

Approved: 2-21-94  
Date

## MINUTES OF THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES.

The meeting was called to order by Chairperson Don Saltee at 8:00 a.m. on February 16, 1994 in Room 423-S of the Capitol.

All members were present or excused:

Committee staff present: Raney Gilliland, Legislative Research Department  
Dennis Hodgins, Legislative Research Department  
Don Hayward, Revisor of Statutes  
Clarene Wilms, Committee Secretary

Conferees appearing before the committee:  
Alan Steppat, McGill Associates  
Richard Wenstrom, Water PACK  
David Pope, Division of Water Resources, Board of Agriculture

Others attending: See attached list

Richard Wenstrom presented information concerning the Water Protection Association of Central Kansas stating it was formed four years ago in the Great Bend, Kansas area and is a non-profit organization. Attachment 1 indicates the primary counties served, an area of 670,000 irrigated acres containing 50000 wells generating \$240 million per year in agriculture production. The area also supports livestock production and dry land farming with agriculture being the main base of economy.

Mr. Wenstrom continued his presentation noting the focus area is the Rattlesnake Creek basin, with sub-basin in the Quivera Wild Life Refuge and Stafford, Edwards, Kiowa Counties. Six public water supplies exist. Quivera has surface rights. He further stated Water PACK was trying to circumvent surface right claims and find solutions to provide for efficient management of the Quivera National Wildlife Refuge water resource.

Mr. Wenstrom told members that Quivera gets water at the wrong times, timing, not supply is the problem. The transfer system is out of date. Dave Hilley, Manager, would like to develop a storage system to solve the timing problem. Goals and objectives are to use public and private funding and making use of data already collected to solve the timing and preserve local economy.

In his presentation Mr. Wenstrom told members that Water PACK doesn't speak for all agencies. Rattlesnake Creek already has a plan of action, however Quivera involves many agencies. The Quivera Project Partnership agreement has not been signed but progress toward that end continues. Their major thrust is coordination and research. The Quivera Coalition's job is to develop funding from three projected sources: private/trade, the Kansas Legislature, and United States Congress. Federal involvement comes about because Quivera is a federal wild life refuge.

Mr. Wenstrom stressed that this area does not involve the aqua Ogallala water level of Western Kansas. This area is in shallow Ogallala with shallow wells with the sand hills being the recharge area. This is a sustaining resource but it does need better management. Water PACK's project is to make Quivera self-containing which should serve environmentalists as well as those earning their living from the area.

A member questioned whether the area loses the surface water in Rattlesnake Creek with Mr. Wenstrom stating there is broad fluctuation and it sometimes goes dry.

A member asked if the Refuge is a wet land with Mr. Wenstrom replying that historically it has been although there have been some dry years.

A member questioned whether the Legislature was expected to help provide funds and Mr. Wenstrom stated they were going through the normal Kansas Walter Plan which was already identified in the study.

## CONTINUATION SHEET

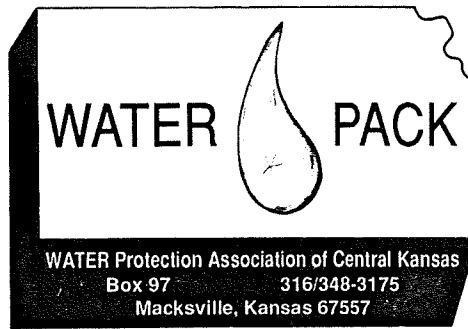
MINUTES OF THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES, Room 423-S Statehouse, at 8:00 a.m. on February 16, 1994.

A member questioned the time frame with Mr. Wenstrom stating they planed to be in Washington in March , 1994 and the time table in the Partnership agreement-project was for the year 1995 or 1997.

Mr. David Pope, Division of Water Resources, State Board of Agriculture, stated his organization had a regulatory role and will maintain objectivity, look at feasibility studies and hope for an outcome acceptable to all concerned.

The meeting adjourned at 8:45 a.m.

The next meeting is scheduled for February 21, 1994.



The Water Protection Association of Central Kansas was formed four years ago as a result of the hearings held addressing the water supply issues related to Cheyenne Bottoms. Water PACK did not participate in, but, did monitor the intensive groundwater use control area (IGUCA) hearings.

Water PACK is an association of farmers and agribusinesses organized to promote, foster and encourage the intelligent, economical, and sustainable use of quality water.

Water PACK is taking a lead role in education programs and the development of conservation strategies. We are asking people to take a long range view of water conservation and management.

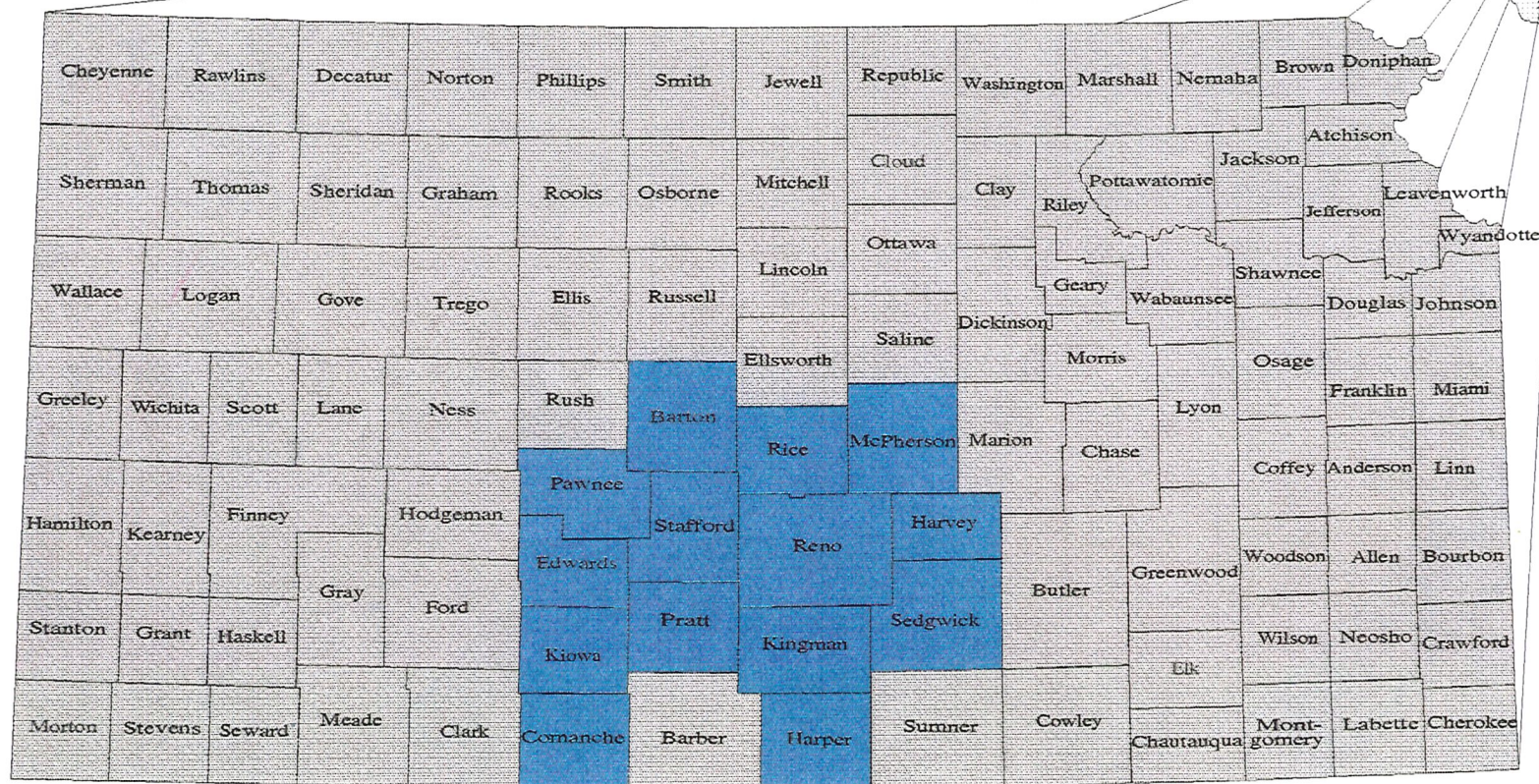
**Water PACK helps members by:**


1. Determine the quantity and quality of water.
2. Take action when necessary to protect water rights.
3. Encourage improvements in water management.
4. Study and involvement with legislation, rules and regulations which affect members.

Senate Energy & Natural Resc.  
February 16, 1994  
Attachment 1



# Water Protection Association of Central Kansas, 1993










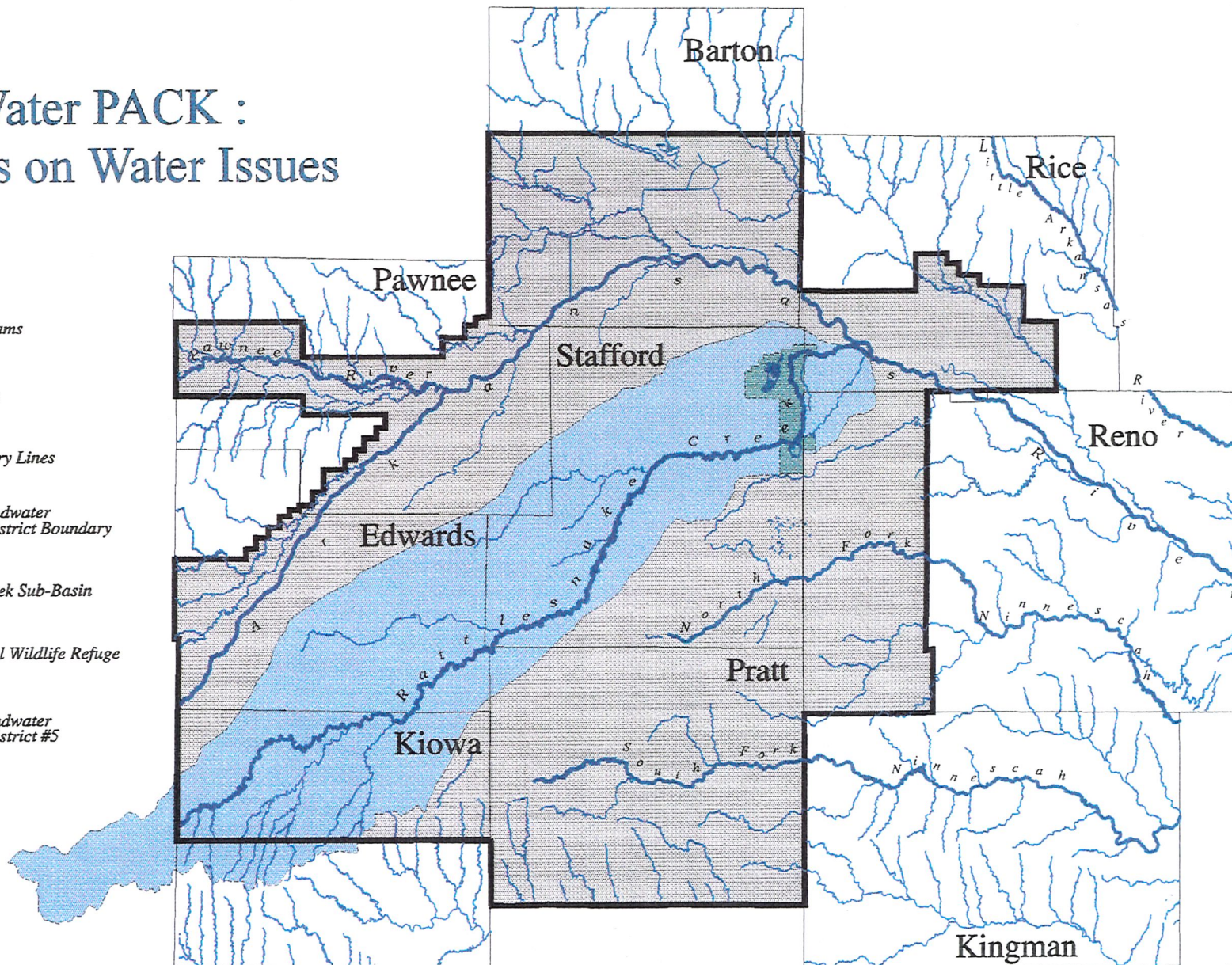
 Participating Counties

0 25 50  
Miles



# Water PACK : Focus on Water Issues

-  Rivers and Streams
-  Primary Rivers
-  County Boundary Lines
-  Big Bend Groundwater Management District Boundary
-  Rattlesnake Creek Sub-Basin
-  Quivira National Wildlife Refuge
-  Big Bend Groundwater Management District #5



# Economic Overview of Irrigated Agriculture in the Water PACK area of Kansas

**671,900 irrigated acres in the Water PACK area (1992)**

## **Total dollars generated by irrigation**

	\$358.00	Irrigated average income per acre
x	671,900	Total number of irrigated acres in the Water PACK area
	\$240,540,200	Total dollars generated on irrigated land
x	5	Number of times a dollar turns in the Water PACK area
	\$1,202,701,000	Money turned in the Water PACK area as a result of irrigation

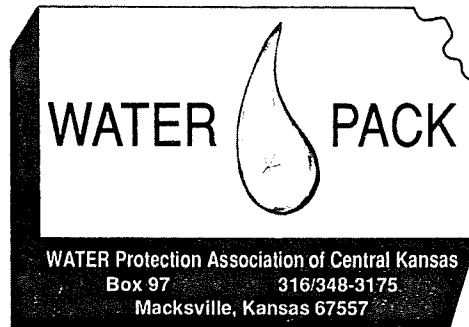
## **Total additional dollars generated by irrigation in the Water PACK area:**

	671,900	Irrigated acres in the Water PACK area
x	\$230.08	Average irrigated income per acre
	\$154,590,752	Additional dollars generated by irrigation
x	5	Number of times a dollar turns in the area
	\$772,953,760	Dollars circulating in the Water PACK area as a result of irrigation

There is an additional \$3,359,500 of real estate taxes paid as a direct result of irrigation. (Generally thought to be an additional \$5/acre in taxes generated on irrigated over dryland acres.

## **Jobs created by irrigation:**

	671,900	Acres irrigated in the Water PACK area
x	\$230.08	Additional dollars generated by irrigation
	\$154,590,752	Additional dollars generated by irrigation
x	2.5	Factor in determining jobs created
	\$386,476,880	Worth of jobs created
/	\$16,500	Estimated per capita income in the Water PACK area
	23,423	Total people supported by irrigation in the Water PACK area



**March 30, 1993**

**QUIVIRA PROJECT  
ENHANCEMENT PROJECT FOR QUIVIRA NATIONAL WILDLIFE REFUGE**

**INTRODUCTION**

The Water Protection Association of Central Kansas (Water PACK) was formed to address water issues. Water PACK is finding itself in several roles at this time. Water PACK has become a watchdog over water studies related to different drainage basins as well as a platform for educational programs related to water law, water policies, and water conservation in Kansas. In the area of water conservation, Water PACK is developing water conservation strategies concurrent with encouraging members to conserve through use of high efficiency delivery systems and water timing.

Acknowledging a less than adequate stream flow in some months to meet Quivira National Wildlife Refuge demands and excess flow in other months, Water PACK invites organizations to form a coalition for the purpose of doing a feasibility study addressing the possibility of upgrading water facilities at Quivira National Wildlife Refuge to allow for more timely storage, conservation and delivery of water in the system.

It is essential to the economy of Kansas to maximize the use of water resources of the state. Both the economy and the wildlife habitat are vital to the long term stability of the area. To accomplish this, all parties, agriculture, municipalities and the Quivira National Wildlife Refuge will need to develop management programs that will reduce these water requirements and maintain the natural and economic environment. It is the position of Water PACK that the water resources of this area are adequate to supply the existing appropriations if all parties use available technology and implement water management programs.

## **ISSUES**

### **SUPPLY**

1. Rattlesnake Creek is located in the western portion of the Lower Arkansas Basin in south central Kansas. The majority of the subbasin is contained in Stafford, Kiowa and Edwards counties. Smaller portions of the subbasin are located in Rice, Barton, Reno, Pawnee, Ford and Clark counties. Agricultural cropland represents the predominant land use in the subbasin. Grassland is the second most prominent land use.
2. The predominant water use in the subbasin is for irrigation accounting for approximately 98 percent of the volume of appropriated ground water rights and permits. The largest permitted surface water use is from Rattlesnake Creek for the Quivira National Wildlife Refuge in Stafford County. Six public water supply systems exist in the subbasin, all of which rely on groundwater as their source of supply.
3. The principal source of water supply for beneficial uses in the Rattlesnake Creek Subbasin is groundwater. The average annual precipitation in the subbasin varies from 26 inches along the eastern side to 23 inches in the western portion. Actual precipitation received can vary widely ranging from 14 inches to over 40 inches annually. Since the area is a semi-arid region, there is a large variance in precipitation from season to season as well as year to year. To further disrupt the supply, the events of rainfall over two inches at a time, vary greatly. Such events recharge the water table and increase the stream flow of the Rattlesnake Creek.

### **SUPPLY MANAGEMENT**

#### **1. Timing**

Due to the semi-arid climate and the variances in rainfall from season to season as well as year to year, the time water is available to the Quivira National Wildlife Refuge is not always when the water is needed to maintain the habitat.

#### **2. Storage**

To adequately manage the variances in stream flow that the climatic conditions create, the development of a storage system to collect water in times of high stream flows would hold water that normally flows past the refuge.

#### **3. Transfers**

The current transfer system in the refuge is very primitive, being old stream channels and sloughs. A transfer system of lined ditches moving water from the many ponds and dikes in the refuge would reduce the volume of water necessary to maintain the natural habitat on the refuge.



## **GOALS & OBJECTIVES**

- 1. To obtain public and private sector funding to assist US Fish & Wildlife Service to complete engineering studies required for the efficient management of the Quivira National Wildlife Refuge water resource.**
- 2. To facilitate the incorporation of Rattlesnake Creek Subbasin modeling information provided to Quivira National Wildlife Refuge by the Kansas Geological Survey and the Groundwater Management District #5 and new Quivira Project engineering studies into a water management plan at Quivira National Wildlife Refuge.**
- 3. To reduce the critical nature of water delivery timing to Quivira National Wildlife Refuge through the development of transfer and storage projects at the refuge.**
- 4. To maintain viability of local economies.**

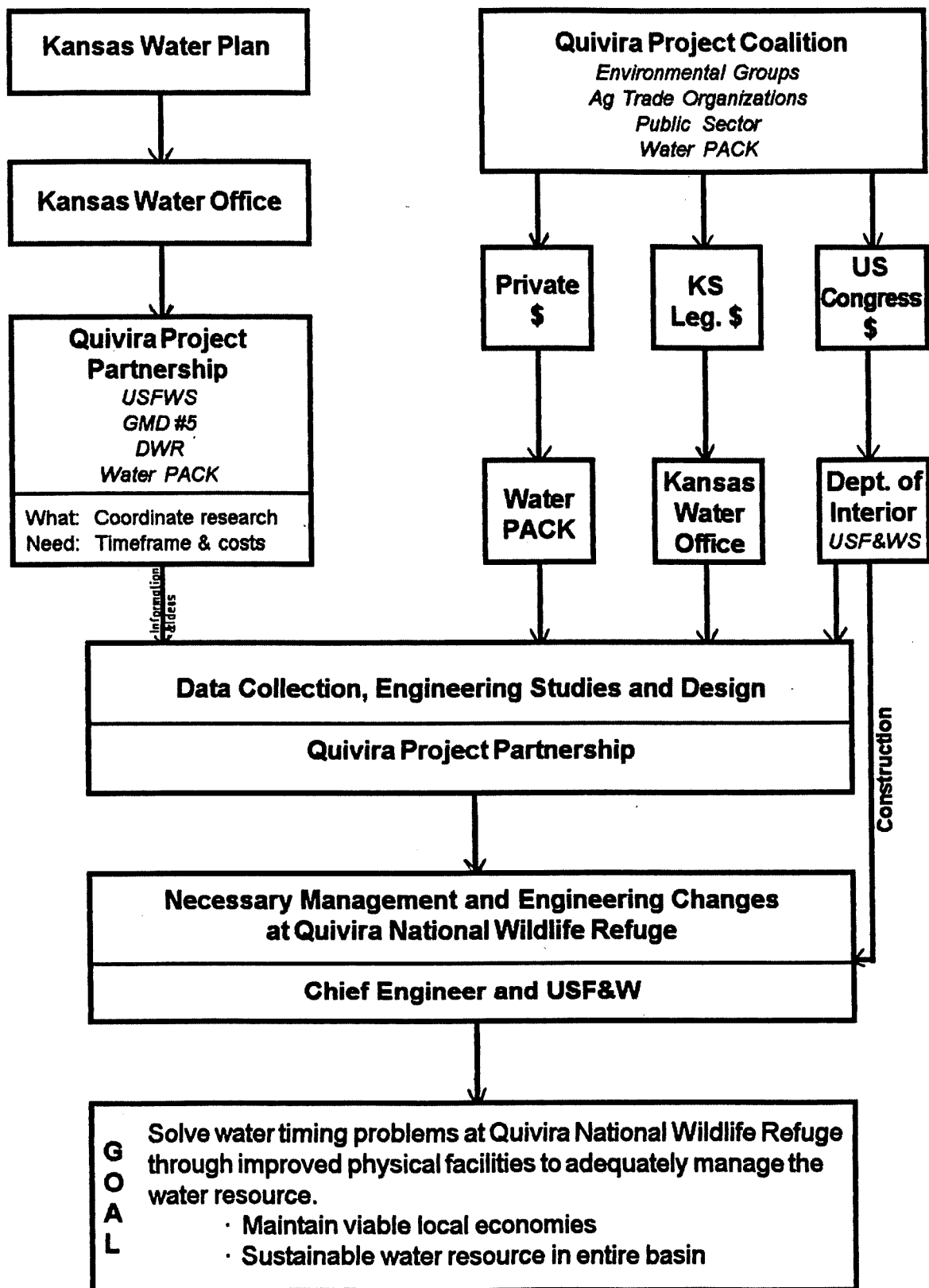
## **PLAN IMPLEMENTATION**

**Following the formation of a coalition with common goals, the initial focus should be on securing funding for engineering studies at Quivira. Possible sources beyond the coalition members are private organizations focused on wildlife protection issues, State and Federal Grants available for projects of this type, and State or Federal funding through congressional appropriations.**

**Implementation of management alternatives at Quivira National Wildlife Refuge would be implemented through US Fish & Wildlife Services. Funding options would be led by an attempt to secure funds through congressional appropriations to the US Department of Interior.**

**In conclusion.**

**The Water Protection Association of Central Kansas believes that the Quivira Project offers an opportunity to enhance a valuable United States asset and at the same time help protect and utilize a valuable state resource, water. Coalition members from agriculture, environment and business combined with a singleness of purpose most surely enhances our likelihood of success.**



## **QUIVIRA PARTNERSHIP**

### **PENDING MEMBERS**

**Big Bend Groundwater Management District #5  
U.S. Fish & Wildlife Service  
Division of Water Resources  
Water Protection Association of Central Kansas**

**The partners, who represent all water users in the Rattlesnake Creek Basin, are committed to a cooperative approach and to acknowledge the interest of all partners within the basin. They also understand water conservation shall be a guiding principle for all partners and are committed to JOINT planning efforts, to minimize duplication and maximize the use of available resources.**



## QUIVIRA PROJECT COALITION MEMBERS

### **Great Bend Chamber of Commerce**

***Michael Walts***  
1307 Williams  
Great Bend, KS 67530  
(316) 792-2401

### **Nature Conservancy**

***Alan Pollom***  
3601 SW 29th; Suite 112B  
Topeka, KS 66614  
(913) 272-5115

### **\*Kansas Farm Bureau**

***Bill Fuller***  
2627 KFB Plaza  
Manhattan, KS 66502  
(913) 587-6000

### **\*Ducks Unlimited**

***David Wesley***  
101 Business Park Drive; Suite D  
Jackson, MS 39213  
(601) 956-1936  
***Lee Queal***  
1004 W. 9th  
Pratt, KS 67124  
(316) 672-6100

### **Wichita Chamber of Commerce**

***Gerald Holman***  
350 W. Douglas  
Wichita, KS 67202  
(316) 265-7771

### **\*Kansas Audubon Council**

***Joyce Wolf***  
2535 Arkansas  
Lawrence, KS 66046  
(913) 749-3203

### **Kansas Livestock Association**

***Mike Beam***  
6031 SW 37th Street  
Topeka, KS 66614-51259  
(913) 273-5115

### **\*Water PACK**

***Steve Maechtlen***  
PO Box 393  
Pratt, KS 67124  
(316) 672-3896

### **\*Reno County Economic Development Council**

***Chad DeLong***  
PO Box 519  
Hutchinson, KS 67504-0519  
(316) 662-3397

\*Indicates Coalition Membership form has been signed.

## **QUIVIRA PROJECT COALITION MEMBERS**

### **ENVIROMENTAL INTERESTS**

**Nature Conservancy  
Kansas Audubon Council  
Ducks Unlimited**

### **PUBLIC SECTOR**

**Great Bend Chamber of Commerce  
Wichita Chamber of Commerce  
Reno County Economic Development Council**

### **AGRICULTURAL TRADE ORGANIZATIONS**

**Kansas Farm Bureau  
Kansas Livestock Association  
Water PACK**

**The purpose of the Quivira Project Coalition is to seek funding from private sources, state government and the federal government to carry out the plans developed by the Quivira Project Partnership.**

**Water PACK  
Presentation to House and Senate  
Energy and Natural Resources Committees**

**February 16, 1994**

**Members of the Committees:**

Because of the time constraints we faced when developing the attached material for your consideration, we have not received input and comments from the Chief Engineer, the President of Big Bend Groundwater Management District, nor the U.S. Fish and Wildlife Service.

Please consider this material as representative of Water PACK's position and understanding of the issues. The other parties listed as "pending members" of the Quivira Partnership, and the Quivira Project Coalition members who have not signed the membership form, may differ with Water PACK on various issues.