2-7-89

Approved _____ Date

MINUTES OF THE SENATE COMMITTEE ON WAYS AND MEANS.

The meeting was called to order by SENATOR AUGUST "GUS" BOGINA Chairperson at

11:10 a.m./~~p~~m. on JANUARY 25, 1989 in room 123-S of the Capitol.

All members were present except:

All members present

Committee staff present:
Research Department: Diane Duffy, Kathy Porter
Revisor: Norman Furse
Committee Staff: Judy Bromich, Pam Parker

Conferees appearing before the committee:

The Chairman announced that the subcommittees could start meeting next week except those staffed by Alan Conroy and Karen DeViney. John Baldwin, Chairman, Kansas Water Authority, was the first conferee of the meeting. (Attachment 1)

Stanley C. Grant, Secretary, Department of Health and Environment, appeared next. (Attachment 2) In regard to a question concerning the request for Public Water Supply Protection and Technical Assistance, Dr. Grant stated that technical assistance would be given the smaller public health departments and they would work with them to contract to other groups capable of providing needed service. In the few counties without a county health department, the county commissioners would be consulted.

Kenneth Kern, State Conservation Commission, was the next conferee. His testimony is found on pages five through 8-A in the Overview of Governor Hayden's Recommended Budget for Implementation of the State Water Plan for 1990 dated January 25, 1989. (Attachment 3) In answer to questions, Mr. Kern stated that the plan for municipal water for the city of Jetmore calls for starting to use water in the next 20 years. He stated that they do not have any applications for water on file other than the one from Holton which is scheduled for 1990. He stated that they have prioritized their requests and they did not feel they should request the total $3 million which would fund their projected needs.

Robert Meinen, Secretary, Wildlife and Parks, presented his testimony which is contained on pages nine through 12 of Attachment 3. Chief Engineer David Pope, Board of Agriculture, Division of Water Resources, presented his testimony which is contained on pages 13, 14 and 15 of Attachment 3. Don Steeples, Deputy Director, Kansas Geological Survey distributed and reviewed the Dakota Aquifer Program Summary. (Attachment 4)

The meeting was adjourned at 12:10 p.m.

GUEST LIST

COMMITTEE: SENATE WAYS AND MEANS DATE: 1-25-89

NAME (PLEASE PRINT)	ADDRESS	COMPANY/ORGANIZATION
Thomas L. Huntzinger	Lawrence, Ks. 4821 Quail Ridge Ct	U.S. Geological Survey
JOHN L BALDWIN	2700 R4 Hutchinson	WAter Authority
[illegible]	900 Jackson	Wildlife + Parks
Dennis F. Schmitz	Tecumseh	Water Authority
[illegible] Page	Victoria Ks.	Ks. Wtr. Authority
Kenneth F. Kern	Conservation Commission	Topeka
Dorothy A. Burns	109 SW 9th	Bd. of Agriculture
Stan Grant	Topeka	KDHE
Russell L. Cutes	Ottawa	KWA
Rob Hodges	Topeka	KCCI
Gary K. Hulett	Topeka	KDHE
Al Campbell	Larned	KWA
Lowell Abeldt	Abilene	KWA
Kyle Bauer	Clay Center	KWA
Marvin C Odgers	Sublette	KWA
LARRY PANNING	ELLINWOOD Ks	KWA
Mary Ann Bradford	Topeka	KWO
James Power	"	KDHE
LAWRENCE WETTER	SALINA	USDA Soil Cons. SERVICE
Les Pinkerton	Manhattan	state & Extension Forestry
Leland E. Rolfs	Topeka	KSBA-DWR
Don Steeples	Kansas Geological Survey	Lawrence
Tom McClain	Kansas Geol. Survey	Lawrence
Anne Smith	Topeka	Hein & Ebert — Mesa
Mike Conduff	Manhattan	Ks Wat Auth
Kim Grant	Topeka	KWO
CR Duffy	"	"
[illegible]	Manhattan	K Water Authority
Jerry Duvall	Topeka	Ks Water Office
[illegible]	Manhattan	Ks. Farm Bureau
David L. Pope	Topeka	KWA / DWR / Bd of Agr
WAYNE BOSSERT	BOX 905, COLBY	NWKS GMD 4

GUEST LIST

COMMITTEE: SENATE WAYS AND MEANS DATE: 1-25-89

NAME (PLEASE PRINT)	ADDRESS	COMPANY/ORGANIZATION
M Entrup	Topeka	DOB
Kelly Arnold	Lawrence	City of Lawrence

Testimony Before the Senate Ways and Means Committee and the House Appropriations Committee Re: State Water Plan Funding by John L. Baldwin, Chairman Kansas Water Authority

January 25, 1989

Mr. Chairman and Members of the Committee:

My name is John L. Baldwin, I am Chairman of the Kansas Water Authority. With me today are the members of the Kansas Water Authority. I would ask at this time that they stand and be recognized. Attached to my testimony is the membership list.

I appreciate the opportunity the Chairman has given us to provide you with an overview of the funding necessary to implement the State Water Plan.

Last year bold steps were taken toward implementation of the State Water Plan when the Governor recommended, and the Legislature approved, $4.1 million dollars in funding. These efforts represented a breakthrough in the struggle to secure funding for the plan, which has enjoyed widespread support since it was originally submitted to the Governor and the Legislature in 1985.

The Kansas Water Authority believes water is our most important resource, and that all Kansans share in the responsibility of its proper stewardship. To accomplish the objective of "comprehensive natural resource planning and management," it is imperative that the State Water Plan be fully funded on a continuous basis.

Kansas stands at the threshold of exciting opportunities in the management of the state's water resources. We have reached a crucial stage in the historical evolution of water resource management. We must implement the State Water Plan.

Governor Hayden has recommended a budget and legislative package that, if adopted, would essentially fully implement the State Water Plan for FY 1990. I would now like to call on the head of each agency to provide the committee with an overview of Governor Hayden's recommended budget for implementation of the State Water Plan for fiscal year 1990.

ATTACHMENT 2
SWAM 1-25-89

STATE OF KANSAS

DEPARTMENT OF HEALTH AND ENVIRONMENT
Forbes Field
Topeka, Kansas 66620-0001
Phone (913) 296-1500

Mike Hayden, *Governor*

Stanley C. Grant, Ph.D., *Secretary*
Gary K. Hulett, Ph.D., *Under Secretary*

Testimony Presented to

Senate Ways and Means Committee
and
House Appropriations Committee
by

The Kansas Department of Health and Environment

Background

During the last several years the entire water resources managing community, including the general public, has worked very hard to fulfill the Kansas Water Office's statutory mandate of formulating "a comprehensive state water plan for the management, conservation, and development of the water resources of the state." The annually-updated plan has been partially implemented because of availability of limited funding sources. It is necessary to find a permanent funding source for implementing this vital document.

Since I am in my present cabinet post, I have been afforded a first hand opportunity to observe the effects of the last year's -- and the continuing -- drought on the quality and quantity of our water resources. The increased need for planning and clever management of all our activities which effect the quantity and quality of Kansas waters cannot be over-emphasized and will bring immeasurable fruits to Kansas citizens. Neither adequate water quality protection nor satisfactory water resource management can be carried out without commensurate funding. Some of us remember the drought of the early 1950's and the need for recycling of sewage effluents to supplement water supplies. The mere thoughts of a new drought period underlines the need for further improving our overall resource management. Any action taken to improve our present level of water resource management for continously providing good quality water in adequate quantity requires funding. Therefore, I strongly recommend the establishment of a permanent funding source to annually implement the water plan initiatives.

Governor Hayden's budget recommendtion includes $1,900,000 from specific funding sources and $4,200,000 from unidentified funding sources for natural resources protection and management improvements administered by KDHE. $4.2 million of this $6.2 million natural resources funding initiative would fund water plan

ATTACHMENT 2
SWAM 1-25-89

initiatives as identified by the Water Authority. The recommended $1.9 million represents the continuation of funding the KDHE's environmental remediation program. The specific projects included in Governor Hayden's natural resource investment budget are listed below.

Hazardous Wastes Cleanup - $300,000

This appropriation will be used for cleanups of abandoned hazardous wastes posing a threat to the public health or safety when there is no identifiable responsible party. Similar appropriations have been used for the removal and proper disposal of abandoned barrels of solvents, pesticides, and the restoration of some publicly accessible contaminated sites.

Superfund Site Cleanup State Match - $100,000

This appropriation will be for the Superfund project at Arkansas City to match $900,000 from the federal Superfund to restore to an environmentally-safe and acceptable condition the old abandoned refinery site. No further federal action is possible at this site under the provisions of the CERCLA.

Contamination Cleanup - $1,500,000

This appropriation will be used for continuing the clean up of sites throughout the state that are contaminated with saltwater or other pollutants. The 1989 environmental remediation site lists identifies 489 known contaminated sites. Sites from this list, which are not eligible for federal funding from the Superfund and pose serious public health and safety problems, will be remediated using this appropriation.

The following were included in the list of projects the Governor recommended as additional funding:

Public Water Supply Protection
and Technical Assistance - $1,700,000

This appropriation in line with Governor Hayden's recommendation would provide $1,700,000 for public water supply protection and technical assistance in the way of grants to local communities.

The proposal contains two elements. The first element would provide grants to counties to support local health departments in preparing county-wide environmental protection strategies and implementing approved waste and environmental management programs. The second element requires public water supply systems to renew their operational permits. The funding is to provide technical assistance to communities to develop the permit applications which

will also contain plans to protect the water supply source from contamination.

The concept under the grant program to county health departments envisions the initial two years as a grant allowing the counties to develop all or parts of their waste and environmental management strategies. After the initial two years, the counties would be required to move towards a matching grant arrangement.

The funds would assist the counties in adopting county sanitary codes, subdivision and wastewater plans, solid waste management plans, public water supply protection plans, county-wide water and waste plans; as well as, to undertake hazardous waste planning and nonpoint source pollution planning. The department would be authorized to grant monies to the county health departments based on their applications to carry out any or all of the programs which were made a part of their waste and environmental management strategies.

Environmental Remediation - $1,000,000

This appropriation will provide an additional $1 million dollars for contaminated sites cleanup. These funds are critical to the success of the department's remediation activities. This additional funding will allow timely remediation of contaminated sites resulting in significant cost savings. Delays in addressing these sites will result in higher costs for the ultimate response action.

Nonpoint Source Pollution Control - $1,500,000

Governor Hayden's recommendation for nonpoint source pollution control included this appropriation request to fund four elements of the water plan, as follows:

1. Hillsdale Reservoir Watershed
   Water Quality Management Plan $150,000

   Earlier studies performed by KDHE show any increase in phosphorous loading from municipal and industrial dischargers and surface runoff from agricultural and urbanized areas will significantly accelerate the rate of eutrophication of the lake. The water quality management plan -- proposed to be prepared by one of our university institutions under contractual agreement -- will allocate phosphorous loads among municipal, industrial, and surface water runoff to assure no further deterioration in the present trophic state of the reservoir. Developing the management plan requires surveys of the lake and entire watershed, identification of phosphorous sources, identifying needed pollution control measures, and establishing the necessary local institutional arrangements to implement the plan.

2. Nonpoint Pollution Source Watershed Assessments $ 60,000

Implementation of the nonpoint source program requires development of watershed water quality management plans. The water quality management plan identifies the water quality objectives and pollution control needs of the watershed. The water quality management plan would guide application of federal Soil Conservation Services funds, State Conservation Commission funds, and local funds appropriated for water quality maintenance and improvement. During FY 1990, water quality management plans are scheduled for Doyle Creek, Lake Minola, and Herington Lake watersheds.

3. Nonpoint Pollution Source Basin Planning $ 90,000

Recommendations of the Kansas Water Plan include the preparation of nonpoint pollution source basin water quality management plans for each of the twelve basins. Each basin plan will identify the protection and restoration needs of the basin for each nonpoint pollutant source category. The appropriation will provide funds for six plans and to develop guides for best management practices. Funding for the remaining six basins will be requested in FY 1991.

4. Private Water Well Testing $1,200,000

This appropriation will provide funding for the collection of useful groundwater quality information including limited trend analysis for areas where previous samples had been collected. By design, this study may provide specific water quality affects of irrigation and a decade of farming practices. This proposal consists of three phases. Phase I and Phase II would proceed concurrently.

Phase I: Estimated cost $360,000. Repeat chemical analyses for approximately 1,400 central and western Kansas irrigation wells tested in 1975-1981 by Kansas Geological Survey. These results would be compared to earlier results to detect areas of groundwater quality deterioration. Areas of deteriorating groundwater would be targeted for further testing in Phase III and for study as to the cause of deterioration. Expenditure includes $260,000 for analyzing samples and $100,000 for services, travel, and contract administration.

Phase II: Estimated cost $100,000. Contract with Kansas Geological Survey to select areas for sampling based on vulnerability and likelihood of contamination. Kansas Geological Survey would use the DRASTIC model now being widely used to predict vulnerability and the joint KDHE/KSU Farmstead Well Study to predict likelihood of contamination from farm management practices. Expenditures include $90,000 for service and $10,000 for computer and contract administration.

Phase III: Estimated cost $740,000. Complete chemical analysis of 700 wells (selected from Phase II) for volatile organic compounds, pesticides, radionuclides, inorganic chemistry, and heavy metals. A report would be prepared by the Kansas Geological Survey making recommendations to KDHE of areas where the state should recognize the vulnerability of domestic water supply and encourage owners to seek periodic sampling analysis. This would also have an administrative supervision cost for KDHE.

Conclusion:

The Kansas Department of Health and Environment respectfully requests the funding of Governor Hayden's natural resource initiatives and looks forward to working with local units of government to protect the quality of our environment and manage our water resources.

Presented by:
Stanley C. Grant, Ph.D.
Secretary, Kansas Department of
Health and Environment
January 25, 1989

ATTACHMENT 3
SWAM 1-25-89

Overview of Governor Hayden's Recommended Budget for Implementation of the State Water Plan for 1990

January 25, 1989

ATTACHMENT 3
SWAM 1-25-89

Agency: Kansas Department of Health and Environment

Program: Contamination Remediation

The Governor's recommended budget for FY 1990 contains several contamination remediation projects included in the State Water Plan. The first is a $300,000 appropriation for hazardous waste cleanup responses. This appropriation will be used for cleanups in which hazardous wastes are discovered and pose a threat to the public health or safety. These funds are used only when there is no identifiable responsible party. Similar appropriations have been used for the removal of abandoned barrels of solvents, pesticides and other types of hazardous waste, and the remediation of some contamination sites. The second item of note in the budget is a $100,000 appropriation for the Superfund project at Arkansas City. These funds will be used to match $900,000 from the federal Superfund for the remedial action at this site. In the event this appropriation is not passed, no further federal action is possible at this site under the provision of the CERCLA. The third appropriation in the budget is $1.5 million from the EDIF for the cleanup of contaminated sites throughout the state. These funds would be used to begin the remedial process at several sites including the groundwater contamination in the 4th and Carey area of Hutchinson and the final remediation of pesticide contamination in the Menlo area. Additional sites will be addressed as funds permit.

In addition to the appropriations described above, the implementation of the State Water Plan as recommended by the Governor would allow the expenditure of an additional $1 million. No suggested source of funding for this appropriation was identified in the budget message. These funds are critical to the success of the department's activities. This appropriation will be used to perform cleanup projects in FY 1990 that were described in the budget but not included above. The initiative of activities at these additional sites in a timely manner will result in a reduction in the cost of the projects. Delays in addressing these sites will result in a higher cost for the ultimate response action.

Agency: Kansas Department of Health and Environment

Program: Non-Point Source Pollution

In its recommendation to Governor Hayden, the Kansas Water Authority included a section entitled "Non-Point Source Pollution" which included four elements as outlined below.

Hillsdale Reservoir Watershed Water Quality Management Plan: $150,000. Studies performed by the Kansas Department of Health and Environment show any increase in phosphorous loading from municipal and industrial dischargers and surface runoff from agricultural and urbanized areas will significantly accelerate the rate of eutrophication of the lake. The water quality management plan will allocate phosphorous loads among municipal, industrial and surface water runoff to assure the present trophic state of the reservoir can be maintained. Developing the management plan requires surveys of the lake and watershed, identification of phosphorous sources, identifying needed pollution control measures and establishing the necessary local institutional arrangements to implement the plan.

Non-Point Source Watershed Assessments: $60,000. Implementation of the non-point source program requires development of watershed water quality management plans. The water quality management plan identifies the water quality objectives and pollution control needs of the watershed. The water quality management plan would guide application of federal Soil Conservation Service funds, State Conservation Commission funds and local funds appropriated for water quality maintenance and improvement. During FY 1990, water quality management plans are scheduled for Doyle Creek, Lake Minola and Herington Lake.

Non-Point Source Basin Planning: $90,000. Non-point source water quality management plans will be prepared for each of the 12 basin planing areas. Each basin plan will identify the protection and restoration needs of the basin for each non-point pollutant source category. Expenditures include $30,000 to develop best management practices and $60,000 for development of non-point basin plans.

Private Well Testing: $1,200,000. This proposal consists of three phases. Phase I and Phase II would proceed concurrently.

> Phase I: Estimated Cost $360,000. Repeat chemical analyses for approximately 1,400 central and western Kansas irrigation wells tested in 1975-1981 by the Kansas Geological Survey. These results would be compared to earlier results to detect areas of groundwater quality

deterioration. Areas of deteriorating groundwater would be targeted for further testing in Phase III and for study as to the cause of deterioration. Expenditure includes $260,000 for analyzing samples and $100,000 for services, travel and contract administration.

Phase II: Estimated cost $100,000. Contract with Kansas Geological Survey to select areas for sampling based on vulnerability and likelihood of contamination. Kansas Geological Survey would use the DRASTIC model now being widely used to predict vulnerability and the joint Kansas Department of Health and Environment/Kansas State University Farmstead Well Study to predict likelihood of contamination from farm management practices. Expenditures include $90,000 for service and $10,000 for computer and contract administration.

Phase III: Estimated cost $740,000. Complete chemical analysis of 700 wells (selected from Phase II) for volatile organic compounds, pesticides, radionuclides, inorganic chemistry and heavy metals. A report would be prepared by the Kansas Geological Survey making recommendations to the Kansas Department of Health and Environment of areas where the state should recognize the vulnerability of domestic water supply and encourage owners to seek periodic sampling analysis. This would also have an administrative supervision cost for the Kansas Department of Health and Environment.

Agency: Kansas Department of Health and Environment

Program: Public Water Supply Protection Technical Assistance

Governor Hayden's budget message recommended $1,700,000 to provide public water supply protection and technical assistance in the way of grants to local communities for environmental management. The Governor recommended the legislature give serious consideration to passage of legislation (House Bill 2008) which would provide a permanent source of funding for this activity.

The proposal contains two elements. First, grants to counties to allow local health departments to prepare county-wide environmental protection strategies and to implement approved waste and environmental management programs. The second elements requires public water supply systems to apply for a renewal permit. The funding is to provide technical assistance to communities to develop the applications which will contain plans to protect the water supply source from contamination.

The concept under the grant program to county health departments envisions the initial two years as a grant allowing the counties to develop all or parts of their waste and environmental management strategies. After the initial two years, the counties would be required to move towards a matching grant over a period of five years. Proposed legislation would authorize grants up to $1.00 per capita. The Governor recommended an initial amount of $.65 per capita.

The funds would allow the counties to adopt county sanitary codes, subdivision and wastewater plans, solid waste management plans, public water supply protection plans, county-wide water and wastewater plans, as well as to undertake hazardous waste planning and non-point source pollution planning. The department would be authorized to grant monies to the county health departments based on their applications to carry out any or all of the programs which were made a part of their waste and environmental management strategies.

A companion initiative would require public water supplies, when modifying or developing new sources of water, to submit an application to the department. When issued, the permit would be for ten years. As part of the application, the applicant must examine the options for a public water supply protection plan. The department may issue a waiver for cause.

Agency: State Conservation Commission

Program: Watershed Dam Construction Assistance

The 1976 Legislature authorized funding for the watershed construction program beginning in FY 1977 by amending K.S.A. 2-1915. The watershed construction program provides funds on a cost-sharing basis to assist watershed districts in the construction of detention dams and grade stabilization structures within watershed districts. General plans have been approved by the Division of Water Resources, State Board of Agriculture, for 75 of the 85 organized and chartered watershed districts in Kansas.

All watershed district general plans and structure plans and specifications must approved by the Chief Engineer, Division of Water Resources, State Board of Agriculture, prior to applications being considered for state funding.

Applications for assistance submitted to the state must include extensive information about the proposed structure, including identification of community benefits and assurances that such benefits will exceed the cost of construction.

State funds for dam construction will be allocated to watershed districts for cost-sharing up to 70 percent of the costs of labor and material necessary for completion of a structure and components. In addition, state funds for engineering, geologic investigations and inspection costs will be allocated for actual costs or at a rate not to exceed ten percent of the actual construction costs, whichever is smaller. The balance of the costs will be paid by the watershed district and the landowner(s). Funds authorized for the watershed dam construction program are not being utilized for construction of watershed structures that are planned for cost-sharing under federal flood programs.

The Governor recommended $770,000 of the Commission's request of $1,500,000 for assistance in Watershed Dam Construction. The recommended amount would be utilized to fund approximately 12 of the 46 applications currently on file.

Additional funds in the amount of $2 million recommended by the Governor, which would come from a dedicated source of funding (H.B. 2008), could also be used to fund additional applications.

Agency: State Conservation Commission

Program: Natural Resources Conservation Program

Beginning in FY 1990, the current Water Resources and High Priority Cost-Share Programs will be combined into one program called the Natural Resources Conservation Program. This program will be administered by the State Conservation Commission through the 105 local conservation district offices. The program provides cost-share assistance to landowners for the establishment of enduring conservation practices to develop and improve the quality and quantity of Kansas water resources and address the conservation compliance provisions of the 1985 Food Security Act.

The program will address problems identified by conservation districts, basin advisory committees, State Conservation Commission and other related entities. Allocation of appropriated funds to each conservation district will be based upon water quality, water quantity and other needs. The Governor recommended $2,720,000 for the Water Resources Cost-Share Program and $500,000 for the High Priority Cost-Share Program. These funds would be combined to make a total of $3,220,000 for the NEW Natural Resources Conservation Program.

Non-point source pollution problems have been identified as a problem in each of the 12 river basin drainages in Kansas. A special "Non-Point Source Pollution Fund" will be established within the Natural Resources Conservation Program to provide a means of cost-sharing on projects treating identified non-point source pollution problems. Approximately five percent of the appropriation would be initially set aside for the Non-Point Source Pollution Fund.

Each conservation district will establish their local program utilizing the procedures and guidelines established by the State Conservation Commission. Land treatment practices for each of the 12 river basins may include such practices as:

- Waste control Facilities (for projects funded through Non-Point Source Pollution Fund only)
- Critical Area Planting (utilized with Diversions, Terraces and Water and Sediment Control Basins to stabilize gullies)
- Diversions
- Grade Stabilization Structure

- Grassed Waterway
- Irrigation Pit
- Irrigation System, Tailwater Recovery
- Irrigation Water Conveyance (for surge valve pipeline installation only)
- Livestock Wells, Pipeline, Permanent Tank or Trough (as a complete system or component thereof)
- Pasture and Hayland Planting
- Pond
- Range Seeding
- Terraces
- Spring Development, Pipeline, Permanent Tank or Trough (as complete project)
- Subsurface Drain (with waterway only)
- Underground Outlet (utilized with Diversion, Grassed Waterway, Terraces and Water and Sediment Control Basins only)
- Water and Sediment Control Basin

Agency: State Conservation Commission

Program: Multipurpose Small Lakes Program

The 1985 Legislature established the Multipurpose Small Lakes Program by enacting K.S.A. 82a-1601 et seq.

The Multipurpose Small Lakes Program provides for "add on" features to a planned structure (dam). The "add on" feature provides for the development of a new proposed structure to its fullest potential or the renovation of an existing structure to provide for additional benefits.

The objectives of this program are: (1) To reduce flood damages caused by excessive runoff and provide protection for safety of people and/or domestic and wild animals; (2) to provide for the development of dependable water supply in close proximity to communities which need water; (3) to provide for a gradual process of developing future water supplies which more closely matches water supply developments with water supply needs; (4) to develop a project that requires a fraction of the capital investment costs of large reservoir projects and consumes a relatively small amount of land resources; (5) to develop projects that can be operated and maintained by local entities; and (6) to provide adequate land treatment measures that will protect the site from pollution and siltation. Payback of state funds used for the water storage portion of the structure is provided for in the statute.

The requested $1,301,250 will provide funding for the construction of a proposed flood control, water supply storage and recreation project in Southwest Kansas. This structure will provide a source of municipal water for the City of Jetmore. The three wells currently used generally do not meet Kansas Department of Health and Environment standards. The city county plans to use the water supply within the next 20 years. The water supply storage cost of the project, $850,000, will be repaid to the State of Kansas when the city begins using the water supply. A public recreation facility, which will include swimming, boating, picnicking, camping, hiking, nature and wildlife areas, sightseeing, hunting and other recreational opportunities, is also included in this project. The Kansas Department of Wildlife and Parks will work with the sponsors to plan and design the recreational facility. A breakdown of projected costs and source of funds is as follows:

Source of Funds	Breakdown of Costs							
	Flood Control		Water Supply		Recreation		Land Rights	Total
	Engineering	Construction	Engineering	Construction	Engineering	Construction		
State Multipurpose Small Lakes Program Funds	68,000	514,000	69,000	520,000		130,250		1,301,250
City of Jetmore					10,500	130,250	152,000	292,750
Pawnee W/S Jt. Dist #81 (Administration, Construction & Inspection)		121,000						121,000
Local Landowners (Donated Easements)							20,000	20,000
Department of Wildlife & Parks (In-Kind Services)					10,500			10,500
TOTALS	68,000	635,000	69,000	520,000	21,000	260,500	172,000	1,745,500

Agency: Kansas Department of Wildlife and Parks

Program: Cheyenne Bottoms Wildlife Area, Barton County, Kansas

This area is a unique ecosystem and may be the most important shorebird migration point in the western hemisphere. It is estimated that 45 percent of the North American shorebird population stops at the Bottoms during spring migration. It has recently been designated as a Wetland of International Importance.

The 19,000 acre area has been managed for waterfowl by the Department since 1925. However, management during the last ten years has become increasingly difficult.

The original design for water management was done by diverting water from the Arkansas River. Water levels could be drawn down in any of the five pools with the guarantee that they could be refilled when needed. The recent decrease in flow in the Arkansas River has done away with this guarantee. Gradual siltation has also occurred making the water transfer more difficult. Solutions to these problems would be difficult and expensive.

The 1987 Legislature authorized an environmental assessment of the area. The Kansas Biological Survey and the Kansas Geological Survey reported information dealing with geology, hydrology, water budget, land use, flora, fauna, ecology, economic impact, engineering and options for improving facilities and management.

Management objectives will include maintaining the current structure and management capabilities with additional equipment, manpower and operation funds. The department will seek to acquire easements or fee title to land surrounding Cheyenne Bottoms to improve management capabilities and prevent the threat of litigation over flooding. Hydrological studies will be completed as the first step in making a series of design changes including work on dikes, reservoir storage and water movement structures. Water delivery from the Arkansas River will be improved by conversion or reconstruction of the current open canal system to a tube or closed system.

There are two major projects in the Governor's recommended budget for FY 1990.

"Cheyenne Bottoms Engineering Study and Renovation Design" $140,000

This will address strategies for wetlands habitat, nongame, threatened and endangered species and migratory birds. A study of the hydrology of the existing inlet canal would be contracted to develop design options and cost estimates for the renovation and reconstruction of the other features of the area to establish a viable management system.

"Cheyenne Bottoms Inlet and Water Control Structure Renovation" $1,500,000

This will provide funds to initiate the reconstruction of the inlet canal and water control structures.

Agency: Kansas Department of Wildlife and Parks

Program: Hillsdale State Park Development

This is the second year funding for the development of a state park system at Hillsdale Reservoir located at Miami County, Kansas. A master plan is now being developed with some construction specifications and development drawings with detailed annual construction phases and preliminary developments.

Funds in FY 1990 will provide for development of those facilities that are needed below the water elevation. Breakwaters for protection of boat ramps, docks and swimming beach and then roads to open the areas to public use, and installing an outlet structure.

The FY 1990 appropriation will be funded with $60,000 from the department fee fund and $150,000 from the Federal Clean Lakes Act funds.

Agency: Kansas Department of Wildlife and Parks

Program: Mined Land Development

Master plan for the development of recreational potential on Mined Land Wildlife Areas $36,642

This would provide for the development of a master plan to develop the mined land areas of southeast Kansas. This plan would provide for the recreational opportunities associated with these lands and would include such activities as canoe trails, nature trails, fishing and hunting access, camping and other activities that might be identified.

Agency: Kansas State Board of Agriculture, Division of Water Resources

Program: Water Project Coordination

Purpose: Provide the field resources necessary to prevent unlawful stream obstructions and channelization activities and to assist with the implementation of the Environmental Coordination Act through stronger enforcement and environmental permit conditions.

Governor's Recommendation: The Governor recommends 2.0 civil engineer and 1.0 environmental engineer positions at a cost of $147,482 including related operating expenses for the water structures subprogram. He recommends assigning one of the new engineers to the Topeka Field Office and one to Chanute. The Governor indicated that he will consider adding more civil engineers in the future as the water-related agencies consolidate offices out in the state.

Program Description: The Environmental Coordination Act (K.S.A. 82a-325-327) became effective July 1, 1987. The act requires that applications for stream obstructions, dams, levees and other water projects be reviewed by several other state agencies with environmental responsibilities so that they may provide advice and recommendations to the Chief Engineer prior to the issuance of permits or approval of plans for such projects. The act provided new authority to place environmental conditions on permits.

The most serious impediment to the full implementation of the Environmental Coordination Act's intent is the limited enforcement capability available to the Division of Water Resources as a result of an inadequate staff to fully enforce the existing statutory programs administered by the agency. Consequently, the intent of the Environmental Coordination Act has not been fully realized since some projects are constructed without permits and may go undetected. The adverse effects of such projects are much more difficult and expensive to correct after the fact than they are to prevent.

The environmental engineer recommended by the Governor would be responsible for overseeing the enforcement of the Environmental Coordination Act, coordinating with other review agencies and to provide expertise to ensure that the conditions placed upon permits resulting from comments by other agencies are implemented. No new staff was added to the agency to carry out the provisions of the act when passed. The program has been carried out by approximately one-half of an existing FTE staff

member's time at the expense of other related activities, including review of actual project plans and enforcement of related statutory provisions. During Fiscal Year 1988, 179 projects were reviewed under the provisions of the act.

The two field engineers recommended by the Governor are essential to provide monitoring and enforcement of projects subject to the provisions of the Stream Obstruction Act and levee law. Without the additional staff, it is likely that damages to private and public property will continue as a result of improper and illegal modifications to streams causing additional erosion and flooding. In addition, such projects can cause pollution of water through sediment and chemicals contained in the additional floodwaters and damage wildlife habitat and other environmental resources. The individual and cumulative effect of improperly designed and constructed channel activities or levees can also cause damage to bridges, roads and other public facilities. with initial developing of camping area with basic sanitary and use facilities.

Agency: Kansas State Board of Agriculture, Division of Water Resources

Program: Water Use Reporting

Purpose: Implement the new water use reporting requirements to help obtain complete and accurate water use information and to maintain and enhance the Kansas water data base.

Governor's Recommendation: The Governor recommends 2.5 positions in the water appropriation subprogram at a cost of $77,870 including related operating expenses to improve monitoring of water use in Kansas. These positions would be financed by special revenue generated by enforcement fines.

Program Description: These positions will be used to review and verify the accuracy of water use information submitted by the holders of the approximately 30,000 water rights in Kansas for entry into the computer data base. They will also assist with enforcement of the reporting requirements in accordance with the provisions of K.S.A. 82a-732 when a complete and accurate report is not received.

Accurate water use information is critical to the proper management of water in Kansas. The information is used by the Division of Water Resources for the administration, perfection and enforcement of water rights. It also provides information necessary to check cross-compliance with the Chemigation Act administered by the agency.

This information is also a key component of the inter-agency water data base used by various local, state and federal agencies for planning and management purposes.

The administrative fine authority provided by the 1988 legislation will be helpful, but it will not be possible to obtain the accuracy and completeness of reporting desired without the staff necessary to adequately enforce the law.

Agency: Kansas Geological Survey

Program: Dakota Study

Since the beginning of FY 1989, the Kansas Geological Survey has been conducting a comprehensive, multi-year research program on the Dakota Aquifer in Kansas. The purpose of the program is to assess the water resources potential of the Dakota Aquifer in order to address the long-term planning and management needs of local and state agencies. In FY 1990 and FY 1991, the goal of the Dakota program is to characterize subregionally the water resources potential of this aquifer system in areas presently undergoing large-scale development in southwest, south-central and northern Kansas. In these areas, the Dakota Aquifer is used extensively for irrigation, public water supply and industrial uses. Insufficient up-to-date information is available in these areas to assess the water resources potential of the Dakota Aquifer. Within each of the subareas it will be necessary to define the geologic framework, and characterize the chemical quality, movement and availability of water in the Dakota Aquifer. During FY 1990, the Kansas Geological Survey and the U.S. Geological Survey will review the geology and hydrology of these subareas and will identify research problems requiring more detailed examination during FY 1991. Hydrologic and geologic information for most of these subregions is dated or nonexistent. The Kansas Geological Survey will work closely with other local and state agencies and expects to work cooperatively with the U.S. Geological Survey in southwest Kansas during this phase of the program (years 2 through 4). By the end of FY 1990, the Kansas Geological Survey expects to have prepared: (1) a subregional characterization of the Dakota Aquifer in the three subareas of investigation based on present-day interpretations of hydrogeology and water chemistry, including an assessment of the chemical quality of waters from the Dakota Aquifer for various uses in each subarea; (2) a detailed and updated geologic data based that will be input to the Kansas Water Data Base where appropriate; and (3) an updated technical document for the Dakota Aquifer program specifying research needs and projects to be undertaken in the subareas during the third year of the program (FY 1991).

Approval to seek funds from the Kansas portion of the oil overcharge settlement managed by the U.S. Department of Energy was granted for years 1-3 of the program and was obtained from this source for the first year. The use of oil-overcharge funding is generally consistent with the goals of the program's first year. However, use of these funds in years two and three significantly diverts attention and resources away from the goal of the program. As a result, the Survey is requesting funding

from the Kansas Legislature to continue the program in FY 1990 and 1991. For FY 1990, the Kansas Geological Survey is requesting $200,000 in funding of which $60,700 will be used to cooperatively work the U.S. Geological Survey in southwest Kansas. The Kansas Geological Survey will continue to contribute a substantial portion of its resources to ensure successful completion of this second year project.

Agency: Kansas Water Office

Program: Public Education

There is no water-related public education program in Kansas. Yet, most water problems could be prevented through informed citizen's actions (especially water conservation and water quality issues). In addition, most of the state's water-related programs require local initiative or cost-sharing before state assistance is available. Therefore, the ultimate success of the state's stewardship of it's water resources requires a well informed and educated public.

The purpose of this program will be to coordinate existing public education activities of agencies and private organizations, develop new programs as opportunities become available and maintain and disseminate information. This program will be targeted to local units of government, schools, private organizations and the public.

An appropriation of $34,038 is requested for a Public Information Officer position and operation expenses for this program. This position will be in the Kansas Water Office and will be responsible for: (1) coordination of water-related public education activities of agencies and private organizations, (2) development of new public education programs and (3) maintenance of a repository of public information/educational materials for use by others.

Program activities will involve preparation of press releases, fact sheets, newsletters, public service announcements, video and slide presentations, and brochure and report layouts. The Public Information Officer would be responsible for setting up and conducting workshops, seminars and exhibits, in cooperation with other organizations.

This program will be designed to provide public information and education for the following types of activities:

Activity	Targeted Audience	Comments
State Water Planning	Public, Organizations and Local Units of Government	Information necessary for state policy development.
Management		
Water Marketing Program	Municipal and Industrial Users	Voluntary program requires local action and financing.
Multipurpose Small Lakes Program	Municipal and Industrial Users	Voluntary program requires local action and financing.
Urban Flood Management	Local Units of Government	Voluntary program requires local initiative and financing.
Rural Flood Management	Local Units of Government	Voluntary program requires local initiative and financing.
Water-Related Research	Local Units of Government	Information necessary for informed decision-making.
Stream Recovery/ Aquifer Restoration Program	Local Units of Government and Private Organizations	Voluntary program requires local initiative and financing.
Assurance Program	Municipal and Industrial Users	Program requires local initiative and financing.
Conservation		
Municipal Water Conservation	Public and Local Units of Government	Required for new contracts, assurance districts and appropriators. All existing contracts and appropriators must be encouraged to participate.

Activity	Targeted Audience	Comments
Agricultural Conservation	Water Right Holders	Required for new contracts, assurance districts and appropriators. All existing contracts and appropriators must be encouraged to participate.
Industrial Conservation	Water Right Holders	Required for new contracts, assurance districts and appropriators. All existing contracts and appropriators must be encouraged to participate.
Quality		
Environmental Protection Strategy	Local Units of Government	Requires local action.
Non-Point Source Pollution	Public and Local Units of Government	Requires local action, initiative and financing. Public can help alleviate this problem.
Public Water Supply Protection Plan	Local Units of Government	Requires local action.
Countywide Water Wastewater Management Plans	Local Units of Government	Requires local action.
New Subdivision Plans	Local Units of Government	Requires local action.
Fish, Wildlife and Recreation		
Riparian Protection	Landowners and Local Units of Government	Requires local initiative.

Activity	Targeted Audience	Comments
Wetland Protection Program	Local Units of Government and Landowners	Public can help alleviate this problem.
River Recreation	Landowners and Public	Public can help alleviate this problem.

Agency: Kansas Water Office

Program: Minimum Desirable Streamflow

The proposed statutory changes add minimum desirable streamflow standards to five streams in Kansas thereby implementing that sub-section of the State Water Plan. The streams are: Walnut, Whitewater, Solomon, Spring River and Chapman Creek. Passage of this legislation allows the Chief Engineer of the Division of Water Resources, State Board of Agriculture, to protect these streams from over-appropriation.

Background and History

Since 1984, the State Water Plan has established and supported designations of minimum desirable streamflows on certain streams of the state. The minimum desirable streamflow program is designed to prevent streams from becoming depleted through an over-appropriation of water rights. Minimum streamflows are intended to protect baseflows for the purposes of water quality, fisheries, wildlife, aquatic life, recreation and aesthetics. They also serve to protect existing water rights by preventing a stream from drying up from over-use. Legislation passed in 1984 gave minimum desirable streamflows a priority date of April 12, 1984. Those water rights applied for prior to that date retain their seniority over the streamflow standards, (i.e., they cannot be shut off). Water rights with priority dates after April 12, 1984, are subject to being administered.

Agency: Kansas Water Office

Program: Interbasin Transfer Study

To implement the interbasin transfer of water sub-section of the State Water Plan, the Kansas Water Office will need $35,000 to initiate research on the social, economic, environmental and political "long-term implications" of interbasin transfers. A letter has been submitted requesting this budget amendment.

Recognizing that proposals to make interbasin transfer may be forthcoming, it is in the best interest of the people of the state that an indepth study of the projected implications of such transfers be completed before they are approved. The Water Transfers Act (K.S.A. 82a-1501 et seq.) defines "water transfer" as a diversion and transportation of water in a quantity of 1,000 acre-feet or more per year for beneficial use outside of a ten mile radius of the point of diversion of such water. Under this act, any entity desiring to make a water transfer shall make application to the Chief Engineer. Within 60 days of receipt of a sufficient application for water transfer, the Chief Engineer shall convene and conduct a hearing thereon. At such hearing, the panel consisting of the Chief Engineer, Division of Water Resources; Secretary, Kansas Department of Health and Environment; and the Director, Kansas Water Office shall consider the application and take testimony, hear all arguments and accept all other evidence offered to determine whether to approve the proposed water transfer.

To determine whether the benefits to the state for approving the transfer outweigh the benefits to the state for not approving the transfer, the panel shall consider all matters pertaining thereto including seven specific review standards.

Research should be conducted to assist any potential future hearing panel on interbasin transfers. This research should examine other interbasin transfers that have taken place throughout the world and include a complete literature search of the "long-term implications," socially, environmentally, economically and politically, of interbasin transfers.

State Water Plan Implementation

Item	Agency	Governor's Budget Recommendation
1. Contamination Remediation	KDHE	$1,900,000
2. Cost Share	SCC	3,220,000
3. Watershed Construction	SCC	770,000
4. Jetmore Multipurpose Small Lake	SCC	1,301,250
5. Mined Land Canoe Trail Evaluation	KDWP	36,642
6. Cheyenne Bottoms Management Project	KDWP	1,640,000
7. Recreation Facilities at Hillsdale Lake	KDWP	1,000,000
8. Water Project Administration	BOA	147,482
9. Water Use Reporting	BOA	77,870
10. Dakota Study	KGS	200,000
11. Public Education	KWO	32,529
12. Minimun Desirable Streamflow	KWO	0
13. Interbasin Transfer Study	KWO	35,000
Subtotal		$10,360,773

Items Recommended Subject to Passage of Funding Legislation

1. Contamination Remediation	KDHE	1,000,000
1. Non-Point Source Pollution	Joint Venture (KDHE Lead)	1,500,000
3. Aid to Local Units and Public Water Supply Protection	KDHE	1,700,000
4. Land Treatment Cost Share and Watershed Construction	SCC	2,000,000
Subtotal		$6,200,000
Total State Water Plan Related Items		$16,560,773

KANSAS WATER AUTHORITY

Name, Address & Telephone	Occupation	Representing	Term Expires
Lowell K. Abeldt 900 NW 2nd Abilene, KS 67410 913/263-4083	Real Estate Broker & Owner of Insurance Agency	Association of Watersheds	5/1/90
John L. Baldwin 2700 East 4th Street Hutchinson, KS 67504 316/665-5511	Pres., Dillons Stores	Governor	Pleasure
Kyle Bauer RR 1, Box 43 Morganville, KS 67468 913/632-3186	Farmer; Pres., Grainland, Inc.	Speaker of the House	6/30/89
Al Campbell 602 Broadway Larned, KS 67550 316/285-2191	Pres., Doerr Mercantile Co.	Kansas Assoc. of Commerce & Industry	5/1/91
Michael Conduff P.O. Box 748 Manhattan, KS 66502 913/537-0056, x-204	City Manager, City of Manhattan	Kansas League of Municipalities	5/1/89
Russell Crites 717 W. 7th Ottawa, KS 66067 913/242-2512	Retired Businessman	Public	6/30/92
Dr. Lee C. Gerhard Director, Kansas Geological Survey 1930 Constant Ave., Campus West University of Kansas Lawrence, KS 66045 913/864-3965	Director, Ks. Geological Survey	Ex Officio	
Stanley C. Grant, Secretary Dept. of Health and Environment Bldg. 740, Forbes Field Topeka, KS 66620 913/296-1522	Secretary, Dept. of Health & Environment	Ex Officio	
Joseph F. Harkins Director, Kansas Water Office Suite 200, 109 W. 9th Street Topeka, KS 66612 913/296-3185	Director, Kansas Water Office	Ex Officio	
Keith Henley, Chairman Kansas Corporation Commission 4th Floor, State Office Bldg. Topeka, KS 66612 913/296-3325	Chairman, Kansas Corporation Commission	Ex Officio	
Sheila Leiker-Page Rt. 1, Box 68 Victoria, KS 67671 913/735-9242	Supervisor, Dairy Herd Improv. Assn.	Conservation District	5/1/92

Marsha Marshall 8560 Rik-Mar Drive DeSoto, KS 66018 913/585-3401		Conservation and Environmental Interests	10/31/92
Robert L. Meinen, Secretary Kansas Dept. of Wildlife and Parks 5th Flr., Landon St. Off. Bldg. Topeka, KS 66612 913/296-2281	Secretary, Kansas Dept. of Wildlife and Parks	Ex Officio	
Marvin Odgers HCR 1, Box 84 Sublette, KS 67877 316/675-2564	Farmer	GMDs #1, 3, 4	5/1/89
Larry K. Panning 500 W. 4th Ellinwood, KS 67526 316/564-2199	Farmer	GMDs #2 & #5	5/1/90
David L. Pope Chief Engineer, Division of Water Resources State Board of Agriculture 109 SW 9th Street Topeka, KS 66612-1283 913/296-3717	Chief Engineer, Div. of Water Resources	Ex Officio	
Harland Priddle Secretary, Dept. of Commerce 400 SW 8th, 5th Floor Topeka, KS 66612 913/296-3480	Secretary, Dept. of Commerce	Ex Officio	
Doyle Rahjes Kansas Farm Bureau 2321 Anderson Manhattan, KS 66502 913/537-2261	Farmer	President of Senate	6/30/89
Helen Schabel Route 2, Box 27 Cherryvale, KS 67335 316/336-3033	Manager, Cattle Operation	Public	5/1/89
Dennis F. Schwartz 3260 SE Tecumseh Rd. Tecumseh, KS 66542 913/379-5553	Manager, Rural Water District	Rural Water Association	5/1/92
Dr. Walter Woods Director, Agricultural Experiment Station 113 Waters Hall Kansas State University Manhattan, KS 66506 913/532-7137	Director, Ag. Exp. Station	Ex Officio	

October 1988

ATTACHMENT
SWAM 1-2 89

DAKOTA AQUIFER PROGRAM SUMMARY

Introduction

Kansas Geological Survey is conducting a comprehensive, multi-year research program on the Dakota aquifer in Kansas to fulfill the future water-information needs of planners and managers in local and state agencies.

Funding for the first year of the Dakota aquifer program in the amount of $170,000 was obtained from the Kansas portion of the oil-overcharge fund administered by the U.S. Department of Energy.

Accomplishments

Kansas Geological Survey has found that:

(1) Development of the Dakota as a freshwater aquifer is presently restricted to southwestern, south-central, and north-central Kansas where it is a major source of water for irrigation, public water supply, and industrial uses;

(2) Water availability and pathways of water movement in the Dakota aquifer can be predicted if the regional geology is sufficiently understood; this understanding can be extended to localized areas;

(3) The potential for upward migration of saline waters into freshwater zones of the Dakota aquifer is high in parts of central Kansas where the Permian and Dakota aquifers are hydraulically interconnected.

(4) Completion of the Dakota aquifer program should be accomplished in ten years rather than the fourteen years estimated at the beginning of the program, assuming continued funding at present levels.

Second Year Dakota Aquifer Program

In the second year of the program (FY90), KGS will begin a three-year detailed examination of the hydrogeology and water quality of the Dakota and related aquifers in southwest, south-central and north-central Kansas.

Program Funding

KGS is requesting funding from the Legislature in the amount of $200,000 for FY90 of which $60,700 will be used to work cooperatively with the US Geological Survey in southwest Kansas.

KGS is requesting state funds to continue work on the Dakota aquifer rather than oil-overcharge funding because the US Department of Energy's intended use of oil-overcharge funds is not consistent with the overall goals of the Dakota aquifer program and the water-information needs of Kansas. Oil-overcharge funds can only be used to meet energy conservation goals, whereas the Dakota aquifer program is directed toward water resources evaluation and management.

ATTACHMENT 4
SWAM 1-25-89