

MINUTES OF THE Senate COMMITTEE ON Energy and Natural Resources

The meeting was called to order by Senator Charlie L. Angell at
Chairperson

8:00 a.m./~~p.m.~~ on Friday, January 27, 1984 in room 123-S of the Capitol.

All members were present except:
Senator Tom Rehorn (Excused)

Committee staff present:
Ramon Powers, Research Department
Don Hayward, Revisor's Office
LaVonne Mumert, Secretary to the Committee

Conferees appearing before the committee:
Clark Duffy, Kansas Water Office

Senator Werts moved that the minutes of the January 26, 1984 meeting be approved. Vice-Chairman Kerr seconded the motion, and the motion carried.

Clark Duffy reviewed his written statement (Attachment 1). He said that Kansas has purchased water supply storage in 9 of the 24 federal reservoirs in the state. This storage has a yield of about 306 million gallons a day. The state's share of the capital costs in these reservoirs is about 70 million dollars to be paid back over 50 years. The state also pays operation and maintenance costs. The Water Office estimates that revenues from water contracts will equal the annual payment to the federal government about the year 2000. Mr. Duffy told the Committee that the Water Office negotiated with the Public Wholesale Water Supply District No. 4 to bring their contract into the standardized form. He said they had their attorneys look into the matter and they could see no benefit to them to change so they rejected the new contract. Mr. Duffy reviewed the following contracts: No. 83-4 with Douglas County RWD No. 2 from Clinton Reservoir, No. 83-5 with the City of Spring Hill from Hillsdale Reservoir, Amended No. 83-1 with Johnson County RWD No. 7 from Hillsdale Reservoir, Supplemental Agreement No. 1 to Amend Contract No. 81-5 with the City of Coffeyville from Elk City Reservoir and No. 84-1 with Kansas-Oklahoma Conference of the United Church of Christ from Council Grove Reservoir.

Mr. Duffy said that Kansas Gas and Electric has contracted to all of the state's storage at John Redmond. Senator Hess asked if the federal government has much incentive to negotiate with Kansas to sell additional storage. Mr. Duffy said he thinks they do, and it would mean additional revenue to the federal government. Senator Hess asked how much the 306 million gallons per day of present storage could be increased by negotiating for additional storage. Mr. Duffy said it would probably be a 100% increase. Senator Hess asked why it would be an advantage for the state to contract with the federal government for additional storage when only 24% of what the state presently owns is being sold. Mr. Duffy replied that they feel that possibly what could be achieved is a better balance by trading off some of the storage the state now owns for storage in different reservoirs. The Committee discussed the fact that legislation passed last year negated the old "priority list" of applications for water contracts.

Staff reviewed held-over bills in Committee.

S.B. 273 - Identification of minimum streamflows for watercourses

Senator Hess moved that the bill be reported adversely. Senator Feleciano seconded the motion, and the motion carried.

S.B. 281 - Amendments to hazardous and solid waste act

Senator Werts moved that the bill be reported adversely. Senator Gordon seconded the motion, and the motion carried.

S.B. 333 - Nuclear energy development and radiation control act amendments and supplement

Senator Werts moved that the bill be reported adversely. Senator Vidricksen seconded the motion, and the motion carried.

CONTINUATION SHEET

MINUTES OF THE Senate COMMITTEE ON Energy and Natural Resources,
room 123-S, Statehouse, at 8:00 a.m./~~xxx~~ on Friday, January 27, 1984

The meeting was adjourned at 8:48 a.m. by the Chairman. The next meeting of the Committee will be at 3:30 p.m. on January 30, 1984.

Senate Energy & Natural Resources

Jan. 27, 1984

<u>Name</u>	<u>Organization</u>
Leland E. Rolp	DWR - KS BIA
Clark Puffy	KWO
JOHN A. HENDERSON	KWO -
Ed Reinert	KS League Women Voters
Chris McKenzie	League of KS Municipalities
Chip Wheeler	KS Legis. Policy Group
Richard D Kready	KS. Power & Light / Gas Service Co.
Ruth Williams	Girl Scout
Miss F. Yagel	Budget
Joe Harkins	KWO
Charles H. Hannon	RPAE

KANSAS WATER OFFICE
 Status of Water Marketing Program
 January, 1984

Background

The Kansas Water Office (KWO) administers agreements with the federal government to purchase water supply storage space in nine of the 24 federal reservoirs in Kansas. This storage has a yield capability of about 306 million gallons per day (mgd).

Projections for the state's share of the capital costs of these nine reservoirs is approximately \$69.9 million which will be paid back over a 50-year period. Additionally, the state must pay operation and maintenance costs associated with the water supply storage.

Impacts of Contracts on Total Storage

As of January 1984, the Kansas Water Office has entered into 21 contracts which obligate about 24 percent of the storage space presently being purchased from the federal government.

TABLE 1

Reservoir	Amount of Water Under State Control mgd	Contracts Approved by Leg. mgd	% of Reservoir Supply	New Contracts Before Leg. mgd	% Contracted
Big Hill	7.11	1.5	21.1		21.0
Clinton	18.80	13.438	71.5	.137	72.2
Council Grove	5.62	3.301	58.7	.004	58.8
Elk City	16.35	5.206	31.8		31.8
Hillsdale	17.38	.957	5.5	.005	5.8
John Redmond	26.50	26.499	100.0		100.0
Marion	5.69	1.711	30.1		30.1
Milford	128.62	20.00	15.6		15.6
Perry	79.50	0.00	0.0		0.0
TOTAL	305.57	72.612	23.7	.196	23.8

Atch. 1

Payments and Revenues

The annual payment to the federal government for water storage space will be approximately \$1,945,000 for FY 1984. Estimated revenues from water contracts is about \$1,094,000. Approximately \$382,000 of the revenue will be deposited into the State Conservation Storage Water Supply Fund which was created by the 1983 Legislature.

It is estimated that the maximum payment for any one year will be approximately \$4 million. Revenue forecasts, based on projected water use, indicate that water sales will generate at least \$4 million a year after the year 2000.

TABLE 2
Payments and Revenues by Year

Pd. on Year	<u>Payments to Fed. Government</u>		<u>Revenue</u>		Cum. Rev. as % of Cum. Pd.
	Total \$ Paid Out	Cumulative \$ Paid Out	\$ Revenue from water sales	Cumulative \$ Revenue	
1 1975	228,638	228,638	0	0	
3 1976	368,919	597,557	360	360	.86%
4 1977	801,892	1,399,449	0	360	.03%
5 1978	886,253	2,285,702	311,200	311,560	13.6%
6 1979	1,216,698	3,502,400	311,200	622,760	17.8%
7 1980	1,414,956	4,917,356	449,021	1,071,781	21.8%
8 1981	1,538,018	6,455,374	449,946	1,521,727	23.6%
9 1982	1,676,390	8,131,764	798,896	2,320,623	28.5%
9 1983	1,663,717	9,795,481	898,783	3,219,406	32.5%
9 1984	1,944,822	11,740,303	1,093,761 (est)	4,313,167	36.7%

1983 Contract Negotiations

In addition to the contracts before the Legislature, the Kansas Water Office executed a surplus water contract with Farmland Industries. The contract ran for 90 days ending November 10, 1983. Farmland Industries contracted for .370 mgd from Big Hill Lake for use in their petroleum refinery in Coffeyville. During the term of the

contract, Farmland used 48.9 million gallons for which they paid the state \$7,816.50.

The Kansas Water Office also negotiated with the Public Wholesale Water Supply District No. 4 to bring their contract into the standardized contract format. Public Wholesale Water Supply District rejected the new contract.

APPENDIX: CONTRACT BRIEFS

Contract No. 83-4, Douglas County RWD No. 2

Reservoir: Clinton

Contract Quantity: .137 mgd
0.7% of water supply yield from Clinton Lake

Payments: Minimum Annual Payment - \$3,040.06
Maximum Annual Payment - \$5,790.00 based on 1983 price
of \$0.1158 per 1,000 gallons

The District has begun making payments for use of water which was scheduled to begin on December 1, 1983. City of Lawrence provides water treatment.

Public Interest Findings:

1. Present and Future Water Supply Needs of the Applicant
Douglas County RWD No. 2 presently serves 275 customers who use about .085 mgd. An increase to 350 customers by 1993 and 420 customers by 2013 will increase demand to .113 mgd by 1983 and to .137 mgd by 2013.
2. Current Beneficial Uses Being Made of the Non-Contracted Waters
The water to be sold is yield from storage in Clinton Lake under contract to the state for water supply purposes. Present beneficial uses are those associated with water in reservoir storage, e.g., recreation, reservoir fishery, and aesthetics.
3. Reasonably Foreseeable Future Benefits of the Water
The water supply yield from Clinton Lake is 18.80 mgd. Seven previous contracts for water supply have been approved for a maximum amount of 13.438 mgd, leaving 5.367 mgd available to meet additional water supply needs. Approval of the contract with Douglas County RWD No. 2 will increase the amount under contract to 13.575 mgd, and leave 5.225 mgd available for future water supply needs. Review of applications on file indicates that no reasonably foreseeable future beneficial uses would be impaired by approval of the contract.
4. Economic, Environmental, Public Health and Welfare, and Other Benefits or Adverse Impact
Water from Clinton Lake is of better quality than the District can obtain from its present well field. The reliability of service will be improved, and the need for restrictions on use during peak demand times will be ended. The sale will also provide revenue for the State General Fund and the State Conservation Storage Water Supply Fund without increasing state costs. There are no known adverse impacts from approving the contract.
5. Alternative Sources of Water Available to the Applicant
The only alternative readily available to the applicant is from the District's present well field. This well field does not produce water of satisfactory quality or quantity.

6. Preliminary Plan of Design, Construction, and Operation of Works or Facilities Used in Conjunction with Carrying the Water to the Point of Use

The District has constructed a pipeline to connect with the Lawrence municipal system near Iowa Street and Armstrong Road within the City of Lawrence. A 6-inch PVC water supply line connects with the District's standpipe located approximately one mile south of Pleasant Grove, approximately six miles south of Lawrence. A 180 gpm pump at the bottom of Pleasant Grove Hill will lift water into the standpipe.

7. Consistency with the State Water Plan Approved by the Legislature
The State Water Plan approved by the Legislature identifies water supply storage in Clinton Lake for municipal and industrial needs. The proposed use is consistent with the State Water Plan.

8. Date of Receipt of Application

Douglas County RWD No. 2 filed Application No. 40 on February 3, 1977. The application is for 72 mgy, an average of 192,000 gallons per day.

9. Minimum Streamflow Requirements

No minimum streamflow requirements have been established for the Wakarusa River. A separate allocation of storage space is available in the reservoir to provide releases for streamflow. The proposed sale is not expected to affect releases from Clinton Lake to meet downstream needs.

Contract No. 83-5, City of Spring Hill

Reservoir: Hillsdale

Contract Quantity: .055 mgd
0.3% of water supply yield from Hillsdale Lake

Payments: Minimum Annual Payment: \$1,216.03
Maximum Annual Payment: \$2,316.00 based on 1983 price
of \$0.1158 per 1,000 gallons

The City requested a deferment of one year for beginning of the payment period. This deferment was approved to allow the City time to construct the necessary pipeline and water treatment facilities.

Public Interest Findings

1. Present and Future Water Supply Needs of the Applicant
The City proposes to contract for .055 mgd which is 34% of the actual water use for the year 1982 and 23% of the projected water use for the year 1990. The City proposes to use purchased water to supplement the present City supply which is inadequate to meet needs during extended dry periods.
2. Current Beneficial Uses Being Made of the Non-Contracted Waters
The water proposed to be sold is presently in storage in Hillsdale Lake for immediate water supply use. The water is not being used for other beneficial purposes.
3. Reasonably Foreseeable Future Beneficial Uses of the Water
The water is designated for municipal and industrial uses. The 2% chance yield from the water supply storage in Hillsdale Lake is 17.38 mgd; 0.957 mgd has been sold to Miami County RWD No. 2 and Johnson County RWD No. 7. Other applicants include Edgerton, Wellsville, Louisburg, Lenexa, and Olathe which requested a total of 38.966 mgd but have subsequently obtained other water supplies; and Johnson County RWD No. 5, Paola, Gardner, Johnson County RWD No. 7, and George Butler Associates which have requested 14.175 mgd. The total of the quantity under contract, the quantity requested by entities which may want water in the future, and the quantity to be sold to City of Spring Hill is slightly over 15 mgd. This is less than the amount available for sale.
4. Economic, Environmental, Public Health and Welfare, and Other Benefits or Adverse Impacts
The City of Spring Hill would benefit from the proposed sale by having a more reliable water supply for its citizens. The state's Water Marketing Program would benefit because the state is now paying for 2.5 mgd of immediate use yield from the reservoir and the contract would provide revenues for an additional portion of that yield without increasing state costs.
5. Alternative Sources of Water Available to the Applicant
Options considered by the City include expansion of the City lake and construction of a new treatment plant; purchase water from Hillsdale and construct a treatment plant near the lake;

purchase treated water from City of Olathe; purchase water from Hillsdale and contract with Miami County RWD No. 2 for water treatment; or rehabilitate the existing City lake, construct a new treatment plant, and purchase supplemental water supply from Hillsdale Reservoir. The last option has been selected. It has the lowest present-worth cost and provides a more reliable source of water supply.

6. Preliminary Plan of Design, Construction and Operation of Works of Facilities Used in Conjunction with Carrying the Water to the Point of Use

The City proposes to construct 8.6 miles of 6-inch PVC pipeline to transport water from the Miami County RWD No. 2 water intake to the existing City lake. Pumping facilities will be required at Hillsdale Lake.

7. Consistency with the State Water Plan Approved by the Legislature

The use of water from state managed conservation storage was approved by the Legislature in the 1983 amendments to the State Water Plan Storage Act. Water in Hillsdale Lake is designated for municipal and industrial water supply purposes in the State Water Plan. The proposed use is consistent with the goals and objectives of the State Water Plan.

8. Date of Receipt of Application

The City of Spring Hill filed Application No. 21 on June 28, 1974, for 0.027 mgd and filed Application No. 97 on October 15, 1982, for 0.60 mgd.

9. Minimum Streamflow Requirements

Minimum streamflow requirements will not be established for Bull Creek. The proposed sale will not affect minimum streamflow requirements.

Amended Contract No. 83-1, Johnson County RWD No. 7

Reservoir: Hillsdale

Contract Quantity: 110 MGY or .301 MGD
1.7% of water supply yield from Hillsdale Lake
No additional impact on reservoir - water previously appropriated.

Payments: Minimum Annual Payment - \$ 6,664.39
Maximum Annual Payment - \$12,738.00 based on 1983 price
or \$0.1158 per 1,000 gallons

This contract was renegotiated to bring the original contract into line with the new standard contract format. The original contract was dated March 21, 1983, and the amendment was approved on December 16, 1983. The Kansas Water Authority approved a two-year deferment for beginning of payments due to the need for construction of a pipeline and treatment plant before the water can be used.

Public Interest Findings:

1. Water storage in Hillsdale Lake has been designated for water supply purposes as identified in the State Water Plan.
2. The state has authorized the sale of up to the two percent chance drought yield from water supply storage in the reservoir.
3. The Purchaser intends to use the water for public water supply purposes which are consistent with the State Water Plan.
4. The amended contract does not change any negotiable items from the original contract. The contracted quantity, price, and withdrawal plans remain the same as in the original contract.

Supplemental Agreement No. 1 to Amend Contract No. 81-5, City of Coffeyville

Reservoir: Elk City

The City of Coffeyville requested a Supplemental Agreement to change the place of use for water purchased from Elk City Lake. The change will permit the sale of .34 mgd to supply the water needs of South Coffeyville and Nowata County RWD No. 7, both in Oklahoma.

Supplemental Agreement No. 1 will permit the City of Coffeyville to increase and expand its water supply service to residents of Oklahoma who need and desire reliable, economical water supply service. This change will not require an increase in the quantity already under contract to the City of Coffeyville. This amendment will not deprive Kansas residents of needed water supply during the term of the contract. The area to be served in Oklahoma is mostly within the Coffeyville trade area.

Public Interest Findings

1. Present and Future Water Supply Needs of the Applicant [Purchaser]
During contract negotiations, the population in the Coffeyville water supply service area was 18,253 and total water production by the City was 5.10 mgd. Projected water needs for the year 2000 in the service area were determined to be 5.20 million gallons per day (MGD) to service a projected population of 20,277. Projected water supply needs have not changed significantly. The Purchaser proposed to continue water supply service to South Coffeyville and to add water supply service to Nowata County RWD No. 7. This proposed sale of treated water would not require an increase in the amount of water already under contract from Elk City Lake.
2. Current Beneficial Uses Being Made of the Non-Contracted Waters
The water is already under contract to the City of Coffeyville and the beneficial purposes will remain the same, municipal and industrial water supply, including water supply service to other communities and rural water districts.
3. Reasonably Foreseeable Future Beneficial Uses of the Water
The water purchased has been designated for use as a public water supply and for municipal and industrial water supply uses.
4. Economic, Environmental, Public Health and Welfare, and Other Benefits or Adverse Impact
Economic benefits from the proposed amendment will accrue to the City of Coffeyville and to Nowata County RWD No. 7. Coffeyville has had three major water users discontinue or greatly reduce water use over the past year. Approval of the sale of water supply to Nowata County RWD No. 7 will provide additional revenue to the City without an additional investment to provide treatment facilities. The RWD will benefit by not having to build a treatment facility and having to lay less pipe to obtain a potable water supply. Environmental benefits will occur in Kansas due to delivery of the water from Elk City Lake to City of Coffeyville by means

of the Verdigris River. Releases from the lake will be needed most during times when natural flow in the river is low, and the released water will provide streamflow benefits for fish and wildlife. Public health and welfare benefits will be greatest in Oklahoma where reliable, economical water supply service will be provided. Water quality in the rural area to be served has been declining.

5. Alternative Source of Water Available to the Applicant [Purchaser]
City of Coffeyville does not require additional water sources at this time. The City has filed an application for possible future purchase of water supply from Big Hill Lake. Alternative sources available to the City of South Coffeyville would require that City to build and operate a water treatment facility to process water from the Verdigris River in Oklahoma a short distance downstream from where the water is presently being diverted and treated by Coffeyville. Coffeyville has provided water supply service to South Coffeyville for many years. Stopping this service would cause economic problems in both Oklahoma and Kansas. Alternative water sources available to the Nowata RWD are natural flows in the Verdigris River, present inadequate individual water wells, or obtain water from several miles further away at Copan Lake.
6. Preliminary Plan of Design, Construction, and Operation of Works or Facilities Used in Conjunction with Carrying the Water to the Point of Use
Water from Elk City Lake will be delivered by stream to the City's existing diversion works. The Oklahoma rural water district will be responsible for laying pipe to connect to the Coffeyville system.
7. Consistency with the State Water Plan Approved by the Legislature
The use of water from state managed conservation storage was approved by the Legislature in the 1983 amendments to the State Water Plan Storage Act. Water in Elk City Lake is designated for municipal and industrial water purposes. Those purposes would remain the same for the proposed amendment of the contract. Only the place of use would change. The proposed change is consistent with the goals and objectives of the State Water Plan.
8. Date of Receipt of Application
This item is not pertinent to the amendment of Water Purchase Contract No. 81-5. The contract date is December 16, 1981.
9. Minimum Streamflow Requirements
Minimum Streamflow requirements for the Verdigris River has not been established. However, the delivery of water to Coffeyville by stream will enhance low flow conditions in that reach of the river.

Contract No. 84-1, Kansas-Oklahoma Conference of the United Church
of Christ

Reservoir: Council Grove

Contract Quantity: .004 mgd

Payments: Minimum Annual Payment: \$92.63
Maximum Annual Payment: \$176.56 based upon 1984 prices

Contract negotiations began in November, 1980. Contract was approved
by the Authority on January 25, 1984.

Public Interest Findings:

1. Present and future water supply needs: The request is for municipal water for a Church Camp and Retreat Center adjacent to Council Grove Lake. The Camp has reported average use of 1.322 million gallons of water annually under an appropriation right for natural flows in the Neosho River. The applicant's primary need for additional water is to assure its availability during periods of low flow from the Neosho River into Council Grove Lake. Corps of Engineer's Operational Reports for Council Grove Lake indicate there were two months in 1980 and three months in 1981 when zero inflow into Council Grove Lake occurred. Kansas Water Resources Board Technical Report No. 14A, "Kansas Streamflow Characteristics, Statistical Summary of Streamflow Data for Kansas Streams in the Arkansas River Basin," indicates 4.8 percent of the days of flow recorded from 1939 to 1964 had flows less than .1 cfs. The Church camp needs additional water during drought conditions and to meet growing needs which exceed the amount available from the natural flows water right (1.8 million gallons per year).
2. Current beneficial uses being made of the noncontracted water proposed to be diverted: The water proposed to be sold is presently stored in Council Grove Lake. Its use has been as a base for recreation and fish and wildlife pursuits. This has been an interim use until a need for the water supply developed.
3. Reasonably foreseeable future beneficial uses of the water: A water supply storage volume of 24,400 acre-feet in Council Grove Lake is designated for municipal and industrial use and has a 2% chance drought yield of 5.62 million gallons per day (mgd). Two communities (Emporia and Iola) have contracted for a total of 3.301 mgd from this storage, leaving 2.319 mgd available for sale. The request from the Church Camp is for 0.004 mgd. Public Wholesale Water Supply District No. 5 has requested to change the point of sale for contract No. 81-6 from Marion to Council Grove. The amount involved is 0.238 mgd but the request has been deferred. The City of Council Grove is the only applicant likely to want water supply from the Lake in the immediate future. The City has an application on file for 0.137 mgd.

4. Economic, environmental, public health and welfare, and other benefits or adverse impact: White Memorial Camp will benefit from the proposed sale of water by having a more reliable water supply. The State's Water Marketing Program will benefit from revenue for the additional amount of the yield which is sold. There is no known adverse impact associated with this proposed sale.

5. Alternate sources of water available to the applicant: Alternate sources of water for White Memorial Camp are non-existent. There are no rural water districts in Morris County and no nearby communities from which to purchase water. Obtaining groundwater by drilling a well would be highly unlikely. The contract for water from storage in Council Grove Lake will supplement the existing appropriation right for natural flow Neosho River.

6. The preliminary plan of design, construction, and operation of works or facilities used in conjunction with carrying the water to its point of use: White Memorial Camp has intake facilities in Council Grove Lake, a treatment plant, and distribution lines for using natural flows which pass through Council Grove Lake. The operation of the treatment facility will be the same regardless of whether the Camp uses water under its appropriation right or under contract with the Kansas Water Office.

7. Whether the proposed sale is consistent with the State Water Plan approved by the Legislature. The use of water from State-managed storage was approved by the Legislature in the 1983 amendments. Water in Council Grove Lake is designated for municipal and industrial water supply purposes in the State Water Plan. White Memorial Camp's water use is an appropriate municipal use of water from storage in Council Grove Lake. The proposed use is consistent with the goals and objectives of the State Water Plan.

8. Date of receipt of the application: Application No. 19 was filed by Kansas-Oklahoma Conference of the United Church of Christ on June 25, 1974. The desire to purchase 1.5 million gallons per year (mgy) was reconfirmed by letter of May 12, 1983.

9. Minimum streamflow requirements: The proposed sale will not affect minimum streamflow requirements. Council Grove Lake contains 17,500 acre-feet of storage designated for water quality control purposes. This volume of storage should produce 4.4 mgd of water to maintain downstream flow conditions.