEMENT

- By 2010, maintain, enhance or restore priority wetlands and riparian areas.

RECREATION

- By 2010, increase recreational opportunities at public lakes and streams.

DATA AND RESEARCH

- By 2010, target data collection, research projects, and information sharing activities to address specific water resource issues as identified in the Kansas water planning process and to support and guide State water resource program operations.

PUBLIC INFORMATION AND EDUCATION

- By 2010, focus public information dissemination activities to provide current and reliable information on the status of water resources in Kansas.
 - By 2010, provide educational activities to ensure that all Kansans have the knowledge necessary to understand the hydrologic cycle and to have an appreciation for demands and influences upon the State's water resources.
-

Fiscal Year 2000 Water Resources Planning Activities

Addressing Future Kansas Water Issues

Clark Duffy, Assistant Director
Kansas Water Office

I N T R O D U C T I O N

The following are highlighted *Kansas Water Plan* activities for FY 2000. Governor Graves' Vision Summit and the approval of the 2010 Objectives helped focus these future state water planning activities. Those sections of the *Kansas Water Plan* approved by the Kansas Water Authority for FY 2000 will be presented to the Governor and 2000 Legislature for implementation beginning in FY 2001. **Legislative and public comment on these items is welcomed and encouraged.**

Comprehensive Review of Policy Sections

A review of all policy sections of the *Kansas Water Plan* was initiated. The *Kansas Water Plan* Objectives will serve as guidance to identify and clarify priority issues in the existing water plan. This effort should result in a better understanding of the *Kansas Water Plan* and the actions necessary to implement the plan.

Comprehensive Review of Basin Sections

A review of all 12 basin sections was initiated. The year 2010 *Kansas Water Plan* Objectives will serve as guidance to basin advisory committees in the development of basin specific objectives. All basin subsections will then be reviewed for the identification and clarification of priority issues. This action should result in a better understanding of the priority issues in the basin and the actions necessary to address those issues through the state water planning process.

Development of an evaluation subsection

Development of a *Kansas Water Plan* Evaluation subsection is considered unnecessary since evaluation primarily involves methodology rather than policy. The immediate focus of the Office's Conservation and Evaluation Unit will be to redirect the Basin Assessment Project to focus on water resources conditions that pertain to the newly approved Year 2010 *Kansas Water Plan* Objectives. Specific resource conditions will be selected and work will proceed simultaneously with all 12 river basins. Some initial results should be available by Summer 1999. The assessment of water resource conditions will help the water-related agencies identify programs that are candidates for evaluation. The methodology for conducting program evaluations will be developed in close coordination with the water-related state agencies.

Potential New Subsection on Water Quality

The highest priority issue identified at the Vision Summit is related to **water quality**. The Kansas Department of Health and Environment has developed a "continuing planning process" as required by the Clean Water Act. The Kansas Water Office and Kansas Department of Health and Environment will work on a collaborative effort to ensure the public fully participates in the implementation of the requirements of the Clean Water Act, including water quality standards, designated uses, total maximum daily loads and revisions to the State Water Quality Management Plan. This effort will result in the development of a policy subsection for the KLR Basin in July, 1999. Similar basin subsections will also be developed in the future.

Potential Subsection on Public Water Supplies

The Vision Summit identified a number of inter-related issues regarding public water supplies. The Kansas Water Office has completed **population and water demand projections** to the year 2040 for all public water suppliers in the state. In addition, a pilot **regional water supply strategy** has been developed for the Walnut Basin. This pilot strategy has identified infrastructure improvement and drought vulnerability as two frequent needs. The Office is currently conducting a regional water supply analysis in northeast Kansas identified as the **Pikitanoi Project**. The Kansas Water Office will complete 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 subsection of the Management Section of the *Kansas Water Plan* on public water supply issues.

Implementation of Public Education, Information and Water Based Recreation Subsections

The Kansas Water Authority adopted three new subsections of the *Kansas Water Plan* for FY 1999. The Kansas Water Office will provide the leadership to coordinate the implementation of these subsections of the *Kansas Water Plan* during the FY 2000 planning cycle.

Determination of Priority Water Issues

Kansas law declares the Kansas Water Office shall "develop a state plan of water resources, management, conservation and development for water planning areas..." (K.S.A. 74-2608b). The water resource plans developed by the Office are in response to problems, issues and concerns identified from a broad spectrum of sources - groups, and individuals - all in some way involved or associated with the planning and management of the State's water and related land resources. Thus it was that following the 1997 Kansas Water Plan Vision Summit the Office identified a rather extensive list of water-related concerns that needed attention.

The Office has reviewed this list and has committed to analyzing each of them as part of its forthcoming comprehensive review of the *Kansas Water Plan*. This review will be carried out according to the established protocols of the state water planning process. It is expected this process will rank-order the issues by priority and assign them to an appropriate planning cycle. They are grouped here under the following four categories (*Agriculture, Public Water Supply, Economic Development, and Environmental Protection*) merely for organizational purposes.

The Issues

Agriculture

- Agriculture's emphasis must be on water conservation.
- As a result of the 1996 Farm Bill, increased focus should be on developing best management practices.
- Kansas must avoid divisions (East/West, Urban/Rural) and litigation.
- Farmers must consider diversification and de-intensification.
- Education is extremely important especially as it relates to best farm practices.
- More research needs to be completed before determining which policy options to take.
- Research should also address cost/benefits of proposed policies.
- Local and regional solutions are preferable to state and federal regulations.
- Incentives work better than regulations.
- Dispense with "use it or lose it" administration of water rights.

Public Water Supply

- Attention must be given to modern economics and management practices to insure safe drinking water.
- Banking of water rights and surface water storage are important management concepts.

- Needs of improvements in rural water districts far outstrip the available money.

- Reclamation and reuse of water using technology to reclaim wastewater needs to be considered as an alternative supply.

- Desalination of marginal water (Dakota Aquifer) and the use of "gray" water should also be considered as water source alternatives.

- Water supply storage alternatives, transportation alternatives, treated water pricing policies, the use of water demonstration projects, and conservation alternatives need to be developed.

- Mismatches of water needs and availability should be resolvable through a process that redistributes or reallocates water rights to those in need of greater water supply allocations from those holding excess allocations.

Economic Development

- The need to build a consensus even though this consensus may be difficult to erect.

- More regulation on water use will not be successful unless it is supported by economic incentives.

- Eliminate the "use it or lose it" regulations.

- Determine the role of water quality in economic development.

- Educate the public.

- Emphasize returning water to systems in good condition.

Environmental Protection

- Nonpoint source pollution will continue to be one of the most serious pollution problems.

- Future water plans must provide comprehensive and long-term (25 to 100 year) strategies to effectively address non point source pollution.

- Education about water issues is an extremely important task if we are going to resolve many of the water issues.

- Accurate data and information analysis are important in creating water policies.

- The best policymaking and enforcement will likely come from local, state, and federal agencies equally.

Legal structures, non-point source pollution, and the need for a consensus on policy direction were the most frequently discussed issues. Even though the water summit was a good start at forming a consensus about water issues, more consensus building and goal setting is needed.

Sources For Additional State Water Resources Information

KWO is Great Source for Locating Kansas Water Resources Information

John Gottschamer, Public Information Program Coordinator
Kansas Water Office

An important function of the water and related land resources planning function of the Office is providing information and education opportunities to the public about Kansas' water resources. The Office holds several public meetings and hearings yearly on proposed water planning issues, and seeks opportunities whenever possible, to inform and to educate the public about our State's valuable water resources.

The Office utilizes several types of media to communicate with its various "target" audiences. Here's three of our most popular:

Legislators, you (and others) looking for almost any kind of water resources information, can get help by calling the KWO toll free at . . .

1-888-KAN-WATER

Give the friendly resource person an idea of your information needs, your name and where you can be reached and with one phone call we can almost guarantee that you'll get a prompt response. "One call does it all."

**KWO web site at
kwo.org**

The KWO maintains a web site that offers lots of interesting and valuable information that can be quickly downloaded to your site.

We post the latest news about current water resources planning activities, including everything you need to know about basin advisory committee meetings, and the deliberations of the Kansas Water Authority.

The HydroGRAM

In-depth articles about the State's water resources, studies, State programs, and notices of meetings and hearings regarding the water planning process are published quarterly in the *HydroGRAM*, the official quarterly journal of the Kansas Water Office. There's *no charge* to subscribe. All we need is your name and address on our mailing list.

Sources For Additional State Water Resources Information

Here's a partial list of sources of information that we used to prepare this special legislative edition of the *HydroGRAM*. If you're looking for more details about what you've read so far or just want to learn more, the KWO staff highly recommends checking this list first. If you can't find what you're looking for, don't forget how easy it is to contact us at one of these numbers:

- Outside of Topeka (and from five state's around Kansas) 1-888-KAN-WATER
- KWO Headquarters 1-785-296-3185
- FAX 1-785-296-0878

- People Policies and Programs* (brochure), KWO
- Geographic Information Systems*, KWO
- Kansas Population and Water Supply Demand Projections*, KWO
- Status of Kansas Interstate Lawsuits*, Kansas Department of Agriculture, Division of Water Resources
- Kansas Public Water Supply Issues*, KWO
- Report to the Governor and 1999 Legislature on Recommendations to Implement the Kansas Water Plan for FY 2000*, Kansas Water Authority
- State and Federal Water Programs* (available mid-February)

Other Helpful Information

The Kansas Water Authority

The Kansas Water Authority is within and a part of the Kansas Water Office. It is responsible for advising the Governor, the Legislature, and the Director of the Kansas Water Office on water policy issues, for approving the *Kansas Water Plan* and revisions thereto, for approving water storage sales, federal contracts, administrative regulations, and legislation proposed by the Kansas Water Office.

	Occupation	Representing	Term Expires
Kent Lamb, Chairman RR 1, Box 69 Macksville, Kansas 67557 (316) 348-2315	Farmer/Irrigator	Governor	Pleasure
Gerald Blain 1815 W. Pine Wichita, Kansas 67203 (316) 268-4965	Superintendent, City of Wichita	GMDs #2 & #5	May 1, 2002
Tom Bogner 10055 Eagle Road Dodge City, Kansas 67801 (316) 225-4085 FAX (316) 225-1748	Farmer/Irrigator	GMDs #1, #3, & #4	May 1, 1999
Roger L. Boyd P.O. Box 65 Baldwin City, Kansas 66006 (785) 594-3172 (H) (785) 594-6451 (W) ext 547 (785) 594-6721 (FAX)	Professor of Biology Baker University	Environ./Conservation	Jan. 15, 2001
William R. Hamm P.O. Box 884 Newton, Kansas 67114-0884 (316) 284-0707	Insurance/Investments	State Association of KS Watersheds	May 1, 2002
Don Paxson P.O. Box 487 Penokee, Kansas 67659 (785) 421-2364	Businessman/Farmer	KS Association of Conservation Dists.	May 1, 2000
Richard A. Porter 2429 Murray Court El Dorado, KS 67042 (316) 321-9100 (W)	Dir. of Public Utilities City of El Dorado	League of Kansas Municipalities	Jan. 15, 2001
Gordon Schmidt 10320 N. Wheat State Rd. Inman, KS 67546 (316) 543-2628	Farmer/Irrigator	Public	Aug. 31, 2000

David Mueller Route 2, Box 2 Tampa, Kansas 67483 (785) 965-2628	Farmer/Stockman	Kansas Rural Water Association	May 1, 2000
John Spurling RR 5, Box 139 Fort Scott, Kansas 66701 (316) 362-4232	Newspaperman/Farmer	Speaker of the House	July 1, 1997
Sharon Steele 1045 Villa Vista Drive Colby, Kansas 67701 (785) 462-2558	Farmer/Irrigator	Public	Jan. 15, 2000
Paul Tobia P.O. Box 12283 Wichita, Kansas 67277 (316) 529-7463	Plant Manager Vulcan Chemicals	KS Assn. of Commerce & Industry	May 1, 1999
Dick Weisser 20004 Riggs Stillwell, Kansas 66085 (913) 681-2697	Pres., South JO County Fire & Rescue Dept.	President of the Senate	July 1, 1999

Alice Devine Secretary, Kansas Department of Agriculture 901 S.W. Kansas Ave. Topeka, Kansas 66612 (785) 296-3558	David L. Pope Chief Engineer, Division of Water Resources Kansas Department of Agriculture 901 S.W. Kansas Ave. Topeka, Kansas 66612 (785) 296-3717
Dr. Lee Gerhard Director, Kansas Geological Survey 1930 Constant Ave., University of Kansas Lawrence, Kansas 66045 (785) 864-3965	Gary Sherrer Lt. Governor Statehouse -- 2nd Floor Topeka, Kansas 66612 (785) 296-2213
Dr. Ron Hammerschmidt Director, Division of Environment Kansas Department of Health and Environment Topeka, Kansas 66620 (785) 296-1535	Tracy Streeter Executive Director, State Conservation Commission 109 S.W. 9th St., Suite 500 Topeka, Kansas 66612 (785) 296-3600
Dr. Marc Johnson Director, Agricultural Experiment Station 113 Waters Hall, Kansas State University Manhattan, Kansas 66506 (785) 532-7137	Steve Williams Secretary, Kansas Department of Wildlife and Parks 900 S.W. Jackson, Suite 502 Topeka, Kansas 66612 (785) 296-2281
Al LeDoux Director, Kansas Water Office 109 S.W. 9th St., Suite 300 Topeka, Kansas 66612 (785) 296-3185	John Wine Chair, Kansas Corporation Commission 1500 S.W. Arrowhead Rd. Topeka, Kansas 66604 (785) 271-3100

Basin Advisory Committee Chairpersons

Basin Advisory Committees (BACs) provide the working link between the Kansas Water Authority, Kansas Water Office, and the public in formulating and implementing the Kansas Water Plan. There is an 11-member BAC in each of the state's 12 major river basins. Members are volunteers and serve a four-year term without compensation. Listed in the table below are the Chairpersons for each BAC, their address and telephone number.

Name	Address	Telephone
Donald Peterson Lower Arkansas Basin Advisory Committee	424 N. Main P.O. Box 338 Macksville, KS 67557-0338	(316) 348-2385
Clark D. Rusco Upper Arkansas Basin Advisory Committee	Evans, Bierly, Hutchison & Associates 1105 Williams Great Bend, KS 67530-4468	(316) 793-8411 (316) 793-8413 (FAX)
Gloria A. McKinney Cimarron Basin Advisory Committee	P.O. Box 205 Englewood, KS 67840-0205	(316)539-2977
R.E. Pelton Kansas Lower Republican Basin Advisory Committee	212 SW 7th Street Topeka, KS 66603-3717	(785) 232-8081 (H) (785) 232-9947 (W) (785) 232-1922 (FAX)
T.J. Dickerson Marais des Cygnes Basin Advisory Committee	RR 3, Box 53 Ft. Scott, KS 66701-9203	(316) 223-0145
Julian L. Geiger Missouri Basin Advisory Committee	RR 1, Box 2 Robinson, KS 66532-970	(785) 544-6860
James R. Triplett Neosho Basin Advisory Committee	Dept. of Biology Pittsburg State University 1701 S. Broadway St. Pittsburg, KS 66762-5889	(316) 235-4730 (W) (316) 235-4194 (FAX)
Norman Nelson Upper Republican Basin Advisory Committee	505 Sunset Dr. Norton, KS 67654-1541	(785) 877-5365 (H) (785) 877-3341 (W) (785) 877-5808 (FAX)
David W. Pierson Smoky Hill-Saline Basin Advisory Committee	2910 Country Lane Hays, KS 67601-1710	(785) 625-6937
Francis Sweat Solomon Basin Advisory Committee	RR 1, Box 25 Cedar, KS 67628-9717	(785) 476-2275
Al Goering Verdigris Basin Advisory Committee	P.O. Box 331 Neodesha, KS 66757-0331	(316) 325-2125
James Milton Fry Walnut Basin Advisory Committee	2032 Chelsa Dr. El Dorado, KS 67042-4005	(316) 321-3168

Sources for Additional State Water Resources Information



Kansas Geographic Information Systems Initiative

Rick Miller, State GIS Coordinator
Kansas Water Office

Geographic Information Systems (GIS) refer to a computer technology that utilizes geographic location as the organizing theme around which data and information can be organized, linked, and integrated. GIS provides the capacity to analyze, model, and display multiple sets of information using computerized maps as the primary form of system output. A brief list of GIS applications in Kansas includes: natural resources management and assessment; property appraisal, legislative redistricting, transportation planning, infrastructure management, public works, urban planning, school bus routing, real estate marketing and sales, and economic development.

The Kansas GIS Initiative was established in 1989 to coordinate the development of GIS technology in the State. Governor Hayden's executive directive created the Kansas GIS Policy Board and placed administrative responsibility for this activity within the Kansas Water Office. Governor Graves' Executive Order #95-180 re-affirmed support for the GIS Policy Board while re-organizing Board membership to include greater representation from local government. The Kansas GIS Policy Board includes twenty-two members drawn from state agencies, local government, Regents' institutions, federal agencies, and the private sector.

Governor Graves' executive order directs the Board to maintain a Strategic Management Plan for GIS Technology, and gives the Board the responsibility of developing policies, standards, and strategies that emphasize cooperation and coordination among agencies, organizations, and government entities. Primary goals of the Board are to reduce the redundant development of geographic databases, coordinate multi-organizational and jurisdictional database requirements, and to maximize the value and benefit of GIS technology to the citizens of Kansas. Since 1991, the GIS Policy Board has received fiscal support for its operations through the Kansas Water Plan.

In 1991, the position of State GIS Coordinator was created to provide leadership within the Kansas GIS community and staff support to the Board. The State GIS Coordinator is a staff member of the Kansas Water Office. Since 1991, the Board has also sub-contracted with the Kansas

Geological Survey to house the Data Access and Support Center (DASC), a repository and clearinghouse for the Kansas GIS Core Database, a collection of shared geographic databases.

The DASC provides valuable services to the GIS community by archiving, updating, and distributing geographic databases of common interest. Over the past several years, DASC business has grown dramatically as the adoption of GIS technology has expanded. The number of database files distributed by the DASC has grown from approximately 9,000 in FY95 to over 66,000 in FY98. The DASC Internet web site provides on-line access to archived databases, copies of all Kansas GIS Policy Board, Standards Task Force, and DASC publications, and interactive mapping capabilities for the casual user. Visit the DASC web site at:

<http://gisdasc.kgs.ukans.edu>



Sources for Additional State Water Resources Information

Update on the Status of Kansas Interstate Lawsuits

Don Pitts
Assistant Attorney General

The State of Kansas is currently involved in two interstate lawsuits. The following is an update on the status of these lawsuits.

Kansas v. Nebraska and Colorado, No. 126, Original

On May 26, 1998, the State of Kansas filed a Motion for Leave to File Bill of Complaint, Bill of Complaint, and Brief in Support of Motion for Leave to File Bill of Complaint against the State of Nebraska and the State of Colorado in the United States Supreme Court. Colorado was named as a party because it is a signatory to the Compact, but no relief was requested against the State of Colorado.

Kansas, in its Bill of Complaint, requested the Court to award the State of Kansas all damages and other relief which were appropriate to fully remedy the injuries suffered by the State of Kansas by reason of the State of Nebraska's past and continuing violations of the Republican River Compact, and to issue a decree commanding the State of Nebraska to deliver the waters of the Republican River in accordance with the provisions of the Republican River Compact in the future.

In July 1998, the State of Nebraska filed its Brief in Reply. In August 1998, Kansas filed its reply. In August 1998, Nebraska also filed a Motion for Leave to File Sur-Reply to Kansas' Reply to Nebraska's Brief in Opposition and Sur-Reply. In September, Kansas filed its Response to Nebraska's Motion for Leave to File Sur-Reply. On October 5, 1998, the United States Supreme Court issued an Order which did not rule on Kansas' motion for leave to file, nor any other motion before it, but rather simply invited, "The Solicitor General ... to file a Brief expressing the views of the United States."

In late December 1998 the United States filed a brief, as Amicus Curiae, concluding that, "The Motion of the State of Kansas for leave to file a complaint should be granted." However, it also concluded that, "The Court may wish to grant the State of Nebraska leave to file a motion to dismiss" in the nature of a motion under Rule 12(b)(6), limited to the question whether, as a matter of law, the Republican River Compact limits Nebraska's right to consume groundwater. It is expected that the Court will rule on Kansas' motion for leave to file on or about January 15, 1999.

Kansas v. Colorado, No. 105, Original

This case was filed by the State of Kansas on December 16, 1985 against the State of Colorado in the original jurisdiction of the United States Supreme Court to enforce the terms of the Arkansas River Compact.

On May 15, 1995, in an opinion by Chief Justice Rehnquist, the United States Supreme Court unanimously affirmed the Special Master's Final Report, which held that the State of Colorado was liable for violating Article IV-D of the Arkansas River Compact by allowing increased post-compact well pumping in Colorado. The Court has since ruled that Colorado has depleted the usable state line flows of the Arkansas River, in violation of the Arkansas River Compact, by 420,070 acre feet during the period 1950 through 1994.

An additional trial segment was held in May, 1998 on the amount of Colorado depletions to usable state line flow during the period 1995 through 1996. No decision has yet been issued by the Special Master on that issue.

Some of the issues that remain to be decided include:

1. Whether Colorado will repay Kansas for past damages in water or in money;
2. Whether Colorado owes Kansas past or future interest on water or money damages; and
3. Whether Colorado regulations and actions are sufficient to prevent future compact violations by Colorado.

Sources for Additional State Water Resources Information

Kansas Population and Water Demand Projections

Darrel Eklund, Evaluation and Conservation Manager
Kansas Water Office

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.

Results

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 six-county area in Eastern Kansas (Douglas, Johnson, Leavenworth, Miami, Shawnee and Wyandotte) is projected to increase 71% by 2040, from 847,680 in 1990 to 1,450,527 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 Data

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.

Testimony
of

Dale Lambley
Kansas Department of Agriculture

Before the
House Environment Committee

January 19, 1999

*House Environment
1-19-99
Attachment 2*

NUTRIENT UTILIZATION PLANNING AND CAFOs

During last session, the Kansas Legislature enacted Sub. H.B. 2950 - generally known as the swine bill. The bill strengthened permitting requirements for confined swine operations and also put into place restrictions on the amount of swine waste which can be applied to farm fields. The permitting of facility sites is overseen by KDHE; however, the Department of Agriculture was assigned the responsibility of overseeing field fertility testing and application of manure as fertilizer.

Both KDHE and KDA have developed the regulations necessary for implementation. Kansas State University, the KDHE swine advisory committee, the Kansas Pork Producers Association and several consultants assisted KDA in the development of the nutrient utilization regulations which went into effect on January 1, 1999. Swine producers having more than 1000 Animal Units of hogs will be entering into a 5 year field fertility planning and manure application schedule. Annual soil testing of fields for nitrogen, phosphorus, chlorides, copper and zinc levels is required. Phosphorus testing is a key to protecting both surface water and groundwater from nutrient enrichment. When phosphorus runoff is limited, losses of nitrogen, zinc, copper and chlorides to either groundwater or surface water are minimal. The swine operations also will be conducting soil profile testing for nitrates.

KDHE employed a consultant to assist in development of a computerized program to be used in maintaining information and issuing CAFO permits. KDA, KSU Cooperative Extension and the Kansas Pork producers will be holding workshops for pork producers in late February and early March in Linn, Garden City, Newton and Seneca. The purpose of these workshops is to help producers learn how to prepare the required nutrient utilization plans. The nutrient plan is a part of the application which will then be submitted to KDHE.

The system KDA will use in processing applications for swine CAFO permits is as follows: 1) producers will submit all information to KDHE District Offices; 2) KDHE will scan in the application and electronically transmit the nutrient utilization plan to KDA for review; 3) following review, KDA will signify approval/denial to KDHE. Electronic handling should reduce errors in handling and speed up the response process.

PESTICIDE MANAGEMENT PLANS

Since 1990, the US Environmental Protection Agency has been developing a new initiative designed to prevent pesticide contamination of the nation's groundwater resources. The EPA's Pesticides and Groundwater Strategy calls for their review of the various pesticides and identification of those that may offer a potential for leaching into groundwater. States would then develop management plans for the pesticides identified by EPA as posing a threat to groundwater. The Pesticide Management Planning (PMP) process would provide each state the opportunity to tailor their pesticide use and groundwater protection measures to fit local conditions.

The first step in the pesticide management program is state development of a generic management plan. The generic plan is the basic framework of the program that would be put into place. It outlines the processes and procedures under which future plans for designated pesticides would be developed. The Kansas Department of Agriculture, as state pesticide lead agency, is charged with development of the generic and any future pesticide specific plans. These state plans require the involvement, assistance and coordination with other entities having water related responsibilities or interests.

The Kansas generic plan has been drafted and submitted it to EPA for review. It strongly emphasizes prevention of water contamination, rather than after-the-fact remediation. EPA comments and general approval of the Kansas generic plan are expected by February 1, 1999. Once that is received, KDA will begin a wider process of education and outreach on this program and ask for advice and suggestions. The Kansas generic plan is a living document. This allows the state to know what EPA is going to require and still incorporate the "better ideas" that people may come up with during public review of the plan. Planner expect to learn a great deal as they develop and implement the first pesticide specific plan, and these experiences can be added.

EPA has indicated that the first group of pesticides for which they might require development of plans are alachlor, atrazine, metolachlor, simazine and cyanazine. Following formal federal notice that a plan was required for use of a pesticide, the state would have 2 years for plan development and implementation.