

MINUTES OF THE House Sub COMMITTEE ON Natural Resources

The meeting was called to order by Representative Spaniol at _____
Chairperson

3:30 ~~xxxx~~ a.m./p.m. on March 17, 1987 in room 526-S of the Capitol.

All members were present except:

- Rep. Burr Sifers
- Rep. Kathryn Sughrue, Excused
- Rep. Ginger Barr

Committee staff present:

- Ramon Powers, Department of Legislative Research
- Arden Ensley, Department of Legislative Research
- Betty Meyer, Committee Secretary

Conferees appearing before the committee:

Chairman Spaniol called the meeting to order.

The committee heard testimony on SB 40.

Clark Duffy, Kansas Water Office, testified SB40 provides the general framework for interagency review by appropriate state agencies. He stated the Kansas Water Office strongly supports the passage of the bill. (Attachment 1)

John K. Strickler, Associate State Extension Forester, Department of Forestry, testified that passage of SB 40 would be timely in terms of the increased emphasis on total conservation farm planning. (Attachment 2)

Mr. Strickler presented testimony on behalf of Mr. Rex Naanes, Chairman, Kansas Tree Farm Committee, stating the Committee wishes to go on record as endorsing SB 40. (Attachment 3)

Mr. Lee Rolfs presented testimony for Mr. David Pope, Chief Engineer, Division of Water Resources, stating the SB 40 will provide for adequate coordination and allow our office to draw upon the expertise available within state government to provide for the better protection of the environment. (Attachment 4)

Hearings concluded on SB 40. STANDING COMM. 3/26/87

Tom Stiles, Kansas Water Office, testified that SB 41 represents a well thought-out approach to propose initial minimum streamflow values, and recommends the bill for passage. (Attachment 5)

Representative Spaniol read testimony from Carol Estes, President, Kansas Audubon Council, urging passage of SB 41. (Attachment 6)

Rich McKee, Executive Secretary, Kansas Livestock Association opposed SB41, stating there is conflict with soil conservation efforts. (Attachment 7)

Ken Brunson, Kansas Fish and Game Commission, testified the guidance of SB 41 is needed.

Lee Rolfs testified for Mr. David Pope asking for passage of SB 41. (Attachment 8)

Hearings concluded on SB 41. STANDING COMM. 3/26/87

Kerry Wedel, Kansas Water Office, testified in favor of SB 42.

Denny Koch, Southwestern Bell Telephone Comp., opposed SB 42, stating the bill is too broad to define.

Janet Stubbs, Executive Director, Home Builders Association, testified for Mr. M. S. Mitchell, Legislative Chairman, Home Builders Assc. of Kansas in opposition to SB 42. (Attachment 9)

CONTINUATION SHEET

MINUTES OF THE House Sub COMMITTEE ON Natural Resources,
room 526-S, Statehouse, at 3:30 ~~xxx~~ p.m. on March 17, 1987.

Representative Spaniol rescheduled hearings on SB 51 for Monday, March 23, 1987

The meeting was adjourned at 5:00 p.m.

Kansas Water Office
Testimony on
State Water Plan Legislation
Re: Senate Bill 40
Presented to the
Subcommittee on Natural Resources
of the
House Committee on Energy and Natural Resources

March 16, 1987

Chairman Spaniol and Members of the Committee:

Senate Bill 40 addresses the important issue of interagency coordination on water development projects and would implement the Environmental Coordination Sub-section of the State Water Plan. The review requirements contained in Senate Bill 40 are intended to facilitate the development of water projects which are environmentally sound and provide an opportunity to optimize potential benefits. Although some interagency coordination currently exists between various state agencies, a consistent review procedure which assures consideration of the potential adverse and beneficial effects of a proposed water development project on our state's water-related environment is needed. The projects of primary concern are projects which are not currently subject to interagency reviews under existing state or federal environmental laws. Water development projects affected by this act are projects currently subject to state regulation by the Division of Water Resources. The projects include:

1. levees and dikes
2. water obstructions including dams and channel changes
3. general plans of watershed districts

Senate Bill 40 provides the general framework for interagency review by appropriate state agencies. The Division of Water Resources would continue to be responsible for determining what, if any, action needs to be taken to address the concerns identified in the review process. This may be accomplished by applying appropriate conditions to the permit or approval.

The Kansas Water Office strongly supports passage of Senate Bill 40 as recommended in the State Water Plan.



Cooperative Extension Service
 Department of Forestry
 State and Extension Forestry
 2610 Claflin Road
 Manhattan, Kansas 66502
 913-532-5752

March 16, 1987

TO: House Committee on Energy and Natural Resources
 Ron Fox Chairperson *John K. Strickler*

FROM: John K. Strickler, Associate State Extension Forester

RE: SB39-Kansas Stream Alteration Act
 SB40-Water Projects Environmental Coordination Act
 SB41-Minimum Desirable Stream Flow
 SB42-Establishment of Conservation Easements
 SB51-Conservation Structures, Riparian and Wetland Protection

On behalf of State and Extension Forestry, I want to express our support for passage of Senate Bills 39, 40, 41, 42 and 51.

By strengthening the existing law to include channel changes and specifying the intent under the public safety definition to include protection of the environment and public and private property, SB39 is consistent with the Wetland and Riparian Protection Programs provided for in the State Water Plan and SB51.

Considerable discussion and coordination have taken place during the past several years by the various agencies and organizations involved in development of the Fish, Wildlife and Recreation Section of the State Water Plan. SB40 will assure that this interagency coordination continues in a timely manner as water projects are implemented. We feel that passage of SB40 will be a very positive step forward in development of a coordinated and effective state water policy.

While our agency has less direct involvement with the minimum desirable stream flow provisions in SB41, we believe its passage is consistent and proper with the intent of the other four bills.

The purpose of the Riparian and Wetland Protection Programs provided in SB51 will be to promote proper management of these vital areas so that their values for water quality, soil stabilization, wildlife, timber and other multiple benefits are protected and enhanced. We believe that the strong involvement of the county conservation districts will be a very positive step in building local support for development of effective riparian and wetland protection programs. As the state forestry agency, we work closely with the conservation districts, the State Conservation Commission, the Kansas Fish and Game Commission, the Soil Conservation Service and other agencies in providing technical forestry assistance to Kansas landowners.

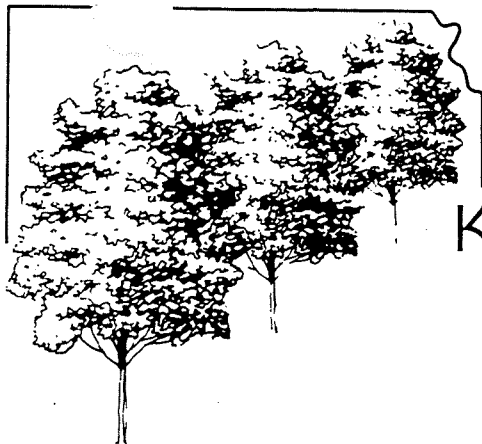
KSU, County Extension Councils and U.S. Department of Agriculture Cooperating.
 All educational programs and materials available without discrimination on the basis of race, color, national origin, sex, or handicap.

Many of the riparian and wetland areas that will be involved in these protection programs are in natural woodlands. Through proper management, these woodlands can make valuable contributions to water quality and quantity, while at the same time providing quality lumber, fuelwood, wildlife habitat and other multiple benefits for the people of Kansas. Our State and Extension Forestry staff will work closely with the other local, state and federal agencies in assisting landowners with this management. With education, coordination and technical assistance, Kansas landowners can voluntarily implement effective riparian and wetland protection practices.

The conservation easement capability outlined in SB42 would provide opportunities for landowners to voluntarily dedicate riparian or wetland areas of particular worth to the purposes of protection of these values. Therefore, SB42 complements the purposes of SB51.

One other factor I would like to point out is that the Riparian and Wetland Programs outlined in SB51 mesh very well with the "Sodbuster," "Swampbuster" and the Conservation Compliance provisions of the 1985 Federal Farm Bill. Passage of these bills would be very timely in terms of the increased emphasis on total conservation farm planning called for in this federal legislation.

JKS/plp



Kansas Tree Farm Committee

RFD #2, Box 142
Erie, KS 66773
Phone: 316/244-3477
March 16, 1987

TO: House Committee on Energy and Natural Resources
Ron Fox, Chairperson

FROM: Kansas Tree Farm Committee
Rex Naanes, Chairman

RE: Proposal No. 10:
SB 39-Kansas Stream Alteration Act
SB 40-Water Projects Environmental Coordination Act
SB 42-Establishment of Conservation Easements
SB 51-State Water Plan; Conservation Structures

The Kansas Tree Farm Committee is dedicated to promoting the cause of sound forest management for timber products, wildlife, soil and water protection and other multiple benefits. Members of the Committee represent the forest industry, consulting foresters, wildlife and soil conservation interests, and the general public. The more than 300 individual Kansas Tree Farmers are recognized for the outstanding job of multiple use management they are doing on their woodlands.

The Committee has reviewed the Fish, Wildlife and Recreation Section of the State Water Plan as adopted by the Kansas Water Authority in 1986. The Kansas Tree Farm Committee wishes to go on record as endorsing Senate Bills 39, 40, 42 and 51 which will implement the Environmental Coordination, Riparian Protection and Wetland Protection Subsections of the Water Plan. It is the Committee's hope with this legislative action, the various agencies will implement the provisions of these Subsections through timely administrative action.

We believe proper management of the state's riparian woodlands can make a valuable contribution to water quality and water quantity in Kansas while also providing timber, wildlife, recreation and other multiple benefits. Our Committee works closely with the State Forester in assisting woodland owners in their management efforts.

The Kansas Tree Farm Committee stands ready to support and assist in any way it can in the implementation of the Fish, Wildlife and Recreation Section of the Water Plan as it relates to the Kansas forest resource.

RAN/sdz



Route 5, House Subcommittee on Natural Resources

STATEMENT OF DAVID L. POPE
CHIEF ENGINEER
DIVISION OF WATER RESOURCES
KANSAS STATE BOARD OF AGRICULTURE
TO
HOUSE COMMITTEE ON ENERGY AND NATURAL RESOURCES

SENATE BILL NO. 40

March 16, 1987

Chairman Fox and Members of the Committee, thank you for the opportunity to comment on Senate Bill No. 40 pertaining to the creation of the Water Projects Environmental Coordination Act which implements the Environmental Coordination Subsection recommendation of the State Water Plan.

This proposed Act provides for environmental review by various state agencies whenever a water development project is submitted for review and approval by the permitting agency. The Division of Water Resources, Kansas State Board of Agriculture, is the permitting agency for the statutes identified in the Bill.

Senate Bill No. 40 proposes that before permitting a proposed water development project, the permitting agency shall obtain a review of the proposed project for environmental effects by the appropriate review agencies within 30 days. The Division would then be authorized to condition the approval of a permit for a project in a manner which would address the environmental concerns of the environmental review agencies.

The Bill would apply to three statutes for which the Chief Engineer is required to review project plans and issue a permit, if appropriate, for construction of the project and/or approve plans for such a project. These are: 1) K.S.A. 24-126 which deals with the construction of levees and requires approval of plans by Chief Engineer prior to the construction of said levees; 2) K.S.A. 24-1213 which requires the Chief Engineer to review and approve the

general plan for the works of improvement to be constructed by watershed Districts, generally a series of flood detention dams; and 3) K.S.A. 82a-301 et seq. which deals with the construction of dams and changes to the course, current or cross section of a stream. The Act requires the prior written approval of the specific plans by the Chief Engineer before any such activity may be undertaken. Examples would be channel realignments, stream obstructions, bank stabilization projects and dams which impound more than 30 acre-feet.

The Division of Water Resources already notifies some agencies on the list identified in Senate Bill No. 40 through mutual agreements. Two examples of this are: (1) the Kansas Historical Society is notified whenever a water structure is proposed so it can conduct a review of the site to ensure that nothing of historical value would be jeopardized by subsequent construction, and (2) The Kansas Fish and Game Commission is notified of proposed projects so that it can better carry out its duties under the Endangered Species Act.

Senate Bill No. 40 will broaden the list of agencies for which notification would be required from the Division of Water Resources. It further will require that consideration be given to environmental concerns. Environmental concerns should be considered during the preliminary design stages of a project so that mitigation measures can be incorporated into the design and construction of a project, rather than after the fact. Senate Bill No. 40 may facilitate that process.

In summary, we believe Senate Bill No. 40 will provide for adequate coordination and allow our office to draw upon the expertise available within state government to provide for the better protection of the environment.

In some instances, where serious concerns are raised during the review process, some projects may be delayed considerably or result in re-design of certain features. If this Bill is passed, we will do our best to work with the

other state agencies to help protect the environment of the state while facilitating the development, use and enjoyment of the water resources of the State of Kansas for the benefit of the health and welfare of its people.

Thank you very much. I would be happy to answer any questions the Committee may have.

March 16, 1987

Testimony of the
Kansas Water Office
to
Subcommittee on Natural Resources of the
House Energy and Natural Resources Committee
Senate Bill 41: Minimum Desirable Streamflows

Members of the Committee:

The Kansas Water Office and Kansas Water Authority has worked since 1982 toward the implementation of the section of the State Water Plan dealing with minimum desirable streamflows. These efforts have resulted in streamflow standards being established on nine streams in 1984 and 1985. In Senate Bill 41, minimum desirable streamflow values for nine additional streams are proposed.

Prior to 1984, the state established certain "ground rules" regarding the identification of minimum desirable streamflow values. The Office has consistently followed those rules in recommending minimum desirable streamflows. A major rule called for the Office to evaluate the reliability of established streamflows. The Kansas Water Office has recently initiated its ongoing evaluation of flow and water right conditions on the 18 established and proposed streams listed in Senate Bill 41.

Flow Conditions

Table 1 lists the percentage of time over the period October 1, 1983, to September 30, 1985, that minimum desirable streamflow values were met. The table indicates that most streams had little problem with flow conditions. However, the Arkansas River at Kinsley and Great Bend and Rattlesnake Creek show very poor

TABLE 1. PERCENT OF TIME MDS WERE MET
OCTOBER 1, 1983 - SEPTEMBER 30, 1985

STREAM	MDS VALUES (CFS)	% OF TIME
UPPER NEOSHO	5	100
LOWER NEOSHO	40-50	89
COTTTONWOOD	10-20	100
MARAIS DES CYGNES	15-25	93
LITTLE ARKANSAS	20	82
INF NINNESCAH	5-50	99
SF NINNESCAH (PRATT)	5-10	77
SF NINNESCAH (MURDOCK)	30-90	98
NINNESCAH	30-100	99
ARKANSAS (KINSLEY)	1-5	43
ARKANSAS (GREAT BEND)	2-10	26
ARKANSAS (HUTCHINSON)	60-100	86
RATTLESNAKE CR	1-10	33
REPUBLICAN	90-250	100
BIG BLUE	65-150	100
LITTLE BLUE	60-150	100
DELAWARE	2-20	100
MILL CREEK	15-45	100
SMOKY HILL	2-15	56
SALINE	2-35	80
MEDICINE LODGE	5-50	99
CHIKASKIA	1-60	99

reliability relative to the established minimum streamflow values at those sites. The South Fork of the Ninnescah at Pratt, the Smoky Hill at Ellsworth and the Little Arkansas River showed fair compliance with the recommended standards. Flow on these three rivers was showing good recovery by mid-1985.

The conditions on the Arkansas River and Rattlesnake Creek is indicative of regional groundwater withdrawals around the Big Bend Prairie and strongly suggest further evaluation of the recommended flows is in order. The Kansas Water Office will continue this evaluation on these three sites and report on those minimum streamflow values next year. The condition at these three sites is also a warning not to wait too long before implementing minimum streamflows. In other words, we may have been too late to save those streams.

Water Right Status

Table 2 lists the number of surface water right applications junior to minimum desirable streamflows which have been filed with the Chief Engineer. The number of rights applied for on each stream, the total quantity of water they may take, the principal use of the water rights and the number of those rights which are on tributaries are listed. Of the 49 water rights, 32 would take water from tributaries. Actual administration of these rights to maintain minimum desirable streamflows will depend on the amount of water they are taking and their location relative to the monitoring gage on the stream.

TABLE 2. SUMMARY OF SURFACE WATER RIGHTS JUNIOR TO MDS

STREAM	NUMBER	QUANTITY(AF)	PRINCIPAL USE	# ON TRIBS
NEOSHO	14	1190	IRR	12
COTTONWOOD	0	0	---	0
MARAIS DES CYGNES	18	1915	M&I	12
LITTLE ARKANSAS	7	570	IRR	1
NF NINNESCAH	1	20	IRR	1
SF NINNESCAH	1	10	REC	1
NINNESCAH	1	12	IRR	1
ARKANSAS	0	0	---	0
RATTLESNAKE CR	0	0	---	0
REPUBLICAN	1	60	IRR	1
BIG BLUE	0	0	---	0
LITTLE BLUE	2	107	IRR	2
DELAWARE	1	145	IRR	1
MILL CREEK	0	0	---	0
SMOKY HILL	0	0	---	0
SALINE	0	0	---	0
MEDICINE LODGE	0	0	---	0
CHIKASKIA	3	179	IRR	1

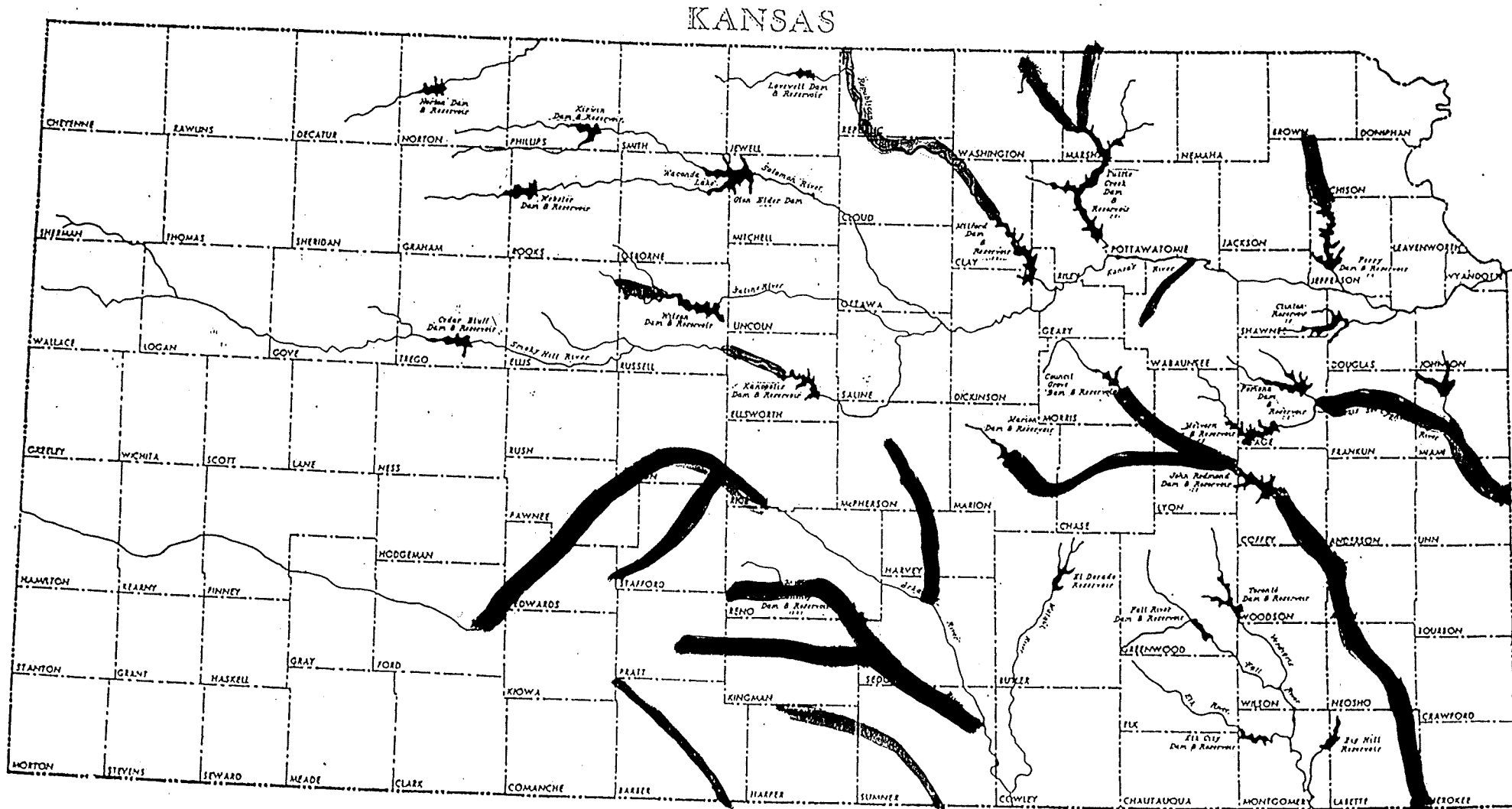
A number of groundwater rights have been applied for with the Chief Engineer across the state. Some of these groundwater applications are on hold because of their proximity to streams and the uncertainty of whether minimum streamflows will be put in place. While the number of applications have slowed since the 1970's, they have not ceased.

Any action taken in regard to minimum desirable streamflows will pertain to future water rights. Those applied for prior to April 13, 1984, retain their constitutionally protected seniority over minimum streamflows. This has always been a "ground rule" of the state, as dictated by law

Location of Minimum Streamflows

When the Kansas Water Office initially designed the minimum streamflow program, there was a question of where to apply it. Since 1984, the Kansas Water Office has examined the flow records of streams in the state and concluded that minimum streamflows would not be logical in western Kansas. The station farthest to the west with a minimum streamflow designation is the Kinsley station on the Arkansas. The results in Table 1 indicate that Kinsley is a marginal site. Therefore, the Kansas Water Office does not recommend any additional streams west of Kinsley be designated for minimum streamflows. Figure 1 shows the location of the existing and proposed minimum desirable streamflow sites. Note that this program is keyed to streams in the eastern two-thirds of the state.

FIGURE 1. SITES OF EXISTING & PROPOSED MDS



MINIMUM DESIRABLE STREAMFLOW

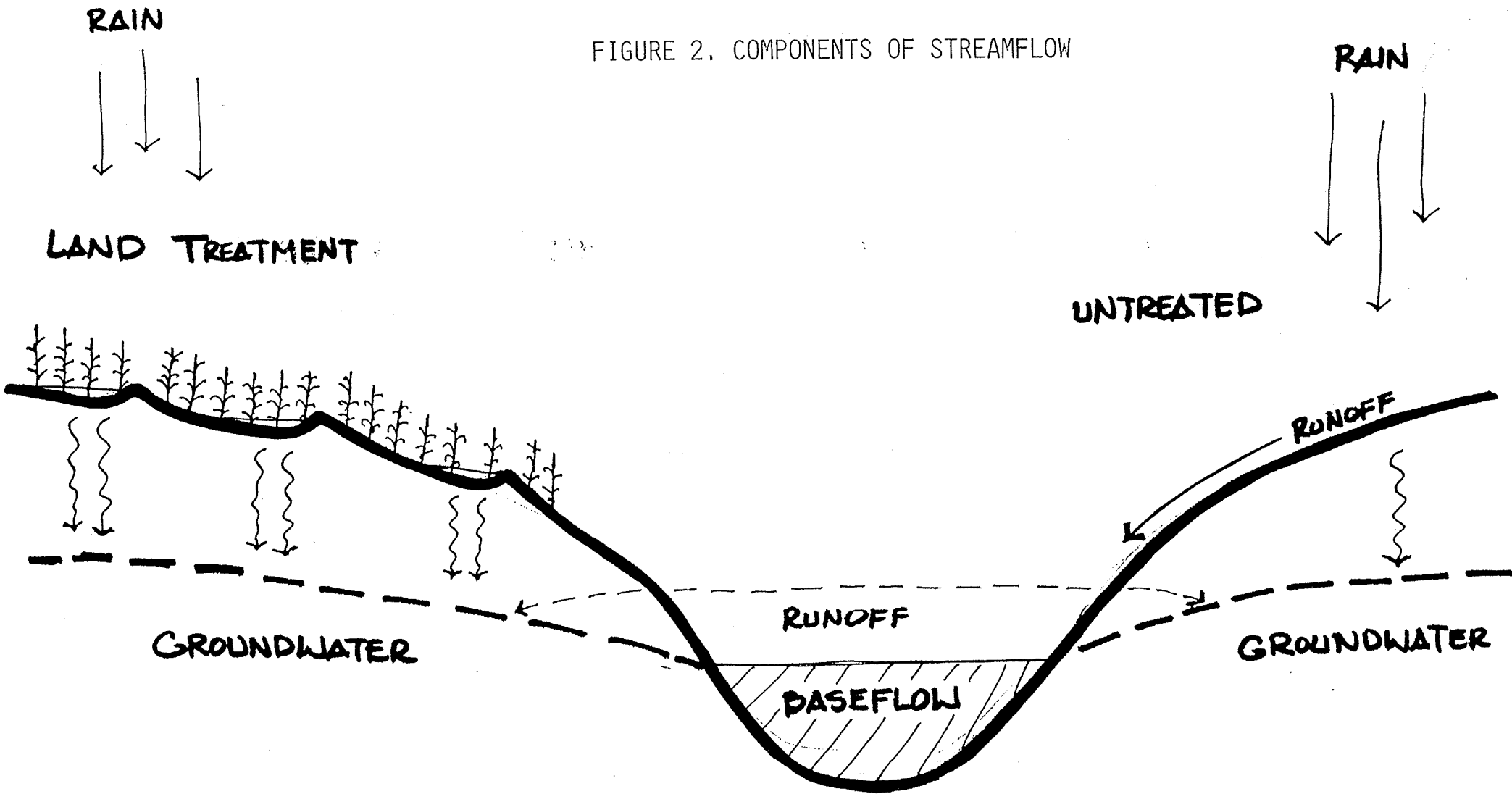
Availability of Water

The Kansas Water Office examines the flow records of any stream for which a minimum streamflow is proposed. Any flow recommendation negotiated by the multi-agency technical committee is expected to be present most of the time. Minimum desirable streamflows are keyed to the Appropriation Act, they prevent over-appropriation. Over-appropriation occurs during baseflow periods. It is not logical to set a minimum streamflow so high that it naturally cannot be maintained. The general "ground rule" is the flows should be present about 85 percent of the time.

Depletion of streamflow by conservation practices continues to be a concern. Streamflow is composed of two components, runoff and baseflow (Figure 2). Baseflow originates from the groundwater and predominates during extended dry periods. Runoff comes from rainfall and is much larger than baseflow. Conservation practices hold the water from precipitation on the land, thereby reducing the runoff component to the stream. In western Kansas, this effectively eliminates streamflow. However, the flows in western Kansas have always been marginal and there is no desire for the state to establish minimum streamflows out there.

In eastern Kansas, the conservation practices work to hold the runoff from storms on the land and induce increased percolation of the water into the ground. This water then

FIGURE 2. COMPONENTS OF STREAMFLOW



reappears as baseflow during dry periods. Thus, conservation practices act to increase surface water supplies at the time when water rights exert their most significant impact. Additionally, effective use of rain lowers the need to draw upon supplemental water supply sources such as streams and aquifers.

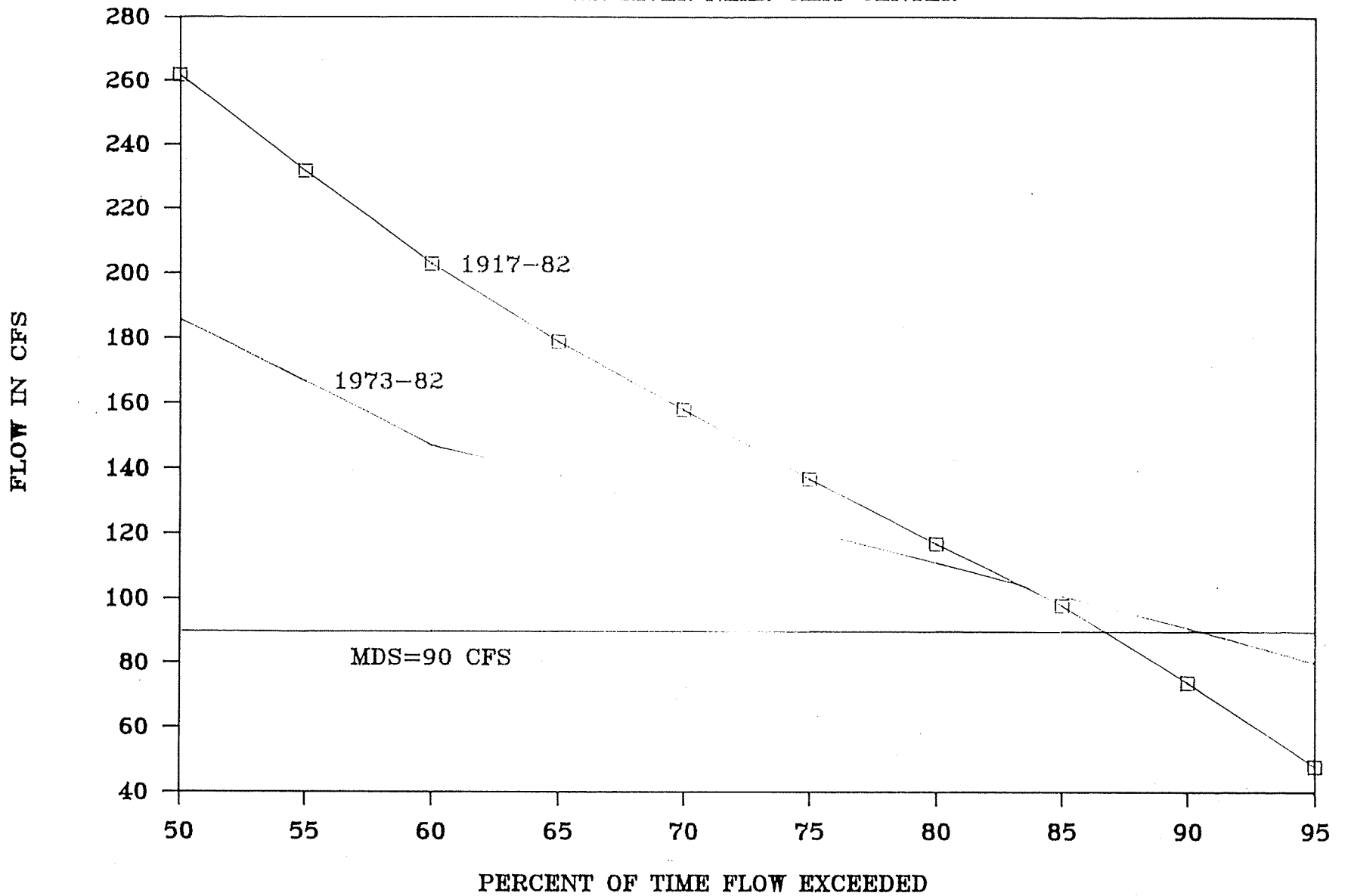
Figure 3 is an analysis of flow on the Republican River at Clay Center since 1917 and over the last ten years. Significant depletion by conservation practices can be seen in the runoff component (50-60 percent). However, the recent record breaks from the depleted trend and approaches the long-term condition, surpassing it at the 83 percent level. At the 85-95 percent levels, indicative of baseflow, recent flow conditions have exceeded the long term. The minimum streamflow recommendation of 90 cfs was established at the 87 percent level, but was met 91 percent of the time over the last ten years. It is the opinion of the Kansas Water Office that conservation practices have redistributed the high flows occurring along this river as runoff to enhance the baseflow condition over the long term. This baseflow enhancement, as well as more effective use of rain, is a complementary water management strategy to minimum desirable streamflows.

Summary

The flow recommendations in Senate Bill 41 represent a well thought-out approach to propose initial minimum streamflow values. They may need adjustment over time, but the underlying

"ground rules" dictate that a prudent methodology has been applied. There is no benefit in delaying adoption of these flows. The state's best evaluation of these flows takes place in the field. The Kansas Water Office recommends the passage of Senate Bill 41.

FIGURE 3.
OCTOBER FLOW DURATION
REPUBLICAN RIVER NEAR CLAY CENTER





March 16, 1987

Representative Ron Fox
Chairman
Energy & Natural Resources Committee
Room 523 F
State Capitol
Topeka, KS 66612

Dear Representative Fox:

Enclosed is a letter I sent to Senator Werts in January regarding the KAC position on the bills listed. Please have it added to the hearing record.

I would like to emphasize again the importance of this legislation to Kansas Audubon members. Passage of these bills is of immediate concern to the kind of conservation-minded individuals that Audubon represents, and, we believe, of the utmost importance to the future of all Kansans.

We will all be following the actions of your committee anxiously.

Sincerely,

Carol Estes
President



January 25, 1987

Senator Merrill Werts
Chairperson
Energy & natural Resources
Committee
Room 523 F
State Capitol Building
Topeka, KS 66612

Dear Senator Werts:

The Kansas Audubon Council has asked me to write to you on their behalf to express our unanimous support for several pieces of legislation that will come before your Committee soon. Senate Bills 39, 40, 41, 42 and 51 deal with issues that we consider to be critical, and are all bills that we strongly support.

The Council, as you probably know from talking to Jan Garton, represents over 3,000 Audubon members throughout Kansas. However, I believe we also represent the public interest in issues such as these -- afterall, we all have a huge stake in the intelligent use of our natural resources.

We would certainly appreciate anything you can do to help see these bills safely through the weeks ahead.

Thank you.

Sincerely,

Carol Estes
President



2044 Fillmore • Topeka, Kansas 66604 • Telephone: 913/232-9358
Owns and Publishes The Kansas STOCKMAN magazine and KLA News & Market Report newsletter.

STATEMENT
OF THE
KANSAS LIVESTOCK ASSOCIATION
TO THE
NATURAL RESOURCES SUBCOMMITTEE
REPRESENTATIVE DENNIS SPANIOL, CHAIRMAN
WITH RESPECT TO SB 41
MINIMUM DESIRABLE STREAM FLOWS
PRESENTED BY
RICH MCKEE, EXECUTIVE SECRETARY, FEEDLOT DIVISION
MARCH 16, 1987

Mr. Chairman, members of the committee, my name is Rich McKee. I am here representing the members of the Kansas Livestock Association. KLA is a state-wide voluntary association of livestock producers. Our association represents cattle, swine and sheep producers. A large percentage of our membership is also engaged in crop production activities. For many years our association has actively participated in the legislative process to represent the best interests of Kansas agriculture in general and the livestock producing segment specifically. We appreciate the chance to appear before your committee to share with you some of our views and experiences relative to Minimum Desirable Stream Flows.

The Kansas Livestock Association opposes SB 41. This bill increases the conflicting signals being sent out by various agencies of both state and

national government. For years our members have worked very closely with the soil conservation service in an effort to decrease water runoff from agricultural land. We are proud to say that to a great extent this objective has been met due to the continual efforts of innovative and practical management techniques. The continued request for the establishment of additional Minimum Desirable Stream Flows sends conflicting signals to the farmers and ranchers who nurture and care for the land and water resources they have available. On the one hand, we've placed our best foot forward in working with the soil conservation service to prevent water runoff, while at the same time this proposed bill seemingly asks for more water runoff.

Secondly, stream flow levels are greatly determined by the decisions of our neighboring states on how much water they will release. Establishing Minimum Desirable Stream Flow requirements by Kansas Statute will not have any effect on the amount of water released by states that are "upstream" from Kansas.

In reviewing this proposed bill, our members questioned the basis for these additional minimum stream flow recommendations. Frankly, the concern our membership has is these proposed additional minimum stream flows seem to be based on the livelihood of fish population benefiting from the Kansas Water Plan. We do not feel that minimum stream flow recommendations should be based primarily on concerns for fish.

Finally, Mr. Chairman, in discussing Minimum Desirable Stream Flows, our members ask, "by enacting this legislation we are denying the right of Kansans to use water only to allow residents of other states to use what we legislate must flow out of our fine state?"

The Kansas Livestock Association appreciates the opportunity to present it's position to your committee. If there are any questions from the committee, I would gladly attempt to provide an answer. Thank you.

Kansas Water Plan

Smoky Hill-Saline Basin Section

Sub-section: Table of Contents and Introduction

Kansas Water Office
109 S.W. Ninth, Suite 200
Topeka, Kansas 66612-1215
An Equal Opportunity Employer

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FY 1988

**Approved
by the
Kansas Water Authority**

September 1986

INTRODUCTION

The Smoky Hill-Saline Basin covers 12,100 square miles from the eastern border of Colorado to the central area of the state. The basin includes all or part of 32 counties. The total population of the Smoky Hill-Saline basin in 1980 was approximately 147,200. The preceding page contains a map showing the major political and drainage features of the basin. The major reservoirs are Cedar Bluff, Wilson and Kanopolis.

PROBLEM IDENTIFICATION

The 1985 Kansas Water Plan contains issues, options and recommended guidelines for the Smoky Hill-Saline Basin. The nine issues in the 1985 Kansas Water Plan were considered by the Smoky Hill-Saline Basin Advisory Committee as a point of departure for identification of water-related problems in the basin which are a state responsibility. Thirteen problems were identified for the FY 1988 Basin Plan. Examination of the problems identified by the Smoky Hill-Saline Basin Advisory Committee reveals that quality problems dominate the concerns in the Smoky Hill-Saline Basin and that quantity problems are also a major concern.

The problems that were identified for the FY 1988 Basin Plan are considered to be the most apparent and current problems. Other problems will become apparent and will be identified and dealt with in future planning cycles. Eight issue sub-sections are included in the FY 1988 Basin Plan; one problem is being addressed through state agency channels; and four problems remain for future action.

Problems Addressed in Issue Sub-Sections

NON-POINT SOURCE POLLUTION

Water quality problems related to non-point source pollution need to be identified and appropriate remedial actions should be implemented.

WATER CONTAMINATION

Water contamination sites in the basin need to be identified and appropriate protective and remedial actions should be implemented.

RURAL FLOODING

Rural flooding is a periodic problem on some of the streams in the Smoky Hill-Saline Basin.

MOISTURE CONSERVATION

There is a need for moisture conservation practices on 38 percent of the land in the Smoky Hill-Saline Basin.

GROUNDWATER DECLINES

Withdrawal of the groundwater at a rate far exceeding the recharge has resulted in a decline of the groundwater resources in the western part of the Smoky Hill-Saline Basin overlying the Ogallala Aquifer.

STREAMFLOW SHORTAGE IN SMOKY HILL RIVER

Streamflows in the Smoky Hill River have been reduced by the effects of soil and water conservation practices and groundwater pumping.

WATER SUPPLY SHORTAGE FOR HAYS AND RUSSELL

Hays and Russell have experienced water supply shortages from their sources in the Smoky Hill River alluvium. Additional sources of supply need to be identified.

WATER SUPPLY SHORTAGE FROM CEDAR BLUFF RESERVOIR

The water supply from Cedar Bluff Reservoir is inadequate to meet all demands. Alternative uses for the reservoir need to be investigated.

Problems Addressed Through Other Than Basin Plan

Some water-related problems are most logically addressed through state administrative actions or require consideration as statewide policy issues prior to incorporation into a basin plan. One such problem was identified in the Smoky Hill-Saline Basin.

LAND TREATMENT MAINTENANCE

Land treatment measures such as dams, waterways, diversions and terraces will lose their effectiveness if not properly maintained. The Kansas Water Office reviewed the concerns with other agencies and other basins to determine the extent of the problem. Lack of maintenance was identified as a statewide problem. The State Conservation Commission is presently carrying out the appropriate action to develop rules and regulations to require maintenance for all land treatment practices for which the state participates in cost-share funding.

Problems for Future Action

URBAN FLOODING

Urban flooding problems were identified at Hays and Salina. Other communities with high flood potential should be identified and the feasibility of remedies such as watershed structures and floodplain zoning need to be examined.

Kansas Water Plan

Management Section

Sub-section: Minimum Desirable Streamflows

Kansas Water Office
109 S.W. Ninth, Suite 200
Topeka, Kansas 66612-1215
An Equal Opportunity Employer

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1986

Approved
by the
Kansas Water Authority

January 1986

NINNESCAH RIVER

The Ninnescah River forms from its two forks in south-central Kansas (Figure 4). The North Fork enters Cheney Reservoir with little outflow to the mainstem. Average flow above the reservoir has been 140 cfs, while 109 cfs has flowed on the average below the reservoir. Median flow for the upper reach has been 63 cfs. The South Fork is unregulated and has averaged 204 cfs. Median flow has been 134 cfs. The headwaters of the river are within Groundwater Management District No. 5. Stream depletion has been noted in the South Fork above Pratt, however, overall, the Ninnescah River has not shown extensive depletion. The groundwater gradient of baseflow toward the stream is more steep than the Arkansas River and Rattlesnake Creek. Thus, groundwater appropriations do not have as significant an effect as on those other streams. The flows recommended in Table 2 are likely to be met 80-90 percent of the time.

SMOKY HILL AND SALINE RIVERS

These two rivers begin in western Kansas, although little baseflow occurs until immediately above Kanopolis and Wilson Reservoirs (Figure 5). Flow along the Smoky Hill River near Schoenchen has been depleted because of extensive use of the alluvium, conservation practices and critical depletions above Cedar Bluff Reservoir, thereby eliminating any release downstream. Flow in the Saline River becomes mineralized once it enters Russell county. Flow on the Smoky Hill River at Ellsworth and the Saline River near Russell has averaged 245 and 96 cfs, respectively. Respective median flows have been 60 and 29 cfs. The Saline River has shown some depletion effects over the past ten years, while the Smoky Hill River at Ellsworth shows little change at this time. The flows recommended in Table 3 have been met 80-90 percent of the time.

CHIKASKIA AND MEDICINE LODGE RIVERS

These unregulated rivers flow from south-central Kansas into Oklahoma (Figure 5). The Chikaskia River averages 200 cfs while the Medicine Lodge River has an average flow of 135 cfs. The river interacts with underlying Permian Redbed formations and becomes mineralized as it flows into Oklahoma. Median flows have been 79 cfs and 74 cfs for the Chikaskia and Medicine Lodge rivers, respectively. Little depletion has been seen in either stream. Both rivers are viewed as valuable fishery and riparian resources. The flows recommended in Table 3 are present 80 percent of the time.

LITTLE AND BIG BLUE RIVERS

The Little and Big Blue Rivers originate in Nebraska and flow into Tuttle Creek Reservoir (Figure 5). Average flow on the Little Blue River has been 650 cfs while average flow on the Big Blue River has been 785 cfs. An interstate compact between Nebraska and Kansas designates stateline flows for the period May to September. These stateline flows are reflected in the recommended flows listed in Table 3. In addition to protecting the fishery resource, these flows also protect reservoir inflows from future depletion.

REPUBLICAN RIVER

The Republican River originates in Nebraska, Colorado and western Kansas. However, the substantial portion of flow occurs below Harlan County Dam in Nebraska. Steady flow occurs from the state line to Milford Reservoir (Figure 5). The Republican River averages 700-1000 cfs in Kansas. Median flow is 500 cfs at Clay Center. The Republican River is viewed as an important fishery, riparian and recreation resource. Additionally, inflows of the Republican River are very important to the yield of Milford Reservoir. **The basin has experienced depletion in the form of conservation practices and groundwater appropriations.** Severe de-

Recommended Minimum Desirable Streamflows (cfs)—1986

Stream Name	Location	J	F	M	A	M	J	J	A	S	O	N	D
Saline River	Near Russell	5	5	15	15	15	12	2	2	2	5	5	5
Smoky Hill River ^a	At Ellsworth	20	20	25	30	35	45	35	15	15	15	20	20
Medicine Lodge River	Near Kiowa	50	55	60	60	40	30	6	1	1	4	40	50
Chikaskia River	Near Corbin	30	45	50	45	40	30	16	5	5	8	30	30
Big Blue River	At Marysville	100	100	125	150	150 ^b	150 ^b	80	90	65	80	80	80
Little Blue River	Near Barnes	100	100	125	150	150 ^b	150 ^b	75	80	60	80	80	80
Republican River ^c	At Concordia	100	125	150	150	150	150	150	150	80	65	80	100
Republican River ^c	At Clay Center	125	150	200	250	250	250	200	200	100	90	100	125
Mill Creek	Near Paxico	8	8	8	25	30	35	10	5	5	2	5	8
Delaware River	Near Muscotah	10	10	20	20	20	20	5	3	3	2	10	10

^a Subject to subsequent assessment of lagged effects of upstream depletions.
^b Subject to the stateline flows contained in the Blue River Compact.
^c Subject to subsequent assessment of Harlan County Reservoir Operations, development of compact stateline flows and lagged effects of upstream depletions.

TABLE 3

STATEMENT OF DAVID L. POPE
CHIEF ENGINEER
DIVISION OF WATER RESOURCES
KANSAS STATE BOARD OF AGRICULTURE
TO
HOUSE COMMITTEE ON ENERGY AND NATURAL RESOURCES

SENATE BILL NO. 41

March 16, 1987

Chairman Fox and Members of the Committee, thank you for the opportunity to comment on Senate Bill No. 41 pertaining to the establishment of minimum desirable streamflows for the nine new rivers and streams listed in the bill.

If the legislature enacts legislation establishing these minimum desirable streamflows, it would be the responsibility of the Chief Engineer to withhold from appropriation that amount of water deemed necessary to establish and maintain, for the identified watercourse, the desired minimum streamflow. In other words, our office would be required to determine whether or not there was sufficient water available for appropriation in excess of the amount of water deemed necessary to satisfy the existing senior water rights and the minimum desirable streamflow requirements. In those cases where additional water is not available, additional permits for the appropriation of water would not be granted. If water is available a significant portion of the time, new appropriations would be granted, however, these appropriation rights would be junior to the minimum desirable streamflow requirements.

These proposed minimum desirable streamflows would not affect the holders of existing senior water rights with a priority date on or before April 12, 1984, provided they are operating in compliance with the conditions of their permits during times of streamflow administration.

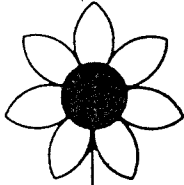
Any such junior appropriation (i.e. one with an application filed after April 12, 1984) would be subject to regulation during periods of low flow and would not be allowed to divert water if such diversion would cause the minimum desirable streamflow to not be satisfied.

In some cases, groundwater withdrawals from wells in the alluvial aquifer along streams can significantly affect the streamflow. Therefore, it will be necessary for us to analyze the effect of new wells on these streamflow requirements in order to determine whether new wells should be allowed, and if so, at what distance to the stream. Groundwater - surface water inter-relationships are normally quite complex and vary from one stream system to another. The Division has spent a considerable amount of time developing administrative policies and procedures to deal with the issue and is currently receiving input from the Groundwater Management Districts so that such procedures are as workable as possible for streams within the Districts.

In essence, the minimum desirable streamflow program does not change the way the water rights are administered, except to leave a certain portion of streamflow, when available, in the stream for in-stream flow purposes, rather than to allow that water to be appropriated for new consumptive uses. In addition to the environmental and water quality benefits associated with this in-stream flow, it should make it easier to protect existing water rights, such as domestic rights for livestock watering. Said another way, once a stream has been dried up or severely depleted, even regulation of junior upstream water users may still not make it possible to provide an adequate supply of water for senior downstream users. However, if we can maintain some limited amount of water in the stream, this problem can normally be overcome.

The Division of Water Resources, Kansas State Board of Agriculture, has had an opportunity to provide input into the development of the proposed minimum desirable streamflows through an interagency technical committee working closely with the Kansas Water Office. The proposal for minimum desirable streamflow standards on the nine new stream reaches contained in Senate Bill No. 41 is the result of extensive discussions between the water related agencies and has resulted in the best consensus of opinion between those agencies, taking into consideration extensive public input at the public meetings and hearings, as to what those minimum desirable streamflows should be. The Division is satisfied with the process that took place in order to set those minimum desirable streamflow values which are being brought before the legislature for approval this year.

Thank you very much. I would be happy to answer any questions the Committee might have.



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TESTIMONY BEFORE
HOUSE NATURAL RESOURCES SUBCOMMITTEE
MARCH 17, 1987
BY
M.S. MITCHELL, LEGISLATIVE CHAIRMAN
HOME BUILDERS ASSOCIATION OF KANSAS

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

MY NAME IS M.S. MITCHELL, LEGISLATIVE CHAIRMAN FOR THE HOME BUILDERS ASSOCIATION OF KANSAS.

SB 42 AS AMENDED BY THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES IS NOT WHAT WAS INTENDED WHEN THE KANSAS WATER PLAN SUBSECTIONS ON RIPARIAN AND WETLANDS PROTECTION WAS DISCUSSED IN PUBLIC HEARINGS ACROSS THE STATE IN 1985. THAT CONCEPT WAS FOR THE KANSAS FISH AND GAME COMMISSION TO IDENTIFY CRUCIAL WILD LIFE HABITATE IN RIPARIAN AND WETLAND SETTINGS AND ENCOURAGE THEIR PROTECTION AND PROPER MANAGEMENT BY ACCEPTING CONSERVATION EASEMENTS IN EXCHANGE FOR EXPERT PREPARATION OF MANAGEMENT PLANS BY STATE AGENCIES

NO ONE IS CERTAIN HOW THAT SIMPLE CONCEPT DEVELOPED INTO THE BILL BEING CONSIDERED NOW, BUT WE ARE CERTAIN THAT PARTS OF IT WOULD, IF THEY BECAME LAW, LEAD TO UNNECESSARY LAND USE CONFLICTS WHICH WILL SERVE NEITHER FUTURE LAND OWNERS, NOR THE RIAPARIAN AND WETLAND PROTECTION PROGRAM.

TO THE END OF REMOVING THE PARTS OF THIS BILL WHICH WE BELIEVE WILL LEAD TO SUCH CONFLICTS WE RECOMMEND THE FOLLOWING:

1. ON LINES 24 AND 26 THE REFERENCES TO "AIR SPACE" SHOULD BE DELETED. PRESERVATION OF AIR RIGHTS IS NOT GERMAIN TO RIPARIAN AND WETLAND PROTECTION.
2. ON LINES 26 AND 27 THE WORDS "INCLUDING IMPROVEMENTS" SHOULD BE DELETED. PRESERVATION OF STRUCTURES IS NOT GERMAIN TO RIPARIAN AND WETLAND PROTECTION.
3. ON LINES 31 - 33 REFERENCES TO "PRESERVATION OF BUILDINGS, SITES OR STRUCTURES HAVING HISTORICAL, ARCHITECTURAL OR CULTURAL



INTERESTS OR VALUE." SHOULD BE DELETED AS NOT BEING GERMAIN TO RIPARIAN AND WETLAND PROTECTION. LAWS ALREADY EXIST TO ADDRESS THIS ISSUE.

4. ON LINES 52 - 55 REFERENCES TO "AN ORGANIZATION EXEMPT UNDER SECTION 501 (C)(3) OF THE INTERNAL REVENUE CODE..." SHOULD BE DELETED. ALL OF THE DISCUSSION OF THE RIPARIAN AND WETLAND PROTECTION PROGRAM WAS BASED ON THE STATE BEING THE GRANTEE OF THE CONSERVATION EASEMENTS IN EXCHANGE FOR THE EXPERT ADVISE AND ASSISTANCE IN PREPARING AND IMPLEMENTING THE MANAGEMENT PLANS. PRIVATE ORGANIZATIONS SHOULD NOT BE PERMITTED TO SUBSTITUTE FOR THE STATE.
5. ON LINES 64 - 70 THE REQUIREMENT FOR THE FILING OF A DESCRIPTIVE STATEMENT SHOULD BE DELETED. SUCH DESCRIPTIONS COULD NEVER BE COMPLETE AND WOULD DO NOTHING BUT LEAD TO FUTURE CONFLICT OF OPINIONS OVER PROPORTED CHANGES.
6. SUBSECTION 4(C) ON PAGE 3 IS NOT APPROPRIATE FOR CONSERVATION EASEMENTS WHERE THE STATE IS THE GRANTEE.