MINUTES OF THE HOUSE COMMITTEE ON ENERGY AND NATURAL RESOURCES.

The meeting was called to order by Chairperson Carl Holmes at 3:30 p.m. on February 8, 1993 in Room 526-S of the Capitol.

All members were present except: Rep. Lloyd, excused

Rep. Ruff, excused Rep. Gatlin, excused

Committee staff present: Raney Gilliland, Legislative Research Department

Dennis Hodgins, Legislative Research Department

April Howell, Committee Secretary

Conferees appearing before the committee:

Steve Hurst, Director

Terry Duvall, Policy Consultant

Kansas Water Office

Others attending: See attached list

Chairperson Holmes called the meeting to order and introduced Steve Hurst, Director, Kansas Water Office who briefly outlined the Water Marketing Program within the State. Mr. Hurst then introduced to the Committee Terry Duvall, Policy Consultant, also with the Kansas Water Office.

Terry Duvall addressed the Committee on federal reservoir storage options available to the State. She went into detail in her analysis and explanation of the Kansas Water Marketing Program in reference to additional storage and reallocation of water quality storage to water supply storage. The Kansas Water Office believes that certain purchases of additional water storage will meet the water supply needs of the municipal and industrial users in this basin. Both parties stressed to the Committee that there will not be another opportunity for the State to purchase additional storage space under such favorable financial conditions and further action should be taken on this matter immediately. In support thereof, Terry Duvall had included in her analysis graphs concerning estimated costs to call additional storage space into service and current allocation of storage in acre-feet, a map showing various reservoirs with their status and the 1991 Annual Report of the State of Kansas. (Attachment 1)

Chairperson Holmes then opened the floor to questions by the Committee members.

The meeting adjourned at 4:55 p.m.

The next meeting will be February 9, 1993.

Date: Jebruary 8 93

GUEST REGISTER

HOUSE

*COMMITTEE ON ENERGY AND NATURAL RESOURCES

NAME	ORGANIZATION	, ADDRESS	PHONE
Jim Luguica	WESTELLN RESONACES	Topseha	575-
Tammy R. Dodson	0	Joseka	
Shelley Wells	Legislative Intern	Lawrence	3560 3560
Billanderson	Water Dist #1 of So Co	M15510N	p
Pat Williams	GEID8	Beloit	738-3954
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Deborah Tompkins	Intern	Baldwin City	
Letand E Rolle	DUR-KSBA	Togelea J	4623
Larry D Shannon	Topeka Water	Topelia	235-1393
R.E Polton	Topoka Wato-	Topoka	2953821
Milu Stuelds	Harris News	и	354-757
T. Michael FEGAN	JUNETION City WATER GOMA	JUNCTION Eity,	238-8640
BOB THOMPSON	11 11 4	21 11	238,2408
Rex Buchanan	Ks. Goological Survey	Lawrence	864-3965
Dwight Metal			
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TESTIMONY OF TERRY K. DUVALL KANSAS WATER OFFICE

BEFORE THE HOUSE ENERGY AND NATURAL RESOURCES COMMITTEE

February 8, 1993

RE: FEDERAL RESERVOIR STORAGE PURCHASE OPTIONS BRIEFING

Thank you Mr. Chairman and Members of the Committee: I am Terry Duvall, and I am a Policy Consultant with the Kansas Water Office charged with administration of the State Water Marketing Program and Water Assurance Program.

The State of Kansas currently holds contracts for water supply storage space in ten major federal reservoirs in the eastern one-third of the state. These contracts were negotiated between the years 1974 and 1991. This long time span has resulted in contracts with requirements and conditions which vary from contract to contract.

The first nine contracts were negotiated specifically under the provisions of the 1958 Federal Water Supply Act. Under this Act, the State of Kansas could add up to an additional 30% to the storage space of a proposed federal flood control structure, at state cost, for "future" municipal and industrial water supply needs. The federal government would allow the State to repay the costs for constructing the add-on water supply over 50-years with interest (at time of contracting ranging from 2 to 4%). If the State requested water supply storage space be added which exceeded the 30% allowed under the 1958 Act, the State was required to begin making payment on this "immediate use" portion immediately upon completion of the dam. The remaining 30% would remain interest free until the tenth year following completion of the dam. At the end of the ten-year interest-free period, the State could either begin making payment on that 30% or allow interest to accrue on construction costs.

The tenth contract, negotiated in 1991, was negotiated under the provisions of a 1985 Memorandum of Understanding (MOU) with the Corps of Engineers and contains some of the provisions of the 1958 Water Supply Act. The major difference is that the State is not given the option to pay the capital construction costs off over 50 years. The capital costs must be paid in one lump sum within 30 days of conclusion of contract negotiations. However, the capital costs charged to the State are calculated at original construction costs and original interest rates, rather than the federal policy of updating costs and interest rates.

The real importance of the 1985 MOU, however, lies in the fact that it provides for reallocation of water quality storage to water supply storage in certain reservoirs which heretofore were

House Energy & NR 2/8/93 Attachment unavailable to the State to use for water supply purposes. Such reallocated storage can be purchased by the State at original construction costs and interest rates, in one lump sum payment. The MOU will expire in June of 1996, leaving the State a "window of opportunity" to take advantage of this offer from the federal government prior to that date.

An additional issue of immediate importance relates to the ability of the State to control releases from water supply storage space which the State has not yet "called into service" in some of the major federal reservoirs. Releases of water supply from the Kansas River reservoirs to support navigation on the Missouri River summer before last has brought this issue to the forefront.

Analysis of Options

The following worksheets depict basic information regarding the 14 major federal reservoirs included in this analysis. For purposes of explanation, these reservoirs will be grouped according to specific options available to the State.

John Redmond, Council Grove, Marion, Elk City:

*State's request for add-on storage did not exceed 30%, therefore, no provision for "immediate use" vs. "future use" storage space in these reservoirs.

*At the end of the ten-year interest-free period the State was required to begin making annual capital cost payments on the entire water supply storage space including operation and maintenance charges associated with the entire water supply storage space "in service." The State therefore has TOTAL CONTROL of the water supply storage space-the Corps cannot utilize water supply in the State controlled ("in service") storage space for navigation or any other purpose at its discretion.

*Under the 1985 MOU, the Corps has agreed to consider reallocation of a portion of the water quality storage space in these reservoirs to water supply.

*The opportunity under the 1985 MOU for the State to purchase this storage at original construction costs and interest rates will expire June, 1996.

Milford, Perry, Big Hill, Hillsdale, Clinton:

*Big Hill and Hillsdale water supply space requested by the State exceeded the 30% limit required by the 1958 Water Supply Act.

*That portion of water supply space exceeding 30% in Big Hill and Hillsdale was designated as "immediate use" and the State was required to begin making payment on this portion of the storage space and associated operation and maintenance costs immediately upon completion of construction of the dam. The ten-year interest-free

-2

period did not apply to this storage. This storage space is considered "in service" and is not subject to use by the Corps for such purposes as navigation.

*The remaining 30% of the storage in Big Hill and Hillsdale ("future use") may be "called into service" by the State incrementally. The state does not need to pay any of the costs of future storage until ten years after the reservoir is put into operation. If the future storage is not used by the end of the ten year period, then interest will accrue to the investment cost associated with the future storage. The state may either pay the accrued interest or allow the interest to accumulate until "... it uses or exercises control over the storage space." When the state uses or exercises control over the storage space payments will be made "... for the portion used" for both capital costs and operation and maintenance. Future storage can be used or controlled in increments:

Big Hill . . . 2 increments
Hillsdale . . 5 increments
Clinton . . . 10 increments
Milford . . . 10 increments
Perry 10 increments

*The State has not needed to "call into service" any additional increments in Big Hill and Hillsdale because current contracts with water users do not exceed the portion the State is already paying for as "immediate use."

*Perry, Milford, and Clinton requests did not exceed the 30%, so all storage was designated "future use."

*Immediately upon completion of Clinton Dam, the State "called into service" 60% of the water supply storage space under contract with the Corps to meet the needs of the City of Lawrence, the City of Baldwin, and six Douglas County Rural Water Districts. The remainder of this storage is not "in service" and the Corps may exercise its option to use this water for navigation (although it is unlikely they would do so because of the insignificant contribution of this reservoir to Kansas River flows).

*At the end of the ten-year interest-free period on Perry and Milford the State began making payments on 100% of the "future use" storage. These payments were considered "pre-payments" on the debt and did not constitute "calling into service" 100% of the "future use" water supply. The State was not exercising "control" over this storage, therefore, the Corps could utilize water from this space for navigation without being in violation of their contract with the State. In 1986, following over a year of study and analysis, the Kansas Water Office decided to discontinue making "pre-payments" to the Corps on "future use" storage until a water user had made a commitment to purchase the water supply from the State.

*The State has subsequently called 33% of Milford and 16.66% of Perry "into service"

for Water Marketing Purchasers and the Kansas River Water Assurance District Number 1. The remainder of the storage in these two reservoirs is still available for use by the Corps for navigation, since the State has not "exercised control" of nor "called into service" and begun making payments for both the capital cost and the operation and maintenance costs of this storage.

Toronto & Fall River:

*These reservoirs were constructed before the 1958 Water Supply Act. They are included in this analysis because the Corps has agreed (through the Verdigris Agreement signed in 1989) that storage space in these reservoirs allocated to "low flow augmentation" may be used by the State to enhance stream flows during periods of low flow (in particular, drought). The State's access to use of this storage is at no cost to the State.

Melvern, Pomona & Tuttle Creek:

*Prior to the 1985 MOU with the Corps of Engineers, no water supply storage space was available to the State from these reservoirs.

*Under the 1985 MOU the State may purchase storage space which the Corps reallocates from Water Quality (WQ) to Water Supply (WS).

*The purchase price to the State will be at original construction costs, original interest rates, with a ten-year interest free period (from end of construction), but the State must protect releases from the remaining water quality storage space from unlawful diversion by water right holders along the stream reach below the reservoir, form a water assurance district in the basin (the district must be a participant for the State to purchase the water supply storage space), and must pay the Corps in one lump sum for the storage space.

*The State may purchase the storage space incrementally, with each increment no less than 10% of the storage available.

*Other reservoirs included under the 1985 MOU for possible reallocation of existing water quality space to water supply under the same terms and conditions noted above are: Marion, John Redmond, Elk City, and Council Grove.

Purchase Recommendations

Reservoir

Big Hill:

The State continue to defer payment for the Future Use portion of this reservoir until Water Marketing purchasers contract for water supply service from this source. There is no threat of the Corps using this storage space for any other

1-4

purpose at this time.

Clinton:

0

The State continue to defer payment for the Future Use portion of this reservoir until Water Marketing purchasers contract for water supply service from this source. There is no threat of the Corps using this storage space for any other purpose at this time.

Council Grove:

\$1,451,345

The State should purchase reallocated water quality storage space in this reservoir under the provisions of the 1985 MOU. There will never be an opportunity for the State to purchase additional storage space under such favorable financial conditions. Work is beginning on an assurance district in this basin and current requests by water marketing purchasers exceed the yield capability of this reservoir. The KWO believes an assurance district would better meet the water supply needs of the municipal and industrial users in this basin. Under the MOU the State must pay for this storage in one lump sum up front.

Elk City:

\$2,042,762

The State should purchase reallocated water quality storage space in this reservoir under the provisions of the 1985 MOU. There will never be an opportunity for the State to purchase additional storage space under such favorable financial conditions. The water right holders in this basin have decided not to form an assurance district. This may prove to be a stumbling block in purchasing the storage space under the MOU with the Corps. However, the State does have the Verdigris Agreement with the Corps.

Fall River:

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No purchase necessary.

Hillsdale:

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The State continue to defer payment for the Future Use portion of this reservoir until Water Marketing purchasers contract for water supply service from this source. There is no threat of the Corps using this storage space for any other purpose at this time.

John Redmond:

\$4,142,820

The State should purchase reallocated water quality storage space in this reservoir under the provisions of the 1985 MOU. There will never be an opportunity for the State to purchase additional storage space under such favorable financial conditions. Work is beginning on an assurance district in this basin and reallocated storage space in this reservoir is key to the operation of an assurance district. The KWO believes an assurance district would better meet the water supply needs of the municipal and industrial users in this basin. Under the MOU

the State must pay for this storage in one lump sum up front.

Marion: \$2,505,783

The State should purchase reallocated water quality storage space in this reservoir under the provisions of the 1985 MOU. There will never be an opportunity for the State to purchase additional storage space under such favorable financial conditions. Work is beginning on an assurance district in this basin. The KWO believes an assurance district would better meet the water supply needs of the municipal and industrial users in this basin. Under the MOU the State must pay for this storage in one lump sum up front.

Melvern: \$6,398,000

The State currently does not own any water supply capacity in this reservoir. The State should purchase reallocated water quality storage space in this reservoir under the provisions of the 1985 MOU. There will never be an opportunity for the State to purchase additional storage space under such favorable financial conditions. An assurance district has been formed in this basin. The assurance district may not commit to the entire storage space available for reallocation. KWO believes an assurance district would meet many of the water supply needs of the municipal and industrial users in this basin. However, there is also a need for reallocated space to be made available under the Water Marketing Program in this basin as well. The KWO is currently negotiating with three water users who are not eligible for membership in an assurance district (Osage City, Burlingame, and Public Wholesale Water Supply District No. 12) for water to be directly withdrawn from the reservoir (not released to the stream for pick up at a diversion point). All potential users of the reallocated storage space may not come forward before the 1985 MOU expires in 1996. Under the MOU the State must pay for this storage in one lump sum up front.

Milford: \$389,451/yr/50yrs

The State currently controls 101,650 A-F of storage on behalf of the Water Marketing and Assurance Programs. The State should call the remaining storage under contract with the Corps into service under its current 50-year repayment contract. This action would prevent the Corps from evacuating storage in Milford for navigation.

Perry: \$371,150/yr/50 yrs

The State should call the remaining storage under contract with the Corps into service under its current 50-year repayment contract. This action would prevent the Corps from evacuating storage in Perry for navigation.

Pomona: \$3,075,520

The State currently does not own any water supply capacity in this reservoir. The State should purchase reallocated water quality storage space in this reservoir

under the provisions of the 1985 MOU. There will never be an opportunity for the State to purchase additional storage space under such favorable financial conditions. An assurance district has been formed in this basin. The assurance district may not commit to the entire storage space available for reallocation. KWO believes an assurance district would meet many of the water supply needs of the municipal and industrial users in this basin. However, there is also a need for reallocated space to be made available under the Water Marketing Program in this basin as well. All potential users of the reallocated storage space may not come forward before the 1985 MOU expires in 1996. Under the MOU the State must pay for this storage in one lump sum up front.

Toronto:

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No purchase necessary.

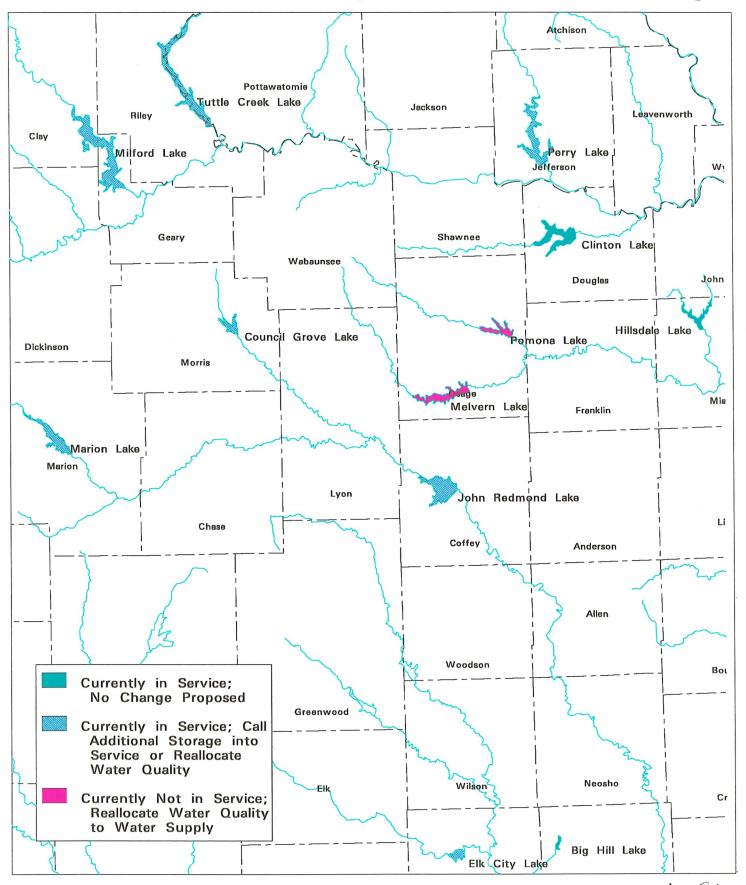
Tuttle Creek:

\$1,558,248

The State currently controls 27,500 A-F of storage on behalf of the Kansas River Water Assurance District No. 1. The KWO believes the remaining reallocated storage should be purchased as this storage space will never be available to the State under such favorable financial conditions. Needs for water withdrawal directly from the reservoir under the Water Marketing Program may develop in the future, but these users may not come forward before the 1985 MOU expires. Under the MOU the State must pay for this storage in one lump sum up front.

The financial commitment by the State to implement these recommended purchases and calling into service of additional storage is explained in attachments. This would give the State control of an additional 517,850 A-F of water supply storage space.

Kansas Water Marketing Program Proposed Call for Additional Storage or Reallocation of Water Quality (517,850 AF New Storage)



ESTIMATED COSTS TO CALL ADDITIONAL STORAGE SPACE INTO SERVICE

Reservoir	Capital Costs	Estimated Oper. & Maint.	TOTAL	AF	Comments
Milford	\$389,451	\$140,683	\$530,134	198,350	1st of 50 ann. pmts. under current contract
Perry	\$371,150	\$137,197	\$508,347	125,000	1st of 50 ann. pmts. under current contract
Tuttle Creek	\$1,558,248	\$23,696	\$1,581,944	22,500	Lump-sum pmtrealloc. WQ. thru MOU
John Redmond	\$4,142,820	•	\$4,374,402	20,000	Lump-sum pmtrealloc. WQ. thru MOU
Melvern	\$6,398,000	•	\$6,516,500	50,000	Lump-sum pmtrealloc. WQ. thru MOU
Council Grove	\$1,451,345	• •	\$1,936,904	15,000	Lump-sum pmtrealloc. WQ. thru MOU
Marion	\$2,505,783	•	\$2,600,583	40,000	Lump-sum pmtrealloc. WQ. thru MOU
Pomona	\$3,075,520	• •	\$3,151,360	32,000	Lump-sum pmtrealloc. WQ. thru MOU
Elk City	\$2,042,762		\$2,716,873	·	
TOTAL	\$21,935,078		\$23,917,046	502,850	Acre-Feet of added storage

		CURRENT A	LLOCATI	ON OF STOP	RAGE IN ACF		- 14 Martin - 14 M	ADDITIONAL ST	TORAGE
	TOTAL Useable	CURRENT	DESIGN	ATION/ALLO		Water Supply			
	Storage	Flood	Water	Other	Water	under	under	Current	Avail. thru
RESERVOIR	in AF	Control	Quality	Uses	Supply	State control	User Contr.	Corps Contr.	MOU
						(IN SERVICE)			
Big Hill	38,400	12,700	0	0	25,700	9,200	5,424	16,500	
•									
Clinton	368,700	258,300	0	21,200	89,200	53,500	67,346	35,700	
Council Grove	104,000	62,100	17,500	0	24,400	24,400	14,347	10,053	(15,000
Elk City	273,000	230,700	18,000	0	24,300	24,300	1,215	23,085	15,000
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Fall River	256,400	234,500	15,000	6,900	NA	NA	NA		
	•	·				444			
Hillsdale	149,000	81,000	15,000	0	53,000	7,500	3,837	45,500	
	,	•							
John Redmon	593,800	531,300	27.600	0	34,900	34,900	34,900	0	20,000
		***************************************	•••••	***************************************					
Marion	142.800	59,900	44,600	O	38,300	38,300	11,517	26,783	40,000
***************************************		•••••	••••	***************************************					
Melvern	351,000	214,000	90,000	47,000	0		500	0	50,000
Milford	1,000,000	700,000	0	0	300,000	101,650	101,650	198,350)
•••••		***************************************							•
Perry	630,000	480,000	0	0	150,000	25,000	25,000	125,000)
***************************************		•	***************************************						
Pomona	218,000	170,000	43.000	O	5,000	0	0		32,000
***************************************		***************************************	***************************************	•••••	***************************************				
Toronto	198,800	179,000	10,300	9,100	700	NA	400		
	,	,	•	•					
Tuttle Creek	2,001,000	1,879,000	72,000	0	50,000	27,500	27,500		22,500
			ecoccosti P otobilo (1000)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		******		
TOTALS	6,324,900	5,092,500	353.000	84,200	795,500	346,250	293,636	480,971	194,500
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1991 ANNUAL REPORT

STATE OF KANSAS

- WATER MARKETING PROGRAM
- WATER ASSURANCE PROGRAM
- MULTIPURPOSE SMALL LAKES PROGRAM

THE RIGHT TO USE WATER BEARS
THE RESPONSIBILITY TO USE IT WISELY

Kansas Water Office 109 SW 9th Street, Suite 300 Topeka, Kansas 66612-1249

AN EQUAL OPPORTUNITY EMPLOYER

INTRODUCTION

The Kansas Water Office administers or participates financially in three state programs for the management, conservation and development of municipal, industrial and public water supplies: the State Water Marketing Program, the Multipurpose Small Lakes Program and the Water Assurance Program. The current status of these three programs is described in this document.

STATUS OF WATER MARKETING PROGRAM

Background

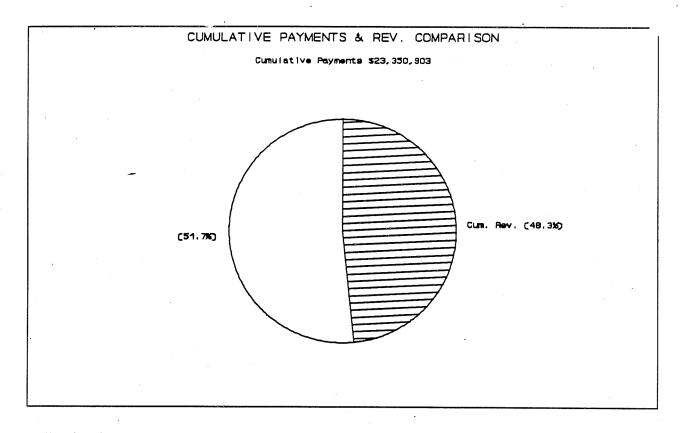
The State of Kansas was a pioneer in the development of a state-federal-local partnership to ensure that water supply storage space was included in major federal reservoirs in Kansas. Kansas was one of the first states to take advantage of the 1958 Water Supply Act, which allowed for the addition of water supply storage space in federal reservoirs, provided the costs of the added storage would be repaid by a state or local entity. The state recognized the importance of including storage space in federal projects to meet the future water supply needs of its citizens.

Since the enactment of K.S.A. 82a-1301 et al in 1974, the Kansas Water Resources Board, and its successor agency, the Kansas Water Office, have operated and administered the State Water Marketing Program to provide water to municipal and industrial users.

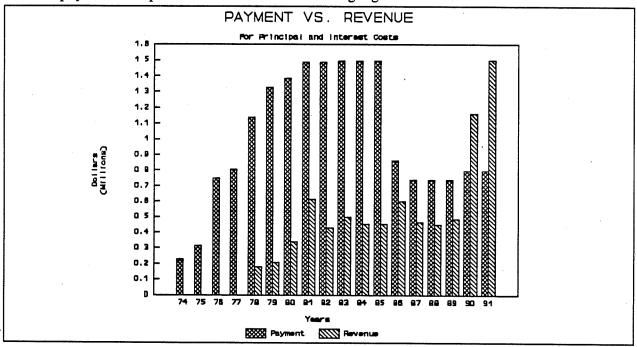
Costs for Water Supply Storage Under State Control and Revenue for Repayment

The state presently controls some portion of the conservation water supply storage space in nine federal reservoirs. The program began with one reservoir in 1975. By 1982, the state was making payments for capital costs and operation and maintenance to the federal government on the present nine reservoirs: Big Hill, Clinton, Council Grove, Elk City, Hillsdale, John Redmond, Marion, Milford and Perry. The total payments in 1975 were \$228,638 as compared to the \$1,383,977 payment in Calendar Year (CY) 1991. The cumulative payments reached \$23,350,903 in CY 1991. The cumulative revenue for repayment of the capital costs and operation and maintenance reached \$11,288,988 in CY 1991, or 48.3 percent of the cumulative repayment. (See figure box, page 2)

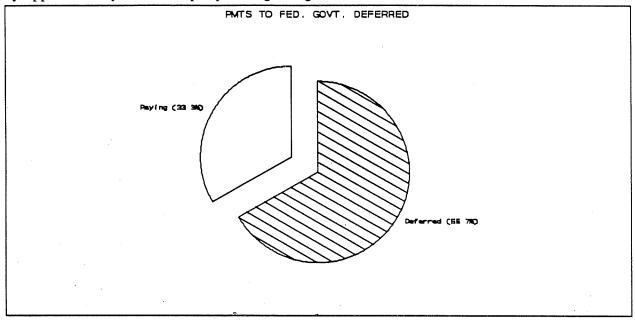
Purchasers of water supply under the Water Marketing Program are charged at a price per 1,000 gallons sufficient to repay the state for costs associated with the program. Two of the components of the price are based upon the principal and interest payments the state is required to make each year to the federal government for the storage space in the nine reservoirs under the program (the capital cost component) and the interest on the General Fund shortfall. The capital cost component is based upon the total principal and interest payments to be made over the repayment period on contracts with the federal government. (Further detail on the General Fund shortfall is provided in the next section of this report.)



Following is a bar chart of the principal and interest (capital cost) payments and revenue from 1975 through 1991. Revenue represents only the revenue associated with making the principal and interest payments. It should be noted, annual principal and interest revenue exceeded annual principal and interest payments for the first time in CY 1990. In addition, revenues from the transfer of reserve capacity in Milford and Perry reservoirs from the Water Marketing Program to the Water Assurance Program and use of Development Fund and State Water Plan Funds to pay capital costs during calendar year 1990 and 1991 had a significant impact upon the revenue/payment comparison shown in the following figure.



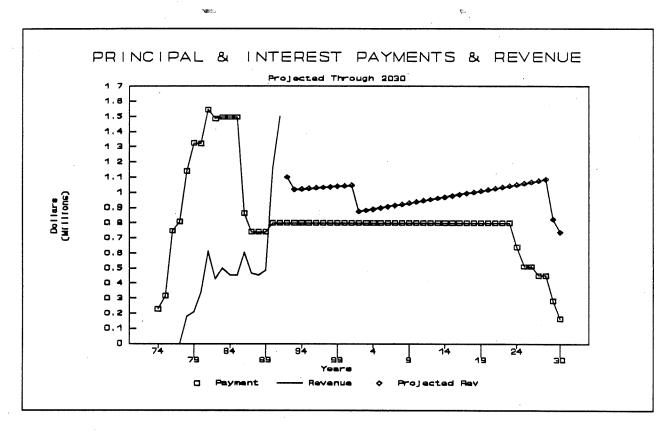
Capital cost payments to the federal government increased as new reservoirs were added to the program through 1981. A policy decision in 1986 to defer payments on future use storage in Big Hill, Clinton, Hillsdale, Milford and Perry reservoirs reduced the annual repayment obligation by approximately \$800,000 per year beginning in 1987.



General Fund Shortfall

From the inception of the Water Marketing Program, state policy has been to recoup the costs of providing the water supply storage space from those who use the water. Users, therefore, are charged at a rate for water under their contracts which is sufficient to repay the entire debt to the federal government. In the early years, when demand for water supply was low, revenues were not expected to be sufficient to meet the annual principal and interest (capital cost) repayment commitment to the federal government. Funds to make up this shortfall between revenue and repayments were advanced from the State General Fund. The cumulative shortfall advances through CY 1991 are \$11,130,146. In CY 1991, repayment of approximately \$117,595 of the capital cost shortfall was made to the State General Fund from receipts from water supply purchasers. In addition, \$175,116 was received from the Kansas River Water Assurance District for water supply storage space in Milford and Perry lakes. Payment from the District at \$175,116 per year will continue through 2001. \$408,976 from the State Conservation Water Supply Fund and the State Water Plan Fund were utilized to make capital cost payments in calendar year 1991. This was done to ensure adequate balances in the newly created Water Marketing Fund to meet October 1 repayment obligations to the federal government.

The entire principal and interest cost for the nine reservoir system, including the shortfall covered by State General Fund advances, plus interest on the shortfall, will be recovered from present and future water supply purchasers. The following figure shows projected annual repayments for principal and interest and projected revenues for principal and interest through 2030. The last principal and interest payment is due to be paid to the federal government that year for the current storage space.



Yield Available and Associated Costs

A total of 739,800 acre-feet of water supply storage space has been included in the nine current reservoirs in the Water Marketing Program. Initial principal cost for this water supply is \$69 million. The total yield capability of this storage is estimated to be 111.5 billion gallons per year with a 2 percent chance of shortage.

Table 1

Reservoir	Construction Costs	Storage in AF	Interest Rate
Big Hill	\$6,955,700	25,700	4.012%
Clinton	6,768,131	89,200	3.502%
Council Grove	1,461,764	24,400	2.699%
Elk City	2,146,666	24,300	2.742%
Hillsdale	23,421,675	53,000	4.012%
John Redmond	4,498,911	34,900	2.67%
Marion	1,576,327	38,300	3.046%
Milford	13,045,576	300,000	2.632%
Реггу	9,208,342	150,000	3.046%
	\$69,083,162	739,800	

By exercising options available to the state under the contracts with the Corps of Engineers, the state has deferred payment on approximately 414,541 acre-feet, slightly more than one-half of the total available under contract with the federal government. The costs of 75,000 acre-feet of

storage in Milford and Perry have been shifted to the Kansas River Water Assurance District, leaving 250,259 acre-feet of storage space in the Marketing Program at an initial cost of \$22,764,784. Final cost of this storage, including interest during the repayment period, is estimated to total \$46,654,063.

Of the 352,759 acre-feet of storage space being paid for by the state, 299,278 acre-feet are under contract between the state and 21 municipal and industrial water users in the Marketing Program and the Kansas River Water Assurance District. The state, therefore, has a reserve capacity in the nine reservoir system of approximately 89,827 acre-feet of storage upon which the state is required to make payment to the federal government but which is not under contract with users.

Table 2

Reservoir	In Marketing Program	Water Supply Capacity (AF)	Portion on Which State is Currently Paying or Has Paid Fed. Gov't (AF)	Portion Under Contract w/Users (AF)	Reserve Capacity (AF)	Portion on Which State has Deferred Payment to Fed. Gov't (AF)
Big Hill	1	25,700	9,200	5,425	3,775	16,500
Clinton	2	89,200	53,500	67,346	0	35,700
Council Grove	3	24,400	24,400	14,379	10,021	0
Elk City	· 4	24,300	24,300	1,215	23,085	0
Fall River		" 15,000	N/A	0	0	- 0
Hillsdale	<u>.</u> 5	53,000	7,500	3,837	3,663	45,500
John Redmond	6	34,900	34,900	34,900	. 0	0
Marion	7	38,300	38,300	11,517	26,783	0
Melvern		5,000	0	0	0	0
Milford	8	300,000	101,650	1 01,650	0	198,350
Perry	9	150,000	31,509	*31,509	0	118,491
Pomona		33,000	0	0	0	. 0
Toronto		"10,700	N/A	0	0	0
Tuttle Creek		50,000	27,500	**27,500	22,500	0
TOTALS		853,500	352,759	299,278	89,827	414,541

Includes storage for use by Kansas River Water Assurance District Number 1.

City of Toronto has contract with the Corps of 400 acre-feet of storage in Toronto Lake. Remainder of Toronto and Fall River Storage is available for low flow augmentation in the Verdigris Basin without cost to the state. Both projects were built prior to the 1958 Federal Water Supply Act.

Price Setting Under the Marketing Program

The rate charged under purchase contracts is calculated each year based upon a formula set out in the law and rules and regulations governing the Water Marketing Program. Historic annual rates are depicted in the following table.

Table 3

	1976	1977	1978	1979	1980	1981	1982
1 Capital Cost, Operation & Maintenance & Interest on General Fund Shortfall	\$0.05935	\$0.06126	\$0.07022	\$0.06902	\$ 0.06902	\$0.06902	\$0,06902
2 Admin. & Enforcement	\$0.00500	\$0.00500	\$0.00500	\$0.00500	\$0.00500	\$0.00500	\$0,00500
2 Admin. & Landeement	\$0.06435	\$0.06626	\$0.07522	\$0.07402	\$0.07402	\$0.07402	\$0.07402
	1983	1984	1985	1986	1987	1988	1989
1 Capital Costs	\$0.02670	\$0.02700	\$0.02730	\$0.03517	\$0.02876	\$0.02892	\$0.02954
2 Operation & Maint.	\$0.01440	\$0.01350	\$0.2030	\$0.01885	\$0.02048	\$0.02392	\$0.07382
3 Admin. & Enforcement	\$0.00460	\$0.00350	\$0.00510	\$0.00575	\$0.00535	\$0.00542	\$0.00518
4 Int. on Shortfall	\$0.04510	\$0.04870	\$0.04780	\$0.05376	\$0.04729	\$0.03833	\$0.04179
5 Depreciation Reserve	\$0.02500	\$0.02500	\$0.02500	\$0.02500	\$0.02500	\$0.02500	\$0.02500
·	\$0.11580	\$0.11770	\$0.12550	\$0.13853	\$0.12688	\$0.12159	\$0.17533
	1990	1991	1992	1993			
1 Capital Costs	\$0.05250	\$0.05114	\$0.05110	\$0.04616		-	
2 Operation & Maint.	\$0.02348	\$0.02534	\$0.02739	\$0.03266		1	
3 Admin. & Enforcement	\$0.00564	\$0.00567	\$0.00660	\$0.00486			
4 Int. on Shortfall	\$0.05191	\$0.06224	\$0.5361	\$0.03311			
5 Depreciation Reserve	\$0.02500	\$0.02500	\$0.02500	\$0.02500			
	\$0.15853	\$0.16939	\$0.16370	\$0.14179			

Legislation Affecting Water Rates

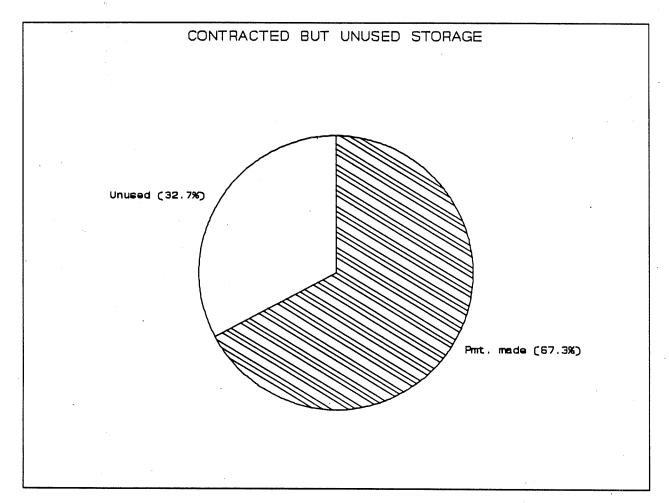
In 1987, major repair work was required at one of the nine reservoirs in the Water Marketing Program. The operation, maintenance and repair costs in that year were \$1,193,158 compared to the previous year's bill of \$408,506. To compute the rate to be paid by purchasers in a given year for operation and maintenance costs, the actual operation and maintenance costs of two years ago are divided by last year's water use. As can be seen in the above table, the rate component for operation and maintenance jumped in 1989 from 2.392 cents to 7.382 cents--an increase of nearly 5 cents per 1,000 gallons. Inflationary increases in operation and maintenance costs as well as cost spikes of unusual operation and maintenance costs will occur as the reservoirs age.

Following a study and analysis of the rate setting procedure, the Kansas Water Office and Kansas Water Authority proposed changes to the State Water Plan Storage Act (K.S.A. 82a-1301 et seq.) to address potential spikes in rates caused by unusual operation and maintenance costs. Those changes are embodied in Senate Bill 89 passed by the 1991 Legislative Session. Senate Bill 89

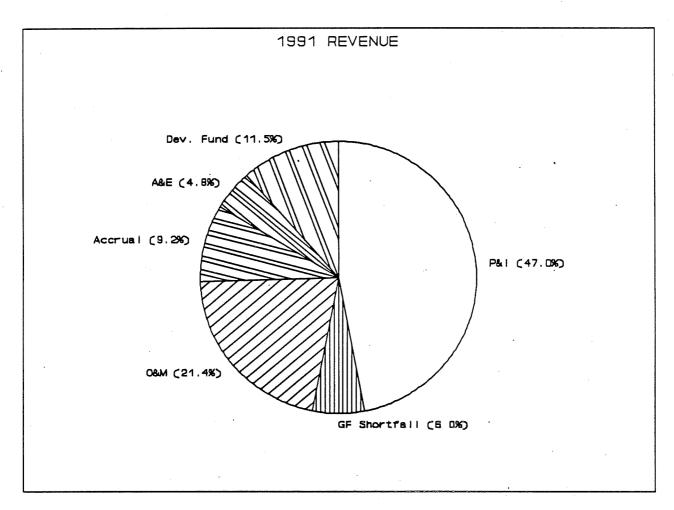
created a new fund (the Water Marketing Fund) through which all revenues and expenditures relating to the Water Marketing Program are to be processed. Within the fund is special operation and maintenance accrual account. Up to 1 cent per 1,000 gallons of the current revenue from the Water Marketing Program may be deposited in the accrual account to be used solely to offset unusual operation and maintenance costs, or to cover any shortage in revenue in any one year to meet the annual operation and maintenance costs. In calendar year 1991, \$179,175 in revenue was deposited in the Operation and Maintenance Accrual Account.

Water Use and Revenue in CY 1991

Of the 26.6 billion gallons of yield from storage under contract between the state and the 21 municipal and industrial water users, 17.9 billion gallons were actually used or paid for by purchasers in 1991. This is an increase in water use compared to 1990 use of 16.4 billion gallons. Purchasers are required by contract to pay for a minimum of 50 percent of their annual contracted quantity regardless of actual use.



Total revenue for calendar year 1991 was \$1,831,931 from water marketing contracts, compared to \$1,480,996 in calendar year 1990. In addition, \$684,144, from the Kansas Assurance District Development and State Water Plan Fund was used to pay capital costs in 1991. The following figure depicts the manner in which 1991 revenue was credited for payment of costs associated with the program:



Legend:

SCSWS = State Conservation Storage Water Supply Fund ("Development Fund")

A&E = Administration and Enforcement

O&M = Operation and Maintenance

P&I = Principal and Interest ("Capital Costs")

GF Shortfall = General Fund Shortfall

Accrual = Operation and Maintenance Accrual Account

Funding of Water Supply Projects - From Water Marketing Receipts

1983 amendments to the State Water Plan Storage Act (K.S.A. 82a-1301 et seq.) created the State Conservation Storage Water Supply Fund (K.S.A. 82a-1315b), which serves as a savings account to be used for acquisition and development of conservation water supply storage in reservoirs deemed necessary to implement the State Water Plan. All Water Marketing Program revenue which is not credited to meet each year's calculated capital cost, operation and maintenance, administration and enforcement, and operation and maintenance accrual fund expense is deposited in this "Development" Fund. The deposits (including interest earned) to this account for CY 1991 were \$232,751. The following table describes expenditures from the State Conservation Storage Water Supply Fund.

Table 4
State Conservation Storage Water Supply Fund

Deposits from Revenue (1984-1991) Earned Interest	\$2,743,906 300,467	
Total Revenue		\$3,044,373
Expenditures		
1. Multipurpose Small Lakes* Projects		
a. Centralia Site 50	•	
Water Supply (1988)	\$98,192	
Land Treatment (1989)	\$240,000	
b. Wellington Reservoir (1989)		
Flood Control	\$745,000	
Recreation	\$50,000	
Land Treatment	\$122,482	
c. Jetmore Reservoir (1990)		
Flood Control	\$130,750	
Water Supply	\$589,000	
Recreation	\$130,250	
2. Repayment to Federal Government		
for Water Supply Storage under Water		
Marketing Program (1990 & 1991)	\$709,498	
Total Expenditures		\$2,815,172
Balance		\$229,201

^{*}See further explanation of this program later in this report.

Current Purchaser Contracts and Price of Water Supply

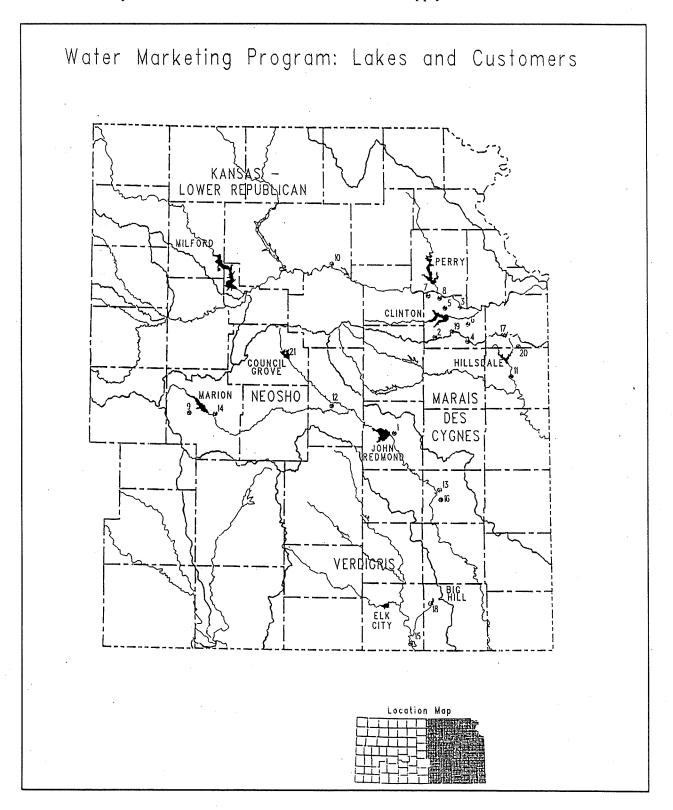
Current water supply purchasers, the reservoir for which they have contracted, the yield under contract, current price paid under contract per 1,000 gallons, price review date, and frequency of review are shown in the following table.

Table 5

I able 0								
		Yield U Contract in		Price Per 1,000	Next Price	Frequency of		
Purchaser	Reservoir	Minimum	Maximum	Gallons	Review Date	Review		
1 Ks. Gas & Electric	John Redmond	4,836.00	9,672.00	\$0.10000	Sept-95	Every 10 years		
2 Douglas Co. RWD No. 5	Clinton	24.00	48.00	0.10000	Nov-97	Every 10 years		
3 Lawrence	Clinton	1,825.00	3,650.00	0.10000	Nov-97	Every 10 years		
4 Baldwin	Clinton	170.00	340.00	0.10000	Nov-97	Every 10 years		
5 Douglas Co. RWD No. 1	Clinton	25.0	50.00	0.10000	Nov-97	Every 10 years		
6 Douglas Co. RWD No. 4	Clinton	36.00	72.00	0.10000	Nov-99	Every 10 years		
7 Douglas Co. RWD No. 3	Clinton	360.00	720.00	0.10000	Nov-99	Every 10 years		
8 Douglas Co. RWD No. 6	Clinton	12.50	25.00	0.10000	May-2000	Every 10 years		
9 Hillsboro	Marion	150.00	300.00	0.1000	May-2000	Every 10 years		
10 Ks. Power & Light	Milford	3,650.00	7,300.00	0.10000	Sept-96	Every 5 years*		
11 Miami Co. RWD No. 2	Hillsdale	119.72	239.44	0.10000	Sept-96	Every 5 years*		
12 Emporia	Council Grove	547.50	. 1,095.00	0.10000	Nov-96	Every 5 years*		
13 Iola	Council Grove	55.00	110.00	0.10000	Nov-96	Every 5 years*		
14 Marion	Marion	118.75	237.50	0.10000	Nov-96	Every 5 years*		
15 Coffeyville	Elk City	150.00	300.00	0.10000	Nov-96	Every 5 years*		
16 Pub. Wholesale Water Supply Dist. No. 5	Marion	43.50	87.00	0.10000	Nov-96	Every 5 years*		
17 Johnson Co. RWD No. 7	Hillsdale	55.00	110.00	0.16939	Jan	Every year		
18 Pub. Wholesale Water Supply Dist. No. 4	Big Hill	273.75	547.50	0.16939	Jan	Every year		
19 Douglas Co. RWD No. 2	Clinton	25.00	50.00	0.16939	Jan	Every year		
20 Spring Hill	Hillsdale	55.00	110.00	0.16939	Jan	Every year		
21 White Mem. Camp	Council Grove	0.75	1.50	0.16939	Jan	Every year		
22 Lawrence	Clinton	730.00	1,460.00	0.1637	Jan	Every year		
23 Douglas Co. RWD No. 1	Clinton	7.50	15.00	0.1637	Jan	Every year		
24 Douglas Co. RWD No. 2	Clinton	25.00	50.00	0.1637	Jan	Every year		
25 Douglas Co. RWD No. 4	Clinton	15.00	30.00	0.1637	Jan	Every year		
26 Douglas Co. RWD No. 5	Clinton	24.00	48.00	0.1637	Jan	Every year		
27 Douglas Co. RWD No. 6	Clinton	5.00	10.00	0.1637	Jan	Every year		
		13,338.97	26,678.94	-	·			

^{*}The price under these contracts cannot be adjusted to more than 10 cents per 1,000 gallons during the 40 year term of the contracts.

The following map depicts the location of the nine Water Marketing Program reservoirs and the location of the purchasers who have contracted for water supply from those reservoirs.



Contracting Activities in 1991

The following municipalities, industries and rural water districts have requested negotiation of contracts for water supply in the named reservoirs during 1991. Contract negotiations are continuing, were terminated, or completed as noted in the following table.

Table 6
1991 Negotiations

Applicant Requesting Negotiation	Reservoir	QTY Requested in MGY	QTY Contracted in MGY
Council Grove	Council Grove	50	N/A Negotiations ongoing
Burlington	Council Grove	365	N/A Negotiations ongoing
Burlingame	Melvern	65	N/A Negotiations ongoing
Osage City	Melvern	260	N/A Negotiations ongoing
Public Wholesale Water Supply Dist. No. 12	Melvern	600	N/A Negotiations ongoing
TOTAL		1,231	·

During the drought conditions of late summer and early fall of 1991, a gubernatorial drought declaration was issued which allowed Burlingame and Osage City to obtain needed water supply from Melvern Lake through short-term emergency surplus water contracts with the Corps.

Burlingame and Osage City are two of the three potential users of Melvern Lake water supply who have been negotiating in 1991 for water supply contracts from this source. The Kansas Water Office does not currently own water supply storage space in Melvern Lake, therefore, the Kansas Water Office is simultaneously negotiating the purchase of storage space from this lake with the Corps of Engineers. Since negotiations with the Marais des Cygnes Assurance District were broken off in 1991, the Kansas Water Office will not, at this time, have an opportunity to purchase this storage at original construction costs and interest rates as provided under the 1985 Memorandum of Understanding with the Corps (see Water Assurance Program section of this report). The Corps is negotiating with the Kansas Water Office to purchase storage at updated costs and interest rates.

A total of 44 active applications to negotiate remain on file requesting a total of 755 million gallons per day from reservoirs already under state control, as well as reservoirs in which the state has yet to purchase storage space. These applicants have not yet requested negotiations for water supply. Their applications will remain on file for up to ten years unless they request negotiations commence at some time prior to the end of the ten-year period.

Table 7

No. Applicant	Reservoir	Average Quality in MGD	Date Filed	Appl. Expires
58 City of Salina	Kanopolis	32.139	12/21/79	12/21/92
59 City of Salina	Milford	10.713	12/21/79	12/21/92
60 City of McPherson	Milford	10.713	1/9/80	1/9/93
61 City of Wichita	Milford	53.565	1/23/80	1/23/93
62 City of Wichita	Kanopolis	44.637	1/23/80	1/23/93
63 City of Coffeyville	Big Hill	0.329	1/24/80	1/24/93
67 Equus Beds GMD #2	Milford	17.855	2/14/80	2/14/93
69 City of Arkansas City	Douglass	5.486	2/26/80	2/26/93
72 County of Wilson	Big Hill	3.000	10/24/80	10/24/93
74 PWWSD #5	John Redmond	0.238	10/29/80	10/29/93
75 City of Humboldt	John Redmond	0.200	2/25/81	2/25/94
76 City of Emporia	Council Grove	3.000	3/13/81	3/13/94
78 City of Council Grove	Council Grove	0.137	3/20/81	3/20/94
80 City of Emporia	Marion	5.000	3/23/81	3/23/94
82 City of Coffeyville	Big Hill	0.500	4/10/81	4/10/94
84 City of Oxford	Douglass	0.219	4/27/81	4/27/94
87 City of Augusta	Douglass	4.000	5/22/81	5/22/94
88 City of Park City	Milford	0.848	6/16/81	6/16/94
90 City of Lindsborg	Kanopolis	1.785	7/20/81	7/20/94
91 City of Lindsborg	Milford	1.785	7/20/81	7/20/94
95 City of Hutchinson	Milford	17.855	8/17/81	8/27/92
96 City of Newton	Milford	17.855	9/20/82	9/20/92
98 City of Cottonwood Falls	Marion	0.266	1/21/83	1/21/93
99 PWWSD #5	Council Grove	0.238	2/1/83	2/1/93
101 Farmland Industries	Elk City	1.065	8/12/83	8/12/93
102 City of Peabody	Marion	0.200	10/28/83	10/28/93
105 Wet Walnut PWWSD	Fall River	0.288	12/18/84	12/18/94
106 Wet Walnut PWWSD	Toronto	0.288	12/18/84	12/18/94
107 Miami Co. RWD #2	Hillsdale	1.000	1/2/85	1/2/94

No. Applicant	Reservoir	Average Quality in MGD	Date Filed	Appl. Expires
109 Monarch Cement	Marion	0.500	7/9/87	7/9/97
110 Monarch Cement	Council Grove	0.500	7/9/87	7/9/97
111 Monarch Cement	John Redmond	0.164	7/9/87	7/9/97
113 Morris Co. RWD #1	Council Grove	0.300	4/27/89	4/27/99
114 Jefferson Co. Econ. Dev.	Регту	8.000	5/12/89	5/12/99
119 Jost Farms	Marion	1.000	8/10/89	8/10/99
120 Osage City	Melvern	2.000	8/21/89	8/21/99
121 Ellsworth Co. RWD 1 (Post Rock)	Kanopolis	1.200	9/12/89	9/12/99
122 PWWSD #10	Milford	132.000	11/17/89	11/17/99
124 PWWSD #12	Melvern	1.100	5/21/90	5/21/2000
125 City of Burlington	Council Grove	365.000	9/3/91	9/3/2001
126 City of Burlingame	Melvern	0.350	11/4/91	11/4/2001
127 PWWSD #12	Melvern	1.400	12/23/91	12/23/2001
128 Johnson Co. RWD #7	Hillsdale	0.548	1/24/92	1/24/2002
129 Lyon Co. RWD #2	Council Grove	0.205	2/10/92	2/10/2002
TOTAL .		754.971		

MULTIPURPOSE SMALL LAKES PROGRAM

Overview

Small lakes play an important role in the management and conservation of the state's water resources. Although hundreds of small lake projects have been built in Kansas for flood control and watershed protection, additional multipurpose structures will be required in the future to meet the water resource needs of the state.

The Multipurpose Small Lakes Program, which is a part of the State Water Plan, provides for "add on" features for the development of a proposed watershed structure to its fullest potential and/or renovation of an existing structure to provide for additional benefits. A planned flood control structure may become multipurpose by adding water supply storage and/or recreation. Conversely, a planned water supply structure may become multipurpose by adding flood control, or recreation to the project. Renovation projects may also be treated this way.

Each structure must contain flood control features and meet specific criteria set out in the law (K.S.A. 82a-1601 et seq.) to be eligible for funding under the Multipurpose Small Lakes Program. Each project must include adequate land treatment of the drainage area to protect the site from pollution and siltation. The major sponsor of a Multipurpose Small Lakes project must have taxing authority and power of eminent domain. Payback of state funds used for the water supply portion of the structure is required. (See: Funding of Water Supply Projects - From Water Marketing Receipts funding detail for early projects under this program.)

Table 8 Multipurpose Small Lakes Projects

	Fundin	g.		Water		
Name of Project	Amount	Source	FY	Supply Sold		Reimbursable Costs
1. Centralia Site 50 Flood Control Water Supply Water Supply Recreation Land Treatment TOTAL	\$0.00 \$10,000.00 \$98,192.00 \$0.00 \$240,000.00 \$348,192.00	State General Fund Dev. Fund Water Mktg. Dev. Fund Water Mktg.	1987 1988 1989	No	\$98,192.00 280.00 200.00 \$98,672.00	Construction of water supply Water right filing fee Water right inspection fee
2. Yates Center Flood Control Water Supply Recreation Land Treatment TOTAL	\$0.00 \$0.00 \$100,000.00 \$140,352.00 \$240,352.00	State General Fund State General Fund	1987 1988	NA	NA	Funding was not used for water supply.
3. Wellington Flood Control Water Supply Recreation Land Treatment TOTAL	\$745,000.00 \$0.00 \$50,000.00 \$122,482.00 \$917,482.00	Dev. Fund Water Mktg. Dev. Fund Water Mktg. Dev. Fund Water Mktg.	1989 1989 1989	NA	NA	Funding was not used for water supply.
4. Jetmore Flood Control Flood Control Water Supply Recreation Land Treatment TOTAL	\$451,250.00 \$130,750.00 \$589,000.00 \$130,250.00 <u>\$0.00</u> \$1,301,250.00	Economic Dev. Fund Dev. Fund Water Mktg. Dev. Fund Water Mktg. Dev. Fund Water Mktg.	1990 1990 1990 1990	No	\$589,000.00	Construction of water supply.
5. Bone Creek Flood Control Water Supply Recreation Land Treatment TOTAL	\$903,402.00 \$500,000.00 \$996,598.00 <u>\$0.00</u> \$1,900,000.00	State Water Plan Fund State Water Plan Fund State Water Plan Fund	1991 1992 1991	No	\$500,000.00	Construction of water supply.
6. Banner Creek Flood Control Water Supply Recreation Land Treatment TOTAL	\$0.00 \$396,969.00 \$0.00 <u>\$73,040.00</u> \$470,009.00	State Water Plan Fund State Water Plan Fund	1993 1991	No	\$396,969.00	Construction of water supply.
7. Sabetha Lake Flood Control Water Supply Recreation Land Treatment TOTAL	\$571,420.00 \$815,425.00 \$87,378.00 \$1,474,223.00	State Water Plan Fund State Water Plan Fund State Water Plan Fund	1992 1992 1992	No	\$815,425.00	Construction of water supply.

New Legislation Affecting the Multipurpose Small Lakes Program

Amendments to the Multipurpose Small Lakes Act (K.S.A. 82a-1601 et seq.) were enacted in 1991. Changes to the Act include:

Rural water districts may now participate as sponsors of projects. The Kansas Water Office is exempted from fees imposed on water right filings and maintenance of the water right application.

Multipurpose small lakes are now subject to a cost-benefit analysis to be conducted by the Chief Engineer, Division of Water Resources. The Kansas Water Office is the responsible agency to recoup the state's cost of water supply storage in multipurpose small lakes. The state may now include water supply storage in Class III lakes, at state expense. However, interest is charged on the state's investment in Class III projects.

STATUS OF WATER ASSURANCE PROGRAM

History

During periods of drought, natural streamflow on streams may be significantly reduced. Municipal and industrial water users along a stream who hold appropriation rights to the natural flow may find their ability to use the surface water is severely limited, at a time when their demand for water is at its highest. Many of these users are located below federal reservoirs.

Prior to 1986, water in storage from upstream reservoirs was available to these users only under terms of the State Water Marketing Program. In order to participate in the water marketing program, municipal and industrial water users were required to sign a long-term (up to 40 years) contract with the state agreeing to: repay the state for the costs of providing the water; pay for at least 50 percent of the contracted water each year, regardless of actual use; and pay for water lost in transit from the dam to the purchaser's intake. The state recognized that the marketing program may not meet the needs of many municipal and industrial water users since it obligates a purchaser to a long-term financial commitment for water supply from a specific reservoir which they may only need during low flow periods.

The 1986 Legislature enacted the Water Assurance Program Act (K.S.A. 82a-1330 et seq.). The act gives the Kansas Water Office authority to enter into contracts with the federal government for storage space to be used for water assurance. It sets out the procedures for organization of an assurance district and contracting procedures between the assurance district and the Kansas Water Office.

The purpose of the Water Assurance Program is to allow coordinated operation of state-owned or controlled water storage space in federal reservoirs to satisfy downstream municipal and industrial water rights during drought conditions. Water right holders are, therefore, assured to receive water during times of low flow while the state operates the basin reservoirs as a system for increased efficiency in water delivery.

Under a 1985 Memorandum of Understanding with the Department of the Army, the state has the first purchase option for additional storage in the following reservoirs at original construction costs and interest rates: Tuttle Creek, Pomona, Melvern, John Redmond, Marion, Council Grove, Elk City, Toronto and Fall River.

Four conditions must be met before this storage space can be added to the Water Marketing Program or Water Assurance Program at the favorable costs.

- 1. An Assurance District must form in the basin,
- 2. Water quality releases must be protected from unlawful diversion,
- 3. A water user must negotiate a contract with the state prior to the state's purchase of the storage, and
- 4. The state must make full payment to the federal government (including accumulated interest) for the storage at the time of purchase (no long-term repayment).

In addition, this memorandum of understanding expires in 1996. Purchases made after June 30, 1996, would be at updated construction and interest costs. The state has requested a five-year extension to this deadline.

Contracts with the Federal Government

A contract with the federal government on behalf of Kansas River Assurance District No. 1 (KWAD No. 1) was negotiated for 27,500 acre-feet of storage space in Tuttle Creek Reservoir in calendar year 1990. The cost for this storage space was \$1.9 million. Kansas Water Assurance District No. 1 chose to utilize the state's bonding authority to finance the costs of Tuttle Creek storage. The district will also utilize 55,000 acre-feet of storage in Milford and 25,000 acre-feet of storage space in Perry reservoirs at an estimated cost of \$3.3 million. The district has taken advantage of the long-term, low-interest contracts the state already had in place to pay out the costs for Milford and Perry reservoirs. Annual payments for this storage will total \$121,070 per year for the next 50 years.

No other purchases of storage space have been negotiated with the federal government for additional storage space for any other assurance districts. However, the state has been provided first draft contracts for Melvern and Pomona reservoirs for possible use in the Marais des Cygnes Basin.

Contracts with Assurance Districts

A contract between the Kansas Water Office and Kansas River Assurance District No. 1 was signed in December 1989. Since that time, details of the operation agreement, defining how storage in the three reservoirs in the Kansas Basin will be utilized to meet the water supply needs of the district members, have been negotiated.

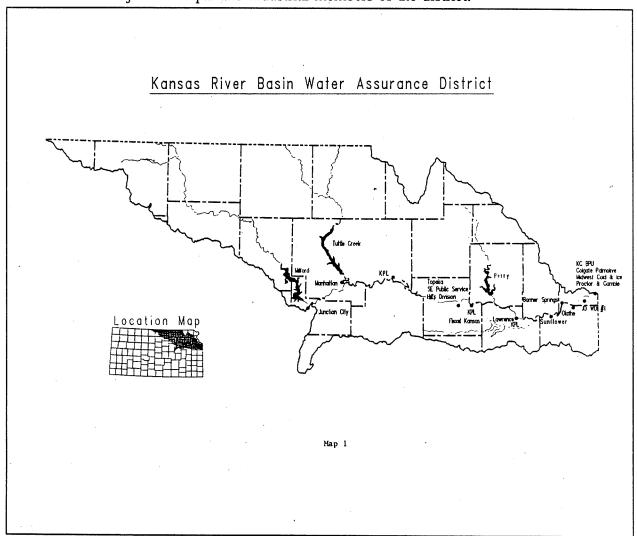
KWAD No. 1 will be paying the state for all costs associated with management and operation of Milford, Tuttle Creek and Perry reservoirs. The district will utilize up to 55,000 acre-feet of storage in Milford, 27,500 acre-feet of storage in Tuttle Creek and 25,000 acre-feet of storage in Perry reservoirs. In addition, the district has requested the set-aside of 60,400 acre-feet of storage in Milford, 13,850 acre-feet in Tuttle Creek and 15,000 acre-feet in Perry with specific

dates for the district to exercise its option to purchase this additional storage. The district will pay the state for the interest accruing on the capital costs associated with this storage.

A portion of the storage space to be utilized by the district from Milford and Perry reservoirs is included in the calculation of costs in the reserve capacity of the Water Marketing Program. (See page 4 of this report.) The district will be paying approximately \$175,000 per year for the next ten years to reimburse the Water Marketing Program for principal and interest costs associated with that reserve capacity. As these receipts are credited to the Water Marketing Program, they will reduce that program's costs for repayment of the State General Fund shortfall discussed earlier in this report.

The district paid approximately \$509,000 to the state in calendar year 1991 for a partial year of costs of the Assurance Program. In calendar year 1992, the district is projected to pay \$833,000 to the state.

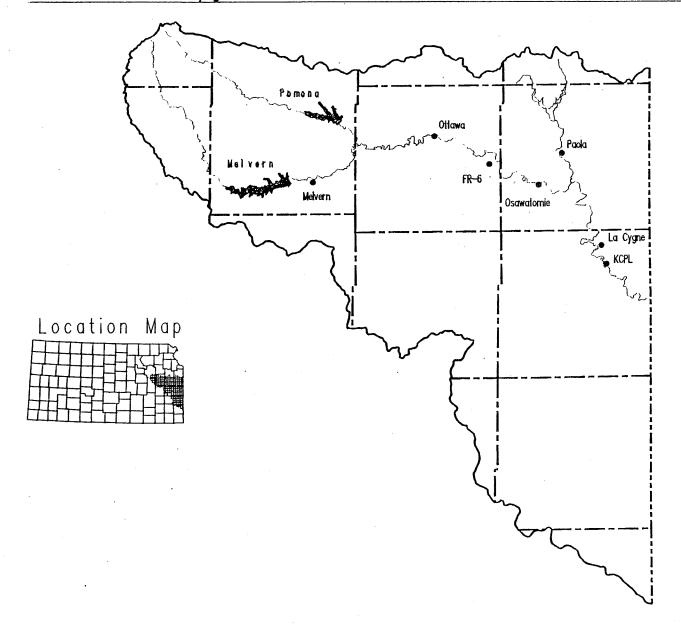
Map 1 shows the Kansas Basin, the reservoirs under the Kansas River Assurance Program, and the location of major municipal and industrial members of the district.



Update on Assurance District Formation

In calendar year 1990, a new assurance district was formed in the Marais des Cygnes Basin. Negotiations with this district began in the spring of 1991. However, the district broke off negotiations in the fall. At year's end, no request to reopen negotiations had been received. The Marais des Cygnes Assurance District operations would involve water supply storage capacity in Melvern and Pomona lakes. The state does not currently have contracts with the federal government for water supply in these reservoirs. It was hoped that purchase of storage could be accomplished under the 1985 Assurance District Memorandum of Understanding to serve both the Marais des Cygnes Assurance District and Burlingame, Osage City and Public Wholesale Water Supply District No. 12 at original construction costs and interest rates. With the breakdown of negotiations with the Assurance District, however, the immediacy of need of other purchaser for water supply from Melvern, the state is negotiating for storage space for these entities at updated costs. Map 2 shows the reservoirs included in the Marais des Cygnes Assurance District and the location of members of the district.

Marais des Cygnes River Basin Water Assurance District



DEPARTMENT OF THE ARMY



OFFICE OF THE ASSISTANT SECRETARY WASHINGTON, DC 20310-0103





REPLY TO ATTENTION OF

1 6 JUN 1992

Mr. Stephen A. Hurst Director Kansas Water Office Suite 300 109 SW Ninth Topeka, Kansas 66612-1249



Dear Mr. Hurst:

Thank you for your letter of April 15, 1992, regarding the 1985 Memorandum of Understanding (MOU) concerning the Purchase of Municipal and Industrial Water Supply Storage at Army reservoir projects in Kansas.

The Federal/State partnership established by the MOU was designed to take advantage of a unique opportunity to solve water supply problems in the State of Kansas, to enhance recovery of Federal costs related to initial construction and operation and maintenance of nine Army reservoir projects. In return for the State enacting legislation to protect water quality inflows and releases and undertaking system-wide conjunctive use of the reservoirs for water supply, the Army agreed to make significant reductions in cost for reallocated storage at the nine projects for a ten year period ending July 1, 1996. The State has passed the necessary legislation. However, only one contract has been approved for part of the storage available. We hope we will be able to complete more of these over the next four years.

As you may know, others have been interested in entering into similar arrangements with the Army for the purpose of reducing the cost of reallocated storage. We have consistently informed them that we would be willing to enter into such agreements if the same opportunities existed. However, we have not been able to identify such opportunities in these other areas.

Since the State has enacted the necessary water quality legislation, which could be used to the Mourant the Mourant the Mourant the Mourant the Mourant to discuss such opportunities with you.

Sincerely,

Nancy P. Dorn

Assistant Secretary of the Army

(Civil Works)